

PINZONE COMMUNICATIONS PRODUCTS, INC.
10142 FAIRMOUNT RD., NEWBURY, OHIO U.S.A. 44065

MODIFICATION PROCEDURE
FOR
COASTCOM MODEL 412 DEMODULATOR

PINZONE ENGINEERING
12/10/84

MODIFICATION PROCEDURE

FOR

COASTCOM MODEL 412 DEMODULATOR

- 1) Remove power from demodulator shelf.
- 2) Remove demodulator from shelf and place it on bench with printed circuit side up. At this time, look at the four (4) rear screws. Note that the washers under the screws do not touch any printed circuit runs. This is important when re-assembling the demodulator. Remove the four rear screws holding the printed circuit board, leave front two screws intact. (See figure No. 1)
- 3) Holding the two sides of the demodulator together, turn the demodulator over and remove the two screws holding the metal plate to the front panel. (See figure No. 2)
Note: Screws have nut and flat washer.
- 4) With front panel facing to the right, and printed circuit side of the demodulator down against the bench, slide the metal plate back slightly and fold it over. (See figure No. 3)
- 5) Refer to figure No. 4 - Locate integrated circuit U5. With a thin bladed screwdriver or similar tool, gently pry U5 from its socket. Note the location of Pin "1" of integrated circuit U5.
- 5a) Remove the new integrated circuit U5 from its anti-static protection and insert it into the empty socket. Make sure that the new integrated circuit is oriented the same way as the integrated circuit that was removed. Refer to figure No. 5.
- 5b) Place the integrated circuit that was removed into the anti-static protection pad for storage.
- 6) Remove the thumbwheel switch from the front panel. It may be necessary to remove the two headset jacks before the switch can be removed. (See figure No. 6)
- 7) Two (2) U-Shaped clips hold the switch together. Refer to figure No. 7 - Gently pry these clips off. The switch will come apart into three (3) pieces.

Modification Procedure For Coastcom Model 412 Demodulator

- 8) Remove the two (2) side pieces of the switch. Holding the switch center section with the printed circuit side away and down from you, you will see two small silver colored pin heads. Using a razor blade, or thin knife blade, pry under the head of the pin and remove them. The thumbwheel should now rotate completely around showing all the numbers from zero through fifteen. Refer to figure No. 8.
- 9) Re-Assemble the thumbwheel switch.
 - 9a) When remounting thumbwheel to front panel, you can use the red nut-starter tool to start bottom nut.
 - 9b) When re-assembling demodulator, care should be taken to avoid pinching any wires. Note that one of the screws has a cut washer such that it will not touch an adjacent printed circuit run. (Refer to Figure No. 9)

In no case should a washer touch any printed circuit runs.
 - 9c) After demodulator is completely re-assembled, check that the connectors are seated in their sockets. (Refer to Figures 10 and 11)
- 10) Installation of Demodulator Back Into Shelf -

: IMPORTANT !

Touch yourself first to the rack to discharge any static build-up. While holding onto rack, slide demodulator into its slot. (Refer to Figure No. 12)

IMPORTANT !!

IT IS IMPERATIVE NOT TO DISCHARGE ANY
STATIC BUILDUP WHILE CARRYING OR
MOVING THE DEMOD THROUGH THE DEMOD!!

GROUND AND DISCHARGE YOURSELF AND
THE DEMOD AFTER WALKING ACROSS A
CARPET BY TOUCHING THE RACK WITH
YOUR HAND FIRST, BEFORE ALLOWING THE
DEMODO TO COME IN CONTACT!!

FAILURE TO DO SO WILL RESULT IN SEVERE
DAMAGE TO THE RECEIVER!!

THIS INCLUDES DISCHARGING YOURSELF
BEFORE TOUCHING THE DEMOD WHEN
PERFORMING THIS MODIFICATION!!

A SPECIAL HOTLINE HAS BEEN ARRANGED FOR YOUR CONVENIENCE.

ANY QUESTIONS SHOULD BE DIRECTED TO (216) 338-4494 FROM
9 A.M. TO 5 P.M. E.T.

DURING THE MONTH OF DECEMBER AND THE FIRST WEEK OF JANUARY,
THE NUMBER WILL BE FORWARDED AND ANSWERED AFTER HOURS BY AN
ON-CALL ENGINEER AT HOME.

WE ARE AWARE THAT MANY OF YOU PERFORM ROUTINE MAINTENANCE
ON SUNDAY NIGHT THROUGH MONDAY MORNING. CALLS WILL BE WELCOME
AT THIS TIME.

THE HOTLINE WILL BE ANSWERED BY A MESSAGE CENTER FROM 6 P.M.
DECEMBER 24 THROUGH 6 A.M. DECEMBER 26, AND FROM 6 P.M.
DECEMBER 31 THROUGH 6 A.M. JANUARY 2, 1985.

MODIFICATION PROCEDURE

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COASTCOM MODEL 412 DEMODULATOR

- 1) Remove power from demodulator shelf.
- 2) Remove demodulator from shelf and place it on bench with printed circuit side up. At this time, look at the four (4) rear screws. Note that the washers under the screws do not touch any printed circuit runs. This is important when re-assembling the demodulator. Remove the four rear screws holding the printed circuit board, leave front two screws intact. (See figure No. 1)

