



INSTRUCTIONS
FOR
EXTERNAL METERING KITS
OPTIONS 9558, 9559, 9571, 9572, 9590-9593,
9603, 9604, 9726 & 9727
(FOR MASTR® II Stations)

LB14845F
(DF8414)

TABLE OF CONTENTS

| | Page |
|--|------|
| DESCRIPTION | 1 |
| INSTALLATION INSTRUCTIONS | |
| HARNESS 19C320811G4 | 3 |
| 19C320811G5 | 4 |
| 19C320811G6 | 5 |
| 19C320811G12 | 12 |
| OUTLINE DIAGRAMS | |
| METER PANEL 19C320762G1 & G2 | 6 |
| PA COVER 19B227194G1 | 2 |
| METER PANEL 19C320762G1 & G2 | |
| SERVICE SHEET | 7 |
| INSTALLATION INSTRUCTIONS | 8 |
| METERING KIT 19B226293G1-G4 | |
| SERVICE SHEET | 9 |
| INSTALLATION INSTRUCTIONS (19B226293G1-G3) | 10 |
| INSTALLATION INSTRUCTIONS (19B226293G4) | 11 |
| SERVICE SPEAKER 19C320728G3 | |
| SERVICE SHEET | 13 |
| INSTALLATION INSTRUCTIONS | 14 |

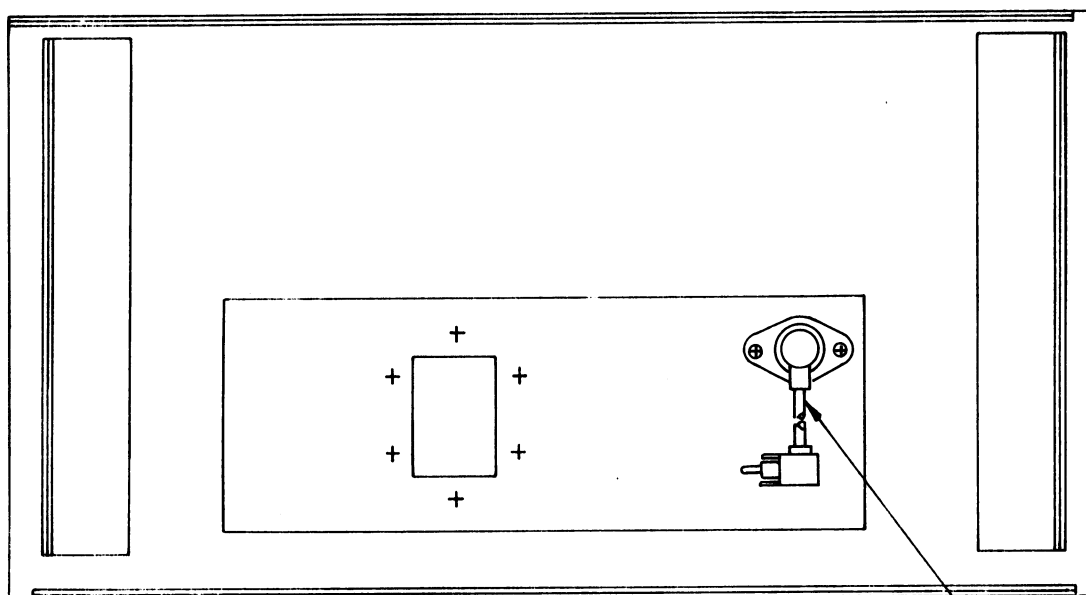
DESCRIPTION

Refer to the chart below for the description of the Panel Meter options with and without speaker for MASTR® II stations.

| OPTION NO. | DESCRIPTION |
|------------|--|
| 9558 | PANEL METERS (2), for low and medium power <u>continuous</u> duty stations with 5th digit R,T,Y,U or V. Adds transmitter and receiver tune-up meters to the external top front panel on a 69" cabinet, relocations the normally furnished internal speaker to the meter panel and provides built-in metering switches. |
| 9559 | PANEL METERS (3), similar to Option 9558 except a third meter is provided for monitoring 121 VAC line voltage. |
| 9590 | PANEL METERS (2), for low and medium power <u>intermittent duty</u> stations with 5th digit R or T, otherwise same as Option 9558. |
| 9591 | PANEL METERS (3), similar to Option 9590 except a third meter is provided for monitoring 121 VAC line voltage. |
| 9571 | PANEL METERS (2) AND SPEAKER, for low and medium power <u>continuous duty</u> stations with 5th digit E,K,J or N. Adds transmitter and receiver tune-up meters and a speaker to the external top front panel on a 69" cabinet and provides built-in metering switches. |



| OPTION NO. | DESCRIPTION |
|------------|--|
| 9572 | PANEL METERS (3) AND SPEAKER, similar to Option 9571 except a third meter is provided for monitoring 121 VAC line voltage. |
| 9592 | PANEL METERS (2) AND SPEAKER, for low and medium power <u>intermittent duty</u> stations with 5th digit K or J. Adds transmitter and receiver tune-up meters and a speaker to the external top front panel on a 69" cabinet and provides built-in metering switches. |
| 9593 | PANEL METERS (3) AND SPEAKER, similar to Option 9592 except a third meter is provided for monitoring 121 VAC line voltage. |
| 9603 | PANEL METERS (2), for 800 MHz floor mount stations. Adds transmitter and receiver tune-up meters to the external top front panel on a 69" cabinet and provides built-in metering switches. |
| 9604 | PANEL METERS (3), similar to Option 9603 except a third meter is provided for monitoring 121 VAC line voltage. |
| 9726 | PANEL METERS (2), similar to Option 9603 except used in 800 MHz 90-Watt Solid State Station. |
| 9727 | PANEL METERS (3), similar to Option 9604 except used in 800 MHz 90-Watt Solid State Station. |



(19B227702, Rev. 0)

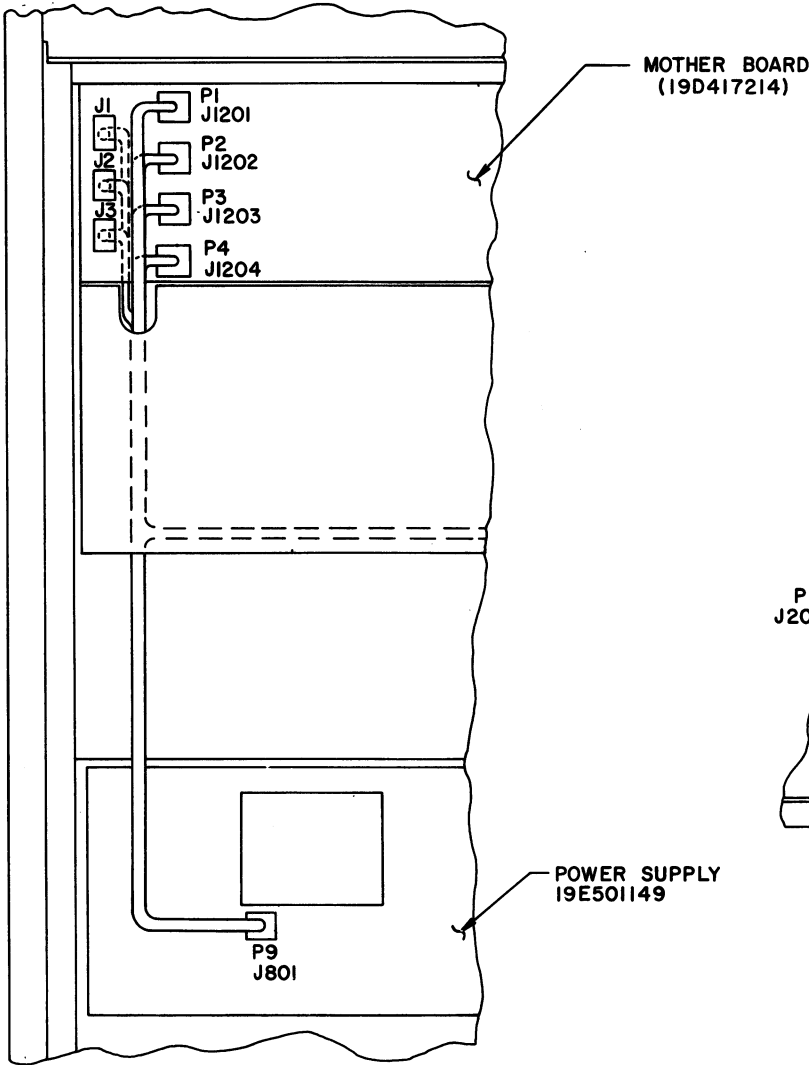
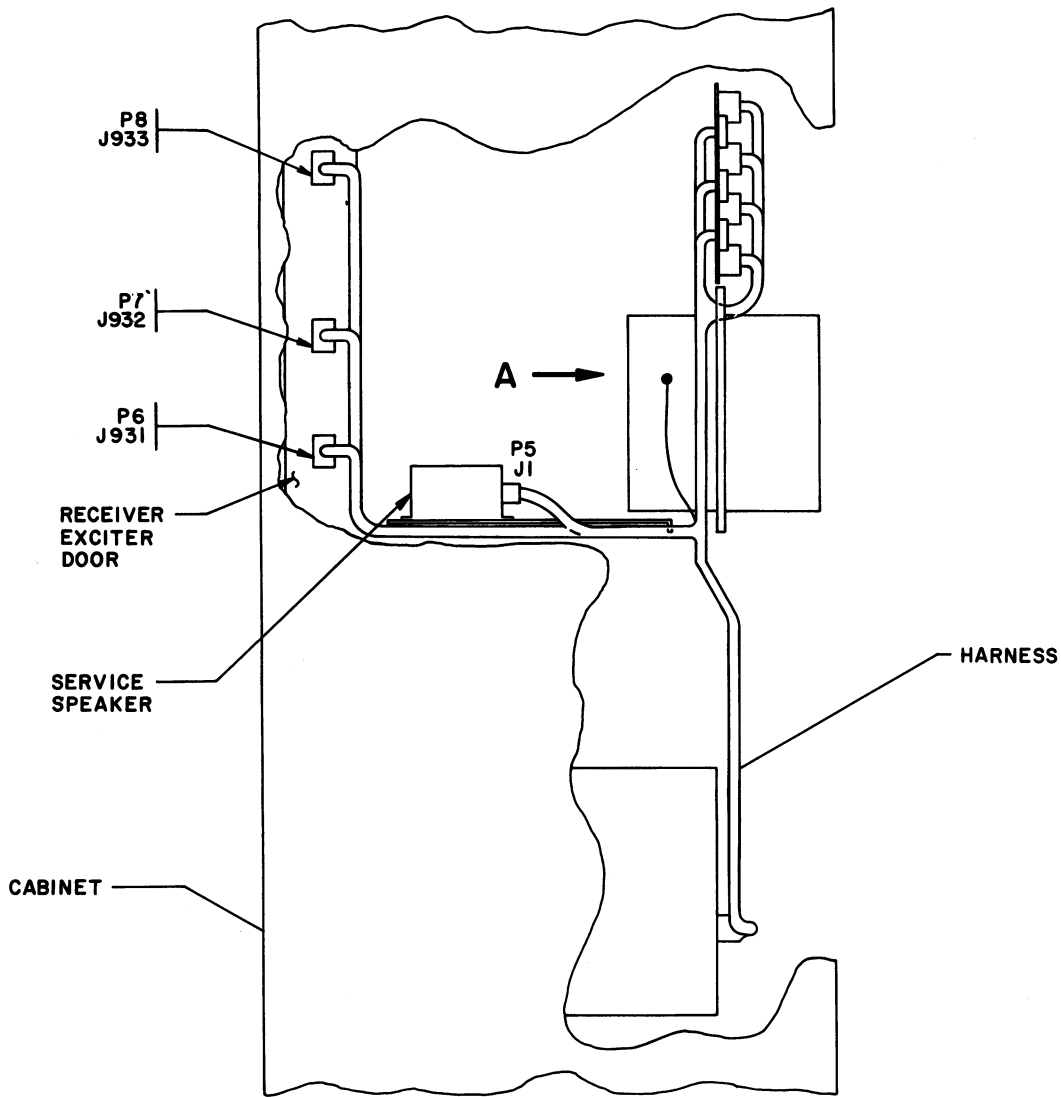
WI (5491689PI04)
RF CABLE

GENERAL ELECTRIC COMPANY • MOBILE COMMUNICATIONS DIVISION
WORLD HEADQUARTERS • LYNCHBURG, VIRGINIA 24502 U.S.A.

OUTLINE DIAGRAM

PA COVER 19B227194G1

GENERAL ELECTRIC*
U.S.A.



