

Sony Broadcast products are serviced from five major locations. Qualified technical personnel are available on dedicated telephone lines for technical assistance and consultation.

### REGIONAL OFFICES

#### EASTERN REGION

47-47 Van Dam Street  
Long Island City, New York 11101  
Manager: Carlo Severo

#### MIDWESTERN REGION

500 Park Boulevard, Hamilton Lakes  
Itasca, Illinois 60143  
Manager: Paul Minadeo

#### WESTERN REGION

700 West Artesia Boulevard  
Compton, California 90220  
Manager: Ernest Reading

#### SOUTHWESTERN REGION

1320 Walnut Hill Lane  
Irving, Texas 75062  
Manager: Elton Graham

#### SOUTHERN REGION

2300 Peachford Road, Suite 3000  
Atlanta, Georgia 30338  
Manager: Joe Atkins

### DEDICATED TECHNICAL ASSISTANCE LINES

#### EASTERN — New York

(212) 361-0014  
Business Hours  
8:45 am - 5:00 pm

#### MIDWESTERN — Chicago

(312) 647-9596  
Business Hours  
8:45 am - 5:00 pm

#### WESTERN — Los Angeles

(213) 635-6322  
Business Hours  
8:00 am - 4:30 pm

#### SOUTHWESTERN — Dallas

(214) 659-3631  
Business Hours  
8:00 am - 4:30 pm

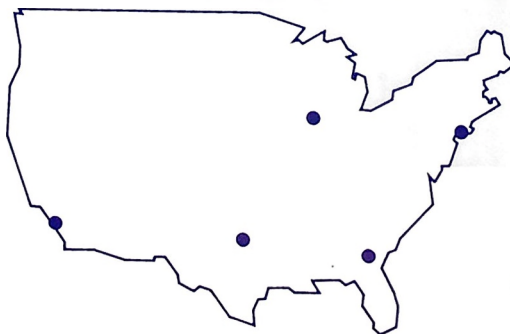
#### SOUTHERN — Atlanta

(404) 457-3902  
Business Hours  
8:30 am - 5:00 pm

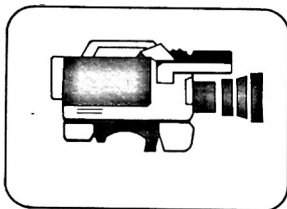
### SONY BROADCAST ENGINEERING

677 River Oaks Parkway  
San Jose, CA 95134  
(408) 946-9090  
Business Hours: 8:30 am - 5:00 pm PST

Emergency Technical Assistance  
available 24 hours/day, 7 days/week  
after 4:30 pm PST: (408) 946-9219



Field Engineers located in • Boston • Detroit • Atlanta • Dallas • Los Angeles • Philadelphia • Sacramento



**SONY**  
Broadcast

# information bulletin

## Misnumbered Bulletin

A duplicate bulletin number was issued in our February mailing. Broadcast bulletin 81-11 (BVU-50) dated November, 1981, should have been numbered 81-30. A corrected copy is included in this mailing. Please discard the duplicate 81-11 from your files.

## Omega Bulletin No. 14, BVT-2000

The modification described in this bulletin has been successfully installed in some units, but not in others. Broadcast Engineering is currently investigating the problem and will revise the bulletin as soon as possible—hopefully, in our next mailing. In the meantime, we recommend that you do *not* install the modification until the problem has been resolved.

## Unused Circuits

In accordance with good engineering practice, Sony normally ties the inputs of unused TTL circuits to ground. If any of these spare circuits are used in a modification, the ground traces must first be cut. Since all unused circuits (particularly on earlier boards) are not grounded in this manner, future bulletins will advise you to examine the spare circuit and cut the ground traces, if any, before proceeding with the modification.

## New Index

This month's mailing includes a complete index of bulletins published through December, 1981. The new Index supersedes all previously published versions. These earlier versions should be discarded to avoid confusion when ordering. Supplements to the new index will be issued periodically throughout the year. A revised and updated edition of the index will be published each year.

## Missing Numbers

Many of you have asked why bulletins are not being issued in numerical sequence. The reason is that some bulletins take longer to prepare and may take more time going through the comprehensive review process. This has resulted in higher numbered bulletins being published earlier. We are now assigning numbers *after* review, which should eliminate the problem. Those 'missing' numbers will show up in future mailings.

## Technical Information Services

Two different organizations within Sony Broadcast are

responsible for distribution of technical literature:

- Broadcast and omega bulletins are prepared and published by Broadcast Information Services in San Jose, CA. Please address all correspondence on bulletins to:

**SONY BROADCAST PRODUCTS COMPANY**  
**BROADCAST INFORMATION SERVICES**  
677 River Oaks Parkway  
San Jose, CA 95134  
Phone: 408-946-9622

- Technical manuals and supplements for broadcast equipment are prepared and published in Japan, but distributed within the United States by the National Broadcast Parts Distribution Center in San Jose, CA. All mail relating to broadcast manuals or supplements should be addressed to:

**SONY BROADCAST PRODUCTS COMPANY**  
**NATIONAL BROADCAST PARTS DIST. CENTER**  
677 River Oaks Parkway  
San Jose, CA 95134  
TWX: 910-338-2168  
800-538-7550 (Outside CA)  
213-467-4430 (Southern CA)  
408-946-9640 (Northern CA)

Technical manual supplements, when available, are distributed at nominal cost to owners of the equipment. Please provide the following information when ordering supplements:

- Name and address of *manual holder*
- Model and serial number of equipment
- Edition and revision number of manual

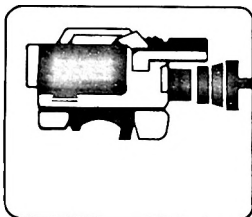
Please note that technical bulletins and manuals for video equipment (other than broadcast) are *not* distributed by either of the departments listed above. For further information on non-broadcast video equipment, contact:

**SONY VIDEO COMMUNICATIONS PROD. CO.**  
**VIDEO TECHNICAL PUBLICATIONS**  
47-47 Van Dam Street  
Long Island City, NY 11101  
Phone: 212-361-8600

## Mailing List Update

In the interest of keeping our mailing list accurate and efficient, please complete the attached Mailing List Renewal Form, changing the mailing address if necessary, and return by July 1st, 1982.



**SONY**

# **broadcastbulletin** No. 82-77

**SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134****MODEL: BVU SERIES****SERIAL NO: ALL****SUBJECT: SERVICE TOOLS AND FIXTURES**

Date: November, 1982

**THIS BULLETIN SUPERSEDES BROADCAST BULLETIN NO. 81-12****DESCRIPTION**

This bulletin identifies recommended tools and alignment fixtures for the BVU Series Broadcast VTRs.

**ORDERING INFORMATION**

Please place orders for tools and fixtures by calling toll-free numbers listed below, or sending P.O. (if on open account) to:

SONY BROADCAST PRODUCTS CO.  
NATIONAL BROADCAST PARTS DISTRIBUTION CENTER  
677 River Oaks Parkway  
San Jose, CA 95134

(800) 538-7550 (Outside CA)  
(213) 467-4430 (Southern CA)  
(408) 946-9640 (Northern CA)

**TABLE 1. RECOMMENDED TOOLS**

| Tool                   | Sony Part No. | Description             | Price*<br>(\$) |
|------------------------|---------------|-------------------------|----------------|
| Phillips Screwdriver   | 7-700-749-01  | 2.0mm screw dia.        | .78            |
| Phillips Screwdriver   | 7-700-749-02  | 2.6mm screw dia.        | .66            |
| Phillips Screwdriver   | 7-700-749-03  | 2-2.6mm screw dia.      | 1.55           |
| Phillips Screwdriver   | 7-700-749-04  | 3-5mm screw dia.        | 1.81           |
| Slot & Dot Screwdriver | 7-721-050-61  | 2.0mm screw dia.        | 7.26           |
| Slot & Dot Screwdriver | 7-721-050-62  | 2.6mm screw dia.        | 7.02           |
| Slot & Dot Screwdriver | 7-721-050-63  | 3.0mm screw dia.        | 6.67           |
| Slot & Dot Screwdriver | 7-721-050-64  | 4.0mm screw dia.        | 7.02           |
| Alignment Tool         | 7-700-733-01  | For hex core alignments | 2.21           |

\* Prices subject to change without notice.

Reference: NBPDC

Page 1 of 5

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**TABLE 1. RECOMMENDED TOOLS (Cont.)**

| Tool   | Sony Part No. | Description  | Price*<br>(\$) |
|--|---------------|--|----------------|
| Hexagonal Allen Wrenches                     | 7-700-736-00  | Set of 12 hexagonal wrenches<br>socket sizes:<br>1.27, 1.4, 1.5, 1.58mm<br>2.0, 3.0, 3.5, 4.0mm<br>5.0, 6.0, 8.0, 10.0mm | 8.90           |
| Additional Wrench<br>(for changing gear box) | 7-700-736-06  | 0.89mm   | .43            |
| Sony Lubrication Oil                         | Y-201-610-10  | 1 Fluid Ounce  | .75            |
| Inside-Outside Calipers                      | Non-Sony Part | Brown & Sharpe   | —              |

**TABLE 2. ALIGNMENT FIXTURES**

| Ref.<br>No. | Part No.     | Description                             | Price*<br>(\$) | BVU- |     |     |     |      |      |     |
|-------------|--------------|---|----------------|------|-----|-----|-----|------|------|-----|
|             |              |   |                | 50   | 100 | 110 | 200 | 200A | 200B | 800 |
| 1           | J-600-182-0A | Drum Eccentricity Gauge                 | 9.63           | •    | •   | •   | •   | •    | •    | •   |
| 2           | J-600-183-0A | Drum Eccentricity Gauge                 | 14.26          | •    | •   | •   | •   | •    | •    | •   |
| 3           | J-600-184-0A | Drum Eccentricity Gauge                 | 62.32          | •    | •   | •   | •   | •    | •    | •   |
| 4           | J-600-193-0A | Drum Eccentricity Gauge                 | 2.45           | •    |     | •   | •   | •    | •    | •   |
| 5           | J-600-906-0A | Driver with Gear                        | 15.01          |      |     |     | •   | •    | •    |     |
| 6           | J-600-108-5A | Pinch Lever Adjusting Jig               | 96.00          |      |     |     | •   | •    | •    |     |
| 7           | 3-601-330-00 | Head Cleaning Kit                       | 3.62           |      | •   |     | •   | •    |      |     |
| 8           | Y-203-100-10 | Cleaning Fluid                          | 1.69           | •    | •   | •   | •   | •    | •    | •   |
| 9           | 1-931-420-00 | System Control Extension<br>Cord        | 43.52          |      |     |     | •   | •    | •    |     |
| 10          | J-600-299-0A | Dihedral Adjusting<br>Screws (4 Screws) | 9.63           |      | •   | •   | •   | •    | •    | •   |
| 10          | 3-702-210-01 | Dihedral Adjusting Screw<br>(Single)    | 2.58           |      |     |     |     |      |      |     |
| 11          | 3-702-216-01 | Back Tension<br>Adjustment Fixture      | 17.80          |      |     |     | •   | •    | •    | •   |
| 12          | 3-702-390-01 | Eccentric Screwdriver,<br>4 mm dia      | 6.08           |      |     | •   | •   | •    | •    |     |
| 12          | 3-702-391-01 | Eccentric Screwdriver<br>5 mm dia       | 6.40           |      |     |     | •   | •    | •    |     |
| 13          | 3-702-394-01 | FWD Back Tension<br>Measurement Fixture | 39.63          |      |     |     | •   | •    | •    |     |
| 14          | 3-702-397-01 | Reel Table Height<br>Adjustment Fixture | 14.26          |      |     |     | •   | •    | •    |     |
| 15          | 3-702-398-01 | Position Fixture                        | 106.67         |      |     |     | •   | •    | •    |     |

\* Prices subject to change without notice.

TABLE 2. ALIGNMENT FIXTURES (Cont.)

| Ref. No. | Part No.     | Description                             | Price* (\$) | BVU- |     |     |     |      |      |     |  |
|----------|--------------|---|-------------|------|-----|-----|-----|------|------|-----|--|
|          |              |   |             | 50   | 100 | 110 | 200 | 200A | 200B | 800 |  |
| 16       | 7-732-050-10 | Tension Scale, 20g Full Scale           | 23.20       | •    |     | •   | •   | •    |      |     |  |
| 16       | 7-732-050-20 | Tension Scale, 50g Full Scale           | 22.11       | •    | •   | •   | •   | •    | •    |     |  |
| 16       | 7-732-050-30 | Tension Scale, 100g Full Scale          | 22.11       | •    | •   | •   | •   | •    | •    | •   |  |
| 16       | 7-732-050-40 | Tension Scale, 200g Full Scale          | 22.11       | •    | •   | •   | •   | •    | •    | •   |  |
| 16       | 7-732-050-50 | Tension Scale, 500g Full Scale          | 23.20       |      |     | •   | •   | •    | •    |     |  |
| 17       | 8-960-015-13 | Alignment Tape, RR5-3SB                 | 202.67      | •    | •   | •   | •   | •    | •    |     |  |
| 18       | 9-911-053-00 | Thickness Gauge                         | 10.80       | •    | •   | •   | •   | •    | •    | •   |  |
| 19       | HE-4         | Demagnetizer                            | 26.00       | •    | •   | •   | •   | •    | •    | •   |  |
| 20       | 8-888-991-31 | Torque Measurement Tape (40 mm dia)     | 3.66        | •    | •   | •   |     |      | •    |     |  |
| 20       | 8-888-991-32 | Torque Measurement Tape (80 mm dia)     | 3.86        |      | •   | •   |     |      |      |     |  |
| 21       | 8-899-999-53 | Reel Table Torque Meas. Fix. 100 mm dia | 3.66        |      |     |     | •   | •    | •    | •   |  |
| 22       | J-600-983-0A | Flatness Plate                          | 11.97       | •    | •   | •   | •   | •    | •    | •   |  |
| 23       | 3-702-217-01 | Reel Table Height Check Fixture         | 41.73       |      | •   |     |     |      |      |     |  |
| 24       | 3-702-367-01 | Reel Table Height Check Base Fixture    | 74.67       |      | •   |     |     |      |      |     |  |
| 25       | J-600-097-1A | DC Cord                                 | 2.83        |      | •   |     |     |      |      |     |  |
| 26       | J-613-001-0A | Reel Table Height Check Base Fixture    | 101.33      | •    |     | •   |     |      |      |     |  |
| 27       | J-613-002-0A | Reel Table Height Check Fixture         | 39.63       | •    |     | •   |     |      |      |     |  |
| 28       | J-604-163-0A | Tension Gauge, 200g Full Scale          | 33.68       |      |     |     |     |      | •    |     |  |
| 28       | 7-732-051-02 | Tension Gauge 1000g Full Scale          | 35.46       | •    |     |     |     |      |      |     |  |
| 29       | J-600-495-0A | Playback Checker                        | 695.00      | •    |     |     |     |      |      |     |  |
| 30       | J-614-014-0A | Extension Cable                         | 6.08        |      |     | •   |     |      |      |     |  |
| 31       | 2-034-697-00 | Chamois                                 | 5.47        | •    | •   | •   | •   | •    | •    | •   |  |



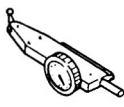


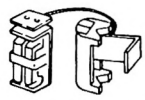
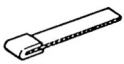





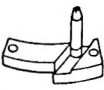

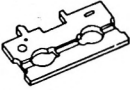
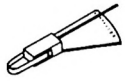
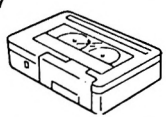
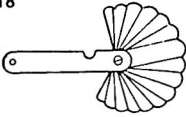
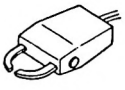
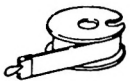

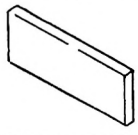
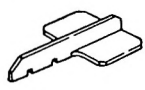
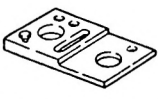
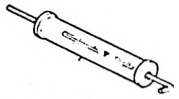

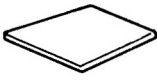
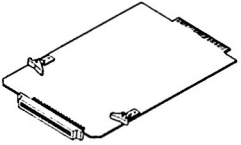
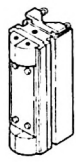
\*Prices subject to change without notice.

TABLE 2 ALIGNMENT FIXTURES (Cont.)

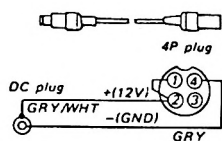
| Ref. No. | Part No.     | Description                    | Price* (\$) | BVU- |     |     |     |      |      |     |
|----------|--------------|--------------------------------|-------------|------|-----|-----|-----|------|------|-----|
|          |              |                                |             | 50   | 100 | 110 | 220 | 200A | 200B | 800 |
| 32       | A-672-424-4A | Extension Board Ass'y, EX-7    | 188.41      |      |     |     |     |      |      | •   |
| 33       | J-615-002-0A | Pinch Lever Adjustment Fixture | 149.33      |      |     |     |     |      |      | •   |

\* Prices subject to change without notice.

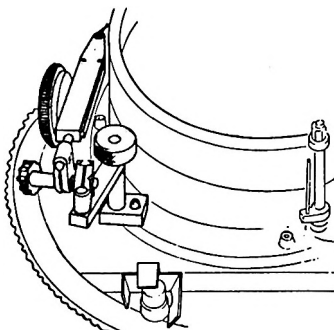
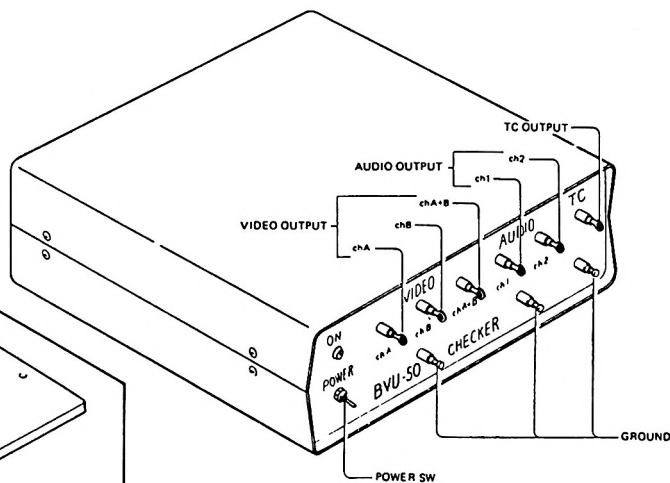
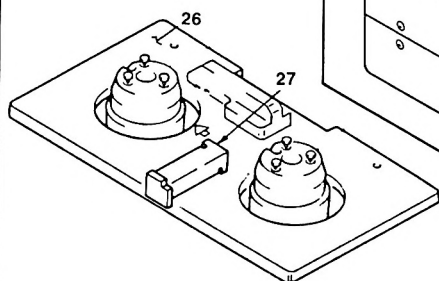
NOTE: Ref. No. items 1 through 4 cannot be used independently.  
Order all of these items at the same time.

|   |   |   |   |   |
|---|---|---|---|---|
| 1<br>    | 2<br>    | 3<br>    | 4<br>      | 5<br>    |
| 6<br>    | 7<br>    | 8<br>    | 9<br>      | 10<br>   |
| 11<br>  | 12<br>   | 13<br>  | 14<br>     | 15<br>  |
| 16<br> | 17<br> | 18<br> | 19<br>   | 20<br> |
| 21<br> | 22<br> | 23<br> | 24<br>   | 28<br>  |
| 30<br> | 31<br> | 32<br> | 33<br> |   |

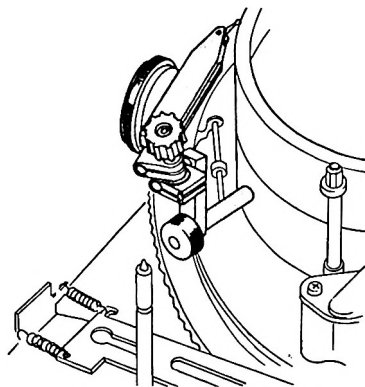
25



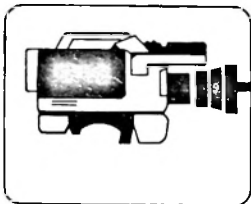
29



**BUV-50, -110, -200, -200A, -200B**  
Gauges installed (forward mode, power off, no cassette).  
Gauges ①, ②, ③ and ④ used in combination.



**BVU-100**  
Gauges installed (normal threading mode, power off, no cassette).  
Gauges ①, ② and ③ used in combination.

**technical bulletin****83-124**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: July, 1983

**MODEL: BVU SERIES****SERIAL NO: ALL****SUBJECT: CHANGES TO RR5-3SB ALIGNMENT TAPE****DESCRIPTION**

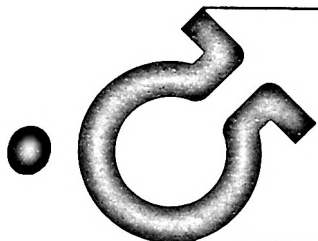
The following changes have been made in the BVU Series Service Alignment Tape RR5-3SB:

| Part Number |                |                                 |
|-------------|----------------|---------------------------------|
| RR5-3SB     | 8-960-015-13   | → 8-960-015-14                  |
| DOC Segment |                |                                 |
| Signal      | EIA Color Bars | → Full Field Color Bars         |
| Drop Out    | 1 Line         | → 3 Lines (2 lines added below) |

The new alignment tape is applicable to all BVU models and serial numbers

*Reference: VTRW 82-1163 / B.G.**Page 1 of 1*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: August, 1982

model: BVH-1000A/-1100

bulletin no.: 61R

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

**THIS BULLETIN SUPERSEDES BVH-1000A, -1100 BULLETIN NO. 61**

## SERVICE TOOLS AND FIXTURES

Alignment fixtures for the BVH-1000A, -1100 are available from the National Broadcast Parts Distribution Center in San Jose, California. See Table 2 for descriptions and part numbers.

Table 1 below is a list of tools which are recommended for servicing Broadcast VTRs.

Please place orders for fixtures and tools by calling:

(800) 538-7550 (except Calif.)

(213) 467-4430 (Southern Calif.)

(408) 946-9640 (Northern Calif.)

**Table 1. Recommended Tools**

| Tool   | Sony Part No. | Description   | Price  |
|--|---------------|---|--------|
| Phillips Screwdriver                         | 7-700-749-01  | 2.0 mm screw dia.   | \$ .78 |
| "  | 7-700-749-02  | 2.6 mm screw dia.   | \$ .66 |
| "  | 7-700-749-03  | 2-2.6 mm screw dia.   | \$1.55 |
| "  | 7-700-749-04  | 3-5 mm screw dia.   | \$1.81 |
| Slot & Dot Screwdriver                       | 7-721-050-61  | 2.0 mm screw dia.   | \$7.26 |
| "  | 7-721-050-62  | 2.6 mm screw dia.   | \$7.02 |
| "  | 7-721-050-63  | 3.0 mm screw dia.   | \$6.67 |
| "  | 7-721-050-64  | 4.0 mm screw dia.   | \$7.02 |
| Alignment Tool                               | 7-700-733-01  | For hex core alignments   | \$2.21 |
| Hexagonal Allen Wrenches                     | 7-700-736-00  | Set of 12 hexagonal wrenches,<br>socket sizes (mm):<br>1.27, 1.4, 1.5, 1.58, 2.0,<br>3.0, 3.05, 4.0, 5.0, 6.0,<br>8.0, 10.0 | \$8.90 |
| Additional Wrench (for<br>changing gear box) | 7-700-736-06  | 0.89 mm   | \$ .43 |
| Sony Lubrication Oil                         | Y-201-610-10  | 1 Fluid Ounce   | \$ .75 |
| Inside/Outside Calipers                      | non-Sony part | Brown & Sharpe  |        |

Prices subject to change without notice.

Page 1 of 2

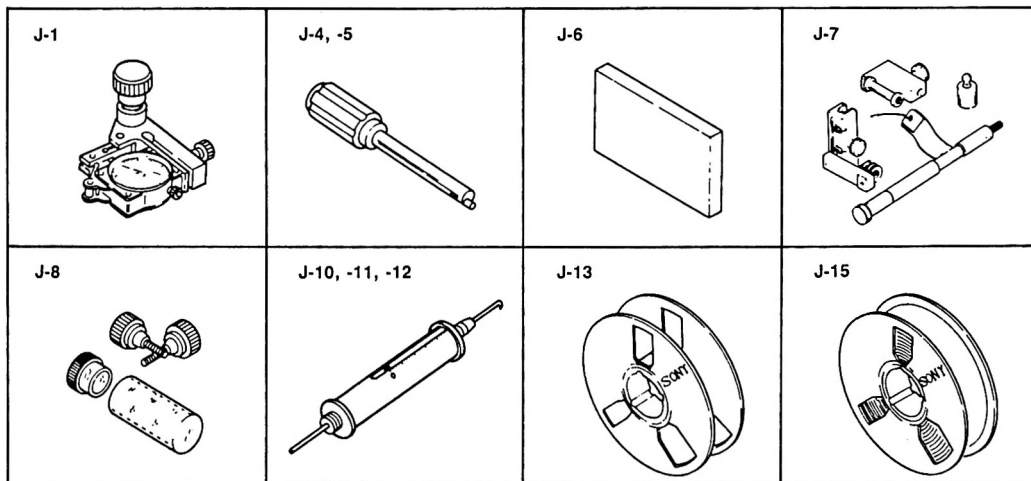
This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

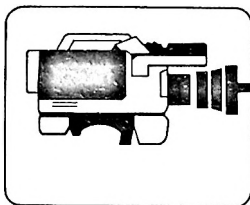


Table 2. Fixtures (Optional)

| Ref. | Part No.                               | Description                             | Price    |
|------|--|---|----------|
| J-1  | J-604-075-0B                           | Drum Eccentricity Gauge (H)             | \$496.00 |
| J-4  | J-604-007-0A                           | Eccentric Screwdriver (3-7)             | \$ 7.65  |
| J-5  | 3-702-390-01                           | Eccentric Screwdriver (4-2)             | \$ 6.08  |
| J-6  | J-604-016-0A                           | Reference Flat Plate                    | \$ 10.80 |
| J-7  | J-604-032-0A                           | Tension Alignment Fixture               | \$213.33 |
| J-8  | J-604-046-0A                           | Tapered Screws                          | \$ 11.97 |
| J-10 | J-604-163-0A                           | Tension Scale (200g)                    | \$ 33.68 |
| J-11 | J-604-031-0A                           | Tension Scale (500g)                    | \$ 35.70 |
| J-12 | J-604-164-0A                           | Tension Scale (5K)                      | \$ 74.67 |
| J-13 | Standard Prod.<br>Available from Parts | Empty Reel (R1-9V (N))                  | \$ 45.00 |
| J-15 | 8-944-005-02                           | Alignment Tape (BR5-2) NTSC             | \$430.38 |
|      | 8-944-005-62                           | Alignment Tape (BR5-2PS-A4) PS          | \$432.00 |
| J-16 | Standard Prod.                         | Tape (V-16-64)                          | \$120.00 |
| J-17 | Standard Prod.                         | Sony HE-3, or HE-4 Head<br>Demagnetizer | \$ 26.00 |

Prices subject to change without notice.





# TECHNICAL MANUAL INDEX

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

EDITION 1  
April, 1983

This index lists all Technical Manuals and Supplements currently available from the National Broadcast Parts Distribution Center. The index lists only the latest editions and revisions applicable to NTSC equipment. Prices listed are subject to change without notice.

NOTE: This index will be updated by CHANGE pages. Refer to the following list for current configuration:

| Page | Configuration |
|------|---------------|
| 1-10 | Edition 1     |

To order, call toll-free numbers listed below or send P.O. (if on open account) to:

SONY BROADCAST PRODUCTS COMPANY  
NATIONAL BROADCAST PARTS DISTRIBUTION CENTER  
677 River Oaks Parkway  
San Jose, CA 95134  
TWX: 910-338-2168  
800-538-7550 (Outside CA)  
213-467-4430 (Southern CA)  
408-946-9640 (Northern CA)

| Manual               | Part No.     | Title/Description  | Appl. Serial No. | Price |
|----------------------|--------------|--|------------------|-------|
| AC-200 Ed 1          | MC200-E1     | AC Adaptor   | 10,001 - Higher  | 5.00  |
| AC-500 Ed 1, Rev 9   | MC500-E1R9   | AC Adaptor   | 10,001 - Higher  | 5.00  |
| BC-210 Ed 1          | MC210-E1     | Battery Charger  | 10,001 - Higher  | 5.00  |
| BC-210 Ed 1 Corr     | MC500-C      | Correction for Ed 1  | —                | 5.00  |
| Betacam Ed 1         | MVA1-E1      | Betacam  | 10,001 - 10,701  | 5.00  |
| BK-31, Ed 1, Rev 3   | MK31-E1R3    | Color Corrector  | 10,001 - Higher  | 5.00  |
| BK-31 Suppl 1        | MK31-S1      | CC-7 Board; Color Corrector Block Diagram; Electrical Alignment Section 3-12 | 10,001 - Higher  | 5.00  |
| BK-101—3 Ed 1        | MK101/3-E1   | BVH Interface Kit; BVU Interface Kit   | —                | 5.00  |
| BK-101—3 Ed 1, Rev 1 | MK101/3-E1R1 | BVH Interface Kit; BVU Interface Kit   | —                | 5.00  |
| BK-101—3 Ed 1, Rev 2 | MK101/3-E1R2 | BVH Interface Kit; BVU Interface Kit   | —                | 5.00  |
| BK-111 Ed 1, Rev 1   | MK111-E1R1   | Time Code Generator  | 10,001 - 10,390  | 5.00  |
| BK-111 Ed 2          | MK111-E2     | Time Code Generator Card   | 10,391 - 10,490  | 5.00  |
| BK-111 Ed 2, Rev 3   | MK111-E2R3   | Time Code Generator Card   | —                | 5.00  |
| BK-112 Ed 1          | MK112-E1     | Time Code Generator  | 10,001 - 10,100  | 5.00  |
| BK-112 Ed 2          | MK112-E2     | Time Code Generator  | 10,101 - Higher  | 5.00  |
| BK-301 Ed 1          | MK301-E1     | Blanking Generator   | 10,001 - Higher  | 5.00  |
| BK-301 Ed 1, Corr    | MK301-C      | Correction for 1st Edition   | —                | 5.00  |
| BK-801 Ed 1          | MK801-E1     | Control Panel  | 10,001 - 10,200  | 5.00  |
| BK-801 Ed 2          | MK801-E2     | Control Panel  | 10,231 - 10,530  | 5.00  |

**TECH MANUAL INDEX**  
**EDITION 1**

| <i>Manual</i>                       | <i>Part No.</i>      | <i>Title/Description</i>   | <i>Appl.<br/>Serial No.</i>        | <i>Price</i> |
|-------------------------------------|----------------------|--|------------------------------------|--------------|
| BK-802—805 Ed 1                     | MK802—805-E1         | 40P Flat Cable; Control Panel Case;<br>Blank Panel; Rack Mount Kit   | —                                  | 5.00         |
| BK-806 Ed 1<br>BK-806 Ed 1, Suppl 1 | MK806-E1<br>MK806-S1 | Time Code Generator/Reader<br>1. Revised Section 2-2: Additional<br>TC-20 Board Mounted Diagram and<br>Schematic Diagram<br>2. Revised Section 2-3: Revised<br>Electrical Parts List | 10,001 - 10,400<br>10,901 - Higher | 5.00<br>5.00 |
| BK-807 Ed 1                         | MK807-E1             | 9 Pin Interface Board for BVU-800  | —                                  | 5.00         |
| BK-808 Ed 1                         | MK808-E1             | 36 Pin Recorder Interface Board  | —                                  | 5.00         |
| BK-809 Ed 1                         | MK809-E1             | 36 Pin Player Interface Board  | —                                  | 5.00         |
| BK-810 Ed 1                         | MK810-E1             | Cue Rec/PB Board For BVE-800   | —                                  | 5.00         |
| BK-811 Ed 1                         | MK811-E1             | Function Panel Rear Cover  | —                                  | 5.00         |
| BK-1001 Ed 1                        | MK1001-E1            | BVH Interface  | 10,001 - Higher                    | 5.00         |
| BK-1002 Ed 1                        | MK1002-E1            | BVU Interface  | 20,001 - Higher                    | 5.00         |
| BK-1003 Ed 1                        | MK1003-E1            | Teletype Interface   | 30,001 - Higher                    | 5.00         |
| BK-1103 Ed 1, Rev 1                 | MK1103-E1R1          | Auto Chroma Corrector  | 10,001 - Higher                    | 5.00         |
| BK-1105/6 Rev 2                     | MK1105/6-R2          | Extension Cables   | 10,001 - Higher                    | 5.00         |
| BK-1181/2 Ed 1, Rev 3               | MK1181/2-E1R3        | Monitor Rack   | 10,001 - Higher                    | 5.00         |
| BK-2003 Ed 1, Rev 2                 | MK2003-E1R2          | NTSC Heterodyne Color Processor  | —                                  | 5.00         |
| BK-2006—8 Ed 1, Rev 2               | MK2006/8-E1R2        | Remote Control Unit  | 10,001 - Higher                    | 5.00         |
| BK-2100 Ed 1, Rev 1                 | MKH2100-E1R1         | Digital Time Base Corrector  | 10,001 - Higher                    | 5.00         |
| BK-5001 Ed 1, Rev 1                 | MK5001-E1R1          | Time Code Reader   | 10,001 - Higher                    | 5.00         |
| BK-5002 Ed 1, Rev 1                 | MK5002-E1R1          | BVH-10P Interface  | 10,001 - Higher                    | 5.00         |
| BK-5002A Ed 1, Rev 4                | MK5002A-E1R4         | BVH-10P Interface  | 10,001 - Higher                    | 5.00         |
| BK-5003 Ed 1, Rev 4                 | MK5003-E1R4          | U-Matic 36P Interface  | 10,001 - Higher                    | 5.00         |
| BK-5004 Ed 1, Rev 3                 | MK5004-E1R3          | General Purpose Interface  | 10,001 - Higher                    | 5.00         |
| BK-5005 Ed 1 Rev 1                  | MK5005-E1R1          | BVH/BVU 9P Interface   | 10,001 - Higher                    | 5.00         |
| BK-5021 Ed 1, Rev 3                 | MK5021-E1R3          | Parallel Switcher Interface  | 10,001 - Higher                    | 5.00         |
| BK-5022 Ed 1, Rev 1                 | MK5022-E1R1          | Serial Switcher Interface  | 10,001 - Higher                    | 5.00         |
| BK-5031 Ed 1, Rev 3                 | MK5031-E1R3          | RS-232C Interface  | 10,001 - Higher                    | 5.00         |

**TECH MANUAL INDEX**  
**EDITION 1**

| <i>Manual</i>              | <i>Part No.</i> | <i>Title/Description</i>                                   | <i>Appl.<br/>Serial No.</i> | <i>Price</i> |
|----------------------------|-----------------|--|-----------------------------|--------------|
| BKD-2901 Ed 1              | MKD2901-E1      | CCJ VTR Interface Option                                   | —                           | 5.00         |
| BKD-2902 Ed 1              | MKD2902-E1      | 150 Cue Keyboard Option                                    | —                           | 5.00         |
| BKD-2903 Ed 1              | MKD2903-E1      | Remote Data Switcher                                       | —                           | 5.00         |
| BKH-2011 Ed 1, Rev 2       | MKH2011-E1R2    | Control Panel Type 1                                       | 10,001 - Higher             | 5.00         |
| BKH-2012 Ed 1, Rev 2       | MKH2012-E1R2    | Control Panel Type 2                                       | 10,001 - Higher             | 5.00         |
| BKH-2013 Ed 1, Rev 3       | MKH2013-E1R3    | Control Panel Type 3                                       | 10,001 - Higher             | 5.00         |
| BKH-2014 Ed 1, Rev 1       | MKH2014-E1R1    | Side Panel Kit   | —                           | 5.00         |
| BKH-2015 Ed 1, Rev 2       | MKH2015-E1R2    | Time Code Generator/Reader                                 | 10,001 - Higher             | 5.00         |
| BKH-2016 Ed 1, Rev 1       | MKH2016-E1R1    | CCJ Converter  | 10,001 - Higher             | 5.00         |
| BKH-2017 Ed 1              | MKH2017-E1      | Remote Control Panel Adaptor Box                           | 10,001 - Higher             | 5.00         |
| BVE-500 Op Man             | ME500-OM        | Operation Manual   | 10,001 - Higher             | 5.00         |
| BVE-500 Ed 1               | ME500-E1        | Editor for BVU-200   | 10,001 - 10,080             | 30.00        |
| BVE-500 Ed 1, Rev 1        | ME500-E1R1      | Editor For BVU-200   | 10,001 - 10,290             | 30.00        |
| BVE-500 Suppl 1            | ME500-S1        | Alignment  | 10,001 - 10,080             | 5.00         |
| BVE-500A Op Guide          | ME500A-OG       | Operator's Guide   | 20,001 - Higher             | 5.00         |
| BVE-500A Ed 1              | ME500A-E1       | Automatic Editing Control Unit                             | 20,001-20,080               | 30.00        |
| BVE-500A Ed 1, Rev 3       | ME500A-E1R3     |  | 21,001-21,899               | 30.00        |
| BVE-500A Ed 2              | ME500A-E2       | Editor for BVU-200A  | 20,081-20,200               | 30.00        |
| BVE-500A Ed 3, Rev 1       | ME500A-E3R1     | Editor for BVU-200A  | 20,301 - Higher             | 30.00        |
| BVE-500A Ed 3, Rev 3       | ME500A-E3R3     | Editor for BVU-200A  | 20,301 - Higher             | 30.00        |
| BVE-500A Suppl 1           | ME500A-S1-1     | Supplement for 1st Edition                                 | —                           | 5.00         |
| BVE-500A Ed 1, Corr        | ME500A-C        | Correction for 1st Edition                                 | —                           | 5.00         |
| BVE-800 Ed 1, Rev 2        | ME800-E1R2      | Automatic Editing Control Unit                             | 10,001 - Higher             | 30.00        |
| BVE-800 Suppl 1            | ME800-S1        | Theory of Operation<br>(For the 1st Ed., Rev. 2)           | —                           | 10.00        |
| BVE-1000 Ed 1              | ME1000-E1       | Time Code Editor   | 10,001 - Higher             | 65.00        |
| BVE-5000 Op Man            | ME5000-OM       | Operation Manual   | 10,001 - Higher             | 5.00         |
| BVE-5000 Op Man,<br>Rev 2  | ME5000-OMR2     | Operation Manual   | —                           | 5.00         |
| BVE-5000 Ed 1              | ME5000-E1       | Editor for 1" Machines                                     | 10,001 - Higher             | 65.00        |
| BVE-5000 Ed 1, Rev 1       | ME5000-E1R1     | Editor for 1" machines includes<br>English Operator Manual | 10,301 - 10,400             | 65.00        |
| BVE-5000 Ed 2              | ME5000-E2       | Editor for 1" Machines                                     | 15,001 - Higher             | 65.00        |
| BVE-5000 Ed 2, Rev 1       | ME5000-E2R1     | Editing System   | 20,401 - 20,599             | 5.00         |
| BVE-5000 Ed 3              | ME5000-E3       | Editing System   | 25,601 - 25,699             | 65.00        |
| BVE-5000 Ed 3, Rev 1       | ME5000-E3R1     | Editing System   | 25,601 - 25,799             | 65.00        |
| BVE-5000 Ed 3, Rev 2       | ME5000-E3R2     | Change for S/N 10,001 - 10,307<br>NOT FACTORY MODIFIED     | 25,601 - 25,999             | 65.00        |
| BVE-5000 Suppl 1           | ME5000-S1       | BVE-Kit; VITS Format                                       | 25,601 - 25,799             | 5.00         |
| BVE-5000 Suppl 2           | ME5000-S2       | DT Modification Kit (BVE-Kit 2)                            | 20,000 - Lower              | 5.00         |
| BVE-5000 Suppl 2,<br>Rev 1 | ME5000-S2R1     |  | —                           | 5.00         |

**TECH MANUAL INDEX**  
**EDITION 1**

| <i>Manual</i>   | <i>Part No.</i>  | <i>Title/Description</i>  | <i>Appl.<br/>Serial No.</i>   | <i>Price</i>  |
|---|--|---|---|---|
| BVE-5000 Suppl 3<br>BVE-5000 Suppl 4  | ME5000-S3<br>ME5000-S4   | Electrical Alignment<br>BVE-Kit 4 (The upgrade of<br>Operation Program V2.1)  | 20,401 - 20,499<br>10,001 - 20,599  | 5.00<br>5.00  |
| BVF-5 Ed 1<br>BVF-5 Ed 2<br>BVF-5 Suppl 1<br>BVF Corr   | MF5<br>MF5-E2<br>MF5-S1<br>MF5-C1  | Electronic Viewfinder<br>Electronic Viewfinder<br>Block Diagrams; Parts List<br>Replace Section 5   | 10,001 - Higher<br>20,001 - Higher<br>10,001 - Higher<br>10,001 - Higher  | 5.00<br>5.00<br>5.00<br>5.00  |
| BVG-10 Ed 1, Rev 1  | MG10-E1R1  | Color Frame Pulse Generator   | 10,001 - Higher   | 5.00  |
| BVG-100 Ed 1, Rev 2   | MG100-E1R2   | Portable Time Code Generator  | 10,001 - Higher   | 5.00  |
| BVG-1000 Ed 1, Rev 10<br><br>BVG-1000 Suppl 1<br>BVG-1000 Suppl 2<br>BVG-1000 Suppl 3<br>BVG-1000 Suppl 4<br><br>BVG-1000 Suppl 5<br>BVG-1000 Suppl 6                   | MG1000-E1R10<br><br>MG1000-S1<br>MG1000-S2<br>MG1000-S3<br>MG1000-S4<br><br>MG1000-S5<br>MG1000-S6               | SMPTE/VITC Time Code Generator/<br>Reader<br>Correction and Change Information<br>Electrical and Mechanical Alignment<br><br>BVG-Kit, VITC Modification<br><br>Change Information<br>Change Information   | 10,001 - Higher<br><br>10,041 - Higher<br>10,001 - Higher<br>10,001 - Higher<br>10,001 - 11,200;<br>21,201<br>—<br>21,401 - Higher                                | 30.00<br><br>5.00<br>5.00<br>5.00<br>5.00<br><br>5.00<br>5.00                   |
| BVG-1500 Ed 1, Rev 1  | MG1500-E1R1  | Time Code Reader  | 10,001 - Higher   | 30.00   |
| BVG-1600 Ed 1, Rev 1  | MG1600-E1R1  | Time Code Generator   | 10,001 - Higher   | 30.00   |
| BVH-500 Theory<br>BVH-500 Ed 1<br>BVH-500 Ed 2<br>BVH-500 Corr 1<br>BVH-500 Suppl 1<br><br>BVH-500 Suppl 2<br>BVH-500 Suppl 3<br><br>BVH-500 Suppl 4<br>BVH-500 Suppl 5 | MH500-TO<br>MH500-E1<br>MH500-E2<br>MH500-C1<br>MH500-S1<br><br>MH500-S2<br>MH500-S3<br><br>MH500-S4<br>MH500-S5 | Theory of Operation<br>Portable 1" Recorder Type C<br>Portable 1" Recorder Type C<br>Correction to 1st Edition<br>Periodic Check and Maintenance,<br>Replacement of Main Parts<br>Electrical Alignment<br>Tape Path Adjustment for 1st<br>and 2nd Edition<br>Alignment and Parts Replacement<br>Information to Service Engineer | —<br>10,001 - 10,100<br>10,401 - 10,700<br>10,001 - 10,100<br>10,001 - Higher<br><br>10,001 - 10,100<br>10,001 - 10,700<br><br>10,001 - 10,700<br>10,001 - 10,700 | 20.00<br>65.00<br>65.00<br>5.00<br>5.00<br><br>5.00<br>5.00<br><br>5.00<br>5.00 |
| BVH-500A Ed 1, Rev 5<br>BVH-500A Suppl 1<br>BVH-500A Suppl 2  | MH500A-E1R5<br>MH500A-S1<br>MH500A-S2  | Portable Videocorder<br>Mechanical Alignment and Parts List<br>Printed Circuit Modular Replacement<br>Guide; Electrical Alignment   | 21,001 - 22,599<br>21,001 - 21,200<br>21,001 - 21,399   | 65.00<br>5.00<br>5.00   |
| BVH-1000A Ed 4<br>BVH-1000A Suppl 1<br>BVH-1000A Suppl 2  | MH1000A-E4<br>MH1000A-S1<br>MH1000A-S2   | 1" Videocorder<br>Electrical Alignment<br>Replacement and Adjustment of<br>Drum System Main Parts   | 20,901 - Higher<br>20,801 - Higher<br>—   | 65.00<br>5.00<br>5.00   |
| BVH-1100 Theory<br>BVH-1100 Ed 5<br>BVH-1100 Suppl 1<br><br>BVH-1100 Suppl 2,<br>Rev 1  | MH1100-TO<br>MH1100-E5<br>MH1100-S1<br>(Japanese)<br><br>MH1100-S2R1   | Theory of Operation<br>Videocorder<br>Alignment<br><br>Videocorder, Mechanical Alignment  | —<br>10,001 - Higher<br>—<br><br>10,001 - 10,100  | 20.00<br>65.00<br>5.00<br><br>5.00  |

| <i>Manual</i>         | <i>Part No.</i> | <i>Title/Description</i>  | <i>Appl.<br/>Serial No.</i> | <i>Price</i> |
|-----------------------|-----------------|---|-----------------------------|--------------|
| BVH-1100 Suppl 3      | MH1100-S3       | Videocorder, DT System Alignment;<br>DT System Diagrams   | —                           | 5.00         |
| BVH-1100 Suppl 4      | MH1100-S4       | Videocorder, Electrical Parts List<br>Exploded View for 2nd, 3rd<br>and 4th Editions                    | 10,001 - 10,300             | 5.00         |
| BVH-1100 Suppl 5      | MH1100-S5       | Videocorder, Rev Spec, New Tape<br>Timer Board Schematics,<br>Spare Parts List                          | 10,601 - Higher             | 5.00         |
| BVH-1100 Suppl 7      | MH1100-S7       | Videocorder, Information to Service<br>Technician   | —                           | 5.00         |
| BVH-1100 Suppl 9      | MH1100-S9       | Videocorder, Block Diagram and<br>Timing Chart  | —                           | 5.00         |
| BVH-1100A Ed 2, Rev 1 | MH1100A-E2R1    | Manual (2 Volumes)  | 20,001 - 21,399             | 65.00        |
| BVH-1100A Suppl 1     | MH1100A-S1      | Parts List, Mechanical Alignment  | —                           | 5.00         |
| BVH-1100A Suppl 2     | MH1100A-S2      | Add Information: Sections 2, 3, 11-19   | —                           | 5.00         |
| BVH-1100A Suppl 3     | MH1100A-S3      |   | 21,301 - Higher             | 5.00         |
| BVH-1100A Suppl 8     | MH1100A-S8      | Videocorder, Electrical Alignment   | —                           | 5.00         |
| BVH-1180 Rev 2        | MH1180-E1R2     | Manual (2 Volumes)  | 10,001 - Higher             | 65.00        |
| BVH-1180 Suppl 1      | MH1180-S1       |   | —                           | 5.00         |
| BVH-1180 Suppl 2      | MH1180-S2       |   | 10,001 - 10,399             | 5.00         |
| BVH-2000 Protocol     | MH2000-PROTCL   | Manual, 9 Pin Protocol<br>RS-422-A STD  | —                           | 5.00         |
| BVH-2000 Ed 1, Rev 2  | MH2000-E1R2     | Videocorder   | 10,001 - Higher             | 65.00        |
| BVH-2000 Suppl 1      | MH2000-S1       | Addition and Correction<br>of Documents   | 10,001 - 10,399             | 5.00         |
| BVM-1200 Ed 2         | MM1200-E2       | NTSC High Resolution Monitor  | 10,001 - Higher             | 30.00        |
| BVM-1201 Ed 1         | MM1201-E1       | NTSC High Resolution Monitor  | 10,001 - Higher             | 30.00        |
| BVM-1900 Ed 1         | MM1900-E1       | Trinitron Color Video Monitor   | 10,001 - Higher             | 30.00        |
| BVM-1900 Suppl 1      | MM1900-S1       | Adjustment Procedures   | —                           | 5.00         |
| BVM-1900 Suppl 2      | MM1900-S2       | Schematic and Board Diagrams<br>for BH and BK Boards  | —                           | 5.00         |
| BVM-1900 Corr 1       | MM1900-C1       | Correction of Electrical Parts  | 10,001 - Higher             | 5.00         |
| BVM-4050 Ed 2         | MM4050-E2       | Trinitron Color Video Monitor   | 10,001 - Higher             | 30.00        |
| BVP-1 Ed 1, Rev 2     | MP1-E1R2        | Color Video Camera  | 10,001 - Higher             | 30.00        |
| BVP-3 Ed 1            | MP3-E1          | Color Video Camera  | 10,001 - 10,030             |              |
| BVP-110 Theory        | MP110-TO        | Theory of Operation   | —                           | 10.00        |
| BVP-110 Ed 1, Rev 4   | MP110-E1R4      |   | 10,001 - 10,100             | 30.00        |
| BVP-110 Corr 1        | MP110-C1        | Correction to Sections:<br>2, Technical Information<br>4, Schematic and Board Diagram<br>8, Spare Parts | 10,001 - 10,100             | 5.00         |
| BVP-250 Theory        | MP250-TO        | Theory of Operation BVP-250/330   | —                           | 15.00        |
| BVP-250 Ed 1          | MP250-E1        | Color Video Camera  | 10,001 - Higher             | 50.00        |
| BVP-250 Suppl 1       | MP250-S1        | Maintenance Procedure;<br>Tube Replacement  | 10,001 - Higher             | 5.00         |

**TECH MANUAL INDEX**  
**EDITION 1**

| <i>Manual</i>        | <i>Part No.</i> | <i>Title/Description</i>                            | <i>Appl.<br/>Serial No.</i> | <i>Price</i> |
|----------------------|-----------------|---|-----------------------------|--------------|
| BVP-250 Suppl 2      | MP250-S2        | Technical Changes<br>(1st Edition, Revision 3)      | —                           | 5.00         |
| BVP-250 Suppl 3      | MP250-S3        | Manual Change Information                           | —                           | 5.00         |
| BVP-250 Suppl 4      | MP250-S4        | Manual Change Information                           | —                           | 5.00         |
| BVP-300 Theory       | MP300-TO        | Theory of Operation                                 | —                           | 15.00        |
| BVP-300 Ed 5         | MP300-E5        | Color Video Camera                                  | 10,001 - Higher             | 50.00        |
| BVP-300 Corr         | MP300-C         | Battery Case Frame Wiring                           | —                           | 5.00         |
| BVP-300 Suppl 1      | MP300-S1        | Section 2, Maintenance                              | 10,001 - Higher             | 5.00         |
|                      |                 | Section 3, Diagrams                                 |                             |              |
|                      |                 | Section 4, Tube Replacement                         |                             |              |
| BVP-300 Suppl 2      | MP300-S2        | 2-4-12 Shading Correction<br>Adjustment             | 10,001 - Higher             | 5.00         |
|                      |                 | 2-4-13 Black Level Balance<br>Adjustment            |                             |              |
| BVP Kit-1            | MPKIT-1         | 2-4-14 Power Supply Alignment<br>Maintenance Manual | —                           | 5.00         |
| BVP-300A Theory      | MP300A-TO       | Theory of Operation                                 | —                           | 15.00        |
| BVP-300A Ed 2        | MP300A-E2       | Color Video Camera                                  | 21,101 - Higher             | 50.00        |
| BVP-300A Suppl 1     | MP300A-S1       | 1. Section 2, Maintenance                           | 20,001 - Higher             | 5.00         |
|                      |                 | 2. Section 4, Tube Replacement                      |                             |              |
| BVP-300A Suppl 2     | MP300A-S2       | Manual Change Information                           | —                           | 5.00         |
| BVP-330 Theory       | MP330-TO        | Theory of Operation                                 | —                           | 15.00        |
| BVP-330 Ed 1, Rev 2  | MP330-E1R2      | Color Video Camera                                  | 10,001 - Higher             | 50.00        |
| BVP-330 Suppl 1      | MP330-S1        | Change, Auto Centering Adjustment                   | 10,001 - Higher             | 5.00         |
| BVP-330 Suppl 2      | MP330-S2        | Section 2, Maintenance                              | 10,001 - Higher             | 5.00         |
|                      |                 | Section 4, Tube Replacement                         |                             |              |
| BVR-30 Ed 1, Rev 2   | MR30-E1R2       | Remote Control Unit                                 | 10,001 - Higher             | 5.00         |
| BVR-30 Suppl 1       | MR30-S1         | Electrical Alignment                                | —                           | 5.00         |
| BVR-500 Ed 1         | MR500-E1        | Remote Control                                      | 10,001 - Higher             | 5.00         |
| BVR-500 Ed 1, Rev 1  | MR500-E1R1      | Remote Control                                      | 10,001 - Higher             | 5.00         |
| BVR-500 Corr         | MR500-C         | Correction for 1st Edition                          | —                           | 5.00         |
| BVR-510 Ed 1         | MR510-E1        | Remote Control                                      | 10,001 - 10,080             | 5.00         |
| BVR-510A Ed 2        | MR510A-E2       | Remote Control                                      | 15,018 - 15,110             | 5.00         |
| BVR-800 Ed 1         | MR800-E1        | Remote Control Unit                                 | 10,001 - Higher             | 5.00         |
| BVR-820 Ed 1         | MR820-E1        | Remote Control Unit                                 | 10,001 - Higher             | 5.00         |
| BVR-1000 Ed 1, Rev 1 | MR1000-E1R1     | Remote Control Unit                                 | 10,001 - Higher             | 10.00        |
| BVR-1010 Rev A       | MR1010-RA       | Remote Control (BVH-1000/1100)                      | —                           | 10.00        |
| BVR-1020 Rev A       |                 |   |                             |              |
| BVS-500 Ed 1         | MS500-E1        | Video and Audio Switcher                            | 10,001 - 10,080             | 5.00         |
| BVS-500 Suppl 1      | MS500-S1        |   | 10,102 - Higher             | 5.00         |
| BVT-800 Ed 1, Rev 2  | MT800-E1R2      | Digital Time Base Corrector                         | 10,001 - Higher             | 30.00        |
| BVT-800 Suppl 1      | MT800-S1        | Digital Time Base Corrector                         | 10,001 - 10,999             | 5.00         |



| Manual                | Part No.     | Title/Description   | Appl. Serial No.                    | Price |
|-----------------------|--------------|---|-------------------------------------|-------|
| BVT-800 Suppl 2       | MT800-S2     | Electrical Alignment; Sections 5-18   | 10,001 - 10,999                     | 5.00  |
| BVT-1000 Theory       | MT1000-TO    | Theory of Operation   | —                                   | 20.00 |
| BVT-1000 Ed 3, Rev 3  | MT1000-E3R3  | Digital Time Base Corrector   | 10,201 - 10,500                     | 65.00 |
| BVT-1000 Ed 4, Rev 5  | MT1000-E4R5  | Digital Time Base Corrector   | 10,501 - Higher                     | 65.00 |
| BVT-1000 Suppl 7      | MT1000-S7    | SQ-1 Board, Adjustment Changes  | 10,501 - Higher                     | 5.00  |
| BVT-1000 Suppl 8      | MT1000-S8    | Change Information  | 10,601 - 10,700                     | 5.00  |
| BVT-1000 Suppl 15     | MT1000-S15   | Change Information  | 11,601 - Higher                     | 5.00  |
| BVT-1000 Suppl 16     | MT1000-S16   | Correction  | —                                   | 5.00  |
| BVT-2000 Theory       | MT2000-TO    | Theory of Operation   | —                                   | 20.00 |
| BVT-2000 Ed 1, Rev 14 | MT2000-E1R14 | Digital Time Base Corrector   | 10,013 - 10,017;<br>10,201 - Higher | 65.00 |
| BVT-2000 Suppl 1      | MT2000-S1    | Spare Parts List  | 10,013 - 10,017;<br>10,021 - 10,600 | 5.00  |
| BVT-2000 Suppl 2      | MT2000-S2    | Correction and Change Information   | 10,013 - 10,017;<br>10,021 - 10,600 | 5.00  |
| BVT-2000 Suppl 3      | MT2000-S3    | Block Diagrams Applicable to 1st Edition, Revisions 1, 2, and 3                           | 10,013 - 10,400                     | 5.00  |
| BVT-2000 Suppl 4      | MT2000-S4    | Modification for Remote Control (BVT-Kit 4) Modification                                  | 10,001 - 12,599                     | 5.00  |
| BVT-2000 Suppl 7      | MT2000-S7    | Modification for Remote Control   | 10,001 - 12,599                     | 5.00  |
| BVT-2000 Suppl 8      | MT2000-S8R1  | Picture Quality Improvement in DT Mode  | 10,001 - 52,899                     | 5.00  |
| BVU-50 Theory         | MU50-TO      | Theory of Operation   | —                                   | 10.00 |
| BVU-50 PB Checker     | MU50-PB      | BVU-50PB Checker  | —                                   | 5.00  |
| BVU-50 Ed 1, Rev 2    | MU50-E1R2    | Portable Videocassette Recorder   | 10,001 - 10,750                     | 30.00 |
| BVU-50 Ed 2           | MU50-E2      | Portable Videocassette Recorder   | 20,001 - 20,120                     | 30.00 |
| BVU-50 Ed 3, Rev 4    | MU50-E3R4    | U-Matic Record Only Portable  | —                                   | 30.00 |
| BVU-50 Ed 3, Rev 5    | MU50-E3R5    | U-Matic Record Only Portable  | —                                   | 30.00 |
| BVU-50 Ed 3, Rev 9    | MU50-E3R9    | U-Matic Record Only Portable  | 20,541 - 22,490                     | 30.00 |
| BVU-50 Suppl 1        | MU50-S1      | 1. Electrical Alignment<br>2. Mechanical Alignment  | 10,001 - 20,120                     | 5.00  |
| BVU-50 Suppl 2        | MU-50-S2     | New AR-8A Board<br>1. Mounted Diagram<br>2. Schematic Diagram<br>3. Electrical Parts List | 21,891 - Higher                     | 5.00  |
| BVU-50 Corr           | MU50-C       | Correction-1 Manual Corrections   | 20,001 - 20,370                     | 5.00  |
| BVU-50 Corr 1         | MU50-C1      | Correction of Supplement-1  | —                                   | 5.00  |
| BVU-100 Ed 1, Rev 1   | MU100-E1R1   | Portable Videocassette Recorder   | 10,001 - 10,290                     | 30.00 |
| BVU-100 Ed 2          | MU100-E2     | Portable Videocassette Recorder   | 20,001 - 20,350                     | 30.00 |
| BVU-100 Ed 3, Rev 3   | MU100-E3R3   |   | 20,351 - Higher                     | 30.00 |
| BVU-100 Suppl 1       | MU100-S1     | 1. Correction<br>2. Change Information  | 20,001 - 20,350                     | 5.00  |
| BVU-100 Suppl 3-1     | MU100-S3-1   | Manual Correction; Change Information, Supplement to 3rd Edition                          | 20,351 - 20,720                     | 5.00  |
| BVU-100 Suppl 3-2     | MU100-S3-2   | 1. Correction<br>2. Change Information  | 20,351 - 21,110                     | 5.00  |
| BVU-100 Corr          | MU100-C1     | Correction to 2nd Edition   | 20,001 - 20,150                     | 5.00  |
| BVU-110 Theory        | MU110-TO     | Theory of Operation   | —                                   | 10.00 |
| BVU-110 Ed 1, Rev 5   | MU110-E1R5   | Portable Videocassette Recorder   | 10,001 - 11,430                     | 30.00 |
| BVU-110 Ed 1, Rev 6   | MU110-E1R6   | U-Matic Portable Recorder/Player  | —                                   | 30.00 |
| BVU-110 Ed 1, Rev 7   | MU110-E1R7   | U-Matic Portable Recorder/Player  | —                                   | 30.00 |

**TECH MANUAL INDEX**  
**EDITION 1**

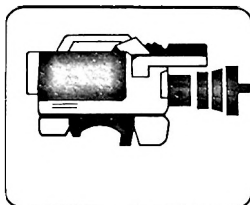
| <i>Manual</i>  | <i>Part No.</i>  | <i>Title/Description</i>   | <i>Appl.<br/>Serial No.</i>  | <i>Price</i>  |
|--|--|--|--|---|
| BVU-110 Ed 2<br>BVU-110 Suppl 1  | MU110-E2<br>MU110-S1   | Portable Videocassette Recorder<br>Change Information  | 20,001 - 20,650<br>10,361 - 10,610   | 30.00<br>5.00   |
| BVU-200 Dub Kit<br>BVU-200 Ed 1, Rev 2<br>BVU-200 Ed 1, Rev 3<br>BVU-200 Suppl 1<br>BVU-200 Suppl 3  | MU200-DUB<br>MU200-E1R2<br>MU200-E1R3<br>MU200-S1<br>MU200-S3  | Dub Kit for BVU-200<br>U-Matic Recorder/Player with Editing<br>Videocassette Recorder<br>Electrical Alignment<br>Preventive Maintenance, Replace-<br>ment of Major Components  | —<br>10,001 - Higher<br>10,001 - 11,350<br>10,001 - Higher<br>10,001 - Higher  | 5.00<br>30.00<br>30.00<br>5.00<br>5.00  |
| BVU-200 Suppl Vol. 1   | MU200-S-V1   | Videocassette Recorder<br>Technical Manual   | —  | 5.00  |
| BVU-200 Suppl Vol. 2   | MU200-S-V2   | Service Manual Volume 2<br>Block Diagrams, Schematics, Parts<br>List   | 10,001 - 10,250  | 5.00  |
| BVU-200 Suppl Vol. 3   | MU200-S-V3   | Videocassette Recorder<br>Electrical Alignment   | 10,001 - Higher  | 5.00  |
| BVU-200 Suppl Vol. 4   | MU200-S-V4   | Videocassette Recorder<br>Mechanical Alignment   | 10,001 - Higher  | 5.00  |
| BVU-200A Ed 3<br>BVU-200A Suppl 1  | MU200A-E3<br>MU200A-S1   | Videocassette Recorder<br>1. Caution and Other Information<br>2. Replacement of Major Parts<br>3. Mechanical Alignment   | 20,001 - Higher<br>—   | 30.00<br>5.00   |
| BVU-200A Suppl 2   | MU200A-S2  | Electrical Alignment   | —  | 5.00  |
| BVU-200B Theory<br>BVU-200B Ed 2, Rev 9<br>BVU-200B Corr 1   | MU200B-TO<br>MU200B-E2R9<br>MU200B-C1  | Theory of Operation<br>Videocassette Recorder<br>1. This Correction 1 Applicable to<br>Operation and Maintenance<br>Manual, 2nd Edition, Revision-7<br>and Revision-8 Only.  | —<br>30,001 - Higher<br>32,851 - 33,520  | 10.00<br>30.00  |
| BVU-200B Suppl 1   | MU200B-S1  | 2. SY-15 Board Mounted Diagram.<br>An Added ED-4 Printed Wiring Board<br>Diagram   | 30,201 - 30,800  | 5.00  |
| BVU-800 Ed 1<br>BVU-800 Ed 1, Rev 1<br>BVU-800 Ed 2<br>BVU-800 Ed 3<br>BVU-800 Ed 4<br>BVU-800 Ed 5<br>BVU-800 Ed 6<br>BVU-800 Suppl 1<br>BVU-800 Suppl 2<br>BVU-800 Suppl 3 | MU800-E1<br>MU800-E1R1<br>MU800-E2<br>MU800-E3<br>MU800-E4<br>MU800-E5<br>MU800-E6<br>MU800-S1<br>MU800-S2<br>MU800-S3 | Videocassette Recorder<br>Videocassette Recorder<br>Videocassette Recorder<br>Videocassette Recorder<br>Videocassette Recorder<br>Videocassette Recorder<br>Videocassette Recorder<br>Revised Sections 17 and 18<br>Revised Sections 15-18<br>1. Revised Block Diagram | 10,001 - 10,200<br>10,001 - 10,100<br>10,201 - 10,500<br>10,501 - 10,950<br>10,951 - 11,550<br>11,551 - 12,250<br>14,751 - 14,950<br>10,001 - 10,200<br>10,201 - 10,500<br>10,501 - 10,950 | 30.00<br>30.00<br>30.00<br>30.00<br>30.00<br>30.00<br>30.00<br>5.00<br>5.00<br>5.00 |
| BVU-800 Suppl 4  | MU800-S4   | 2. Revised Sections 17 and 18<br>1. Revised Section 17, Printed Circuit<br>Board and Schematic Diagram<br>2. Revised Section 18-3, Electrical<br>Parts List  | 10,951 - 11,550  | 5.00  |
| BVU-800 Suppl 5  | MU800-S5   | 1. Revised Section 15, Block Diagram<br>2. Revised Section 17, Printed Circuit<br>Board and Schematic Diagram<br>3. Revised Section 18-3, Electrical<br>Parts List   | 11,551 - 12,250  | 5.00  |
| BVU-800 Suppl 6  | MU800-S6   | Added DC Voltage and Waveform  | 10,201 - 10,950  | 5.00  |

TECH MANUAL INDEX  
EDITION 1

| <i>Manual</i>                            | <i>Part No.</i> | <i>Title/Description</i>   | <i>Appl.<br/>Serial No.</i> | <i>Price</i> |
|--|-----------------|--|-----------------------------|--------------|
| BVU-800 Suppl 9                          | MU800-S9        | 1. Electrical Alignment  | —                           | 5.00         |
| BVU-800 Suppl 10                         | MU800-S10       | 2. Mechanical Alignment<br>Additional Information of The<br>Mounted Parts on The PW-79 Board<br>(Switching Regulator) to The "Elec-<br>trical Parts List." | —                           | 5.00         |
| BVU-800 T.C. Kit 1<br>BVU-800 T.C. Kit 2 |                 |  |                             |              |
| BVU-820<br>BVU-820 Suppl 1               | MU820-S1        | 1. Mechanical Alignment  | —                           | 5.00         |
| BVU-820 Suppl 3                          | MU820-S3        | 2. Electrical Alignment<br>Additional Information of The<br>Mounted Circuit Board FC-10  | —                           | 5.00         |
| BVV-1 Ed 1                               | MV1-E1          | Portable Videocassette Recorder  | 10,001 - 10,150             | 30.00        |
| BVW-10 Ed 1                              | MW10-E1         | Betacam Video Cassette Player  | 10,001 - 10,255             | 30.00        |
| BVX-30 Ed 1, Rev 3                       | MX30-E1R3       | Digital Video Multi Processor  | 10,001 - 10,399             | 50.00        |
| BVX-30 Ed 2                              | MX30-E2         | Digital Video Multi Processor  | 10,401 - 10,699             | 50.00        |
| BVX-30 Suppl 1                           | MX30-S1         | Function Addition  | 10,001 - 10,010             | 5.00         |
| BVX-30 Suppl 2                           | MX30-S2         | Electrical Alignment   | 10,001 - 10,199             | 5.00         |
| BVX-30 Suppl 3                           | MX30-S3         |  | 10,001 - 10,299             | 5.00         |
| BVX-30 Suppl 4                           | MX30-S4         | BVX-Kit 2, Modification for DT Normal<br>Play  | 10,001 - 10,399             | 5.00         |
| CA-3                                     |                 | Camera Adaptor BVP 1/3   |                             |              |
| CA-300 Ed 1                              | MCA300-E1       | Camera Adaptor BVP-330   | 20,001 - Higher             | 5.00         |
| CCU-300 Ed 2, Rev 3                      | MU300-E2R3      | Camera Control Unit/BVP-300  | —                           | 30.00        |
| CCU-300 Suppl 1                          | MU300-S1        | Cover Removal; Alignment   | 10,001 - Higher             | 5.00         |
| CCU-300 Suppl 2                          | MU300-S2        | Manual Change Information  | 10,001 - Higher             | 5.00         |
| CCU-300 Suppl 3                          | MCU300-S3       |  | —                           | 5.00         |
| CG-100                                   | MCG100          | SMPTE Time Code Generator  | —                           | 5.00         |
| CG-110                                   | MCG110          | SMPTE Time Code Generator  | —                           | 5.00         |
| CG-1000 Ed 2                             | MCG1000-E2      | SMPTE Time Code Generator/Reader   | 10,101 - 10,250             | 5.00         |
| CG-1000 Ed 4                             | MCG1000-E4      | SMPTE Time Code Generator/Reader   | 10,801 - Higher             | 5.00         |
| CG-1000 Suppl                            | MCG1000-S       | Check and Alignment to 2nd Edition   | —                           | 5.00         |
| CG-1000 Suppl 1                          | MCG1000-S1      | Supplement to 2nd Edition  | 10,101 - 10,250             | 5.00         |
| CLP-550 Ed 1, Rev 3                      | MLP550-E1R3     | Playback Adaptor (BVH-500)   | 10,001 - Higher             | 5.00         |
| CLP-550 Suppl 1                          | MLP550-S1       | 1. Playback Adaptor<br>2. Wiedergabe Adaptor<br>3. Adaptor Lecture   | 10,001 - Higher             | 5.00         |
| DTR-1100 Ed 1                            | MTR1100-E1      | Dynamic Motion Controller  | 21,201 - Higher             | 30.00        |
| DTR-2000 Ed 2                            | MTR2000-E2      | Dynamic Motion Controller  | —                           | 30.00        |
| HT-500A Ed 2                             | MHT500A-E2      | Chroma Stabilizer  | 10,001 - Higher             | 5.00         |

TECH MANUAL INDEX  
EDITION 1

| <i>Manual</i>                          | <i>Part No.</i>            | <i>Title/Description</i> | <i>Appl.<br/>Serial No.</i> | <i>Price</i> |
|--|----------------------------|--------------------------|-----------------------------|--------------|
| HT-1000 Ed 1, Rev 1<br>HT-1000 Suppl 1 | MHT1000-E1R1<br>MHT1000-S1 | Heterodyne Color Unit    | 10,001 - Higher<br>—        | 5.00<br>5.00 |
| IF-1000 Ed 1, Rev 2                    | MIF1000-E1R2               | Interface Box            | 10,001 - Higher             | 10.00        |
| VA-I                                   |                            | Component Adaptor BVV-1  |                             |              |
| VA-IV                                  |                            | Composite Adaptor BVV-1  |                             |              |



# bulletin index

# SUPPLEMENT

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

SEPTEMBER, 1983

This supplement to the January, 1983 index lists technical bulletins published July through September, 1983.

| <i>Model No.</i> | <i>Subject</i>  | <i>Serial No.</i>  | <i>Bulletin No.</i> |
|------------------|---|--|---------------------|
| Betacam          | Alignment Tools, Fixtures and PB Checker                          | All  | 83-153              |
| BKH-2011         | Flickering Display After IC Replacement On DY-01 Board            | 10,300 and Lower   | 83-137              |
| BKH-2012         | Display Flicker, BVH-2000 Control Panel                           | 10,500 and Lower   | 83-159              |
| BKH-2013         | Display Flicker, BVH-2000 Control Panel                           | 10,672 and Lower   | 83-159              |
| BVE-500A         | Manual Correction: Add Wheel Bracket Ass'y Name and Part Number   | All  | 83-130              |
| BVE-5000         | Ground Line Connections For BK-5002A Boards                       | 10,401 and Higher  | 83-129              |
| BVG-100          | New Carrying Cases For BVU-50 and BVG-100                         | 22,591 and Higher  | 83-132              |
| BVH-500          | New Replacement Part For SL-4 Board                               | All  | 83-147              |
|                  | Improved Frequency Response Adjustment For The Modulator Board    | All  | 83-161              |
| BVH-500A         | Manual Correction: SV-38 Component Board Mislabeled SV-37         | 21,001-21,699  | 83-154              |
|                  | Improved Frequency Response Adjustment For The Modulator Board    | All  | 83-161              |
| BVH-1100         | Tape Timer Idler Slippage   | 11,001 and Lower   | 8, Rev 2            |
|                  | Improved Capstan Override Function Following Tension Board Repair | 10,800 and Lower   | 83-150              |
| BVH-1100A        | Reel Aux-A Board; Component Change                                | 20,100 and Lower   | 83-127              |
|                  | Drum Servo Improvement For Editing Applications                   | 21,500 and Lower   | 83-149              |
|                  | Video Noise In The Programmed Jog Mode                            | 20,340 and Lower<br>(except 20,326;<br>20,328-20,330;<br>20,332;<br>20,334-20,337;<br>20,339 | 83-165              |
|                  | Compatibility Between CD-17 And RL-12 Boards                      | All  | 83-167              |

# INDEX SUPPLEMENT

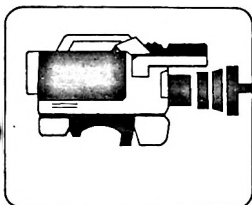
| Model No. | Subject   | Serial No.       | Bulletin No. |
|-----------|---|------------------|--------------|
| BVH-1180  | Corrections To Manual   | 10,101-10,399    | 83-146       |
|           | Drum Servo Improvement For Editing Applications                   | 10,500 and Lower | 83-149       |
| BVH-2000  | Manual Correction: Tape Speed Adjustment Spec                     | 10,600 and Lower | 83-157       |
|           | Unstable Image When 1" VTR Uses DT Head For Normal Playback       | 63,100 and Lower | 83-158       |
| BVP-1     | Addition To Manual: Part Number For Board Extractor               | All              | 83-139       |
|           | Improved Betacam Lens Mount Stability                             | All              | 83-163       |
| BVP-110   | Addition To Manual: Part Number For Board Extractor               | All              | 83-139       |
|           | CRT Harness Replacement Procedure                                 | 10,600 and Lower | 83-142       |
|           | Improved White Balance Memory And VF Filter Display               | 10,730 and Lower | 83-145       |
| BVP-250   | Corrections To Manual   | All              | 83-122       |
|           | SC Phase Circuit Improvement                                      | 11,120 and Lower | 83-143       |
| BVP-300A  | Corrections To Manual   | All              | 83-122       |
|           | SC Phase Circuit Improvement                                      | 21,120 and Lower | 83-143       |
| BVP-330   | Corrections To Manual   | All              | 83-122       |
|           | New AL-3 Board: Addition Of Bias Lamp Level Control               | All              | 83-140       |
|           | SC Phase Circuit Improvement                                      | 16,710 and Lower | 83-143       |
| BVR-510A  | Manual Correction: Add Wheel Bracket Ass'y Name And Part Number   | All              | 83-130       |
|           | BVU-820 DT Mode Cancelled When BVR-510A Search Dial Is At "Still" | All              | 83-160       |
| BVR-800   | Addition Of Insulating Sheet                                      | 10,015 and Lower | 83-155       |
|           | Corrections To Manual   | All              | 83-156       |
| BVR-820   | Addition Of Insulating Sheet                                      | 10,015 and Lower | 83-155       |
|           | Corrections To Manual   | All              | 83-156       |
| BVT-800   | Improved Operation At High AC Line Voltages                       | 11,500 and Lower | 83-136       |
| BVT-1000  | Replacement Of SN75207N (BH-1 Board)                              | 12,300 and Lower | 83-125       |
| BVT-2000  | Improved Stability Of Horizontal Position During Playback         | All              | 83-128       |
|           | Improved Blanking Temperature Stability                           | 10,001-10,600    | 83-148       |

| <i>Model No.</i>     | <i>Subject</i>   | <i>Serial No.</i>   | <i>Bulletin No.</i> |
|----------------------|--|---|---------------------|
| BVT-2000<br>(Cont'd) | BVT-2000 Video Level Control Modification When Used With BVH-2000                                    | 60,001-64,000   | 83-152              |
|                      | Video Output Vertical Timing Shift When TBC Is Used With BVU-820 Operating In Record Confidence Mode | 52,700 and Lower  | 83-166              |
| BVU Series           | Changes To RR5-3SB Alignment Tape  | All   | 83-124              |
| BVU-50               | New Carrying Cases For BVU-50 And BVG-100  | 22,591 and Higher   | 83-132              |
|                      | Improved Sync Separator Stability With High Video Levels   | 21,890 and Lower  | 83-151              |
|                      | Operation and Maintenance Manual Corrections   | All   | 83-164              |
| BVU-110              | Changes Of CP-25 Board And Handle Bracket  | 20,650 and Lower  | 83-123              |
| BVU-200, A, B        | Gear Box Change And New Threading Motor Ass'y Kit  | All (BVU-200);<br>All (BVU-200A);<br>32,700 and Lower<br>(BVU-200B) | 82-011<br>Rev. 01   |
| BVU-800              | Correction To Manual: Addition Of "Inner Sleeve" And "Ball Bearing" To D Roller Guide Assembly       | 10,500 and Lower  | 83-006<br>Rev. 02   |
|                      | Improved Heat Dissipation of -12V (3 Terminal REG) Power Supply                                      | 12,950 and Lower  | 83-099<br>Rev. 01   |
|                      | Change To Threading Ring Assembly  | 10,200 and Lower  | 83-126              |
|                      | Addition Of Shield Case Insulating Spacer  | All   | 83-131              |
|                      | Corrections To Manual  | 10,201 and Higher   | 83-133              |
|                      | Corrections To Manual  | All   | 83-135              |
|                      | RE-3 Board Change: Version A → Version B   | 14,451 and Higher   | 83-141              |
|                      | New Roller Flange (Upper)  | 12,951 and Higher   | 83-144              |
|                      | Addition Of Shield Case Insulating Spacer  | All   | 83-131              |
| BVU-820              | Corrections To Manual  | All   | 83-133              |
|                      | Corrections To Manual: Service Part Change   | All   | 83-134              |
|                      | Corrections To Manual  | All   | 83-135              |
|                      | RE-3 Board Change: Version A → Version B   | All   | 83-141              |
|                      | New Roller Flange (Upper)  | 10,351 and Higher   | 83-144              |
|                      | Video Output Vertical Timing Shift When TBC Is Used With BVU-820 Operating In Record Confidence Mode | 52,700 and Lower  | 83-166              |
|                      |  | All   | 83-138              |
| BVW-10               | EX-9 Extension Board   | All   |                     |



## INDEX SUPPLEMENT

| <i>Model No.</i> | <i>Subject</i>                                    | <i>Serial No.</i>   | <i>Bulletin No.</i> |
|------------------|---|---|---------------------|
| CCU-300          | Addition Of Audio Insulator                       | 11,200 and Lower  | 83-162              |
| VO-2000          | Gear Box Change And New Threading Motor Ass'y Kit | 28,090 and Lower<br>(VO-2610);<br>16,860 and Lower<br>(VO-2800);<br>14,010 and Lower<br>(VO-2860) | 83-011<br>Rev. 01   |

**bulletin index****SUPPLEMENT****SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134****APRIL, 1984**

This supplement to the January, 1984 index lists Technical Bulletins published January through March, 1984.

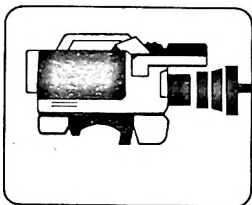
| <i>Model No.</i> | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|------------------|--|-------------------|---------------------|
| BK-5021          | Manual Corrections - SIO-1 Schematic                                     | 10,001-10,910     | 84-036              |
| BKH-2015         | Improved Hold Data Control Panel Display                                 | 10,200 And Lower  | 84-028              |
| BKH-2018         | Corrections To Manual  | All               | 84-042              |
| BKH- 2100        | Correction To Manual - Processor Alignment Section                       | 10,001-11,299     | 84-046              |
| BVE-3000         | Addition of Sync Defeat Switch for Easier H SYNC Timing                  | 30,046 and Lower  | 84-021              |
|                  | Addition of HSYNC Adjustment to CPR Board                                | 30,073 and Lower  | 84-039              |
| BVE-5000         | Correction To Manual: Sec. 1-11, Wipe Pattern Codes                      | 35,399 and Lower  | 84-029              |
| BVG-100          | Improved GEN/RDR Switching Operation                                     | 11,300 and Lower  | 84-041              |
| BVH-500A         | Improved Operation Of CF Lock Lamp                                       | 21,801-21,920     | 84-035              |
| BVH-1100A        | Manual Correction-Tension Detector Adjustment                            | 20,001-20,499     | 84-045              |
| BVH-2000         | Version 3 Software Update Kit  | 10,001-10,499     | 84-015              |
|                  | Improved T Guide And S Taper Guide                                       | 11,599 and Lower  | 84-022              |
|                  | Regen TC Output Selection  | 11,300 and Lower  | 84-023              |
|                  | Availability Of Supplement-6   | 10,001-11,799     | 84-026              |
|                  | Routing Audio-3 Monitor Signal To Waveform Monitor                       | All               | 84-027              |
|                  | Operation And Maintenance Manual Changes Required For Version 3 Software | 12,199 and Lower  | 84-032              |
|                  | Reduced Overshoot In REF/SYNC Separator                                  | 10,101-10,399     | 84-033              |
|                  | Relocation of Wire Harness To Allow Lowering Of Connector Panel          | 11,500 and Lower  | 84-034              |
| BVP-1            | Improved Blanking Level Clamp During Changes                             | 11,000 and Lower  | 84-038              |
|                  | Operation And Maintenance Manual Changes                                 | All               | 84-002              |
|                  | Vertical Crosstalk And Noise During VTR Start/Stop                       | 10,107 and Lower  | 84-010              |

# INDEX SUPPLEMENT

| <i>Model No.</i>  | <i>Subject</i>  | <i>Serial No.</i> | <i>Bulletin No.</i> |
|-------------------|---|-------------------|---------------------|
| BVP-1<br>(Cont'd) | Chroma Level Improvement at +12dB Setting                                 | 10,475 and Lower  | 84-013              |
|                   | Addition To Manual Parts List: Vidicon Socket Assembly                    | All               | 84-017              |
| BVP-250           | Replacing Pick-Up Tube Sockets During Periodic Maintenance Check          | All               | 84-008              |
|                   | Modification For Use With CA-300 And BVV-1                                | All               | 84-019              |
|                   | Change Of Crystal On The SG-40 Board                                      | 10,801 and Higher | 84-040              |
|                   |   |                   |                     |
| BVP-300           | Replacing Pick-Up Tube Sockets During Periodic Maintenance Check          | All               | 84-008              |
|                   | Modification For Use With CA-300 And BVV-1                                | All               | 84-019              |
| BVP-300A          | Replacing Pick-Up Tube Sockets During Periodic Maintenance Check          | All               | 84-008              |
|                   | Modification For Use With CA-300 And BVV-1                                | All               | 84-019              |
|                   | Change of Crystal On The SG-40 Board                                      | 21,101 and Higher | 84-040              |
| BVP-330           | Replacing Pick-Up Tube Sockets During Periodic Maintenance Check          | All               | 84-008              |
|                   | Modification For Use With CA-300 And BVV-1                                | All               | 84-019              |
|                   | Change Of Crystal On The SG-40 Board                                      | 11,301 and Higher | 84-040              |
| BVP-330A          | Replacing Pick-Up Tube Sockets During Periodic Maintenance Check          | All               | 84-008              |
|                   | Corrections To Manual   | All               | 84-009              |
| BVR-800           | Improved Preroll Operation  | 10,075 and Lower  | 84-001              |
| BVS-500           | Preventing Hum And Pop In The Audio Lines                                 | All               | 84-006              |
| BVT-2000          | Part Number Change  | 64,000 and Lower  | 84-004              |
|                   | Use Of Test Switches S1 And S2 On MY Board To Locate Defective Memory ICs | 12,199 and Lower  | 84-012              |
|                   | Improved Operation Of FAST FWD/REV Bidirex Detector                       | 64,100 and Lower  | 84-018              |
|                   |   |                   |                     |
| BVU-110           | Improved Reliability, Rotation Defector                                   | 20,000 and Lower  | 84-014              |
| BVU-800           | BVU-800 EPROM Update: Version 6   | 14,150 and Lower  | 84-003              |
|                   | Addition To Manual: Connector Part Number Information                     | All               | 84-020              |
|                   | 1. New SV-24 Board<br>2. Changes To Manual: Servo System Alignment        | 15,900 and Lower  | 84-025              |

# INDEX SUPPLEMENT

| <i>Model No.</i>    | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|---------------------|--|-------------------|---------------------|
| BVU-800<br>(Cont'd) | PCB Shield Case A Assembly Deleted                                 | 17,501 and Higher | 84-030              |
|                     | Switching Regulator Over-Voltage Detector Adjustment               | 10,800-15,900     | 84-043              |
| BVU-820             | New MB-36 Board And FC-10 Harness                                  | 10,745 and Lower  | 84-005              |
|                     | Manual Correction  | All               | 84-016              |
|                     | 1. New SV-24 Board<br>2. Changes To Manual: Servo System Alignment | 10,645 and Lower  | 84-025              |
|                     | PCB Shield Case A Assembly Deleted                                 | 10,896 and Higher | 84-030              |
|                     | Switching Regulator Over-Voltage Detector Adjustment               | 10,550 and Lower  | 84-043              |
|                     |  |                   |                     |
| BVV-1               | Addition To Manual Supplement-1                                    | All               | 84-031              |
|                     | Modification Of TR-15 Board When Used With New Tape End Sensor     | 10,690 and Lower  | 84-037              |
| BVW-10              | Improved Tape Tension Regulation In FWD/REV Mode                   | 10,255 and Lower  | 84-044              |
|                     | Version 3 Software Update Kit                                      | 10,001-10,499     | 84-015              |
| Canon Lens          | Canon Europe-Address Change  | All               | 84-011              |
| DTR-2000            | Incorrect Connector Reference Numbers: Driver And Display Boards   | All               | 84-024              |
| TBC-200             | Improved Operation Of FAST FWD/REV Bidirex Detector                | 12,668 and Lower  | 84-018              |
| VA-1                | Improved SYNC Separator Stability                                  | All               | 84-007              |

**bulletin index****January, 1984****SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134****COMPLETE INDEX OF TECHNICAL BULLETINS PUBLISHED IN 1983**

| <i>Model No.</i>           | <i>Subject</i>  | <i>Serial No.</i> | <i>Bulletin No.</i> |
|----------------------------|---|-------------------|---------------------|
| BC-210                     | Lamp Escutcheon Color Change                                      | 13,925 and Lower  | 83-056              |
|                            | Manual Correction   | All               | 83-094              |
|                            | Replacement of R77 (CH-2 Board)                                   | 15,275 and Lower  | 83-212              |
| Betacam                    | Alignment Tools, Fixtures And PB Checker                          | All               | 83-153              |
|                            | Replacement Procedure For "Chip" Components                       | All               | 83-185              |
| BK-101/102/<br>103         | Corrections To Manual, 1st Edition                                | All               | 83-012              |
| BK-102                     | Change In BVU-50 Screws To Mount BK-102 Interface<br>For BVG-100  | All<br>(BVU-50)   | 83-100              |
| BK-806                     | Switch Changes On TC-20 Board Of BK-806                           | 10,900 and Lower  | 83-095              |
|                            | Incorrect Replacement Part Numbers in Manual                      | All               | 83-169              |
|                            | Corrections To Manual   | All               | 83-201              |
| BK-1002                    | BK-1002 Switch And Jumper Positions For BVE-3000<br>BVU Interface | 20,001 and Higher | 83-187              |
| BK-1105/1106/<br>1107/1108 | Standardization Of Extension Cables                               | All               | 83-207              |
| BK-5005                    | BVH-2000 Output Termination For BK-5005/BVE-5000<br>Configuration | All               | 83-096              |
| BK-5031                    | Modifications For Connecting Terminals                            | 10,101 and Lower  | 83-027              |
| BKE-3001                   | Additions To Manual   | 31,001 and Higher | 83-186              |
| BKH-2011                   | Flickering Display After IC Replacement On<br>DY-01 Board         | 10,300 and Lower  | 83-137              |
| BKH-2012                   | Display Flicker, BVH-2000 Control Panel                           | 10,500 and Lower  | 83-159              |
| BKH-2013                   | Display Flicker, BVH-2000 Control Panel                           | 10,672 and Lower  | 83-159              |
| BKH-2015                   | LTC Polarity Change   | 10,200 and Lower  | 83-113              |
|                            | Time Code Characters Jitter When Adjusting<br>Horizontal Size     | All               | 83-175              |

# BULLETIN INDEX

| Model No.            | Subject   | Serial No.                      | Bulletin No.      |
|----------------------|---|---------------------------------|-------------------|
| BKH-2015<br>(Cont'd) | Noise In BVH Video Output Sync  | 10,200 and Lower                | 83-183            |
| BKH-2100             | Horizontal Picture Shift When Editing With<br>BVH-2000 In The Frame Lock Mode | 10,205 and Lower                | 83-035            |
|                      | Improved Hue Stability From Standby To Play Mode                              | 10,001-10,100                   | 83-120            |
|                      | H-Shift At Power-On Or Play   | 10,001-10,100                   | 83-179            |
| BKH-2100/<br>2200    | Improved Power-On In BVH-2000 Equipped With<br>BKH-2100/2200                  | —                               | 83-182            |
| BVE-500A             | Operation And Maintenance Manual Change<br>Information                        | All                             | 83-037            |
|                      | Loss Of DT Mode (BVU-820) When BVE-500A<br>Search Dial Is At "Still"          | All                             | 83-046            |
|                      | Manual Correction: Add Wheel Bracket Ass'y Name And<br>Part Number            | All                             | 83-130            |
| BVE-800              | Corrections To Manual: Switch Settings For<br>TTY Interface                   | All                             | 83-105            |
|                      | Correction To Manual  | All                             | 83-106            |
| BVE-3000             | Prevention Of Jog/Shuttle Knob Lock Up  | 30,045 and Lower                | 83-197            |
|                      | Corrections And Additions To 3rd Edition Operation<br>And Maintenance Manual  | All                             | 83-200            |
| BVE-5000             | G.V.G. E-MEM Interface  | All                             | 82-036<br>Rev. 01 |
|                      | Modifications For Connecting Terminals  | 10,101 and Lower<br>(BK-5031)   | 83-027            |
|                      | Improved Ramp Signal Stability And Adjustments For<br>ASE-2 Board             | 15,308-15,312;<br>20,401-20,411 | 83-079            |
|                      | PLL Lock Phase Stabilization  | 25,800 and Lower                | 83-090            |
|                      | Correction To Modification Procedure, Manual<br>Supplement-2 (BVE-Kit 2)      | All                             | 83-092            |
|                      | Corrections To Manual: KIO-1 Board  | All                             | 83-093            |
|                      | Stereo Audio Monitor Output Kit BVE-ST. MON                                   | 15,000 and Lower                | 83-098            |
|                      | Ground Line Connections For BK-5002A Boards                                   | 10,401 and Higher               | 83-129            |
|                      | Video Noise Caused By C37/C138 On VSE-2 Board                                 | 25,601-26,102                   | 83-213            |
| BVG-100              | New Carrying Cases For BVU-50 And BVG-100                                     | 22,591 and Higher               | 83-132            |
|                      | Manual Correction: Capacitor Part Number Change                               | —                               | 83-180            |

| Model No.           | Subject  | Serial No.       | Bulletin No. |
|---------------------|--|------------------|--------------|
| BVG-100<br>(Cont'd) | Manual Correction: Part Number Change                          | All              | 83-189       |
| BVG-1000            | Improved Character And Temperature Stability                   | 21,200 and Lower | 83-013       |
| BVG-1500            | CX-7913 Open Input Terminal                                    | —                | 83-190       |
| BVH-500             | Noise Reduction In CH-3 After Audio Erase Head Replacement     | All              | 83-119       |
|                     | New Replacement Part For SL-4 Board                            | All              | 83-147       |
|                     | Improved Frequency Response Adjustment For The Modulator Board | All              | 83-161       |
| BVH-500A            | Improved Tape Timer/Time Code (GEN) Power Off Memory Function  | 22,400 and Lower | 83-110       |
|                     | Noise Reduction In CH-3 After Audio Erase Head Replacement     | 21,000 and Lower | 83-119       |
|                     | Manual Correction: SV-38 Component Board Mislabeled SV-37      | 21,001-21,699    | 83-154       |
|                     | Improved Frequency Response Adjustment For The Modulator Board | All              | 83-161       |
| BVH-1000A           | Time Code Jam Sync With BVG-1000                               | All              | 83-011       |
|                     | -12V(B) Oscillation  | 21,100 and Lower | 83-019       |
|                     | Lamp For Function Control Switches: New Service Part           | All              | 83-041       |
| BVH-1100            | Incorrect Etching Pattern On Tension Board                     | 10,201-11,100    | 83-001       |
|                     | Tape Speed In Programmed Jog Mode                              | 10,400 and Lower | 83-002       |
|                     | Reversed Capstan Rotation During Programmed Jog Still          | 10,800 and Lower | 83-003       |
|                     | Time Code Jam Sync With BVG-1000                               | All              | 83-011       |
|                     | DT Lamp  | 10,001-10,801    | 83-020       |
|                     | Framing Board Capacitor, Polarity Reversal                     | 10,001-10,100    | 83-030       |
|                     | Prevention Of Tension Pinch Roller Chatter                     | 10,001-10,300    | 83-031       |
|                     | Playback CTL Amplifiers, DC Offset                             | All              | 83-032       |
|                     | Possible Shorts Between Mother Boards And Chassis              | 10,301-10,500    | 83-033       |
|                     | Player VTR May Not Enter Still At The End Of An Auto Edit      | 10,100 and Lower | 83-036       |
|                     | Lamp For Function Control Switches: New Service Part           | All              | 83-041       |



# BULLETIN INDEX

| Model No.            | Subject  | Serial No.        | Bulletin No. |
|----------------------|--|-------------------|--------------|
| BVH-1100<br>(Cont'd) | VTR May Not Accept Commands When Power Is Applied                      | 11,005 and Lower  | 83-042       |
|                      | Intermittent Operation Of Jog Button                                   | 10,201-10,900     | 83-043       |
|                      | Improved Tape Handling In FF And REW Modes                             | 10,000-10,200     | 83-049       |
|                      | Improvement In RF Envelope When Changing From P. Jog X2 To Play        | 10,001-10,300     | 83-052       |
|                      | Reel Oscillation in P. Jog X½ Speed                                    | 10,001-10,200     | 83-060       |
|                      | Picture Disturbance Due To CTL Track Drop-Out                          | All               | 83-061       |
|                      | Incorrect Capstan Rotation Following Power On                          | 11,000 and Lower  | 83-114       |
|                      | Improved Capstan Override Function Following Tension Board Repair      | 10,800 and Lower  | 83-150       |
|                      | Search Dial Locks In P. Jog X2   | 10,400 and Lower  | 83-176       |
|                      | Tape Timer Idler Slippage  | 11,001 and Lower  | 8, Rev 2     |
| BVH-1100A            | Loss Of Audio Editing Capability Due To IC Failure                     | 20,500 and Lower  | 83-004       |
|                      | Power Supply Noise Filter  | All               | 83-007       |
|                      | Time Code Jam Sync With BVG-1000                                       | All               | 83-011       |
|                      | Improved Capstan And Tension Motor Functions                           | 20,300 and Lower  | 83-034       |
|                      | Lamp For Function Control Switches:<br>New Service Part                | All               | 83-041       |
|                      | Improved Tape Handling When Using Partial Tape Reels                   | 20,200 and Lower  | 83-050       |
|                      | Framing-A Board Replacement  | 20,500 and Lower  | 83-051       |
|                      | Diode Reverse Voltage Rating Increase                                  | 20,100 and Lower  | 83-053       |
|                      | Improved Diode Reliability, MPA-A Board                                | 20,600 and Lower  | 83-059       |
|                      | Reel Oscillation In P. Jog X½ Speed                                    | 10,001-10,200     | 83-060       |
|                      | Picture Disturbance Due To CTL Track Drop-Out                          | All               | 83-061       |
|                      | Tape Tension Improvement During Transition From ¼ FWD or ¼ REV To Stop | 20,001-20,299     | 83-067       |
|                      | New WFM Select Switch  | 21,301 and Higher | 83-086       |
|                      | Audio Select Switch Modification                                       | All               | 83-088       |
|                      | Timer-2 Does Not Count With CG-1000G/R Installed                       | 20,600 and Lower  | 83-108       |

| Model No.             | Subject  | Serial No.   | Bulletin No. |
|-----------------------|--|--|--------------|
| BVH-1100A<br>(Cont'd) | Reel Aux-A Board; Component Change                             | 20,100 and Lower   | 83-127       |
|                       | Drum Servo Improvement For Editing Applications                | 21,500 and Lower   | 83-149       |
|                       | Video Noise In The Programmed Jog Mode                         | 20,340 and Lower<br>(except 20,326;<br>20,328-20,330;<br>20,332;<br>20,334-20,337;<br>20,339 | 83-165       |
|                       | Reduced Transitional Tape Slack Between FF And Rev Modes       | 21,500 and Lower   | 83-191       |
|                       | Tension Arm Oscillation; Stop To Play Transition               | 21,400 and Lower   | 83-209       |
| BVH-1180              | Picture Disturbance Due To CTL Drop-Out                        | All  | 83-061       |
|                       | New WFM Select Switch  | 10,201 and Higher  | 83-086       |
|                       | Audio Select Switch Modification                               | 10,200 and Lower   | 83-088       |
|                       | Corrections To Manual  | 10,101-10,399  | 83-146       |
|                       | Drum Servo Improvement For Editing Applications                | 10,500 and Lower   | 83-149       |
| BVH-2000              | Reduced Transitional Tape Slack Between FF And Rev Modes       | 10,500 and Lower   | 83-191       |
|                       | Tension Arm Oscillation; Stop To Play Transition               | 10,300 and Lower   | 83-209       |
|                       | BVH-2000 Output Termination For BK-5005/BVE-5000 Configuration | All  | 83-096       |
|                       | Clamp Circuit Improvement, DM-25 Board                         | 10,700 and Lower   | 83-112       |
|                       | Black Stripes In Video During REC Confidence Mode              | 10,700 and Lower   | 83-118       |
|                       | Manual Correction: Tape Speed Adjustment Spec                  | 10,600 and Lower   | 83-157       |
|                       | Unstable Image When 1" VTR Uses DT Head For Normal Playback    | 63,100 and Lower   | 83-158       |
|                       | Compatibility Between CD-17 And RL-12 Boards                   | All  | 83-167       |
|                       | Standby Mode Cancelled Due To Noise                            | 10,400 and Lower   | 83-168       |
|                       | Improvement Of RF Envelope Display On Waveform Monitor         | 10,800 and Lower   | 83-170       |
|                       | Audio-1 And Audio-2 Bias Level Adjustment                      | 10,800 and Lower   | 83-171       |
|                       | Distortion Of Vertical Sync Equalizing Pulses                  | 10,700 and Lower   | 83-172       |
|                       | Improved Power-On In BVH-2000 Equipped With BKH-2100/2102      | 10,800 and Lower   | 83-182       |

# BULLETIN INDEX

| Model No.            | Subject   | Serial No.        | Bulletin No. |
|----------------------|---|-------------------|--------------|
| BVH-2000<br>(Cont'd) | Color Framed Edits: BVH-2000 (With BKH-2100)<br>Controlled By BVE-3000/5000 | All               | 83-194       |
|                      | Improved Tape Timer Operation   | 10,501-11,000     | 83-195       |
|                      | Improved Operation Of CTL And Audio Relays                                  | 10,700 and Lower  | 83-204       |
|                      | Manual Parts List Changes and Additions                                     | All               | 83-210       |
| BVM-1200/<br>1201    | V Jitter When Used With BVU Series VTR                                      | All               | 83-005       |
| BVP Cameras          | New Logarithmic Gray Scale  | All               | 83-028       |
|                      | Improved White Balance And Color<br>Reproduction                            | All               | 83-065       |
| BVP-7                | White Balance Shift And VF Filter Display Malfunction                       | 10,050 and Lower  | 83-107       |
|                      | Addition To Manual: Part Number For Board Extractor                         | All               | 83-139       |
|                      | Improved Betacam Lens Mount Stability                                       | All               | 83-163       |
| BVP-110              | Change Of Lock Knob   | 10,701 and Higher | 83-058       |
|                      | Improved White Balance And Color Reproduction                               | All               | 83-065       |
|                      | BVP-110 Manual, Supplement-2: Alignment Change                              | 10,001 and Higher | 83-087       |
|                      | Optional Modification To Improve Red Color<br>Reproduction                  | All               | 83-089       |
|                      | Correction To Manual  | All               | 83-103       |
|                      | Change In Red Level Color Frame Specification                               | All               | 83-117       |
|                      | Addition To Manual: Part Number For Board Extractor                         | All               | 83-139       |
|                      | CRT Harness Replacement Procedure   | 10,600 and Lower  | 83-142       |
|                      | Improved White Balance Memory And VF Filter<br>Display                      | 10,730 and Lower  | 83-145       |
|                      | New Service Part: Front Panel For 3-Tube Color Camera<br>Prism              | All               | 83-071       |
| BVP-250              | New Service Part: Filter Disk For 3-Tube Color Camera                       | All               | 83-073       |
|                      | Operation And Maintenance Manual  | All               | 83-101       |
|                      | Change In CRT Hood Assembly   | 11,001 and Higher | 83-116       |
|                      | Corrections To Manual   | All               | 83-122       |
|                      | SC Phase Circuit Improvement  | 11,120 and Lower  | 83-143       |
| BVP-300              | Manuals and Supplements Available   | All               | 83-039       |

| <i>Model No.</i>    | <i>Subject</i>  | <i>Serial No.</i> | <i>Bulletin No.</i> |
|---------------------|---|-------------------|---------------------|
| BVP-300<br>(Cont'd) | New Service Part: Front Panel For 3-Tube Color Camera Prism       | All               | 83-071              |
|                     | New Service Part: Filter Disk For 3-Tube Color Camer              | All               | 83-073              |
| BVP-300A            | New Service Part: Front Panel For 3-Tube Color Camera Prism       | All               | 83-071              |
|                     | New Service Part: Filter Disk For 3-Tube Color Camera             | All               | 83-073              |
|                     | Change In CRT Hood Assembly                                       | 21,101 and Higher | 83-116              |
|                     | Corrections To Manual   | All               | 83-122              |
|                     | SC Phase Circuit Improvement                                      | 21,120 and Lower  | 83-143              |
|                     |   |                   |                     |
| BVP-330             | New Service Part: Front Panel For 3-Tube Color Camera Prism       | All               | 83-071              |
|                     | Change Of Part Number For Side Cover (A)                          | All               | 83-074              |
|                     | Change In CRT Hood Assembly                                       | 11,301 and Higher | 83-116              |
|                     | Corrections To Manual   | All               | 83-122              |
|                     | New AL-3 Board: Addition Of Bias Lamp Level Control               | All               | 83-140              |
|                     | SC Phase Circuit Improvement                                      | 16,710 and Lower  | 83-143              |
| BVR-510A            | Manual Correction: Add Wheel Bracket Ass'y Name And Part Number   | All               | 83-130              |
|                     | BVU-820 DT Mode Cancelled When BVR-510A Search Dial Is At "Still" | All               | 83-160              |
| BVR-800             | Addition Of Insulating Sheet                                      | 10,015 and Lower  | 83-155              |
|                     | Corrections To Manual   | All               | 83-156              |
| BVR-820             | Addition Of Insulating Sheet                                      | 10,015 and Lower  | 83-155              |
|                     | Corrections To Manual   | All               | 83-156              |
| BVS-500             | Incorrect Audio Phase   | All               | 83-199              |
| BVT-800             | Power Supply, Isolated Ground Reference And Revised Alignment     | All               | 83-082              |
|                     | Improved Operation At High AC Line Voltages                       | 11,500 and Lower  | 83-136              |
|                     | Improved High AC Input Voltage Control                            | 11,500 and Lower  | 83-192              |
| BVT-1000            | IC Substitution On D0-1 And MY-1 Boards                           | 11,801-12,100     | 83-009              |
|                     | Improved PB-V Phase Stability                                     | 11,400 and Lower  | 83-014              |
|                     | 140NSEC Video Delay When VTR Is In The Frame Mode                 | 12,100 and Lower  | 83-018              |

# BULLETIN INDEX

| <i>Model No.</i>     | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|----------------------|--|-------------------|---------------------|
| BVT-1000<br>(Cont'd) | Replacement Of SN75207N (BH-1 Board)   | 12,300 and Lower  | 83-125              |
| BVT-2000             | Hue Instability After U-Matic "Long Pause"   | 10,500 and Lower  | 83-015              |
|                      | Hue Variations When Switching Between<br>U-Matic AFC/APC Modes   | 10,601-10,672     | 83-016              |
|                      | DP Deviation Due To Temperature  | 11,600 and Lower  | 83-017              |
|                      | Input Protection Of Data Line Driver<br>(A-D Converter)  | 12,300 and Lower  | 83-021              |
|                      | Vertical Picture Shift At Speeds Greater Than X2 Play  | 63,040 and Lower  | 83-040              |
|                      | Improved Burst Width Stability   | 10,001-10,600     | 83-045              |
|                      | Preventing Hue Variations During Dropout   | 11,200 and Lower  | 83-047              |
|                      | SC Lock Stability At Low Temperatures  | 11,300 and Lower  | 83-048              |
|                      | Optional Modification To Increase Hue Control Range  | 10,101 and Higher | 83-062              |
|                      | Reduction Of Hue Deviation With Temperature<br>Changes   | 10,600 and Lower  | 83-063              |
|                      | Overheating Of Power Transformer Connectors  | 10,001-10,400     | 83-075              |
|                      | DOC In DT Mode When BVT-2000 Is Used With BVU-820  | 63,300 and Lower  | 83-083              |
|                      | Improved Drop Out Compensation   | 11,700 and Lower  | 83-111              |
|                      | DT Picture Quality Improvement   | 60,000 and Lower  | 83-115              |
|                      | Improved Stability Of Horizontal Position<br>During Playback   | All               | 83-128              |
|                      | Improved Blanking Temperature Stability  | 10,001-10,600     | 83-148              |
|                      | BVT-2000 Video Level Control Modification<br>When Used With BVH-2000                                       | 60,001-64,000     | 83-152              |
|                      | Unstable Image When 1" VTR Uses DT Head For<br>Normal Playback   | 63,100 and Lower  | 83-158              |
|                      | Video Output Vertical Timing Shift When TBC Is<br>Used With BVU-820 Operating In Record<br>Confidence Mode | 52,700 and Lower  | 83-166              |
|                      | Spike In SG-28(N) Board "A BLK OUT" Signal   | 52,720 and Lower  | 83-181              |
|                      | DO-9 Board Change: New Reference Comp<br>Video-2 Terminal  | 52,600 and Lower  | 83-198              |
| BVU Series           | Changes To RR5-3SB Alignment Tape  | All               | 83-124              |
|                      | BVU Switching Position Specification   | All               | 83-211              |

| <i>Model No.</i> | <i>Subject</i>   | <i>Serial No.</i>   | <i>Bulletin No.</i> |
|------------------|--|---|---------------------|
| BVU-50           | Manuals And Supplements Available                                | All   | 83-022              |
|                  | Servo Alarm Indicator Improvement                                | 20,180 and Lower  | 83-057              |
|                  | Improved Head Clog Detector: Change Of AR-7 Board To AR-8A Board | 21,890 and Lower  | 83-069              |
|                  | Addition Of Washer   | 21,740 and Lower  | 83-072              |
|                  | Change In BVU-50 Screws To Mount BK-102 Interface For BVG-100    | All   | 83-100              |
|                  | Micro Switch And Brake Ass'y Change                              | 21,191 and Higher   | 83-104              |
|                  | New Carrying Cases For BVU-50 And BVG-100                        | 22,591 and Higher   | 83-132              |
|                  | Improved Sync Separator Stability With High Video Levels         | 21,890 and Lower  | 83-151              |
|                  | Operation and Maintenance Manual Corrections                     | All   | 83-164              |
|                  | Manual Correction  | All   | 83-174              |
| BVU-100          | Change Of Drum Eccentricity Gauge Mounting Position              | All   | 83-097              |
|                  | Micro Switch And Brake Ass'y Change                              | 21,781 and Higher   | 83-104              |
| BVU-110          | Improved Operation Of RF Warning Lamp Circuit                    | 10,001-10,610   | 82-021<br>Rev 01    |
|                  | New Stop Lever   | 11,060 and Lower  | 83-008              |
|                  | Change Of "Plate, Function (4) (FF, REW)"                        | 10,060 and Lower  | 83-010              |
|                  | Standardization Of "Belt, Strap"                                 | All   | 83-054              |
|                  | TR Arm Assembly Parts Standardization                            | 11,730 and Lower  | 83-066              |
|                  | Addition Of Support Plate Threading Lever (A)                    | 11,730 and Lower  | 83-070              |
|                  | Electromagnetic Interference In Audio Line Out                   | 20,650 and Lower<br>21,050 and Lower                                | 83-102              |
|                  | Micro Switch And Bracket Ass'y Change                            | 10,881 and Higher   | 83-104              |
|                  | Changes Of CP-25 Board And Handle Bracket                        | 20,650 and Lower  | 83-123              |
|                  | Improved 3.58MHz Reference Oscillator Stability                  | 21,700 and Lower  | 83-178              |
|                  | Capstan And Drum Motor Drive Improvement                         | 22,050 and Lower  | 83-188              |
|                  | Gear Box Change And New Threading Motor Ass'y Kit                | All (BVU-200);<br>All (BVU-200A);<br>32,700 and Lower<br>(BVU-200B) | 82-011<br>Rev 01    |
|                  |  | All   | 83-203              |
| BVU-200, A, B    | Noise Due To Tape Distortion During Edit                         | All   |                     |

# BULLETIN INDEX

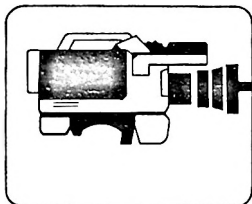
| Model No. | Subject   | Serial No.        | Bulletin No.      |
|-----------|---|-------------------|-------------------|
| BVU-800   | Correction To Manual: Supplement-9  | All               | 82-090<br>Rev. 01 |
|           | Correction To Manual: Addition Of "inner Sleeve"<br>And "Ball Bearing" To D Roller Guide Assembly | 10,500 and Lower  | 83-006<br>Rev. 02 |
|           | Corrections To Manual   | 10,200 and Lower  | 83-023            |
|           | Change Of Guide Flange (Lower)  | 10,500 and Lower  | 83-024            |
|           | Regulation Improvement  | 10,001-10,500     | 83-025            |
|           | Tape Curling At Guide Roller  | 10,950 and Lower  | 83-026            |
|           | Correction To Manual  | All               | 83-044            |
|           | Possible Tape Damage When Switching<br>The VCR From Local To Remote                               | 15,250 and Lower  | 83-064            |
|           | Improved Search Dial Speed Control  | 11,550-12,950     | 83-076            |
|           | New Upper Lid   | All               | 83-077            |
|           | New Tension Spring  | 10,500 and Lower  | 83-080            |
|           | Improved Cassette Control Rack Ass'y  | 14,750 and Lower  | 83-081            |
|           | Drop Out Control Level Correction   | 13,450 and Lower  | 83-091            |
|           | Switch Changes On TC-20 Board Of BK-806   | All               | 83-095            |
|           | Improved Heat Dissipation Of - 12V (3 Terminal REG)<br>Power Supply                               | 12,950 and Lower  | 83-099<br>Rev. 01 |
|           | 335MM (13 Inch) 40 Pin Flat Cable   | All               | 83-121            |
|           | Change To Threading Ring Assembly   | 10,200 and Lower  | 83-126            |
|           | Addition Of Shield Case Insulating Spacer   | All               | 83-131            |
|           | Corrections To Manual   | 10,201 and Higher | 83-133            |
|           | Corrections To Manual   | All               | 83-135            |
|           | RE-3 Board Change: Version A→Version B  | 14,451 and Higher | 83-141            |
|           | New Roller Flange (Upper)   | 12,951 and Higher | 83-144            |
|           | V-Sync Time Code Interference   | All               | 83-177            |
|           | Change Of T Threading Assembly  | —                 | 83-196            |
|           | New Key Panel Sub Assembly  | —                 | 83-202            |
|           | New Switches On YD-8 Board  | 14,950 and Lower  | 83-205            |
|           | Change Of AU-13 (AU-25) Board And Related Adjustments   | —                 | 83-206            |

| <b>Model No.</b>    | <b>Subject</b>  | <b>Serial No.</b>   | <b>Bulletin No.</b> |
|---------------------|---|---|---------------------|
| BVU-800<br>(Cont'd) | Corrections To Manual: Frame (2) (MB-9)<br>Schematic Diagram  | 10,001-10,200   | 83-208              |
| BVU-820             | Improved Cassette Control Rack Ass'y  | 10,150 and Lower  | 83-081              |
|                     | DOC In DT Mode When BVT-2000 Is Used With BVU-820   | All   | 83-083              |
|                     | Improved Dynamic Tracking   | 10,150 and Lower;   | 83-084              |
|                     | Improved Dynamic Tracking (Cont'd)  | (except 10,011;<br>10,016; 10,023;<br>10,055; 10,066;<br>10,076; 10,081;<br>10,082; 10,084;<br>10,086; 10,096;<br>10,097; 10,104;<br>10,107;<br>10,111-10,113;<br>10,119; 10,120;<br>10,123 |                     |
|                     | Color D0 When Using BVU-820 In DT Mode With TBC   | 10,080 and Lower  | 83-085<br>Rev 1     |
|                     | 335MM (13 Inch) 40 Pin Flat Cable   | All   | 83-121              |
|                     | Addition Of Shield Case Insulating Spacer   | All   | 83-131              |
|                     | Corrections To Manual   | All   | 83-133              |
|                     | Corrections To Manual: Service Part Change  | All   | 83-134              |
|                     | Corrections To Manual   | All   | 83-135              |
|                     | RE-3 Board Change: Version A      Version B   | All   | 83-141              |
|                     | New Roller Flange (Upper)   | 10,351 and Higher   | 83-144              |
|                     | Video Output Vertical Timing Shift When TBC Is Used<br>With BVU-820 Operating In Record Confidence Mode | 52,700 and Lower  | 83-166              |
|                     | V-Sync Time Code Interference   | All   | 83-177              |
|                     | Preventing Dropouts In DT When PB Speed<br>Exceeds FWD x 1  | —   | 83-184              |
|                     | Preventing H Flagging When Editing  | 10,745 and Lower  | 83-193              |
|                     | Change Of T Threading Assembly  | —   | 83-196              |
|                     | New Key Panel Sub Assembly  | —   | 83-202              |
|                     | Change Of AU-13 (AU-25) Board And Related Adjustments   | —   | 83-206              |
| BVV-1               | RA-8 Board Transistor Lead Check To Prevent<br>Y Channel-A Recording Malfunction                        | 10,150 and Lower  | 83-173              |



# BULLETIN INDEX

| <i>Model No.</i> | <i>Subject</i>  | <i>Serial No.</i>  | <i>Bulletin No.</i> |
|------------------|---|--|---------------------|
| BVW-10           | EX-9 Extension Board  | All  | 83-138              |
| BVX-30           | BVX-Kit 1   | 10,001-10,100  | 83-029              |
|                  | Optional "Auto Freeze" Bypass/Operate Switch                | All  | 83-055              |
| Cameras          | Lens Manufactures And Service Networks                      | All  | 83-109              |
| CCU-300          | Manuals and Supplements Available                           | All  | 83-038              |
|                  | Parts Standardization Of Remote Control Window (2) Assembly | 10,900 and Lower   | 83-068              |
|                  | New Circuit Board Holder                                    | 10,901 and Higher  | 83-078              |
|                  | Addition Of Audio Insulator                                 | 11,200 and Lower   | 83-162              |
| TBC              | DT Picture Quality Improvement                              | 12,623 and Lower   | 83-115              |
| VO-2000          | Gear Box Change And New Threading Motor Ass'y Kit           | 28,090 and Lower (VO-2610);<br>16,860 and Lower (VO-2800);<br>14,010 and Lower (VO-2850) | 83-011<br>Rev. 01   |
| VO-4800          | New Stop Lever  | 11,050 and Lower   | 83-008              |
|                  | Change Of "Plate, Function (4) (FF, REW)"                   | 11,050 and Lower   | 83-010              |
|                  | Standardization of "Belt, Strap"                            | All  | 83-054              |
|                  | TR Arm Assembly Parts Standardization                       | 10,050 and Lower   | 83-066              |
|                  | Addition Of Support Plate Threading Lever (A)               | 15,850 and Lower   | 83-070              |
|                  | Micro Switch And Bracket Ass'y Switch                       | 12,651 and Higher  | 83-104              |

**bulletin index****SUPPLEMENT**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

APRIL, 1983

This supplement to the January, 1983 index lists bulletins published January through March, 1983.

| <i>Model No.</i> | <i>Subject</i>   | <i>Serial No.</i>             | <i>Bulletin No.</i> |
|------------------|--|-------------------------------|---------------------|
| BC-210           | Lamp Escutcheon Color Change   | 13,925 and Lower              | 83-056              |
| BK-101/102/103   | Corrections To Manual, 1st Edition   | All                           | 83-012              |
| BK-5031          | Modifications For Connecting Terminals                                     | 10,101 and Lower              | 83-027              |
| BKH-2100         | Horizontal Picture Shift When Editing With BVH-2000 In The Frame Lock Mode | 10,205 and Lower              | 83-035              |
| BVE-500A         | Operation And Maintenance Manual Change Information                        | All                           | 83-037              |
|                  | Loss Of DT Mode (BVU-820) When BVE-500A Search Dial Is At "Still"          | All                           | 83-046              |
| BVE-5000         | G.V.G. E-MEM Interface   | All                           | 82-036<br>Rev. 01   |
|                  | Modifications For Connecting Terminals                                     | 10,101 and Lower<br>(BK-5031) | 83-027              |
| BVG-1000         | Improved Character And Temperature Stability                               | 21,200 and Lower              | 83-013              |
| BVH-1000A        | Time Code Jam Sync With BVG-1000   | All                           | 83-011              |
|                  | -12V(B) Oscillation  | 21,100 and Lower              | 83-019              |
|                  | Lamp For Function Control Switches:<br>New Service Part                    | All                           | 83-041              |
| BVH-1100         | Incorrect Etching Pattern On Tension Board                                 | 10,201-11,100                 | 83-001              |
|                  | Tape Speed In Programmed Jog Mode  | 10,400 and Lower              | 83-002              |
|                  | Reversed Capstan Rotation During Programmed Jog Still                      | 10,800 and Lower              | 83-003              |
|                  | Time Code Jam Sync With BVG-1000   | All                           | 83-011              |
|                  | DT Lamp  | 10,001-10,801                 | 83-020              |
|                  | Framing Board Capacitor, Polarity Reversal                                 | 10,001-10,100                 | 83-030              |
|                  | Prevention Of Tension Pinch Roller Chatter                                 | 10,001-10,300                 | 83-031              |

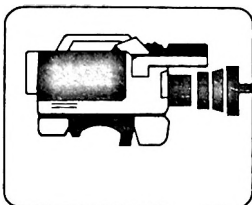
# INDEX SUPPLEMENT

| Model No.         | Subject  | Serial No.       | Bulletin No. |
|-------------------|--|------------------|--------------|
| BVH-1100 (Cont'd) | Playback CTL Amplifiers, DC Offset                                     | All              | 83-032       |
|                   | Possible Shorts Between Mother Boards And Chassis                      | 10,301-10,500    | 83-033       |
|                   | Player VTR May Not Enter Still At The End Of An Auto Edit              | 10,100 and Lower | 83-036       |
|                   | Lamp For Function Control Switches: New Service Part                   | All              | 83-041       |
|                   | VTR May Not Accept Commands When Power Is Applied                      | 11,005 and Lower | 83-042       |
|                   | Intermittent Operation Of Jog Button                                   | 10,201-10,900    | 83-043       |
|                   | Improved Tape Handling In FF And REW Modes                             | 10,000-10,200    | 83-049       |
|                   | Improvement In RF Envelope When Changing From P. Jog X2 To Play        | 10,001-10,300    | 83-052       |
|                   | Reel Oscillation in P. Jog X½ Speed                                    | 10,001-10,200    | 83-060       |
|                   | Picture Disturbance Due To CTL Track Drop-Out                          | All              | 83-061       |
| BVH-1100A         | Loss Of Audio Editing Capability Due To IC Failure                     | 20,500 and Lower | 83-004       |
|                   | Power Supply Noise Filter  | All              | 83-007       |
|                   | Time Code Jam Sync With BVG-1000                                       | All              | 83-011       |
|                   | Improved Capstan And Tension Motor Functions                           | 20,300 and Lower | 83-034       |
|                   | Lamp For Function Control Switches: New Service Part                   | All              | 83-041       |
|                   | Improved Tape Handling When Using Partial Tape Reels                   | 20,200 and Lower | 83-050       |
|                   | Framing-A Board Replacement  | 20,500 and Lower | 83-051       |
|                   | Diode Reverse Voltage Rating Increase                                  | 20,100 and Lower | 83-053       |
|                   | Improved Diode Reliability, MPA-A Board                                | 20,600 and Lower | 83-059       |
|                   | Reel Oscillation In P. Jog X½ Speed                                    | 10,001-10,200    | 83-060       |
|                   | Picture Disturbance Due To CTL Track Drop-Out                          | All              | 83-061       |
|                   | Tape Tension Improvement During Transition From ¼ FWD or ¼ REV To Stop | 20,001-20,299    | 83-067       |
|                   | Picture Disturbance Due To CTL Drop-Out                                | All              | 83-061       |
|                   | V Jitter When Used With BVU Series VTR                                 | All              | 83-005       |
| BVH-1180          |  |                  |              |
| BVM-1200/1201     |  |                  |              |

| <i>Model No.</i> | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|------------------|--|-------------------|---------------------|
| BVP-1            | Improved White Balance And Color Reproduction                    | All               | 83-065              |
| BVP-110          | Change Of Lock Knob  | 10,701 and Higher | 83-058              |
|                  | Improved White Balance And Color Reproduction                    | All               | 83-065              |
| BVP-300          | Manuals and Supplements Available                                | All               | 83-039              |
| BVP Cameras      | New Logarithmic Gray Scale                                       | All               | 83-028              |
| BVT-1000         | IC Substitution On D0-1 And MY-1 Boards                          | 11,801-12,100     | 83-009              |
|                  | Improved PB-V Phase Stability                                    | 11,400 and Lower  | 83-014              |
|                  | 140NSEC Video Delay When VTR Is In The Frame Mode                | 12,100 and Lower  | 83-018              |
| BVT-2000         | Hue Instability After U-Matic "Long Pause"                       | 10,500 and Lower  | 83-015              |
|                  | Hue Variations When Switching Between U-Matic AFC/APC Modes      | 10,601-10,672     | 83-016              |
|                  | DP Deviation Due To Temperature                                  | 11,600 and Lower  | 83-017              |
|                  | Input Protection Of Data Line Driver (A-D Converter)             | 12,300 and Lower  | 83-021              |
|                  | Vertical Picture Shift At Speeds Greater Than X2 Play            | 63,040 and Lower  | 83-040              |
|                  | Improved Burst Width Stability                                   | 10,001-10,600     | 83-045              |
|                  | Preventing Hue Variations During Dropout                         | 11,200 and Lower  | 83-047              |
|                  | SC Lock Stability At Low Temperatures                            | 11,300 and Lower  | 83-048              |
|                  | Optional Modification To Increase Hue Control Range              | 10,101 and Higher | 83-062              |
|                  | Reduction Of Hue Deviation With Temperature Changes              | 10,600 and Lower  | 83-063              |
| BVU-50           | Manuals And Supplements Available                                | All               | 83-022              |
|                  | Servo Alarm Indicator Improvement                                | 20,180 and Lower  | 83-057              |
|                  | Improved Head Clog Detector: Change Of AR-7 Board To AR-8A Board | 21,890 and Lower  | 83-069              |
| BVU-110          | Improved Operation Of RF Warning Lamp Circuit                    | 10,001-10,610     | 82-021<br>Rev. 01   |
|                  | New Stop Lever   | 11,060 and Lower  | 83-008              |
|                  | Change Of "Plate, Function (4) (FF, REW)"                        | 10,060 and Lower  | 83-010              |

# INDEX SUPPLEMENT

| <i>Model No.</i> | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|------------------|--|-------------------|---------------------|
| BVU-110 (Cont'd) | Standardization Of "Belt, Strap"   | All               | 83-054              |
|                  | TR Arm Assembly Parts Standardization  | 11,730 and Lower  | 83-066              |
|                  | Addition Of Support Plate Threading Lever (A)  | 11,730 and Lower  | 83-070              |
| BVU-800          | Correction To Manual: Addition Of "Inner Sleeve" And "Ball Bearing" To D Roller Guide Assembly | 10,500 and Lower  | 83-006              |
|                  | Corrections To Manual  | 10,200 and Lower  | 83-023              |
|                  | Change Of Guide Flange (Lower)   | 10,500 and Lower  | 83-024              |
|                  | Regulation Improvement   | 10,001-10,500     | 83-025              |
|                  | Tape Curling At Guide Roller   | 10,950 and Lower  | 83-026              |
|                  | Correction To Manual   | All               | 83-044              |
|                  | Possible Tape Damage When Switching The VCR From Local To Remote                               | 15,250 and Lower  | 83-064              |
|                  |  |                   |                     |
| BVX-30           | BVX-Kit 1  | 10,001-10,100     | 83-029              |
|                  | Optional "Auto Freeze" Bypass/Operate Switch   | All               | 83-055              |
| CCU-300          | Manuals and Supplements Available  | All               | 83-038              |
| VO-4800          | New Stop Lever   | 11,050 and Lower  | 83-008              |
|                  | Change Of "Plate, Function (4) (FF, REW)"  | 11,050 and Lower  | 83-010              |
|                  | Standardization of "Belt, Strap"   | All               | 83-054              |
|                  | TR Arm Assembly Parts Standardization  | 10,050 and Lower  | 83-066              |
|                  | Addition Of Support Plate Threading Lever (A)  | 15,850 and Lower  | 83-070              |
|                  |  |                   |                     |



# bulletin index

## January, 1983

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

### COMPLETE INDEX OF BROADCAST BULLETINS PUBLISHED THROUGH DECEMBER, 1982

| Model No. | Subject  | Serial No.                                     | Bulletin No. |
|-----------|--|--|--------------|
| AC-200    | Battery Overcharge   | All  | 80-1         |
| AC-500    | Pilot Lamp Current Reduction                                     | 10,000-10,780                                  | 80-9         |
|           | 'Converter Transformer' Change                                   | 10,750 and Lower                               | 81-23        |
|           | Change Of Hall IC  | 13,415 and Lower                               | 82-80        |
| AC-5000   | AC-5000 Charge Lamp  | 21,080 and Lower                               | 78-23        |
| BC-210    | Battery Overcharge   | All  | 80-1         |
|           | Pilot Lamp Current Reduction                                     | 10,001-10,780                                  | 80-9         |
|           | Improved Guide Ring  | 10,980 and Lower                               | 82-35        |
| BK-111    | 1. Time Code Recording Improvement<br>2. Thumbwheel Modification | 10,001-10,390                                  | 81-9         |
|           | Addition To Manual: User Bit Information                         | 10,001-10,390                                  | 81-17        |
|           | Electrical Alignment Of BK-111                                   | All  | 82-48        |
| BK-806    | CTL Not Selected During Low Search Speed                         | 10,400 and Lower                               | 82-59        |
|           | Video Detector For The BK-806                                    | 10,900 and Lower                               | 82-65        |
| BK-1181   | BK-1181 Schematic Correction                                     | All  | 1            |
|           | Improved Performance of Audio Monitor<br>Output And Alarm Level  | All (except<br>10,301-10,305<br>10,401-10,405) | 2            |
| BK-5002A  | On-Board Regulation Improvement                                  | 10,001-10,006                                  | 2            |
| BK-5004   | Providing Switched Time Code Using BK-5004                       | 20,501 and Lower                               | 7            |
| BVE-500   | Interchangeability Modification                                  | All  | 77-18        |
|           | Cue Detector (QC-2 Board)  | 20,350 and Lower                               | 78-19        |
| BVE-500A  | Interchangeability Modification                                  | All  | 77-18        |
|           | Digital Counter Operation at High<br>Temperatures                | 20,350 and Lower                               | 78-8R        |
|           | Tape Slack In BVU-200A When Used<br>With BVE-500A                | All  | 78-25        |

# BULLETIN INDEX

| <i>Model No.</i>     | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|----------------------|--|-------------------|---------------------|
| BVE-500A<br>(Cont'd) | Out Edit/Preview Timing Improvement  | 20,510 and Lower  | 79-6                |
|                      | UP/DOWN Counter Operation  | All               | 80-10R              |
| BVE-5000             | New AC IN Connector  | 21,711 and Higher | 80-28               |
|                      | Modification Required For Installation Of<br>BK-5022 And/Or BK-5031                  | 20,401 and Lower  | 82-18               |
|                      | G.V.G. E-MEM Interface   | All               | 82-36               |
|                      | Dip Switch Settings For BK-5003,<br>BVU-800 Maintenance                              | All               | 82-45               |
|                      | Changes in SIO-1 Board   | 10,006-10,201     | 1                   |
|                      | On-Board Regulation Improvement  | 10,001-10,006     | 2                   |
|                      | Ground Line Connections For BK-5003 Boards<br>On BVE-5000 Systems                    | 10,701 and Higher | 3                   |
|                      | BK-5003 Manual Correction  | All               | 4                   |
|                      | Corrections to the Manual:<br>Unit-3 Frame Wiring                                    | 20,400 and Lower  | 5                   |
|                      | Modification(s) Required To Use BK-5031 Paper<br>Tape Reader-Punch/Printer Interface | 20,401 and Lower  | 6                   |
|                      | Providing Switched Time Code Using BK-5004   | 20,501 and Lower  | 7                   |
|                      | 4 Field Detection/VTR Phase Correction   | 20,405 and Lower  | 8                   |
|                      | BK-5003 Modification When Connecting BVU-800<br>To BVE-5000                          | 10,001 and Higher | 9                   |
|                      | Operating Manual Update For Version V2.05 And<br>Above                               | All               | 10                  |
|                      | Jog Function Improvement   | 10,299 and Lower  | 11                  |
| BVG-1000             | Improved Time Code Detection With BVU-200  | 10,401 and Higher | 82-47               |
|                      | Potential Transformer Short  | All               | 2                   |
|                      | Technical Manual Corrections   | 10,001-10,261     | 3                   |
|                      | Noise Transients in Character Video Output   | All               | 4                   |
|                      | Improvement in VITC Reader   | 10,040 and Lower  | 5                   |
|                      | VITC Regeneration  | 10,040 and Lower  | 5                   |
|                      | Improved Detection of REF Lock   | 10,040 and Lower  | 5                   |
|                      | Reader Data Hold Function  | All               | 6                   |

| <i>Model No.</i> | <i>Subject</i>  | <i>Serial No.</i>                          | <i>Bulletin No.</i> |
|------------------|---|--|---------------------|
| BVH-500          | Increased Range of Audio Record Bias Adjustment                   | 10,100 and Lower                           | 1                   |
|                  | Reel Table Height Adjustment                                      | 10,071 and Higher                          | 2                   |
|                  | Production Changes  | 10,600 and Lower                           | 2A                  |
|                  | Video Output Differential Gain                                    | 10,200 and Lower                           | 3                   |
|                  | Stabilized Video Output   | 10,200 and Lower                           | 3                   |
|                  | Time Code Output Waveform Improvement                             | 10,001-10,103<br>10,105; 10,106;<br>10,113 | 4                   |
|                  | Audio Feedback Modification                                       | All  | 5                   |
|                  | Sync Channel REC/PB Improved                                      | 10,001-10,200                              | 6                   |
|                  | Improved Drum Response  | 10,001-10,401                              | 7                   |
|                  | Improved Standby Alarm  | 10,001-10,200                              | 8                   |
|                  | Wow and Flutter Improvement                                       | 10,001-10,200                              | 9                   |
|                  | Change of Tape Tension  | 10,001-10,600                              | 10                  |
|                  | Drum FG Waveform  | 10,600 and Lower                           | 11                  |
|                  | 15 Hz Edit Pulse  | All  | 12R                 |
|                  | Improved Battery Jack   | 10,701 and Lower                           | 13                  |
|                  | Double Gap Erase Head   | 10,700 and Lower                           | 14                  |
|                  | Excess Video Light Setting  | 10,001-10,200                              | 15                  |
|                  | Board Interface   | 10,600 and Lower                           | 16                  |
|                  | Timer Memory  | 10,001-10,500                              | 17                  |
|                  | Transistor Substitution   | All  | 18                  |
|                  | Tape Tracking Improvement By Elimination Of Tape Supporting Block | All  | 19                  |
|                  | Tape End Detection Malfunction                                    | 10,001-10,240                              | 20                  |
|                  | Reel Panel Change   | 10,001 and Higher                          | 21                  |
|                  | New Upper Drum Assembly   | 10,701 and Higher                          | 22                  |
|                  | Change In Part Number Of IC On RF-2 Board                         | 10,701 and Higher                          | 23                  |
|                  | Improving S/N Ratio And Distortion On The AU-10 Board             | 10,701 and Lower                           | 24                  |



# BULLETIN INDEX

| Model No.           | Subject   | Serial No.        | Bulletin No. |
|---------------------|---|-------------------|--------------|
| BVH-500<br>(Cont'd) | Improved Performance Of Tape Timer Memory                               | —                 | 25           |
| BVH-500A            | Improved Tape Timer Memory  | All               | 82-67        |
|                     | Technical Manual Corrections  | 21,001-21,899     | 1            |
|                     | Drum Servo Stability Improvement  | 21,112 and Lower  | 2            |
|                     | Reduction of Rewind Time  | 21,100 and Lower  | 3            |
|                     | Improved Responses Of Camera Alarm Circuit<br>To VTR Excess Video Alarm | 21,601 and Lower  | 4            |
|                     | Corrections To Manual: SY-73 Board<br>Part Number                       | 21,001-21,399     | 5            |
|                     | Reducing Noise In Drum FG Signal<br>To Prevent Brake Solenoid Chatter   | 22,300 and Lower  | 6            |
|                     | Improved VTR Response To Standby<br>Command From Camera                 | 21,600 and Lower  | 7            |
| BVH-1000            | Record Stop Inhibit   | All               | 7            |
|                     | Record Stop Inhibit with Constant Speed                                 | 10,100 and Lower  | 7B           |
|                     | Spot Audio, Cue Erase   | All               | 8            |
|                     | Equalization Controls   | All               | 9            |
|                     | Tape Timer Selector Switch Change                                       | All               | 12           |
|                     | Power ON-OFF Switchguard  | All               | 13           |
|                     | Standby Drop-Out Inhibit  | All               | 14           |
|                     | Split-Edit Modification (Change 2)                                      | All               | 15           |
|                     | HT-1000 Color-1 Board Change  | All               | 16           |
|                     | Audio Monitor OUT (Audio AUX) Installation                              | All               | 17           |
|                     | A/V Bias and EQ Readjustments for Extension<br>Cable Use (Change 2)     | 10,100 and Lower  | 19           |
|                     | Readjustments for Extension Cable Use                                   | 10,101 and Higher | 19A          |
|                     | Moiré Measurement Procedure   | All               | 20           |
|                     | Audio Impedance Modifications   | All               | 21           |
|                     | Reel Installation Difficulty  | 10,007-10,037     | 22           |
|                     | Waveform Monitor Switch Modification                                    | 10,100 and Lower  | 23           |
|                     | Capstan Override Modification   | 10,100 and Lower  | 24           |

| <i>Model No.</i>     | <i>Subject</i>  | <i>Serial No.</i>                  | <i>Bulletin No.</i> |
|----------------------|---|------------------------------------|---------------------|
| BVH-1000<br>(Cont'd) | Guardband and Hue Adjustments                                   | 10,100 and Lower                   | 25                  |
|                      | Reduce Back Tension During Still Frame                          | 10,100 and Lower                   | 26                  |
|                      | Tape Protection (FF, To Play)                                   | 10,100 and Lower                   | 27                  |
|                      | Bidirex Jog Limit   | 10,100 and Lower                   | 28                  |
|                      | Delete X25 Slow Down  | 10,100 and Lower                   | 29                  |
|                      | Power OFF Modifications   | 10,000 and Lower;<br>10,001-10,113 | 30                  |
|                      | Drum Replacement—Video Section<br>Adjustments                   | All                                | 32                  |
|                      | Extension Cables for Five-part<br>BVH-1000 System               | All                                | 33                  |
|                      | Locking Color Frame Mode  | 10,100 and Lower                   | 35                  |
|                      | Increasing Resistor Power Rating                                | 10,100 and Lower                   | 36                  |
|                      | Eliminating Cue Turn-Off "Click"                                | 10,040 and Lower                   | 37                  |
|                      | Hour Meter Modification   | 10,100 and Lower                   | 38                  |
|                      | Drum Brake Circuit Improvement                                  | 10,100 and Lower                   | 39                  |
|                      | Subcarrier Delay Line Check                                     | 10,100 and Lower                   | 40                  |
|                      | Increasing Demod Board Resistor<br>Power Rating                 | 10,100 and Lower                   | 41                  |
|                      | REW Chroma Shift Countermeasure                                 | 10,100 and Lower                   | 42                  |
|                      | Camera-Produced Overmodulation                                  | All                                | 43                  |
|                      | Video Hum with HT-1000  | 10,100 and Lower                   | 44                  |
|                      | Correcting Mode Shifts  | All                                | 46                  |
|                      | REC Amp Oscillator Change                                       | 20,201-20,300                      | 47                  |
|                      | Large-Input DG, DP Countermeasure                               | All                                | 48                  |
|                      | Tape Timer Accuracy Check and Adjustment                        | All                                | 49                  |
|                      | Improved MOD Board Square Wave<br>Response                      | All                                | 50                  |
|                      | Address Code Reassignment                                       | All                                | 50A                 |
|                      | Replacement of Audio Tape Guide to Reduce<br>Oxide Accumulation | 20,700 and Lower                   | 53R                 |
|                      | IC Replacement for HA17741G                                     | All                                | 54                  |