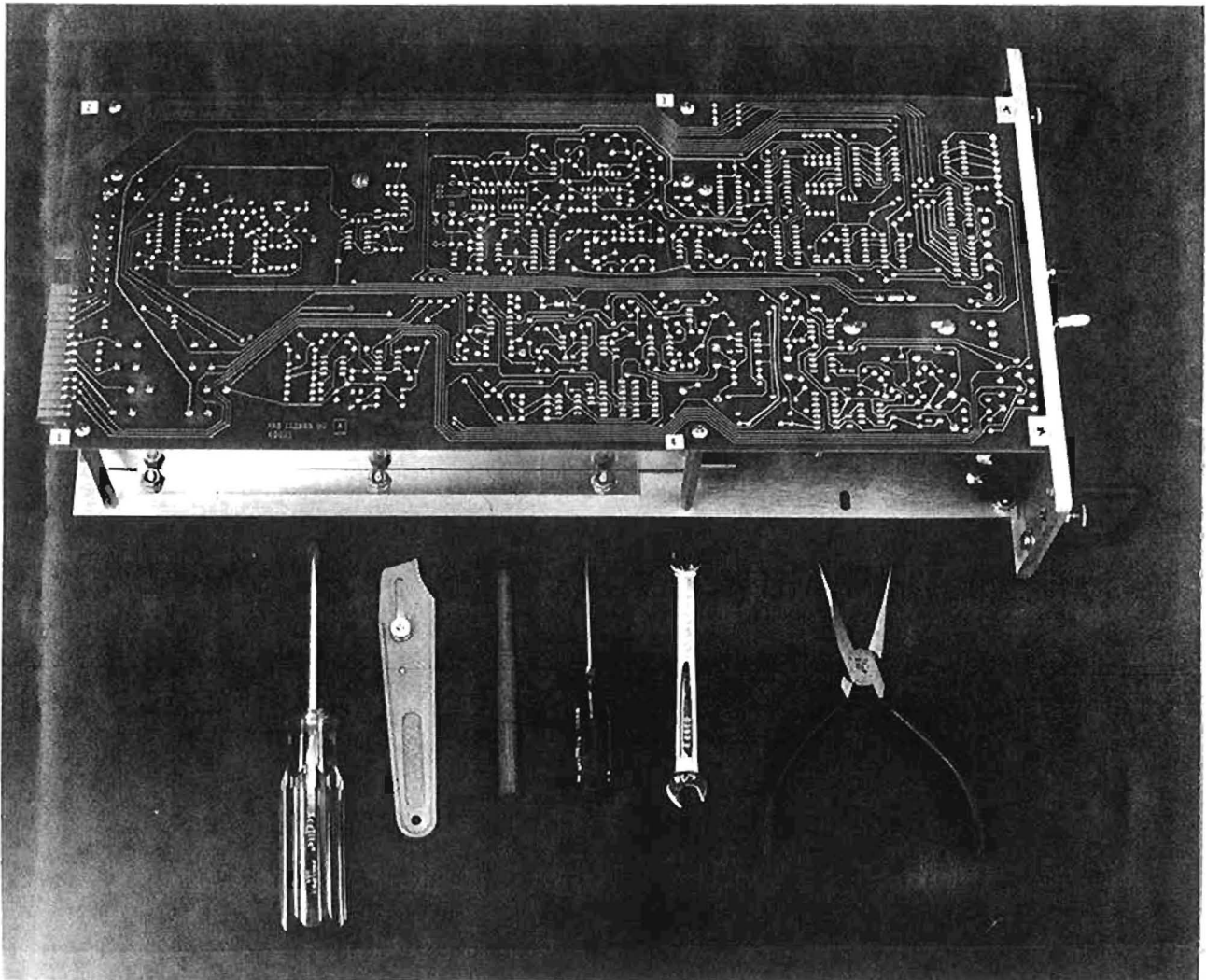


FIGURE NO. 1

- 3) Holding the two sides of the demodulator together, turn the demodulator over and remove the two screws holding the metal plate to the front panel. (See figure No. 2)
Note: Screws have nut and flat washer.

