



LBI-38775D

Mobile Communications

MASTR® III BASE STATION
SYSTEMS COMBINATION PACKAGE

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| | |
|-------------------------|-----------|
| T/R SHELF | LBI-38637 |
| SYSTEM MODULE | LBI-38764 |
| POWER MODULE | LBI-38752 |



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Maintenance Manual

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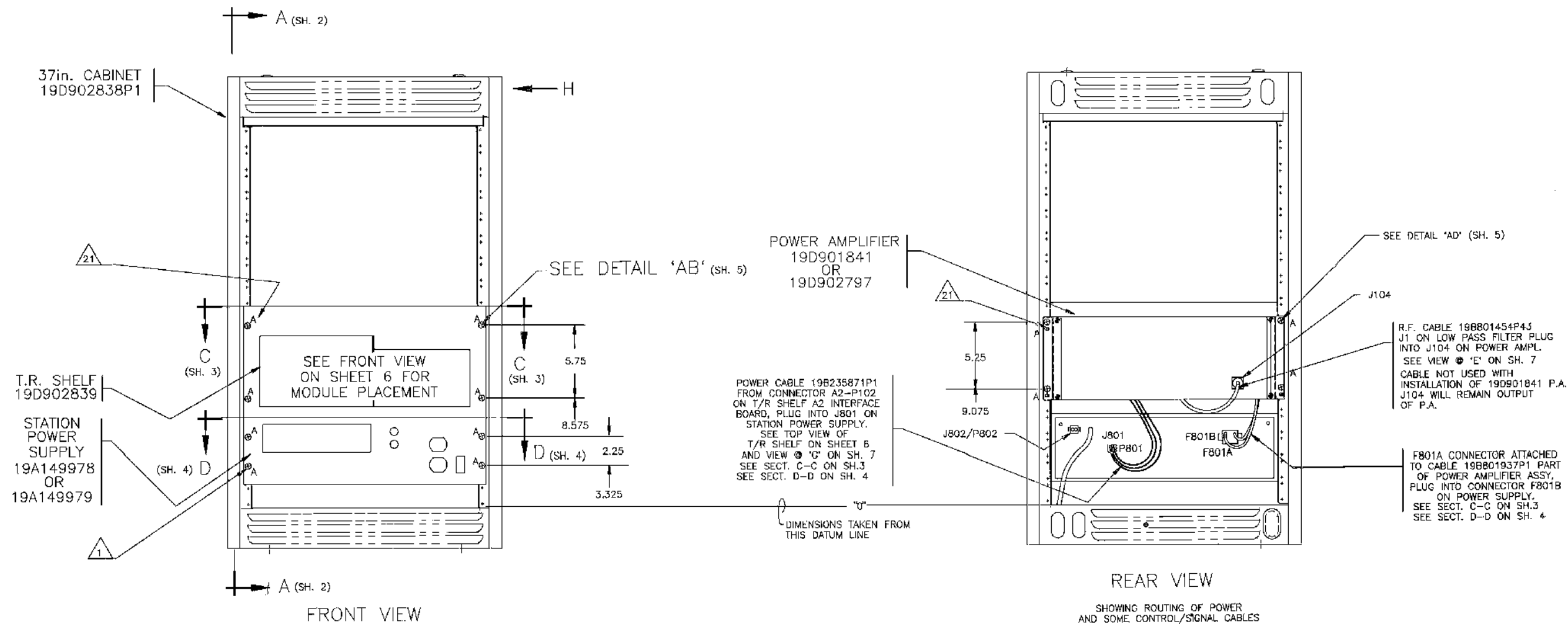
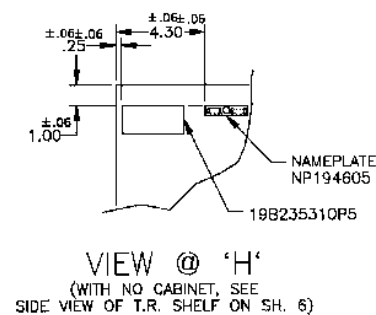
INTRODUCTION

This manual contains information for the MASTR III Station including application information, cable diagrams and a parts list for the cabinet hardware. For additional information refer to the following manuals:

| | | |
|-----------|---------------------|---|
| LBI-38636 | Installation | How to install including Interconnection Diagrams. |
| LBI-39074 | Installation | Installation, Configuration and Checkout for EDACS Basic or Level 1 System. |
| LBI-38754 | VHF RF Package | Information on the VHF frequency equipment. |
| LBI-38675 | UHF RF Package | Information on the UHF frequency equipment. |
| LBI-39025 | 800 MHz RF Package | Information on the 800 MHz frequency equipment. |
| LBI-38983 | Antenna Systems | Information on typical antenna system installations. |
| LBI-38812 | EDACS System Panel | Information on the panel used in EDACS applications. |
| LBI-38894 | GETC | Information on the GETC equipment. |
| LBI-38625 | Charger/Emer. Power | Information on the battery charger and emergency power equipment. |

APPLICATIONS

| OPTION NUMBER | APPLICATION ASSEMBLY | DESCRIPTION |
|---------------|----------------------|---|
| SXCAIS | 19D902845P1 | Installation of one MASTR III station in a 37" indoor cabinet. |
| SXRB1J | 19D902845P2 | Installation of T/R shelf for MASTR III station. |
| SXSU3A | 19D902845P3 | Installation of coax switch. |
| SXDU1J | 19D902845P4 | Installation of VHF (150-162 MHz) duplexer. |
| SXDU1K | | Installation of VHF (162-174 MHz) duplexer. |
| SXDU1M | | Installation of UHF (450-470 MHz) duplexer. |
| SXCH1L/M | 19D901845P5 | Installation of battery charger with automobile battery emergency power in a 37" indoor cabinet. |
| SXCH1R | 19D902845P6 | Installation of battery charger with Gel Cell battery emergency power in a 37" in-door cabinet. |
| SXCH3A | | |
| SXSU3D | 19D902845P7 | Installation of SOR Relay Kit. |
| SXMK3C | 19D902845P8 | Installation of auxiliary receiver in a 37" or 69" cabinet. |
| SXMD3J | 19D902845P9 | Installation of GETC shelf in a 69" indoor cabinet. |
| SXVG3E | 19D902845P11 | Installation of GETC shelf for a E/E Voice Guard/Aegis repeater and remote/repeater in a 37" or 69" indoor cabinet. |
| SXVG3F | | |
| SXVV1N | 19D902845P12 | Installation of E/D module (non-1027 version) in a 37" or 69" indoor cabinet. |
| SXVW1J | | |
| SXVV1M | | |
| SXVG3C | 19D902845P13 | Installation of E/D module (1027 version) in a 37" or 69" indoor cabinet. |
| SXVG3D | | |
| SXDE5B | 19D902845P14 | Installation of transmit data board. |
| SXAP3K | 19D902845P16 | Installation of multi-station in a 69" or 83" indoor cabinet or open rail rack. |
| SXMNEY | 19D902845P21 | Installation in 69" indoor cabinet or open rail rack. |
| SXMD3M | 19D902845P22 | Installation of simulcast stations. |
| SXMD1S | 19D902845P23 | Installation and modification instructions for RIC telephone interconnect. |
| SXVT1B | 19D902845P24 | Modification for station receiver voting for RS-232. |
| | 19D902845P25 | Installation in 45" weatherproof cabinet. |
| SXVT1L | 19D902845P26 | Modem Voting installation. |
| SXCP5T | 19D902845P27 | CNI installation. |



- ① 37in. HIGH INDOOR FIXED LAND CABINET WITH
(1) MASTR III TRANSMIT/RECEIVE 800Mhz. BASE STATION

NOTES:

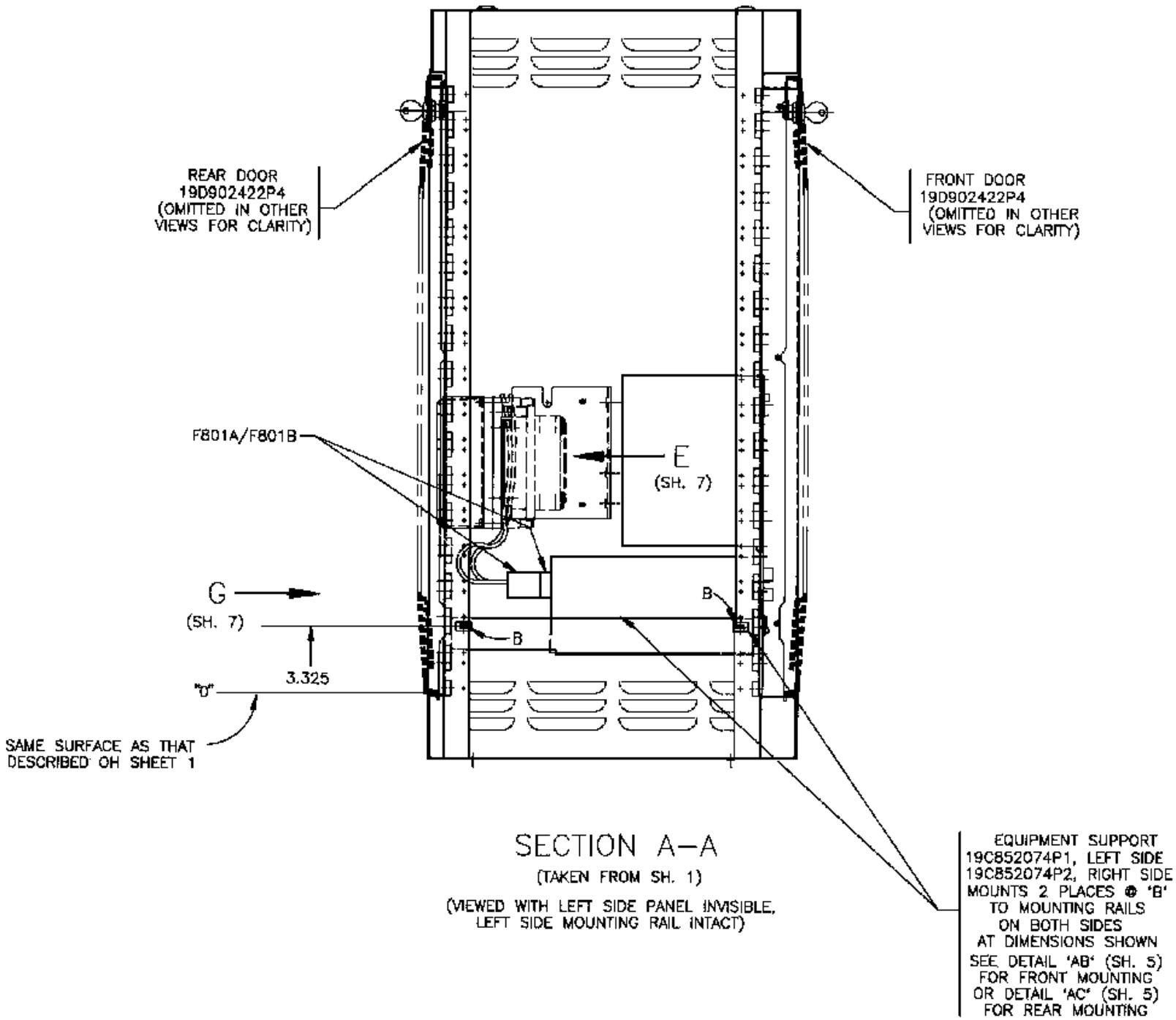
① ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR
ON HARDWARE KIT P.L. 344A3450G1.

2 INSTALL CABLES AS SHOWN AND INTERCONNECT IN
ACCORDANCE WITH INTERCONNECT DIAGRAM 19D903635.

② ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR
ON HARDWARE KIT P.L. 344A3450G2.

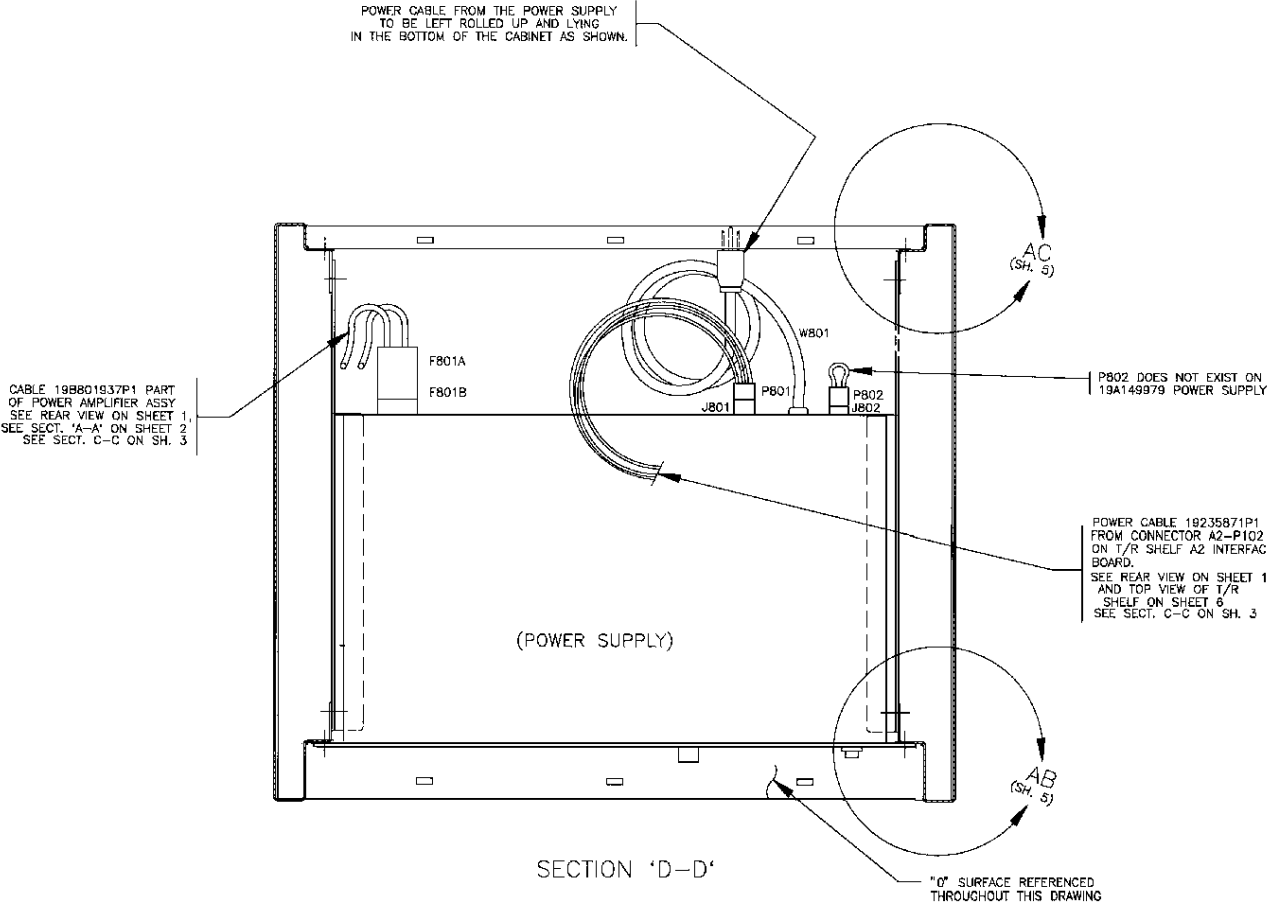
MASTR III STATION
19D902845P1

(19D902845, Sh. 1, Rev. 4)