# BULLETIN INDEX

| Model No.            | Subject  | Serial No.   | Bulletin No. |
|----------------------|--|--|--------------|
| BVH-1000<br>(Cont'd) | Audio Logic Board  | All  | 55           |
|                      | Edit Phase Error Compensation  | All  | 57           |
|                      | Audio Level of Alignment Tape BR5-2                                      | All  | 58           |
|                      | Part Number for Audio/Video Meter Lamp                                   | All  | 59           |
| BVH-1000A            | Replacement Of Audio Erase Head  | 21,100 and Lower   | 82-61        |
|                      | Correction To Manual. IC Number On<br>SYS-2 Board                        | All  | 11           |
|                      | CTL Signal Polarity at "Remote In" Connector                             | All  | 12           |
|                      | Readjustments for Extension Cable Use                                    | 10,101 and Higher  | 19A          |
|                      | New Photo Couplers   | 21,001 and Lower   | 20           |
|                      | Mods/Kits Availability Announcement                                      | All  | 42B          |
|                      | Reel-2 Board, Search Detect, OSC.MOD.                                    | 20,219;<br>20,229 and Higher   | 51           |
|                      | Sys-3 Board Mod, Tape Hunting  | 20,219;<br>20,229 and Higher   | 52           |
|                      | Audio Logic Board  | All  | 55           |
|                      | Using Extension Cables   | All  | 56           |
|                      | Edit Phase Error Compensation  | All  | 57           |
|                      | Frequency Response Adjustment, Manual<br>Supplement 1                    | All  | 60           |
|                      | Service Tools and Fixtures   | All  | 61R          |
|                      | Improvement Of Playback Jitter With Self-<br>Recorded Tape               | All  | 82-58        |
| BVH-1100             | Replacement Of Audio Erase Head  | 10,300 and Lower   | 82-61        |
|                      | Improved Tape Handling When Repeatedly<br>Shifting Between Play And Stop | 10,001-11,000  | 82-62        |
|                      | Auto Tension Release At "Power On"                                       | 10,200 and Lower   | 82-68        |
|                      | Auto Edit Reliability Modification                                       | 10,100 and Lower   | 82-72        |
|                      | Correction Of FF And REW Speed After<br>Replacing Reel Aux Board Triacs  | 10,200 and Lower   | 82-76        |
|                      | Tape Slack Protection  | 10,001-10,068<br>(except 10,027;<br>10,028; 10,046;<br>10,050; 10,066) | 1            |

| <i>Model No.</i>     | <i>Subject</i>  | <i>Serial No.</i>        | <i>Bulletin No.</i> |
|----------------------|---|--------------------------|---------------------|
| BVH-1100<br>(Cont'd) | Capacitor Assembly and Sub-Harness  | 10,001-10,017;<br>10,024 | 2                   |
|                      | Dropout Detection Improvement<br>(RF EQ-2 Board)                                      | 10,001 and Higher        | 3                   |
|                      | BVH-1100 Extension Cables   | All                      | 4                   |
|                      | Tape Timer with CTL Update (Change of Tape<br>Timer Board)                            | 10,601 and Higher        | 5                   |
|                      | Edit Accuracy Improvement   | 10,900 and Lower         | 6                   |
|                      | Tape Timer Accuracy   | 10,601-10,800            | 7                   |
|                      | Tape Timer Idler Slippage   | 11,001 and Lower         | 8R                  |
|                      | HT-1000 Installation (NTSC)   | All                      | 9                   |
|                      | 15-Hz Reference Pulse Simplifies Color<br>Synchronization                             | All                      | 10R                 |
|                      | Improved Head-to-Tape Contact in DT<br>Operation                                      | 11,100 and Lower         | 11                  |
|                      | Frame Edit Modification   | 20,800 and Lower         | 12                  |
|                      | Stretching the Color Frame Detector Window  | 10,001-11,000            | 13                  |
|                      | Locking the Time Code to the Color Frame  | 10,001-11,000            | 14                  |
|                      | Corrections to BVH-1100 Manual  | 10,001 and Higher        | 15                  |
|                      | Improving Picture Continuity During Transition<br>From Jog $\frac{1}{5}$ To Jog Still | 10,001-10,800            | 16                  |
|                      | Providing a Color Frame Interface for the<br>BVT-1000                                 | All                      | 17                  |
|                      | Audio-3 Output Muted For 8ms During Review<br>Mode                                    | 10,600 and Lower         | 18                  |
|                      | Improvement of Auto Edit Recall Operation   | All                      | 19                  |
|                      | New Photo Couplers  | 10,901 and Lower         | 20                  |
|                      | Improved Tape Tension During Transition From<br>Play To Program Jog $\frac{1}{5}$     | 10,300 and Lower         | 21                  |
|                      | Preventing Relay Latch-Up Due To Mechanical<br>Vibration                              | 10,100 and Lower         | 22                  |
|                      | Modification To Provide Color Framed Playback<br>Operation In DT-3 Position           | 20,501 and Lower         | 23                  |
|                      | Improved Tape Tension Stability When<br>Changing From Play To Still                   | 10,101 and Lower         | 24                  |

# BULLETIN INDEX

| Model No.            | Subject  | Serial No.        | Bulletin No. |
|----------------------|--|-------------------|--------------|
| BVH-1100<br>(Cont'd) | Using Extension Cables   | All               | 56           |
|                      | Part Number for Audio/Video Meter Lamp                         | All               | 59           |
|                      | Service Tools And Fixtures                                     | All               | 61R          |
| BVH-1100A            | Tension Stabilizer Adjustment                                  | All               | 82-63        |
|                      | MPA-A Board; Bypass Capacitor Discharge                        | 20,300 and Lower  | 82-69        |
|                      | Improvement Of "Triac Pulse" Circuits                          | 20,200 and Lower  | 82-70        |
|                      | VTR Enters Stop Mode When FF Is Commanded Under Editor Control | 20,300 and Lower  | 82-73        |
|                      | Improved Tape Tension When Using Manual Tracking Control       | 20,200 and Lower  | 82-74        |
|                      | Improved S/N In Audio Channel-3 Microphone Amplifier           | 20,000 and Lower  | 82-75        |
|                      | Tape Tension Consistency In Programmed Jog Mode                | 20,500 and Lower  | 82-81        |
|                      | Audio Mute at 5X Normal Speed                                  | All               | 1            |
|                      | Auto Selection Of 2F/4F For Edit (Insert, Assemble) And Record | 20,001-20,499     | 2, Rev. 2    |
|                      | Improved IC Reliability on Reel-2A Board                       | 20,000 and Lower  | 3            |
|                      | Spot Erasures During Power Down                                | 20,000 and Higher | 4            |
|                      | Circuit Protection (IC6/7 On RF SW Board)                      | 20,401 and Lower  | 5            |
|                      | Changes To Operation And Maintenance Manual                    | All               | 6            |
|                      | Improved Tape Handling Reliability                             | 20,600 and Lower  | 7            |
|                      | Improved IC Reliability (Framing -A Board)                     | 20,501 and Higher | 8            |
|                      | Tension Detector Check   | All               | 9            |
|                      | Component Change On Reel 1-A Board                             | 20,400 and Lower  | 10           |
|                      | Correction To Manual. IC Number On SYS-2 Board                 | All               | 11           |
|                      | Frame Edit Modification  | 20,800 and Lower  | 12           |
|                      | Noise In Video Caused By +12V And -12V Regulators              | 21,500 and Lower  | 13           |
|                      | Improved Video S/N   | All               | 14           |
|                      | Improved Time Code Reading                                     | 21,100 and Lower  | 15           |

| <i>Model No.</i>      | <i>Subject</i>   | <i>Serial No.</i>   | <i>Bulletin No.</i> |
|-----------------------|--|---|---------------------|
| BVH-1100A<br>(Cont'd) | Video Logic Board Modification To Reduce Power Source Noise              | 20,501 and Lower  | 16                  |
|                       | Providing a Color Frame Interface for the BVT-1000                       | All   | 17                  |
|                       | Improved Performance In Program Jog/DT                                   | 20,325 and Lower<br>20,237; 20,331;<br>20,333; 20,338<br>and 20,340 | 18                  |
|                       | Modification To Provide Color Framed Playback Operation in DT-3 Position | 20,501 and Lower  | 23                  |
| BVH-1180              | Tension Stabilizer Adjustment  | All   | 82-63               |
|                       | BK-1181 Schematic Correction   | All   | 1                   |
|                       | Improved Performance Of Audio Monitor Output And Alarm Level             | 10,201-10,228<br>(except<br>10,301-10,305<br>10,401-10,405)         | 2                   |
|                       | Noise In Video Caused By +12V And -12V Regulators                        | 10,400 and Lower  | 13                  |
| BVP-200               | Registration at High Temperatures  | 15,130 and Lower  | 79-8                |
|                       | Added Service Parts  | All   | 80-18               |
|                       | Operation And Maintenance Manual Correction                              | All   | 82-44               |
| BVP-250               | Switch Label On PR-28 Board  | 10,101 and Lower  | 82-92               |
| BVP-300               | Tripod Adaptor   | All   | 79-15               |
|                       | Foil Pattern Misprint (SG-15 Board)                                      | 10,301-10,360<br>10,401-10,440                                      | 79-24               |
|                       | 1. Gamma Deviation at Low Temperatures                                   | 10,001-10,200   | 79-25               |
|                       | 2. Blanking Correction at Low Temperatures                               | 10,001-10,200   |                     |
|                       | 3. Power Interruptions from Impacts                                      | 10,001-10,300   |                     |
|                       | 4. Bias Light Correction   | 10,001-10,300   |                     |
|                       | 5. Reinforced Tripod Attachment  | 10,001-10,400   |                     |
|                       | 6. Frequency Response Improvement  | 10,001-10,300   |                     |
|                       | 7. ABO Circuit Frequency Response Improvement                            | 10,001-10,707   |                     |
|                       | Correction of SUPP-1 and 3rd Edition                                     | All   | 80-26               |
|                       | Change of Limiter Range for RB-Gain Control                              | 10,001-10,707   | 81-4                |
|                       | Change of 'Microswitch'  | 11,157 and Lower  | 82-14               |
|                       | Improved Potentiometer Reliability, VR-3 Board                           | 11,000 and Lower  | 82-78               |

# BULLETIN INDEX

| <i>Model No.</i> | <i>Subject</i>  | <i>Serial No.</i>                                 | <i>Bulletin No.</i> |
|------------------|---|---|---------------------|
| BVP-300A         | Change Of Optical Prism                                       | 21,020 and Lower                                  | 82-17R              |
|                  | Operation And Maintenance Manual Correction                   | All   | 82-44               |
|                  | Switch Label On PR-28 Board                                   | 20,601 and Lower                                  | 82-92               |
| BVP-330          | Correct P/N for 1.5" Viewfinder CRT                           | All   | 81-14               |
|                  | Part Number Correction  | All   | 81-20               |
|                  | Corrections To Manual, 1st Edition:<br>Part Numbers           | All   | 82-15               |
|                  | Operation And Maintenance Manual Correction                   | All   | 82-44               |
|                  | Switch Label On PR-28 Board                                   | 10,701 and Lower                                  | 82-92               |
| BVR-1000         | Technical Manual Corrections                                  | All   | 1                   |
|                  | Technical Manual Corrections: Incorrect<br>Polarity of C20    | All   | 2                   |
| BVR-1010         | Production Change   | All   | 1                   |
|                  | Sync Select Modification                                      | All   | 2                   |
| BVR-1020         | Power On Reset Improvement, Remote Bypass                     | All   | 82-55               |
| BVT-1000         | Correction To Operation And Maintenance<br>Manual             | All   | 82-40               |
|                  | Input Level Control Support Bracket                           | 10,001-10,037                                     | 2                   |
|                  | Sync Clock Modification                                       | 10,004-10,009<br>10,011-10,020                    | 3                   |
|                  | HUE Control—Chroma Phase Control                              | 10,100 and Lower                                  | 4A                  |
|                  | HUE Control—Chroma Phase Control                              | 10,101 and Higher                                 | 4B                  |
|                  | Streaking Countermeasure                                      | 10,070 and Lower                                  | 5                   |
|                  | Procedure for Inspection of Memory ICs                        | 10,001-10,100                                     | 6                   |
|                  | High Temperature Operation                                    | 10,101-10,110;<br>10,114-10,116;<br>10,118-10,120 | 7                   |
|                  | V-Bkgr. Width Modification                                    | All   | 8                   |
|                  | Voltage Timing and Zero Address Control<br>Voltage Adjustment | 10,100 and Lower                                  | 9                   |
|                  | Decreasing Chroma Level Adjustment Range                      | 10,100 and Lower                                  | 10                  |
|                  | Minimization of Picture Quaking                               | 10,001-10,064                                     | 11                  |

| <i>Model No.</i>     | <i>Subject</i>  | <i>Serial No.</i>   | <i>Bulletin No.</i> |
|----------------------|---|---|---------------------|
| BVT-1000<br>(Cont'd) | Voltage Detector Circuit Improvement  | 10,037 and Lower  | 12                  |
|                      | Decreasing Interference Between the Main and U-Matic Clocks in the U-Matic APC Mode for Improved Chroma | 10,048 and Lower  | 13                  |
|                      | Streaking Countermeasure  | 10,100 and Lower  | 14                  |
|                      | H. Sync Detector and Dropout Gate Multi-Vibrator Malfunctions   | 10,100 and Lower  | 15                  |
|                      | Mandatory Parts Replacement   | 10,101-10,110;<br>10,112-10,120;<br>10,122-10,124;<br>10,128; 10,130;<br>10,131; 10,134;<br>10,135; 10,137                                  | 16                  |
|                      | CK-1 Board Changes  | 10,050 and Lower  | 17                  |
|                      | CG-1 Board Changes  | 10,047-10,053<br>10,101-10,110<br>10,116;<br>10,118-10,120  | 18                  |
|                      | BH-1 Board Changes  | 10,001-10,140   | 19                  |
|                      | Moviola Window Circuit Improvements   | 10,101-10,110<br>10,116;<br>10,118-10,120   | 20                  |
|                      | SG-6 Board Changes  | 10,001-10,140   | 21                  |
|                      | Improvement of Video Output Amp DP  | 10,001-10,042   | 22                  |
|                      | APC Limiter Voltage Change  | 10,223 and Lower<br>(except 10,209;<br>10,210; 10,217-<br>10,220; 10,224)   | 23                  |
|                      | ADV SYNC Phase Control Modification   | 10,200 and Lower  | 24                  |
|                      | Video Phase Shifting Countermeasures  | 10,200 and Lower  | 25                  |
|                      | Streaking In AFC Mode When Using U-Matics   | All (except<br>10,010; 10,111;<br>10,121; 10,125;<br>10,127; 10,129;<br>10,132; 10,133;<br>10,136; 10,138-<br>10,165; 10,201 and<br>Higher) | 26                  |
|                      | DOC Muting Change   | All (Except<br>10,111; 10,121;<br>10,125-10,127;<br>(Cont'd)  | 27                  |



# BULLETIN INDEX

| <i>Model No.</i>     | <i>Subject</i>                                      | <i>Serial No.</i>  | <i>Bulletin No.</i> |
|----------------------|---|--|---------------------|
| BVT-1000<br>(Cont'd) | DOC Muting Change                                   | 10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165  |                     |
|                      | Countering U-Matic Skew Effects                     | All (except<br>10,111 10,121;<br>10,125-10,127;<br>10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165)                      | 28                  |
|                      | A/D Converter Trouble Shooting                      | All (except<br>10,111; 10,121;<br>10,125; 10,126;<br>10,127; 10,129;<br>10,132; 10,133;<br>10,135; 10,136;<br>10,138-10,168) | 29                  |
|                      | Prevention of Double Termination—Comp<br>Sync Input | 10,200 and Lower   | 30                  |
|                      | Reduction of Process Mode<br>Residual Jitter        | 10,101-10,110<br>10,114-10,116<br>10,118-10,120  | 31                  |
|                      | Moviola Window Circuit Change                       | All (except<br>10,111; 10,121;<br>10,125-10,127;<br>10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165)                     | 32                  |
|                      | - 12V Power Supply Change                           | 10,036 and Lower   | 33                  |
|                      | New SG-6 Board                                      | 10,500 and Lower   | 34                  |
|                      | Improving Hue Drift, Temperature<br>Characteristic  | 10,300 and Lower   | 35                  |
|                      | SQ-1 Switching Pulse—WR Zero Check                  | All  | 36                  |
|                      | Reversed Capacitor                                  | 10,200 and Lower   | 37                  |
|                      | Change of System Sync and SC Control Range          | All  | 38                  |
|                      | Countermeasures for 280ns Video Shift               | 10,235 and Lower   | 39                  |
|                      | V-Sync Detection Improvement                        | 10,051 and Lower   | 40                  |
|                      | Improved Moviola and Muting Function (DO-1)         | 10,350 and Lower   | 41                  |
|                      | V-Sep Kit   | All  | 42                  |
|                      | Mods/Kits Availability Announcement                 | All  | 42B                 |

| <i>Model No.</i>     | <i>Subject</i>  | <i>Serial No.</i>  | <i>Bulletin No.</i> |
|----------------------|---|--|---------------------|
| BVT-1000<br>(Cont'd) | 1. Color Framing Temperature Characteristic Improvement, SQ-1 Board                     | 10,300 and Lower<br>(except 10,238;<br>10,253;<br>10,261-10,270) | 43                  |
|                      | 2. SG-6 Board   |  |                     |
|                      | 280/ns Editing Phase Shift (Color Framing Modification)                                 | 10,500 and Lower   | 44                  |
|                      | Improvement in Bidirex Mode   | 10,370 and Lower   | 45                  |
|                      | Improved Retrigger MMV  | 10,500 and Lower   | 46                  |
|                      | Low Reference Sync Level  | 10,371-10,501  | 47                  |
|                      | Improved Sync Sep Circuit   | 10,501 and Higher  | 48                  |
|                      | Low Level Ref SC Inputs Affecting Ext Sync Lock   | 10,500 and Lower   | 49                  |
|                      | Hue Deviation and Power Transients  | 10,370 and Lower   | 50                  |
|                      | Input Pedestal Level Detector Change (BH-1 Board)                                       | 10,500 and Lower   | 51                  |
|                      | DP and DG Improvement, PR-4 Board   | 10,500 and Lower   | 52                  |
|                      | CG-1 Board Adjustment with Extension Board  | 10,701 and Higher  | 53R                 |
|                      | Part Number Correction, AD-1 Board  | All  | 54                  |
|                      | Horizontal Sync Width   | 10,001-10,100<br>10,101-10,380                                   | 55                  |
|                      | Increase Chroma Level Adjustable Range, UI-1 Board                                      | 11,300 and Lower   | 56                  |
|                      | Voltage Selector Seal Part Number Correction  | All  | 57                  |
|                      | Vertical Stability, VS-6 Board  | 11,300 and Lower   | 58                  |
|                      | Read Zero Reset Circuit   | 10,001-10,301<br>(except 11,002;<br>11,104)                      | 59                  |
|                      | Fixture for Service Purposes  | All  | 60                  |
|                      | Modification To Prevent The TBC From Going Into Play Mode When The VTR Is In Still Mode | 10,001-10,600  | 61                  |
|                      | Fixture For Service Purposes  | All  | 62                  |
| BVT-2000             | Correction To Manual  | 52,899 and Lower   | 82-56               |
|                      | Modification To Prevent Phase Shift During CNR ON/OFF                                   | 11,600 and Lower   | 82-57               |

# BULLETIN INDEX

| Model No.            | Subject  | Serial No.   | Bulletin No. |
|----------------------|--|--|--------------|
| BVT-2000<br>(Cont'd) | Sequencer Video Phase Stabilization                                  | 10,901 and Lower   | 82-64        |
|                      | Video Phase Shift When VTR Head Select Switch Is Changed From 3 To 1 | 10,900 and Lower   | 82-71        |
|                      | Set-up Level Improvement   | 11,100 and Lower   | 82-79        |
|                      | Improvement of Dropout Circuit                                       | 10,001-10,200  | 1R           |
|                      | Board Interchangeability   | 10,001-10,015  | 2            |
|                      | Change of P-Rom Designation  | 10,001-10,100  | 3            |
|                      | Hue Shift When Playing Tapes with No Sync Tracks                     | 10,013; 10,014;<br>10,021; 10,025;<br>10,028; 10,030;<br>10,032; 10,034;<br>10,036; 10,037;<br>10,040; 10,042;<br>10,043; 10,046;<br>10,048; 10,050;<br>10,054, 10,056             | 4            |
|                      | CK-3, SQ-2 (SQ-3) Boards   | 10,013; 10,014;<br>10,017; 10,021;<br>10,025; 10,028;<br>10,030; 10,032;<br>10,033; 10,034;<br>10,036; 10,037;<br>10,040; 10,042;<br>10,043; 10,046;<br>10,048; 10,050;<br>10,054, | 5            |
|                      | Noise Reduction During V Blanking                                    | 10,015; 10,016;<br>10,022; 10,023;<br>10,026; 10,027;<br>10,029; 10,035  | 6            |
|                      | Latch Added to ID Blk. Switch  | 10,001-10,200  | 7            |
|                      | Vector Jitter In U-Matic AFC Mode                                    | 10,001-10,100  | 8            |
|                      | Picture Waterfall Effect at High Speed Play (40 through 50X Normal)  | 10,001-10,101  | 9            |
|                      | Low Luminance During Dropout Replacement                             | 10,001-10,200  | 10           |
|                      | Frequency Response Improvement (PR-22 Board)                         | 10,001-10,300  | 11           |
|                      | Increased System Sync Adjustment Range                               | 10,016; 10,022;<br>10,023; 10,026;<br>10,027; 10,029   | 12           |
|                      | Horizontal Shift In DT Mode  | All  | 13           |

| <i>Model No.</i>     | <i>Subject</i>   | <i>Serial No.</i>   | <i>Bulletin No.</i> |
|----------------------|--|---|---------------------|
| BVT-2000<br>(Cont'd) | Improved Stability of Horizontal Position During Playback                                  | All   | 14                  |
|                      | DP Flutter Improvement   | 11,601 and Higher   | 15                  |
|                      | Improvement in Vertical Blanking Stability   | All (Except 11,901 and Higher)  | 17R                 |
|                      | Modification To Provide Color Framed Playback Operation In DT-3 Position                   | 11,701 and Lower  | 23                  |
| BVU-Series           | Alignment Tape Change  | All   | 78-16               |
|                      | Video Head Dihedral Adjustment. New Switch Position, RR5-3SB Alignment Tape (8-960-015-13) | All   | 82-23               |
|                      | Service Tools And Fixtures   | All   | 82-77               |
| BVU-50               | Improved Reset Switch On FP-4 Board  | 10,071 and Higher   | 78-27               |
|                      | Time Code Crosstalk Reduction  | All   | 78-29               |
|                      | Erase Head Crosstalk in Video  | All   | 79-5R               |
|                      | Threading Motor Protection   | All   | 79-10               |
|                      | Playback Checker   | All   | 79-12               |
|                      | 1. Wiring Change, Tape End Detection (LED)<br>2. SM-10 Board Interchangeability            | 10,621 and Lower  | 79-16               |
|                      | Low Temperature Servo Operation  | 20,120 and Lower;<br>20,121-20,126;<br>20,128-20,132;<br>20,135; 20,137;<br>20,139; 20,141-<br>20,148; 20,150;<br>20,154; 20,159;<br>20,160 | 80-3                |
|                      | Improved Microphone Grounding  | 20,020 and Lower  | 80-4                |
|                      | RF Alarm Improvement   | 20,020 and Lower  | 80-6                |
|                      | Shoulder Strap Hanger Assembly   | 20,540 and Lower  | 80-7                |
|                      | Threading Motor Protection   | 20,541 and Lower  | 80-8                |
|                      | Production Changes   | 20,540 and Lower  | 80-11               |
|                      | Servicing Equipment  | All   | 80-12               |
|                      | Cassette Control Assembly Part Changes   | All   | 80-13               |
|                      | Audio Crosstalk  | 20,541 and Lower  | 80-20R              |

# BULLETIN INDEX

| <b>Model No.</b>           | <b>Subject</b>  | <b>Serial No.</b>                   | <b>Bulletin No.</b> |
|----------------------------|---|-------------------------------------|---------------------|
| <b>BVU-50<br/>(Cont'd)</b> | AGC Kit Installation Instructions                                     | 20,000 and Lower                    | 80-22               |
|                            | Correction of Spring Part Numbers                                     | All                                 | 80-25R              |
|                            | Shoulder Belt Improvement   | 20,540 and Lower                    | 81-1                |
|                            | New D Motor Pulley Configuration                                      | 20,540 and Lower                    | 81-3                |
|                            | Reinforcement of Cassette Panel                                       | 20,270 and Lower                    | 81-7                |
|                            | Service Manual Additions: CTL HEAD,<br>PS/SYSCON Alignment Procedures | All                                 | 81-10               |
|                            | Service Tools and Fixtures  | All                                 | 81-12               |
|                            | Improved DC-DC Converter Filtering                                    | 10,001-20,990                       | 81-29               |
|                            | 1. Additional Protection Against Electrostatic<br>Damage (IC3)        | 10,001-20,370                       | 81-30               |
|                            | 2. Corrections To Operation And Maintenance<br>Manual, 3rd Edition    | 20,541-20,740                       |                     |
|                            | Improved Operation Of Return Guide During<br>Composite Shooting       | All                                 | 82-2                |
|                            | Roller, Guide Part Number Change                                      | 21,870 and Higher                   | 82-3                |
|                            | Correction To Manual: Micro-switch Part<br>Numbers                    | All                                 | 82-8                |
|                            | Change of Threading Ring Sub Ass'y                                    | 20,001-21,870                       | 82-25               |
|                            | Video Head Maintenance Procedure                                      | All                                 | 82-28R              |
|                            | Precautions On Use Of VMC-1MQ (8-14 Pin<br>Connecting Cable)          | All                                 | 82-41               |
|                            | New Threading Motor And<br>SW-15 Board                                | 20,001-21,540;<br>21,541 and Higher | 82-50               |
|                            | New Bracket And Pinch Press Lever                                     | 21,740 and Lower                    | 82-82               |
|                            | Change of Base Sheet  | 22,090 and Lower                    | 82-83               |
|                            | Corrections To Manual; Continuous<br>Recording Time                   | All                                 | 82-89               |
| <b>BVU-100</b>             | CG-100 Mounting Hardware  | 20,001-20,150                       | 77-2                |
|                            | Reel Table Height Check Jig   | All                                 | 77-4                |
|                            | Technical Manual Correction   | All                                 | 77-12               |
|                            | Audio Bias Frequency Checks   | 20,350 and Lower                    | 77-19               |
|                            | Bias Erase Oscillator Circuit Change                                  | 20,920 and Lower                    | 78-7                |

| <i>Model No.</i>    | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|---------------------|--|-------------------|---------------------|
| BVU-100<br>(Cont'd) | Camera Trigger Modification  | 20,351-21,080     | 78-9                |
|                     | Condensation Sensor  | 20,291 and Higher | 78-11               |
|                     | Drum Assembly and Upper Head Drum Standardization                                      | All               | 78-20               |
|                     | AC-5000 Charge Lamp  | 21,080 and Lower  | 78-23               |
|                     | Increased Audio Meter Adjustment Range   | 21,260 and Lower  | 78-28               |
|                     | Printed Circuit Board Standardization  | All               | 79-2                |
|                     | Address Head Assembly Change   | 20,819 and Higher | 79-3                |
|                     | 1. Improvement on Pause Edit Operation<br>2. Change of FF and REW Torque Specification | 21,630 and Lower  | 79-11               |
|                     | PG Error Correction  | All               | 80-2                |
|                     | Reel Motor Noise Filter  | 21,781 and Lower  | 80-5                |
|                     | BR-4 Boards  | All               | 80-21               |
|                     | Service Manual Correction (Drum Servo)   | All               | 80-23               |
|                     | Service Tools and Fixtures   | All               | 81-12               |
|                     | Flatness Plate Part Number   | All               | 82-42               |
|                     | Initiating "Record Pause" From New Cameras   | 20,001-21,080     | 82-84               |
| BVU-110             | Interface with TK-76   | All               | 80-29               |
|                     | Service Tools and Fixtures   | All               | 81-12               |
|                     | Pause Plunger Timer Adjustment   | All               | 81-13               |
|                     | Bracket, Ass'y Change  | 10,001-10,610     | 81-18               |
|                     | Possible Tape Damage, Eject Mode   | 10,001-10,360     | 81-21               |
|                     | New Stop Button Switch   | 10,001-11,230     | 81-27               |
|                     | Reduced Gear Noise In REW And FF Modes   | 10,001-10,060     | 82-1                |
|                     | 'Bracket, SY-60 Board'   | 10,001-10,810     | 82-4                |
|                     | Liquid Crystal Display Remains On After Power Down                                     | 10,001-10,289     | 82-10               |
|                     | Color Loss After Pause Release In Playback Mode  | 10,001-10,810     | 82-19               |
|                     | Improved Operation Of RF Warning Lamp Circuit  | 10,001-10,610     | 82-21               |

# BULLETIN INDEX

| <i>Model No.</i>    | <i>Subject</i>  | <i>Serial No.</i>                   | <i>Bulletin No.</i> |
|---------------------|---|-------------------------------------|---------------------|
| BVU-110<br>(Cont'd) | Modulator Circuit Part Change. Incompatibility Between Older Parts And Newer Circuit Boards | 12,080 and Higher                   | 82-24               |
|                     | Improved Operation Of Bias/Erase Oscillator   | 10,001-11,080                       | 82-26               |
|                     | Audio Signal Loss Due To Power Surge  | 10,001-10,810                       | 82-33               |
|                     | Change Of 'Arm Ass'y, TR'   | 10,001-10,810                       | 82-37               |
|                     | Use Of New "Cap, Preceding Guide"<br>And "Retainer, Spring"                                 | 11,731-20,300<br>20,301 and Higher  | 82-38               |
|                     | Precautions On Use Of VMC-1MQ (8-14 Pin Connecting Cable)                                   | All                                 | 82-41               |
|                     | Electrical Alignment Of BK-111  | All                                 | 82-48               |
|                     | Roller, Guide Change  | 10,001-11,080;<br>11,081 and Higher | 82-49               |
|                     | Preventing Surge Damage On SY-61 Board  | 11,080 and Lower                    | 82-51               |
|                     | Change of Connector   | 11,730 and Lower                    | 82-60               |
|                     | Operation And Maintenance Manual  | All                                 | 82-85               |
|                     | Change Of Drawing Roller And Threading Ring Assemblies                                      | 10,001-11,730;<br>11,731 and Higher | 82-86               |
|                     | New Bracket Assembler   | 12,380 and Lower                    | 82-93               |
|                     | New Tape Guide Assembly   | 10,251 and Higher                   | 77-5                |
|                     | Replacement Parts for Cassette-Up Assembly  | All                                 | 77-6                |
| BVU-200             | Improved Take-Up Tension Regulator and Brake Shoe   | 10,251 and Higher                   | 77-7                |
|                     | Change in Forward Take-Up Torque Specification  | All                                 | 77-8                |
|                     | S. Hold Arm Assembly and S. Hold Lever  | 10,851 and Higher                   | 77-9                |
|                     | Brush Guard   | 11,101 and Higher                   | 77-10               |
|                     | Erase Head Base Assembly  | 10,250 and Higher                   | 77-11               |
|                     | Improper Transistor Substitute for 2SA772   | All                                 | 77-13               |
|                     | Frame Skipping, Editing Errors  | 10,600 and Lower                    | 77-15               |
|                     | Dubbing Adaptor Kit   | All                                 | 78-1R               |
|                     | Preventive Maintenance  | All                                 | 78-3                |
|                     | Servo Lock to Incoming Video In the REC Mode  | All                                 | 78-4R               |

| <i>Model No.</i>    | <i>Subject</i>                                     | <i>Serial No.</i> | <i>Bulletin No.</i> |
|---------------------|--|-------------------|---------------------|
| BVU-200<br>(Cont'd) | New Brake Shoe                                     | All               | 78-5                |
|                     | Pinch Roller Assembly and Upper Sub Ring           | 20,051 and Higher | 78-6                |
|                     | Improved Midway Pulley and Take-up Reel Table      | 20,000 and Lower  | 78-10               |
|                     | New Condensation Sensor                            | 11,351 and Higher | 78-11               |
|                     | Vertical Blanking Kit                              | All               | 78-12R              |
|                     | Drum Assembly and Upper Head Drum Standardization  | All               | 78-20               |
|                     | Standardization of PB-2 Board                      | All               | 78-21               |
|                     | Improved Noise Immunity in RC CTL Counter          | 21,050 and Lower  | 78-22               |
|                     | Main Solenoid Drive Transistor Protection          | 11,350 and Lower  | 78-26               |
|                     | Printed Circuit Board Standardization              | All               | 79-1                |
|                     | Address Head Assembly Change                       | 20,201 and Higher | 79-3                |
|                     | Threading Back Tension Improvement                 | 11,101 and Higher | 79-7R               |
|                     | AM Kit   | All               | 80-16               |
|                     | Deck Assembly Replacement                          | All               | 80-19               |
|                     | Editing, Reduction of Audio Pops                   | 10,001-10,251     | 81-8                |
|                     | Service Tools and Fixtures                         | All               | 81-12               |
|                     | Gear Box Assembly Installation                     | 31,800 and Lower  | 81-26               |
|                     | Substitute For Discontinued IC                     | 11,350 and Lower  | 82-6                |
|                     | New Drum Base Assembly                             | 31,800 and Lower  | 82-12               |
|                     | Audio Level Control, Manual Part Number Correction | All               | 82-20               |
| BVU-200A            | Video Head Maintenance Procedure                   | All               | 82-28R              |
|                     | Flatness Plate Number                              | All               | 82-42               |
|                     | Pinch Roller Assembly and Upper Sub Ring           | 21,051 and Higher | 78-6                |
|                     | Improved Midway Pulley and Take-Up Reel Table      | 20,000 and Lower  | 78-10               |
|                     | New Condensation Sensor                            | 21,051 and Higher | 78-11               |
|                     | Vertical Blanking Kit                              | All               | 78-12R              |
|                     | Line-Dubbing Losses                                | All               | 78-13               |



# BULLETIN INDEX

| <i>Model No.</i>     | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|----------------------|--|-------------------|---------------------|
| BVU-200A<br>(Cont'd) | System Control Noise Suppression in Playback and Record                  | 21,050 and Lower  | 78-17               |
|                      | 1. Power Surges and Drum Servo Operation<br>2. Servo Lock Lamp Operation | 21,050 and Lower  | 78-18               |
|                      | Drum Assembly and Upper Head Drum Standardization                        | All               | 78-20               |
|                      | Standardization of PB-2 Board  | All               | 78-21               |
|                      | Improved Noise Immunity in RC CTL Counter                                | 21,050 and Lower  | 78-22               |
|                      | Flicker in Dubbing   | 21,410 and Lower  | 78-24               |
|                      | Tape Slack in the BVU-200A When Used with BVE-500A                       | 20,650 and Lower  | 78-25               |
|                      | Printed Circuit Board Standardization                                    | All               | 79-1                |
|                      | Address Head Assembly Change   | 20,201 and Higher | 79-3                |
|                      | Improved Stability of Video Output                                       | 21,410 and Lower  | 79-4                |
|                      | 1. Time Code Oscillation<br>2. CTL Crosstalk                             | 21,760 and Lower  | 79-9                |
|                      | Picture Improvement  | 22,260 and Lower  | 79-14               |
|                      | Removal of Still Switch  | 22,510 and Lower  | 79-18               |
|                      | Y Record Current Stabilization   | 22,260 and Lower  | 79-19               |
|                      | CTL Amplifier (ED-4 Board)   | 22,260 and Lower  | 79-20               |
|                      | Stabilized Internal Vertical Drive Generator (ED-4 Board)                | 21,051 and Higher | 79-21               |
|                      | Capstan Brake  | 22,511 and Lower  | 79-22               |
|                      | Improved Static Immunity   | 22,261 and Lower  | 79-23               |
|                      | Function Assembly (1) Part Numbers                                       | All               | 80-14R              |
|                      | Deck Assembly Replacement  | All               | 80-19               |
|                      | New AC IN Connector  | 24,361 and Higher | 80-28               |
|                      | Take-Up Tension Regulator Change   | 24,160 and Lower  | 81-5                |
|                      | Service Tools and Fixtures   | All               | 81-12               |
|                      | Part Changes: T-Tension Regulator  | 24,160 and Lower  | 81-19               |
|                      | Gear Box Assembly Installation   | 31,800 and Lower  | 81-26               |
|                      | Substitute For Discontinued IC   | 24,160 and Lower  | 82-6                |

| <i>Model No.</i>     | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|----------------------|--|-------------------|---------------------|
| BVU-200A<br>(Cont'd) | New Drum Base Assembly   | 31,800 and Lower  | 82-12               |
|                      | Audio Level Control, Manual Part Number Correction   | All               | 82-20               |
|                      | Video Head Maintenance Procedure   | All               | 82-28R              |
|                      | Flatness Plate Part Number   | All               | 82-42               |
| BVU-200B             | Adjustment Procedure for DIP SW-2 on DS-7 Board  | All               | 80-24               |
|                      | Servo Lock with CTL Recorded Tape  | 30,000-31,401     | 81-2                |
|                      | Take-Up Tension Regulator Change   | 30,500 and Lower  | 81-5                |
|                      | Service Manual Addition: Playback Chroma Phase Equalizer Adjustment                            | All               | 81-11               |
|                      | Service Tools and Fixtures   | All               | 81-12               |
|                      | Part Changes: T-Tension Regulator  | 30,500 and Lower  | 81-19               |
|                      | Gear Box Assembly Installation   | 31,800 and Lower  | 81-26               |
|                      | Change of IC's on DS-7 Board   | 30,800 and Lower  | 81-28               |
|                      | Threading Motor Drive Transistor Change.   | 31,800 and Lower  | 82-5                |
|                      | Substitute For Discontinued IC   | 31,800 and Lower  | 82-6                |
|                      | Production Changes   | 32,701 and Higher | 82-11               |
|                      | New Drum Base Assembly   | 31,800 and Lower  | 82-12               |
|                      | Audio Level Control, Manual Part Number Correction   | All               | 82-20               |
|                      | Bearing And Worm Wheel Shaft Replacement, Cassette Up Gear Case                                | 31,801 and Higher | 82-22               |
|                      | Improvement Of Head Drum Phase Servo And Speed Servo Circuits                                  | 31,801 and Lower  | 82-30               |
|                      | Flatness Plate Part Number   | All               | 82-42               |
| BVU-800              | Preroll / Pause Modification   | All               | 81-15               |
|                      | Operation And Maintenance Manual Correction: Frame Wiring List For CN31                        | All               | 81-22               |
|                      | Corrections To Manual: RP-5 Board  | 10,001-10,200     | 82-13               |
|                      | Elimination Of The Internal Drop Out Compensator When Using The VCR With A Time Base Corrector | 10,001-11,550     | 82-27               |

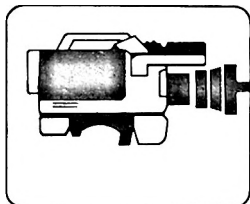
# BULLETIN INDEX

| Model No.           | Subject   | Serial No.                  | Bulletin No. |
|---------------------|---|-----------------------------|--------------|
| BVU-800<br>(Cont'd) | Replacement of Ring Sensor Assembly<br>X-366-802-40 And T.H.D. Cam 3-668-213-00 With<br>-02 Version | 10,130 and Lower            | 82-29        |
|                     | Improved Audio Record Timing  | All                         | 82-31        |
|                     | Improved Time Counter Operation When<br>Interfacing with BVE-500 Editor                             | 10,951-11,550               | 82-32        |
|                     | Improved Reliability, DME Assembly  | 10,500 and Lower            | 82-39        |
|                     | Change In Sequence Of Periodic Check And<br>Maintenance Adjustments                                 | 11,550 and Lower            | 82-52        |
|                     | Time Code Output During Stop, FF, REW,<br>SEARCH> X1.2 Modes  | 10,500 and Lower            | 82-53        |
|                     | Modifications For BK-806 Use  | 12,149 and Lower            | 82-54        |
|                     | CTL Not Selected During Low Search Speed  | BK-806,<br>10,400 and Lower | 82-59        |
|                     | Video Detector For The BK-806   | BK-806,<br>10,900 and Lower | 82-65        |
|                     | Search Mode Operation Function Lamps  | 12,251-12,950               | 82-66        |
|                     | Serial Number Applicability For Manuals And<br>Supplements  | 12,950 and Lower            | 82-87        |
|                     | Corrections To Manual: Part Numbers   | All                         | 82-88        |
|                     | Corrections To Manual: Supplement-9   | All                         | 82-90        |
| BVU-820             | Time Code Output During Stop, FF, REW,<br>SEARCH> X1.2 Modes  | 10,500 and Lower            | 82-53        |
|                     | Erratic DT Mode Playback When Video<br>Recording Is Not Continuous                                  | 10,100 and Lower            | 82-91        |
| BVX-30              | Improvement of Drop Out Killer Operation  | 10,001-10,300               | 81-16        |
|                     | Image Improvement In Freeze Mode  | 10,300 and Lower            | 82-16        |
|                     | Improved Video Signal To Noise Ratio  | All                         | 82-34        |
| CCU-200             | Cable Compensator Modification for<br>Improved Reliability  | 15,104 and Lower            | 81-6         |
| CCU-300             | Improved Operation Of Camera Check Lamp   | 10,001-10,300               | 82-7         |
|                     | Change of 'Microswitch'   | 10,800 and Lower            | 82-14        |
|                     | Reduced Static Interference   | 10,001-10,300               | 82-43        |
|                     | IC Changes  | 10,001-10,300               | 82-46        |

| <i>Model No.</i> | <i>Subject</i>  | <i>Serial No.</i>               | <i>Bulletin No.</i> |
|------------------|---|---------------------------------|---------------------|
| CG-100           | Frame Clock Generator Modification  | Those purchased before 12/15/76 | 77-3                |
| CG-1000R         | Correcting the Time Code Reader Display   | 10,001-10,300                   | 1                   |
| CLP-500          | AC-5000 Charge Lamp   | 21,080 and Lower                | 78-23               |
|                  | New Handle Bearing  | 21,630 and Lower                | 80-17               |
| CLP-550          | Noise In Video Caused By +2V And -12V Regulators  | 10,600 and Lower                | 13                  |
| D-100            | 1. Chance Of Drum Assembly Part No. (DPR-100)<br>2. New Threading Motor (DPR-100)<br>3. New Changer Motor (DCH-100) | All                             | 80-15               |
| DCH-100          | New Changer Motor   | All                             | 80-15               |
| DPR-100          | 1. Change Of Drum Assembly Part No.<br>2. New Threading Motor (DPR-100)   | All                             | 80-15               |
| IF-1000          | I.C. Protection   | 10,501 and Higher               | 1                   |
|                  | Jog Speed   | 1-300                           | 2                   |
| U-Matics         | Alignment Tape Change   | All                             | 78-16               |
| VO-2800          | External Subcarrier For Use With A Time Base Corrector  | 10,501 and Higher               | 77-1                |
|                  | Gear Box Assembly Installation  | 20,650 and Lower                | 81-26               |
|                  | Production Changes  | 16,851 and Higher               | 82-11               |
|                  | New Drum Base Assembly  | 20,650 and Lower                | 82-12               |
|                  | Bearing And Worm Wheel Shaft Replacement, Cassette Up Gear Case   | 16,651 and Higher               | 82-22               |
| VO-2850          | External Subcarrier For Use With A Time Base Corrector  | 20,001 and Higher               | 75-2                |
| VO-2850A         | External Subcarrier For Use With A Time Base Corrector  | 22,171 and Higher               | 77-1                |
| VO-2860          | Substitute For Discontinued IC  | 10,060 and Lower                | 82-6                |
| VO-2860A         | Gear Box Assembly Installation  | 13,370 and Lower                | 81-26               |
|                  | Substitute For Discontinued IC  | 13,640 and Lower                | 82-6                |
|                  | Corrections To Manual   | All                             | 82-9                |
|                  | Production Changes  | 14,011 and Higher               | 82-11               |

# BULLETIN INDEX

| <i>Model No.</i>     | <i>Subject</i>  | <i>Serial No.</i>                   | <i>Bulletin No.</i> |
|----------------------|---|-------------------------------------|---------------------|
| VO-2860A<br>(Cont'd) | New Drum Base Assembly  | 12,770 and Lower                    | 82-12               |
| VO-3800              | Modification Of The VO-3800 Provide V. Lock<br>To An Externally-Applied Video Or Sync Signal<br>During Playback | 11,501 and Higher                   | 76-1                |
| VO-4800              | Modulator Circuit Part Change. Incompatibility<br>Between Older Parts And Newer Circuit Boards                  | 18,551 and Higher                   | 82-24               |
|                      | Change Of 'Arm Ass'y Y, TR'   | 10,001-12,300                       | 82-37               |
|                      | Use Of New "Cap, Preceding Guide" And<br>"Retainer, Spring"   | 15,051-19,650;<br>19,651 and Higher | 82-38               |
|                      | Roller, Guide Change  | 10,001-13,050;<br>13,051 and Higher | 82-49               |
|                      | Change Of Drawing Roller And Threading Ring<br>Assemblies   | 10,001-15,050;<br>15,051 and Higher | 82-86               |
|                      | New Bracket Assembly  | 19,150 and Lower                    | 82-93               |
| VP-2260              | Substitute For Discontinued IC  | 13,031 and Lower                    | 82-6                |



**SONY**  
Broadcast

# bulletin index

# SPECIAL

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

## NUMERICAL LISTING OF BROADCAST AND OMEGA BULLETINS PUBLISHED THROUGH DECEMBER, 1982

Effective January, 1983, Sony Broadcast adopted a single numbering system for technical bulletins. All bulletins are now numbered consecutively within the year of issue, similar to existing Broadcast Bulletins. Omega Bulletins, which were numbered consecutively by model, are now discontinued. The 1-inch line of equipment will continue to be covered under the new format. The January, 1983 Index lists all available bulletins by equipment model number. To assist you in maintaining a complete library, two supplementary indexes are provided on the following pages. These indexes list all available Broadcast Bulletins in numeric order and Omega Bulletins in alpha-numeric order. Bulletins listed as "O.P." are out of print and no longer relevant.

### BROADCAST BULLETINS

| Bulletin | Model               |
|----------|---------------------|
| 75-1     | O.P.                |
| 75-2     | VO-2850             |
| 76-1     | VO-3800             |
| 77-1     | VO-2800<br>VO-2850A |
| 77-2     | BVU-100             |
| 77-3     | CG-100              |
| 77-4     | BVU-100             |
| 77-5     | BVU-200             |
| 77-6     | BVU-200             |
| 77-7     | BVU-200             |
| 77-8     | BVU-200             |
| 77-9     | BVU-200             |
| 77-10    | BVU-200             |
| 77-11    | BVU-200             |
| 77-12    | BVU-200             |
| 77-13    | BVU-200             |

| Bulletin | Model               |
|----------|---------------------|
| 77-14    | O.P.                |
| 77-15    | BVU-200             |
| 77-16    | O.P.                |
| 77-17    | O.P.                |
| 77-18    | BVE-500<br>BVE-500A |
| 77-19    | BVU-100             |
| 78-1     | BVU-200             |
| 78-2     | O.P.                |
| 78-3     | BVU-200             |
| 78-4     | BVU-200             |
| 78-5     | BVU-200             |
| 78-6     | BVU-200<br>BVU-200A |
| 78-7     | BVU-200<br>BVU-200A |
| 78-8     | BVE-500A            |

| Bulletin | Model                          |
|----------|--------------------------------|
| 78-9     | BVU-110                        |
| 78-10    | BVU-200<br>BVU-200A            |
| 78-11    | BVU-110<br>BVU-200<br>BVU-200A |
| 78-12    | BVU-200<br>BVU-200A            |
| 78-13    | BVU-200A                       |
| 78-14    | O.P.                           |
| 78-15    | O.P.                           |
| 78-16    | All U-Matics                   |
| 78-17    | BVU-200A                       |
| 78-18    | BVU-200A                       |
| 78-19    | BVE-500                        |
| 78-20    | BVU-100<br>BVU-200             |

| Bulletin | Model                        |
|----------|------------------------------|
| 78-20    | BVU-200A                     |
| 78-21    | BVU-200<br>BVU-200A          |
| 78-22    | BVU-200<br>BVU-200A          |
| 78-23    | AC-500<br>CLP-500<br>BVU-100 |
| 78-24    | BVU-200A                     |
| 78-25    | BVU-200A<br>BVE-500A         |
| 78-26    | BVU-200                      |
| 78-27    | BVU-50                       |
| 78-28    | BVU-100                      |
| 78-29    | BVU-50                       |
| 79-1     | BVU-200<br>BVU-200A          |

| <b>Bulletin</b> | <b>Model</b> |
|-----------------|--------------|
| 79-2            | BVU-100      |
| 79-3            | BVU-100      |
|                 | BVU-200      |
|                 | BVU-200A     |
| 79-4            | BVU-200A     |
| 79-5            | BVU-50       |
| 79-6            | BVE-500A     |
| 79-7            | BVU-200      |
| 79-8            | BVP-200      |
| 79-9            | BVU-200A     |
| 79-10           | BVU-50       |
| 79-11           | BVU-100      |
| 79-12           | BVU-50       |
| 79-13           | O.P.         |
| 79-14           | BVU-200A     |
| 79-15           | BVP-300      |
| 79-16           | BVU-50       |
| 79-17           | O.P.         |
| 79-18           | BVU-200A     |
| 79-19           | BVU-200A     |
| 79-20           | BVU-200A     |
| 79-21           | BVU-200A     |
| 79-22           | BVU-200A     |
| 79-23           | BVU-200A     |
| 79-24           | BVP-300      |
| 79-25           | BVP-300      |
| 80-1            | AC-200       |
|                 | BC-210       |
| 80-2            | BVU-100      |
| 80-3            | BVU-50       |

| <b>Bulletin</b> | <b>Model</b> |
|-----------------|--------------|
| 80-4            | BVU-50       |
| 80-5            | BVU-100      |
| 80-6            | BVU-50       |
| 80-7            | BVU-50       |
| 80-8            | BVU-50       |
| 80-9            | AC-500       |
|                 | BC-210       |
| 80-10           | BVE-500A     |
| 80-11           | BVU-50       |
| 80-12           | BVU-50       |
| 80-13           | BVU-50       |
| 80-14           | BVU-200A     |
| 80-15           | D-100        |
|                 | DPR-100      |
|                 | DCH-100      |
| 80-16           | BVU-200      |
| 80-17           | CLP-500      |
| 80-18           | BVP-200      |
| 80-19           | BVU-200      |
|                 | BVU-200A     |
| 80-20           | BVU-50       |
| 80-21           | BVU-100      |
| 80-22           | BVU-50       |
| 80-23           | BVU-100      |
| 80-24           | BVU-200B     |
| 80-25           | BVU-50       |
| 80-26           | BVP-300      |
| 80-27           | O.P.         |
| 80-28           | BVU-200A     |
|                 | BVE-500A     |

| <b>Bulletin</b> | <b>Model</b> |
|-----------------|--------------|
| 80-29           | BVU-110      |
| 81-1            | BVU-50       |
| 81-2            | BVU-200B     |
| 81-3            | BVU-50       |
| 81-4            | BVP-300      |
| 81-5            | BVU-200A     |
|                 | BVU-200B     |
| 81-6            | CCU-200      |
| 81-7            | BVU-50       |
| 81-8            | BVU-200      |
| 81-9            | BK-111       |
| 81-10           | BVU-50       |
| 81-11           | BVU-200B     |
| 81-12           | BVU-50       |
|                 | BVU-100      |
|                 | BVU-110      |
|                 | BVU-200      |
|                 | BVU-200A     |
|                 | BVU-200B     |
| 81-13           | BVU-110      |
| 81-14           | BVP-330      |
| 81-15           | BVU-800      |
| 81-16           | BVX-30       |
| 81-17           | BK-111       |
| 81-18           | BVU-110      |
| 81-19           | BVU-200A     |
|                 | BVU-200B     |
| 81-20           | BVP-330      |
| 81-21           | BVU-110      |
| 81-22           | BVU-800      |

| <b>Bulletin</b> | <b>Model</b> |
|-----------------|--------------|
| 81-23           | AC-500       |
| 81-24           | O.P.         |
| 81-25           | O.P.         |
| 81-26           | VO-2800      |
|                 | VO-2860A     |
|                 | BVU-200      |
| 81-27           | BVU-110      |
| 81-28           | BVU-200B     |
| 81-29           | BVU-50       |
| 81-30           | BVU-50       |
| 82-1            | BVU-110      |
| 82-2            | BVU-50       |
| 82-3            | BVU-50       |
| 82-4            | BVU-110      |
| 82-5            | BVU-200B     |
| 82-6            | BVU-200A     |
|                 | BVU-200B     |
|                 | VO-2860A     |
|                 | VP-2260      |
| 82-7            | CCU-300      |
| 82-8            | BVU-50       |
| 82-9            | VO-2860A     |
| 82-10           | BVU-110      |
| 82-11           | BVU-200B     |
|                 | VO-2800      |
|                 | VO-2860A     |
| 82-12           | BVU-200B     |
| 82-13           | BVU-800      |
| 82-14           | BVP-300      |
|                 | CCU-300      |

| <b>Bulletin</b> | <b>Model</b>        |
|-----------------|---------------------|
| 82-15           | BVP-330             |
| 82-16           | BVX-30              |
| 82-17           | BVP-300A            |
| 82-18           | BVE-5000            |
| 82-19           | BVU-110             |
| 82-20           | BVU-200 (Ser)       |
| 82-21           | BVU-110             |
| 82-22           | BVU-200B<br>VO-2800 |
| 82-23           | BVU-Series          |
| 82-24           | BVU-110<br>VO-4800  |
| 82-25           | BVU-50              |
| 82-26           | BVU-110             |
| 82-27           | BVU-800             |
| 82-28           | BVU-50<br>BVU-200A  |
| 82-29           | BVU-800             |
| 82-30           | BVU-200B            |
| 82-31           | BVU-800             |
| 82-32           | BVU-800             |
| 82-33           | BVU-110             |
| 82-34           | BVX-30              |
| 82-35           | BC-210              |
| 82-36           | BVE-5000            |

| <b>Bulletin</b> | <b>Model</b>                   |
|-----------------|--------------------------------|
| 82-37           | BVU-110<br>VO-4800             |
| 82-38           | BVU-110<br>VO-4800             |
| 82-39           | BVU-800                        |
| 82-40           | BVT-1000                       |
| 82-41           | BVU-50<br>BVU-110              |
| 82-42           | BVU-100 (Ser)<br>BVU-200 (Ser) |
| 82-43           | CCU-300                        |
| 82-44           | BVP-250<br>BVP-300A<br>BVP-330 |
| 82-45           | BVE-5000                       |
| 82-46           | CCU-300                        |
| 82-47           | BVG-1000                       |
| 82-48           | BVU-110<br>BK-111              |
| 82-49           | BVU-110<br>VO-4800             |
| 82-50           | BVU-50                         |
| 82-51           | BVU-110                        |
| 82-52           | BVU-800                        |
| 82-53           | BVU-800                        |

| <b>Bulletin</b> | <b>Model</b>          |
|-----------------|-----------------------|
| 82-53           | BVU-820               |
| 82-54           | BVU-800               |
| 82-55           | BVR-1020              |
| 82-56           | BVT-2000              |
| 82-57           | BVT-2000              |
| 82-58           | BVH-1100              |
| 82-59           | BVU-800<br>BK-806     |
| 82-60           | BVU-110               |
| 82-61           | BVH-1000A<br>BVH-1100 |
| 82-62           | BVH-1100              |
| 82-63           | BVH-1100A<br>BVH-1180 |
| 82-64           | BVT-2000              |
| 82-65           | BVU-800<br>BK-806     |
| 82-66           | BVU-800               |
| 82-67           | BVH-500A              |
| 82-68           | BVH-1100              |
| 82-69           | BVH-1100A             |
| 82-70           | BVH-1100A             |
| 82-71           | BVT-2000              |
| 82-72           | BVH-1100              |
| 82-73           | BVH-1100A             |

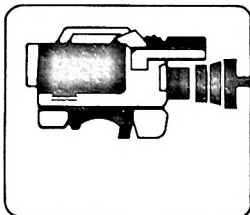
| <b>Bulletin</b> | <b>Model</b>                   |
|-----------------|--------------------------------|
| 82-74           | BVH-1100A                      |
| 82-75           | BVH-1100A                      |
| 82-76           | BVH-1100                       |
| 82-77           | BVU-Series                     |
| 82-78           | BVP-300                        |
| 82-79           | BVT-2000                       |
| 82-80           | AC-500                         |
| 82-81           | BVH-1100A                      |
| 82-82           | BVU-50                         |
| 82-83           | BVU-50                         |
| 82-84           | BVU-100                        |
| 82-85           | BVU-110                        |
| 82-86           | BVU-110<br>VO-4800             |
| 82-87           | BVU-800                        |
| 82-88           | BVU-800                        |
| 82-89           | BVU-50                         |
| 82-90           | BVU-800                        |
| 82-91           | BVU-820                        |
| 82-92           | BVP-250<br>BVP-300A<br>BVP-330 |
| 82-93           | BVU-110<br>VO-4800             |



# OMEGA BULLETINS

| Model No. | Bulletin No.   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| BK-1181   | 1 2  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BK-5002A  | 1 2  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BK-5004   | 1 2 3 4 5 6 7  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVE-5000  | 1 2 3 4 5 6 7 8 9 10 11  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVG-1000  | 1 2 3 4 5 6  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVH-500   | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVH-500A  | 1 2 3 4 5 6 7  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVH-1000  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           | 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           | 51 52 53 54 55 56 57 58 59   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVH-1000A | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           | 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           | 51 52 53 54 55 56 57 58 59 60 61   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVH-1100  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           | 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           | 51 52 53 54 55 56 57 58 59 60 61   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVH-1100A | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVH-1180  | 1 2 3 4 5 6 7 8 9 10 11 12 13  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVR-1000  | 1 2  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVR-1010  | 1 2  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVT-1000  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           | 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|           | 51 52 53 54 55 56 57 58 59 60 61 62  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| BVT-2000  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CG-1000R  | 1  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CLP-550   | 1 2 3 4 5 6 7 8 9 10 11 12 13  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IF-1000   | 1 2  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

= Out of Print.

**SONY®**

# bulletin index SUPPLEMENT

**SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134****JUNE, 1982**

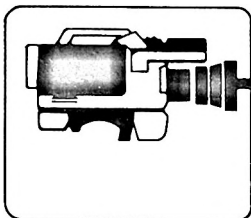
This supplement to the January, 1982 index lists bulletins published April through June, 1982.

| <i>Model No.</i>  | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|-------------------|--|-------------------|---------------------|
| <b>BVE-5000</b>   | Modification(s) Required To Use BK-5031 Paper Tape Reader-Punch/Printer Interface          | 20,401 and Lower  | 6                   |
|                   | Providing Switched Time Code Using BK-5004   | 20,500 and Lower  | 7                   |
|                   | 4 Field Detection/VTR Phase Correction   | 20,405 and Lower  | 8                   |
|                   | BK-5003 Modification When Connecting BVU-800 To BVE-5000                                   | 10,001 and Higher | 9                   |
|                   | Operating Manual Update For Version V2.05 And Above  | All               | 10                  |
| <b>BVH-500</b>    | Tape Tracking Improvement By Elimination Of Tape Supporting Block                          | All               | 19                  |
| <b>BVH-500A</b>   | Drum Servo Stability Improvement   | 21,112 and Lower  | 2                   |
|                   | Reduction of Rewind Time   | 21,100 and Lower  | 3                   |
| <b>BVH-1100</b>   | Improving Picture Continuity During Transition From Jog 1/8 To Jog Still                   | 10,001-10,800     | 16                  |
|                   | Audio-3 Output Muted For 8ms During Review Mode  | 10,600 and Lower  | 18                  |
| <b>BVH-1100A</b>  | Auto Selection of 2F/4F For Edit (Insert, Assemble) And Record                             | 11,000 and Higher | 2R                  |
|                   | Changes To Operation And Maintenance Manual  | All               | 6                   |
|                   | Improved Tape Handling Reliability   | 20,600 and Lower  | 7                   |
| <b>BVP-300</b>    | Change of 'Microswitch'  | 11,157 and Lower  | 82-14               |
| <b>BVU-Series</b> | Video Head Dihedral Adjustment. New Switch Position, RR5-3SB Alignment Tape (8-960-015-13) | All               | 82-23               |
| <b>BVU-50</b>     | 1. Additional Protection Against Electrostatic Damage (IC3)                                | 10,001-20,370     | 81-30               |

# INDEX SUPPLEMENT

| Model No.          | Subject   | Serial No.        | Bulletin No. |
|--------------------|---|-------------------|--------------|
| BVU-50<br>(Cont'd) | 2. Corrections To Operation And Maintenance Manual, 3rd Edition                             | 20,541-20,740     |              |
|                    | Improved Operation Of Return Guide During Composite Shooting                                | All               | 82-2         |
|                    | Change of Threading Ring Sub Ass'y  | 20,001-21,870     | 82-25        |
| BVU-110            | Reduced Gear Noise In REW And FF Modes  | 10,001-10,060     | 82-1         |
|                    | 'Bracket, SY-60 Board'  | 10,001-10,810     | 82-4         |
|                    | Liquid Crystal Display Remains On After Power Down  | 10,001-10,289     | 82-10        |
|                    | Modulator Circuit Part Change. Incompatibility Between Older Parts And Newer Circuit Boards | 12,080 and Higher | 82-24        |
|                    | Improved Operation of Bias/Erase Oscillator   | 10,001-11,080     | 82-26        |
| BVU-200            | Gear Box Assembly Installation  | 31,800 and Lower  | 81-26        |
|                    | Substitute For Discontinued IC  | 11,350 and Lower  | 82-6         |
|                    | New Drum Base Assembly  | 31,800 and Lower  | 82-12        |
|                    | Audio Level Control, Manual Part Number Correction  | All               | 82-20        |
| BVU-200A           | Part Changes: T-Tension Regulator   | 24,160 and Lower  | 81-19        |
|                    | Gear Box Assembly Installation  | 31,800 and Lower  | 81-26        |
|                    | Substitute For Discontinued IC  | 24,160 and Lower  | 82-6         |
|                    | New Drum Base Assembly  | 31,800 and Lower  | 82-12        |
|                    | Audio Level Control, Manual Part Number Correction  | All               | 82-20        |
| BVU-200B           | Part Changes: T-Tension Regulator   | 30,500 and Lower  | 81-19        |
|                    | Gear Box Assembly Installation  | 31,800 and Lower  | 81-26        |
|                    | Threading Motor Drive Transistor Change.  | 31,800 and Lower  | 82-5         |
|                    | Substitute For Discontinued IC  | 31,800 and Lower  | 82-6         |
|                    | Production Changes  | 32,701 and Higher | 82-11        |
|                    | New Drum Base Assembly  | 31,800 and Lower  | 82-12        |
|                    | Audio Level Control, Manual Part Number Correction  | All               | 82-20        |
|                    |   |                   |              |

| <i>Model No.</i> | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|------------------|--|-------------------|---------------------|
| BVU-800          | Operation And Maintenance Manual Correction:<br>Frame Wiring List For CN31                           | All               | 81-22               |
|                  | Elimination Of The Internal Drop Out<br>Compensator When Using The VCR With A Time<br>Base Corrector | 10,001-11,550     | 82-27               |
|                  | Replacement of Ring Sensor Assembly<br>X-366-802-40 And T.H.D. Cam 3-668-213-00 With<br>-02 Version  | 10,130 and Lower  | 82-29               |
| CCU-300          | Change of 'Microswitch'  | 10,800 and Lower  | 82-14               |
| VO-2800          | Gear Box Assembly Installation   | 20,650 and Lower  | 81-26               |
|                  | Production Changes   | 16,851 and Higher | 82-11               |
|                  | New Drum Base Assembly   | 20,650 and Lower  | 82-12               |
| VO-2860          | Substitute For Discontinued IC   | 10,060 and Lower  | 82-6                |
| VO-2860A         | Gear Box Assembly Installation   | 13,370 and Lower  | 81-26               |
|                  | Substitute For Discontinued IC   | 13,640 and Lower  | 82-6                |
|                  | Corrections To Manual  | All               | 82-9                |
|                  | Production Changes   | 14,011 and Higher | 82-11               |
|                  | New Drum Base Assembly   | 12,770 and Lower  | 82-12               |
| VO-4800          | Modulator Circuit Part Change. Incompatibility<br>Between Older Parts And Newer Circuit Boards       | 18,551 and Higher | 82-24               |
| VP-2260          | Substitute For Discontinued IC   | 13,030 and Lower  | 82-6                |



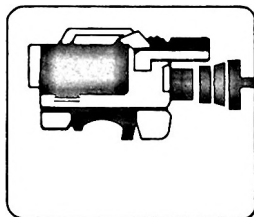
# bulletin index SUPPLEMENT

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

MARCH, 1982

This supplement to the January, 1982 index lists bulletins published January through March, 1982.

| <i>Model No.</i> | <i>Subject</i>  | <i>Serial No.</i> | <i>Bulletin No.</i> |
|------------------|---|-------------------|---------------------|
| AC-500           | 'Converter Transformer' Change                            | 10,750 and Lower  | 81-23               |
| BK-111           | Addition to Manual: User Bit Information                  | All               | 81-17               |
| BVE-5000         | On-Board Regulation Improvement                           | 10,001-10,006     | 2                   |
|                  | BK-5003 Manual Correction                                 | All               | 4                   |
|                  | Corrections To Manual: Unit-3 Frame Wiring                | 20,000 and Lower  | 5                   |
| BVH-1100A        | Circuit Protection (IC6/7 On RF SW BOARD)                 | 20,401 and Lower  | 5                   |
|                  | Improved IC Reliability (Framing-A Board)                 | 20,501 and Higher | 8                   |
| BVP-330          | Part Number Correction                                    | All               | 81-20               |
| BVT-2000         | Improved Stability of Horizontal Position During Playback | All               | 14                  |
|                  | DP Flutter Improvement                                    | 11,601 and Higher | 15                  |
|                  | Improvement In Vertical Blanking Stability                | 11,901 and Higher | 17                  |
| BVU-50           | Correction Of Spring Part Numbers                         | All               | 80-25R              |
|                  | Improved DC-DC Converter Filtering                        | 10,001-20,990     | 81-29               |
| BVU-110          | Bracket, Ass'y Changes                                    | 10,001-10,610     | 81-18               |
|                  | Possible Tape Damage, Eject Mode                          | 10,001-10360      | 81-21               |
|                  | New Stop Button Switch                                    | 10,001-11,230     | 81-27               |
| BVU-200B         | Change of ICs On DS-7 Board                               | 30,800 and Lower  | 81-28               |
| BVU-800          | Preroll / Pause Modification                              | All               | 81-15               |
| BVX-30           | Improvement of Drop Out Killer Operation                  | 10,001-10,300     | 81-16               |



# bulletin index

## January, 1982

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

### COMPLETE INDEX OF BROADCAST BULLETINS PUBLISHED THROUGH DECEMBER, 1981

| <i>Model No.</i> | <i>Subject</i>                                  | <i>Serial No.</i> | <i>Bulletin No.</i> |
|------------------|---|-------------------|---------------------|
| AC-200           | Battery Overcharge                              | All               | 80-1                |
| AC-500           | Pilot Lamp Current Reduction                    | 10,000-10,780     | 80-9                |
|                  | "Converter Transformer" Change                  | All               | 81-23               |
| AC-5000          | AC-5000 Charge Lamp                             | 21,080 and Lower  | 78-23               |
| BC-210           | Battery Overcharge                              | All               | 80-1                |
|                  | Pilot Lamp Current Reduction                    | 10,001-10,780     | 80-9                |
| BK-111           | 1. Time Code Recording Improvement              | 10,001-10,390     | 81-9                |
|                  | 2. Thumbwheel Modification                      |                   |                     |
|                  | Addition To Manual: User Bit Information        | 10,001-10,390     | 81-17               |
| BVE-500          | Interchangeability Modification                 | All               | 77-18               |
|                  | Cue Detector (QC-2 Board)                       | 20,350 and Lower  | 78-19               |
| BVE-500A         | Interchangeability Modification                 | All               | 77-18               |
|                  | Digital Counter Operation at High Temperatures  | 20,350 and Lower  | 78-8R               |
|                  | Tape Slack in BVU-200A When Used With BVE-500A  | All               | 78-25               |
|                  | Out Edit/Preview Timing Improvement             | 20,510 and Lower  | 79-6                |
|                  | UP/DOWN Counter Operation                       | All               | 80-10R              |
|                  | New AC IN Connector                             | 21,711 and Higher | 80-28               |
| BVE-5000         | Changes in SIO-1 Board                          | 10,006-10,201     | 1                   |
|                  | On-Board Regulation Improvement                 | 10,001-10,006     | 2                   |
|                  | BK-5003 Manual Correction                       | All               | 4                   |
|                  | Corrections to the Manual: Unit-3 Frame Wiring  | 20,400 and Lower  | 5                   |
| BVG-1000         | Potential Transformer Short                     | All               | 2                   |
|                  | Technical Manual Corrections                    | 10,001-10,261     | 3                   |
|                  | Noise Transients in Character Video Output      | All               | 4                   |
|                  | Improvement in VITC Reader                      | 10,040 and Lower  | 5                   |
|                  | VITC Regeneration                               | 10,040 and Lower  | 5                   |
|                  | Improved Detection of REF Lock                  | 10,040 and Lower  | 5                   |
|                  | Reader Data Hold Function                       | All               | 6                   |
| BVH-500          | Increased Range of Audio Record Bias Adjustment | 10,100 and Lower  | 1                   |

# BULLETIN INDEX

| Model No.           | Subject   | Serial No.                                 | Bulletin No. |
|---------------------|---|--|--------------|
| BVH-500<br>(Cont'd) | Reel Table Height Adjustment  | 10,071 and Higher                          | 2            |
|                     | Production Changes  | 10,600 and Lower                           | 2A           |
|                     | Video Output Differential Gain                                      | 10,200 and Lower                           | 3            |
|                     | Stabilized Video Output   | 10,200 and Lower                           | 3            |
|                     | Time Code Output Waveform Improvement                               | 10,001-10,103<br>10,105; 10,106;<br>10,113 | 4            |
|                     | Audio Feedback Modification   | All  | 5            |
|                     | Sync Channel REC/PB Improved  | 10,001-10,200                              | 6            |
|                     | Improved Drum Response  | 10,001-10,401                              | 7            |
|                     | Improved Standby Alarm  | 10,001-10,200                              | 8            |
|                     | Wow and Flutter Improvement   | 10,001-10,200                              | 9            |
|                     | Change of Tape Tension  | 10,001-10,600                              | 10           |
|                     | Drum FG Waveform  | 10,600 and Lower                           | 11           |
|                     | 15 Hz Edit Pulse  | All  | 12R          |
|                     | Improved Battery Jack   | 10,701 and Lower                           | 13           |
|                     | Double Gap Erase Head   | 10,700 and Lower                           | 14           |
|                     | Excess Video Light Setting  | 10,001-10,200                              | 15           |
|                     | Board Interface   | 10,600 and Lower                           | 16           |
|                     | Timer Memory  | 10,001-10,500                              | 17           |
|                     | Transistor Substitution   | All  | 18           |
| BVH-500A            | Technical Manual Corrections  | 21,001-21,899                              | 1            |
| BVH-1000            | Record Stop Inhibit   | All  | 7            |
|                     | Record Stop Inhibit with Constant Speed                             | 10,100 and Lower                           | 7B           |
|                     | Spot Audio, Cue Erase   | All  | 8            |
|                     | Equalization Controls   | All  | 9            |
|                     | Tape Timer Selector Switch Change                                   | All  | 12           |
|                     | Power ON-OFF Switchguard  | All  | 13           |
|                     | Standby Drop-Out Inhibit  | All  | 14           |
|                     | Split-Edit Modification (Change 2)                                  | All  | 15           |
|                     | HT-1000 Color-1 Board Change  | All  | 16           |
|                     | Audio Monitor OUT (Audio AUX) Installation                          | All  | 17           |
|                     | A/V Bias and EQ Readjustments for Extension<br>Cable Use (Change 2) | 10,100 and Lower                           | 19           |
|                     | Readjustments for Extension Cable Use                               | 10,101 and Higher                          | 19A          |
|                     | Molre Measurement Procedure   | All  | 20           |
|                     | Audio Impedance Modifications                                       | All  | 21           |
|                     | Reel Installation Difficulty  | 10,007-10,037                              | 22           |
|                     | Waveform Monitor Switch Modification                                | 10,100 and Lower                           | 23           |
|                     | Capstan Override Modification                                       | 10,100 and Lower                           | 24           |
|                     | Guardband and Hue Adjustments                                       | 10,100 and Lower                           | 25           |
|                     | Reduce Back Tension During Still Frame                              | 10,100 and Lower                           | 26           |
|                     | Tape Protection (FF, To Play)                                       | 10,100 and Lower                           | 27           |

| Model No.            | Subject   | Serial No.                         | Bulletin No. |
|----------------------|---|------------------------------------|--------------|
| BVH-1000<br>(Cont'd) | Bidirex Jog Limit   | 10,100 and Lower                   | 28           |
|                      | Delete X25 Slow Down  | 10,100 and Lower                   | 29           |
|                      | Power OFF Modifications   | 10,000 and Lower;<br>10,001-10,113 | 30           |
|                      | Drum Replacement—Video Section<br>Adjustments                   | All                                | 32           |
|                      | Extension Cables for Five-part<br>BVH-1000 System               | All                                | 33           |
|                      | Locking Color Frame Mode  | 10,100 and Lower                   | 35           |
|                      | Increasing Resistor Power Rating                                | 10,100 and Lower                   | 36           |
|                      | Eliminating Cue Turn-Off "Click"                                | 10,040 and Lower                   | 37           |
|                      | Hour Meter Modification   | 10,100 and Lower                   | 38           |
|                      | Drum Brake Circuit Improvement                                  | 10,100 and Lower                   | 39           |
|                      | Subcarrier Delay Line Check                                     | 10,100 and Lower                   | 40           |
|                      | Increasing Demod Board Resistor<br>Power Rating                 | 10,100 and Lower                   | 41           |
|                      | REW Chroma Shift Countermeasure                                 | 10,100 and Lower                   | 42           |
|                      | Camera-Produced Overmodulation                                  | All                                | 43           |
|                      | Video Hum with HT-1000  | 10,100 and Lower                   | 44           |
|                      | Correcting Mode Shifts  | All                                | 46           |
|                      | REC Amp Oscillator Change                                       | 20,201-20,300                      | 47           |
|                      | Large-Input DG, DP Countermeasure                               | All                                | 48           |
|                      | Tape Timer Accuracy Check and Adjustment                        | All                                | 49           |
|                      | Improved MOD Board Square Wave<br>Response                      | All                                | 50           |
|                      | Address Code Reassignment                                       | All                                | 50A          |
|                      | Sys-3 Board Mod, Tape Hunting                                   | 20,219;<br>20,229 and Higher       | 52           |
|                      | Replacement of Audio Tape Guide to Reduce<br>Oxide Accumulation | 20,700 and Lower                   | 53R          |
|                      | IC Replacement for HA17741G                                     | All                                | 54           |
|                      | Audio Logic Board   | All                                | 55           |
|                      | Edit Phase Error Compensation                                   | All                                | 57           |
|                      | Audio Level of Alignment Tape BR5-2                             | All                                | 58           |
|                      | Part Number for Audio/Video Meter Lamp                          | All                                | 59           |
| BVH-1000A            | Readjustments for Extension Cable Use                           | 10,101 and Higher                  | 19A          |
|                      | Mods/Kits Availability Announcement                             | All                                | 42B          |
|                      | Reel-2 Board, Search Detect, OSC.MOD.                           | 20,219;<br>20,229 and Higher       | 51           |
|                      | Sys-3 Board Mod, Tape Hunting                                   | 20,219;<br>20,229 and Higher       | 52           |
|                      | Audio Logic Board   | All                                | 55           |
|                      | Using Extension Cables  | All                                | 56           |
|                      | Edit Phase Error Compensation                                   | All                                | 57           |



# BULLETIN INDEX

| Model No.             | Subject   | Serial No.   | Bulletin No. |
|-----------------------|---|--|--------------|
| BVH-1000A<br>(Cont'd) | Frequency Response Adjustment, Manual Supplement 1                | All  | 60           |
|                       | Service Tools and Fixtures  | All  | 61           |
| BVH-1100              | Tape Slack Protection   | 10,001-10,068<br>(except 10,027;<br>10,028; 10,046;<br>10,050; 10,066) | 1            |
|                       | Capacitor Assembly and Sub-Harness                                | 10,001-10,017;<br>10,024   | 2            |
|                       | Dropout Detection Improvement<br>(RF EQ-2 Board)                  | 10,001 and Higher  | 3            |
|                       | BVH-1100 Extension Cables   | All  | 4            |
|                       | Tape Timer with CTL Update (Change of Tape<br>Timer Board)        | 10,601 and Higher  | 5            |
|                       | Edit Accuracy Improvement   | 10,900 and Lower   | 6            |
|                       | Tape Timer Accuracy   | 10,601-10,800  | 7            |
|                       | Tape Timer Idler Slippage   | 11,001 and Lower   | 8R           |
|                       | HT-1000 Installation (NTSC)                                       | All  | 9            |
|                       | 15-Hz Reference Pulse Simplifies Color<br>Synchronization         | All  | 10R          |
|                       | Improved Head-to-Tape Contact in DT<br>Operation                  | 11,100 and Lower   | 11           |
|                       | Frame Edit Modification   | 20,800 and Lower   | 12           |
|                       | Stretching the Color Frame Detector Window                        | 10,001-11,000  | 13           |
|                       | Locking the Time Code to the Color Frame                          | 10,001-11,000  | 14           |
|                       | Corrections to BVH-1100 Manual                                    | 10,001 and Higher  | 15           |
|                       | Providing a Color Frame Interface for the<br>BVT-1000             | All  | 17           |
|                       | Using Extension Cables  | All  | 56           |
|                       | Part Number for Audio/Video Meter Lamp                            | All  | 59           |
|                       | Service Tools and Fixtures  | All  | 61           |
| BVH-1100A             | Audio Mute at 5X Normal Speed                                     | All  | 1            |
|                       | Auto Selection of 2F/4F for Edit (Insert,<br>Assemble) and Record | 11,000 and Higher  | 2            |
|                       | Improved IC Reliability on Reel-2A Board                          | 20,000 and Lower   | 3            |
|                       | Spot Erasures During Power Down                                   | 20,000 and Higher  | 4            |
|                       | Circuit Protection (IC6/7 On RF SW Board)                         | 20,401 and Lower   | 5            |
|                       | Improved IC Reliability (Framing -A Board)                        | 20,500 and Lower   | 8            |
|                       | Frame Edit Modification   | 20,800 and Lower   | 12           |
|                       | Providing a Color Frame Interface for the<br>BVT-1000             | All  | 17           |
| BVP-200               | Registration at High Temperatures                                 | 15,130 and Lower   | 79-8         |
|                       | Added Service Parts   | All  | 80-18        |
| BVP-300               | Tripod Adaptor  | All  | 79-15        |

| Model No.           | Subject   | Serial No.   | Bulletin No. |
|---------------------|---|--|--------------|
| BVP-300<br>(Cont'd) | Foil Pattern Misprint (SG-15 Board)   | 10,301-10,360<br>10,401-10,440   | 79-24        |
|                     | 1. Gamma Deviation at Low Temperatures  | 10,001-10,200  | 79-25        |
|                     | 2. Blanking Correction at Low Temperatures  | 10,001-10,200  |              |
|                     | 3. Power Interruptions from Impacts   | 10,001-10,300  |              |
|                     | 4. Bias Light Correction  | 10,001-10,300  |              |
|                     | 5. Reinforced Tripod Attachment   | 10,001-10,400  |              |
|                     | 6. Frequency Response Improvement   | 10,001-10,300  |              |
|                     | 7. ABO Circuit Frequency Response Improvement   | 10,001-10,707  |              |
|                     | Correction of SUPP-1 and 3rd Edition  | All  | 80-26        |
|                     | Change of Limiter Range for RB-Gain Control   | 10,001-10,707  | 81-4         |
|                     |   |  |              |
| BVP-330             | Correct P/N for 1.5" Viewfinder CRT   | All  | 81-14        |
|                     | Part Number Correction  | All  | 81-20        |
| BVR-1000            | Technical Manual Corrections  | All  | 1            |
|                     | Technical Manual Corrections: Incorrect Polarity of C20   | All  | 2            |
| BVR-1010            | Production Change   | All  | 1            |
|                     | Sync Select Modification  | All  | 2            |
| BVT-1000            | Input Level Control Support Bracket   | 10,001-10,037  | 2            |
|                     | Sync Clock Modification   | 10,004-10,009<br>10,011-10,020   | 3            |
|                     | HUE Control—Chroma Phase Control  | 10,100 and Lower   | 4A           |
|                     | HUE Control—Chroma Phase Control  | 10,101 and Higher  | 4B           |
|                     | Streaking Countermeasure  | 10,070 and Lower   | 5            |
|                     | Procedure for Inspection of Memory ICs  | 10,001-10,100  | 6            |
|                     | High Temperature Operation  | 10,101-10,110;<br>10,114-10,116;<br>10,118-10,120  | 7            |
|                     | V-Blkg. Width Modification  | All  | 8            |
|                     | Voltage Timing and Zero Address Control   | 10,100 and Lower   | 9            |
|                     | Voltage Adjustment  |  |              |
|                     | Decreasing Chroma Level Adjustment Range  | 10,100 and Lower   | 10           |
|                     | Minimization of Picture Quaking   | 10,001-10,064  | 11           |
|                     | Voltage Detector Circuit Improvement  | 10,037 and Lower   | 12           |
|                     | Decreasing Interference Between the Main and U-Matic Clocks in the U-Matic APC Mode for Improved Chroma | 10,048 and Lower   | 13           |
|                     | Streaking Countermeasure  | 10,100 and Lower   | 14           |
|                     | H. Sync Detector and Dropout Gate Multi-Vibrator Malfunctions   | 10,100 and Lower   | 15           |
|                     | Mandatory Parts Replacement   | 10,101-10,110;<br>10,112-10,120;<br>10,122-10,124;<br>10,128; 10,130;<br>10,131; 10,134;<br>10,135; 10,137 | 16           |
|                     |   |  |              |
|                     | CK-1 Board Changes  | 10,050 and Lower   | 17           |

# BULLETIN INDEX

| Model No.            | Subject   | Serial No.  | Bulletin No. |
|----------------------|---|---|--------------|
| BVT-1000<br>(Cont'd) | CG-1 Board Changes                                  | 10,047-10,053<br>10,101-10,110<br>10,116;<br>10,118-10,120  | 18           |
|                      | BH-1 Board Changes                                  | 10,001-10,140   | 19           |
|                      | Moviola Window Circuit Improvements                 | 10,101-10,110<br>10,116;<br>10,118-10,120   | 20           |
|                      | SG-6 Board Changes                                  | 10,001-10,140   | 21           |
|                      | Improvement of Video Output Amp DP                  | 10,001-10,042   | 22           |
|                      | APC Limiter Voltage Change                          | 10,223 and Lower<br>(except 10,209; 10,210;<br>10,217-10,220;<br>10,224)  | 23           |
|                      | ADV SYNC Phase Control Modification                 | 10,200 and Lower  | 24           |
|                      | Video Phase Shifting Countermeasures                | 10,200 and Lower  | 25           |
|                      | Streaking In AFC Mode When Using U-Matics           | All (except<br>10,010; 10,111;<br>10,121; 10,125;<br>10,127; 10,129;<br>10,132; 10,133;<br>10,136; 10,138-<br>10,165; 10,201 and<br>Higher) | 26           |
|                      | DOC Muting Change                                   | All (Except<br>10,111; 10,121;<br>10,125-10,127;<br>10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165)                                    | 27           |
|                      | Countering U-Matic Skew Effects                     | All (except<br>10,111 10,121;<br>10,125-10,127;<br>10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165)                                     | 28           |
|                      | A/D Converter Trouble Shooting                      | All (except<br>10,111; 10,121;<br>10,125; 10,126;<br>10,127; 10,129;<br>10,132; 10,133;<br>10,135; 10,136;<br>10,138-10,168)                | 29           |
|                      | Prevention of Double Termination—Comp<br>Sync Input | 10,200 and Lower  | 30           |
|                      | Reduction of Process Mode<br>Residual Jitter        | 10,101-10,110<br>10,114-10,116<br>10,118-10,120   | 31           |
|                      | Moviola Window Circuit Change                       | All (except<br>10,111; 10,121;<br>10,125-10,127;<br>10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165)                                    | 32           |

| Model No.            | Subject   | Serial No.  | Bulletin No. |
|----------------------|---|---|--------------|
| BVT-1000<br>(Cont'd) | - 12V Power Supply Change                               | 10,036 and Lower                                      | 33           |
|                      | New SG-6 Board  | 10,500 and Lower                                      | 34           |
|                      | Improving Hue Drift, Temperature Characteristic         | 10,300 and Lower                                      | 35           |
|                      | SQ-1 Switching Pulse—WR Zero Check                      | All   | 36           |
|                      | Reversed Capacitor                                      | 10,200 and Lower                                      | 37           |
|                      | Change of System Sync and SC Control Range              | All   | 38           |
|                      | Countermeasures for 280ns Video Shift                   | 10,235 and Lower                                      | 39           |
|                      | V-Sync Detection Improvement                            | 10,051 and Lower                                      | 40           |
|                      | Improved Moviola and Muting Function (DO-1)             | 10,350 and Lower                                      | 41           |
|                      | V-Sep Kit   | All   | 42           |
|                      | Mods/Kits Availability Announcement                     | All   | 42B          |
|                      | Color Framing Temperature                               | 10,300 and Lower(except 10,238; 10,253; 10,261-10,270 | 43           |
|                      | Characteristic Improvement (SQ-1 Board and SG-6 Board   | 10,261-10,270   |              |
|                      | 280/ns Editing Phase Shift (Color Framing Modification) | 10,500 and Lower                                      | 44           |
|                      | Improvement in Bidirex Mode                             | 10,370 and Lower                                      | 45           |
|                      | Improved Retrigger MMV                                  | 10,500 and Lower                                      | 46           |
|                      | Low Reference Sync Level                                | 10,371-10,501   | 47           |
|                      | Improved Sync Sep Circuit                               | 10,501 and Higher                                     | 48           |
|                      | Low Level Ref SC Inputs Affecting Ext Sync Lock         | 10,500 and Lower                                      | 49           |
|                      | Hue Deviation and Power Transients                      | 10,370 and Lower                                      | 50           |
|                      | Input Pedestal Level Detector Change (BH-1 Board)       | 10,500 and Lower                                      | 51           |
|                      | DP and DG Improvement, PR-4 Board                       | 10,500 and Lower                                      | 52           |
|                      | CG-1 Board Adjustment with Extension Board              | 10,701 and Higher                                     | 53R          |
|                      | Part Number Correction, AD-1 Board                      | All   | 54           |
|                      | Horizontal Sync Width                                   | 10,001-10,100<br>10,101-10,380                        | 55           |
|                      | Increase Chroma Level Adjustable Range, UI-1 Board      | 11,300 and Lower                                      | 56           |
|                      | Voltage Selector Seal Part Number Correction            | All   | 57           |
|                      | Vertical Stability, VS-6 Board                          | 11,300 and Lower                                      | 58           |
|                      | Read Zero Reset Circuit                                 | 10,001-10,301<br>(except 11,002; 11,104)              | 59           |
|                      | Fixture for Service Purposes                            | All   | 60           |
| BVT-2000             | Improvement of Dropout Circuit                          | 10,001-10,200   | 1R           |
|                      | Board Interchangeability                                | 10,001-10,015   | 2            |
|                      | Change of P-Rom Designation                             | 10,001-10,100   | 3            |

# BULLETIN INDEX

| Model No.            | Subject   | Serial No.   | Bulletin No. |
|----------------------|---|--|--------------|
| BVT-2000<br>(Cont'd) | Hue Shift When Playing Tapes<br>with No Sync Tracks                             | 10,013; 10,014;<br>10,021; 10,025;<br>10,028; 10,030;<br>10,032; 10,034;<br>10,036; 10,037;<br>10,040; 10,042;<br>10,043; 10,046;<br>10,048; 10,050;<br>10,054, 10,056             | 4            |
|                      | CK-3, SQ-2 (SQ-3) Boards  | 10,013; 10,014;<br>10,017; 10,021;<br>10,025; 10,028;<br>10,030; 10,032;<br>10,033; 10,034;<br>10,036; 10,037;<br>10,040; 10,042;<br>10,043; 10,046;<br>10,048; 10,050;<br>10,054, | 5            |
|                      | Noise Reduction During V Blanking   | 10,015; 10,016;<br>10,022; 10,023;<br>10,026; 10,027;<br>10,029; 10,035  | 6            |
|                      | Latch Added to ID Blk. Switch   | 10,001-10,200  | 7            |
|                      | Vector Jitter In U-Matic AFC Mode   | 10,001-10,100  | 8            |
|                      | Picture Waterfall Effect at High Speed Play<br>(40 through 50X Normal)          | 10,001-10,101  | 9            |
|                      | Low Luminance During Dropout Replacement  | 10,001-10,200  | 10           |
|                      | Frequency Response Improvement<br>(PR-22 Board)                                 | 10,001-10,300  | 11           |
|                      | Increased System Sync Adjustment Range  | 10,016; 10,022;<br>10,023; 10,026;<br>10,027; 10,029   | 12           |
|                      | Horizontal Shift in DT Mode   | All  | 13           |
|                      | Improved Stability of Horizontal<br>Position During Playback                    | All  | 14           |
|                      | DP Flutter Improvement  | 11,601 and Higher  | 15           |
|                      | Improvement In Vertical Blanking Stability                                      | 11,900 and Lower   | 17           |
| BVU-50               | Improved Reset Switch On FP-4 Board   | 10,071 and Higher  | 78-27        |
|                      | Time Code Crosstalk Reduction   | All  | 78-29        |
|                      | Erase Head Crosstalk in Video   | All  | 79-5R        |
|                      | Threading Motor Protection  | All  | 79-10        |
|                      | Playback Checker  | All  | 79-12        |
|                      | 1. Wiring Change, Tape End Detection (LED)<br>2. SM-10 Board Interchangeability | 10,621 and Lower   | 79-16        |
|                      | Low Temperature Servo Operation   | 20,120 and<br>Lower;<br>20,121-20,126;<br>20,128-20,132;<br>20,135; 20,137;<br>20,139; 20,141-<br>20,148; 20,150;<br>20,154; 20,159;<br>20,160                                     | 80-3         |

| <i>Model No.</i>   | <i>Subject</i>  | <i>Serial No.</i> | <i>Bulletin No.</i> |
|--------------------|---|-------------------|---------------------|
| BVU-50<br>(Cont'd) | Improved Microphone Grounding   | 20,020 and Lower  | 80-4                |
|                    | RF Alarm Improvement  | 20,020 and Lower  | 80-6                |
|                    | Shoulder Strap Hanger Assembly  | 20,540 and Lower  | 80-7                |
|                    | Threading Motor Protection  | 20,541 and Lower  | 80-8                |
|                    | Production Changes  | 20,540 and Lower  | 80-11               |
|                    | Servicing Equipment   | All               | 80-12               |
|                    | Cassette Control Assembly Part Changes  | All               | 80-13               |
|                    | Audio Crosstalk   | 20,541 and Lower  | 80-20R              |
|                    | AGC Kit Installation Instructions   | 20,000 and Lower  | 80-22               |
|                    | Correction of Spring Part Numbers   | All               | 80-25R              |
|                    | Shoulder Belt Improvement   | 20,540 and Lower  | 81-1                |
|                    | New D Motor Pulley Configuration  | 20,540 and Lower  | 81-3                |
|                    | Reinforcement of Cassette Panel   | 20,270 and Lower  | 81-7                |
|                    | Service Manual Additions: CTL HEAD,<br>PS/SYSCON Alignment Procedures                     | All               | 81-10               |
|                    | 1. Additional Protection Against<br>Electrostatic Damage (IC3)                            | 10,001-20,370     | 81-11               |
|                    | 2. Corrections to Operation and<br>Maintenance Manual, 3rd Edition                        | 20,541-20,740     | 81-11               |
|                    | Service Tools and Fixtures  | All               | 81-12               |
|                    | Improved DC-DC Converter Filtering  | 10,001-20,990     | 81-29               |
| BVU-100            | CG-100 Mounting Hardware  | 20,001-20,150     | 77-2                |
|                    | Reel Table Height Check Jig   | All               | 77-4                |
|                    | Technical Manual Correction   | All               | 77-12               |
|                    | Audio Bias Frequency Checks   | 20,350 and Lower  | 77-19               |
|                    | Bias Erase Oscillator Circuit Change  | 20,920 and Lower  | 78-7                |
|                    | Camera Trigger Modification   | 20,351-21,080     | 78-9                |
|                    | Condensation Sensor   | 20,291 and Higher | 78-11               |
|                    | Drum Assembly and Upper Head Drum<br>Standardization                                      | All               | 78-20               |
|                    | AC-5000 Charge Lamp   | 21,080 and Lower  | 78-23               |
|                    | Increased Audio Meter Adjustment Range  | 21,260 and Lower  | 78-28               |
|                    | Printed Circuit Board Standardization   | All               | 79-2                |
|                    | Address Head Assembly Change  | 20,819 and Higher | 79-3                |
|                    | 1. Improvement on Pause Edit Operation<br>2. Change of FF and REW Torque<br>Specification | 21,630 and Lower  | 79-11               |
|                    | PG Error Correction   | All               | 80-2                |
|                    | Reel Motor Noise Filter   | 21,781 and Lower  | 80-5                |
|                    | BR-4 Boards   | All               | 80-21               |
|                    | Service Manual Correction (Drum Servo)  | All               | 80-23               |
|                    | Service Tools and Fixtures  | All               | 81-12               |
| BVU-110            | Interface with TK-76  | All               | 80-29               |
|                    | Service Tools and Fixtures  | All               | 81-12               |

# BULLETIN INDEX

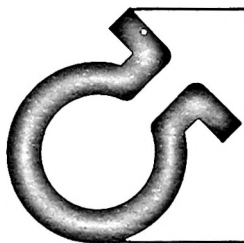
| Model No.           | Subject   | Serial No.        | Bulletin No. |
|---------------------|---|-------------------|--------------|
| BVU-110<br>(Cont'd) | Pause Plunger Timer Adjustment                          | All               | 81-13        |
|                     | Bracket, Ass'y Change                                   | 10,001-10,610     | 81-18        |
|                     | Possible Tape Damage, Eject Mode                        | 10,001-10,360     | 81-21        |
|                     | New Stop Button Switch                                  | 10,001-11,230     | 81-27        |
| BVU-200             | New Tape Guide Assembly                                 | 10,251 and Higher | 77-5         |
|                     | Replacement Parts for Cassette-Up Assembly              | All               | 77-6         |
|                     | Improved Take-Up Tension Regulator and Brake Shoe       | 10,251 and Higher | 77-7         |
|                     | Change in Forward Take-Up Torque Specification          | All               | 77-8         |
|                     | S. Hold Arm Assembly and S. Hold Lever                  | 10,851 and Higher | 77-9         |
|                     | Brush Guard   | 11,101 and Higher | 77-10        |
|                     | Erase Head Base Assembly                                | 10,250 and Higher | 77-11        |
|                     | Improper Transistor Substitute for 2SA772               | All               | 77-13        |
|                     | Frame Skipping, Editing Errors                          | 10,600 and Lower  | 77-15        |
|                     | Dubbing Adaptor Kit                                     | All               | 78-1R        |
|                     | Preventive Maintenance                                  | All               | 78-3         |
|                     | Servo Lock to Incoming Video in the REC Mode            | All               | 78-4R        |
|                     | New Brake Shoe  | All               | 78-5         |
|                     | Pinch Roller Assembly and Upper Sub Ring                | 20,051 and Higher | 78-6         |
|                     | Improved Midway Pulley and Take-up Reel Table           | 20,000 and Lower  | 78-10        |
|                     | New Condensation Sensor                                 | 11,351 and Higher | 78-11        |
|                     | Vertical Blanking Kit                                   | All               | 78-12R       |
|                     | Drum Assembly and Upper Head Drum Standardization       | All               | 78-20        |
|                     | Standardization of PB-2 Board                           | All               | 78-21        |
|                     | Improved Noise Immunity in RC CTL Counter               | 21,050 and Lower  | 78-22        |
|                     | Main Solenoid Drive Transistor Protection               | 11,350 and Lower  | 78-26        |
|                     | Printed Circuit Board Standardization                   | All               | 79-1         |
|                     | Address Head Assembly Change                            | 20,201 and Higher | 79-3         |
|                     | Threading Back Tension Improvement                      | 11,101 and Higher | 79-7R        |
|                     | AM Kit  | All               | 80-16        |
|                     | Deck Assembly Replacement                               | All               | 80-19        |
|                     | Editing, Reduction of Audio Pops                        | 10,001-10,251     | 81-8         |
|                     | Service Tools and Fixtures                              | All               | 81-12        |
| BVU-200A            | Pinch Roller Assembly and Upper Sub Ring                | 21,051 and Higher | 78-6         |
|                     | Improved Midway Pulley and Take-Up Reel Table           | 20,000 and Lower  | 78-10        |
|                     | New Condensation Sensor                                 | 21,051 and Higher | 78-11        |
|                     | Vertical Blanking Kit                                   | All               | 78-12R       |
|                     | Line-Dubbing Losses                                     | All               | 78-13        |
|                     | System Control Noise Suppression in Playback and Record | 21,050 and Lower  | 78-17        |

| <i>Model No.</i>     | <i>Subject</i>  | <i>Serial No.</i>               | <i>Bulletin No.</i> |
|----------------------|---|---------------------------------|---------------------|
| BVU-200A<br>(Cont'd) | 1. Power Surges and Drum Servo Operation                            | 21,050 and Lower                | 78-18               |
|                      | 2. Servo Lock Lamp Operation  |                                 |                     |
|                      | Drum Assembly and Upper Head Drum Standardization                   | All                             | 78-20               |
|                      | Standardization of PB-2 Board                                       | All                             | 78-21               |
|                      | Improved Noise Immunity in RC CTL Counter                           | 21,050 and Lower                | 78-22               |
|                      | Flicker in Dubbing  | 21,410 and Lower                | 78-24               |
|                      | Tape Slack in the BVU-200A When Used with BVE-500A                  | 20,650 and Lower                | 78-25               |
|                      | Printed Circuit Board Standardization                               | All                             | 79-1                |
|                      | Address Head Assembly Change  | 20,201 and Higher               | 79-3                |
|                      | Improved Stability of Video Output                                  | 21,410 and Lower                | 79-4                |
|                      | 1. Time Code Oscillation  | 21,760 and Lower                | 79-9                |
|                      | 2. CTL Crosstalk  |                                 |                     |
|                      | Picture Improvement   | 22,260 and Lower                | 79-14               |
|                      | Removal of Still Switch   | 22,510 and Lower                | 79-18               |
|                      | Y Record Current Stabilization                                      | 22,260 and Lower                | 79-19               |
|                      | CTL Amplifier (ED-4 Board)  | 22,260 and Lower                | 79-20               |
|                      | Stabilized Internal Vertical Drive Generator (ED-4 Board)           | 21,051 and Higher               | 79-21               |
|                      | Capstan Brake   | 22,511 and Lower                | 79-22               |
|                      | Improved Static Immunity  | 22,261 and Lower                | 79-23               |
|                      | Function Assembly (1) Part Numbers                                  | All                             | 80-14               |
|                      | Deck Assembly Replacement   | All                             | 80-19               |
|                      | New AC IN Connector   | 24,361 and Higher               | 80-28               |
|                      | Take-Up Tension Regulator Change                                    | 24,160 and Lower                | 81-5                |
|                      | Service Tools and Fixtures  | All                             | 81-12               |
| BVU-200B             | Adjustment Procedure for DIP SW-2 on DS-7 Board                     | All                             | 80-24               |
|                      | Servo Lock with CTL Recorded Tape                                   | 30,000-31,401                   | 81-2                |
|                      | Take-Up Tension Regulator Change                                    | 30,500 and Lower                | 81-5                |
|                      | Service Manual Addition: Playback Chroma Phase Equalizer Adjustment | All                             | 81-11               |
|                      | Service Tools and Fixtures  | All                             | 81-12               |
|                      | Change of IC's on DS-7 Board  | 30,800 and Lower                | 81-28               |
| BVU-800              | Preroll/Pause Modification  | All                             | 81-15               |
| BVX-30               | Improvement of Drop Out Killer Operation                            | 10,001-10,300                   | 81-16               |
| CCU-200              | Cable Compensator Modification for Improved Reliability             | 15,104 and Lower                | 81-6                |
| CG-100               | Frame Clock Generator Modification                                  | Those purchased before 12/15/76 | 77-3                |
| CG-1000R             | Correcting the Time Code Reader Display                             | 10,001-10,300                   | 1                   |



# BULLETIN INDEX

| <i>Model No.</i>       | <i>Subject</i>   | <i>Serial No.</i> | <i>Bulletin No.</i> |
|------------------------|--|-------------------|---------------------|
| CLP-500                | AC-5000 Charge Lamp<br>New Handle Bearing  | 21,080 and Lower  | 78-23               |
|                        |  | 21,630 and Lower  | 80-17               |
| IF-1000                | I.C. Protection<br>Jog Speed   | 10,000 and Lower  | 1                   |
|                        |  | 1-300             | 2                   |
| U-Matics               | Alignment Tape Change  | All               | 78-16               |
| VO-2850                | External Subcarrier for use with a Time<br>Base Corrector  | 20,001 and Higher | 75-2                |
| VO-3800                | Modification of the VO-3800 Provide V. Lock<br>to an Externally-Applied Video or Sync Signal<br>During Playback. | 11,501 and Higher | 76-1                |
| VO-2800,<br>VO-2850(A) | External Subcarrier for use with a Time Base<br>Corrector  | 22,171 and Higher | 77-1                |



SONY  
BROADCAST

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date:

model:

bulletin no.:

**SPECIAL**

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## OMEGA BULLETIN INDEX (August, 1981)

This index identifies all Omega bulletins published through August, 1981. The bulletins are listed in alphanumeric order by equipment model numbers. Gaps in the numerical sequence indicate bulletins which have been superseded or which apply to more than one model. Serial number effectivity for each bulletin is included so that only those bulletins appropriate for your equipment need be ordered.

Bulletins may be ordered free of charge from:

SONY VIDEO PRODUCTS CO.  
BROADCAST INFORMATION SERVICES  
676 River Oaks Parkway  
San Jose, CA 95134  
Phone (408) 946-9090

When ordering, please specify the model and serial numbers of your equipment and the edition or revision numbers of your operation and maintenance manual.

NOTE: The symbol (>) in the index should be construed to mean "equal to or greater than." Similarly, the symbol (<) means "equal to or less than." Bulletins pertaining to "All" serial numbers should be ordered and reviewed for applicability against your equipment.

| Model No. | Subject   | Serial No.                                 | Bulletin No. |
|-----------|---|--|--------------|
| BVE-5000  | Changes in SIO-1 Board                          | 10,006-10,201                              | 1            |
| BVG-1000  | Potential Transformer Short                     | All  | 2            |
|           | Technical Manual Corrections                    | 10,001-10,261                              | 3            |
|           | Noise Transients in Character Video Output      | All  | 4            |
|           | Improvement in VITC Reader                      | <10,040                                    | 5            |
|           | VITC Regeneration                               | <10,040                                    | 5            |
|           | Improved Detection of REF Lock                  | <10,040                                    | 5            |
| BVH-500   | Increased Range of Audio Record Bias Adjustment | <10,100                                    | 1            |
|           | Reel Table Height Adjustment                    | >10,071                                    | 2            |
|           | Production Changes                              | <10,600                                    | 2A           |
|           | Video Output Differential Gain                  | <10,200                                    | 3            |
|           | Stabilized Video Output                         | <10,200                                    | 3            |
|           | Time Code Output Waveform Improvement           | 10,001-10,103<br>10,105; 10,106;<br>10,113 | 4            |
|           | Audio Feedback Modification                     | All  | 5            |
|           | Sync Channel REC/PB Improved                    | 10,001-10,200                              | 6            |

| Model No.           | Subject   | Serial No.                | Bulletin No. |
|---------------------|---|---------------------------|--------------|
| BVH-500<br>(Cont'd) | Improved Drum Response  | 10,001-10,401             | 7            |
|                     | Improved Standby Alarm  | 10,001-10,200             | 8            |
|                     | Wow and Flutter Improvement                                       | 10,001-10,200             | 9            |
|                     | Change of Tape Tension  | 10,001-10,600             | 10           |
|                     | Drum FG Waveform  | <10,600                   | 11           |
|                     | 15 Hz Edit Pulse  | All                       | 12R          |
|                     | Improved Battery Jack   | <10,701                   | 13           |
|                     | Double Gap Erase Head   | <10,700                   | 14           |
|                     | Excess Video Light Setting  | 10,001-10,200             | 15           |
|                     | Board Interface   | <10,600                   | 16           |
|                     | Timer Memory  | 10,001-10,500             | 17           |
|                     | Transistor Substitution   | All                       | 18           |
| BVH-1000            | Record Stop Inhibit   | All                       | 7            |
|                     | Record Stop Inhibit with Constant Speed                           | <10,100                   | 7B           |
|                     | Spot Audio, Cue Erase   | All                       | 8            |
|                     | Equalization Controls   | All                       | 9            |
|                     | Tape Timer Selector Switch Change                                 | All                       | 12           |
|                     | Power ON-OFF Switchguard  | All                       | 13           |
|                     | Standby Drop-Out Inhibit  | All                       | 14           |
|                     | Split-Edit Modification (Change #2)                               | All                       | 15           |
|                     | HT-1000 Color-1 Board Change                                      | All                       | 16           |
|                     | Audio Monitor OUT (Audio AUX) Installation                        | All                       | 17           |
|                     | A/V Bias and EQ Readjustments for Extension Cable Use (Change #2) | <10,100                   | 19           |
|                     | Readjustments for Extension Cable Use                             | >10,101                   | 19A          |
|                     | Moiré Measurement Procedure                                       | All                       | 20           |
|                     | Audio Impedance Modifications                                     | All                       | 21           |
|                     | Reel Installation Difficulty                                      | 10,007-10,037             | 22           |
|                     | Waveform Monitor Switch Modification                              | <10,100                   | 23           |
|                     | Capstan Override Modification                                     | <10,100                   | 24           |
|                     | Guardband and Hue Adjustments                                     | <10,100                   | 25           |
|                     | Reduce Back Tension During Still Frame                            | <10,100                   | 26           |
|                     | Tape Protection (FF, To Play)                                     | <10,100                   | 27           |
|                     | Bidirex Jog Limit   | <10,100                   | 28           |
|                     | Delete X25 Slow Down  | <10,100                   | 29           |
|                     | Power OFF Modifications   | <10,000;<br>10,001-10,113 | 30           |
|                     | Drum Replacement—Video Section Adjustments                        | All                       | 32           |
|                     | Extension Cables for Five-part BVH-1000 System                    | All                       | 33           |

| Model No.            | Subject  | Serial No.   | Bulletin No. |
|----------------------|--|--|--------------|
| BVH-1000<br>(Cont'd) | Locking Color Frame Mode                                     | <10,100  | 35           |
|                      | Increasing Resistor Power Rating                             | <10,100  | 36           |
|                      | Eliminating Cue Turn-Off "Click"                             | <10,040  | 37           |
|                      | Hour Meter Modification                                      | <10,100  | 38           |
|                      | Drum Brake Circuit Improvement                               | <10,100  | 39           |
|                      | Subcarrier Delay Line Check                                  | <10,100  | 40           |
|                      | Increasing Demod Board Resistor Power Rating                 | <10,100  | 41           |
|                      | REW Chroma Shift Countermeasure                              | <10,100  | 42           |
|                      | Camera-Produced Overmodulation                               | All  | 43           |
|                      | Video Hum with HT-1000                                       | <10,100  | 44           |
|                      | Correcting Mode Shifts                                       | All  | 46           |
|                      | REC Amp Oscillator Change                                    | 20,201-20,300  | 47           |
|                      | Large-Input DG, DP Countermeasure                            | All  | 48           |
|                      | Tape Timer Accuracy Check and Adjustment                     | All  | 49           |
|                      | Improvement MOD Board Square Wave Response                   | All  | 50           |
|                      | Address Code Reassignment                                    | All  | 50A          |
|                      | Sys-3 Board Mod, Tape Hunting                                | 20,219; >20,229  | 52           |
|                      | Replacement of Audio Tape Guide to Reduce Oxide Accumulation | <20,700  | 53R          |
|                      | IC Replacement for HA17741G                                  | All  | 54           |
|                      | Audio Logic Board  | All  | 55           |
|                      | Edit Phase Error Compensation                                | All  | 57           |
|                      | Audio Level of Alignment Tape BR5-2                          | All  | 58           |
|                      | Part Number for Audio/Video Meter Lamp                       | All  | 59           |
| BVH-1000A            | Readjustments for Extension Cable Use                        | >10,101  | 19A          |
|                      | Mods/Kits Availability Announcement                          | All  | 42B          |
|                      | Reel-2 Board, Search Detect, OSC.MOD.                        | 20,219;<br>>20,229   | 51           |
|                      | Sys-3 Board Mod, Tape Hunting                                | 20,219;<br>>20,229   | 52           |
|                      | Audio Logic Board  | All  | 55           |
|                      | Using Extension Cables                                       | All  | 56           |
|                      | Edit Phase Error Compensation                                | All  | 57           |
|                      | Frequency Response Adjustment, Manual Supplement 1           | All  | 60           |
|                      | Service Tools and Fixtures                                   | All  | 61           |
|                      | Tape Slack Protection  | 10,001-10,068<br>(except 10,027;<br>10,028; 10,046;<br>10,050; 10,066) | 1            |
| BVH-1100             |  |  |              |

10216

10 247

| Model No.            | Subject   | Serial No.  | Bulletin No. |
|----------------------|---|---|--------------|
| BVH-1100<br>(Cont'd) | Capacitor Assembly and Sub-Harness                            | 10,001-10,017;<br>10,024                          | 2            |
|                      | Dropout Detection Improvement (RF EQ-2 Board)                 | >10,001   | ③            |
|                      | BVH-1100 Extension Cables                                     | All   | ④            |
|                      | Tape Timer with CTL Update (Change of Tape<br>Timer Board)    | >10,601   | 5            |
|                      | Edit Accuracy Improvement                                     | <10,900   | ⑥            |
|                      | Tape Timer Accuracy   | 10,601-10,800                                     | 7            |
|                      | Tape Timer Idler Slippage                                     | <11,001   | ⑧            |
|                      | HT-1000 Installation (NTSC)                                   | All   | ⑨            |
|                      | 15-Hz Reference Pulse Simplifies Color<br>Synchronization     | All   | ⑩            |
|                      | Improved Head-to-Tape Contact in DT<br>Operation              | <11,100   | ⑪            |
|                      | Frame Edit Modification                                       | <20,800   | ⑫            |
|                      | Using Extension Cables  | All   | ⑤⑥           |
|                      | Part Number for Audio/Video Meter Lamp                        | All   | ⑤⑨           |
|                      | Service Tools and Fixtures                                    | All   | ⑥①           |
| BVH-1100A            | Frame Edit Modification                                       | <20,800   | 12           |
| BVR-1000             | Technical Manual Corrections                                  | All   | 1            |
|                      | Technical Manual Corrections: Incorrect<br>Polarity of C20    | All   | 2            |
| BVR-1010             | Production Change   | All   | 1            |
|                      | Sync Select Modification                                      | All   | 2            |
| BVT-1000             | Input Level Control Support Bracket                           | 10,001-10,037                                     | 2            |
|                      | Sync Clock Modification                                       | 10,004-10,009<br>10,011-10,020                    | 3            |
|                      | HUE Control—Chroma Phase Control                              | <10,100   | 4A           |
|                      | HUE Control—Chroma Phase Control                              | >10,101   | 4B           |
|                      | Streaking Countermeasure                                      | <10,070   | 5            |
|                      | Procedure for Inspection of Memory ICs                        | 10,001-10,100                                     | 6            |
|                      | High Temperature Operation                                    | 10,101-10,110;<br>10,114-10,116;<br>10,118-10,120 | 7            |
|                      | V-Blkg. Width Modification                                    | All   | 8            |
|                      | Voltage Timing and Zero Address Control<br>Voltage Adjustment | <10,100   | 9            |
|                      | Decreasing Chroma Level Adjustment Range                      | <10,100   | 10           |
|                      | Minimization of Picture Quaking                               | 10,001-10,064                                     | 11           |
|                      | Voltage Detector Circuit Improvement                          | <10,037   | 12           |

| Model No.            | Subject   | Serial No.  | Bulletin No. |
|----------------------|---|---|--------------|
| BVT-1000<br>(Cont'd) | Decreasing Interference Between the Main and U-Matic Clocks in the U-Matic APC Mode for Improved Chroma | <10,048   | 13           |
|                      | Streaking Countermeasure  | <10,100   | 14           |
|                      | H. Sync Detector and Dropout Gate Multi Vibrator Malfunctions   | <10,100   | 15           |
|                      | Mandatory Parts Replacement   | 10,101-10,110;<br>10,112-10,120;<br>10,122-10,124;<br>10,128; 10,130;<br>10,131; 10,134;<br>10,135; 10,137                    | 16           |
|                      | CK-1 Board Changes  | <10,050   | 17           |
|                      | CG-1 Board Changes  | 10,047-10,053<br>10,101-10,110<br>10,116;<br>10,118-10,120  | 18           |
|                      | BH-1 Board Changes  | 10,001-10,140   | 19           |
|                      | Moviola Window Circuit Improvements   | 10,101-10,110<br>10,116;<br>10,118-10,120   | 20           |
|                      | SG-6 Board Changes  | 10,001-10,140   | 21           |
|                      | Improvement of Video Output Amp DP  | 10,001-10,042   | 22           |
|                      | APC Limiter Voltage Change  | <10,223 (except<br>10,209; 10,210;<br>10,217-10,220;<br>10,224)   | 23           |
|                      | ADV SYNC Phase Control Modification   | <10,200   | 24           |
|                      | Video Phase Shifting Countermeasures  | <10,200   | 25           |
|                      | Streaking In AFC Mode When Using U-Matics   | All (except<br>10,010; 10,111;<br>10,121; 10,125<br>10,127; 10,129;<br>10,132; 10,133;<br>10,136; 10,138-<br>10,165; >10,201) | 26           |
|                      | DOC Muting Change   | All (except<br>10,111; 10,121;<br>10,125-10,127;<br>10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165;<br>10,201)           | 27           |
|                      | Countering U-Matic Skew Effects   | All (except<br>10,111 10,121;<br>10,125-10,127;<br>10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165)                       | 28           |

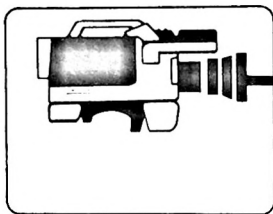
| Model No.            | Subject   | Serial No.   | Bulletin No. |
|----------------------|---|--|--------------|
| BVT-1000<br>(Cont'd) | A/D Converter Trouble Shooting  | All (except<br>10,111; 10,121;<br>10,125; 10,126;<br>10,127; 10,129;<br>10,132; 10,133;<br>10,135; 10,136;<br>10,138-10,168) | 29           |
|                      | Prevention of Double Termination—Comp<br>Sync Input                                   | <10,200  | 30           |
|                      | Reduction of Process Mode<br>Residual Jitter  | 10,101-10,110<br>10,114-10,116<br>10,118-10,120  | 31           |
|                      | Moviola Window Circuit Change   | All (except<br>10,111; 10,121;<br>10,125-10,127;<br>10,129; 10,132;<br>10,133; 10,136;<br>10,138-10,165)                     | 32           |
|                      | -12V Power Supply Change  | <10,036  | 33           |
|                      | New SG-6 Board  | <10,500  | 34           |
|                      | Improving Hue Drift, Temperature<br>Characteristic                                    | <10,300  | 35           |
|                      | SQ-1 Switching Pulse—WR Zero Check  | All  | 36           |
|                      | Reversed Capacitor  | <10,200  | 37           |
|                      | Change of System Sync and SC Control Range  | All  | 38           |
|                      | Countermeasures for 280ns Video Shift   | <10,235  | 39           |
|                      | V-Sync Detection Improvement  | <10,051  | 40           |
|                      | Improved Moviola and Muting Function (DO-1)   | <10,350  | 41           |
|                      | V-Sep Kit   | All  | 42           |
|                      | Mods/Kits Availability Announcement   | All  | 42B          |
|                      | Color Framing Temperature<br>Characteristic Improvement (SQ-1<br>Board and SG-6 Board | <10,300 (except<br>10,238; 10,253;<br>10,261-10,270)   | 43           |
|                      | 280/ns Editing Phase Shift (Color Framing<br>Modification)                            | <10,500  | 44           |
|                      | Improvement in Bidirex Mode   | <10,370  | 45           |
|                      | Improved Retrigger MMV  | <10,500  | 46           |
|                      | Low Reference Sync Level  | 10,371-10,501  | 47           |
|                      | Improved Sync Sep Circuit   | >10,501  | 48           |
|                      | Low Level Ref SC Inputs Affecting<br>Ext Sync Lock                                    | <10,500  | 49           |
|                      | Hue Deviation and Power Transients  | <10,370  | 50           |
|                      | Input Pedestal Level Detector Change<br>(BH-1 Board)                                  | <10,500  | 51           |
|                      | DP and DG Improvement, PR-4 Board   | <10,500  | 52           |

| Model No.            | Subject  | Serial No.  | Bulletin No. |
|----------------------|--|---|--------------|
| BVT-1000<br>(Cont'd) | CG-1 Board Adjustment with Extension Board                             | >10,701   | 53R          |
|                      | Part Number Correction, AD-1 Board                                     | All   | 54           |
|                      | Horizontal Sync Width  | 10,001-10,100<br>10,101-10,380  | 55           |
|                      | Increased Chroma Level Adjustable Range,<br>UI-1 Board                 | <11,300   | 56           |
|                      | Voltage Selector Seal Part Number Correction                           | All   | 57           |
|                      | Vertical Stability, VS-6 Board   | <11,300   | 58           |
|                      | Read Zero Reset Circuit  | 10,001-10,301<br>(except 11,002;<br>11,104)   | 59           |
|                      | Fixture for Service Purposes   | All   | 60           |
|                      | Improvement of Dropout Circuit   | 10,001-10,200   | ①            |
|                      | Board Interchangeability   | 10,001-10,015   | 2            |
| BVT-2000             | Change of P-Rom Designation  | 10,001-10,100   | 3            |
|                      | Hue Shift When Playing Tapes<br>with No Sync Tracks                    | 10,013; 10,014;<br>10,021; 10,025;<br>10,028; 10,030;<br>10,032; 10,034;<br>10,036; 10,037;<br>10,040; 10,042;<br>10,043; 10,046;<br>10,048; 10,050;<br>10,054; 10,056            | 4            |
|                      | CK-3, SQ-2 (SQ-3) Boards   | 10,013; 10,014;<br>10,017; 10,021;<br>10,025; 10,028;<br>10,030; 10,032;<br>10,033; 10,034;<br>10,036; 10,037;<br>10,040; 10,042;<br>10,043; 10,046;<br>10,048; 10,050;<br>10,054 | 5            |
|                      | Noise Reduction During V Blanking                                      | 10,015; 10,016;<br>10,022; 10,023;<br>10,026; 10,027;<br>10,029; 10,035   | 6            |
|                      | Latch Added to ID BIK. Switch  | 10,001-10,200   | ⑦            |
|                      | Vector Jitter In U-Matic AFC Mode                                      | 10,001-10,100   | 8            |
|                      | Picture Waterfall Effect at High Speed Play<br>(40 through 50X Normal) | 10,001-10,101   | 9            |
|                      | Low Luminance During Dropout Replacement                               | 10,001-10,200   | ⑩            |
|                      | Frequency Response Improvement<br>(PR-22 Board)                        | 10,001-10,030   | 11           |
|                      | Increased System Sync<br>Adjustment Range                              | 10,016; 10,022;<br>10,023; 10,026;<br>10,027; 10,029  | 12           |

10180  
10202



| Model No. | Subject         | Serial No. | Bulletin No. |
|-----------|-----------------|------------|--------------|
| IF-1000   | I.C. Protection | <10,000    | 1            |
|           | Jog Speed       | 1-300      | 2            |

**SONY®**

# **broadcastbulletin** No. **SPECIAL**

**SONY CORPORATION OF AMERICA •****Broadcast Engineering**

• 676 River Oaks Pkwy., San Jose, CA 95134

## **BROADCAST BULLETIN INDEX**

**Date: August, 1981**

This index identifies all Broadcast Bulletins published through August, 1981. The bulletins are listed in alphanumeric order by equipment model numbers. Gaps in the numerical sequence indicate bulletins which have been superseded or which apply to more than one model. Serial number effectivity for each bulletin is included so that only those bulletins appropriate for your equipment need be ordered.

Bulletins may be ordered free of charge from:

SONY VIDEO PRODUCTS CO.  
BROADCAST INFORMATION SERVICES  
676 River Oaks Parkway  
San Jose, CA 95134  
Phone (408) 946-9090

When ordering, please specify the model and serial numbers of your equipment and the edition or revision numbers of your operation and maintenance manual.

NOTE: The symbol (>) in the index should be construed to mean "equal to or greater than." Similarly, the symbol (<) means "equal to or less than." Bulletins pertaining to "All" serial numbers should be ordered and reviewed for applicability against your equipment.

| Model No. | Subject  | Serial No.    | Bulletin No. |
|-----------|--|---------------|--------------|
| AC-200    | Battery Overcharge   | All           | 80-1         |
| AC-500    | Pilot Lamp Current Reduction                                     | 10,001-10,780 | 80-9         |
| AC-5000   | AC-5000 Charge Lamp  | <21,080       | 78-23        |
| BC-210    | Battery Overcharge   | All 11520     | 80-1         |
|           | Pilot Lamp Current Reduction                                     | 10,001-10,780 | 80-9         |
| BK-111    | 1. Time Code Recording Improvement<br>2. Thumbwheel Modification | 10,001-10,390 | 81-9         |
| BVE-500   | Interchangeability Modification                                  | All           | 77-18        |
|           | Cue Detector (QC-2 Board)  | <20,350       | 78-19        |
| BVE-500A  | Interchangeability Modification                                  | All           | 77-18        |
|           | Digital Counter Operation at High Temperatures                   | <20,350       | 78-8R        |
|           | Tape Slack in BVU-200A When Used With BVE-500A                   | All           | 78-25        |
|           | Out Edit/Preview Timing Improvement                              | <20,510       | 79-6         |
|           | UP/DOWN Counter Operation  | All           | 80-10R       |
|           | New AC IN Connector  | >21,711       | 80-28        |
| BVP-200   | Registration at High Temperatures                                | <15,130       | 79-8         |
|           | Added Service Parts  | All           | 80-18        |

Page 1 of 5

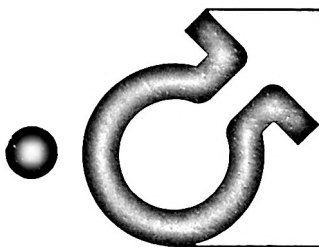
This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

| Model No. | Subject  | Serial No.  | Bulletin No. |
|-----------|--|---|--------------|
| BVP-300   | Tripod Adaptor   | All   | 79-15        |
|           | Foil Pattern Misprint (SG-15 Board)                                  | 10,301-10,360<br>10,401-10,440  | 79-24        |
|           | 1. Gamma Deviation at Low Temperatures                               | 10,001-10,200   | 79-25        |
|           | 2. Blanking Correction at Low Temperatures                           | 10,001-10,200   |              |
|           | 3. Power Interruptions from Impacts                                  | 10,001-10,300   |              |
|           | 4. Bias Light Correction   | 10,001-10,300   |              |
|           | 5. Reinforced Tripod Attachment                                      | 10,001-10,400   |              |
|           | 6. Frequency Response Improvement                                    | 10,001-10,300   |              |
|           | 7. ABO Circuit Frequency Response Improvement                        | 10,001-10,707   |              |
|           | Correction of SUPP-1 and 3rd Edition                                 | All   | 80-26        |
|           | Change of Limiter Range for RB-Gain Control                          | 10,001-10,707   | 81-4         |
| BVU-50    | Improved Reset Switch On FP-4 Board                                  | >10,071   | 78-27        |
|           | Time Code Crosstalk Reduction  | All   | 78-29        |
|           | Erase Head Crosstalk in Video  | All   | 79-5R        |
|           | Threading Motor Protection   | All   | 79-10        |
|           | Playback Checker   | All   | 79-12        |
|           | 1. Wiring Change, Tape End Detection (LED)                           | <10,621   | 79-16        |
|           | 2. SM-10 Board Interchangeability                                    |   |              |
|           | Low Temperature Servo Operation                                      | <20,120;<br>20,121-20,126;<br>20,128; 20,132;<br>20,135; 20,137;<br>20,139; 20,141-<br>20,148; 20,150;<br>20,154; 20,159;<br>20,160 | 80-3         |
|           |  |   |              |
|           | Improved Microphone Grounding  | <20,020   | 80-4         |
|           | RF Alarm Improvement   | <20,020   | 80-6         |
|           | Shoulder Strap Hanger Assembly                                       | <20,540   | 80-7         |
|           | Threading Motor Protection   | <20,541   | 80-8         |
|           | Production Changes   | <20,540   | 80-11        |
|           | Servicing Equipment  | All   | 80-12        |
|           | Cassette Control Assembly Part Changes                               | All   | 80-13        |
|           | Audio Crosstalk  | <20,541   | 80-20R       |
|           | AGC Kit Installation Instructions                                    | <20,000   | 80-22        |
|           | Correction   | All   | 80-25        |
|           | Shoulder Belt Improvement  | <20,540   | 81-1         |
|           | New D Motor Pulley Configuration                                     | <20,540   | 81-3         |
|           | Reinforcement of Cassette Panel                                      | <20,270   | 81-7         |
|           | Service Manual Additions: CTL HEAD,<br>PS/SYSCON Alignment Procedure | All   | 81-10        |
|           | Service Tools and Fixtures   | All   | 81-12        |
| BVU-100   | CG-100 Mounting Hardware   | 20,001-20,150   | 77-2         |

| Model No.           | Subject  | Serial No.    | Bulletin No.     |
|---------------------|--|---------------|------------------|
| BVU-100<br>(Cont'd) | Reel Table Height Check Jig  | All           | 77-4             |
|                     | Technical Manual Correction  | All           | 77-12            |
|                     | Audio Bias Frequency Checks  | <20,350       | 77-19            |
|                     | Bias Erase Oscillator Circuit Change   | <20,920       | 78-7             |
|                     | Camera Trigger Modification  | 20,351-21,080 | 78-9             |
|                     | Condensation Sensor  | >20,291       | 78-11            |
|                     | Drum Assembly and Upper Head Drum Standardization                                      | All           | 78-20            |
|                     | AC-5000 Charge Lamp  | <21,080       | 78-23            |
|                     | Increased Audio Meter Adjustment Range   | <21,260       | 78-28            |
|                     | Printed Circuit Board Standardization  | All           | 79-2             |
|                     | Address Head Assembly Change   | >20,819       | 79-3             |
|                     | 1. Improvement on Pause Edit Operation<br>2. Change of FF and REW Torque Specification | <21,630       | 79-11            |
|                     | PG Error Correction  | All           | 80-2             |
|                     | Reel Motor Noise Filter  | <21,781       | 80-5             |
|                     | BR-4 Boards  | All           | 80-21            |
|                     | Service Manual Correction (Drum Servo)   | All           | 80-23            |
|                     | Service Tools and Fixtures   | All           | 81-12            |
|                     | Interface with TK-76   | All           | 80-29            |
|                     | Service Tools and Fixtures   | All           | <del>81-12</del> |
| BVU-110             |  | 10649         |                  |
| BVU-200             | New Tape Guide Assembly  | >10,251       | 77-5             |
|                     | Replacement Parts for Cassette-Up Assembly   | All           | 77-6             |
|                     | Improved Take-Up Tension Regulator and Brake Shoe                                      | >10,251       | 77-7             |
|                     | Change in Forward Take-Up Torque Specification   | All           | 77-8             |
|                     | S. Hold Arm Assembly and S. Hold Lever   | >10,851       | 77-9             |
|                     | Brush Guard  | >11,101       | 77-10            |
|                     | Erase Head Base Assembly   | >10,250       | 77-11            |
|                     | Improper Transistor Substitute for 2SA772  | All           | 77-13            |
|                     | Frame Skipping, Editing Errors   | <10,600       | 77-15            |
|                     | Dubbing Adaptor Kit  | All           | 78-1R            |
|                     | Preventive Maintenance   | All           | 78-3             |
|                     | Servo Lock to Incoming Video in the REC Mode   | All           | 78-4R            |
|                     | New Brake Shoe   | All           | 78-5             |
|                     | Pinch Roller Assembly and Upper Sub Ring   | >20,051       | 78-6             |
|                     | Improved Midway Pulley and Take-Up Reel Table  | <20,000       | 78-10            |
|                     | New Condensation Sensor  | >11,351       | 78-11            |

| Model No.           | Subject  | Serial No.    | Bulletin No. |
|---------------------|--|---------------|--------------|
| BVU-200<br>(Cont'd) | Vertical Blanking Kit  | All           | 78-12R       |
|                     | Drum Assembly and Upper Head Drum Standardization                        | All           | 78-20        |
|                     | Standardization of PB-2 Board  | All           | 78-21        |
|                     | Improved Noise Immunity in RC CTL Counter                                | <21,050       | 78-22        |
|                     | Main Solenoid Drive Transistor Protection                                | <11,350       | 78-26        |
|                     | Printed Circuit Board Standardization                                    | All           | 79-1         |
|                     | Address Head Assembly Change   | >20,201       | 79-3         |
|                     | Threading Back Tension Improvement                                       | >11,101       | 79-7R        |
|                     | AM Kit   | All           | 80-16        |
|                     | Deck Assembly Replacement  | All           | 80-19        |
|                     | Editing, Reduction of Audio Pops   | 10,001-10,251 | 81-8         |
|                     | Service Tools and Fixtures   | All           | 81-12        |
| BVU-200A            | Pinch Roller Assembly and Upper Sub Ring                                 | >21,051       | 78-6         |
|                     | Improved Midway Pulley and Take-Up Reel Table                            | <20,000       | 78-10        |
|                     | New Condensation Sensor  | >21,051       | 78-11        |
|                     | Vertical Blanking Kit  | All           | 78-12R       |
|                     | Line-Dubbing Losses  | All           | 78-13        |
|                     | System Control Noise Suppression in Playback and Record                  | <21,050       | 78-17        |
|                     | 1. Power Surges and Drum Servo Operation<br>2. Servo Lock Lamp Operation | <21,050       | 78-18        |
|                     | Drum Assembly and Upper Head Drum Standardization                        | All           | 78-20        |
|                     | Standardization of PB-2 Board  | All           | 78-21        |
|                     | Improved Noise Immunity in RC CTL Counter                                | <21,050       | 78-22        |
|                     | Flicker in Dubbing   | <21,410       | 78-24        |
|                     | Tape Slack in the BVU-200A When Used with BVE-500A                       | <20,650       | 78-25        |
|                     | Printed Circuit Board Standardization                                    | All           | 79-1         |
|                     | Address Head Assembly Change   | >20,201       | 79-3         |
|                     | Improved Stability of Video Output                                       | <21,410       | 79-4         |
|                     | 1. Time Code Oscillation<br>2. CTL Crosstalk                             | <21,760       | 79-9         |
|                     | Picture Improvement  | <22,260       | 79-14        |
|                     | Removal of Still Switch  | <22,510       | 79-18        |
|                     | Y Record Current Stabilization   | <22,260       | 79-19        |
|                     | CTL Amplifier (ED-4 Board)   | <22,260       | 79-20        |
|                     | Stabilized Internal Vertical Drive Generator (ED-4 Board)                | >21,051       | 79-21        |
|                     | Capstan Brake  | <22,511       | 79-22        |

| Model No.            | Subject   | Serial No.                      | Bulletin No. |
|----------------------|---|---------------------------------|--------------|
| BVU-200A<br>(Cont'd) | Improved Static Immunity                                | <22,261                         | 79-23        |
|                      | Function Assembly (1) Part Numbers                      | All                             | 80-14        |
|                      | Deck Assembly Replacement                               | All                             | 80-19        |
|                      | New AC IN Connector                                     | >24,361                         | 80-28        |
|                      | Take-Up Tension Regulator Change                        | <24,160                         | 81-5         |
|                      | Service Tools and Fixtures                              | All                             | 81-12        |
| BVU-200B             | Adjustment Procedure for DIP SW-2 on DS-7 Board         | All                             | 80-24        |
|                      | Servo Lock with CTL Recorded Tape                       | 30,000-31,401                   | 81-2         |
|                      | Take-Up Tension Regulator Change                        | <30,500                         | 81-5         |
|                      | Service Tools and Fixtures                              | All                             | 81-12        |
| CCU-200              | Cable Compensator Modification for Improved Reliability | <15,104                         | 81-6         |
| CG-100               | Frame Clock Generator Modification                      | Those purchased before 12/15/76 | 77-3         |
| CLP-500              | AC-5000 Charge Lamp                                     | <21,080                         | 78-23        |
|                      | New Handle Bearing                                      | <21,630                         | 80-17        |
| U-Matics             | Alignment Tape Change                                   | All                             | 78-16        |



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1981

model: BVG-1000

bulletin no.: 6

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## READER DATA HOLD FUNCTION

### GENERAL

This modification adds a Data Hold capability to the BVG-1000. The modification is not included as a standard machine option but may be added to all versions of the BVG-1000, if desired.

The Data Hold modification allows the latest time code address to be held intact when tape motion stops in the associated recorder.

### PARTS REQUIRED

| Part No.     | Description                  | Qty. |
|--------------|------------------------------|------|
| 8-759-901-23 | IC, SN74LS123N               | 1    |
| 8-759-900-38 | IC, SN74LS38N                | 1    |
| 1-211-573-00 | Res, Carbon, 18K, 1/4W       | 1    |
| 1-131-238-00 | Cap, Tantal, 10 $\mu$ F, 25V | 1    |

### MODIFICATION PROCEDURE

Figure 1 illustrates the Data Hold modification. To implement this change, proceed as follows:

1. Open front panel and remove Generator Board.
2. Install IC type SN74LS123N in spare slot G8.
3. Install IC type SN74LS38N in spare slot I8.
4. On foil side, add the following jumpers:

| From          | To          |
|---------------|-------------|
| CN39A .....   | ICG8-2      |
| ICG8-1 .....  | ICG8-8      |
| ICG8-3 .....  | ICG8-16     |
| ICG8-13 ..... | IC18-9, -10 |
| IC18-8 .....  | CN23B       |

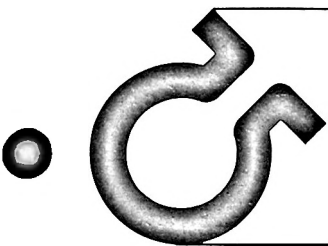
5. Connect 10 $\mu$ F capacitor between ICG8-14 and ICG8-15.
6. Connect 18K resistor between ICG8-15 and ICG8-16.
7. Return Generator Board to card slot and remove Reader Board.

Reference: VS 79-57 / T.M.

Page 1 of 2







SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1981

model: CG-1000R

bulletin no.: 1

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## CORRECTING THE TIME CODE READER DISPLAY

### GENERAL

A recent change to the SMPTE Edit Time Code assigned bit 11 as the color frame flag. (See Figure 1.) When reading tapes recorded with the new format, early versions of the Time Code-2 Board (Suffix Numbers -11, -12) may interpret bit 11 as the MSB of the frames tens digit. As a result, 8 will be added to the actual value of the tens digit when bit 11 is high. For example, frame 05 will be displayed as 85 and frame 15 as 95, etc.