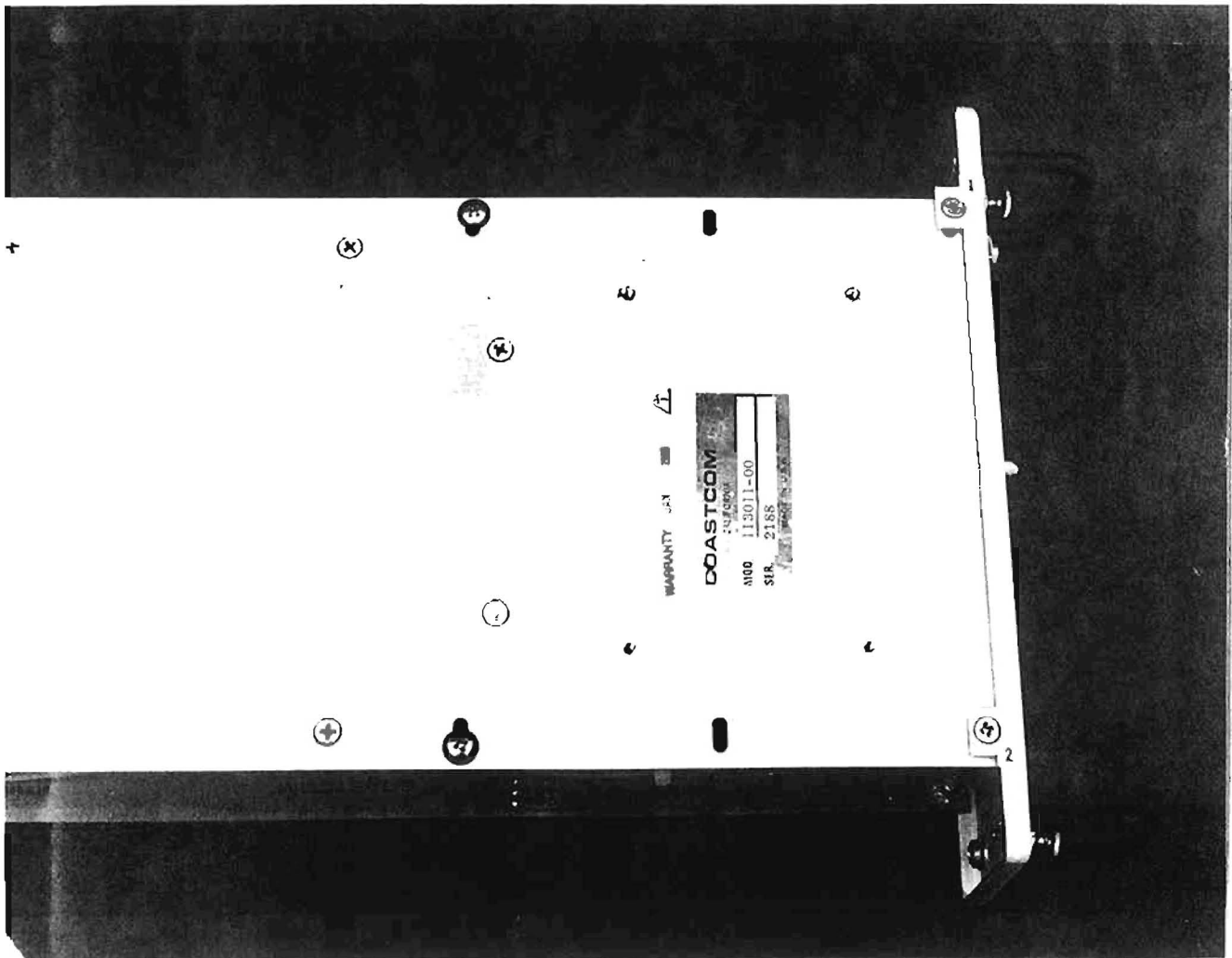


FIGURE NO. 2

- 4) With front panel facing to the right, and printed circuit side of the demodulator down against the bench, slide the metal plate back slightly and fold it over. (See figure No. 3)

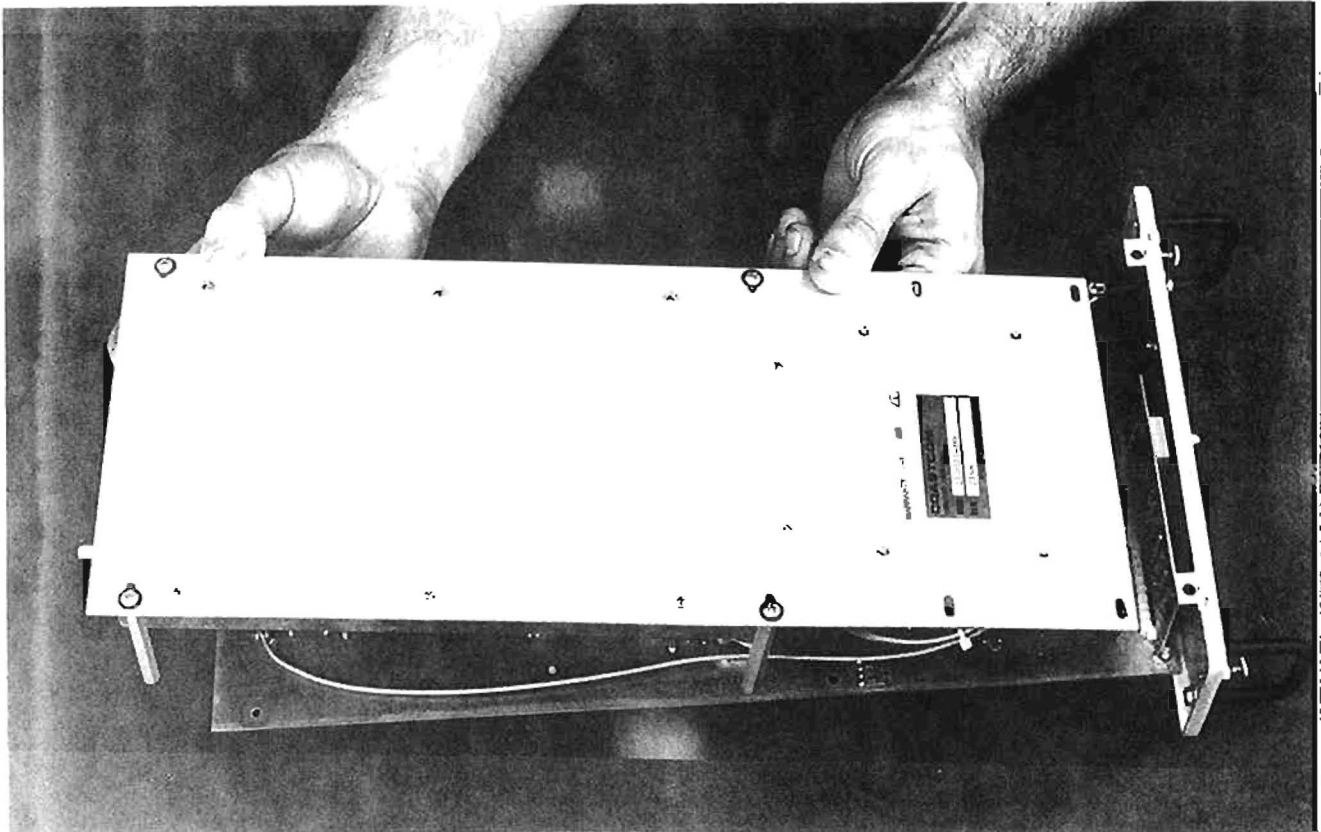


FIGURE NO. 3

- 5) Refer to figure No. 4 - Locate integrated circuit U5. With a thin bladed screwdriver or similar tool, gently pry U5 from its socket. Note the location of Pin "1" of integrated circuit U5.