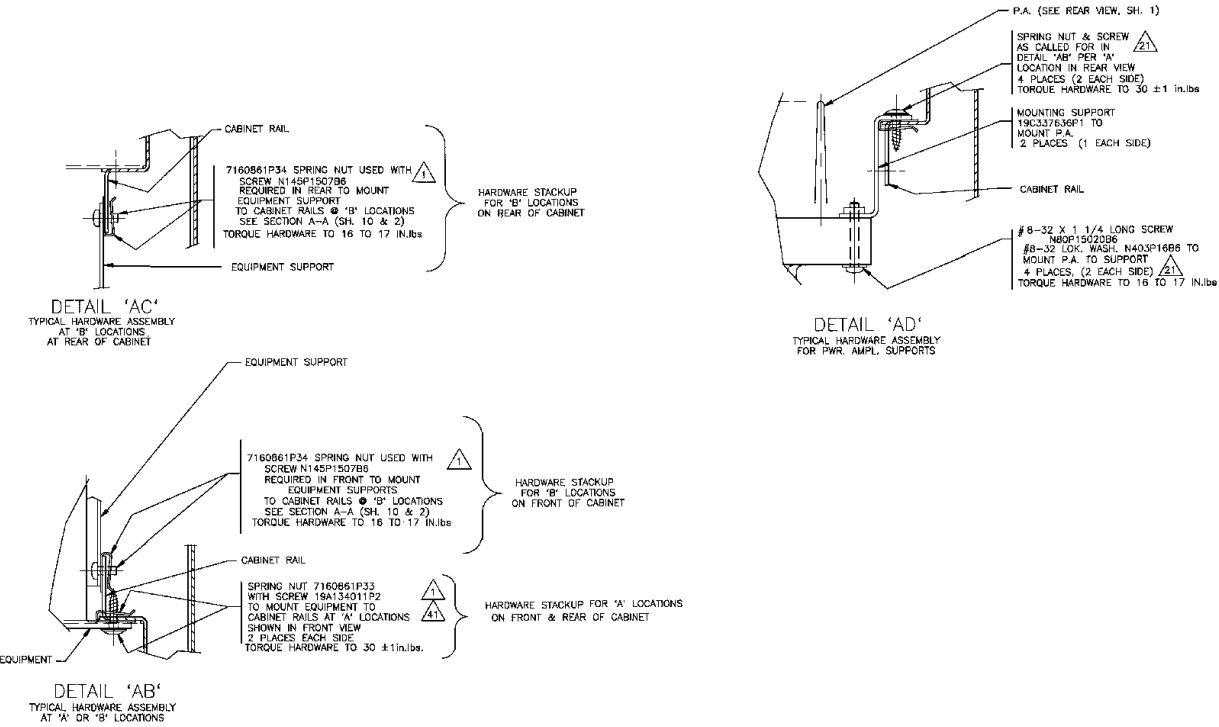
(19D902845, Sh. 3, Rev. 3)

(19D902845, Sh. 3A, Rev. 2)



MASTR III STATION

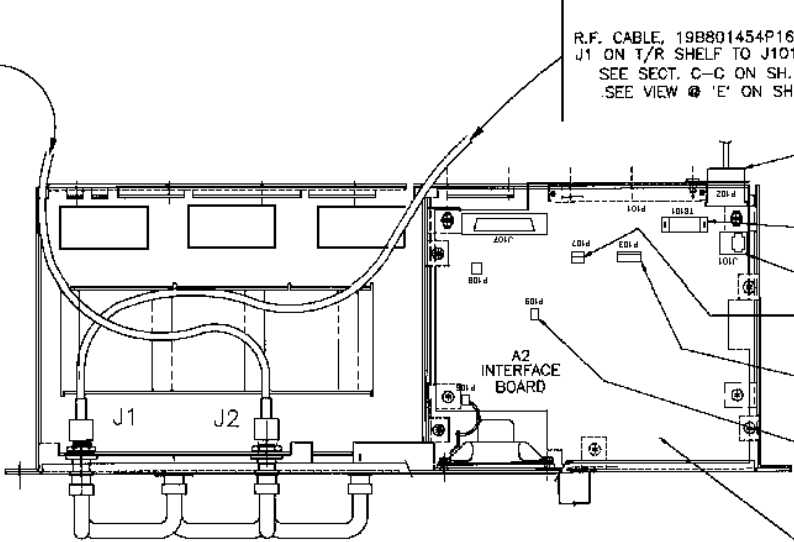
(19D902845, Sh. 4, Rev. 1)



MASTR III STATION

(19D902845, Sh. 5, Rev. 3)

R.F. CABLE 19B801454P19
FROM J2 ON T/R SHELF
TO J2 ON ANTENNA SWITCH
SEE SECT. C-C ON SH. 3
SEE VIEW 'F' CONFIG. 3
ON SH. 8
OR
R.F. CABLE 19B801454P20
FROM J2 ON T/R SHELF
TO RX ON DUPLEXER SHELF
SEE SECT. C-C ON SH. 3
SEE REAR VIEW ON SH. 9
FOR EDACS APPLICATIONS USE
CABLE 19B801454P16 AND
INSTALL BETWEEN J2 ON
T/R SHELF AND REAR OF RACK
MOUNTED CONNECTOR 19A115938P13.
SEE SHEET 22
FOR REAR CONNECTOR DETAIL.
FOR NON-EDACS APPLICATION,
USE CABLE 19B801454P20.
CONNECT BETWEEN J2 ON T/R SHELF
AND EITHER T/R RELAY OR DUPLEXER
DEPENDENT ON STATION CONFIGURATION.



R.F. CABLE, 19B801454P16, FROM
J1 ON T/R SHELF TO J101 ON P.A.
SEE SECT. C-C ON SH. 3
SEE VIEW 'E' ON SH. 7

POWER CABLE 19B235871P1
FROM CONNECTOR J801 ON
STATION POWER SUPPLY PLUG
INTO A2-P102 CONNECTOR
ON A2 INTERFACE BOARD.
SEE SECT. C-C ON SH. 3
SEE SECT. D-D ON SH. 4

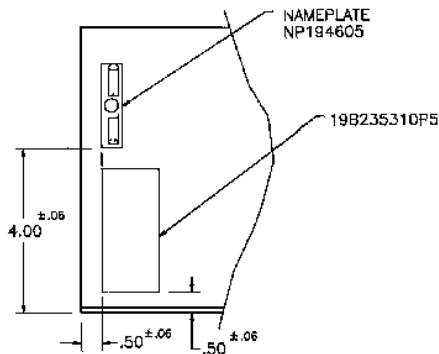
A2-J101 & A2-TB101
TELEPHONE CONNECTIONS

A2-P107, TO ANTENNA RELAY
SEE SECT. C-C ON SH. 3
SEE VIEW 'F'
(CONFIGURATION 1) ON SH. 8.

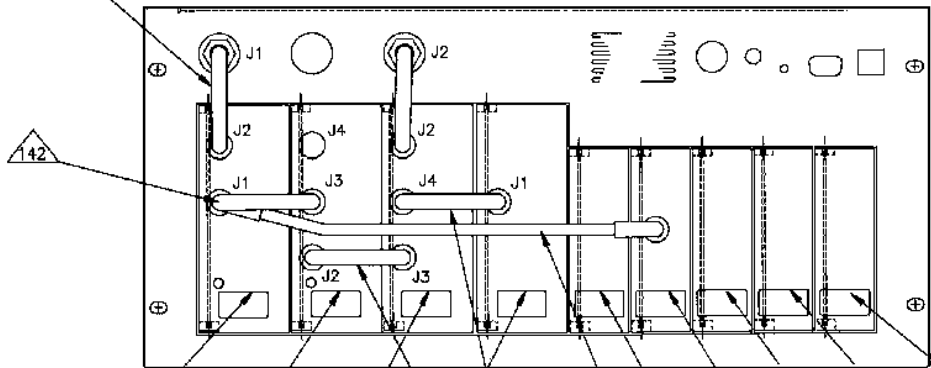
A2-P103, CONTROL CABLE
19B801739P1 TO P.A.
CONNECTOR J201
SEE SECT. C-C ON SH. 3
SEE VIEW 'E' NO SH. 7

A2-P109, P.A. FAN
SEE SECT. C-C ON SH. 3
SEE VIEW 'E' NO SH. 7

A2 INTERFACE BOARD
19D902975
PART OF T/R SHELF



RF CABLE, 344A3052P1
USED 5 PLACES AS SHOWN



Tx. SYNTHESIZER MOD.
19D902780

Rx. SYNTHESIZER MOD.
19D902781

Rx. FRONT END MOD
19D902782

Rx. IF MOD.
19D902783

POWER SUPPLY MOD.
19D902589

BLANK PANEL
19C337621P1

BLANK PANEL
19C337621P1

BLANK PANEL
19C337621P1

DATA MOD
19D904658

SYSTEM MOD.
19D902590

RF CABLE
344A4688P1

② ASSEMBLY OF T/R SHELF FOR
THE MASTR III INDOOR CABINET
APPLICATION.

△ INSTALL R.F. CABLE 344A3052P3, IF SUPPLIED.

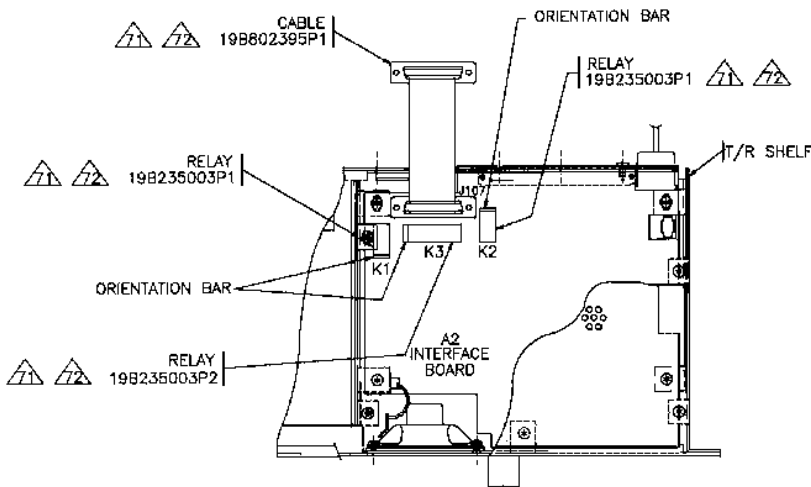
⑭ INSTALLATION OF DATA MODULE.

NOTES:

△11 INSTALL DATA MODULE IN SLOT AS SHOWN.

△12 DELETE RF CABLE 344A3052P1 FROM TX SYN MOD. TO RX SYN MOD.

△13 CONNECT 344A4688P1 RF CABLE FROM TX SYN MOD TO DATA
MODULE AS SHOWN



⑦ INSTALLATION OF SQUELCH OPERATED RELAY
INTO T/R SHELF A2 INTERFACE BOARD.

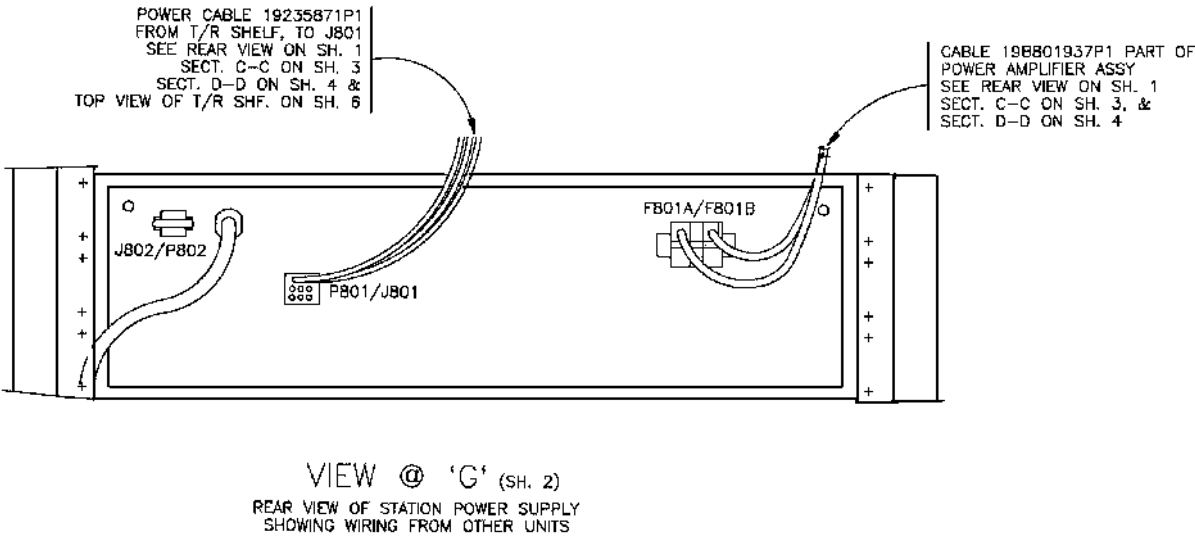
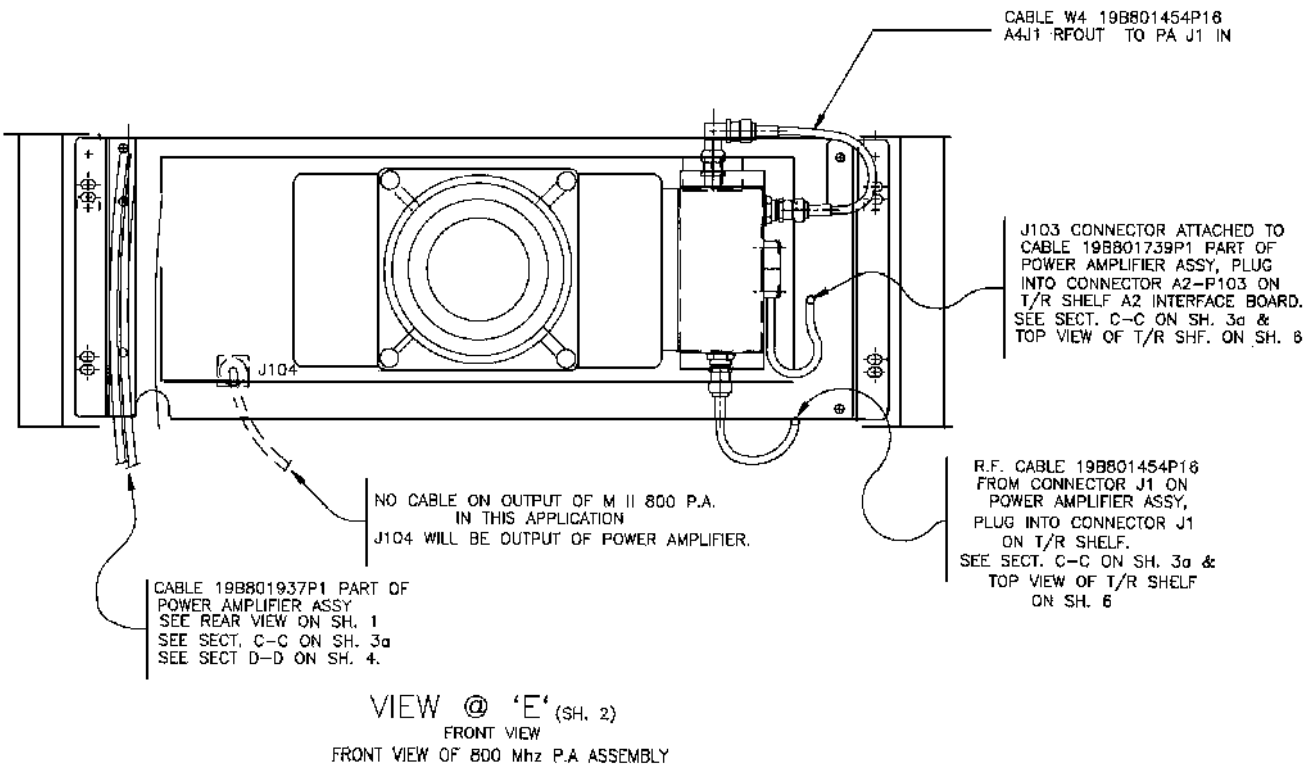
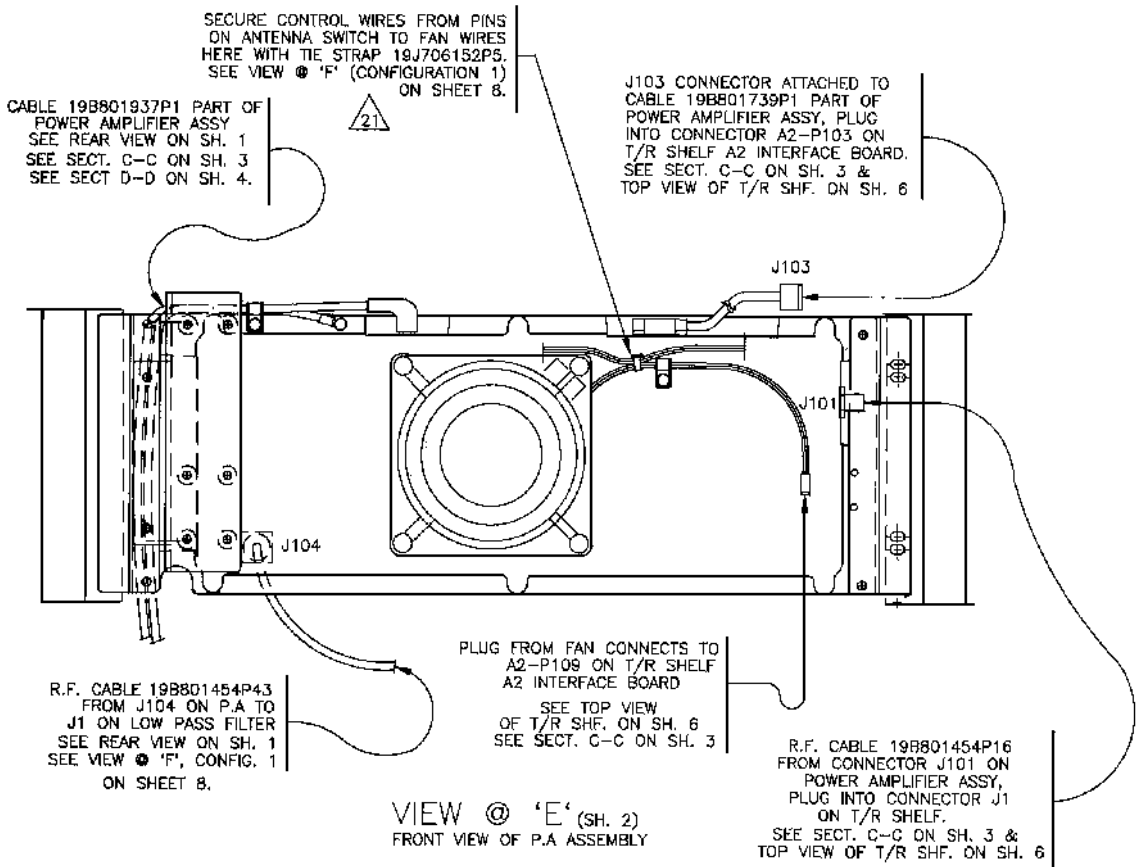
NOTES:

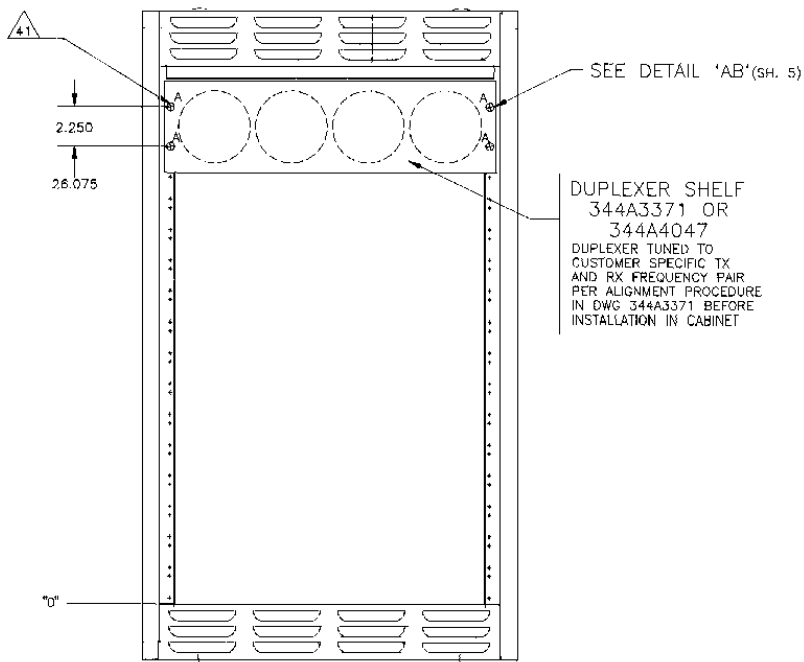
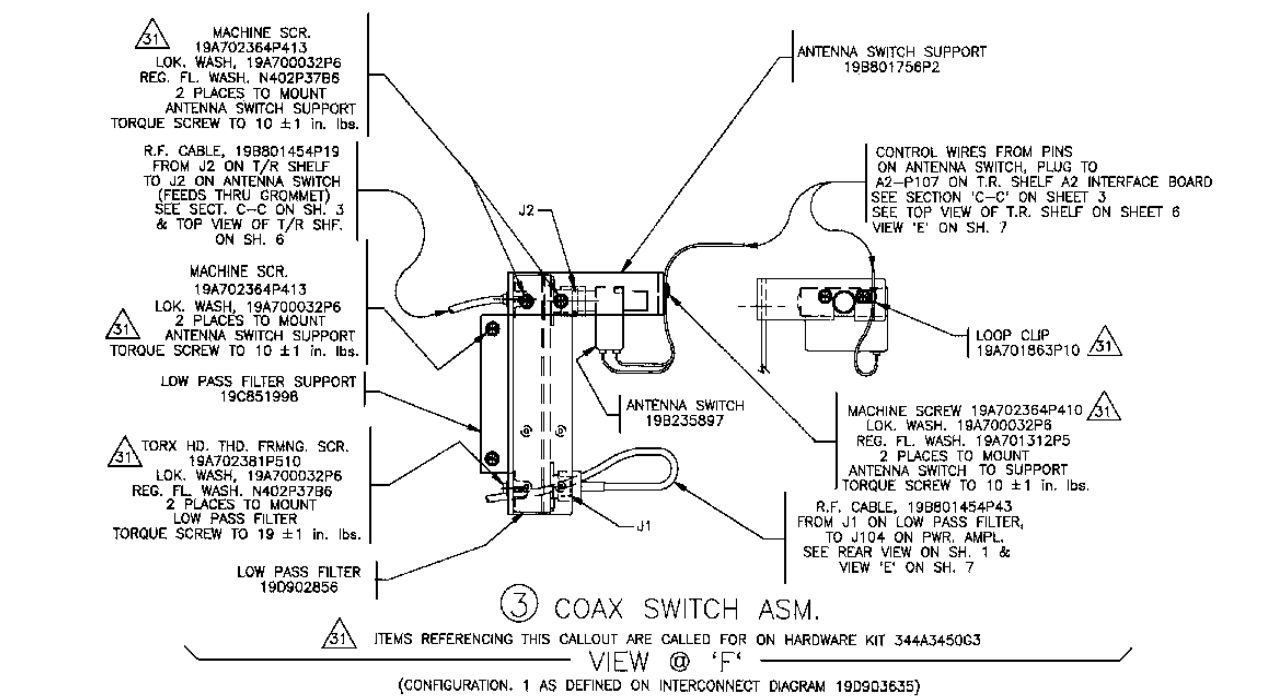
△11 ITEMS REFERENCING THIS CALLOUT ARE
CALLED FOR ON SQUELCH OPERATED
RELAY KIT PL344A3450G7.

△12 INSTALL CABLE 19B802395P1 AND
RELAYS K1, K2 & K3 AS SHOWN.

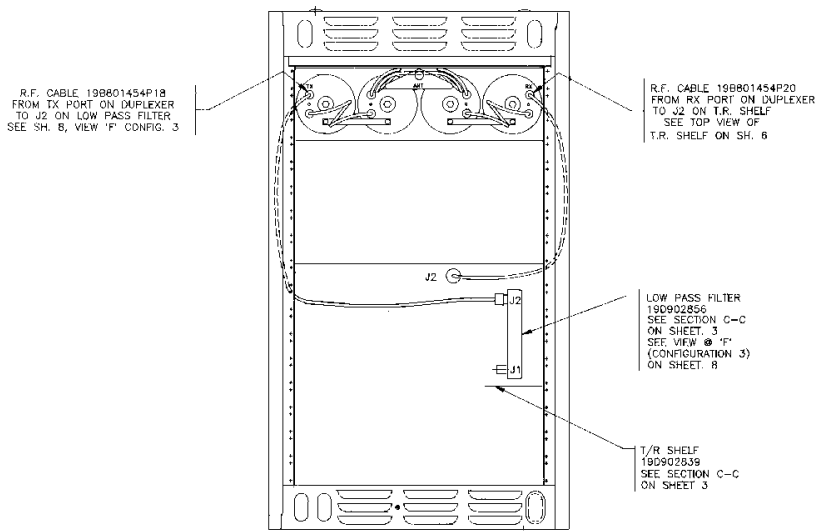
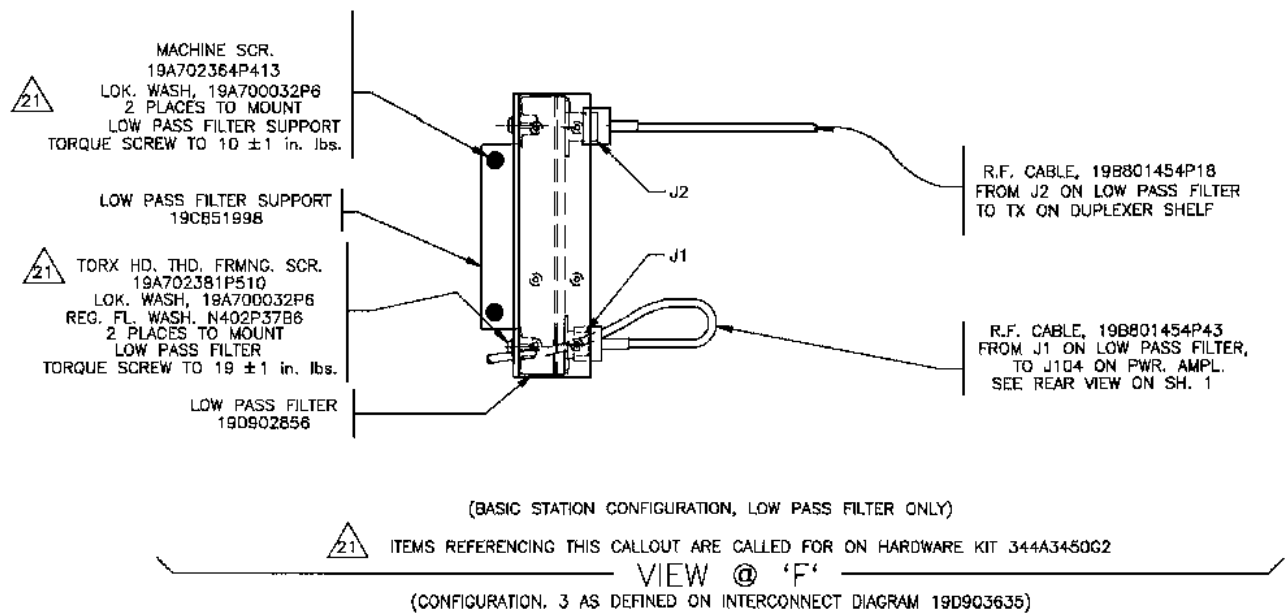
MASTR III STATION
19D902845P2, P7 & P14

(19D902845, Sh. 6, Rev. 5)





FRONT VIEW



REAR VIEW

MASTR III STATION
19D902845P3

(19D902845, Sh. 8, Rev. 5)

MASTR III STATION
19D902854P4

(19D902845, Sh. 9, Rev. 3)

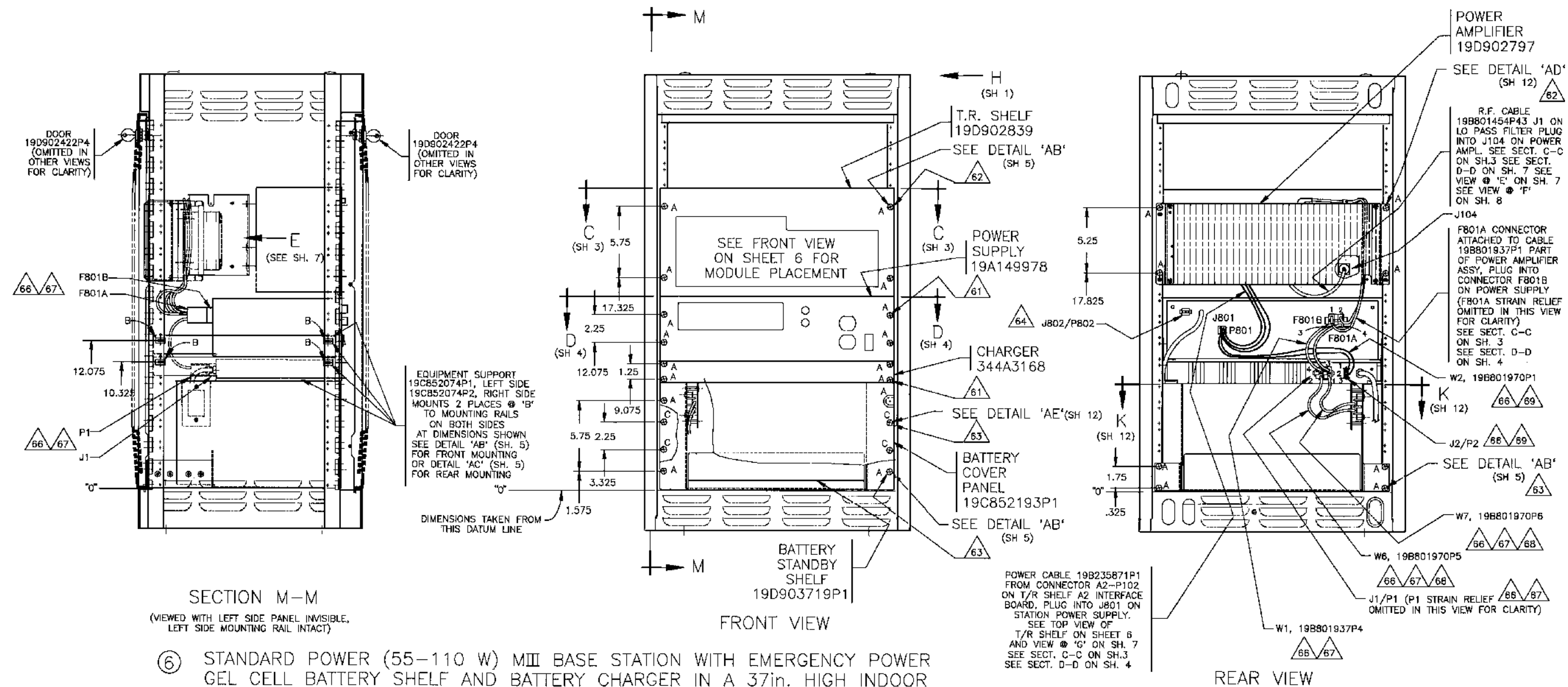
4 37in. HIGH INDOOR FIXED LAND CABINET
MASTR III STATION WITH DUPLEXER SHELF

- NOTES:
- 41 ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT P.L. 344A3450G4.
2. INSTALL CABLES AS SHOWN AND INTERCONNECT IN ACCORDANCE WITH INTERCONNECT DIAGRAM 19D903635 (CONFIGURATION 3)



56. REMOVE F801A OF PA LEAD ASSEMBLY 19B801937P1 FROM F801B OF POWER SUPPLY. REMOVE STRAIN RELIEFS FROM F801A AND FROM P1 OF W1.
INSERT THE BROWN WIRE OF W1 INTO THE NUMBER 3 CAVITY OF F801A.
INSERT THE BLACK WIRE OF W1 INTO THE NUMBER 4 CAVITY OF F801A.
INSERT THE CONTACT END OF W4 INTO THE NUMBER 1 CAVITY OF P1 OF W1.
INSERT THE CONTACT END OF W5 INTO THE NUMBER 2 CAVITY OF P1 OF W1.
REINSTALL STRAIN RELIEFS FOR P1 OF W1 AND F801A.
PLUG P1 OF W1 INTO J1 OF THE CHARGER.
PLUG F801A INTO F801B OF THE POWER SUPPLY.
CABLES W4 AND W5 ARE TO BE LEFT ROLLED UP AND LYING ON THE FLOOR OF THE CABINET.

57. PLUG P2 OF W2 INTO J2 ON THE CHARGER.
INSERT THE ORANGE WIRE OF W2 INTO THE NUMBER 8 CAVITY OF P801 OF CABLE ASSEMBLY 19B235871P1.
INSERT THE BLACK WIRE OF W2 INTO THE NUMBER 9 CAVITY OF P801 OF CABLE ASSEMBLY 19B235871P1.



⑥ STANDARD POWER (55-110 W) MIII BASE STATION WITH EMERGENCY POWER GEL CELL BATTERY SHELF AND BATTERY CHARGER IN A 37in. HIGH INDOOR FIXED LAND CABINET.

