D. TRANSMITTER MODIFICATIONS

Some simple modification must be made in the transmitter so that the TC-6 may be integrated into the station First, the screen grid circuit of the final amplifier must be disabled for six meter operation. In addition, low level output (0.25 V) must be added. Equipment manufactured by the R.L. Drake Company may be returned to the factory where it will be modified for a nominal charge.

1. T-4X Modifications

Although the following instructions are intended for the T-4 series of transmitters, the principles should be applicable to other transmitters.

Carefully drill three 1/4 inch holes in the rear of the chassis in the location shown in Fig. 2. Three holes are provided in the T-4B and T-4XB chassis and need not be added. Mount the phono fittings in the holes with nuts, lockwashers, and lugs.

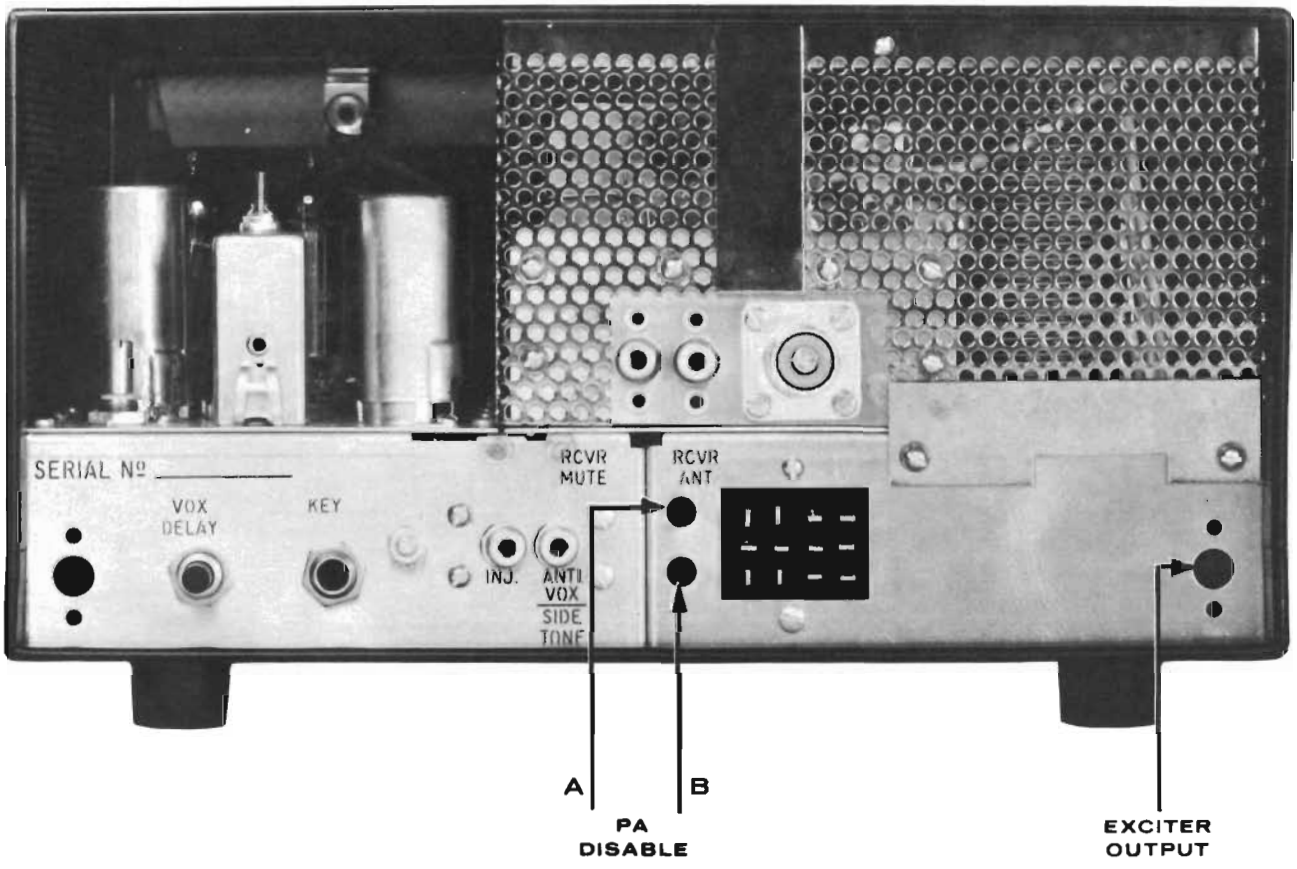