This modification allows bit 11 to be properly decoded as the color frame flag. In addition, an optional modification allows bit 11 to be brought out to the mother board for future use. The modifications are applicable to BVH-1000/BVH-1100 series units equipped with Time Code-2 Boards 1-585-489-11, -12 (CG-1000R, Serial Numbers 10,001-10,300).

### PARTS REQUIRED

Modification No. 1 (Decoding The Color Frame Flag) can be implemented with existing spare circuits on the Time Code-2 Board. Optional modification No. 2 (Providing the Color Frame Output) requires one IC, SN74LS02N (P/N 8-759-900-02).

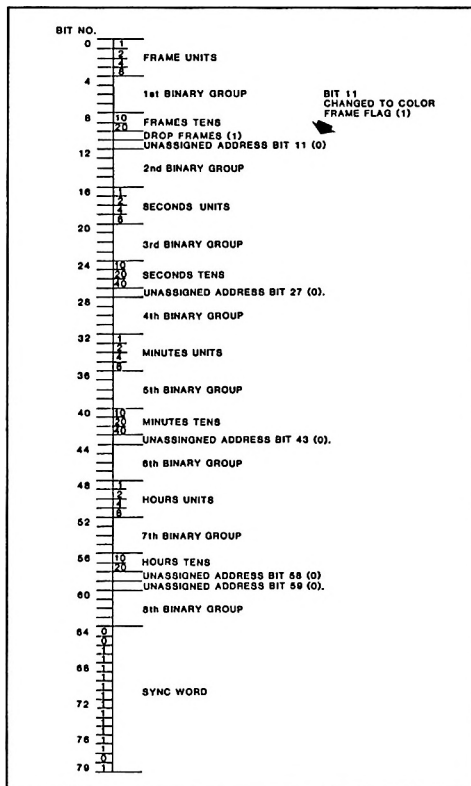


Figure 1. Modified SMPTE Edit Time Code

## MODIFICATION PROCEDURES

### 1. Decoding The Color Frame Flag (Figure 2)

- On foil side of Time Code-2 Board, cut trace at pin 9 of IC33.
- Add the following jumpers:

| From         | To     |
|--------------|--------|
| IC21-3 ..... | IC10-4 |
| IC21-4 ..... | IC10-5 |
| IC10-6 ..... | IC33-9 |

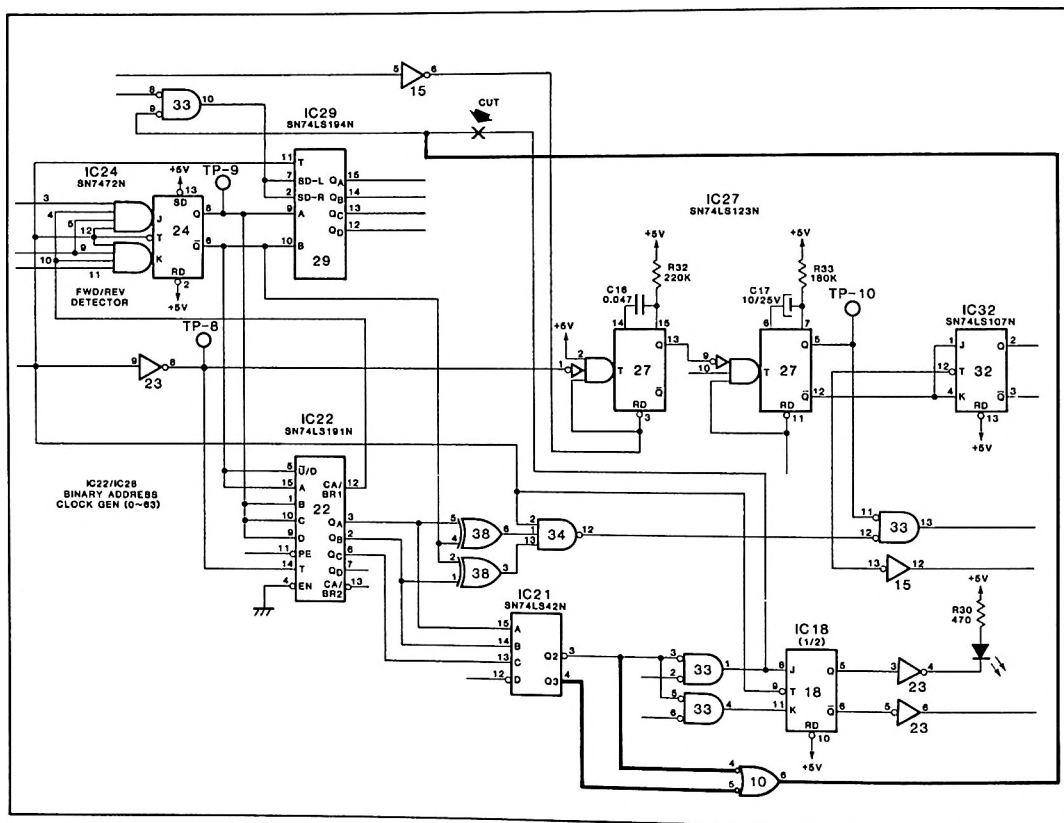


Figure 2. Color Frame Flag Decoder

## 2. Providing The Color Frame Output (Figure 3)

- Install IC SN74LS02N in location C8. (Connect pin 7 to ground and pin 14 to +5V.)
- Add the following jumpers:

| From    | To      |
|---------|---------|
| IC21-4  | ICC8-2  |
| IC33-2  | ICC8-3  |
| IC33-6  | ICC8-6  |
| IC18-9  | IC32-9  |
| ICC8-2  | ICC8-5  |
| ICC8-1  | IC32-8  |
| ICC8-4  | IC32-11 |
| IC32-10 | IC32-13 |
| IC32-6  | IC15-9  |
| IC15-8  | CN11B   |

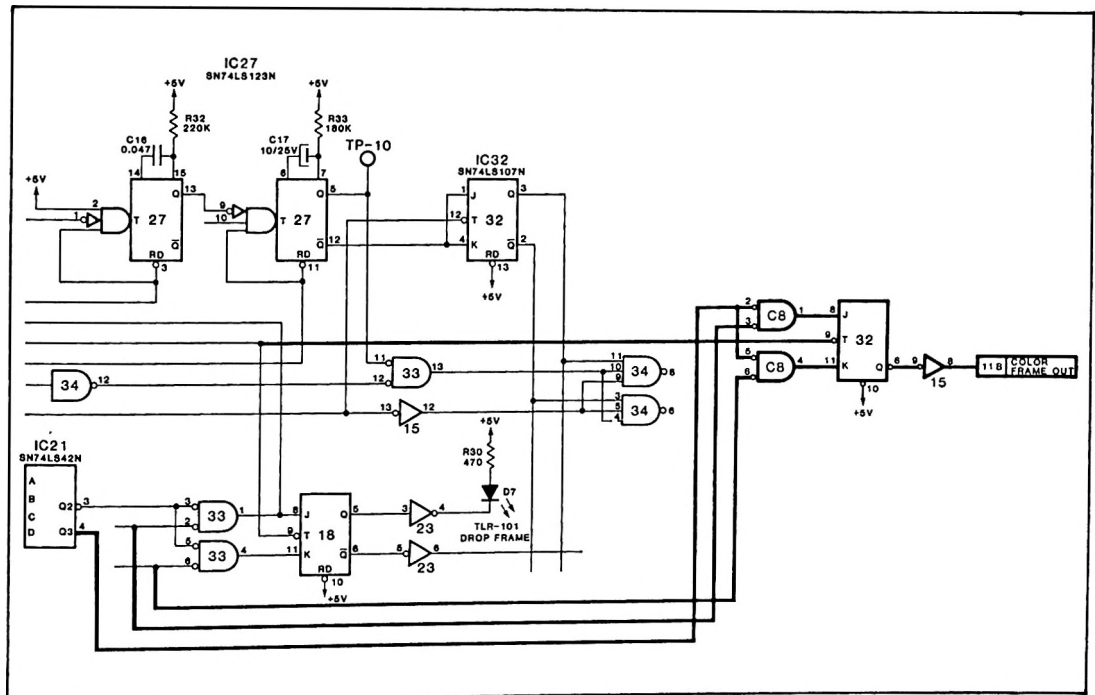
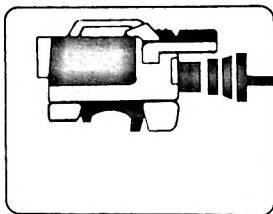


Figure 3. Color Frame Output

**SONY®**

# **broadcastbulletin** No. **81-12**

**SONY CORPORATION OF AMERICA •****Broadcast Engineering**

• 676 River Oaks Pkwy., San Jose, CA 95134

**MODEL: BVU-50, -100, -110, -200, -200A, -200B**  
**SUBJECT: SERVICE TOOLS AND FIXTURES****Date: August, 1981****THIS BULLETIN SUPERSEDES BROADCAST BULLETIN NO. 80-27****GENERAL**

This bulletin identifies recommended tools and alignment fixtures for the BVU-50, -100, -110, -200, -200A and -200B Broadcast VTRs. Changes from previous listings for Recommended Tools (Table 1) and Alignment Fixtures (Table 2) are flagged by arrows.

**ORDERING INFORMATION**

Please place orders for tools and fixtures by calling toll-free numbers listed below, or sending P.O. (if on open account) to:

SONY VIDEO PRODUCTS CO.  
NATIONAL BROADCAST PARTS DISTRIBUTION CENTER  
676 River Oaks Parkway  
San Jose, CA 95134  
(800) 538-7550 (Outside CA)  
(213) 467-4430 (Southern CA)  
(408) 946-9640 (Other Areas of CA)

**TABLE 1. RECOMMENDED TOOLS**

| <b>Tool</b>              | <b>Sony Part No.</b> | <b>Description</b>   | <b>Price*<br/>(\$)</b> |
|--------------------------|----------------------|--|------------------------|
| Phillips Screwdriver     | 7-700-749-01         | 2.0mm screw dia.   | .71                    |
| Phillips Screwdriver     | 7-700-749-02         | 2.6mm screw dia.   | .59                    |
| Phillips Screwdriver     | 7-700-749-03         | 2~2.6mm screw dia.   | 1.40                   |
| Phillips Screwdriver     | 7-700-749-04         | 3~5mm screw dia.   | 1.63                   |
| Slot & Dot Screwdriver   | 7-721-050-61         | 2.0mm screw dia.   | 6.88                   |
| Slot & Dot Screwdriver   | 7-721-050-62         | 2.6mm screw dia.   | 6.32                   |
| Slot & Dot Screwdriver   | 7-721-050-63         | 3.0mm screw dia.   | 6.32                   |
| Slot & Dot Screwdriver   | 7-721-050-64         | 4.0mm screw dia.   | 6.32                   |
| Alignment Tool           | 7-700-733-01         | For hex core alignments  | 2.09                   |
| Hexagonal Allen Wrenches | 7-700-736-00         | Set of 12 hexagonal wrenches, socket sizes:<br>1.27, 1.4, 1.5, 1.58mm<br>2.0, 3.0, 3.5, 4.0mm<br>5.0, 6.0, 8.0, 10.0mm | 8.01                   |

\*Prices subject to change without notice.

*Reference: NBPDC**Page 1 of 4*

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

TABLE 1. RECOMMENDED TOOLS (Cont.)

| Tool  | Sony Part No. | Description    | Price*<br>(\$) |
|---|---------------|----------------|----------------|
| Additional Wrench<br>(for changing gear box)<br>Sony Lubrication Oil<br>Inside-Outside Calipers | 7-700-736-06  | 0.89mm         | .40            |
|   | Y-201-610-10  | 1 Fluid Ounce  | .50            |
|   | Non-Sony Part | Brown & Sharpe | —              |

TABLE 2. ALIGNMENT FIXTURES

| Ref.<br>No. | Part No.     | Description                             | Price*<br>(\$) | BVU- |     |     |     |      |      |
|-------------|--------------|---|----------------|------|-----|-----|-----|------|------|
|             |              |   |                | 50   | 100 | 110 | 200 | 200A | 200B |
| 1           | J-600-182-0A | Drum Eccentricity Gauge                 | 9.12           | *    | *   | *   | *   | *    | *    |
| 2           | J-600-183-0A | Drum Eccentricity Gauge                 | 13.51          | *    | *   | *   | *   | *    | *    |
| 3           | J-600-184-0A | Drum Eccentricity Gauge                 | 56.09          | *    | *   | *   | *   | *    | *    |
| 4           | J-600-193-0A | Drum Eccentricity Gauge                 | 2.30           | *    |     | *   | *   | *    | *    |
| 5           | J-600-906-0A | Driver with Gear                        | 13.51          |      |     |     | *   | *    | *    |
| 6           | J-600-108-5A | Pinch Lever Adjusting Jig               | 86.40          |      |     |     | *   | *    | *    |
| 7           | 3-601-330-00 | Head Cleaning Kit                       | 3.39           |      | *   |     | *   | *    |      |
| 8           | Y-203-100-10 | Cleaning Fluid                          | .52            | *    | *   | *   | *   | *    | *    |
| 9           | 1-931-420-00 | System Control<br>Extension Cord        | 38.84          |      |     |     | *   | *    | *    |
| 10          | J-600-229-0A | Dihedral Adjusting Screws<br>(4 Screws) | 9.12           |      | *   | *   | *   | *    | *    |
| 10          | 3-702-210-01 | Dihedral Adjusting Screw<br>(Single)    | 2.32           |      |     |     |     |      |      |
| 11          | 3-702-216-00 | Back Tension<br>Adjustment Fixture      | 17.80          |      |     |     | *   | *    | *    |
| 12          | 3-702-390-01 | Eccentric Screwdriver,<br>4mm dia       | 5.76           |      |     | *   | *   | *    | *    |
| 12          | 3-702-391-01 | Eccentric Screwdriver,<br>5mm dia       | 5.76           |      |     |     | *   | *    | *    |
| 13          | 3-702-394-01 | FWD Back Tension<br>Measurement Fixture | 37.56          |      |     |     | *   | *    | *    |
| 14          | 3-702-397-01 | Reel Table Height<br>Adjustment Jig     | 13.51          |      |     |     | *   | *    | *    |
| 15          | 3-702-398-01 | Position Fixture                        | 96.00          |      |     |     | *   | *    | *    |
| 16          | 7-732-050-10 | Tension Scale,<br>20g Full Scale        | 21.97          | *    |     | *   | *   | *    |      |
| 16          | 7-732-050-20 | Tension Scale,<br>50g Full Scale        | 19.90          | *    | *   | *   | *   | *    | *    |
| 16          | 7-732-050-30 | Tension Scale,<br>100g Full Scale       | 19.90          | *    | *   | *   | *   | *    | *    |
| 16          | 7-732-050-40 | Tension Scale,<br>200g Full Scale       | 19.90          |      | *   | *   | *   | *    |      |

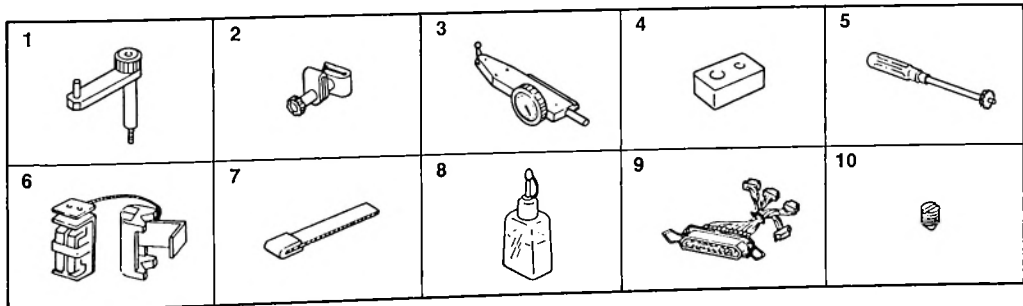
\* Prices subject to change without notice.

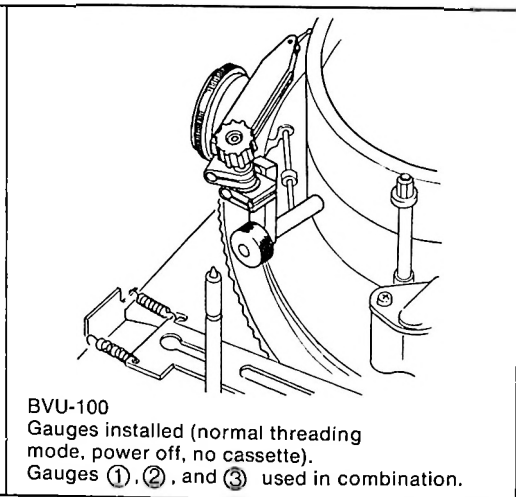
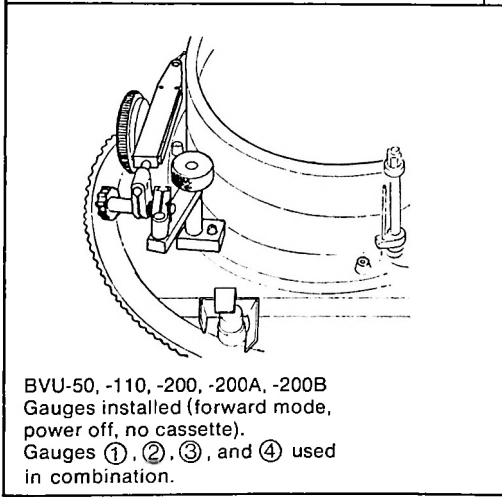
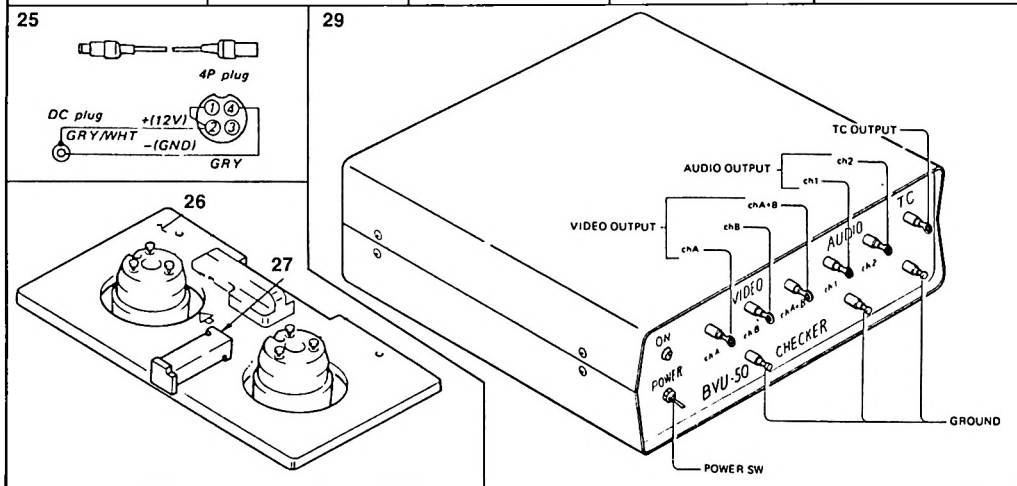
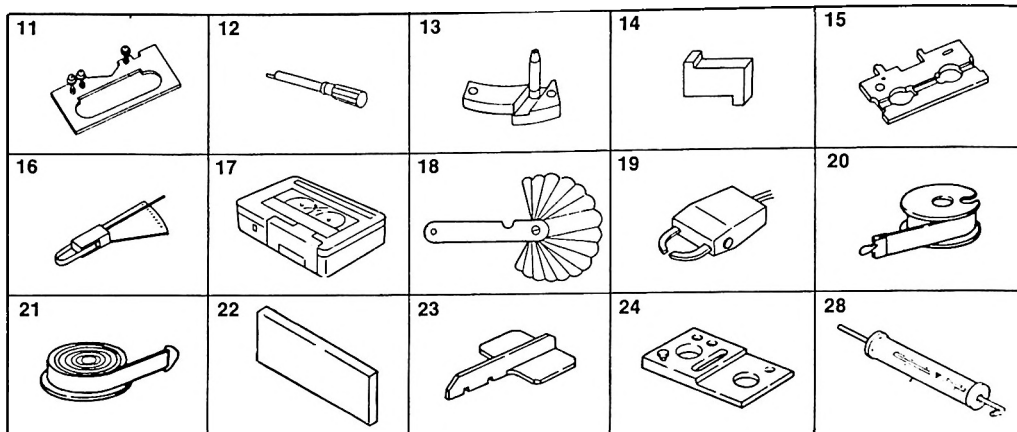
TABLE 2. ALIGNMENT FIXTURES (Cont.)

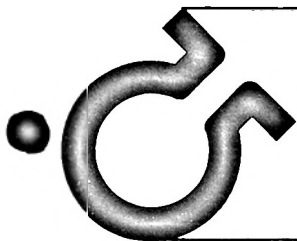
| Ref. No. | Part No.     | Description                            | Price* (\$) | BVU- |     |     |     |      |      |
|----------|--------------|--|-------------|------|-----|-----|-----|------|------|
|          |              |  |             | 50   | 100 | 110 | 200 | 200A | 200B |
| 16       | 7-732-050-50 | Tension Scale, 500g Full Scale         | 21.97       |      |     | *   | *   | *    | *    |
| 17       | 8-960-015-12 | Alignment Tape, RR5-2SB                | 163.20      | *    | *   | *   | *   | *    | *    |
| 18       | J-604-167-0A | Thickness Gauge                        | 10.22       |      | *   | *   | *   | *    | *    |
| 19       | HE-3         | Demagnetizer                           | 26.00       | *    | *   | *   | *   | *    | *    |
| 20       | 8-888-991-31 | Torque Measurement Tape (40mm dia)     | 3.47        | *    | *   | *   |     |      | *    |
| 20       | 8-888-991-32 | Torque Measurement Tape (80mm dia)     | 3.50        |      | *   | *   |     |      |      |
| 21       | 8-899-999-53 | Reel Table Torque Meas. Fix. 100mm dia | 4.91        |      |     |     | *   | *    | *    |
| 22       | J-600-983-0A | Flatness Plate                         | 11.33       | *    |     | *   |     |      | *    |
| 23       | 3-702-217-01 | Reel Table Height Check Fixture        | 37.56       |      | *   |     |     |      |      |
| 24       | 3-702-367-00 | Reel Table Height Check Base Fixture   | 67.20       |      | *   |     |     |      |      |
| 25       | J-600-097-1A | DC Cord                                | 2.55        |      | *   |     |     |      |      |
| 26       | J-613-001-0A | Reel Table Height Check Base Fixture   | 96.00       | *    |     | *   |     |      |      |
| 27       | J-613-002-0A | Reel Table Height Check Fixture        | 37.55       | *    |     | *   |     |      |      |
| 28       | J-604-163-0A | Tension Gauge, 200g Full Scale         | 26.04       |      |     |     |     |      | *    |
| 28       | 7-732-051-02 | Tension Gauge, 1000g Full Scale        | 31.91       | *    |     |     |     |      |      |
| 29       | J-600-495-0A | Playback Checker                       | 695.00      | *    |     |     |     |      |      |
| —        | J-614-014-0A | Extension Cable                        | 5.76        |      |     | *   |     |      |      |
| —        | 2-034-697-00 | Chamois                                | 5.18        | *    | *   | *   | *   | *    | *    |

\* Prices subject to change without notice.

NOTE: J-600-182-0A, J-600-183-0A, J-600-184-0A and J-600-193-0A cannot be used independently. Order all of these items at the same time.







**SONY  
BROADCAST**

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: December 1980

model: BVH-1000A, -1100

bulletin no.: 61

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

Subject: SERVICE TOOLS AND FIXTURES

Applicable to Serial Numbers: A11

The alignment fixtures for the BVH-1000A, -1100 are available from the National Broadcast Parts Distribution Center in Palo Alto, California. See Table 2 for descriptions and part numbers.

Table 1 below is a list of tools which are recommended for servicing Broadcast VTRs.

Please place orders for fixtures and tools by calling:

Phone: (800) 227-8050 (except Ca)  
(213) 467-4430 (Southern Ca)  
(415) 965-3140 (other areas of Ca)

Table 1. Recommended Tools

| Tool                                      | Sony Part No. | Description  | Price  |
|---|---------------|--|--------|
| Phillips Screwdriver                      | 7-700-749-01  | 2.0mm screw dia.   | \$ .71 |
| "   | 7-700-749-02  | 2.6mm "  | \$ .59 |
| "   | 7-700-749-03  | 2-2.6mm "  | \$1.40 |
| "   | 7-700-749-04  | 3-5mm "  | \$1.63 |
| Slot & Dot Screwdriver                    | 7-721-050-61  | 2.0mm "  | \$6.88 |
| "   | 7-721-050-62  | 2.6mm "  | \$6.32 |
| "   | 7-721-050-63  | 3.0mm "  | \$6.32 |
| "   | 7-721-050-64  | 4.0mm "  | \$6.32 |
| Alignment Tool                            | 7-700-733-01  | For hex core alignments  | \$2.09 |
| Hexagonal Allen Wrenches                  | 7-700-736-00  | Set of 12 hexagonal wrenches, socket sizes: 1.27, 1.4, 1.5, 1.58mm 2.0, 3.0, 3.05, 4.0mm 5.0, 6.0, 8.0, 10.0mm | \$8.01 |
| Additional Wrench (for changing gear box) | 7-700-736-06  | 0.89mm   | \$ .40 |
| Sony Lubrication Oil                      | Y-201-610-10  | 1 Fluid Ounce  | \$ .67 |
| Inside-Outside Calipers                   | non-Sony part | Brown & Sharpe   |        |

Prices subject to change without notice.

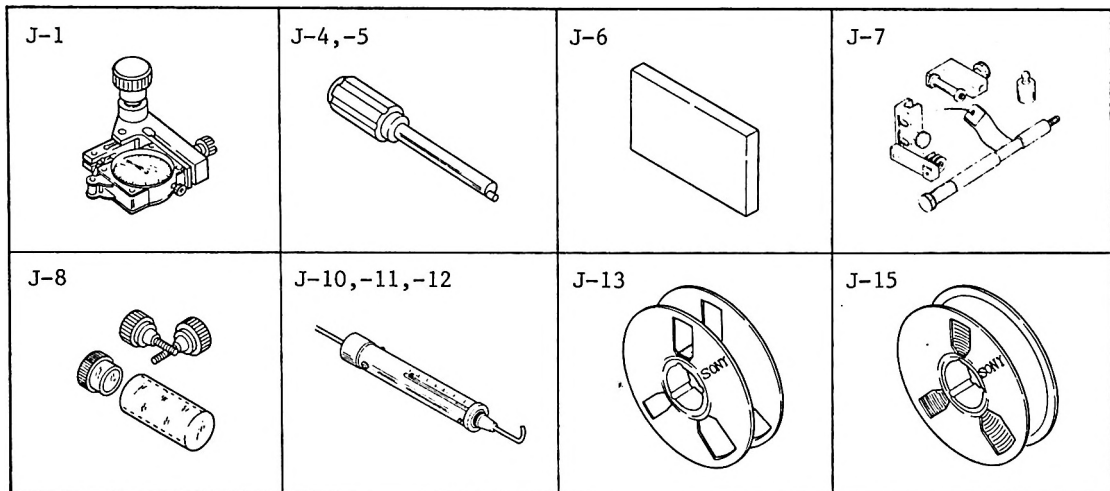
Page 1 of 2



FIXTURES (OPTIONAL)

| REF  | PART NO.      | DESCRIPTION                            | PRICE    |
|------|---------------|--|----------|
| J-1  | J-604-075-0B  | Drum Eccentricity Guage (H)            | \$446.40 |
| J-4  | J-604-007-0A  | Eccentric Screwdriver (3-7)            | 6.88     |
| J-5  | 3-702-390-01  | Eccentric Screwdriver (4-2)            | 5.76     |
| J-6  | J-604-016-0A  | Reference Flat Plate                   | 10.22    |
| J-7  | J-604-032-0A  | Tension Alignment Fixture              | 192.00   |
| J-8  | J-604-032-0A  | Tapered Screws                         | 11.33    |
| J-10 | J-604-163-0A  | Tension Scale (200g)                   | 31.91    |
| J-11 | J-604-031-0A  | Tension Scale (500g)                   | 33.83    |
| J-12 | J-604-164-0A  | Tension Scale (5K)                     |          |
| J-13 | Standard Prod | Empty Reel (R1-9V (N))                 |          |
| J-15 | 8-944-005-02  | Alignment Tape (BR5-2) NTSC            | 432.35   |
|      | 8-944-005-12  | Alignment Tape (BR5-2) PM              | "        |
|      | 8-944-005-62  | Alignment Tape (BR5-2PS-A4)PS          | "        |
| J-16 | Standard Prod | Tape (V-16-64)                         |          |
| J-17 | Standard Prod | SONY HE-2 or HE-3 Head<br>Demagnetizer |          |

Prices subject to change without notice.



## technical bulletin

# 83-209

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: December, 1983

**MODEL: BVH-1100A; BVH-1180**

**SERIAL NO: 21,400 AND LOWER (BVH-1100A)  
10,300 AND LOWER (BVH-1180)**

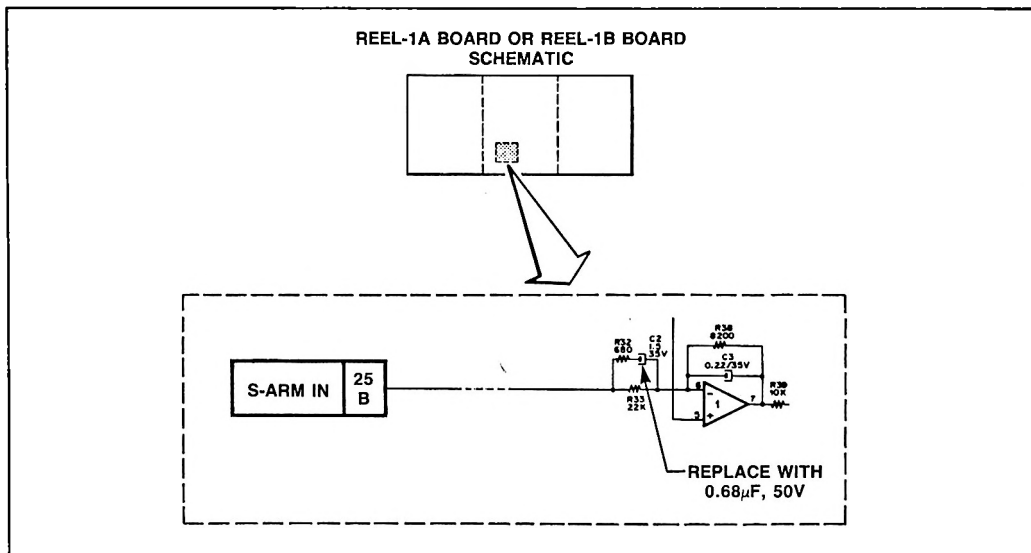
**SUBJECT: TENSION ARM OSCILLATION; STOP TO PLAY TRANSITION**

### DESCRIPTION

Tension Arm oscillation during the transition from STOP to PLAY can occur due to excessive low frequency gain in the reel servo system feedback loop. The excessive gain is the result of variations between the individual capacitors used for C2. Replacement of C2 (1.5 $\mu$ F) with a .68 $\mu$ F capacitor will eliminate this problem. (See Figures 1 and 2.)

### PARTS REQUIRED

| Part No.     | Description                           | Qty. |
|--------------|---------------------------------------|------|
| 1-131-346-00 | Cap, Tantalum, 0.68 $\mu$ F, 50V, 10% | 1    |



**Figure 1**

Reference: VTRW 82-2014 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

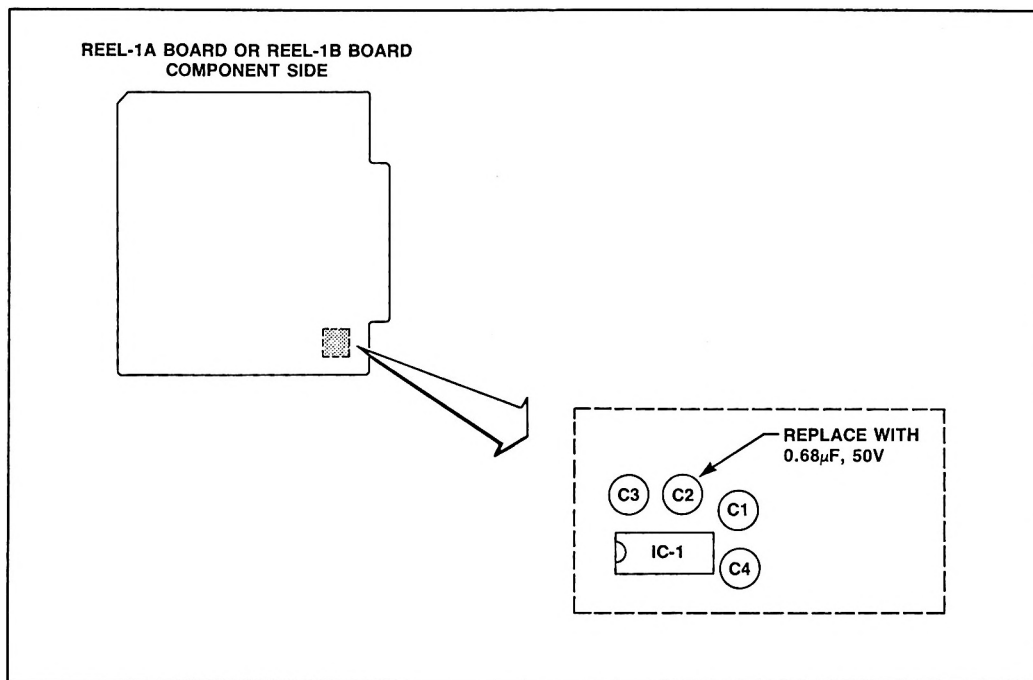
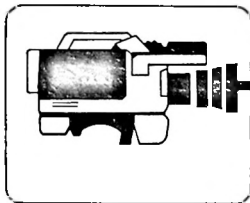


Figure 2



Date: September, 1983

**MODEL: BVH-1100A**

**SERIAL NO: SEE TEXT**

**SUBJECT: VIDEO NOISE IN THE PROGRAMMED JOG MODE**

## DESCRIPTION

Noise may be induced in the video signal from an oscillator located on the Tension-A Board. The modification shown in Figure 1 will eliminate this problem.

NOTE: This modification is applicable to serial numbers 20,340 and lower with the following exceptions: 20,326; 20,328-20,330; 20,332, 20,334-20,337; 20,339.

## MODIFICATION PROCEDURE

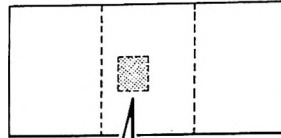
### Tension-A Board (See Figure 2.)

1. Remove R66, R67 and C31.
2. On component side, cut traces between:  
IC14-11 . . . IC13-11  
IC14-12 . . . IC13-7
3. On solder side, cut traces between:  
IC46-9 . . . . +5V  
IC46-10 . . . . +5V  
IC4-8 . . . . . R65  
IC4-9 . . . R65/C30
4. On solder side, solder jumpers between:  
R65 . . . . . IC3-5  
R65 . . . . . IC46-8  
R65/C30 . . . IC46-9  
IC13-7 . . . . IC46-10

Reference: VS 81-2069 / T.Mc.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



TENSION-A BOARD  
SERIES 1-603-616-11  
SCHEMATIC

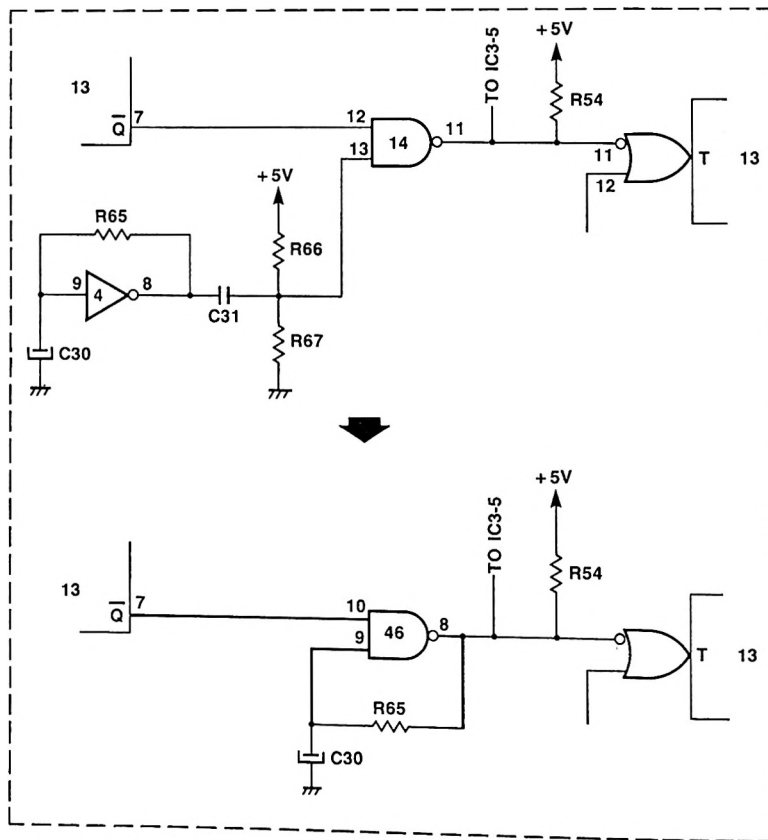


Figure 1

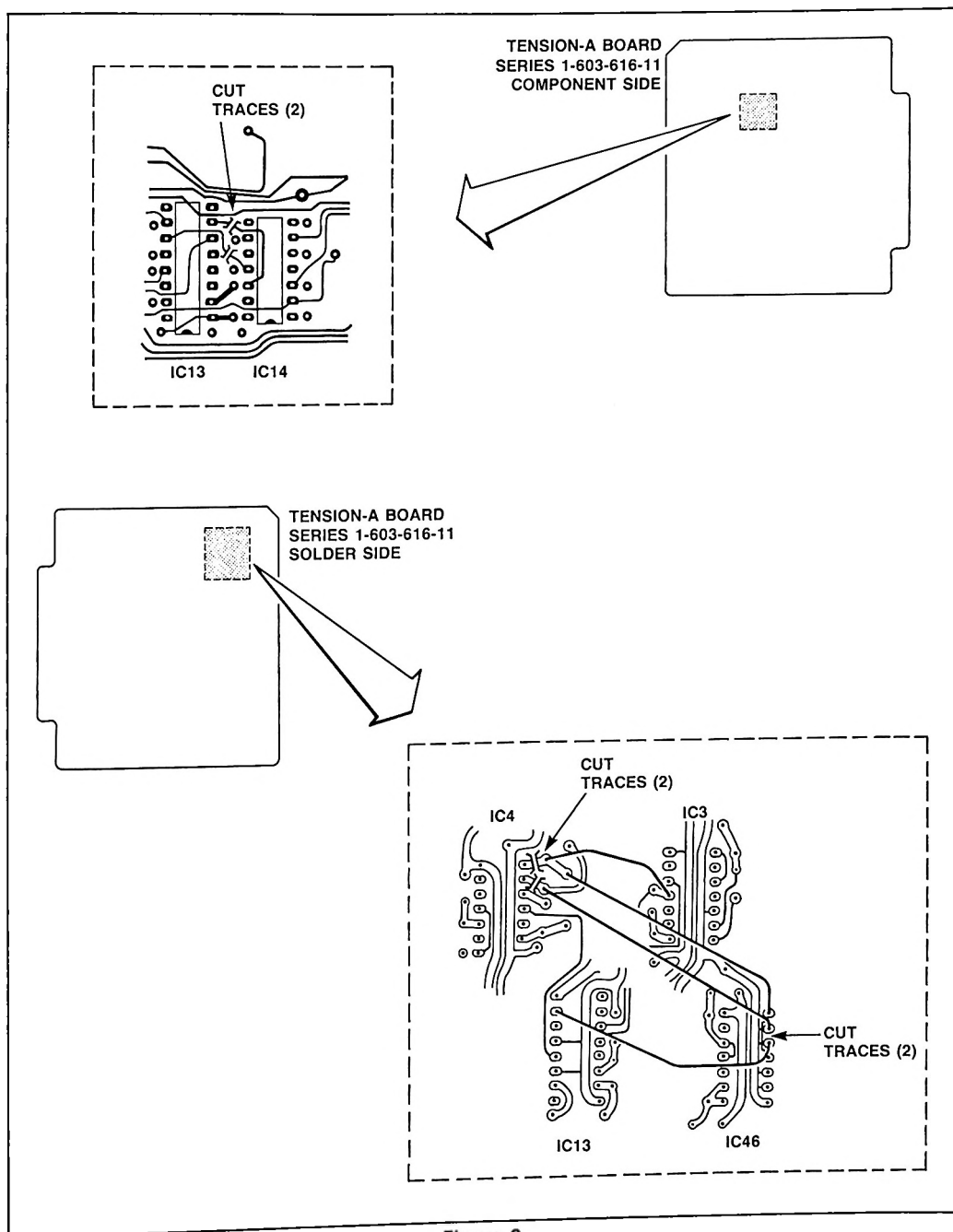
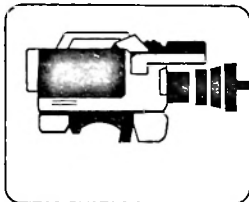


Figure 2



## technical bulletin

# 83-127

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVH-1100A**

Date: July, 1983

**SERIAL NO: 20,100 AND LOWER**

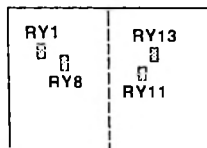
**SUBJECT: REEL AUX-A BOARD; COMPONENT CHANGE**

### DESCRIPTION

In serial numbers 20,100 and lower, a type ANW relay is used at the positions indicated in Figure 1. Use of this part required the addition of an RC circuit to insure reliability. The D2W has been replaced by the D2N in serial numbers 20,101 and higher. If the D2N is used as a replacement part in older units, remove the associated RC circuit as shown in Figure 1.

### PARTS REQUIRED

| Part No.     | Description | Qty. |
|--------------|-------------|------|
| 1-515-390-21 | D2N Relay   | 4    |



REEL AUX-A BOARD  
SCHEMATIC

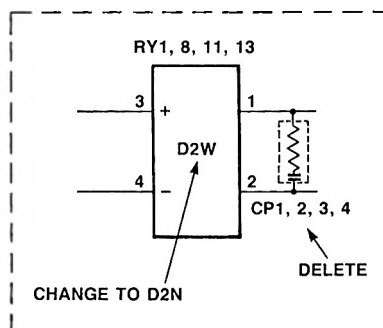
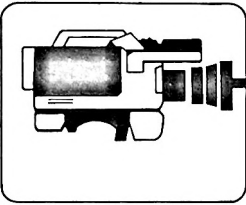


Figure 1

Reference: VS 81-2010 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# technical bulletin

# 83-108

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: June, 1983

**MODEL: BVH-1100A**

**SERIAL NO: 20,600 AND LOWER**

**SUBJECT: TIMER-2 DOES NOT COUNT WITH CG-1000G/R INSTALLED**

## DESCRIPTION

With the CG-1000G/R installed, and Display Select Switch SW1 on the Time Code-2 Board set to the U-BIT position, Timer-2 will remain at a count of 0:00:00:00. This can be corrected by replacing IC29 on the Tape Timer-A Board with the PROM listed below.

## PARTS REQUIRED

| Part No.     | Description        | Qty. |
|--------------|--------------------|------|
| 8-759-753-90 | PROM, MB7052 TAM-K | 1    |

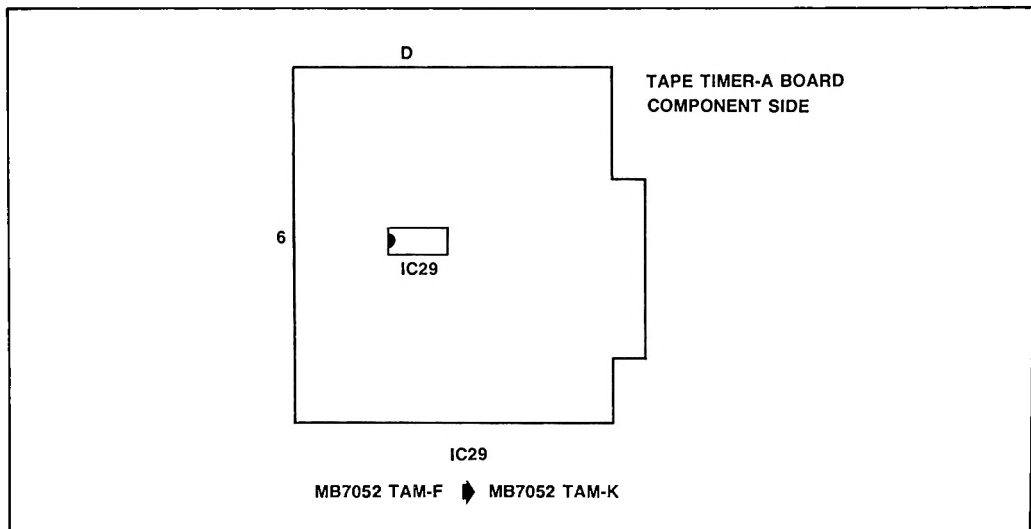


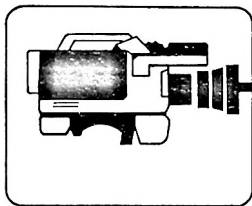
Figure 1

Reference: VS 81-2089 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.





Date: April, 1983

**MODEL: BVH-1100A, BVH-1180****SERIAL NO: 21,300 AND LOWER, 21,301 AND HIGHER (BVH-1100A)****10,200 AND LOWER, 10,301 AND HIGHER (BVH-1180)****SUBJECT: AUDIO SELECT SWITCH MODIFICATION****DESCRIPTION**

Switch SW1 on the Audio Select Board has been changed to improve reliability. Modification of the board to accommodate the new switch has resulted in a new assembly number: A-602-506-7B. The new switch is not compatible with the former audio select board. To replace the former switch with a new switch, the entire board assembly must be replaced. The Parts Required table lists the part numbers with their serial number applicability. Figure 1 shows the schematic for the new board and Figure 2 shows the new board layout.

**PARTS REQUIRED**

| Description           | Part No.                  | Serial No.       |                   |
|-----------------------|---------------------------|------------------|-------------------|
|                       |                           | BVH-1100A        |                   |
|                       |                           | 21,300 and Lower | 21,301 and Higher |
|                       |                           | BVH-1180         |                   |
|                       |                           | 10,200 and Lower | 10,301 and Higher |
| Switch (SW1)          | 1-552-068-00 (Former)     | Yes              | No                |
|                       | 1-554-069-00 (New)        | Yes *            | Yes               |
| Audio Select Board ** | 1-588-362-15,-14 (Former) | Yes              | No                |
|                       | 1-606-846-11 (New)        | Yes              | Yes               |
| Audio Select Assembly | A-602-506-7A (Former)     | Yes              | No                |
|                       | A-602-506-7B (New)        | Yes              | Yes               |

\* Must be installed on new Audio Select Board.

\*\* Part numbers are for reference only. Actual part number is the assembly part number.

Reference: VS 81-2154 / T.M.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



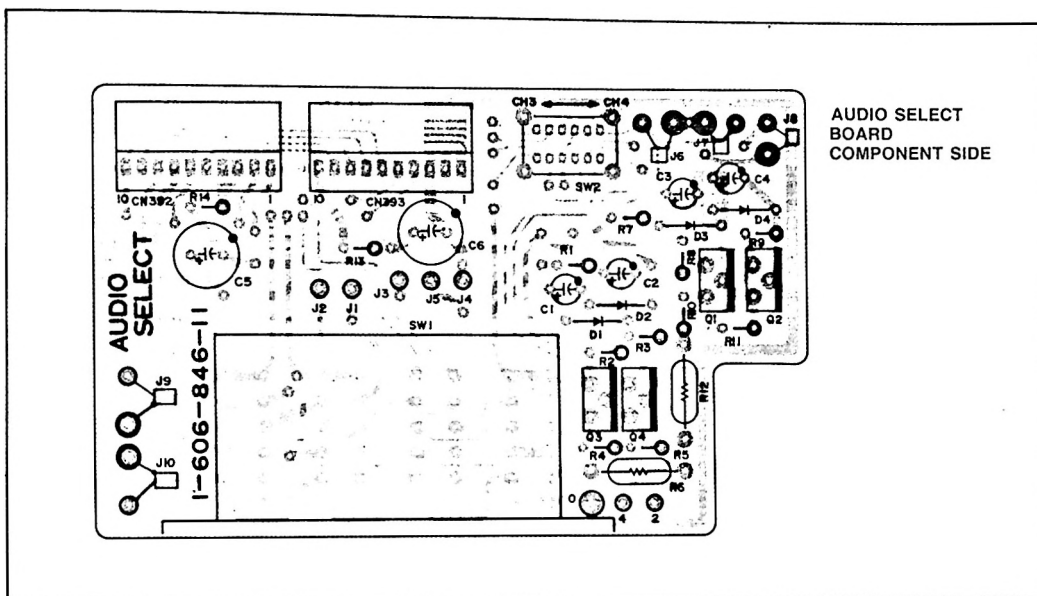
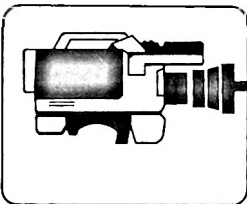


Figure 2



# technical bulletin

## 83-059

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: March, 1983

**MODEL: BVH-1100A**

**SERIAL NO: 20,600 AND LOWER**

**SUBJECT: IMPROVED DIODE RELIABILITY, MPA-A BOARD**

### DESCRIPTION

Schottky diodes used on the MPA-A Board may be damaged by static charges. To improve reliability, we recommend replacement of diodes D28 through D33 (IS1925PS) with IS1992. (See Figure 1.)

### PARTS REQUIRED

| Part No.     | Description   | Qty. |
|--------------|---------------|------|
| 8-719-119-92 | Diode, IS1992 | 6    |

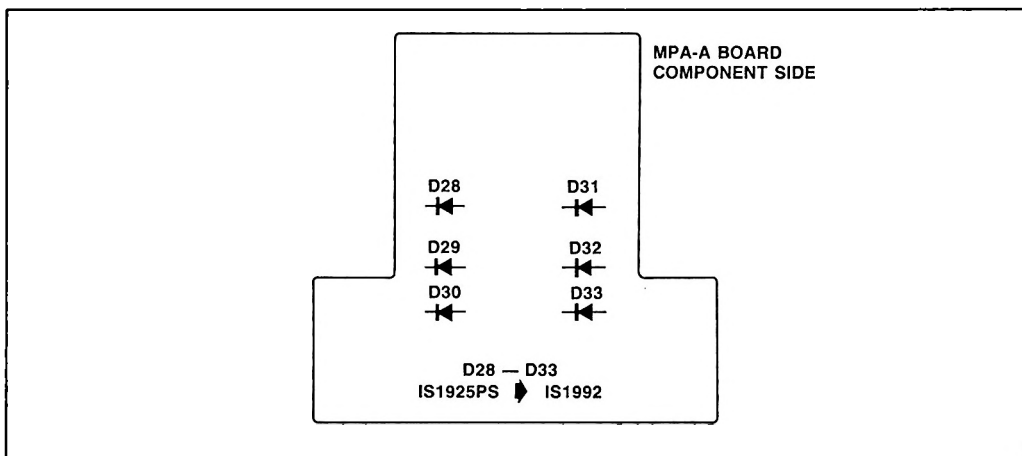


Figure 1

Reference: VS 81-2072 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**MODEL: BVH-1100A**

Date: March, 1983

**SERIAL NO: 20,100 AND LOWER**

**SUBJECT: DIODE REVERSE VOLTAGE RATING INCREASE**

### DESCRIPTION

Diode D10 on the REG-1A Board has been changed in units with S.N. 20,101 and higher to increase the reverse voltage rating. This modification applied to earlier units will prevent damage should the 18V line of the Switching Regulator open.

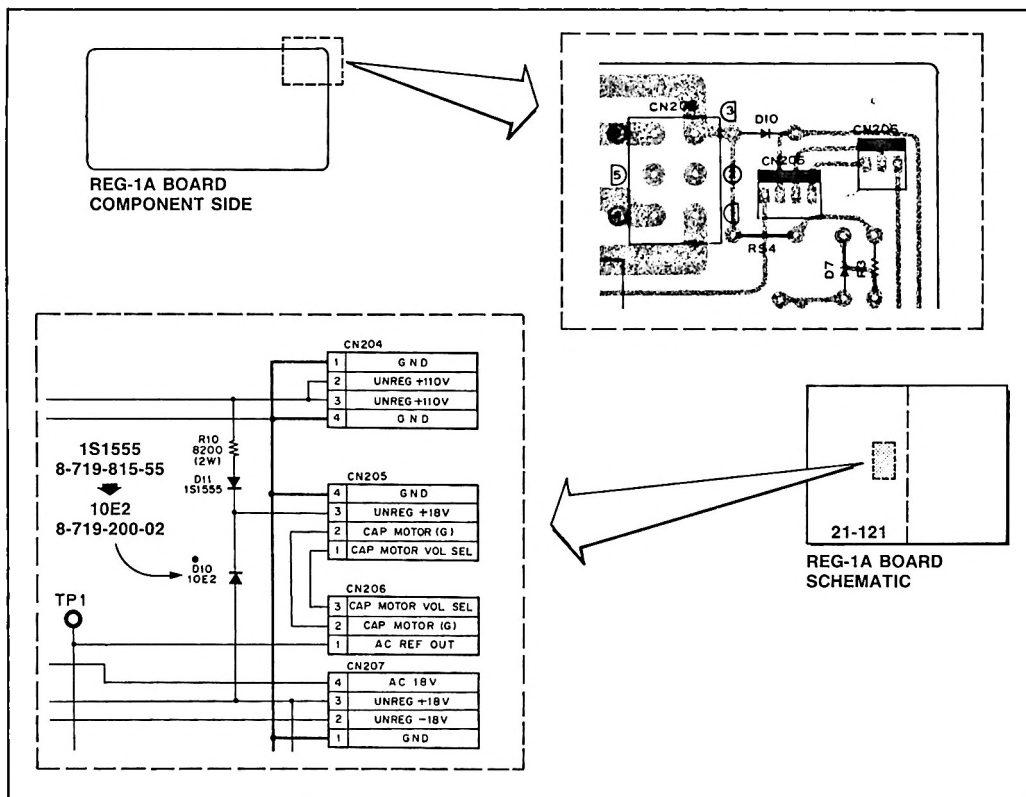
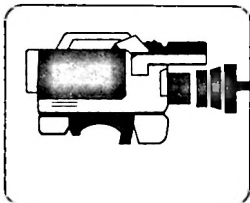


Figure 1

Reference: VS 81-2009 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



Date: March, 1983

**MODEL: BVH-1100A**

**SERIAL NO: 20,500 AND LOWER**

**SUBJECT: FRAMING-A BOARD REPLACEMENT**

**DESCRIPTION**

The Framing-A Board in current production models has been revised to include the following improvements:

- Eliminates problem of Color Frame ID Pulse being recorded on CTL track, regardless of SW-1 position.
- Improves Reference vs CTL comparison circuits to decrease capstan lock time in Color Frame mode.
- Adds Ext Color Frame Pulse input (Pin 18A).

The new board is plug-compatible for direct substitution in earlier units (S.N. 20,500 and lower).

**Former Board**

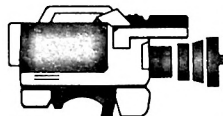
**New Board**

A-6015-050-A → A-6015-050-B

*Reference: VS 81-2041 / T.Mc.*

*Page 1 of 1*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# technical bulletin

# 83-050

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: March, 1983

**MODEL: BVH-1100A**

**SERIAL NO: 20,200 AND LOWER**

**SUBJECT: IMPROVED TAPE HANDLING WHEN USING PARTIAL TAPE REELS**

## DESCRIPTION

The Acceleration Detector on the Reel-1A Board was originally designed with a broad "Detection Window" based on using full tape reels. The circuit response to partial reels (containing less than 20 minutes of tape) can be improved with the following modification to the Reel-1 Board.

## PARTS REQUIRED

| Part No.     | Description                         | Qty. |
|--------------|-------------------------------------|------|
| 1-214-147-00 | Res, Metal, 4.3k $\Omega$ , 1%, 1/4 | 1    |
| 1-214-154-00 | Res, Metal, 8.2k $\Omega$ , 1%, 1/4 | 1    |

## MODIFICATION PROCEDURE

**Reel-1A Board (See Figure 1.)**

1. Replace R43 with 4.3k $\Omega$  resistor.
2. Replace R46 with 8.2k $\Omega$  resistor.

Reference: VS 81-2002 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

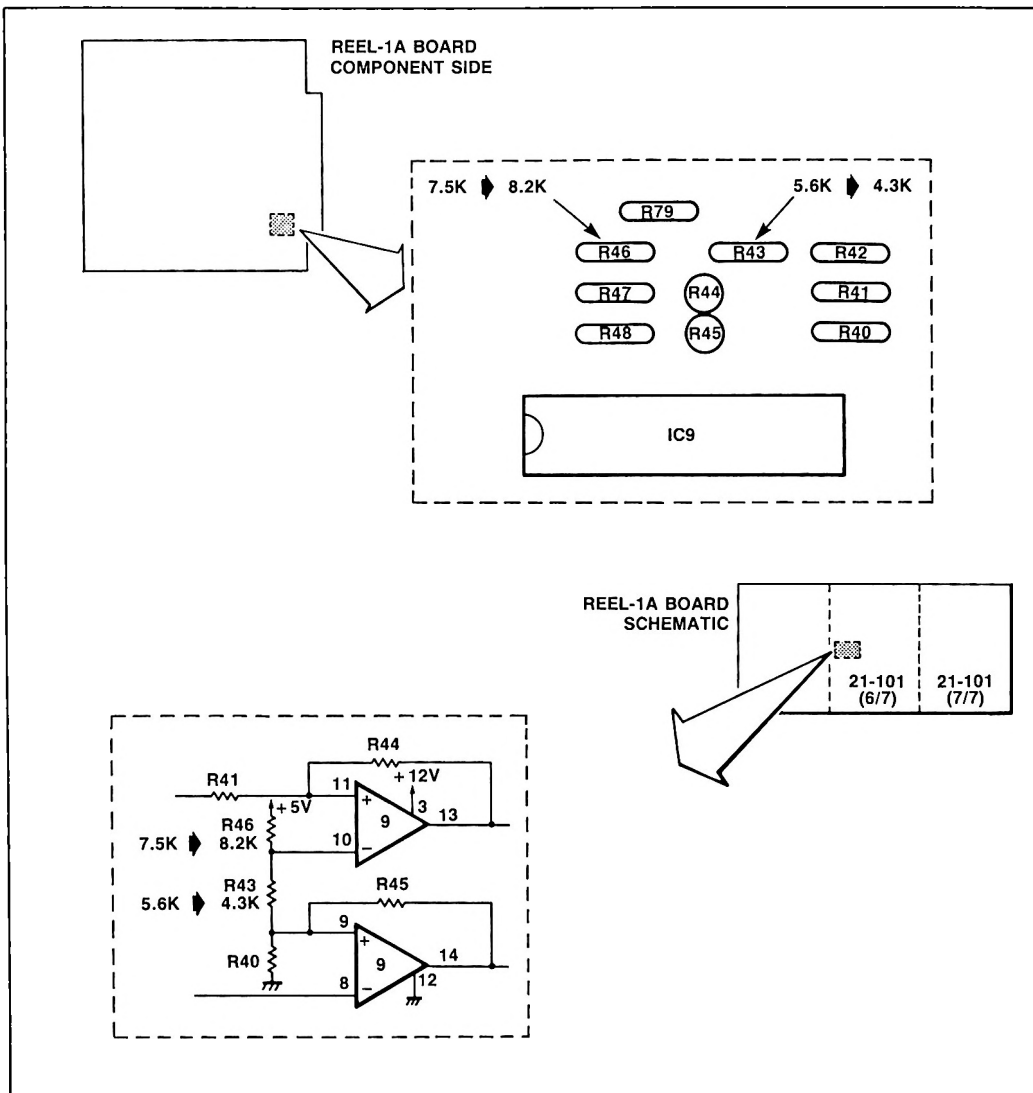
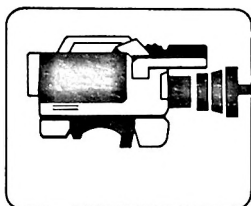


Figure 1





# technical bulletin

# 83-034

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: February, 1983

**MODEL: BVH-1100A**

**SERIAL NO: 20,300 AND LOWER**

**SUBJECT: IMPROVED CAPSTAN AND TENSION MOTOR FUNCTIONS**

## DESCRIPTION

The Capstan and/or Tension Motor may not function properly due to the possible latchup of a C-MOS "Low-to-High Voltage Translation Inverter" on the Capstan-A and Tension-A Boards. Symptoms of the problem include failure of the Capstan or Tension Motors to rotate, or failure of the Capstan Servo to lock. The following modification will eliminate this problem.

## PARTS REQUIRED

| Part No.     | Description                           | Qty. |
|--------------|---------------------------------------|------|
| 1-246-481-00 | Res, Carbon, 2.2k $\Omega$ , 1/4W, 5% | 2    |

## MODIFICATION PROCEDURE

### Capstan-A Board (See Figure 1.)

1. Cut +12V trace to IC44-1 and IC44-16.
2. Jumper IC44-16 to IC44-1.
3. Add 2.2k $\Omega$  resistor (R114) between IC44-1 and +12V.

### Tension-A Board (See Figure 2.)

#### Component Side

1. Cut +12V trace to IC41-1 and IC41-16.
2. Jumper +12V trace around IC41.

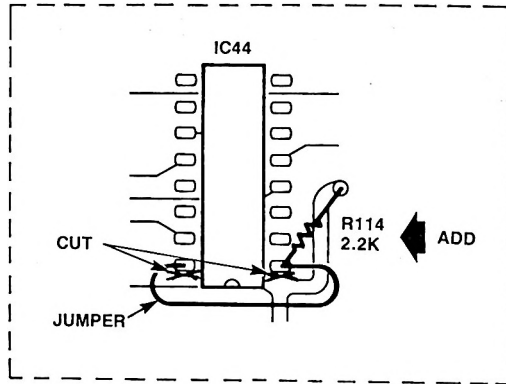
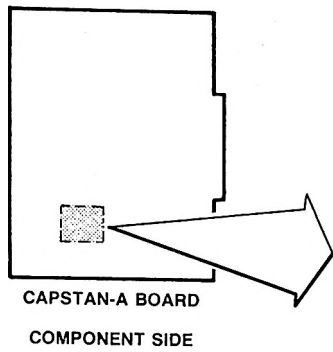
#### Solder Side

3. Cut +12V trace to IC41-16.
4. Jumper remaining +12V trace to +12V trace next to IC41.
5. Jumper IC41-1 to IC41-16.
6. Add 2.2k $\Omega$  resistor (R140) between IC41-1 and +12V.

Reference: VS 81-2028 / T.Mc.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



CAPSTAN-A BOARD  
SCHEMATIC

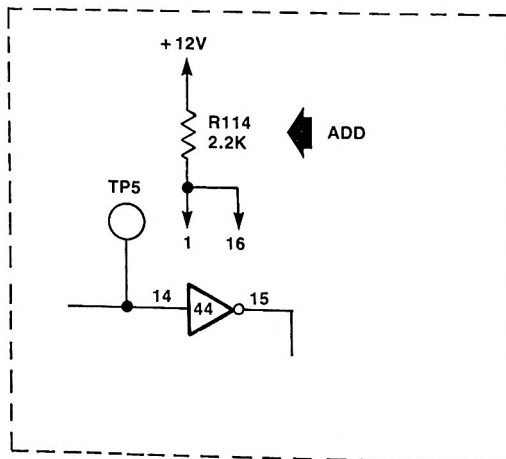
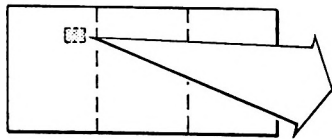
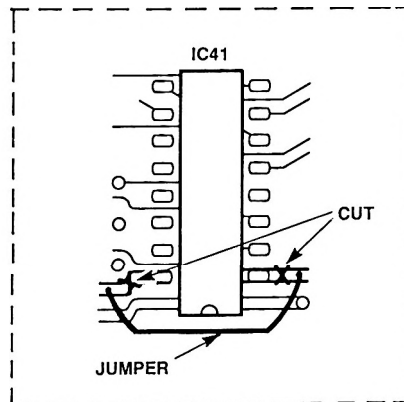
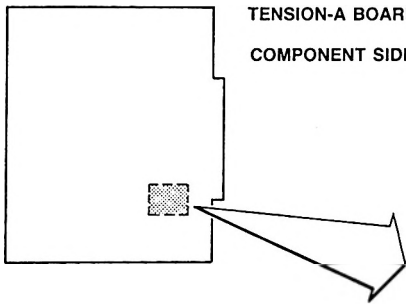
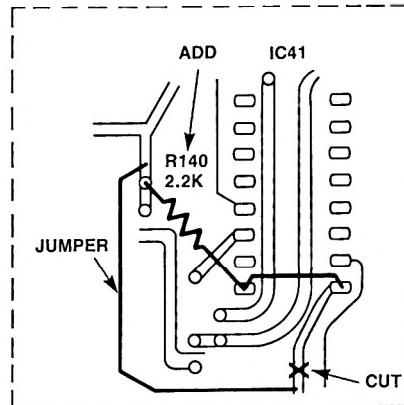
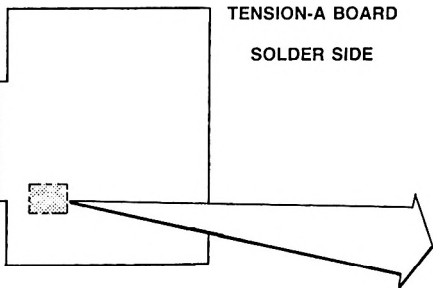


Figure 1

TENSION-A BOARD  
COMPONENT SIDE



TENSION-A BOARD  
SOLDER SIDE



TENSION-A BOARD  
SCHEMATIC

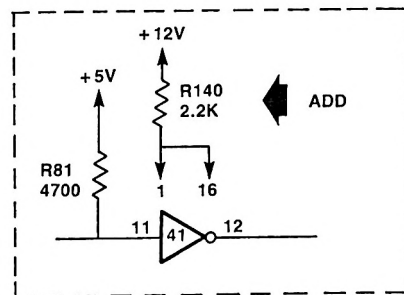
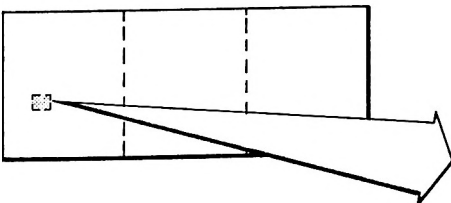
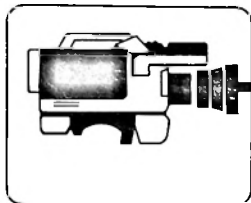


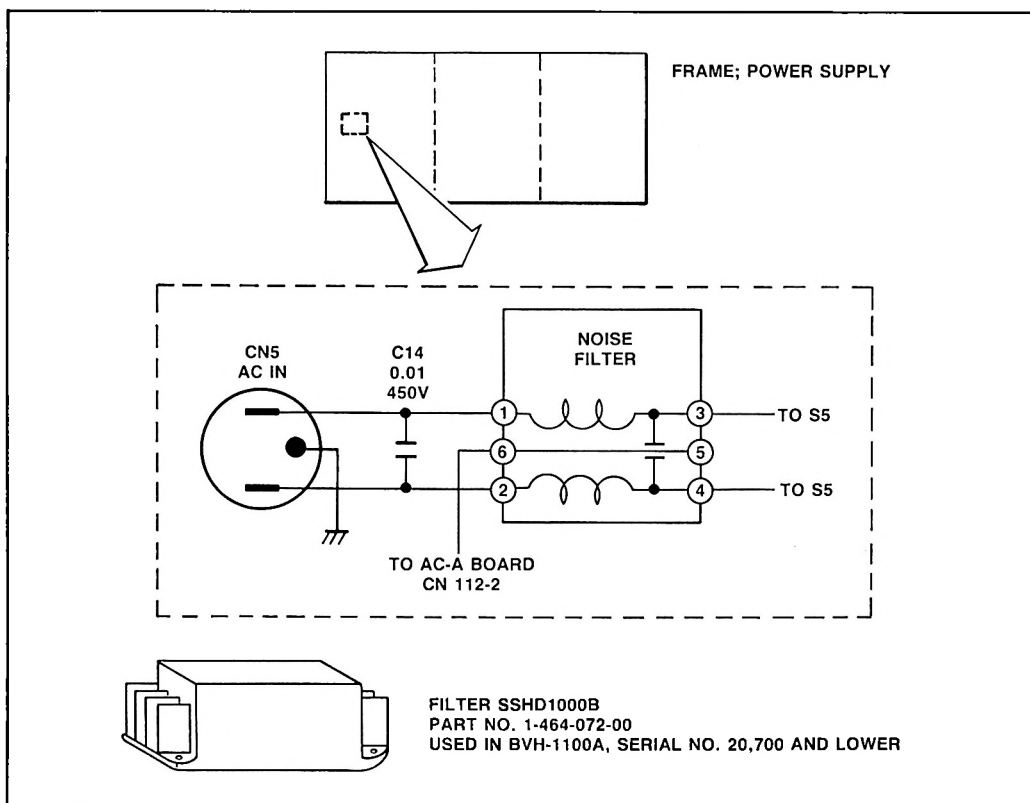
Figure 2

**MODEL: BVH-1100A****SERIAL NO: ALL****SUBJECT: POWER SUPPLY NOISE FILTER**

Date: January, 1983

**DESCRIPTION**

The power supply noise filter used in earlier models is not interchangeable with the filter used in later production runs. Be sure to use the appropriate part number if a replacement is needed. (See Figures 1 & 2.)

**Figure 1**

Reference: VTRW 81-2010, VS 81-2078 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

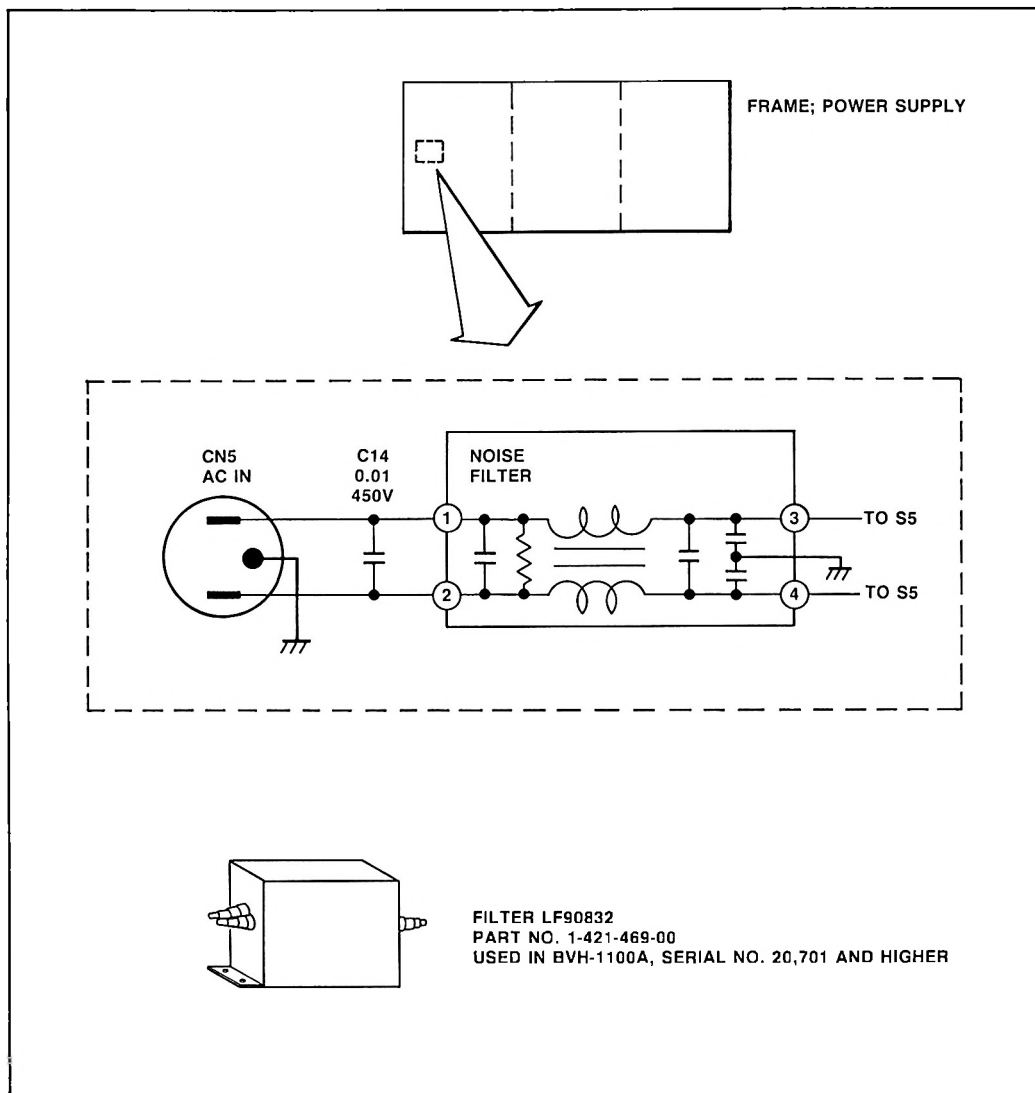
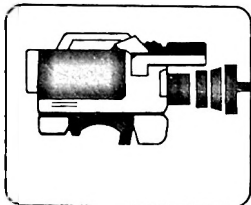


Figure 2



# technical bulletin

# 83-004

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVH-1100A**

Date: January, 1983

**SERIAL NO: 20,500 AND LOWER**

**SUBJECT: LOSS OF AUDIO EDITING CAPABILITY DUE TO IC FAILURE**

### DESCRIPTION

The MM74C164N chip used on the Audio Logic Board has demonstrated a high failure rate, and has been replaced in current production models with the TC40H164P. Replacement of ICs 1 through 5 and 10 through 13 is recommended in earlier models.

### PARTS REQUIRED

| Part No.     | Description   | Qty. |
|--------------|---|------|
| 8-759-221-64 | TC40H164P, 8-Bit Parallel Out Serial Shift Register | 9    |

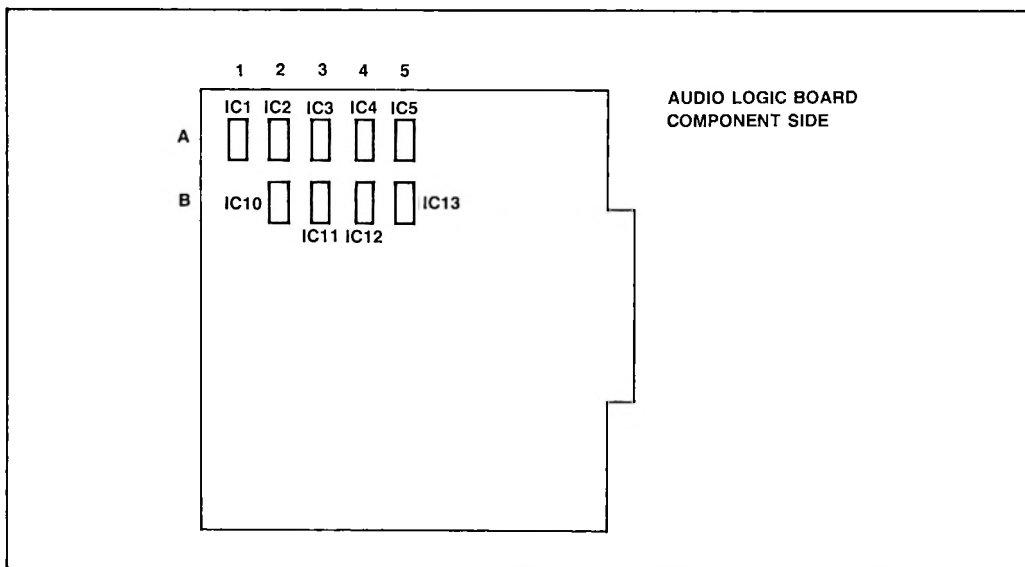
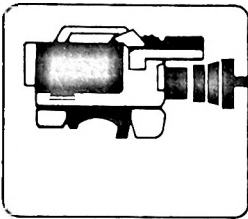


Figure 1

Reference: VS 81-2026 / T.Mc.

Page 1 of 1



# broadcastbulletin No. 82-81

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: December, 1982

MODEL: BVH-1100A

SERIAL NO: 20,500 AND LOWER

SUBJECT: TAPE TENSION CONSISTENCY IN PROGRAMMED JOG MODE

## DESCRIPTION

Variation in tape tension is the result of transient noise in the "Jog Pulse Serial/Parallel Converter" on the Capstan-A Board. The problem can be corrected by adding filter capacitor C114 as shown in Figure 1.

## PARTS REQUIRED

| Part No.     | Description                    | Qty. |
|--------------|--------------------------------|------|
| 1-102-110-00 | Cap, Ceramic, 220 pF, 50V, 10% | 1    |

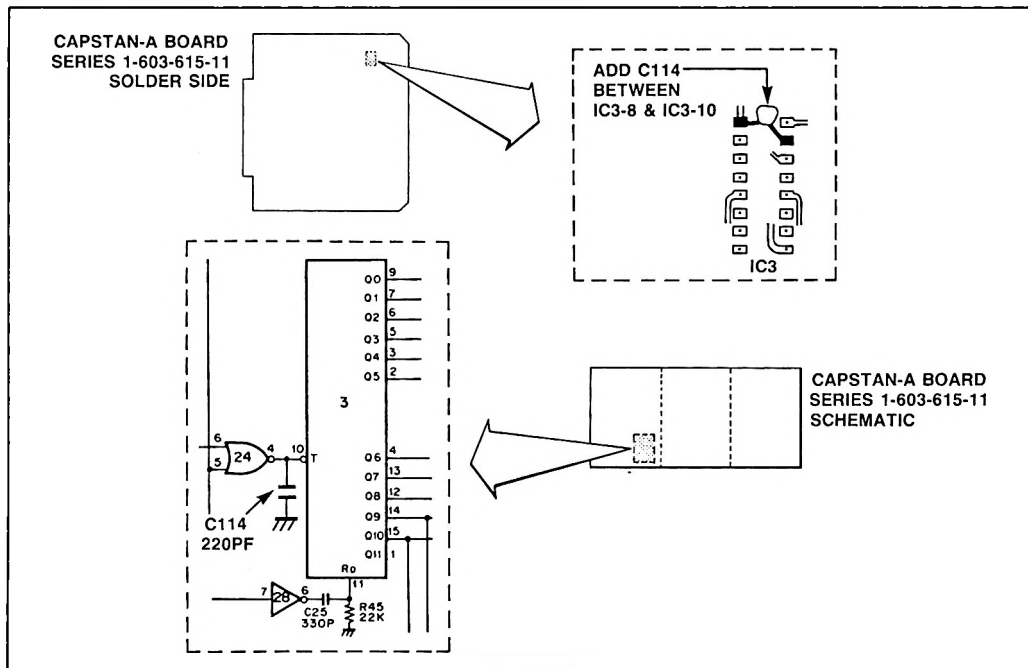
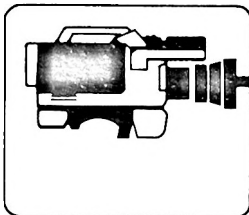


Figure 1

Reference: VS 81-2121 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**SONY®**

# **broadcastbulletin** No. **82-75**

**SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134**

Date: November, 1982

**MODEL: BVH-1100A****SERIAL NO: 20,000 AND LOWER****SUBJECT: IMPROVED S/N IN AUDIO CHANNEL-3  
MICROPHONE AMPLIFIER****DESCRIPTION**

The following modifications to the Audio-3 Board and front panel MIC INPUT jack will improve the signal to noise ratio on Audio Channel-3.

**PARTS REQUIRED**

| Part No.     | Description                  | Qty. |
|--------------|------------------------------|------|
| 1-108-559-00 | Cap, Mylar, 1500 pF, 5%, 50V | 1    |

**MODIFICATION PROCEDURE****Audio-3 Board**

1. Connect the new capacitor (C122) between TP-4 and E-3 (Figure 1).

**MIC IN Jack**

1. Remove the coax wires from pins 6 and 7, and their shields from pin 2.
2. Jumper pins 2, 1 and 9.
3. Twist and solder together the shields from the wires disconnected in step 1. (Figure 3.)
4. Reconnect the wires to pins 6 and 7.

*Reference: VS 81-2022 / T.Mc.**Page 1 of 3*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



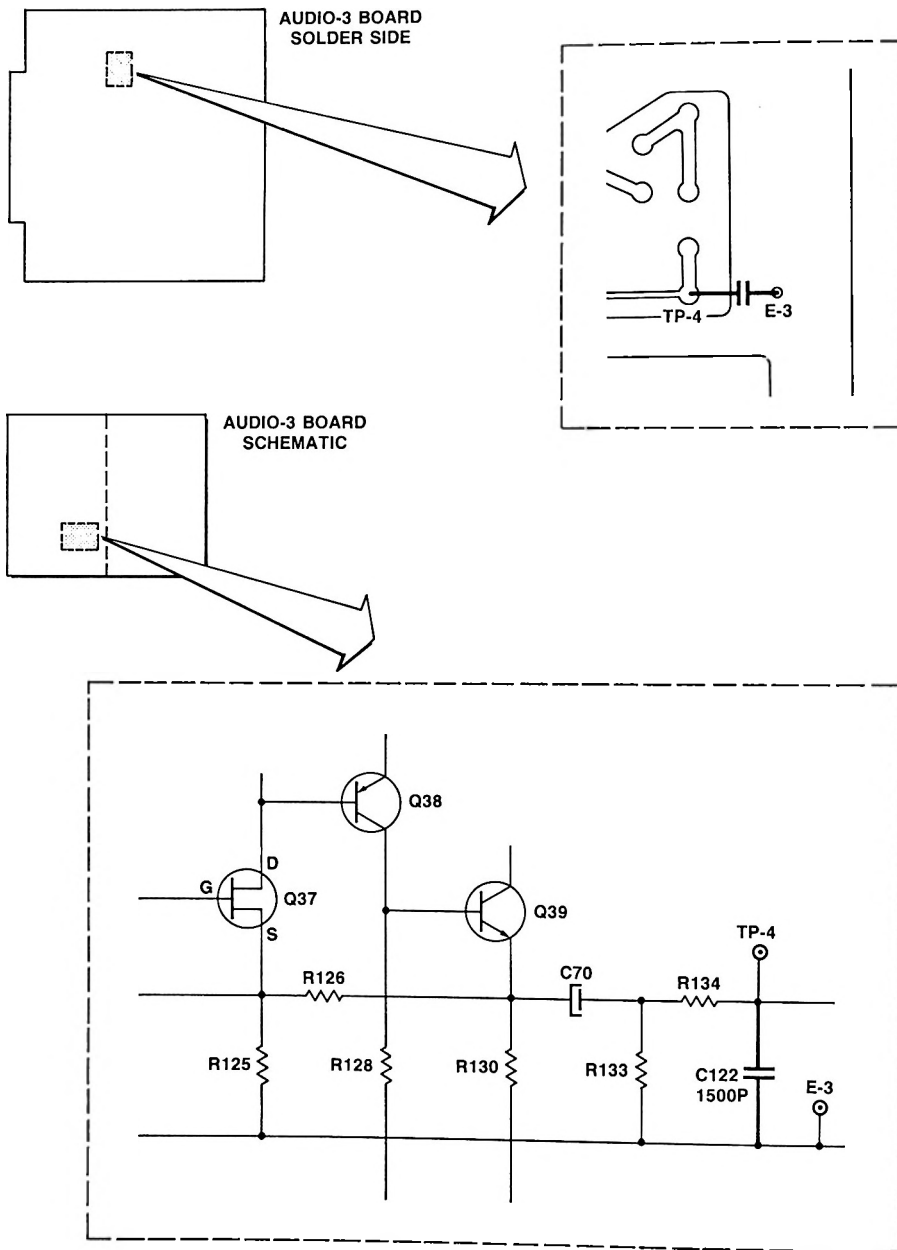


Figure 1

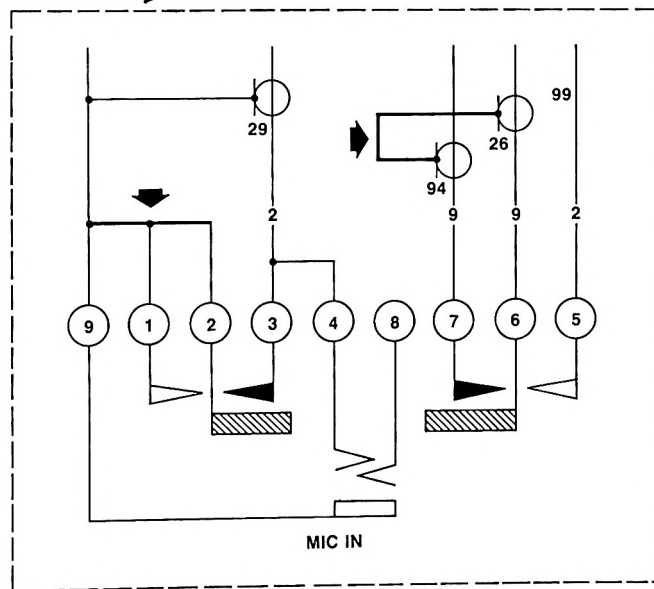
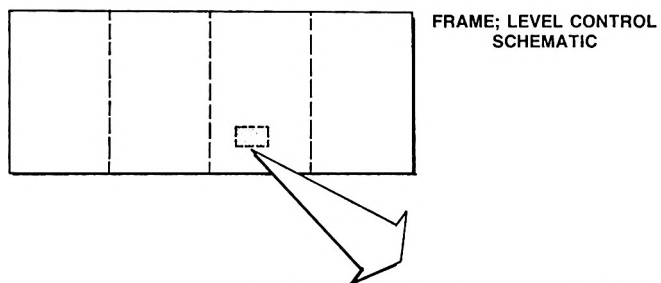
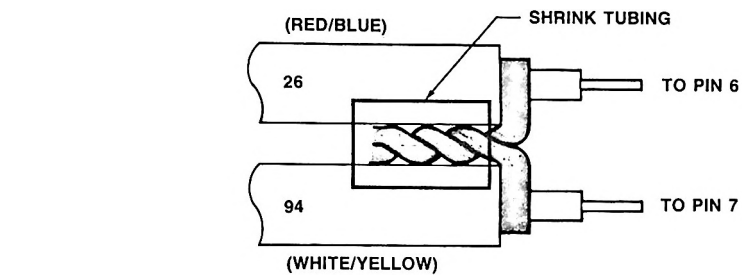
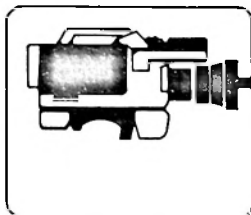


Figure 2

**SONY®**

# **broadcastbulletin** No. **82-74**

**SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134**

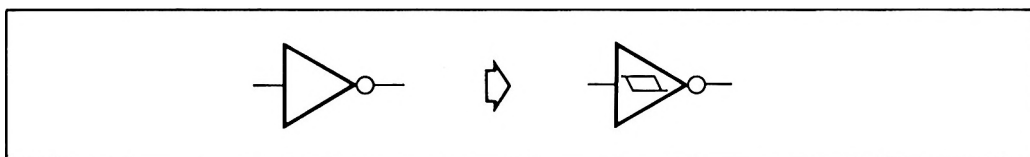
Date: November, 1982

**MODEL: BVH-1100A****SERIAL NO: 20,200 AND LOWER****SUBJECT: IMPROVED TAPE TENSION WHEN USING  
MANUAL TRACKING CONTROL****DESCRIPTION**

This modification affects serial numbers 20,200 and lower.

The tape tension may temporarily increase while tracking is adjusted manually. The tension increase is a result of the response characteristics of the Phase Modulator circuits on the CAPSTAN-A Board and TENSION-A Board. The poor response is caused by the inverter chips used in these circuits.

The problem can be eliminated by substituting a Schmitt-trigger inverter for the old inverter. (See Figure 1.)

*Figure 1***PARTS REQUIRED**

| Part No.     | Description                              | Qty. |
|--------------|--|------|
| 8-759-045-84 | Schmitt-Trigger Inverter,<br>MC14584 BCP | 4    |

**MODIFICATION PROCEDURE****CAPSTAN-A Board**

1. Replace IC46 and IC56 with the new chips (See Figures 2 & 3.)

*Reference: VS 81-2004 / T.Mc.**Page 1 of 3*

This bulletin is published by the Sony Broadcast Training Info Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

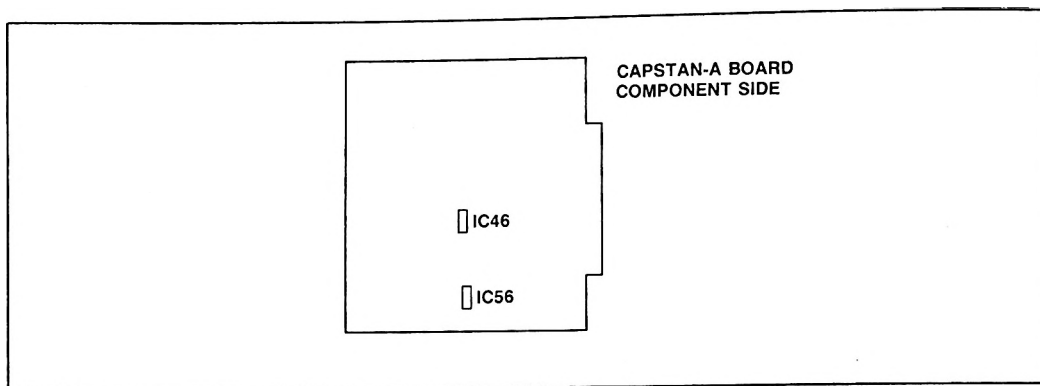


Figure 2

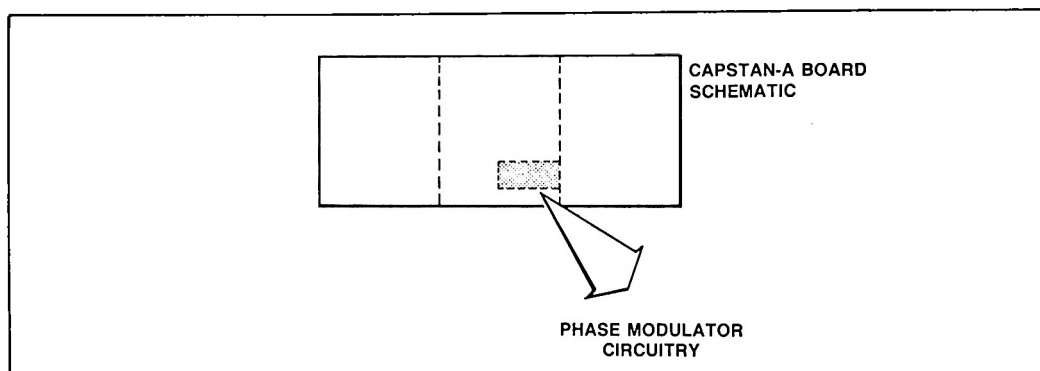


Figure 3

### TENSION-A Board

1. Replace IC34 and IC35 with the new chips (See Figures 4 & 5.)

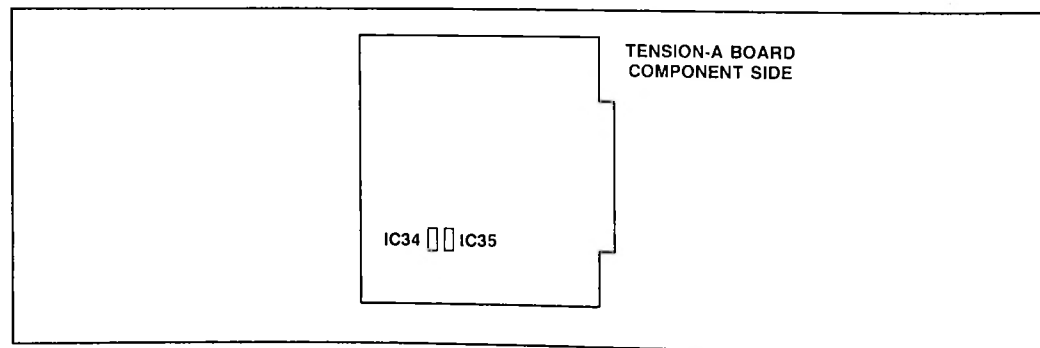
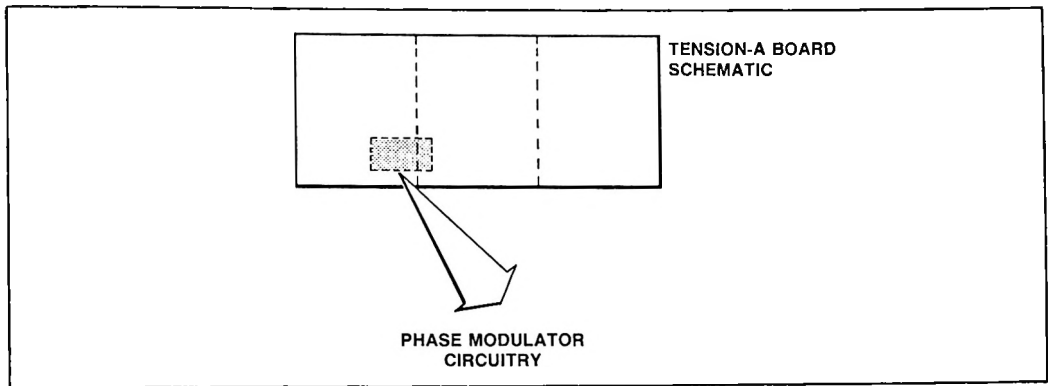
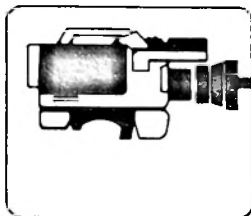


Figure 4



*Figure 5*



*If we ever get an  
Editor/Controller*

**SONY**

# **broadcastbulletin** No. **82-73**

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: November, 1982

**MODEL: BVH-1100A**

**SERIAL NO: 20,300 AND LOWER**

**SUBJECT: VTR ENTERS STOP MODE WHEN FF IS  
COMMANDED UNDER EDITOR CONTROL**

## **DESCRIPTION**

When a FF command is preceded by a REW command under Editor Control\*, the VTR may enter STOP mode. The problem is caused by accidental triggering of a safety circuit, and can be eliminated by adding the timing circuit shown in Figure 1.

## **PARTS REQUIRED**

| Part No.     | Description                           | Qty. |
|--------------|---------------------------------------|------|
| 1-214-132-00 | Res, Carbon, 1K $\Omega$ , 5%, 1/4 W  | 1    |
| 1-246-545-00 | Res, Metal, 1M $\Omega$ , 1%, 1/4 W   | 1    |
| 8-719-815-55 | Diode, 1S1555                         | 1    |
| 1-131-403-00 | Cap, Tantalum, 0.15 $\mu$ F, 35V, 20% | 1    |

## **MODIFICATION PROCEDURE**

### **REEL-1A Board**

1. Add the additional circuit to the board at spare IC position G9. Insert the components as indicated in Figure 2.
2. On the solder side, add the following jumpers (See Figure 3.):

| From         | To      | From          | To     |
|--------------|---------|---------------|--------|
| ICG9-5 ..... | ICG9-6  | ICG9-9 .....  | IC37-1 |
| ICG9-9 ..... | ICG9-11 | ICG9-12 ..... | IC36-2 |

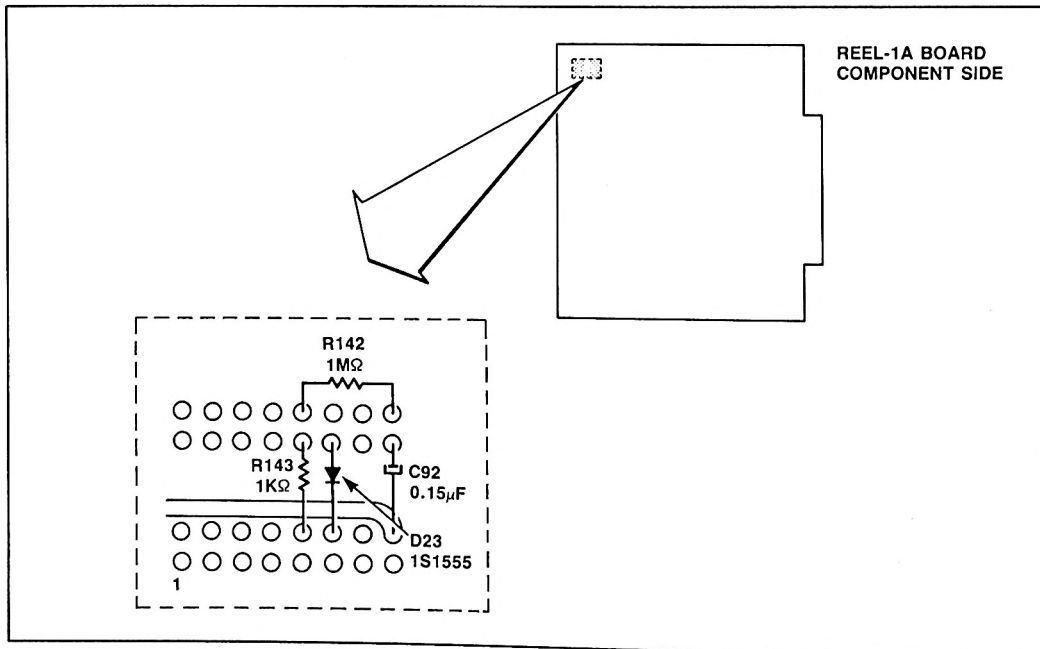
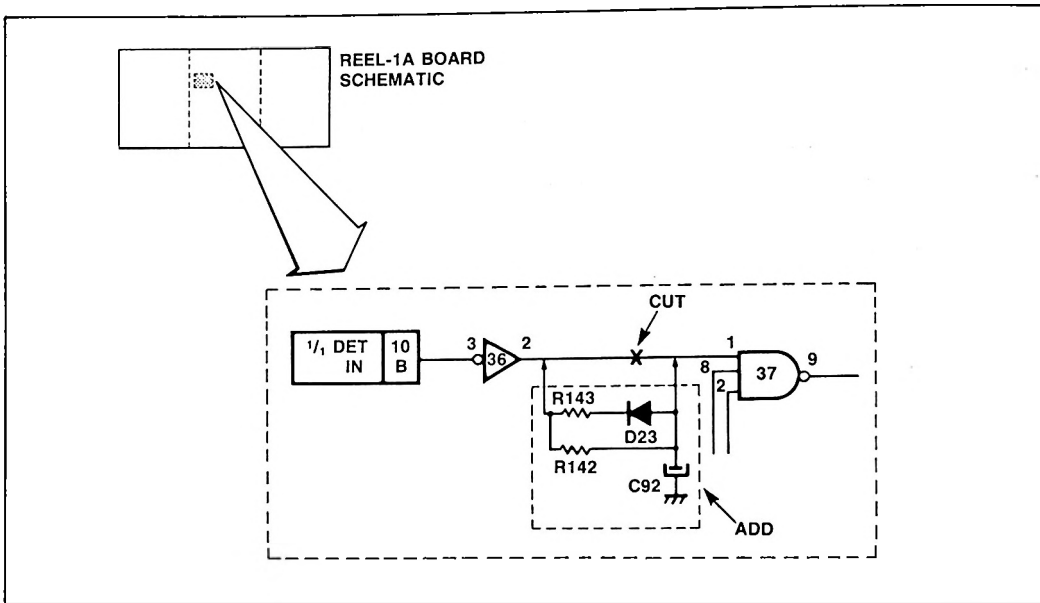
3. Cut the trace between IC37-1 and IC36-2.

\* Editor control refers to BVE-1000, BVE-5000, DTR-1100, etc.

Reference: VS 81-2025 / T.Mc.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



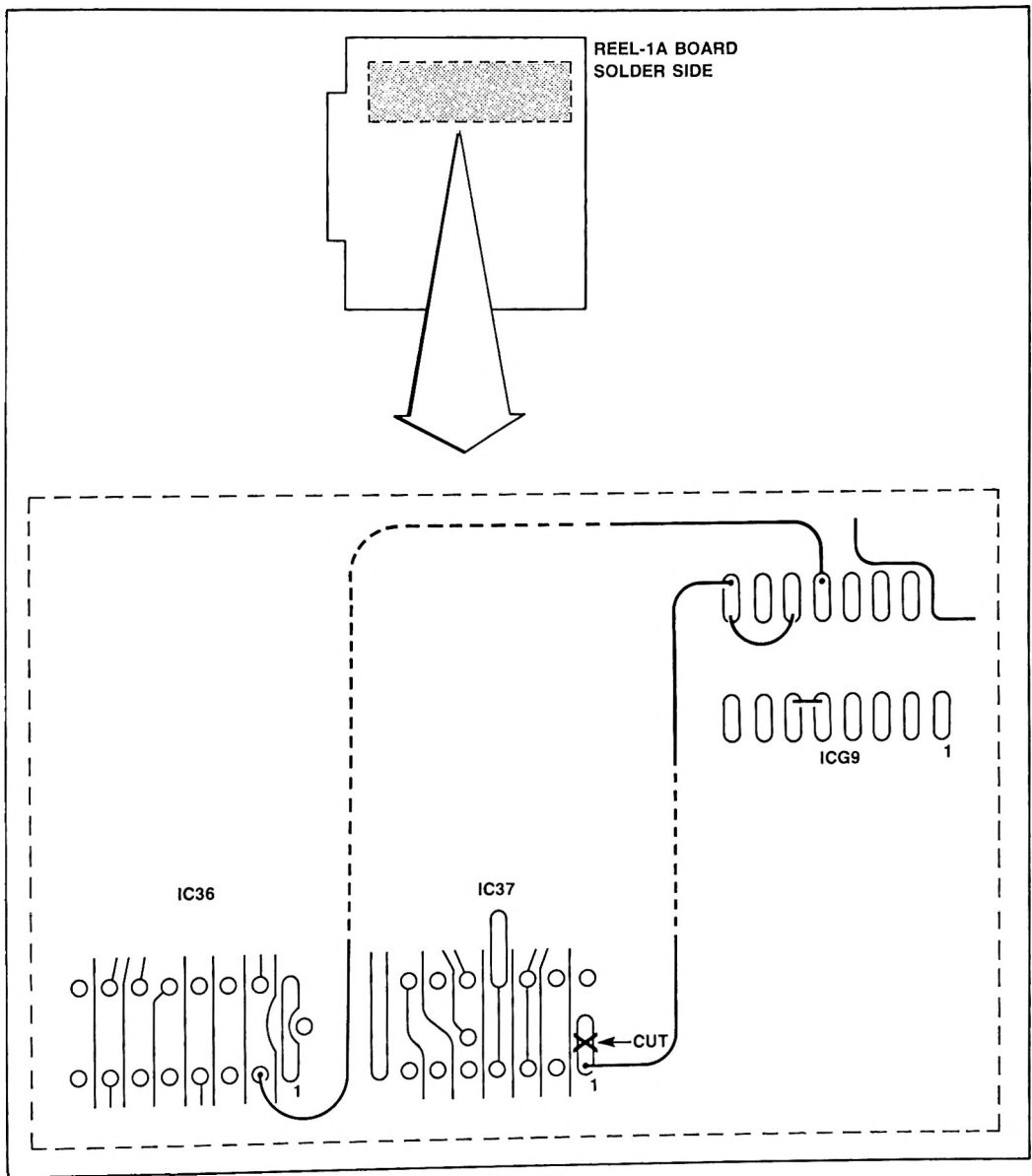
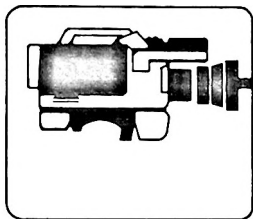


Figure 3





Do

SONY®

# broadcastbulletin No. 82-70

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: November, 1982

**MODEL: BVH-1100A****SERIAL NO: 20,200 AND LOWER****SUBJECT: IMPROVEMENT OF "TRIAC PULSE" CIRCUITS****DESCRIPTION**

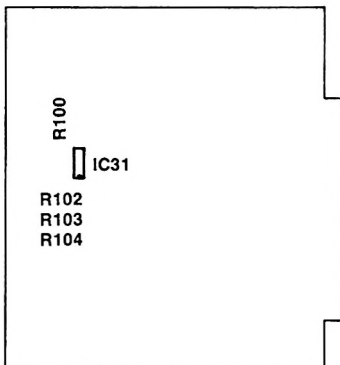
The firing sequence for Reel Motor Triacs is controlled by circuits on the Reel-2A Board. The reliability of these circuits can be affected by variations between the individual chips used for IC9 (TC4023BP). Modification of the Reel-2A Board as shown in Figure 1 will eliminate the effect of input-threshold variations in IC9.

**PARTS REQUIRED**

| Part No.     | Description                            | Qty. |
|--------------|--|------|
| 1-214-144-00 | Res, Metal, 3.3 k $\Omega$ , 1/4 W, 1% | 2    |
| 1-214-147-00 | Res, Metal, 4.3 k $\Omega$ , 1/4 W, 1% | 2    |

*Reference: VS 81-2023 / T.Mc.**Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



REEL-2A BOARD  
SCHEMATIC

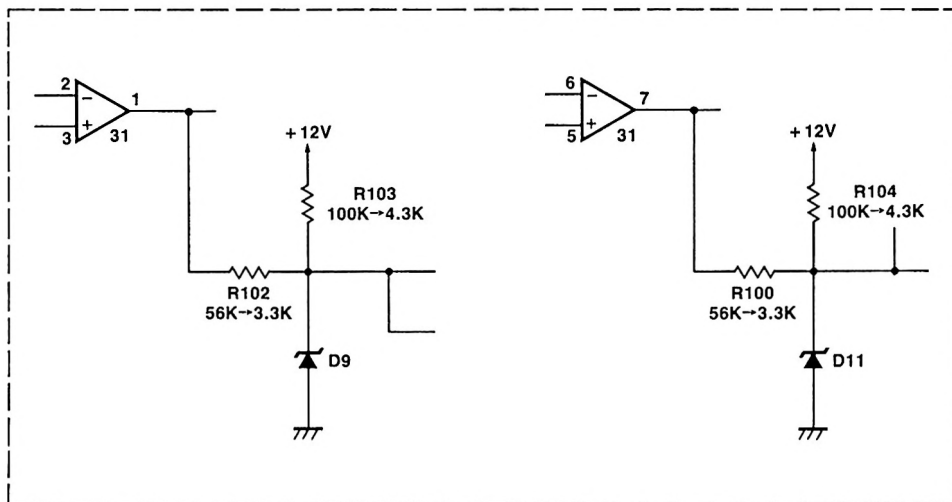
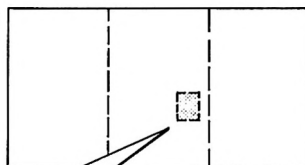
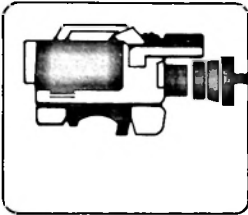


Figure 1



## broadcastbulletin No. 82-69

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: November, 1982

**MODEL: BVH-1100A**

**SERIAL NO: 20,300 AND LOWER**

**SUBJECT: MPA-A BOARD; BYPASS CAPACITOR DISCHARGE**

### DESCRIPTION

The following modification provides a rapid discharge path for the bypass capacitors when power to the VTR is turned off.

### PARTS REQUIRED

| Part No.     | Description                       | Qty. |
|--------------|-----------------------------------|------|
| 1-213-155-00 | Res, Metal, 10k $\Omega$ , 1W, 5% | 2    |

### MODIFICATION PROCEDURE

#### MPA-A Board

1. Add 10k ohm metallic resistors (R58 and R59) to board using existing pads. (See Figures 1 and 2.)

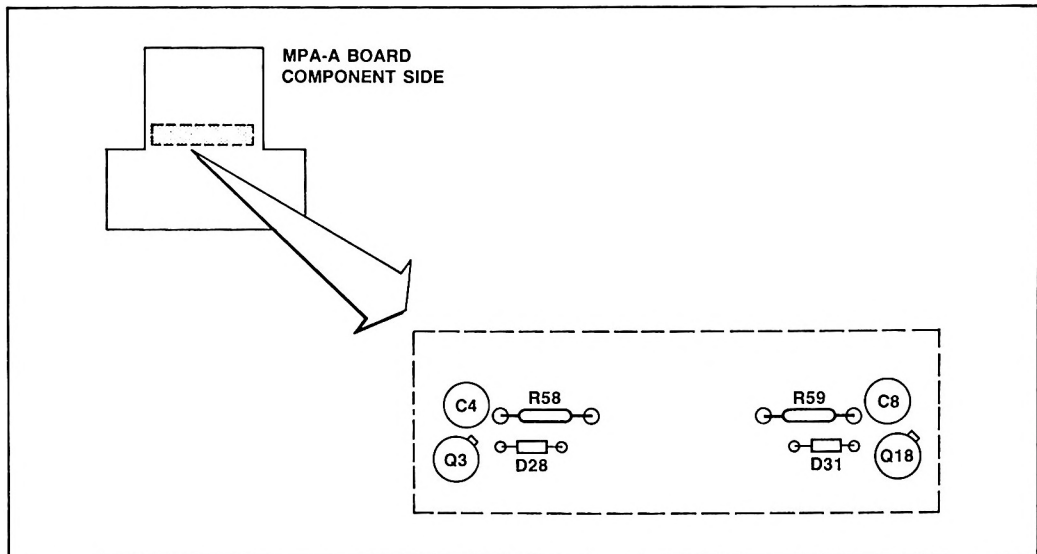


Figure 1

Reference: VS 81-2008 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

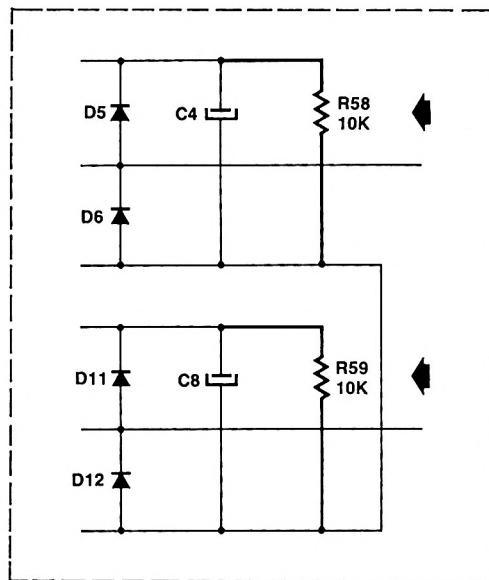
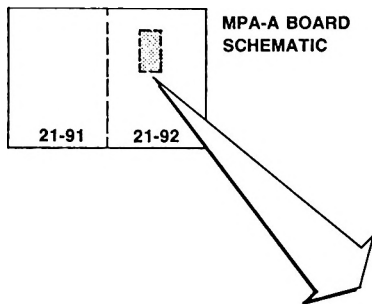
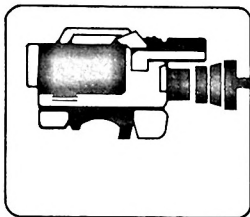


Figure 2



*Do if tension problems*

**SONY**

# **broadcastbulletin** No. **82-63**

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVH-1100A/-1180**

Date: November, 1982

**SERIAL NO: ALL**

**SUBJECT: TENSION STABILIZER ADJUSTMENT**

## **DESCRIPTION**

The adjustments listed below should be performed after the tension stabilizer assembly or any of its parts are replaced.

NOTE: The tension stabilizer is called the L Arm Assembly in the BVH-1100A.

## **PROCEDURE**

### **Pin Adjustment**

1. See Figure 1. Thread tape, set machine in stop mode and turn power off.
2. Check for slack in tape. Remove slack by turning T reel.
3. Loosen screws A and B. Adjust gap between pin I and tape by moving solenoid assembly in direction shown. Gap should be 0.5mm to 0.8mm. Tighten screws A and B.

### **Stopper Adjustment**

1. See Figure 2. Check gap between motor thrust stopper and pin II. Gap should be 0.5mm to 1mm.
2. If gap is not within specification, adjust gap by loosening screw C, moving motor thrust plate in direction shown and tightening screw C.
3. Turn on power and set machine in play mode. When switching PB Head Select from 1 to 3, pin I should contact tape. If not, repeat pin and stopper adjustments.

Reference: VS82-2030 / S.C.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

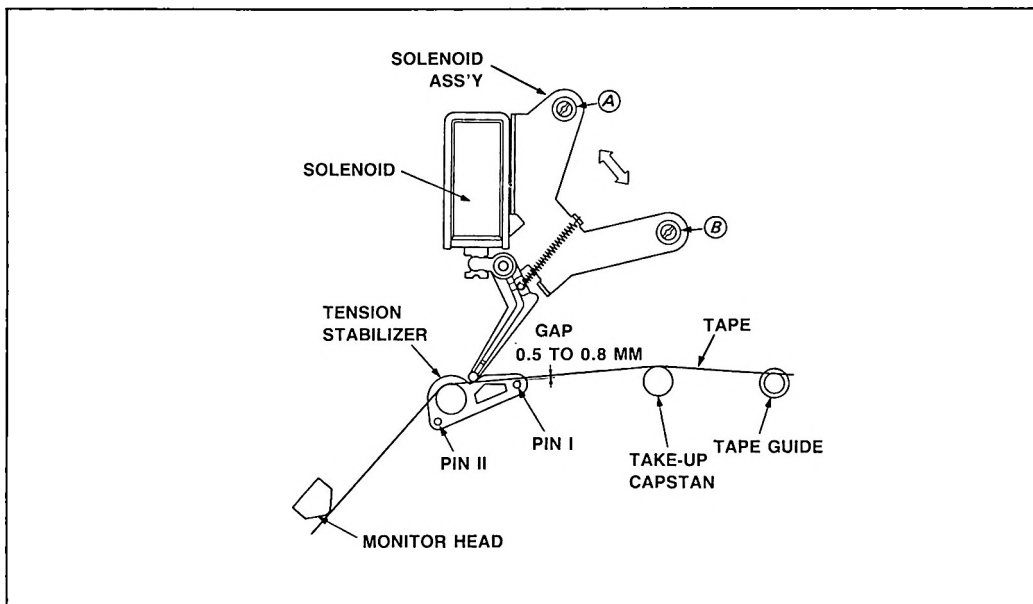


Figure 1

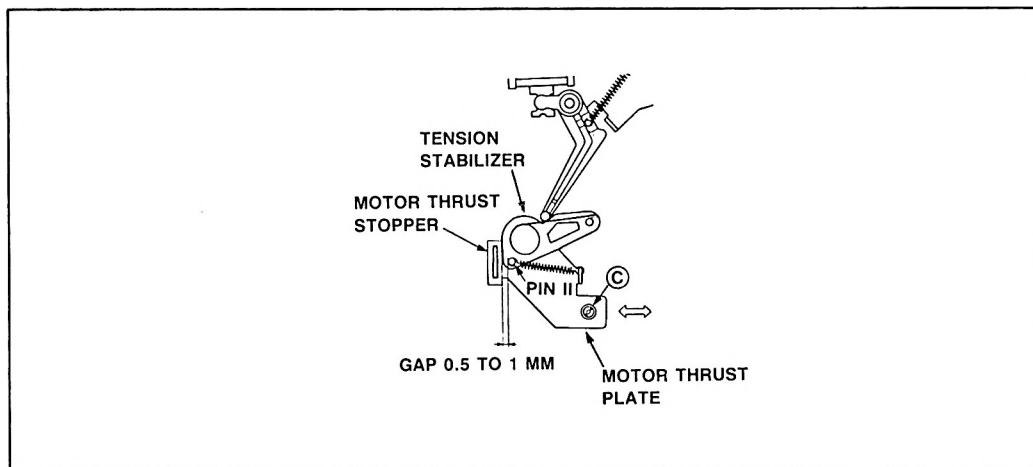
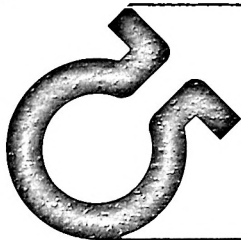


Figure 2



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1982

model: BVH-1100A

bulletin no.: 2, Rev. 2

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

**THIS BULLETIN SUPERSEDES BVH-1100A  
BULLETIN NO. 2R DATED DECEMBER, 1981**

## AUTO SELECTION OF 2F/4F FOR EDIT (INSERT, ASSEMBLE) AND RECORD

### DESCRIPTION

Revision arrows are used to indicate changed information.

The BVH-1100A will operate in 2-Field or 4-Field framing modes as selected by switch SW-1 on the Framing Board. The unit normally operates in the 4-Field mode for proper color framing during Record and Playback. The Color Frame Pulse, generated only in the 4-Field mode, is recorded on tape for subsequent use by the TBC during Playback. When the BVH-1100A is used with CMX or Datatron Editors for Insert Edits, the 2-Field mode is required. This inhibits generation of the Color Frame Pulse, which is still required by the BVH-1100A for Record and Assemble Edits.

Automatic selection of the proper conditions for both modes can be achieved by the following modification to the Framing Board. This modification generates the Color Frame Pulse any time Record or Assemble Edit is selected, even if switch SW-1 is in the 2F position. The modification is applicable to units with serial numbers 20,001-20,499. ⚡

### PARTS REQUIRED

This modification can be implemented with existing spare circuits on the Framing Board.

### MODIFICATION PROCEDURE

1. On foil side of Framing Board, add the following jumpers (See Figures 1 and 2):

| From          | To           |
|---------------|--------------|
| IC15-2 .....  | IC33-8       |
| IC33-9 .....  | IC33-14      |
| IC33-10 ..... | Pole of SW-1 |

2. Cut trace between ground and pole of SW-1 as shown in Figure 2.
3. On component side, cut traces at IC33 pins 8 and 9 as shown in Figure 2.

⚡ **NOTE:** This modification may be implemented in serial numbers 20,500 and above by substituting any unused AND-gate for IC33-8,-9,-10.

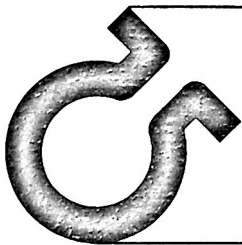
Reference: G.C. / P.M.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.







**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: December, 1981

model: BVH-1100A

bulletin no.: 2R

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

**THIS BULLETIN SUPERSEDES BVH-1100A  
BULLETIN NO. 2 DATED OCTOBER, 1981**

## **AUTO SELECTION OF 2F/4F FOR EDIT (INSERT, ASSEMBLE) AND RECORD**

### **GENERAL**

- ◆ Revision arrows are used to indicate changed information. ◆

The BVH-1100A will operate in 2-Field or 4-Field framing modes as selected by switch SW-1 on the Framing Board. The unit normally operates in the 4-Field mode for proper color framing during Record and Playback. The Color Frame Pulse, generated only in the 4-Field mode, is recorded on tape for subsequent use by the TBC during Playback. When the BVH-1100A is used with CMX or Datatron Editors for Insert Edits, the 2-Field mode is required. This inhibits generation of the Color Frame Pulse, which is still required by the BVH-1100A for Record and Assemble Edits.

Automatic selection of the proper conditions for both modes can be achieved by the following modification to the Framing Board. This modification generates the Color Frame Pulse any time Record or Assemble Edit is selected, even if switch SW-1 is in the 2F position. The modification is applicable to units with serial numbers 11,000 and above.

### **PARTS REQUIRED**

This modification can be implemented with existing spare circuits on the Framing Board.

### **MODIFICATION PROCEDURE**

1. On foil side of Framing Board, add the following jumpers (See Figures 1 and 2):

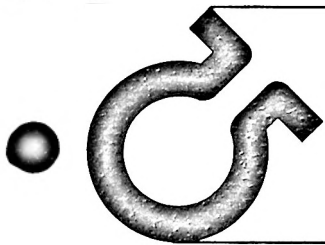
| From          | To           |
|---------------|--------------|
| IC15-2 .....  | IC33-8       |
| IC33-9 .....  | IC33-14      |
| IC33-10 ..... | Pole of SW-1 |

2. Cut trace between ground and pole of SW-1 as shown in Figure 2.
- ◆ 3. On component side, cut traces at IC33 pins 8 and 9 as shown in Figure 2. ◆

Reference: G.C./P.M.

Page 1 of 2





**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1981

model: BVH-1100A

bulletin no.: 2

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## AUTO SELECTION OF 2F/4F FOR EDIT (INSERT, ASSEMBLE) AND RECORD

### GENERAL

The BVH-1100A will operate in 2-Field or 4-Field framing modes as selected by switch SW-1 on the Framing Board. The unit normally operates in the 4-Field mode for proper color framing during Record and Playback. The Color Frame Pulse, generated only in the 4-Field mode, is recorded on tape for subsequent use by the TBC during Playback. When the BVH-1100A is used with CMX or Datatron Editors for Insert Edits, the 2-Field mode is required. This inhibits generation of the Color Frame Pulse, which is still required by the BVH-1100A for Record and Assemble Edits.

Automatic selection of the proper conditions for both modes can be achieved by the following modification to the Framing Board. This modification generates the Color Frame Pulse any time Record or Assemble Edit is selected, even if switch SW-1 is in the 2F position. The modification is applicable to units with serial numbers 11,000 and above.

### PARTS REQUIRED

This modification can be implemented with existing spare circuits on the Framing Board.

### MODIFICATION PROCEDURE

1. On foil side of Framing Board, add the following jumpers. (See Figures 1 and 2):

| From          | To           |
|---------------|--------------|
| IC15-2 .....  | IC33-8       |
| IC33-9 .....  | IC33-14      |
| IC33-10 ..... | Pole of SW-1 |

2. Cut trace between ground and pole of SW-1 as shown in Figure 2.

Reference: G.C./P.M.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

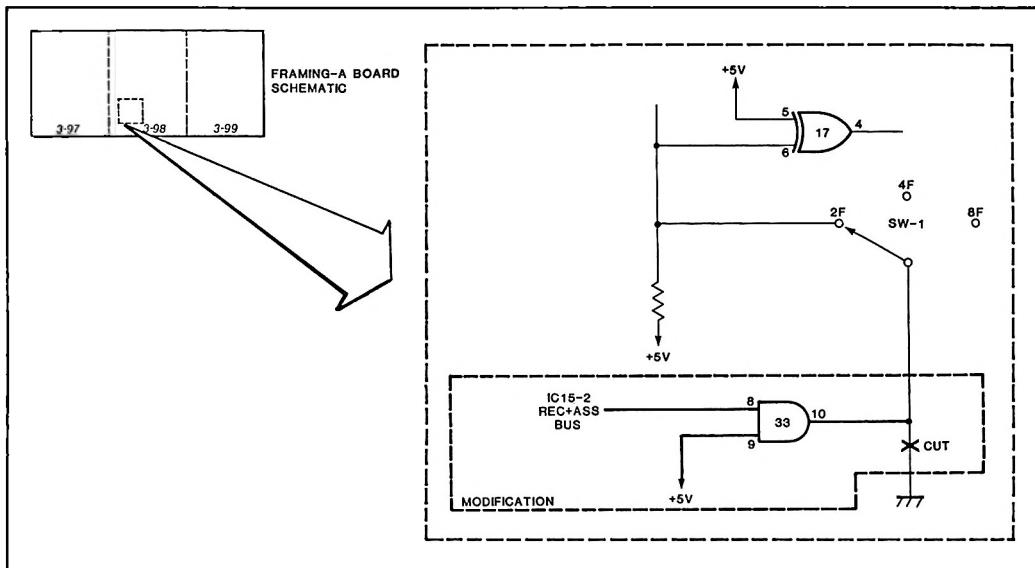


Figure 1

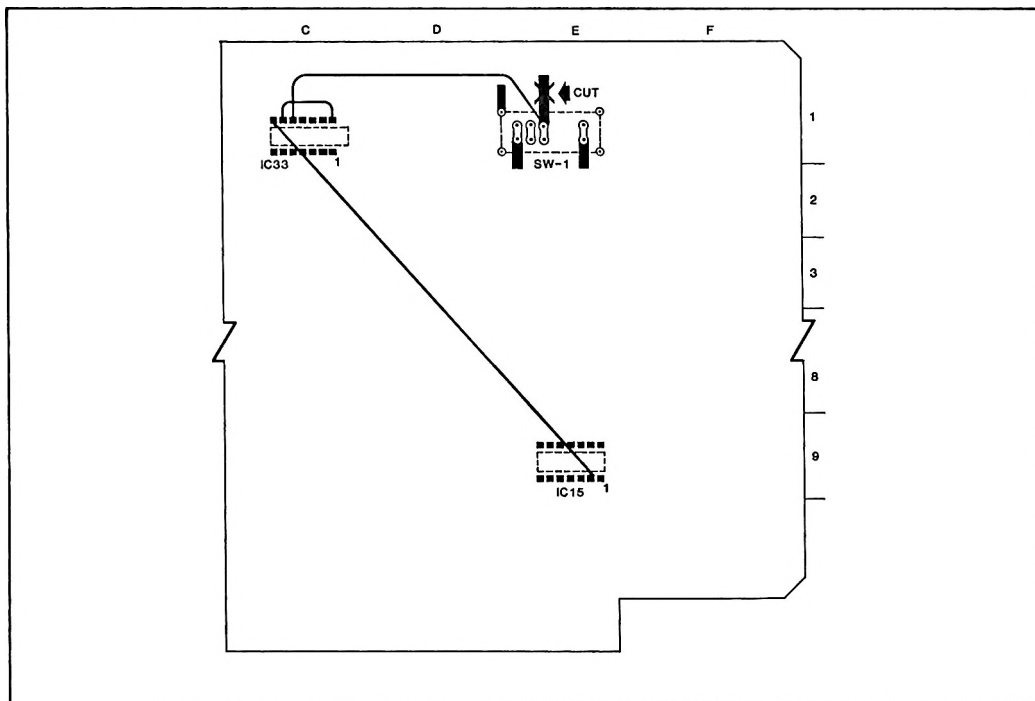
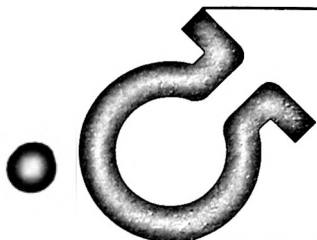


Figure 2



SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

Do-  
Some work

date: October, 1982

model: BVH-1100A

bulletin no.: 18

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED PERFORMANCE IN PROGRAM JOG/DT

### DESCRIPTION

This modification is applicable to serial numbers 20,325 and lower; 20,237; 20,331; 20,333; 20,338 and 20,340.

In the transition from Program Jog to Still, operation of the Tape Slack Check circuits to correct excessive tape tension may result in reduced head-to-tape contact. The following modification to the Tension-A Board will eliminate the problem.

### MODIFICATION PROCEDURE

1. Delete the following components (See Figures 1 and 2.)

R66.....Carbon, 1K.....(1-246-473-00)

R67.....Carbon, 1.5K.....(1-246-477-00)

C31.....Mylar, 4700P.....(1-108-571-00)

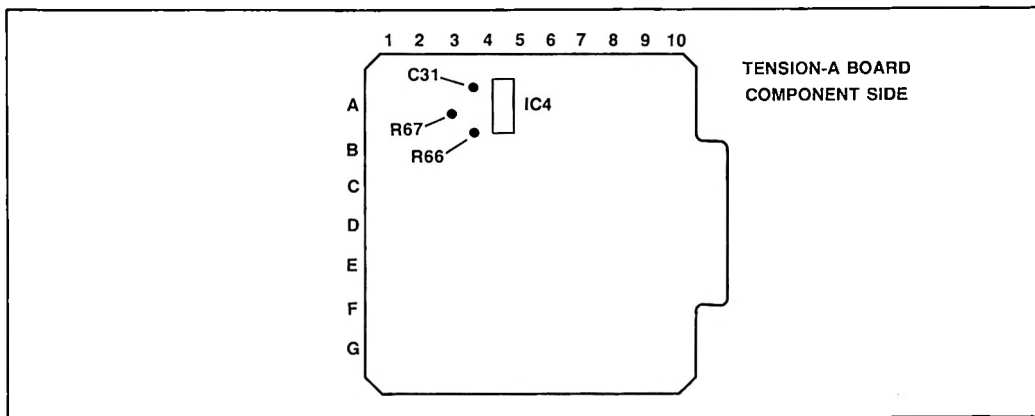


Figure 1

Reference: VS81-2069 / T.M.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

2. On component side, cut 2 traces as shown in Figure 3.

| From         | To      |
|--------------|---------|
| IC13-11..... | IC14-11 |
| IC13-7.....  | IC14-12 |

3. On solder side, cut 4 traces as shown in Figure 4.

| From         | To             |
|--------------|----------------|
| IC4-8.....   | R65            |
| IC4-9.....   | R56            |
| IC46-9.....  | Circuit runner |
| IC46-10..... | Circuit runner |

4. On solder side, install jumpers as shown in Figure 4.

|   | From         | To     |
|---|--------------|--------|
| ① | IC3-5.....   | R65    |
| ② | IC46-8.....  | R65    |
| ③ | IC46-9.....  | R56    |
| ④ | IC46-10..... | IC13-7 |

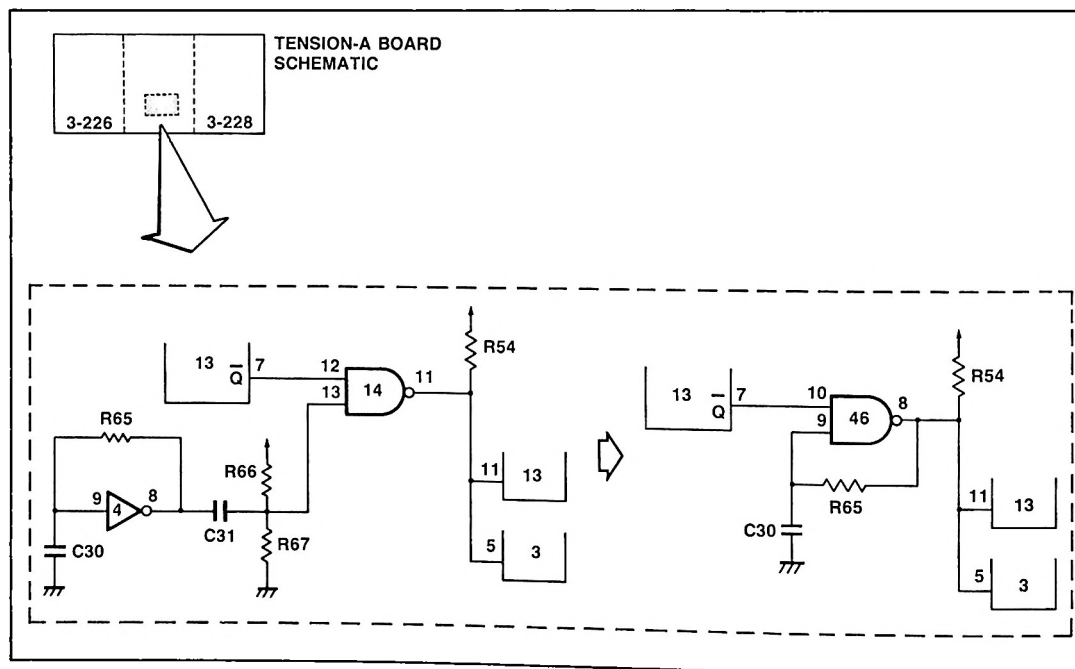


Figure 2

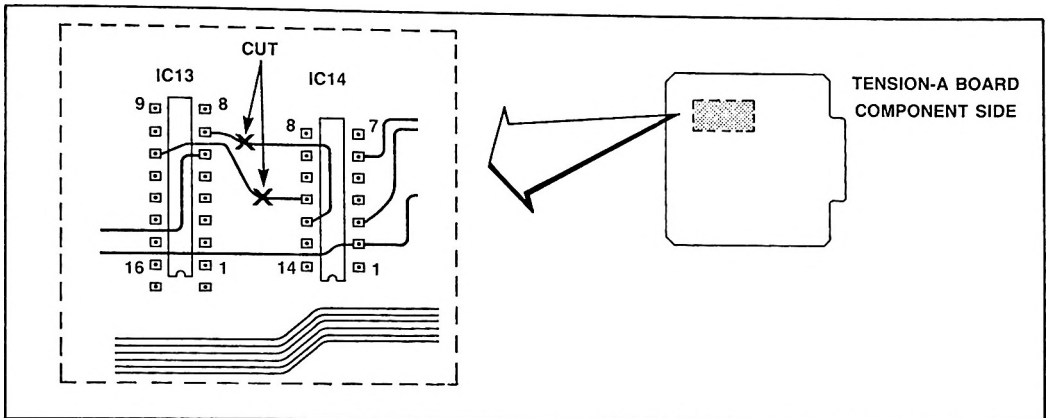


Figure 3

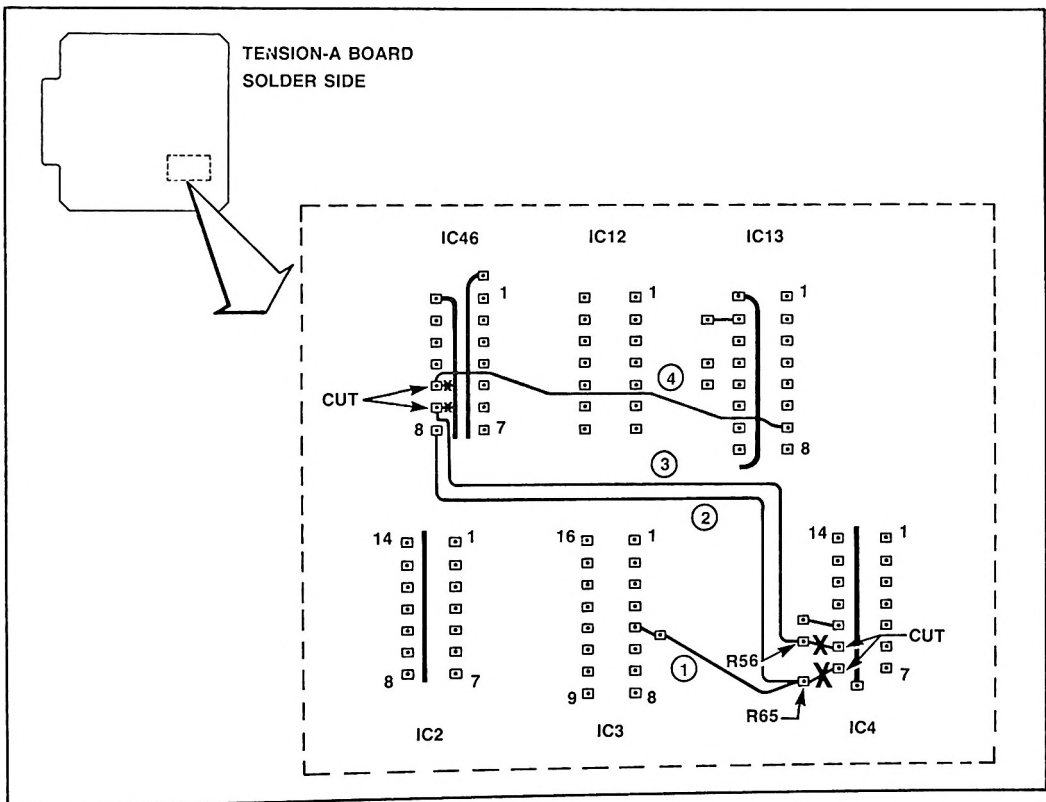
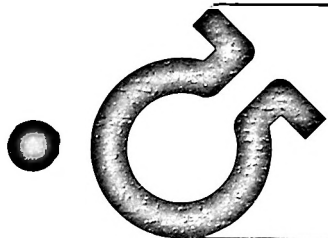


Figure 4

check



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1982

model: BVH-1100A

bulletin no.: 16

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## VIDEO LOGIC BOARD MODIFICATION TO REDUCE POWER SOURCE NOISE

### DESCRIPTION

Due to 400V power source noise, momentary loss of the playback picture may occur during Record Confidence. The following modification to the Video Logic Board will correct this problem in units with serial numbers below 20,501.

### PARTS REQUIRED

| Part No.     | Description          | Qty. |
|--------------|----------------------|------|
| 1-246-461-00 | Res, Carbon, 330     | 1    |
| 1-102-074-00 | Cap, Ceramic, 1000pF | 1    |

### MODIFICATION PROCEDURE

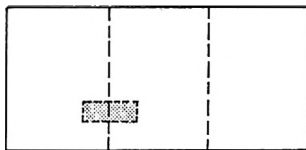
- NOTE: 1. Two versions of the Video Logic Board, 1-588-365-12 and 1-588-365-13 with lot numbers of 001 - 004, or 901 - 912, require these modifications. (The lot number is taped on the top side of the Board.)
2. First inspect your Video Logic Board and determine whether C49 and/or R56 have been installed. If either or both of these components is missing, perform the modifications shown in Figure 1.

