

TMC SPECIFICATION

NO. Kit 451

REV:

COMPILED:

dw

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L. Uno

APPD:

003

SHEET

OF

TITLE:

CU-2, CU-2B DIODE/RESISTOR REPLACEMENT

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1. GENERAL DESCRIPTION

This modification Kit is intended to provide a complete replacement for the diode sensors and the resistance element of the R.F. bridge in the directional coupler unit TMC Model ATS/CU-2 and the ATS-2B/CU-2B. NOTE: This Kit is an up-graded replacement of Kit 283.

2. EQUIPMENT SUPPLIED

- a. One (1) TMC Drawing ID-445
- b. One (1) alignment tool TMC part no. TP-110
- c. The following component parts are supplied as a packaged replacement for CU-2, CU-2B.

ITEM	QTY	PART NUMBER	DESCRIPTION	SYMBOL
1	2	CL254	Coil, RF Fixed	L302, L304
2	2	CB21PX152K	Cap, Fixed Mica	C307, C308
3	2	CK70AW102M	Cap, Fixed Ceramic	C303, C306
4	1	RR122-0.6	Resistor, Fixed Film	R301
5	2	CU177	Clamp, Resistor	use on R301
6	2	CL140-1	Choke, RF	L301, L303
7	2	IN485	Diode	CR301, CR302
8	2	CV102	Cap, Var	C302, C305
9	2	CK70AW751M	Cap Fixed Ceramic	C301, C304
10	1	CL178	Coil RF	L305
11	2	MS6960	Coupler, Comp Mtg.	
12	X	WL100-7	Wire, Buss	
13	X	PX370	Insul, Sleeving Teflon	
14	2	TE115-1	Term, Turret	

3. EQUIPMENT REQUIRED BUT NOT SUPPLIED

- a. One (1) each R.F. power source variable between 100 watts and 1000 watts at a frequency of 6.0 MHz.
- b. One (1) each 50 or 70 ohm dummy load with power rating suitable for R.F. power source indicated in para. 3a.
- c. One (1) each R.F. VTVM.
- d. One (1) each soldering iron 75-100 watt.
- e. One (1) each long nose pliers.
- f. One (1) each Phillips screwdriver size P-1.

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4. PROCEDURE

- a.1. Refer to figure 5-6 of the ATS-2 instruction manual, IN-2001/214 issue date 1 May 1961, use this reference when replacing components in the ATS/CU-2.
- a.2. Refer to figure 5-6 of the ATS-2B instruction manual, 204441200 issue date Sept. 1979, use this reference when replacing components in the ATS-2B/CU-2B.
- b. Orient the directional coupler to correspond with figure 5-6.
- c. Remove top cover of coupler.
- d. Remove washer and nut from C302 and C305.
- e. Remove C307 and C308 from the coupler housing.
- f. Unsolder L305 GND connections.
- g. Remove the screws (4) securing J301 and J302 from the ends of the coupler.
- h. Remove J301 and J302 from the existing resistor element. Discard the complete component assembly. Care should be exercised in this removal, as same components may be undamaged and can be used at a later time.
- i. J301 and J302 now should be fastened to the component package supplied (Kit-451) refer to ID445 drawing (supplied) for reassembling the coupler CU-2 or CU-2B.
- j. Replace the top cover and realign and re-calibrate the ATS-2 system using the procedure outlined on pages 6-0, 6-1, 6-2 and 6-3 of the ATS-2 or ATS-2B manual.