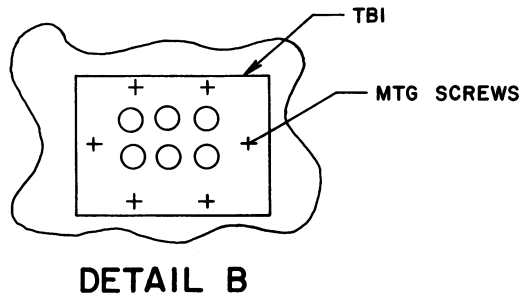
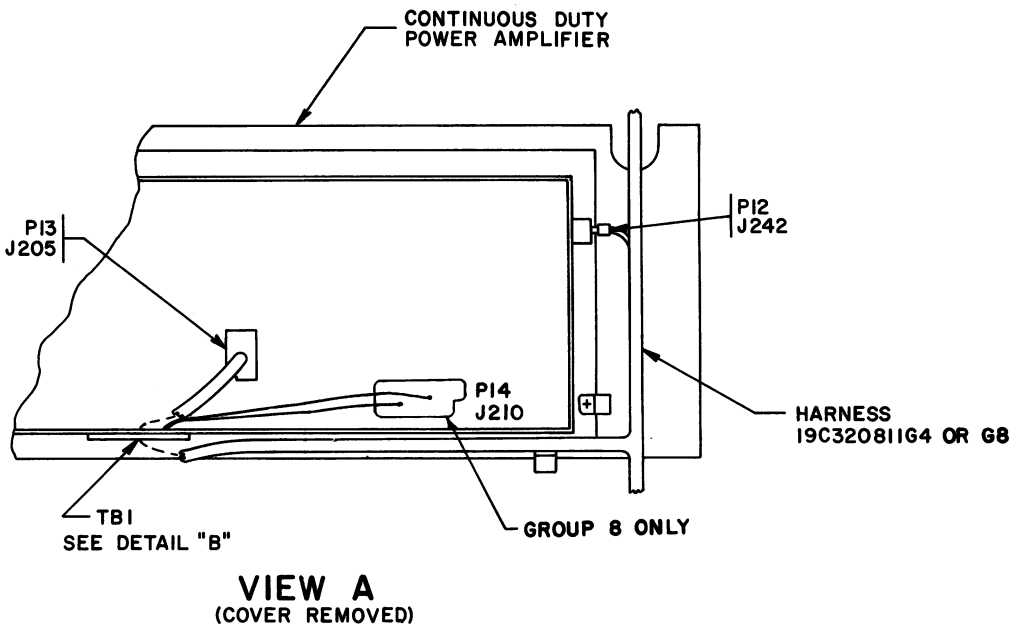
REAR VIEW

(19D417656, Rev. 4)

THESE INSTRUCTIONS COVER THE INSTALLATION OF HARNESS 19C320811G4 OR G8 IN MASTR II STATIONS.

INSTRUCTIONS FOR INSTALLING HARNESS 19C320811G4 OR G8

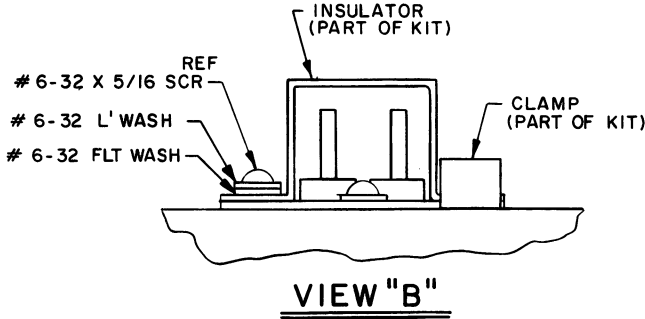
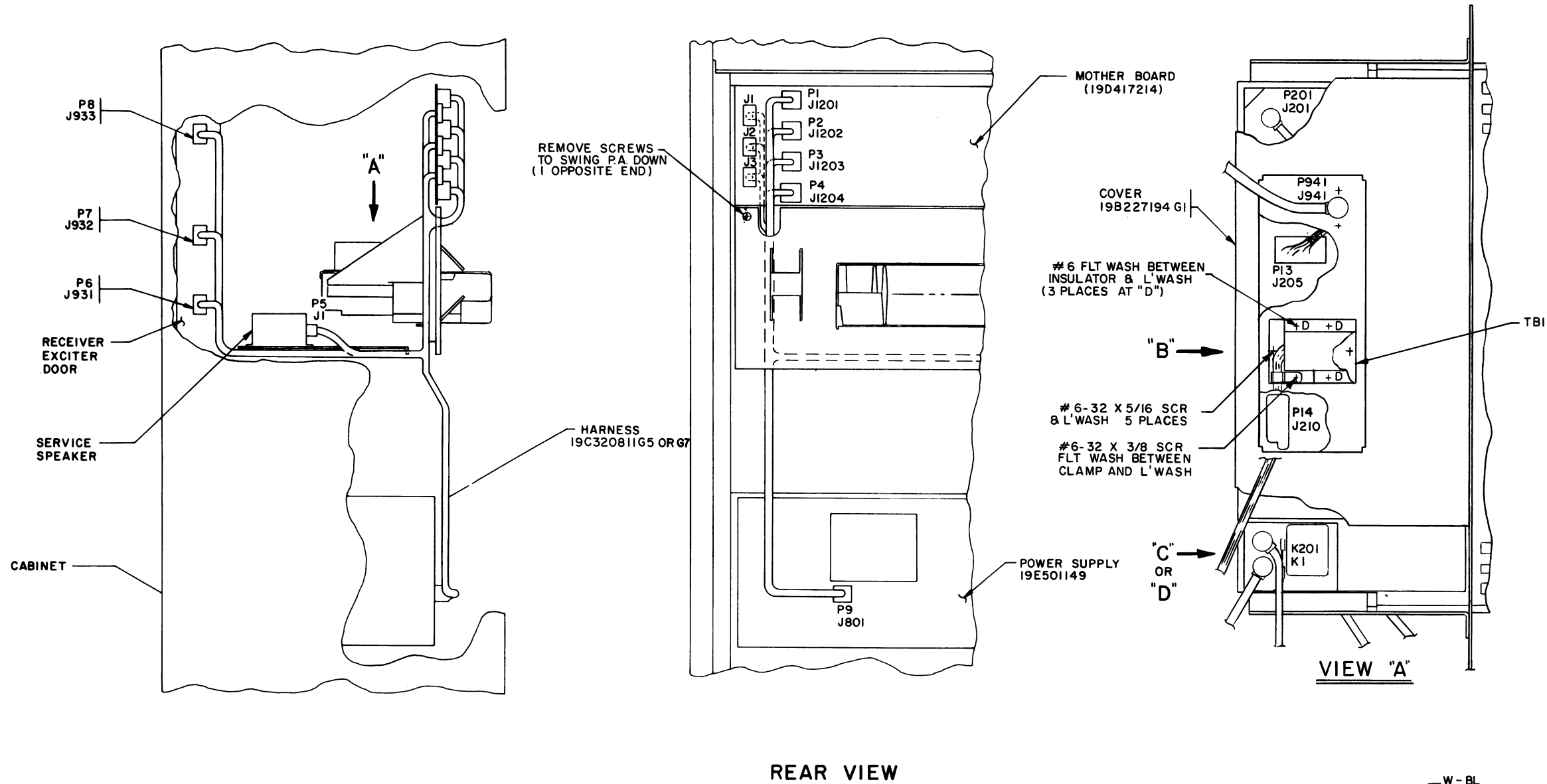
1. REMOVE EXISTING HARNESS.
2. INSTALL HARNESS (PL19C320811G4 OR G8) AS SHOWN.
3. REMOVE COVER FROM POWER AMPL. TO EXPOSE J205 & J210.
4. REMOVE MTG SCREWS AND COVER PLATE FROM POWER AMPL. (SEE VIEW A). INSTALL TBI USING SAME SCREWS.



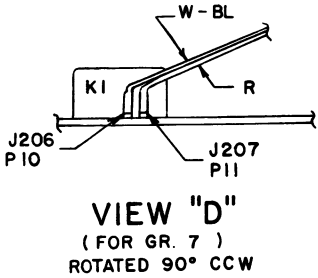
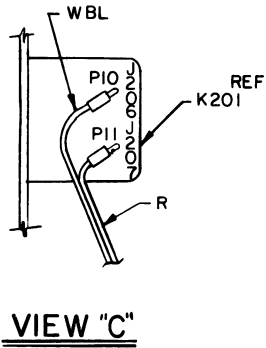
DETAIL B

INSTALLATION INSTRUCTIONS

HARNESS 19C320811G4



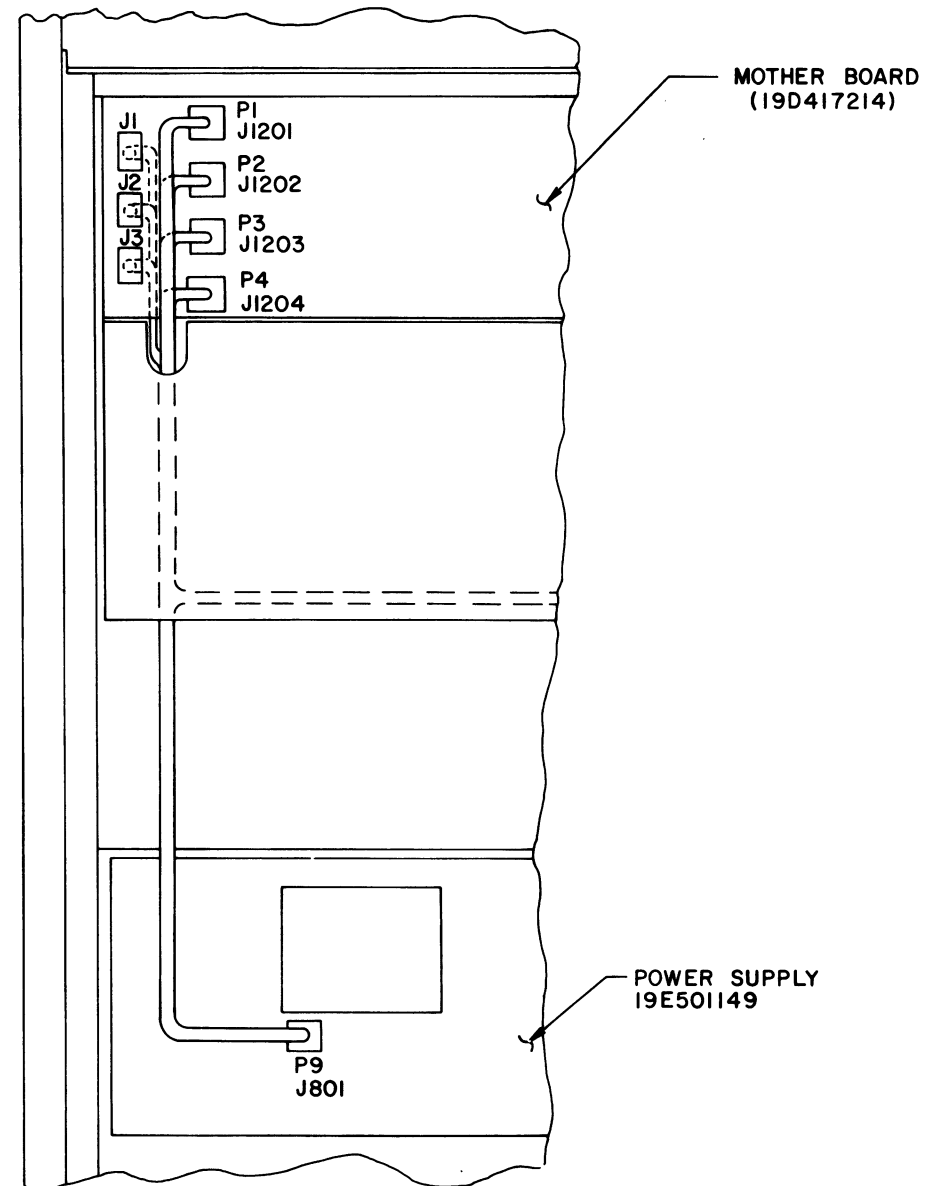
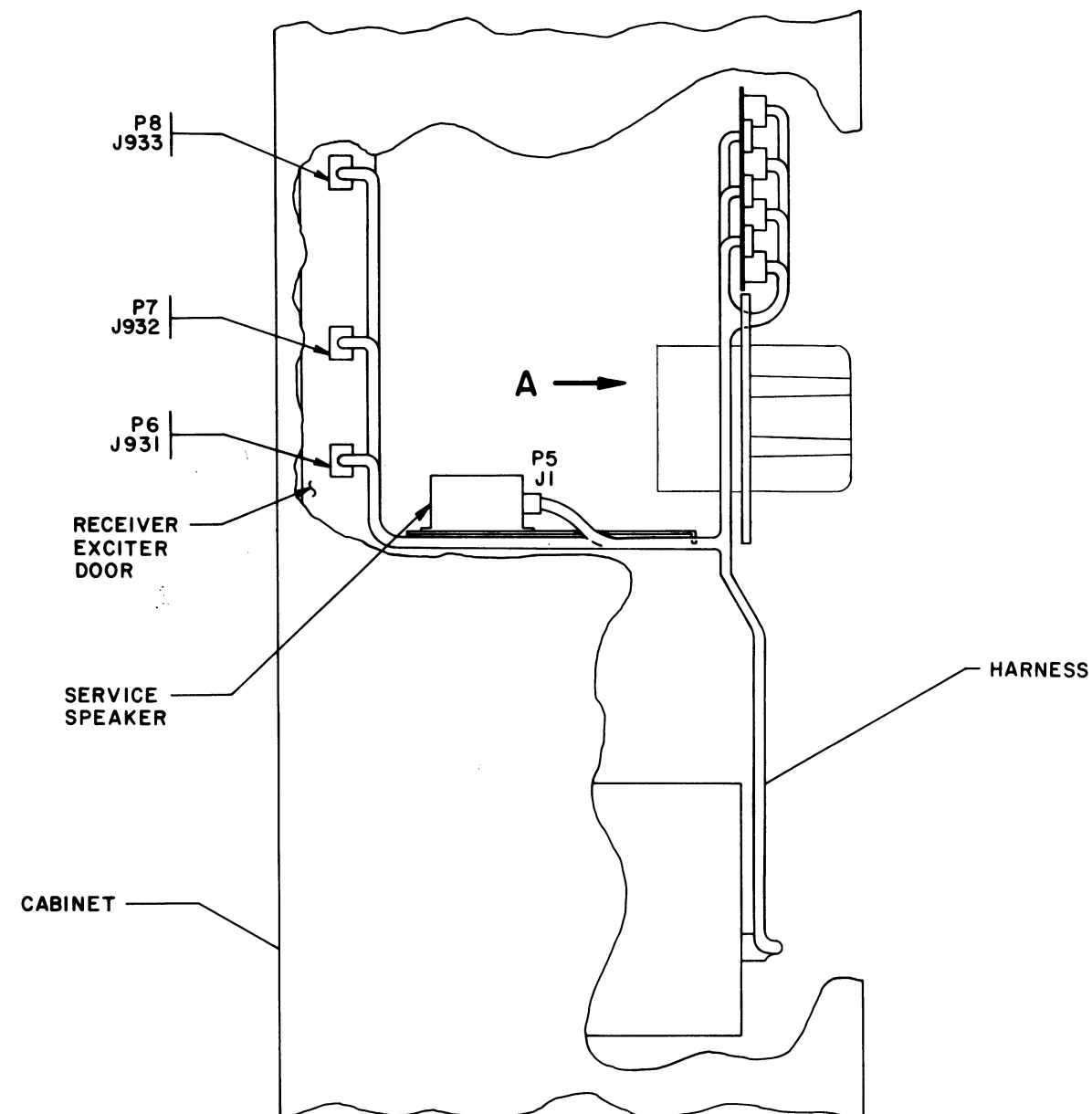
- ① THESE INSTRUCTIONS COVER THE INSTALLATION OF THE 19C320811G5 OR G7 METERING HARNESS, 19A130914G1 INSTALLATION KIT & THE 19B227194G1 PA COVER IN THE INTERMITTENT DUTY MASTR II STATION.
- PROCEDURES:
1. REMOVE 2 SCREWS AND SWING P.A. DOWN.
 2. REMOVE EXISTING HARNESS.
 3. REMOVE EXISTING P.A. COVER.
 4. INSTALL 19C320811G5 OR G7 HARNESS, MOUNT TBI AND 19B227194G1 INSULATOR ON 19B227194G1 COVER AS SHOWN USING PARTS FROM INSTALLATION KIT.
 5. PLUG P13 INTO J205 AND P201 INTO J201, AND P14 INTO J210.
 6. INSTALL COVER ON P.A. AND PLUG P941 INTO J941.
 7. PLUG P10 (WBL WIRE) ONTO J206 AND P11 (R WIRE) ONTO J207.
 8. HINGE P.A. UP AND RE-INSTALL 2 SCREWS TO SECURE IN POSITION.