Reference: VS80-182 / T. Mc.

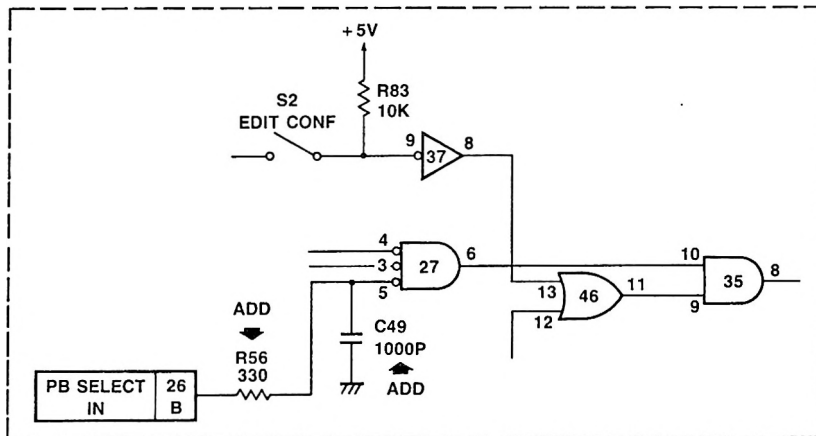
Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

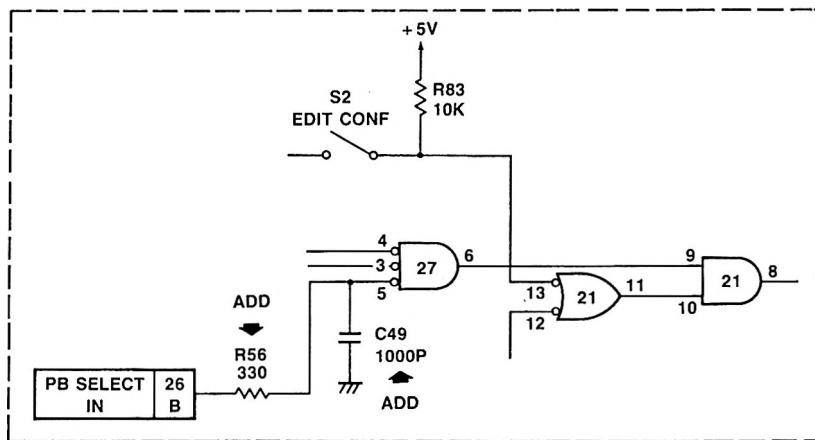




# VIDEO LOGIC BOARD SCHEMATIC

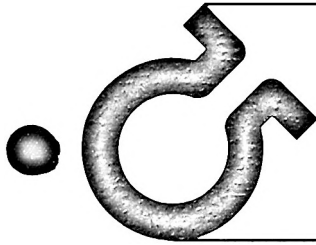


BOARD NO. 1-588-365-12



BOARD NO. 1-588-365-13

Figure 1



# SONY Broadcast bulletin

date: August, 1982  
model: BVH-1100A  
bulletin no.: 15

maintenance and modification information for the one-inch line of Sony Broadcast Products

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED TIME CODE READING

### DESCRIPTION

In rack-mounted units, Time Code errors may occur due to noise introduced through the cable harness from the motor or other sources. To resolve this problem, additional filtering on the Line Out Board is recommended as shown in Figures 1 and 2. This modification is applicable to serial numbers 21,100 and lower.

### PARTS REQUIRED

| Part No.     | Description                | Qty. |
|--------------|----------------------------|------|
| 1-109-633-00 | Cap, Mica, 470pF, 500V, 2% | 1    |

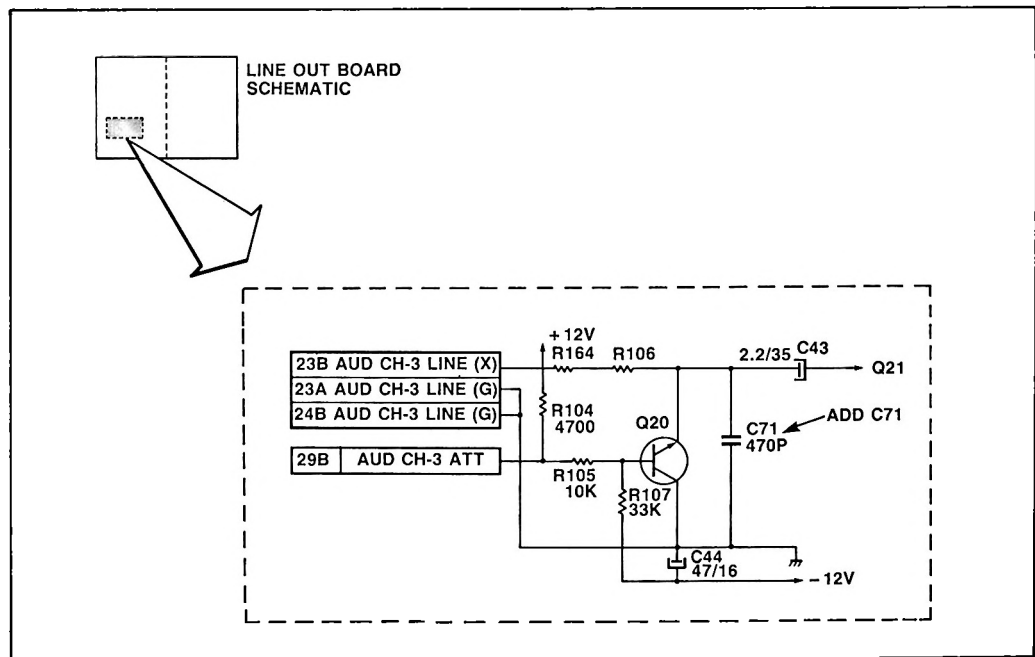


Figure 1

Reference: VS 81-2142 / T. Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

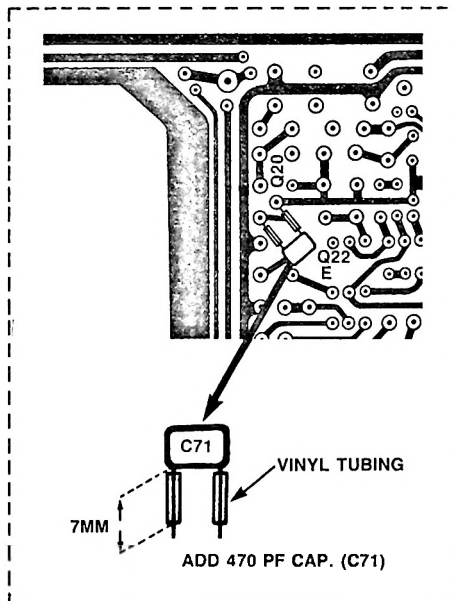
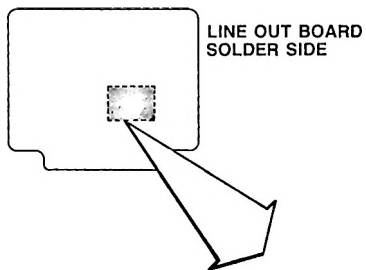
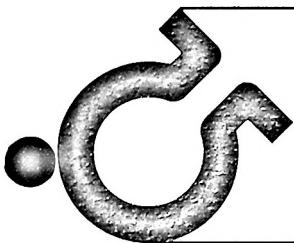


Figure 2



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: August, 1982

model: BVH-1100A

bulletin no.: 10

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## COMPONENT CHANGE ON REEL-1A BOARD

### DESCRIPTION

This modification is applicable to serial numbers 20,400 and lower. On early versions of the REEL-1A Board, counter chips IC38 and IC39 were type SN74LS193N. The  $Q_A$  output of IC38 was loaded with capacitor C91 to ensure reliable operation. On later versions of the circuit board ICs 38 and 39 were changed to type TC40H193P, and C91 was eliminated.

The older boards can be easily updated if IC38 or 39 should fail, or if you wish to standardize the REEL-1A Boards in all machines. (See Figure 1.)

### PARTS REQUIRED

| Part No.     | Description        | Qty. |
|--------------|--------------------|------|
| 8-759-221-93 | Counter, TC40H193P | 2    |

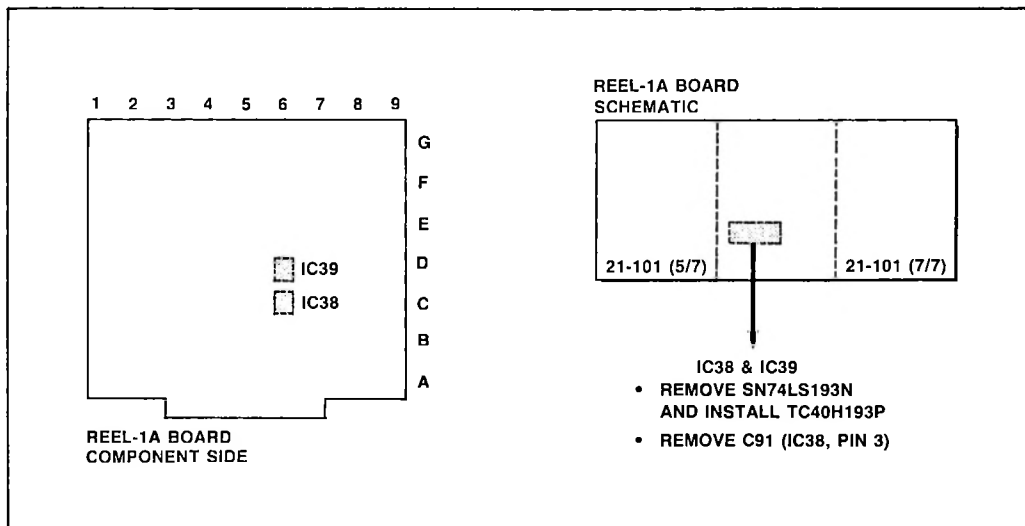


Figure 1

Reference: VS 81-2018/T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

## TENSION DETECTOR CHECK

### DESCRIPTION

Please add the following procedure to your BVH-1100A Operation and Maintenance Manual, page 4-6.

NOTE: If you have Edition 1 of the manual, add this information to Supplement 1, rather than to the manual.

### 4-7. TENSION DETECTOR CHECK

If the tape stops running due to dust adhering to the tape path, perform the following check and then perform the adjustment in Sec. 7-3.

1. Remove the tension cover and observe whether or not the leaf spring in the tension detector is deformed. If the leaf spring is deformed, replace the tension detector with a new tension detector assembly, and proceed with the following procedure.
2. If the leaf spring is not deformed perform the following procedure:

- a. Short-circuit TP1 and TP2 on the REEL-1A Board.
- b. Insert a piece of opaque paper into the photocoupler (the tape end sensor).
- c. Set the machine in the REC mode.

NOTE: When the REC and the PLAY buttons are pressed simultaneously without threading a tape, the machine is set in the STOP mode. In that case, press them again.

- d. Short-circuit TP3 and TP4 on the TENSION-A Board.
- e. Measure the voltage (V1) at 13B on the TENSION-A Board with a digital voltmeter.
- f. Remove the short between TP3 and TP4.
- g. Confirm that the voltage at 13B-TENSION-A is V1  $-4.0 \pm 0.3V$ . If this specification is not met, proceed to the adjustment in Sec. 7-3.
- h. Remove the short between TP1 and TP2.

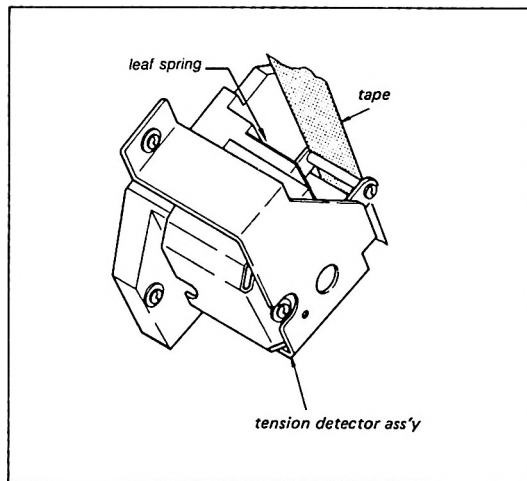
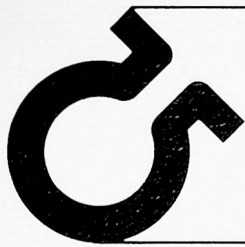


Fig. 4-7. Tension Detector



CK. Board

**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June, 1982

model: BVH-1100A

bulletin no.: 14

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED VIDEO S/N

### DESCRIPTION

This modification is applicable to any machine using Sub Control Board series: 1-588-361-11,-12,-13,-14. The BVH-1100A and the BVH-1100 use essentially the same Sub Control Board. However, the board used in the BVH-1100A has a different ground-path from the boards listed above. The use of an older board in the BVH-1100A may result in a reduced signal to noise ratio.

### MODIFICATION PROCEDURE

1. Cut the foil to SW3-7 on the component side. (Cut A, Figure 1.)
2. Cut the foil to CN355, pins 3 and 4, to isolate them from CN355-6. (Cut B, Figure 1.)
3. Connect jumper between SW3-7 and CN355, pins 3 and 4.
4. On the solder side, cut the foil to Q1 emitter. (See Figure 2.)

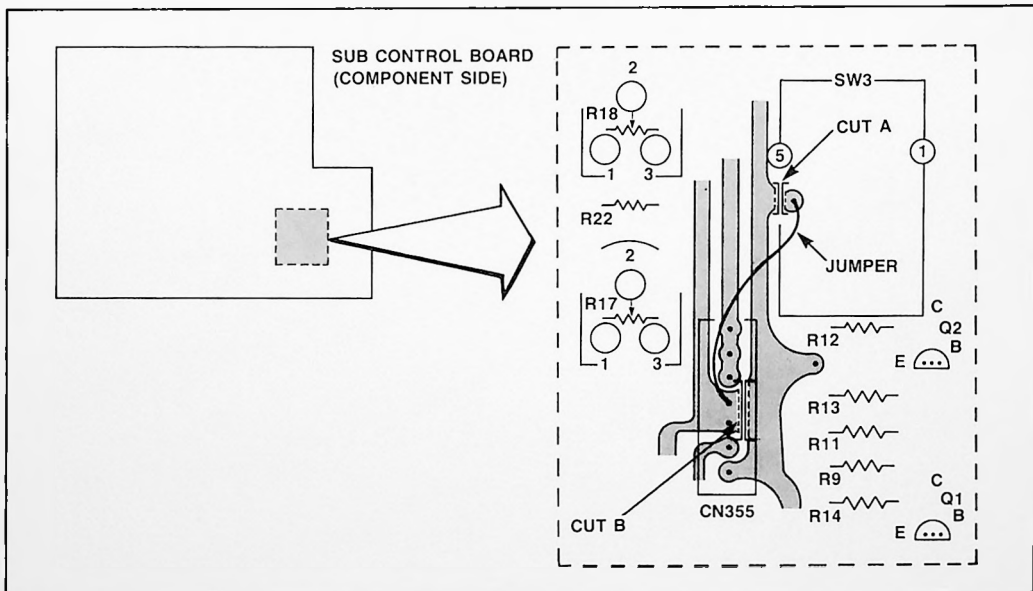


Figure 1

Reference: VS 81-2005

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

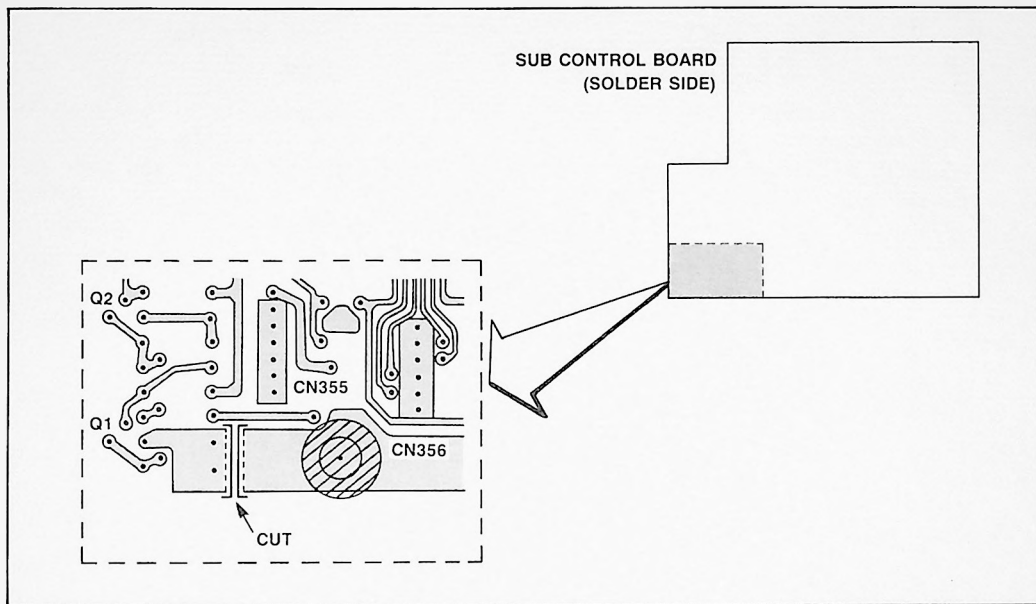
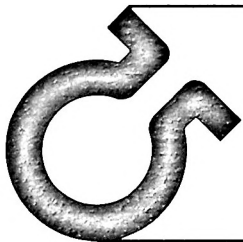


Figure 2



SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June, 1982

model: BVH-1100A/BVH-1180/CLP-550

bulletin no.: 13

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## NOISE IN VIDEO CAUSED BY +12V AND -12V REGULATORS

This modification is applicable to the following serial numbers:

BVH-1100A: 21,500 and lower

BVH-1180: 10,400 and lower

CLP-550: 10,600 and lower

### DESCRIPTION

Demodulator Boards in units listed above contain +12V and -12V switching regulators. Excessive regulator noise on the +12V or -12V lines to the demodulator circuits may cause noise in the output video signal. Such noise would be most apparent in the sync portion of the signal.

This problem can be avoided by adding additional capacitance to the +12V and -12V inputs on the Demodulator Board as shown in Figure 1.

### PARTS REQUIRED

| Part No.     | Description                               | Qty. |
|--------------|---|------|
| 1-101-005-00 | Cap, Ceramic, 0.022 $\mu$ F, 50V, 2%      | 2    |
| 1-123-324-00 | Cap, Electrolytic, 1000 $\mu$ F, 16V, 20% | 2    |

### DEMODO BOARD MODIFICATION PROCEDURE

1. Connect a 1000 $\mu$ F capacitor (C111) between edge connector pin 26A (+12V) and ground. (See Figure 2.)
2. Connect a 1000 $\mu$ F capacitor (C113) between edge connector pin 28A (-12V) and ground.
3. Connect a 0.022 $\mu$ F capacitor (C110) between edge connector pin 26B (+12V) and ground. (See Figure 3.)
4. Connect a 0.022 $\mu$ F capacitor (C112) between edge connector pin 28B (-12V) and ground.

Reference: VS 82-2017

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



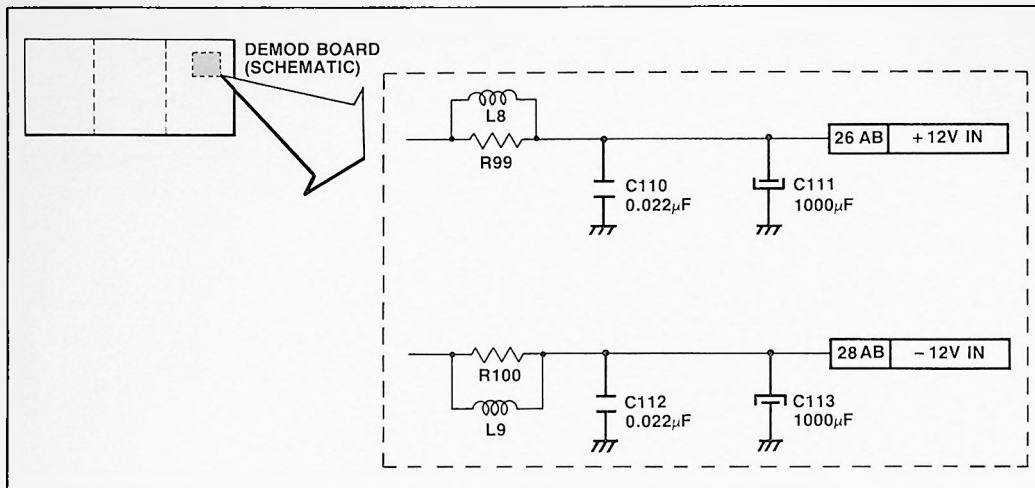


Figure 1

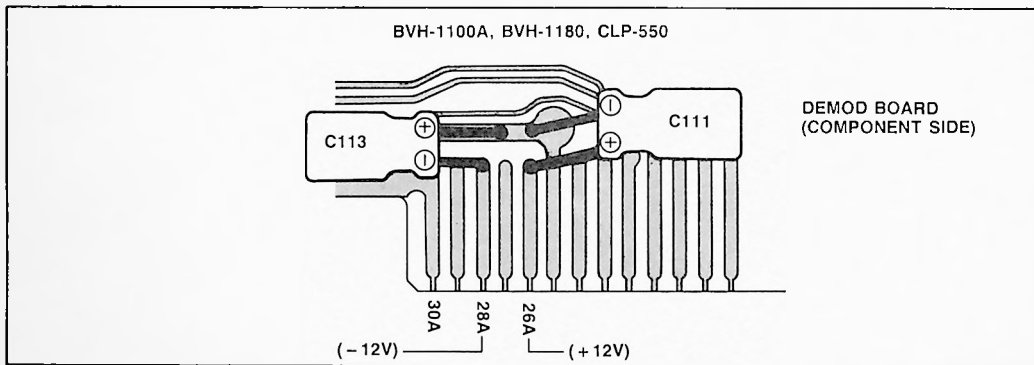


Figure 2

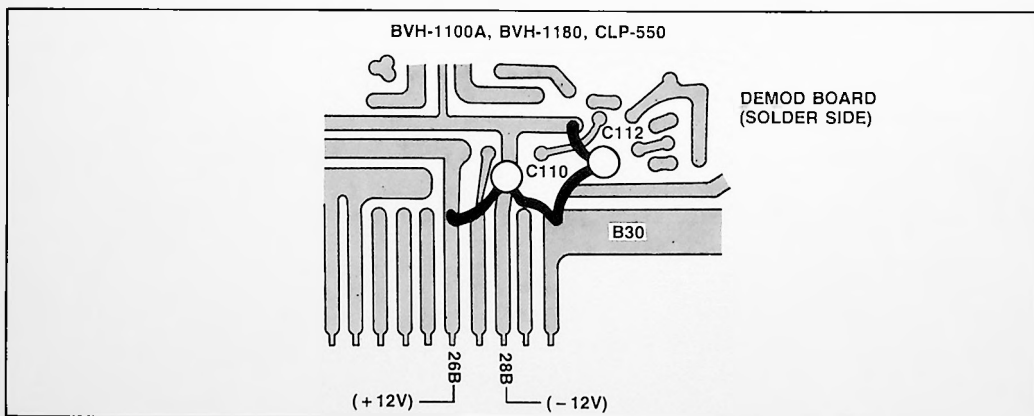
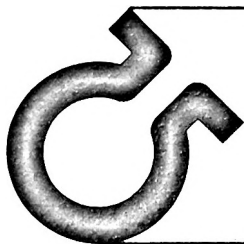


Figure 3



SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June, 1982

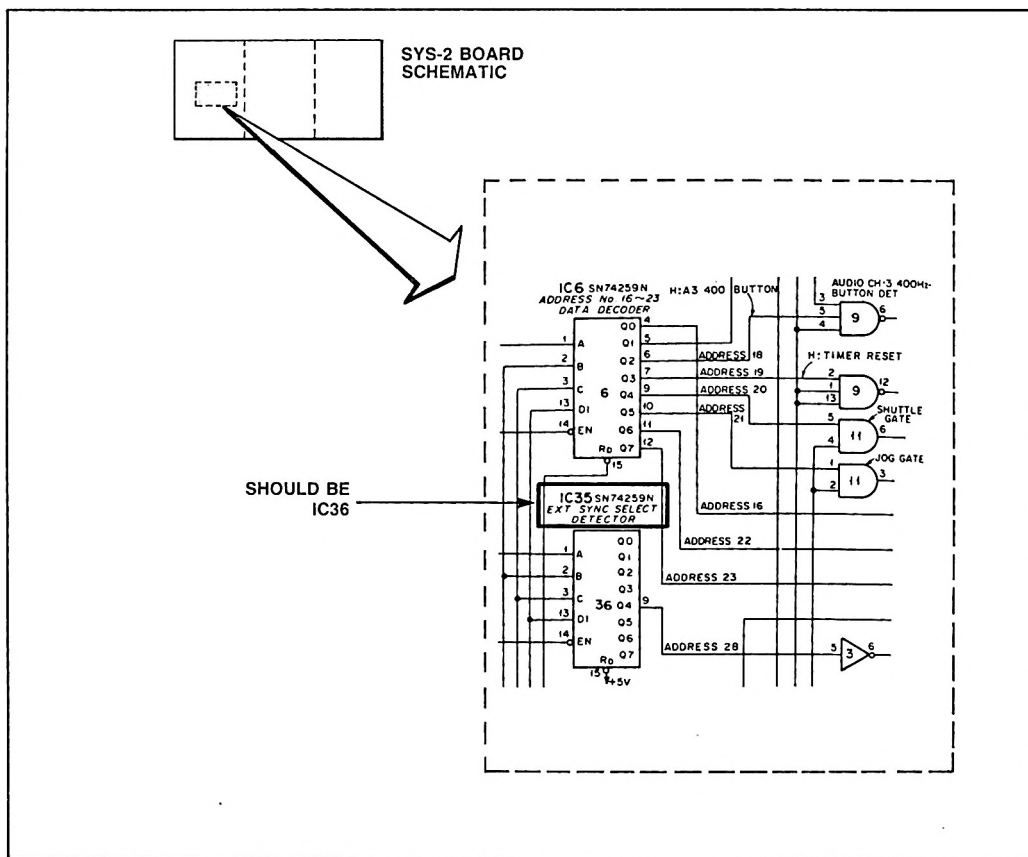
model: BVH-1000A / BVH-1100A

bulletin no.: 11

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## CORRECTION TO MANUAL. IC NUMBER ON SYS-2 BOARD

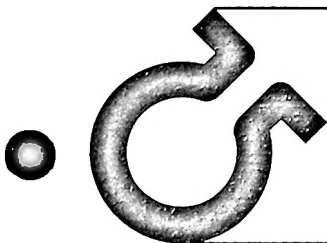
Please make the following correction to your Operation and Maintenance Manual (all editions).



Reference: Memo / G.D.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: December, 1981

model: BVH-1100A

bulletin no.: 6

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## CHANGES TO OPERATION AND MAINTENANCE MANUAL

Please make the following corrections to your BVH-1100A Operation and Maintenance Manual:

Supplement-1 to 1st Edition

Supplement-1 to 1st Edition, Rev 1

2nd Edition

### Torque Adjustment: Table 6-1, Page 6-6

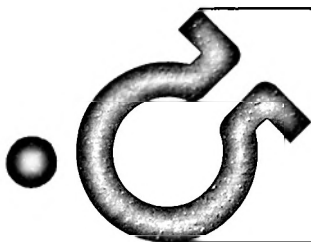
|   | adjustment step   | measuring reel table<br>or measuring point | shorting<br>points | tension<br>scale | function mode   | adjustment<br>points | spec.        |
|---|---|--|--------------------|------------------|---|----------------------|--------------|
| a | Take-up Reel Table<br>Take-up Torque Adj.<br><small>see note 1</small>  | T  | REEL-1A<br>TP1 TP2 | 200 gr.          | REC PLAY  | REEL-1A<br>RV-1      | 150 ± 10 gr. |
| b | Supply Reel Table<br>Take-up Torque Adj.<br><small>see note 1</small>   | S  | REEL-1A<br>TP1 TP2 | 200 gr.          | REC PLAY  | REEL-1A<br>RV-2      | 150 ± 10 gr. |
| c | (Single Pinch Roller Operation)<br>Supply Reel Table Back<br>Torque Adj. in FWD mode<br><small>see note 2</small> | REEL-1A<br>TP5                             |                    |                  | with DT unit: 3 PLAY<br>(PB Head Select)<br>without DT unit: FWD 1/4        | REEL-1A<br>RV-4      | 0V ± 0.15V   |
| d | (Single Pinch Roller Operation)<br>Supply Reel Table Back<br>Torque Adj. in REV mode<br><small>see note 3</small> | REEL-1A<br>TP5                             |                    |                  | PROGRAMMED JOG<br>mode with DT unit<br>: REV1/5<br>without DT unit: REV 1/4 | REEL-1A<br>RV-5      | 4V ± 0.5V    |
| e | Take-up Torque Adj. after Ten-<br>sion released (Must do STBY<br>Time out)  | REEL-1A<br>TP5                             |                    |                  | STOP<br>(Time out of 30 sec. STBY)  | REEL-1A<br>RV-9      | -2V to +3V   |
| f | REV Search Back<br>Torque Adj.<br><small>see note 3</small>   | REEL-1A<br>TP5                             |                    |                  | REV 10 fold Search<br>Thread 10.5" reel and run<br>to middle of the tape.   | REEL-2A<br>RV-2      | 4V ± 0.5V    |
| g | Wound Tape Diameter<br>Detection Adj. in FWD mode   | REEL-1A<br>TP4                             |                    |                  | • STOP<br>• 9B/REEL-1A: HIGH<br>• Turn the Counter<br>Roller to the left    | REEL-1A<br>RV-3      | 5.5V ± 0.1V  |
| h | Wound Tape Diameter<br>Detection Adj. in REV mode   | REEL-1A<br>TP4                             |                    |                  | • STOP<br>• 9B/REEL-1A: LOW<br>• Turn the Counter<br>Roller to the right    | REEL-1A<br>RV-6      | 6.0V ± 0.1V  |

☐ Change as noted.

Reference: S.S.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: November, 1981

model: BVH-1100A

bulletin no.: 8

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED IC RELIABILITY (FRAMING-A BOARD)

This modification corrects reliability problems associated with IC Type MM74C74N on the Framing-A Board. The recommended replacement for this part is IC Type TC40H074P. The modification has been implemented in units with serial numbers 20,501 and higher. In earlier units exhibiting reliability problems, replace IC18, IC19 and IC25 on the Framing-A Board with the new part listed below:

| Part                          | Old Part No.             | New Part No.              |
|-------------------------------|--------------------------|---------------------------|
| IC's 18, 19, 25<br>(Figure 1) | MM74C74N<br>8-759-994-74 | TC40H074P<br>8-759-220-74 |

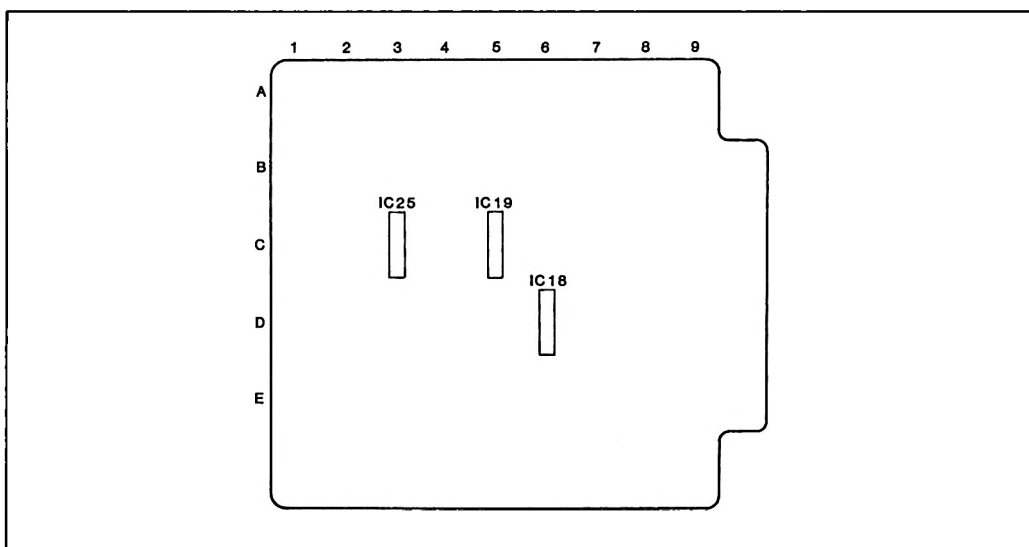
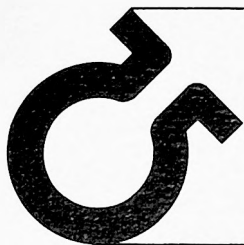


Figure 1. Framing-A Board (Component Side)

Reference: VS 81-2049/T.M.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: November, 1981

model: BVH-1100A

bulletin no.: 7

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED TAPE HANDLING RELIABILITY

This modification provides surge protection for 4-Channel Multiplexer/Demultiplexer IC11 (TC4052) on the Reel-1A Board. The modification is factory installed in units with serial numbers 20,601 and higher. Earlier units exhibiting reliability problems with IC11 should be modified as shown in Figure 1.

### PARTS REQUIRED

| Part No.     | Description         | Qty. |
|--------------|---------------------|------|
| 8-719-911-19 | Diode, 1SS119 (D25) | 1    |

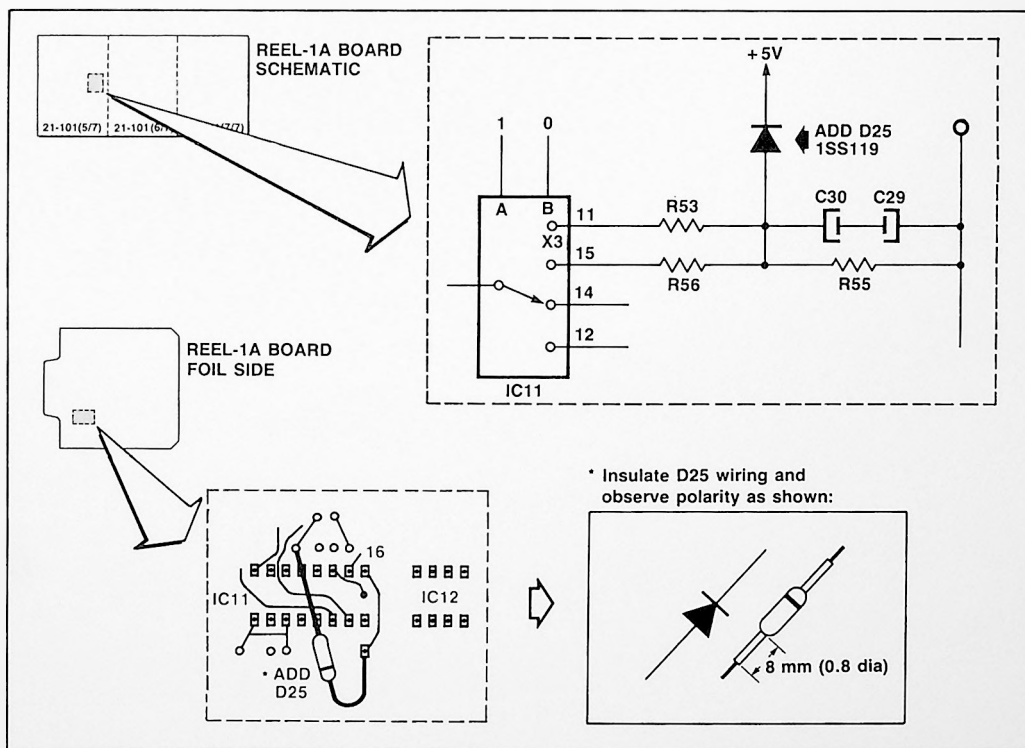
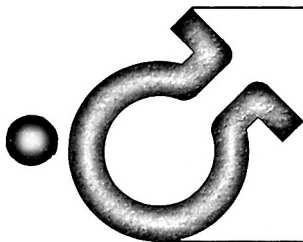


Figure 1

Reference: VS 81-2053 / T.M.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



**SONY**  
Broadcast

*DO*

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: November, 1981

model: BVH-1100A

bulletin no.: 5

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## CIRCUIT PROTECTION (IC6/7 ON RF SW BOARD)

### GENERAL

This modification prevents possible burnout of IC6 and IC7 on the RF SW Board if power is applied with connector CN501 disconnected. The modification applies to serial numbers below 20,401.

### PARTS REQUIRED

| Part No.     | Description                | Qty. |
|--------------|----------------------------|------|
| 1-206-648-00 | Res, Metal, 220Ω, 2W (R60) | 1    |

### MODIFICATION PROCEDURE

1. Swing card cage open for access to REG-2 Board.
2. Remove REG-2 Board.

NOTE: Label unidentified connectors on lower edge of board, to ensure proper placement after modification is complete.

3. Install R60 as shown in Figure 1.
4. Reinstall REG-2 Board and secure card cage.

### CAUTION

Even with R60 installed, power should not be turned on with CN501 disconnected.

Reference: VS 81-2057 / T.M.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

R81-030

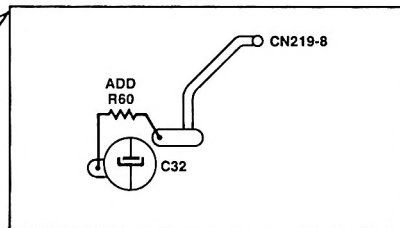
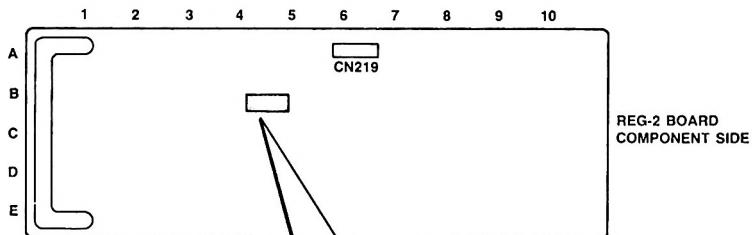
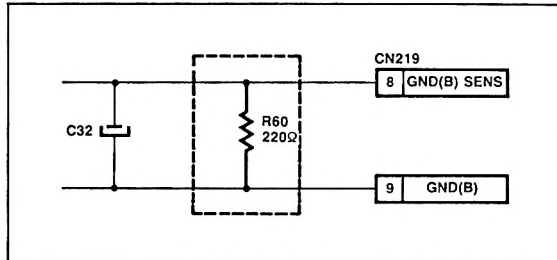
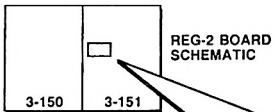
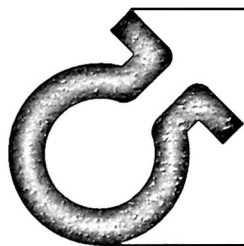


Figure 1

Do - Needs 16 IC's



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1981

model: BVH-1100A

bulletin no.: 3

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED IC RELIABILITY ON REEL-1A, REEL-2A BOARDS

### GENERAL

Replacement of the following IC's on the Reel-1A and Reel-2A boards is recommended to eliminate unwanted oscillations or latch-ups, etc. Factory modification has been implemented on units with serial numbers 20,501 and above. The modification should be implemented in earlier units exhibiting the problems mentioned.

### MODIFICATION PROCEDURE

Change the IC's listed from TLO82CP (P/N 8-759-990-82) to  $\mu$ PC4558C (P/N 8-759-145-58).

#### Reel-1A

IC 1, 3, 5, 6

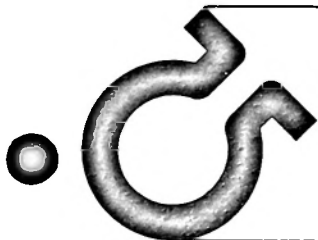
7, 8, 10, 16

#### Reel-2A

IC 20, 21, 30, 31

32, 43, 44, 46





DA ?

**SONY**  
Broadcast  
**bulletin**

date: October, 1981  
model: BVH-1100A  
bulletin no.: 1

maintenance and modification information for the one-inch line of Sony Broadcast Products

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## AUDIO MUTE AT 5X NORMAL SPEED

### GENERAL

This modification allows audio muting to begin at 5 times normal playback speed, rather than 10 times normal as presently implemented in the BVH-1100A. The modification is applicable to all serial numbers.

### PARTS REQUIRED

This modification requires one 74LS10N IC (P/N 8-759-900-10).

### MODIFICATION PROCEDURE

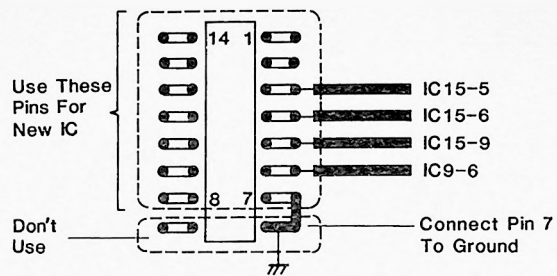
1. Remove SYS-1 Board from card slot.
2. Remove PCB shield plate for access to foil side.
3. Install new IC 74LS10N in spare slot E1 (Figure 1A).
4. Connect pin 7 to ground (Figure 1A).
5. Cut trace at IC9-6 (Figure 1B).
6. Add the following jumpers:

| From          | To            |
|---------------|---------------|
| IC 9-6 .....  | New IC, pin 6 |
| IC 15-5 ..... | New IC, pin 3 |
| IC 15-6 ..... | New IC, pin 4 |
| IC 15-9 ..... | New IC, pin 5 |

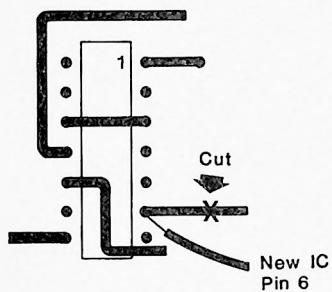
7. Check wiring against Figure 1. When satisfied, install PCB shield plate and return SYS-1 Board to card slot.
8. Establish playback mode and verify audio muting at playback rates of 5X and above.

Reference: Telex, CS

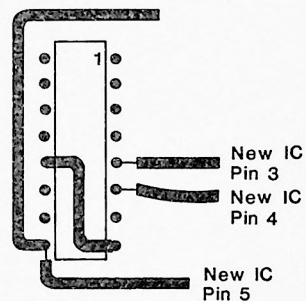
Page 1 of 2



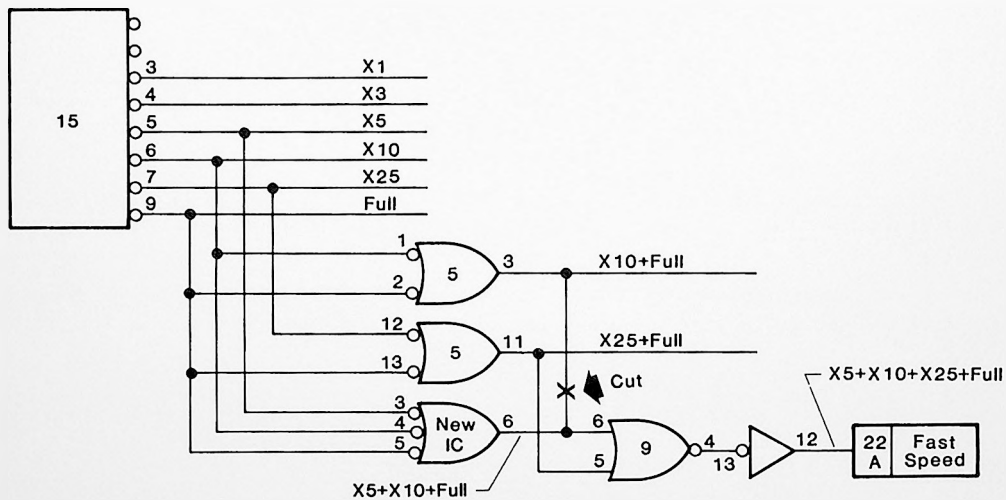
A. New IC (Slot E1)



B. IC9 (D3)

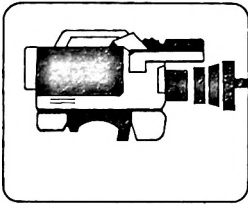


C. IC15 (E4)



D. Modification Schematic

Figure 1



# technical bulletin

## 83-176

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: October, 1983

**MODEL: BVH-1100****SERIAL NO: 10,400 AND LOWER****SUBJECT: SEARCH DIAL LOCKS IN P. JOG X2****DESCRIPTION**

Search Dial lock-up may occur in the Programmed Jog mode when the X2 speed is selected. This situation is caused by propagation delay in IC47 on the SYS-SW-2 Board (location B18). Replacing this low-power Schottky IC with a standard IC (74191) will eliminate this problem.

**PARTS REQUIRED**

| Part No.     | Description       | Qty. |
|--------------|-------------------|------|
| 8-759-941-91 | Counter, SN74191N | 1    |

*Reference: VS 80-151 / T.M.**Page 1 of 1*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134**

**MODEL: BVH-1100, BVH-1100A, BVH-1180**

Date: March, 1983

**SERIAL NO: ALL**

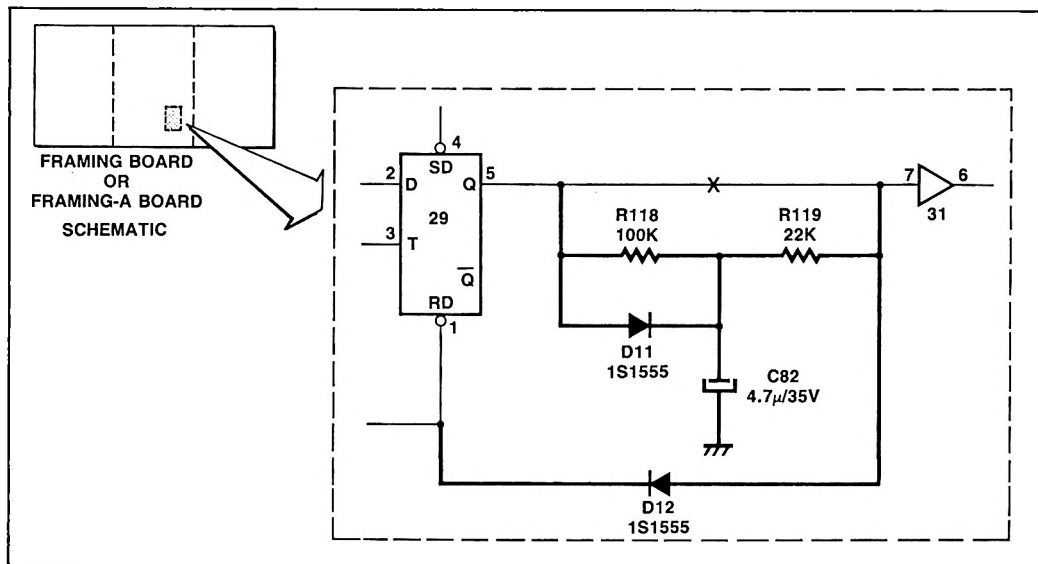
**SUBJECT: PICTURE DISTURBANCE DUE TO CTL TRACK DROP-OUT**

### DESCRIPTION

The Capstan Lock Detector circuits on the Framing or Framing-A Board could react to a momentary drop-out on the CTL track. Addition of the circuit shown in Figure 1 will improve the detector's immunity to drop-out.

## PARTS REQUIRED

| Part No.     | Description                    | Qty. |
|--------------|--------------------------------|------|
| 1-246-505-00 | Res, Carbon 22kΩ, ¼W, 5%       | 1    |
| 1-246-521-00 | Res, Carbon, 100kΩ, ¼W, 5%     | 1    |
| 1-131-351-00 | Cap, Tantalum, 4.7μF, 35V, 10% | 1    |
| 8-719-815-55 | Diode, 1S1555                  | 2    |



**Figure 1**

Reference: VS 82-2094 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

## SUGGESTION

You may find that the modification is performed more easily if the components are first mounted on a piece of vectorboard. The vectorboard can then be mounted to the main board with double-sided tape.

One possible configuration is shown in Figure 2.

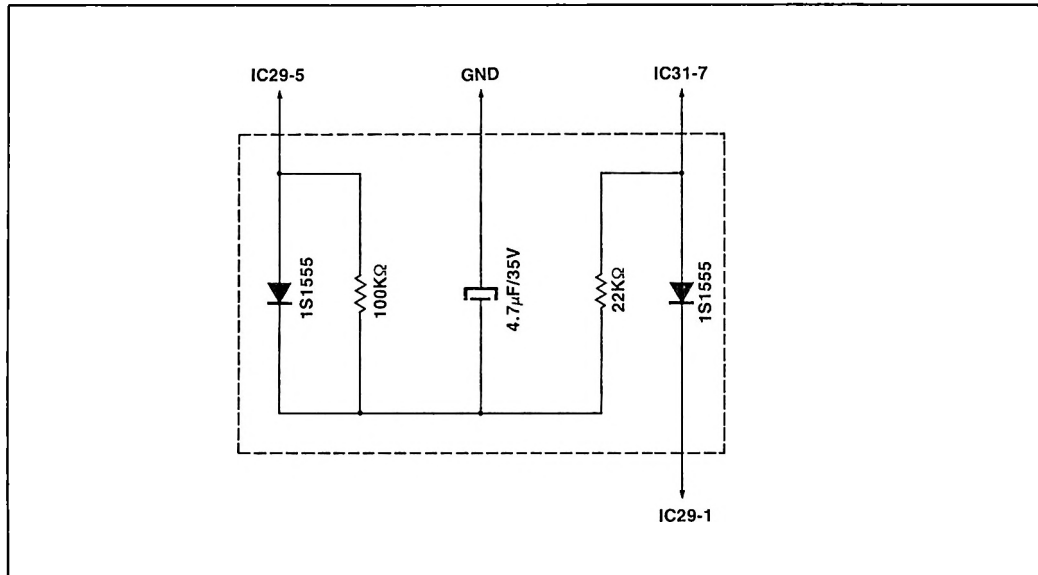
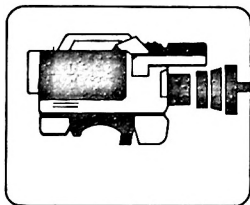


Figure 2



Do

**SONY**  
Broadcast

# technical bulletin

**83-060**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVH-1100 Series**

Date: March, 1983

**SERIAL NO: 10,001 — 10,200****SUBJECT: REEL OSCILLATION IN P. JOG X $\frac{1}{2}$  SPEED****DESCRIPTION**

Noise may be generated in the Capstan FG, causing the Capstan error voltage to vary; this may cause the Capstan and reels to oscillate. The addition of two capacitors to the Capstan Board (Figure 1) will correct this problem.

**PARTS REQUIRED**

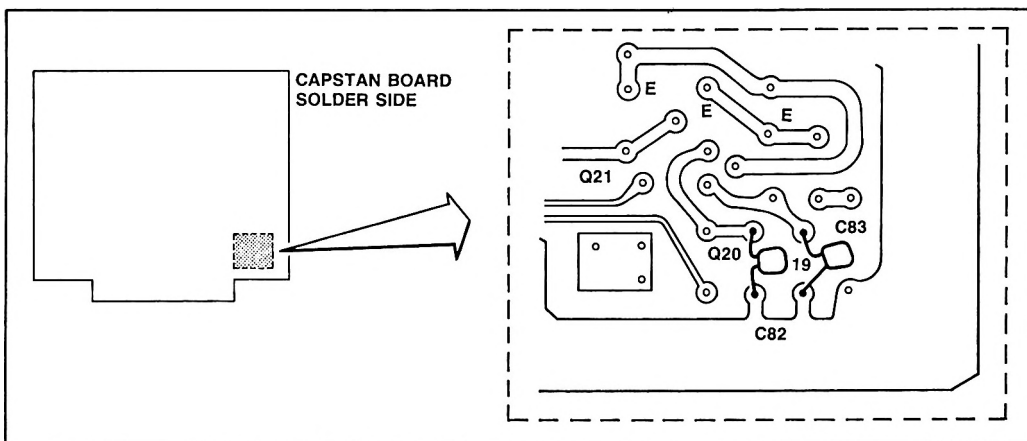
| Part No.     | Description                 | Qty. |
|--------------|-----------------------------|------|
| 1-108-555-00 | Cap, Mylar, 1000pF, 50V, 5% | 2    |

**MODIFICATION PROCEDURE****CAPSTAN BOARD (Figure 1)**

Add 1000pF capacitors as follows:

Between base and GND of Q19 . . . C83

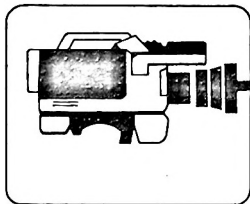
Between base and GND of Q20 . . . C82

**Figure 1**

Reference: VS 80-142 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



DO

**SONY**  
Broadcast

# technical bulletin

**83-052**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

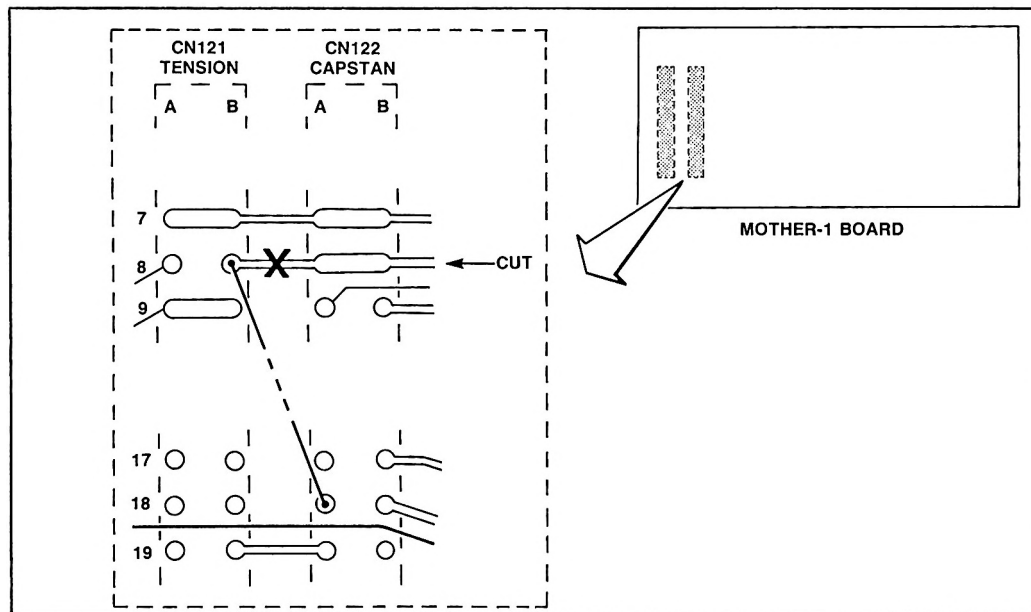
Date: March, 1983

**MODEL: BVH-1100****SERIAL NO: 10,001 — 10,300****SUBJECT: IMPROVEMENT IN RF ENVELOPE WHEN CHANGING FROM  
P. JOG X2 TO PLAY****DESCRIPTION**

When changing from P. JOG X2 to PLAY, the tape tension around the head drum may be reduced momentarily. This is caused by a change in the response characteristic of the Tension Detect circuit which supplies feedback to the reel servo. The problem can be eliminated by changing the control signal to the Tension Detect circuit from NOR FWD to TENSION PINCH.

**MODIFICATION PROCEDURE****Mother-1 Board (See Figures 1-3.)**

1. Cut the trace between CN121-8B and CN122-8A.
2. Jumper CN121-8B to CN122-18A.

**Figure 1**

Reference: VS 80-128 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

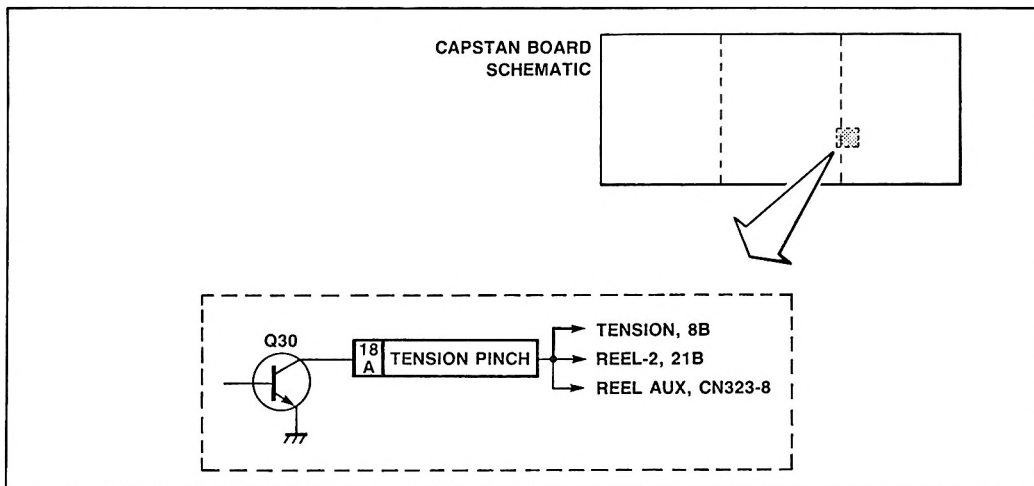


Figure 2

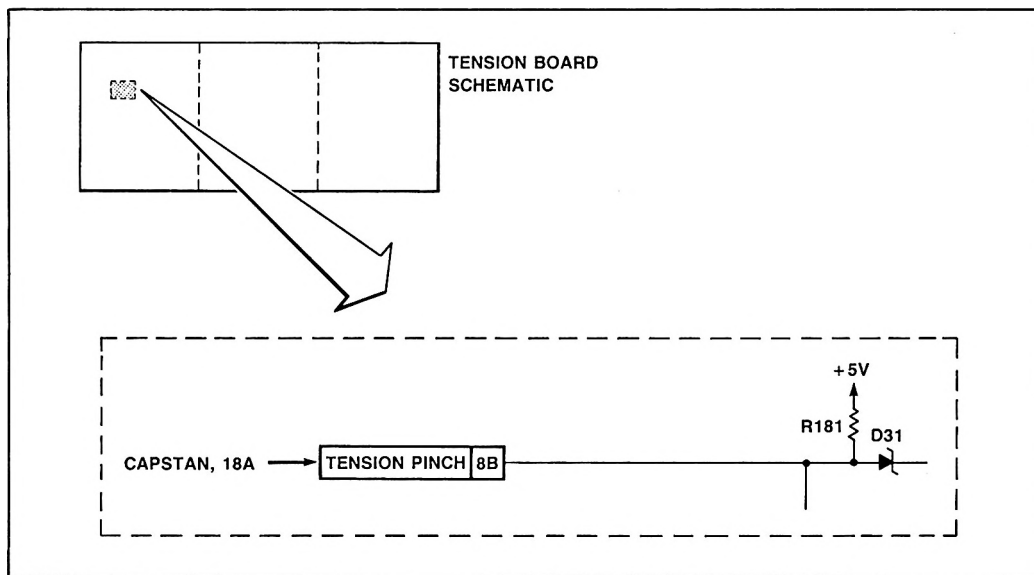
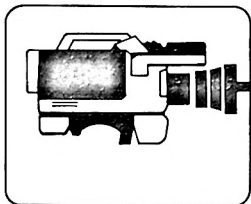


Figure 3





Date: February, 1983

**MODEL: BVH-1100****SERIAL NO: 10,201 — 10,900****SUBJECT: INTERMITTENT OPERATION OF JOG BUTTON****DESCRIPTION**

Capacitor C39 was added to the JOG button circuit to guard against static charges. However, the ground path provided by the foil has proved to be inadequate. The problem can be overcome by repositioning C39.

**PARTS REQUIRED**

| Part No.     | Description                    | Qty. |
|--------------|--------------------------------|------|
| 1-161-009-00 | Cap, Ceramic, 4700pF, 25V, 10% | 1    |

**MODIFICATION PROCEDURE****SYS SW-1 Board, Series 1-588-366-13,-14**

1. Remove C39 from its present position. (See Figure 1.)
2. Install 4700pF capacitor between IC35-4 and IC35-7.

*Reference: VS 80-147 / T.M.**Page 1 of 2*

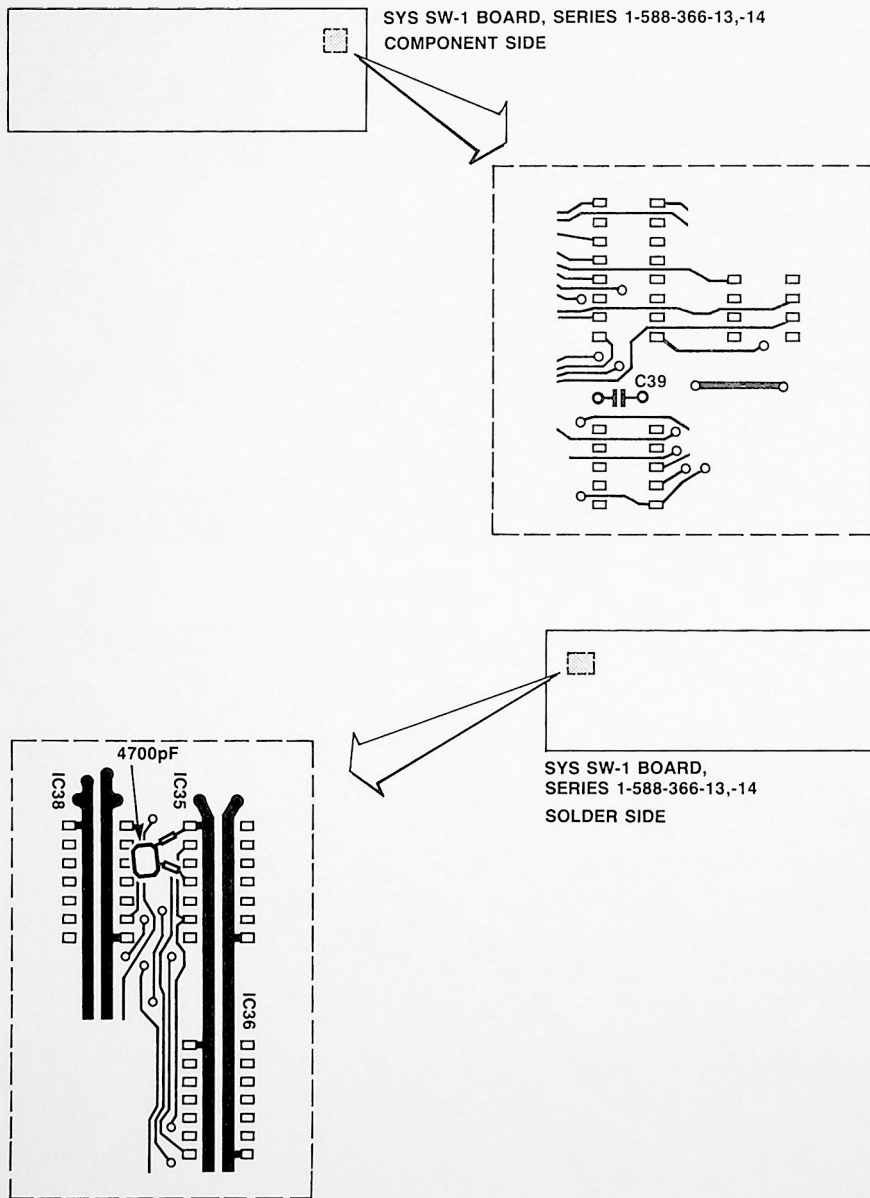


Figure 1



**83-042**

**MODEL: BVH-1100**

Date: February, 1983

**SERIAL NO: 11,005 AND LOWER**

**SUBJECT: VTR MAY NOT ACCEPT COMMANDS WHEN POWER IS APPLIED**

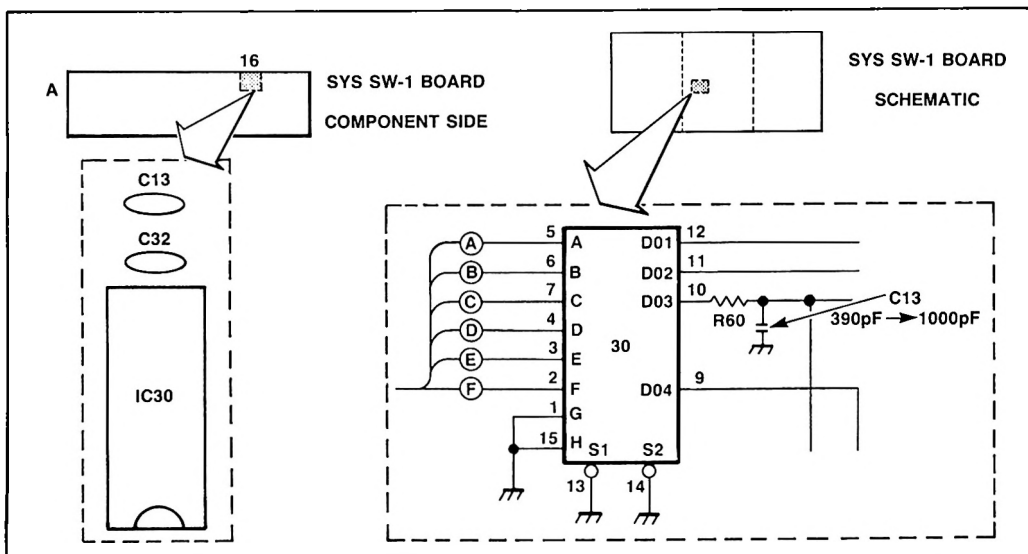
### DESCRIPTION

When power is applied the Play lamp may turn on but the VTR will remain in Stop mode and reject commands. This problem is caused by transients which introduce a false Index Pulse into the clock. The faulty clock effectively shifts the data, and commands will not be accepted by the system control circuits.

The transient pulses can be removed by increasing the value of C13 on the SYS SW-1 Board to 1000pF. (See Figure 1.)

## PARTS REQUIRED

| Part No.     | Description                    | Qty. |
|--------------|--------------------------------|------|
| 1-102-074-00 | Cap, Ceramic, 1000pF, 50V, 10% | 1    |

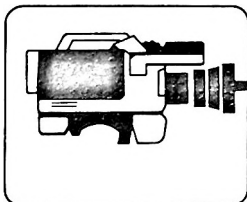


**Figure 1**

Reference: VS 80-156 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



Date: February, 1983

**MODEL: BVH-1000A, -1100, -1100A****SERIAL NO: ALL****SUBJECT: LAMP FOR FUNCTION CONTROL SWITCHES:  
NEW SERVICE PART****DESCRIPTION**

Function Control Switch lamps are now available as separate service parts. (See Table 1.) This eliminates the need to change the complete switch assembly when the lamp filament is damaged.

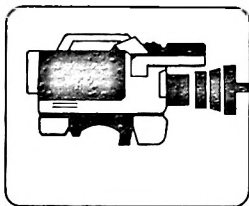
**Table 1**

| Part No.     | Description   |
|--------------|---|
| 1-518-311-00 | <b>BVH-1000A</b><br>Lamp, 5V/115mA<br>S1 — S13 (1-552-070-00) on SYS SW-1 Board<br>(AUDIO-3, INSERT, EDIT, STANDBY, STOP, PLAY, RECORD, JOG and SHUTTLE switches) |
| 1-518-311-00 | <b>BVH-1100, 1100A</b><br>Lamp, 5V/115mA<br>S1 — S6 (1-552-070-00) on SYS SW-1 Board<br>(STANDBY, STOP, PLAY, RECORD, JOG and SHUTTLE switches)                   |
| 1-518-446-00 | Lamp, 5V/75mA<br>S1 — S11 (1-552-905-00), SYS SW-4 Board<br>(AUDIO-3, ASSEMBLE, INSERT, EDIT, AUTO EDIT, ENTRY and PREVIEW switches)                              |

Reference: VTRW 81-2001 / T.M.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# technical bulletin

## 83-036

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: February, 1983

**MODEL: BVH-1100**

**SERIAL NO: 10,100 AND LOWER**

**SUBJECT: PLAYER VTR MAY NOT ENTER STILL AT THE END OF AN AUTO EDIT.**

### DESCRIPTION

The Play side machine receives the STILL command from the Record side machine. If the command duration is too short, the Play VTR will continue in the PLAY mode. Increasing the value of capacitor C25 on the SYS SW-2 Board will increase the command duration and eliminate the problem. (See Figure 1.)

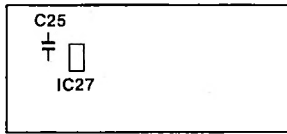
### PARTS REQUIRED

| Part No.     | Description                        | Qty. |
|--------------|------------------------------------|------|
| 1-131-347-00 | Cap, Tantalum, 1 $\mu$ F, 35V, 20% | 1    |

Reference: VS 80-162 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



SYS SW-2 BOARD  
COMPONENT SIDE

SYS SW-2 BOARD  
SCHEMATIC

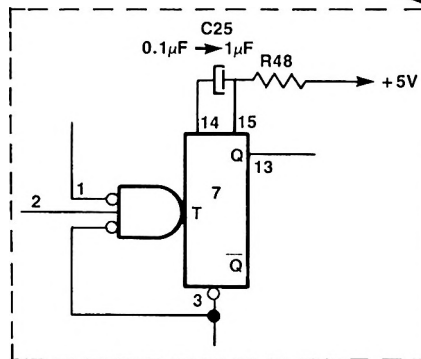
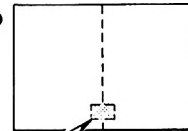
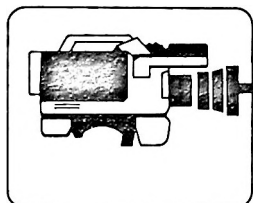


Figure 1



# technical bulletin

# 83-032

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVH-1100**

**SERIAL NO: ALL**

**SUBJECT: PLAYBACK CTL AMPLIFIERS, DC OFFSET**

Date: February, 1983

## DESCRIPTION

The DC offset of IC1 on the Capstan Board and IC3 on the Framing Board must be checked if they are replaced. Excessive DC offset will distort the playback CTL, causing errors in the framing circuitry.

## PARTS REQUIRED

(For Framing Board Series 1-588-352-11)

| Part No.     | Description                           | Qty. |
|--------------|---------------------------------------|------|
| 1-246-538-00 | Res, Carbon, 510k $\Omega$ , 1/4W, 5% | 1    |
| 1-246-545-00 | Res, Carbon, 1Meg $\Omega$ , 1/4W, 5% | 1    |

## CHECK & ADJUSTMENT PROCEDURE

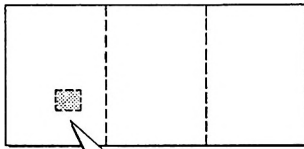
**Framing Board Series 1-588-352-11 (Figure 1.)**

1. Place VTR in EE mode and measure DC voltage at TP10 on Framing Board. Specification is  $0.0 \pm 0.3$  VDC.
2. If DC offset is greater than +0.3VDC, connect a 510k $\Omega$  or 1Meg $\Omega$  resistor between Pins 1 & 7 of IC3 to reduce the voltage.
3. If DC offset is less than -0.3VDC, connect 510k $\Omega$  or 1Meg $\Omega$  resistor between Pins 5 & 7 of IC3 to raise the voltage.

Reference: VS 80-125 / T.Mc.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



FRAMING BOARD  
SERIES 1-588-352-11  
SCHEMATIC

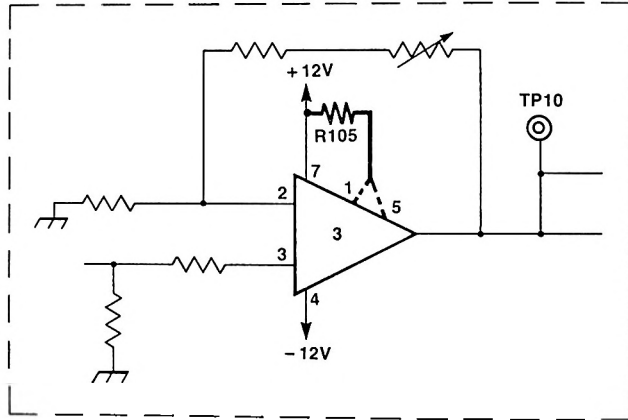


Figure 1



### Framing Board Series 1-588-352-12, -13,-14 (Figure 2.)

1. Place VTR in EE mode and measure DC offset at TP10 on Framing Board. Specification is  $0.0 \pm 0.1$  VDC.
2. If DC offset is not within specification, adjust R103.

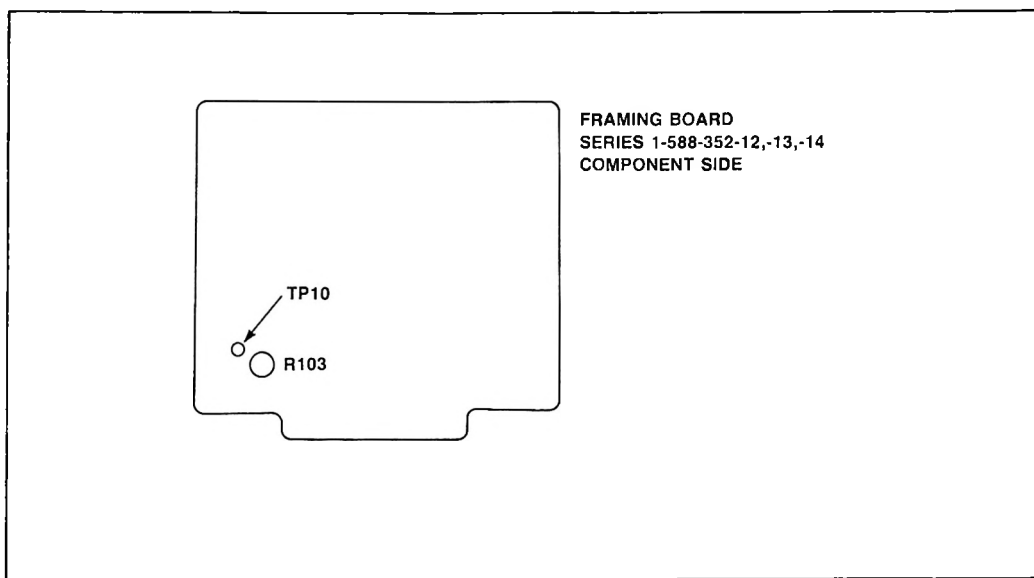
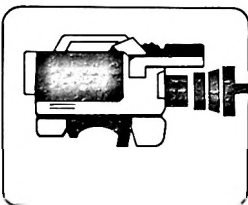


Figure 2

### Capstan Board

1. Place VTR in EE mode and measure DC offset at connector pin 9B on Capstan Board. Specification is -0.3VDC to +1.0VDC.
2. If DC offset is not within specification, replace IC1 with another  $\mu$ A739.



**MODEL: BVH-1100**

Date: February, 1983

**SERIAL NO: 10,001 — 10,300**

**SUBJECT: PREVENTION OF TENSION PINCH ROLLER CHATTER**

## DESCRIPTION

When changing from Rewind to Play mode, the Tension Pinch Roller may chatter because of insufficient delay to the "Pinch" signal on the Capstan Board. Increasing the value of C39 from  $1\mu\text{F}$  to  $2.2\mu\text{F}$  as shown in Figure 1 will correct this problem.

## PARTS REQUIRED

| Part No.     | Description                               | Qty. |
|--------------|---|------|
| 1-131-217-00 | Cap, Tantalum $2.2\mu\text{F}$ , 35V, 10% | 1    |

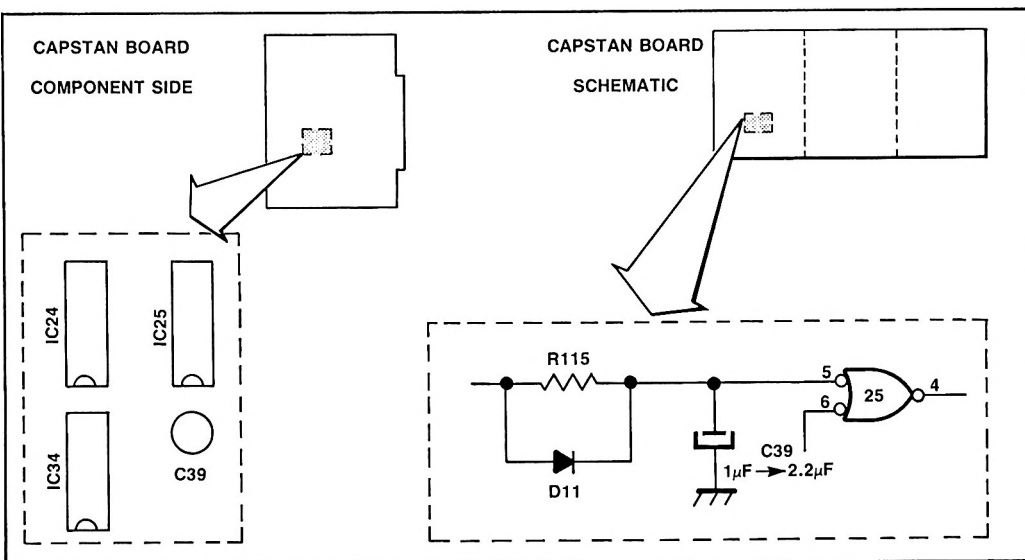
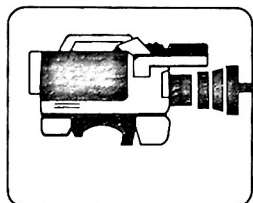


Figure 1

Reference: VS 80-137 / T.Mc.

Page 1 of 1



# technical bulletin

## 83-030

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVH-1100**

Date: February, 1983

**SERIAL NO: 10,001 — 10,100**

**SUBJECT: FRAMING BOARD CAPACITOR, POLARITY REVERSAL**

### DESCRIPTION

Capacitor C1 on the Framing Board may be mounted with its polarity reversed. The capacitor must be replaced on boards where this has occurred. (See Figure 1.)

### PARTS REQUIRED

| Part No.     | Description                       | Qty. |
|--------------|-----------------------------------|------|
| 1-123-333-00 | Cap, Elect, 100 $\mu$ F, 25V, 10% | 1    |

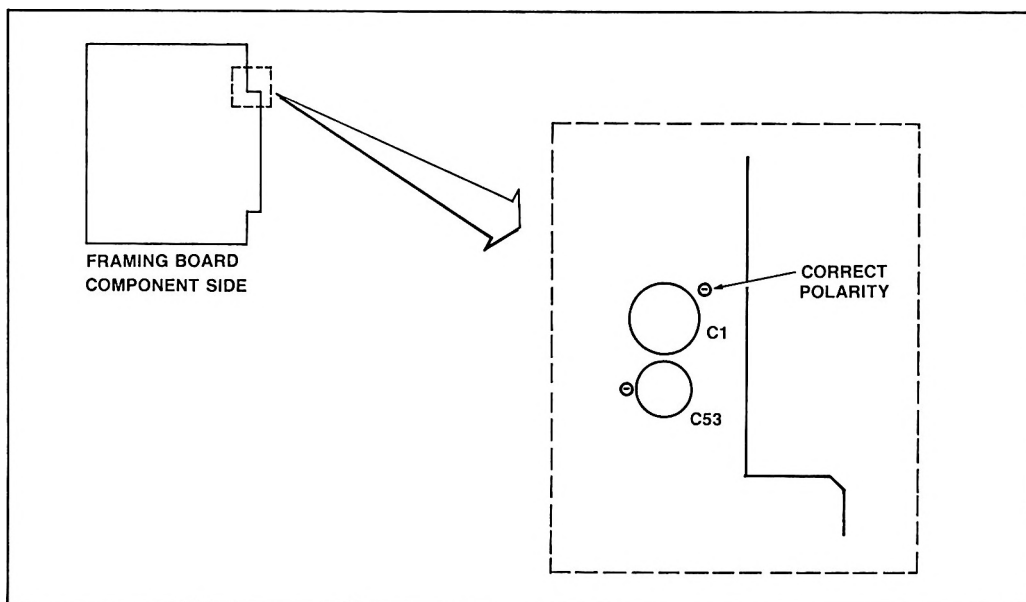
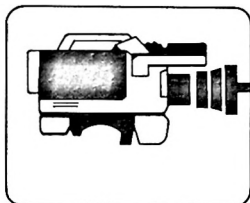


Figure 1

Reference: VS 80-136 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**MODEL: BVH-1100**

Date: January, 1983

**SERIAL NO: 10,001 - 10,801****SUBJECT: DT LAMP****DESCRIPTION**

The DT lamp may not light because of insufficient base current to the transistor controlling the lamp. The following modification to the SYS SW-2 Board will correct this problem.

**PARTS REQUIRED**

| Part No.     | Description                           | Qty. |
|--------------|---------------------------------------|------|
| 1-247-152-00 | Res, Carbon, 7.5k $\Omega$ , 1/4W, 5% | 1    |
| 1-247-162-00 | Res, Carbon, 20k $\Omega$ , 1/4W, 5%  | 1    |

**MODIFICATION PROCEDURE****SYS SW-2 Board (Figure 1)**

1. Replace R40 with the 20k $\Omega$  resistor.
2. Replace R41 with the 7.5k $\Omega$  resistor.

*Reference: VS 80-144 / T.M.**Page 1 of 2*

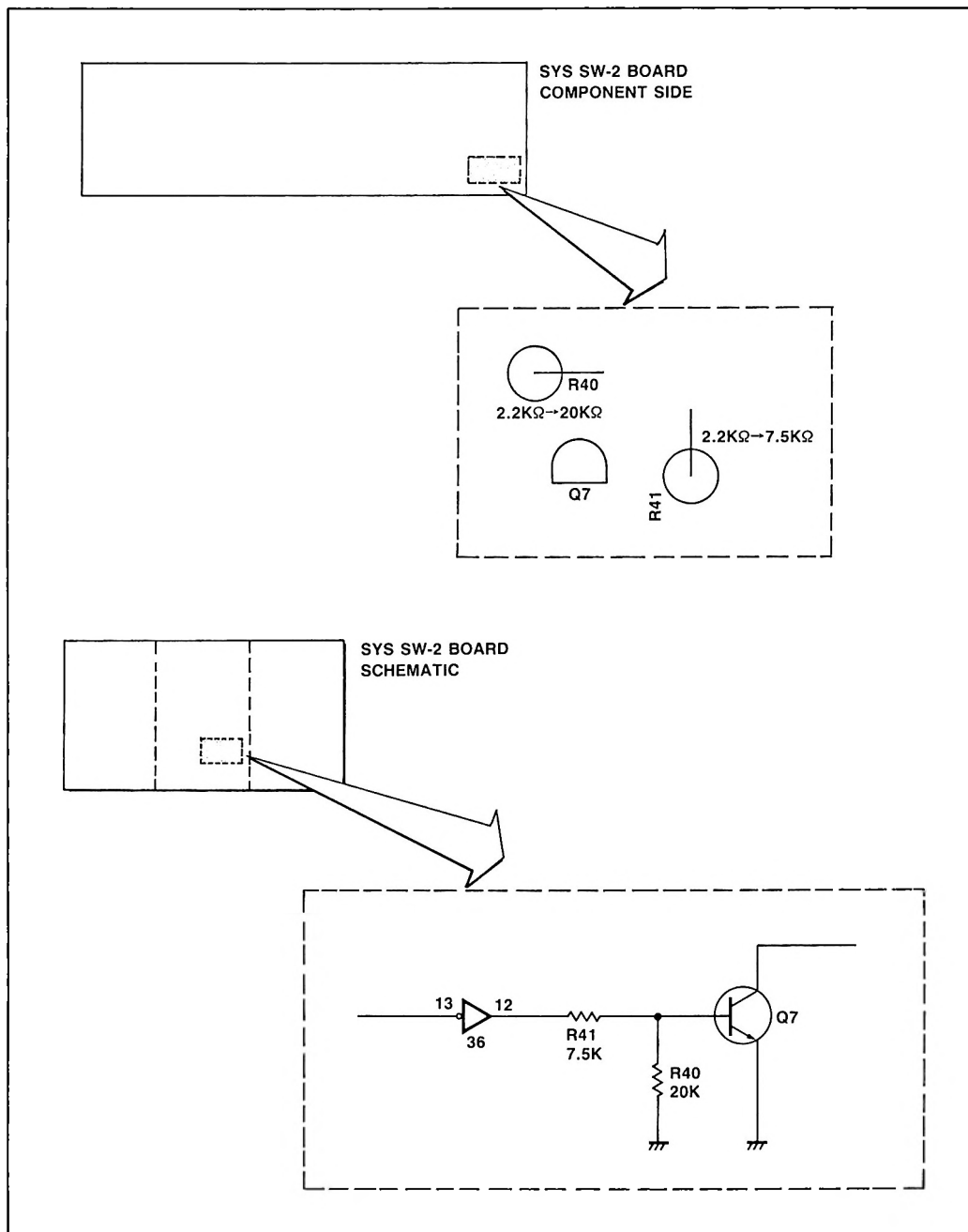
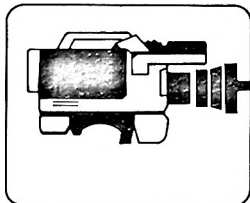


Figure 1



# technical bulletin

# 83-011

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: January, 1983

**MODEL: BVH-1000A, BVH-1100, BVH-1100A**

**SERIAL NO: ALL**

**SUBJECT: TIME CODE JAM SYNC WITH BVG-1000**

## DESCRIPTION

When performing Time Code Jam Sync with a BVH VTR and BVG-1000, as illustrated in Figure 1, a data error will occur at the assemble edit point. This error occurs because the audio output is muted for approximately 8 msec.

The following modification to the Audio Logic Board will eliminate the 8 msec mute on Audio-3.

## MODIFICATION PROCEDURE

### AUDIO LOGIC Board

**Series 1-586-908-12 (See Figure 2.)**

1. Cut trace between IC22-8 and IC27-2.
2. Jumper IC27-2 to IC27-7 (GND).

**Series 1-588-364-12 (See Figure 3.)**

1. Cut trace between IC47-3 and IC48-12.
2. Jumper IC48-12 to IC48-8 (GND).

**NOTE:** This modification also applies to Audio Logic Board series 1-586-908-11 and series 1-588-364-11, although pattern traces do not necessarily match the configurations given in Figures 2 and 3.

*Reference: VS 80-175 / T.M.*

*Page 1 of 4*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

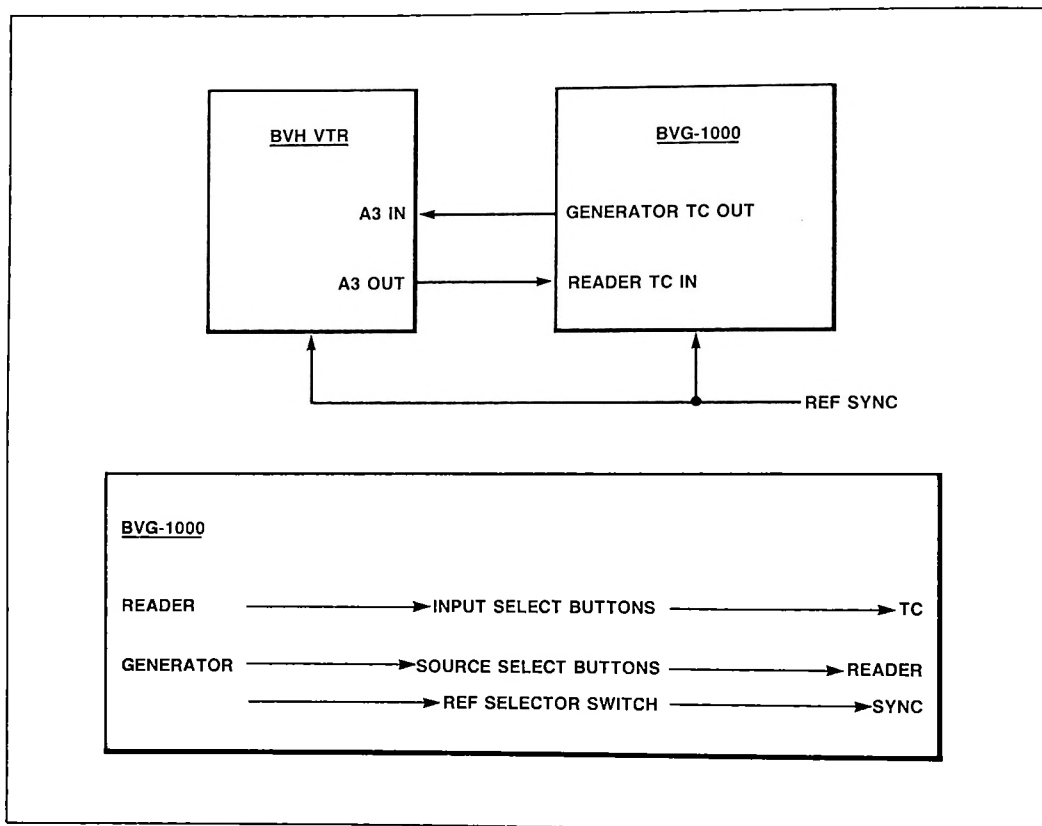
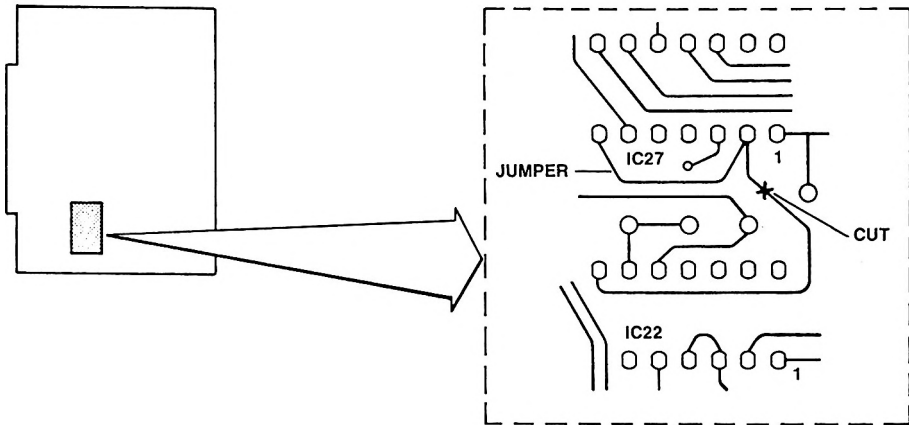


Figure 1

AUDIO LOGIC BOARD  
SERIES 1-586-908-12

SOLDER SIDE



AUDIO LOGIC BOARD  
SERIES 1-586-908-12

SCHEMATIC

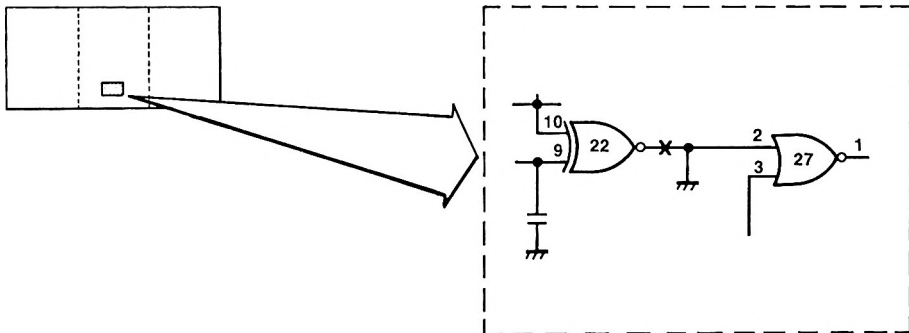
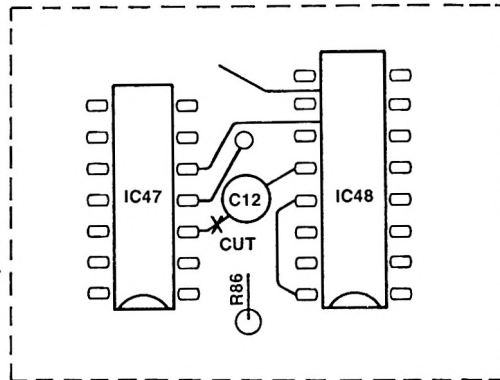
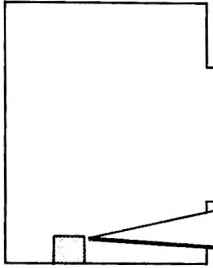


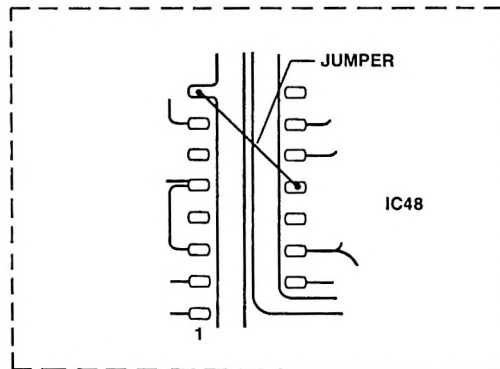
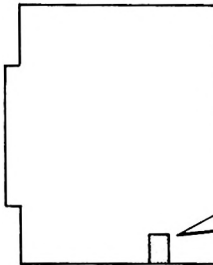
Figure 2



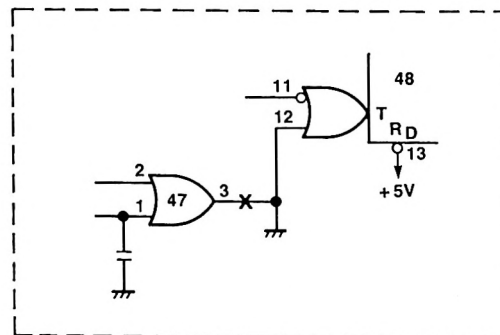
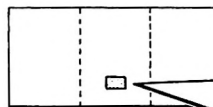
AUDIO LOGIC BOARD  
SERIES 1-585-364-12  
COMPONENT SIDE

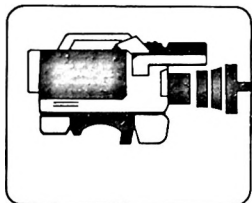


AUDIO LOGIC BOARD  
SERIES 1-585-364-12  
SOLDER SIDE



AUDIO LOGIC BOARD  
SERIES 1-588-364-12





**MODEL: BVH-1100**

**SERIAL NO: 10,800 AND LOWER**

**SUBJECT: REVERSED CAPSTAN ROTATION DURING  
PROGRAMMED JOG STILL**

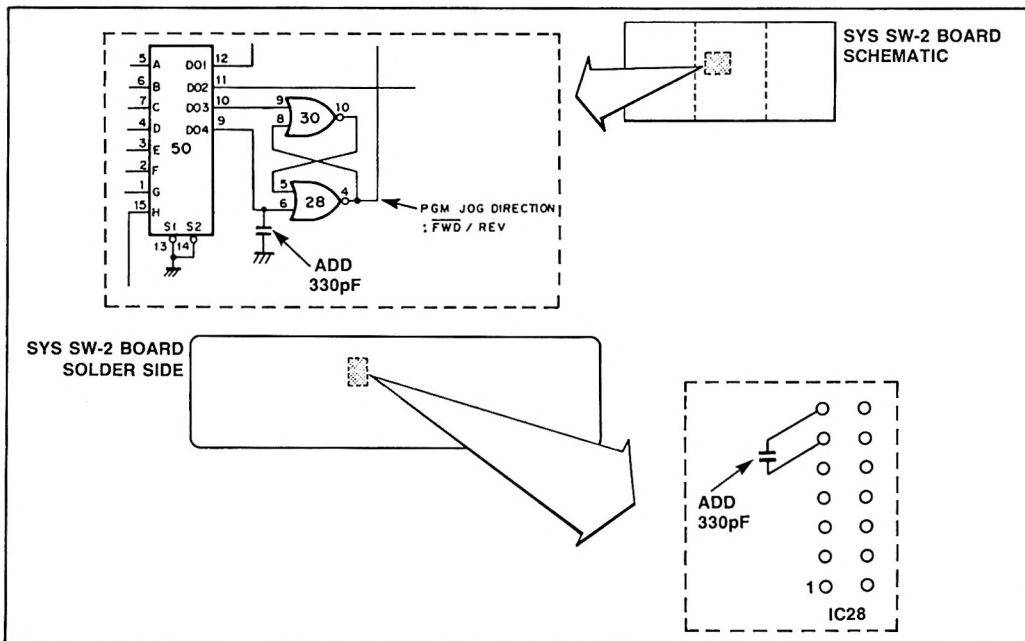
Date: January, 1983

## DESCRIPTION

The Capstan may rotate backward momentarily during the transition from P. JOG  $\frac{1}{20}$  to P. JOG STILL. When this happens, a transient pulse signal is generated at IC50-9 on the SYS SW-2 Board. (See Figure 1.) This pulse sets flip-flop IC30/IC28, causing the Capstan to continue rotation in the reverse direction. The transient can be filtered out by the addition of a 330 pF capacitor as shown in Figure 1.

## PARTS REQUIRED

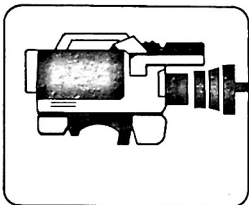
| Part No.     | Description                   | Qty. |
|--------------|-------------------------------|------|
| 1-102-112-00 | Cap, Ceramic, 330pF, 50V, 10% | 1    |



**Figure 1**

Reference: VS 80-146 / T.Mc.

Page 1 of 1



**MODEL: BVH-1100**  
**SERIAL NO: 10,400 AND LOWER**  
**SUBJECT: TAPE SPEED IN PROGRAMMED JOG MODE**

Date: January, 1983

## DESCRIPTION

Tape speed in the Programmed Jog mode may actually be twice as fast as the speed indicated on the SEARCH dial. The problem is caused by noise generated on the trailing edge of the V-F Converter Output (IC8) on the SYS SW-5 Board. This noise may be recognized as a valid count by the next counter stage, IC5. As a result, the Programmed Jog Speed Out frequency will be doubled. Installation of filter capacitor C20 as shown in Figures 1 and 2 will eliminate this problem.

## PARTS REQUIRED

| Part No.     | Description              | Qty. |
|--------------|--------------------------|------|
| 1-107-078-00 | Cap, Mica, 51pF, 50V, 5% | 1    |

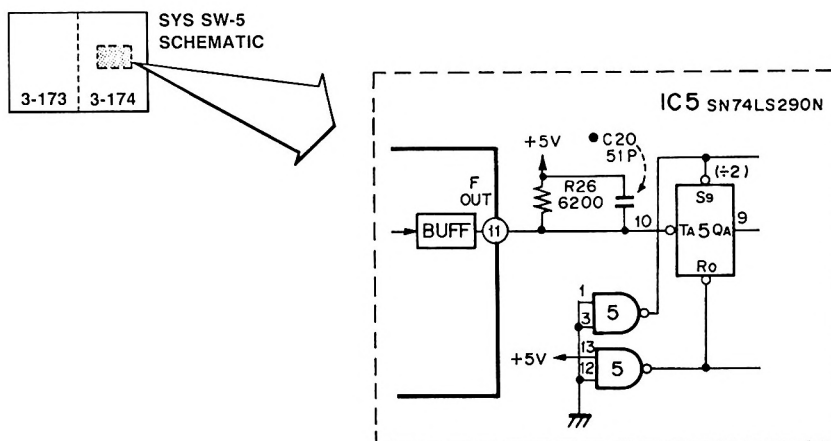
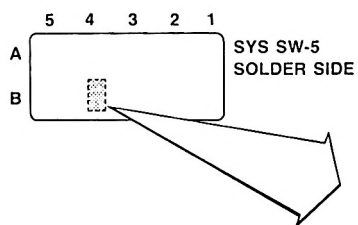


Figure 1

Reference: VS80-149 / T.Mc.

Page 1 of 2



NOTE: The SYS SW-5 schematic and board diagrams are found in BVH-1100 Manual, 5th Edition.

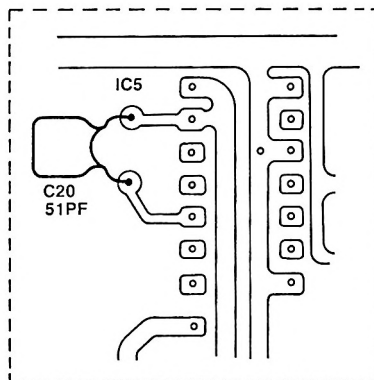


Figure 2

MODEL: BVH-1100

SERIAL NO: 10,201-11,100

SUBJECT: INCORRECT ETCHING PATTERN ON TENSION BOARD

Date: January, 1983

### DESCRIPTION

In the units listed above, an incorrect etching pattern on the Tension Board may cause malfunction of the Tension Motor drive circuits. The problem is a missing connection to +5V for pull-up resistor R182 (Figure 1). Tension motor drive is generated by NAND Gates in IC11. These gates are enabled by the output of AND Gate D32/D33. With no pull-up connection the output of D32/D33 becomes unstable when the inputs are high, and IC11 may be switched off by noise. The pattern cut and jumper connection shown in Figure 1 will eliminate the problem.

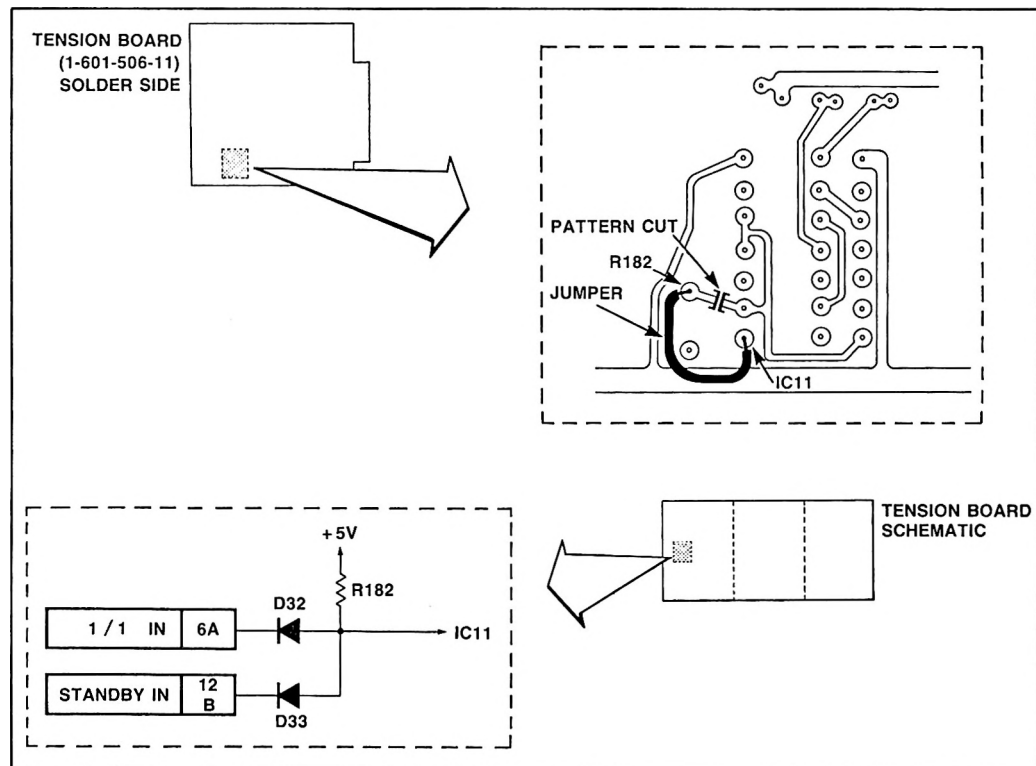
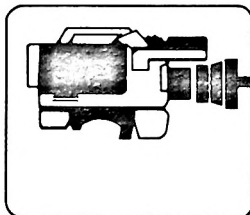


Figure 1

Reference: VS 80-145 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**SONY®**

# **broadcastbulletin** No. **82-62**

**SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134****MODEL: BVH-1100****Date: November, 1982****SERIAL NO: 10,001 — 11,000****SUBJECT: IMPROVED TAPE HANDLING WHEN REPEATEDLY  
SHIFTING BETWEEN PLAY AND STOP****DESCRIPTION**

This modification applies to serial numbers 10,001 through 11,000.

The Reel-1 Board generates a "Reel 0Hz (2)" signal when the VTR is stopped, and clears this signal when the machine enters PLAY. The Reel 0Hz (2) circuit contains an RC circuit which must have its capacitor discharged when entering PLAY. Rapid shifts between STOP and PLAY can prevent this from happening, and ultimately cause tape to slacken around the head drum.

The following modification to the Reel-1 Board ensures that the capacitor will discharge by using a signal from the "Slow to FWD (1/1) Start Torque-up Booster" circuitry. Figures 1 and 5 show the modification schematics for Reel-1 Board series 1-585-490-12 and 1-600-679-11, -12, respectively.

**PARTS REQUIRED (Board Series 1-585-490-12)**

| Part No.     | Description                          | Qty. |
|--------------|--------------------------------------|------|
| 1-246-509-00 | Res, Carbon, 33K $\Omega$ , 5%, 1/4W | 1    |
| 8-759-900-02 | IC, NOR Gate, SN74LS02N              | 1    |

**PARTS REQUIRED (Board Series 1-600-679-11, -12)**

| Part No.     | Description             | Qty. |
|--------------|-------------------------|------|
| 8-759-900-02 | IC, NOR Gate, SN74LS02N | 1    |

**Reference: VS 80-87 / T.Mc.****Page 1 of 6**

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

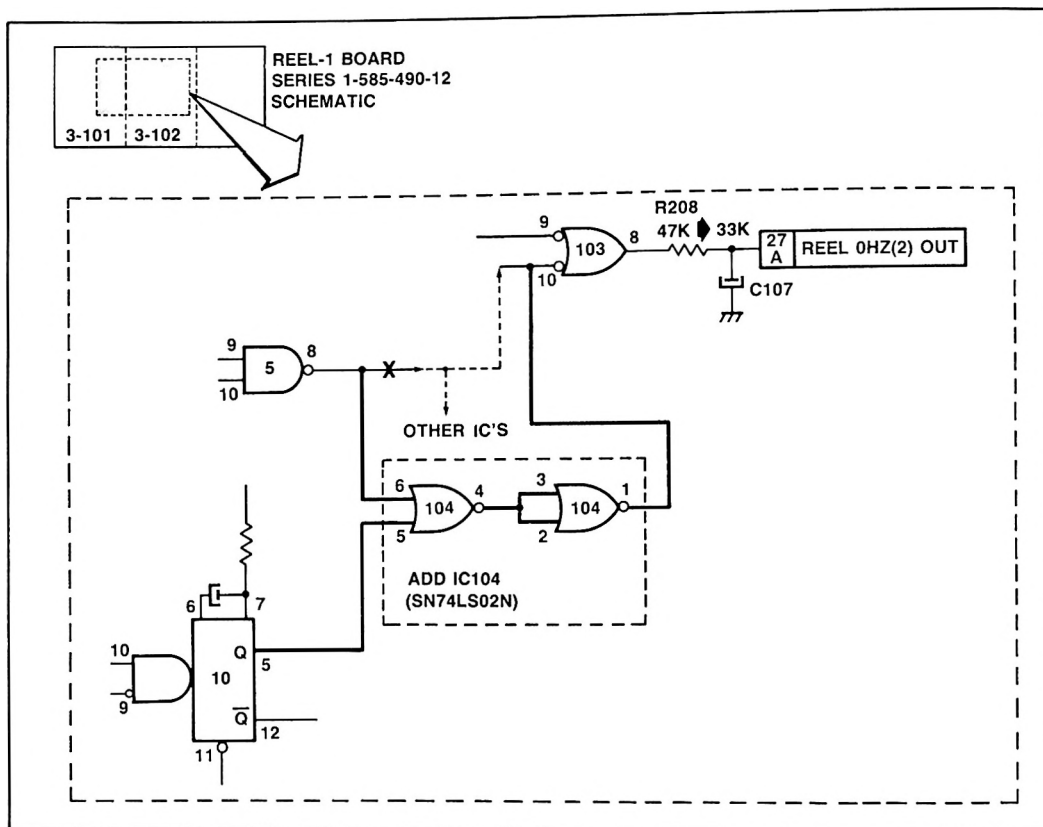


Figure 1

## MODIFICATION PROCEDURE

### Reel-1 Board, 1-585-490-12

1. Replace R208 with 33k ohm carbon resistor. (See Figure 2.)
2. Add new IC104 to unused area designated IC12. (See Figure 2.)

NOTE: Before installing IC104 cut all the existing connections to pins 1-6 of the IC slot.

3. On solder side, cut trace at IC5-8. Cut should be made as close to pin 8 as possible. (See Figure 3.)
4. Add the following jumpers (See Figure 4.):

| From        | To          |
|-------------|-------------|
| (A) IC104-2 | IC104,-3,-4 |
| (B) IC5-8   | IC104-6     |
| (C) IC10-5  | IC104-5     |
| (D) IC104-1 | IC15-1      |

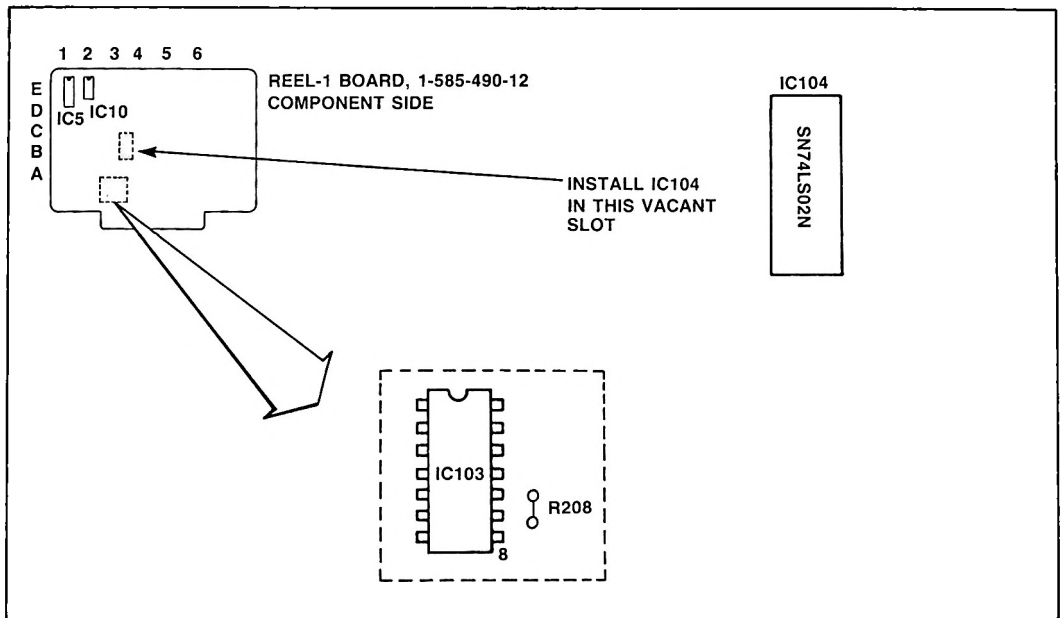


Figure 2

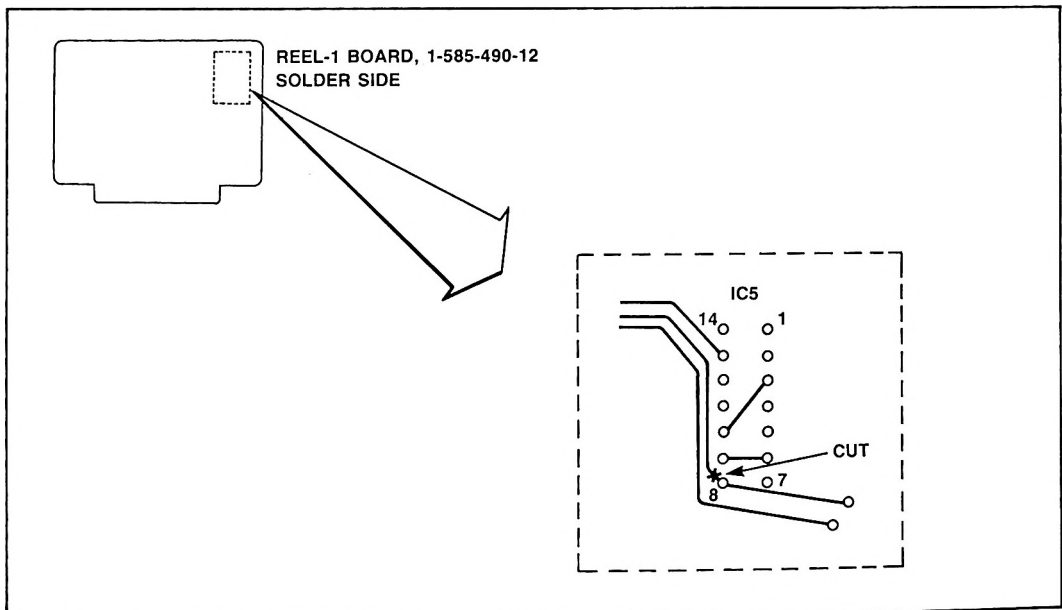


Figure 3



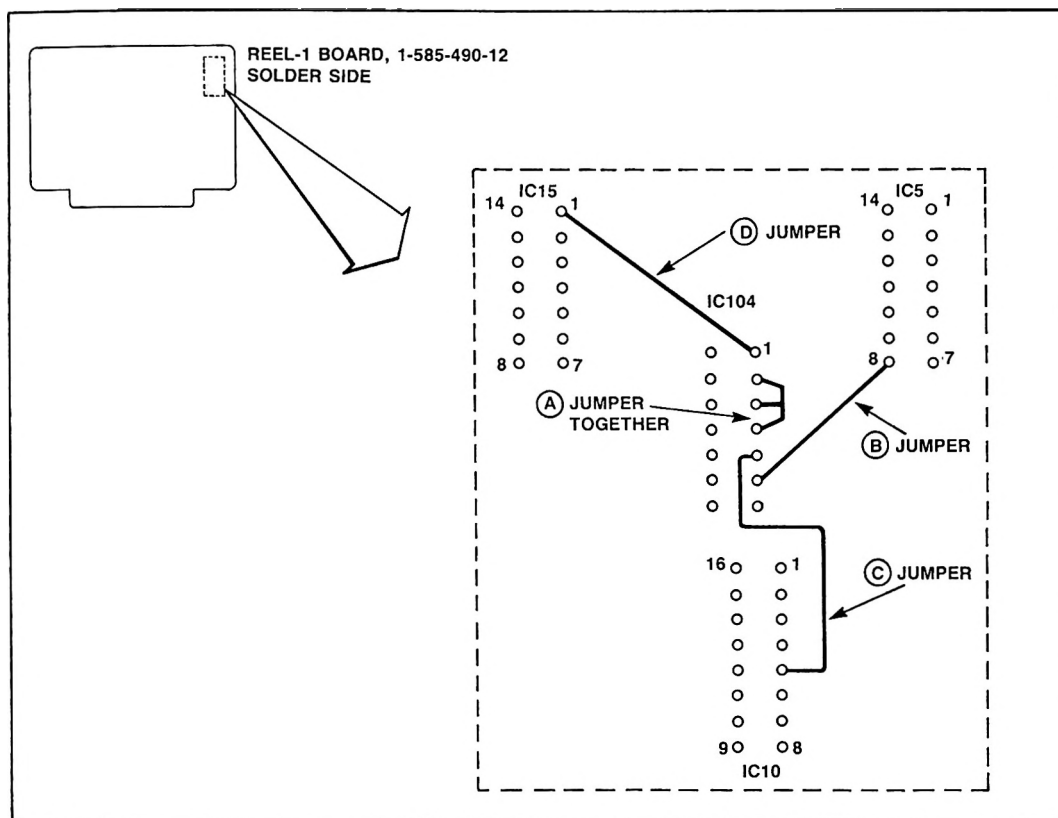


Figure 4

## MODIFICATION PROCEDURE

### Reel-1 Board, 1-600-679-11, -12

1. Delete C42. (See Figure 6.)

NOTE: C42 is located at C-6 position (unused).

2. On solder side of board, cut trace at IC25-11. (See Figure 7.)
3. Install IC28 in unused area of the board. (See Figure 7.)
4. On solder side, add following jumpers (See Figure 7.):

| From        | To        |
|-------------|-----------|
| (A) IC28-2  | IC28-3,-4 |
| (B) IC25-11 | IC28-6    |
| (C) IC3-5   | IC28-5    |
| (D) IC28-1  | IC6-11    |

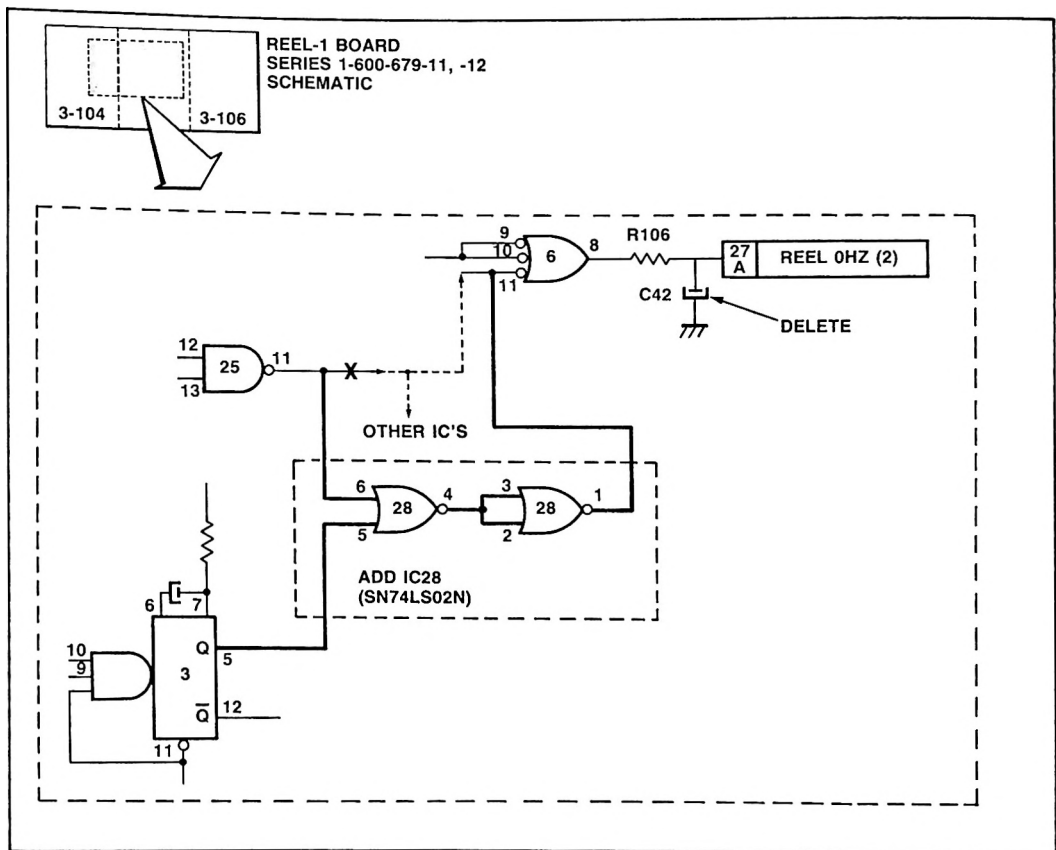


Figure 5

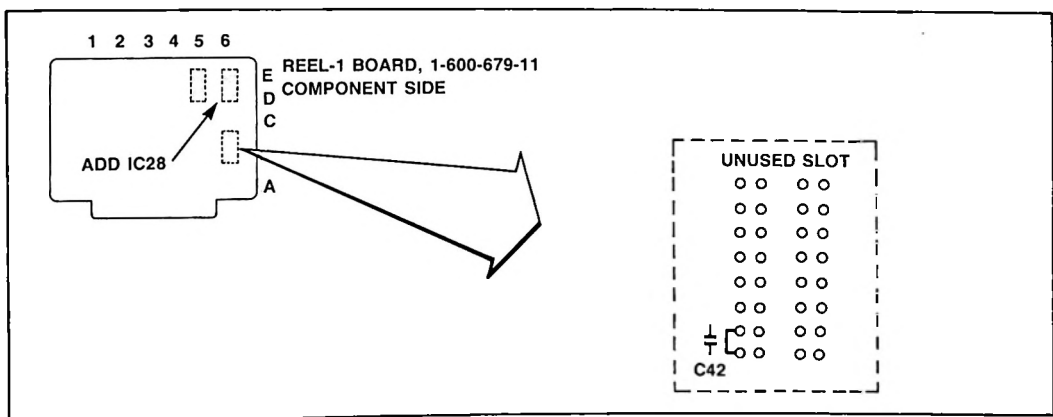


Figure 6

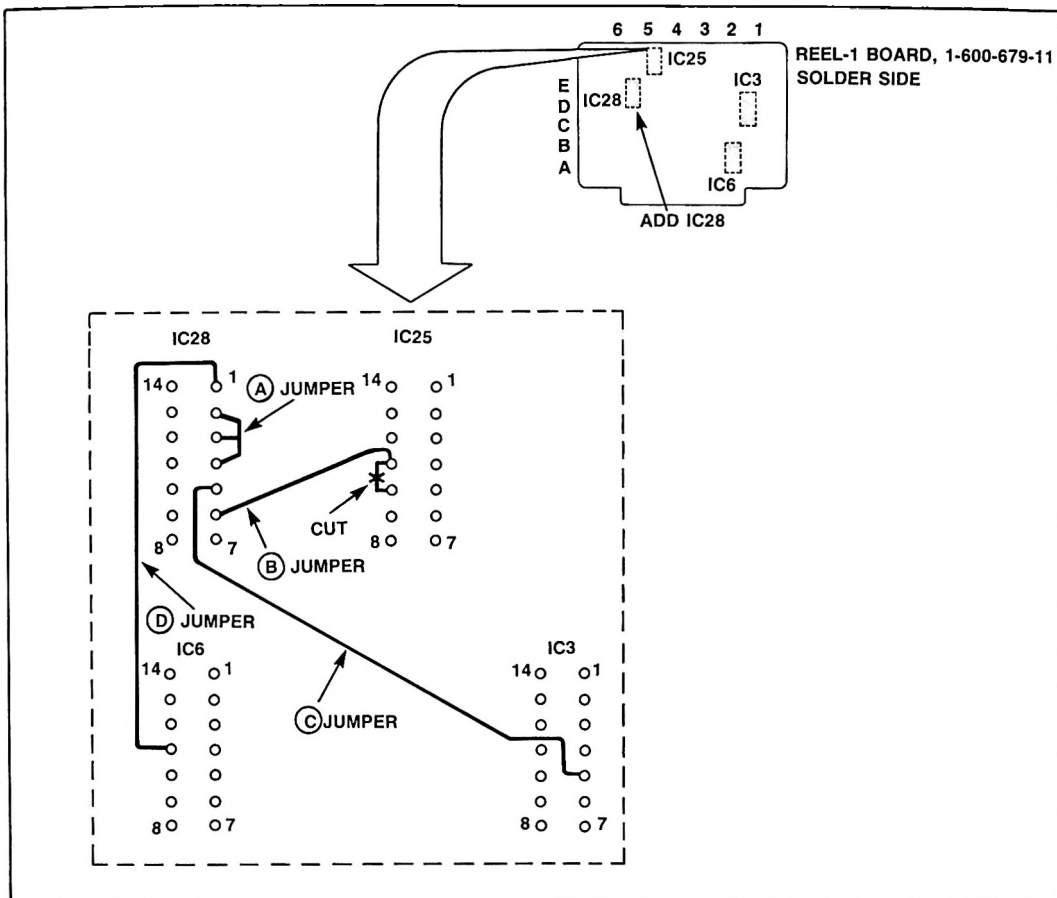
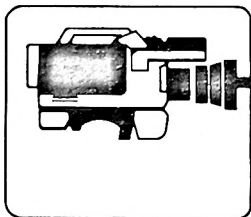


Figure 7



If Audio erase head is ever replaced

SONY®

# broadcastbulletin No. 82-61

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVH-1000A / BVH-1100**

Date: November, 1982

**SERIAL NO: SEE TEXT**

**SUBJECT: REPLACEMENT OF AUDIO ERASE HEAD**

## DESCRIPTION

This modification is applicable to BVH-1000A serial numbers 21,100 and lower and BVH-1100 serial numbers 10,300 and lower. The earlier models of the BVH-1000A and BVH-1100 were manufactured with single gap audio erase heads (EF18-5103 or EF18-5104A). The later models were manufactured with double gap audio erase heads (EF204-5104A).

When a double gap head is used to replace the single gap head, the following modifications are necessary.

## PARTS REQUIRED

| Part No.     | Description                 | Qty. |
|--------------|-----------------------------|------|
| 1-246-445-00 | Res, Carbon, 68Ω, ¼W, 5%    | 4    |
| 1-246-448-00 | Res, Carbon, 91Ω, ¼W, 5%    | 2    |
| 1-246-449-00 | Res, Carbon, 100Ω, ¼W, 5%   | 1    |
| 1-246-494-00 | Res, Carbon, 7.5KΩ, ¼W, 5%  | 1    |
| 1-109-633-00 | Cap, Mica, 470pF, 500V, 2%  | 1    |
| 1-109-639-00 | Cap, Mica, 1500pF, 500V, 2% | 1    |

## MODIFICATION PROCEDURE

### Audio Erase Head Connections:

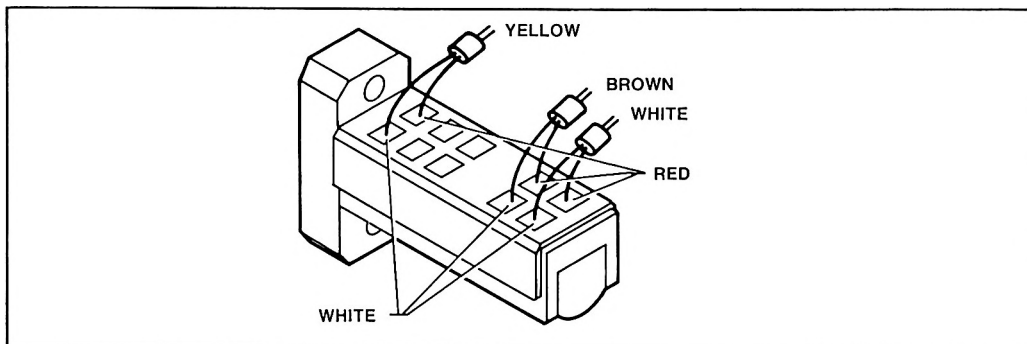


Figure 1

Reference: VS 80-88 / T. Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

## Bias Board

1. Replace the following components with the values listed:

|          |               |           |              |
|----------|---------------|-----------|--------------|
| R39..... | 7.5K $\Omega$ | R117..... | 100 $\Omega$ |
| R40..... | 91 $\Omega$   | R125..... | 68 $\Omega$  |
| R41..... | 91 $\Omega$   | R126..... | 68 $\Omega$  |
| R42..... | 68 $\Omega$   | C19.....  | 470pF        |
| R43..... | 68 $\Omega$   | C58.....  | 1500pF       |

2. Cut trace to T8-6. (See Figure 2.)
3. Connect jumper between T8-7 and C59. (See Figure 2.)

## ADJUSTMENT PROCEDURE

Perform Audio Erase Head Height Adjustment procedure in Section 10-6 of the Operation and Maintenance Manual.

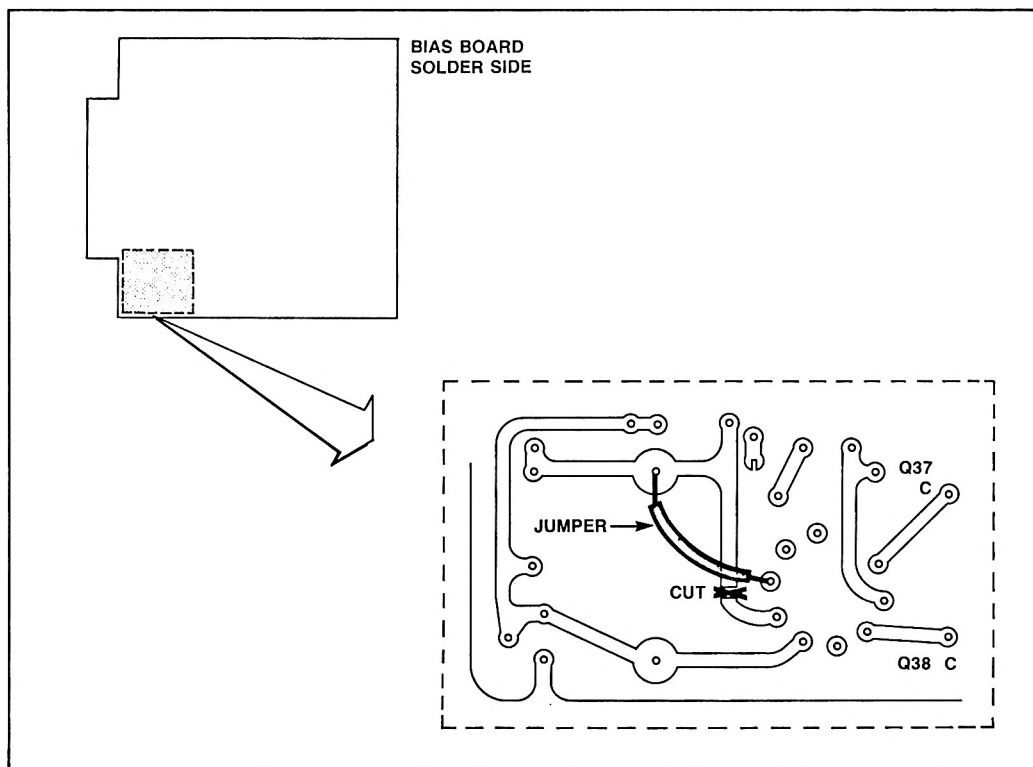
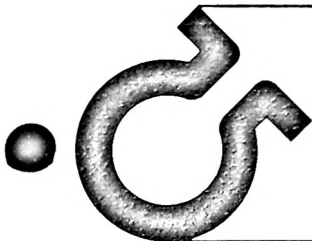


Figure 2



Do with Time

**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: July, 1982

model: BVH-1100 / -1100A / BVT-2000

bulletin no.: 23

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## MODIFICATION TO PROVIDE COLOR FRAMED PLAYBACK OPERATION IN DT-3 POSITION

### DESCRIPTION

This modification affects BVH-1100 and BVH-1100A Videocorders with serial numbers below 20,501 and BVT-2000 Digital Time Base Correctors with serial numbers below 11,701.

In the BVH-1100/1100A, DT-3 play was intended for slow motion operation. Thus, Y/C separation always occurred. When DT-3 was used in normal mode, the lack of SC/H-Sync phase relationship made color framing operation impossible. By applying the modification described below, the SC/H-Sync phase relationship is restored for normal mode so that full band playback and color framing operations are possible.

The three boards requiring modification in the BVH-1100 are the DT-1, VIDEO LOGIC and MOTHER-2 Boards. The BVH-1100A has two boards, DT-1 and VIDEO LOGIC, requiring modification. The BVT-2000 has one board, the SQ-3, requiring modification.

### PARTS REQUIRED

| Part No.     | Description                | Qty. | Ref. Desig.  |
|--------------|----------------------------|------|--------------|
| 1-214-144-00 | Res, Metal, 3300, 1%, 1/4W | 1    | VID LOG, R55 |
| 1-214-180-00 | Res, Metal, 100K, 1%, 1/4W | 1    | DT-1, R61    |
| 1-131-359-00 | Cap, Tant, 10μF/25V        | 1    | DT-1, C42    |
| 1-108-599-00 | Cap, Mylar, .068μF         | 1    | SQ-3, C9     |
| 8-759-900-74 | IC, SN74LS74AN             | 1    | DT-1, IC48   |
| 8-759-901-23 | IC, SN74LS123N             | 1    | DT-1, IC49   |

### MODIFICATION PROCEDURE

There are two methods of implementing the modification. The boards may be replaced with new factory-modified boards or the components listed in the Parts Required table may be installed in the old boards. Regardless of the method chosen, perform the Overall Check listed in this bulletin after the modification is complete.

Reference: VTRW 81-2003 / T.M.

Page 1 of 11

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

## I. Modification by Board Replacement

| Board Name  | Former P/N   | New P/N       |
|-------------|--------------|---------------|
| DT-1        | A-626-302-1C | A-626-302-1D  |
| VIDEO LOGIC | A-601-703-8B | A-601-703-8C  |
| SQ-3 (N)    | A-625-906-9A | A-625-906-9B  |
| MOTHER-2    | —            | Not Available |

## II. Modification by Component Installation

### A. MOTHER-2 Board (BVH-1100)

1. Prepare the following jumpers and solder them as follows. Figure 1 shows the jumper locations.

|    |                       |       |
|----|-----------------------|-------|
| J1 | CN54-5 .....CN55-10   | 30 mm |
| J2 | CN51-3 .....CN142-29A | 80 mm |

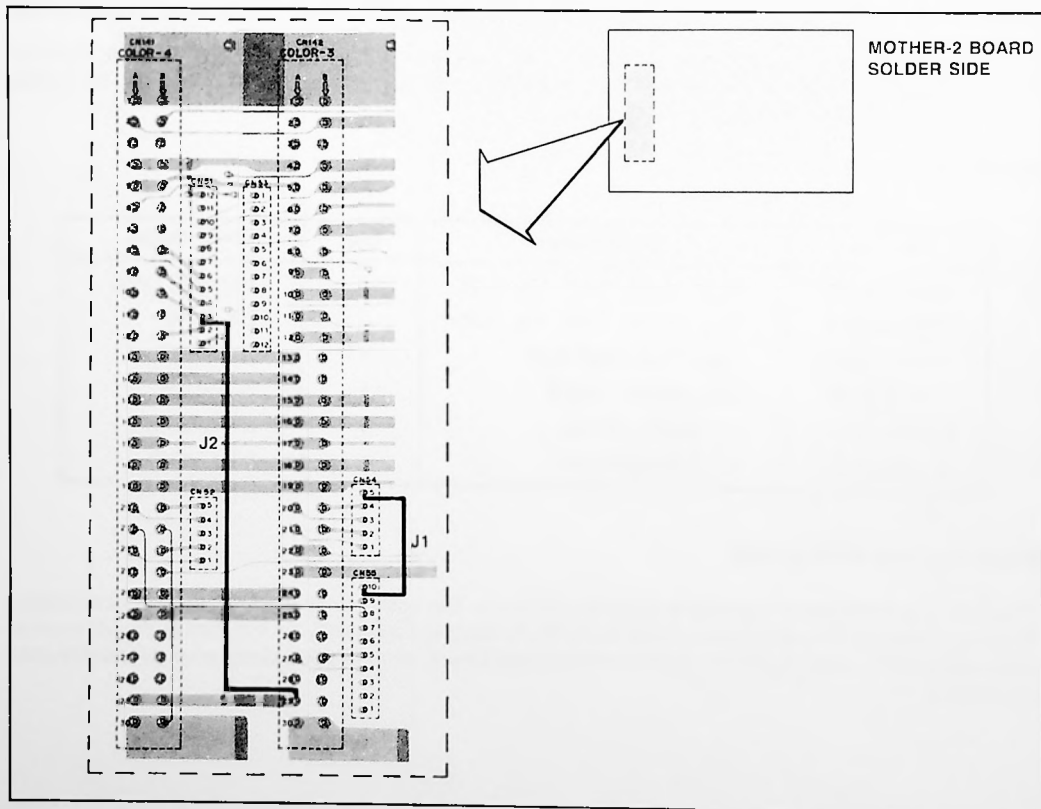


Figure 1

B. DT-1 Board (BVH-1100 and BVH-1100A)

1. Carefully cut the trace at the locations listed below. Figure 2 shows the changes to the schematic and Figure 3 shows both sides of the board.

- (a) IC48-1.....IC48-14, solder side (1-600-181-13, -14 only)
- (b) IC11-10.....IC11-11, component side
- (c) IC11-2.....IC11-13, solder side
- (d) IC48-3.....IC25-12, solder side (1-600-181-13, -14 only)
- (e) IC48-2.....IC11-1, component side (1-600-181-13, -14 only)
- (f) IC48-5.....IC16-1, component side (1-600-181-13, -14 only)

2. Install the following parts:

|      |             |                              |
|------|-------------|------------------------------|
| IC48 | SN74LS74AN  | E4, (1-600-181-11, -12 only) |
| IC49 | SN74LS123N  | E3                           |
| R61  | Res, 100K   | From E3-15 to E3-16          |
| C42  | Cap, 10/25V | From E3-15 to E3-14          |

NOTE: When installing new ICs, ensure that the pads are not connected to ground.