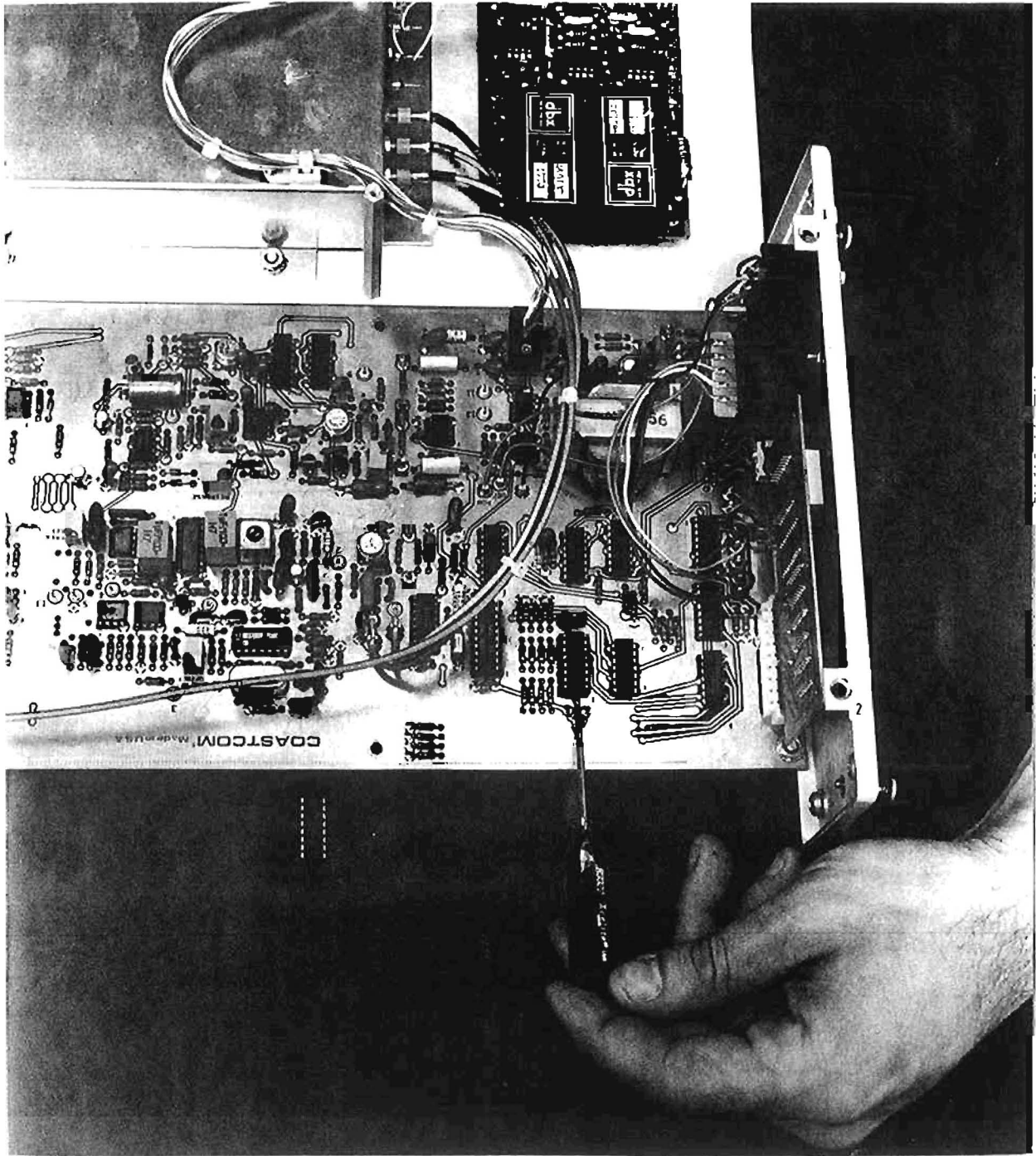


FIGURE NO. 4

- 5a) Remove the new integrated circuit U5 from its anti-static protection and insert it into the empty socket. Make sure that the new integrated circuit is oriented the same way as the integrated circuit that was removed. Refer to figure No. 5.
- 5b) Place the integrated circuit that was removed into the anti-static protection pad for storage.

