

TMC SPECIFICATION

NO. S-1159

REV:

COMPILED:

CHECKED:

APPD:

SHEET

1

OF

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TITLE:

jb 11/21/66

KIT 315

NOT RECOMMENDED FOR ACCOMPLISHMENT IN THE FIELD

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I. Equipment affected:

A. SBT-1K

II. Purpose

A. To operate with a KMCU or a TIS in existing system.

III. It can be determined if this modification has been completed by noting if the rear of APP-4A has 3 barrier strips in place of 2; also the addition of R.F. Monitor on the rear of RFD-1A.

IV. Materials supplied in Kit:

A. Parts required to modify APP-4 to APP-4A.

Item No.	TMC Part No.	Qty.	Description
1.	LD2163/MS5083	1	CHASSIS, WRAP AROUND
2.	LD2164/MS5084	1	DIVIDER, COMP. MTG.
3.	LD2167/MS2484	1	COVER, TOP
4.	CA1267	1	CABLE, HARNESS ASSY.
5.	TM100-16	1	
6.	PX337-16	1	
7.	MS154-1	2	
8.	CK70AW102M	7	CAPACITOR, FEED THRU
9.	CL140-2	7	
10.	SCBPO440BN9	4	SCREW, MACHINE
11.	LWE04MRN	4	LOCKWASHER, EXTERNAL
12.	NTH0440BN8	4	NUT, HEXAGON
13.	UG625*/U	1	CONNECTOR, R.F.

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Item No.	TMC Part No.	Qty.	Description
14.	CC109-1	1	CAPACITOR
15.	✓ CM20B901J <i>CM15F</i>	1	CAPACITOR, MICA
16.	TE149-120 <i>431J03</i>	1	LUG, SOLDER
17.	PX100-1-.186	105"	INSULATION, SLEEVING
18.	TE102-2	1	TERMINAL, INSULATED
19.	SCBP0440BN4	1	SCREW, MACHINE
20.	LWE04MRN	1	LOCKWASHER, EXTERNAL
21.	MWC22(7)U6	45"	CABLE, INSULATED
22.	CD101-1MW	24"	CORD, LACING
23.	15/32 DRILL BIT	1	
24.	1/8 DRILL BIT	1	
25.	MWC22(7)U94	186"	124" CA1277; 62" CA1276
26.	U95	172"	110" CA1278; 62" CA1276
27.	U96	62"	CA1276
28.	U98	62"	CA1276
29.	U3	62"	CA1276
30.	MWC22(7)U4	62"	CA1276
31.	MWC22(7)SJ2	75"	CABLE, INSULATED, SHIELDED
32.	MWC22(7)U97	62"	CA1276
33.	MWC22(7)U90	172"	110" CA1278; 62" CA1276
34.	MWC22(7)U92	62"	CA1276
35.	TM105-14AR	1	FANNING, STRIP
36.	CU102-5	1	CLAMP, G TYPE

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Item No.	TMC Part No.	Qty.	Description
37.	SCBP0632BN6	1	SCREW, MACHINE
38.	LWE06MRN	1	LOCKWASHER, EXTERNAL
39.	NTH0632BN8	1	NUT, HEXAGON
40.	PX100-1-.294	35"	INSULATION, SLEEVING
41.	PX100-1-.118	180"	INSULATION, SLEEVING
42.	PX100-1-.263	12"	INSULATION, SLEEVING
43.	TE120-2	1	LUG, SPADE
44.	MWC22(7)U93	124"	CA1277 INSULATION, SLEEVING
45.	PL105-1	1	
46.	MWC22(7)U1	110"	CA1278 CABLE, INSULATED
47.	MWC22(7)U7	110"	CA1278 CABLE, INSULATED
48.	MS3106A14S-2S	1	
49.	MS3057-6	1	
50.	MS3024-6A	1	
51.	CK-1204	1	SCHEMATIC, APP-4A
52.	3/16" DRILL BIT	1	
53.	J203	1	STAMP
54.	STAMP PAD (BLACK)	1	
55.	MONITOR	1	STAMP
56.	CU142-2-9	16	TIE WRAP

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V. TOOLS REQUIRED

To Be Provided By Installing Activity:

1. Screwdriver Set (Phillips)
2. Electric Drill Motor, 1/2" chuck capacity

VI. PROCEDURE:

CAUTION -----CAUTION -----CAUTION

Remove A.C. Input To System Before Proceeding
With Modification.