NOTES:

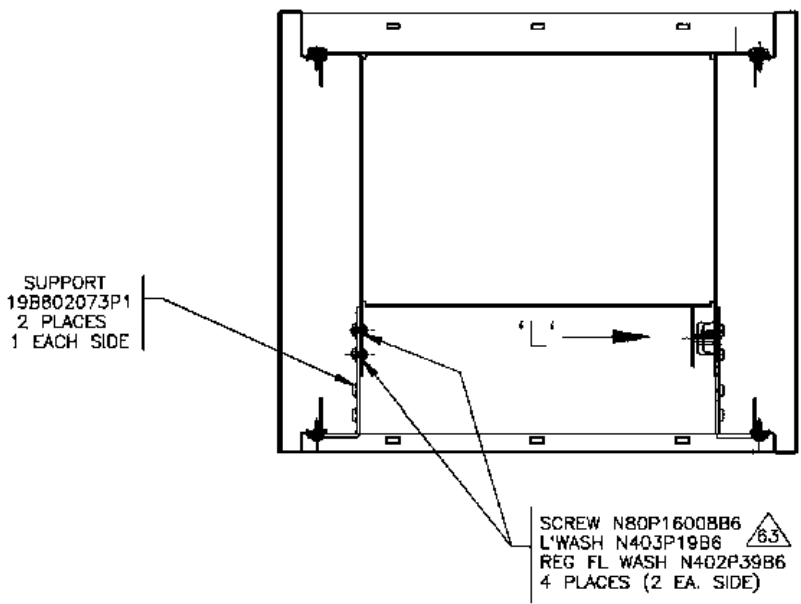
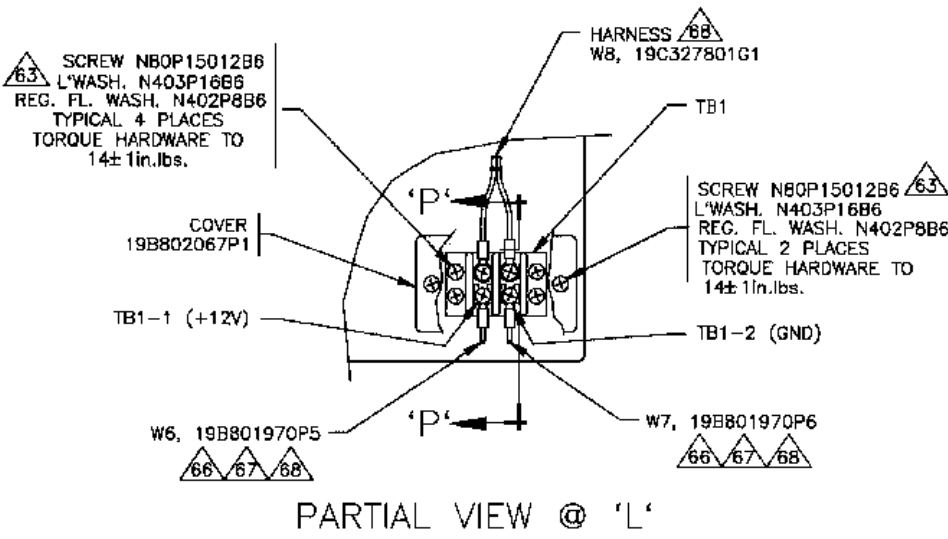
- 61. ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT PL344A3450G1.
- 62. ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT PL344A3450G2.
- 63. ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT PL344A3450G5.
- 64. REMOVE P802 FROM J802 ON POWER SUPPLY 19A149978.
- 65. INSTALL CABLES AS SHOWN AND INTERCONNECT IN ACCORDANCE WITH INTERCONNECT DIAGRAM 19D903635. SEE ALSO NOTES 66, 67, 68 & 69.
- 66. INTERCONNECTION OF CABLES IN NOTES 67, 68 & 69 TO BE CONSISTENT WITH INTERCONNECTION DRAWING 19D903635.

- 67. REMOVE STRAIN RELIEFS FROM F801A OF THE PA LEAD ASSEMBLY, 19B801937P1, AND FROM P1 OF W1 (19B801937P4). INSERT THE BROWN WIRE OF W1 INTO THE NUMBER 3 CAVITY OF F801A. INSERT THE BLACK WIRE OF W1 INTO THE NUMBER 4 CAVITY OF F801A. INSERT THE HERMAPHRODITIC CONTACT OF W6 (19B801970P5) INTO THE NUMBER 1 CAVITY OF P1 OF W1. INSERT THE HERMAPHRODITIC CONTACT OF W7 (19B801970P6) INTO THE NUMBER 2 CAVITY OF P1 OF W1. REINSTALL STRAIN RELIEFS FOR P1 OF W1 AND F801A OF THE PA LEAD ASSEMBLY. PLUG P1 OF W1 INTO J1 OF THE CHARGER. PLUG F801A INTO F801B OF THE POWER SUPPLY.
- 68. CONNECT W6 TO THE "+12V" TERMINAL OF THE W8 (19C327801G1) TERMINAL BOARD. (TB1-1) CONNECT W7 TO THE "GND" TERMINAL OF THE W8 (19C327801G1) TERMINAL BOARD. (TB1-2)

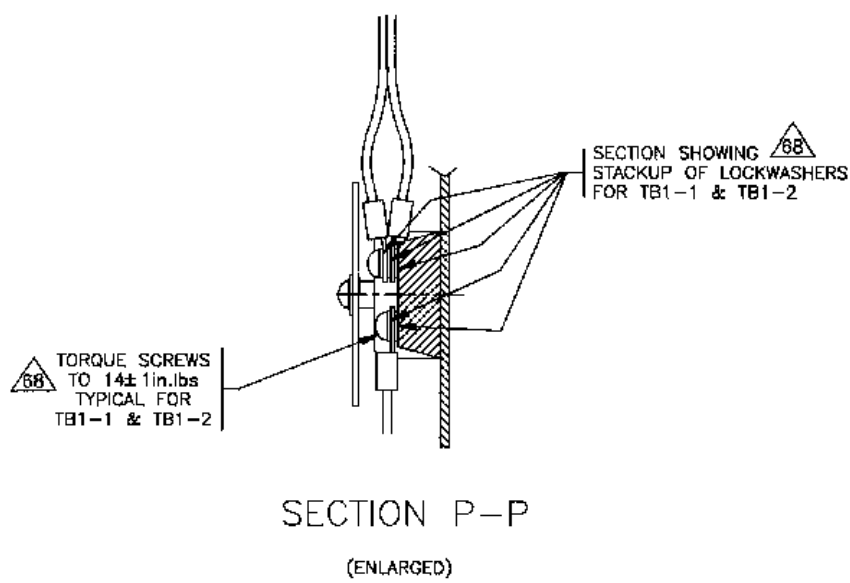
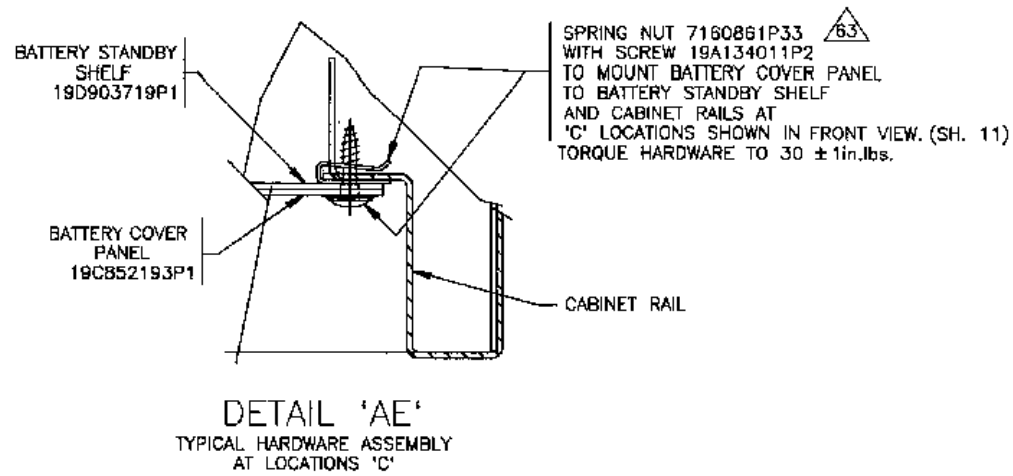
- 69. PLUG P2 OF W2 (19B801970P1) INTO J2 ON THE CHARGER. INSERT THE ORANGE WIRE OF W2 INTO THE NUMBER 8 CAVITY OF P801 OF CABLE ASSEMBLY 19B235871P1. INSERT THE BLACK WIRE OF W2 INTO THE NUMBER 9 CAVITY OF P801 OF CABLE ASSEMBLY 19B235871P1.

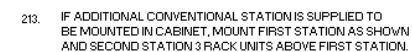
MASTR III STATION
19D902845P6

(19D902845, Sh. 11, Rev. 1)

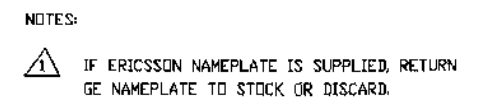


SECTION K-K

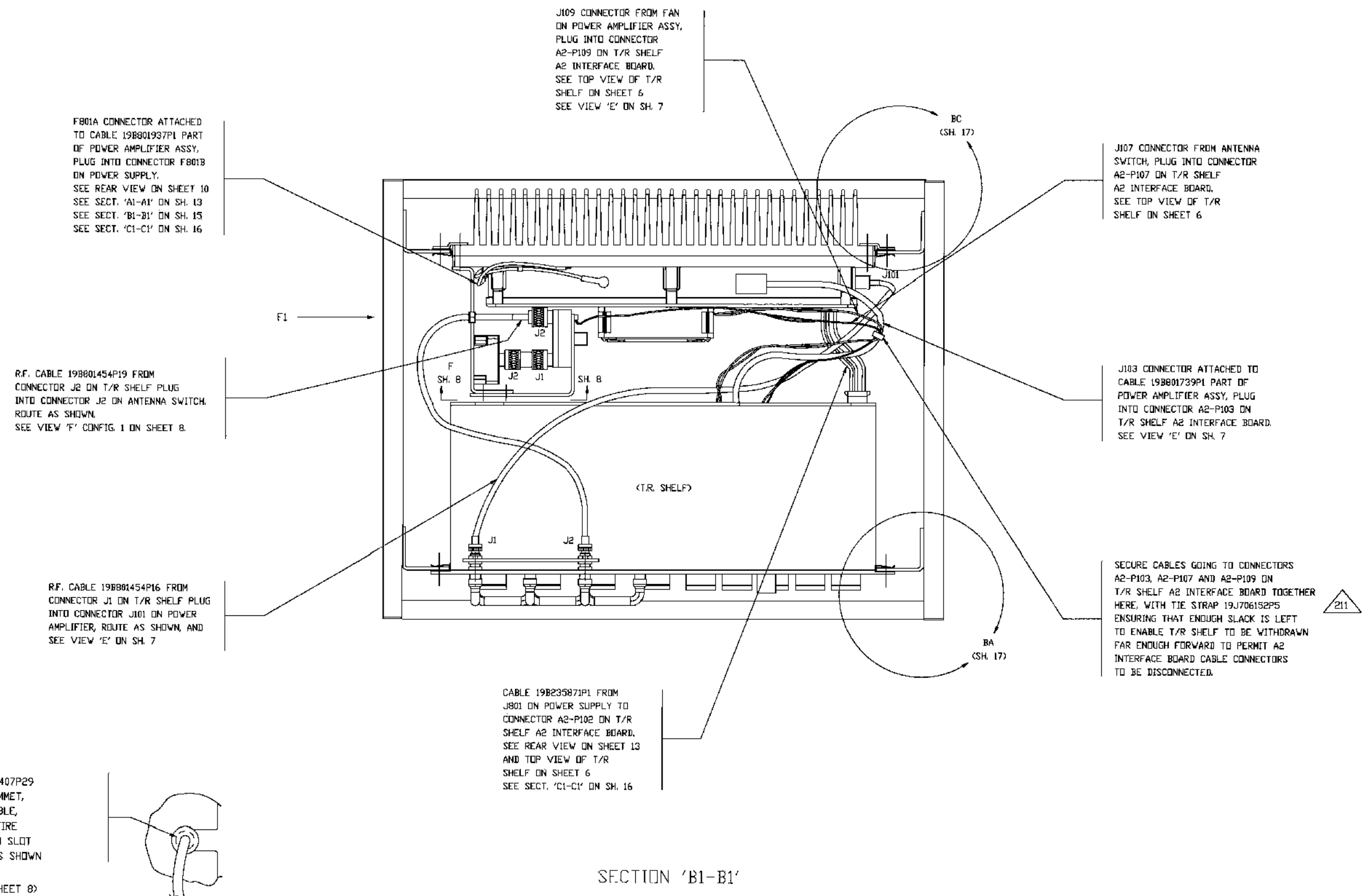




(19D902845, Sh. 13, Rev. 2)

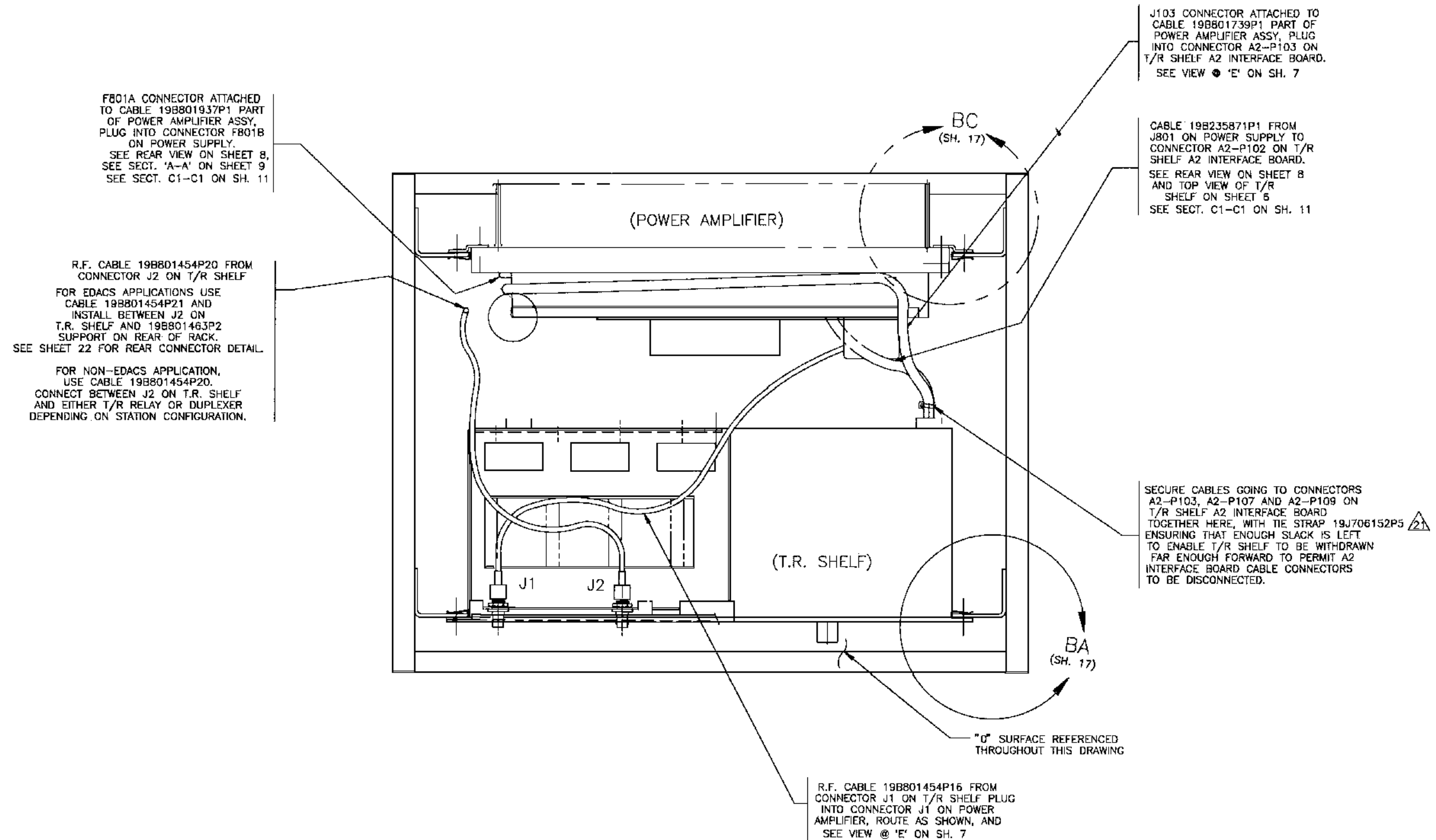


(19D902845, Sh. 14, Rev. 3)



