

HOW TO INSTALL WIRING FOR TD-5 IN REP-200 REPEATER

GENERAL.

Because the TD-5 cannot transmit and receive simultaneously, completely separate installations are required for the two applications. The receive unit is mounted inside the rear of the receiver compartment in the repeater, and the transmit unit is mounted inside the exciter compartment. In both cases, the TD-5 board is mounted with the dip switch levers up to allow adjustment.

RECEIVE INSTALLATION.

Attach hookup wires to the TD-5 as in the following table. Connect the orange wire to the receiver DISCRIMINATOR output terminal, and connect the other wires to the feedthrough capacitors on the compartment shield.

Receive Wires for TD-5		
TD-5	Repeater	Wire
E2	B+ FT Cap.	9" Red
E3	Rcvr Discrim Pad E4	11" Orn
E5	Defeat FT Cap.	8" Brn or Blk *
E6	COS FT Cap.	9 $\frac{3}{4}$ " Blu

*Also, attach a 5 $\frac{1}{2}$ " brn or blk wire to connect E7 on COR-5 to the Defeat FT cap at the rear of the receiver partition.

TRANSMIT INSTALLATION.

Shield Preparation.

The "L" shaped shield for the transmitter compartment must be punched or drilled to allow mounting of the TD-5. Following is a view of the inside of the right hand side of the shield, the short section. Match holes so the TD-5 board mounts flush with the underside of the flange and just 1/16 inch from the edge of the flange as shown. Dimensions are critical to ensure the fit of the TD-5 (with an electrolytic capacitor at the bottom) next to the Exciter and with the capacitor between two Exciter power wire pads.

⚠ **Caution: TD-5 is static sensitive!**

Installing TD-5 Board.

For transmit mode, the TD-5 requires only two wires plus a bus wire jumper. Install the wires on the board and check everything over before mounting the board.

⊗ *Be careful not to overtighten the screws because it is hard to remove the screws after the repeater is assembled and the slots will strip out if too much torque is needed to remove them with the screwdriver on an angle. It is best to mount the TD-5 to the partition before attaching the partition to the chassis.*

a. **Install** a short **jumper** of #22 bus wire on the TD-5 board from **E12 to E10** in the upper right hand quadrant of the board under the area between the dip switch and the pot. **This switches the board into transmit mode.**

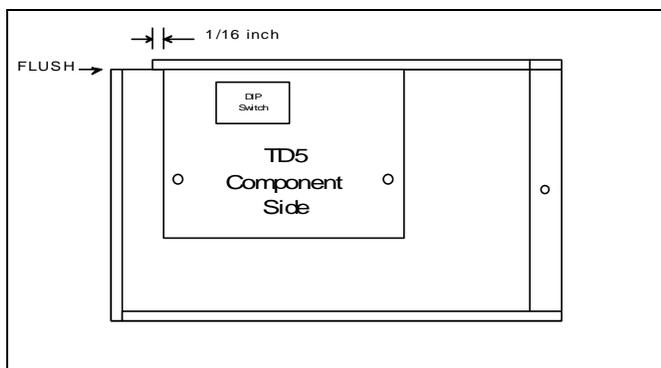
b. Install a **4 $\frac{1}{4}$ " orange** wire from E2 on the TD-5 to the feedthrough capacitor with the orange wire (orange wire going to the Exciter).

It is best to install the wires coming off the rear of the board so they tuck down out of the way of the exciter, under the TD-5 board.

c. Install a **1 $\frac{3}{4}$ " black** wire from E7 on the TD-5 to the top lead of a resistor on the Exciter used as a terminal.

For the T301 or T304, connect to E5 (top lead of R37).

For the TA51, connect to R22.



For the TA451, connect to R17.

Check to be sure the resistor was installed with correct orientation when the exciter was assembled.