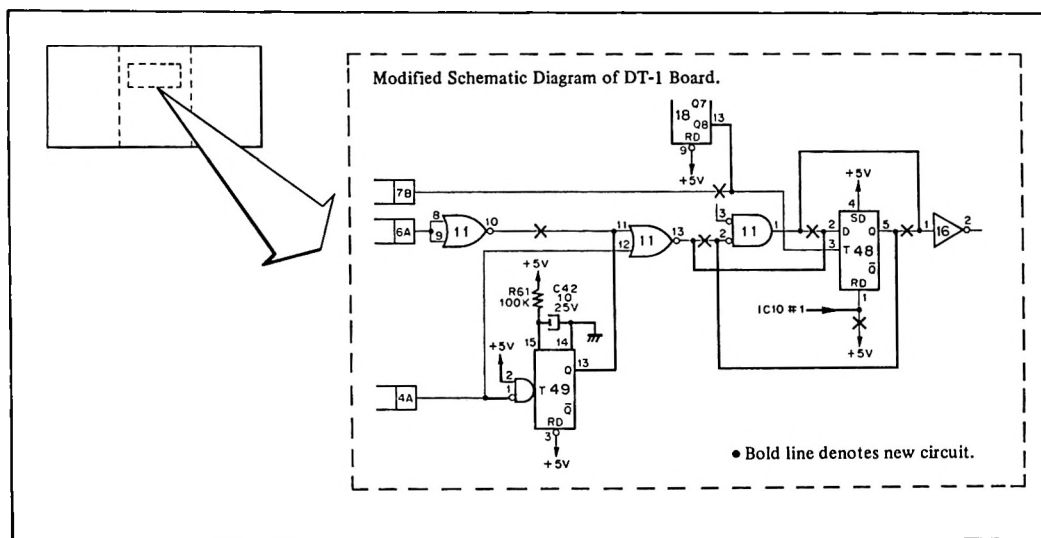
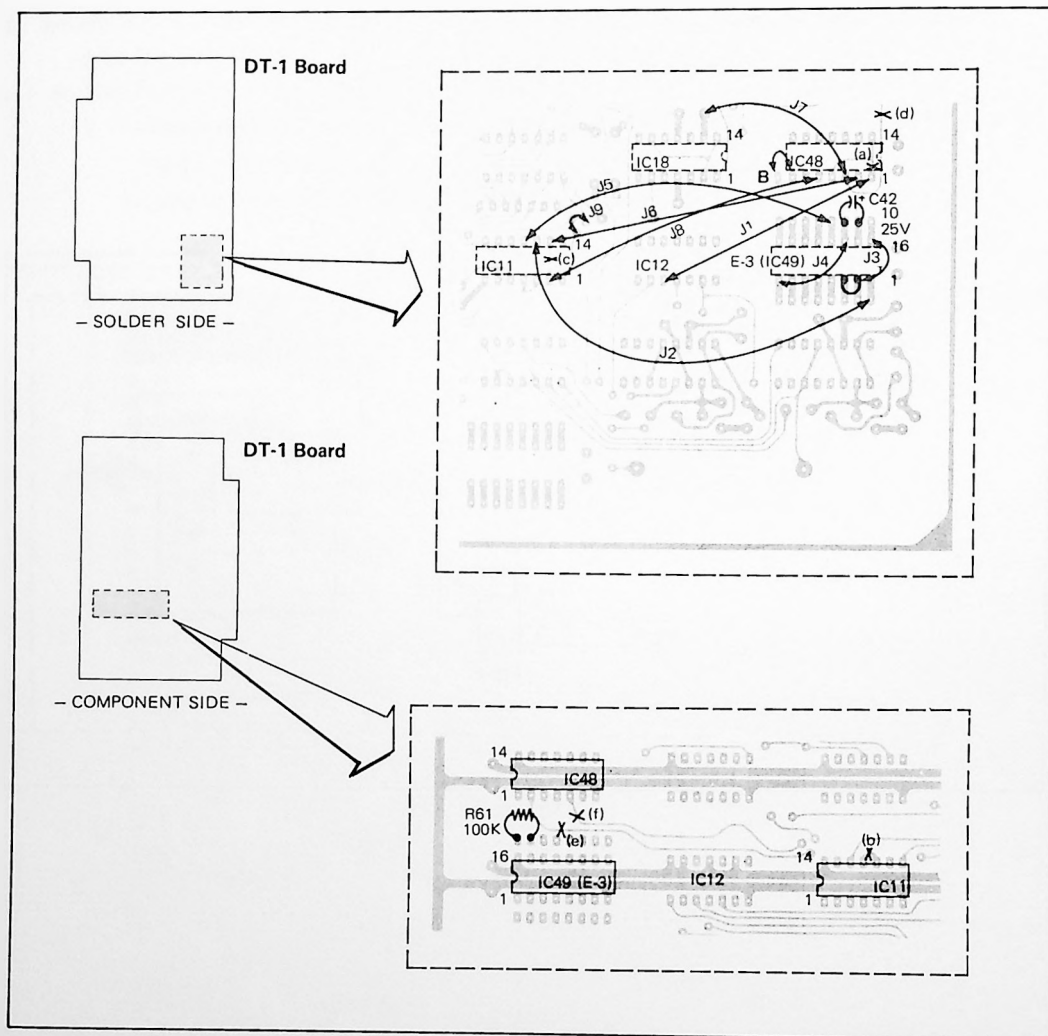


Figure 2



3. Prepare the following jumpers and solder them at the locations shown in Figure 3.

|    |                       |       |      |                         |       |
|----|-----------------------|-------|------|-------------------------|-------|
| J1 | IC12-5.....IC48-1     | 50 mm | J8   | IC48-5.....IC11-2       | 90 mm |
| J2 | IC11-12.....IC49-1    | 80 mm | J9-1 | IC11-1.....IC16-1       | 20 mm |
| J3 | IC49-16.....IC49-2,-3 | 20 mm | J9-2 | IC48-14.....IC48-4      | 20 mm |
| J4 | IC49-8.....IC49-14    | 20 mm |      | (1-600-181-11,-12 only) |       |
| J5 | IC49-13.....IC11-11   | 60 mm | J9-3 | IC48-7.....Point B      | 20 mm |
| J6 | IC48-2.....IC11-13    | 70 mm |      | (1-600-181-11,-12 only) |       |
| J7 | IC48-3.....IC18-13    | 40 mm |      |                         |       |



C. VIDEO LOGIC Board (BVH-1100 and BVH-1100A)

1. Carefully cut the trace at the locations listed below. Figure 4 shows the changes to the schematic. Figure 5 shows the changes to the board.

(a) IC15-12.....IC15-13

(b) IC23-4.....CN22B

2. Install the following resistor. Use Figure 5 for reference.

R55

Res, 3300

From IC45-12 to IC45-14

3. Prepare and solder the following jumpers.

|    |                     |        |
|----|---------------------|--------|
| J1 | IC45-12.....CN2B    | 110 mm |
| J2 | IC30-5.....CN4B     | 120 mm |
| J3 | IC30-6.....IC45-13  | 130 mm |
| J4 | IC45-11.....IC15-12 | 140 mm |
| J5 | IC15-11.....IC30-3  | 120 mm |
| J6 | IC30-4.....IC40-13  | 110 mm |
| J7 | IC40-6.....IC40-12  | 20 mm  |
| J8 | IC40-11.....CN22B   | 160 mm |

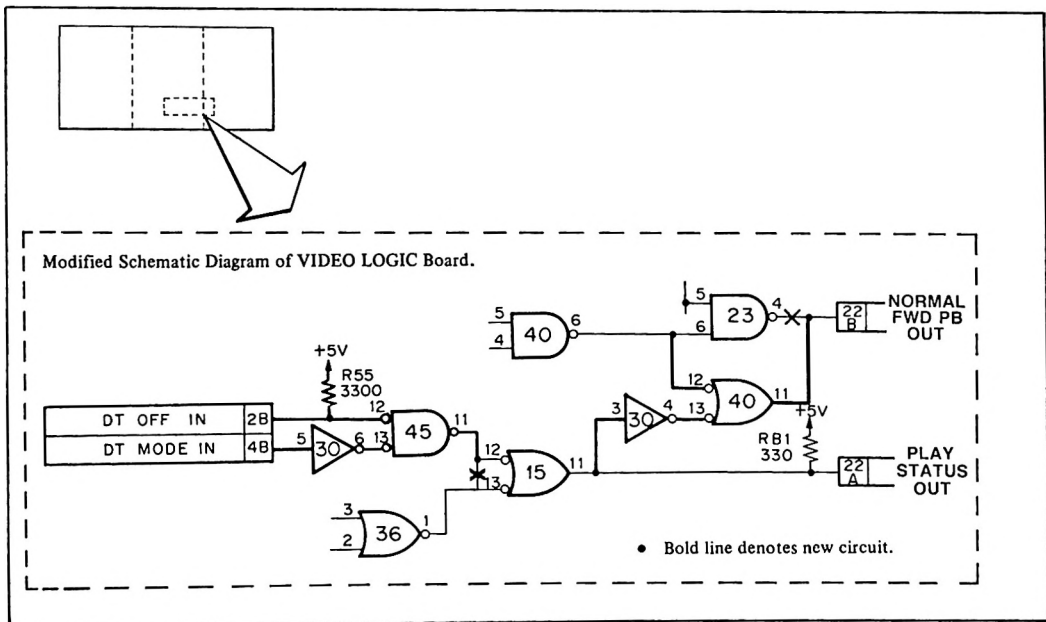


Figure 4



2. Replace capacitor C9 (.01) with the new value listed below (.068).

C9

Cap, Mylar

.068 $\mu$ F

3. Prepare the following jumpers and solder them in the locations shown in Figure 7.

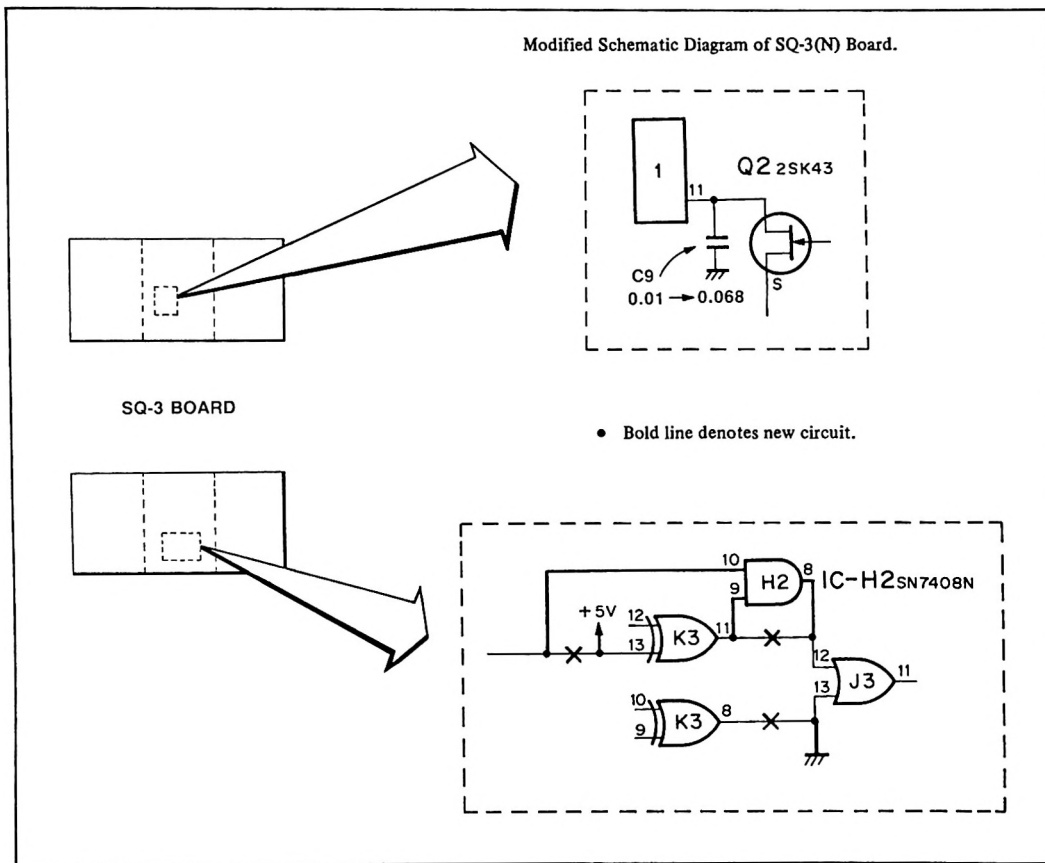
J1 ICK3-11.....ICH2-9

J2 ICK4-6.....ICH2-10

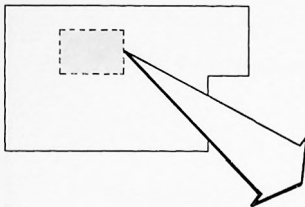
J3 ICK3-13.....ICK3-14

J4 ICJ3-12.....ICH2-8

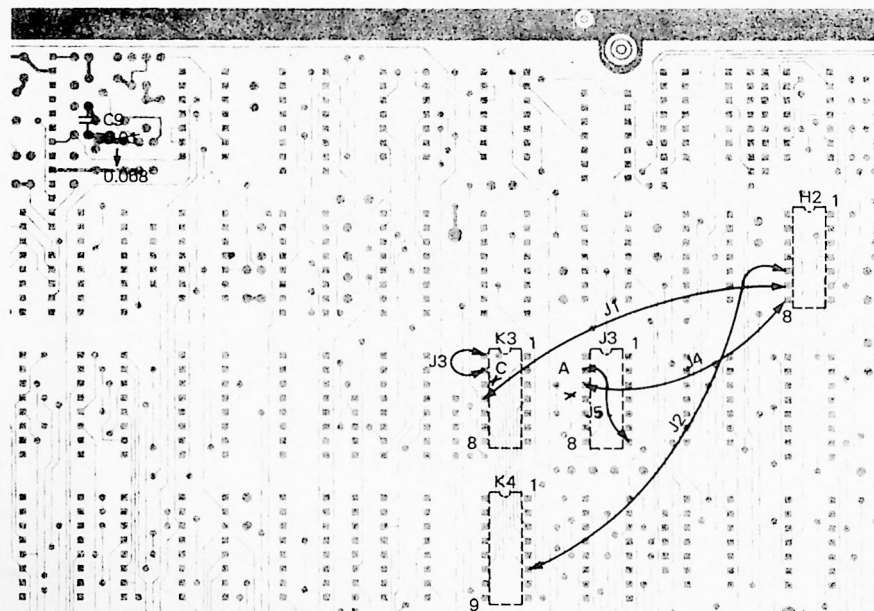
J5 ICJ3-13.....ICJ3-7



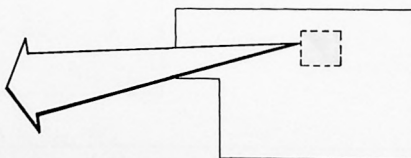
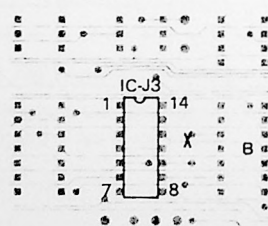
**Figure 6**



**SQ-3(N) Board**  
— SOLDER SIDE —



**SQ-3(N) Board**  
— COMPONENT SIDE —



**Figure 7**

## CHECKS AND ADJUSTMENTS

### I. Overall Check

- Perform the Logic System Adjustment (See II below).
- Perform the DT-1 Board Alignment (See III below).
- Connect the BVH-1100/1100A, BVT-2000 and test equipment as shown in Figure 8.
- Set the units in the color framing mode as follows:

BVH-1100/1100A Framing Board:

CAPSTAN LOCK switch.....4F

CF DETECT LED.....ON (R89)

BVT-2000 SQ-3 (N) Board:

NORMAL/ADJUST switch.....ADJUST

COLOR FRAMING LEDs.....ON (VR12) (VR13)

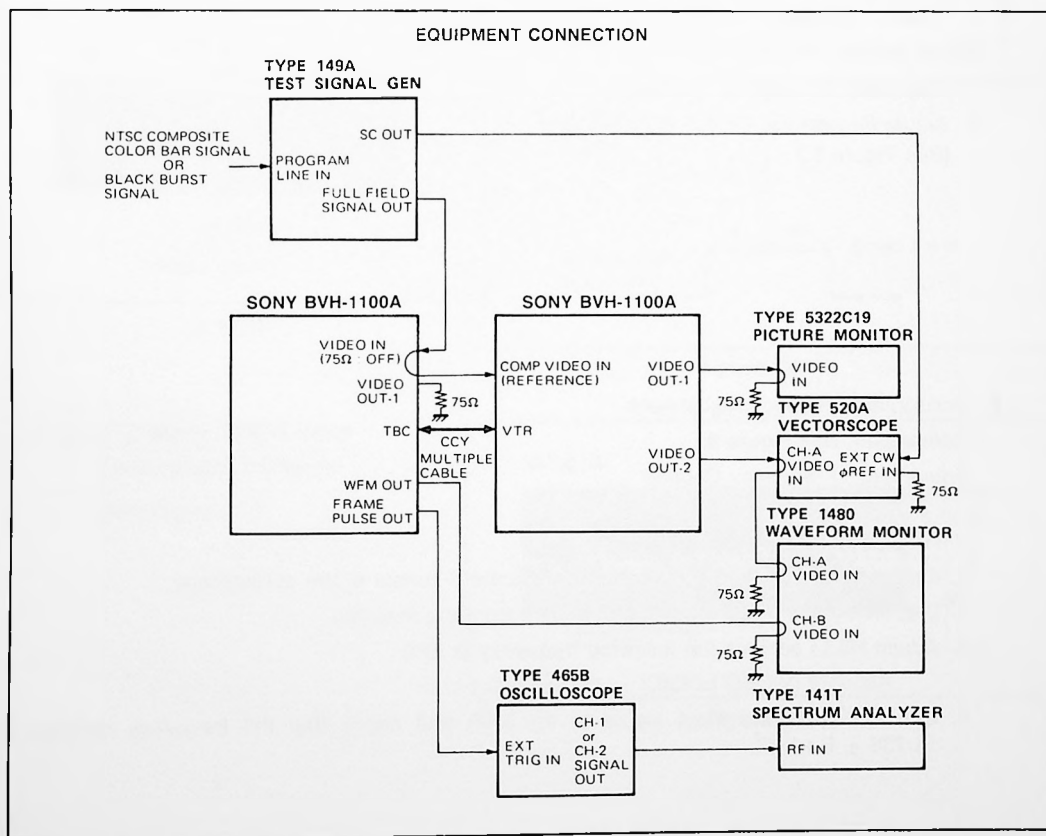


Figure 8

NOTE: When performing the Color Framing LED adjustment, set the VTR in the Normal Playback Mode with the tape on which the color frame information has been recorded. After the adjustment, set the NORMAL/ADJUST switch to the NORMAL position.

- E. Record the COLOR BAR or MULTIBURST signal for several minutes.
- F. While playing back the recorded portion, set the VTR in the PLAY  $\blacktriangleright$  P-JOG  $\blacktriangleright$  PLAY alternately and observe the TBC output video signal on the waveform monitor and color monitor and check the following:
  - Make sure that no Horizontal Phase Shift and HUE inverse occurs at the mode switching change.
  - Make sure that the DIRECT process (Full Band) is established in the normal ( $\times 1$ ) playback mode.

## II. Logic System Adjustment

### A. Switching Position Adjustment

Connection: See Figure 8

Equipment: Oscilloscope

VTR Mode: REC  $\blacktriangleright$  PLAYBACK

PB HEAD SELECT: R/P position

Signal Source: Any Signal

1. Play back the tape just recorded.
2. Adjust R11 on the VIDEO LOGIC Board.  
(See Figure 9.)

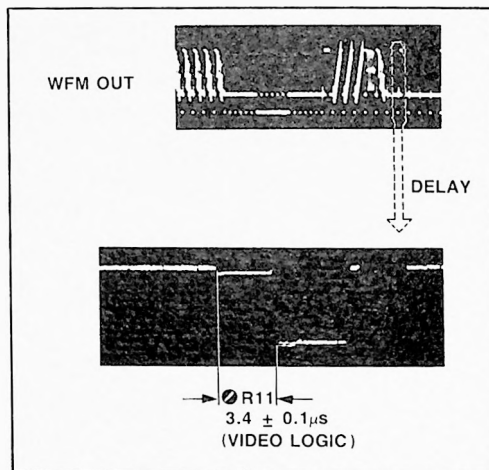


Figure 9

### B. Horizontal Frequency Adjustment

Connection: See Figure 8

Equipment: Frequency Counter  
Oscilloscope

VTR Mode: STOP (Auto E-E)

1. Connect the frequency counter to the channel-1 output of the oscilloscope.
2. Disconnect the video input signal source from the machine.
3. Adjust R8 to achieve the following frequency at TP2:  
R8: TP2 (VIDEO LOGIC) =  $15.735 \pm 0.1$  kHz
4. Connect the video input signal to the VTR and check that the frequency remains at  $15.735 \pm 0.1$  kHz.

### III. DT-1 Board Alignment

- A. 1. When the board engraved with No. 1-600-181-11 is used.

VTR Mode: PLAY mode

Oscilloscope: DC mode

R24: TP2 =  $-2 \pm 0.2V$  dc

R35: IC1-10 =  $-5 \pm 0.2V$  dc

R34: IC1-6 =  $1 \pm 0.2V$  dc

2. When the board engraved with No. 1-600-181-12, -13, -14 is used.

VTR Mode: JOG (see table below)

Oscilloscope: DC mode

| ADJ   | VTR MODE  | TP  | SPECIFICATION     |
|-------|-----------|-----|-------------------|
| ⊗ R50 | - 1/8 JOG | TP3 | $65 \pm 2$ msec   |
| ⊗ R54 | + 1 JOG   | TP2 | $12.5 \pm 1$ msec |

- B. VTR Mode: STOP mode

EE/PB Switch: EE position

(See Figure 10.)

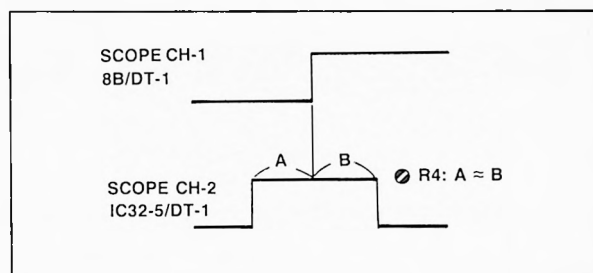


Figure 10

- C. VTR Mode: SLOW mode

Oscilloscope: DC mode

(See Figure 11.)

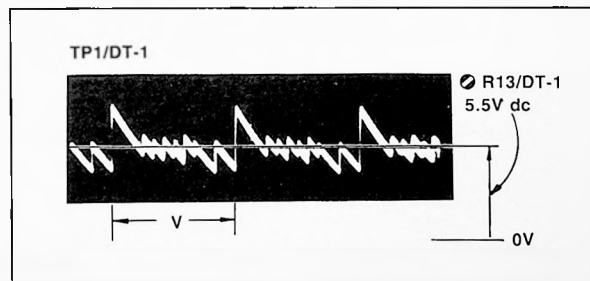
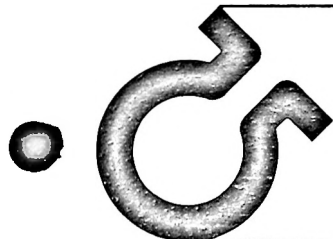


Figure 11



DO



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June, 1982

model: BVH-1100

bulletin no.: 21

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED TAPE TENSION DURING TRANSITION FROM PLAY TO PROGRAM JOG $\frac{1}{5}$

### DESCRIPTION

In a BVH-1100 equipped with the DT option, there is a momentary loss of tape tension around the Head Drum when the machine is set into PROGRAM JOG  $\frac{1}{5}$  from PLAY. The resulting loss of head-to-tape contact causes a distortion or break-up in the output video signal.

The problem can be avoided by adding a new circuit to the Capstan Board. (See Figure 1.) This circuit will enable the "Still Det" circuit (and thus the "Still Voltage Gen" circuit), and temporarily inhibit the "Step Trigger" input to the board. This modification is applicable to serial numbers 10,300 and lower.

### PARTS REQUIRED

| Part No.     | Description                            | Qty. |
|--------------|--|------|
| 1-602-718-00 | Circuit Board, CAP-2                   | 1    |
| 1-246-497-00 | Res, Carbon, 10K, $\frac{1}{4}$ W, 5%  | 1    |
| 1-246-505-00 | Res, Carbon, 22K, $\frac{1}{4}$ W, 5%  | 2    |
| 1-246-525-00 | Res, Carbon, 150K, $\frac{1}{4}$ W, 5% | 1    |
| 1-131-216-00 | Cap, Tantal, 1.5 $\mu$ F, 35V, 10%     | 1    |
| 8-724-375-01 | Transistor, 2SC403C                    | 1    |
| 8-729-384-48 | Transistor, 2SA844D                    | 1    |
| 8-759-140-13 | IC, MC14013BCP                         | 1    |

Reference: VS 80-93 / T.M.

Page 1 of 4

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

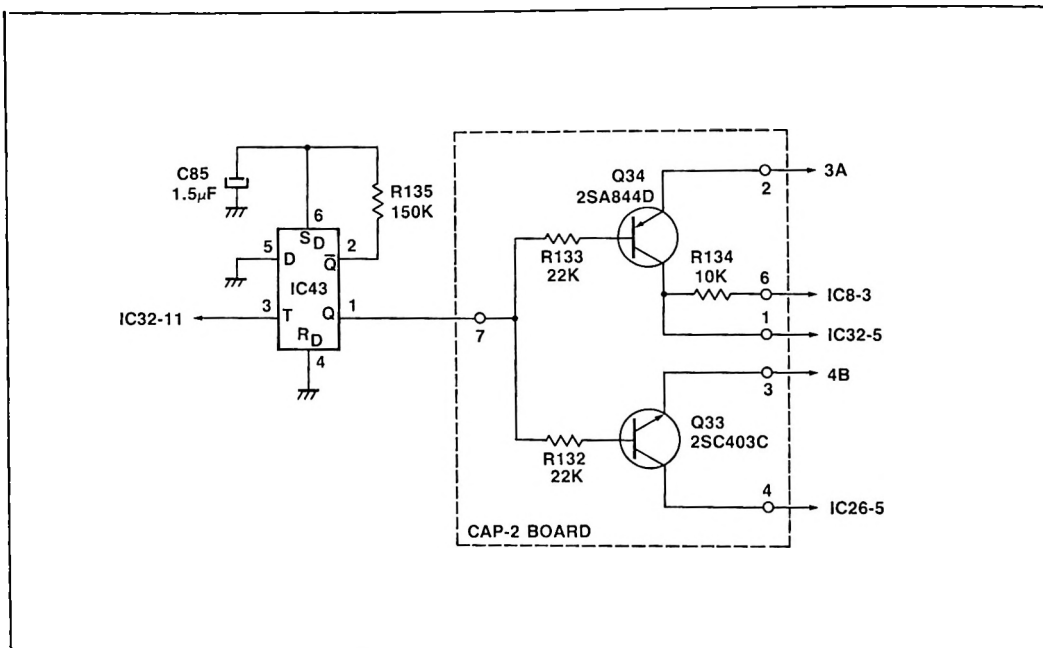


Figure 1

## MODIFICATION PROCEDURE

### CAP-2 Board

1. Mount the components and jumper wires on the new board as indicated in Figures 1 and 2.
2. Connect jumper wires as indicated in Figure 2.
3. Mount the new board on Capstan Board with double sided tape as indicated in Figure 3A.

### Capstan Board

1. Cut the trace between edge connector pin 4B and IC26-5 as indicated in Figure 3B.
2. Cut the trace between IC8-3 and IC32-5 as indicated in Figure 4B.
3. Add the 150KΩ resistor to IC43-2 and -6 as indicated in Figure 4C.
4. Add the 1.5μF capacitor to IC43-6 and ground as indicated in Figure 4C.
5. Jumper IC43-4 and -5 to IC27-8 (Ground) as indicated in Figure 4C.
6. Jumper IC43-3 to IC32-11 as indicated in Figure 4C.

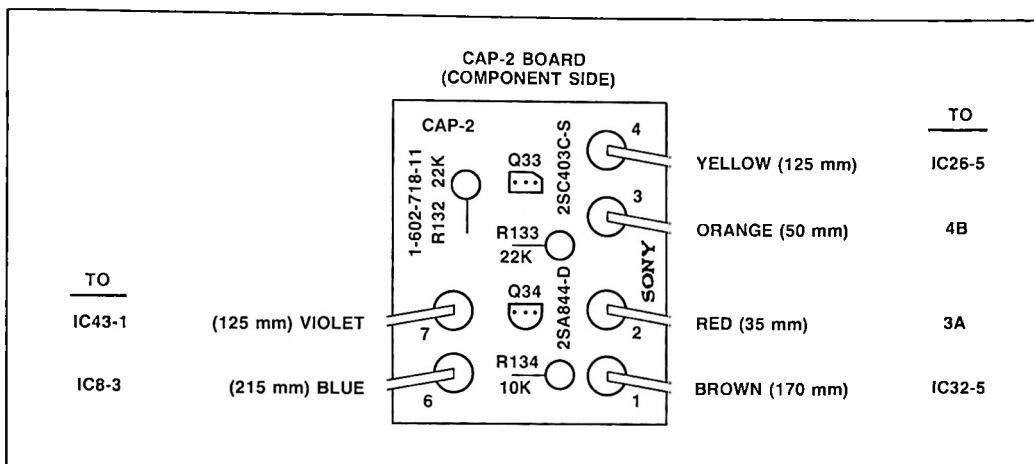


Figure 2

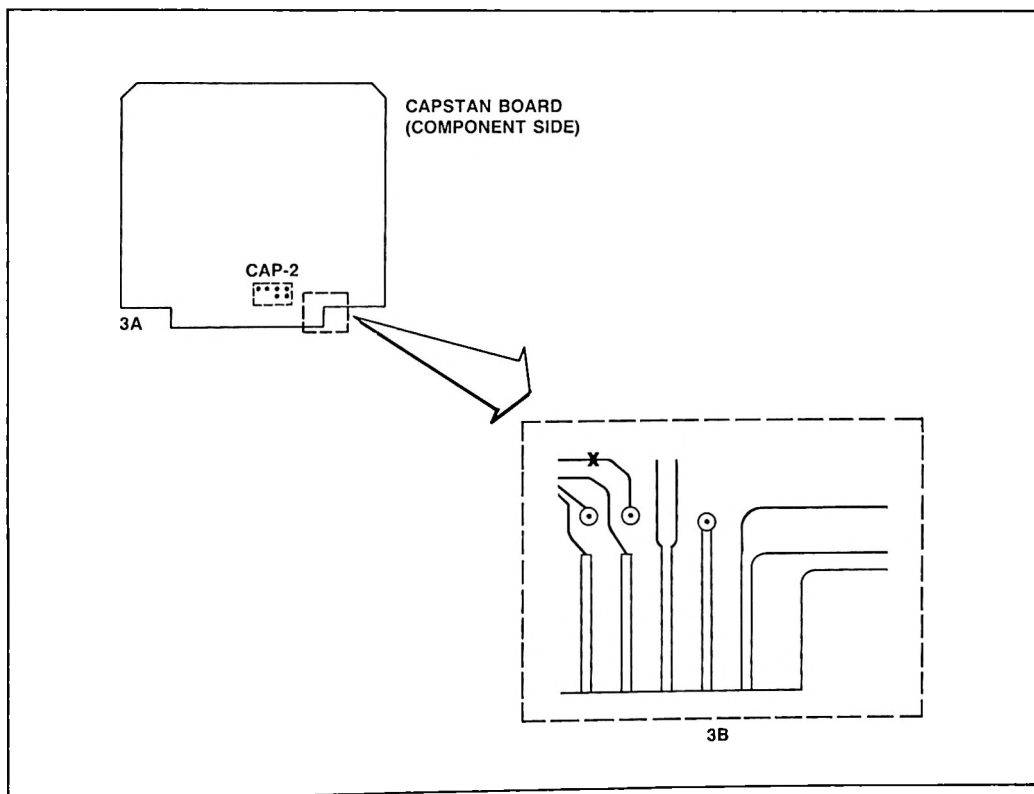


Figure 3

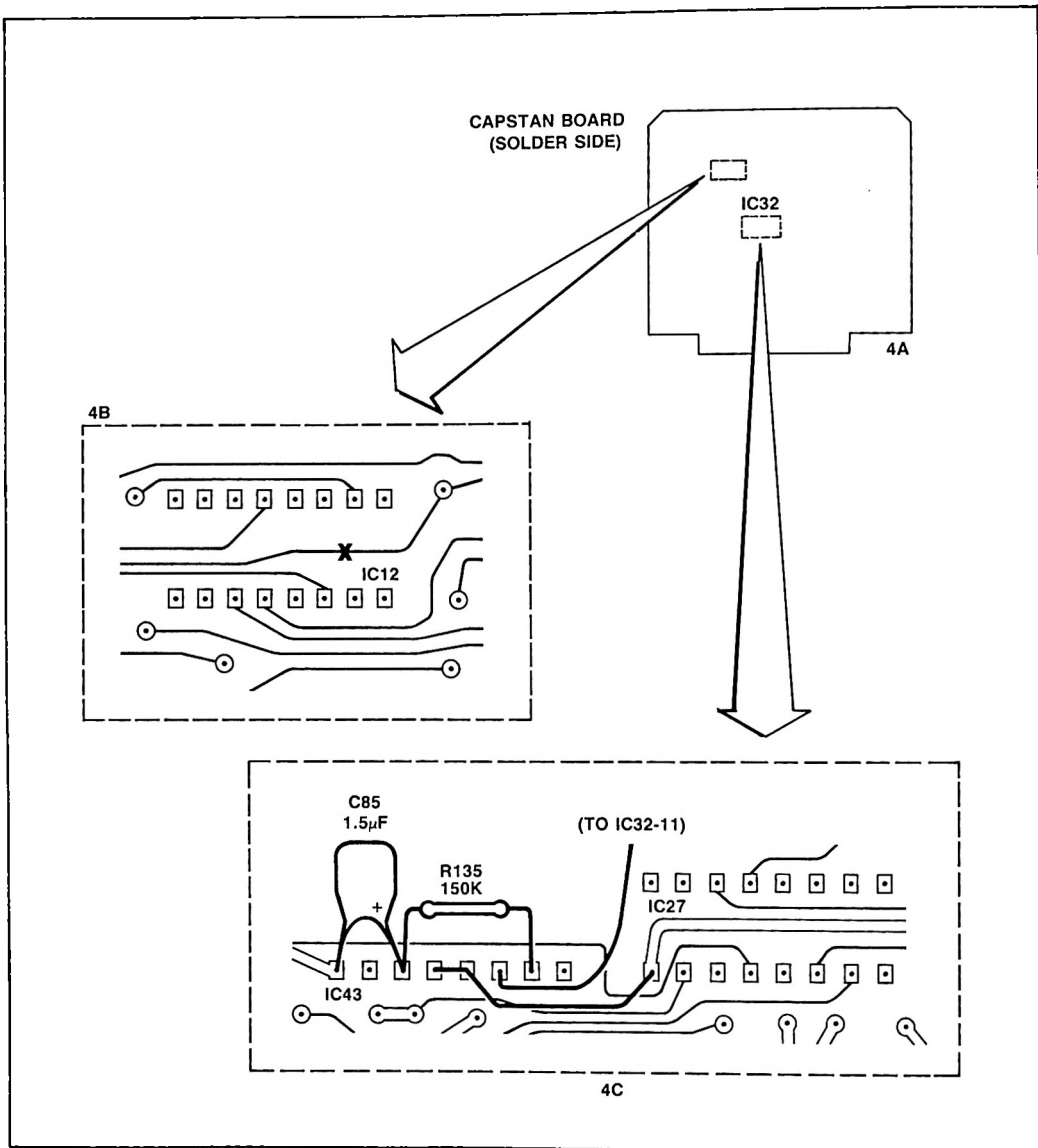
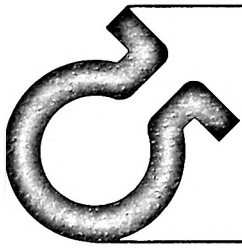


Figure 4



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June, 1982

model: BVH-1000A/BVH-1100

bulletin no.: 20

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## NEW PHOTO COUPLERS

This modification is applicable to BVH-1000A serial numbers below 21,001 and BVH-1100 serial numbers below 10,901.

### DESCRIPTION

The BVH Series VTRs use photo couplers to sense the following conditions:

- Search dial movement/position
- Tape movement
- Reel motor rotation
- Tape presence/absence

The photo couplers used in these applications on older machines have been superseded by new parts listed in Table 1. When a new photo coupler replaces the old one for the first time, it is necessary to perform the modifications described in this bulletin.

Table 1

| Photo Coupler Designation |     | New Component | Part No.     | New Mounting Board (First Replacement) | Part No.     |
|---------------------------|-----|---------------|--------------|--|--------------|
| Search Dial Direction     | IC1 | ON1102SF      | 8-719-411-02 | SE-1 Board                             | 1-603-024-00 |
| Search Dial Direction     | IC2 |               |              |  |              |
| Fwd/Rev Counter Reset     | IC3 |               |              |  |              |
| Tape End Sensor           | IC9 |               |              |  |              |
| S-Reel Rotation Sensor    | IC4 | ON1106        | 8-719-447-81 | SE-2 Board                             | 1-603-025-00 |
| T-Reel Rotation Sensor    | IC6 |               |              |  |              |
| Tape Counter Roller       | IC7 |               |              |  |              |
| Tape Counter Roller       | IC8 |               |              |  |              |

### BVH-1000A MODIFICATION PROCEDURE

#### Mechanical

1. Refer to the maintenance manual for removal/installation information.
2. IC1, 2, 3 and 9 require an additional fiber washer to insulate the new mounting board from ground. (See Figure 1.)

Reference: VS 80-02

Page 1 of 5

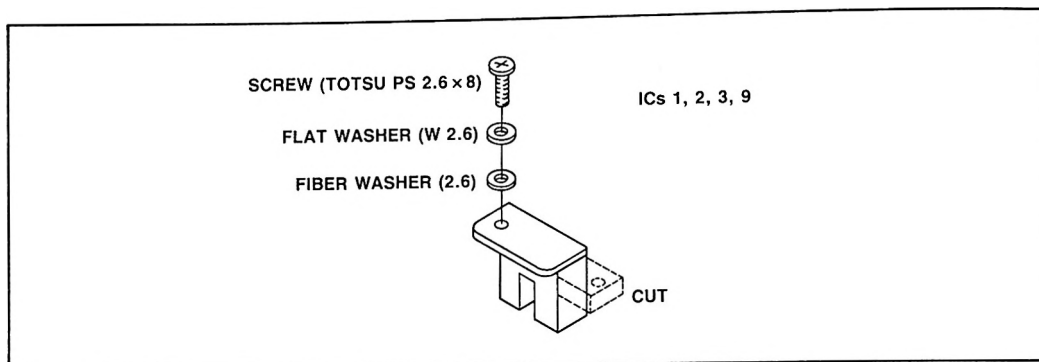


Figure 1

## Electrical

- Table 2 indicates the component changes to be made when a given photo coupler is replaced.

Table 2

| Photo Coupler Replaced | Circuit Board | Component Designation | New Value            | Part No.     |
|------------------------|---------------|-----------------------|----------------------|--------------|
| IC1                    | SYS SW-2      | R5                    | 2.4K $\Omega$        | 1-246-482-00 |
| IC2                    |               | R6                    |                      |              |
| IC3                    |               | R4                    |                      |              |
| IC9                    | Coupler       | R2                    | 5.6K—15K<br>Selected |              |
| IC4                    | Coupler-S     | R12                   |                      |              |
| IC6                    | Coupler-T     | R11                   |                      |              |

- When IC1 or IC2 has been replaced (and R5 or R6 replaced), the specification in Figure 2 must be met.

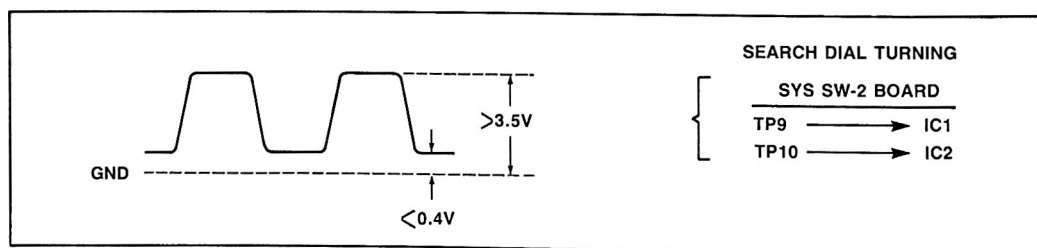


Figure 2

- When IC3 has been replaced (and R4 replaced), the following specification must be met.

## Shuttle Mode

### SYS SW-2 Board

TP8  $\leq 0.4V$   
 $> 3.5V$

Search dial in center "detent"  
 Search dial not in center "detent"

4. When IC9 has been replaced (and R2 replaced), the following specification must be met.

Coupler Board

Voltage across R2  $> 3.5V$   
 $< 0.4V$

No tape present

Tape interrupting photo coupler

5. When IC4 has been replaced, R12 on the Coupler-S Board must be selected in order to meet the specification in Figure 3.

When IC6 has been replaced, R11 on the Coupler-T Board must be selected in order to meet the specification in Figure 3.

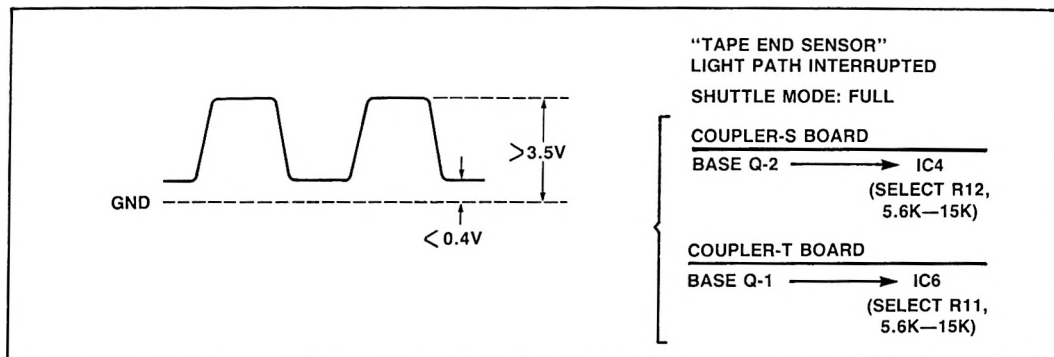


Figure 3

6. When IC7 or IC8 are replaced, the specifications in Figure 4 and Figure 5 must be met.

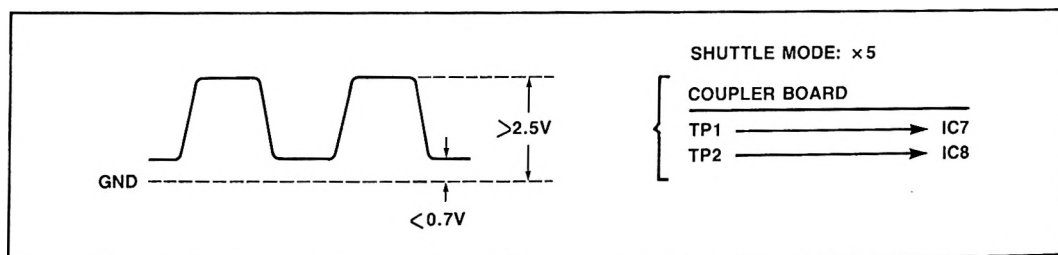


Figure 4

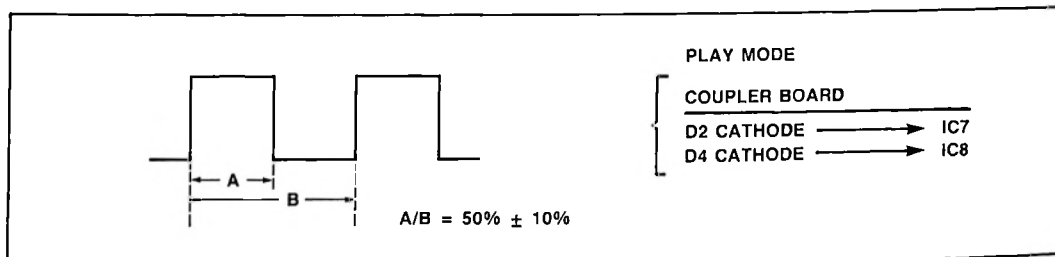


Figure 5

7. If the specifications in any of the preceding sections cannot be met, replace the photo coupler with another new photo coupler.

## RECOMMENDATION

When changing from the old version of the photo coupler to the new version, replace the following photo couplers at the same time.

- a) IC1, IC2 and IC3 (Search Dial Sensors)
- b) IC4 and IC6 (Reel Rotation Sensors)
- c) IC7 and IC8 (Counter Roller Sensors)

## BVH-1100 MODIFICATION PROCEDURE

### Mechanical

1. Refer to the maintenance manual for removal/installation information.
2. IC1, 2, 3 and 9 require an additional fiber washer to insulate the new mounting board from ground. (See Figure 1.)

### Electrical

1. Table 3 indicates the component changes to be made when a given photo coupler is replaced.

Table 3

| Photo Coupler Replaced | Circuit Board | Component Designation | New Value     | Part No.     |
|------------------------|---------------|-----------------------|---------------|--------------|
| IC1                    | SYS SW-2      | R5                    | 2.4K $\Omega$ | 1-246-482-00 |
| IC2                    |               | R6                    |               |              |
| IC3                    |               | R4                    |               |              |
| IC9                    | Coupler       | R2                    |               |              |
| IC4                    | Coupler-S     | R10                   | 20K $\Omega$  | 1-224-931-00 |
| IC6                    | Coupler-T     |                       | Variable      |              |

2. When IC1 or IC2 has been replaced (and R5 or R6 replaced), the specification in Figure 6 must be met.

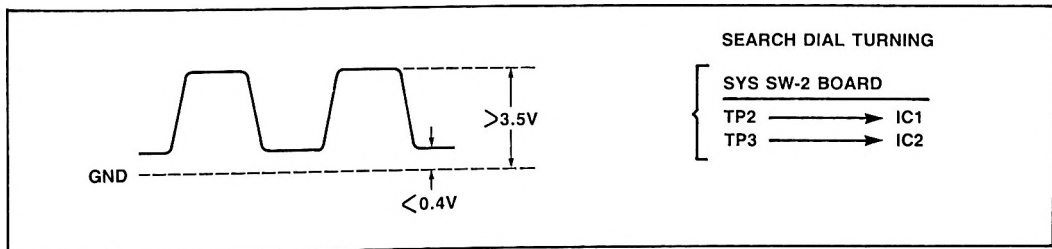


Figure 6



- When IC3 has been replaced (and R4 replaced), the following specification must be met.

#### Shuttle Mode

#### SYS SW-2 Board

|     |          |                                    |
|-----|----------|------------------------------------|
| TP1 | $< 0.4V$ | Search dial in center "detent"     |
|     | $> 3.5V$ | Search dial not in center "detent" |

- When IC9 has been replaced (and R2 replaced), the following specification must be met.

#### Coupler Board

|                   |          |                                 |
|-------------------|----------|---------------------------------|
| Voltage across R2 | $> 3.5V$ | No tape present                 |
|                   | $< 0.4V$ | Tape interrupting photo coupler |

- When IC4 or IC6 has been replaced (and R10 replaced on the appropriate board), the specification in Figure 7 must be met.

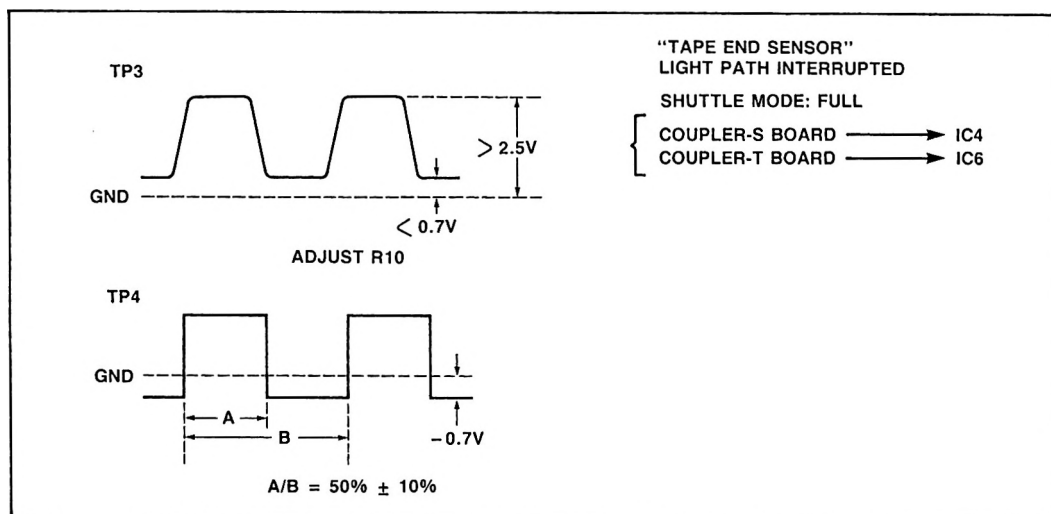


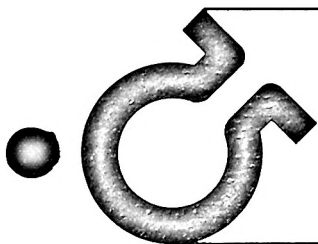
Figure 7

- When IC7 or IC8 has been replaced, the specification in Figure 4 and Figure 5 must be met.
- If the specifications in any of the preceding sections cannot be met, replace the photo coupler with another new photo coupler.

#### RECOMMENDATION

When changing from the old version of the photo coupler to the new version, replace the following photo couplers at the same time.

- IC1, IC2 and IC3 (Search Dial Sensors)
- IC4 and IC6 (Reel Rotation Sensors)
- IC7 and IC8 (Counter Roller Sensors)



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June, 1982

model: BVH-1100

bulletin no.: 19

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

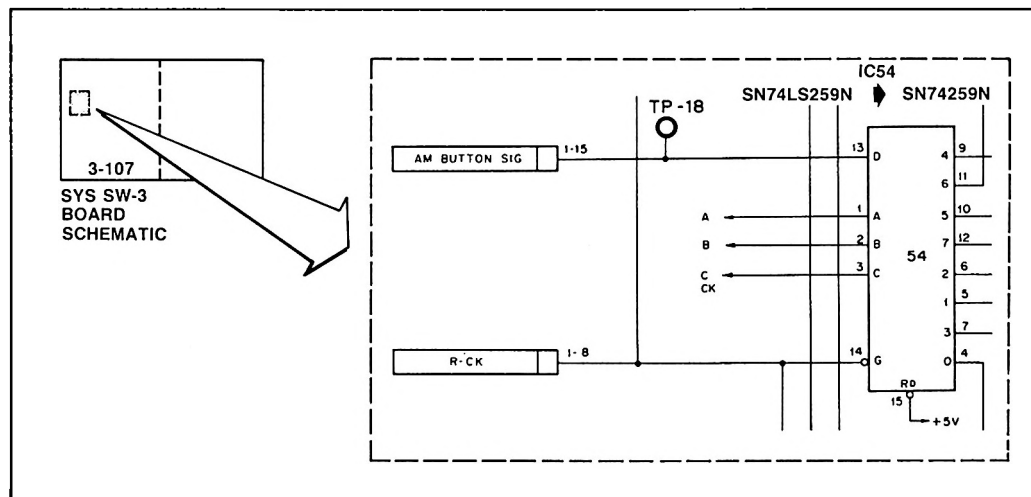
## IMPROVEMENT OF AUTO EDIT RECALL OPERATION

### DESCRIPTION

When the TRIM IN button is pressed after completion of auto editing to correct the IN point, the previously entered IN point should be recalled, the IN ENT lamp should light and the OUT ENT lamp should flash. If IC54 on the SYS SW-3 Board malfunctions, however, the OUT point will also be recalled and the OUT ENT lamp will remain lit. The problem is caused by inadequate response time of the low-power Schottky device used for IC54 (SN74LS259N). The standard SN74259N should be substituted to clear this problem.

### PARTS REQUIRED

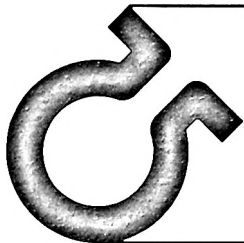
| Former       |                | New          |              | Location |
|--------------|----------------|--------------|--------------|----------|
| Part No.     | Description    | Part No.     | Description  | IC54     |
| 8-759-902-59 | IC, SN74LS259N | 8-759-942-59 | IC, SN74259N | (A22)    |



Reference: VTRW- 80-071 / VS 80-12

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



SONY  
Broadcast



# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: May, 1982

model: BVH-1100

bulletin no.: 18

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## AUDIO-3 OUTPUT MUTED FOR 8MS DURING REVIEW MODE

### DESCRIPTION

This modification is applicable to serial numbers 10,600 and lower. During the REVIEW mode the output from Audio-3 may be muted for 8ms at either the "In" point or the "Out" point of the edit. This occurs because of a spurious pulse at IC27-4 which is caused by the propagation delay of IC7 (See Figure 1.) The effect of this pulse can be eliminated with the following modification. (See Figure 2.)

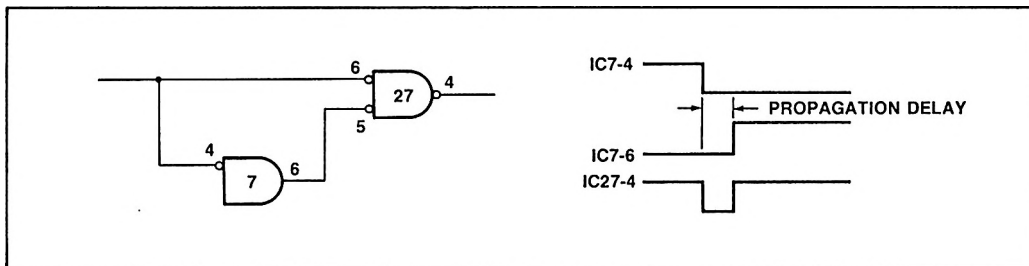


Figure 1

### PARTS REQUIRED

| Part No.     | Description                           | Qty. |
|--------------|---------------------------------------|------|
| 1-244-705-00 | Res, Carbon, 22K $\Omega$ , 5%, 1/4 W | 1    |
| 1-107-085-00 | Cap, Mica, 100pF, 5%, 50V             | 1    |

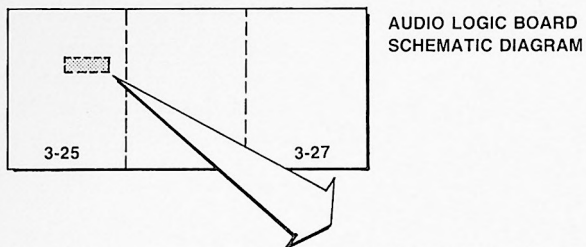
### MODIFICATION PROCEDURE

1. Cut the trace to IC15-8 on the solder side of the Audio Logic Board (See Figure 3.)
2. Connect the 100pF capacitor between pins 7 and 8 of IC15.
3. Connect the 22K $\Omega$  resistor between IC15-8 and IC27-4.

Reference: VS 80-19

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



AUDIO LOGIC BOARD  
SCHEMATIC DIAGRAM

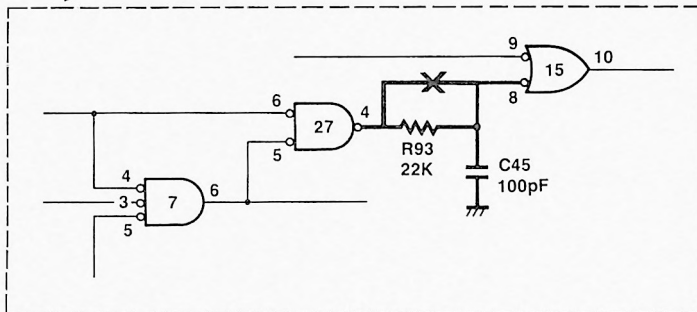
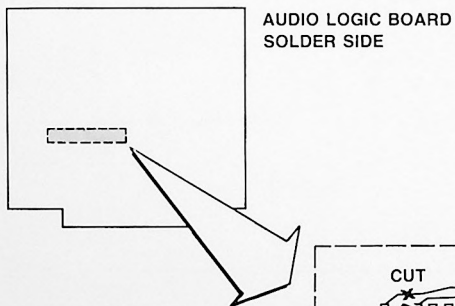


Figure 2



AUDIO LOGIC BOARD  
SOLDER SIDE

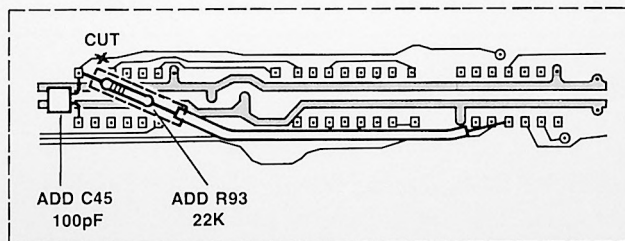


Figure 3

## PROVIDING A COLOR FRAME INTERFACE FOR THE BVT-1000

### GENERAL

In the BVH-1100 series, the PLAY-STATUS signal required by the TBC for color frame phase-lock is included in a multi-pin connector cable. The BVT-1000 requires this signal as a BNC input. This modification makes the required signal available at a spare BNC connector on the rear panel of the BVH-1100. The modification is applicable to all serial numbers.

### MODIFICATION PROCEDURE

1. Swing the card cage open for access to the Mother-1 Board (See Figure 1.)
2. Prepare one end of a sub-miniature coax cable (RG-174 or equivalent) for soldering to the Mother-1 Board.
3. Connect center conductor of coax to CN126 pin 22A and connect shield to ground (pin 30AB).
4. Dress the coax cable along existing cable routes as shown in Figure 1, then connect to spare BNC connector.
5. Check for strain on coax cable while moving the card cage, then close and secure card cage.

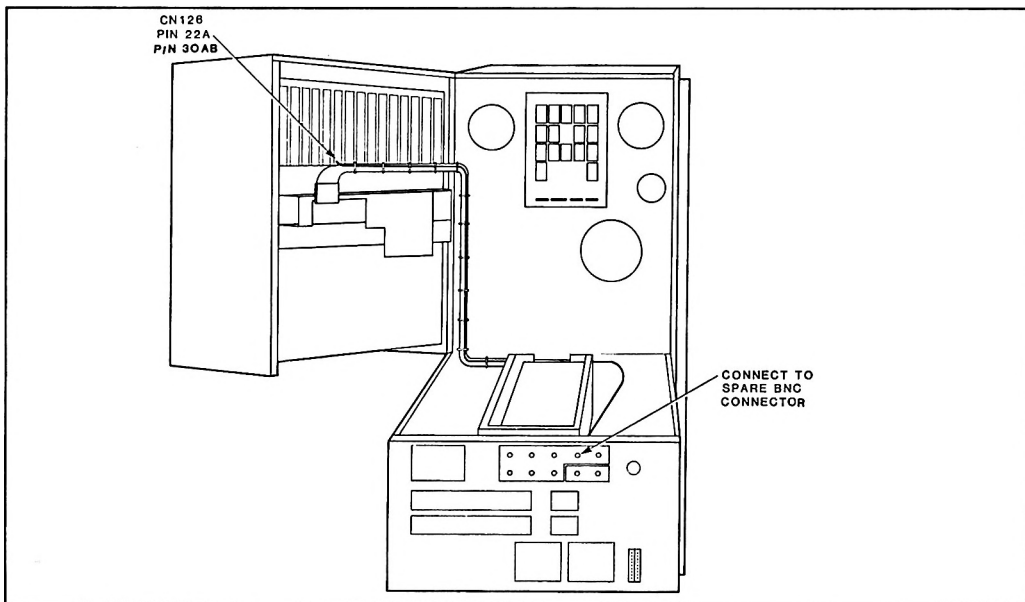


Figure 1

SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1981

model: BVH-1100

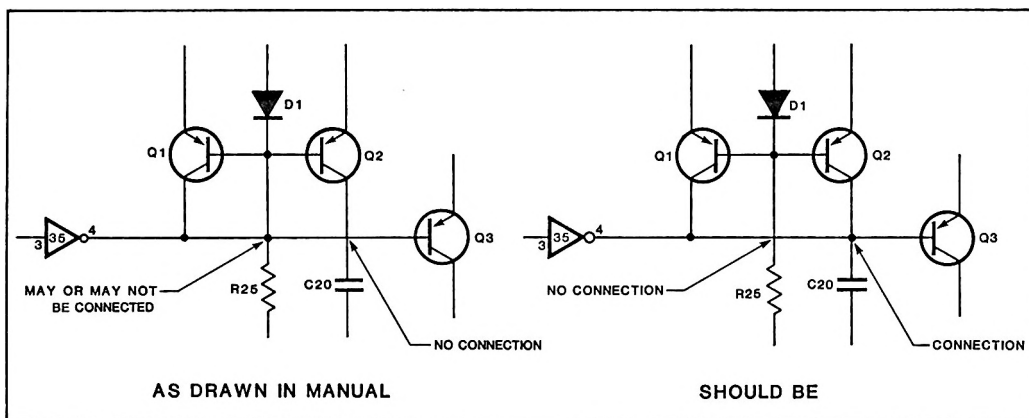
bulletin no.: 15

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

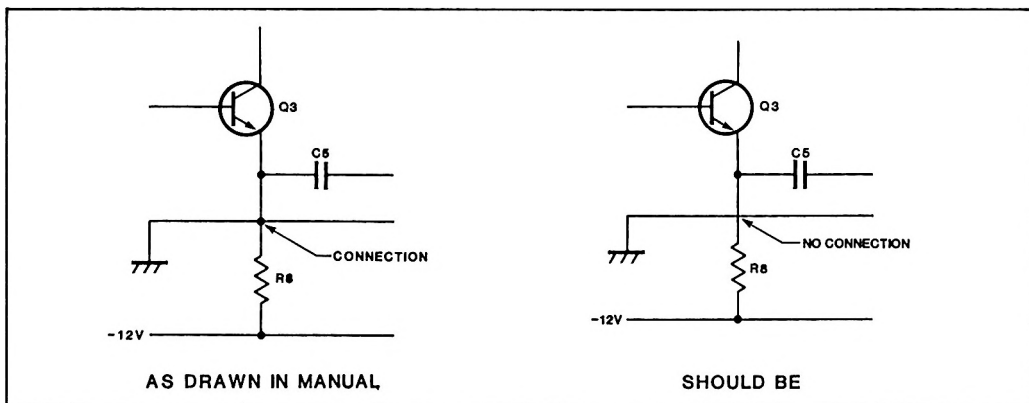
## CHANGES TO OPERATION AND MAINTENANCE MANUAL

Please make the following corrections to your BVH-1100 Operation and Maintenance Manual (5th Edition, Serial No. 10,001 and Higher).

### 1. Drum Board Schematic, Page 3-79



### 2. Framing Board Schematic, Page 3-84



Reference: KB/GD

Page 1 of 3

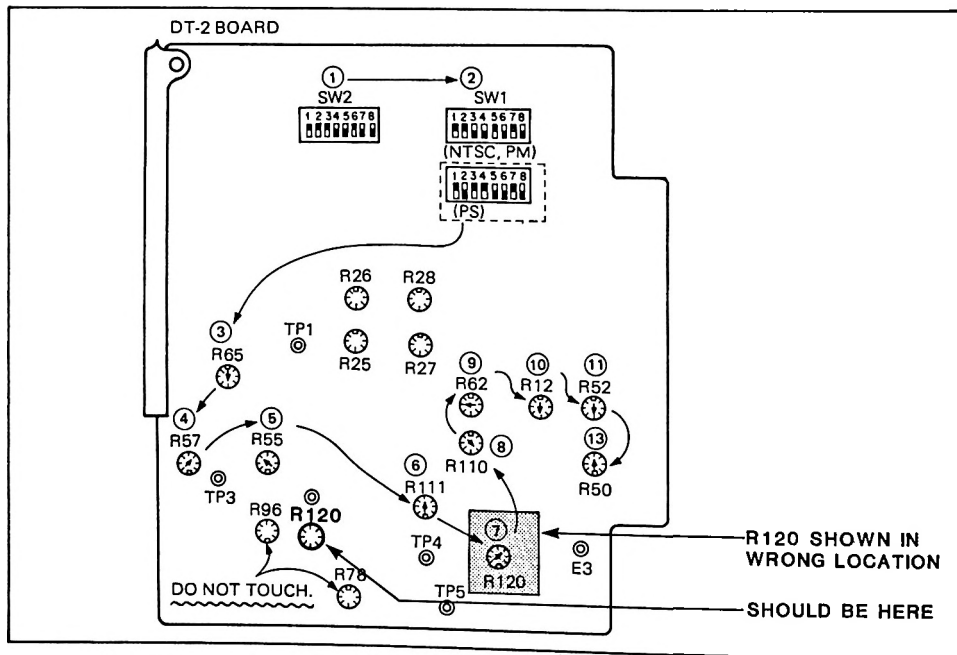
This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

### 3. Table 6-1, Reel Motor Torque Adjustment Procedure, Page 6-6

| Adjustment Step   | Measuring Reel Table or Measuring point | Shorting points    | Tension scale (gr) | Function mode  | Adjustment points                          | Spec.       |
|---|---|--------------------|--------------------|--|--|-------------|
| "T" Reel Table Take-up Torque Adjustment  | T                                       | —                  | 200                | STILL  | REEL-1 R47                                 | 150 ± 10gr  |
| "S" Reel Table Take-up Torque Adjustment  | S                                       | —                  | 200                | REC PLAY   | REEL-1 R90                                 | 150 ± 10gr  |
| (Single Pinch Roller Operation) "S" Reel Table Back Torque Adjustment in FWD mode                     | Reel-1 TP-5 (see the note 1)            |                    |                    | with DT unit: 3 PLAY (PB Head Select)<br>without DT unit: FWD 1/4          | REEL-1 R95                                 | 1V ± 0.3V   |
| (Single Pinch Roller Operation) "S" Reel Table Take-up Torque Adjustment in REV mode (see the note 2) | Reel-1 TP-5                             |                    |                    | (PROGRAMMED JOG mode)<br>with DT unit: REV 1/5<br>without DT unit: REV 1/4 | REEL-1 R104                                | 8V ± 0.8V   |
| Take-up Torque Adjustment after Tension Release (see the note 3)                                      | Q6E                                     | Q33B-E1 (Q101B-E1) |                    | STOP   | R100 (R207)                                | 3.9V ± 0.1V |
| FF & REW Back Torque Adjustment   | S                                       | REEL-2 TP-5-TP-6   | 200                | FF   | REEL-2 R161                                | 100 ± 10gr  |
| FWD Search Torque Adjustment  | S                                       | REEL-2 TP3-TP-6    | 500                | FWD 10 fold Search   | REEL-2 R71                                 | 450 ± 10gr  |
| REV Search Torque Adjustment  | S                                       | REEL-2 TP-3-TP-6   | 200                | REV 10 fold Search   | REEL-2 R73 mechanical center<br>REEL-2 R77 | 100 ± 10gr  |

SHOULD BE Q-33B-E (Q101B-E)

### 4. Supplement-3, Page 2



## 5. Supplement-3, Page 3

### Step 1-5.

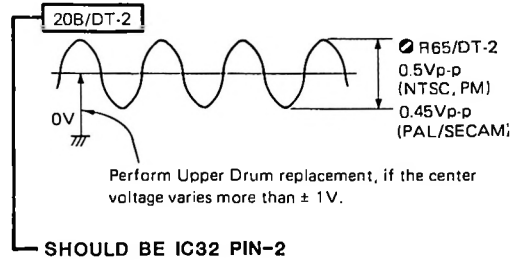
Set the machine in the RECORD mode, then check the following with an oscilloscope.

| TEST POINT<br>DT-2 BOARD | SPECIFICATIONS      | SWITCH/CONTROL            |
|--------------------------|---------------------|---------------------------|
| 2A                       | $0 \pm 0.2V$ dc     | SW1                       |
| TP1                      | $0 \pm 0.2V$ dc     | SW2                       |
| IC23 PIN-1               | $0.7 \pm 0.05V$ dc  | ⊗ R27                     |
| IC23 PIN-7               | $2.1 \pm 0.05V$ dc  | ⊗ R28                     |
| IC24 PIN-1               | $-0.7 \pm 0.05V$ dc | ⊗ R25                     |
| IC24 PIN-7               | $-2.1 \pm 0.05V$ dc | ⊗ R26                     |
| 22B                      | $3 \pm 0.7V$ dc     | Replace the<br>Upper Drum |

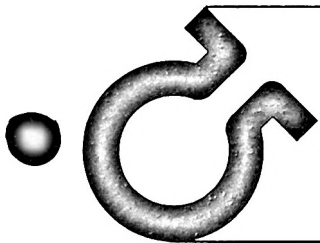
— SHOULD BE IC30 PIN-1

### Step 2-1.

VTR Mode : REC mode  
EE/PB Switch : PB position  
Oscilloscope : 5msec/DIV  
DC mode







**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1981

model: BVH-1100

bulletin no.: 14

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## LOCKING THE TIME CODE TO THE COLOR FRAME

### GENERAL

This modification locks the time code generator to the color frame for accurate color editing. The modification is applicable to BVH-1100 units (serial numbers 10,001–11,000) equipped with Time Code Generator Option CG-1000G, Board P/N 1-585-488-14 or higher.

### PARTS REQUIRED

BVH-1100 Bulletin No. 13 must be implemented before this modification can be made. No additional parts are required for this modification.

### MODIFICATION PROCEDURE

#### Mother-1 Board P/N 1-600-111

1. Serial Numbers 10,001–10,300  
Connect a jumper between CN123 pin 13A (Framing Board) and CN135 pin 14AB (Time Code-1 Board).
2. Serial Numbers 10,301–10,500  
In these units, CN123 pin 13A and CN135 pin 14AB may or may not be connected. If connected to ground, cut the trace and connect as in step 1 above.
3. Serial Numbers 10,501–11,000  
These units have been modified prior to shipment and no modification is necessary.

#### Framing Board P/N 1-588-352

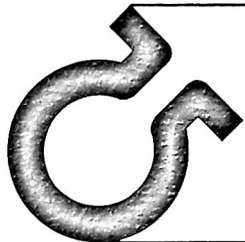
1. Serial Numbers 10,001–10,300  
If not already applied, perform the modification "Stretching the Color Frame Detector Window" (BVH-1100 Bulletin No. 13).
2. Serial Numbers 10,301 and Higher  
No modification necessary.

Reference: VS 80-90

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

Do it free on hand



**SONY**  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1981

model: BVH-1100

bulletin no.: 13

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## STRETCHING THE COLOR FRAME DETECTOR WINDOW

### GENERAL

A slight drift in SC-H phase during the record mode can misalign the color frame with the frame detector. As a result, the color framing pulse may not be added to the control track and frame jump will be experienced during playback. This modification to Framing Board 1-588-352 resolves the problem by widening the color frame detector window. The modification is applicable to serial numbers 10,001 through 11,000.

### PARTS REQUIRED

| Part No.      | Description              | Qty. |
|---------------|--------------------------|------|
| 8-759-900-00* | IC, SN74LS00N            | 1    |
| 8-719-709-25  | Diode, 1S1925P           | 1    |
| 1-102-499-00  | Cap, Ceramic, 120pF, 50V | 1    |

\*Not required if Bulletin 10R has been implemented.

### MODIFICATION PROCEDURES

#### Framing Board 1-588-352-11, -12, -13

1. Install SN74LS00 and designate as IC36. (See Figure 3.) Pin 7 is ground and pin 14 is +5V.

NOTE: If the 15-Hz Reference Pulse Modification has already been installed (Bulletin 10R), this step is not necessary.

2. On foil side of board, connect 120pF capacitor between IC1-1 and IC1-7.
3. Refer to Figure 1 and make the following changes:
  - a. Connect jumper between Q11-B and Q12-B (A, Figure 1).
  - b. Cut trace between Q11-B and DL1-13 (B, Figure 1).
  - c. Cut trace between Q12-E and IC7-10 (C, Figure 1).
  - d. On component side (at silkscreen for R43) cut trace between Q13-E and IC7-9 (D, Figure 1).
  - e. On foil side, connect diode 1S1925P between Q11-E and Q10-E (E, Figure 1).

Reference: VS 80-91

Page 1 of 3

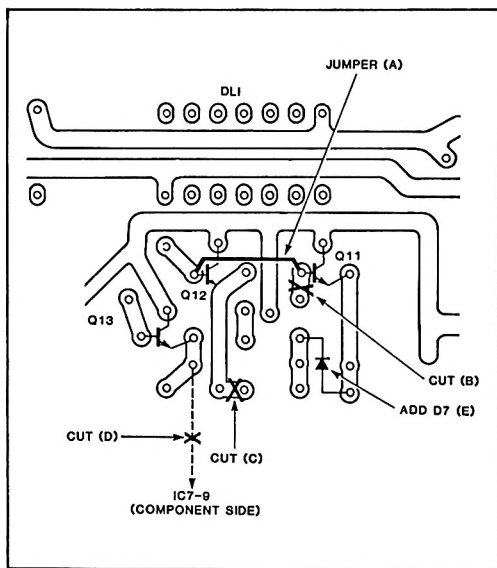
This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

4. On foil side, connect the following jumpers:

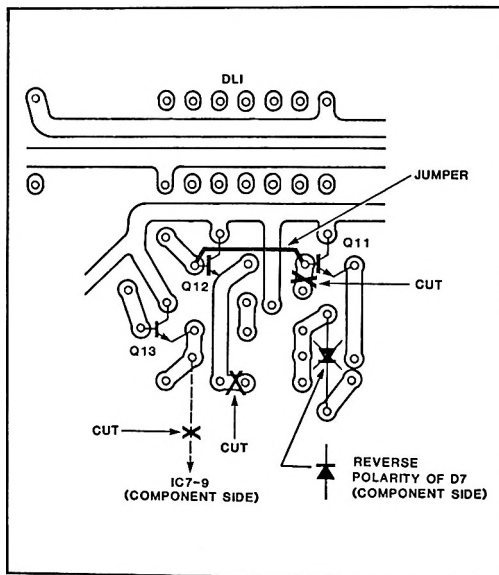
| From         | To     |
|--------------|--------|
| IC8-6 .....  | IC36-4 |
| IC17-6 ..... | IC36-5 |
| IC36-6 ..... | CN13A  |
| IC8-5 .....  | IC7-10 |
| IC8-3 .....  | IC7-9  |

#### Framing Board 1-588-352-14

1. Perform steps 1 through 4 above. (In step 3e, reverse the polarity of diode D7 as shown in Figure 2.)
2. Cut trace between IC8-4 and R107.
3. Remove R107.
4. Cut trace between IC8-5 and CN13A.
5. Connect jumper from IC8-4 to IC8-16.



**Figure 1. Framing Boards With Suffix -11, -12, -13**



**Figure 2. Framing Boards With Suffix -14**

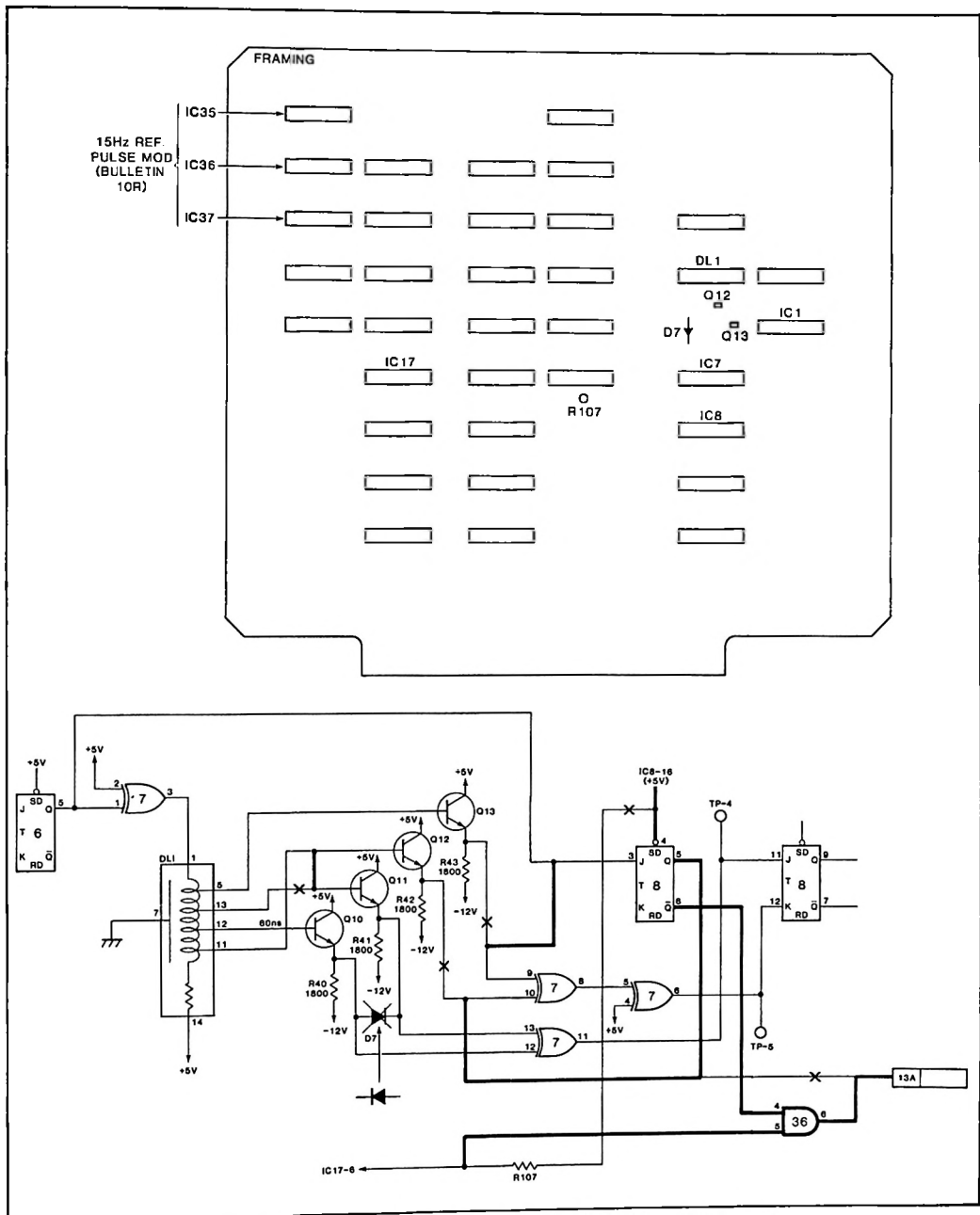
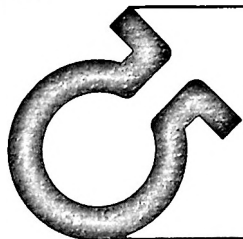


Figure 3. Component Locations and Modification Schematic



SONY  
BROADCAST

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: August, 1981

model: BVH-1100

bulletin no.: 10R

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

**THIS BULLETIN SUPERSEDES BULLETIN NO. 10 DATED JUNE, 1981**

## 15-Hz REFERENCE PULSE SIMPLIFIES COLOR SYNCHRONIZATION

### GENERAL

Adding a 15-Hz reference pulse for the BVT-2000 TBC will simplify Color Synchronization in editing. The following modification to the Framing Board will provide this reference pulse. The modification is applicable to all BVH-1100s.

### PARTS REQUIRED

| Part No.     | Description                 | Qty. |
|--------------|-----------------------------|------|
| 8-759-902-21 | 74LS221                     | 1    |
| 8-759-900-74 | 74LS74                      | 1    |
| 8-759-900-00 | 74LS00                      | 1    |
| 1-123-306-00 | Cap, Elect, 47uF, 10V       | 1    |
| 1-131-236-00 | Cap, Tantal, 1uF, 25V       | 1    |
| 1-246-526-00 | Res, Carbon, 160K, 1/4W, 5% | 1    |
| 1-246-497-00 | Res, Carbon, 10K, 1/4W, 5%  | 1    |

### MODIFICATION PROCEDURE

Perform the modification using three open IC slots on the Framing Board. For the purpose of this procedure the slots have been designated IC35, 36 and 37. (See Figures 1 and 2.)

1. Install and solder ICs 35, 36 and 37.

2. Connect jumpers as follows:

| From          | To      | From         | To      |
|---------------|---------|--------------|---------|
| CN8B .....    | IC35-2  | IC35-5 ..... | IC30-3  |
| IC35-1 .....  | IC35-8  | IC37-6 ..... | IC37-2  |
| IC35-3 .....  | IC35-16 | IC37-1 ..... | IC37-14 |
| IC35-16 ..... | IC35-11 | IC32-6 ..... | IC37-3  |
| IC35-11 ..... | IC35-10 | IC36-3 ..... | IC37-4  |
| IC35-13 ..... | IC36-2  | IC19-9 ..... | IC36-1  |
| IC37-6 .....  | IC35-9  |              |         |

3. Cut trace between IC30-3 and IC19-8.

4. Connect 47uF capacitor between IC35-14 (+) and IC35-15 (-).

5. Connect 160K resistor between IC35-15 and IC35-16.

6. Connect 1uF capacitor between IC35-6 and IC35-7.

7. Connect 10K resistor between IC35-7 and IC35-16.

Reference: Memo 9/80 T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA. 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

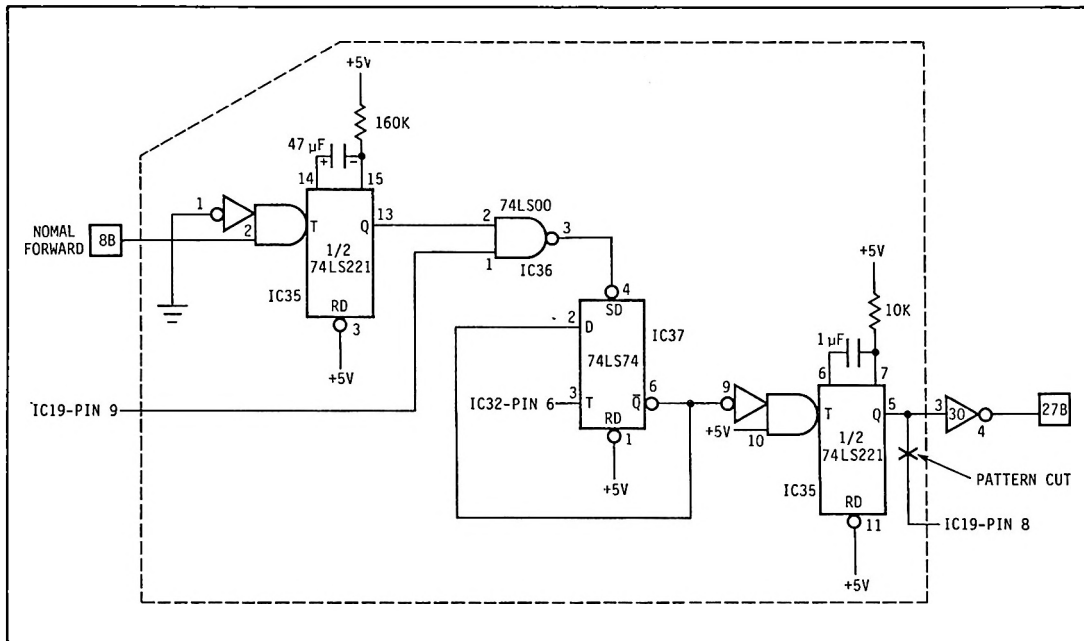


Figure 1.

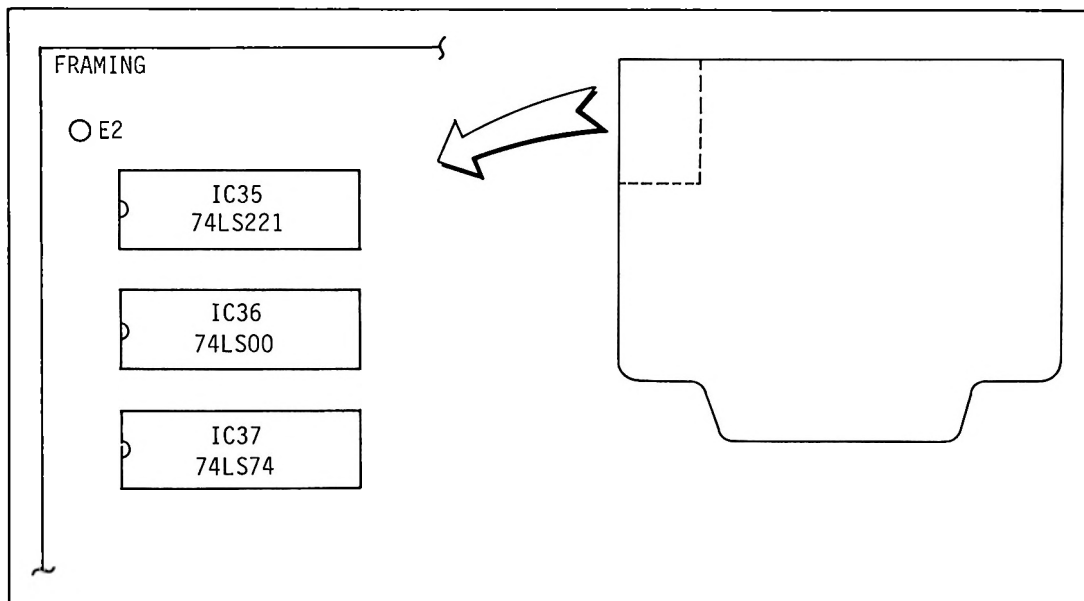
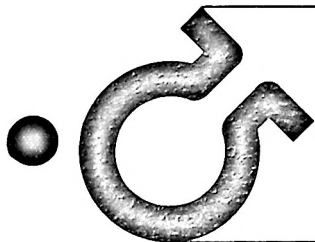


Figure 2.



SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: October, 1981

model: BVH-1100

bulletin no.: 8R

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

**THIS BULLETIN SUPERSEDES BULLETIN NO. 8  
DATED DEC. 1980**

## TAPE TIMER IDLER SLIPPAGE

### GENERAL

After repeated STOP and PLAY commands, the tape may fall away from the tape timer idler. This modification to the Reel-1 and System-3 boards will correct the problem. The modification is applicable to units with serial numbers 11,001 and below.

### PARTS REQUIRED

| Part No.     | Description                    | Qty. |
|--------------|--------------------------------|------|
| 8-759-900-02 | IC, SN74LS02N                  | 1    |
| 8-759-900-14 | IC, SN74LS14N                  | 1    |
| 1-131-218-00 | Cap., Tantal, 3.3 $\mu$ F, 16V | 1    |
| 1-246-473-00 | Res., Carbon, 1K, 1/4W, 5%     | 1    |
| 1-214-140-00 | Res., Metal, 2.2K, 1/4W, 1%    | 1    |

### MODIFICATION PROCEDURE

#### A. Reel-1 Board

1. Replace R42 (4.3K) with 2.2K resistor. (See Figure 1.)
2. Remove C42. (Figure 1.)
3. On foil side, cut trace between pins 10 and 11 of IC25. (Figure 2.)
4. Install SN74LS02N in spare breadboard slot (Figure 1) and designate as IC28. Connect pin 7 to ground and pin 14 to Vcc.
5. Add the following jumpers (Figure 3):

| From          | To     | From         | To      |
|---------------|--------|--------------|---------|
| IC25-11 ..... | IC28-6 | IC28-2 ..... | IC28-3  |
| IC3-5 .....   | IC28-5 | IC28-1 ..... | IC25-10 |
| IC28-4 .....  | IC28-2 |              |         |

Reference: T.Mc./S.T.

Page 1 of 4

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

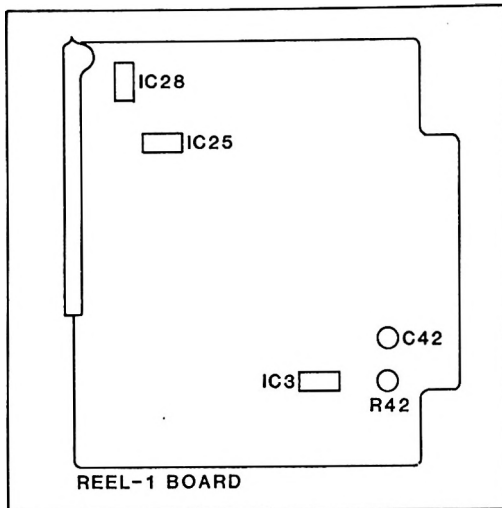


Figure 1

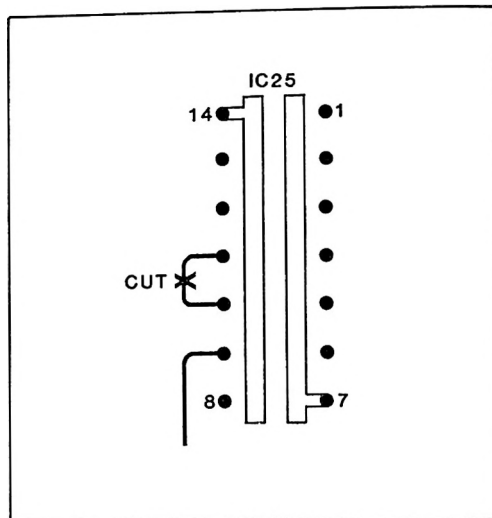


Figure 2

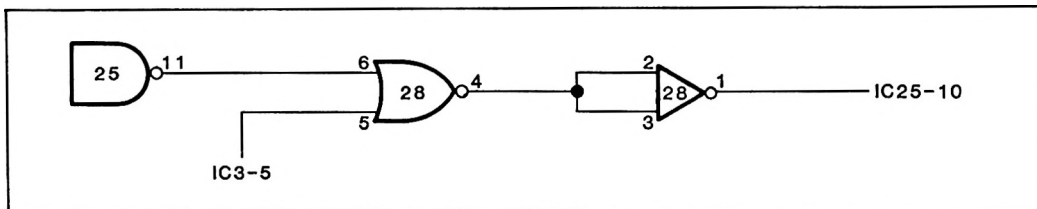


Figure 3

## B. System-3 Board

Different procedures are required for this board, depending on the configuration.

### Procedure I. For Serial Numbers Below 10,701

1. Cut trace at IC37-10. (Make cut on component side, between pins 7 and 8 as shown in Figure 4.)
2. On foil side connect jumper between IC37-10 and IC37-16 (Vcc).
3. With board extended, power up equipment and adjust R69 (Figure 4) to eliminate tape slack around scanner when switching from JOG REV to PLAY.

### Procedure II. For Serial Numbers 10,701 and Above

1. Install 74LS14N in spare slot and designate as IC44. (See Figure 5.) Connect pin 7 to ground and pin 14 to Vcc.
2. Cut trace at IC38-10. (Make cut on component side, between pins 7 and 8 as shown in Figure 5.)
3. On foil side, add 1K resistor between IC44-2 and IC44-3.
4. Add 3.3 $\mu$ F capacitor between IC44-3 and IC44-7 (gnd).



5. Add the following jumpers (Figure 6):

| From         | To      |
|--------------|---------|
| IC33-6 ..... | IC44-1  |
| IC44-4 ..... | IC38-10 |

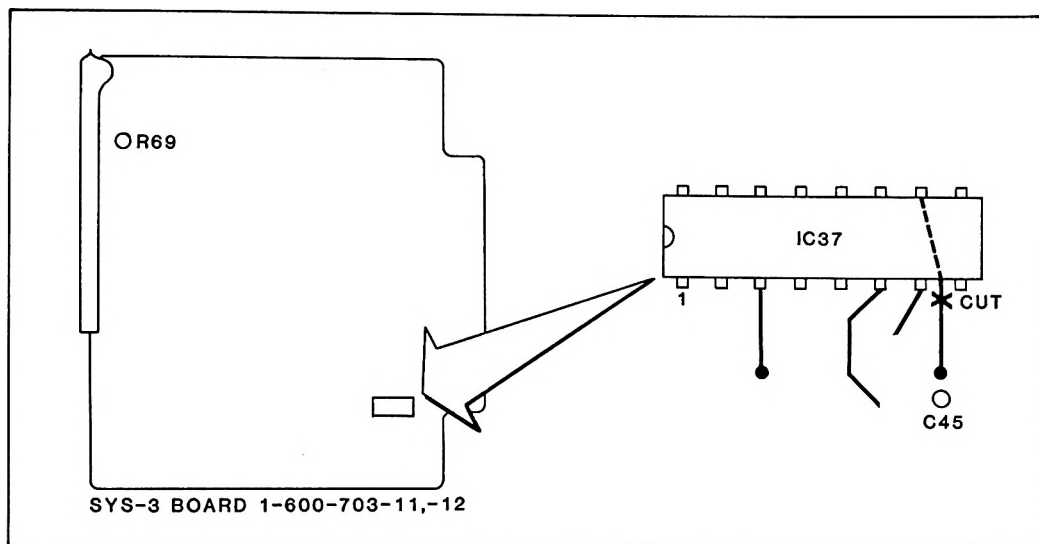


Figure 4

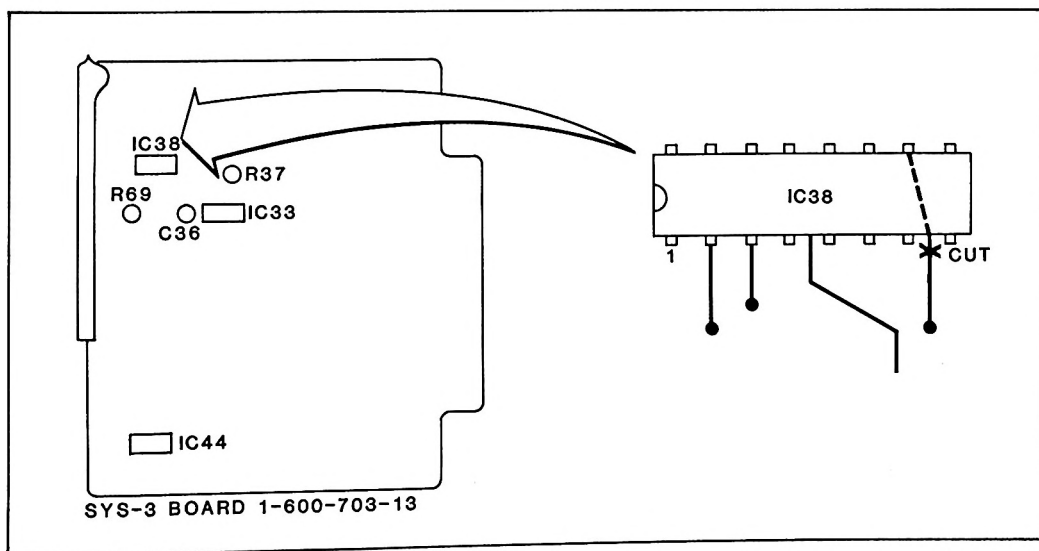


Figure 5

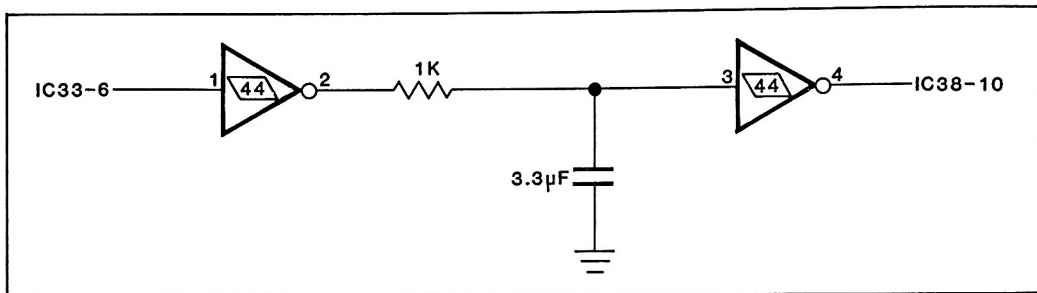


Figure 6

6. Cut trace at IC33-1. (Figure 7.)

7. Add the following jumpers (Figure 8):

| From                    | To      |
|-------------------------|---------|
| Junction, R37/C36 ..... | IC44-13 |
| IC44-12 .....           | IC44-11 |
| IC44-10 .....           | IC33-1  |

8. With board extended, power up equipment and adjust R69 (Figure 5) to eliminate tape slack around scanner when switching from JOG REV to PLAY.

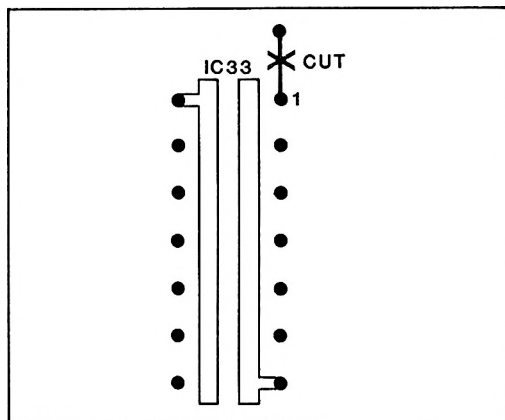


Figure 7

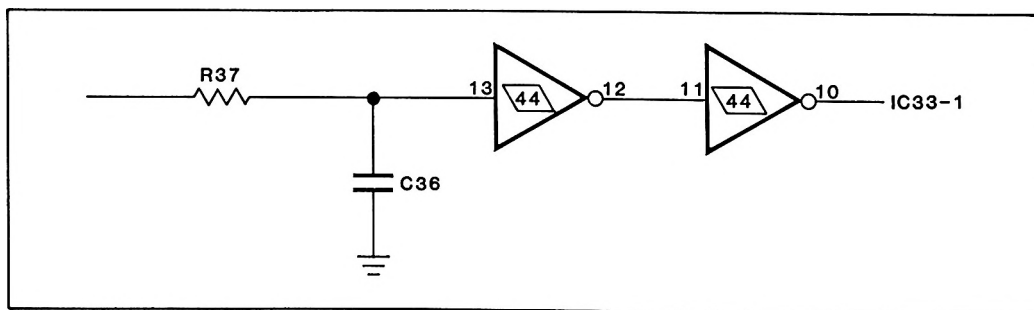


Figure 8

**date:** December 1980

**model:** BVH-1100

bulletin no.: 8

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

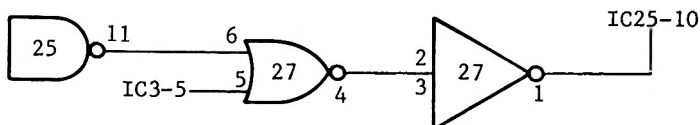
Subject: TAPE TIMER IDLER SLIPPAGE

Applicable to Serial Numbers: 11,001 and below.

Reel-1 board

After repeated STOP and PLAY commands, the tape may fall away from the tape timer idler. The following modification will remedy this situation.

1. Replace R42 with 2200 ohms (1/4 W, 1% 1-214-140-00)  
(former value 4300 ohms 1/4 W, 1% 1-214-147-00)
2. Remove C42 33  $\mu$ F 10V 10% (P.N. 1-131-195-00)
3. Cut trace at IC 25 pin 11.
4. Add IC 27 SN47LS02N (Vcc & GND must be connected).  
(P.N. 8-759-900-02)
5. Add jumpers:
  - (a) IC 27 pin 1 to IC 25 pin 10;
  - (b) IC 25 pin 11 to IC 27 pin 6;
  - (c) IC 27 pin 5 to IC 27 pin 5;
  - (d) IC 27 pin 3 to IC 27 pin 2;
  - (e) IC 27 pin 4 to IC 27 pin 2 & 3.



\* System 3 board S/N 10,701 to 10,901.

1. Add IC 44 74LS14N (connect Vcc and GND)  
(P.N. 8-759-900-14).
2. Cut trace at IC 38 pin 10.

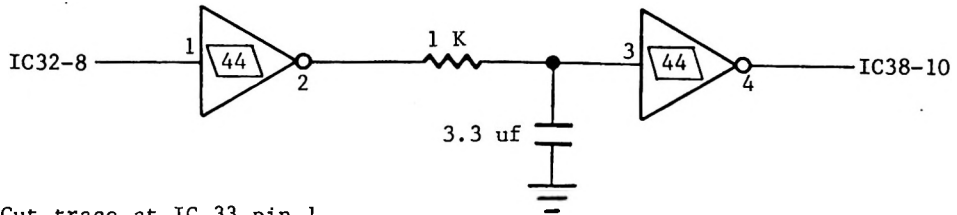
\* NOTE: For serial numbers below 10,701, omit steps 1 thru 10; cut trace at IC 37-10 and connect IC 37-10 to Vcc.

Reference: Memo T.Mc.

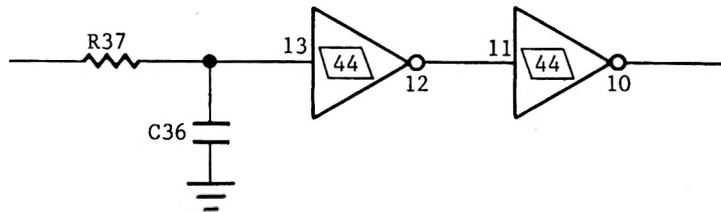
Page 1 of 2

This bulletin is published by the Sony Video Tech Info Dept., 700 W. Artesia Blvd., Compton, CA. 90220. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

3. Connect IC 32 pin 8 to IC 44 pin 1.
4. Add a 1 K ohm 1/4 W resistor between IC 44 pin 2 & pin 3 (P.N. 1-246-473-00).
5. Add a 3.3  $\mu$ F 16V cap from IC 44 pin 3 to GND. (P.N. 1-131-218-00)
6. Connect IC 38 pin 10 to IC 44 pin 4.

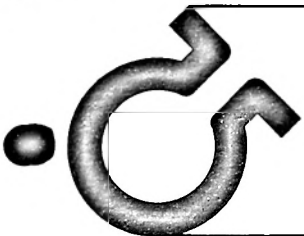


7. Cut trace at IC 33 pin 1.
8. Connect IC 44 pin 13 to junction of R37, C36.
9. Connect IC 44 pin 12 to IC 44 pin 11.
10. Connect IC 44 pin 10 to IC 33 pin 1.



11. Adjust R69 to eliminate tape slack around the scanner when going from JOG REV to PLAY.

Do. if #8 can be found



**SONY.  
BROADCAST**

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: December 1980

model: BVH-1100

bulletin no.: 6

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

Subject: EDIT ACCURACY IMPROVEMENT

Applicable to Serial Numbers 10,900 and below.

To improve Edit Accuracy on repeated previews or very short edits the following changes should be made.

#### SYS SW-1 BOARD

1. Add a .001  $\mu$ F capacitor (C42 Part Number 1-161-039-00), from IC42-2 to GND.
2. Add a .001  $\mu$ F capacitor (C43 Part Number 1-161-039-00) from IC 29-9 to GND.

#### SYS SW-4 BOARD

1. Change C8 from 33 $\mu$ F (P.N. 1-161-039-11) to 1000pF (P.N. 1-131-195-00)
2. Add a 470pF capacitor (P.N. 1-107-234-11) from IC4-13 to GND.

#### SYS SW-3 BOARD

1. Cut the trace at IC 28 pin 1.
2. Add IC 59 (74LS14N - P.N. 8-759-900-14).
3. Connect a jumper from IC 59-13 to IC 28-1.
4. Connect IC 59-6 to IC 11-10.
5. Connect a 100 ohm resistor, (1/4 W, 5% - P.N. 1-246-449-11) from IC 59-12 to IC 59-5.
6. Add a 4700 pF capacitor (P.N. 1-161-047-11) from IC 59-5 to GND.

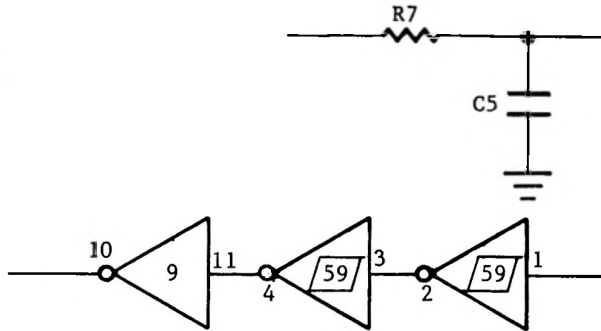
NOTE: Bulletin #8 (TAPE TIMER IDLER SLIPPAGE) must be completed before implementing this bulletin.

Reference: Memo T.Mc.

Page 1 of 2

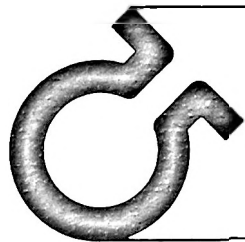
This bulletin is published by the Sony Video Tech Info Dept., 700 W Artesia Blvd., Compton, CA 90220. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

7. Cut trace at IC 9-11.
8. Connect a jumper from IC 9-11 to IC 59-4.
9. Connect a jumper from IC 59-2 to IC 59-3.
10. Connect a jumper from IC 59-1 to junction R7, C5.



- \* 11. Cut the trace from IC 27-12.
- \* 12. Connect a jumper from IC 27-12 to GND.
- \* NOTE: If SN is below 10,100, substitute the following procedures for steps 11 and 12.
- \* 11. Cut trace from IC 27-13.
- \* 12. Connect jumper from IC 27-13 to GND.
13. Change R2 from 47 K ohm (P.N. 1-246-513-00)  
to 75 K ohm (P.N. 1-246-518-00)

Requires a New Board



SONY  
BROADCAST

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: August, 1981

model: BVH-1100, 1100A

bulletin no.: 12

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## FRAME EDIT MODIFICATION

### GENERAL

In the BVH-series, Video and Audio Editing have been performed on a Field basis. Effective with serial number 20,801, the BVH-series will permit Video and Audio Editing on both a Field and/or Frame basis. This bulletin describes procedures for modifying earlier units (serial numbers up to 20,800) to provide the same capability.

### PARTS REQUIRED

This modification requires the new A Version Audio Logic Board, P/N 1-588-364-13 (U/C A-6017-036-B).

### MODIFICATION PROCEDURE

1. On foil side of Mother-1A Board, connect jumper between Video Logic Board pin 12A and Audio Logic Board pin 2B.
2. Remove Audio Logic Board P/N 1-588-364-11, -12.
3. On the new Audio Logic Board, P/N 1-588-364-13, set switch S4 and establish "A" and "B" solder-bridge configurations as defined under *Application*. Then install the new board.

### APPLICATION

This modification allows the timing of Edit In and Out Commands to establish switch-selectable Field or Frame editing. Various configurations can be established, depending on the position of switch S4 and the selection of "A" and "B" solder bridges. (See Figures 1 and 2.)

#### 1. S4 Functions

Switch S4 can be set to select the Edit timing for Field 1, Field 2, or Field 1/Field 2, depending on the Edit Command timing (same as present BVH-1100, -1100A). Additional timing delays (in comparison with the unmodified BVH Editing Mode) are summarized in Figure 3 and in the following table:

| S4 Position | Edit Command Timing |                  |
|-------------|---------------------|------------------|
|             | During F1 Period    | During F2 Period |
| F1          | 2-Field Delay       | 1-Field Delay    |
| F2          | 1-Field Delay       | No Delay         |
| F1/F2       | No Delay            | No Delay         |

NOTE: The above delays are in addition to the 7-Field Delay presently experienced from the time of the Edit Command to the Edit Start/End point. Please note that these delays apply during Insert Editing and Assemble Editing while in Remote or Local; the Record Mode, as before, is on a Field basis.

Reference: VS 81-2087

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**Figure 1**



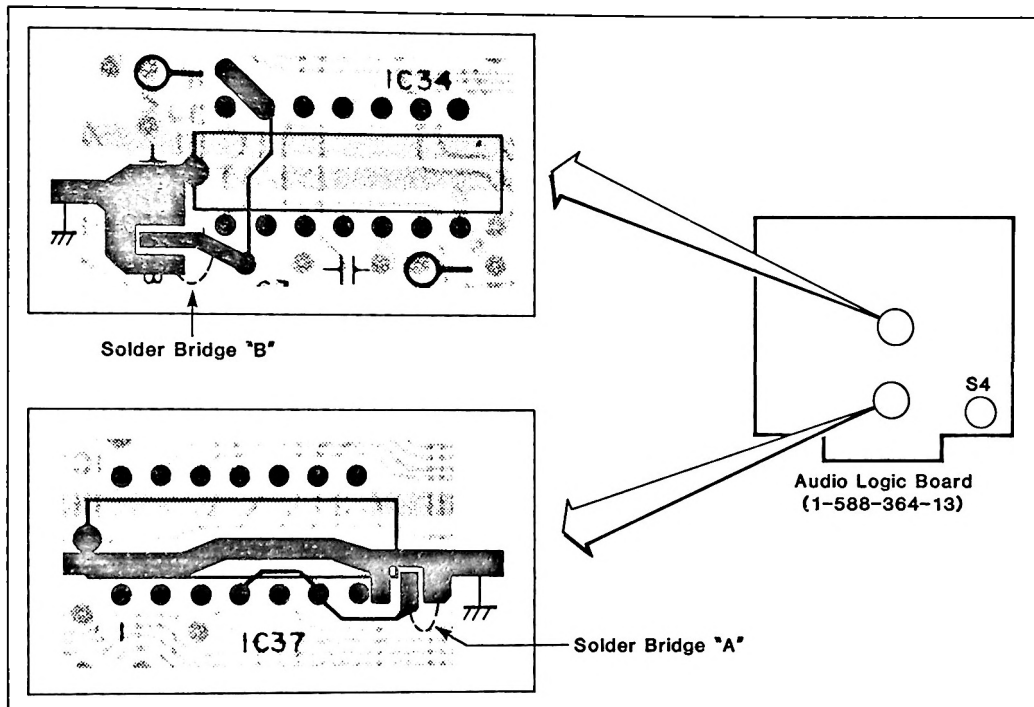


Figure 2

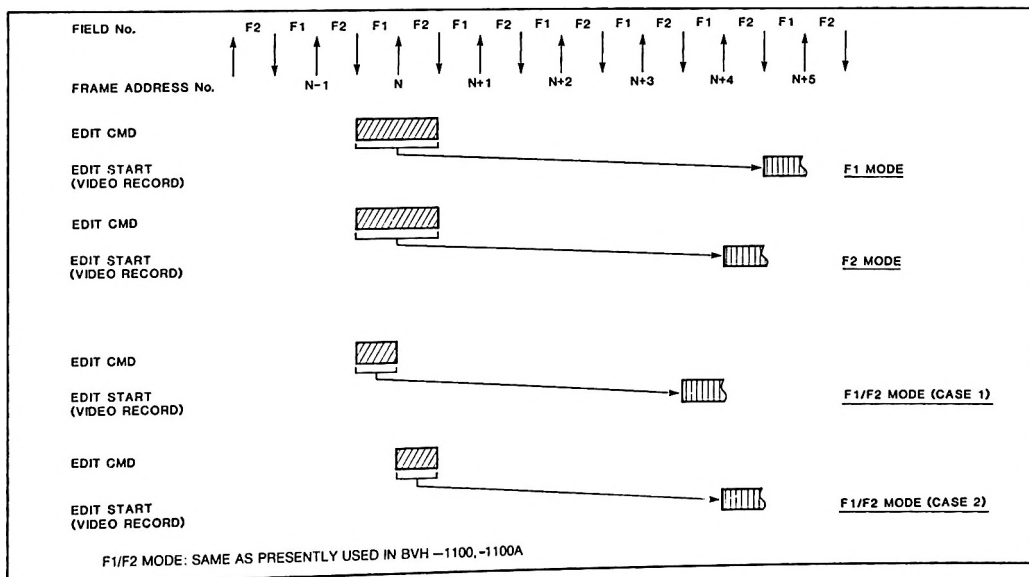


Figure 3

On Drum Assy Replacement

SONY  
BROADCAST

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June, 1981

model: BVH-1100

bulletin no.: 11

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED HEAD-TO-TAPE CONTACT IN DT OPERATION

### GENERAL

In order to improve head-to-tape contact in DT operation, the items listed below have been changed in units with serial numbers 11,101 and above. This bulletin provides instructions for updating older units (serial numbers up to 11,100) to the new configuration.

| Description & Models   | Former                   | New                       |
|------------------------|--------------------------|---------------------------|
| Upper Drum for NTSC/PM | RV-45 RP<br>A-6052-026-A | DMR-13-R<br>A-6052-034-A  |
| Drum Ass'y for NTSC/PM | RD-45 RP<br>A-6050-050-A | DMH-13A-R<br>A-6050-077-A |
| BD Board               | A-6023-025-A             | A-6023-025-B              |
| REG-4 Board            | A-6023-024-A             | A-6023-024-B              |

### MODIFICATION PROCEDURE

NOTE 1: If only the upper drum or drum assembly are replaced with new parts, the former REG-4 Board must be modified as described in steps 1 through 3 below. If the former REG-4 Board and the former BD Board are also replaced with new parts, perform step 3 only.

1. Change diodes D8, D9, D10 and D11 on the REG-4 Board for diodes with part number 8-719-109-07 (RD 39 BE).
2. Check collector voltages of transistors Q7 and Q10 for the following specifications:  
Q7: +170 to +200 volts (nominal +185 volts)  
Q10: -170 to -200 volts (nominal -185 volts)
3. Perform the DT system adjustment in Section 11 of the Operation and Maintenance Manual. If the head-jump adjustment does not meet the requirements of step 2-9, change variable resistors R12/R52 on the DT-2 Board as shown below. Then perform the head-jump adjustment again.

R12, R52/DT-2: VAR 10k → VAR 20k  
(SONY Part No. 1-224-941-00)

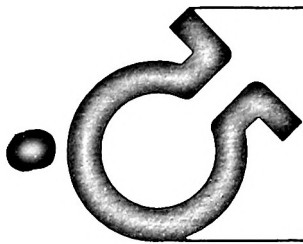
NOTE 2: For inventory purposes it is conceivable that a new upper drum or drum assembly might be replaced with former parts. If so, the new REG-4 Board should be modified by removing the two jumpers connected at the cathode of D13 and anode of D14. See Figure 1.

Reference: BVH-1100, Supplement-7/IVTRW-81-2014

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.





**SONY  
BROADCAST**

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June, 1981

model: BVH-1100

bulletin no.: 9

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## HT-1000 INSTALLATION (NTSC)

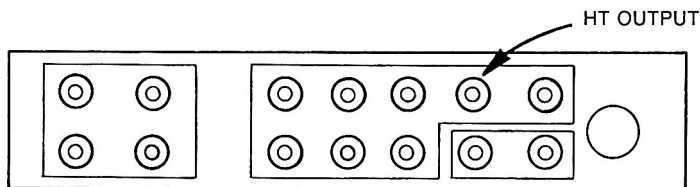
### GENERAL

To stabilize the color signal and provide color monitoring in normal playback, still frame, and any forward or reverse shuttle mode with tape speeds up to 5 times normal, the Heterodyne color unit HT-1000 can be used. Serial number applicability is noted in the modification procedures.

### PRECAUTIONS

1. The Dynamic Tracking mode can not be operated in units with the HT-1000 unit installed.
2. If the BVH-1100 has been modified to accommodate the HT-1000 DEMOD Board, the TO TBC multiple connector between the VTR and the TBC can not be used.
3. If an unmodified HT-1000 is installed in a BVH-1100, the machine will go into the STOP mode, the STOP lamp will blink, and the machine will not be operable.
4. the Heterodyne color output signal can be obtained from an unmarked output jack on the Video Connector Panel as shown.

### VIDEO CONNECTOR PANEL



### HT-1000 MODIFICATION

NOTE: This modification has been performed in units with serial numbers 10,501 and higher; Color-2/Color-3/Color-4 Boards with suffix number "-13" and higher have been modified prior to shipment.

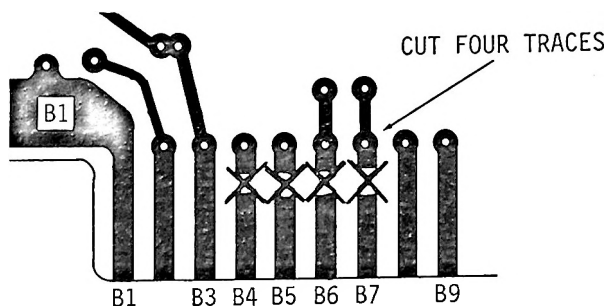
Cut the foil traces on the wire side (Side B) of the Color-2/Color-3/Color-4 Boards as shown on page 2:

Reference: VTRW 80-36

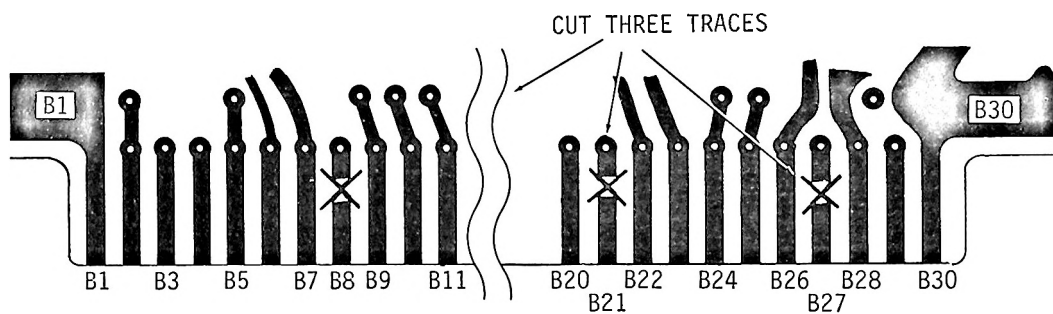
Page 1 of 4

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

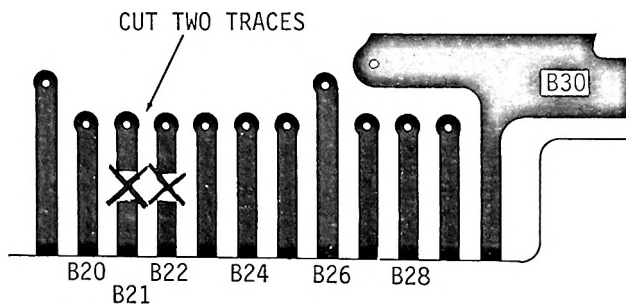
**1. Color-2 Board (Board No. 1-585-524-11/-12)**



**2. Color-3 Board (Board No. 1-585-525-11/-12)**



**3. Color-4 Board (Board No. 1-585-526-11/-12)**



**BVH-1100 MODIFICATION**

NOTE: Units with serial numbers 10,701 and higher have been modified prior to shipment.

**1. Mother-2 Board**

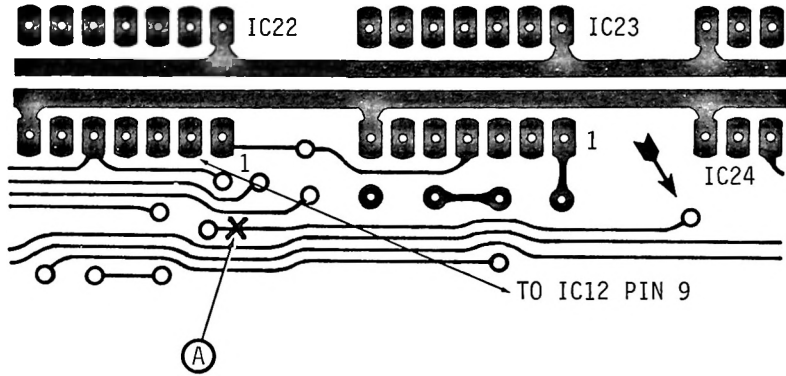
Disconnect CN51 plug from its receptacle and reconnect to CN53.

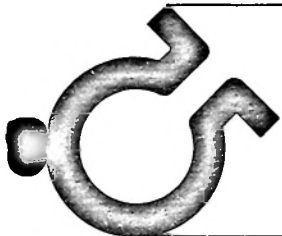
**2. Demodulator Board**

Change the value of carbon resistor R187 from 51 ohms to 75 ohms. Disconnect jumper from R187 to 27AB and reconnect jumper from R187 to 18AB.



WIRING SIDE (SIDE B)





**SONY  
BROADCAST**

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: November 1980

model: BVH-1100

bulletin no.: 4

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

Subject: BVH-1100 EXTENSION CABLES

Applicable to Serial Numbers: A11

The BVH-1100 extension cables for the rack and console mounting, BK-1105 and BK-1106, are available through the Broadcast Sales group.

Note that the BK-1105 "Rack Mount" Extension does not provide for separation of the power supply from the Transport Ass'y. For this purpose, the BK-1106 is required. Note also that the EXT-21 (for DT machines) is optional and must be ordered separately.

For further information on these extension kits see the BK-1105/1106 Technical Manual.

The individual Extension cables may be ordered direct from The National Broadcast Parts Distribution Center in Palo Alto Calif.

Table 1. BK-1105

| Ref. No.             | Part No.     | Price   |
|----------------------|--------------|---------|
| EXT- 4               | 1-931-605-00 | \$75.12 |
| EXT-12               | 1-932-113-00 | \$64.26 |
| EXT-13               | 1-932-114-00 | \$71.99 |
| EXT-14               | 1-932-115-00 | \$71.99 |
| EXT-15               | 1-932-116-00 | \$60.69 |
| EXT-16               | 1-932-117-00 | \$30.35 |
| RF Cable             | 1-551-856-00 | \$71.40 |
| EXT-17<br>(optional) | 1-932-118-00 | \$60.69 |

Prices subject to change without notice.

Phone: (800) 227-8050 (except Ca)  
(213) 467-4430 (Southern Ca)  
(415) 965-3140 (other areas of Ca)



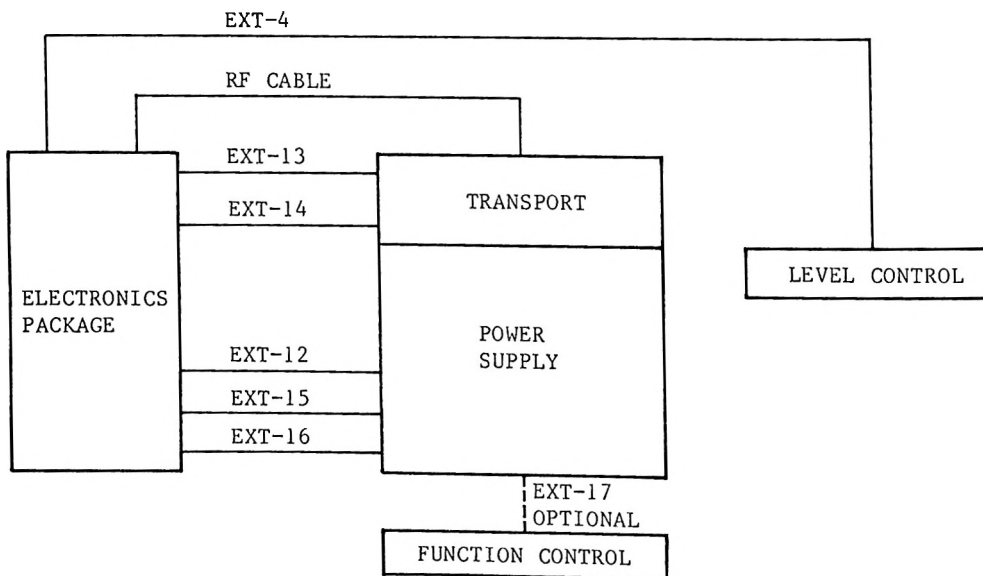
Table 2. BK-1106

| Ref. No. | Part No.     | Price   |
|----------|--------------|---------|
| EXT- 4   | 1-931-605-00 | \$75.12 |
| EXT- 5   | 1-931-606-00 | \$16.72 |
| EXT- 6   | 1-931-607-00 | \$39.23 |
| EXT- 9   | 1-931-610-00 | \$24.99 |
| EXT-10   | 1-931-611-00 | \$20.90 |
| EXT-11   | 1-931-691-00 | \$21.42 |
| EXT-12   | 1-932-113-00 | \$64.26 |
| EXT-13   | 1-932-114-00 | \$71.99 |
| EXT-14   | 1-932-115-00 | \$71.99 |
| EXT-15   | 1-932-116-00 | \$60.69 |
| EXT-16   | 1-932-117-00 | \$30.35 |
| EXT-17   | 1-932-118-00 | \$60.69 |
| *EXT-21  | 1-932-122-00 | \$21.42 |
| RF Cable | 1-551-856-00 | \$71.40 |

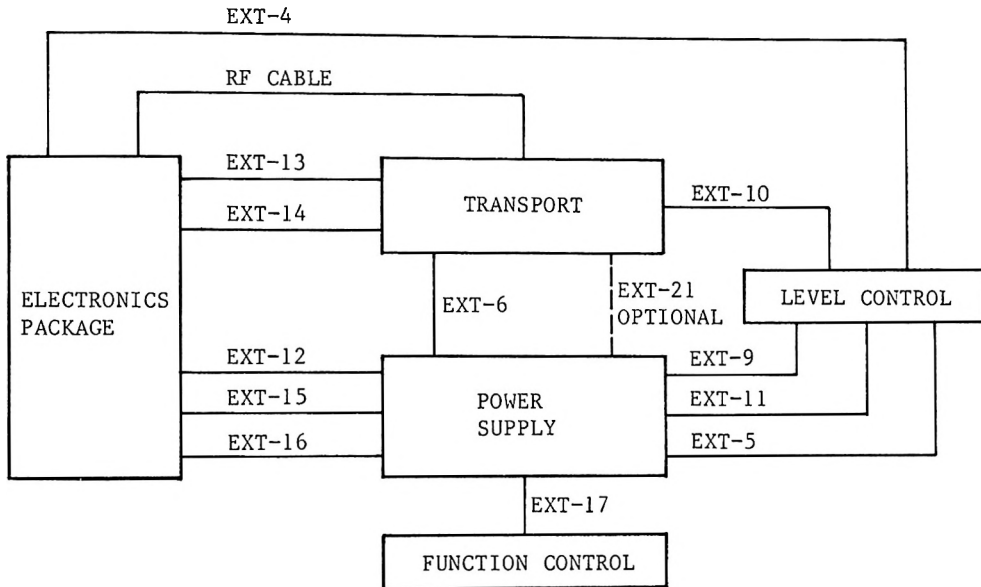
Prices subject to change without notice.

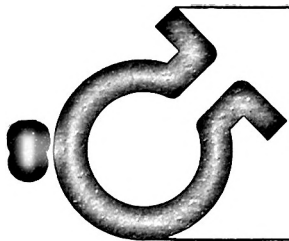
\*DT Drive Extension Cable (optional)

BK-1105 EXTENSION CABLES FOR RACK MOUNTING



BK-1106 EXTENSION CABLES FOR CONSOLE MOUNTING





SONY  
BROADCAST

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: November 1980

model: BVH-1100

bulletin no.: 3

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

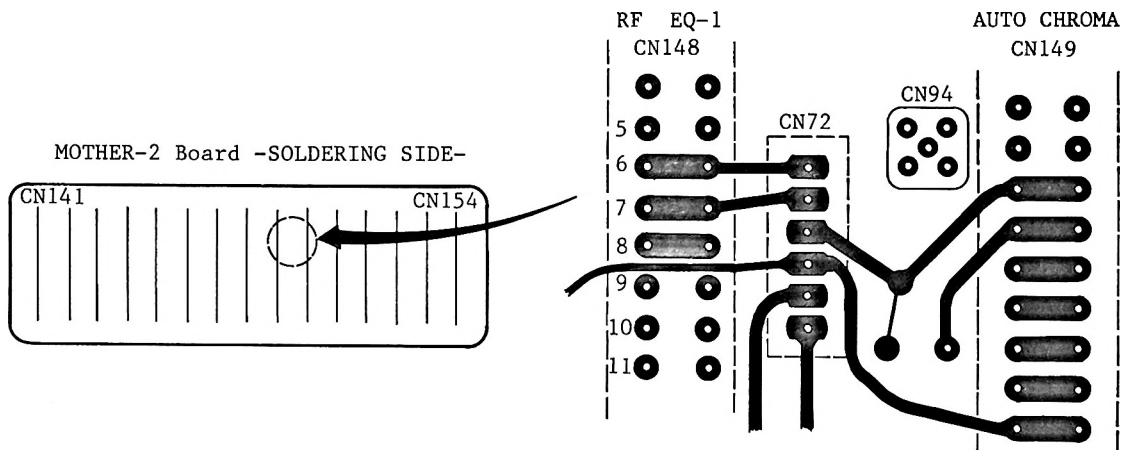
Subject: DROPOUT DETECTION IMPROVEMENT (RF EQ-2 BOARD)

Applicable to Serial Numbers: 10,001 and higher.

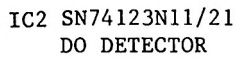
The performance of the dropout detector is dependent upon the device characteristics of IC2, RF EQ-2 Board (SN 74123N - PN 8-759-941-23). When replacing IC2, confirm that the time constant is within the specified range.

## DROPOUT TIME CONSTANT TEST AND COMPENSATION

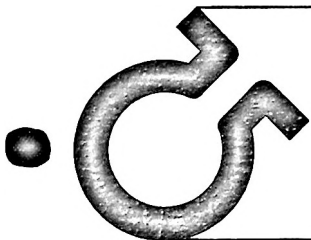
- 1). Disconnect coaxial connector (CN 94) on the MOTHER-2 board; supply CW (1 MHz/0.6 Vp-p) signal to CN 94.



- 2). Connect a scope to IC2, pin 5, on the RF EQ-2 board.
- 3). The output pulse width should be between 185 and 208 nsec.



- Page 2 of 2



SONY  
BROADCAST

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: June 1980

model: BVH-1000,-1100

bulletin no.: 59

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

Subject: PART NUMBER FOR AUDIO/VIDEO METER LAMP

Applicable to Serial Numbers:

The part number for the Audio/Video meter lamp is now available.

| REF NO.   | PART NO.     | DESCRIPTION           |
|-----------|--------------|-----------------------|
| PL1 - PL4 | 1-518-412-00 | LAMP BULB, 6.3V/70 mA |

Reference: VTRW 79-149

Page 1

This bulletin is published by the Sony Video Tech Info Dept., 700 W. Artesia Blvd., Compton, CA 90220. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

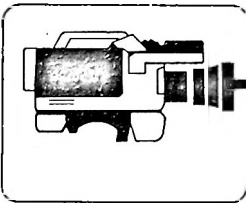


BVH-1000A/1100 (ECR-001)  
USING EXTENSION CABLES

BULLETIN 56

If the BVH-1000A/1100 is used with interconnect/extension cables, when rack mounting for example, care should be taken to label all cables and connectors in order to ensure proper connection of the mating pairs. Since the cables in the extender kits are not keyed or pre-labeled, it is necessary that the user pay particular attention in making the connections. Improper connection could result in damage from the application of incorrect voltages.

August 1979



## technical bulletin

# 83-198

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: December, 1983

**MODEL: BVT-2000**

**SERIAL NO: 52,600 AND LOWER**

**SUBJECT: DO-9 BOARD CHANGE: NEW REFERENCE COMP VIDEO-2 TERMINAL**

### DESCRIPTION

When each component in a REC/PB system is widely separated, the timing delays due to cable length (approx. 7ns/m) and EE signal path during REC may shift incoming video beyond the TBC's correction range, causing H and V shifts on the monitor that do not actually appear in the recorded signal.

In order to provide a stable monitor picture in both PB and EE/REC modes, the DO-9 Board and F Harness have been changed and a reference COMP VIDEO-2 terminal has been added to the rear connector panel in units with S.N. 52,601 and higher.

|                    | Former         |   | New          |
|--------------------|----------------|---|--------------|
| DO-9 Board         | 1-588-057-13   | → | 1-588-057-14 |
| (Service Part No.) | A-6257-033-A   | → | A-6257-033-B |
| F Harness          | 1-932-310-15   | → | 1-932-310-16 |
| CN 306             | REF COMP VIDEO | → | COMP VIDEO-1 |
| CN 313             | REMOTE OUT     | → | COMP VIDEO-2 |

Figures 1 and 2 show system configurations before and after addition of COMP VIDEO-2. Table 1 shows the applicability of former and new parts. Table 2 shows the functions provided by different combinations of former and new BVT-2000 and DO-9 Board.

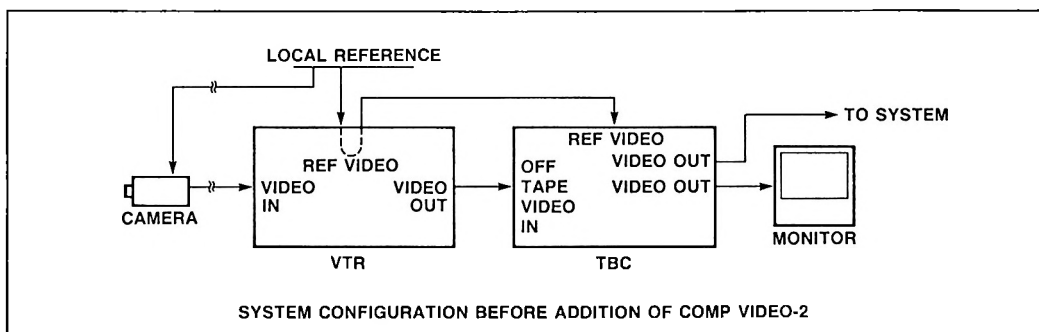
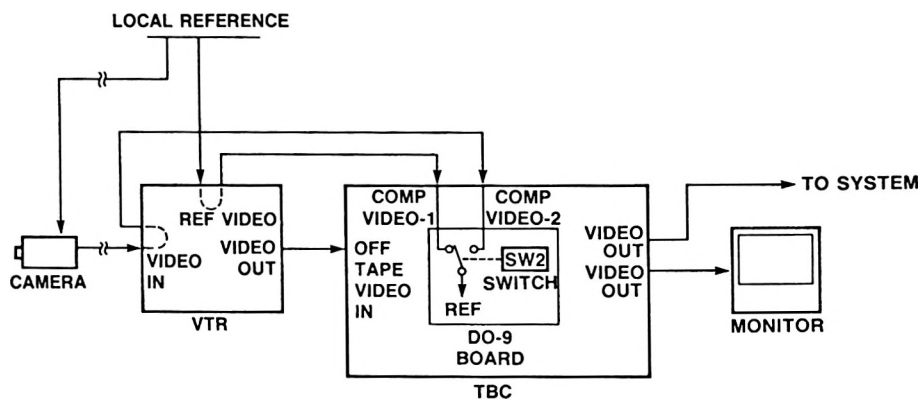


Figure 1

Reference: VS 82-2001, 82-2032 / T.M.

Page 1 of 7

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



| SW2 SWITCH POS.<br>VTR MODE | NOR          | AUTO E-E     |
|-----------------------------|--------------|--------------|
| PLAYBACK                    | COMP VIDEO 1 | COMP VIDEO 1 |
| RECORD, E-E, CONF PB        | COMP VIDEO 1 | COMP VIDEO 2 |

TBC REFERENCE

SYSTEM CONFIGURATION AFTER ADDITION OF COMP VIDEO-2

Figure 2

Table 1

| Description | Part No. |              | BVT-2000        |                   |
|-------------|----------|--------------|-----------------|-------------------|
|             |          |              | 10,001 - 52,600 | 52,601 and Higher |
| DO-9 Board  | Former   | A-6257-033-A | Yes             | No                |
|             | New      | A-6257-033-B | Yes             | Yes               |
| F Harness   | Former   | 1-932-310-15 | Yes             | No                |
|             | New      | 1-932-310-16 | Yes             | Yes               |



Table 2

| BVT-2000               | DO-9 Board/Harness | Reference Function   |
|------------------------|--------------------|--|
| S.N. 52,600 and Lower  | Former             | REF COM VIDEO  |
|                        | New                | SW2: NOR . . . COM VIDEO-1<br>SW2: AUTO EE . . . TBC INT REF during EE/REC   |
| S.N. 52,601 and Higher | New                | SW2: NOR . . . COMP VIDEO-1<br>SW2: AUTO EE . . . Switching between COMP VIDEO-1 during NOR PB and COMP VIDEO-2 during EE/REC/CONF PB. |

To add a second COMP VIDEO reference to earlier units (S.N. 52,600 and lower), perform the following modification.

#### PARTS REQUIRED

| Ref.        | Part No.     | Description                          | Qty. |
|-------------|--------------|--------------------------------------|------|
| IC12, 13    | 8-743-870-00 | IC, BX-387                           | 2    |
| IC14        | 8-759-974-02 | IC, SN7402N                          | 1    |
| SW2         | 1-553-439-00 | Toggle Switch                        | 1    |
| R56         | 1-214-105-00 | Res, Metal, 75 $\Omega$ , 1%, 1/4W   | 1    |
| R55         | 1-214-144-00 | Res, Metal, 3.3k $\Omega$ , 1%, 1/4W | 1    |
| C40, 41, 42 | 1-131-441-00 | Cap, Tantalum, 22 $\mu$ F, 16V       | 3    |

#### MODIFICATION PROCEDURE

##### Frame Wiring

1. Loosen 2 screws on rear connector panel and swing open.
2. Remove DO-9 and PW-42 Boards.
3. Unscrew 4 screws on right side of board holder and push up, then pull out gently to gain easier access to rear panel connector CN313.
4. Remove 2 wires connected to CN313 REMOTE OUT BNC.
5. Unscrew CN102 (DO-9 Board connector) from holder and pull up gently.
6. Following frame wiring, run shielded wire (approx. 13") between CN313 and CN102, then solder as follows:

CN313 core . . . CN102-F  
CN313 shield . . . CN102-6

7. Following frame wiring, install a jumper (approx. 29") between CN102-2 and CN2-44A (MB-5 Board solder side).
8. Tie wrap wires in place.
9. Screw down CN102.
10. Reposition board holder and screw to main frame.