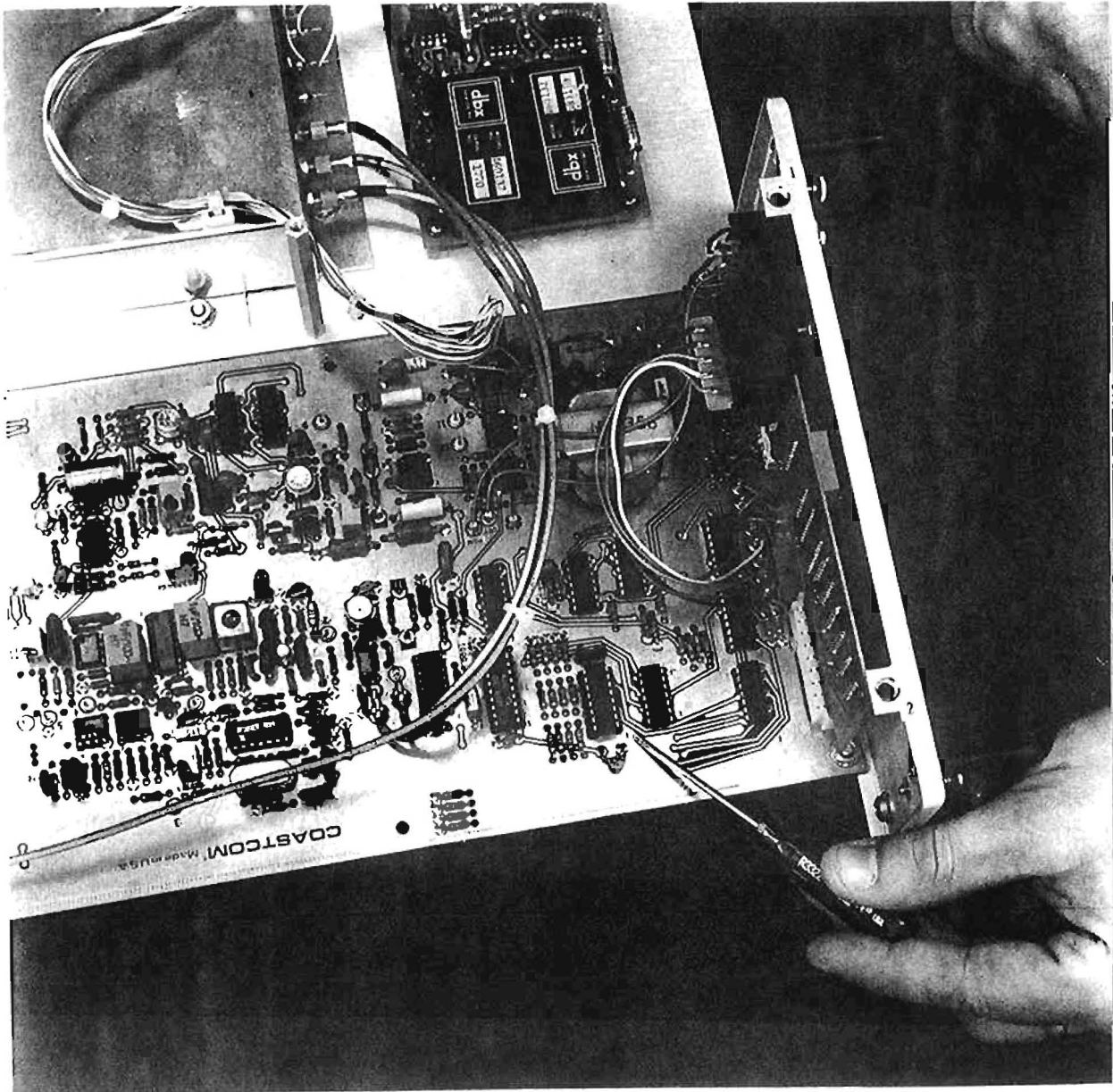


FIGURE NO. 5

- 6) Remove the thumbwheel switch from the front panel. It may be necessary to remove the two headset jacks before the switch can be removed. (See figure No. 6)

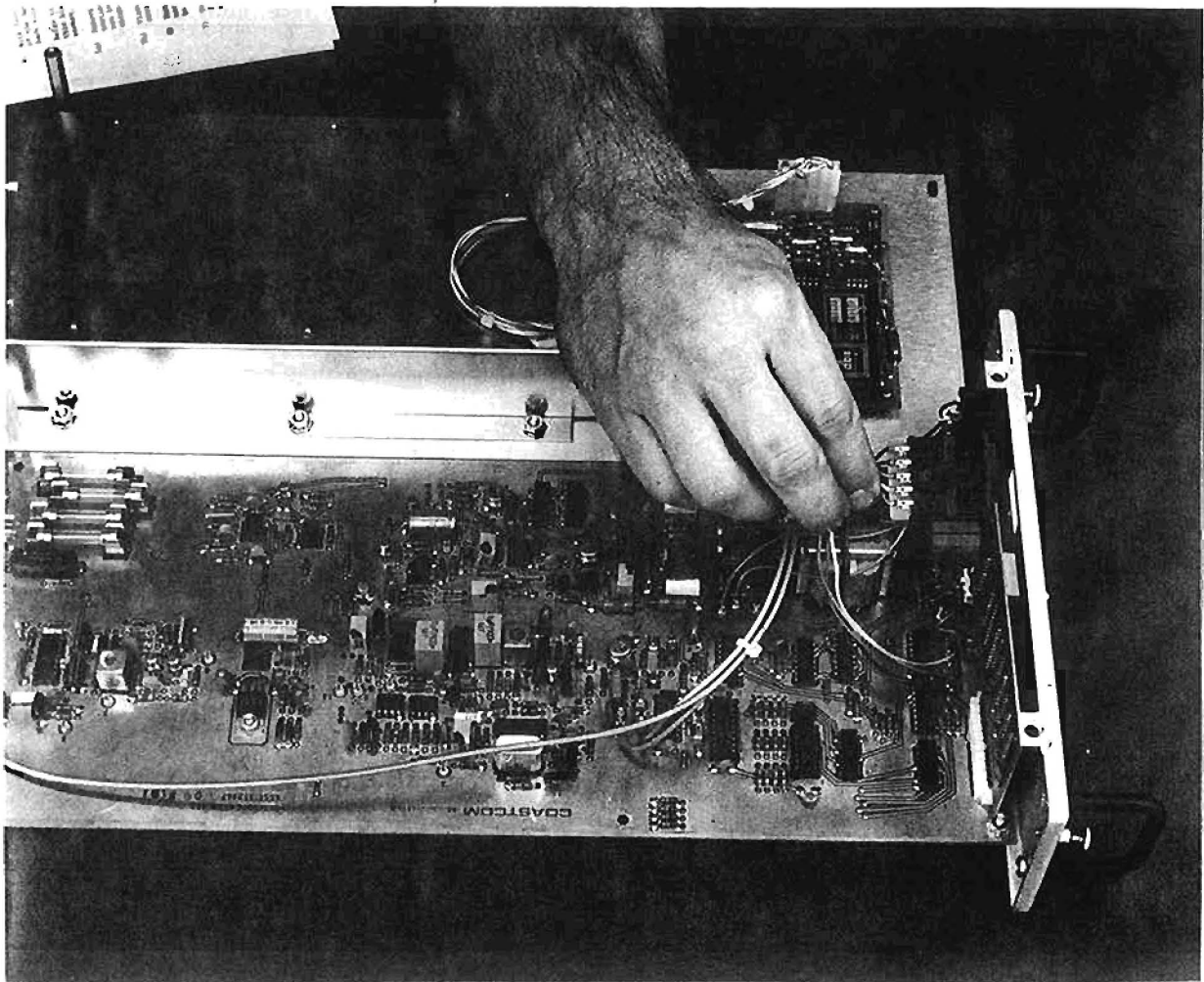


FIGURE NO. 6

- 7) Two (2) U-Shaped clips hold the switch together. Refer to figure No. 7 - Gently pry these clips off. The switch will come apart into three (3) pieces.

