

COMMUNICATIONS AND

## **SERVICE BULLETIN**

MAINTENANCE AND MODIFICATION DATA

**Broadcast Products Division** 

Equipment: MW-5

Bulletin No.AM-117MJBDate1-18-78

ITEMS AFFECTED: Relay Board 1A4A1

<u>PURPOSE</u>: Replacement with a new relay PC board to prevent possible loss of step-start resistors.

TOOLS REQUIRED: The usual small hand tools and a soldering iron.

## MODIFICATION PROCEDURE:

This product improvement is optional on past production models of the MW-5 transmitter. This is already included in the MW-5A series transmitters.

Step-start resistors (R's 6, 7 and 8) may be lost anytime there is an extremely high current surge in the high voltage power supply. Field replacement PC board (992-4961-001) will sense over-current condition and shut down the power supply prior to damage of equipment, such as the step-start resistors.

Recycle board |A4A| presently (992-4035-001) has a Time Delay Relay (TD-1), three switching relays (K-1, 2 and 3), and thirteen terminal posts. The replacement recycle PC board will have an additional relay (K-4), and two more terminal posts.

Review how your present recycle PC board is installed. Please note what numbered wires go to their respective terminal post number.

Carefully remove all relays from their sockets on the board. Label where they came from and save all relays for reinstallation in the replacement board. Unsolder wires and remove original PC board 992-4035-001. Install replacement board 992-4961-001.

Locate terminals 7 and 8 on the step-start relay K4. Using any fine quality insulated #18 gage hook-up wire, connect from terminal 14 on the newly installed PC board to terminal #8 on the stepstart relay K4. Connect another wire from terminal 15 on the PC board to terminal 7 on the step-start relay K4. Service Bulletin AM-117MJB Page 2

Upon completion be sure and dress the additional wiring neatly along the existing wiring harness.

Re-install relays Kl, 2 and 3 and TDl in their marked sockets. Also install relay K4 that comes with this kit.

The additional resistors sent with this kit are used to select the proper value of R3 on the newly installed PC board 992-4961-001. Starting with the 330 ohm resistor already installed, select the proper value for your transmitter to when upon "initial" turn on, the transmitter does not flag a DC overload.

After the resistor selection is made, it will be necessary to readjust the DC overload trip setting. This is done by feeding in a 20Hz tone at 95% modulation and adjusting R9 until the transmitter trips off. This is of course done at the 5kw power level.

Please contact Harris Broadcast Products Division, Service Department for any further assistance.

Please complete the enclosed postage paid card and return it to us. This assures us that you have received this Service Bulletin and that the modification has been made.

## THIS COMPLETES THE MODIFICATION

Enclosures:

<u>Qty</u> .	Description	Part Number
l	300 ohm $\frac{1}{2}$ w res.	540-0036-000
1	360 ohm $\frac{1}{2}$ w res.	540-0038-000
1	430 ohm ½w res.	540-0040-000
1	470 ohm $\frac{1}{2}$ w res.	540-0041-000
1	560 ohm $\frac{1}{2}$ w res.	540-0043-000
1	680 ohm ½w res.	540-0045-000
1	750 ohm ½w res.	540-0046-000
1	820 ohm $\frac{1}{2}$ w res.	540-0047-000
1	MW-5A overall schematics	852-7591-002
1	Relay recycle board	992-4961-001