#### **D0-9 Board**

1. Remove following components (See Figure 3.):

|                              |                      |
|------------------------------|----------------------|
| IC10 (PC71A)                 | R44 (1k $\Omega$ )   |
| C23 (100pF)                  | R45 (5.6k $\Omega$ ) |
| C24, 25 (.022pF)             | R48 (10k $\Omega$ )  |
| R42, 43, 46 (4.7k $\Omega$ ) | D8, 9 (1S1555)       |
|                              | L5 (1 $\mu$ H)       |

2. On solder side, jumper IC11-11 to CN102-P as shown in Figure 4.
3. On solder side, cut trace between TP4 and R1.
4. Install new circuit illustrated in Figure 6 in space provided by Step 1.

**SUGGESTION:** First mount components on vector board, then mount vector board to D0-9 Board with double sided tape. Figure 5 shows a possible configuration.

5. Set new SW2 to AUTO EE position.

#### **CHECK PROCEDURE**

1. Set up video system as shown in Figure 2.
2. Set DO-9 Board SW2 to NOR and observe REF VIDEO signal at Pin 9 on SG-18 Board.
3. Check that COMP VIDEO-1 is present when VTR is in EE, REC, NOR PB and CONF PB modes.
4. Set SW2 to AUTO EE and check that REF VIDEO signal is as follows:

EE/REC/CONF PB . . . . COMP VIDEO-2  
 NOR PB . . . . . COMP VIDEO-1

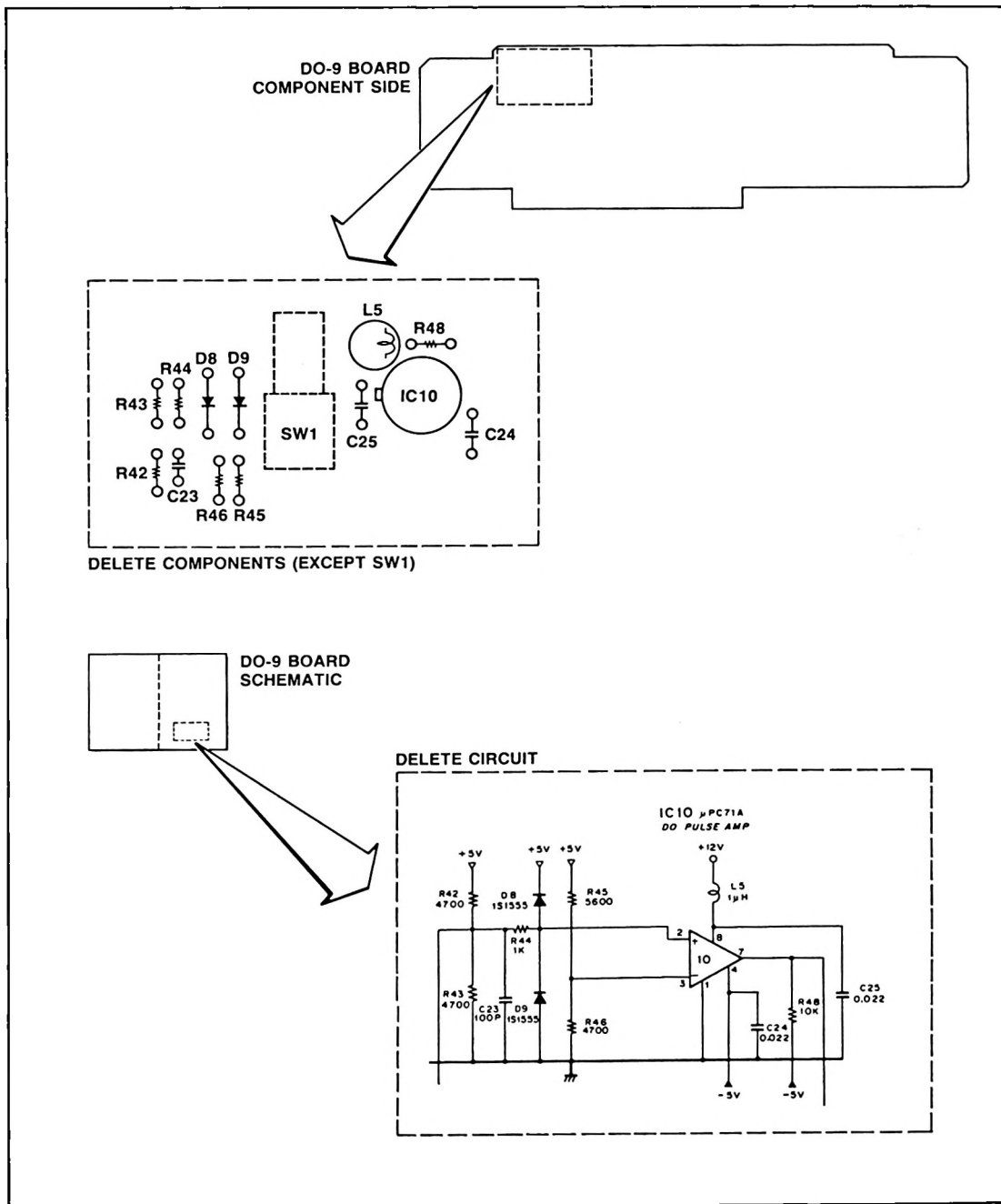


Figure 3

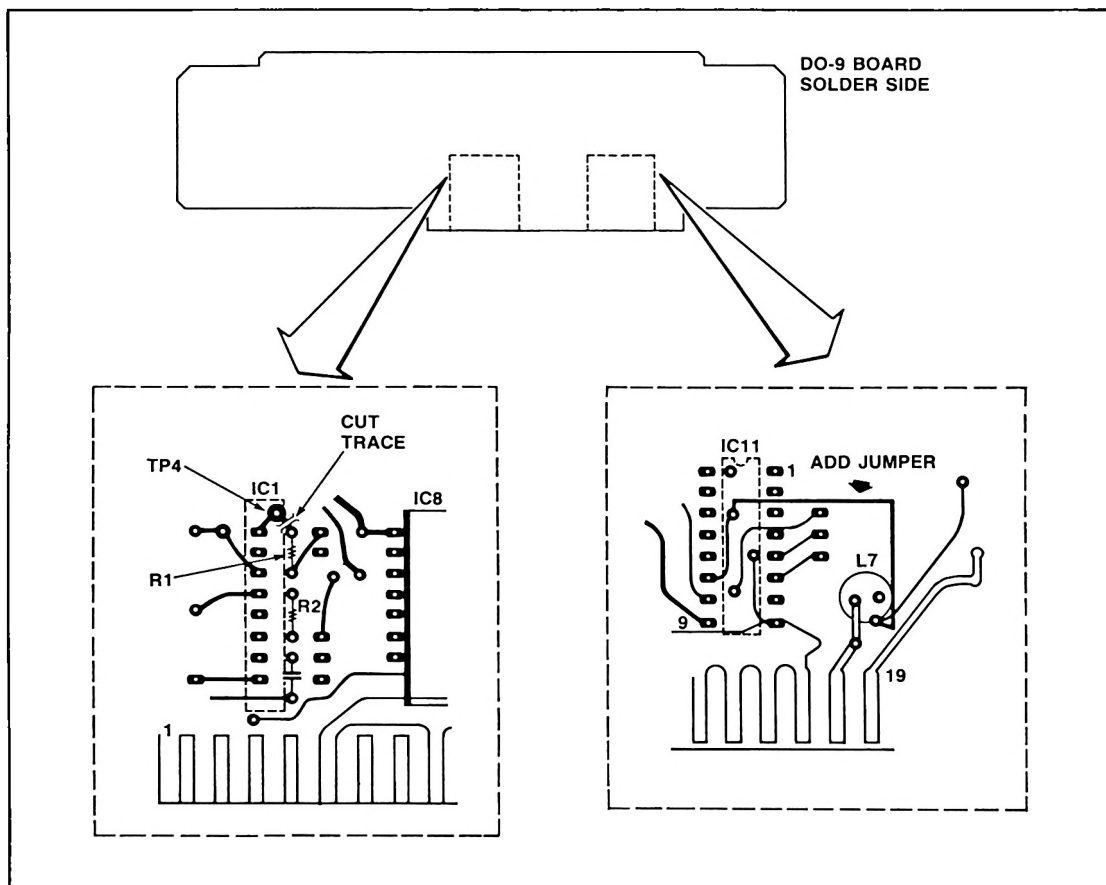


Figure 4

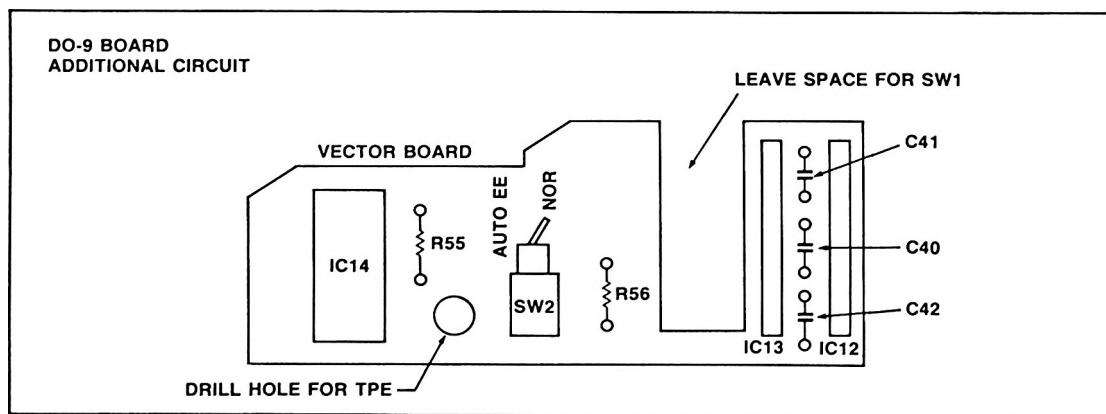


Figure 5

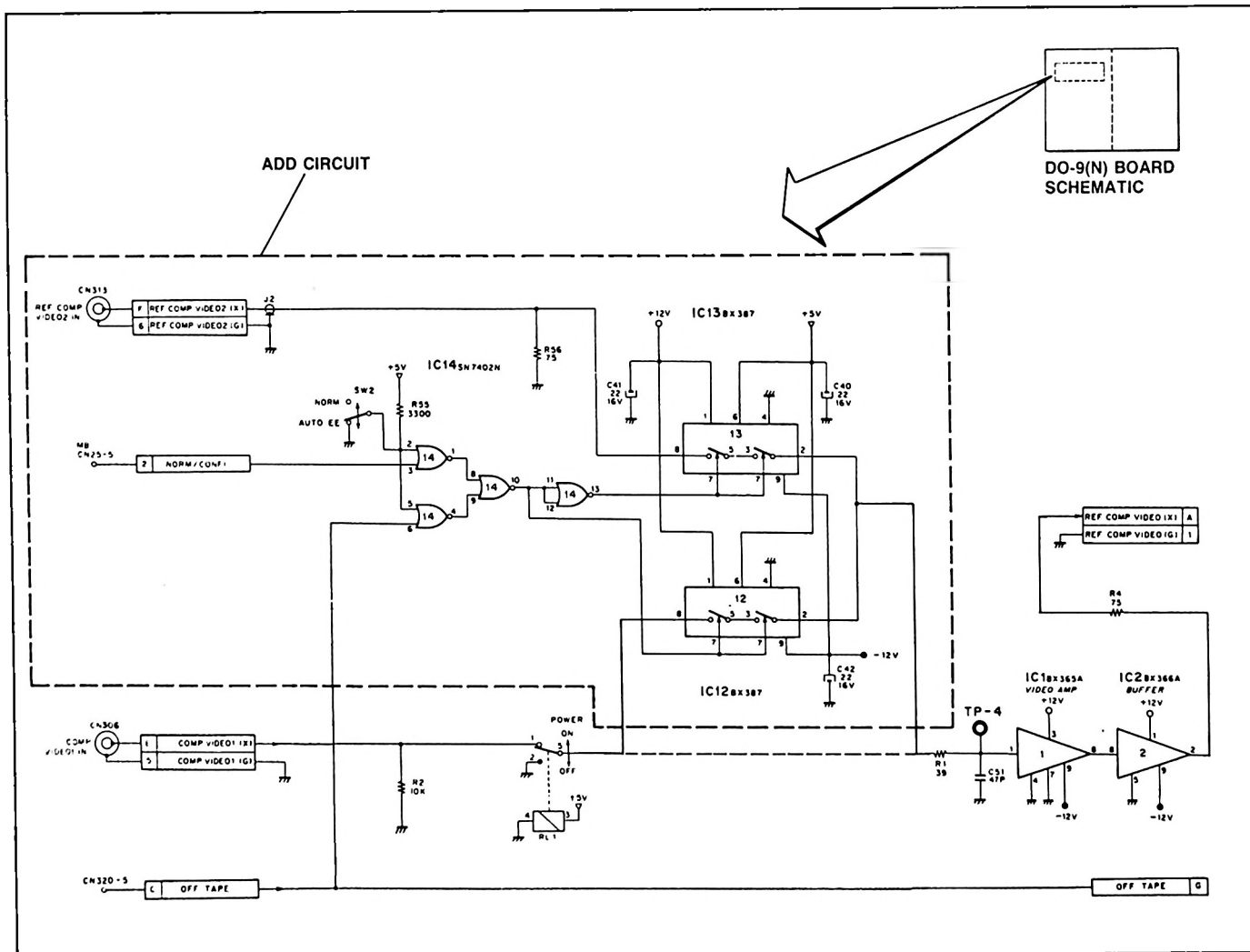


Figure 6

**MODEL: BVT-2000, TBC-200**

Date: February, 1984

**SERIAL NO: 64,100 AND LOWER (BVT-2000)**

**12,668 AND LOWER (TBC-200)**

**SUBJECT: IMPROVED OPERATION OF FAST FWD/REV BIDIREX DETECTOR**

## DESCRIPTION

The high sensitivity of VR3 on the CK-3 Board may cause a malfunction of the FAST FWD/REV BIDIREX DETECTOR. Replace R21 (7.5K) with a 27K resistor to correct the problem. (See Figure 1.)

## PARTS REQUIRED

| Ref. | Description                         | Part No.     | Qty. |
|------|-------------------------------------|--------------|------|
| R21  | Res, Metal, 27K $\Omega$ , 1/4W, 1% | 1-214-166-00 | 1    |

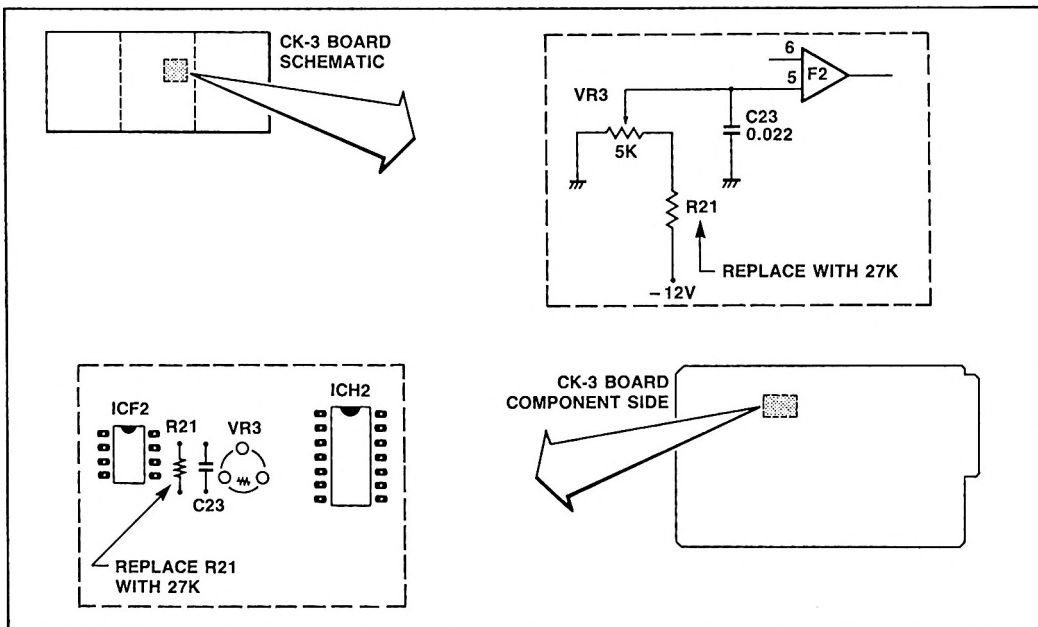
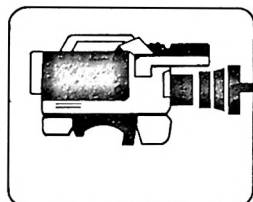


Figure 1

Reference: SD2048 TM

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



## technical bulletin

# 84-012

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: February, 1984

**MODEL: BVT-2000**

**SERIAL NO: 12,199 AND LOWER**

**SUBJECT: USE OF TEST SWITCHES S1 AND S2 ON MY BOARD TO  
LOCATE DEFECTIVE MEMORY ICs**

### DESCRIPTION

Test switches S1 and S2 (location T8 and K8 respectively) are installed on the MY Board for troubleshooting defective memory ICs. S1 provides a MEMORY READ (LINE) INHIBIT for each of four (2-Line) Blocks and S2 provides a MEMORY READ INHIBIT for each of nine (2-IC) Bits. (See Figure 1.) By sequentially switching S1 and S2 (as described in the following example) the location of the defective pair of ICs on the MY Board can easily be determined.

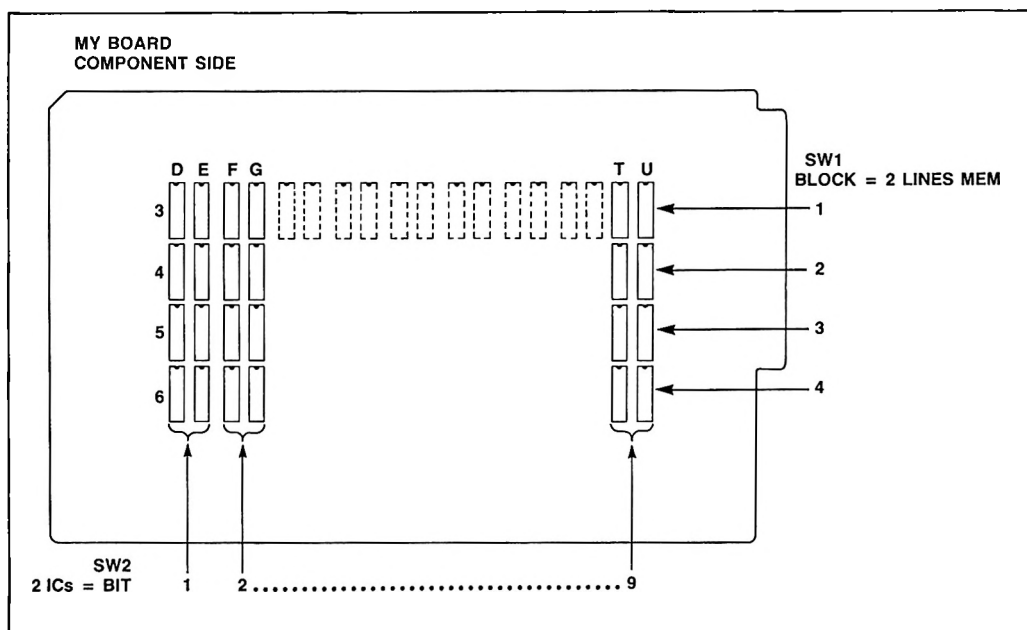


Figure 1

NOTE: While S1 and S2 are not mounted on the MY Boards in units with S.N. 12,200 and higher, the mounting locations are still present.

Reference: SBNA9 TMC

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

SYMPTOM: Noise on monitor due to defective MY Board.

### TROUBLESHOOTING PROCEDURE

1. Set up: Connect WFM monitor to TBC output.  
Connect monitor to TBC output.  
Input to TBC — Unmodulated Linearity Signal.
2. Remove MY Boards 8-1 and 8-2 sequentially. Noise will dissappear when defective board is removed.
3. Place defective MY Board on Extender. Observing WFM, switch S1 positions ON/OFF sequentially to determine which Line Block contains the defective IC.  
Ex. When S1-3 is OFF, noise spike disappears and 100% level bar appears. Indicates defective IC is in Line Block 3. (See Figure 2.)
4. Return all S1 positions to ON.
5. Observing waveform, switch S2 positions ON/OFF sequentially to determine which Bit contains the defective IC.  
Ex. The waveform switches from noise to 100% level when position 2 is ON. Then defective IC is in 2nd Bit of Line Block 3. In this case, ICF5 or ICG5 is defective.

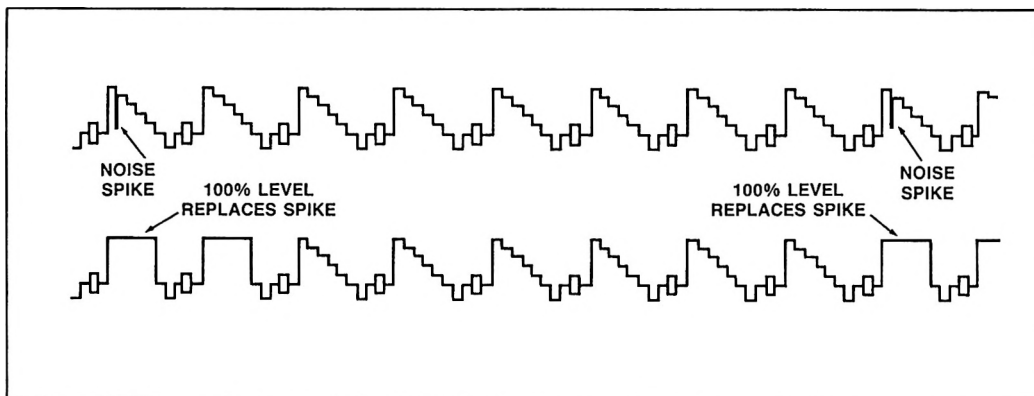
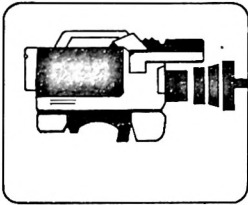


Figure 2





# technical bulletin

## 84-004

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: January, 1984

**MODEL: BVT-2000**

**SERIAL NO: 64,000 AND LOWER**

**SUBJECT: PART NUMBER CHANGE**

### DESCRIPTION

The part number for ICU7 (IM5623-S4NA) on the SG-78(N) Board has been changed as follows:

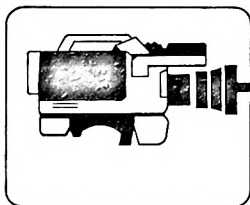
| Former       | New          |
|--------------|--------------|
| 8-759-923-22 | 8-759-758-86 |

Please change the SG-78(N) Parts List in the Operation and Maintenance Manual to show the new number.

Reference: SD2041 TM

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# technical bulletin

# 83-181

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: October, 1983

**MODEL: BVT-2000**

**SERIAL NO: 52,720 AND LOWER**

**SUBJECT: SPIKE IN SG-28(N) BOARD "A BLK OUT" SIGNAL**

## DESCRIPTION

The temperature characteristics of ICD1 on the SG-28(N) Board may cause a spike to appear in the signal at TP-19. (See Figure 1.) The following component changes and adjustment revision will eliminate this problem.

## PARTS REQUIRED

| Part No.     | Description                         | Qty. |
|--------------|-------------------------------------|------|
| 1-224-941-00 | Res, Variable, Metal, 20k $\Omega$  | 1    |
| 1-214-164-00 | Res, Metal, 22k $\Omega$ , 1/4W, 1% | 1    |
| 1-130-140-00 | Cap, Film, 0.039 $\mu$ F, 100V, 5%  | 1    |

## MODIFICATION PROCEDURE

**SG-28(N) Board (See Figure 2.)**

1. Replace VR502 with 20k $\Omega$  variable resistor.
2. Replace R116 with 22k $\Omega$  resistor.
3. Replace C107 with 0.039 $\mu$ F capacitor.

## ADJUSTMENT REVISION

**SG-28(N) Board**

1. Refer to BVT-2000 Manual, Section 20-3 (V BLK HALF H WIDTH ADJUSTMENT). Change wave form specification in Step 2 to  $27.0 \pm 1.0\mu$ S.
2. Perform entire adjustment as described in Section 20-3.

Reference: VS 82-2085 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

# SG-28(N) BOARD

TP-19  
FIELD 2 OR 4

SPIKE

Figure 1

SG-28(N) BOARD  
COMPONENT SIDE

ICD1

VR502

10K  $\rightarrow$  20K

R116

15K  $\rightarrow$  22K

C107

0.056 $\mu$ F  $\rightarrow$  0.039 $\mu$ F

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

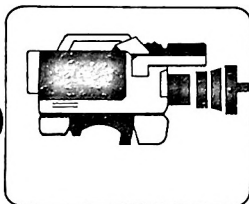
VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

VR502 10K  $\rightarrow$  20K R116 15K  $\rightarrow$  22K

SG-28(N) BOARD (2/2)  
SCHEMATIC

Figure 2



## technical bulletin

# 83-166

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: September, 1983

**MODEL: BVT-2000, BVU-820**

**SERIAL NO: 52,700 AND LOWER**

**SUBJECT: VIDEO OUTPUT VERTICAL TIMING SHIFT WHEN TBC IS USED  
WITH BVU-820 OPERATING IN RECORD CONFIDENCE MODE**

### DESCRIPTION

When an edit is performed with a BVU-820, the VCR uses its DT heads to playback the signal being recorded by its R/P heads. Because the DT heads lag the R/P heads by 45°, a timing shift occurs in the output video which must be corrected by the TBC to produce a normal picture on the monitor.

The BVT-2000 correction circuits were designed for the 1" Type C Format VTR. Installation of the SG-69 Board as described in the following modification will make them compatible with the BVU-820 as well.

NOTE: The SG-69 Board has been factory installed in BVT-2000 units with S.N. 52,701 and higher.

### PARTS REQUIRED

| Part No.     | Description                   | Qty. |
|--------------|-------------------------------|------|
| 1-561-971-00 | Socket, Single Line, 8/20 Pin | 2    |
| 1-607-436-00 | SG-69 Circuit Board           | 1    |

### MODIFICATION PROCEDURE

**SG-18 (N) Board (See Figures 1-3.)**

1. Remove the following components:

ICU6

ICT6

C518

RS510 (This is a jumper between ICT6-11 and ICR6-10.)

2. Install single line socket in pads formerly occupied by ICT6 pins 1 - 8.
3. Install single line socket in pads formerly occupied by ICU6 pins 9 - 16.
4. Mount SG-69 Board on new sockets.
5. On solder side, jumper following locations:

Former ICT6-14 ..... ICW3-10

Former ICU6-2 ..... Former ICU-6-15

Former ICT6-4 ..... Former JN PS/RS510 (or ICR6-10)

Reference: VS 82-2100 / T.M.

Page 1 of 4

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

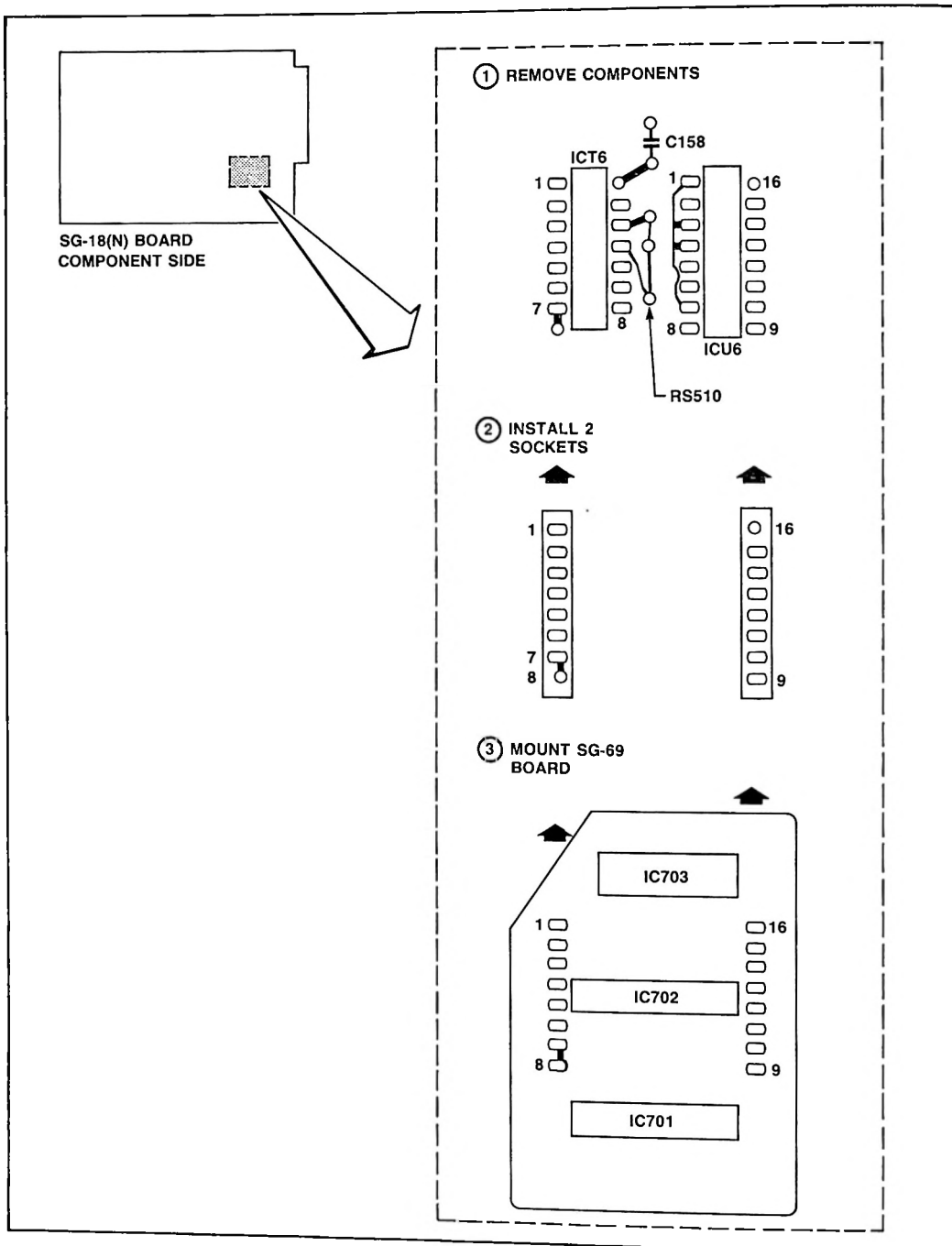
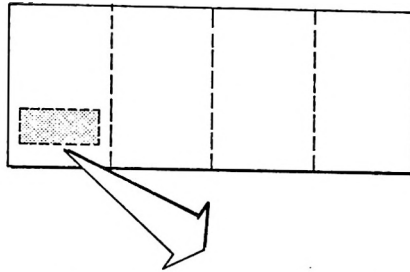


Figure 1



SG-18(N) BOARD (C/ABCD)  
SCHEMATIC

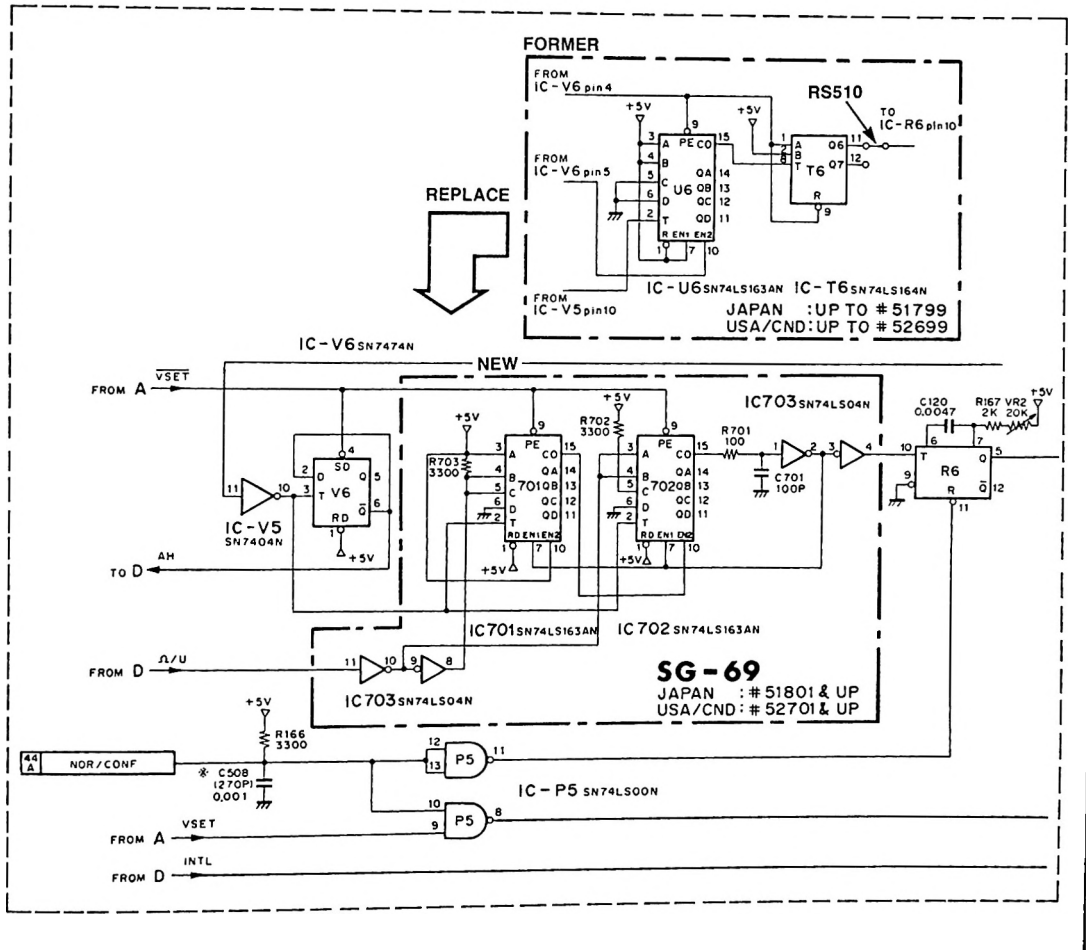
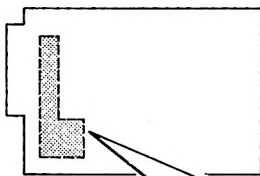


Figure 2



SG-18(N) BOARD  
SOLDER SIDE

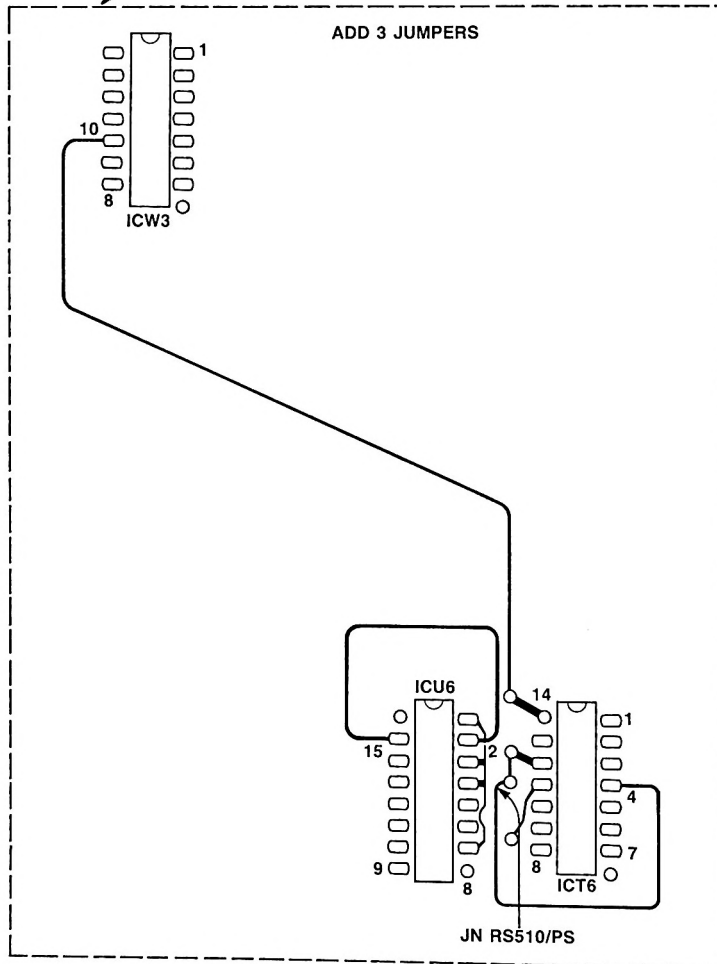
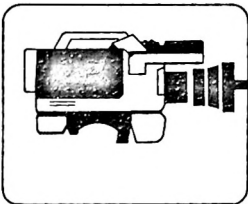


Figure 3



Date: September, 1983

**MODEL: BVT-2000**

**SERIAL NO: 63,100 AND LOWER**

**SUBJECT: UNSTABLE IMAGE WHEN 1" VTR USES  
DT HEAD FOR NORMAL PLAYBACK**

**DESCRIPTION**

The TBC detects playback V with either of two circuits: the "PB V Detector" or the "1st EQ Pulse Detector." The first circuit has priority, the second circuit was intended for tapes without a Sync track.

When a BVH-1100A or BVH-2000 uses the DT head for normal playback, the effective Skew error between the Video and Sync Heads may exceed 1H. This error makes it difficult for the TBC priority circuit to choose between the two circuits mentioned above. The end result is an unstable video image.

The modification shown in Figure 1 will cause the TBC to use the "1st EQ Pulse Detector" whenever a 1" VTR is used for playback.

**MODIFICATION PROCEDURE**

**IV-1(N) Board (See Figures 1 and 2.)**

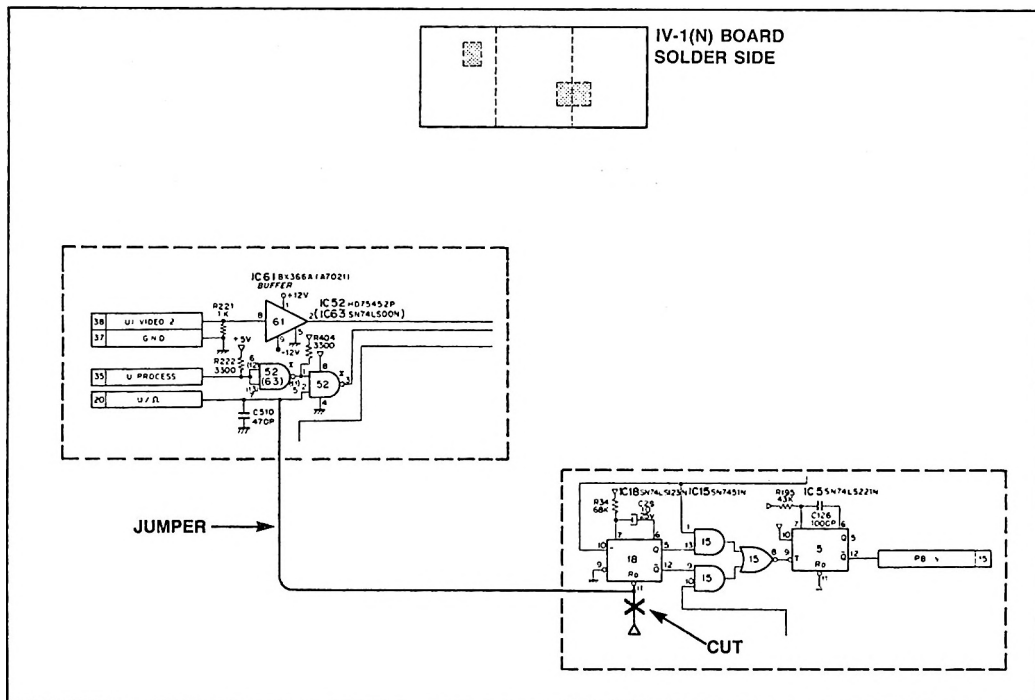
1. Cut trace between IC18-11 and IC18-16.
2. Install a jumper between IC18-11 and IC52-2.

*Reference: VS 82-2087 / T.Mc.*

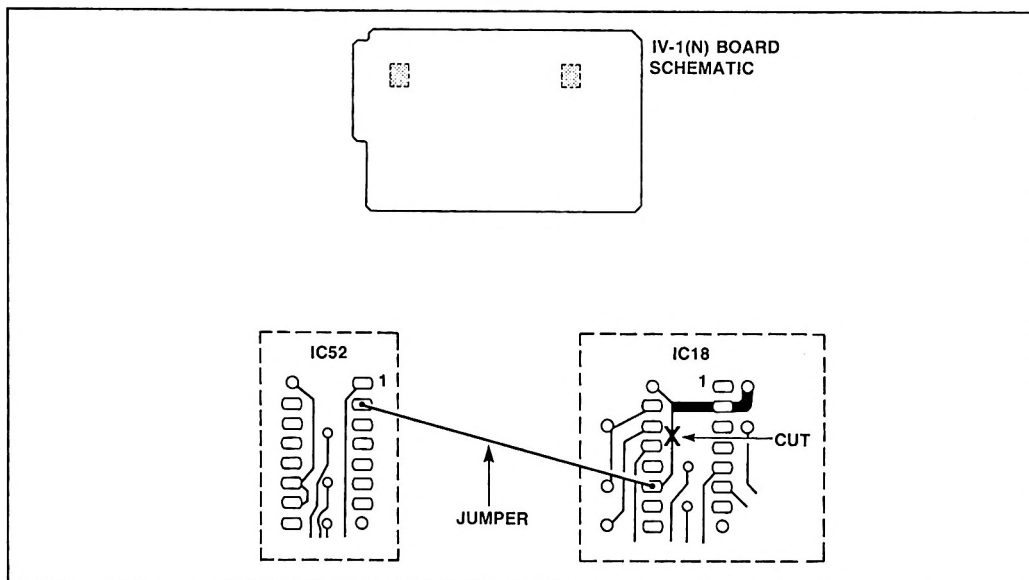
*Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

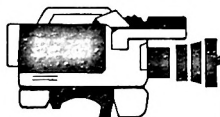




**Figure 1**



**Figure 2**



# technical bulletin

# 83-128

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVT-2000**

Date: July, 1983

**SERIAL NO: SEE TEXT**

**SUBJECT: IMPROVED STABILITY OF HORIZONTAL POSITION  
DURING PLAYBACK**

**THIS BULLETIN SUPERSEDES BVT-2000 BULLETIN NO. 14  
DATED OCTOBER, 1981**

## DESCRIPTION

This modification to the SQ-3 Board eliminates H-Shifts due to TBC mislocking and color frame pulse jitter. The modification generates a color frame pulse using SC and corrected SH to verify horizontal leading edge timing (referenced to Burst phase). The recorded color frame pulse is no longer used, which makes this feature suitable for CMX and Datatron Editors.

The modification as written applies to SQ-3 Boards 1-600-166-11 through -23. For boards with part number suffixes -24 and higher, substitute any unused gate for G3-11,12,-13.

## PARTS REQUIRED

| Part No.     | Description           | Qty. |
|--------------|-----------------------|------|
| 1-247-855-00 | Res, Carbon, 10k 1/6W | 1    |
| 1-107-077-00 | Cap, Mica, 47 pF, 50V | 1    |

## MODIFICATION PROCEDURE

1. On foil side of SQ-3 Board, add the following jumpers. (See Figures 1 and 2.):

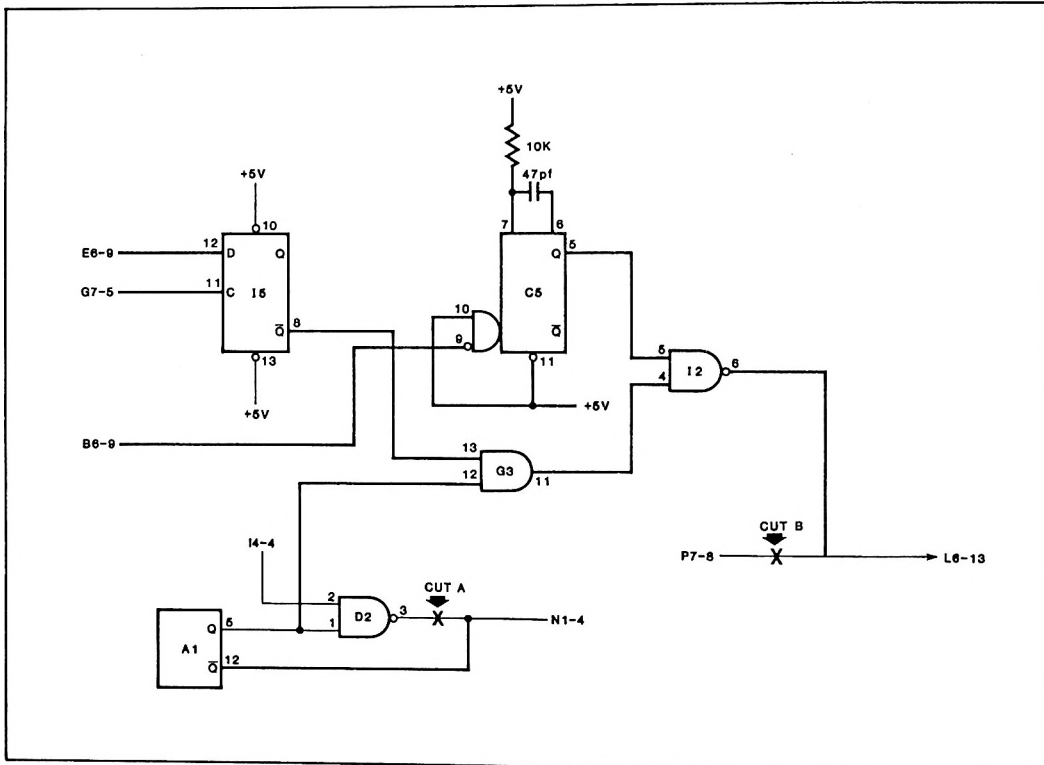
| From  | To                   | From  | To                    |
|-------|----------------------|-------|-----------------------|
| E6-9  | I5-12                | G3-11 | I2-4                  |
| G7-5  | I5-11                | I2-6  | L6-13 (Ref. Figure 2) |
| I5-8  | G3-13                | C5-10 | C5-11                 |
| D2-1  | G3-12                | C5-11 | C5-16                 |
| B6-9  | C5-9                 | I5-10 | I5-13                 |
| A1-12 | N1-4 (Ref. Figure 2) |       |                       |
| C5-5  | I2-4                 |       |                       |

Reference: D.T. / T.Mc.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

2. Connect 10k resistor between C5-7 and C5-10 (+5V).
3. Connect 47 pF capacitor between C5-6 and C5-7.
4. Cut trace between D2-3 and N1-4 (Cut A, Figure 2).
5. Cut trace between O7-8 and L6-13 (Cut B, Figure 2).
6. On component side, adjust VR17 (location F8) and VR3 (location B1) fully CCW.



**Figure 1**

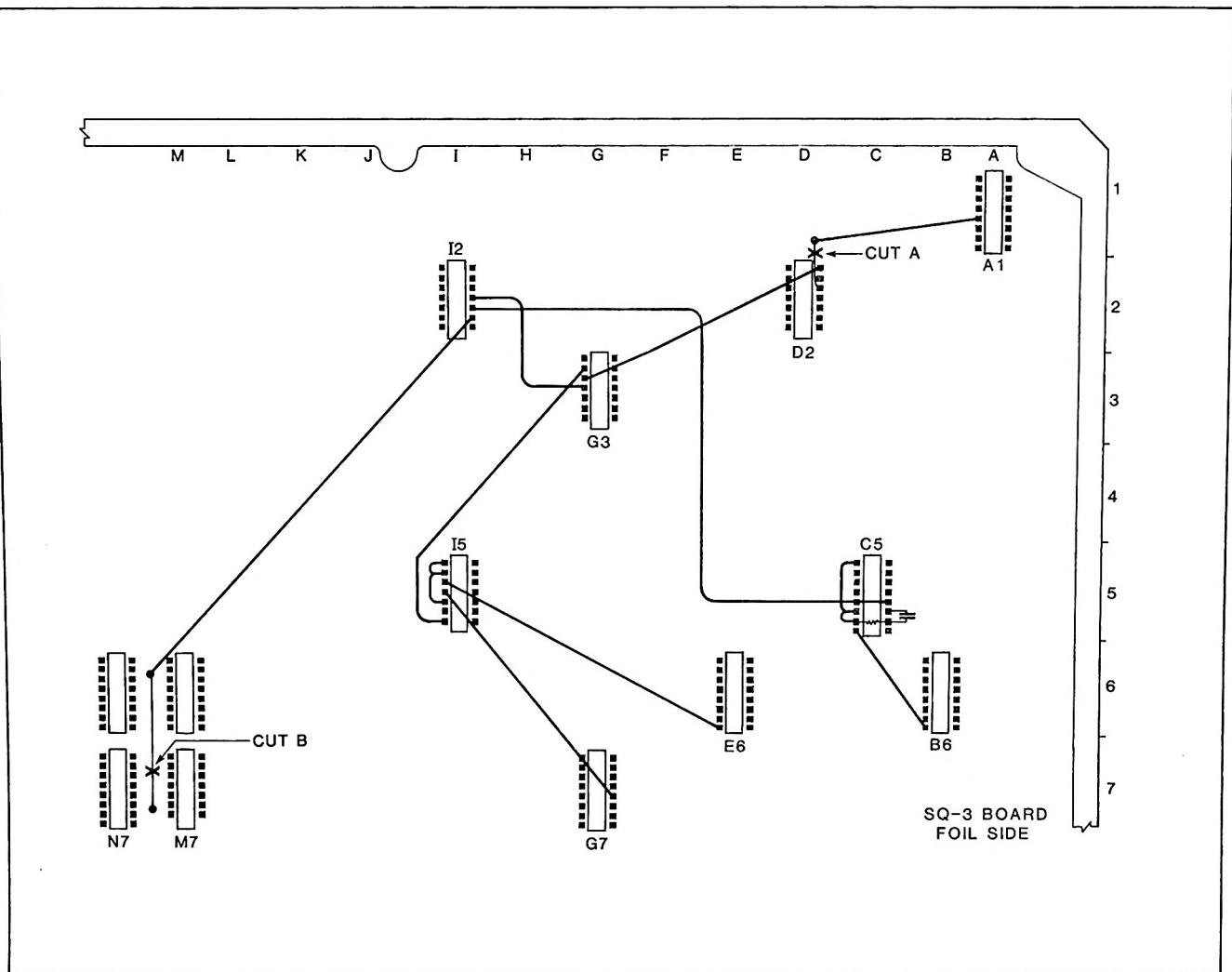
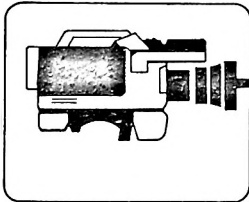


Figure 2



## technical bulletin

# 83-111

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: June, 1983

**MODEL: BVT-2000**

**SERIAL NO: 11,700 AND LOWER**

**SUBJECT: IMPROVED DROP OUT COMPENSATION**

### DESCRIPTION

The Drop Out Compensator of BVT-2000 units with S.N. 11,700 and lower may not completely cover a drop out horizontally, leaving a white glitch to the immediate left of the restored line of video. If the drop out encompasses several lines, this will result in a vertical white streak on the raster as shown in Figure 1. The following modification to the IV-1 Board will eliminate this problem.

### PARTS REQUIRED

| Part No.     | Description                   | Qty. |
|--------------|-------------------------------|------|
| 1-102-114-00 | Cap, Ceramic, 470pF, 50V, 10% | 1    |

### MODIFICATION PROCEDURE

**IV1- Board (See Figure 2.)**

1. Add 470pF ceramic capacitor (C503) between IC47-1 and IC47-8 (GND).

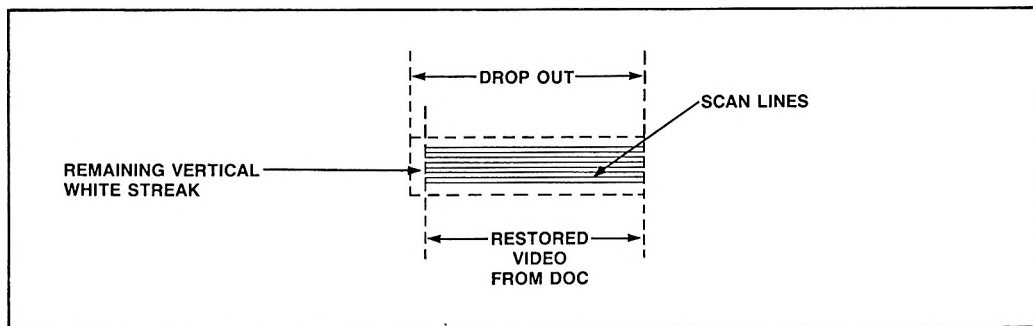


Figure 1

Reference: VS 81-2096 / T.Mc.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

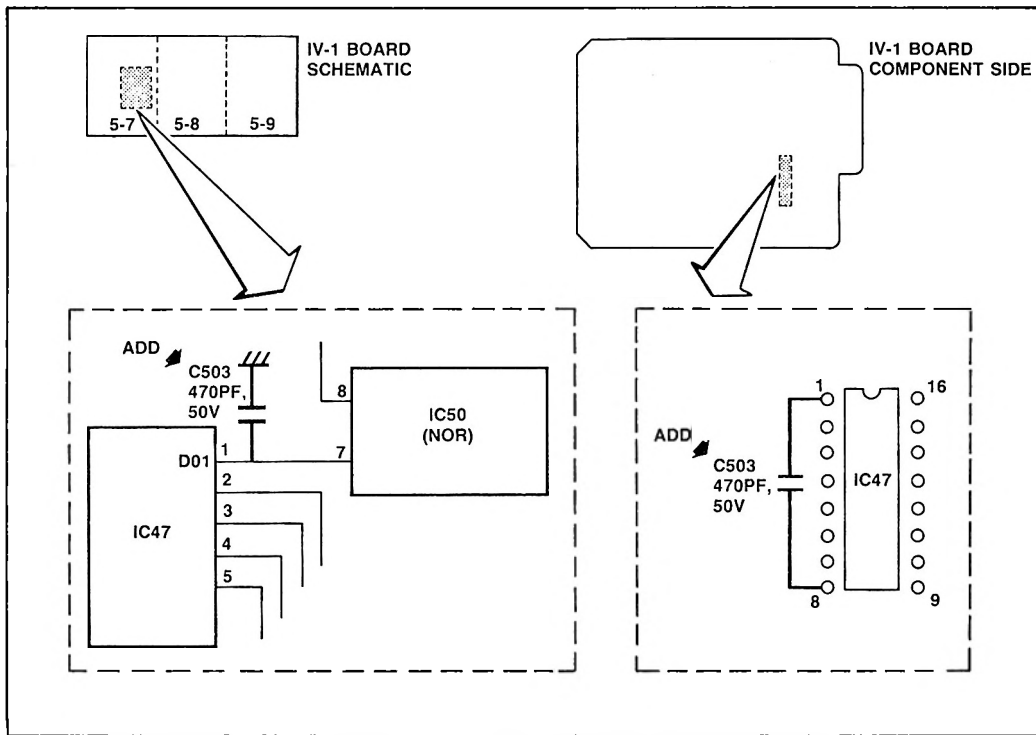
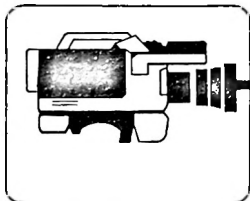


Figure 2



# technical bulletin

# 83-115

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: June, 1983

**MODEL: BVT-2000, TBC-200**

**SERIAL NO: 60,000 AND LOWER (BVT-2000)  
12,623 AND LOWER (TBC-200)**

**SUBJECT: DT PICTURE QUALITY IMPROVEMENT**

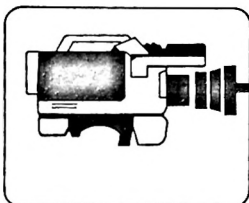
## DESCRIPTION

Y-ADD processing for reducing the Chroma signal jitter during DT PLAY BACK has been added to the machine. Earlier serial number machines can be updated to include this improvement by installing BVT-KIT 5. Information concerning the kit is found in Supplement-8 to the Operation and Maintenance Manual.

*Reference: VS 82-2035 / T.Mc.*

*Page 1 of 1*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# technical bulletin

## 83-083

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: April, 1983

**MODEL: BVT-2000, BVU-820**

**SERIAL NO: 63,300 AND LOWER (BVT-2000)**

**SUBJECT: DOC IN DT MODE WHEN BVT-2000 IS USED WITH BVU-820**

### DESCRIPTION

When the BVT-2000 is used with a BVU-820, the BVT-2000 DOC will function properly only when the U-matic is in Normal PB mode. The following modification will provide DOC during DT PB mode as well.

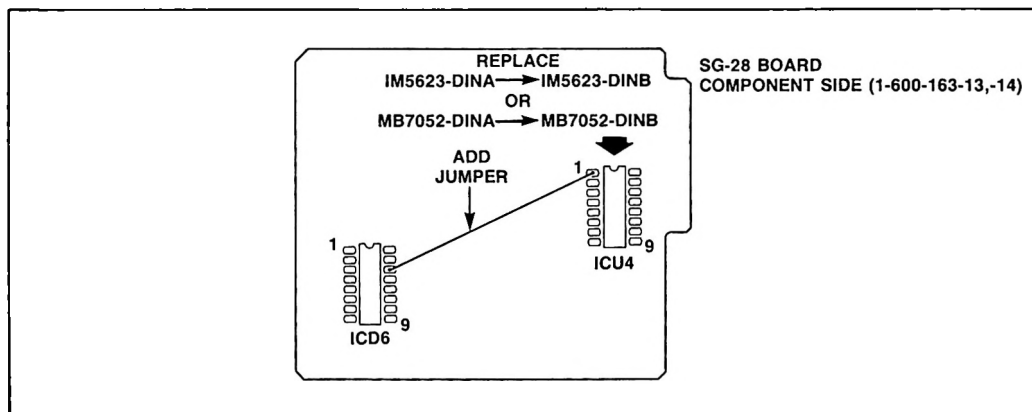
### PARTS REQUIRED

| Part No.     | Description       | Qty. |
|--------------|-------------------|------|
| 8-759-923-23 | PROM, 1M5623-DINB | 1    |
|              | OR                |      |
| 8-759-752-14 | PROM, 1M7052-DINB | 1    |

### MODIFICATION PROCEDURE

**SG-28 Board (See Figure 1.)**

1. Replace former ICU4 (DINA) with new PROM (DINB).
2. Jumper ICD6-14 to ICU4-1.



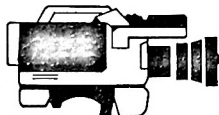
**Figure 1**

Reference: VS 82-2111 Revised / T.M.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.





# technical bulletin

# 83-075

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVT-2000**

Date: April, 1983

**SERIAL NO: 10,001 — 10,400**

**SUBJECT: OVERHEATING OF POWER TRANSFORMER CONNECTORS**

## DESCRIPTION

The primary to secondary current of the BVT-2000 power transformer is 2A to 7A. This relatively high amperage may cause the Molex miniature connectors to overheat if the male and female contacts are not tightly seated. Should this problem occur, apply the procedure described below.

## MODIFICATION PROCEDURE

1. Check connectors shown in Figure 1 for adequate contact between male and female pins. Re-seat connectors firmly. If contact is still not sufficient, proceed to next step.
2. Remove pins from connector and wires and solder wires together as shown in Figure 2.

*Reference: VS 80-69 / T.M.*

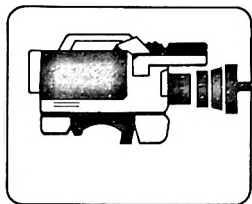
*Page 1 of 3*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

|       |       |       |       |
|-------|-------|-------|-------|
| 5-123 | 5-124 | 5-125 | 5-126 |
|-------|-------|-------|-------|







**MODEL: BVT-2000**

Date: March, 1983

**SERIAL NO: 10,600 AND LOWER**

**SUBJECT: REDUCTION OF HUE DEVIATION WITH TEMPERATURE CHANGES**

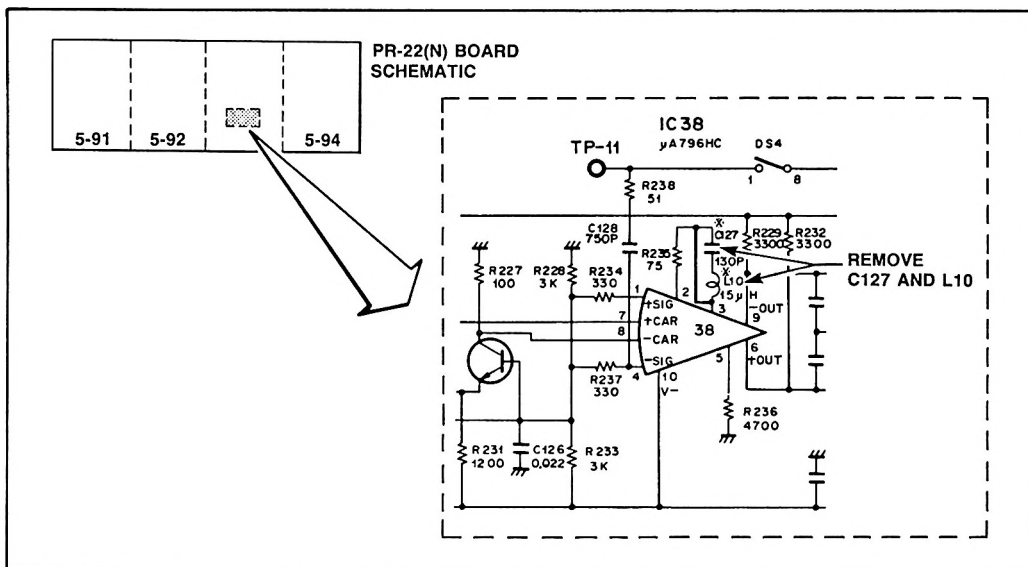
### DESCRIPTION

Beginning with serial number 10,601, two components were removed from the PR-22 Board to reduce hue deviation caused by temperature changes. Although not in the temperature compensation loops, these components caused temperature changes within the range of 20-25°C. Removing these components in earlier units (S.N. 10,600 and lower) will keep temperature drift within 5-7°C.

This modification involves removing the two components from the PR-22 Board and moving a resistor to complete the circuit. This resistor becomes the only component to determine the gain of the multiplier IC (IC38). After the modification is complete, perform the Phase Detect Offset and Hue Preset Adjustments to further guard against hue and temperature variation.

### MODIFICATION PROCEDURE

1. Remove C127 and L10 from PR-22 Board. (See Figures 1 and 2.)
2. Move R235 to new location: from IC38-2 to IC38-3.



**Figure 1**

Reference: VS 80-62 / T.M.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

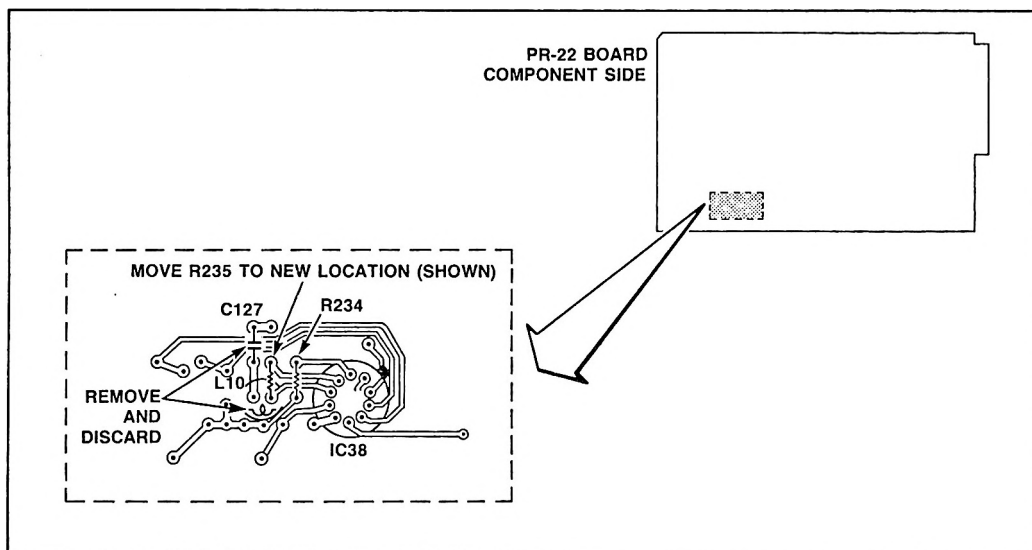


Figure 2

## ADJUSTMENT PROCEDURE

### I. Phase Detect Offset Adjustment

#### A. Setup

1. Connections — same as Sec. 7-2, Connection 1. (See BVT-2000 Operation and Maintenance Manual.)
2. Equipment — Oscilloscope. Trig.-INT; Input Coupling-DC.
3. Switches and Controls — same as Sec. 7-3.
4. Input Signal (Off Tape Video In) — Ramp Linearity Signal 1Vp-p. Subcarrier On.

#### B. Specification and Adjustment

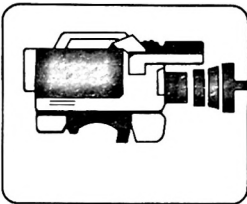
1. On PR-22 Board, set DIP switch DS4, Channel 1 to OFF.
2. Connect jumper between TP10 and TP11.
3. Measure voltage at IC43-1. Adjust VL4 to achieve  $0V_{dc} \pm 0.5V_{dc}$ .
4. Remove jumper and set DS4, Channel 1 to ON.

### II. Hue Preset Adjustment

#### A. Setup — same as above.

#### B. Specification and Adjustment

1. Observe signal at VIDEO OUT on connector panel.
2. Adjust VR4 on SG-28 Board so that phase difference between burst and chroma signals is  $0^\circ \pm 1^\circ$ .



Date: March, 1983

**MODEL: BVT-2000****SERIAL NO: 10,101 AND HIGHER****SUBJECT: OPTIONAL MODIFICATION TO INCREASE HUE CONTROL RANGE****DESCRIPTION**

This modification will increase the HUE control range from  $\pm 15^\circ$  to  $\pm 45^\circ$ . The modification is offered to users as an option and will not be used in factory production.

**PARTS REQUIRED**

| Part No.     | Description                                      | Qty. |
|--------------|--|------|
| 1-214-145-00 | Res, Metal, 3.6 k $\Omega$ , $\frac{3}{4}$ W, 1% | 1    |
| 1-214-157-00 | Res, Metal, 11 k $\Omega$ , $\frac{1}{4}$ W, 1%  | 1    |
| 1-214-159-00 | Res, Metal, 13 k $\Omega$ , $\frac{1}{4}$ W, 1%  | 1    |
| 1-214-162-00 | Res, Metal, 18 k $\Omega$ , $\frac{1}{4}$ W, 1%  | 1    |
| 1-214-166-00 | Res, Metal, 27 k $\Omega$ , $\frac{1}{4}$ W, 1%  | 1    |
| 1-214-173-00 | Res, Metal, 51 k $\Omega$ , $\frac{1}{4}$ W, 1%  | 1    |
| 1-214-175-00 | Res, Metal, 62 k $\Omega$ , $\frac{1}{4}$ W, 1%  | 1    |
| 1-214-178-00 | Res, Metal, 82 k $\Omega$ , $\frac{1}{4}$ W, 1%  | 1    |
| 8-719-815-55 | Diode, 1S1555                                    | 1    |

**MODIFICATION PROCEDURE****SG-28(N) Board**

1. Replace the following components with the values indicated. (See Figure 1.)

|      |              |   |               |
|------|--------------|---|---------------|
| R519 | 30k $\Omega$ | → | 62k $\Omega$  |
| R22  | 15k $\Omega$ | → | 3.6k $\Omega$ |
| R46  | 15k $\Omega$ | → | 27k $\Omega$  |
| R47  | 20k $\Omega$ | → | 11k $\Omega$  |
| R48  | 12k $\Omega$ | → | 18k $\Omega$  |
| R49  | 24k $\Omega$ | → | 13k $\Omega$  |

Reference: VS 80-30 / T.Mc.

Page 1 of 4

2. Add 82 k $\Omega$  resistor using pads labeled R56. (See Figure 1.)
3. Add diode using pads labeled Q9; anode to emitter pad (GND), and cathode to collector pad (junction R46 & R47). (See Figure 1.)
4. Jumper R17 (connector pin 44A) to 82 k $\Omega$  resistor. (See Figure 2.)
5. Jumper 82 k $\Omega$  resistor to ICB4-6. (See Figure 2.)
6. Add 51 k $\Omega$  resistor between ICB6-2 and ICB6-3. (See Figure 2.)

#### ADJUSTMENT PROCEDURE

After completing the modification, perform the **Burst Phase Error Adjustment** and **Hue Reset Calibration** in section 22-14 of the manual.

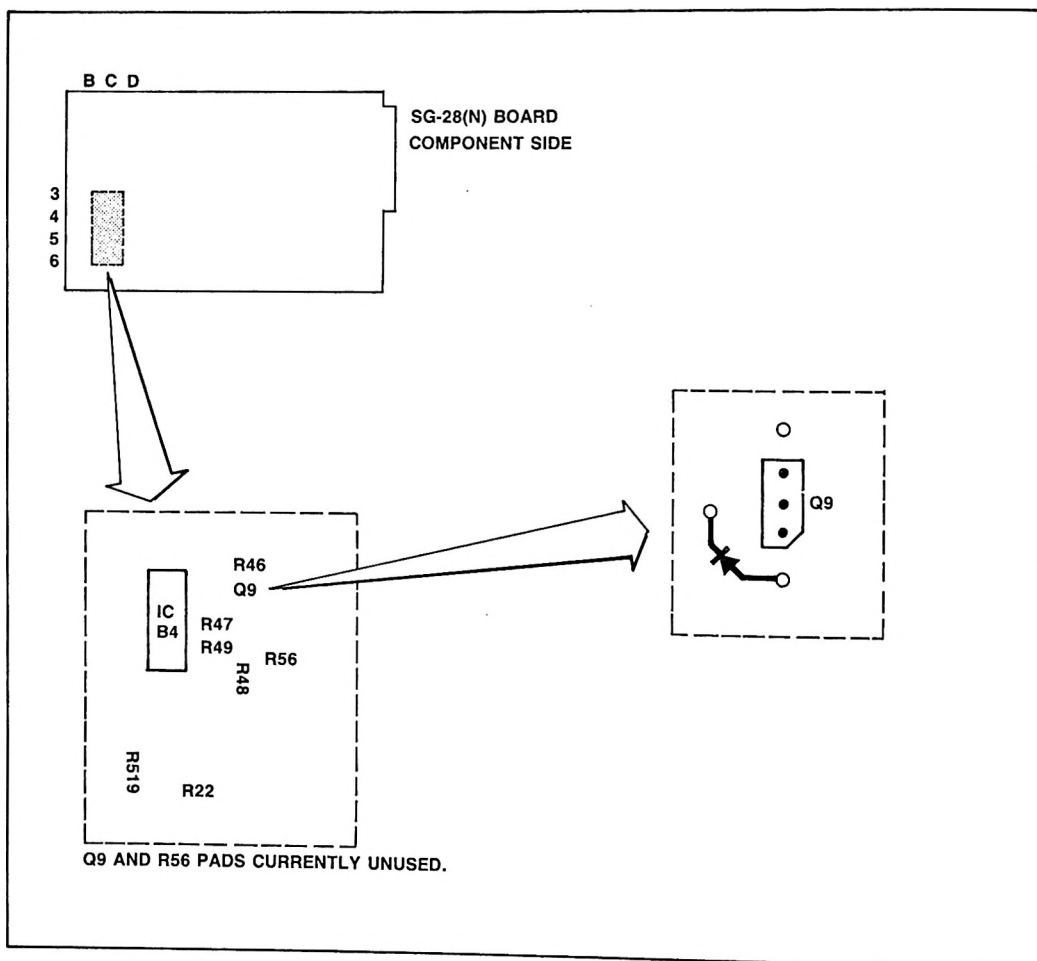


Figure 1

**Figure 2**



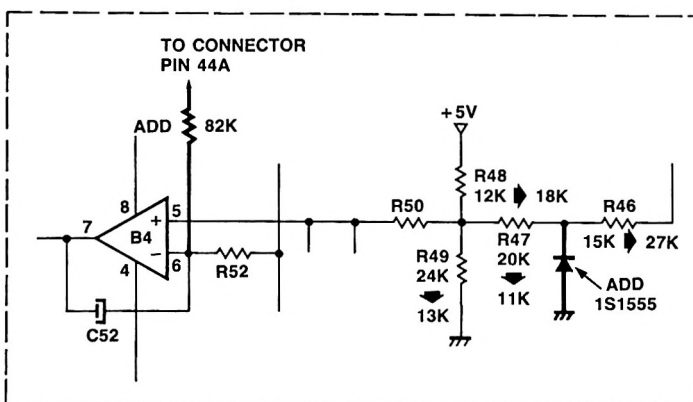
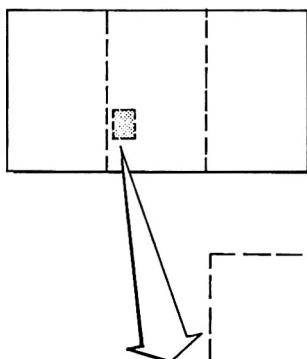
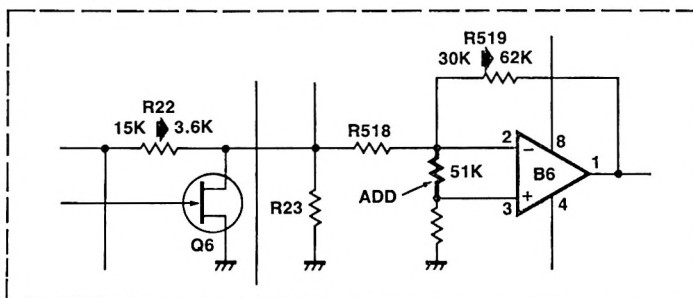
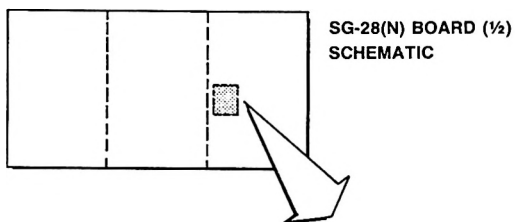
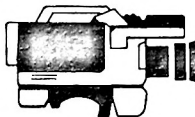


Figure 3



Date: March, 1983

**MODEL: BVT-2000**

**SERIAL NO: 11,300 AND LOWER**

**SUBJECT: SC LOCK STABILITY AT LOW TEMPERATURES**

## DESCRIPTION

Due to inconsistencies in diode characteristics, the subcarrier phase lock loop may become unlocked at low temperatures. If this is observed, replace D10 on the SG-18 Board with the new diode listed below. (See Figure 1.)

## PARTS REQUIRED

| Part No.     | Description   | Qty. |
|--------------|---------------|------|
| 8-719-723-39 | Diode, 1S2339 | 1    |

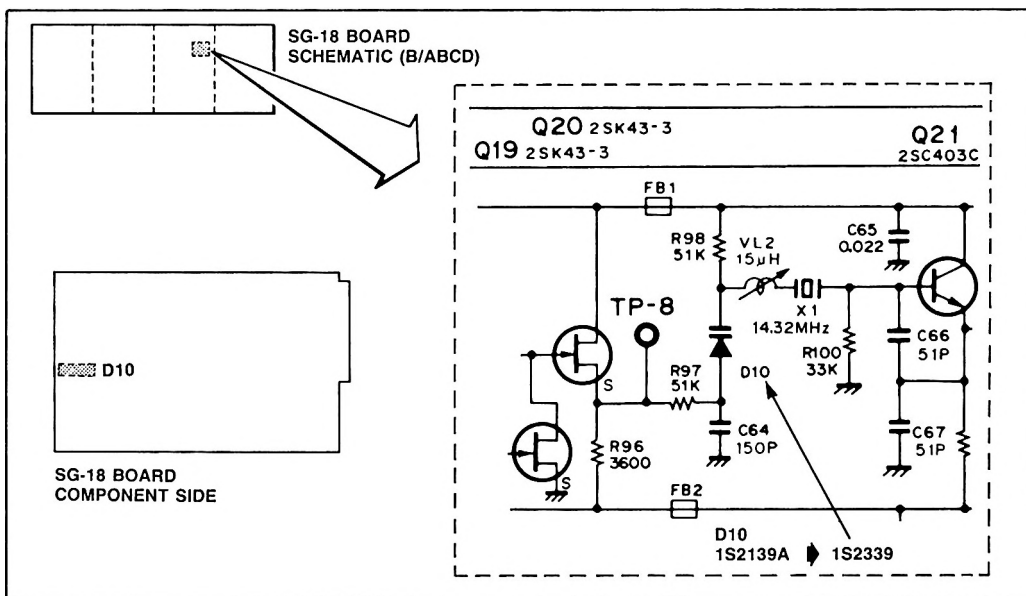
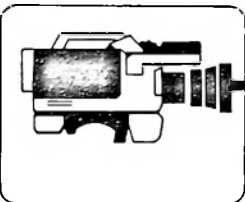


Figure 1

Reference: VS 80-70 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



## technical bulletin

# 83-047

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVT-2000**

Date: March, 1983

**SERIAL NO: 11,200 AND LOWER**

**SUBJECT: PREVENTING HUE VARIATIONS DURING DROPOUT**

### DESCRIPTION

The hue of the video during dropout can vary as much as 10%. This variation is due to differences in the characteristics of the ICs used. Dropout hue variation can be prevented by modifying two boards in the BVT-2000. On the CK-5 Board, IC12 (F4051BPE) is replaced with an NEC manufactured IC ( $\mu$ PD4051BC). On the SG-28(N) Board, a resistor network with an adjustment for the dropout pulse is added.

The Parts Required table lists the part numbers for the new parts. Figure 1 shows the change to the CK-5 Board schematic and the location of IC12. Figure 2 shows the change to the SG-28(N) Board. Figure 3 shows the modification applied to the SG-28(N) Board. Figure 4 shows the adjustment specification.

### PARTS REQUIRED

| Part No.     | Description                | Ref. Desig. |
|--------------|----------------------------|-------------|
| 1-131-441-00 | Cap, Tant, 22 $\mu$ F, 16V | SG-28/C527  |
| 1-214-132-00 | Res, Met, 1k, 1/4W, 5%     | SG-28/R532  |
| 1-214-170-00 | Res, Met, 39k, 1/4W, 5%    | SG-28/R533  |
| 1-224-940-00 | Res, Variable, 10k         | SG-28/VR504 |
| 8-759-140-51 | IC, $\mu$ PD4051BC         | CK-5/IC12   |

### MODIFICATION PROCEDURE

1. On CK-5 Board, replace IC12 (Fairchild IC F4051BPE) with new IC  $\mu$ PD4051BC. (See Figure 1.)
2. On solder side of SG-28(N) Board, install the following parts as shown in Figures 2 and 3. Use insulated wire for long jumpers.

| Component                | From          | To             |
|--------------------------|---------------|----------------|
| 1k $\Omega$ (R532)       | ICE6-16       | ICE6-11        |
| 22 $\mu$ F (C527)        | ICE6-6,8 or 9 | ICE6-16        |
| 10k $\Omega$ VAR (VR504) | ICE6-11       | ICE6-6,8 or 9. |
| 39k $\Omega$ (R533)      | VR504 Wiper   | ICC7-5         |

Reference: VS 80-73 / T.M.

Page 1 of 4

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

3. Perform the adjustment below.

### ADJUSTMENT PROCEDURE

1. Apply color bar signal (OFF TAPE VIDEO IN) 1Vp-p and connect vectorscope to TBC output.
2. Apply DO pulse to DOC PULSE IN (rear panel). (See Figure 4.)
3. On vectorscope, observe that signal oscillates at each end (dots split). Adjust VR504 so that dots overlap.

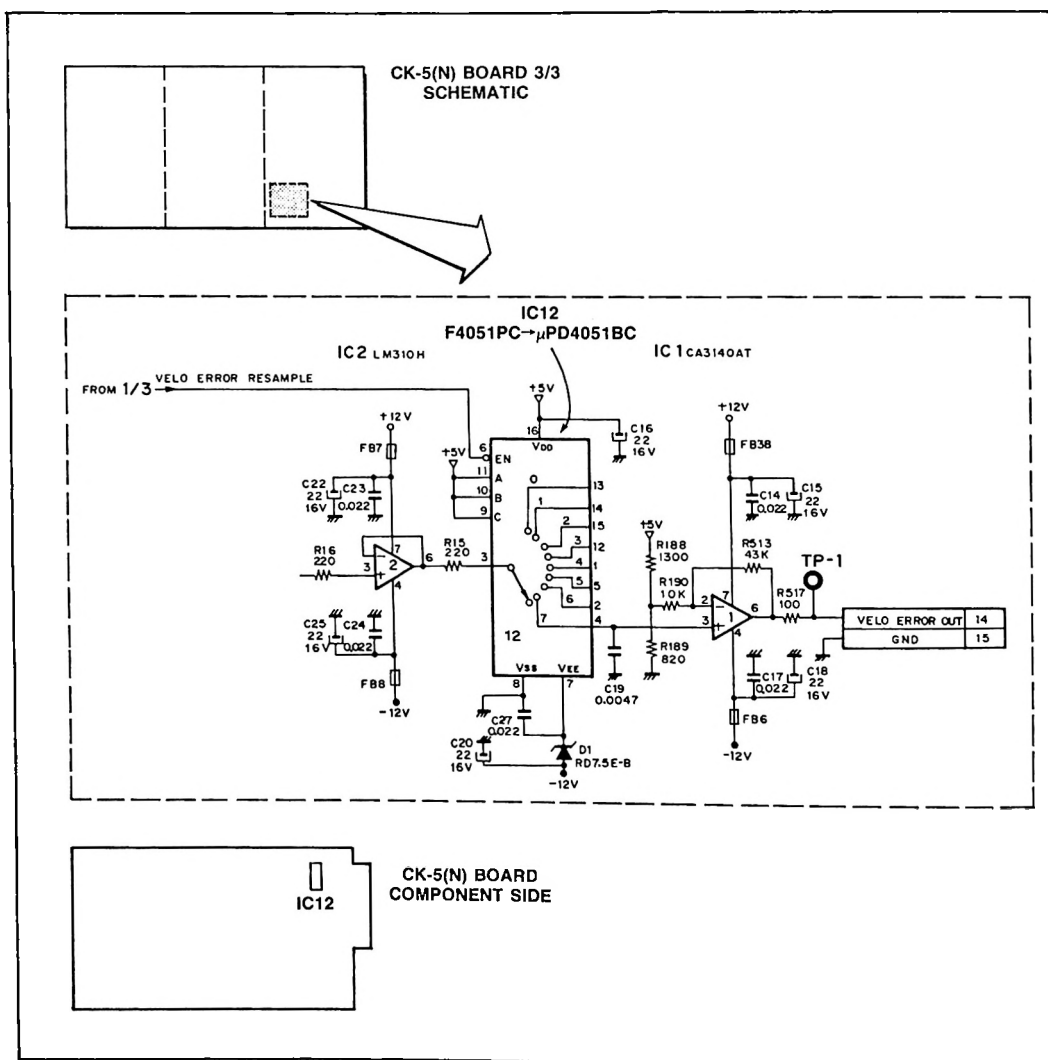


Figure 1

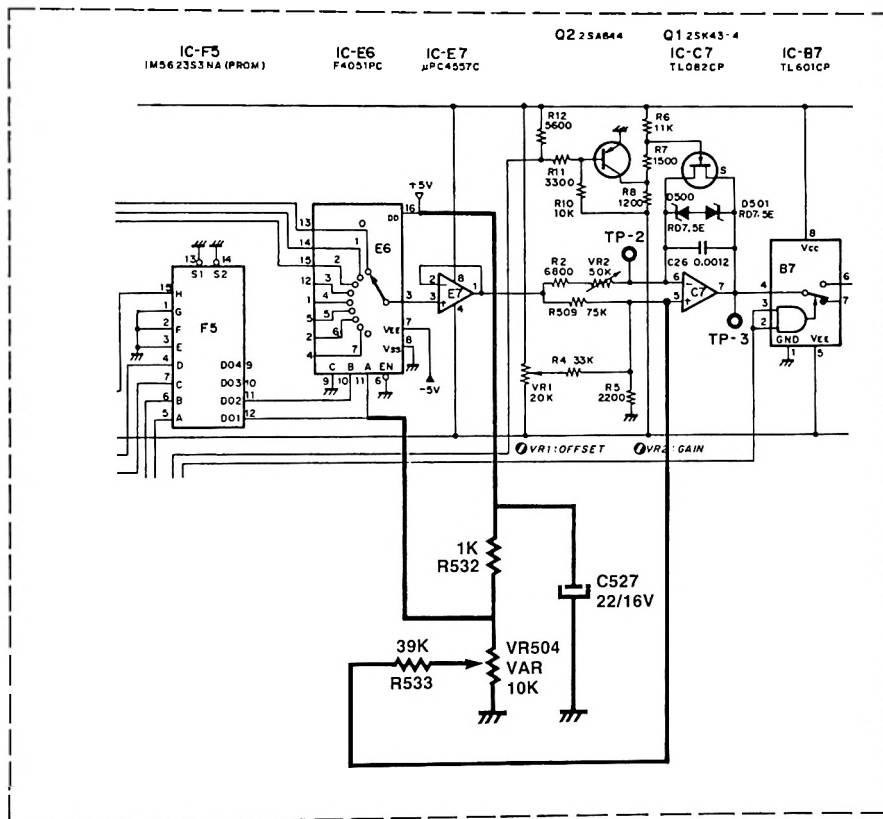
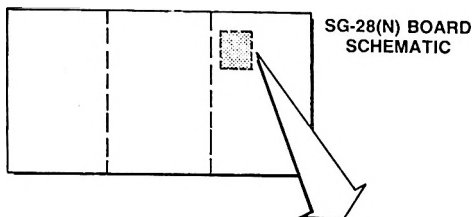


Figure 2

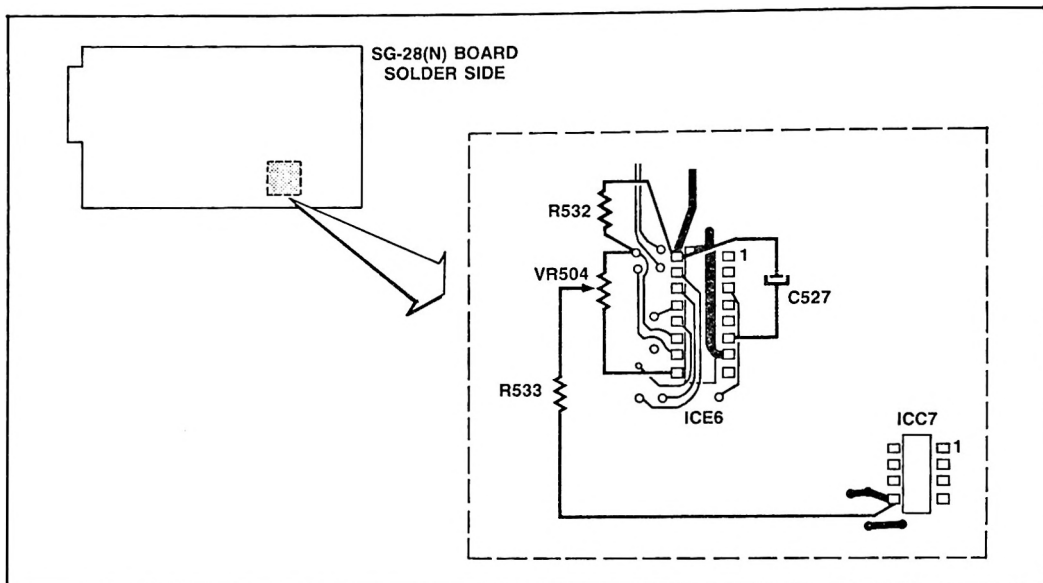


Figure 3

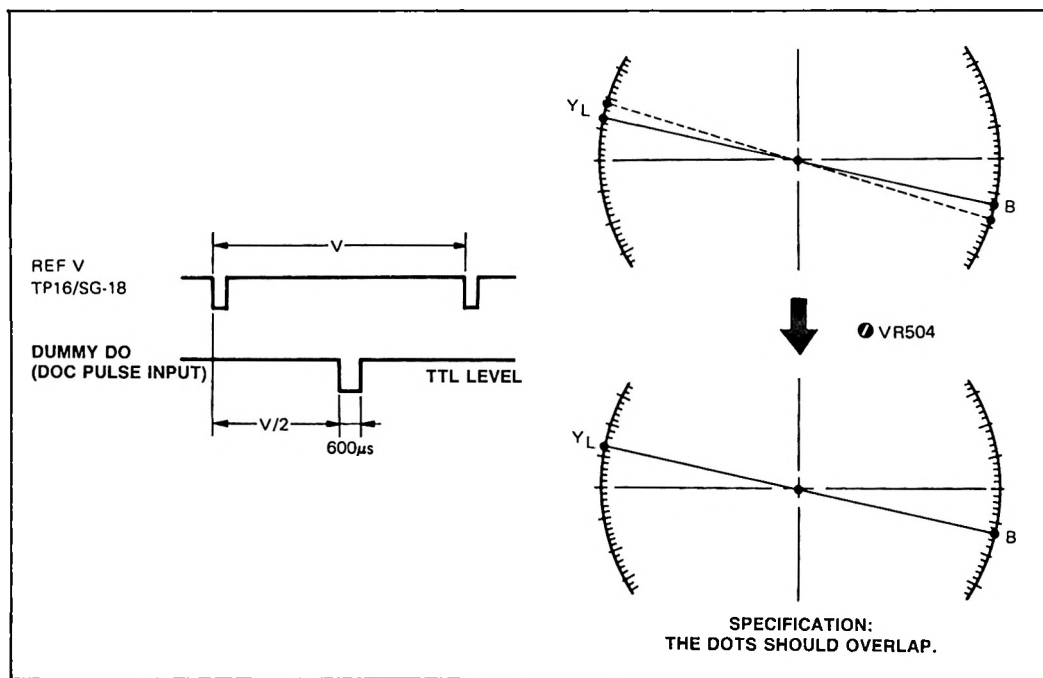
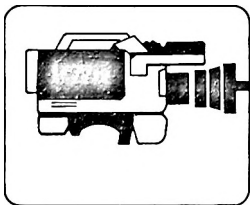


Figure 4



Date: February, 1983

**MODEL: BVT-2000****SERIAL NO: 10,001-10,600****SUBJECT: IMPROVED BURST WIDTH STABILITY****DESCRIPTION**

The burst width of the output video signal may change slightly with variations in temperature. Application of this modification as shown in Figure 1, should eliminate changes in burst width.

**PARTS REQUIRED**

| Part No.     | Description          | Qty |
|--------------|----------------------|-----|
| 1-214-149-00 | Res, Metal, 5.1k, ¼W | 1   |
| 1-214-168-00 | Res, Metal, 33k, ¼W  | 1   |
| 1-214-167-00 | Res, Metal, 30k, ¼W  | 1   |
| 1-214-174-00 | Res, Metal, 56k, ¼W  | 1   |

**MODIFICATION PROCEDURE****PR-22 Board (See Figure 2.)**

1. Remove diodes D8 and D9.
2. Replace the following resistors with the values listed:  
R142 47k → 5.1k  
R143 3.3k → 33k  
R147 220 → 30k
3. On solder side, install new 56kΩ resistor (R311) between base of Q16 and ground (C101).

Reference: VS 80-63 / T.M.

Page 1 of 4

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

## ADJUSTMENT PROCEDURE

- Connections — See Figure 3.
  - Equipment — Oscilloscope
  - Scope Mode — TRIG; INT
  - Control Settings — See Figure 4.
  - Input Signal (OFF TAPE VIDEO IN): Ramp Linearity Signal 1 Vp-p, Subcarrier On.
1. BURST WIDTH — Adjust VR13 on PR-22 Board for VIDEO OUT (connector panel) =  $2.52 \pm 0.1\mu\text{S}$ .
  2. BURST POSITION — Adjust VR11 for VIDEO OUT =  $5.45 \pm 0.1\mu\text{S}$ .

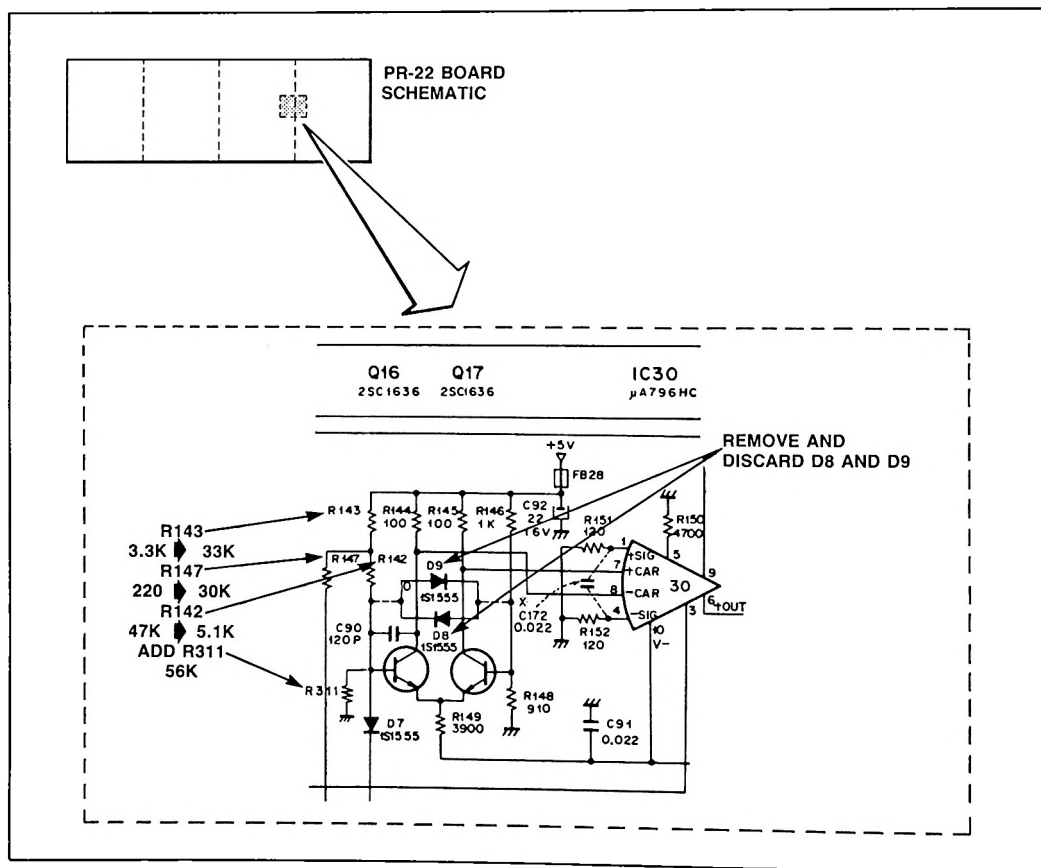


Figure 1



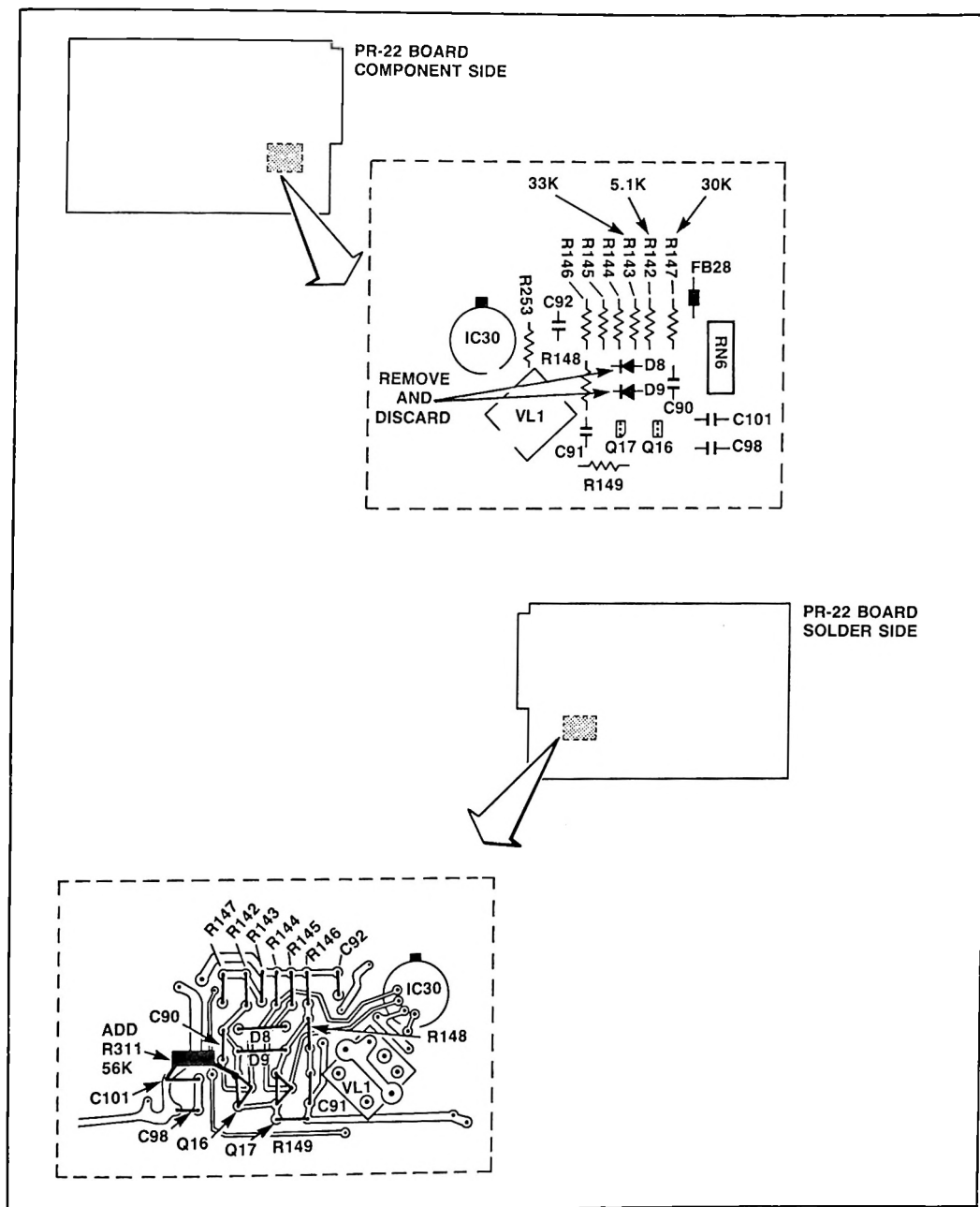


Figure 2

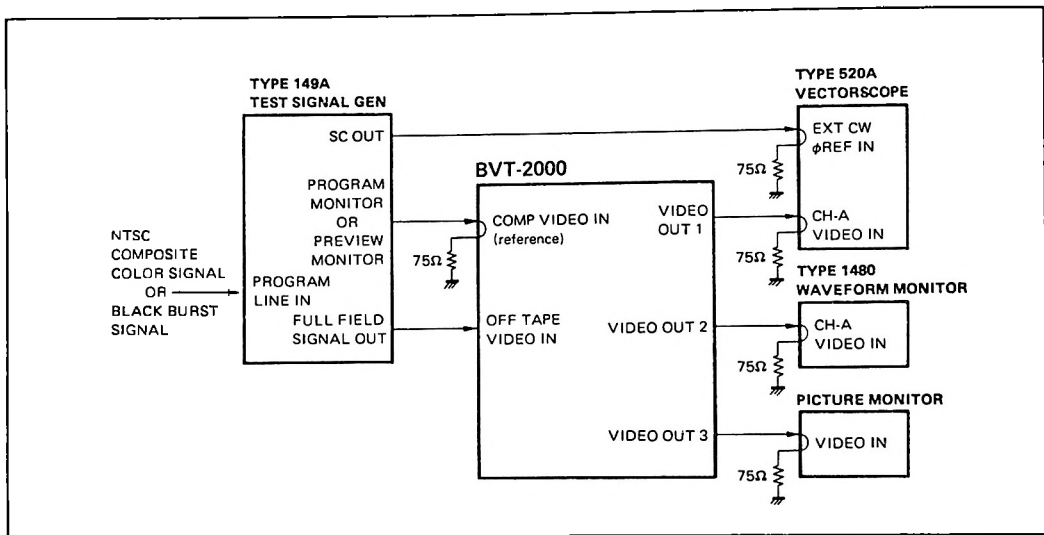


Figure 3

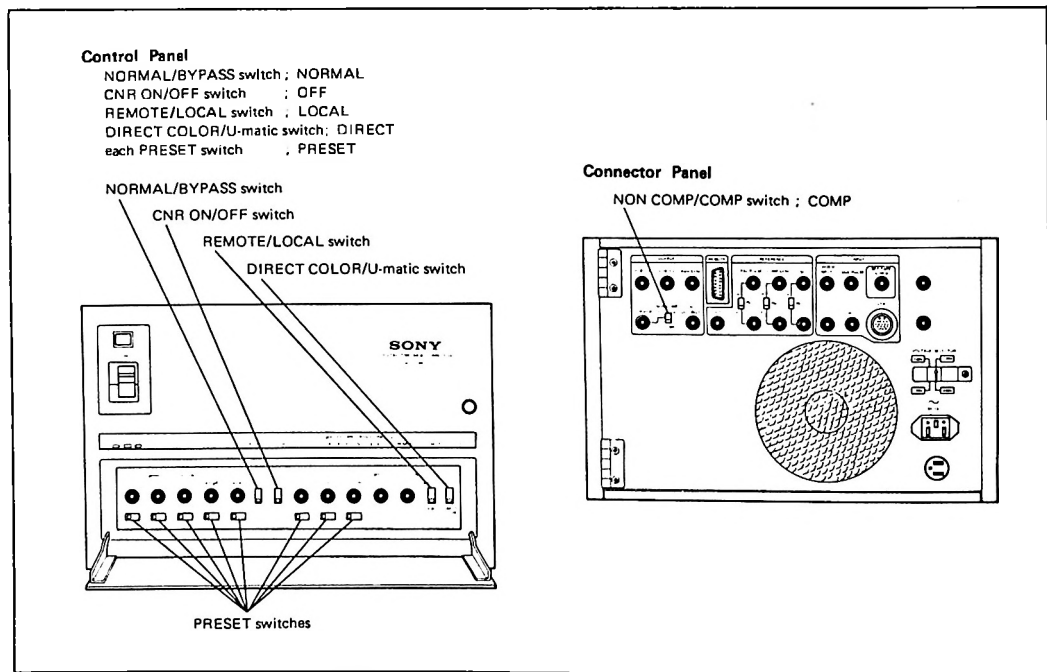
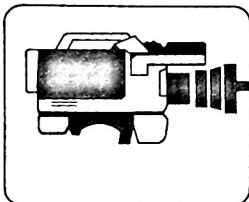


Figure 4



# technical bulletin

# 83-040

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: February, 1983

**MODEL: BVT-2000**

**SERIAL NO: 63,040 AND LOWER**

**SUBJECT: VERTICAL PICTURE SHIFT AT SPEEDS  
GREATER THAN X2 PLAY**

## DESCRIPTION

This bulletin applies to BVT-2000 units with the BK-2001 option. The following modification will provide proper output timing when the TBC must correct the signal from a BVH-2000 operating beyond X2 speed.

## MODIFICATION PROCEDURE

**BVT-2000, Serial No. 52,700 and Lower. (See Figure 1.)**

This modification is for SG-18(N) Boards that do not have the SG-69 Board installed.

1. Cut the trace between ICU6-4 and +5V.
2. Jumper ICU6-4 to edge pin 18B.

**BVT-2000, Serial No. 52,701 to 63,040. (See Figure 2.)**

This modification is for SG-18(N) Boards that include the SG-69 Board.

1. Cut the trace between IC701-5 and IC701-4.
2. Jumper IC701-5 to SG-18(N) Board edge pin 18B.

*Reference: VS 82-2083 / T.M.*

*Page 1 of 3*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

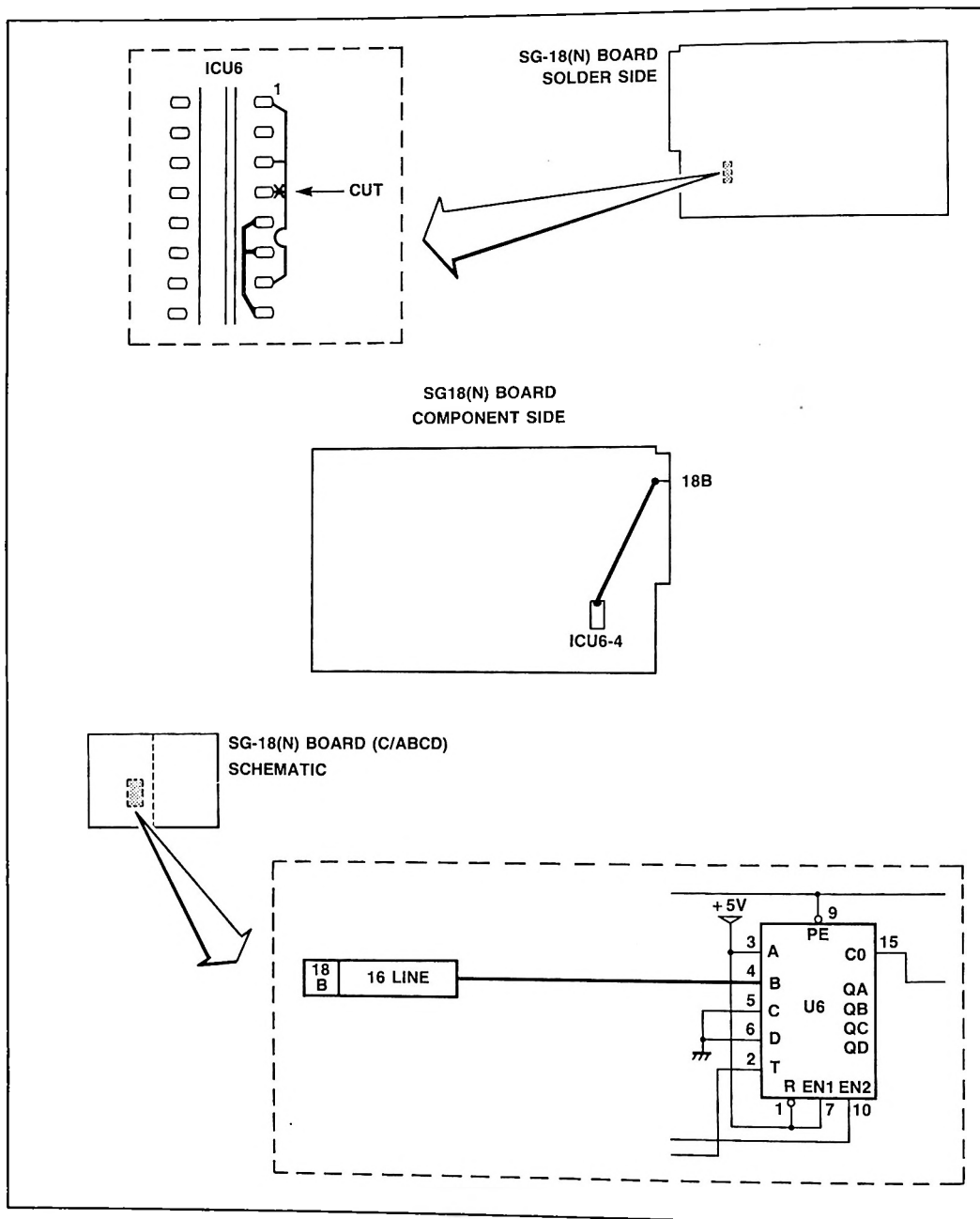
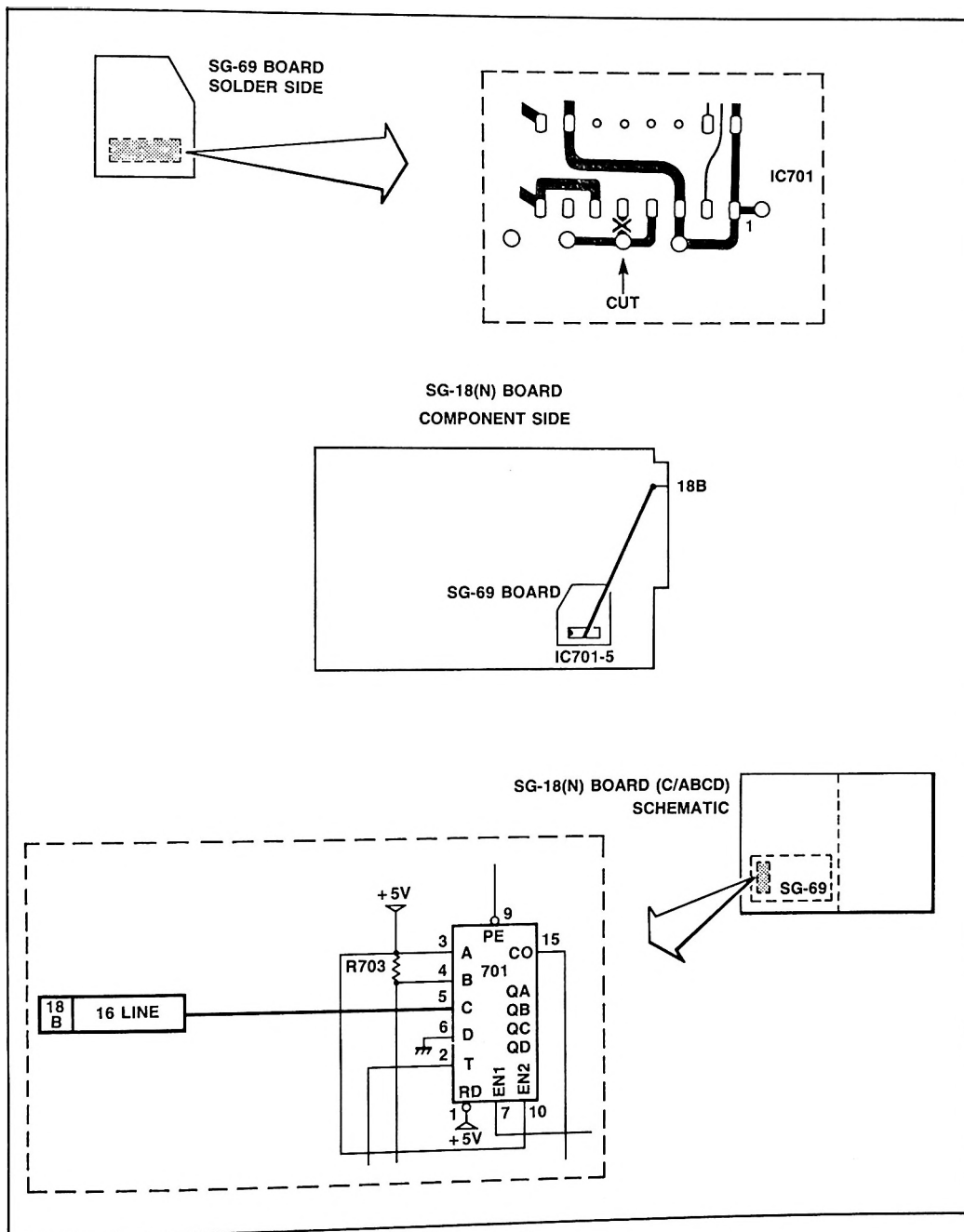
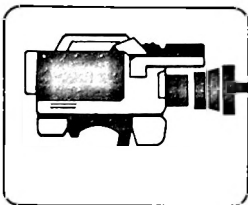


Figure 1



**Figure 2**



DO

**SONY**  
Broadcast**technical bulletin****83-021**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: January, 1983

**MODEL: BVT-2000****SERIAL NO: 12,300 AND LOWER****SUBJECT: INPUT PROTECTION OF DATA LINE DRIVER (A-D CONVERTER)****DESCRIPTION**

TTL-to-ECL Translator MC10124L may not function properly if the input voltage exceeds +5.5V. The following modification will prevent this possibility.

**PARTS REQUIRED**

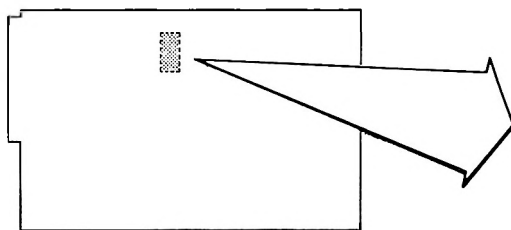
| Part No.     | Description                           | Qty. |
|--------------|---------------------------------------|------|
| 1-214-144-00 | Res, Metal, 3.3k $\Omega$ , 1/4W, 10% | 1    |

**MODIFICATION PROCEDURE****AD-8(N) Board (See Figure 1.)**

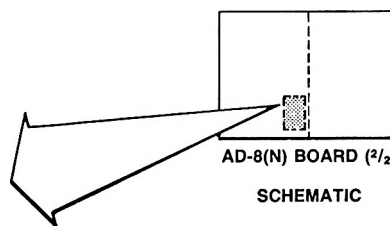
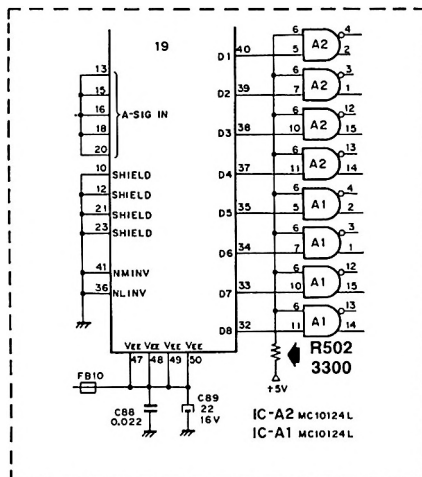
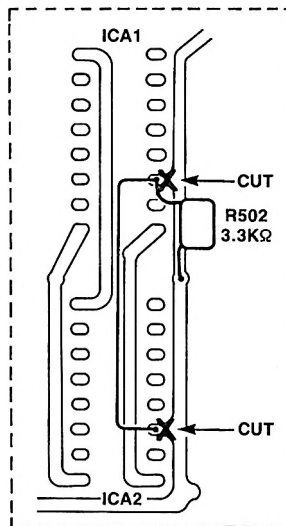
1. Cut trace between ICA1-6 and +5V.
2. Cut trace between ICA2-6 and +5V.
3. Add resistor (R502) between ICA1-6 and +5V.
4. Jumper between ICA1-6 and ICA2-6.

*Reference: VTRW 81-2033 / T.M.**Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

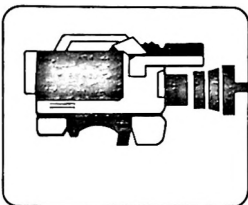


AD-8 (N) BOARD  
SOLDER SIDE



AD-8 (N) BOARD (2/2)  
SCHEMATIC

Figure 1

**technical bulletin****83-017**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVT-2000**

Date: January, 1983

**SERIAL NO: 11,600 AND LOWER****SUBJECT: DP DEVIATION DUE TO TEMPERATURE****DESCRIPTION**

The Differential Phase may deviate as much as 1° due to temperature variations. The modification shown in Figure 1 will eliminate this problem.

**PARTS REQUIRED**

| Part No.     | Description                         | Qty. |
|--------------|-------------------------------------|------|
| 1-108-569-00 | Cap, Mylar, 0.0039 $\mu$ F, 5%, 50V | 1    |

*Reference: VS 81-2076 / T.M.**Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



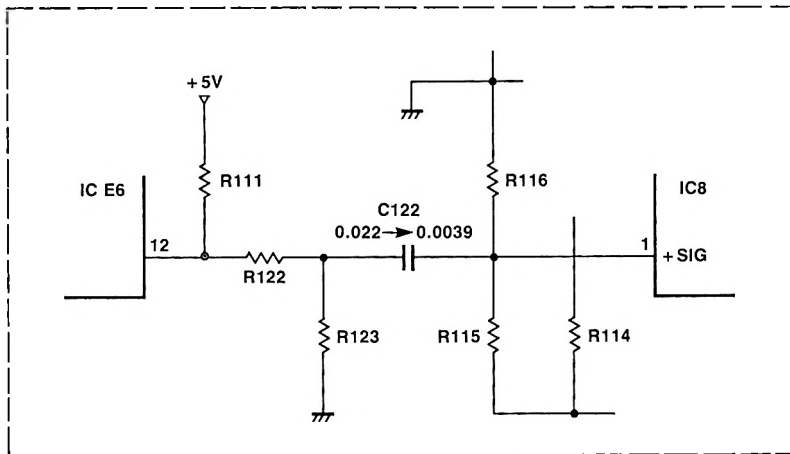
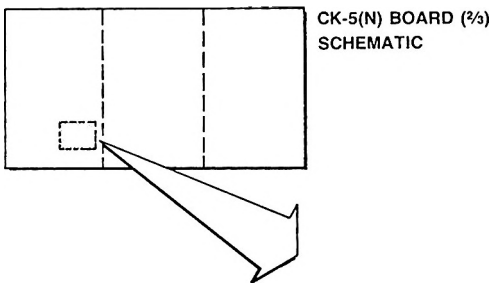
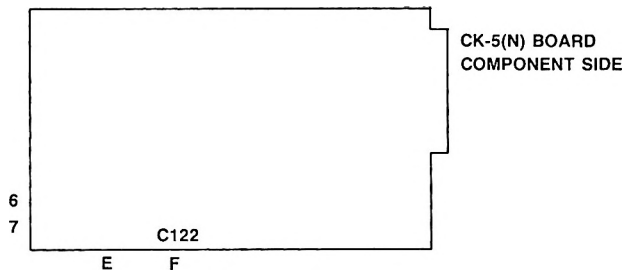
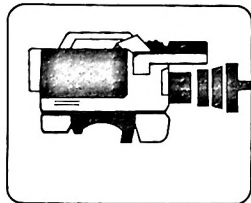


Figure 1

**technical bulletin****83-015**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: January, 1983

**MODE: BVT-2000****SERIAL NO: 10,500 AND LOWER****SUBJECT: HUE INSTABILITY AFTER U-MATIC "LONG PAUSE"****DESCRIPTION**

The CK-5(N) Board on some units may not lock-in again after the U-Matic "Long Pause" mode is released. The following modification to the Burst Stretcher circuits will correct this problem.

**PARTS REQUIRED**

| Part No.     | Description                          | Qty. |
|--------------|--------------------------------------|------|
| 1-246-515-00 | Res, Carbon, 56k $\Omega$ , 1/4W, 5% | 2    |
| 1-214-125-00 | Res, Metal, 510 $\Omega$ , 1/4W, 1%  | 1    |

**MODIFICATION PROCEDURE****CK-5(N) BOARD**

1. Replace the following components (See Figure 1.):

R45, R47 . . . 100k $\Omega$   $\rightarrow$  56k $\Omega$ R34 . . . . . 240 $\Omega$   $\rightarrow$  510 $\Omega$ 

2. Perform Burst Stretcher Adjustment in section 15-6 of manual.

*Reference: VS 81-2103 / T.M.**Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

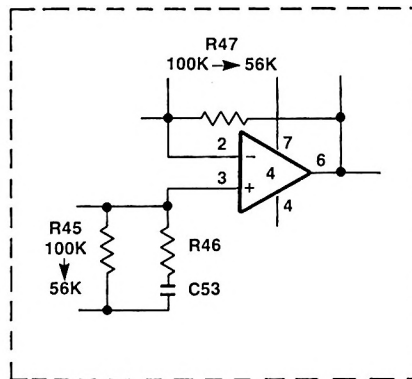
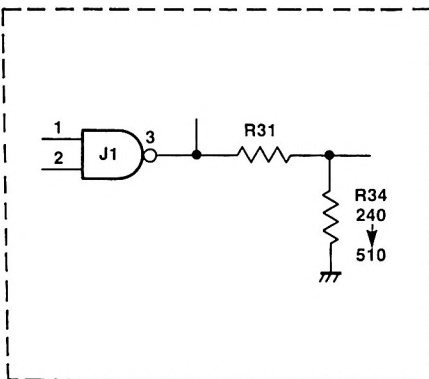
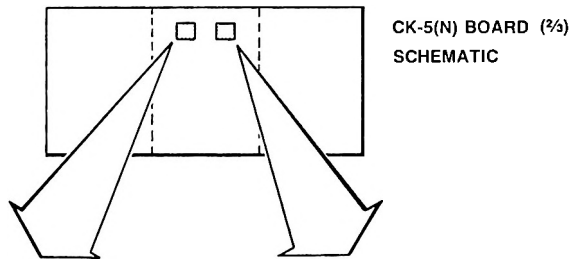
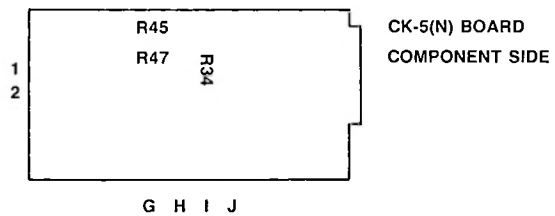
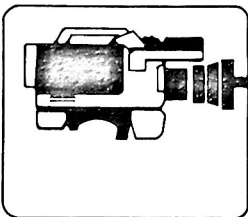


Figure 1



SONY®

# broadcastbulletin No. 82-79

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

MODEL: BVT-2000

Date: November, 1982

SERIAL NO: 11,100 AND LOWER

SUBJECT: SET-UP LEVEL IMPROVEMENT

*In case of set-up  
level trouble*

## DESCRIPTION

The set-up level is increased approximately 40 IRE in some BVT-2000 Digital Time Base Correctors. This is due to transients during on/off switching that can damage C32 on the AD-8 Board. The damage will result in increasing leakage and changes in set up level. If this is observed, apply the following modification.

Replace C32 on the AD-8 Board with two new capacitors, 22 $\mu$ F/16V. The reference designation for the additional capacitor is C304. This changes C32 into a non-polarity capacitor and prevents capacitor leakage caused by inverse voltage. The Parts Required table lists the part number for the new capacitors. Figure 1 shows the change to the schematic. Figure 2 shows the modification applied to the AD-8 Board.

## PARTS REQUIRED

| Part No.     | Description               | Qty. |
|--------------|---------------------------|------|
| 1-131-441-00 | Cap, Tant. 22 $\mu$ F/16V | 2    |

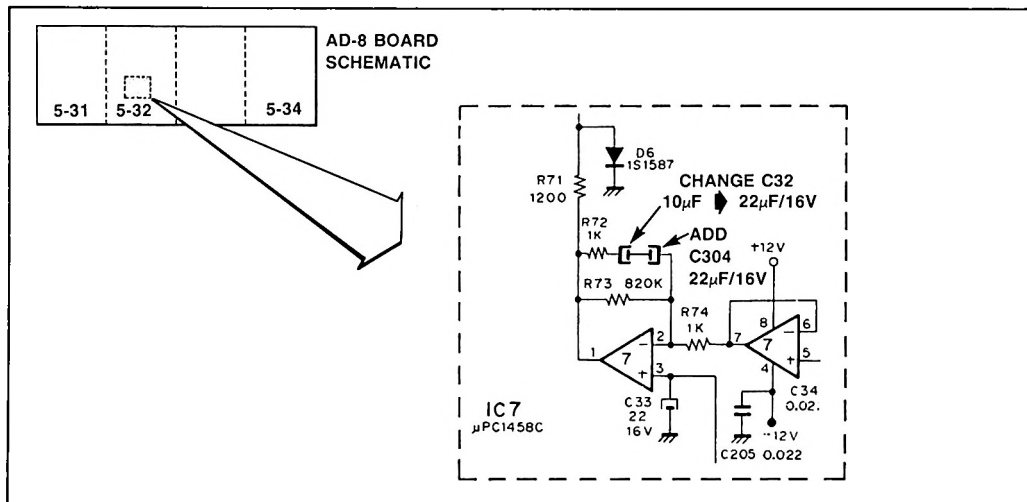


Figure 1

Reference: VS80-071 / T.M.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

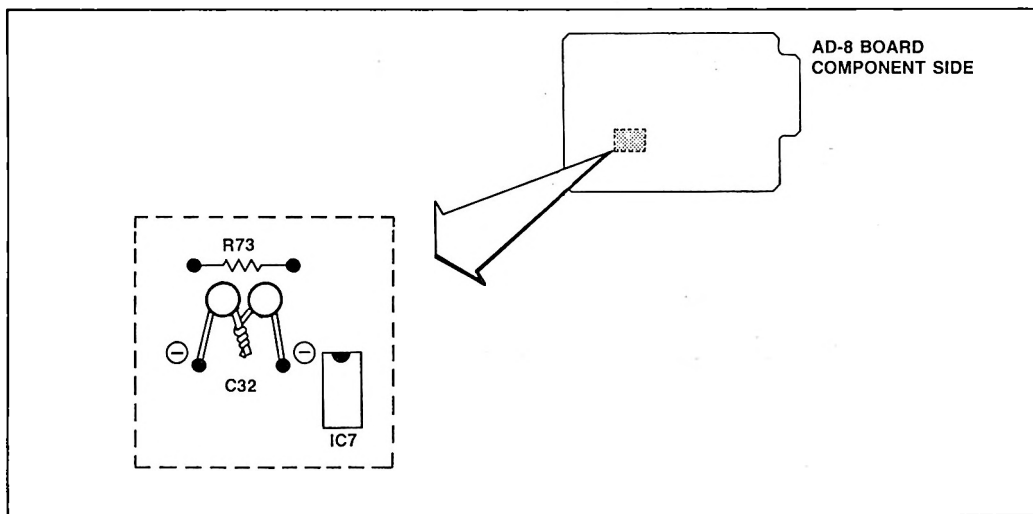
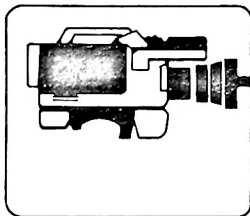


Figure 2



D2

SONY®

# broadcastbulletin No. 82-71

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

MODEL: BVT-2000

Date: November, 1982

SERIAL NO: 10,900 AND LOWER

SUBJECT: VIDEO PHASE SHIFT WHEN VTR HEAD SELECT SWITCH IS CHANGED FROM 3 TO 1

## DESCRIPTION

The TBC output video phase may shift by one cycle of SC (280ns) if the VTR Head Select switch is changed from 3 to 1 during normal playback. This problem can be corrected by changing the value of R14 on the SQ-3 Board from 39k to 82kΩ. (See Figure 1.)

## PARTS REQUIRED

| Part No.     | Description                | Qty. |
|--------------|----------------------------|------|
| 1-214-178-00 | Res, Metal, 82kΩ, 1/4W, 1% | 1    |

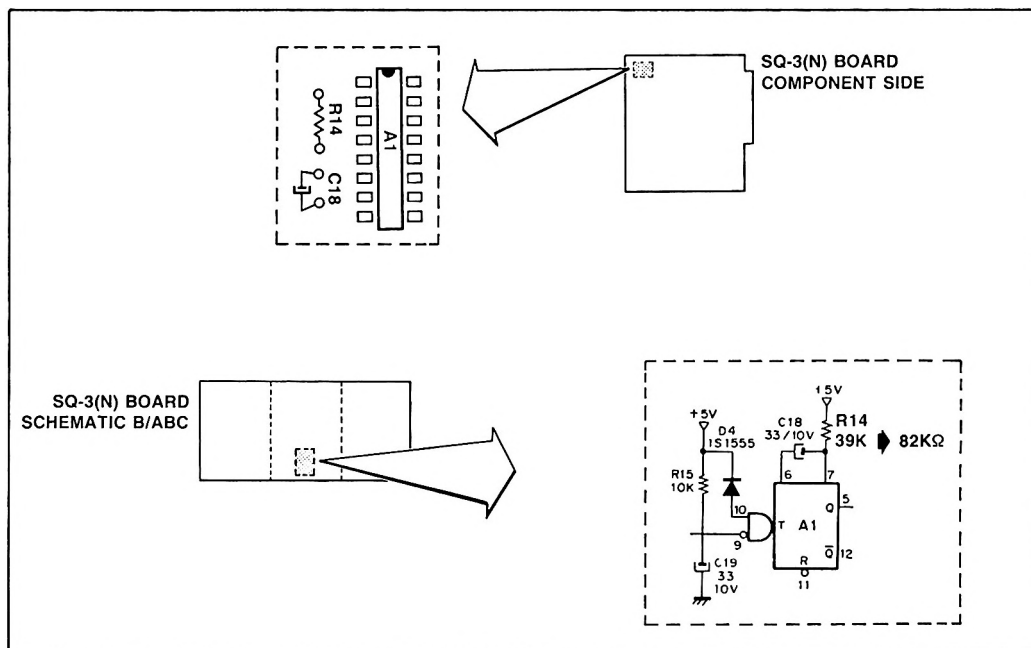


Figure 1

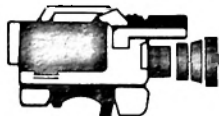
Reference: VTRW81-2034 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

Do

SONY®



# broadcastbulletin No. 82-64

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVT-2000**

**SERIAL NO; 10,901 AND LOWER**

**SUBJECT: SEQUENCER VIDEO PHASE STABILIZATION**

Date: November, 1982

## DESCRIPTION

When the PB SELECT SW on the BVH-1100 is switched from "3" to "1" during NORMAL PLAY, the video phase of the TBC output might deviate by one period of SC (280 nsec). To correct this problem, resistor R14 on the SQ-3 (N) Board should be increased in value from 39k ohms to 82k ohms. (See Figure 1.)

## PARTS REQUIRED

| Part No.     | Description        | Qty. |
|--------------|--------------------|------|
| 1-214-178-00 | Res, Metallic, 82K | 1    |

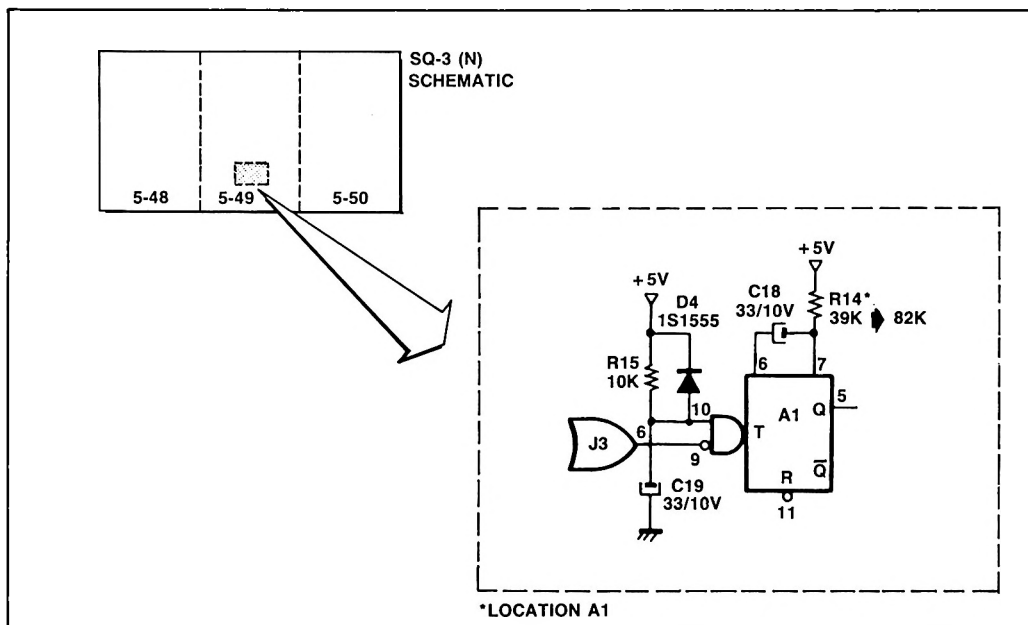
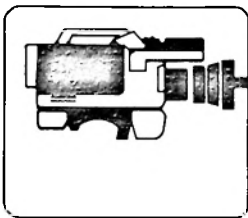


Figure 1

Reference: VS 81-2141 / T. M.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



Do

SONY®

# broadcastbulletin No. 82-57

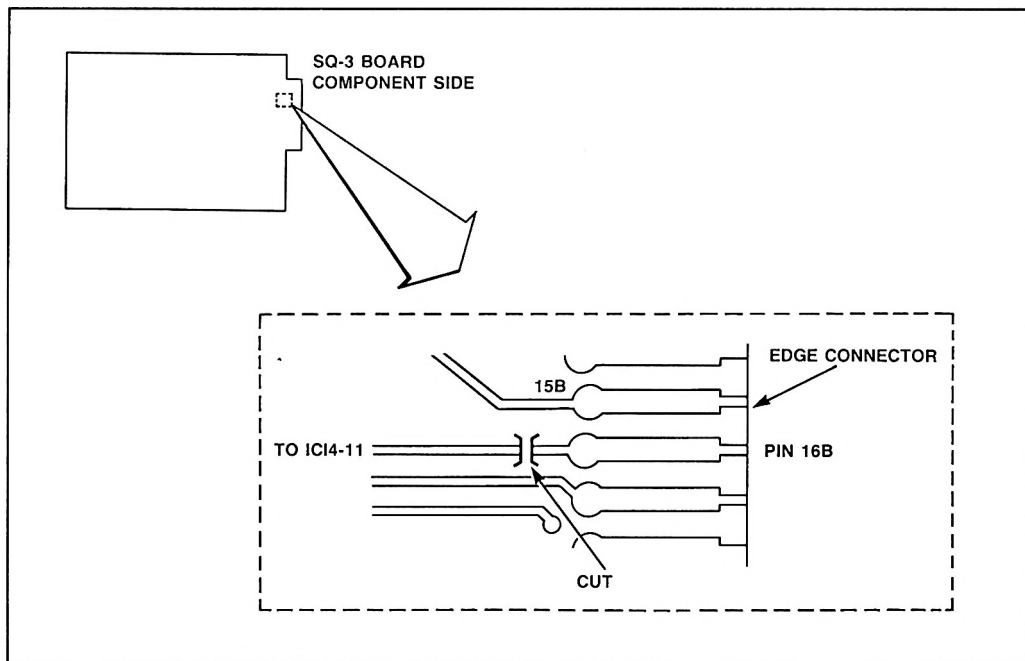
SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: October, 1982

**MODEL: BVT-2000**  
**SERIAL NO: 11,600 AND LOWER**  
**SUBJECT: MODIFICATION TO PREVENT PHASE SHIFT**  
**DURING CNR ON/OFF**

## DESCRIPTION

Apply the following modification to the SQ-3 Board to prevent video phase shift during CNR ON/OFF. The modification removes an unnecessary signal from the circuit. Figure 1 shows the modification applied to the component side of the SQ-3 Board. The schematic is unchanged.

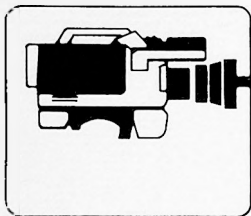


Reference: VS82-2027 / T.Mc.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.





Do

SONY

# broadcastbulletin No. 82-56

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: October, 1982

MODEL: BVT-2000

SERIAL NO: 52,899 AND LOWER

SUBJECT: CORRECTION TO MANUAL

Please make the following correction to your BVT-2000 manual, 1st Edition, Rev. 1 - 12:

Page 19-6

## 19-8. A-D CONVERTER REF. LEVEL ADJUSTMENT

Connection; same as Sec. 7-2, Connection 1

Equipment; oscilloscope  
trigger; HD, TP15/SG-18

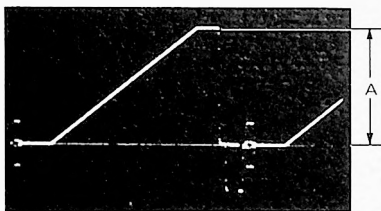
Switches & controls setting;  
same as Sec. 7-3

Input signal (OFF TAPE VIDEO IN);  
ramp linearity signal  
1Vp-p, subcarrier; OFF

Spec. & adj.

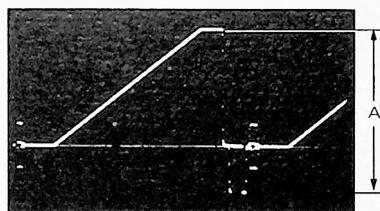
AD-8 board  
Q10-emitter

WAS



spec:  $A = 2.25 \pm 0.01 \text{ V}$   
VR200

SHOULD BE

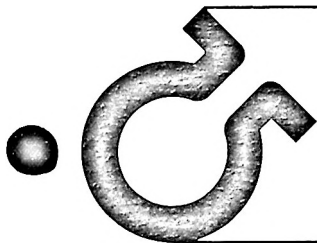


spec:  $A = 2.25 \pm 0.01 \text{ V}$   
VR200

Reference: MEMO/G.D.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



SONY  
Broadcast  
**bulletin**

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: August, 1982

model: BVT-2000

bulletin no.: 17R

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA. 95134

**THIS BULLETIN SUPERSEDES BVT-2000 BULLETIN NO. 17**

**IMPROVEMENT IN VERTICAL BLANKING STABILITY**

**GENERAL**

NOTE: Change information in this bulletin is indicated by arrows.