1. Preparation For Modification.
 - A. Disconnect and remove APP-4
 - B. Disconnect and remove RFD-1B
 - C. Disconnect and remove PS4-A
2. Steps to Modify APP-4 to APP-4A
 - A. Unsolder all leads to E501 and E502; all leads on C501 to C520; all leads on CA-585(discard CA585).
 - B. Remove existing wrap around (LD875/MS2489) and center chassis (LD876/MS2491)
 - C. Remove all gromets and terminal strips(E501 and E502) on wrap around (LD875/MS2489) and put on new wrap around Item 1 (LD2163/MS5083) using existing hardware, ground wires and terminal strip insulators.
 - D. Remove all capacitors and solder lugs on center chassis (LD876/MS2491) and assemble to new divider chassis Item 2 (LD2164/MS5084) C501 to C520.
 - E. Assemble Item 5 (TM100-16); Item 6 (PX337-16); Item 7 (MS154-1); Item 10 (SCBP0440BN9); Item 11 (LWE04MRN) and Item 12(NTH0440BN8) to LD2163/MS5083 reference symbol E503; assemble Item 4 (CA1267) using existing hardware to J501.
 - F. Assemble Item 8 (CK70AW102M) to LD2164/MS5084 reference symbols C525 to C531.
 - G. Assemble Item 2(LD2164/MS5084) to Item 1(LD2163/MS5083) using existing hardware.

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- H. Wire as per (CK-) Item 51; using Item 9 (CL140-2) 7 pcs.
- I. Drill hole on existing bottom cover (MS2485) using 3/16" drill bit (Item 52); looking at cover as it goes on the unit from the rear drill a hole 2 1/2" on center line from the middle hole; put bottom cover on using existing hardware.
- J. This completes modification of APP-4 to APP-4A; install unit in rack and connect cable wires to APP-4A; install item 3 (LD2167/MS2484) top cover using existing hardware.

3. Steps To Modify RFD-1B

- A. drill hole on existing rear plate (LD948/MS2610) of RFD-1B; from bottom of rear plate drill hole 4 5/8" on center line of J202 using Item 23 (15/32" drill bit).
- B. Assemble Item 13 (UG625*/U) To Rear Plate
- C. Remove Lower Right Screw On J202 (Looking at set from rear) and assemble Item 16 (TE149-120) using existing hardware.
- D. Using Item 53 (J203), Item 54 (stamp pad) and Item 55 (MONITOR) stamp new hole J203 MONITOR
- E. Wire Item 14 (CC109-1) and Item 15 (CM20B901J) as per CK- RFD-1B

4. Steps To Modify PS4-A

- A. Remove potentiometer chassis (Located on rear of front panel); remove R703 and unsolder ground end of R704; drill a hole using Item 24 (1/8" drill bit), measure 1 3/4" from left side and 1/2" from bottom (lettering facing you.)
- B. ~~R~~-install R703 and assemble Item 18 (TE102-2) using Item 19 (SCBP0440BN4) and Item 20 (LWEO4MRN).
- C. Using Item 21 (MWC22(7)U6) wire one end to E701 Pin 10 and place along existing cable (CA624) till other end reaches potentiometer chassis; solder loose end

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of R704 and Item 21 (MWC22(7)U6) to Item 18 (TE102-2); replace potentiometer chassis using existing hardware, spot tie loose wire with Item 22 (CD101-1MW).

