

TMC SPECIFICATION

NO. S 1038

REV: QABCOMPILED: BMCHECKED: LSAPPD: 11/18/05

SHEET 1 OF 5

TITLE: CONVERSION OF CSS-1B TO CSS-4, CSS-3B

I. PARTS AFFECTED

A. FOR CSS-4 & CSS-3B ADD THE FOLLOWING ITEMS.

- (1) 1 each LD2010/MS4801; FRONT PANEL (If avail. See Note).
- (2) 1 each LD2009/MS4805; REAR PLATE (If avail.).
- (3) 1 each LD2018/MS4806; MAIN CHASSIS (If avail.).
- (4) 1 each MS4761; TOP COVER (If avail.).

NOTE: IF ANY OF THE ABOVE ITEMS ARE NOT AVAILABLE, SEE THE MODIFICATION INSTRUCTIONS FOR THE ORIGINAL PIECES.

- (5) 1 each LD2019/MS4807; PLATE,ALARM SWITCH:(If LD2018/MS4806 MAIN CHASSIS not avail.).
- (6) 1 each BI110-7; LAMP,INCANDESCENT; I605.
- (7) 1 each BZ101; ALARM, **DS601**.
- (8) 3 each JJ325; CONN,RECP, BNC TYPE; J601, 602, 604.
- (9) 2 each MS154-1; PLATE,STRADDLE.
- (10) 1 each NP102-58; NAMEPLATE.
- (11) 1 each PX337-2; INSULATION,TERM.BD.
- (12) 3 each RC20GF470J; RES,COMP,FXD; R630, 631, 632.
- (13) 1 each ST-22N; SWITCH,TOGGLE,DPDT; S605.
- (14) 1 each TM100-2; TERMINAL BOARD; TB601.
- (15) 1 each TS106-3; LIGHT,INDICATOR W/GREEN LENS; XI602.
- (16) 1 each TS153-1; LIGHT,INDICATOR W/RED LENS; XI605.
- (17) 4 each SCBP0440BN10; SCREW,MACHINE.
- (18) 2 each LWE04MRN; LOCKWASHER,EXT.
- (19) 2 each NTH0440BN6; NUT,HEX.
- (20) 3 each TE129; TERMINAL LUG.

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- (21) 1 each CA1185; CABLE,SPECIAL PURPOSE.
- (22) 1 each CA1186; WIRING HARNESS,BRANCHED.
- (23) 2 each CA409-22-3.00; CABLE ASSY, JUMPER.
- (24) 1 each a.) KIT-215 (CSS-4) S921 OR
b.) KIT-270 (CSS-3B) S1026

B. FOR CSS-4 & CSS-3B, DELETE THE FOLLOWING ITEMS FROM THE CSS-1B.

- (1) 1 each LD722/MS2185; FRONT PANEL (If applicable - See Note Above)
- (2) 1 each LD730/MS2184; REAR PLATE (If applicable).
- (3) 1 each LD1051/MS2833; MAIN CHASSIS (If applicable).
- (4) 1 each MS2367; TOP COVER (If applicable).
- (5) 2 each FC102-1-XX-N; FUSE CLIP.
- (6) 1 each FU102-1; FUSE CART. 1A.
- (7) 1 each NP103-61; NAMEPLATE.
- (8) 1 each TS106-1; LIGHT,INDICATOR W/RED LENS; XI602.
- (9) 3 each UG625*/U; CONN.COAX.FML; J601, 602, 604.
- (10) 2 each TE111-2; TERM.LUG.
- (11) 2 each SCBP0440BN4; SCREW,MACHINE.

II. MODIFICATION OF PARTS.

A. FRONT PANEL- IF LD2010/MS4801 IS NOT AVAILABLE, MODIFY LD772/MS2185 USING THE FOLLOWING PROCEDURES.

- (1) Remove the panel from the unit.
- (2) Remove the components and hardware attached to the panel.
- (3) Machine the panel to conform to MS4801. This calls for changing the jack holes, the nameplate holes and adding the holes for the alarm light and alarm.

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B. REAR PLATE- IF LD2009/MS4805 IS NOT AVAILABLE, MODIFY LD730/MS2184 USING THE FOLLOWING PROCEDURE.

- (1) Remove the panel from the unit.
- (2) Remove the components and hardware attached to the panel.
- (3) Machine the panel to conform to MS4805. This calls for changing 1 jack hole, deleting one spare fuse holder and adding a terminal strip.

C. MAIN CHASSIS- IF LD2018/MS4806 IS NOT AVAILABLE, MODIFY LD1051/MS2833 USING THE FOLLOWING PROCEDURE.

- (1) Machine the chassis to conform to MS4806. This calls for adding a hole for S605, and adding a notch to clear the terminal strip.

D. TOP COVER- IF MS4761 IS NOT AVAILABLE, MODIFY MS2367 USING THE FOLLOWING PROCEDURE.

- (1) Machine the cover to match MS4761. This calls for adding the cutout.

III. MODIFICATION OF UNIT.

The following modification procedure will apply to a CSS-1B unit which has had the new metal work or the modified metal work reassembled with all hardware and components remounted with the exception of the deleted parts.

