| TMC SPECIFICATION | | | NO. S 1187 |
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| REV: Ø 1 | | | |
| COMPILED: BN | CHECKED: | APPD: | SHEET 1 OF 10 |
| TITLE: | | | |
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KIT 334

MODIFICATION PROCEDURE

GPT( )-2.5K

TRANSMIT-RECEIVE RELAY KIT

TITLE: KIT 334 MODIFICATION PROCEDURE GPT( )-2.5K

TRANSMIT-RECEIVE RELAY KIT

I. EQUIPMENT EFFECTED:

TMC GPT( )-2.5K Series Transmitters.

II. PURPOSE:

To provide TMC Model GPT( )-2.5K Transmitters with the ability to operate in conjunction with a receiver using a common antenna. The addition of this kit does not effect the model number. To accomplish this modification, a coaxial relay is added to the RF line.

III. MATERIALS REQUIRED:

Table 1 lists the material supplied with the field change kit. Table 2 lists the tools necessary to accomplish this modification. These are standard tools and are not supplied with the kit.

Table 1

| ITEM | SYMBOL | QTY. | P/N | DESCRIPTION |
|---|---|---|---|---|
| 1 | | 1 | CA480-138-6 | Cable, Ass'y,RF |
| 2 | | 1 | CA1331 | Cable, Special Purpose |
| 3 | | 2 | CK1338 | Diagram,Schematic |
| 4 | | 2 | CU102-3 | Clamp, Loop |
| 5 | | 1 | CU102-4 | Clamp, Loop |
| 6 | | 2 | MS5018 | Bracket,Relay Mtg. |
| 7 | | 1 | MS5109 | Bracket,Relay Mtg. |
| 8 | | 6" | PX100-1-133 | Insulation, Sleeving |
| 9 | | 6" | PX100-1-315 | Insulation, Sleeving |
| 10 | K8001 | 1 | RL168-2C10-24VDC | Relay, Armature |
| 11 | K8000 | 1 | RL177 | Relay, Coaxial |
| 12 | | 1 | TM105-14AR | Terminal Strip,Fanning |
| 13 | XK8001 | 1 | TS101-P01 | Socket, Octal |
| 14 | | 6" | WL100-7 | Wire, Buss |
| 15 | | 6 | SCBP0832BN8 | Screw, Machine |
| 16 | | 4 | SCBP0832BN10 | Screw, Machine |
| 17 | | 3 | SCBP0632BN6 | Screw, Machine |
| 18 | | 2 | SCFP0632BN6 | Screw,Machine,Flathead |
| 19 | | 10 | FW08HBN | Washer, Flat |
| 20 | | 1 | FW06HBN | Washer, Flat |
| 21 | | 10 | LWE08MRN | Washer,Lock,External |

Table 1 - (continued)

| ITEM | SYMBOL | QTY. | P/N | DESCRIPTION |
|---|---|---|---|---|
| 22 | | 5 | LWE06MRN | Washer,Lock,External |
| 23 | | 2 | NTH0832BN10 | Nut, Hex Head |
| 24 | | 5 | NTH0632BN8 | Nut, Hex Head |
| 25 | | 1 | | Drill Bit 5/32" |
| 26 | | 1 | | Countersink, 1/4" Shank |
| 27 | | 36" | BS100 | Solder, Tin Alloy |
| 28 | | 36" | CD101-1MW | Cord, Lacing, Nylon |
| 29 | | 1 Roll | TA100-2 | Tape,Electrical, 1/2 w |

Table 2

1. Screwdriver, Phillips
2. Screwdriver, Flat Blade
3. Pliers, Long Nose
4. Pliers, Diagonal Cutting
5. Drill Motor, 1/4"
6. Soldering Iron

IV. PROCEDURE:

A. COAXIAL RELAY ASSEMBLY (RL177)

1. Cover the wires of the relay with the 6" piece of 5/16" tubing. (PX100-1-315).
2. Using one each 3/8" #6 screw, flat washer, lock washer, nut and the 5/16" clamp, mount the 14 terminal fanning strip (TM105-14AR) to the end of the tubing.
3. Wire the strip as shown in Fig. 1.
4. Using four each 5/8" #8 screws, flat washers and lock washers, mount two brackets (MS5018) to the relay.