MASTR III STATION

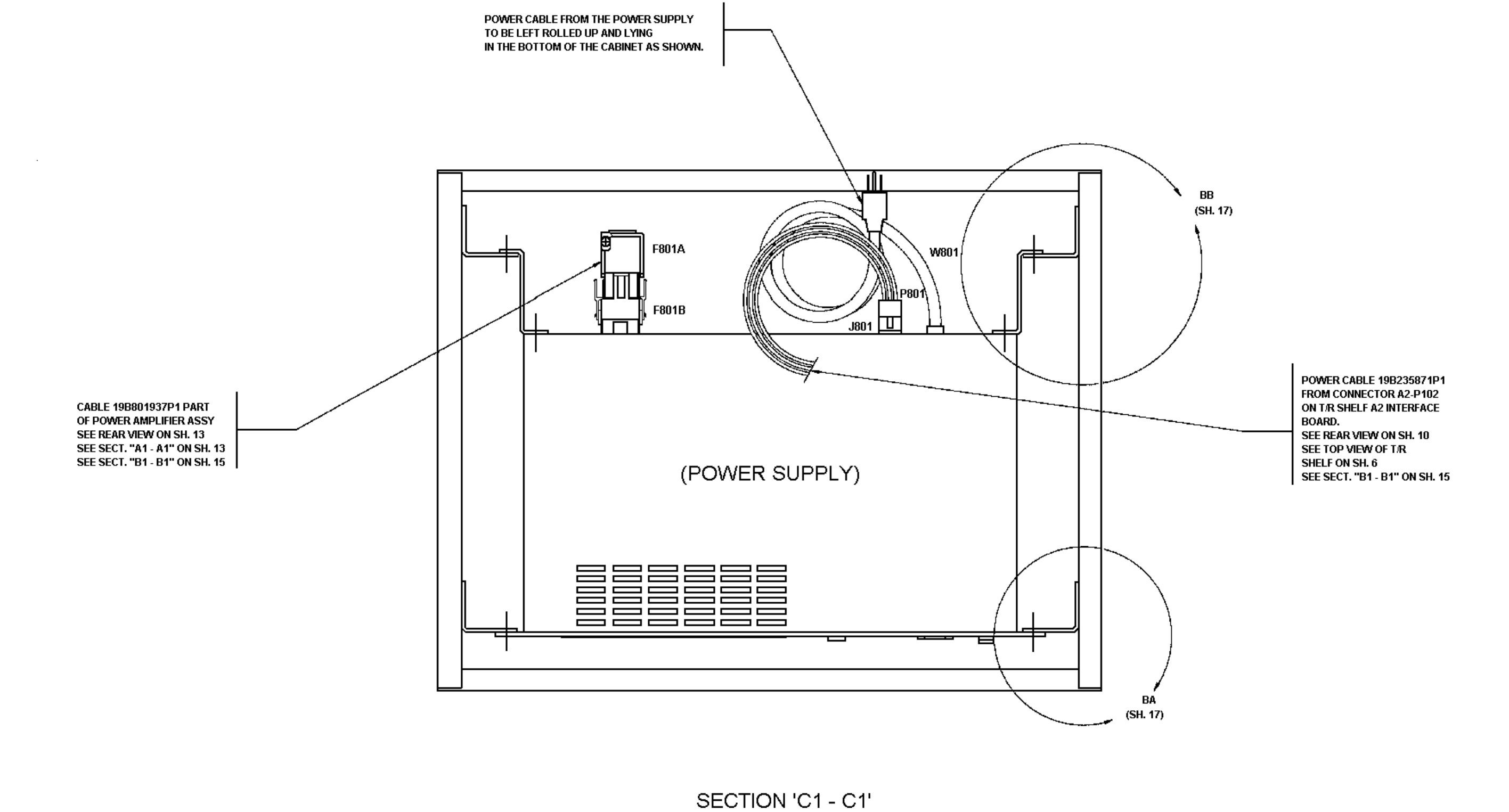
(19D902845, Sh. 15, Rev. 2)



SECTION B1-B1
800 MHz PA ASSEMBLY

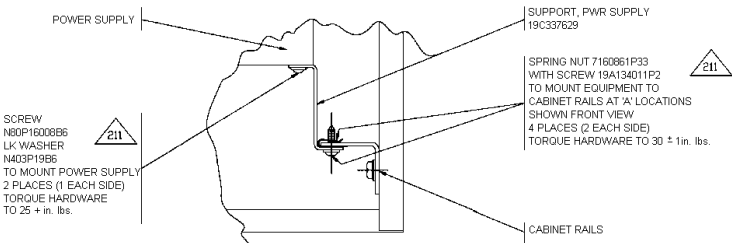
MASTR III STATION

19D902845, Sh. 15A, Rev. 2)

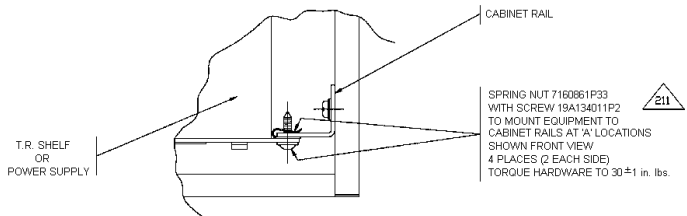


MASTR III STATION

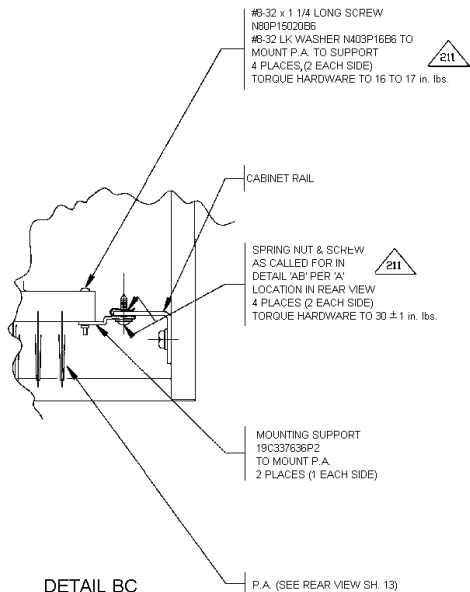
(19D902845, Sh. 16, Rev. 1)



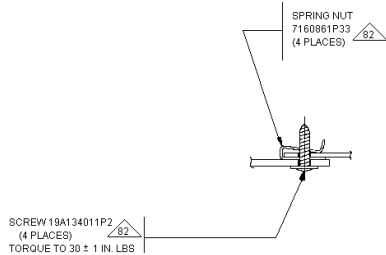
DETAIL BB
TYPICAL HARDWARE ASSEMBLY
AT 'B' LOCATIONS AT REAR
OF CABINET.



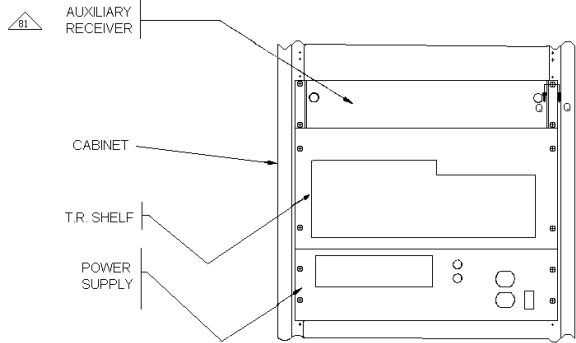
DETAIL BA
TYPICAL HARDWARE ASSEMBLY
AT 'A' LOCATIONS AT FRONT
OF CABINET.



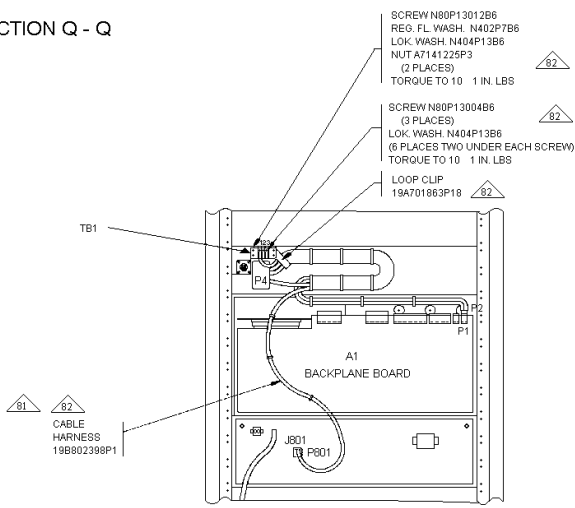
DETAIL BC
TYPICAL HARDWARE ASSEMBLY
AT 'B' LOCATIONS AT REAR
OF CABINET.



PARTIAL SECTION Q - Q



PARTIAL FRONT VIEW OF CABINET



PARTIAL REAR VIEW OF CABINET

⑧ 37 AND 69 INCH. HIGH INDOOR FIXED LAND CABINETS
MASTR III STATION WITH AUXILIARY RECEIVER.

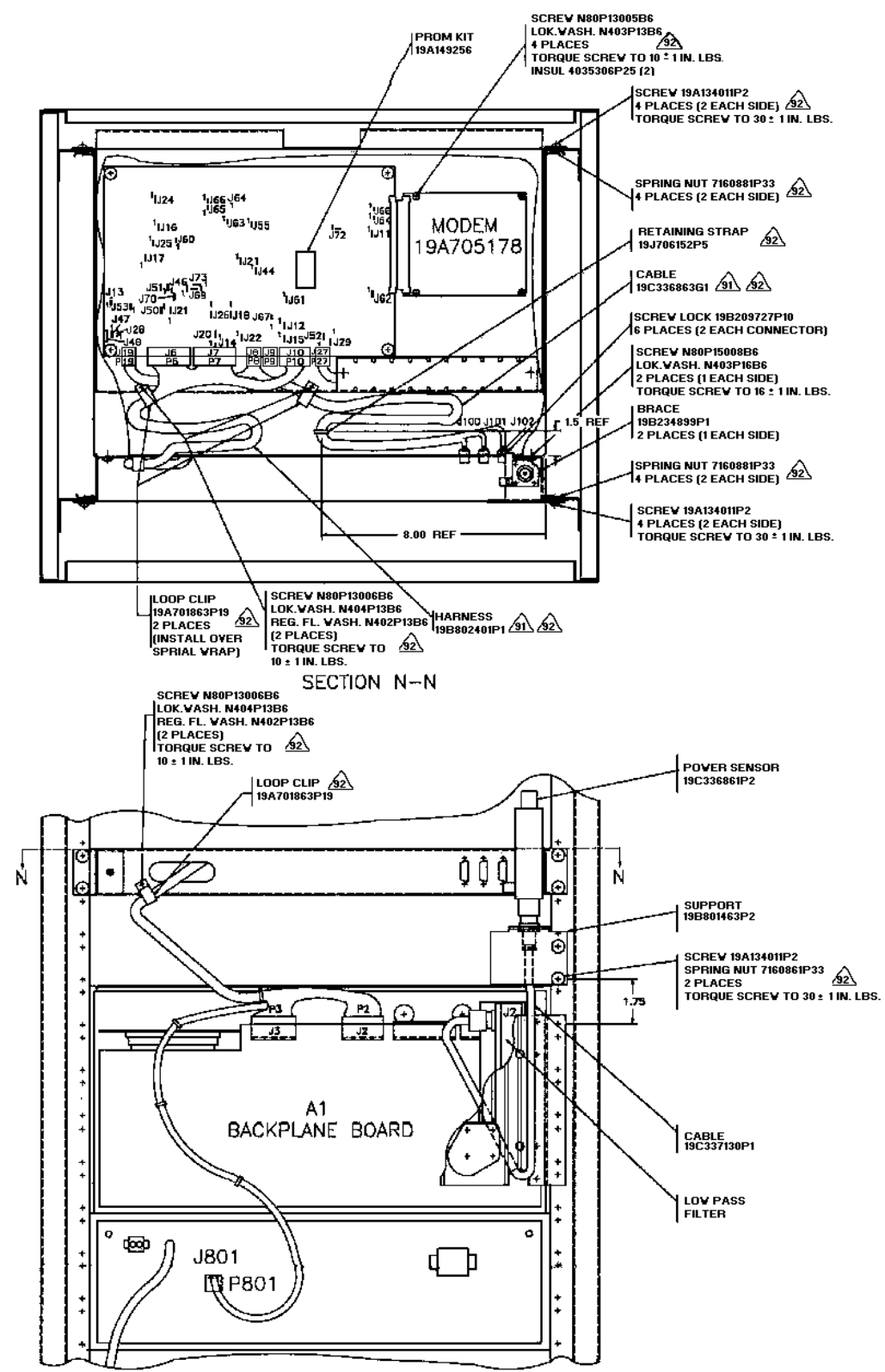
- NOTES:
- 81 INSTALL THE AUXILIARY RECEIVER SHELF
AND CABLE HARNESS 19B802398P1
AS SHOWN. INTERCONNECT IN ACCORDANCE
WITH INTERCONNECT DIAGRAM 19B802438.
 - 82 ITEMS REFERENCING THIS CALLOUT ARE
CALLED FOR ON HARDWARE KIT PL344A345058.

MASTR III STATION

(19D902845, Sh. 17, Rev. 1)

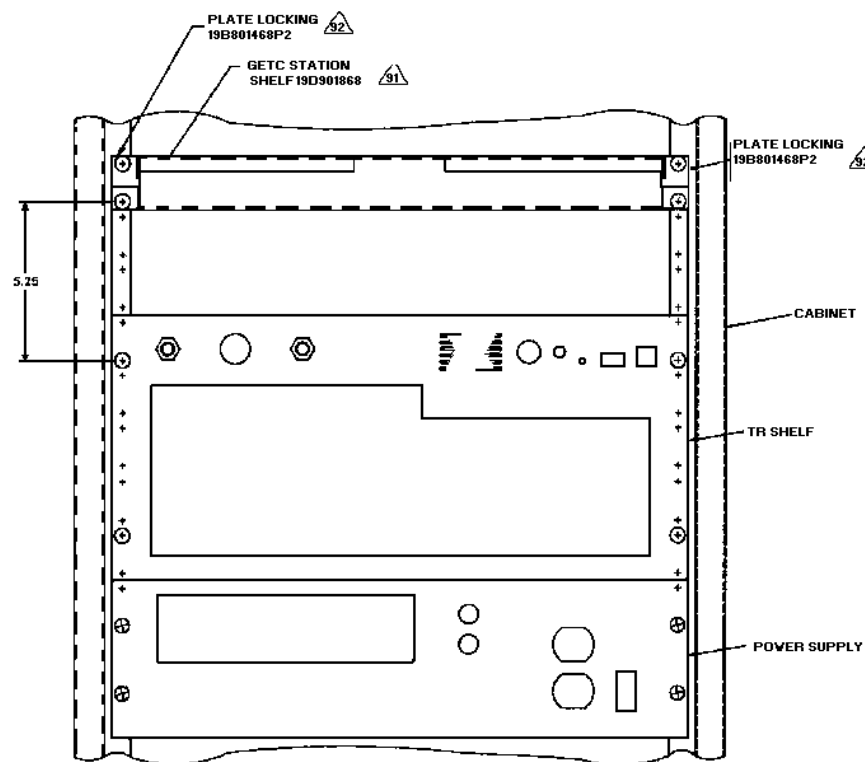
MASTR III STATION
19D902845P8

(19D902845, Sh. 18, Rev. 2)



MASTR III STATION PARTIAL REAR VIEW OF CABINET
19D902845P9 & P10

(19D902845, Sh. 19, Rev. 4)



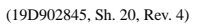
PARTIAL FRONT VIEW OF CABINET
(FRONT AND REAR DOORS OMITTED IN ALL VIEWS FOR CLARITY)