The width of the vertical blanking pulse generated by the SG-28 (N) Board may vary as much as  $12\mu\text{S}$  as a function of ambient (surrounding) temperatures. This modification reduces the pulse width from 20H to 11H, thereby reducing the influence of ambient temperature variations by half.

**APPLICABILITY**

Units with serial numbers 11,901 and higher have been modified at the factory. This modification applies only to SG-28 (N) Boards (P.N. 1-600-163) with -12 and -13 suffixes. Boards with suffixes -14 and higher have been modified at the factory.

**PARTS REQUIRED**

| Part No.     | Description  | Qty. |
|--------------|--|------|
| 1-108-597-00 | Cap, Mylar, $0.056\mu\text{F}$ , 5%, 50V                   | 1    |
| 1-214-160-00 | Res, Metal, $15\text{K}\Omega$ , 1%, $\frac{1}{4}\text{W}$ | 1    |

**MODIFICATION PROCEDURE**

1. On the SG-28 (N) Board, replace R116 ( $16\text{K}\Omega$ ) with  $15\text{K}\Omega$  resistor P.N. 1-214-160-00. (See Figure 1.)
2. Replace C107 ( $0.1\mu\text{F}$ ) with  $0.056\mu\text{F}$  capacitor P.N. 1-108-597-00 (Figure 1).
3. On component side, cut trace between D1-2 and D1-16 (Cut A, Figure 1).

NOTE: Chip must be removed for access to this trace. If damaged, replace chip with P.N. 8-759-902-21 (SN74LS221N).

4. Cut trace at J1-1 (Cut B, Figure 1).
5. On foil side, cut trace at D1-1 and connect D1-1 to ground (Figure 2).
6. Add the following jumpers (Figure 2):

| From      | To   | From      | To    |
|-----------|------|-----------|-------|
| J1-1..... | C1-8 | P4-6..... | C1-9  |
| P4-6..... | D1-2 | D1-4..... | C1-10 |

Reference: VTRW 81-2026, VS 81-2127 / T.M.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

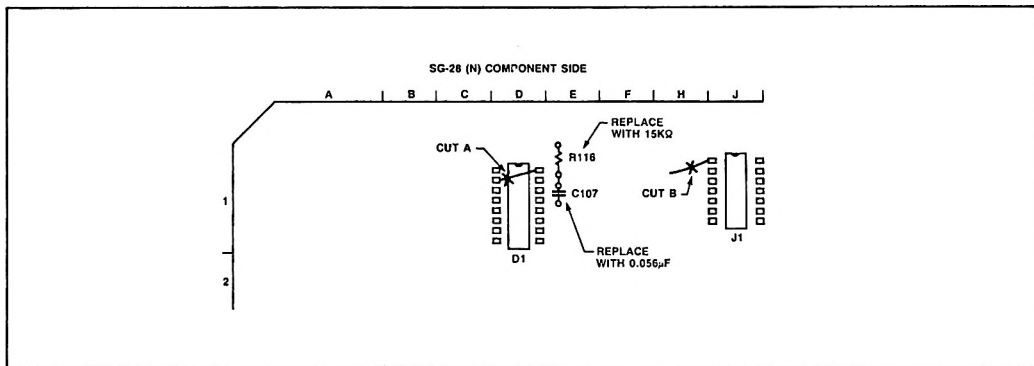


Figure 1

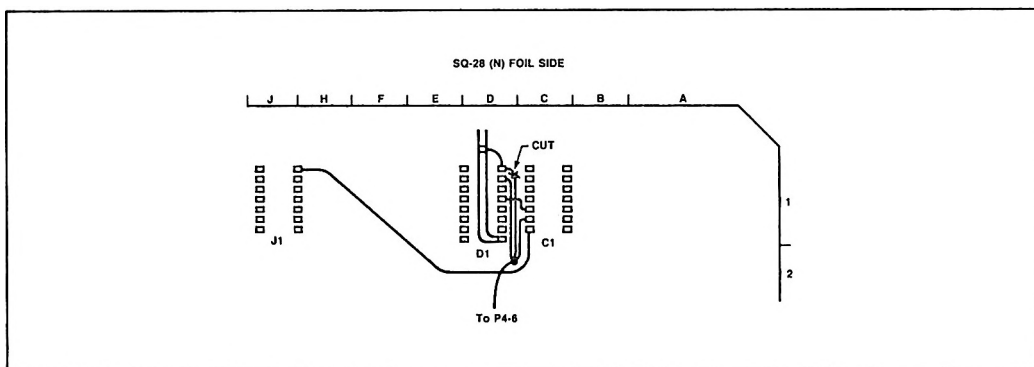


Figure 2

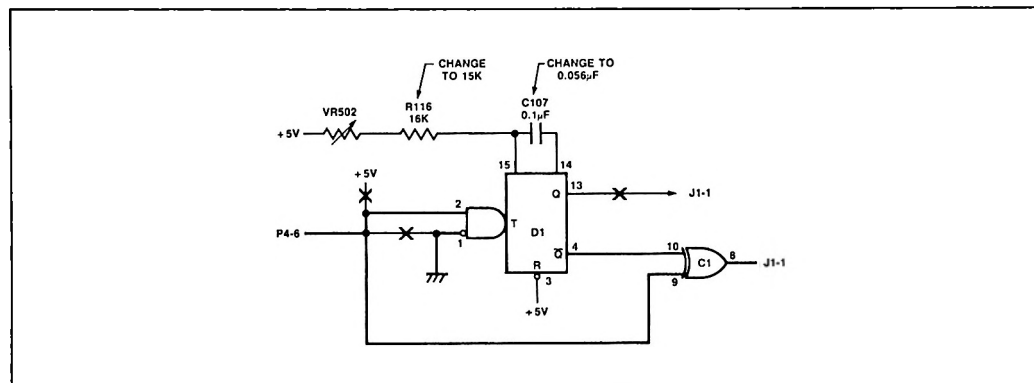
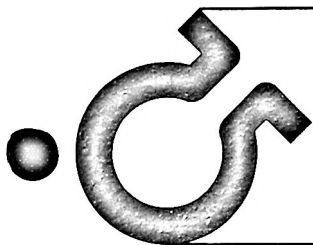


Figure 3



SONY  
Broadcast

*check  
Bd. #*

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: December, 1981

model: BVT-2000

bulletin no.: 17

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVEMENT IN VERTICAL BLANKING STABILITY

### GENERAL

The width of the vertical blanking pulse generated by the SG-28 (N) Board may vary as much as  $12\mu\text{s}$  as a function of ambient (surrounding) temperatures. This modification reduces the pulse width from 20H to 11H, thereby reducing the influence of ambient temperature variations by half.

### APPLICABILITY

Units with serial numbers 11,901 and higher have been modified at the factory. This modification applies only to SG-28 (N) Boards (P.N. 1-600-163) with -12 and -13 suffixes. Boards with suffixes -14 and higher have been modified at the factory.

### PARTS REQUIRED

| Part No.     | Description  | Qty. |
|--------------|--|------|
| 1-108-597-00 | Cap, Mylar, $0.056\mu\text{F}$ , 5%, 50V                   | 1    |
| 1-214-160-00 | Res, Metal, $15\text{K}\Omega$ , 1%, $\frac{1}{4}\text{W}$ | 1    |

### MODIFICATION PROCEDURE

1. On the SG-28 (N) Board, replace R116 ( $16\text{K}\Omega$ ) with  $15\text{K}\Omega$  resistor P.N. 1-214-160-00. (See Figure 1.)
2. Replace C107 ( $0.1\mu\text{F}$ ) with  $0.056\mu\text{F}$  capacitor P.N. 1-108-597-00 (Figure 1).
3. On component side, cut trace between D1-2 and D1-16 (Cut A, Figure 1).  
NOTE: Chip must be removed for access to this trace. If damaged, replace chip with P.N. 8-759-974-86 (SN7486N).
4. Cut trace at J1-1 (Cut B, Figure 1).
5. On foil side, cut trace at D1-1 and connect D1-1 to ground (Figure 2).
6. Add the following jumpers (Figure 2):

| From       | To    |
|------------|-------|
| J1-1 ..... | C1-8  |
| P4-6 ..... | D1-2  |
| P4-6 ..... | C1-9  |
| D1-4 ..... | C1-10 |

Reference: VTRW 81-2026, VS 81-2127 / T.M.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

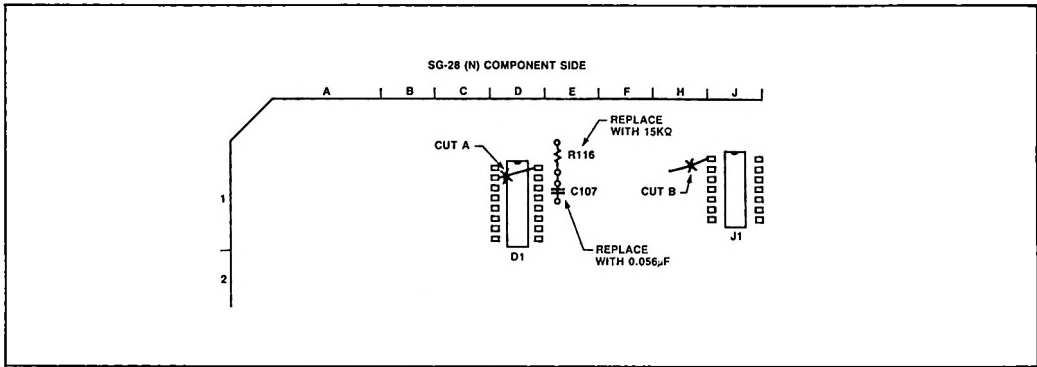


Figure 1

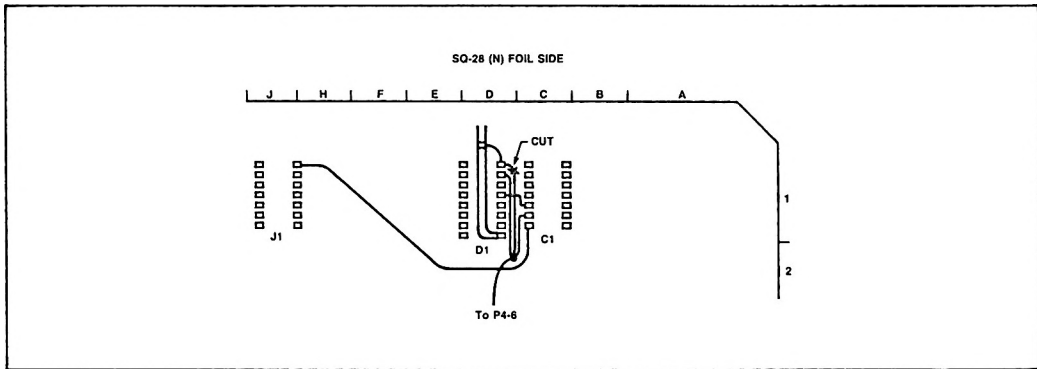


Figure 2

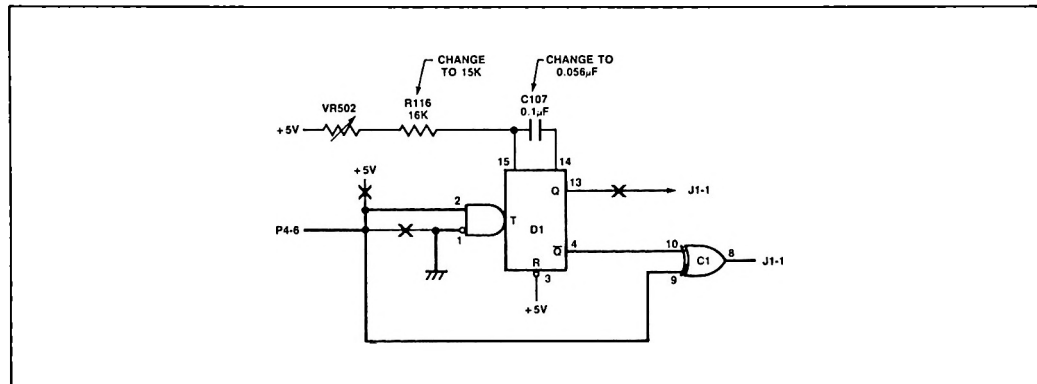
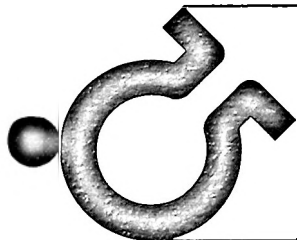


Figure 3



SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

If Edit control is  
CMX or Datatron

date: October, 1981

model: BVT-2000

bulletin no.: 14

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## IMPROVED STABILITY OF HORIZONTAL POSITION DURING PLAYBACK

### GENERAL

This modification to the SQ-3 Board eliminates H-Shifts due to TBC mislocking and color frame pulse jitter. The modification generates a color frame pulse using SC and corrected SH to verify horizontal leading edge timing (referenced to Burst phase). The recorded color frame pulse is no longer used, which makes this feature suitable for CMX and Datatron Editors.

### PARTS REQUIRED

| Part No.     | Description            | Qty. |
|--------------|------------------------|------|
| 1-211-475-00 | Res, Carbon, 10K, 1/8W | 1    |
| 1-107-077-00 | Cap, Mica, 47 pF, 50V  | 1    |

### MODIFICATION PROCEDURE

1. On foil side of SQ-3 Board, add the following jumpers. (See Figures 1 and 2.):

| From        | To                    |
|-------------|-----------------------|
| E6-9 .....  | I5-12                 |
| G7-5 .....  | I5-11                 |
| I5-8 .....  | H2-10                 |
| D2-1 .....  | H2-9                  |
| B6-9 .....  | C5-9                  |
| A1-12 ..... | N1-4 (Ref. Figure 2)  |
| C5-5 .....  | I2-5                  |
| H2-8 .....  | I2-4                  |
| I2-6 .....  | L6-13 (Ref. Figure 2) |
| C5-10 ..... | C5-11                 |
| C5-11 ..... | C5-16                 |
| I5-10 ..... | I5-13                 |
| I5-13 ..... | I5-14                 |

2. Connect 10K resistor between C5-7 and C5-10 (+5V).
3. Connect 47 pF capacitor between C5-6 and C5-7.
4. Cut trace between D2-3 and N1-4 (Cut A, Figure 2).

Reference: D.T.

Page 1 of 3

5. Cut trace between O7-8 and L6-13 (Cut B, Figure 2).

6. On component side, adjust VR17 (location F8) and VR3 (location B1) fully CCW.

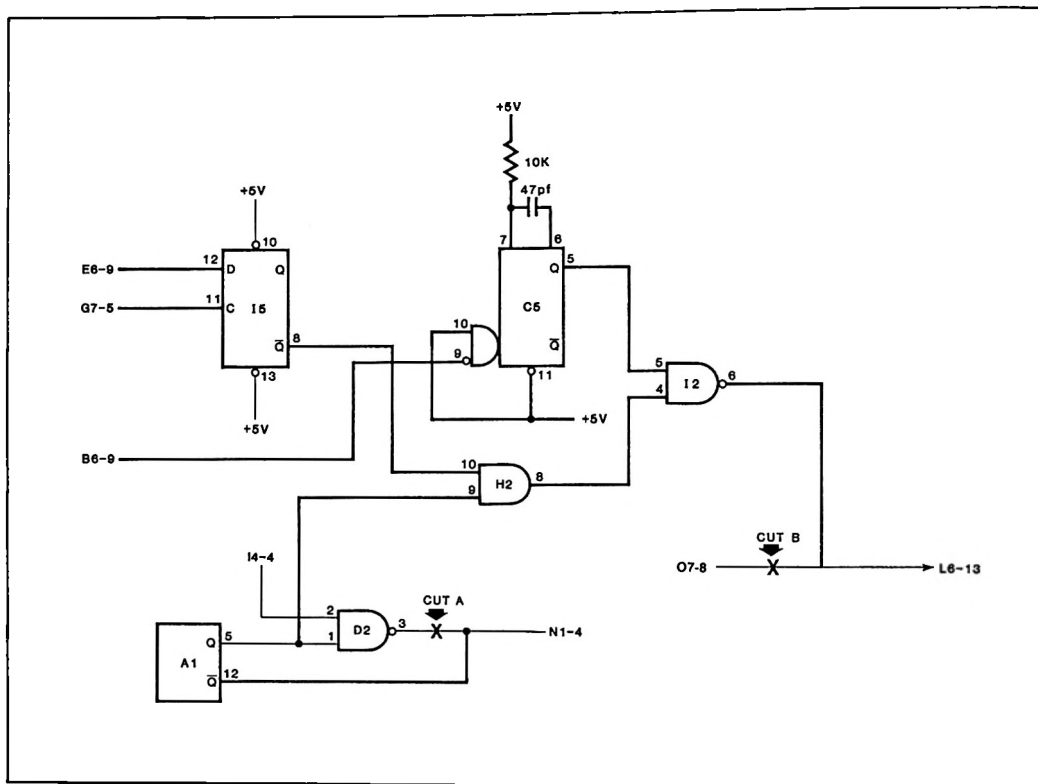


Figure 1

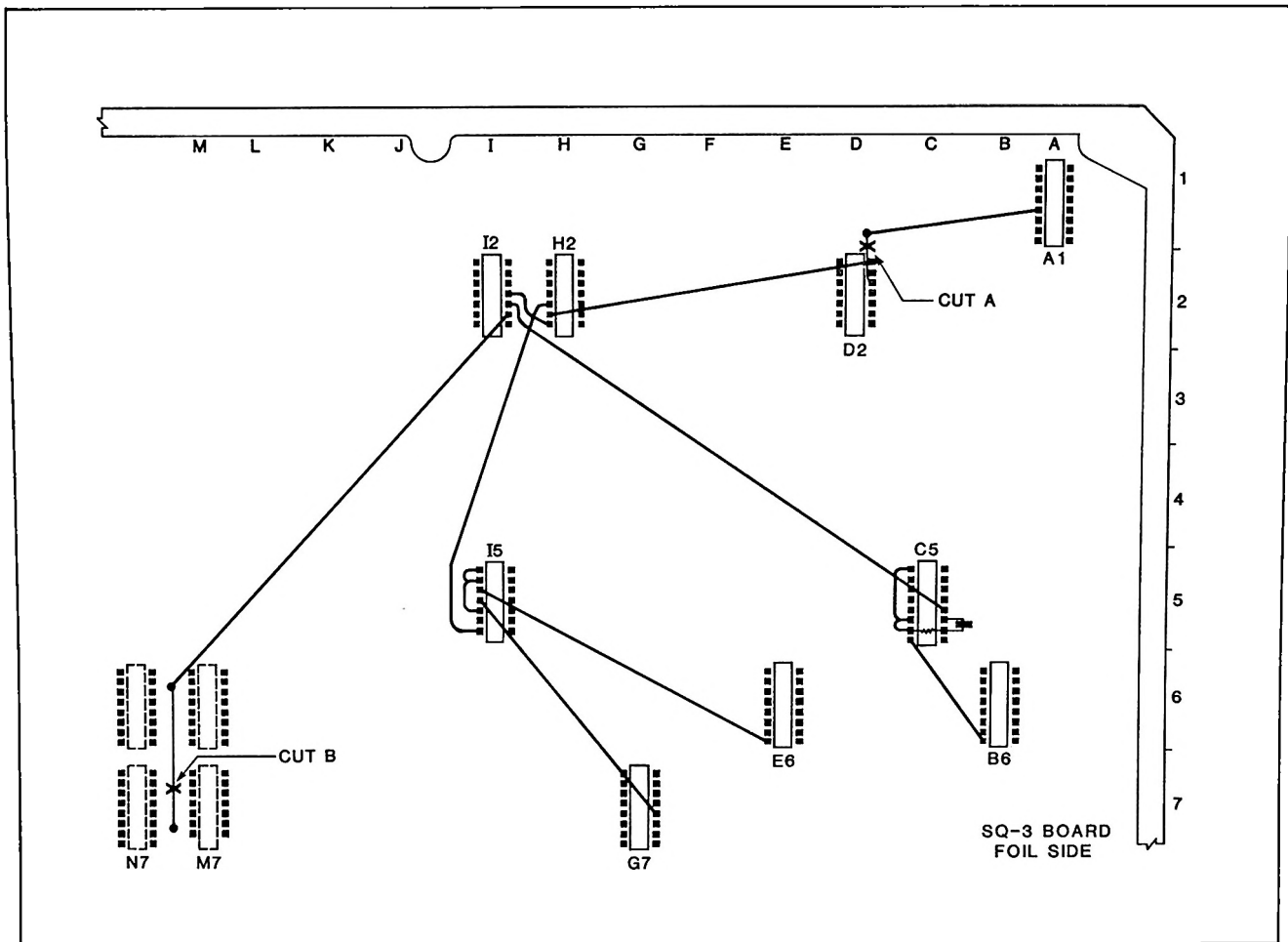
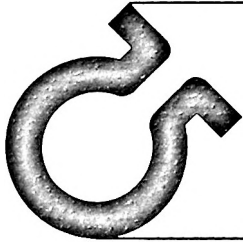


Figure 2



If H sh. ft occurs



**SONY**  
Broadcast  
**bulletin**

date: October, 1981  
model: BVT-2000  
bulletin no.: 13

maintenance and modification information for the one-inch line of Sony Broadcast Products

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

**HORIZONTAL SHIFT IN DT MODE**

**GENERAL**

This modification provides improvements in the BVT-2000 horizontal sync circuits. The modification is designed to prevent inadvertent detection of half-H as the horizontal sync, which would result in a 140ns displacement of the picture. This picture shift is most likely to be observed in the DT mode. The modification may be applied to all units in which the horizontal shift symptom appears.

**PARTS REQUIRED**

| Part No.     | Description                  | Qty. |
|--------------|------------------------------|------|
| 1-214-761-00 | Res, Metallic, 22K, 1/4W, 1% | 1    |
| 1-109-705-00 | Cap, Mica, 2200pF            | 1    |

**MODIFICATION PROCEDURE**

1. On foil side of CK-3 Board, add the following jumpers. (See Figure 1):

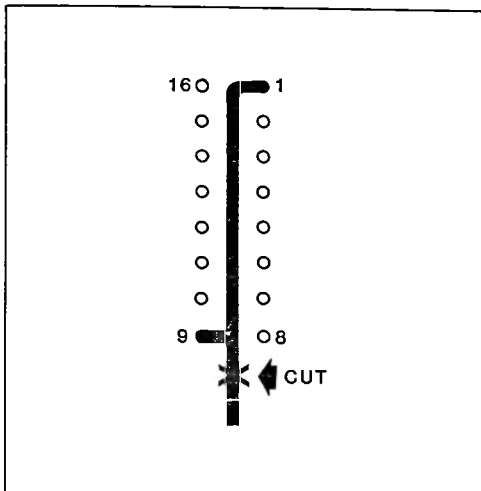
| From          | To           |
|---------------|--------------|
| ICH4-1 .....  | ICF5-13      |
| ICH4-4 .....  | ICF5-12      |
| ICF5-11 ..... | ICE6-10      |
| ICE6-9 .....  | ICE6-8 (Gnd) |
| ICE6-11 ..... | ICE6-16      |
| ICE6-12 ..... | ICE8-10, -11 |
| ICL8-11 ..... | ICE8-9       |
| ICE8-8 .....  | ICA5-12      |
| ICB5-12 ..... | ICA5-13      |
| ICA5-11 ..... | ICM4-1       |

- 2. Cut trace at ICM4-9 as shown in Figure 2.
- 3. Connect 2200pF capacitor between ICE6-6 and ICE6-7 (Figure 3).
- 4. Connect 22K resistor between ICE6-7 and +5V (ICE6-3, Figure 3).

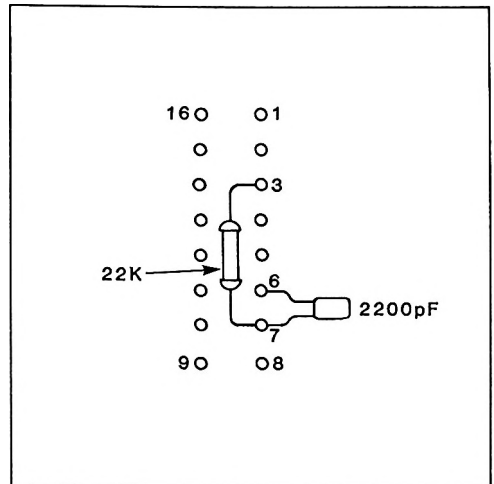
Reference: VS 80-60

Page 1 of 3





**Figure 2. Location M4 (Foil Side)**



**Figure 3. Location E6 (Foil Side)**

Do. on VTR of model  
DONE 21 April 86 LKJ

**SONY  
BROADCAST**

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: September 1980

model: BVT-2000

bulletin no.: 7

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

Subject: LATCH ADDED TO ID BLK SWITCH

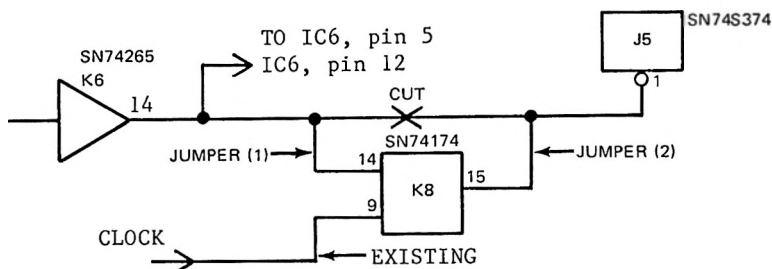
Applicable to Serial Numbers: 10,001 through 10,200; higher numbers have been modified prior to shipment.

In the switching of the digitized burst by the ID signal, noise may appear in the output burst as a result of system timing considerations.

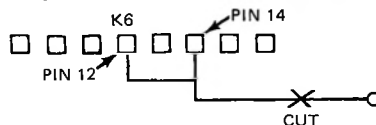
## Modification

DO-12 Board

Synchronize the ID BLOCK with the clock.



Make a pattern cut as shown (foil side).



Add 2 jumpers:

- ✓ 1 IC-K6 pin 14 to IC-K8 pin 14
- 2 KC-K8 pin 15 to IC-35 pin 1

Reference: VS-79-121

Page 1 of 1

This bulletin is published by the Sony Video Tech Info Dept., 700 W. Artesia Blvd., Compton, CA 90220. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

SONY  
Broadcast

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

DONE 21 APRIL 85

date: October, 1981

model: BVT-2000

bulletin no.: 1R

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA. 95134

## THIS BULLETIN SUPERSEDES BVT-2000 BULLETIN NO. 1 DATED MAY, 1980

### IMPROVEMENT OF DROPOUT CIRCUIT

#### GENERAL

When the DOC switch in the BVT-2000 is ON, occasional black streaks may be noticed in the picture when dropouts occur. This is due to a slight decrease in Y level, caused by inversion of the chroma signal. (The previous line of chroma is inverted and used to replace the dropout.)

In this modification to the DO-12 Board, the PMC signal is used to increase the Y level to offset any possibility of black streaking. The modification is applicable to serial numbers 10,001 - 10,200.

#### MODIFICATION PROCEDURE

1. On foil side of DO-12 Board, add the following jumpers (See Figure 1.):

| From          | To          |
|---------------|-------------|
| ✓ I3-6 .....  | I3-12       |
| ✓ I4-11 ..... | I3-13       |
| ✓ I3-11 ..... | K8-13       |
| ✓ I2-13 ..... | I2-16 (+5V) |

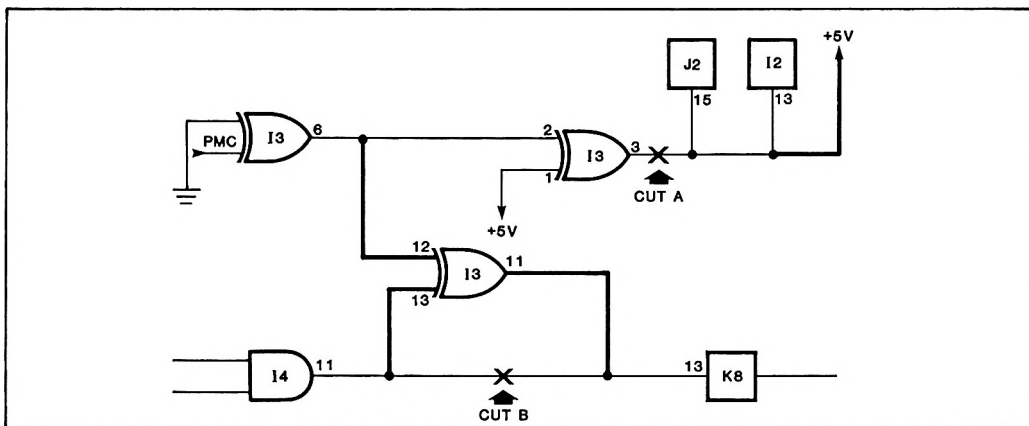
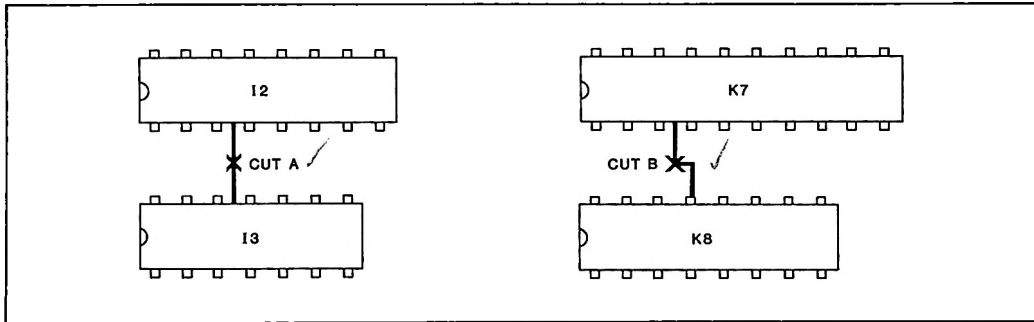


Figure 1

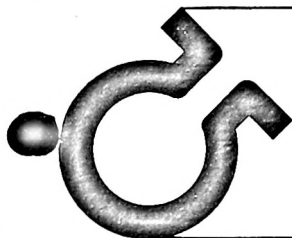
Reference: VS 79-122/P.M.

Page 1 of 2

2. On component side, cut traces at points A and B as shown in Figure 2.



**Figure 2**



SONY  
BROADCAST

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: MAY 1980

model: BVT-2000

bulletin no.: 1

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

Subject: IMPROVEMENT OF DROPOUT CIRCUIT

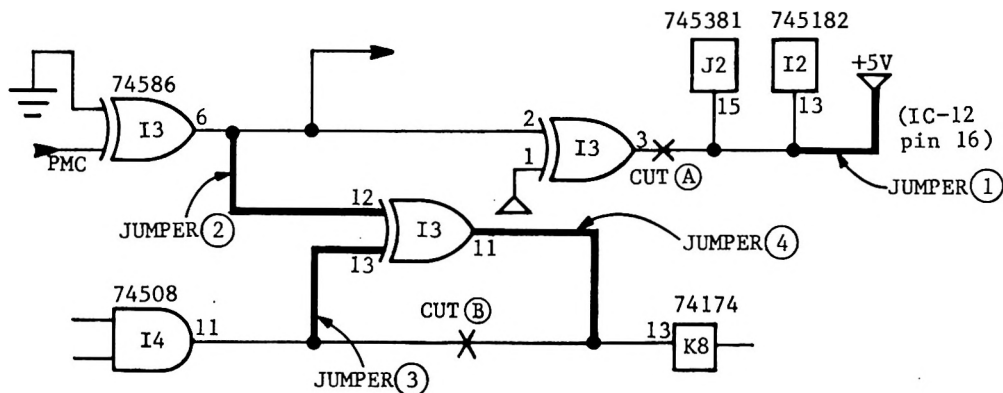
Applicable to Serial Numbers: Apply to serial numbers 10,001 - 10,200.

When the DOC switch in the BVT-2000 is ON, occasional black streaks may be noticed in the picture, whenever a dropout occurs. This is due to a slight decrease in Y level, caused by inversion of the chroma signal. (The previous line of chroma is inverted and used to replace the dropout.)

In the following modification, the PMC signal is used to increase the Y level to offset any possibility of black streaking.

1. Connect four jumpers:

1. IC-I2 pin 13 to IC-I2 pin 16 (+5V)
2. IC-I3 pin 6 to IC-I3 pin 12
3. IC-I4 pin 11 to IC-I3 pin 13
4. IC-I3 pin 11 to IC-K8 pin 13

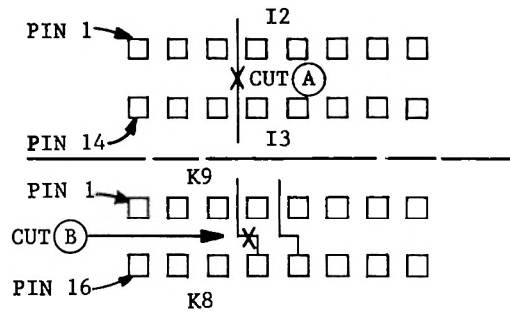


Reference: VS-79-122

Page 1 of 2

This bulletin is published by the Sony Video Tech Info Dept., 700 W. Artesia Blvd., Compton, CA. 90220. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

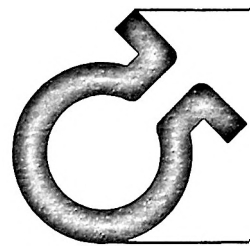
2. Cut the foil as shown (component side).





Do on VT-4 if needed

DONE 21 APRIL 86



SONY  
BROADCAST

# bulletin

maintenance and modification information for the one-inch line of Sony Broadcast Products

date: September 1980

model: BVT-2000

bulletin no.: 10

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 1005 ELWELL CT, PALO ALTO, CA 94303

Subject: LOW LUMINANCE DURING DROPOUT REPLACEMENT

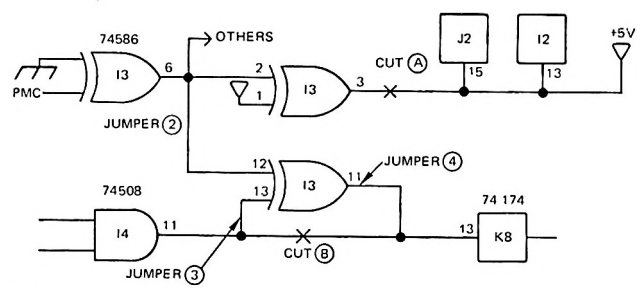
Applicable to Serial Numbers: 10,001 through 10,200

During compensation for dropouts, the chroma is inverted. (More precisely, the previous H Chroma line is inverted and used to replace the dropout signal.) This inversion results in a slight decrease in the Y level.

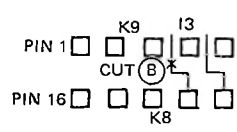
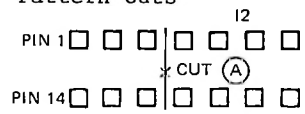
## Modification

DO-12 board

Offset the Y level by applying the PMC signal (chroma inverting signal) during dropout reinsertion.



## Pattern Cuts



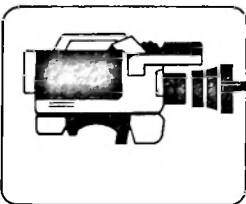
## Jumpers:

1. Connect IC-I2 pin 13 to IC-I2 pin 16 (+5V).
2. Connect IC-I3 pin 6 to IC-I3 pin 12.
3. Connect IC-I4 pin 11 to IC-I3 pin 13.
4. Connect IC-I3 pin 11 to IC-K8 pin 13.

Reference: VS-79-122

Page 1

This bulletin is published by the Sony Video Tech Info Dept., 700 W. Artesia Blvd., Compton, CA. 90220. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



Date: October, 1983

**MODEL: BVU-110****SERIAL NO: 21,700 AND LOWER****SUBJECT: IMPROVED 3.58 MHZ REFERENCE OSCILLATOR STABILITY****DESCRIPTION**

Variations between crystals may make it difficult to adjust the 3.58MHz oscillator to specification in some units. The following modification is recommended to stabilize the oscillator at 3.5795MHz, particularly when crystal X1 has been replaced.

**PARTS REQUIRED**

| Part No.     | Description               | Qty. |
|--------------|---------------------------|------|
| 1-107-045-00 | Cap, Mica, 3.9pF, 50V, 5% | 1    |

**MODIFICATION PROCEDURE****VO-2A Board (See Figure 1.)**

1. Add 3.9pF capacitor (C568) between Q507-Base and GND.
2. Perform the REFERENCE OSCILLATOR FREQUENCY ADJUSTMENT in Section 11-2-1 of the BVU-110 manual.

*Reference: VS 83-1002, VTRW 83-1068 / B.G.**Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

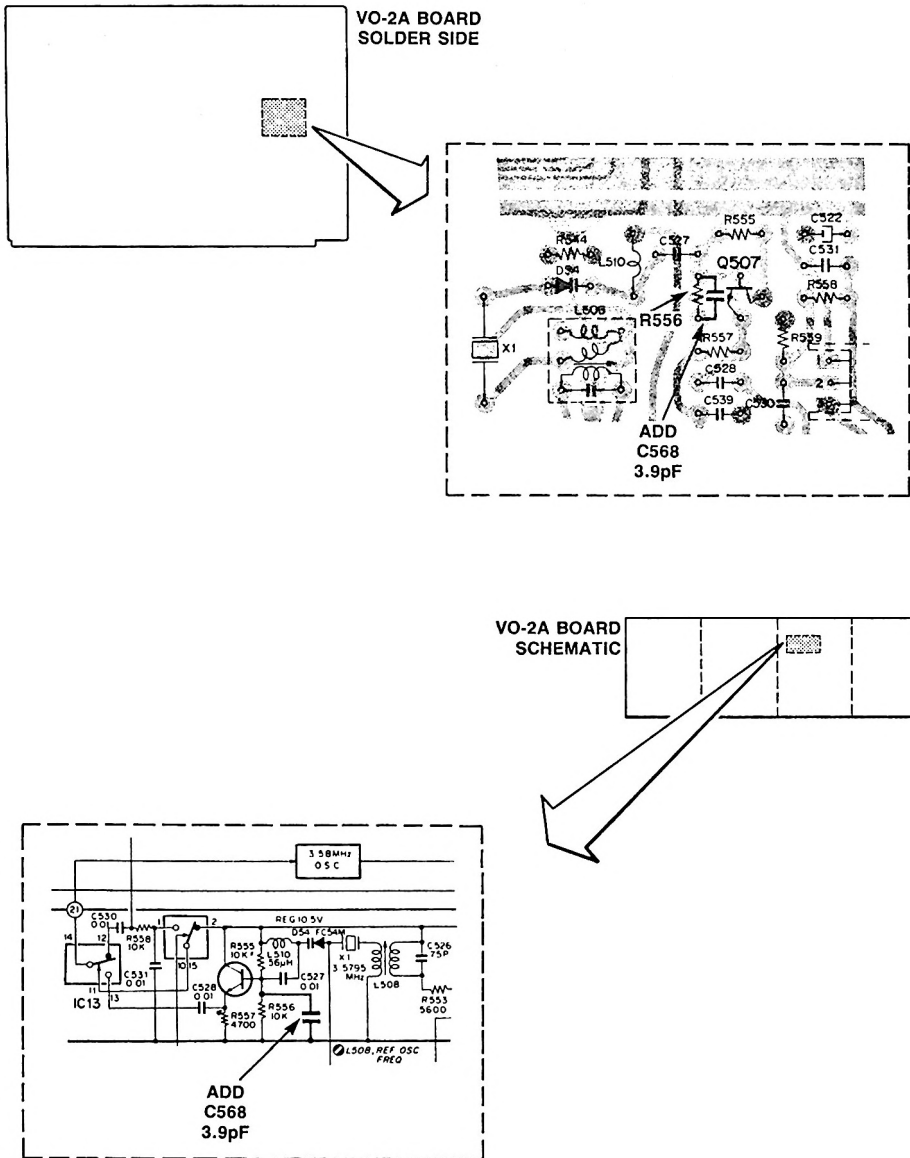
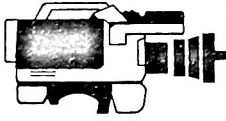


Figure 1



## technical bulletin

# 83-123

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110**

**SERIAL NO: 20,650 AND LOWER**

**SUBJECT: CHANGE OF CP-25 BOARD AND HANDLE BRACKET**

Date: July, 1983

### DESCRIPTION

The CP-26 Board, R Handle Bracket and the method for attaching the bracket have been changed in units with S.N. 20,651 and higher. (See Figure 1.) Installation of the new board in units with S.N. preceding 20,651 will require drilling a hole in the Front Chassis as illustrated below. Table 1 indicates the interchangeability of former and new parts.

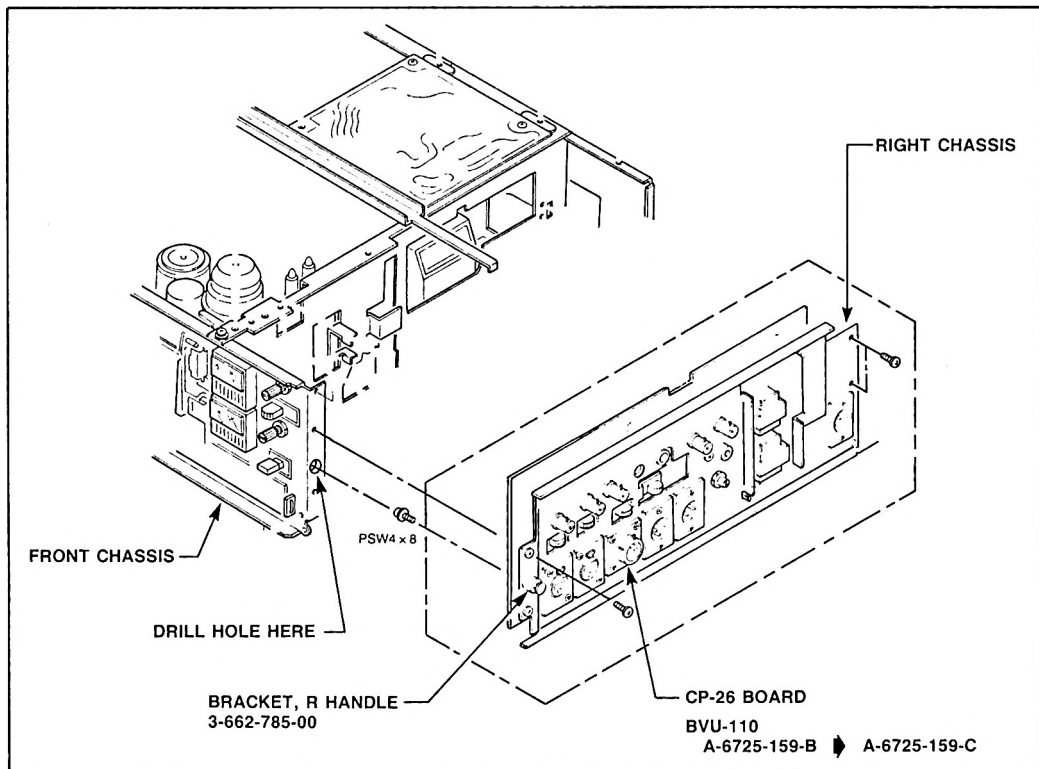


Figure 1

Reference: VTRW 82-1040 / J.B.

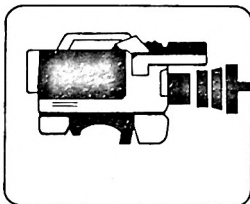
Page 1 of 2

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

Table 1

| Description          | Part No. |              | Serial No.       |                   |
|----------------------|----------|--------------|------------------|-------------------|
|                      |          |              | 20,650 and lower | 20,651 and higher |
| CP-26 Board          | Old      | A-6725-159-B | Yes              | No                |
|                      | New      | A-6725-159-C | Yes*             | Yes               |
| Bracket,<br>R Handle | New      | 3-662-785-00 | No               | Yes               |

\*Indicates that hole must be drilled in Front Chassis.



# technical bulletin

# 83-104

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: June, 1983

**MODEL: BVU-50, BVU-100, BVU-110, VO-4800 SERIES****SERIAL NO: SEE TEXT****SUBJECT: MICRO SWITCH AND BRACKET ASS'Y CHANGE****DESCRIPTION**

In models with serial numbers listed below, micro switches S1 through S7 have been replaced to improve reliability. Consequently, the switch bracket assembly has also been changed. See Table 1 for former and new part numbers. Table 2 indicates the applicability of former and new parts.

Factory modified models and serial numbers:

BVU-50.....21,191 and higher  
BVU-100.....21,781 and higher  
BVU-110.....10,881 and higher  
VO-4800.....12,651 and higher

Table 1

| Reference No. | Part No.              |              |                       |              |
|---------------|-----------------------|--------------|-----------------------|--------------|
| Micro Switch  | SY-49 Board (VO-4800) |              | SY-60 Board (BVU-110) |              |
|               | Former                | New          | Former                | New          |
| S1            | 1-514-722-XX          | 1-553-577-00 | 1-516-544-00          | 1-553-571-00 |
| S2            | 1-516-544-00          | 1-553-571-00 | 1-516-544-00          | 1-553-571-00 |
| S3            | 1-514-722-XX          | 1-553-577-00 | 1-516-544-00          | 1-553-571-00 |
| S4            | 1-514-722-XX          | 1-553-577-00 | 1-516-544-00          | 1-553-571-00 |
| S5            | 1-514-722-XX          | 1-553-577-00 | 1-516-544-00          | 1-553-571-00 |
| S6            | 1-516-544-00          | 1-553-571-00 | 1-516-544-00          | 1-553-571-00 |
| S7            | 1-514-722-XX          | 1-553-577-00 | 1-516-544-00          | 1-553-571-00 |

Reference: VTRW 81-1006 / B.G.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

## MODIFICATION PROCEDURE

### SY-49 Board (VO-4800)/SY-60 Board (BVU-110)

Apply one of the following two options:

1. Replace former switch bracket assembly with new part as shown in Figure 1, then install new switches to new assembly. Or . . .
2. Modify former switch bracket assembly by cutting off section "A," then install new switches parallel to former assembly as shown in Figure 2.

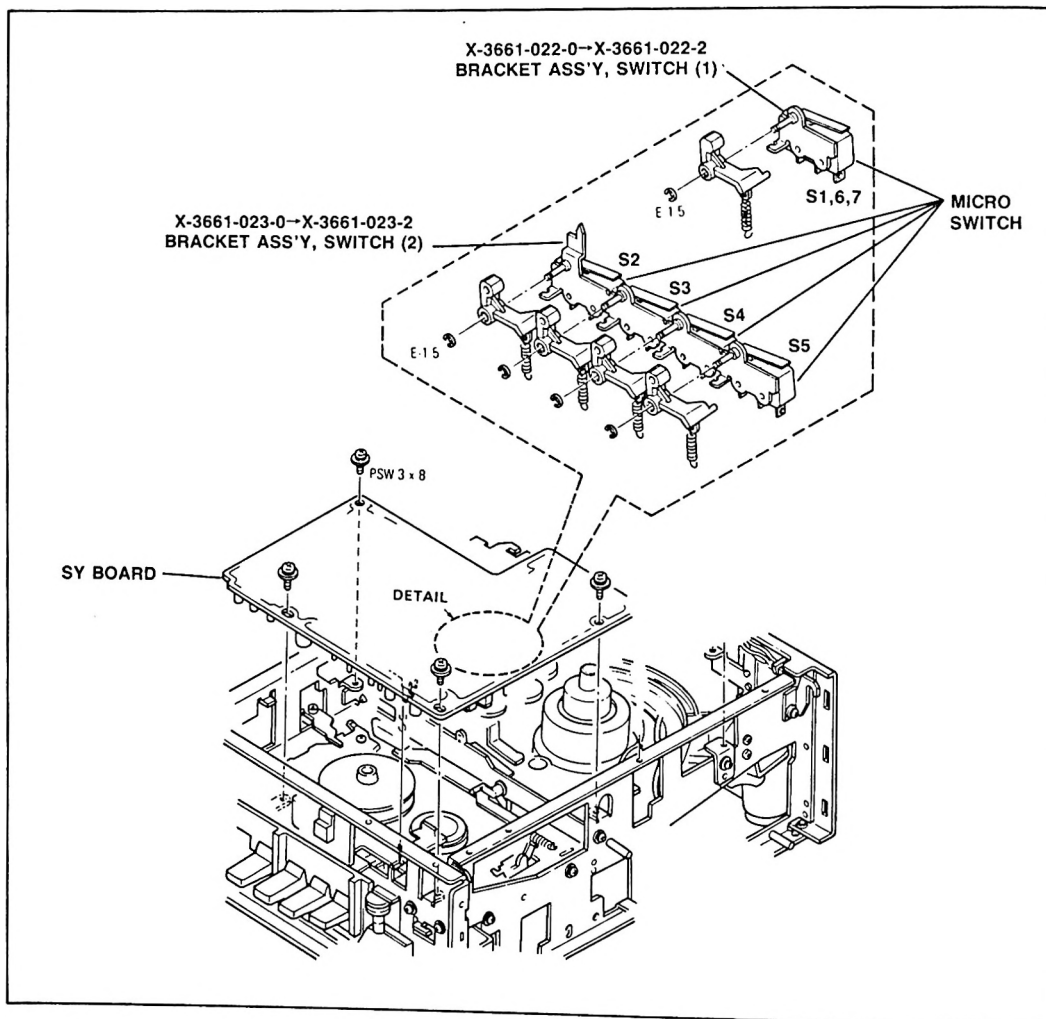


Figure 1

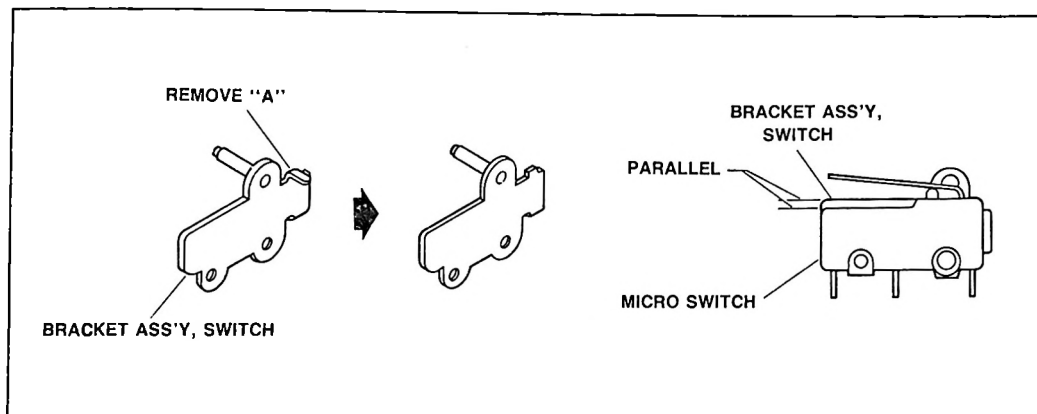
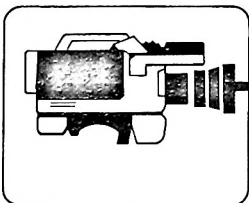


Figure 2

| Description                               | Part No.             | Serial No.               |                              |
|---|----------------------|--------------------------|------------------------------|
|   |                      | VO-4800<br>10,001-12,650 | VO-4800<br>12,651 and higher |
| Switch Bracket Assembly                   | Former X-3661-022-00 | Yes                      | No                           |
|   | New X-3661-022-2     | Yes                      | Yes                          |
|   | Former X-3661-023-0  | Yes                      | No                           |
|   | New X-3661-023-2     | Yes                      | Yes                          |
| Switches<br>S1,S3,<br>S4, S7<br><br>S2,S7 | Former 1-514-722-XX  | Yes                      | No                           |
|   | New 1-553-577-11     | Yes*                     | Yes                          |
|   | Former 1-516-544-00  | Yes                      | No                           |
|   | New 1-553-571-00     | Yes*                     | Yes                          |

NOTES: \*When former Switch Bracket Ass'y has been modified.





Date: May, 1983

**MODEL: BVU-110****SERIAL NO: SEE TEXT****SUBJECT: ELECTROMAGNETIC INTERFERENCE IN AUDIO LINE OUT****DESCRIPTION**

When the BVU-110 is used in a strong electromagnetic environment, interference may appear in the Audio Line Out. Although this problem is audible only in areas of 120dB $\mu$ V/m or higher, the following modifications are recommended if either or both of the crosstalk problems described below appear in the audio output:

MODIFICATION I : Crosstalk during CH-2 PB only. Applies to S.N. 20,650 and lower.

MODIFICATION II: Crosstalk during CH-1/CH-2 REC/PB. Applies to S.N. 21,050 and lower.

**PARTS REQUIRED**

| Part No.     | Description           | Qty. |
|--------------|-----------------------|------|
| 1-407-519-00 | Choke Coil, 8 $\mu$ H | 2    |

**MODIFICATION PROCEDURES****Modification I****AU-16 Board (See Figure 1.)**

1. On solder side, remove yellow shielded wiring at locations B4 (near IC3) and I2 (near IC204).
2. Reverse wiring and re-install with exposed shield to B4 area. Do not move core soldering pads.
3. GND shield at IC3-4 only as illustrated.
4. Route shielded wire same as before.

*Reference: VS 82-1023 / B.G.**Page 1 of 3*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

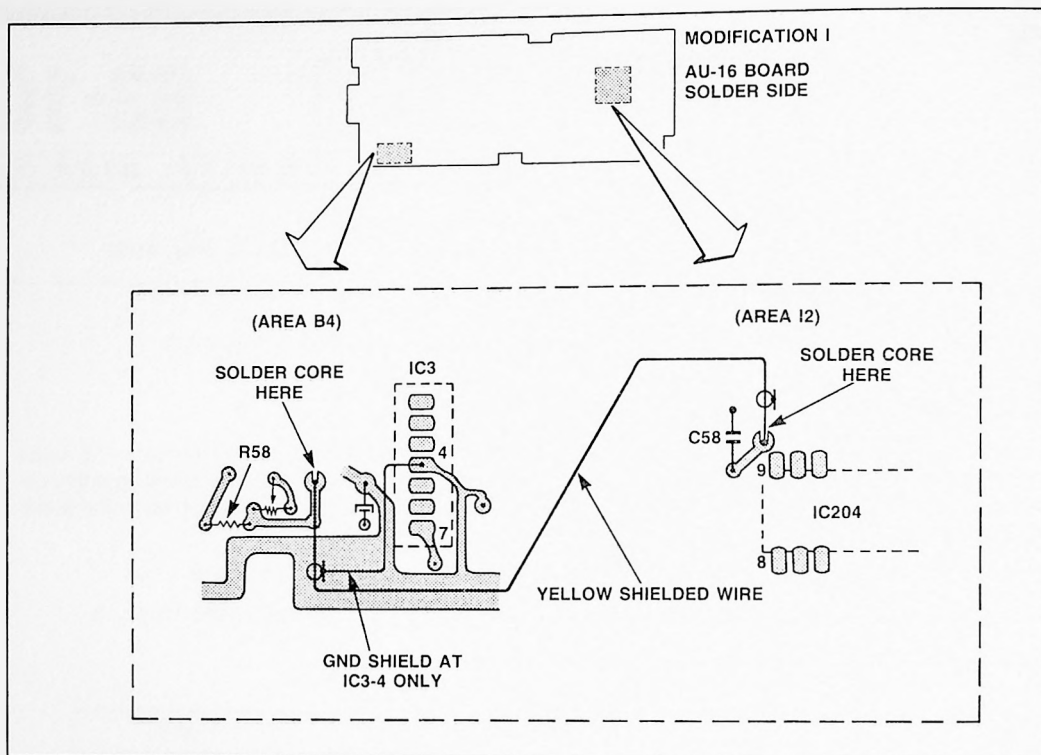


Figure 1

## Modification II

### AU-16 Board (See Figures 2 and 3.)

1. Cut traces (2) at following points:

CH-1: Between S1-8 . . . C3(-)

CH-2: Between S51-8 . . . C53(-)

2. Install  $8\mu\text{H}$  choke coil (Part No. 1-407-519-00) in the MIC/PB EQ amplifier input of each channel between same points as above.

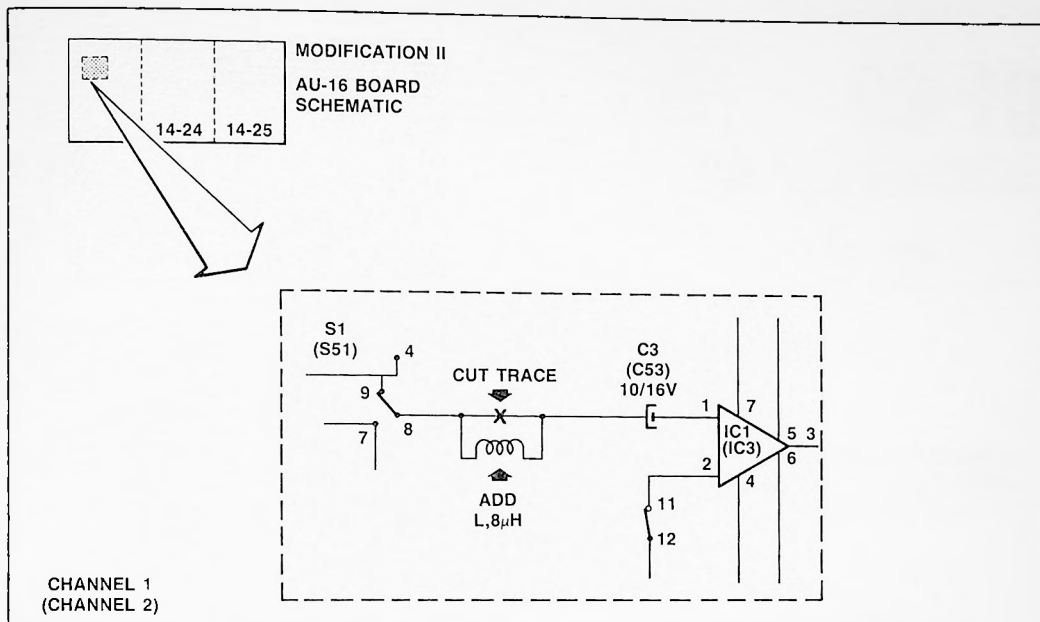


Figure 2

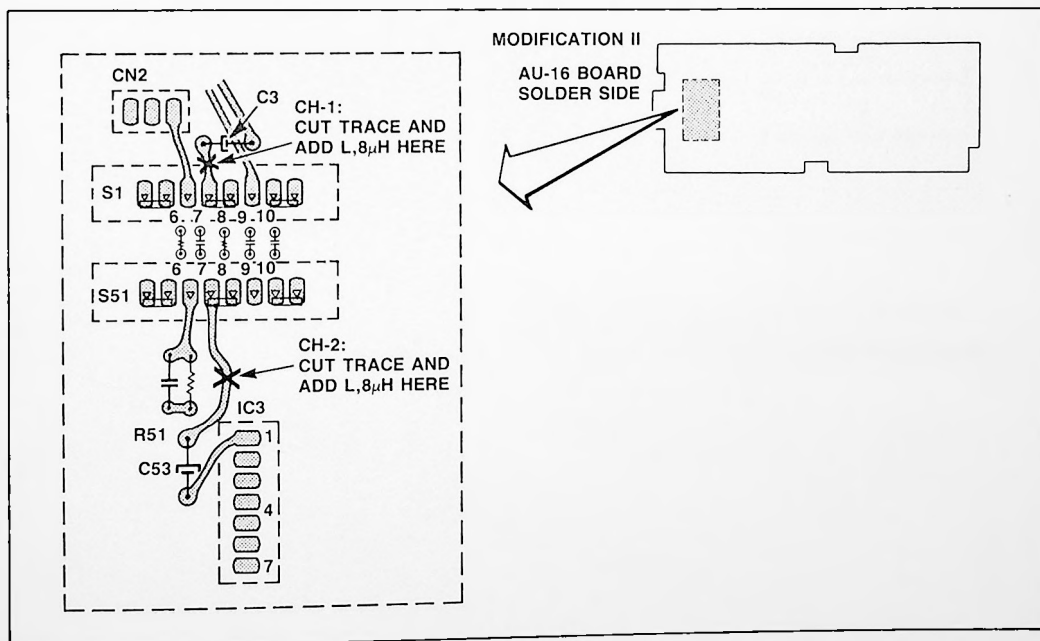
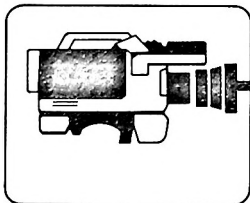


Figure 3



DO

**SONY**  
Broadcast

# technical bulletin

# 83-070

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110, VO-4800**

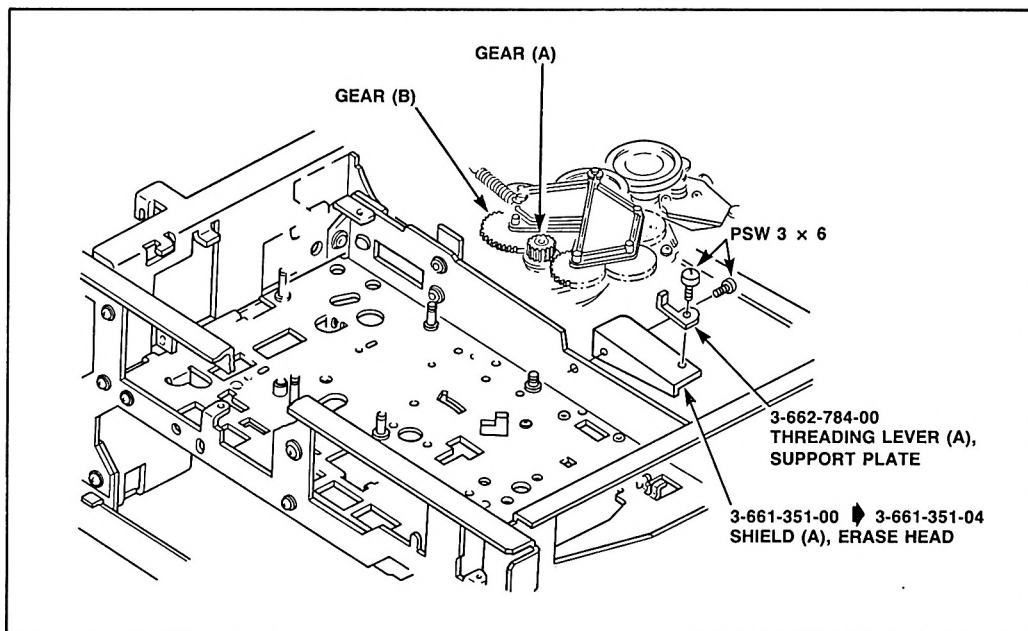
Date: April, 1983

**SERIAL NO: 11,730 AND LOWER (BVU-110)  
15,850 AND LOWER (VO-4800)**

**SUBJECT: ADDITION OF SUPPORT PLATE THREADING LEVER (A)**

## DESCRIPTION

Support Plate Threading Lever (A) has been added to make the space between Gear (B) and Gear (A) adjustable. (See Figure 1.) This adjustment reduces gear noise during unthreading. Consequently, the Shield (A), Erase Head has been replaced and the *Threading Gear Position Adjustment* has been revised as described below.



**Figure 1**

Reference VTRW 81-1038 / B.G.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

Table 1 indicates usability of new parts THREADING LEVER (A), SUPPORT PLATE and SHIELD (A), ERASE HEAD, for earlier and later units of BVU-110 and VO-4800.

Table 1

| Description                        | Part No.            | Serial No.   |  |
|------------------------------------|---------------------|--|--|
|                                    |                     | BVU-110<br>10,001—11,730<br>VO-4800<br>10,001—15,850 | BVU-110<br>11,731 and Higher<br>VO-4800<br>15,851 and Higher |
| SHIELD (A), ERASE HEAD             | Former 3-661-351-00 | Yes  | No   |
|                                    | New 3-661-351-04    | Yes  | Yes  |
| THREADING LEVER (A), SUPPORT PLATE | New 3-662-784-00    | No   | Yes  |

NOTE: • Yes = Usable  
No = Not usable

- 11,730 and higher (BVU-110) and 15,851 and higher (VO-4800) have been modified at the factory.

#### THREADING GEAR POSITION ADJUSTMENT (1)

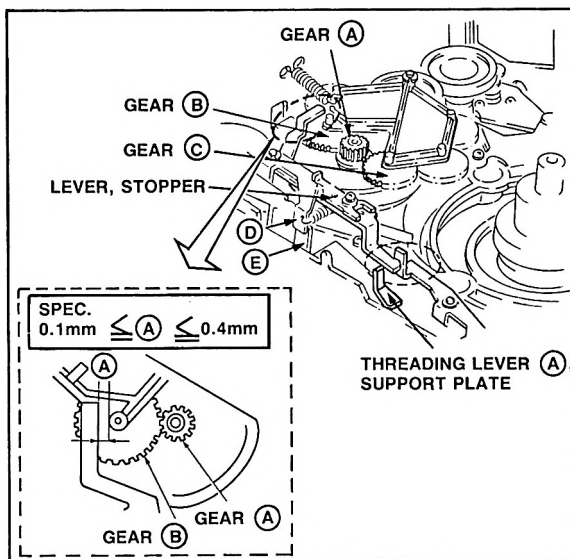
• This is the revised version of the Threading Gear Position Adjustment.

##### (A) THREADING LEVER (A), SUPPORT PLATE POSITION ADJUSTMENT

Cassette tape :  
Mode : Put the machine into the EJECT mode, and turn off the power switch after the Threading Ring returns.

Check procedure : (i) Push the EJECT button to the lock position.  
(ii) Check that the clearance of A meets the required specification when Gear (B) is pressed against Gear (A).

Adjustment procedure: Adjust the position of Threading Lever (A), Support Plate.

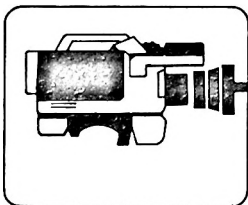


##### (B) LEVER, STOPPER POSITION ADJUSTMENT

Cassette tape :  
Mode : Turn off the power switch during threading.

Check procedure : (i) Make section "D" come into contact with section "E."  
(ii) Make sure Gear (A) meshes securely with Gear (C).  
(iii) Check that the clearance of A meets the required specification.

Adjustment procedure: Adjust the position of the Lever, Stopper.

**technical bulletin****83-066**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: March, 1983

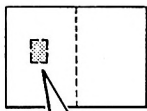
**MODEL: BVU-110, VO-4800****SERIAL NO: 11,730 AND LOWER (BVU-110)  
15,050 AND LOWER (VO-4800)****SUBJECT: TR ARM ASSEMBLY PARTS STANDARDIZATION****DESCRIPTION**

Two parts in the TR Arm Assembly have been changed for parts standardization. As a result, the part number for the TR Arm Assembly has also been changed. (See Figure 1.) These new parts were installed at the factory in BVU-110 units with serial numbers 11,731 and higher and VO-4800 units 15,051 and higher. The new parts are compatible with all serial numbers. In the future, the new part will be the only service part available. Table 1 lists former and new part numbers.

**Table 1**

| Description            | Part No.     |              |
|------------------------|--------------|--------------|
|                        | Former       | New          |
| STR Roller Shaft Ass'y | X-3661-080-0 | X-3661-080-2 |
| E Washer, 2.0mm        | 7-624-105-04 | 7-624-104-04 |
| TR Arm Assembly        | A-6742-028-F | A-6742-028-G |

*Reference: VTRW 81-1016 / B.G.**Page 1 of 2*



LINK BLOCK (3) SUPPLY SIDE

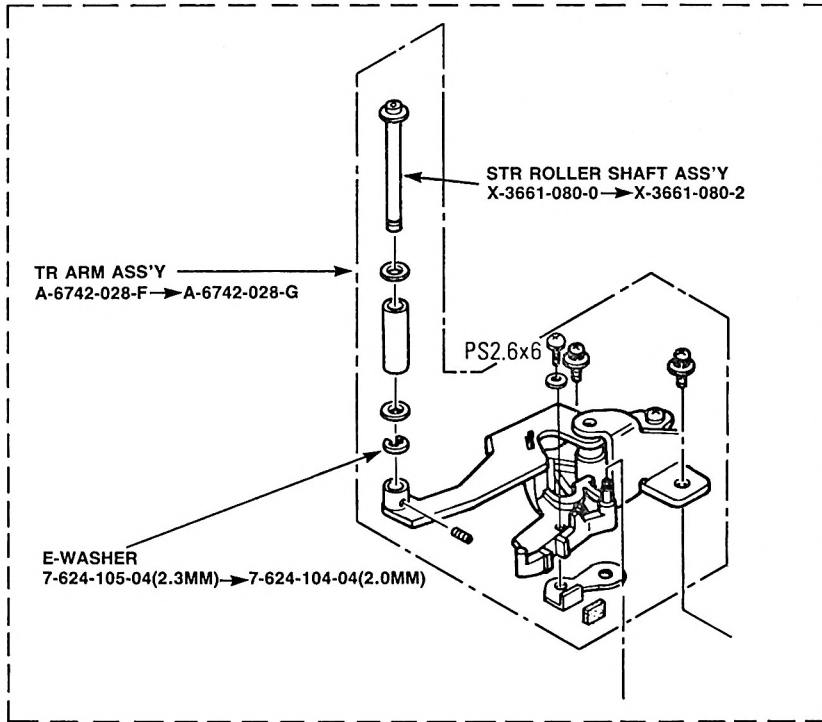
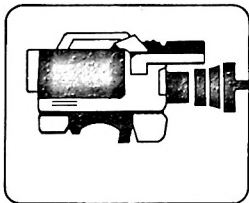


Figure 1



**MODEL: BVU-110, VO-4800**

**SERIAL NO: ALL**

**SUBJECT: STANDARDIZATION OF "BELT, STRAP"**

Date: March, 1983

## DESCRIPTION

The shoulder strap (Belt, Strap) has been changed for parts standardization in the BVU-110 and VO-4800 series. Table 1 lists the former and new part numbers.

Table 1

| Model   | Part No.                    |
|---------|-----------------------------|
| BVU-110 | 3-650-171-00 ♦ 3-662-756-00 |
| VO-4800 | 3-654-620-02 ♦ 3-662-756-00 |

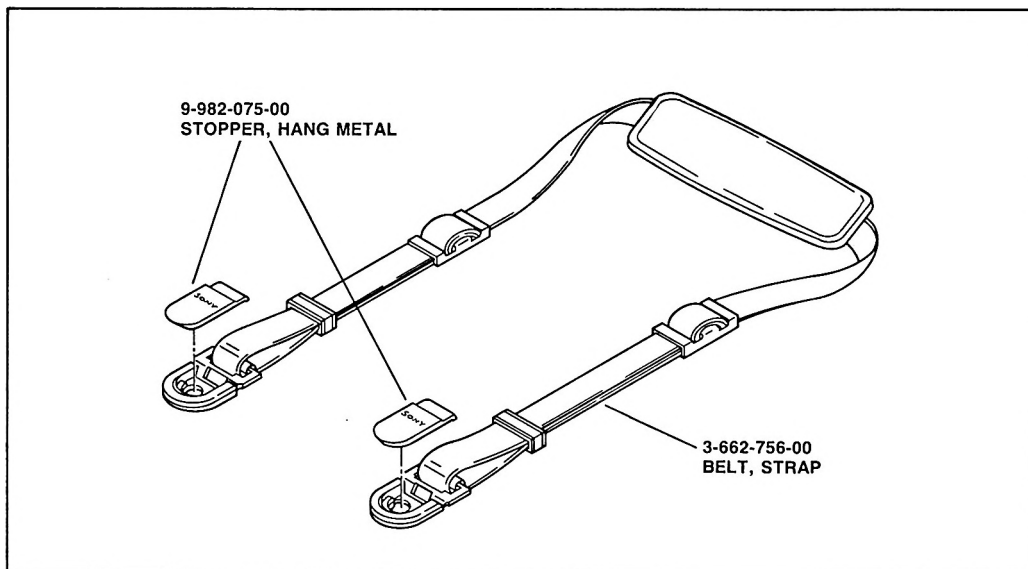


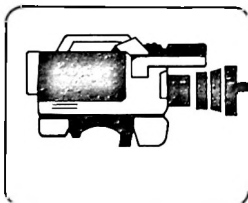
Figure 1

Reference: VTRW 81-1096 / B.G.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.





# technical bulletin

REVISION: 01

**82-021**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

MODEL: BVU-110

Date: January, 1983

SERIAL NO.: 10,001 — 10,610

SUBJECT: IMPROVED OPERATION OF RF WARNING LAMP CIRCUIT

THIS BULLETIN SUPERSEDES BROADCAST BULLETIN NO. 82-21  
DATED JUNE, 1982.

**DESCRIPTION**

The BVU-110 visual warning system sometimes fails to light the RF lamp if the video head clogs during Record mode (one or both channels).

Apply one of the following modifications according to machine serial number to correct this condition. (See Figures 1 and 2.) These modifications also should be applied during routine maintenance, or when the upper head drum is replaced.

| Part No.     | Description                    | Qty. |
|--------------|--------------------------------|------|
| 1-210-506-00 | Res, Carbon, 10k ohm, 1%, 1/4W | 1    |
| 8-719-815-55 | Diode, 1S1555                  | 1    |

**MODIFICATION PROCEDURE FOR S/N 10,001-10,360****AU-16 Board**

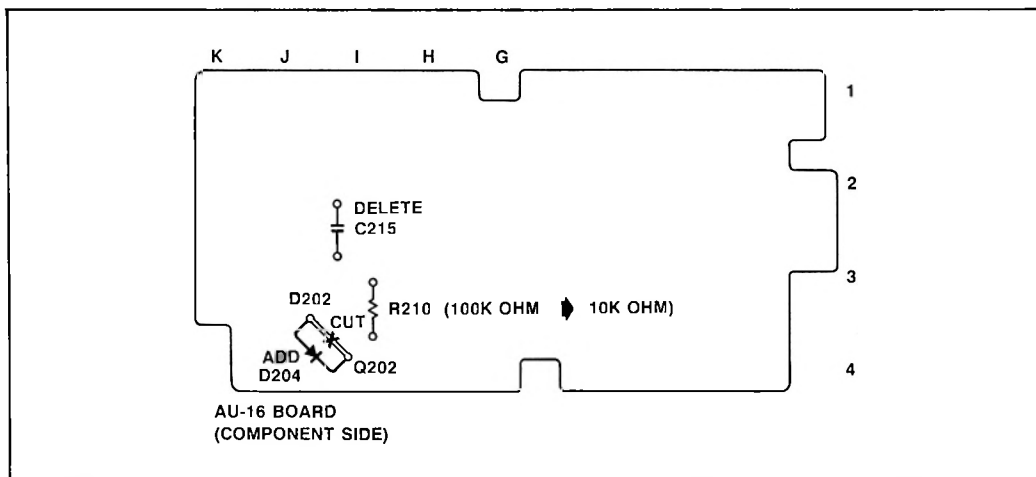
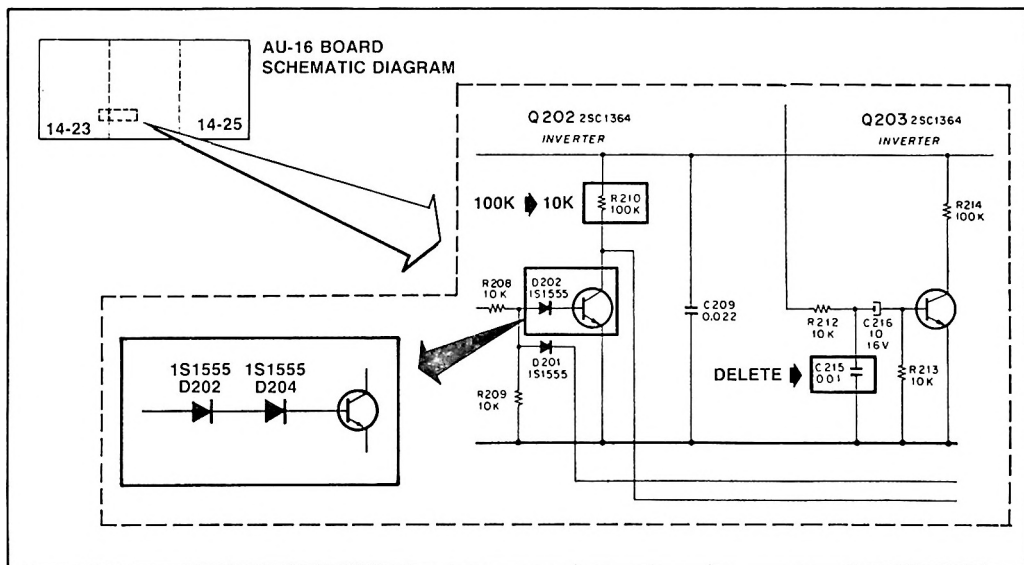
1. Remove 0.01 $\mu$ F capacitor (C215).

**MODIFICATION PROCEDURE FOR S/N 10,361-10,610****AU-16 Board**

1. Remove 0.01 $\mu$ F capacitor (C215).
2. Change R210 from 100k ohm to 10k ohm.
3. Add 1S1555 diode D204.

Reference: VS 80-48; VS 81-1004 / J.B.

Page 1 of 2



**MODEL: BVU-110, VO-4800**

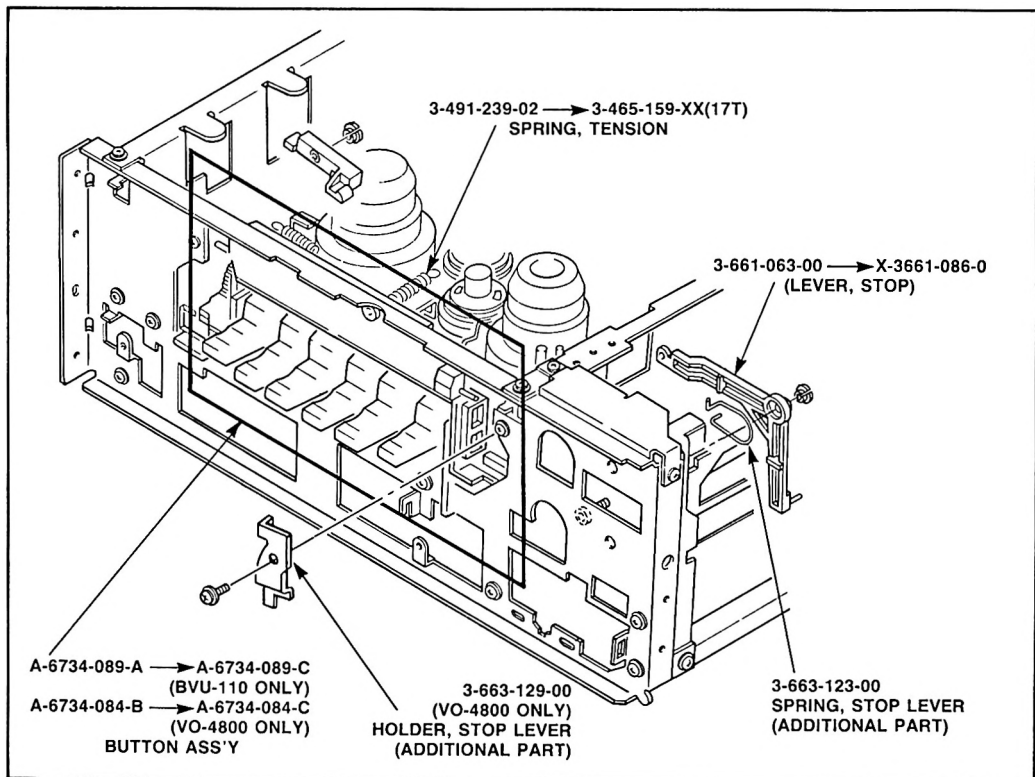
Date: January, 1983

**SERIAL NO: 11,060 AND LOWER (BVU-110)  
11,050 AND LOWER (VO-4800)**

**SUBJECT: NEW STOP LEVER**

### DESCRIPTION

The Stop Lever material has been changed from plastic to zinc for a more effective transfer of power to the Stop Solenoid. In addition, the Stop Lever Spring has been added and the Tension Spring of the Button Assembly has been changed. (See Figure 1.)



Reference: VTRW 81-1004 / J.B.

Figure 1

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

Table 1 lists the applicability of former and new parts.

Table 1

| Description        | Part No. |                              | BVU-110<br>10,001 — 10,060<br>VO-4800<br>10,001 — 11,050  | BVU-110<br>10,061 and higher<br>VO-4800<br>10,051 and higher |
|--------------------|----------|------------------------------|---|--|
|                    | Former   |                              |   |  |
| Lever, Stop        | Former   | 3-661-063-00                 | Yes   | No   |
|                    | New      | X-3661-086-0                 | BVU-110: No<br>VO-4800: Yes<br>Use 3-663-123-00<br>and 3-465-159-XX<br>(17T) at the<br>same time. | Yes  |
| Button, Ass'y      | Former   | A-6734-084-B<br>A-6734-089-A | Yes   | No   |
|                    | New      | A-6734-084-C<br>A-6734-089-C | Yes<br>Use 3-491-239-02<br>at the same time.  | Yes  |
| Spring, Tension    | Former   | 3-491-239-02                 | Yes   | No   |
|                    | New      | 3-465-159-XX(17T)            | No  | Yes  |
| Spring, Stop Lever | New      | 3-663-123-00                 | No  | Yes  |
| Holder, Stop Lever | New      | 3-663-129-00                 | No  | Yes  |

NOTE: Yes = usable  
No = not usable

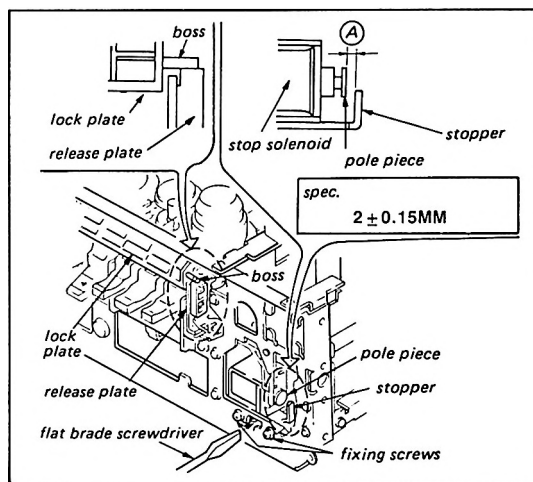
## ADJUSTMENT PROCEDURES

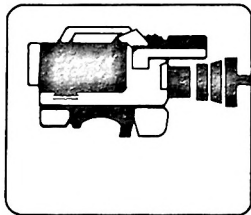
### STOP SOLENOID POSITION ADJUSTMENT

Cassette tape :  
Mode : PLAY

- Check Procedure: (i) Push the pole piece of the stop solenoid until the release plate comes into contact with the boss of the lock plate.
- (ii) Check that clearance (A) (between the stopper and pole piece of the stop solenoid) meets the required specification.

Adjustment Procedure: Adjust the position of the stop solenoid.





DO older 110

SONY

# broadcastbulletin No. 82-93

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

MODEL: BVU-110, VO-4800

SERIAL NO: 12,380 AND LOWER (BVU-110)  
19,150 AND LOWER (VO-4800)

SUBJECT: NEW BRACKET ASSEMBLY

Date: December, 1982

## DESCRIPTION

The "LID CASSETTE" may not open completely when the cassette is seated, causing malfunction of the EJECT operation due to distortion of the "ROD, PULL." (See Figure 1.) To correct this problem the "BRACKET ASS'Y" has been changed as shown in Figure 2.

| Description   | Part No.     |              |
|---------------|--------------|--------------|
|               | Former       | New *        |
| Bracket Ass'y | X-3661-072-2 | X-3661-072-4 |

\* Use new "Bracket Ass'y" for all serial numbers.

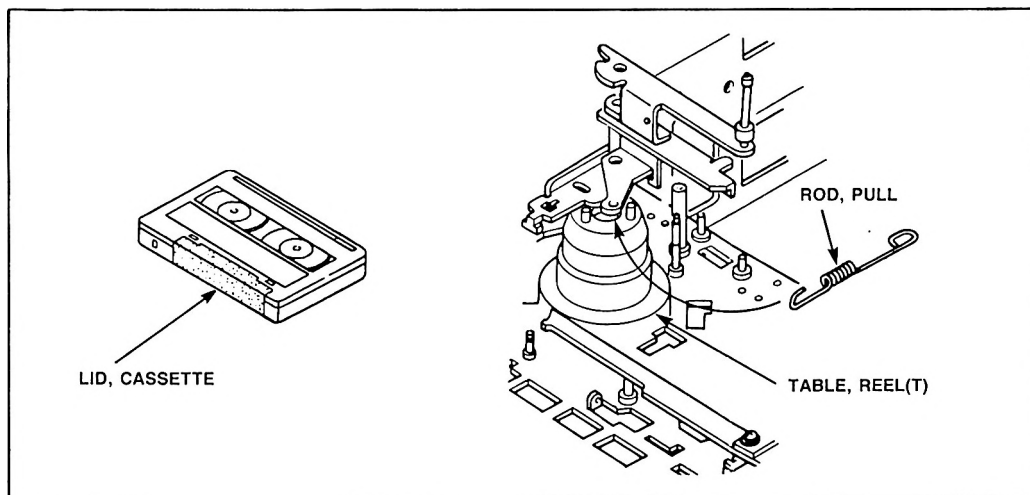


Figure 1

Reference: VTRW 81-1092 / J.B.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

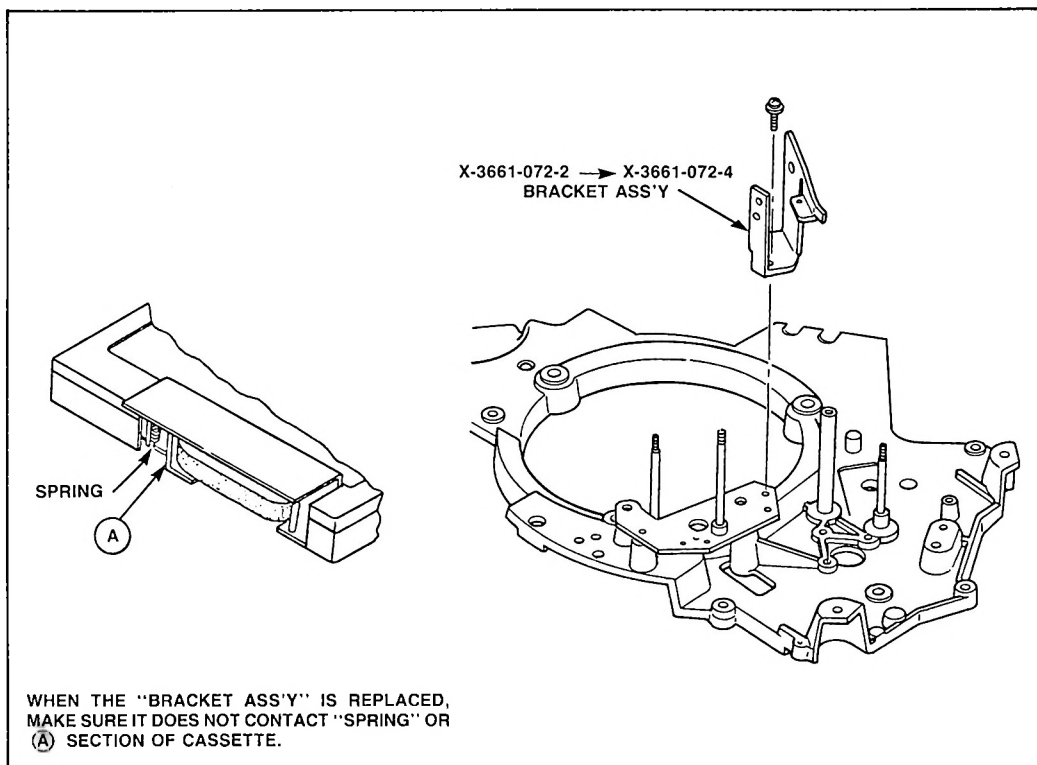
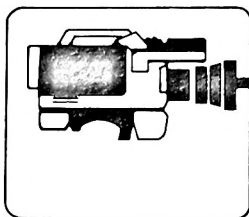


Figure 2



# broadcastbulletin No. 82-86

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: V0-4800, BVU-110**

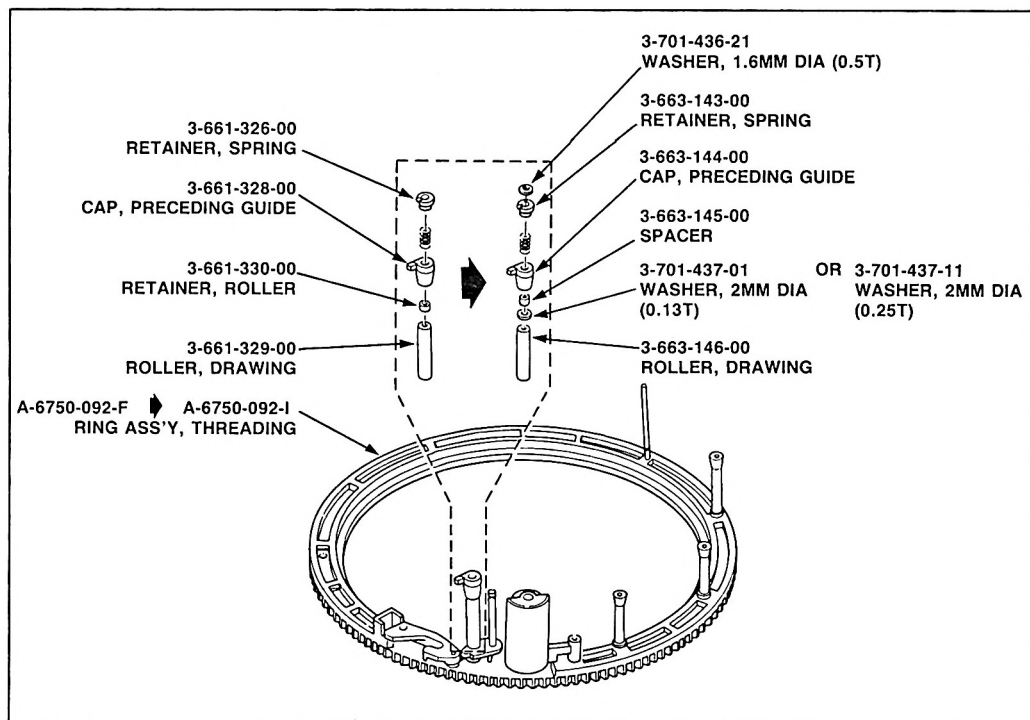
**SERIAL NO: SEE TABLE**

**SUBJECT: CHANGE OF DRAWING ROLLER AND THREADING RING ASSEMBLIES**

Date: December, 1982

## DESCRIPTION

The Drawing Roller has been changed to make part replacement easier. (See Figure 1.)



**Figure 1**

- NOTE:** 1. Check that the thrust clearance of the Drawing Roller meets the required specification of 0.2 - 0.3mm.  
2. Adjust the clearance by adding or removing washer (2mm dia) P.N. 3-701-437(-01/-11).

**Reference:** VTRW 81-1005 / J.B.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

Table 1 below indicates the applicability of former and new parts to VO-4800 and BVU-110 units with different serial numbers.

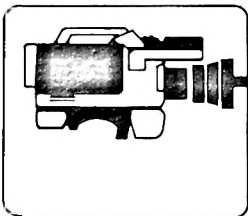
**Table 1**

| Description                | Part No. |              | VO-4800<br>10,001-15,050<br>BVU-110<br>10,001-11,730 | VO-4800<br>15,051 and higher<br>BVU-110<br>11,731 and higher |
|----------------------------|----------|--------------|--|--|
|                            |          |              |  |  |
| Retainer, Spring           | Former   | 3-661-326-00 | Yes  | No   |
|                            | New      | 3-663-143-00 | No   | Yes  |
| Cap, Preceding<br>Guide    | Former   | 3-661-328-00 | Yes  | No   |
|                            | New      | 3-663-144-00 | No   | Yes  |
| Retainer, Roller           | Former   | 3-661-330-00 | Yes  | No   |
| Spacer                     | New      | 3-663-145-00 | No   | Yes  |
| Roller, Drawing            | Former   | 3-661-329-00 | Yes  | No   |
|                            | New      | 3-663-146-00 | No   | Yes  |
| Washer<br>1.6mm dia (0.5T) | New      | 3-701-436-21 | No   | Yes  |
| 2mm dia (0.13T)            | New      | 3-701-437-01 | No   | Yes  |
| 2mm dia (0.25T)            | New      | 3-701-437-11 | No   | Yes  |
| Ring Ass'y.<br>Threading   | Former   | A-6750-092-F | Yes  | No   |
|                            | New      | A-6750-092-I | Yes  | Yes  |

Yes ..... Usable

No ..... Not Usable





Get?

**SONY**

# **broadcastbulletin** No. 82-85

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110**

**SERIAL NO: ALL**

**SUBJECT: OPERATION AND MAINTENANCE MANUAL**

Date: December, 1982

## **DESCRIPTION**

The following BVU-110 Service Manuals and Supplements are available and can be ordered through Broadcast Parts.

| Version                | Part No.    | Applicable Serial Numbers<br>(Printed on Cover) |
|------------------------|-------------|---|
| 1st Edition            | MU110-E1    | 10,001-10,360                                   |
| Supplement-1           | MU110-S1    | 10,361-10,610                                   |
| 1st Edition, Revised 5 | MU110-E1-R5 | 10,001-11,430                                   |
| 2nd Edition            | MU110-E2    | 20,001-20,650                                   |
| Theory of Operation    | MU110-T0    | All   |

## **ORDERING INFORMATION**

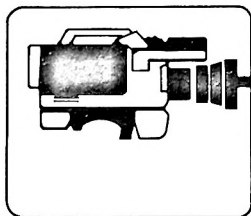
Please place orders for technical manuals or supplements by calling toll-free numbers listed below, or sending P.O. (if on open account) to:

SONY BROADCAST PRODUCTS COMPANY  
NATIONAL BROADCAST PARTS DIST. CENTER  
677 River Oaks Parkway  
San Jose, CA 95134  
TWX: 910-338-2168  
800-538-7550 (Outside CA)  
213-467-4430 (Southern CA)  
408-946-9640 (Northern CA)

Reference: VTRW 80-124 / J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



Get

SONY

# broadcastbulletin No. 82-60

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

MODEL: BVU-110

SERIAL NO: 11,730 AND LOWER

SUBJECT: CHANGE OF CONNECTOR

Date: November, 1982

## DESCRIPTION

The 20P connector (1-560-318-00) for the BK-111 TIME CODE on the BVU-110 has been changed to 28P connector (1-560-511-00) to make it compatible with other BVU-110 series. (See Figure 1.) To update earlier machines, the following items listed in Table 1 are required. The BK-111 or BK-112 can then be used in both early and later units.

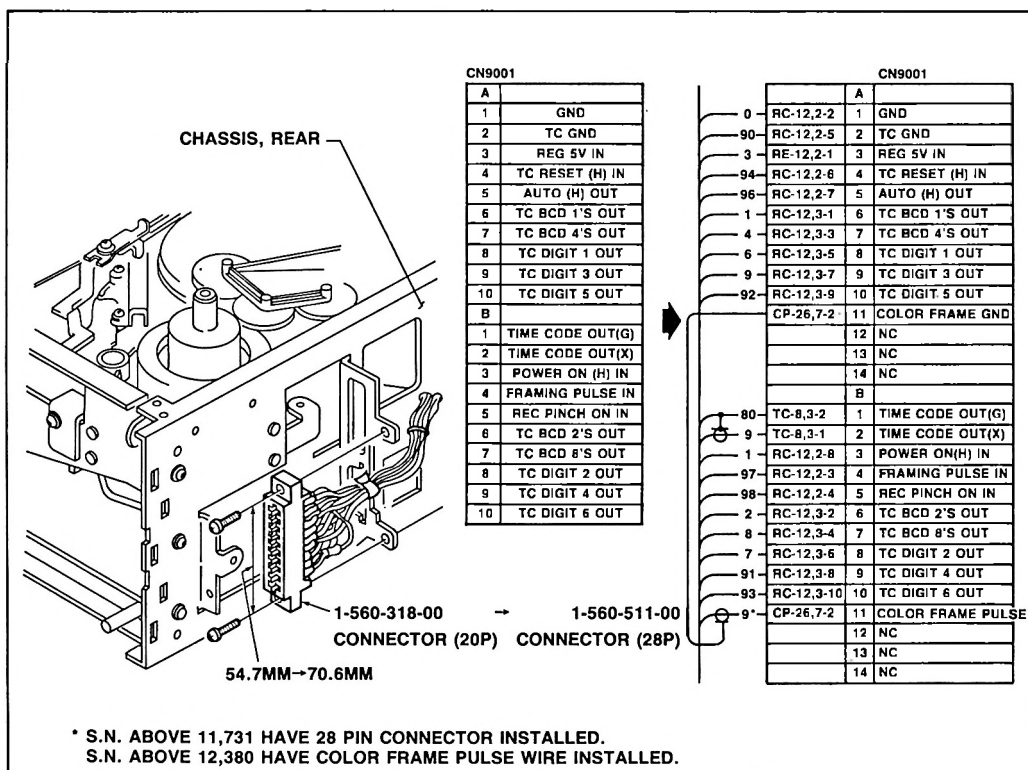


Figure 1

Reference: VTRW 81-1064 / J.B.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**Table 1**

| Part No.     | Description  | Qty. |
|--------------|--|------|
| 1-932-672-00 | Harness Ass'y (which includes new connector, 1-560-511-00) | 1    |
| 3-662-786-00 | Bracket  | 1    |

NOTE: These parts are now available without charge from:

**SONY BROADCAST PRODUCTS COMPANY**  
**NATIONAL BROADCAST PARTS DIST. CENTER**  
 677 River Oaks Parkway  
 San Jose, California 95134  
 TWX: 910-338-2168  
 800-538-7550 (Outside CA)  
 213-467-4430 (Southern CA)  
 408-946-9090 (Northern CA)

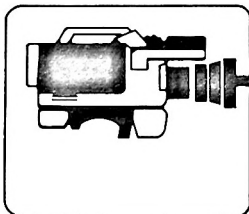
Table 2 shows usability of former and new connector for old and newer machines.

**Table 2**

| Description | Part No. |              | Serial No.               |                              |
|-------------|----------|--------------|--------------------------|------------------------------|
|             |          |              | BVU-110<br>10,001~11,730 | BVU-110<br>11,731 and higher |
| CONNECTOR   | Former   | 1-560-318-00 | Yes                      | No                           |
|             | New      | 1-560-511-00 | No                       | Yes                          |

NOTE:

- Yes = usable; No = not usable.



check sync pulse  
B-

SONY®

# broadcastbulletin No. 82-58

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: October, 1982

**MODEL: BVH-1100**

**SERIAL NO: ALL**

**SUBJECT: IMPROVEMENT OF PLAYBACK JITTER WITH  
SELF-RECORDED TAPE**

## DESCRIPTION

The following modifications will improve playback jitter with a self-recorded tape. The modifications should already exist in machines with serial numbers above 10,600. However, this should be verified by examining the SYNC PULSE Board before proceeding. Figure 1 shows the changes to the SYNC PULSE Board schematic.

## PARTS REQUIRED

| Part No.     | Description                   | Qty. |
|--------------|-------------------------------|------|
| 1-246-489-00 | Res, Carbon, 4700Ω, ¼W, 5%    | 1    |
| 1-107-107-00 | Cap, Mica, 10pF, 50V          | 1    |
| 1-102-114-00 | Cap, Ceramic, 470pF, 50V, 10% | 1    |

## MODIFICATION PROCEDURE

### SYNC PULSE Board

1. Remove capacitor C36 (Figure 2-A).
2. Replace R95 with 4700Ω resistor (Figure 2-B).
3. Connect 470pF capacitor (C89) between pins 12 and 8 of IC32 (Figure 3-A).
4. Connect 10pF capacitor (C88) between gate and drain of Q23 (Figure 3-B).

Reference: VS 80-102 / T.Mc.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

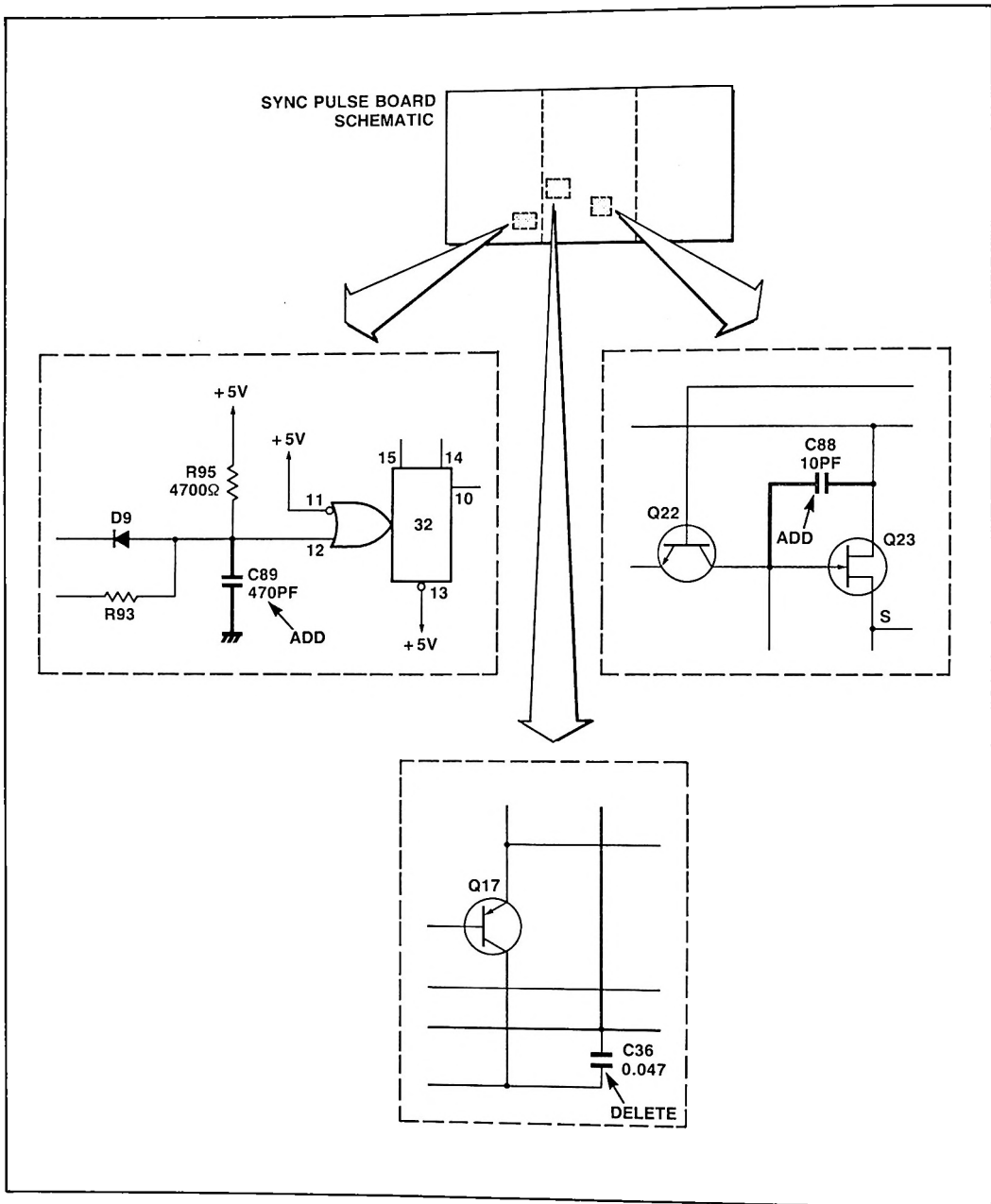


Figure 1

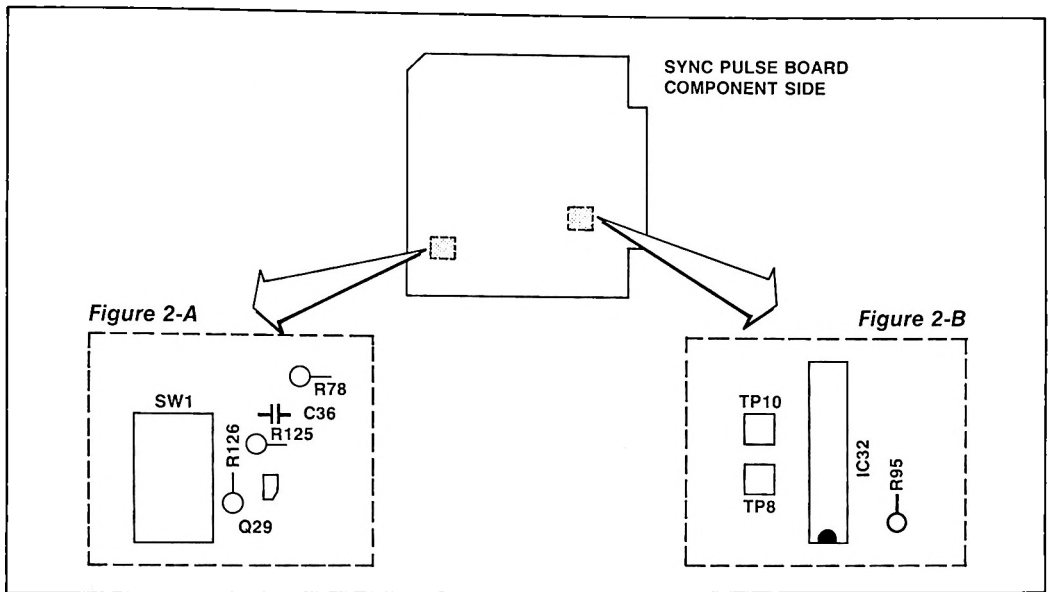


Figure 2

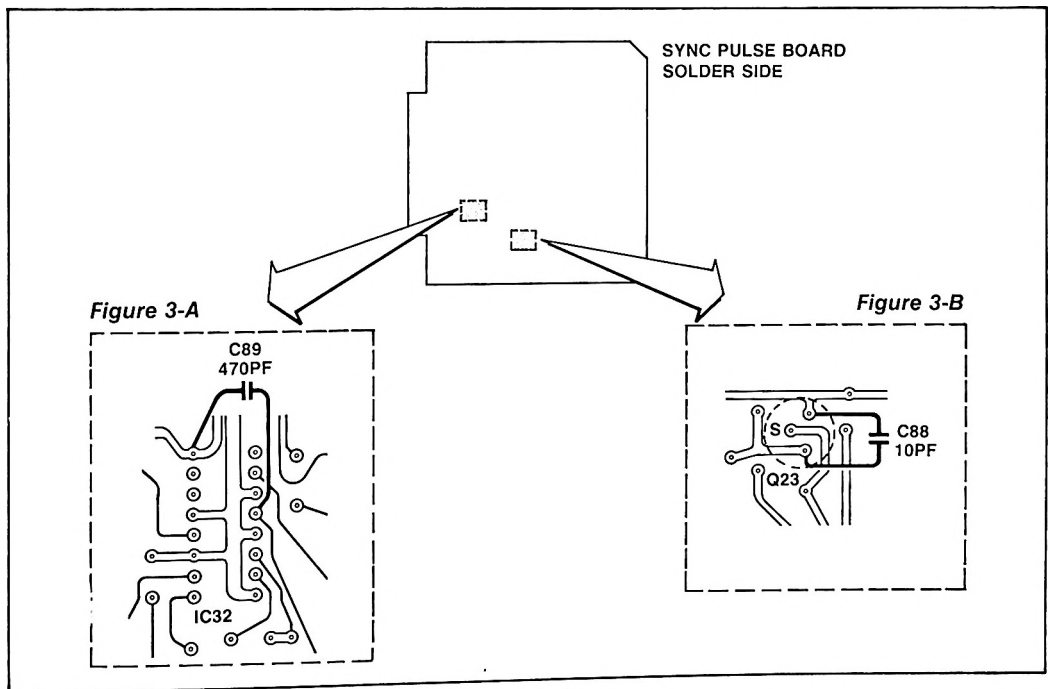
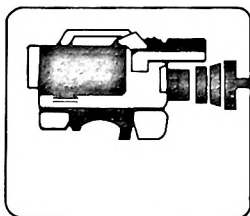


Figure 3



Do or older 110

SONY®

# broadcastbulletin No. 82-51

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

MODEL: BVU-110

SERIAL NO: 11,080 AND LOWER

SUBJECT: PREVENTING SURGE DAMAGE ON SY-61 BOARD

Date: October, 1982

## DESCRIPTION

Diode D3 on the SY-61 Board is subject to surge damage when power is applied to the BVU-110. Symptoms of diode failure are as follows:

- Pinch-on does not occur or takes longer than normal following the "Cassette-In-Threading" mode.
- Pinch-on occurs prematurely during transition from STOP to FW. (Tape does not advance for 2 - 3 seconds.)

The problem can be corrected by changing D3 to a 10E2 as shown in Figure 1.

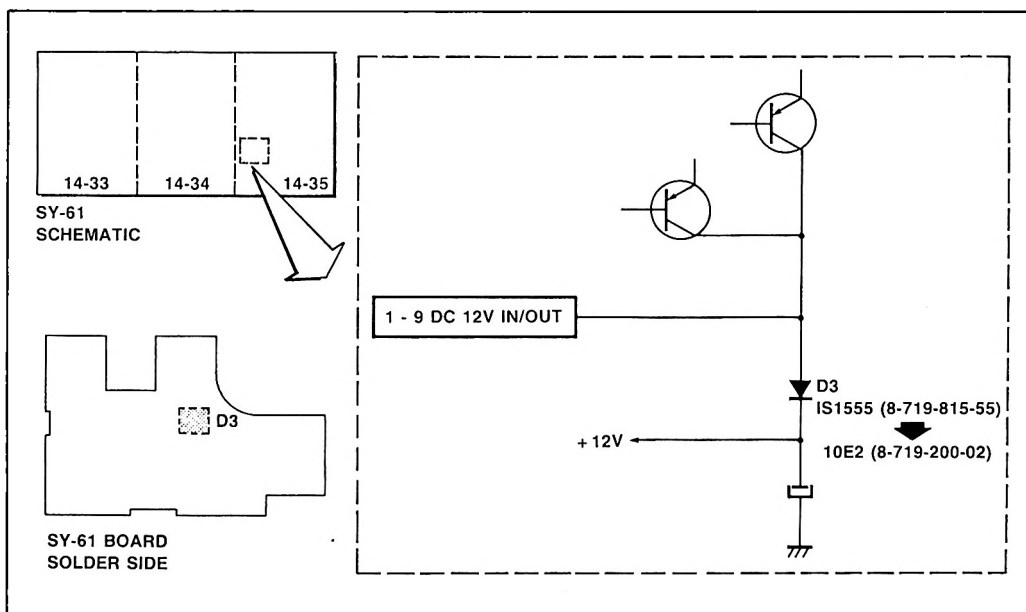
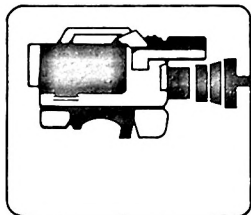


Figure 1

Reference: VS80-118 / J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



**SONY**

# broadcastbulletin No. 82-49

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: September, 1982

**MODEL: BVU-110, VO-4800**

**SERIAL NO: BVU-110, 11,080 AND LOWER  
VO-4800, 13,050 AND LOWER**

**SUBJECT: ROLLER, GUIDE CHANGE**

## DESCRIPTION

The ROLLER, GUIDE has been changed to improve the back space EDIT function. Please note the change of part numbers and their applicability to different units listed below.

| Description   |        | Part Number  | VO-4800<br>10,001 - 13,050<br>BVU-110<br>10,001 - 11,080 | VO-4800<br>13,051 and Higher<br>BVU-110<br>11,081 and Higher |
|---------------|--------|--------------|--|--|
| ROLLER, GUIDE | Former | 3-657-134-00 | Usable   | Not Usable   |
|               | New    | 3-663-137-00 | Usable   | Usable   |

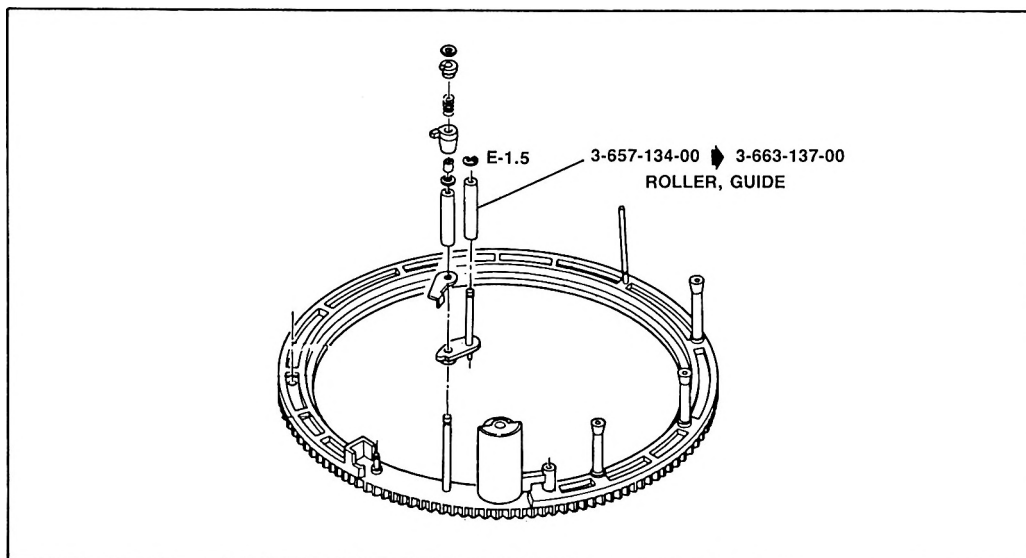


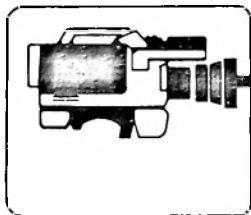
Figure 1

Reference: VTRW81-1012/J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.





# **broadcastbulletin** No. **82-48**

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110 / BK-111**

**SERIAL NO: ALL**

**SUBJECT: ELECTRICAL ALIGNMENT OF BK-111**

Date: September, 1982

This information supplements all editions of the BK-111 Operation and Maintenance Manual.

## **ADJUSTMENT PROCEDURE, VCO AND REFERENCE FREQUENCY.**

### **Step 1. Preparation for Adjustment**

- Insert BK-111 using "BK-111 EXTENSION BOARD" (J-614-038-0A).
- Set BK-111 to Free Run mode.

### **Step 2. Adjustment (See Figures 1 and 2.)**

#### **2-1 (a) VCO Frequency Adjustment (for units with serial numbers up to 10,390)**

- (i) Connect a jumper between R1 input side (Framing Pulse In) and GND. (A) in Figure 1)
- (ii) Connect a frequency counter to IC1-4.
- (iii) Select one of three resistors (56k ohm, 68k ohm or 75k ohm), which provides a counter reading of  $25 \pm \frac{0}{4}$  kHz. Install the resistor between IC1-12 and GND (B) in Figure 1)
- (iv) Remove jumper at (A) (Figure 1), when selection completed.

#### **2-1 (b) VCO Frequency Adjustment (for units with serial numbers 10,391 and higher)**

- (i) Connect a jumper between R1 input side (Framing Pulse In) and GND. (C) in Figure 2)
- (ii) Connect a frequency counter to TP2.
- (iii) Adjust RV1 to obtain a counter reading of  $25 \pm \frac{0}{1}$  kHz.
- (iv) Remove jumper at (C) in Figure 2 when adjustment is complete.

#### **2-2 Reference Frequency (32 kHz) Adjustment**

- (i) Set section 1 of SW7 (System Select Switch) to ON position.
- (ii) Connect a frequency counter to TP1.
- (iii) For units with serial numbers up to 10,390, C13 is connected as shown (D) in Figure 1).
- (iv) Adjust CV2 to obtain a counter reading of  $32 \text{ kHz} \pm 0.4 \text{ Hz}$ .

*Reference: VTRW 81-1079 / J. B.*

*Page 1 of 3*

- 



## 2-3 Reference Frequency (38.4 kHz) Adjustment

- (i) Set SW7-1, SW7-4 to OFF position.  
Set SW7-2, SW7-3 to ON position.
- (ii) Connect frequency counter to TP1.
- (iii) For units with serial numbers up to 10,390, C4 is connected as shown (G) in Figure 1).
- (iv) Adjust CV1 to obtain a counter reading of  $38.4 \text{ kHz} \pm 0.4 \text{ Hz}$ .
- (v) If the specified reading is not obtained, readjust CV1 after performing one of the following steps.
  - For units with serial numbers up to 10,390, solder bridge between the points designated (H) in Figure 1.
  - For units with serial numbers 10,391 and higher, solder bridge between the points designated (I) in Figure 2.

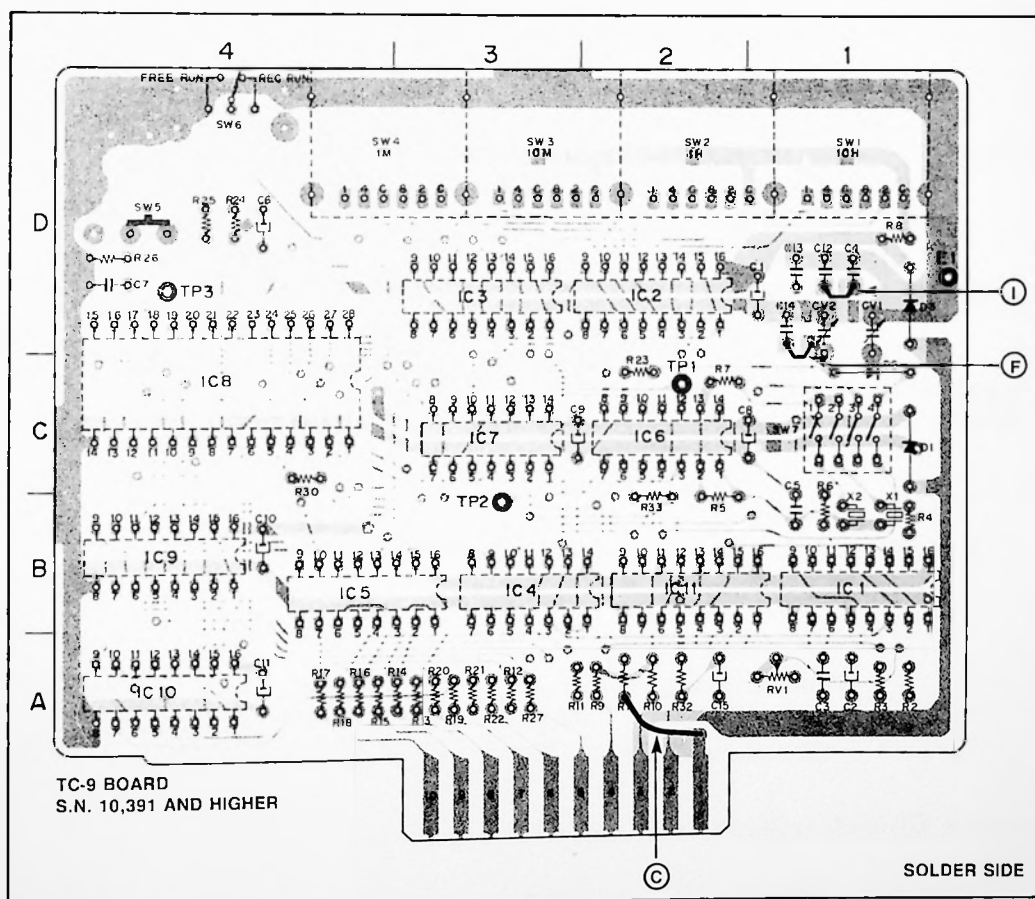
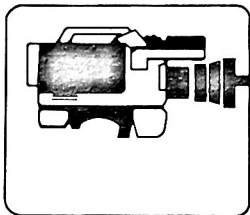


Figure 2

**SONY**

# **broadcastbulletin** No. **82-41**

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

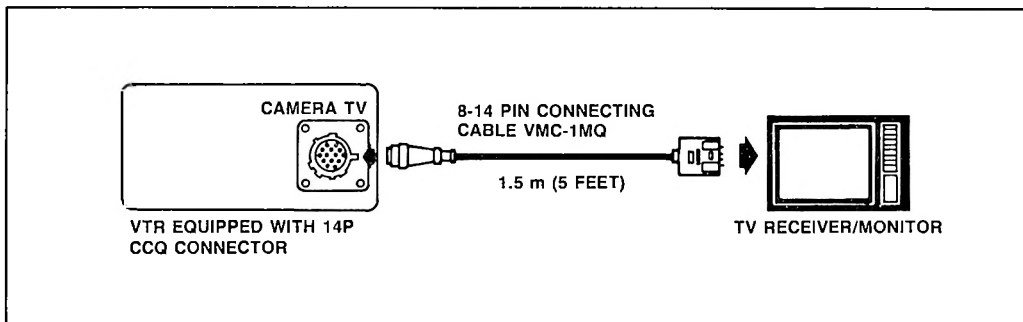
**MODEL: BVU-50, BVU-110**

**SERIAL NO: ALL**

**SUBJECT: PRECAUTIONS ON USE OF VMC-1MQ  
(8-14 PIN CONNECTING CABLE)**

Date: August, 1982

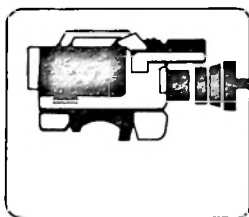
Please note that PAUSE operation is *not possible* when recording TV signals using the VMC-1MQ cable to interconnect the receiver with the BVU-50 or BVU-110. PAUSE operation *is possible* with the VO-4800 recorder (using a 14-pin connector).



Reference: VTRW 80-119 / J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



## broadcastbulletin No. 82-38

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110 / VO-4800**

**SERIAL NO: SEE TABLE 1**

**SUBJECT: USE OF NEW "CAP, PRECEDING GUIDE" AND "RETAINER, SPRING"**

Date: July, 1982

### DESCRIPTION

For production reasons the Preceding Guide Cap, 3-663-144-00, and Spring Retainer, 3-663-143-00, have been changed. (See Figure 1.) The 1.6mm diameter washer formerly used in the Threading Ring Assembly, A-6750-092-G, has been eliminated from the new Threading Ring Assembly, A-6750-092-H. Table 1 shows the applicability of new and former parts.

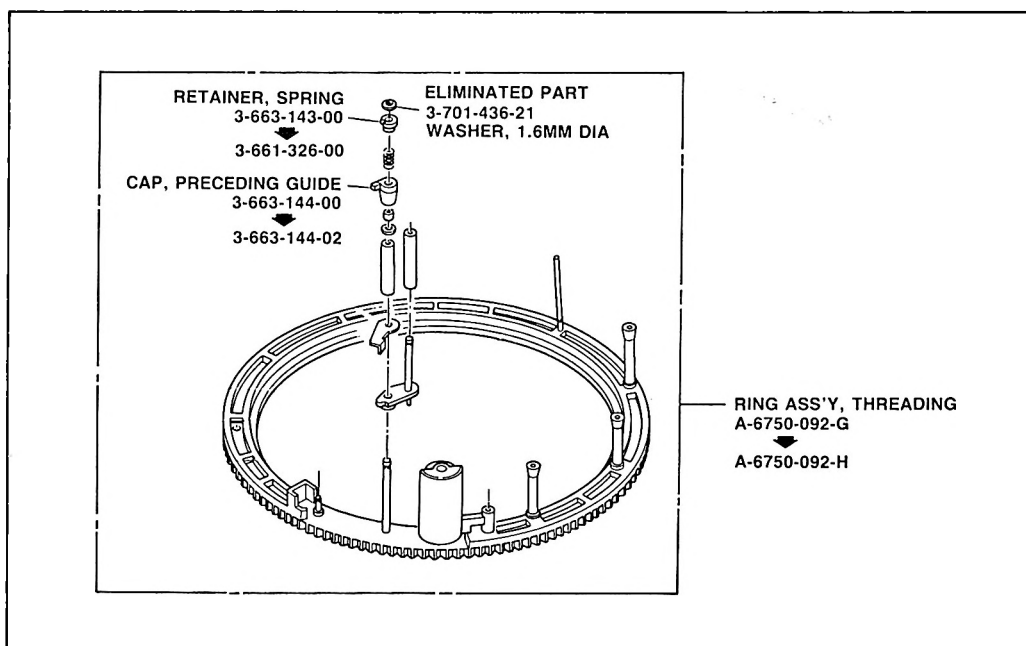


Figure 1

Reference: VTRW 81-1111/J.B

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info Service, 677 River Oaks Pkwy, San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

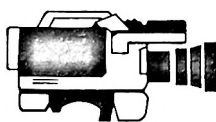
**Table 1. Machine Serial Number Applicability**

| Description           |        | Part No.     | Serial No.               |                              |
|-----------------------|--------|--------------|--------------------------|------------------------------|
|                       |        |              | VO-4800<br>15,051—19,650 | VO-4800<br>19,651 and Higher |
|                       |        |              | BVU-110<br>11,731—20,300 | BVU-110<br>20,301 and Higher |
| RING ASS'Y, THREADING | Former | A-6750-092-G | YES                      | YES                          |
|                       | New    | A-6750-092-H | YES                      | YES                          |
| CAP, PRECEDING GUIDE  | Former | 3-663-144-00 | YES                      | NO                           |
|                       | New    | 3-663-144-02 | NO                       | YES                          |
| RETAINER, SPRING      | Former | 3-663-143-00 | YES                      | NO                           |
|                       | New    | 3-661-326-00 | NO                       | YES                          |
| WASHER, 1.6mm dia     | Former | 3-701-436-21 | YES                      | NO                           |

21333  
10649



SONY



# broadcastbulletin No. 82-37

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110/VO-4800**

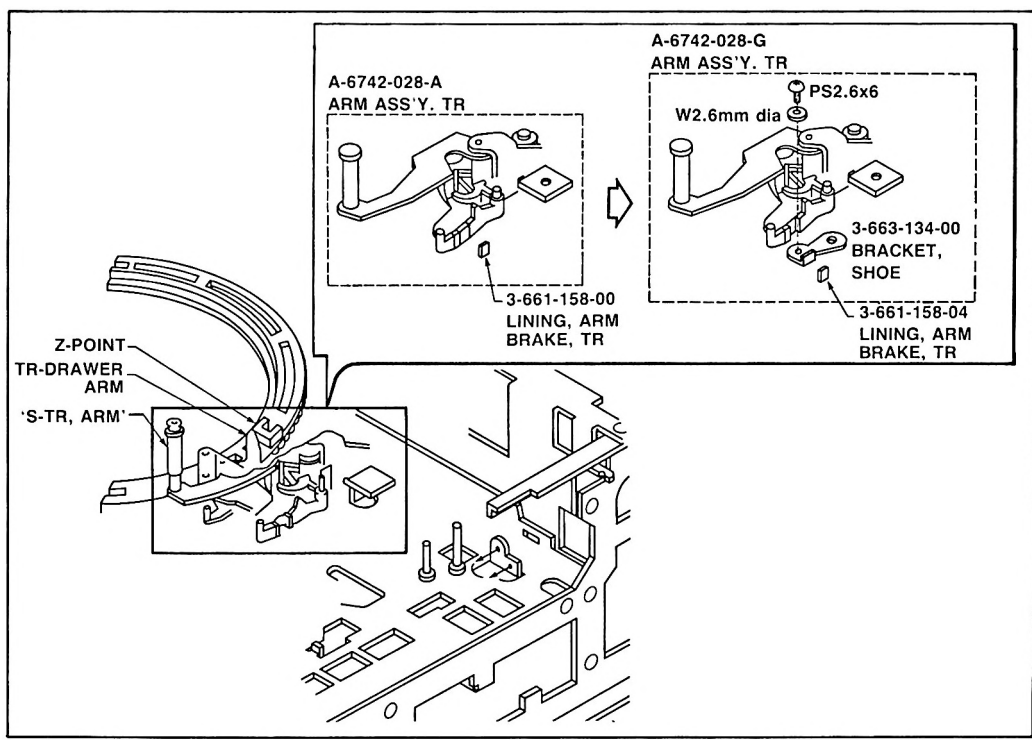
Date: July, 1982

**SERIAL NUMBER: BVU-110, 10,001—10,810  
VO-4800, 10,001—12,300**

**SUBJECT: CHANGE OF 'ARM ASS'Y, TR'**

## DESCRIPTION

The threading arm assembly ('ARM ASS'Y, TR') has been changed in units with serial numbers 10,811 and higher to allow adjustment for optimal contact between 'TR-DRAWER ARM' and the 'Z-point' of the threading ring. (See Figure 1.) Specifically, this change is to draw out the thread supply arm ('S-TR, ARM') more securely at the threading-end. Perform adjustments on page 3 after the modification is complete.



**Figure 1. ARM ASS'Y, TR**

Reference: VTRW 80-109 / J.B.

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

## PARTS REQUIRED

| Assembly              | Part Number  |              |
|-----------------------|--------------|--------------|
|                       | Former       | New          |
| ARM ASS'Y, TR         | A-6742-028-A | A-6742-028-G |
| LINING, ARM BRAKE, TR | 3-661-158-00 | 3-661-158-04 |
| BRACKET, SHOE         | —            | 3-663-134-00 |

## PART APPLICABILITY

| Assembly   | VO-4800<br>10,001—12,300<br>BVU-110<br>10,001—10,810 | VO-4800<br>12,301 and Higher<br>BVU-110<br>10,811 and Higher |
|--|--|--|
| ARM ASS'Y, TR<br>Former (A-6742-028-A)<br>New (A-6742-028-G)         | Usable<br>Usable                                     | Not Usable<br>Usable   |
| LINING, ARM BRAKE, TR<br>Former (3-661-158-00)<br>New (3-661-158-04) | Usable<br>Usable                                     | Not Usable<br>Usable   |
| BRACKET, SHOE<br>New (3-663-134-00)                                  | *  | Usable   |

\* The shoe bracket is an additional part for newer units only and is not used in earlier units.



## ADJUSTMENT PROCEDURES

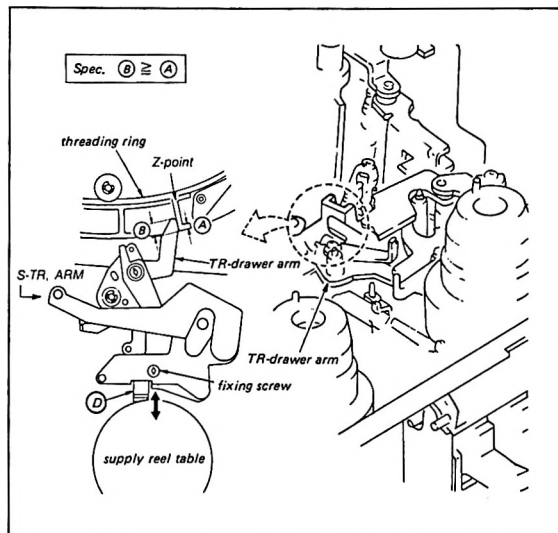
### TR-DRAWER ARM POSITION ADJUSTMENT (1)

- This adjustment is required if the S-TR, ARM does not come out to the correct position in the threading-end mode. Normal FWD back-tension can not be obtained under this condition.

Cassette tape : \_\_\_\_\_  
 Mode : Turn power off after selecting the EJECT mode.

- Check procedure:
- Turn the threading ring clockwise by hand.
  - Stop the threading ring at position that contacts the TR-drawer arm and the Z-point.
  - Check that the length of  $\textcircled{B}$  meets the required specification.
  - Perform TR-drawer arm position adjustment (2)

Adjustment procedure: Adjust the position of  $\textcircled{D}$



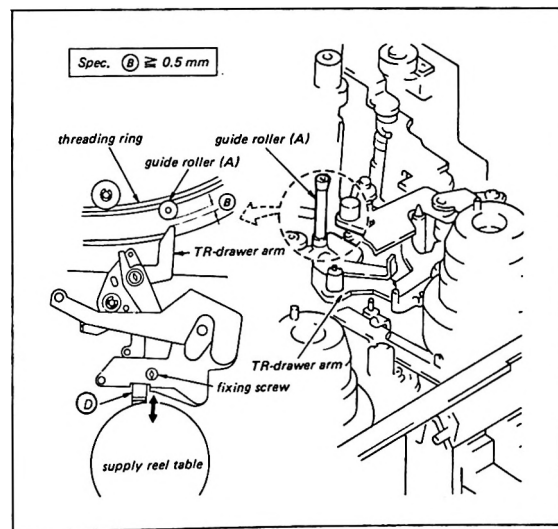
### TR-DRAWER ARM POSITION ADJUSTMENT (2)

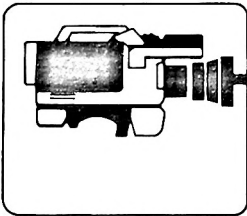
- This adjustment is required if the TR-drawer arm comes in contact with the guide roller (A).

Cassette tape : \_\_\_\_\_  
 Mode : Turn power off after selecting the EJECT mode.

- Check procedure:
- Turn the threading ring clockwise by hand.
  - Stop the threading ring at position where the TR-drawer arm is nearest to the guide roller (A).
  - Check that the clearance between the TR-drawer arm and the guide roller (A) meets the required specification.
  - Perform TR-drawer arm position adjustment (1)

Adjustment procedure: Adjust the position of  $\textcircled{D}$





# SONY®

## broadcastbulletin No. 82-35

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BC-210**

**SERIAL NO: 10,980 AND LOWER**

**SUBJECT: IMPROVED GUIDE RING**

Date: July, 1982

### DESCRIPTION

The battery connector guide ring has been changed in units with serial numbers 10,981 and higher. The new guide ring attaches more securely to the connector, eliminating the tendency for the part to come loose. The new part can be installed in units with serial numbers below 10,981.

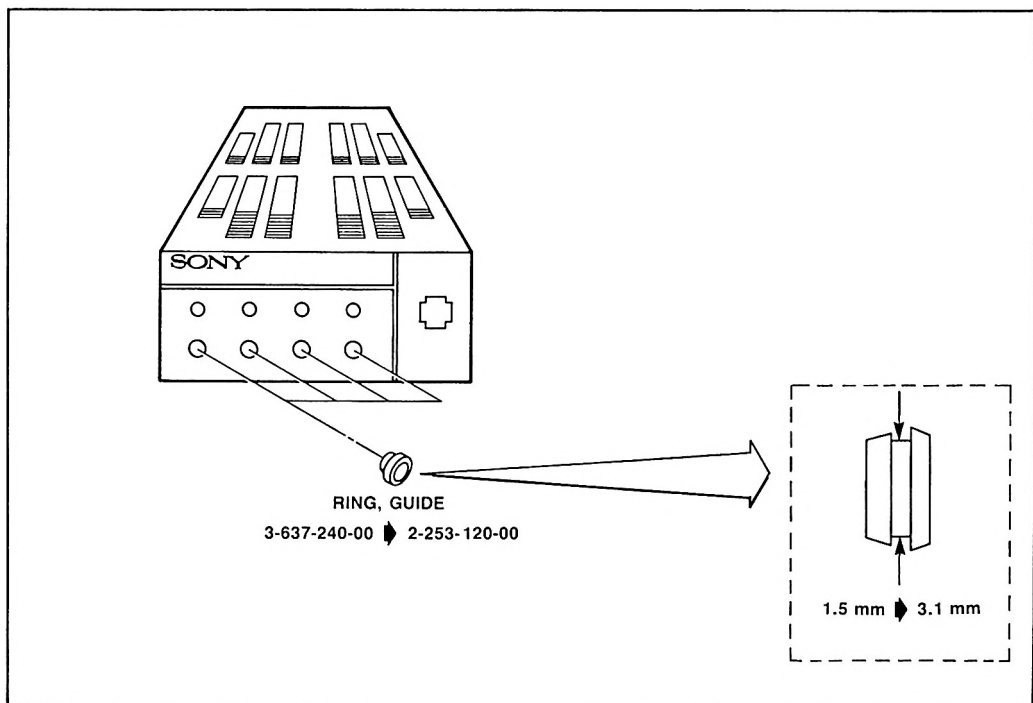
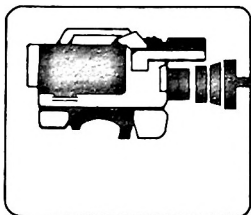


Figure 1

Reference: VTRW 80-20/J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**SONY®**

# **broadcastbulletin** No. **82-33**

**SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134**

Date: July, 1982

**MODEL: BVU-110****SERIAL NO: 10,001-10,810****SUBJECT: AUDIO SIGNAL LOSS DUE TO POWER SURGE****DESCRIPTION**

The BVU-110 uses the CX170 chip in both audio channels. This chip may be damaged by surges. The following modification protects the chip.