B. MODIFICATION OF FRAME:

1. Remove the Rear and Right side covers.
2. Using Fig. 2, mark, drill and countersink the frame.

C. PREPARATION OF CABLE (CA1331)

1. On the relay socket (TS101-P01) solder the buss wire (WL100-7) from Pins 3 and 5 to the ground lugs.
2. Cut the small tubing (PX100-1-133) into 1" lengths.
3. Using a piece of the tubing over each lead, solder the cable leads to the socket using Fig. 3.
4. Using two each 3/8" #6 screws, lockwashers and nuts, mount the socket to the relay bracket as per Fig. 4.

D. INSTALLATION:

1. Remove the round cover plate from the top of the rack.
2. Using four each 1/2" #8 screws, flat washers and lock washers, mount the coaxial relay to the rack.
3. On E8008, remove the fanning strip that is already connected. Insulate it using the electrical type and tie it back to the main cable.
4. Connect the 14 terminal strip of the cable to E8008 in this position. Connect the terminal strip of the coaxial relay to the open terminals of E8008.
5. Using two each #6 flathead screws, lockwashers and nuts mount the small relay bracket to the rack using the two holes previously drilled. The cable should run in the corner of the rack.
6. Route the cable to the channel. Using two each 1/4" clamps, 1/2" #8 screws, flatwashers, lock-washers and nuts, clamp the cable to the channel.
7. Connect the 11 terminal strips to E8006, Terminals 1 thru 11. Connect the External Interlock circuit, if any, to the first three terminals of the fanning strip.
8. Check to see that the coaxial relay is allowed free movement.

9. Mount the small relay (RL168-2C10-24VDC) into the octal socket.

10. Replace the side and back.

11. Connect the RF cable (CA480-138-6) from CP8000, RF output to Jack 4. Connect the Antenna to Jack 1. Connect the receiver to Jack 2.

