

KIT-216

DATE _____		TMC SPECIFICATION NO. S 922	E
SHEET 1 OF 5			
COMPILED <i>[Signature]</i>	CHECKED <i>[Signature]</i>	TITLE:	
APPROVED <i>[Signature]</i>			

AUTOMATIC CHANGEOVER FROM EXTERNAL
1 MC. STANDARD TO INTERNAL 1 MC
STANDARD.
(KIT - 216)

DATE _____

SHEET 2 OF 5

TMC SPECIFICATION NO. S 922

E


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TITLE: AUTOMATIC CHANGOVER FROM EXTERNAL 1 MC STANDARD


 APPROVED

TO INTERNAL 1 MC STANDARD. (TMC NO. KIT-216).

I. EQUIPMENT AFFECTED:

A. TMC MODEL HFS-1, Controlled Synthesizer and Standard.

II. PURPOSE:

- a) Modification of HFS-1, Controlled synthesizer and Standard to provide automatic changeover upon loss of external frequency standard input.

III. MATERIALS SUPPLIED IN KIT:

<u>ITEM NO.</u>	<u>AMOUNT</u>	<u>DESCRIPTION</u>
1	one ea.	TMC NO. AX-546, 1 MC Changeover unit.
2	one ea.	TMC NO. HG-625/U, BNC JACK
3	one ea.	TMC NO. EY-102-2, grommet
4	four ea.	TMC NO. SCBP0632BN6, Mach Screw.
5	four ea.	TMC NO. LWE 06MRN, washer, split
6	four ea.	TMC NO. FW 06HBN, washer, flat.
7	four ea.	TMC NO. NTH 0632BN8, Nut, hex
8	one ea.	TMC NO. CA-1049 power cable.
9	one ea.	7/16" Drill Bit.
10	one ea.	5/16" Drill Bit.
11	one ea.	11/64" Drill Bit.
12	one ea.	TMC NO. TP-131-1-J3035, Stamp, Rub. -Fxd.
13	one ea.	TMC NO. CA 480-3-9 coaxial inter. cable.
14.	one ea.	TMC NO. CA-480-3-9 coaxial inter, cable.
15.	one ea.	TMC NO. NP-362-27, Name Plate
16.	one ea.	STAMP PAD

IV. TOOLS REQUIRED:

To be supplied by the installing activity.

1. Soldering iron, small and 1 foot solder.
2. Pliers, 6" DIAGONAL
3. Pliers, 6" LONGNOSE
4. Screwdriver, 6" Phillips
5. 6" steel rule or equivalent

PROCEDURE:

1. Remove all power from HFS unit by removing Plug, J-3001 from rear of HFS.
2. Remove Top and Bottom covers of HFS.
3. Remove C-3001 (plug in electrolytic capacitor) from socket and SAVE.

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SHEET 3 OF 3

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TO INTERNAL 1 MC STANDARD, (TMC NO. KIT - 216).

PROCEDURES:

4. Remove cable from J-3107 and unsolder other end of this cable from J-3020 (located inside, rear of HFS panel). CABLE NO LONGER USED.
5. Drill a 7/16" hole with item #9 supplied in kit; refer to Figure #1 for proper hole location.
6. Measure the cable that connects to P3009 to a length of 23" from P3009 and cut the RG-174/u cable at this point.
7. Install item #2 in location of hole drilled in Step #5 and with item #12 supplied in kit, stamp J-3035 below item #2.
8. Strip both cut ends of the RG-174/u cable, cut in Step #6, to a length of 1 1/2", leaving braid intact for pigtailling.
9. Connect the Stripped end of the 23" length of cable, measured in Step #6 to item #2 installed in Step #7 (BRAID TO GROUND).
10. Connect the remaining loose end of the stripped RG-174/u to J-3020 (The JACK from which the cable was unsoldered in Step #1) (BRAID TO GROUND).
11. Drill four 11/64" holes with item #11 supplied in kit; refer to Figure #1 for proper hole location.
12. Drill one 5/16" hole with item #10 supplied in kit; Refer to Figure #1 for proper hole location.
13. Insert item #3 supplied in kit, into hole drilled in Step #12.
14. Connect item #8 supplied in kit, to item #1 supplied in kit. as follows:
 - a) Connect one end of the Orange wire, to the stamped 24VDC Terminal (located inside AX-546).
 - b) Connect one end of black wire to the ground lug (located inside AX-546).
15. Viewing the HFS from the rear of the Unit, Insert the loose ends of item #8 through the grommet installed in Step #13 and Install item #1 on the rear of the HFS unit, using items #4 #5, #6, and items #7 supplied in kit; using the holes drilled in step #11. (Refer to FIGURE #1).
16. Insert item #8, loose ends just routed through grommet in Step #15 through the grommet (located just below J-3001) and route under chassis to J-3003.
17. Connect & solder the orange wire of item #8 to Pin #4 of J-3003 (NOTE: There will now be 2 orange wires on Pin #4) and the black wire of item #8 to Pin #3 (ground) of J-3003.
18. Place S-3102 (INT/EXT SW) in INTERNAL POSITION AT ALL TIMES WHEN USED WITH MOD. KIT # 216.
19. Remove all metal drilling particles from inside of HFS.
 - a) Replace C-3001 (plug in electrolytic capacitor) removed in Step #3, in socket.