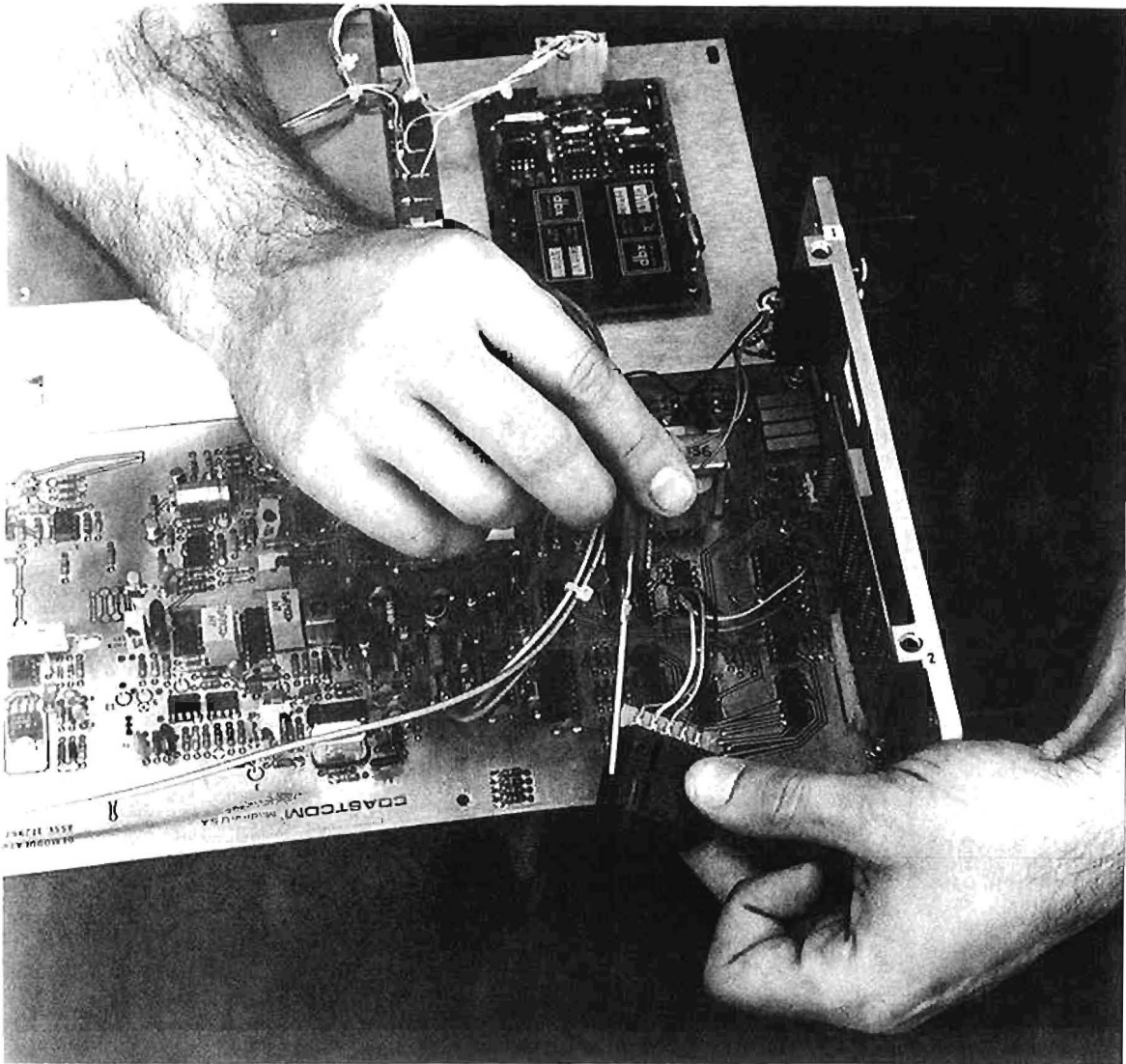


FIGURE NO. 7

- 8) Remove the two (2) side pieces of the switch. Holding the switch center section with the printed circuit side away and down from you, you will see two small silver colored pin heads. Using a razor blade, or thin knife blade, pry under the head of the pin and remove them. The thumbwheel should now rotate completely around showing all the numbers from zero through fifteen. Refer to figure No. 8.