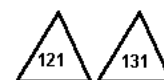
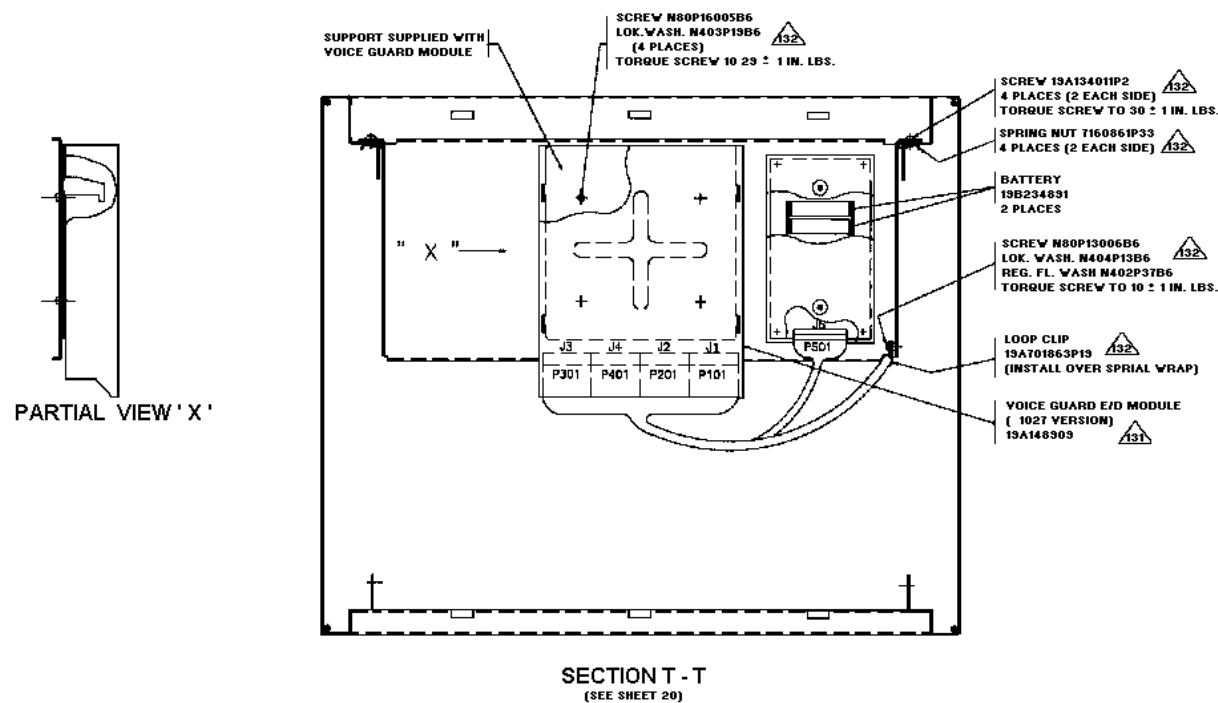
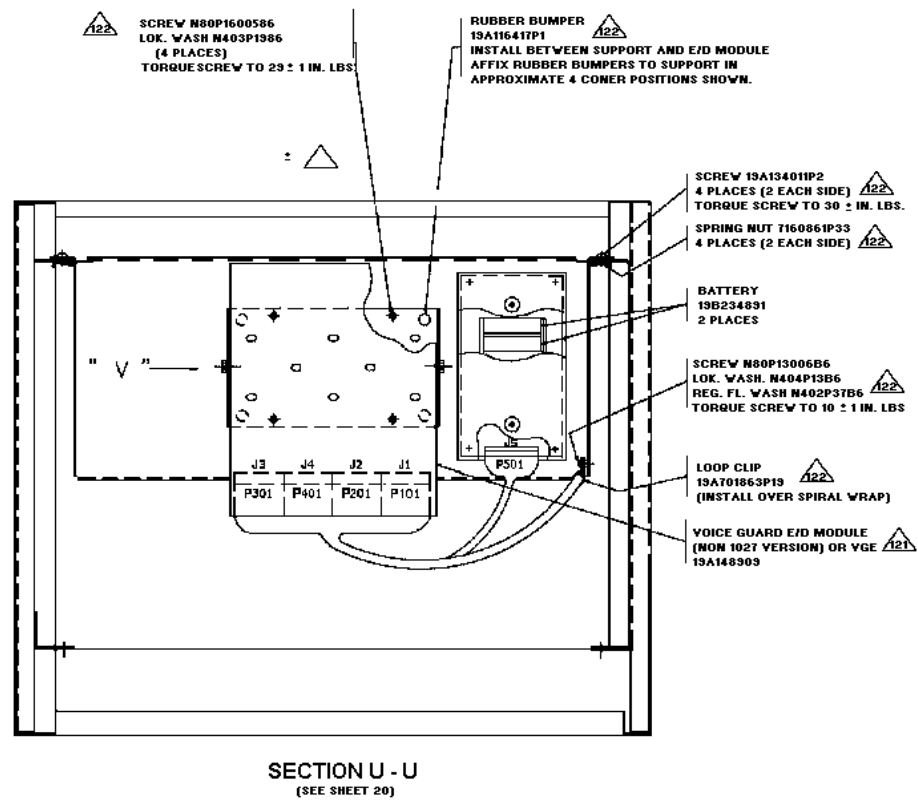
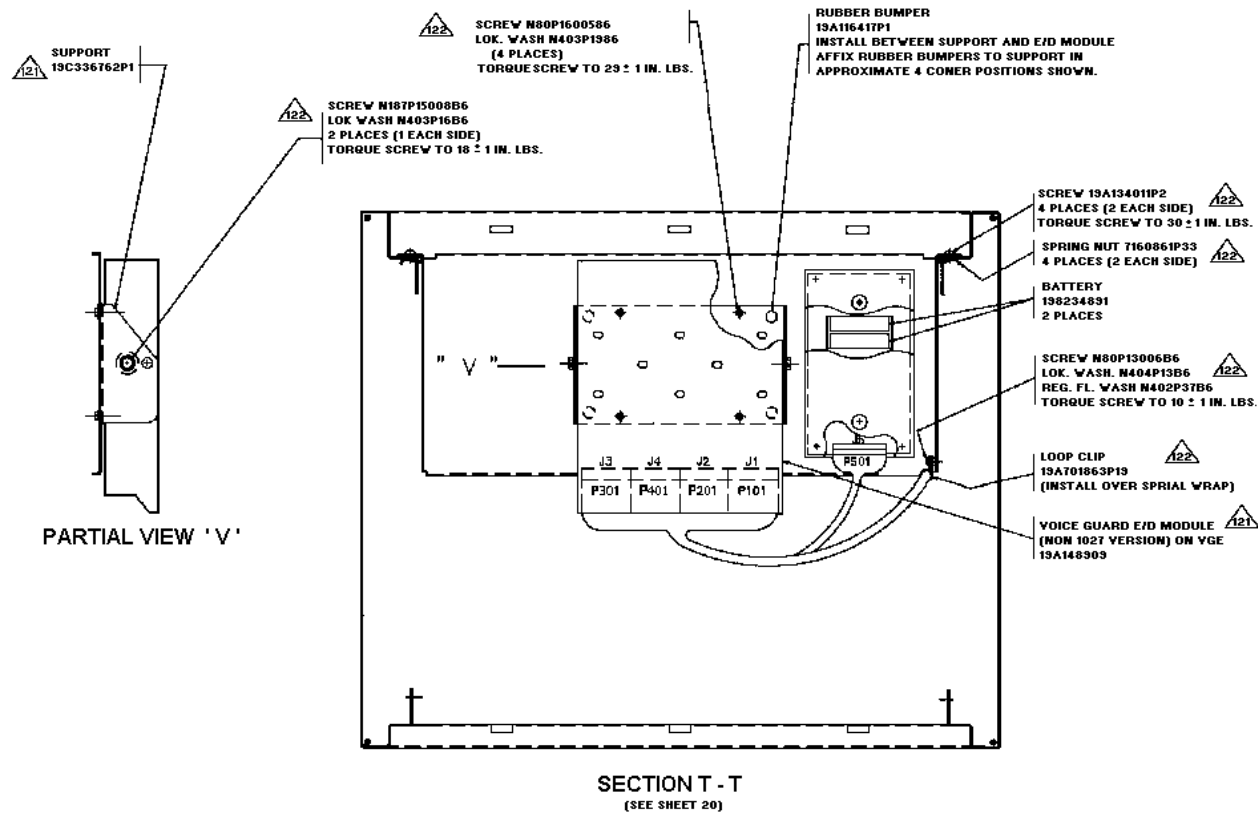
9 69 INCH HIGH INDOOR FIXED LAND CABINET
MASTR III BASE STATION WITH GETC SHELF.

NOTES:

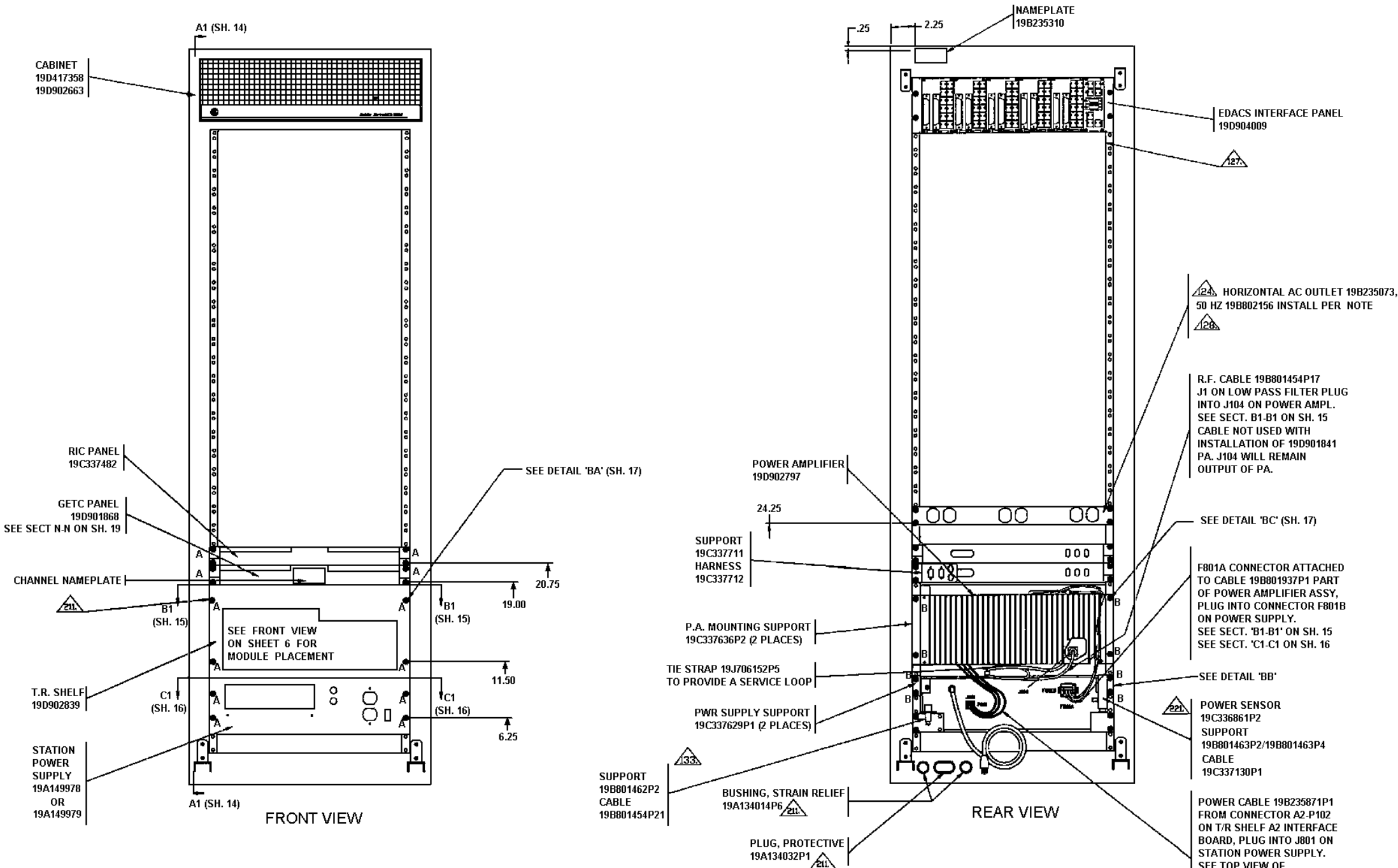
- 91 INSTALL THE GETC SHELF 19D901868, HARNESS 19B802240P1 AND CABLE 19C336863G1 AS SHOWN AND INTERCONNECT IN ACCORDANCE WITH INTERCONNECT DIAGRAM 19D904268. INSTALL JUMPERS 19A702104P2 PER 349A3793P1.
- 92 ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT PL344A3450G3.
- 93. INSTALL EDACS INTERFACE PANEL 19D904009P1 PER 19D904009P101 AND INTERCONNECT IN ACCORDANCE WITH INTERCONNECT DIAGRAM 19D904268. MOUNTING SCREWS AND SPRING NUTS ARE CALLED FOR ON HARDWARE KIT PL344A3450G3.
- 134. REMOVE WIRE FROM P19-5 ON 802401P1 AND INSTALL IN P19-5 ON 19C336863.

10 INSTALLATION OF 19A705178P1 MODEM





| Freq Band (MHz) | Inj. side | RX Data Polarity Inv. |
|-----------------|-----------|-----------------------|
| 136 - 150.8 | High | No |
| 150.8 - 174 | Low | Yes |
| 380 - 403 | High | No |
| 403 - 425 | High | No |
| 425 - 450 | High | No |
| 450 - 470 | Low | Yes |
| 470 - 494 | Low | Yes |
| 494 - 512 | Low | Yes |
| 800 | Low | Yes |



15 CABINET WITH MASTR III STATION
(DOORS REMOVED FOR CLARITY)

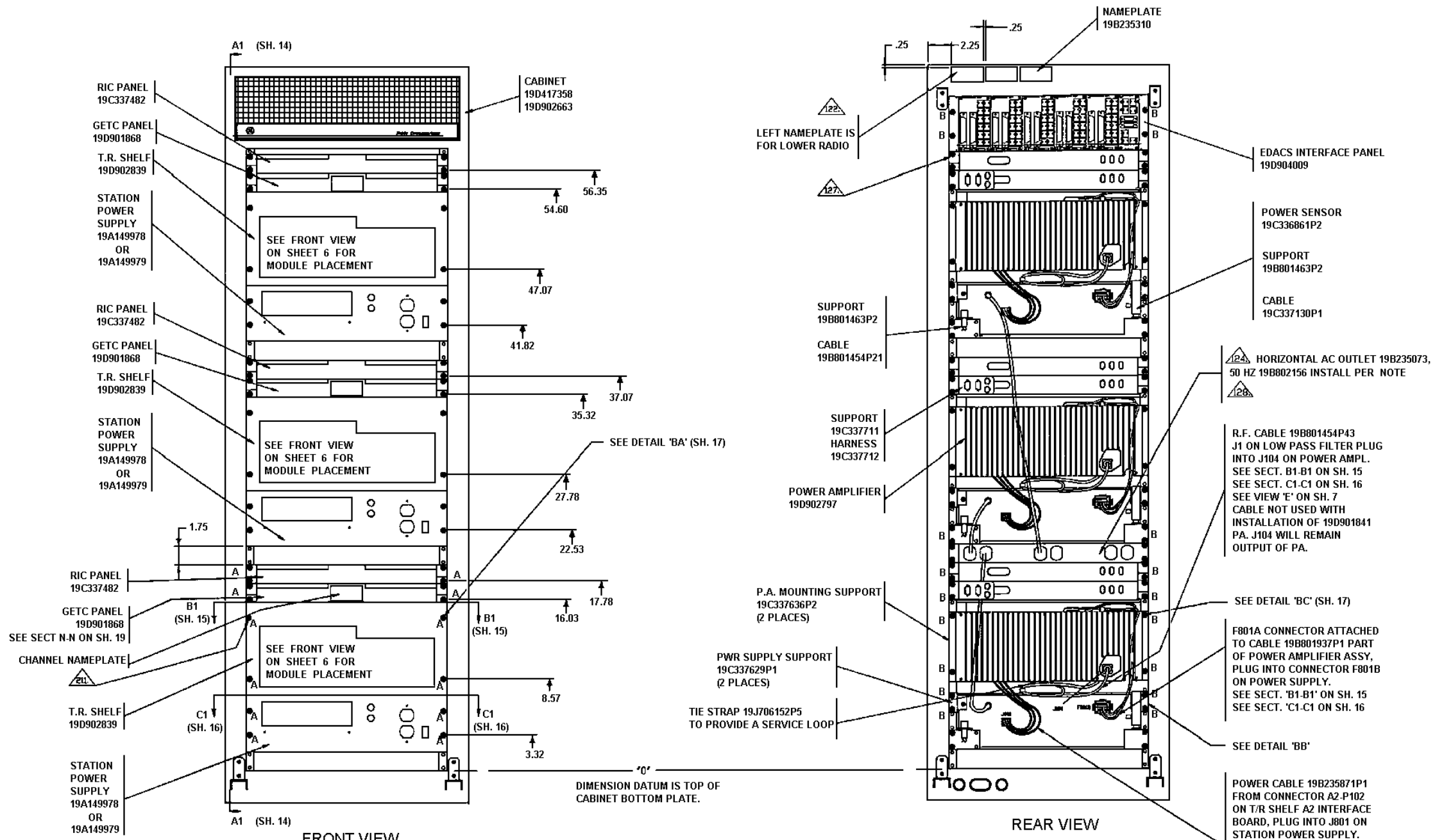
21. ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT PL 344A3450G21.
212. INSTALL CABLES AS SHOWN AND INTERCONNECT IN ACCORDANCE WITH INTERCONNECT DIAGRAM 19D903635.
- 12L. MOUNT STATIONS IN CABINET IN ASCENDING ORDER WITH LOWEST CHANNEL IN THE BOTTOM POSITION.

