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OF

TITLE:

KIT 382

INSTALLATION PROCEDURE

SWITCHABLE LOAD RESISTOR

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TITLE: KIT 382 Installation Procedure for Switchable Load Resistor

I. EQUIPMENT EFFECTED:

TMC transmitter models HFTA-1KJ.

II. PURPOSE:

To allow the transmitter to tune into a fixed impedance.

III. MATERIALS REQUIRED:

Table 1 lists the material supplied with the Kit. Table 2 lists the tools necessary to accomplish this modification. These are standard tools and are not supplied as part of the Kit.

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TABLE 1

ITEM	SYMBOL	QTY	PART NUMBER	DESCRIPTION
1		1	AX5144	Resistor, Assy
2		24"	BS100	Solder, Tin Alloy
3		1	CA1705	Wiring, Harness, Branched
4		2	CK1870	Diag, Schematic, AP151
5] whichever applicable	2	CK1876	Diag, Wiring, HFTA-1KJ
6		2	CK1931	Diag, Wiring, HFTA-1KSJ201
7		2	CK1932	Diag, Schematic, AX5144
8		24	CU142-2	Strap, Cbl
9		24	CU142-10	Strap, Cbl
10	F305	1	FU100-4	Fuse, Cartridge
11	F303	1	FU102-.75	Fuse, Cartridge
12	F303	1	FU102-1.5	Fuse, Cartridge
13	F306	1	FU102-2.5	Fuse, Cartridge
14		2	FW08HBN	Washer, Flat
15		4	LWE06MRN	Washer, Link, External
16		1	LWE08MRN	Washer, Link, External
17		24"	MWC22(7)U0	Wire, Electrical, Ins
18		24"	MWC22(7)U2	Wire, Electrical, Ins
19		1	NTH0832BN10	NUT, Pln, HH
20		24"	PX100-1-106	Ins, Slvg, Blk
21		24"	PX830-8-1	Ins, Slvg, Shrink
22		24"	PX830-18-1	Ins, Slvg, Shrink
23	R309,312	2	RW110-5	Res, Fxd, WW, 20W
24		4	SCBP0632BN8	Screw, Machine
25		1	SCBP0832BN40	Screw, Machine
26		2	WA102-5	Wash, Shoulder, NM
27		1		Drill Bit, 3/16"

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TABLE 2

1. Screwdriver, Phillips
2. Screwdriver, Flat Blade
3. Pliers, Diagonal Cutting
4. Pliers, Long Nose
5. Soldering Iron

IV. PROCEDURE:

A. AP151 MODIFICATION

1. On the left side plate, drill a 3/16 diameter hole as per Figure 1.
2. Mount a 15 ohm 20W resistor (R312) using the 2-1/2" long #8 screw, shoulder washers (2), flat washers (2), lockwasher and nut in the hole.
3. Replace the original R309, 25 ohm, 20W with the second 15 ohm 20W resistor,
4. Using the #22 RED wire, wire the new 15 ohm resistor (R312) in parallel with R306. Cover the terminals with lengths of shrink tubing.
5. Replace the LV fuse (F303) with the 1.5a or .7a fuse whichever is applicable with the line voltage.
6. Replace the DC fuse (F305) with the 4a FAST-BLO fuse.
7. Replace the CONTROL fuse (F306) with the 2.5a fuse.

B. TFP-1K MODIFICATION

1. Remove the two screws holding the left side plate to the rear panel. Discard.
2. Mount the AX5144 Resistor Assembly to the rear of the TFP with two 1/2" long #6 screws and lockwashers. Use the same holes from which the screws in Step 1 were taken. Care should be taken to see that the input pin of the Resistor Assembly enters the center contact of the RF OUT jack, J403 on the TFP.

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TITLE: KIT 382 Installation Procedure for Switchable Load Resistor

3. Drill two 3/16" holes through the rear panel for the mounting hardware of the Resistor Assembly. Care should be taken to assure that the drill will not damage any internal components or wiring. Use the remaining mounting hardware and complete the mounting of the assembly.

C. WIRING HARNESS MODIFICATION

1. Remove P2007 from J1 of the Antenna Tuner RF-601. Open the plug by loosening and removing the clamp and shell.
2. Remove the wire from Pin B, cover the end with the small shrink tubing and fold back into the cable body.
3. Using the #22 BLACK wire, jump Pins A and B. Use a piece of the insulating tubing to cover the pin.
4. Reassemble the plug and reconnect to J1 of the tuner.
5. Remove P2016 from J401 of the Filter, TFP-1K. Open the plug by loosening and removing the clamp and shell.
6. Feed the WHI/V10 wire of CA1705 under the rubber bushings of P2016. Pull the sleeving of CA1705 under the bushings to the same length as the original cable.
7. Solder the wire to Pin R of the plug. Do not remove the original wire.
8. Reassemble the plug and reconnect to J401.
9. Connect the fanning strip to TBI of AX5144.
10. Using the nylon straps secure CA1705 along the cable breakout to the main trunk. Feed the cable under any clamps secured to the cable. Feed the cable up the main trunk and along the AX5130 breakout to P2009 (J202). Secure the cable with the straps.
11. Remove P2009 from J202 of the AX5130 and open the plug by loosening the clamp and shell.
12. Feed the cable under the rubber bushing and connect the YEL wire to Pin Z and the WHI/BLU wire to Pin U. Do not remove the wire on Pin U.

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13. Using the #22 BLACK wire, jump Pins X and a.
14. Reassemble the plug and reconnect to J202.
15. Reconnect all plugs and connections that were removed. This completes the installation of KIT382.

D. ADJUSTMENT TO AX5130

1. Adjust FAULT circuit to activate in 15 seconds.
2. Adjust TUNE LEVEL for approximately 300 ma.

NOTE

Adjustment procedures for FAULT CIRCUIT and TUNE LEVEL are outlined in the applicable HFLA-1K Technical Manual.

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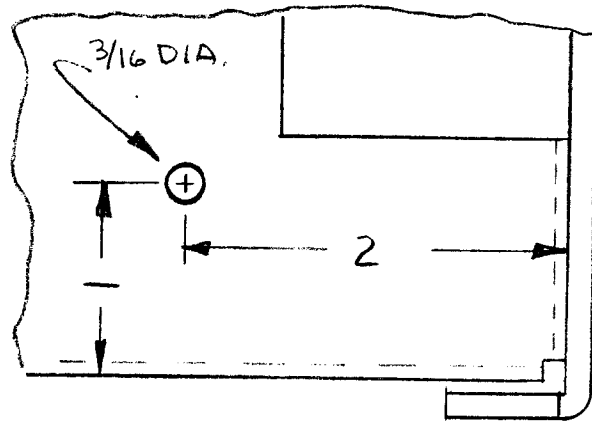
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FRONT
OF
UNIT

FRONT LEFT SIDE VIEW
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FIG. 1