5. Steps to Modify CA596

A. Add the following wires from existing P609:

Item 25 (MWC22(7)U94)	62"	Pin C	NOTE: before soldering wires to respective pins cut 7 pieces of Item 41 (PX100-1-.118) 1/2" length and slip over connections after soldering.
Item 26 (MWC22(7)U95)	62"	Pin E	
Item 27 (MWC22(7)U96)	62"	Pin I	
Item 28 (MWC22(7)U98)	62"	Pin T	
Item 32 (MWC22(7)U97)	62"	Pin U	
Item 33 (MWC22(7)U90)	62"	Pin V	
Item 34 (MWC22(7)U92)	62"	Pin W	

Item 42 (PX100-1-.263) and slip over wires after putting P609 together; cut a hole in Item 42 (PX100-1-.263) 8" from P609 end and slip Item 31 (MWC22(7)SJ2) 10" thru hole.

B. Slip Item 40 (PX100-1-.294) over the wires and insert the following wires to be wired from Item 35 (TM105-14AR) KMCU location:

Item 29 (MWC22(7)U3) 62"
Item 30 (MWC22(7)U4) 62"

C. Solder The Following Wires To Item 35 (TM105-14AR)

Item 25 to Pin #1
Item 26 to Pin #2
Item 27 to Pin #3
Item 32 to Pin #4
Item 29 to Pin #5
Item 30 to Pin #6
Item 31 to Pin #9 and shield to #10
Item 28 to Pin #12
Item 33 to Pin #13
Item 34 to Pin #14

Using 1 each of Item 37 (SCBP0632BN6), Item 36 (CU102-5), Item 38 (LWE06MRN), Item 39 (NTH0632BN8) assemble to Item 35 (TM105-14AR).

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D. Put Item 29 (MWC22(7)U3) and Item 30 (MWC22(7)U4) through Item 41 (PX100-1-.118) 45" long and wire to existing plug (P626) Item 29 to Pin J; Item 30 to Pin K (cut 1/2" of Item 41 (PX100-1-.118) and slip on wires before soldering to pins on plug.)

E. Cut 9" of Item 41 (PX100-1-.118) and slip on loose end of Item 31 (MWC22(7)SJ2); terminate shield of Item 31 and crimp lead to Item 43 (TE120-2) Use 4 pieces Item 56 (CU142-2-9) and tie cable from APP-4A to KMCU to existing cable.

6. Steps To Modify CA595

A. Add these wires to existing TM105-11-AL, Item 46 (MWC22(7)U1) 110" to Pin #7; Item 47 (MWC22(7)U7) 110" to Pin #6; Item 33 (MWC22(7)U90) 110" to Pin #2; Item 26 (MWC22(7)U95) 110" to Pin #1; slip Item 17 (PX100-1-.186) 105" over these 4 wires; slip Item 49 (MS3057-6) and Item 50 (MS3024-6A) over these 4 wires; cut 4 pieces of Item 41 (PX100-1-.118) 1/2" lengths and slip over wires before soldering to Item 48 (MS3106A14S-2S).

Item 46 to Pin A
Item 47 to Pin B
Item 26 to Pin C
Item 33 to Pin D

Use 3 pieces of Item 56 (CU142-2-9) and tie this cable along existing CA595 from fanning strip 26".

7. Steps To Modify CA597

A. Add these wires to existing plug:

Item 25 (MWC22(7)U94) 124" to Pin J
Item 44 (MWC22(7)U93) 124" to Pin K

NOTE: before soldering wires to respective pins cut 2 pcs. of Item 41 (PX100-1-.118) 1/2" length and slip over connections after soldering.

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After wiring to plus slip 120" of Item 41
(PK100-1-.118) over these wires and place along
existing CA597 to junction of breakout of CBE and
CMO.

- B. Wire Item 25 (MWC22(7)U94) to Pin #1 of Item 45
(PL105-1).
Wire Item 44 (MWC22(7)U93) to Pin #2 of Item 45
(PL105-1).
- C. Use 9 pieces of Item 56 (CU142-2-9) and tie along
cable from plug to junction of CBE and CMO.