INSTALLATION INSTRUCTIONS

HARNESS 19C320811G5

(19D423676, Rev. 3)

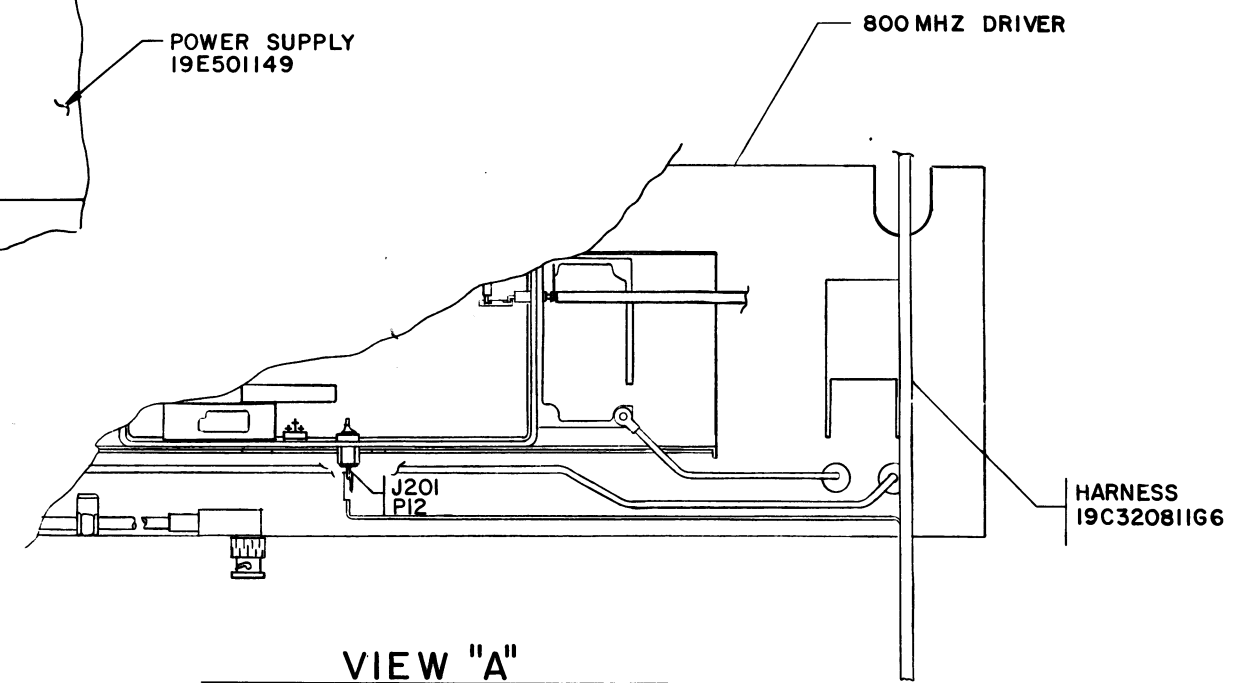


REAR VIEW

1 THESE INSTRUCTIONS COVER THE INSTALLATION OF HARNESS 19C320811G6 IN MASTR II STATIONS

INSTRUCTIONS FOR INSTALLING HARNESS 19C320811G6

1. REMOVE EXISTING HARNESS.
2. INSTALL HARNESS (PL19C320811G6) AS SHOWN.



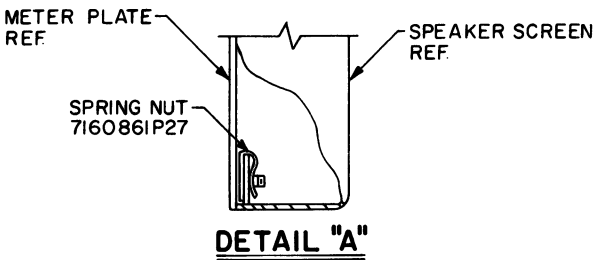
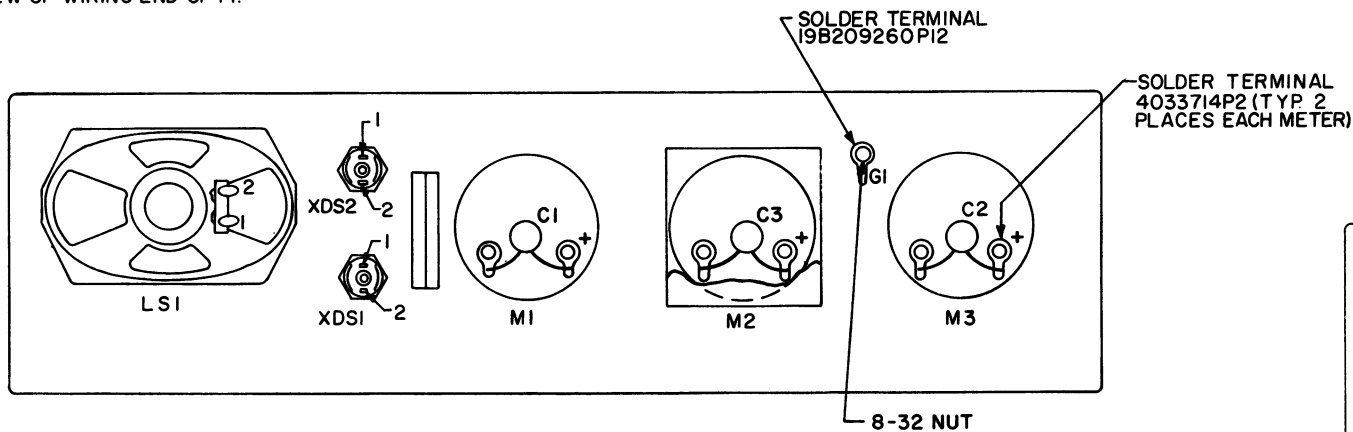
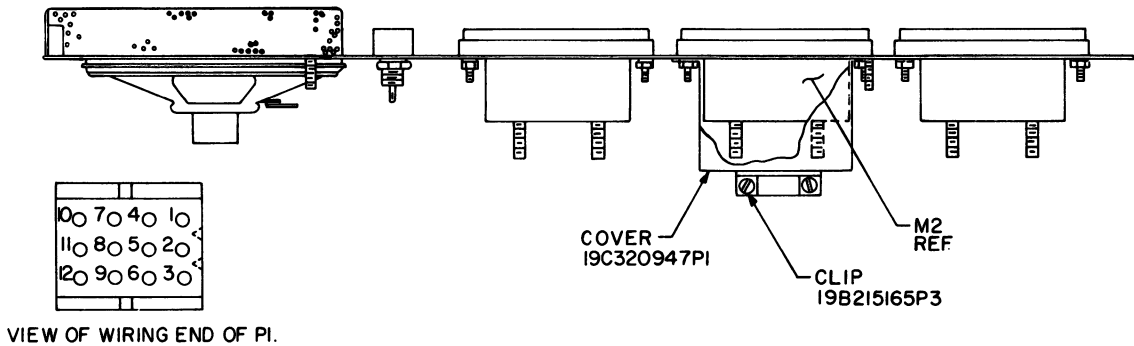
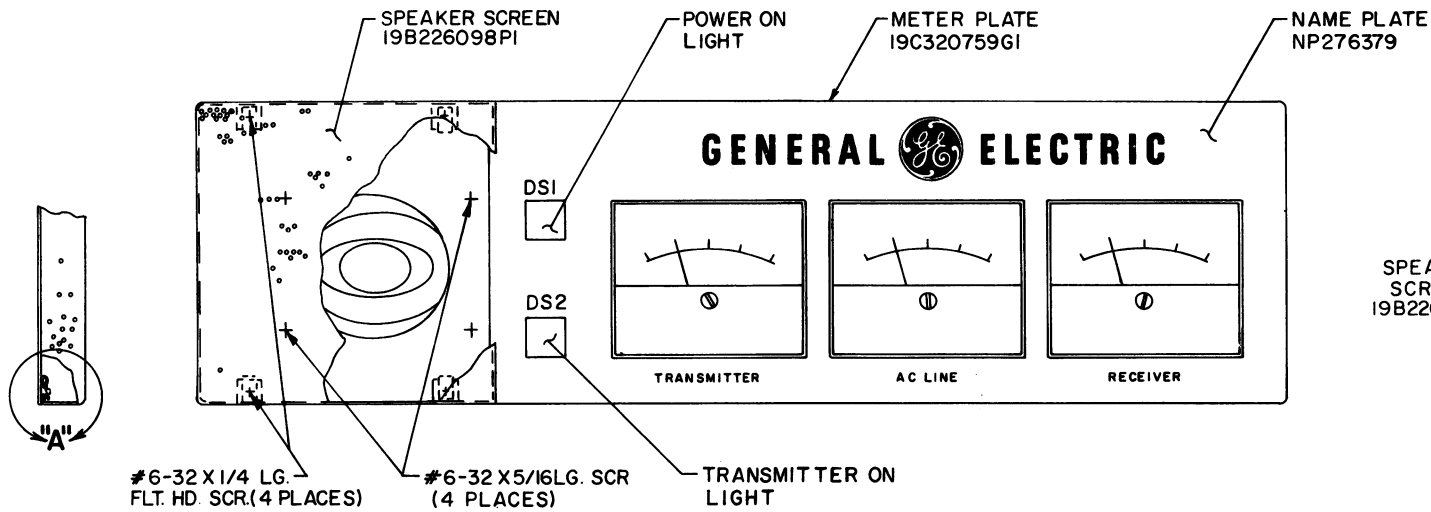
INSTALLATION INSTRUCTIONS