124. PLUG AC POWER CABLES INTO HORIZONTAL OUTLET STRIP 19B235073 / 19B801967.
125. TIE STRAP CABLES TO MOUNTING RAILS.
127. WHEN THERE IS NO RIC PANEL 19C337482 IN THIS POSITION, THE EDACS INT. PANEL CAN BE MOUNTED 1 RACK UNIT LOWER FOR EASIER CABLE ROUTING.

126. LOCATE 50Hz AC OUTLET STRIP 19B801967 IN BOTTOM RACK UNIT.
133. SEE SECTION C-C SHEET 3A FOR CONNECTION OF 801454P21 CABLE.
22. FOR INSTALLATION OF 19B801463P4 SUPPORT. SEE DETAIL BG, SHEET 17. LOCATE SUPPORT IN SAME POSITION AS 19B801463P2 SUPPORT SHOWN, RETURN P2 SUPPORT TO STOCK. ATTACH RF CABLE TO PA CONNECTOR USING 777745P4 RIGHT ANGLE CONNECTOR.

MASTR III STATION
19D902845P15

(19D902845, Sh. 22, Rev. 6)



16 MULTI-STATION ASM, CABINET
(DOORS REMOVED FOR CLARITY)

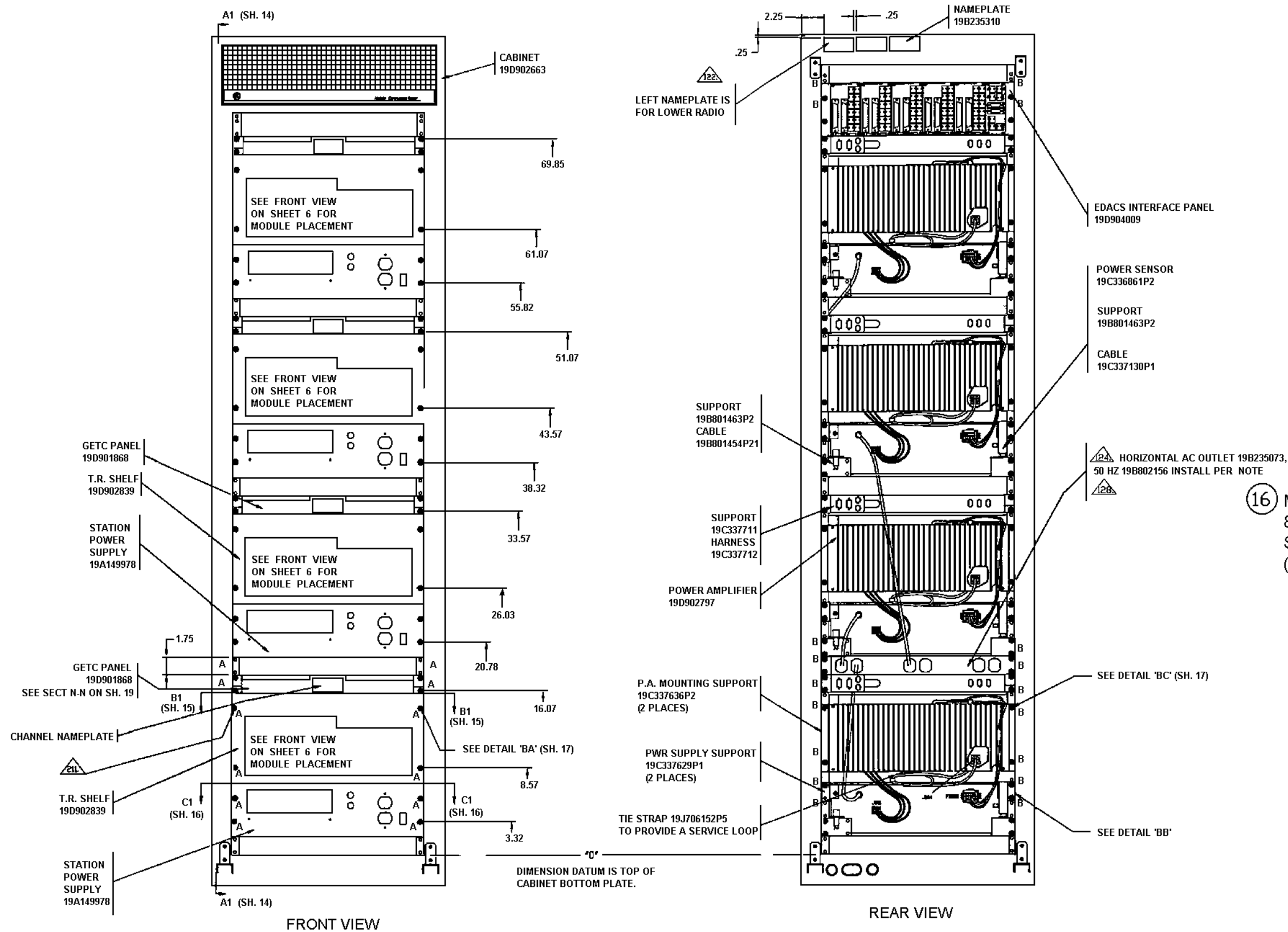
- 121. ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT PL 344A3450G21.
- 122. INSTALL CABLES AS SHOWN AND INTERCONNECT IN ACCORDANCE WITH INTERCONNECT DIAGRAM 19D903635.
- 123. MOUNT STATIONS IN CABINET IN ASCENDING ORDER WITH LOWEST CHANNEL IN THE BOTTOM POSITION.
- 124. APPLY NAMEPLATES LEFT TO RIGHT, LOWEST POSITION STATION TO MATCH LEFT NAMEPLATE, ETC.
- 125. MOUNT THIRD STATION WITH SIMILAR SPACING AS SECOND STATION.

- 126. PLUG AC POWER CABLES INTO HORIZONTAL OUTLET STRIP 19B235073 / 19B801967.
- 127. TIE STRAP CABLES TO MOUNTING RAILS.
- 128. FOR 83" CABINET (19D9026630), MOUNT STATIONS AS SHOWN WITH EDACS INTERFACE PANEL IN TOP RACK UNITS AS SHOWN. FOR 83" CABINET WITH 4 STATIONS AND NO RICS, SEE SHEET 23A.
- 129. WHEN THERE IS NO RIC PANEL 19C337482 IN THIS POSITION, THE EDACS INT. PANEL CAN BE MOUNTED 1 RACK UNIT LOWER FOR EASIER CABLE ROUTING.
- 130. LOCATE 50Hz AC OUTLET STRIP 19B01967 IN BOTTOM RACK UNIT.

129. FOR 4 MASTR III STATIONS MOUNTED IN 83 INCH CABINET, SEE SHEET 23a FOR MOUNTING CONFIGURATION.

MASTR III STATION
19D902845P16

(19D902845, Sh. 23, Rev. 7)

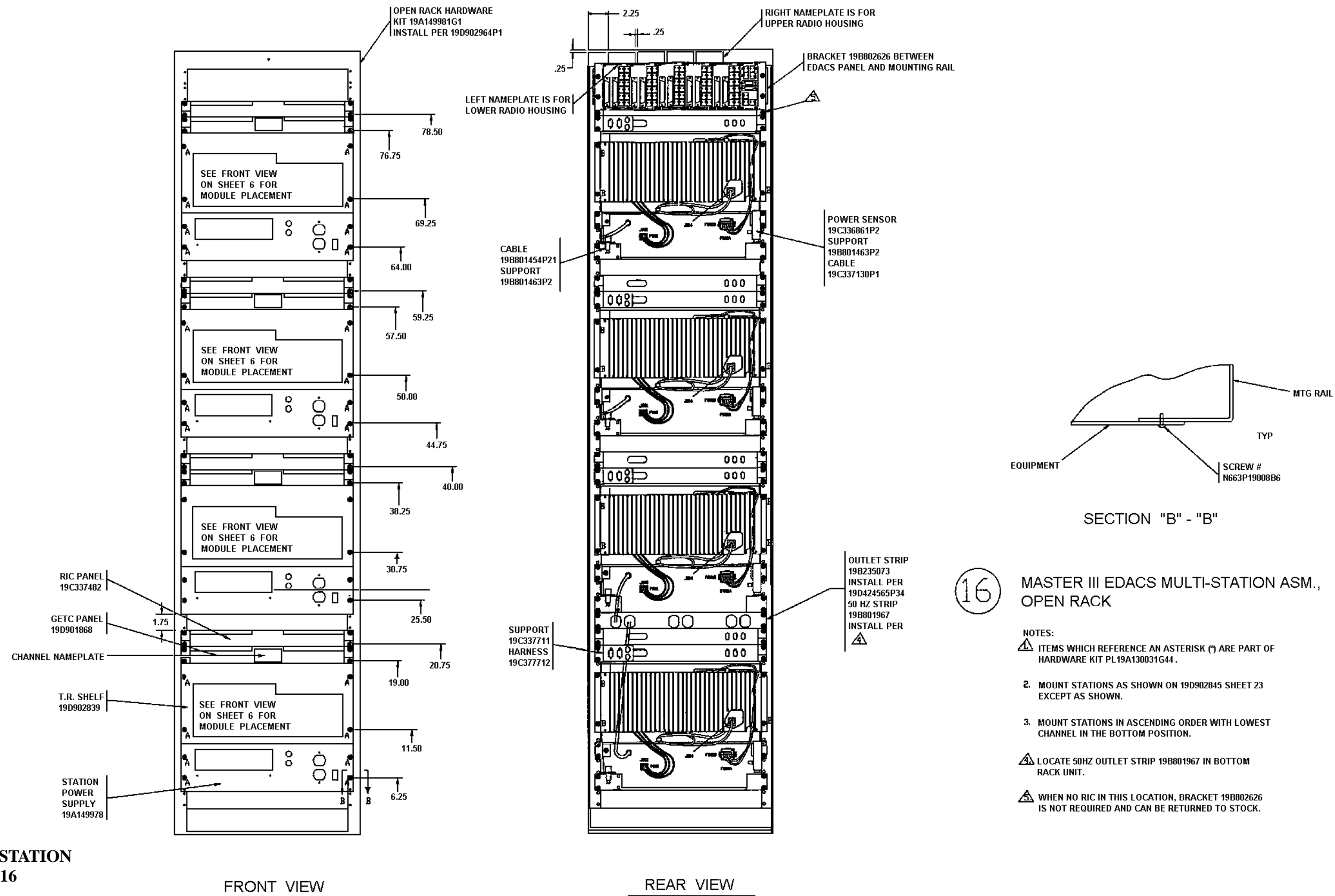


16 MULTI-STATION ASM, CABINET 83' CABINET WITH 4 MASTR III STATIONS (NO RICS) (DOORS REMOVED FOR CLARITY)

- 211. ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT PL 344A3450G21
- 212. INSTALL POWER CABLES AS SHOWN AND INTERCONNECT IN ACCORDANCE WITH INTERCONNECT DIAGRAM 19D903635.
- 121. MOUNT STATIONS IN CABINET IN ASCENDING ORDER WITH LOWEST CHANNEL IN THE BOTTOM POSITION.
- 122. APPLY NAMEPLATES LEFT TO RIGHT, LOWEST POSITION STATION TO MATCH LEFT NAMEPLATE, ETC.
- 124. PLUG AC POWER CABLES INTO HORIZONTAL OUTLET STRIP 19B235073 / 19B801967.
- 125. TIE STRAP CABLES TO MOUNTING RAILS.
- 128. LOCATE 50Hz AC OUTLET STRIP 19B801967 IN BOTTOM RACK UNIT.

MASTR III STATION
19D902845P16

(19D902845, Sh. 23A, Rev. 4)

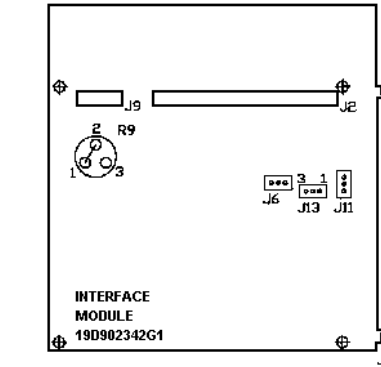


MASTR III STATION
19D902845P16

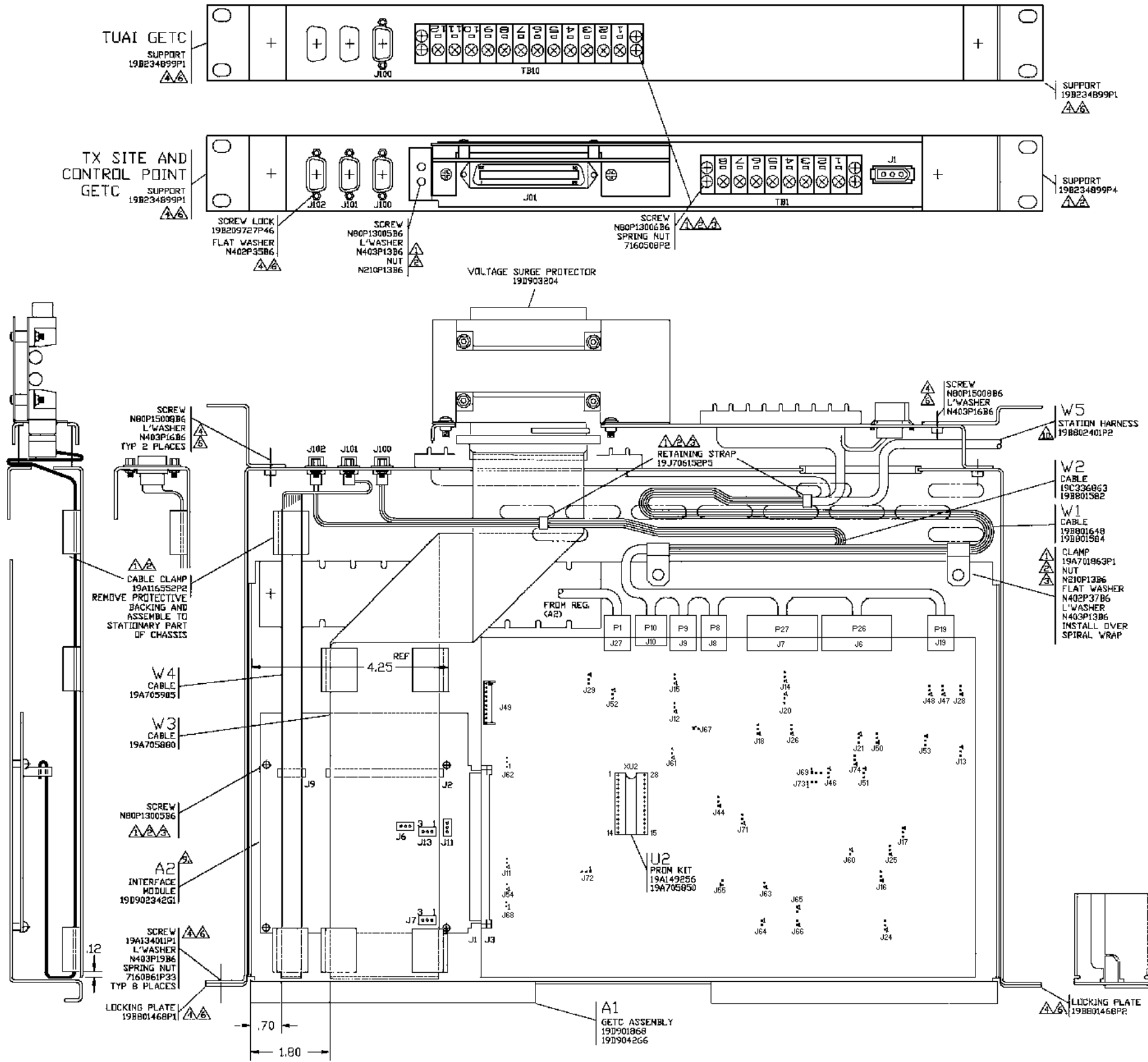
(19D902845, Sh. 24, Rev. 5)

DETAIL SIMULCAST GETC
FOR STATION RACK-UP SEE SHEET 28

- NOTES:
- ▲ PART OF HARDWARE KIT PL19A149821G1
 - ▲ PART OF HARDWARE KIT PL19A149821G2
 - ▲ PART OF HARDWARE KIT PL19A149821G3
 - ▲ PART OF HARDWARE KIT PL19A130031G30
 - ▲ PART OF HARDWARE KIT PL19A130031G40
 - ▲ PART OF HARDWARE KIT PL19A130031G41
 - 7. SEE DRAWING 349A9793P2 FOR JUMPER CONFIGURATION
 - 8. THESE INSTRUCTIONS SUPERCEDE GETC ASSEMBLY INSTRUCTIONS SHOWN ON APPLICATION ASSEMBLY 19D417483. REMOVE R9 FROM INTFC MODULE (19D902342G1). INSTALL WIRE FROM P1-P2 WHERE POT WAS REMOVED.