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<i>Jimmy</i> COMPILED	CHECKED	TITLE: AUTOMATIC CHANGEOVER FROM EXTERNAL 1 MC STANDARD TO INTERNAL 1 MC STANDARD, (TMC NO. KIT-216).	
APPROVED			

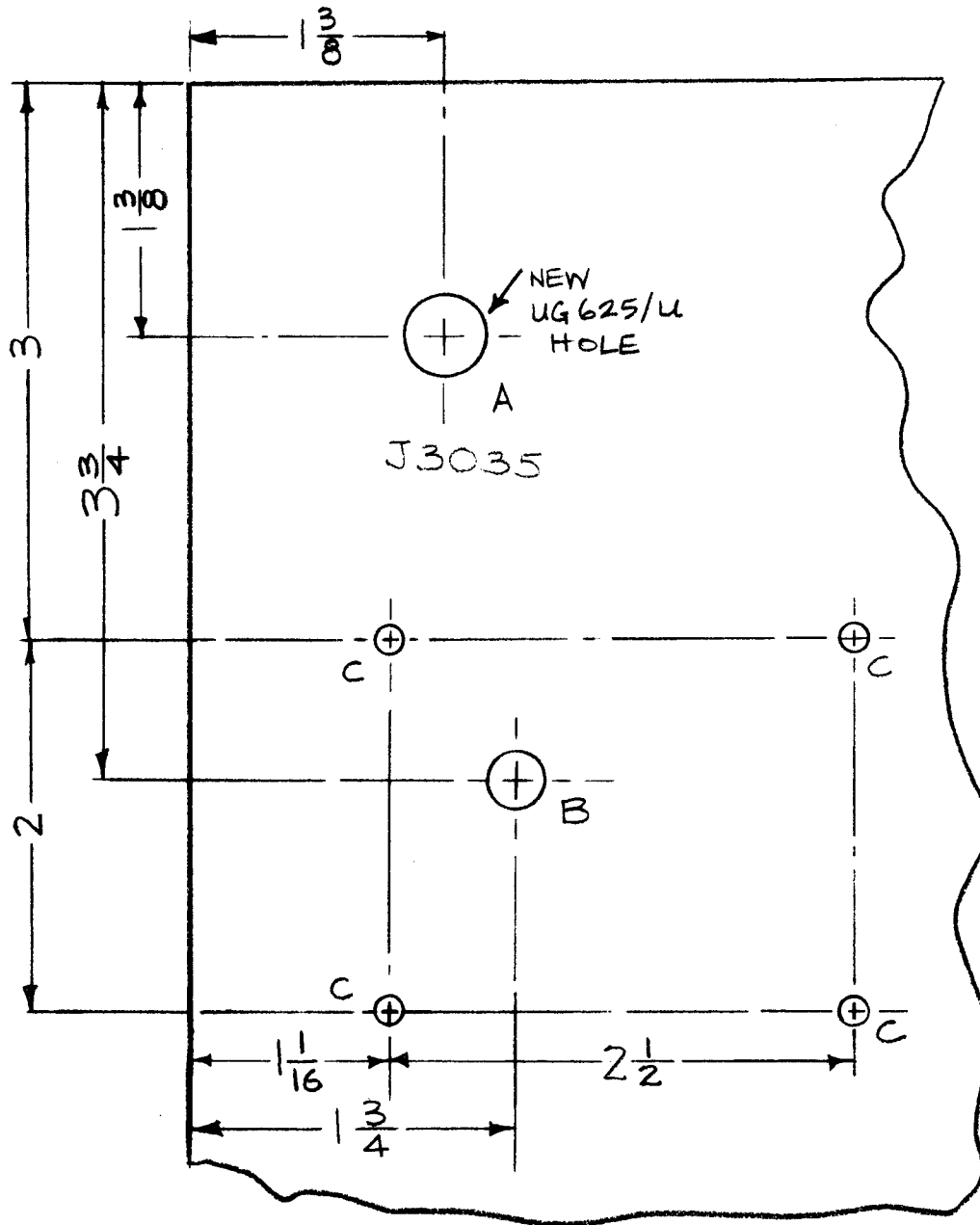
20. Replace Top & Bottom Covers of HFS.
21. Connect item #13 to J-3035 of HFS and J3 (INT,STD IN) of AX-546.
22. Connect item #14 to J-3020.
of HFS and J2 (1 MC OUT) of AX-546.
23. Reconnect Plug to J-3001 of HFS unit.
24. This completes TMC KIT NO. 216 modification of your HFS-1 unit.
25. Apply item #15 directly below name plate of HFS.

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F.B. APPROVED R.D.C.		TO INTERNAL 1 MC STANDARD, (TMC NO. KIT-216)	

FIGURE #1

HFS REAR PANEL

VIEWING UNIT FROM REAR (TOP) OF UNIT.



HOLE LEGEND

A = 7/16 (.437)

B = 5/16 (.312)

C = 11/64 (.171)