FIG.2

Hole Locations for VHF Modifications

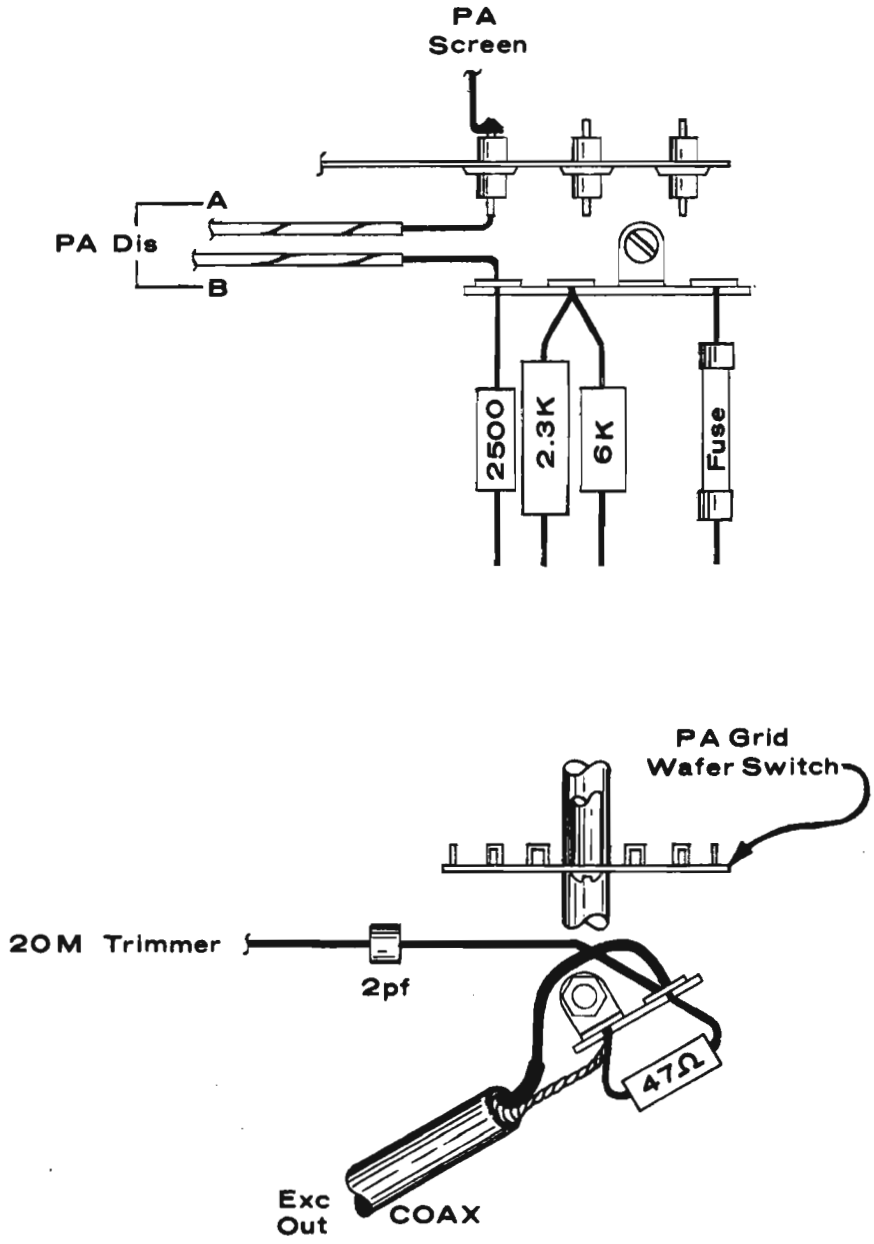


FIG. 3

PICTORIAL DIAGRAM OF T-4 MODIFICATIONS

Replace the two lug terminal strip adjacent to the P.A. Grid compartment with a three lug terminal strip as shown in Fig. 3. The correct terminal strip is already installed in T-4B and T-4XB exciters. Disconnect the wires from the feed-thru capacitor which supplies screen voltage to the P.A. and connect them to the rear lug of the terminal strip. Also, connect a wire from the rear lug to a phono jack (P.A. disable B). Install a 001 MF disc capacitor from the phono jack to ground. Similarly, connect a wire from the screen voltage feed-thru capacitor to the "P.A. disable A" phono jack Install a .001 MF disc capacitor from the phono jack to ground. Reconnect the wires to the two remaining lugs on the terminal strip.