HARNESS 19C320811G6

Issue 1

5

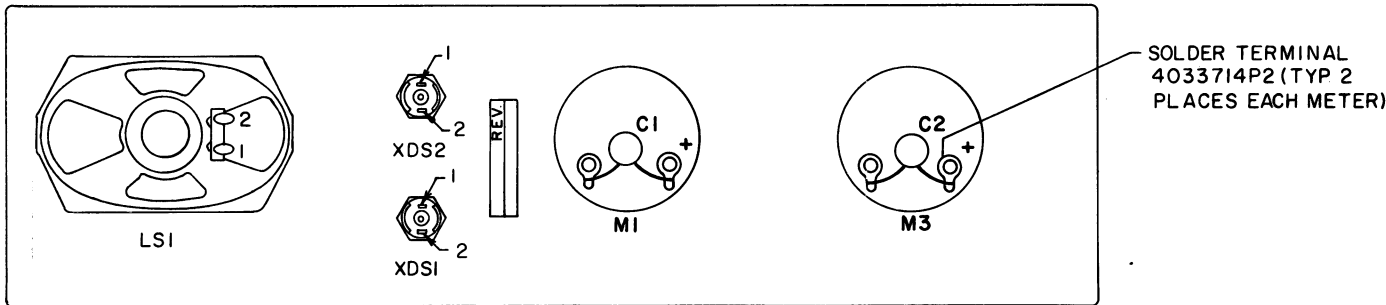
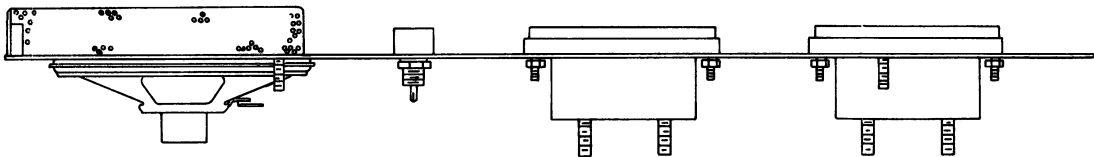
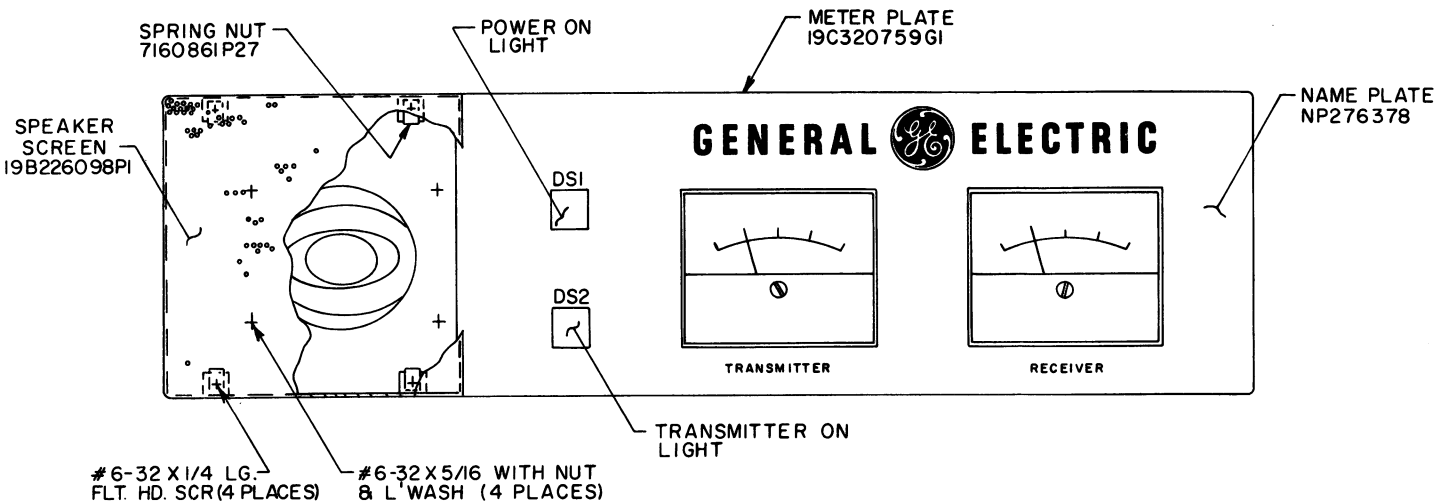
19C320762G2 (3-METER)



OUTLINE DIAGRAM

METER PANEL
19C320762G1 & G2

19C320762G1 (2-METER)



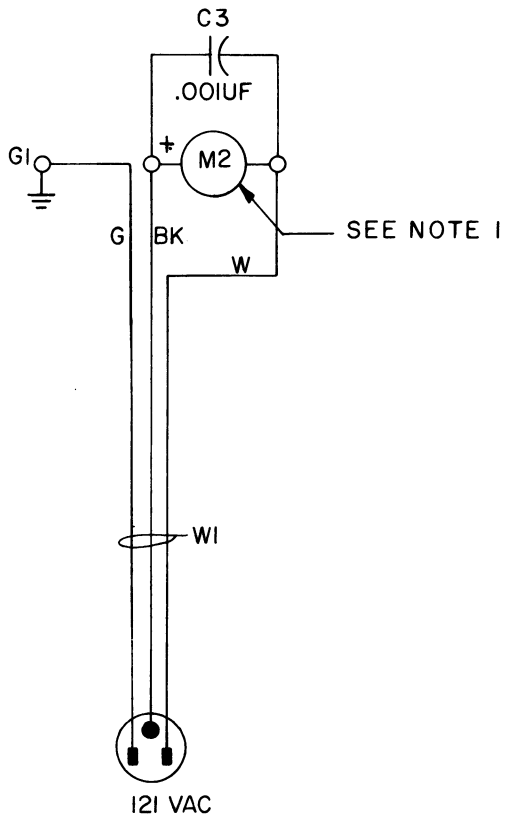
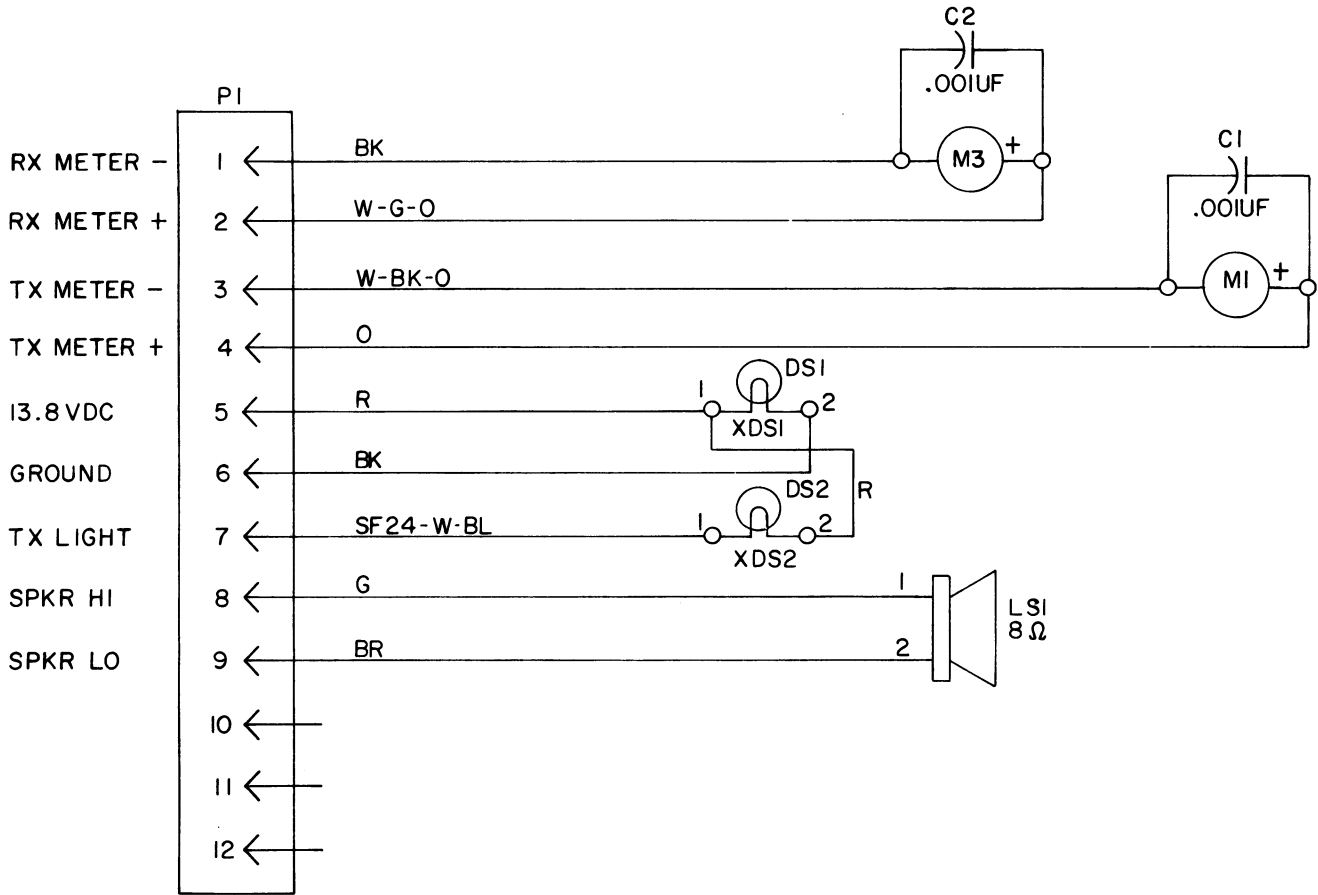
PARTS LIST

LBI4847A

METERING KITS
19C320762G1 TRANSMIT/RECEIVE 2 METERS
19C320762G2 TRANSMIT/AC LINE 3 METERS

CONTINUOUS DUTY

| SYMBOL | GE PART NO. | DESCRIPTION |
|---------------|------------------------------|--|
| C1 thru C3 | 5494481P11 | ----- CAPACITORS ----- Ceramic disc: 1000 pf $\pm 20\%$, 1000 VDCW; sim to RMC Type JF Discap. |
| DS1 and DS2 | 19C307037P35 | ----- INDICATING DEVICES ----- Lamp, incandescent: 14.00 v; sim to GE Lamp Dept. 382. |
| G1 | 19B209260P12 | ----- TERMINALS ----- Terminal, solderless: wire range No. 22-16; sim to AMP 41310. |
| LS1 | 19C307094P3 | ----- LOUDSPEAKERS ----- Permanent magnet: 3 x 5 inch speaker, 8 ohms $\pm 15\%$ at 400 Hz, 1 volt; sim to Pioneer 204095. |
| M1 | 19A134035P1 | ----- METERS ----- Meter, panel: -10/0/50 Microamps DC, Scales: (-20) -0-100 DC volts, (-0.5) -0-3 DC volts, (-2.5) -0-15 DC volts. |
| M2 | 19A134035P2 | Meter, panel: 100 ohms/VAC, mechanism, 0-150 AC volt; sim to GE 50-251344PZPZ1JAD. |
| M3 | 19A134035P1 | Meter, panel: -10/0/50 Microamps DC, Scales: (-20) -0-100 DC volts, (-0.5) -0-3 DC volts, (-2.5) -0-15 DC volts. |
| P1 | 19B209288P24 19B209288P30 | ----- PLUGS ----- Includes: Shell. Connector, receptacle: male contact; sim to Molex 1434. |
| W1 | 19A134567P1 | ----- CABLES ----- Power: 2 pole, 3 wire grounding, approx 6 feet long. |
| XDS1 and XDS2 | 19B209509P1 | ----- SOCKETS ----- Lampholder: sim to Dialco 183-9730-14-602. |
| | | <div>HARNESS ASSEMBLY 19C320762G3 (Includes P1)</div> |
| | | ----- MISCELLANEOUS ----- NP276379 Nameplate. (TRANSMIT/RECEIVE 2 METERS) NP276378 Nameplate. (TRANSMIT/AC LINE 3 METERS) 19B226098P1 Speaker screen. 19C320947P1 Cover. (Used with M2). 19B209509P2 Lampholder: sim to Dialco 184-1871. (Used with DS2). 19B209509P3 Lampholder: sim to Dialco 184-1872. (Used with DS1). 4033714P2 Solderless terminal. (Used on meter terminals). 19B215165P3 Clip. (Used with M2). 7160861P27 Nut, sheet spring. (Secures LS1). |



SEE APPLICABLE PRODUCTION CHANGE SHEETS IN INSTRUCTION BOOK SECTION DEALING WITH THIS UNIT, FOR DESCRIPTION OF CHANGES UNDER EACH REVISION LETTER.