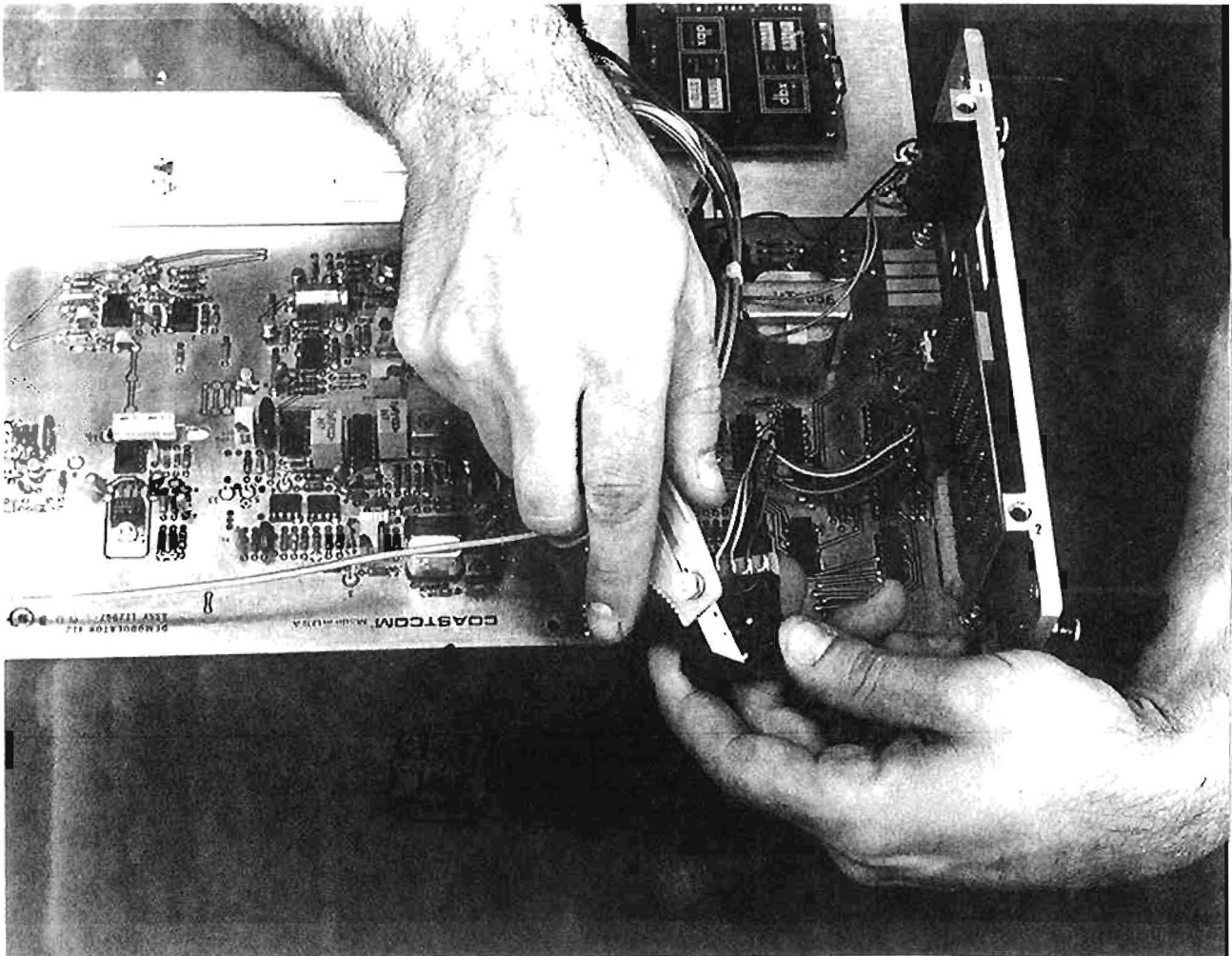


FIGURE NO. 8

- 9) Re-Assemble the thumbwheel switch.
- 9a) When remounting thumbwheel to front panel, you can use the red nut-starter tool to start bottom nut.
- 9b) When re-assembling demodulator, care should be taken to avoid pinching any wires. Note that one of the screws has a cut washer such that it will not touch an adjacent printed circuit run. (Refer to Figure No. 9)

In no case should a washer touch any printed circuit runs.

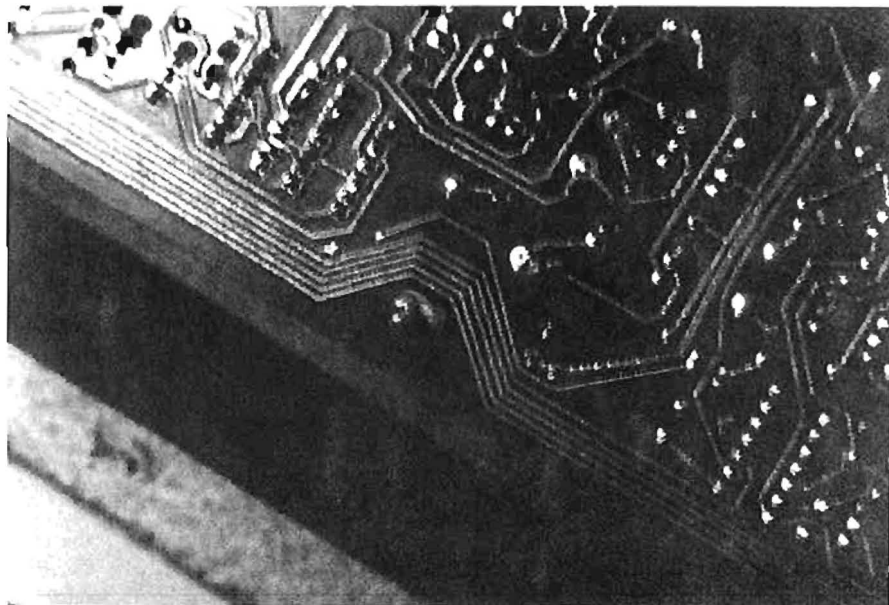


FIGURE NO. 9

9c) After demodulator is completely re-assembled, check that the connectors are seated in their sockets. (Refer to Figures 10 and 11)