Locate the nut under the bandswitch shaft near the P.A. grid wafer switch. Install a two lug terminal strip (one lug grounded) under this nut. Connect a 2.0 pF capacitor from the twenty meter grid trimmer capacitor to the ungrounded lug of the terminal strip.

Connect a 47 ohm 1/2 W resistor between the two lugs of the terminal strip. Connect a length of coax cable between the terminal strip and the remaining phono jack The braid should be grounded at both ends of the cable. Retune the twenty meter trimmer according to the instructions in the transmitter manual.

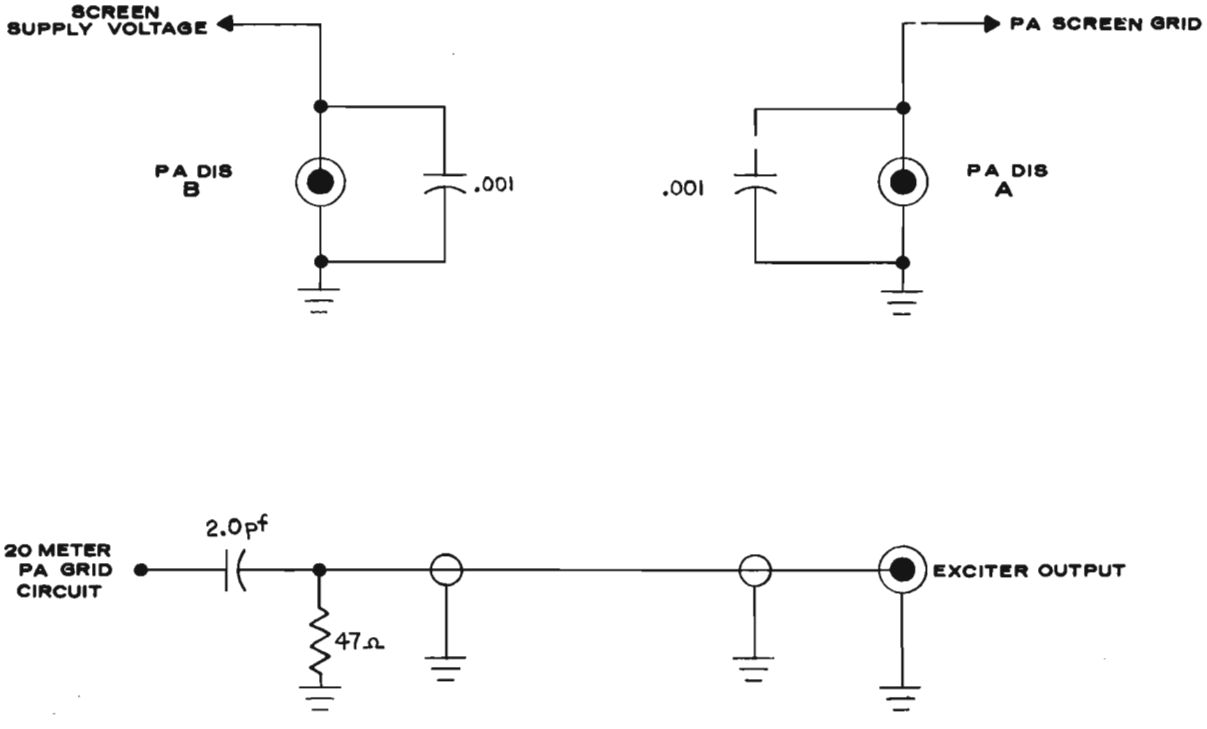


FIG. 4 T-4 MODIFICATIONS