

MESSENGER 130 POSITIVE GROUND INSTALLATION INSTRUCTIONS

These instructions describe the modification of the Johnson Messenger 130 from negative ground operation to positive ground operation using the conversion kit, Part No. 023-3326-001.

1. Remove the cabinet and open the transceiver as shown in Figure 1. Refer to Figures 1 and 2 for the following operations.
2. Replace the eight metal screws holding the printed circuit board to the side rails with nylon screws.

NOTE

When tightening the nylon screws, avoid excessive torque as the nylon screws will strip easily.

3. Replace the black wire between TB1 pin 3 and the chassis rail with a 4700 pF capacitor, Part No. 510-3001-472.
4. Remove the WHT/GRN wire from between the relay, K1 pin 13, and the ON/OFF switch, S1.
5. Disconnect the remaining WHT/GRN wire from the ON/OFF switch and connect it to relay K1 pin 13.
6. Connect one end of the supplied 10 inch length of WHT/GRN wire to the ground lug of the antenna jack, J2. Route the loose end through the hole in the center of the printed circuit board and solder it to pin 13 of relay K1.

7. Connect one end of the supplied 6 inch length of WHT/BLK wire to the empty terminal of the ON/OFF switch, then solder the other end to ground on the printed circuit board near the negative side of capacitor C39.
8. Locate the coax from the antenna jack and disconnect the coax shield from the printed circuit board. Then solder one end of the included 4700 pF capacitor to the pad where the shield was located. Solder the other capacitor lead to the coax shield.
9. Insert the included 82 ohm resistor in the R93 position on the printed circuit board.
10. Disconnect the WHT/ORN lead from R46 and solder it to the ungrounded side of R93 using an available hole in the printed circuit board.
11. Reassemble the transceiver and check for proper operation. Attach the caution label near the power connector on the rear cabinet.

PARTS REQUIRED

QTY	PART DESCRIPTION	PART NUMBER
8	Nylon screws, 4-40	575-4504-008
2	Capacitor, ceramic disc, 4700 pF ±20%	510-3001-472
1	Caution label	559-4006-003
1	Resistor, 82 ohm 1/2 W	569-1004-820
10"	Wire #22 WHT/GRN	071-0911-935
6"	Wire #22 WHT/BLK	071-0911-939

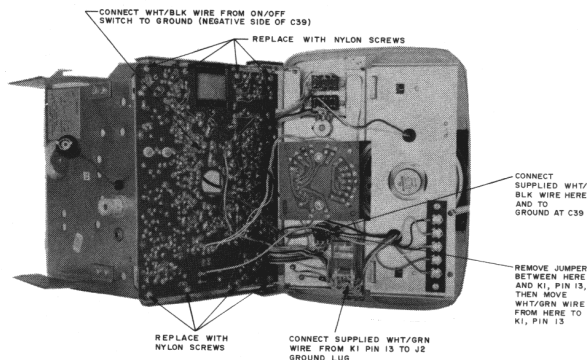


FIGURE 1

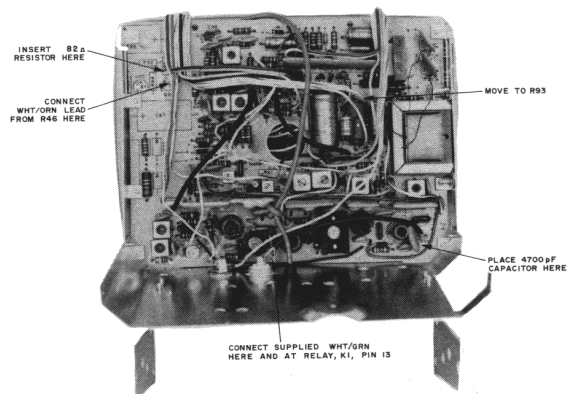


FIGURE 2