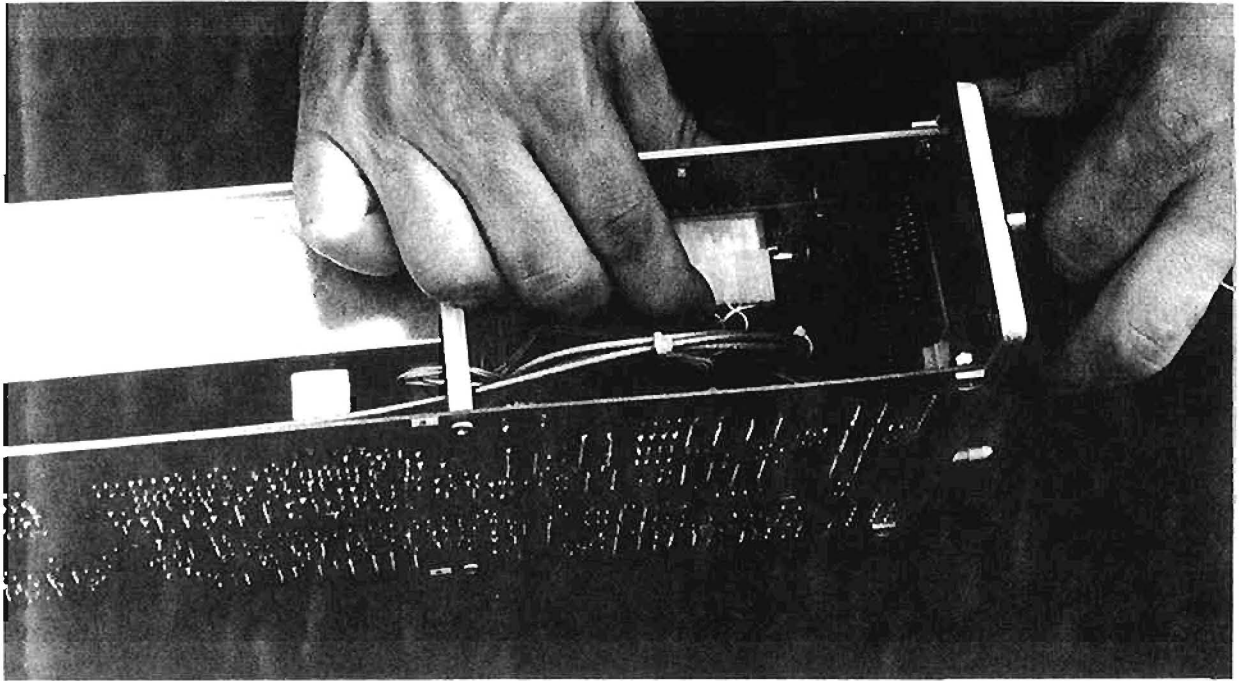


FIGURE NO. 10

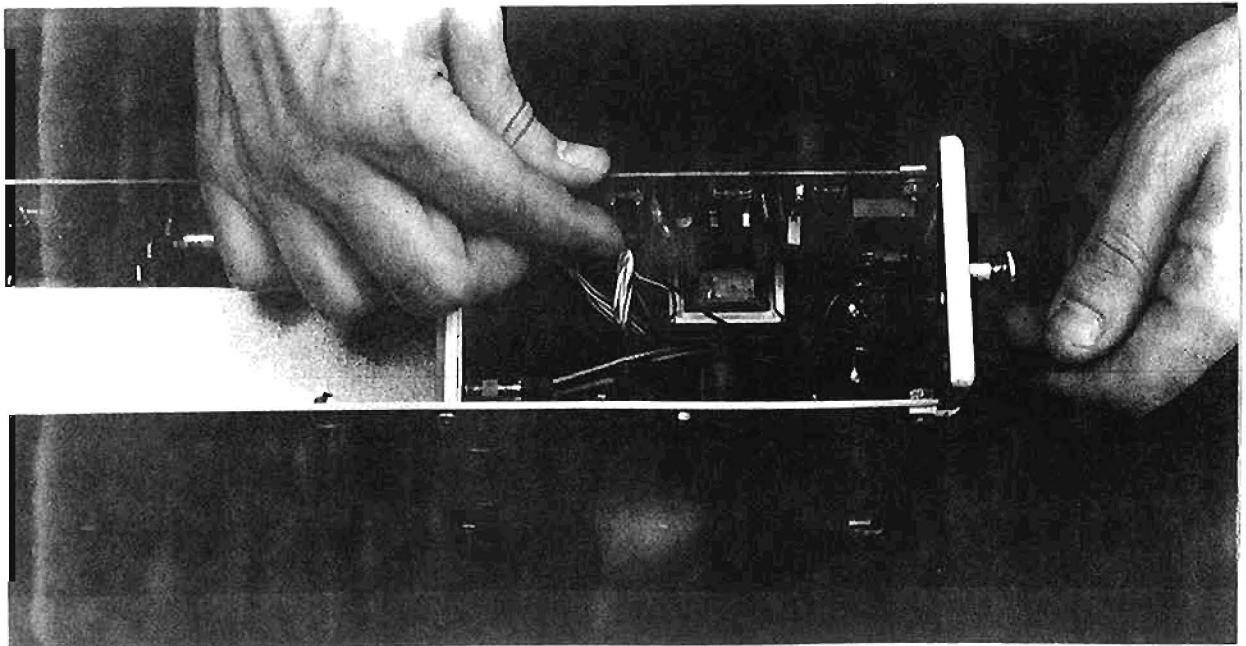


FIGURE NO. 11

10) Installation of Demodulator Back Into Shelf -

: IMPORTANT :

Touch yourself first to the rack to discharge any static build-up. While holding onto rack, slide demodulator into its slot. (Refer to Figure No. 12)

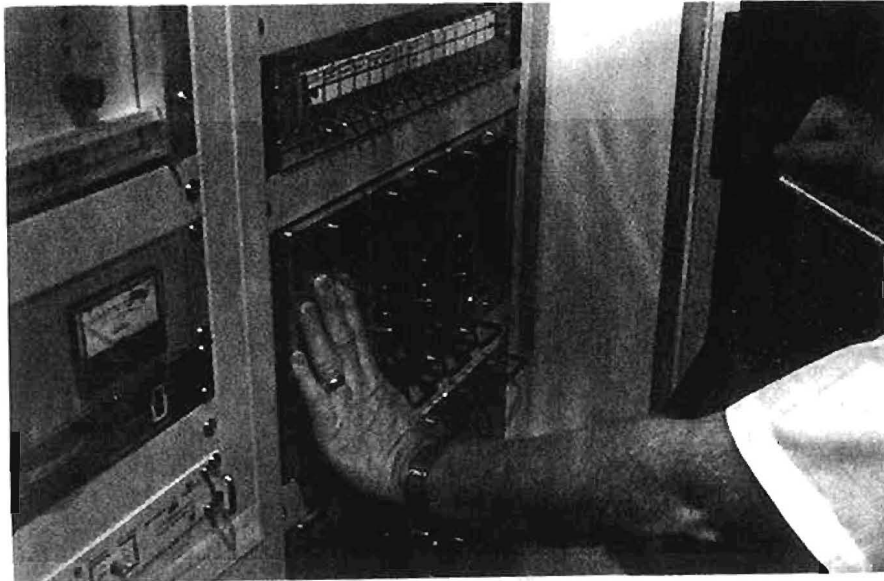


FIGURE NO. 12

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