12. This completes the installation of the Kit.

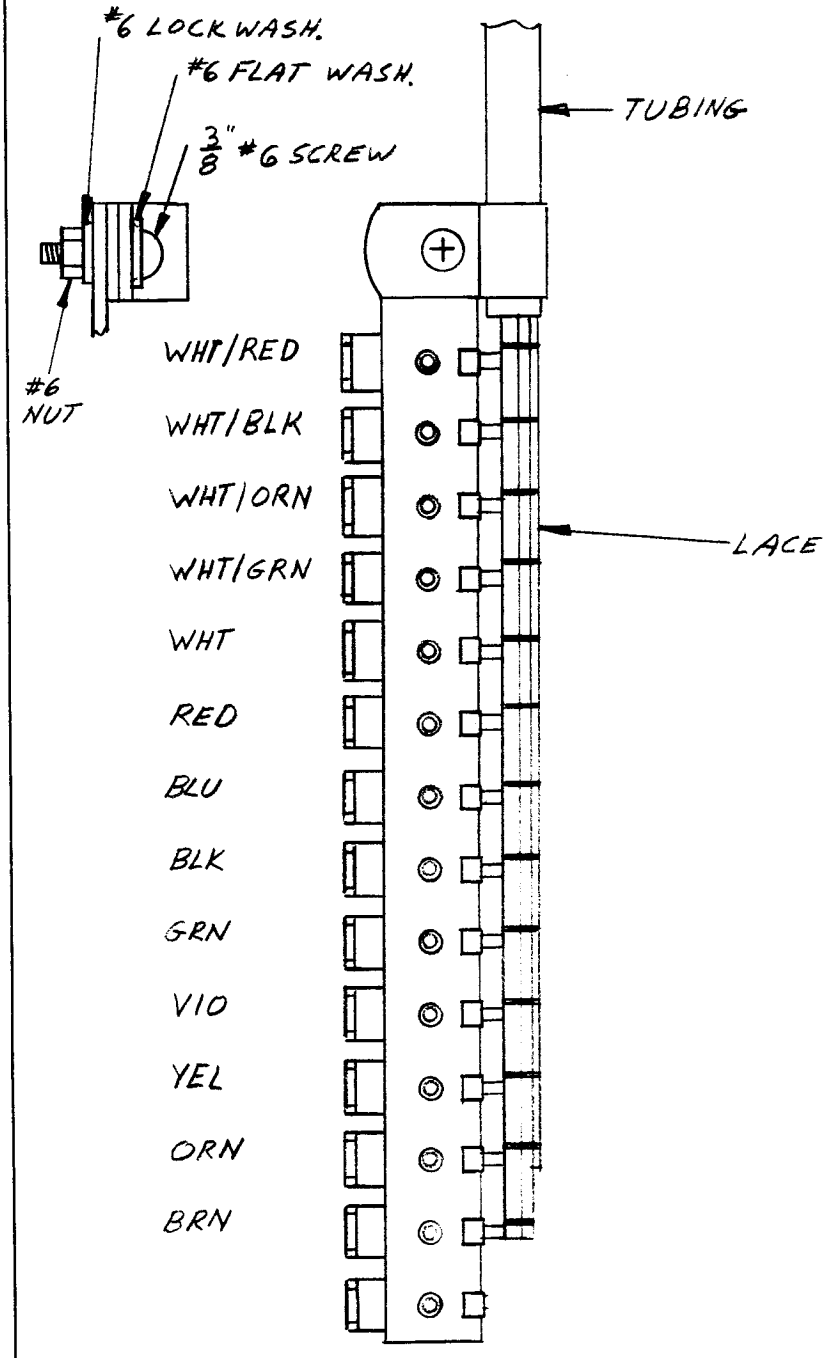
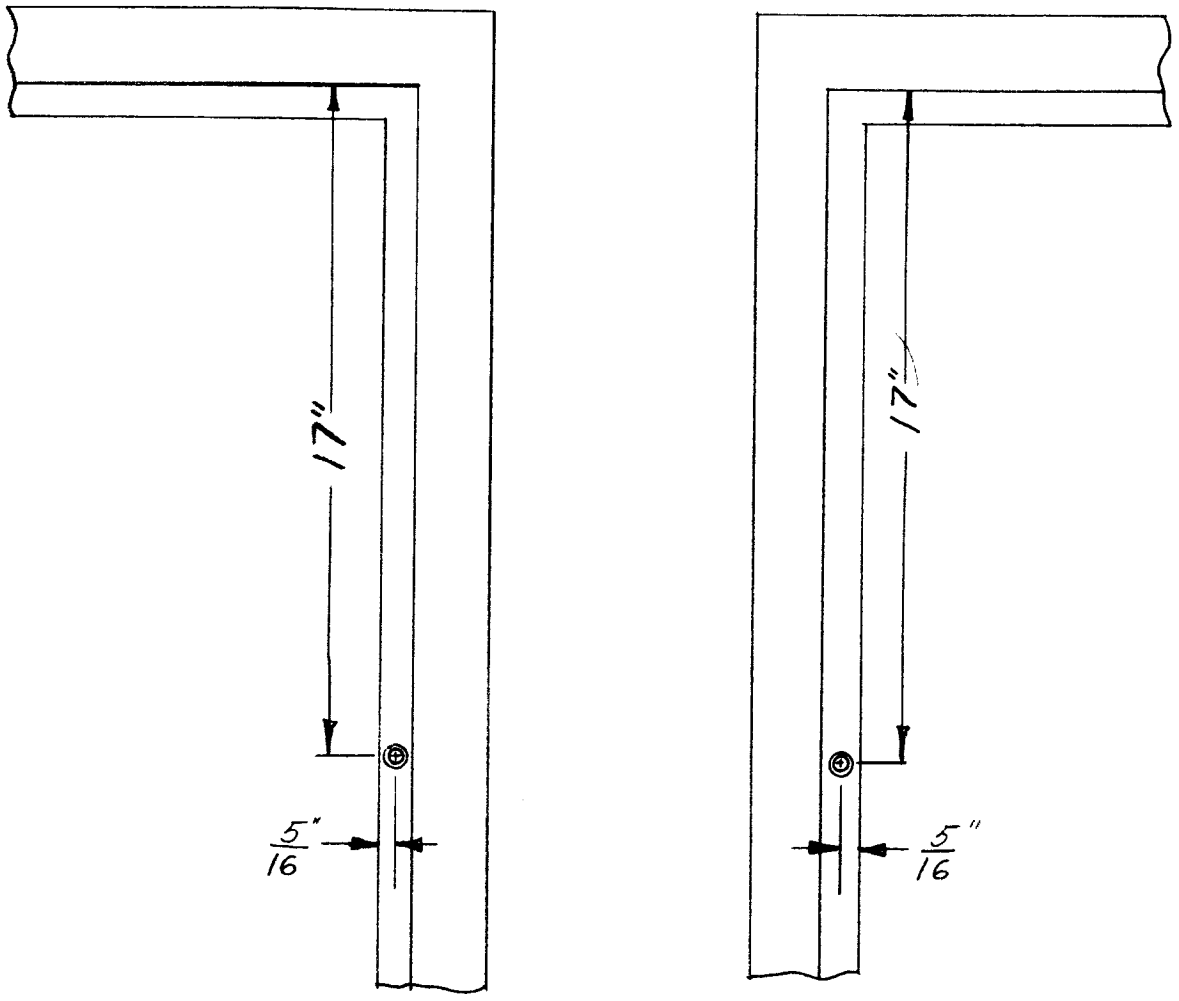