THIS ELEM DIAG APPLIES TO

MODEL NO REV LETTER
PL19C320762G1
PL19C320762G2

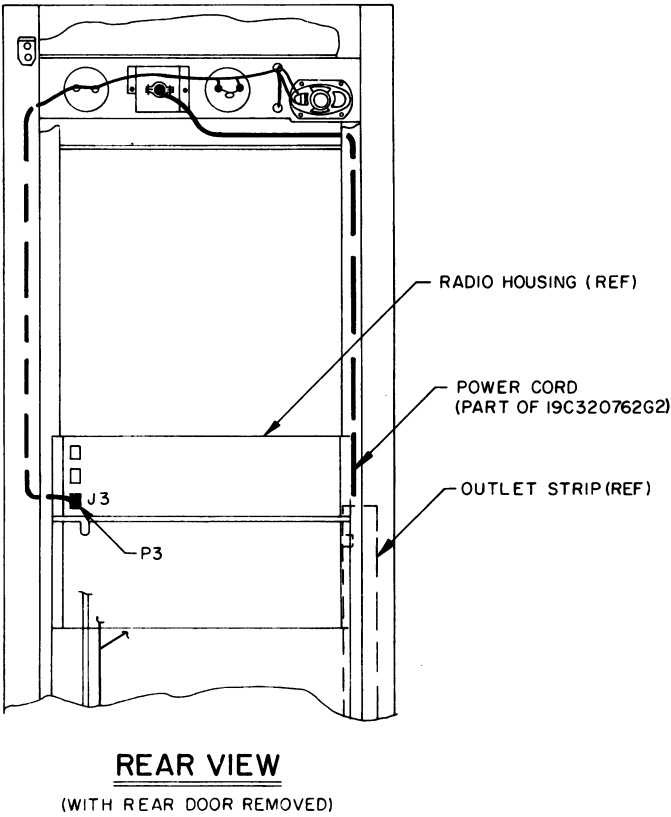
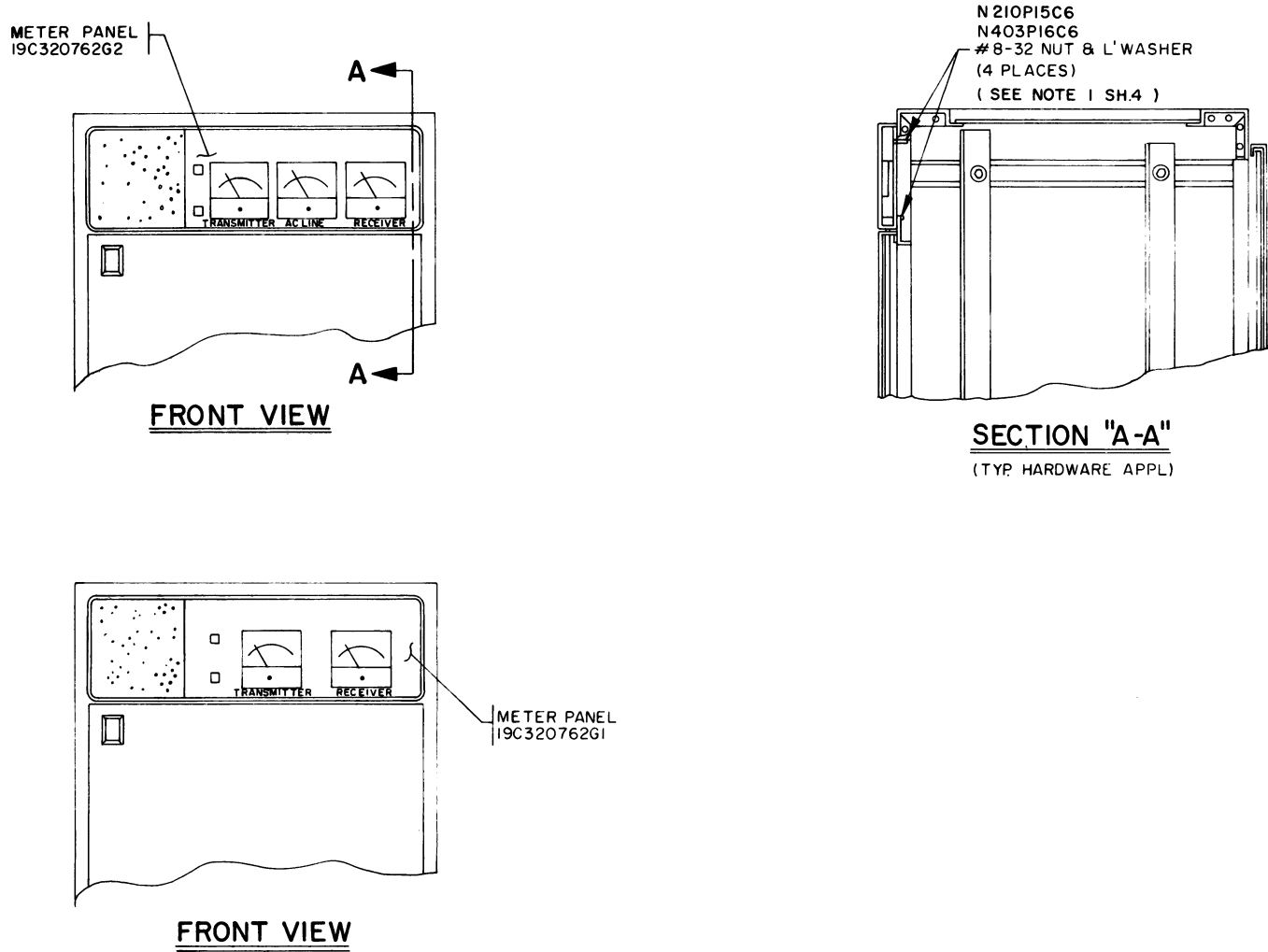
CAPACITOR VALUES IN PICO FARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H= HENRYS.

IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

- NOTES:
- M2 USED IN 19C320762G2 ONLY.
 - ALL WIRE SF22 UNLESS OTHERWISE SPECIFIED.
 - TERMINATE ALL WIRES TO P1 WITH 19B209288P30

(19C320948, Rev. 4)

WIRING DIAGRAM & PARTS LISTS
METER PANEL 19C320762G1 & G2



- INSTRUCTIONS:
1. INSTALL METER PANEL IN FRAME AND FASTEN WITH HARDWARE AS SHOWN.
 2. RUN HARNESS OVER TO AND DOWN BACK MOUNTING RAIL. SPOT TIE TO RAIL AS SHOWN. INSERT PLUG (P3) OF HARNESS INTO JACK (J3) ON RADIO HOUSING.
 3. WHEN APPLICABLE, RUN POWER CORD OVER TO AND DOWN BACK MOUNTING RAIL. SPOT TIE TO RAIL AS SHOWN. PLUG POWER PLUG INTO OUTLET STRIP RECEPTACLE.

INSTALLATION DIAGRAM

(19D417483, Sh. 6, Rev. 4)

METER PANEL 19C320762G1 & G2

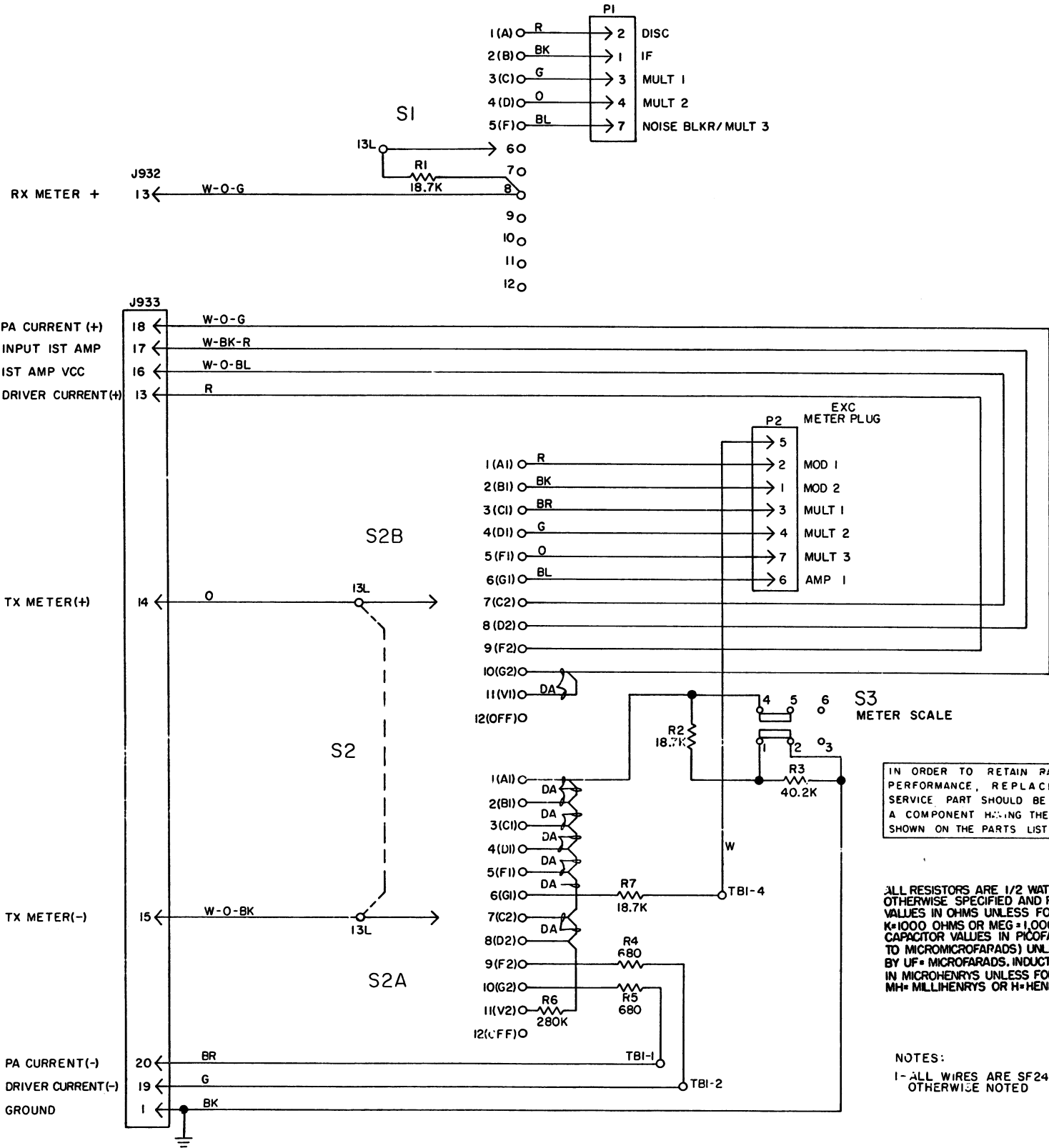
PARTS LIST

LBI4846B

METERING KIT
19B226293G1-G4

| SYMBOL | GE PART NO. | DESCRIPTION |
|-----------|-----------------|---|
| | | ----- PLUGS ----- |
| P1 and P2 | 19B219534P1 | Connector: 9 pin, male. |
| | | ----- RESISTORS ----- |
| R1 and R2 | 19C314256P31872 | Metal film: 18.7K ohms $\pm 1\%$, 1/2 w. |
| R3 | 19C314256P34022 | Metal film: 40.2K ohms $\pm 1\%$, 1/2 w. |
| R4 and R5 | 19A700106P59 | Composition: 680 ohms $\pm 5\%$, 1/4 w. |
| R6 | 19C314256P22803 | Metal film: 280K ohms $\pm 1\%$, 1/4 w. |
| R7 | 19C314256P31872 | Metal film: 18.7K ohms $\pm 1\%$, 1/2 w. |
| | | ----- SWITCHES ----- |
| S1 | 5495454P39 | Rotary: 1 section, 1 pole, 2 to 12 position (adj stop), non-shorting contacts, 2 amps at 25 VDC or 1 amp at 110 VAC; sim to Oak Type A. |
| S2 | 5495454P38 | Rotary: 2 sections, 2 poles, 2 to 12 position (adj stop), non-shorting contacts, 2 amps at 25 VDC or 1 amp at 110 VAC; sim to Oak Type A. |
| S3 | 19B209261P8 | Slide: DPDT, 2 poles, 2 positions, .5 amp VDC or 3 amps VAC at 125 v; sim to Switchcraft 46206L. |
| | | ----- TERMINAL BOARDS ----- |
| TB1 | 7487424P18 | Miniature, phen: 3 terminals. |
| | | ----- CABLES ----- |
| W1 | | HARNESS ASSEMBLY 19B226293G2 (Includes P1, R1, S1) |
| W2 | | HARNESS ASSEMBLY 19B226293G3 (Includes P2, R6, S2) |
| | | ----- MISCELLANEOUS ----- |
| | 7165075P2 | Hex nut, brass: No. 3/8-32. (Used with S1 & S2). |
| | 7115130P9 | Lockwasher, internal tooth: No. 3/8; sim to Shakeproof 1220-2. (Used with S1 & S2). |
| | 19B209532P1 | Knob, screw on. (Used with S1 & S2). |
| | 19A116552P1 | Cable clip. |
| | 7141225P3 | Hex nut: No. 6-32. |
| | N404P13C6 | Lockwasher, internal tooth: No. 6. |
| | N404P11C6 | Lockwasher, internal tooth: No. 4. |
| | 7141225P2 | Hex nut: No. 4-40. |
| | N80P9008C6 | Machine screw: No. 4-40 x 1/2. |

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES



(19D417597, Rev. 4)