**PARTS REQUIRED**

| Part No.     | Description            | Qty. |
|--------------|------------------------|------|
| 8-719-930-12 | Zener Diode, EQB01-12Z | 2    |

**MODIFICATION PROCEDURE****CP-26 Board (Audio 1)**

Connect Zener diode D7 in parallel with C24. (See Figure 1.)

**AU-16 Board (Audio 2)**

Connect Zener diode D58 in parallel with C72. (See Figure 2.)

*Reference: VS 80-56 / J.B.**Page 1 of 3*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

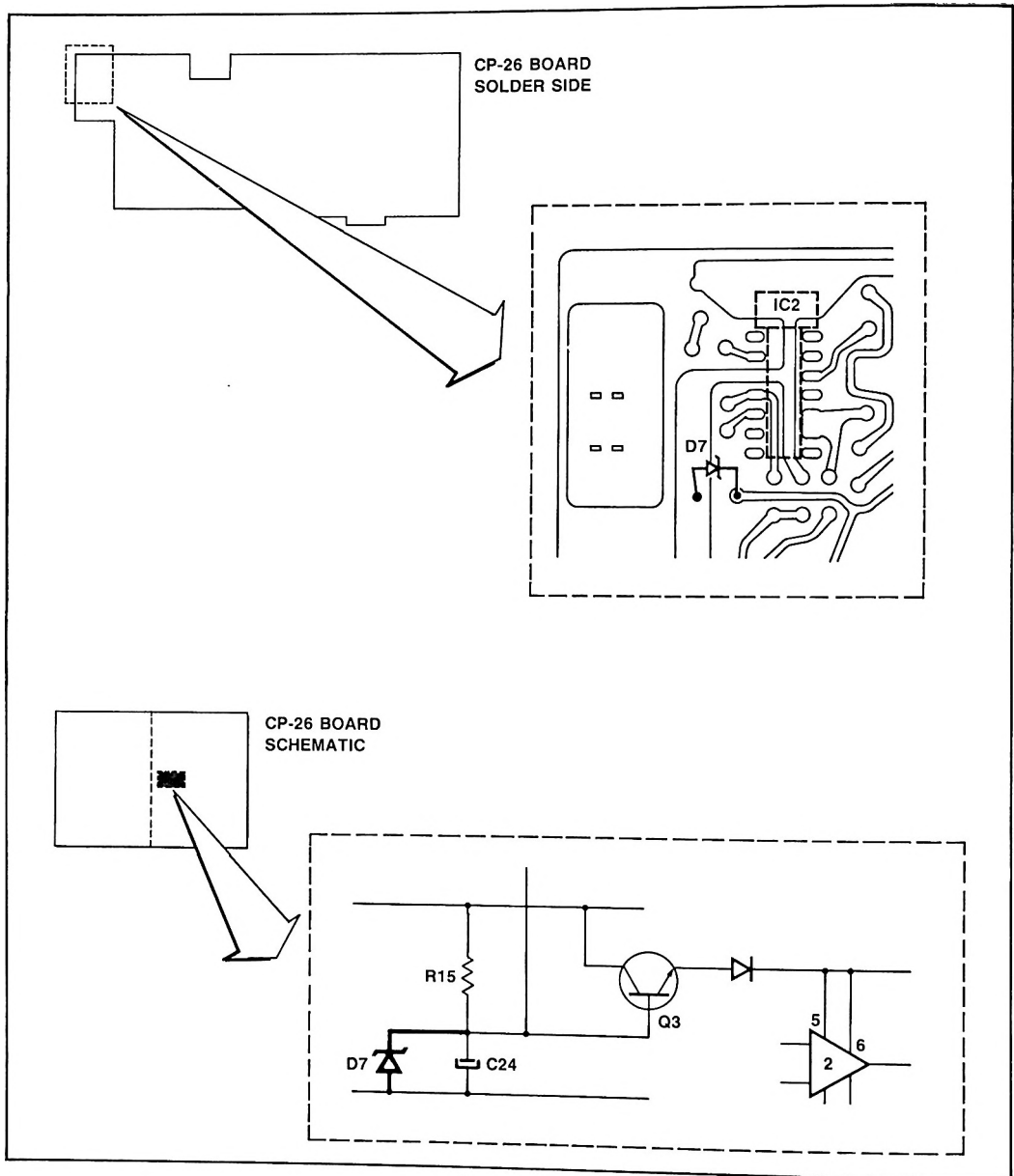


Figure 1

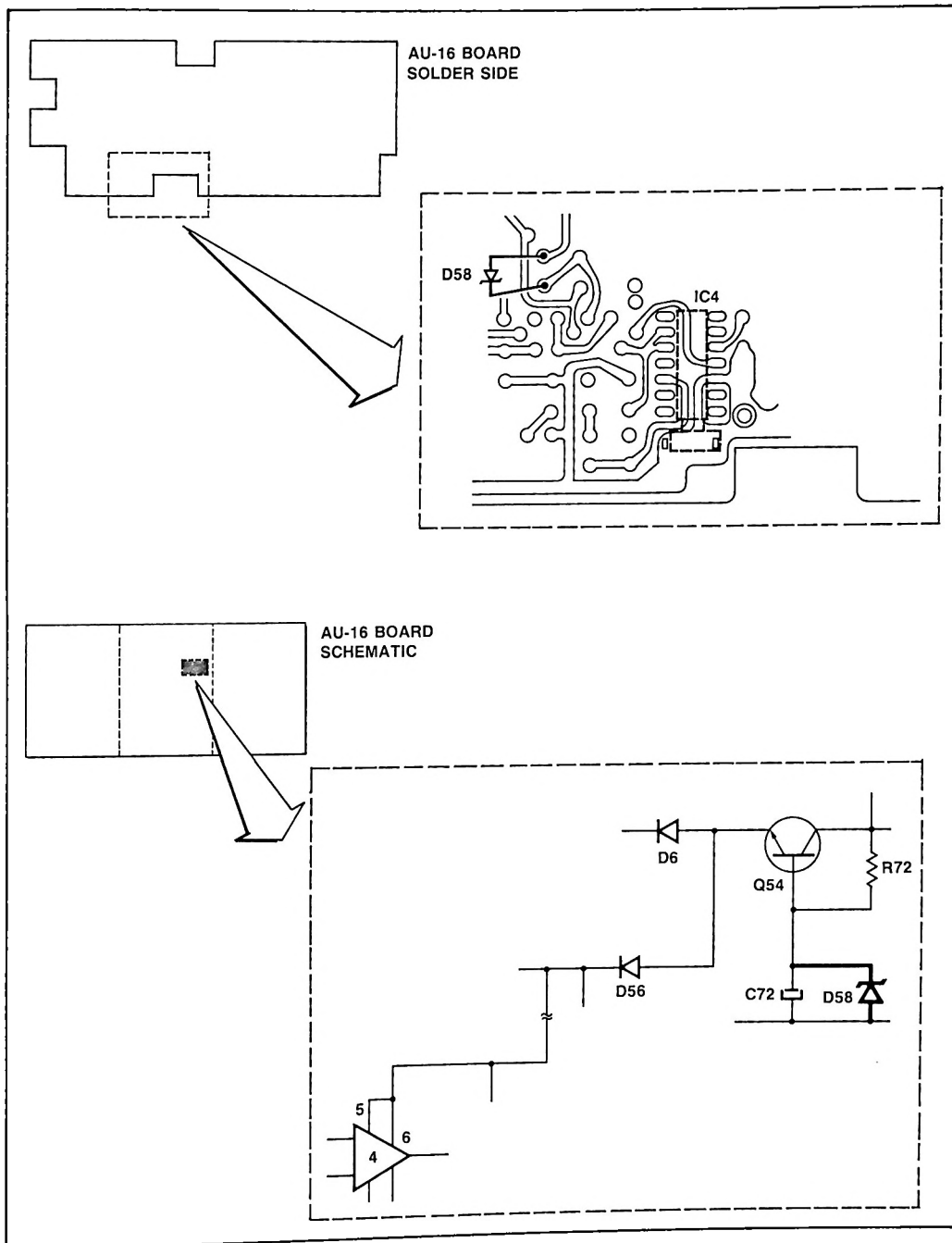
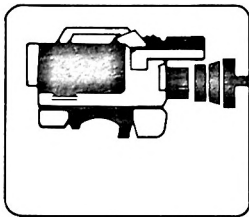


Figure 2



SONY

# broadcastbulletin No. 82-19

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

MODEL: BVU-110

SERIAL NO: 10,001—10,810

SUBJECT: COLOR LOSS AFTER PAUSE RELEASE IN PLAYBACK MODE

Date: July, 1982

## DESCRIPTION

When the PAUSE control is released during playback, color may be lost for more than 5 seconds (normal 1-2 seconds). The problem is caused by the APC circuit on the VO-2A Board. To correct the problem, the value of R594 on the VO-2A Board should be increased from 20k to 330k ohms. (See Figure 1.)

## PARTS REQUIRED

| Part No.     | Description                      | Qty. |
|--------------|----------------------------------|------|
| 1-246-533-00 | Res, Carbon, 330k ohm, 1/4W, 10% | 1    |

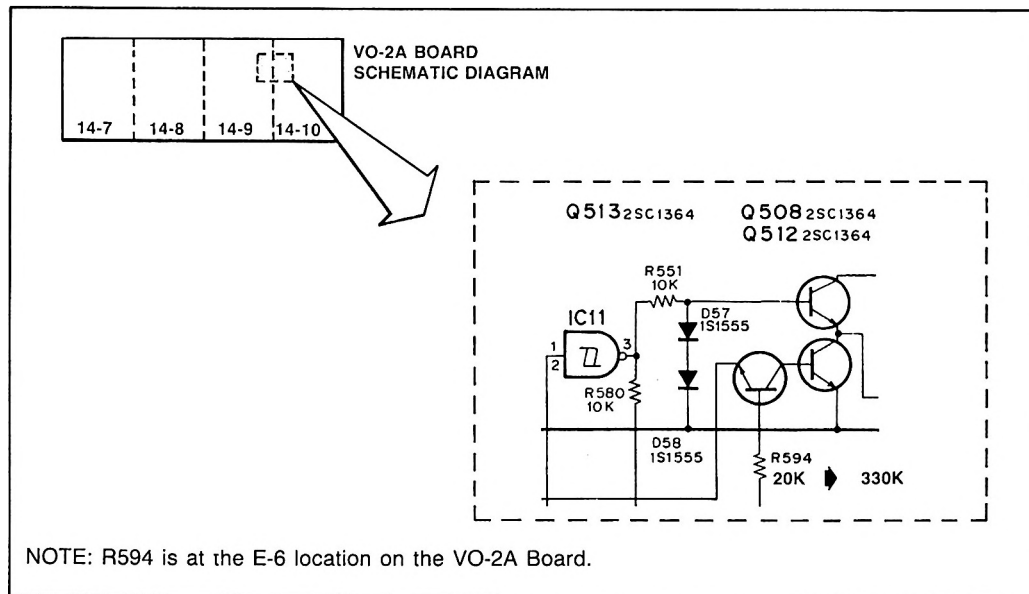


Figure 1

Reference: VS 80-54 / J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# broadcastbulletin<sub>No.</sub>82-21

**SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134**

**MODEL: BVU-110**

Date: June, 1982

**SERIAL NO: 10,001—10,610**

**SUBJECT: IMPROVED OPERATION OF RF WARNING LAMP CIRCUIT**

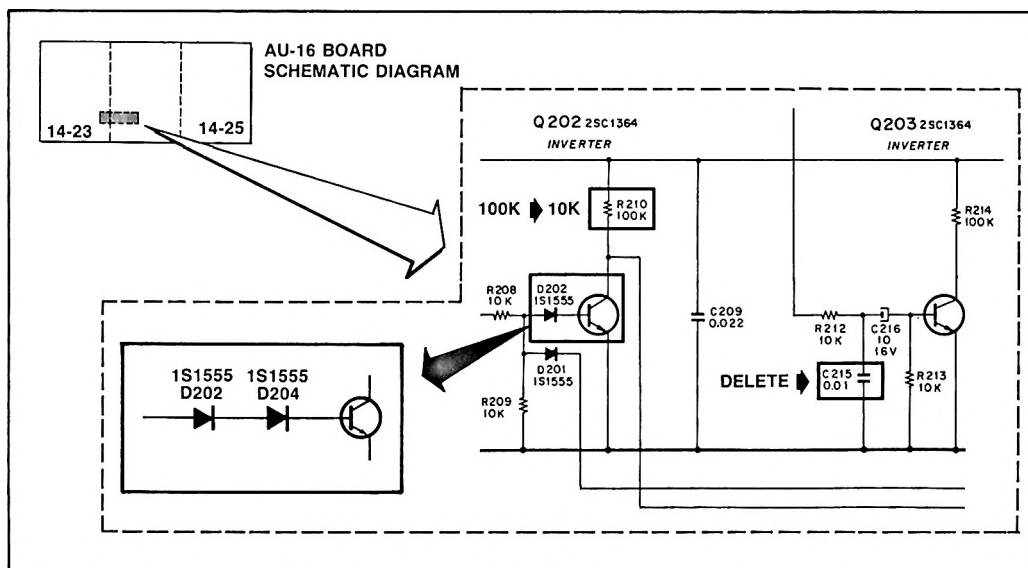
**DESCRIPTION**

The BVU-110 visual warning system sometimes fails to light the RF lamp if the video head clogs during record mode (one or both channels).

The following modifications to the AU-16 Board will eliminate this condition. This modification should be applied when the upper head drum is replaced.

## PARTS REQUIRED

| Part No.     | Description                  | Qty. |
|--------------|------------------------------|------|
| 1-210-506-00 | Res, Carbon, 10k ohm, 1%, ¼W | 1    |
| 8-719-815-55 | Diode, 1S1555                | 1    |



**Figure 1**

Reference: VS 80-48

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

## AU-16 BOARD MODIFICATION PROCEDURE

1. Replace R210 (100k ohm) with 10k ohm resistor. (See Figures 1 and 2.)
2. Delete 0.01 $\mu$ F capacitor, C215.
3. Install diode D204 (1S1555) between D202 and the base of Q202.

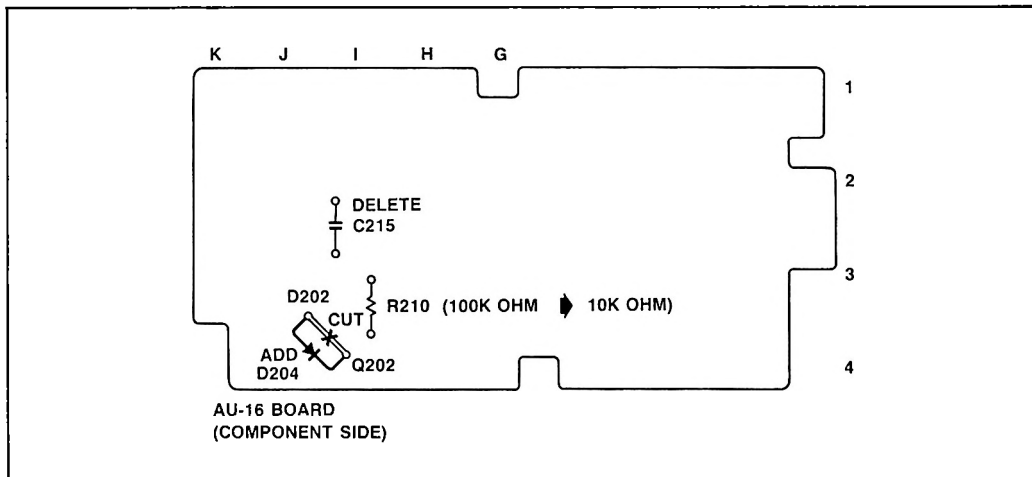
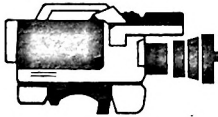


Figure 2





# broadcastbulletin No. 82-4

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110**  
**SERIAL NO: 10,001—10,810**  
**SUBJECT: 'BRACKET, SY-60 BOARD'**

Date: January, 1982

For parts standardization, the securing bracket for the SY-60 Board has been changed in units with serial numbers 10,811 and higher. In addition, the board edging required by the old bracket has been deleted. (See Figure 1.)

an older unit (serial number 10,001—10,810), first transfer the edging from the old board to the new board. If an old board (with edging) is to be installed in a new unit (serial numbers 10,811 and higher), remove the edging before installing the board.

If a new board (without edging) is to be installed in

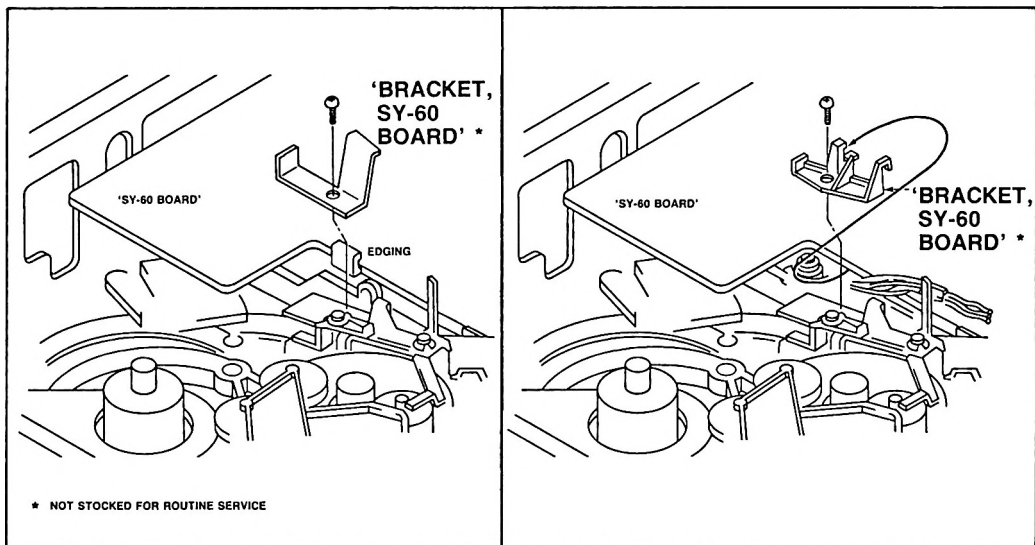
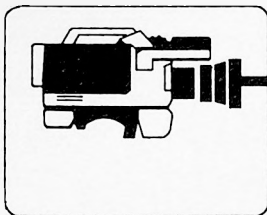


Figure 1

Reference: VTRW 80-110 / J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



SONY

# broadcastbulletin No. 81-30

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-50**

Date: November, 1981

**SUBJECT: 1. ADDITIONAL PROTECTION AGAINST ELECTROSTATIC DAMAGE (IC3)  
2. CORRECTIONS TO OPERATION AND MAINTENANCE MANUAL, 3RD EDITION**

1. **Additional protection for IC3.** (Applicable to S.N. 10,001 to 20,370. Units with S.N. 20,371 and higher have been modified at the factory.)

Install 100-ohm resistor R86, P.N. 1-246-449-00, between IC3 pin 13 and C18 as shown in Figures 1 and 2.

2. **Corrections to Operation and Maintenance Manual, 3rd Edition.** (S.N. 20,541 to 20,740.)

Please correct the SM-10 Board component diagram as shown in Figure 3. (The schematic diagram for this board is correct.)

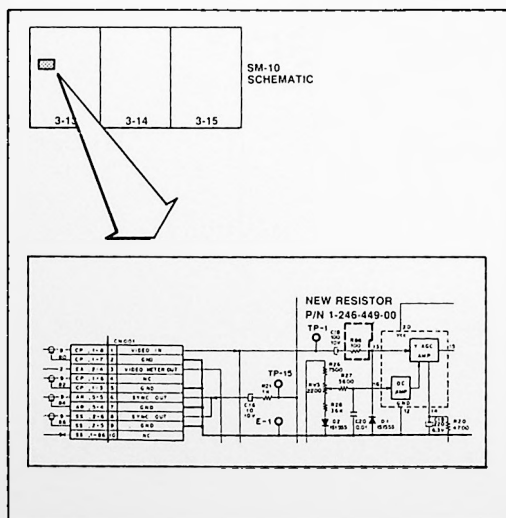


Figure 1

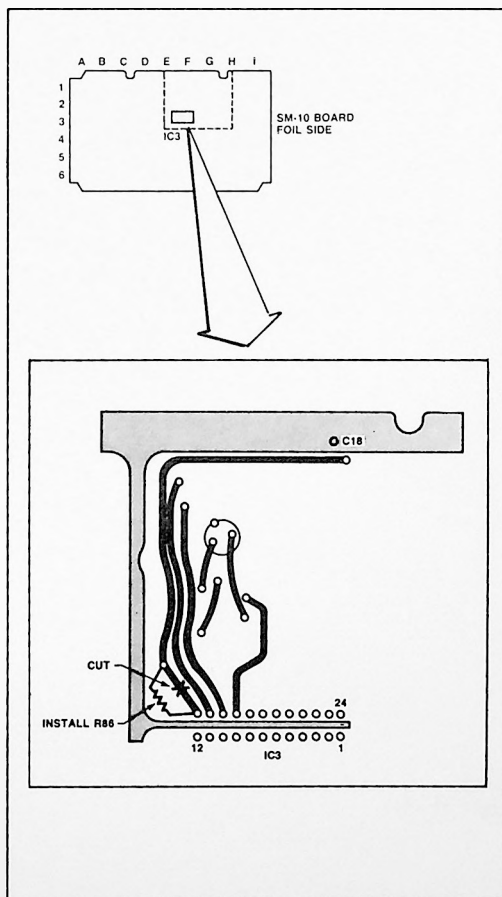


Figure 2

Reference: VTRW 80-26 / J.B.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

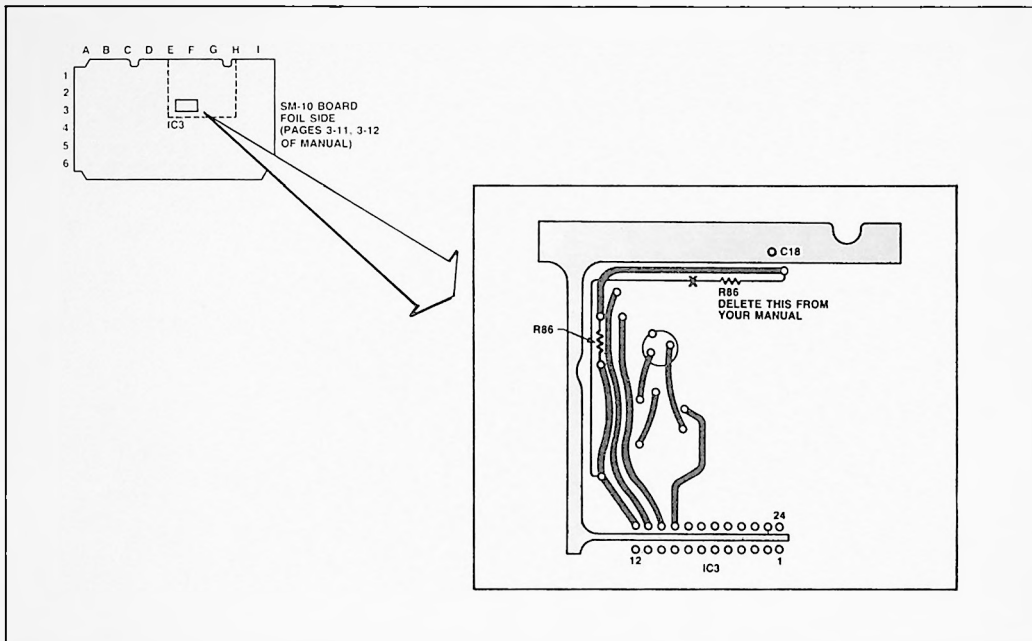
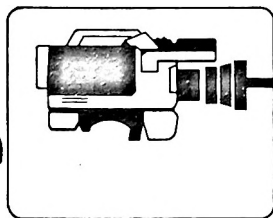


Figure 3



Yes! JER 3/16/82

SONY

# broadcastbulletin No. 81-27

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA 95134

MODEL: BVU-110

Date: November, 1981

SUBJECT: NEW STOP BUTTON SWITCH

In earlier units the stop mode could be selected accidentally, by touching or brushing against the STOP button. Beginning with serial number 11,231, a new STOP button has been installed which requires a more positive pressure to engage the stop mode. (See Figure 1.) The new STOP button can be retrofitted on units with serial numbers 10,001 to 11,230. Because the hole pattern for the new button is slightly larger than the old one, a new front panel must be installed as part of this modification.

Refer to Table 1 for parts applicability.

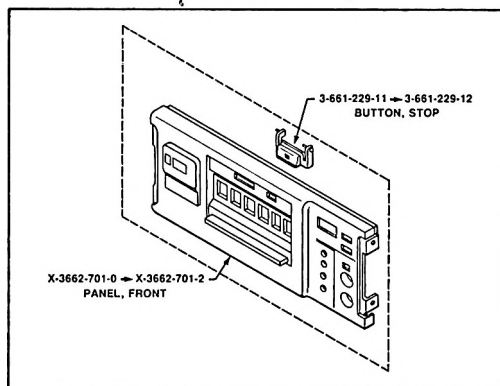


Figure 1.

TABLE 1

| Part Description | Part Number |              | Applicable To      |                   |
|------------------|-------------|--------------|--------------------|-------------------|
|                  |             |              | S.N. 10,001—11,230 | 11,231 and Higher |
| BUTTON, STOP     | Former      | 3-661-229-11 | YES                | NO                |
|                  | New         | 3-661-229-12 | YES *              | YES               |
| PANEL, FRONT     | Former      | X-3662-701-0 | YES                | NO                |
|                  | New         | X-3662-701-2 | YES *              | YES               |

\* Both parts required for retrofit.

1 DP-8 BOARD

A 6717-149-A

\$31.48

2EA D1

8 719 946 95

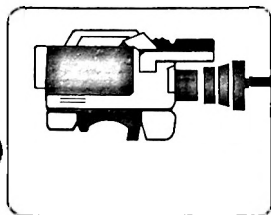
\$4.56

Block 5082 4695

Reference: VTRW 80-114 / J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



PO

SONY®

# broadcastbulletin No. 81-18

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110**

Date: November, 1981

**SUBJECT: BRACKET, ASS'Y CHANGE**

A new bracket assembly, Part Number X-3661-072-2, has been factory installed in units with serial numbers 10,611 and higher. The new bracket assembly combines the functions of former parts "BRACKET ASS'Y" P.N. X-3661-072-0 and "STOPPER, STR" P.N. 3-661-377-00.

The new bracket assembly may be installed in units with serial numbers 10,001—10,610. Refer to Table 1 for applicability of new and former parts.

Table 1

| Part Description           | Part Number  | Applicable To      |                        |
|----------------------------|--------------|--------------------|------------------------|
|                            |              | S.N. 10,001—10,610 | S.N. 10,611 and Higher |
| BRACKET, ASS'Y<br>(Former) | X-3661-072-0 | Yes                | No                     |
| STOPPER, STR<br>(Former)   | 3-661-377-00 | Yes                | No                     |
| BRACKET, ASS'Y<br>(New)    | X-3661-072-2 | Yes                | Yes                    |

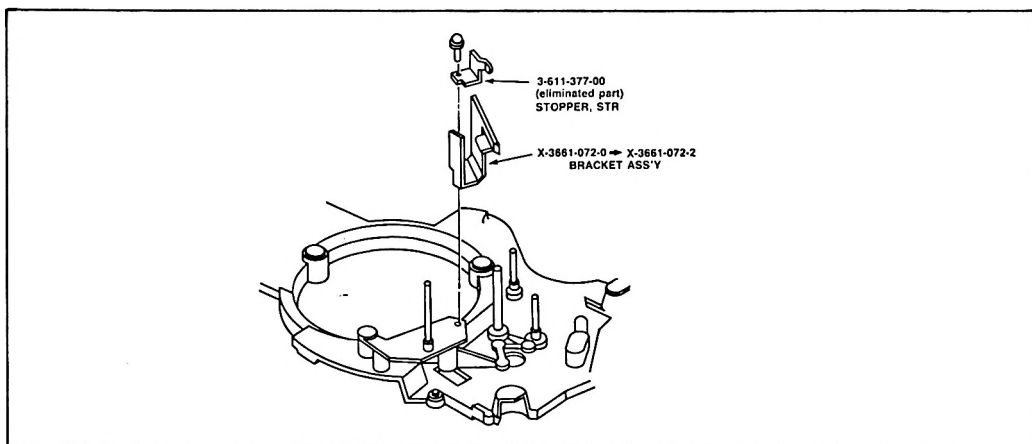
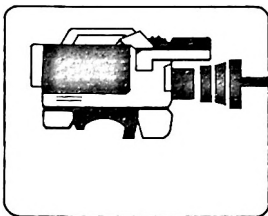


Figure 1

Reference: VTRW 80-102 / J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



p2

SONY

# broadcastbulletin No. 81-13

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 676 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-110****Date: October, 1981****SUBJECT: SERVICE MANUAL ADDITION:  
PAUSE PLUNGER TIMING ADJUSTMENT**

Please note and add the following adjustment information to your BVU-110 Service Manual.

**8-2-4. Pause Plunger Timing Adjustment**

| machine conditions<br>for adjustment   | spec.  | adjustment  |
|--|--|---|
| <ul style="list-style-type: none"><li>• VIDEO IN: video signal</li><li>• REC → PAUSE<br/>mode mode</li></ul> | <p>TP12/SY-60</p> <p>TP13/SY-60</p> <p><math>T = 280\text{mS} \pm 10\text{mS}</math></p> | <p>RV8/SY-60</p> <p>EXT. TRIG;<br/>TP12/SY-60</p> |

**Reference: P.M.****Page 1 of 1**

This bulletin is published by the Sony Broadcast Training Info. Service, 676 River Oaks Pkwy., San Jose, CA 95134. It is distributed at no charge to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**MODEL: BK-101/102/103**

**SERIAL NO: ALL**

**SUBJECT: CORRECTIONS TO MANUAL, 1ST EDITION**

Date: January, 1983

## DESCRIPTION

In the BK-101/102/103 Manual (1st Edition), pin assignments for the 6P-5P cable used in the BK-102 and 103 are in error. Please correct your manual as shown in Figure 1.

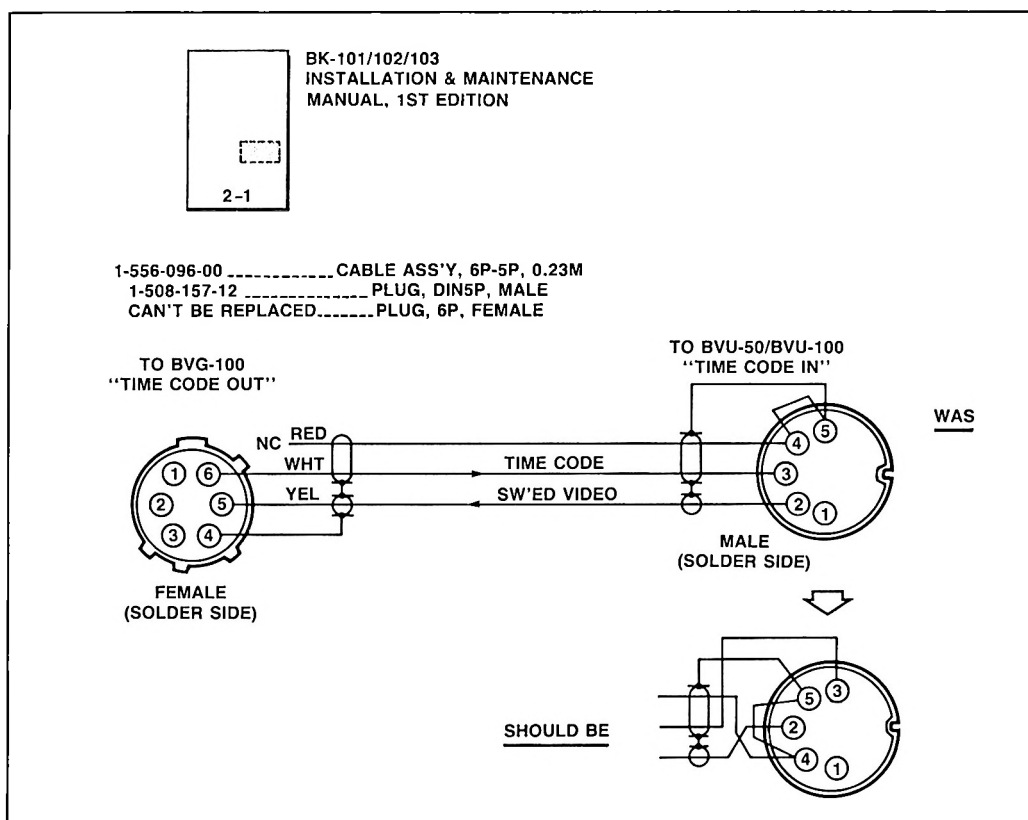
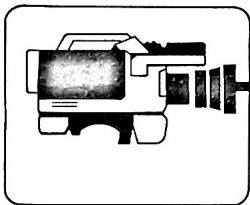


Figure 1

Reference: VTRW 81-2039 / T.M.

Page 1 of 1



# technical bulletin

## 83-206

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: December, 1983

**MODEL: BVU-800, BVU-820**

**SERIAL NO: SEE TEXT**

**SUBJECT: CHANGE OF AU-13 (AU-25) BOARD AND RELATED  
ADJUSTMENTS**

### DESCRIPTION

The AU-13 Board (including the AU-25 Board) has been changed in the following units:

BVU-800 . . . S.N. 16,301 and higher  
BVU-820 . . . S.N. 10,646 and higher

The part number has changed from A-6713-108-A to A-6713-108-B. The new board is compatible with all models and serial numbers.

As a result of this change, indicated portions of the following adjustments are no longer required when using the new board in earlier units.

#### 12-17. RECORD CURRENT LEVEL ADJUSTMENT (Page 12-3)

«machine conditions for adjustment»

- REC mode
- AUDIO IN : 1 kHz, -60dB
- Turn RV7/AU-13 fully counterclockwise. (CH-1)  
(adjust from soldering side)
- Turn RV107/AU-13 fully counterclockwise. (CH-2)  
(adjust from soldering side)

#### 12-18. RECORD CURRENT FREQUENCY RESPONSE ADJUSTMENT (1) (Page 12-4)

«machine conditions for adjustment»

- REC mode
- AUDIO IN : 18 kHz, -90dB
- Turn RV7/AU-13 fully counterclockwise. (CH-1)  
(adjust from soldering side)
- Turn RV107/AU-13 fully counterclockwise. (CH-2)  
(adjust from soldering side)

Reference: VTRW 83-1072 / B.G.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



Date: December, 1983

**MODEL: BVU-800**

**SERIAL NO: 14,950 AND LOWER**

**SUBJECT: NEW SWITCHES ON YD-8 BOARD**

### DESCRIPTION

Two switches (S1 and S2) have been added to the YD-8 Board in units with S.N. 14,951 and higher. These switches provide manual control of the Video Dropout Detector and the Switching Noise Suppressor. (See Figure 1.)

**NOTE:** On YD-8 Boards in units with S.N. 12,951-14,950, a jumper was factory installed between E and C of Q10. (See Figure 1.) With this jumper in place, the VDO Detector is disabled. Remove the jumper for transient suppression.

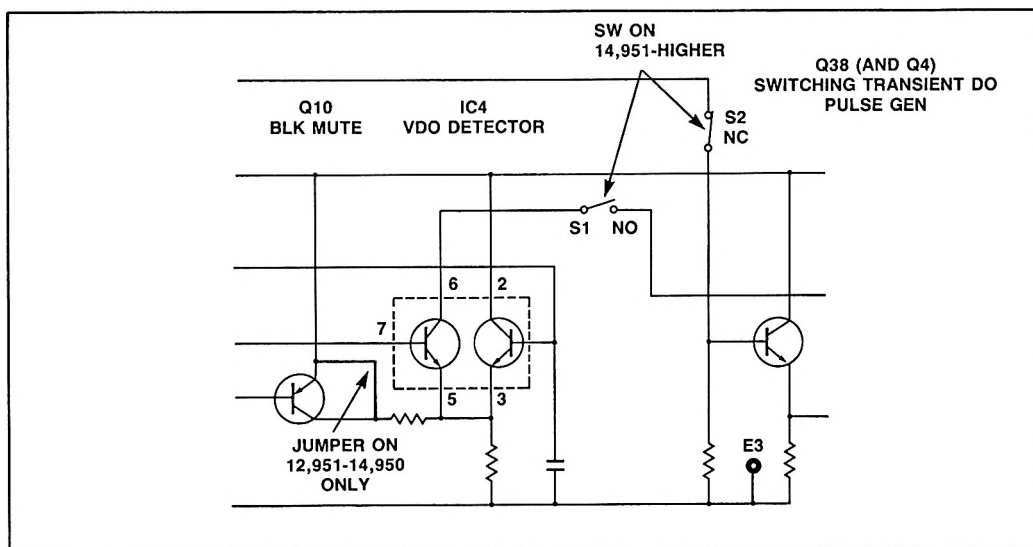


Figure 1

If the YD-8 Board in earlier units is replaced by the YD-8 Board with S1 and S2, add the following information to section 2-7 of the BVU-800 Operation and Maintenance Manual.

Reference: VS 82-1111 / B.G.

Page 1 of 2

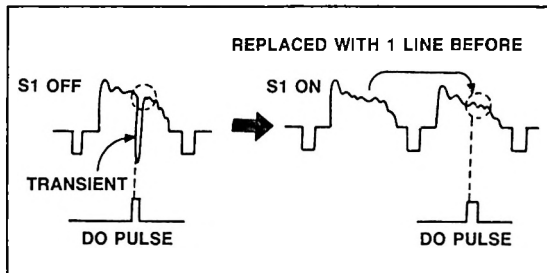
This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

• YD-8 BOARD

(i) VIDEO DROP-OUT DETECTOR ENABLE SW (Ref. No. S1)

When this switch is ON, the Video Drop-out Detector detects negative-going transients (noise under pedestal level) and triggers the D.O.C. circuit to replace the transient with the signal level from the previous line. This compensation is used in cases such as microwave transmission without a TBC. This switch should be OFF if high APL is present.

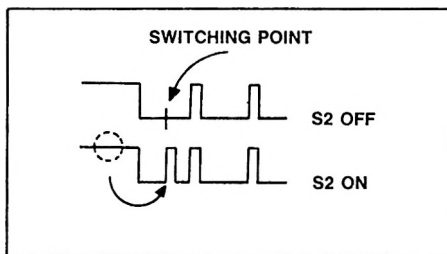
Normal Setting: OFF

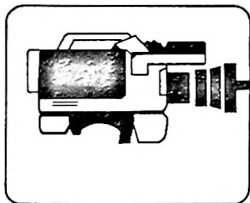


(ii) SWITCHING NOISE SUPPRESSOR ENABLE SW (Ref. No. S2)

SW2 enables the switching Noise Suppressor. This circuit detects switching point transients in vertical sync and triggers the DOC circuit to replace the transient with the signal level from the line before. However, if the switching point is located in the first line in vertical sync, the transient (which is sync tip level) will be replaced with a pedestal level (positive) pulse as shown below.

Normal Setting: ON





Date: December, 1983

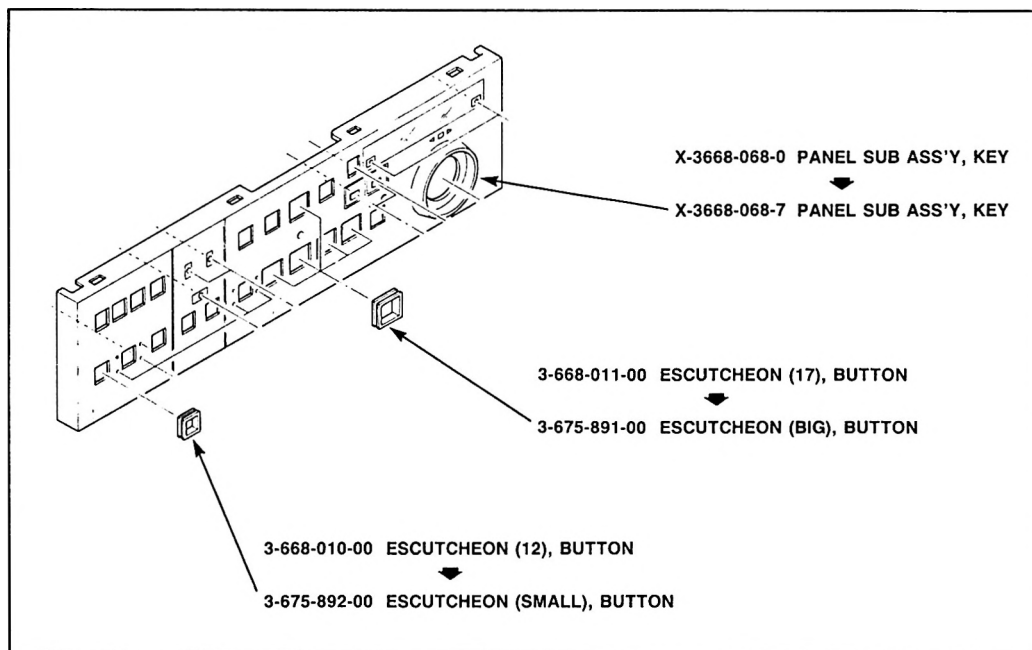
**MODEL: BVU-800, BVU-820****SERIAL NO: SEE TEXT****SUBJECT: NEW KEY PANEL SUB ASSEMBLY****DESCRIPTION**

The Key Panel Sub Assembly and the Button Escutcheons have been changed in the following serial numbers:

BVU-800 . . . 14,951 and higher

BVU-820 . . . 10,201 and higher

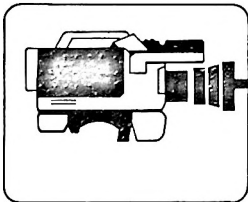
The new parts are compatible with all models and serial numbers. However, the new Escutcheons will not fit in the old Panel and the old Escutcheons will not fit in the new Panel. The old parts must be replaced as a set. Figure 1 shows former and new part numbers.

**Figure 1**

Reference: VTRW 82-1148 / B.G.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



DO

**SONY**  
Broadcast**technical bulletin****83-177**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: October, 1983

**MODEL: BVU-800, BVU-820****SERIAL NO: ALL****SUBJECT: V-SYNC TIME CODE INTERFERENCE****DESCRIPTION**

Interference originating from the time code track may appear at the front porch of the V-Sync signal during Playback. The following modification to the YD-8/YD-10 Board will correct this problem.

**PARTS REQUIRED**

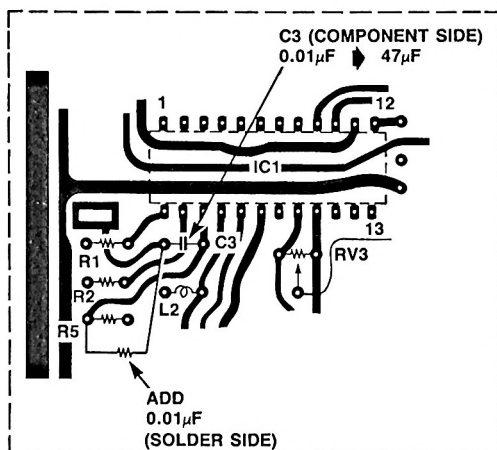
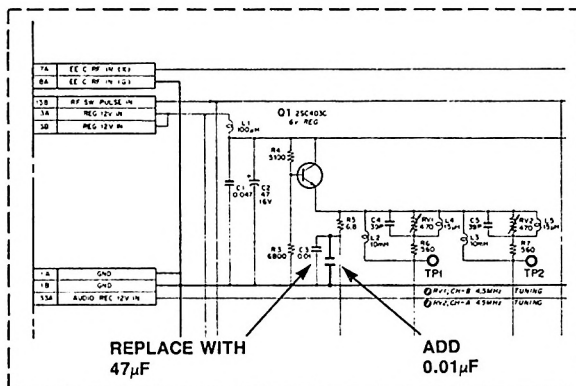
| Part No.     | Description                          | Qty. |
|--------------|--------------------------------------|------|
| 1-123-654-00 | Cap, Ceramic, 47 $\mu$ F, 16V, 20%   | 1    |
| 1-161-051-00 | Cap, Ceramic, 0.01 $\mu$ F, 50V, 10% | 1    |

**MODIFICATION PROCEDURE****YD-8/YD-10 Board (See Figure 1.)**

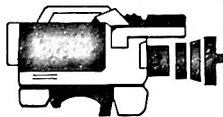
1. Replace C3 with 47 $\mu$ F capacitor.
2. On solder side, add 0.01 $\mu$ F capacitor in parallel with C3.

*Reference: VTRW 83-1012 / B.G.**Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



Page 2 of 2



# technical bulletin 83-141

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: July, 1983

**MODEL:** BVU-800, BVU-820

**SERIAL NO:** SEE TEXT

**SUBJECT:** RE-3 BOARD CHANGE: VERSION A ➔ VERSION B

## DESCRIPTION

The KCS (small tape) Tape-Position circuit of the System Control circuit has been modified to increase stability and eliminate the need for adjustment. Also, the Detection System has been modified to simplify the Optical Axis alignment. Because of these modifications, the suffix of the RE-3 Board has been changed from "A" to "B" in the following serial numbers:

RE-3 Board      A-6725-227-A ➔ A-6725-227-B

BVU-800:    14,451 and higher

BVU-820:    10,101 and higher

**Repair Notes:** BVU-800: 14,450 and lower

BVU-820: 10,100 and lower

1. Use new RE-3 Board (A-6725-227-B) as repair part. (RE-3 Board A-6725-227-A is no longer available as repair part.)
2. When phototransistors or photodiodes used in Detection circuit (PC-8 or PC-12 Boards) need replacing, replace entire board:

Take-up side:    PC-12 Board, A-6742-047-A

Supply side:    PC-8 Board, A-6742-046-A

*Reference: VS 82-1141 / B.G.*

*Page 1 of 1*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

MODEL: BVU-800, BVU-820

SERIAL NO: ALL

SUBJECT: CORRECTIONS TO MANUAL

Date: July, 1983

### DESCRIPTION

Please make the following corrections (Figure 1) to the Frame Wiring Diagram in the BVU-800/820 Operation and Maintenance Manual, all editions.

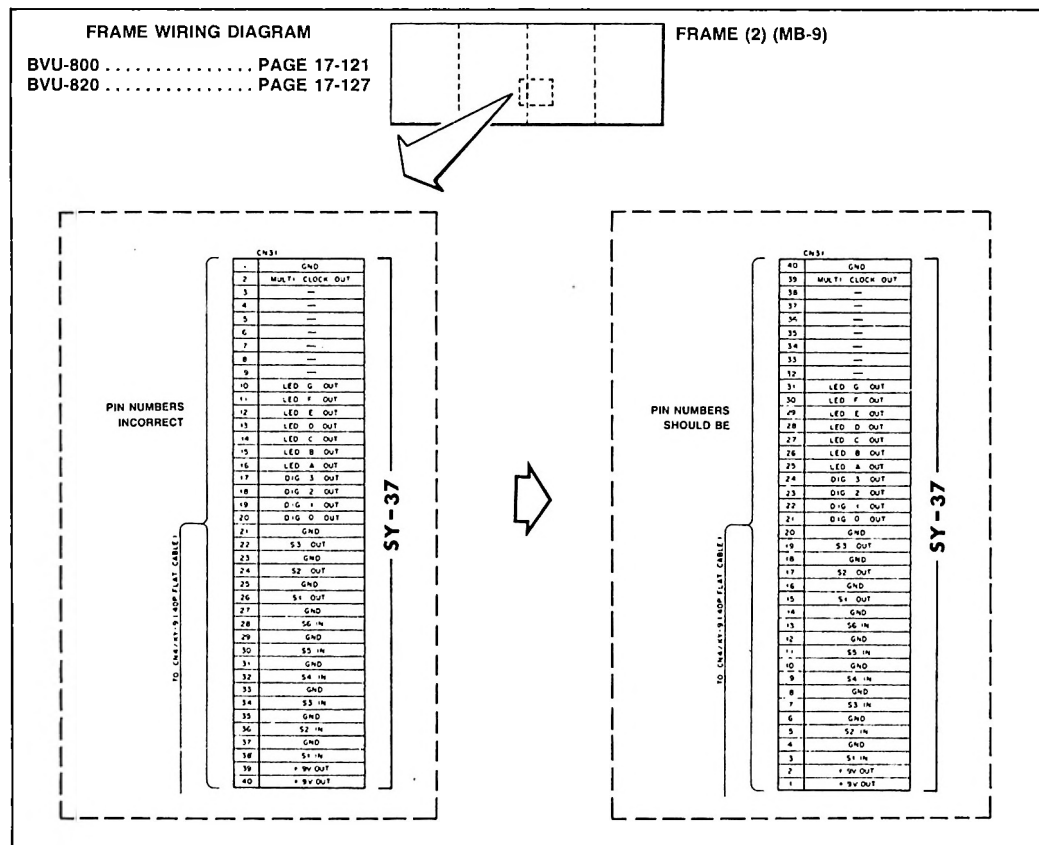
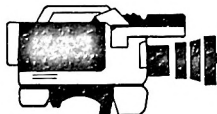


Figure 1

Reference: VTRW 82-1067 / J.B.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# technical bulletin

# 83-133

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-800, BVU-820**

**SERIAL NO: SEE TEXT**

**SUBJECT: CORRECTIONS TO MANUAL**

Date: July, 1983

## DESCRIPTION

Please make the following corrections to your BVU-800/BVU-820 Operation and Maintenance Manual.  
(See Figures 1-4.)

### BVU-800 (SERIAL NUMBER: 10,201 AND HIGHER)

**Section 8-6-3: Supply Tension Detector 100g. Point Adjustment**

**Section 8-6-4: Take-up Tension Detector 100g. Point Adjustment**

|                | WAS              | SHOULD BE        |
|----------------|------------------|------------------|
| Specification: | $0.98 \pm 0.01V$ | $0.49 \pm 0.01V$ |

(NOTE: Serial No. 10,200 and lower remains at  $0.98 \pm 0.01V$ )

Figure 1

### BVU-800, BVU-820 (SERIAL NUMBER: ALL)

**Section 1-11: Specifications**

**Section 3-1 : Specifications**

|                    | WAS  | SHOULD BE |
|--------------------|------|-----------|
| Power Consumption: | 150W | 170W      |

Figure 2

### BVU-800 (SERIAL NUMBER: ALL)

**Section 13-2-1: Dropout Compensator Sensitivity Adjustment**

|             | WAS      | SHOULD BE |
|-------------|----------|-----------|
| ((spec.)) : | TP6/YD-8 | TP31/YD-8 |

Figure 3

Reference: VTRW 82-1119; 82-1147; 82-1117; 82-1132 / B.G. / D.C.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



## BVU-800 (SERIAL NUMBER: ALL)

### Section 13-4-6: SC Trap Adjustment

((machine conditions for adjustments))

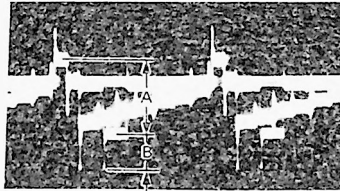
- EE mode
- VIDEO IN: color bar

ADD

- Connect a  $0.047\ \mu\text{F}$  capacitor between the emitter of Q202 and Pin 10 of IC2 on the MD-10 Board.

((spec.))

- TP7/MD-10



TRIG: TP11/MD-10

- Minimize the A amplitude. (3.58MHz)

LV1/MD-10

### Section 13-7: Color Mode Overall Frequency Response Adjustment

((machine conditions for adjustments))

- Playback the self-recorded portion.
- VIDEO IN: gated sweep (with burst)

DELETE

- Short between TP25 and GND/CD-12 with jumper.

ADD

- Connect a  $0.1\ \mu\text{F}$  capacitor between TP25 and GND on the CD-12 Board.

((spec.))

- VIDEO OUT

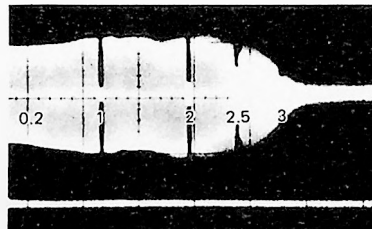


Figure 4

# technical bulletin

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-800, BVU-820**  
**SERIAL NO: SEE TEXT**  
**SUBJECT: CORRECTIONS TO MANUAL**

Date: January, 1984

**THIS BULLETIN SUPERSEDES TECHNICAL BULLETIN NO. 83-133  
DATED JULY, 1983**

## DESCRIPTION

Please make the following corrections to your BVU-800/BVU-820 Operation and Maintenance Manual.  
(See Figures 1-5.)

### **BVU-800 (SERIAL NUMBER: 10,201 AND HIGHER)**

**Section 8-6-3: Supply Tension Detector 100g. Point Adjustment**  
**Section 8-6-4: Take-up Tension Detector 100g. Point Adjustment**

|                | WAS              | SHOULD BE        |
|----------------|------------------|------------------|
| Specification: | $0.98 \pm 0.01V$ | $0.49 \pm 0.01V$ |

(NOTE: Serial No. 10,200 and lower remains at  $0.98 \pm 0.01V$ )

Figure 1

### **BVU-800, BVU-820 (SERIAL NUMBER: ALL)**

**Section 1-11: Specifications**  
**Section 3-1 : Specifications**

|                    | WAS  | SHOULD BE |
|--------------------|------|-----------|
| Power Consumption: | 150W | 170W      |

Figure 2

### **BVU-800 (SERIAL NUMBER: ALL)**

**Section 13-2-1: Dropout Compensator Sensitivity Adjustment**

|             | WAS      | SHOULD BE |
|-------------|----------|-----------|
| ((spec.)) : | TP6/YD-8 | TP31/YD-8 |

Figure 3

Reference: Telex JSP-281 / TC1117 / TC1119 / TC1132 / TC1147 BG / DC

Page 1 of 3

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**BVU-800 (SERIAL NUMBER: ALL)**

**Section 13-4-6. SC Trap Adjustment**

((machine conditions for adjustment))

- EE mode

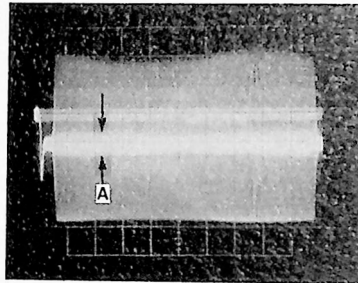
**CHANGE** ➡

- VIDEO IN; color bar
- VIDEO IN; gated sweep signal (with burst)

((spec.))

- TP7/MD-10

**GATED SWEEP**



**MINIMIZE A**

- Minimize the A amplitude. (3.58MHz)

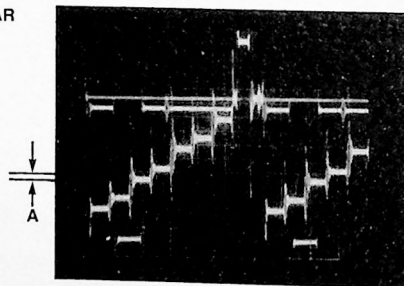
- LV1/MD-10

**ADD** ➡

**NOTE:** If gated sweep signal is not available, set up the following machine conditions for adjustment.

- EE mode
- VIDEO IN; color bar
- Short IC4-7 and IC4-8 with shorting clip

**COLOR BAR  
SIGNAL**



**MINIMIZE A**

## BVU-800 (SERIAL NUMBER: ALL)

### Section 13-7: Color Mode Overall Frequency Response Adjustment

((machine conditions for adjustments))

- Playback the self-recorded portion.
- VIDEO IN: gated sweep (with burst)

DELETE ➡

- Short between TP25 and GND/CD-12 with jumper.

ADD ➡

- Connect a  $0.1\mu\text{F}$  capacitor between TP25 and GND on the CD-12 Board.

((spec.))

- VIDEO OUT

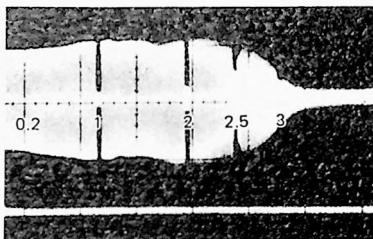
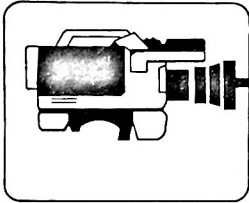


Figure 5



# technical bulletin

# 83-131

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: July, 1983

**MODEL: BVU-800, BVU-820**

**SERIAL NO: ALL**

**SUBJECT: ADDITION OF SHIELD CASE INSULATING SPACER**

## DESCRIPTION

To prevent short circuits that may be caused by contact of Printed Circuit Board solder lines and/or component leads with the Shield Board, insert an insulating spacer as illustrated in Figure 1.

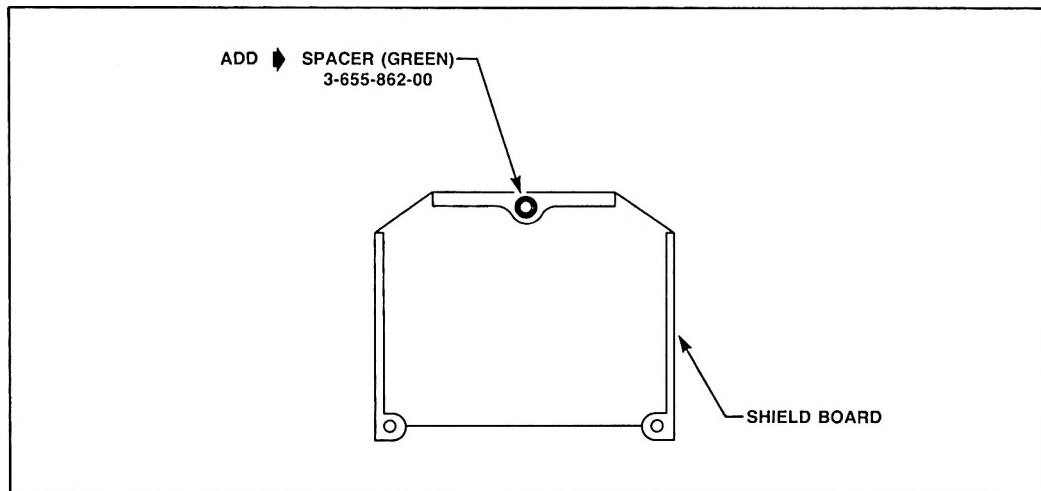
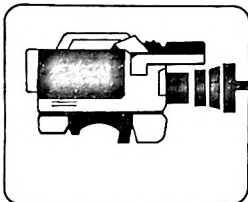


Figure 1

Reference: VS 82-1129 / B.G.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# technical bulletin

# 83-121

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: June, 1983

**MODEL: BVU-800, BVU-820**

**SERIAL NO: ALL**

**SUBJECT: 335MM (13 INCH) 40 PIN FLAT CABLE**

## DESCRIPTION

A 40-pin Flat Cable is now available to connect the SY-37 and KY-9 Boards when using the EX-7 Extender Board. (See Figure 1.)

## ORDERING INFORMATION

Please place orders for the Cable (1-555-698-21) by calling toll-free numbers listed below, or sending P.O. (if on open account) to:

SONY BROADCAST PRODUCTS COMPANY  
NATIONAL BROADCAST PARTS DIST. CENTER  
677 River Oaks Parkway  
San Jose, California 95134  
TWX: 910-338-2168  
800-538-7550 (Outside CA)  
213-467-4430 (Southern CA)  
408-946-9090 (Northern CA)

WIRE ASS'Y, FLAT 40p, 335mm (13 INCH)  
1-555-698-21

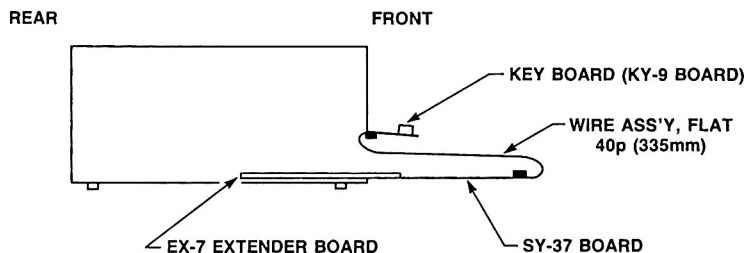
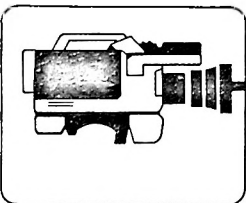


Figure 1

Reference: VTRW 82-1127 / B.G.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

**technical bulletin****83-099**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: May, 1983

**MODEL: BVU-800****SERIAL NO: 12,950 AND LOWER****SUBJECT: IMPROVED HEAT DISSIPATION OF -12V  
(3 TERMINAL REG) POWER SUPPLY****DESCRIPTION**

The following modification will improve the heat dissipation of IC303 on the PD-14 Board.

**PARTS REQUIRED**

| Item No. | Part No.     | Description                             | Qty. |
|----------|--------------|---|------|
| ①        | 1-608-010-00 | Board PD-21                             | 1    |
| ②        | 7-687-510-31 | Self Tapping 3x6                        | 1    |
| ③        | 7-621-972-45 | Convex PS2.6x10                         | 1    |
| ④        | 2-832-007-00 | Insulation Bushing                      | 1    |
| ⑤        | 3-703-003-00 | TO-220 Insulation Board                 | 1    |
| ⑥        | 7-622-207-05 | M2.6 Nut                                | 1    |
| ⑦        | 1-161-059-00 | Semiconductor, Ceramic,<br>0.47 $\mu$ F | 2    |

**MODIFICATION PROCEDURE**

Remove IC303 from the PD-14 Board and mount on PD-15(1) heat sink using the components listed above.  
(See Figure 1.)

*Reference: VS82-1008 / B.G.**Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

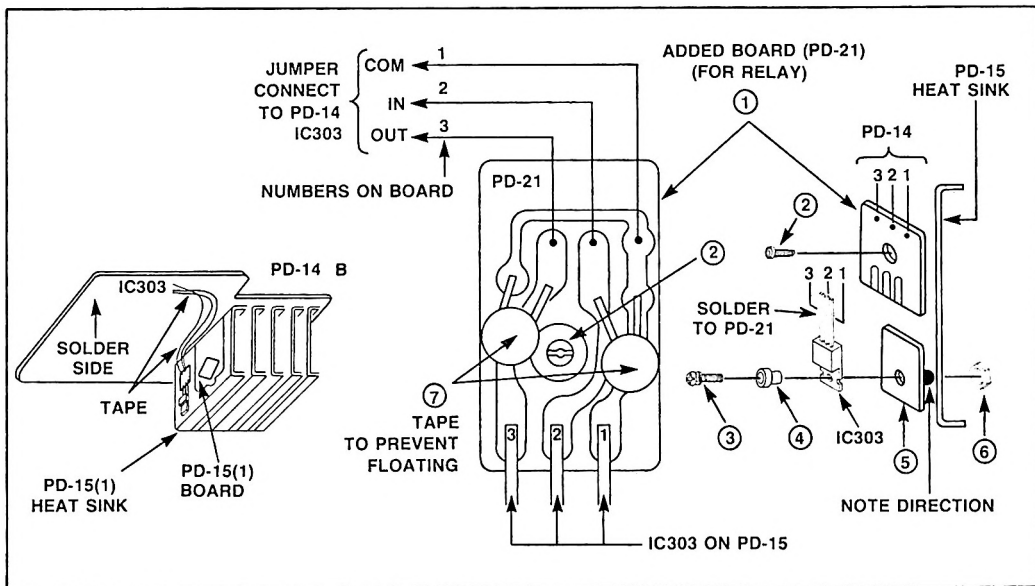
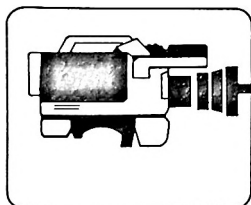


Figure 1





Date: May, 1983

**MODEL: BK-806, BVU-800****SERIAL NO: 10,900 AND LOWER (BK-806)****SUBJECT: SWITCH CHANGES ON TC-20 BOARD OF BK-806****DESCRIPTION**

Slide switches SW2 and SW3 on the TC-20 Board of the BK-806 have been changed at the factory in units with S.N. 10,901 and higher for parts standardization. (See Figure 1.) The former and new switches are not interchangeable. See Table 1 to determine the applicability of former and new parts to the two versions of the TC-20 Board.

NOTE: BK-806 units having either the former or the new switches can be used with all BVU-800s.

**Table 1**

| Description | Part No. |              | Serial No.                  |                             |
|-------------|----------|--------------|-----------------------------|-----------------------------|
|             |          |              | BK-806<br>10,001-10,900     | BK-806<br>10,901 and higher |
|             |          |              | TC-20 Board<br>1-602-912-11 | TC-20 Board<br>1-602-912-12 |
| SW2         | Former   | 1-516-870-00 | Yes                         | No                          |
|             | New      | 1-552-096-00 | No                          | Yes                         |
| SW3         | Former   | 1-552-370-00 | Yes                         | No                          |
|             | New      | 1-552-101-00 | No                          | Yes                         |

Reference: VTRW 82-1013 / B.G.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

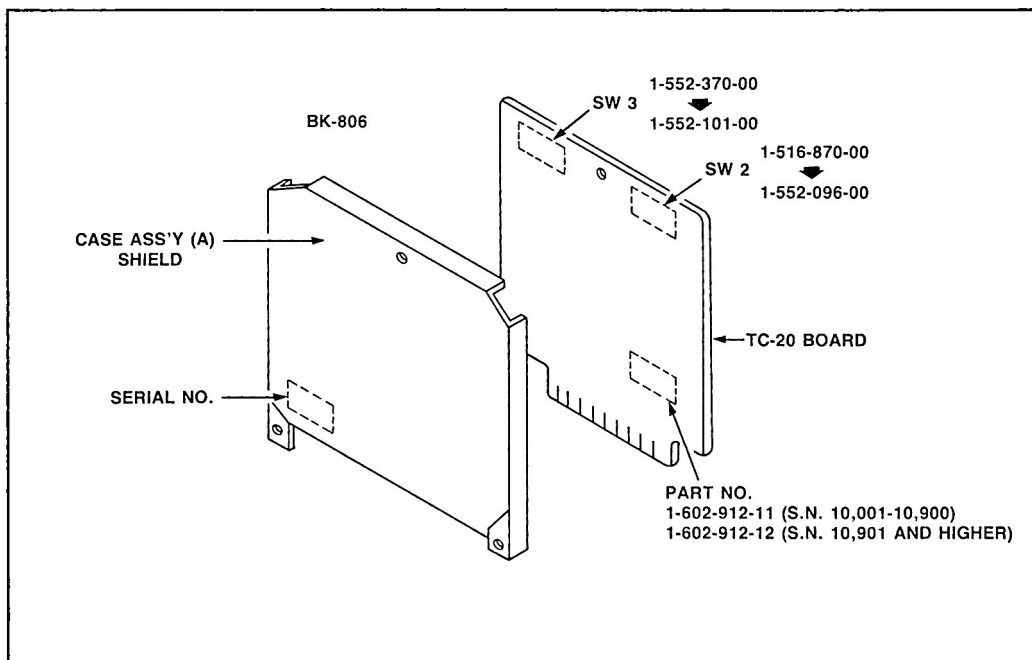
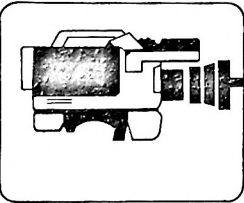


Figure 1



Date: May, 1983

**MODEL: BVU-800**

**SERIAL NO: 13,450 AND LOWER**

**SUBJECT: DROP OUT CONTROL LEVEL CORRECTION**

## DESCRIPTION

At normal or lower temperatures the Drop Out correction signal level may become too low, causing horizontal black lines to appear on the screen. Modification of the DOC detector output as described below will prevent this problem.

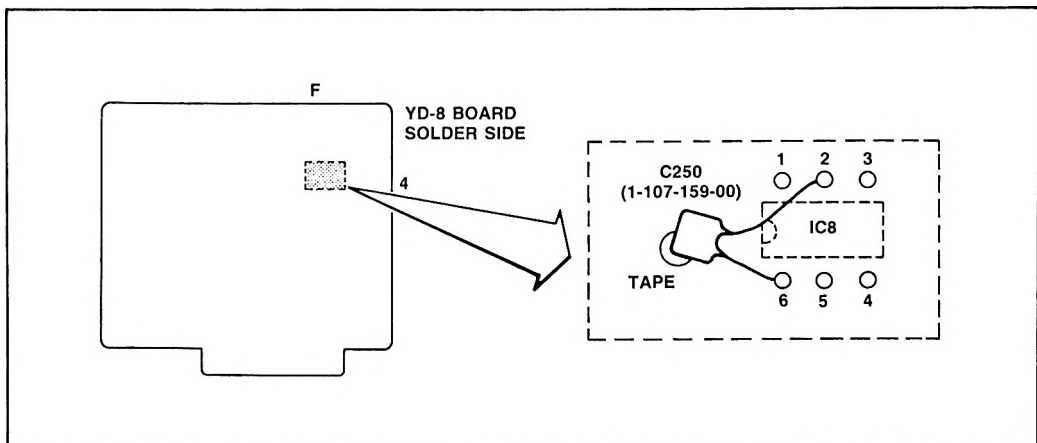
## PART REQUIRED

| Part No.     | Description                        | Qty. |
|--------------|------------------------------------|------|
| 1-107-159-00 | Cap, Silvered Mica, 33pF, 5%, 500V | 1    |

## MODIFICATION PROCEDURE

**YD-8 Board (See Figures 1 and 2.)**

1. Add new capacitor (C250) between pins 2 and 6 of IC8.

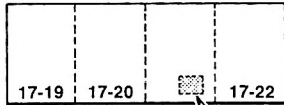


**Figure 1**

Reference: VS 82-1032 / B.G.

Page 1 of 2

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



YD-8 BOARD  
SCHEMATIC

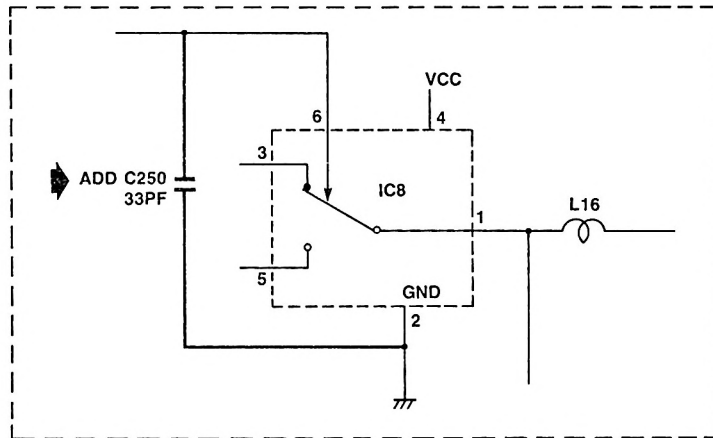
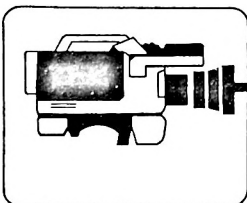


Figure 2



# technical bulletin

REVISION: 01  
**83-006**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-800**

Date: May, 1983

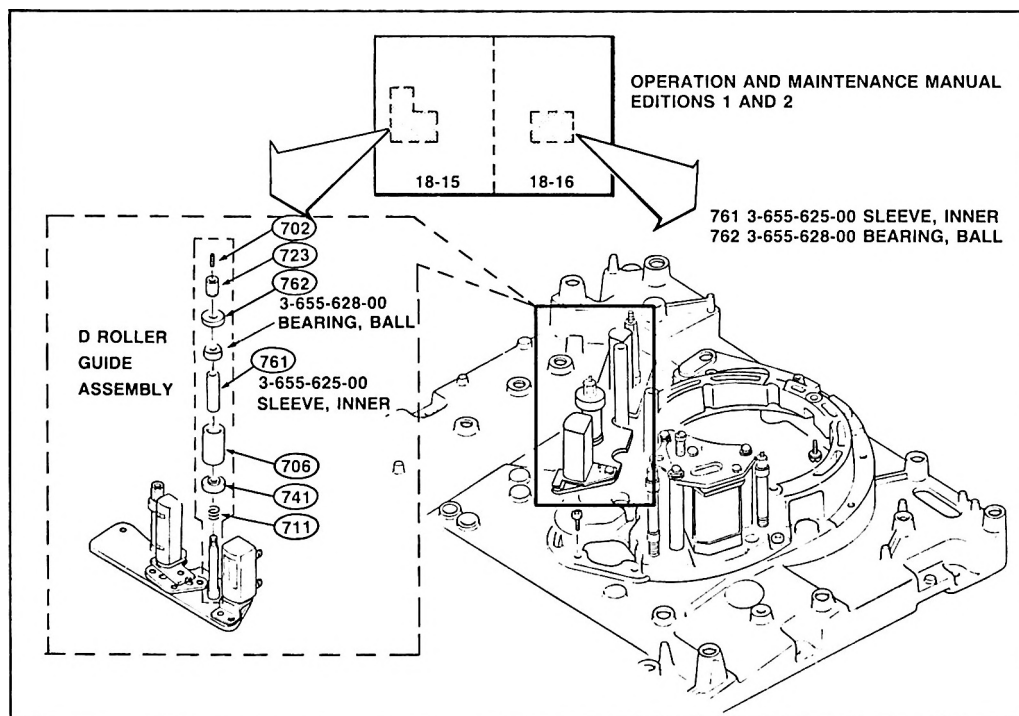
**SERIAL NO: 10,500 AND LOWER**

**SUBJECT: CORRECTION TO MANUAL: ADDITION OF "INNER SLEEVE" AND  
"BALL BEARING" TO D ROLLER GUIDE ASSEMBLY**

**THIS BULLETIN SUPERSEDES BULLETIN 83-006 DATED JULY, 1982**

## DESCRIPTION

For production reasons the "Sleeve, Inner" (3-655-625-00) and "Bearing, Ball" (3-655-628-00) have been added to the D Roller Guide Assembly. (See Figure 1.) Please add the new part numbers to your service manual, 1st and 2nd Edition as shown in Figure 1. (All machines already have these parts.)

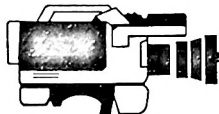


**Figure 1**

Reference: VTRW 81-1105 / B.G.

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



# technical bulletin

REVISION: 01  
**82-90**

SONY BROADCAST PRODUCTS COMPANY • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-800**

**SERIAL NO: ALL**

**SUBJECT: CORRECTIONS TO MANUAL: SUPPLEMENT-9**

Date: May, 1983

**THIS BULLETIN SUPERSEDES BROADCAST BULLETIN NO. 82-90  
DATED DECEMBER, 1982**

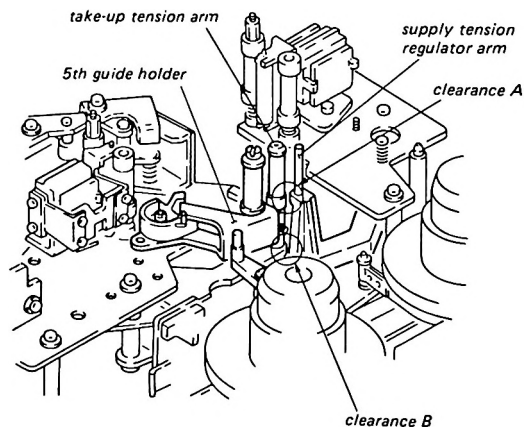
## DESCRIPTION

Please add the following information to your BVU-800 manual, Supplement-9, Page. 7-20.

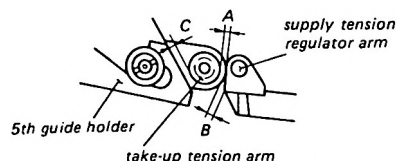
### 7-10-12. Take-up Tension Arm, Unthreading Position Adjustment

#### Adjustment procedure:

Adjust the position of the 6G drawing arm to meet the required specification.



| SPECIFICATION                      |   |       |
|------------------------------------|---|-------|
| A                                  | ≥ | 0.5MM |
| B                                  | ≥ | 0.5MM |
| C                                  | ≥ | 0.3MM |
| NO PHYSICAL CONTACT BETWEEN GUIDES |   |       |



Reference: Telex BCD 0108 / D.C. / B.G

Page 1 of 1

This bulletin is published by the Sony Broadcast Training Information Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



## broadcastbulletin No. 82-31

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

**MODEL: BVU-800**

**SERIAL NO: ALL**

**SUBJECT: IMPROVED AUDIO RECORD TIMING**

Date: June, 1982

### DESCRIPTION

The following modification will improve the audio record timing with reference to video. The Parts Required table lists the resistors that need to be replaced on the AU-13 Board. Figure 1 shows the changes to the schematic and Figure 2 shows the component locations.

### PARTS REQUIRED

| FORMER       |                         | NEW          |                        |      |                                       |
|--------------|-------------------------|--------------|------------------------|------|---------------------------------------|
| Part No.     | Description             | Part No.     | Description            | Qty. | Ref. Des.                             |
| 1-246-497-00 | Res, 10k ohm, 1/4W, 5%  | 1-246-473-00 | Res, 1k ohm, 1/4W, 5%  | 2    | R255, R261                            |
| 1-246-512-00 | Res, 100k ohm, 1/4W, 5% | 1-246-509-00 | Res, 33k ohm, 1/4W, 5% | 6    | R11, R31,<br>R34, R111,<br>R131, R134 |
| 1-246-514-00 | Res, 51k ohm, 1/4W, 5%  | 1-246-497-00 | Res, 10k ohm, 1/4W, 5% | 2    | R612, R614                            |

### MODIFICATION PROCEDURE

1. Replace R255 and R261 with new resistors, 1k ohm, 1/4W, 5%.
2. Replace R11, R31, R34, R111, R131 and R134 with new resistors, 33k ohm, 1/4W, 5%.
3. Perform the adjustments below.

**NOTE:** In early models, R612 and R614 are not installed. When performing the Bias Command adjustment, the timing may not be within range of RV203 (RV205). If this occurs, add R612 (R614), 10k ohm 1/4W 5%.

Reference: J.B.

Page 1 of 4

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.

# 1. EDIT IN POINT ADJUSTMENT

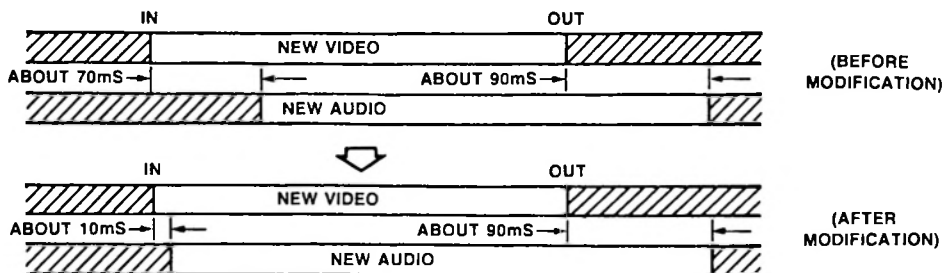
| Measurement Item              | Measurement Point    | Timing 40mS/cm  |
|-------------------------------|----------------------|---|
| Audio Rec Command             | 16B, AU-13           | <p>(REC)<br/>H<br/>33mS VIDEO IN POINT<br/>L (PB)<br/>REFERENCE POINT (SYSCON)</p>  |
| CH-1 Bias Command (CH-2)      | TP506, AU-25 (TP507) | <p>100mS ± 10mS (BEFORE MODIFICATION)<br/>* R612 (R614) 51KΩ → 10KΩ<br/>RV203 (RV205) ADJ<br/>40mS ± 5mS H<br/>L (AFTER MODIFICATION)</p> |
| CH-1 Bias                     | TP502, AU-25         | <p>100mS ± 10mS RISE TIME 5mS (BEFORE MODIFICATION)<br/>40mS ± 5mS RISE TIME 5mS (AFTER MODIFICATION)</p>                                 |
| Erase Osc Command             | TP508, AU-25         | <p>45mS H<br/>L</p>   |
| Erase Osc                     | TP504, AU-25         | <p>45mS RISE TIME 10mS<br/>L</p>  |
| CH-1 Rec Command (CH-2)       | TP203, AU-13         | <p>20mS (BEFORE MODIFICATION)<br/>5mS (AFTER MODIFICATION)<br/>R255 (R261) 10KΩ → 1KΩ</p>   |
| CH-1 PB Control               | Q203-C, AU-13        | <p>35mS (BEFORE MODIFICATION)<br/>20mS (AFTER MODIFICATION)<br/>R31 (R131) 100KΩ → 33KΩ</p>   |
| CH-1 EE Cont<br>CH-1 Mjx Cont | Q201-C<br>Q202-C     | <p>R11 (R111) 100KΩ → 33KΩ<br/>R34 (R134) 100KΩ → 33KΩ</p>  |



## 2. EDIT OUT POINT ADJUSTMENT

| Measurement Item  | Measurement Point | Timing 40mS/cm |
|-------------------|-------------------|----------------|
| Audio Rec Command | 16B, AU-13        |                |
| CH-1 Bias Command | TP506, AU-25      |                |
| CH-1 Bias         | TP502, AU-25      |                |
| Erase Osc Command | TP508, AU-25      |                |
| Erase Osc         | TP504, AU-25      |                |
| CH-1 Rec Command  | TP203, AU-13      |                |
| CH-1 PB Control   | Q203-C, AU-13     |                |

## 3. RECORDED TAPE, AUDIO, VIDEO TIMING CHANGE



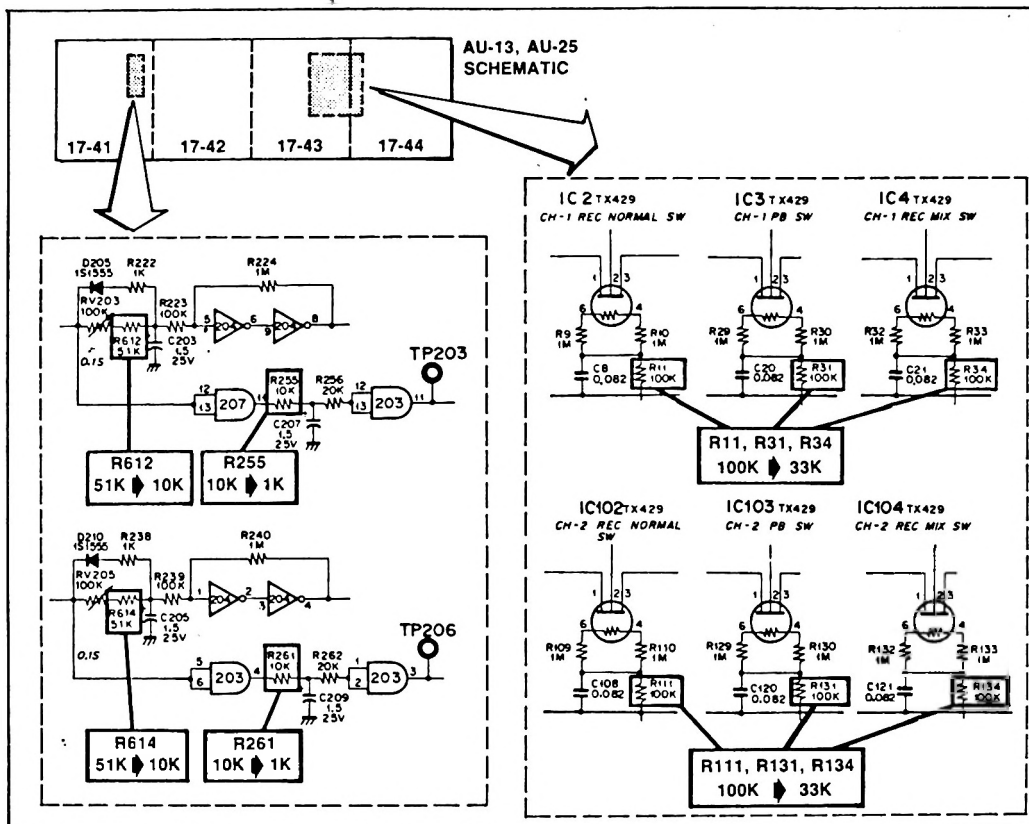


Figure 1

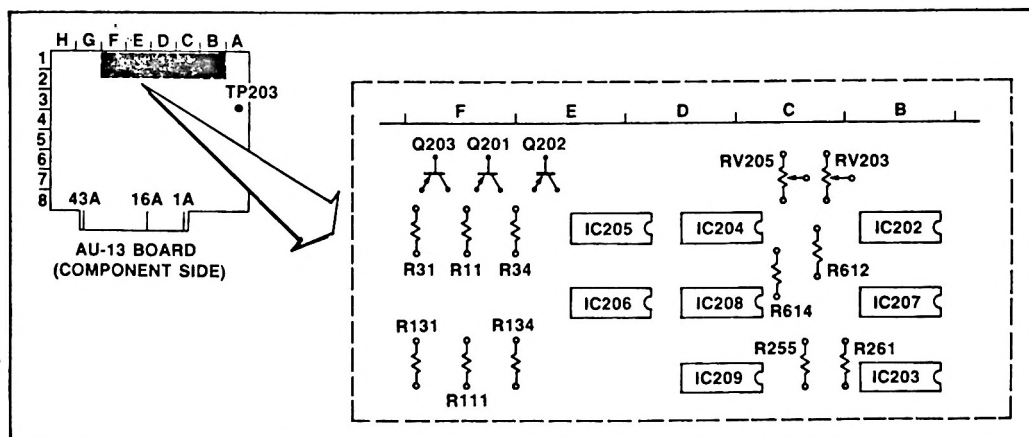


Figure 2



# **broadcastbulletin** No. 82-80

SONY CORPORATION OF AMERICA • BROADCAST ENGINEERING • 677 RIVER OAKS PKWY., SAN JOSE, CA 95134

Date: December, 1982

**MODEL: AC-500**

**SERIAL NO: 13,415 AND LOWER**

**SUBJECT: CHANGE OF HALL IC**

**DESCRIPTION**

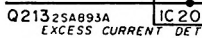
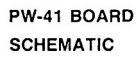
Excess Current Detector IC201 on the PW-41 Board has been changed from ULN3006T (8-759-330-06) to ULN3006T-W (8-759-300-08). (See Figure 1.) Consequently, the number of turns on inductor L206 has been reduced from 11 to 7 to meet the specification required by the new IC. Whenever IC201 is replaced with the new IC, reduce the number of turns on L206 from 11 to 7.

New and former ICs (while in stock) will be available as repair parts.

*Reference: VTRW 81-1098 / J.B.*

*Page 1 of 2*

This bulletin is published by the Sony Broadcast Training Info. Service, 677 River Oaks Pkwy., San Jose, CA 95134. It is distributed to users of Sony Broadcast equipment as an aid in servicing, aligning or modifying this equipment. Any changes or modifications described are to be made at user's option. In supplying this information, Sony Corporation of America assumes no obligation or responsibility to supply parts, pay for modifications, exchange new production models for existing units, or otherwise. Any prices mentioned are subject to change without notice.



## SONY BVH-1100 PERFORMANCE CHECK SHEET (TYPE "C")

SERIAL NUMBER: 10216DATE: 1-10-80INSPECTOR: MD

CUSTOMER'S ACKNOWLEDGEMENT: \_\_\_\_\_

| No. | ITEMS | SPECIFICATIONS | CONDI-<br>TION |
|-----|-------|----------------|----------------|
|-----|-------|----------------|----------------|

## CHECK WITHOUT POWER ON

|   |   |                 |   |
|---|---|-----------------|---|
| 1 | Appearance                                  |                 | ✓ |
| 2 | Physical check of the inside of the machine |                 | ✓ |
| 3 | Hour meter reading                          |                 | ✓ |
| 4 | Power line voltage                          | 120 V $\pm$ 10% | ✓ |

## POWER SWITCH ON, MOUNT V-16-96 TAPE ON

|   |  |  |   |
|---|--|--|---|
|   | Check all the function controls and switches |  | ✓ |
| 6 | Physical tape path check                     |  | ✓ |

## MOUNT BR5-2 ALIGNMENT TAPE ON

|      |                          |                               |   |
|------|--------------------------|-------------------------------|---|
| 7    | Tracking control         | Visual check on monitor       | ✓ |
| 8    | Skew control             | Visual check on monitor       | ✓ |
| 9    | Dihedral (Video/Sync)    | $\pm$ 0.5 $\mu$ s             | ✓ |
| 10   | RF level variation Video | Min. vs. Max. level: 80%      | ✓ |
|      | Sync                     | Min. vs. Max. level: 70%      |   |
| 11   | Video/Sync RF overlap    | 75 $\mu$ s min (Video/Exit)   | ✓ |
| 12   | Switching point          | 2 3/4H (265 3/4H), 16H (278H) | ✓ |
|      | CTL PB level             | 0.5 Vpp (WFM out)             | ✓ |
| 14   | Chroma level variation   | $\pm$ 0.5 dB                  | ✓ |
| 14a. | Video frequency response | Rec/Play                      | ✓ |

|    |                          |  |                  |         |
|----|--------------------------|--|------------------|---------|
| 15 | DG, DP (with BVT-2000)   | Less than 4% 4°  | Mode 1           | 1° 1/2% |
|    |                          |  | Mode 2 or 3      | 1° 1/2% |
| 16 | Velocity error (w/TBC)   | Between yellow and blue: 3°  |                  | 2°      |
| 17 | Audio level variation    | CH1, 2, CUE: $\pm$ 0.5dB at VU meter   |                  | ✓       |
| 18 | Audio frequency response | CH1, 2: 50Hz to 15KHz+1.5dB/-3.0dB. CUE (Normal mode): 50Hz to 15KHz +1.5dB/-3.0dB | $\leq \pm 1.0dB$ | ✓       |

MOUNT V-16-64 TAPE ON

|    |   |   |                      |         |
|----|---|---|----------------------|---------|
| 19 | Shuttle speed from STBY mode                      | 110 Sec.  |                      | ✓       |
| 20 | Tape timer accuracy                               | $\pm$ 10 Sec/hour   |                      | ✓       |
| 21 | Servo mode lamp                                   | Capstan, drum, VH   |                      | ✓       |
| 22 | Wow and flutter                                   | Less than 0.1% rms, NAB unweighted  |                      |         |
| 23 | Time base stability                               | 1 $\mu$ s p-p (VH lock mode)  |                      | ✓       |
| 24 | RF level variation Video Sync                     | Min. vs. max. level 90%<br>Min. vs. max. level 80%  |                      | ✓       |
| 25 | K-factor  | Less than 1%  |                      | ✓       |
| 26 | DG, DP (with BVT-2000)                            | 4%, 4°  | R/P                  | 1% 2.5° |
|    |   |   | Play                 | 1% 2.5° |
| 27 | Video S/N (50% APL)                               | 48dB, unweighted HPF: 100KHz<br>LPF: video fq<br>SC trap: off   |                      | 48.3db  |
| 28 | Video frequency response                          | 30Hz to 4.2MHz/ $\pm$ 0.5dB   |                      | ✓       |
| 29 | Moire (with BVT-2000)                             | -40dB   | R/P                  | 47db    |
|    |   |   | Play                 | 47db    |
| 30 | Residual jitter with BVT-2000                     | +2.5 n sec. (approx. $\pm$ 3.2° on vector)  |                      | ✓       |
| 31 | Overall picture quality with BVT-2000             | Visual check on monitor   |                      | ✓       |
| 32 | Audio frequency response                          | CH1, 2: 50Hz to 15KHz/ $\pm$ 1.5dB<br>-3.0dB<br>Cue (normal mode): 50Hz to 15KHz/ $\pm$ 1.5dB<br>-3.0dB | $\leq \pm 1.0dB$     | ✓       |
| 33 | Audio S/N   | CH1, 2: 56dB at 3% distortion level<br>Cue (normal mode): 50dB at 3% distortion level                   | 59.0<br>59.0<br>58.0 | ✓       |
| 34 | DT operation range                                | -1/5 to X 2 of normal speed   |                      | ✓       |
| 35 | Editing accuracy                                  | $\pm$ 1 frame   |                      | ✓       |
| 36 | Pre roll accuracy                                 | 5 Sec $\pm$ 1 frame   |                      | ✓       |
| 37 | SMPTE time code read out on the counter indicator | 1/8th of normal speed to maximum speed  |                      | ✓       |

## SONY BVT-2000 PERFORMANCE CHECK SHEET

SERIAL NUMBER: 10180BK-2001  
S/N:10288DATE: 1-10-80INSPECTOR: MD

CUSTOMER'S ACK'MNT \_\_\_\_\_

| No.  | ITEMS  | SPECIFICATION   | COND'N |
|--|--|---|--------|
| 1  | Appearance                                       |   | ✓      |
| 2  | Power line voltage                               | 120 V $\pm$ 10%   | ✓      |
| 3  | Check all the function controls, switches, lamps |   | ✓      |
| 4  | Frequency response                               | +0.3dB to 4.2MHz  | ✓      |
| 5  | K-factor   | 1%  | ✓      |
| 6  | DG, DP   | 2%, 2°  | ✓      |
| 7  | Video S/N  | 58dB, unweighted  | ✓      |
| 8  | Output sync specifications: page 2/2             |   |        |
| 9  | Auto advanced sync                               | Visual check  | ✓      |
| CONNECT BVH-1100 AND PLAY BACK THE FULL FIELD COLOR BARS |  |   |        |
| 10   | D.O.C. effect                                    | Visual check on monitor   | ✓      |
| 11   | Bidirex performance                              | The color picture should be locked from 0 to 10 times normal speed in FWD and reverse | ✓      |
|  |  | The B/W picture should be locked up to 40 times normal speed in FWD and reverse       | ✓      |
| 12   | Residual jitter                                  | $\pm$ 2.5 n sec (+3.2°) in color  | ✓      |
| 13   | Processor adjustment range                       | Output video level: $\pm$ 3dB   | ✓      |
|  |  | Chroma level: $\pm$ 3dB   | ✓      |
|  |  | Set up level: 0v 15 IRE   | ✓      |
|  |  | HUE: $\pm$ 15°  | ✓      |
|  |  | System SC phase: 360° p-p   | ✓      |
|  |  | System sync phase: $\pm$ 3 us   | ✓      |
|  |  | Video phase: $\pm$ 560 $\mu$ s (280 ns/step)  | ✓      |
|  |  | DG: $\pm$ 8%  | ✓      |
|  |  | DP: $\pm$ 8°  |        |

|    |                          |                         |  |
|----|--------------------------|-------------------------|--|
| 14 | Over all picture quality | Visual check on monitor |  |
|----|--------------------------|-------------------------|--|

CONNECT BVU-200 AND PLAY BACK THE FULL FIELD COLOR BARS (OPTION: IF UI-2 BOARD IS IN THE UNIT)

|    |  |   |  |
|----|--|---|--|
| 15 | D.O.C. effect                                  | Visual check on monitor                                 |  |
| 16 | Picture quality on direct mode                 | Visual check on monitor                                 |  |
| 17 | Picture quality on process/<br>heterodyne mode | Visual check on monitor                                 |  |
| 18 | APC/AFC effect                                 | Visual check on monitor with the<br>5th generation tape |  |



OUTPUT SYNC SPECIFICATIONS (μs)

| ITEM                    | SPECIFICATION             | CONDITION |
|-------------------------|---------------------------|-----------|
| V. BLK WIDTH            | 1271 - 1334               | ✓         |
| V. SYNC WIDTH           | 190.67                    | ✓         |
| V. SYNC SERRATION WIDTH | 4.4489 - 4.8303           | ✓         |
| H. BLK WIDTH @ 4 IRE    | 10.9 ± 0.2                | ✓         |
| BURST WIDTH             | 2.514                     | ✓         |
| H. SYNC WIDTH           | 4.7 ± 0.1                 | ✓         |
| V. FRONT PORCH          | 192.078 + 3.178<br>- .000 | ✓         |
| H. FRONT PORCH          | 1.5 ± 0.1                 | ✓         |
| SYNC TO BURST END       | 7.814 ± 0.035             | ✓         |
| SYNC TO BLKG END        | 9.4 ± 0.1                 | ✓         |
| BREEZEWAY               | 0.6 ± 0.035               | ✓         |
| BURST LEVEL             | 40 IRE ± 0.5 IRE          | ✓         |

## SONY BVH-1100 PERFORMANCE CHECK SHEET (TYPE "C")

SERIAL NUMBER: 10247DATE: 1-15-80INSPECTOR: MD

CUSTOMER'S ACKNOWLEDGEMENT: \_\_\_\_\_

| No.                                    | ITEMS  | SPECIFICATIONS                | CONDI-<br>TION |
|--|--|-------------------------------|----------------|
| CHECK WITHOUT POWER ON                 |  |                               |                |
| 1                                      | Appearance                                   |                               | ✓              |
| 2                                      | Physical check of the inside of the machine  |                               | ✓              |
| 3                                      | Hour meter reading                           |                               | 0              |
| 4                                      | Power line voltage                           | 120 V $\pm$ 10%               | ✓              |
| POWER SWITCH ON, MOUNT V-16-96 TAPE ON |  |                               |                |
| 5                                      | Check all the function controls and switches |                               | ✓              |
| 6                                      | Physical tape path check                     |                               | ✓              |
| MOUNT BR5-2 ALIGNMENT TAPE ON          |  |                               |                |
| 7                                      | Tracking control                             | Visual check on monitor       | ✓              |
| 8                                      | Skew control                                 | Visual check on monitor       | ✓              |
| 9                                      | Dihedral (Video/Sync)                        | $\pm$ 0.5 $\mu$ s             | ✓              |
| 10                                     | RF level variation Video                     | Min. vs. Max. level: 80%      | ✓              |
|  | Sync   | Min. vs. Max. level: 70%      |                |
| 11                                     | Video/Sync RF overlap                        | 75 $\mu$ s min (Video/Exit)   | ✓              |
| 12                                     | Switching point                              | 2 3/4H (265 3/4H), 16H (278H) | ✓              |
| 13                                     | CTL PB level                                 | 0.5 Vpp (WFM out)             | ✓              |
| 14                                     | Chroma level variation                       | $\pm$ 0.5 dB                  | ✓              |
|  | Video frequency response                     | Rec/Play                      | ✓              |

|    |                          |  |                       |                |
|----|--------------------------|--|-----------------------|----------------|
| 15 | DG, DP (with BVT-2000)   | Less than 4% 4°  | Mode 1<br>Mode 2 or 3 | 1% 1°<br>1% 1° |
| 16 | Velocity error (w/TBC)   | Between yellow and blue: 3°  |                       | .5°            |
| 17 | Audio level variation    | CH1, 2, CUE: $\pm$ 0.5dB at VU meter   |                       | ✓              |
| 18 | Audio frequency response | CH1, 2: 50Hz to 15KHz+1.5dB/-3.0dB. CUE (Normal mode): 50Hz to 15KHz +1.5dB/-3.0dB |                       | —              |

MOUNT V-16-64 TAPE ON

|    |   |   |   |  |
|----|---|---|---|--|
| 19 | Shuttle speed from STBY mode                                      | 110 Sec.  |   | ✓  |
| 20 | Tape timer accuracy   | $\pm$ 10 Sec/hour   |   | ✓  |
| 21 | Servo mode lamp   | Capstan, drum, VH   |   | ✓  |
| 22 | Wow and flutter   | Less than 0.1% rms, NAB unweighted  |   | .005%  |
| 23 | Time base stability   | 1 $\mu$ s p-p (VH lock mode)  |   | ✓  |
| 24 | RF level variation Video Sync                                     | Min. vs. max. level 90%<br>Min. vs. max. level 80%                                    |   | ✓  |
| 25 | K-factor  | Less than 1%  |   | ✓  |
| 26 | DG, DP (with BVT-2000)  | 4%, 4°  | R/P<br>Play   | 3% 1 1/2°<br>2% 1 1/2°                             |
| 27 | Video S/N (50% APL)   | 48dB, unweighted HPF: 100KHz<br>LPF: video fq<br>SC trap: off                         |   | 48.5db   |
| 28 | Video frequency response  | 30Hz to 4.2MHz/ $\pm$ 0.5dB   |   | ✓  |
| 29 | Moire (with BVT-2000)   | -40dB   | R/P<br>Play   | 46db<br>46db                                       |
| 30 | Residual jitter with BVT-2000                                     | +2.5 n sec. (approx. $\pm$ 3.2° on vector)  |   | ✓  |
| 31 | Overall picture quality with BVT-2000                             | Visual check on monitor   |   | ✓  |
| 32 | Audio frequency response  | CH1, 2: 50Hz to 15KHz/+1.5dB -3.0dB<br>Cue (normal mode): 50Hz to 15KHz/+1.5dB -3.0dB | ch 1 50Hz ~ -1.5db<br>ch 2 50Hz ~ -1.5db<br>ch 3 ~ -1.5db | 15KHz ~ -0.8db<br>15KHz ~ -1.5db<br>15KHz ~ -0.2db |
| 33 | Audio S/N   | CH1, 2: 56dB at 3% distortion level<br>Cue (normal mode): 50dB at 3% distortion level | ch 1 ch 2<br>ch 3   | ~ 64 db<br>~ 60 db                                 |
| 34 | DT operation range  | -1/5 to X 2 of normal speed   |   | ✓  |
| 35 | Editing accuracy  | $\pm$ 1 frame   |   | ✓  |
| 36 | Pre roll accuracy   | 5 Sec $\pm$ 1 frame   |   | ✓  |
| 37 | SMPTE time code read out on the counter indicator (Option C-1000) | 1/8th of normal speed to maximum speed  |   | —  |

## SONY BVT-2000 PERFORMANCE CHECK SHEET

SERIAL NUMBER: 10202

BK-2001

DATE: 1-15-80S/N: 10202INSPECTOR: MD

CUSTOMER'S ACK'MNT \_\_\_\_\_

| No.  | ITEMS  | SPECIFICATION   | COND'N |
|--|--|---|--------|
| 1  | Appearance                                       |   | ✓      |
| 2  | Power line voltage                               | 120 V $\pm$ 10%   | ✓      |
| 3  | Check all the function controls, switches, lamps |   | ✓      |
| 4  | Frequency response                               | +0.3dB to 4.2MHz  | ✓      |
| 5  | K-factor   | 1%  | ✓      |
| 6  | DG, DP   | 2%, 2°  | 1% 1°  |
| 7  | Video S/N  | 58dB, unweighted  | ✓      |
|  | Output sync specifications: page 2/2             |   |        |
| 9  | Auto advanced sync                               | Visual check  | ✓      |
| CONNECT BVH-1100 AND PLAY BACK THE FULL FIELD COLOR BARS |  |   |        |
| 10   | D.O.C. effect                                    | Visual check on monitor   | ✓      |
| 11   | Bidirex performance                              | The color picture should be locked from 0 to 10 times normal speed in FWD and reverse | ✓      |
|  |  | The B/W picture should be locked up to 40 times normal speed in FWD and reverse       | ✓      |
| 12   | Residual jitter                                  | $\pm$ 2.5 n sec ( $\pm$ 3.2°) in color  | ✓      |
| 13   | Processor adjustment range                       | Output video level: $\pm$ 3dB   | ✓      |
|  |  | Chroma level: $\pm$ 3dB   | ✓      |
|  |  | Set up level: 0~ 15 IRE   | ✓      |
|  |  | HUE: $\pm$ 15°  | ✓      |
|  |  | System SC phase: 360° p-p   | ✓      |
|  |  | System sync phase: $\pm$ 3 us   | ✓      |
|  |  | Video phase: $\pm$ 560 $\mu$ s (280 ns/step)  | ✓      |
|  |  | DG: $\pm$ 8%  | ✓      |
|  |  | DP: $\pm$ 8°  | ✓      |

|    |                          |                         |   |
|----|--------------------------|-------------------------|---|
| 14 | Over all picture quality | Visual check on monitor | ✓ |
|----|--------------------------|-------------------------|---|

CONNECT BVU-200 AND PLAY BACK THE FULL FIELD COLOR BARS (OPTION: IF UI-2 BOARD IS IN THE UNIT)

|    |  |   |  |
|----|--|---|--|
| 15 | D.O.C. effect                                  | Visual check on monitor                                 |  |
| 16 | Picture quality on direct mode                 | Visual check on monitor                                 |  |
| 17 | Picture quality on process/<br>heterodyne mode | Visual check on monitor                                 |  |
| 18 | APC/AFC effect                                 | Visual check on monitor with the<br>5th generation tape |  |

# OUTPUT SYNC SPECIFICATIONS (μS)

| ITEM                    | SPECIFICATION             | CONDITION |
|-------------------------|---------------------------|-----------|
| V. BLK WIDTH            | 1271 - 1334               | ✓         |
| V. SYNC WIDTH           | 190.67                    | ✓         |
| V. SYNC SERRATION WIDTH | 4.4489 - 4.8303           | ✓         |
| H. BLK WIDTH @ 4 IRE    | 10.9 ± 0.2                | ✓         |
| BURST WIDTH             | 2.514                     | ✓         |
| H. SYNC WIDTH           | 4.7 ± 0.1                 | ✓         |
| V. FRONT PORCH          | 192.078 + 3.178<br>- .000 | ✓         |
| H. FRONT PORCH          | 1.5 ± 0.1                 | ✓         |
| SYNC TO BURST END       | 7.814 ± 0.035             | ✓         |
| SYNC TO BLKG END        | 9.4 ± 0.1                 | ✓         |
| BREEZEWAY               | 0.6 ± 0.035               | ✓         |
| BURST LEVEL             | 40 IRE ± 0.5 IRE          | ✓         |

EXAMINATION DATA SHEET

MODEL **BVT — 2000**

SERIAL NO. **10180**

SONY CORPORATION

# E X A M I N A T I O N   R E C O R D

DATE: Nov. 5, 1979

INSPECOR: T. Kurihara

MODEL : B V T - 2 0 0 0

SERIAL No. : 10180

LINE VOLTAGE : 120 V, TEMPERATURE : 25 °C

LINE FREQUENCY : 60 Hz, HUMIDITY : 60 %

|    | TEST ITEM                       | MEASUREMENT CONDITION<br>& SPECIFICATION | RESULT           |
|----|---------------------------------|--|------------------|
| 1. | APPEARANCE<br>& STRUCTURE       |  | <u>OK</u>        |
| 2. | POWER CONSUMPTION               | 620W                                     | <u>540</u> W     |
| 3. | OFF TAPE VIDEO                  | 1.0Vp-p±3dB                              | <u>OK</u>        |
| 4. | OUTPUT SIGNALS                  |  |                  |
|    | VIDEO-1                         | 1.0Vp-p                                  | <u>1.00</u> Vp-p |
|    | VIDEO-2                         | 1.0Vp-p                                  | <u>1.00</u> Vp-p |
|    | VIDEO-3                         | 1.0Vp-p                                  | <u>1.00</u> Vp-p |
|    |                                 | 0.7Vp-p(NON COMP)                        |                  |
|    | ADVANCED SYNC                   | 4.0Vp-p±0.8V                             | <u>3.80</u> Vp-p |
|    | SUBCARRIER<br>(to U-matic only) | 1.0Vp-p±0.2V                             | <u>1.00</u> Vp-p |



No. 10180

|    |   |   |  |
|----|---|---|--|
| 5. | VIDEO<br>BAND WIDTH<br>DIFFERENTIAL GAIN<br>DIFFERENTIAL PHASE<br>K-FACTOR<br>(2T PULSE & BAR)<br>RESIDUAL ERROR<br>COLOR<br>MONOCHROME<br>CHROMINANCE<br>/LUMINANCE DELAY                    | $\pm 0.3\text{dB}$ to $4.2\text{MHz}$<br>$2\%$<br>$2^\circ$<br>$1\%$<br><br>$\pm 2.5\text{nsec}$<br>$\pm 15\text{nsec}$<br>$\pm 20\text{nsec}$  | Photo No.1<br>$0.5\%$<br>$0.3^\circ$<br>Photo No.3<br><br>} OK<br>Photo No.2 |
| 6. | PROCESSOR<br>ADJUSTMENT RANGE<br>OUTPUT VIDEO LEVEL<br>CHROMA LEVEL-<br>SET UP LEVEL<br>HUE<br>SYSTEM SC PHASE<br>SYSTEM SYNC PHASE<br>VIDEO PHASE<br>DIFFERENTIAL GAIN<br>DIFFERENTIAL PHASE | $\pm 3\text{dB}$<br>$\pm 3\text{dB}$<br>$0 \sim 15\text{IRE}$<br>$\pm 15^\circ$<br>$360 \text{ p-p}$<br>$\pm 3\mu\text{sec}$<br>$\pm 560\text{nsec p-p (280nsec/step)}$<br>$\pm 8\%$<br>$\pm 8^\circ$ | } OK   |

Ser № 10180

Photo № 1

Video band width

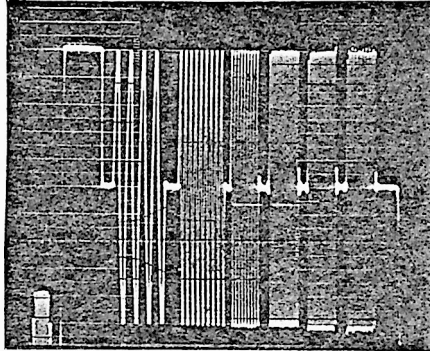
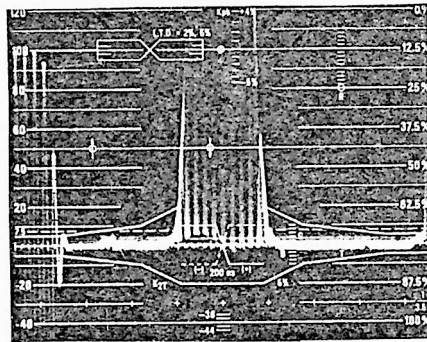


Photo № 2

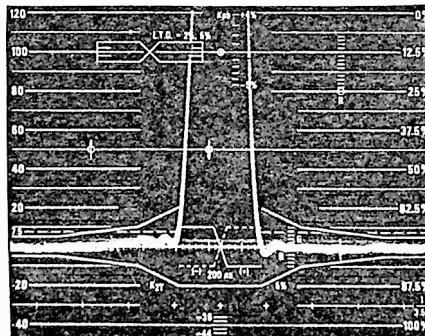
Chrominance to  
luminance delay



(X5)

Photo № 3

Transient response  
K-factor.



(X5)

EXAMINATION DATA SHEET

MODEL      **BVH — 1100**

SERIAL NO.      **10216**

SONY CORPORATION

# E X A M I N A T I O N   R E C O R D

DATE: Oct. 29, 1979  
INSPECTOR: J. Kurikawa

MODEL: B V H - 1 1 0 0

SERIAL No. 10216

LINE VOLTAGE: 120 V, TEMP: 26 °C

LINE FREQUENCY: 60 Hz, HUMID: 60 %

|    | TEST ITEM                 | MEASUREMENT CONDITION<br>& SPECIFICATION | RESULT                           |
|----|---------------------------|--|----------------------------------|
| 1. | Appearance<br>& Structure |  | OK                               |
| 2. | Power consumption         | 700W max                                 | 480 W                            |
| 3. | Tape timer accuracy       | ±10sec./hour                             | Going - 2 sec.<br>Round + 3 sec. |
| 4. | Shuttle speed             | Within 120sec.at50Hz<br>(110) (60)       | F.FWD 88 sec.<br>RWD 85 sec.     |
| 5. | Time base stability       | Within 1.0μsec.p-p<br>(V-H Lock mode)    | OK                               |
| 6. | DT operation range        | -1/5 to 2 times<br>normal speed          | OK                               |
| 7. | Preroll accuracy          | 5sec.                                    | OK                               |

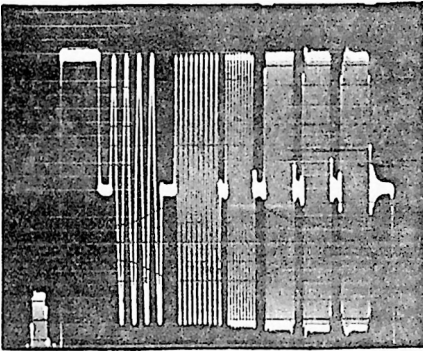
|     |                                  |   |   |
|-----|----------------------------------|---|---|
| 8.  | Input signal                     | Video; $1.0V_{p-p} \pm 0.3V$<br>EXT. REF; $1.0V_{p-p} \pm 0.3V$<br>(Video)                      | OK  |
| 9.  | Output level                     | Video-1; $1.0V_{p-p} \pm 0.1V$<br>Video-2; $1.0V_{p-p} \pm 0.1V$<br>Sync; $4.0V_{p-p} \pm 0.5V$ | 1.02 $V_{p-p}$<br>1.02 $V_{p-p}$<br>4.00 $V_{p-p}$                              |
| 10. | Video band width                 | 30Hz to 4.2MHz; $\pm 0.5dB$   | See photo No. 1   |
| 11. | Video S/N ratio                  | Better than 48dB<br>H.P.F; 100kHz,<br>L.P.F; Video-fg,<br>SC Trap; off, UNWIGHT                 | R/P head<br>49.2 dB<br>PLAY head<br>49.4 dB                                     |
| 12. | Chrominance to luminance delay   | Less than 25nsec.   | See photo No. 2   |
| 13. | Transient response<br>"K" factor | Less than 1%  | See photo No. 3   |
| 14. | Differential gain                | Less than 4%<br>(With T.B.C.)   | REF. tape<br>R/P 1.0 %<br>PLAY 1.0 %<br>Self REC/P.B<br>R/P 2.0 %<br>PLAY 2.0 % |
| 15. | Differential phase               | Less than 4°<br>(With T.B.C.)   | REF. tape<br>R/P 2.5 °<br>PLAY 2.5 °<br>Self-REC/P.B<br>R/P 2.0 °<br>PLAY 2.0 ° |
| 16. | Moire                            | Better than 40dB  | R/P OK<br>PLAY OK   |

|     |                                |   |  |
|-----|--------------------------------|---|--|
| 17. | Input level                    | +20dBm -10dBm<br>(600ohms/10kohms<br>balanced)  | OK   |
| 18. | Output level                   | +8dBm or +4dBm<br>(600ohms balanced)  | + 8 dBm  |
| 19. | S/N ratio                      | Audio 1, Audio 2<br>Better than 56dB<br>Audio 3<br>Better than 50dB<br>(at 3% distortion level) | Audio 1<br>61.5 dB<br>Audio 2<br>61.5 dB<br>Audio 3<br>60.5 dB   |
| 20. | Distortion                     | Less than 1%<br>(at operation level)  | Audio 1<br>0.65 %<br>Audio 2<br>0.60 %<br>Audio 3<br>0.65 %  |
| 21. | Frequency<br>responce          | 50Hz to 15kHz<br>+1.5dB, -3.0dB<br>200Hz to 7.5kHz<br>$\pm 1.0$ dB                              | See fig-1  |
| 22. | Cross talk<br>(at 1kHz)        | Between any two<br>channels<br><br>Better than 60dB<br>(B.P.F.: 1kHz)                           | Audio 1-2<br>64.5 dB<br>Audio 1-3<br>65.5 dB<br>Audio 2-1<br>65.0 dB<br>Audio 2-3<br>65.5 dB<br>Audio 3-1<br>65.5 dB<br>Audio 3-2<br>65.5 dB |
| 23. | Phase difference<br>(at 15kHz) | Between Audio 1 &<br>Audio 2<br><br>Less than 30°   | REF. tape<br>16<br>Self REC/P.B.<br>6  |
| 25. | Wow&flutter<br>(at 3kHz)       | Less than 0.1% rms<br>NAB UNWIGHT   | 0.06 %   |

Ser # 10216

Photo 1a

Video band width R/P Head



PLAY Head

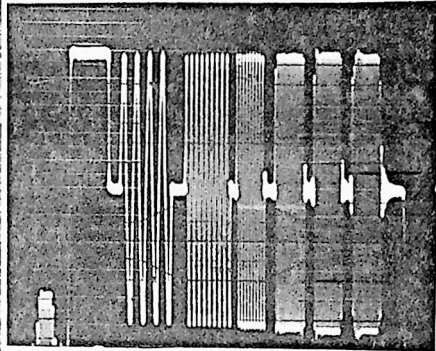
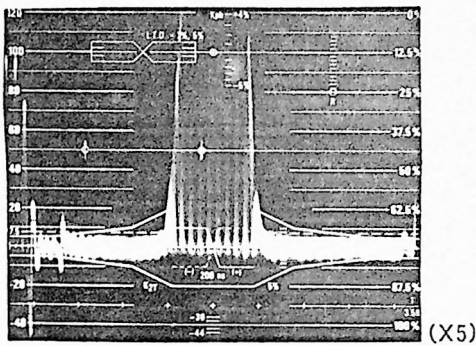


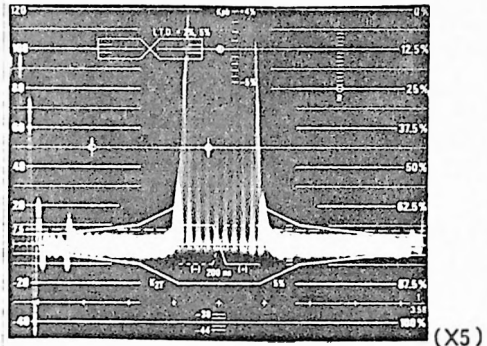
Photo 1b

Chrominance to Luminance delay R/P Head



(X5)

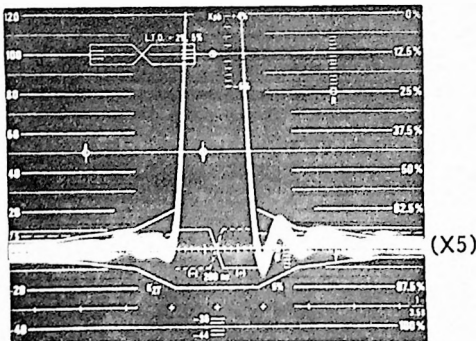
PLAY Head



(X5)

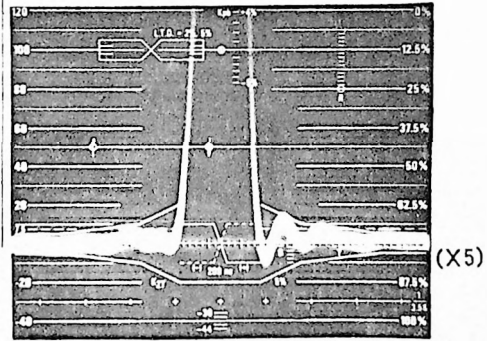
Photo 1c

Transient response K-factor R/P Head



(X5)

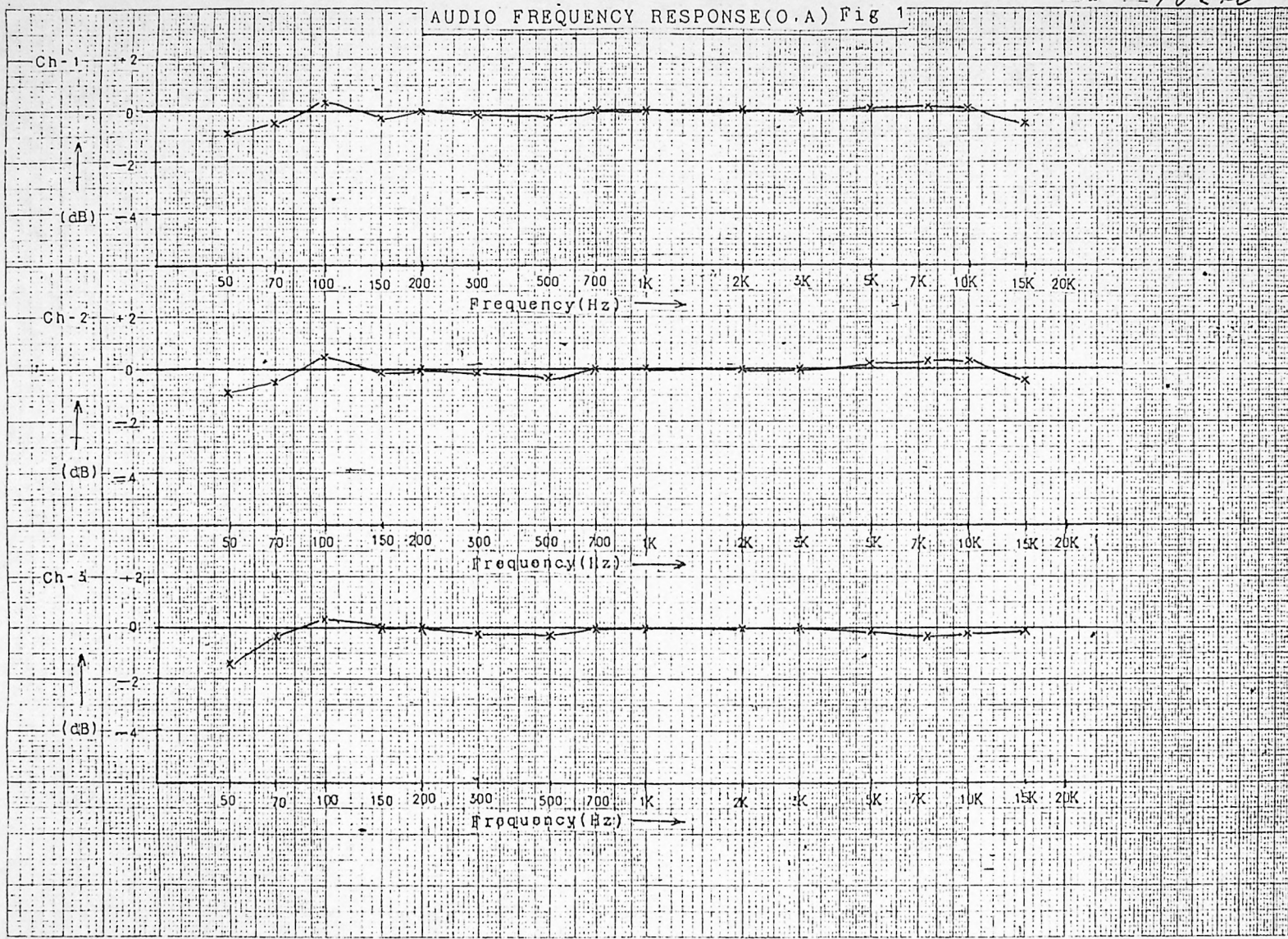
PLAY Head



(X5)

Ser № 10206

# AUDIO FREQUENCY RESPONSE(O.A) Fig 1



JIS A4 180X250mm



EXAMINATION DATA SHEET

MODEL      **BVH — 1100**

SERIAL NO.      10247

SONY CORPORATION

# E X A M I N A T I O N   R E C O R D

DATE: Nov. 12, 1979  
INSPECTOR: J. Kurahara

MODEL: B V H - 1 1 0 0

SERIAL No. 10247

LINE VOLTAGE: 120 V. TEMP: 25 °C

LINE FREQUENCY: 60 Hz. HUMID: 60 %

|    | TEST ITEM                 | MEASUREMENT CONDITION<br>& SPECIFICATION | RESULT                         |
|----|---------------------------|--|--------------------------------|
| 1. | Appearance<br>& Structure |  | OK                             |
| 2. | Power consumption         | 700W max                                 | 500 W                          |
| 3. | Tape timer accuracy       | ±10sec./hour                             | Going +1 sec.<br>Round +2 sec. |
| 4. | Shuttle speed             | Within 120sec.at 50Hz<br>(110) (60)      | F.FWD 84 sec.<br>RWD 86 sec.   |
| 5. | Time base stability       | Within 1.04sec.p-p<br>(V-H Lock mode)    | OK                             |
| 6. | DT operation range        | -1/5 to 2 times<br>normal speed          | OK                             |
| 7. | Preroll accuracy          | 5sec.                                    | OK                             |

|     |                                  |   |   |
|-----|----------------------------------|---|---|
| 8.  | Input signal                     | Video; $1.0V_{p-p} \pm 0.3V$<br>EXT. REF; $1.0V_{p-p} \pm 0.3V$<br>(Video)                      | OK  |
| 9.  | Output level                     | Video-1; $1.0V_{p-p} \pm 0.1V$<br>Video-2; $1.0V_{p-p} \pm 0.1V$<br>Sync; $4.0V_{p-p} \pm 0.5V$ | 1.01 $V_{p-p}$<br>1.01 $V_{p-p}$<br>4.00 $V_{p-p}$                              |
| 10. | Video band width                 | 30Hz to 4.2MHz; $\pm 0.5dB$   | See photo No. 1   |
| 11. | Video S/N ratio                  | Better than 48dB<br>H.P.F; 100kHz,<br>L.P.F; Video-fg,<br>SC Trap; off, UNWIGHT                 | R/P head<br>29.1 dB<br>PLAY head<br>48.5 dB                                     |
| 12. | Chrominance to luminance delay   | Less than 25nsec.   | See photo No. 2   |
| 13. | Transient response<br>"K" factor | Less than 1%  | See photo No. 3   |
| 14. | Differential gain                | Less than 4%<br>(With T.B.C.)   | REF. tape<br>R/P 2.0 %<br>PLAY 2.0 %<br>Self REC/P.B<br>R/P 2.0 %<br>PLAY 2.0 % |
| 15. | Differential phase               | Less than 4°<br>(With T.B.C.)   | REF. tape<br>R/P 2.0 °<br>PLAY 2.0 °<br>Self-REC/P.B<br>R/P 2.0 °<br>PLAY 2.0 ° |
| 16. | Moire                            | Better than 40dB  | R/P OK<br>PLAY OK   |

## A U D I O

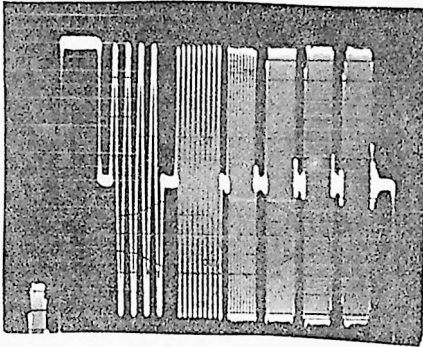
Ser.No. 10247

|     |                                |   |  |
|-----|--------------------------------|---|--|
| 17. | Input level                    | +20dBm -10dBm<br>(600ohms/10kohms<br>balanced)  | OK   |
| 18. | Output level                   | +8dBm or +4dBm<br>(600ohms balanced)  | + 8 dBm  |
| 19. | S/N ratio                      | Audio 1, Audio 2<br>Better than 56dB<br>Audio 3<br>Better than 50dB<br>(at 3% distortion level) | Audio 1 61.5 dB<br>Audio 2 61.5 dB<br>Audio 3 59.5 dB  |
| 20. | Distortion                     | Less than 1%<br>(at operation level)  | Audio 1 0.70 %<br>Audio 2 0.70 %<br>Audio 3 0.75 %   |
| 21. | Frequency<br>responce          | 50Hz to 15kHz<br>+1.5dB, -3.0dB<br>200Hz to 7.5kHz<br>±1.0dB                                    | See fig-1  |
| 22. | Cross talk<br>(at 1kHz)        | Between any two<br>channels<br>Better than 60dB<br>(B.P.F.: 1kHz)                               | Audio 1-2 65.0 dB<br>Audio 1-3 65.0 dB<br>Audio 2-1 64.0 dB<br>Audio 2-3 64.0 dB<br>Audio 3-1 65.0 dB<br>Audio 3-2 65.0 dB |
| 23. | Phase difference<br>(at 15kHz) | Between Audio 1 &<br>Audio 2<br>Less than 30°   | REF. tape 6<br>Self REC/P.P. 0   |
| 25. | Wow&flutter<br>(at 3kHz)       | Less than 0.1% rms<br>NAB UNWIGHT   | 0.06 %   |

Photo No 1

Video band width

R/P Head



PLAY Head

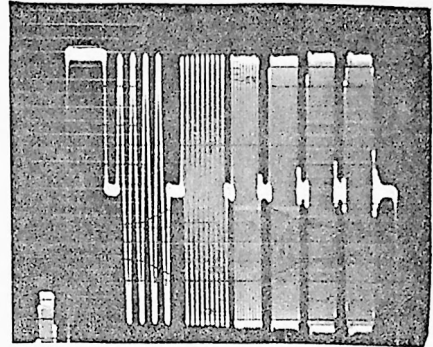
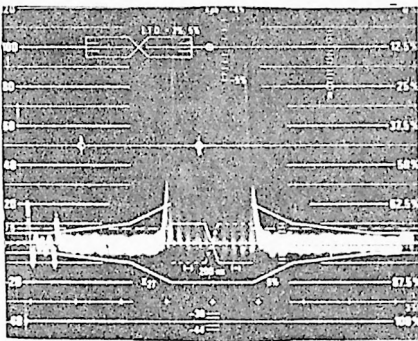


Photo No 2

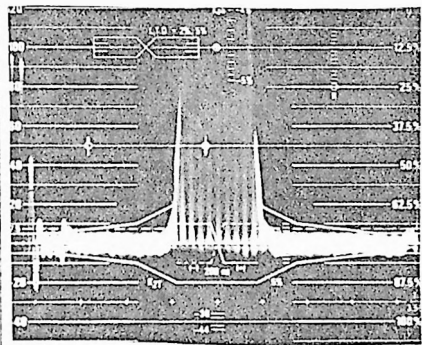
Luminance to  
chrominance delay

R/P Head



(X5)

PLAY Head

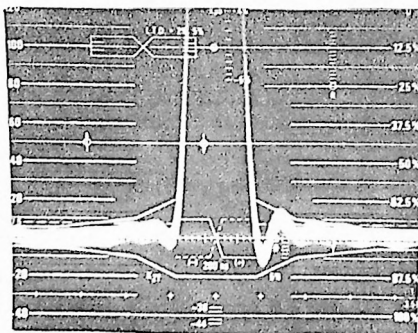


(X5)

Photo No 3

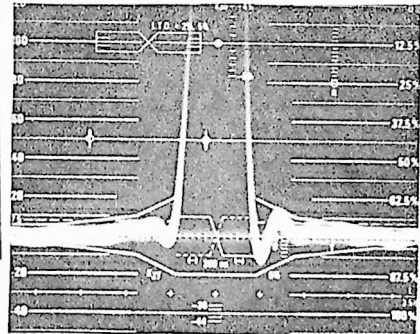
Transient response  
K-factor

R/P Head



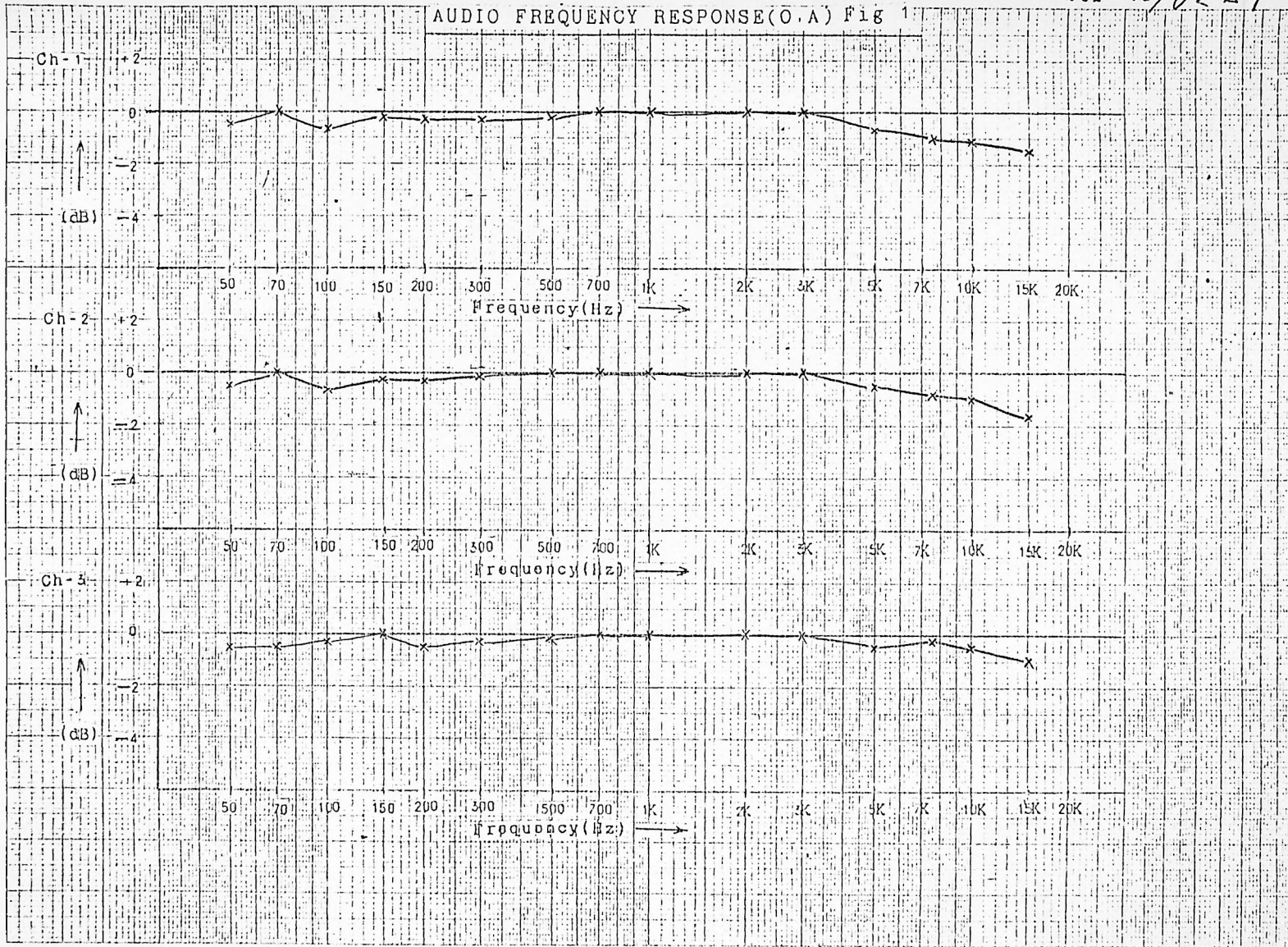
(X5)

PLAY Head



(X5)

# AUDIO FREQUENCY RESPONSE(O.A) Fig 1



EXAMINATION DATA SHEET

MODEL BVT-2000

SERIAL NO. 10202

SONY CORPORATION

# E X A M I N A T I O N   R E C O R D

DATE: Nov. 28, 1979

INSPECOR: J. Kurikawa

MODEL : B V T - 2 0 0 0

SERIAL No. : 10202

LINE VOLTAGE : 120 V, TEMPERATURE : 23 °C

LINE FREQUENCY : 60 Hz, HUMIDITY : 50 %

|    | TEST ITEM                 | MEASUREMENT CONDITION<br>& SPECIFICATION | RESULT           |
|----|---------------------------|--|------------------|
| 1. | APPEARANCE<br>& STRUCTURE |  | <i>ok</i>        |
| 2. | POWER CONSUMPTION         | 620W                                     | <i>540</i> W     |
| 3. | OFF TAP VIDEO             | 1.0Vp-p±3dB                              | <i>ok</i>        |
| 4. | OUTPUT SIGNALS            |  |                  |
|    | VIDEO-1                   | 1.0Vp-p                                  | <i>1.00</i> Vp-p |
|    | VIDEO-2                   | 1.0Vp-p                                  | <i>1.00</i> Vp-p |
|    | VIDEO-3                   | 1.0Vp-p                                  | <i>1.00</i> Vp-p |
|    |                           | 0.7Vp-p(NON COMP)                        | <i>1.00</i> Vp-p |
|    | ADVANCED SYNC             | 4.0Vp-p±0.8V                             | <i>3.80</i> Vp-p |
|    | SUBCARRIER                | 1.0Vp-p±0.2V                             | <i>1.10</i> Vp-p |
|    | (to U-matic only)         |  |                  |





Photo 4.1

Video band width

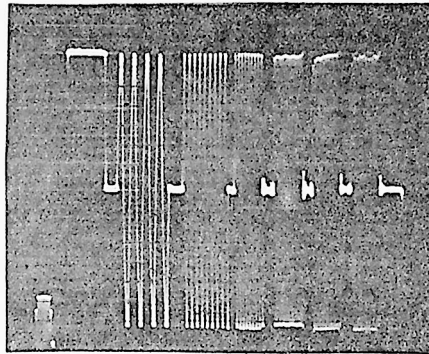
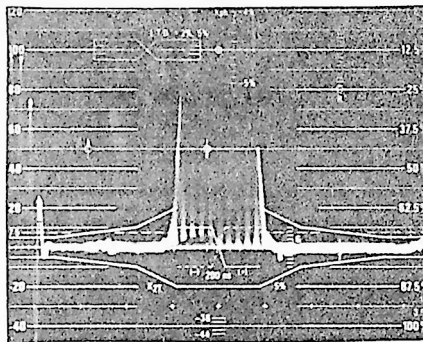


Photo 4.2

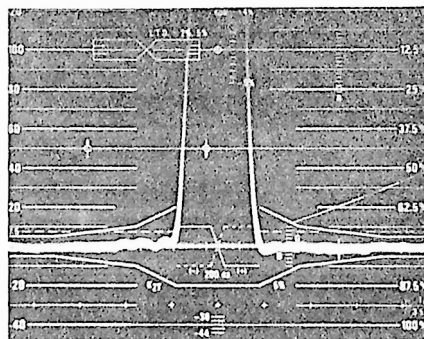
Chrominance to  
Luminance delay



(X5)

Photo 4.3

Transient response  
K-factor



(X5)