#6 LOCK WASH.
#6 FLAT WASH.
3/8" #6 SCREW
TUBING
#6 NUT
WHT/RED
WHT/BLK
WHT/ORN
WHT/GRN
WHT
RED
BLU
BLK
GRN
VIO
YEL
ORN
BRN
LACE

Fig. 1

RIGHT SIDE

REAR




DRILL 5/32" HOLE
COUNTERSINK FOR 6-32 FLAT HEAD SCREW

Fig. 2

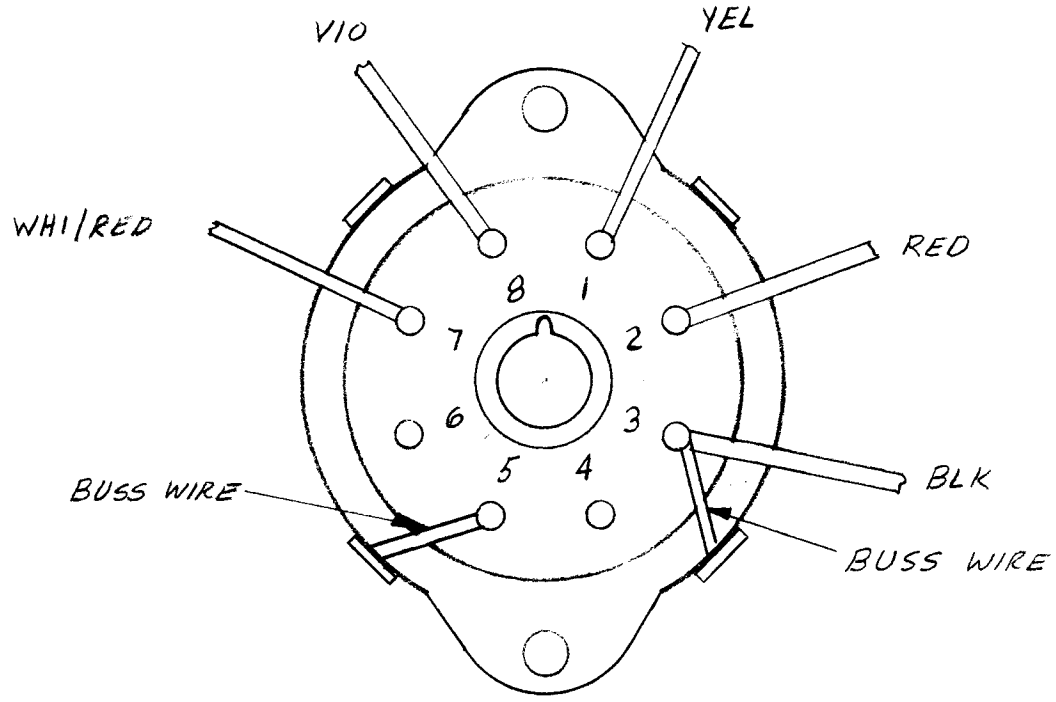

VIO
YEL
WHI/RED
RED
8
1
7
2
6
3
5
4
BUSS WIRE
BLK
BUSS WIRE

Fig. 3

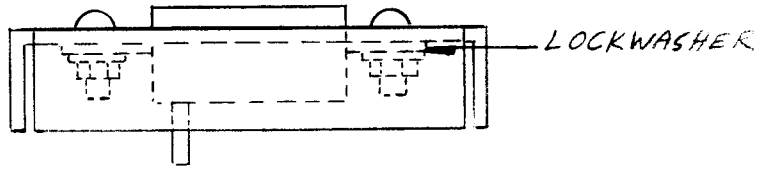

LOCKWASHER

Fig. 4

| REVISION SHEET | THE TECHNICAL MATERIEL CORP. MAMARONECK NEW YORK | S 1187 LIST NO. |
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TMC FORM MLR-1 2-65—AINS.