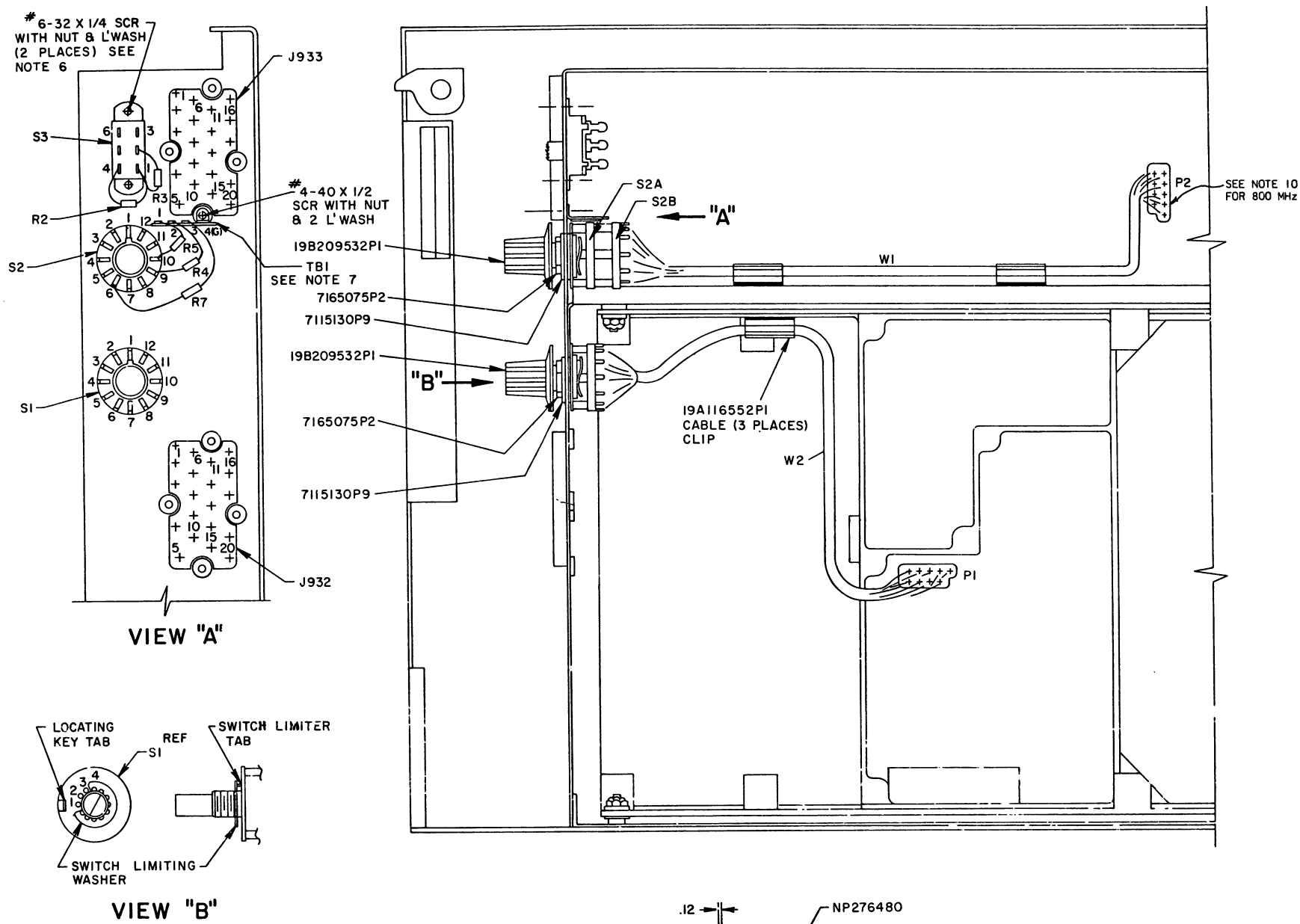
IN ORDER TO RETAIN RATED EQUIPMENT PERFORMANCE, REPLACEMENT OF ANY SERVICE PART SHOULD BE MADE ONLY WITH A COMPONENT HAVING THE SPECIFICATIONS SHOWN ON THE PARTS LIST FOR THAT PART.

ALL RESISTORS ARE 1/2 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICO FARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H=HENRYS.

NOTES:
1- ALL WIRES ARE SF24 UNLESS OTHERWISE NOTED

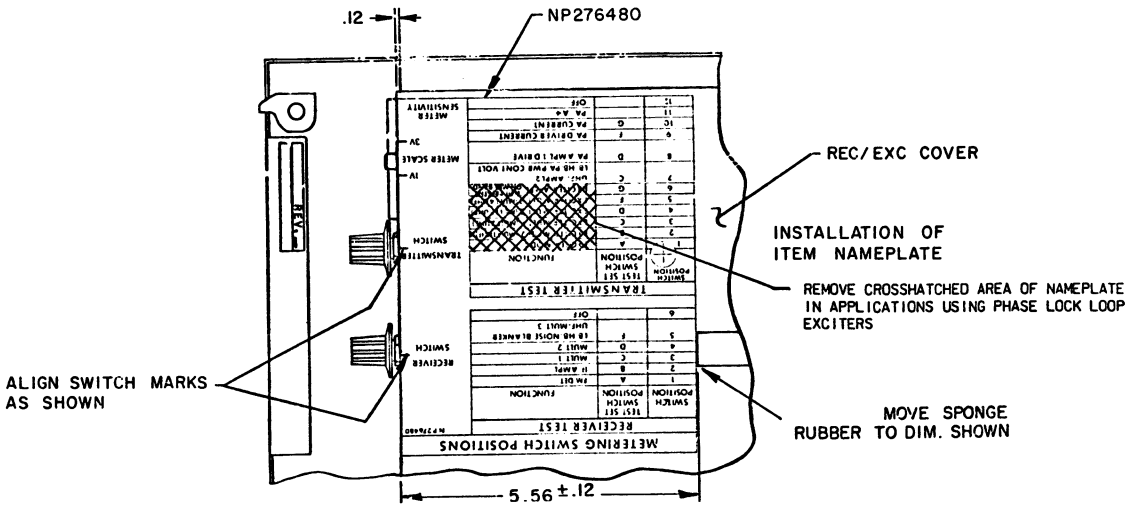
WIRING DIAGRAM & PARTS LIST

METERING KIT 19B226293G1-G4



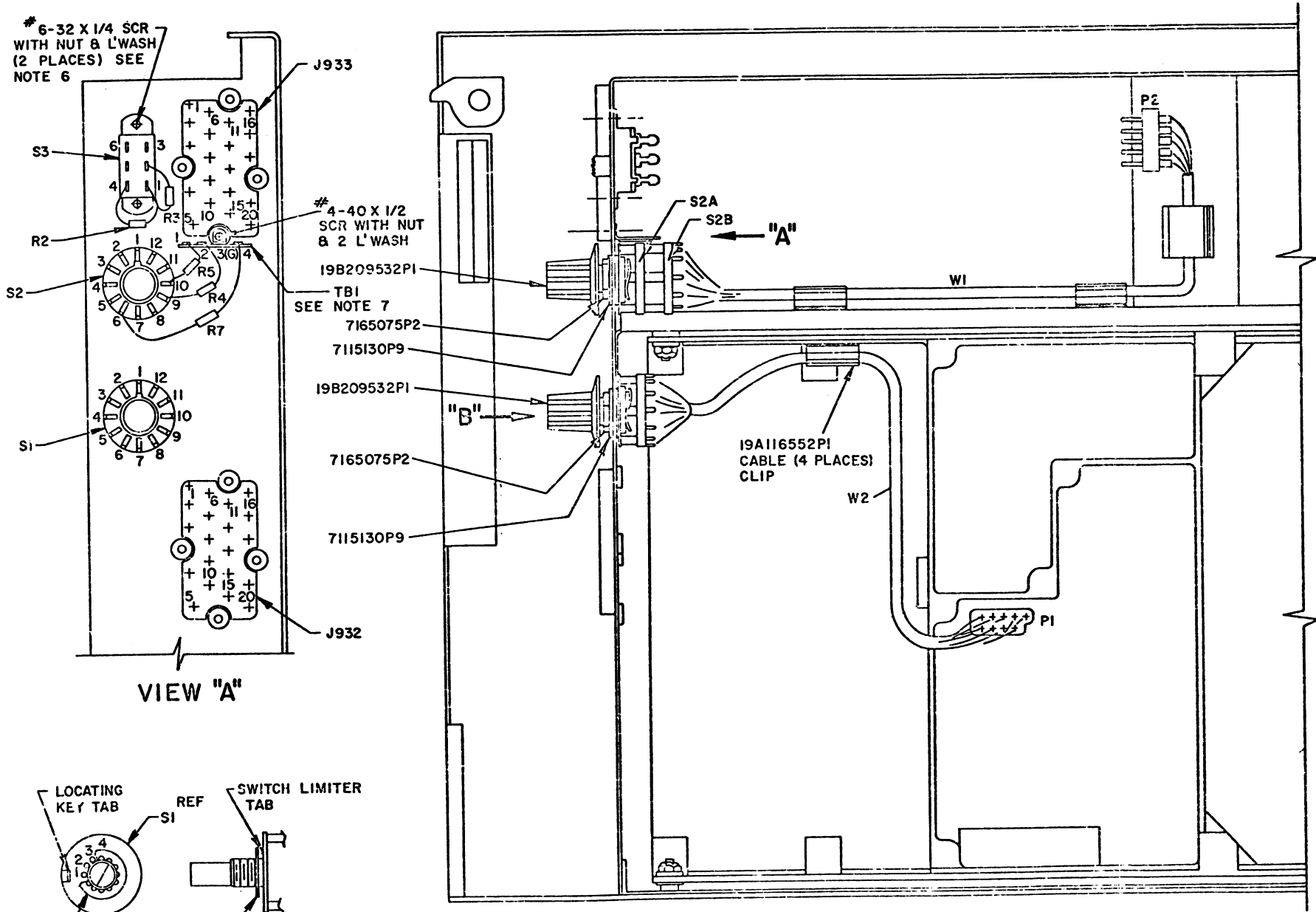
THESE INSTALLATION INSTRUCTIONS COVER THE APPLICATION OF THE METER SWITCHING KIT (PL19B226293G1) TO THE REC/EXC COVER (PL190417262)

1. REMOVE AND DISCARD PLUG BUTTONS AND PLATE NECESSARY FOR INSTALLATION OF S1, S2, S3. RETAIN #6-32 X 1/4 SCREWS FOR INSTALLING S3.
2. BEFORE INSERTING S1 INTO CHASSIS; WITH SWITCH IN ITS FULL COUNTERCLOCKWISE POSITION; INSERT TAB OF SWITCH LIMITING WASHER INTO THE FOURTH HOLE CLOCKWISE FROM THE LOCATING KEY TAB OF THE SWITCH; AS SHOWN IN DETAIL B.
3. INSTALL S1 WITH HARDWARE SUPPLIED. ORIENT AS SHOWN. ROUTE CABLE W2 AS INDICATED. PLUG P1 INTO I.F.A.S. BOARD IN AREA DESIGNATED IF BOARD IS PRESENT.
4. ASSEMBLE DIALFACE TO KNOB. SEATING 4 GUIDES ON DIALFACE INTO OPENING AT LARGE END OF KNOB. PLACE KNOB ON SHAFT OF S1 WITH SWITCH IN ITS FULL COUNTERCLOCKWISE POSITION. ALIGN POSITION NUMBER 1 ON KNOB DIALFACE WITH LOCATING KEY TAB. TIGHTEN KNOB SECURELY USING NUT IN OUTER END OF KNOB. INSERT KNOB BUTTON INTO END OF KNOB. UNTIL FLUSH W/END OF KNOB. SEE VIEW B.
5. INSTALL S3 WITH HARDWARE SUPPLIED. ORIENT AS SHOWN.
6. REMOVE AND DISCARD GUIDE PIN AT THIS LOCATION. THEN INSTALL TB1 WITH #4-40 X 1/2 HARDWARE SUPPLIED. ORIENT AS SHOWN.
7. INSTALL AND SOLDER R2 BETWEEN S3-4 AND S3-1 AS SHOWN. INSTALL AND SOLDER R3 BETWEEN S3-1 AND S3-2 AS SHOWN.
8. INSTALL AND SOLDER R5 TO S2A-10 AS SHOWN. INSTALL AND SOLDER R4 TO S2A-9 AS SHOWN. INSTALL AND SOLDER R7 TO S2A-6 AS SHOWN.
9. CLIP TAB OFF OF LIMITING WASHER THEN, INSTALL S2 WITH HARDWARE SUPPLIED. ORIENT AS SHOWN. ROUTE CABLE W1 AS INDICATED. PLUG P2 INTO EXCITER BOARD IF PRESENT. THEN, WITH SWITCH IN ITS FULL COUNTERCLOCKWISE POSITION, PLACE KNOB ON SHAFT. ALIGN POSITION NUMBER 1 ON KNOB DIALFACE WITH SWITCH LOCATING KEY TAB. TIGHTEN KNOB SECURELY. INSERT KNOB BUTTON. IN APPLICATIONS USING PHASE LOCK LOOP EXCITERS, CUT W1 OFF AT TERMINALS OF S2 AND DISCARD.
10. CONNECT R5 TO TB1-1 AND SOLDER, CONNECT R4 TO TB1-2 AND SOLDER, CONNECT R7 TO TB1-3 AND SOLDER. MAKE THE FOLLOWING CONNECTIONS FROM S1. CONNECT WOG WIRE TO J932-13. MAKE THE FOLLOWING CONNECTIONS FROM S2. CONNECT BK WIRE FROM J933-1 TO S3-2. CONNECT G WIRE FROM J933-19 TO TB1-2. CONNECT BR WIRE FROM J933-29 TO TB1-1. CONNECT WOG WIRE TO J933-15. CONNECT O WIRE TO J933-14. CONNECT WOG WIRE TO J933-16. CONNECT WOG WIRE TO J933-17. CONNECT WOG WIRE TO H0EE-18. CONNECT W WIRE TO TB1-3. CONNECT DA WIRE FROM S2A-1 TO S3-4. CONNECT R WIRE TO J933-13.
11. WHEN MOUNTING THE 800 MHz EXCITER, THE CAN OR COVER DOES NOT HAVE A HOLE FOR P2; USE CLAMP 19A116552P1 TO SECURE P2 & W1 ON TOP OF THE COVER.



