

DATE 10/7/52  
SH. 1 OF 1  
COMPILED BY  
L.N.H.

# TMC SPECIFICATION NO. S-137

TITLE: PROCEDURE FOR MODIFYING 5 PRONG RELAY TO 8

JOB 142

APPROVED

*L.N.H.*

- 1: Remove relay from case.
- 2: With side cutters, cut off all five prongs close to base.
- 3: Grind cut surfaces of prongs even with 1/16 of base so that base sets level on smooth surface.
- 4: Pull all wires thru prong holes from relay side.
- 5: Drill hole with No. 28 drill in center of base, caution, do not drill into relay when drill passes thru base.
- 6: Remove sleeving from two contact wires, cut 3/16 of each piece of sleeving.
- 7: Cut 6 lengths of No. 20 tinned wire, each 4 inches long.
- 8: Push a wire thru pin hole No. 4 for about 2 inches, install sleeving on relay side and twist this wire with contact wire on that side, close to contact. Twist for  $\frac{1}{4}$  inch, solder and cut off excess wires.
- 9: Push wire thru pin hole No. 2 and repeat step (8).
- 10: Push wire thru pin hole No. 5 and twist  $\frac{1}{4}$  inch with coil lead on that side, cut  $\frac{1}{4}$  inch long, do not solder.
- 11: Push wire thru pin hole No. 1 and repeat step (10).
- 12: Push wire thru pin hole No. 3 and with thin long nose pliers pull out from under relay frame and bend around to back of relay, close to base, and solder on rear of base of relay.
- 13: Drill out center, of AMPHENOL Plug Type 86-CP8T Octal type, with No. 28 drill. Drill should be centered in present large hole in key center.
- 14: With "V" shaped file, file groove connecting pin No. 5 and 6 about 1/16 deep.
- 15: Bend wire in center in "U" shape and install in pin No. 5 and 6, push bend down in filed groove.
- 16: Install a 56 K,  $\frac{1}{2}$  W. resistor between leads on coil and solder in place with twisted wires, cut off surplus.
- 17: Install wires protruding thru base of relay into pins of new socket base in the following order and solder and cut off surplus.  
Hole No. 4 to Pin 7, Pole No. 5 to Pin 2, Hole No. 1 to Pin 3, Hole 2 to Pin 4, Hole No. 3 to Pin 6.
- 18: Install a 6-32 X  $1\frac{1}{4}$ " round head bolt thru new base and secure with a nut under relay.
- 19: Clean markings off cover and install new marking and install cover back on relay.

BEFORE ATTEMPTING ABOVE SEE ENGINEERING MODEL AS TO DRESSING DETAILS.