A. INSTALLATION OF KIT-215, KIT-270. (Whichever applicable).

- (1) Following the procedures outlined in S921 or S1026, connect the kit to the CSS-1B with the exception of the reassembly of the AX546 or AX619, the mounting of MS4339, Mounting Plate and the remounting of the terminal board A2352 in the main chassis.
- (2) For a CSS-4 a KIT-215 (AX546) should be used. For a CSS-3B a KIT-270 (AX619) should be used.

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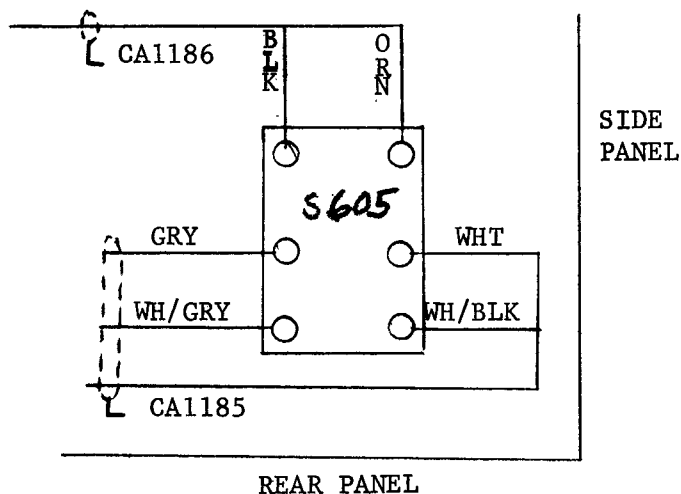
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B. INSTALLATION OF NEW PARTS.

- (1) Viewing the CSS-1B from the underside of the main chassis, cut a small opening in the sleeving of CA1050 (P/O KIT) about 2 inches from the grommet. Feed the 10 inch lengths of white & gray wires of CA1185 through this opening into the AX546 or AX619 unit. Pull the 2 wires through until the tubing of CA1185 is next to the tubing of CA1050.
- (2) In the AX546 or AX619 unit slip back the tubing on the gray and white wires connected to terminals 8 & 9 respectively, of the socket for K1. Feed the wires of CA1185 through the tubing and solder the wires to the socket, gray on 8, white on 9. Replace the tubing.
- (3) Now assemble and mount the AX546 or AX619 unit as per instructions in the related specification. Remount A2352 in the main chassis making sure that no wires are pinched beneath the board. CA1185 is run along the rear panel toward the switch hole.
- (4) Mount the DPDT switch on the main chassis using LD2019/MS4807 if necessary.
- (5) Mount the TM100-2, PX337-2 and the MS154-1 using the 4 screws provided and using the nuts and washers provided and the nuts and washers that were used to mount the deleted fuse clips.
- (6) On CA1185, solder the white/gray wire to terminal 1 and the white/black wire to terminal 2 of the terminal strip. On the switch, connect the gray wire to the wiper contact, the white wire to the opposite wiper contact, the white/gray wire to the contact toward the rear panel on the same side as the gray wire, and the white/black wire to the rear contact on the same side as the white wire.



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- (7) On the rear panel, the UG625/U jacks should be mounted with TE111-2 lugs in the holes for J606, 603. Mount a JJ325 with a TE129 in the hole for J602. The terminal of the jack should face into the unit away from the bottom cover. The tab of the lug should face toward J606. Bend up the end and solder a 47 ohm resistor between the lug and the terminal of the JJ325. Connect the coaxial cable and the jumper to the center pin being certain there is enough slack so when the pin moves it will not break the connection. Solder the shields to the other lugs.
- (8) On the front panel, mount the JJ325 with the TE129 so that the tab of the lug is facing the side opposite the lettering. The terminal of the jack should face into the unit away from the bottom cover. On J604, connect a 47 ohm resistor to the terminal of the jack and the other end, with the coax shield to the TE129. Connect the center conductor to the pin of the jack. Again make sure there is sufficient slack. On J601 follow the same procedure except on the TE129 connect the ground lead from F602, the shield of the coax, the 47 ohm resistor and the 180 ohm resistor from I601.
- (9) Remove the Frequency Standard. Remove the 4 screws securing the socket plate. Feed the brown and black wires of CA1186 through the grommet and solder the brown wire to the brown wire on terminal 2 of the socket. Solder the black wire to a ground lug on the socket. Replace the socket plate and the Standard.
- (10) On the switch, solder the black wire of CA1186 to the terminal on the same side as the gray and the white/gray wires. Solder the orange wire to the terminal on the same side as the white and white/black wires.
- (11) Run the orange and brown wires of CA1186 between the standoffs and CR601 to the front panel under the present wiring and feed it through the grommet to the top side of the chassis.
- (12) Mount the TS153-2 on the front panel. Solder the brown wire of CA1186 and a CA409-22-3.00 to the terminal closest to the cable. Solder the orange wire and a CA409-22-3.00 to the other terminal. Screw the lugs of the CA409-22-3.00 to the terminals on the BZ101 being certain that the jumper that is connected to the brown wire is connected to the positive side of the BZ101. Mount the BZ101 to the front panel.
- (13) This completes the conversion of the unit.