INSTALLATION DIAGRAM

METERING KIT 19B226293G1-G3



THESE INSTALLATION INSTRUCTIONS COVER THE APPLICATION OF THE METER SWITCHING KIT (PL19B226293G4) TO THE REC/EXC COVER (PL19D417262)

1. REMOVE AND DISCARD PLUG BUTTONS AND PLATE NECESSARY FOR INSTALLATION OF S1, S2, S3. RETAIN #6-32 X 1/4 SCREWS FOR INSTALLING S3.
2. BEFORE INSERTING S1 INTO CHASSIS, WITH SWITCH IN ITS FULL COUNTERCLOCKWISE POSITION, INSERT TAB OF SWITCH LIMITING WASHER INTO THE FOURTH HOLE CLOCKWISE FROM THE LOCATING KEY TAB OF THE SWITCH; AS SHOWN IN DETAIL B.
3. INSTALL S1 WITH HARDWARE SUPPLIED. ORIENT AS SHOWN. ROUTE CABLE W2 AS INDICATED. PLUG P1 INTO I.F.A.S. BOARD IN AREA DESIGNATED IF BOARD IS PRESENT.
4. ASSEMBLE DIALFACE TO KNOB. SEATING 4 GUIDES ON DIALFACE INTO OPENING AT LARGE END OF KNOB. PLACE KNOB ON SHAFT OF S1 WITH SWITCH IN ITS FULL COUNTERCLOCKWISE POSITION. ALIGN POSITION NUMBER 1 ON KNOB DIALFACE WITH LOCATING KEY TAB. TIGHTEN KNOB SECURELY USING NUT IN OUTER END OF KNOB. INSERT KNOB BUTTON INTO END OF KNOB. UNTIL FLUSH W/END OF KNOB. SEE VIEW B.
5. CLIP TAB OFF OF LIMITING WASHER THEN INSTALL S2 WITH HARDWARE SUPPLIED. ORIENT AS SHOWN. ROUTE CABLE W1 AS INDICATED, & SECURE P2 & W1 TO THE COVER OF THE CAN IN WHICH THE METERING JACK IS LOCATED USING ONE OF THE CABLE CLIPS SUPPLIED, WITH SWITCH IN ITS FULL COUNTERCLOCKWISE POSITION. PLACE KNOB ON SHAFT. ALIGN POSITION NUMBER 1 ON KNOB DIALFACE WITH SWITCH LOCATING KEY TAB. TIGHTEN KNOB SECURELY. INSERT KNOB BUTTON.
6. INSTALL S3 WITH ADDITIONAL HARDWARE SUPPLIED. ORIENT AS SHOWN.
7. INSTALL TB1 AT ONE END OF J933 AS SHOWN BY REMOVING & DISCARDING GUIDE PIN AT THIS LOCATION, THEN INSTALL TB1 WITH #4-40 X 1/2 HARDWARE SUPPLIED. ORIENT AS SHOWN.
8. INSTALL AND SOLDER R2 BETWEEN S3-4 AND S3-1 AS SHOWN. INSTALL AND SOLDER R3 BETWEEN S3-1 AND S3-2 AS SHOWN.
9. INSTALL AND SOLDER R5 BETWEEN TB1-1 AND S2A-10 AS SHOWN. INSTALL AND SOLDER R4 BETWEEN TB1-2 AND S2A-9 AS SHOWN. INSTALL AND SOLDER R7 BETWEEN TB1-4 AND S2A-6 AS SHOWN.

MAKE THE FOLLOWING CONNECTIONS FROM S1. CONNECT WOG WIRE TO J933-13.

MAKE THE FOLLOWING CONNECTIONS FROM S2.

CONNECT BK WIRE FROM J933-1 TO S3-2

CONNECT G WIRE FROM J933-19 TO TB1-2

CONNECT BR WIRE FROM J933-20 TO TB1-1

CONNECT WOBK WIRE TO J933-15

CONNECT O WIRE TO J933-14

CONNECT WOBK WIRE TO J933-16

CONNECT WOKR WIRE TO J933-17

CONNECT WOG WIRE TO J933-18

CONNECT W WIRE TO TB1-4

CONNECT DA WIRE FROM S2A-1 TO S3-4

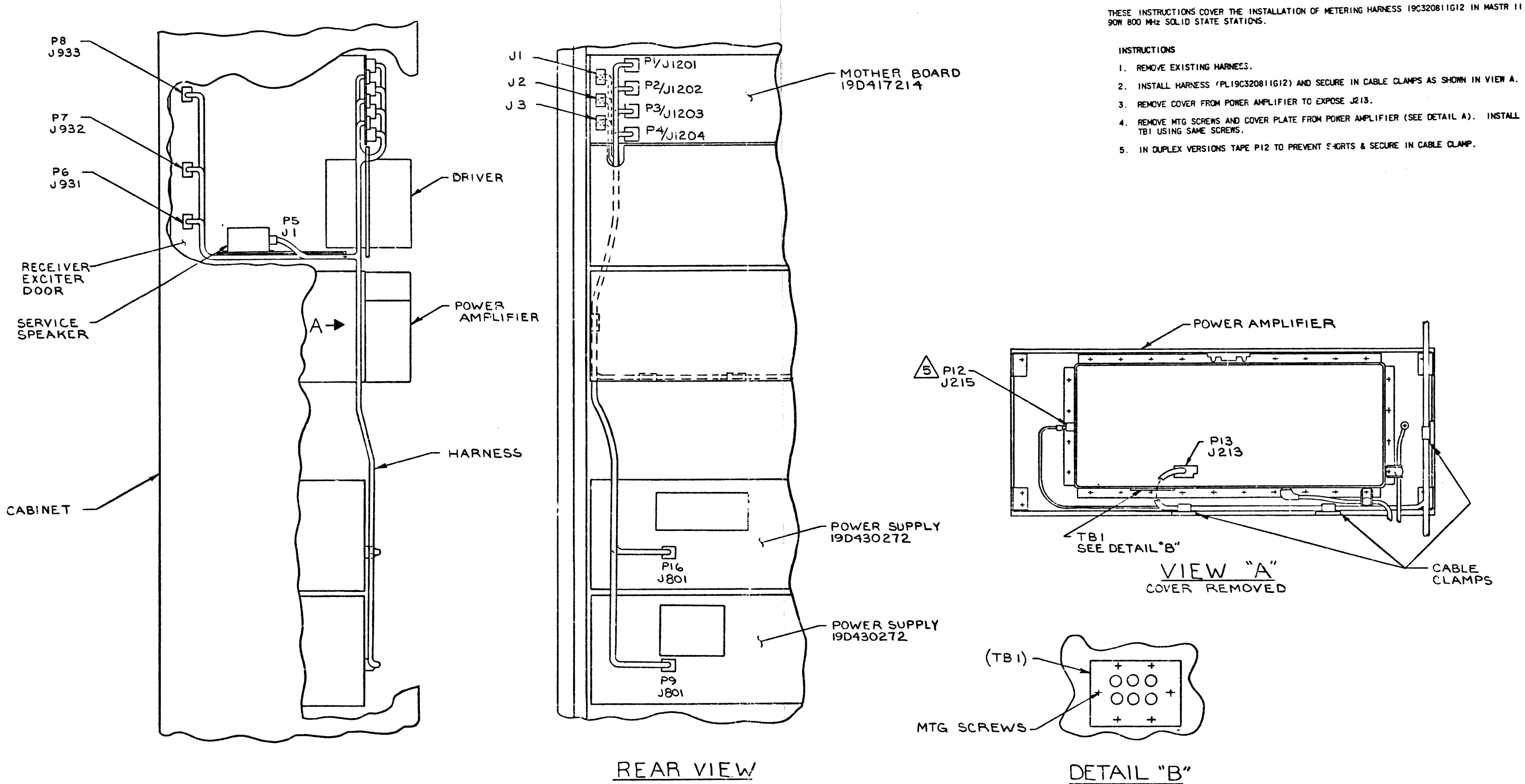
CONNECT R WIRE TO J933-13

INSTALLATION INSTRUCTIONS

METERING KIT 19B226293G4

Issue 1

11



INSTALLATION INSTRUCTIONS

HARNESS 19C320811G12

PARTS LIST

LBI30262A

SERVICE SPEAKER
19C320728G3

PRODUCTION CHANGES

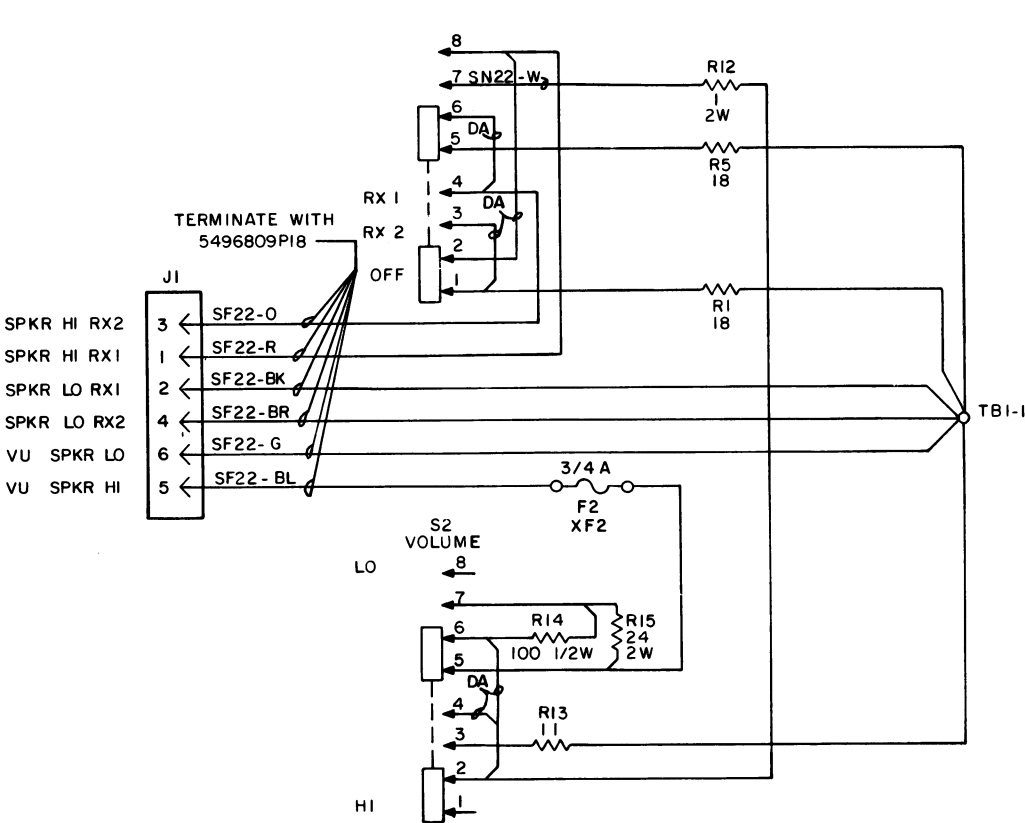
Changes in the equipment to improve performance or to simplify circuits are identified by a "Revision Letter," which is stamped after the model number of the unit. The revision stamped on the unit includes all previous revisions. Refer to the Parts List for descriptions of parts affected by these revisions.

SERVICE SPEAKER 19C320728G3

- REV. A - To eliminate wiring errors caused by duplication of wire colors. Changed Wire Colors: J1-1 from Orange to Red, J1-2 from Brown to Black, J1-5 from Orange to Blue and J1-6 from Brown to Green.
- REV. B - To provide load for receiver output. Added a "DA" wire from S1-3 to S1-1. Added R5 from S1-8 to R3-3.
- REV. C - To prevent component damage due to excessive voltage. Deleted R3 & R4. Added R9, R12, R13, R14, F2, XF1, S2 and TB1.
- REV. D - For Speaker protection. Changed R8 & R9. Changed value and location of F1.

| SYMBOL | GE PART NO. | DESCRIPTION |
|-----------------------------------|----------------------------|--|
| ----- FUSES ----- | | |
| F2* | 1R16P2 | Quick blowing: 3/4 amp at 250 v; sim to Littell-fuse 312.750 or Bussmann AGC-3/4. Added by REV C. |
| ----- JACKS AND RECEPTACLES ----- | | |
| J1 | 19B209288P22 5496809P18 | Connector. Includes: Shell. Contact, male: sim to Molex Products 1380-T. |
| ----- RESISTORS ----- | | |
| R1 | 5493035P53 | Wirewound: 18 ohms $\pm 5\%$, 5 w; sim to Hamilton Hall Type HR. |
| R3* | 19B209490P1 | Variable, wirewound: 35 ohms $\pm 20\%$, 2.25 w; sim to CTS Type 118 With Metal Shaft. Deleted by REV C. |
| R4* | 5493035P52 | Wirewound: 8.2 ohms $\pm 10\%$, 5 w; sim to Hamilton Hall Type HR. Deleted by REV C. |
| R5 | 5493035P53 | Wirewound: 18 ohms $\pm 5\%$, 5 w; sim to Hamilton Hall Type HR. |
| R9* | 19B209022P48 | Wirewound: 24 ohms $\pm 5\%$, 2 w; sim to IRC Type BWH. Added by REV C. Deleted by REV D. |
| R12* | 19B209022P115 | Wirewound: 1.0 ohms $\pm 10\%$, 2 w; sim to IRC Type BWH. Added by REV C. |
| R13* | 5493035P62 | Wirewound: 11 ohms $\pm 5\%$, 5 w; sim to Hamilton Hall Type HR. Added by REV C. |
| R14* | 3R77P101J | Composition: 100 ohms $\pm 5\%$, 1/2 w. Added by REV C. |
| R15* | 19B209022P48 | Wirewound: 24 ohms $\pm 5\%$, 2 w; sim to IRC Type BWH. Added by REV D. |
| ----- SWITCHES ----- | | |
| S1 | 19B209261P5 | Slide: DPTT, 2 poles, 3 positions, 0.5 amp VDC, 3 amp VAC at 125 v; sim to Switchcraft 11D1033B. |
| S2* | 19B209261P5 | Slide: DPTT, 2 poles, 3 positions, 0.5 amp VDC, 3 amp VAC at 125 v; sim to Switchcraft 11D1033B. Added by REV C. |
| ----- TERMINAL BOARDS ----- | | |
| TB1* | 7775500P44 | Phen: 2 terminals. Added by REV C. |
| ----- SOCKETS ----- | | |
| XF2* | 7141008P1 | Fuseholder: 30 amps at 125 v; sim to Bussman 2863. Added by REV C. |
| ----- MISCELLANEOUS ----- | | |
| | 4031543P2 | Knob. (Used with R3). |
| | 7115130P9 | Lockwasher, internal tooth: sim to Shakeproof 1220-2. (Used with R3). |
| | 7165075P2 | Hex nut, brass: thd. size No. 3/8-32. (Used with R3). |
| | N80P9004C6 | Machine screw, phillips head: No. 4-40 x 1/4. (Secures S1, S2). |
| | 4032480P1 | Nut, sheet spring: sim to Vector Electronic 440. (Secures S1, S2). |
| | N80P13005C6 | Machine screw: No. 6-32 x 5/16. (Secures Service Speaker). |
| | 7141225P3 | Hex nut: No. 6-32. (Secures Service Speaker). |
| | N404P13C6 | Lockwasher, internal tooth: No. 6. (Secures Service Speaker). |

*COMPONENTS ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES



SEE APPLICABLE PRODUCTION CHANGE SHEETS IN INSTRUCTION BOOK SECTION DEALING WITH THIS UNIT, FOR DESCRIPTION OF CHANGES UNDER EACH REVISION LETTER

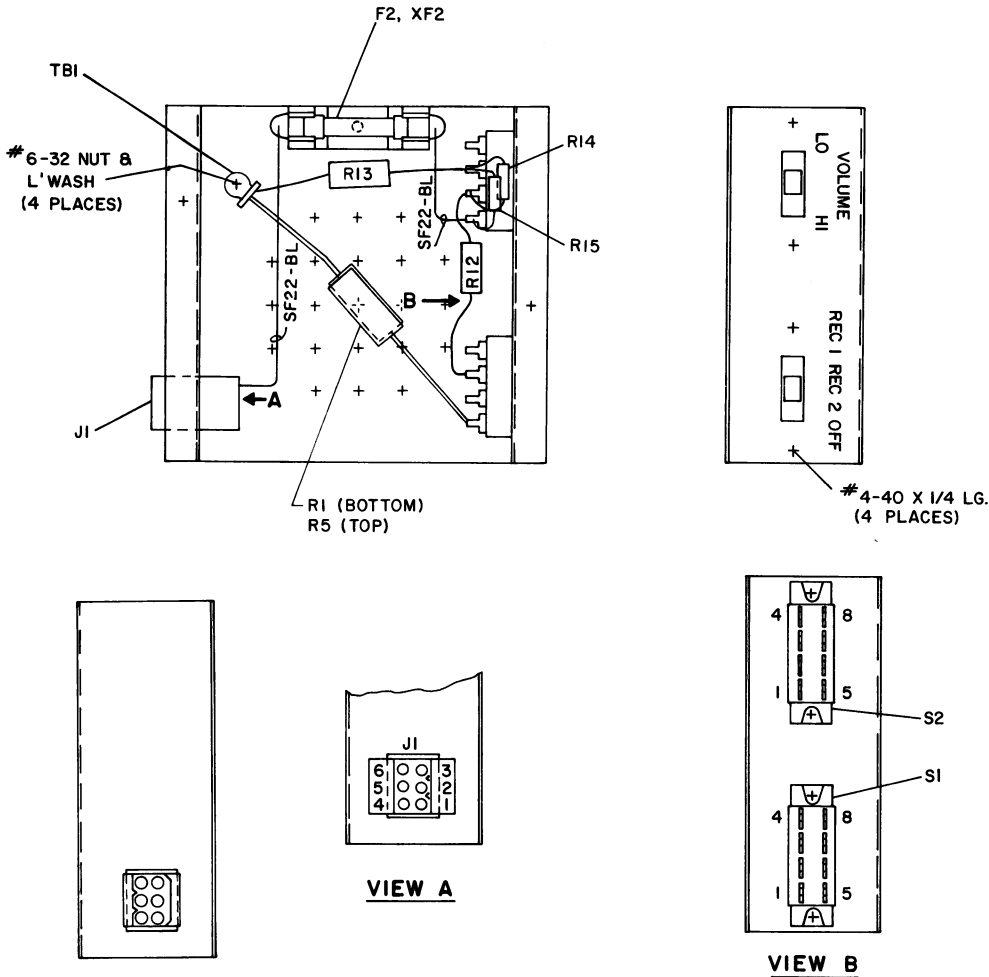
THIS ELEM DIAG APPLIES TO

MODEL NO PLI9C320728G3

REV LETTER D

ALL RESISTORS ARE .5 WATT UNLESS OTHERWISE SPECIFIED AND RESISTOR VALUES IN OHMS UNLESS FOLLOWED BY K=1000 OHMS OR MEG=1,000,000 OHMS. CAPACITOR VALUES IN PICO FARADS (EQUAL TO MICROMICROFARADS) UNLESS FOLLOWED BY UF= MICROFARADS. INDUCTANCE VALUES IN MICROHENRYS UNLESS FOLLOWED BY MH= MILLIHENRYS OR H=HENRYS.

(19C320837, Rev. 6)

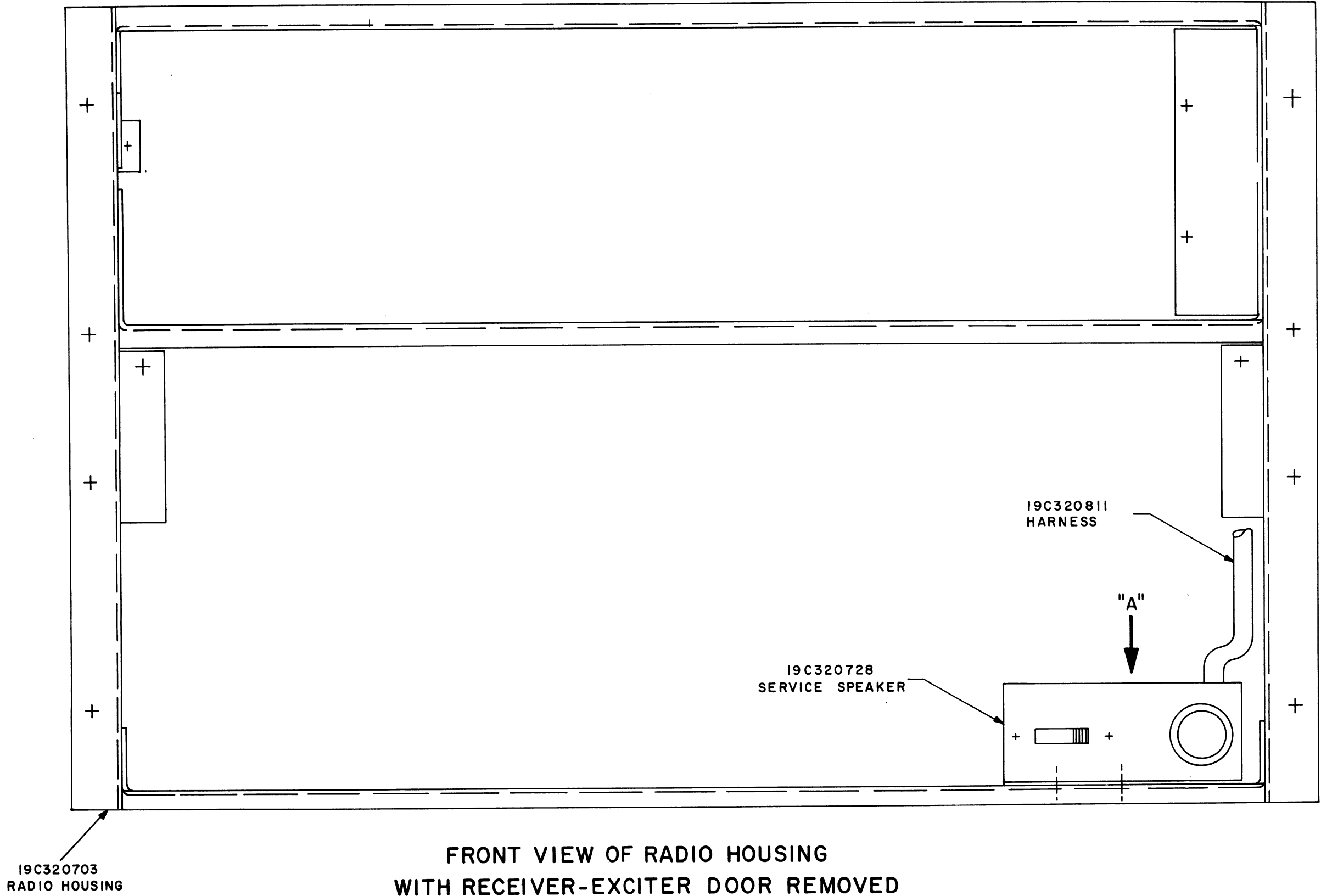


(19C328483, Rev. 1)

SERVICE SHEET

SERVICE SPEAKER 19C320728G3

Issue 2



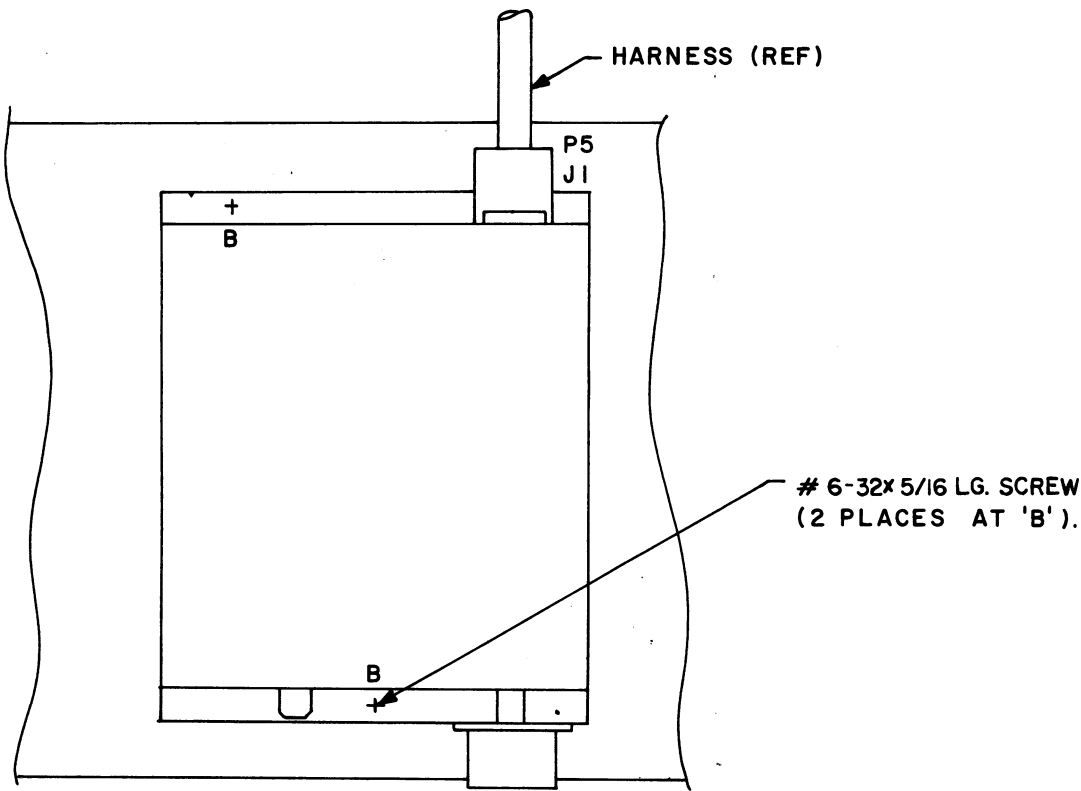
INSTALLATION INSTRUCTIONS

SERVICE SPEAKER 19C320728G3

THESE INSTRUCTIONS COVER THE INSTALLATION OF THE 19C320728 SERVICE SPEAKER TO THE 19C320703 RADIO HOUSING.

INSTRUCTIONS:

1. MOUNT 19C320728 (SERVICE SPEAKER) TO 19C320703 (RADIO HOUSING) AS SHOWN. USE #6-32 x 5/16 LG SCREW, L' WASHERS & NUTS SUPPLIED.
2. CONNECT P5 OF 19C320811 (HARNESS) WITH J1 OF 19C320728 (SERVICE SPEAKER).



VIEW AT "A"
(PARTIAL)