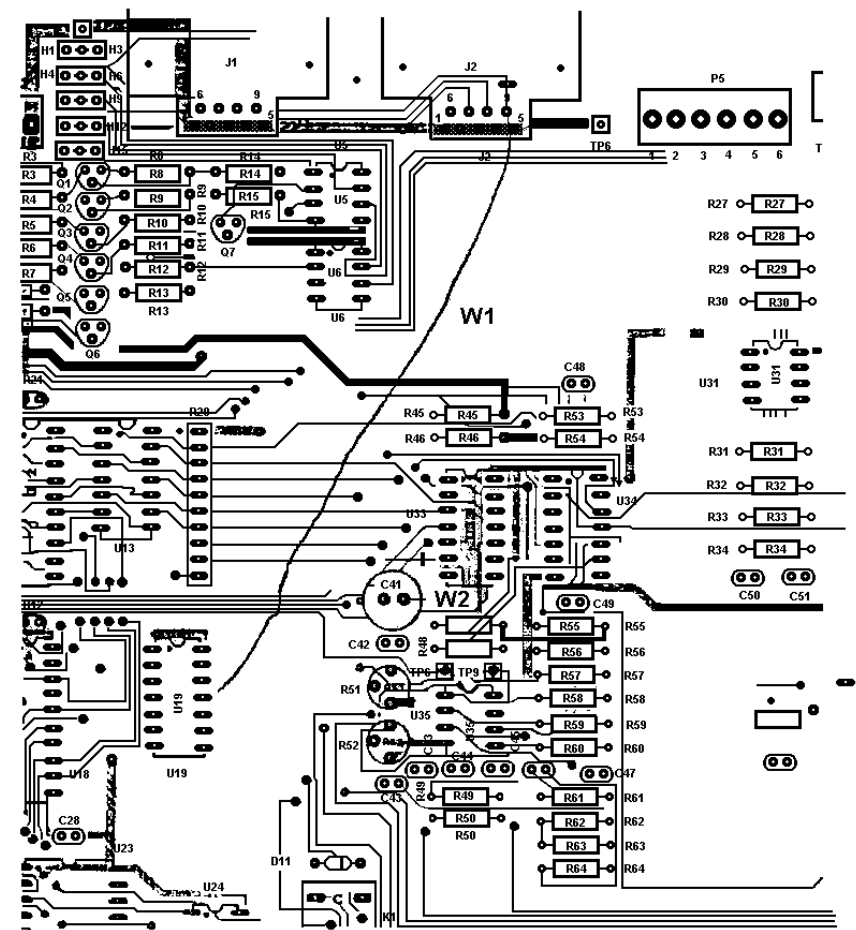


- ▲ REMOVE WIRES FROM P19-5 AND P19-3 ON THE 19B802401P2 HARNESS, AND INSTALL IN P19-5 AND P19-3 OF 19C336863G1 HARNESS.



MASTR III STATION

(19D902845, Sh. 25, Rev. 2)

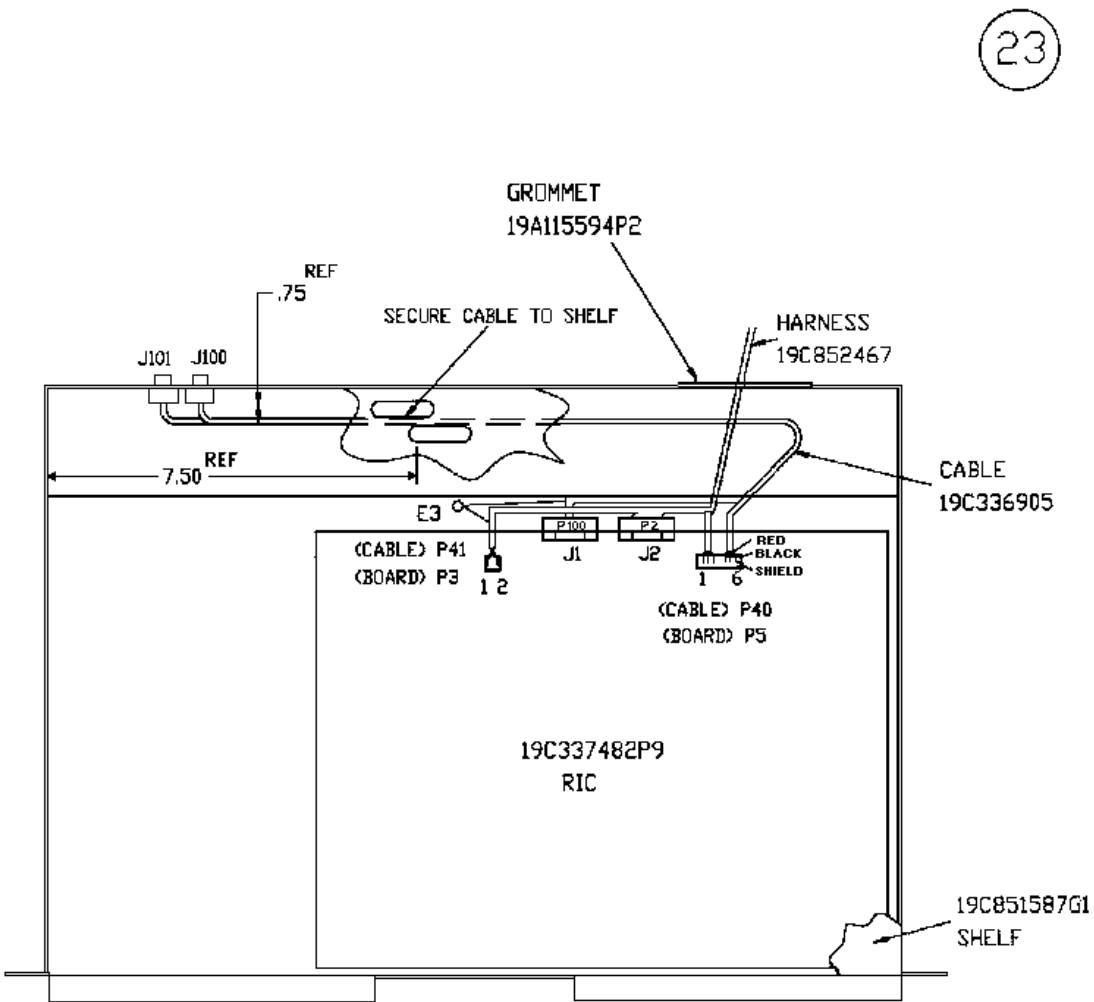


MODIFICATION INSTRUCTION

- 1) CUT PATTERN AT J2 PIN 9, U19 PIN 11, AND U33 PIN 6.
- 2) CONNECT W1 FROM J2 PIN 9 TO U19 PIN 11.
- 3) CONNECT W2 FROM U33 PIN 6 TO U33 PIN 7.
- 4) CUT THE LOCAL PTT LINE ON THE 19B802401P1 HARNESS AT P7 PIN 8 ON THE GETC.
- 5) MATERIAL SUPPLIED IN 349A9784G1 MOD KIT.

MASTR III STATION
19D902845P23

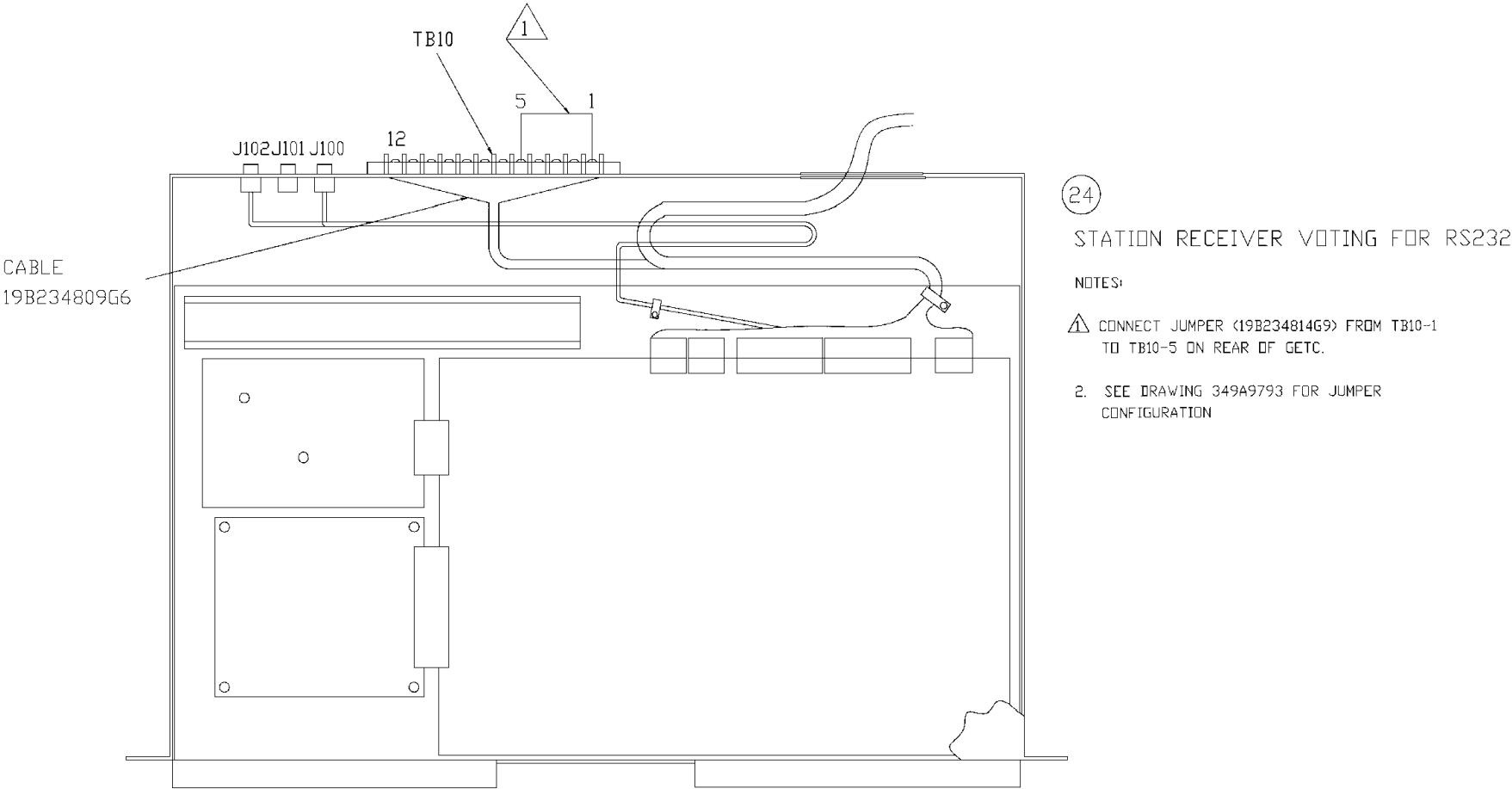
(19D902845, Sh. 26, Rev. 5)



23 INSTALLATION INSTRUCTION

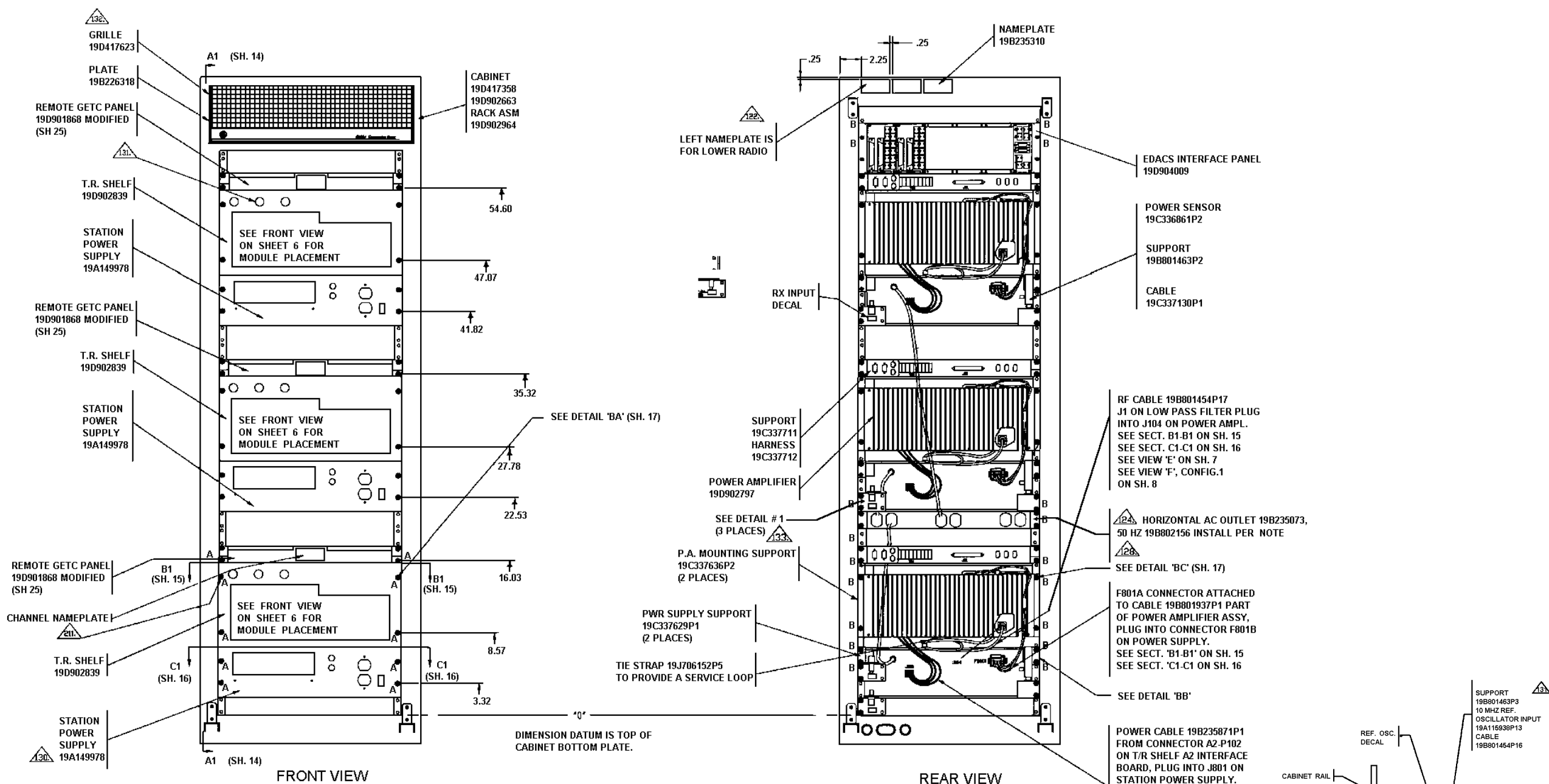
- 1) AFTER MODIFYING THE RIC, CONNECT P100 OF CABLE 19C336905 TO J1.
- 2) INSERT RED, BLACK, AND SHIELD FROM CABLE 19C336905 INTO THE SLOTS OF J5 OF THE MASTER III RIC CABLES AS FOLLOWS:

RED - PIN 4
BLACK - PIN 5
SHIELD - PIN 6
- 3) CONNECT P2 OF MASTER III RIC CABLE TO J2 ON THE RIC.
- 4) CONNECT J3 OF MASTER III RIC CABLE TO P3 ON THE RIC.
- 5) INSTALL GROUND LUGS FROM 19C852467 HARNESS AND 19C336905 CABLE ON E3 USING #6 HARDWARE.



MASTR III STATION
19D902845P24

(19D902845, Sh. 27, Rev. 30)



SIMILAR TO 19D902845P16
EXCEPT AS NOTED :

22 SIMULCAST MASTR III APPL ASM
(DOORS REMOVED FOR CLARITY)

- 21. ITEMS REFERENCING THIS CALLOUT ARE CALLED FOR ON HARDWARE KIT PL 344A3450G21.
- 212. INSTALL CABLES AS SHOWN AND INTERCONNECT IN ACCORDANCE WITH INTERCONNECT DIAGRAM 19D903635.
- 121. MOUNT STATIONS IN CABINET IN ASCENDING ORDER WITH LOWEST CHANNEL IN THE BOTTOM POSITION.
- 122. APPLY NAMEPLATES LEFT TO RIGHT, LOWEST POSITION STATION TO MATCH LEFT NAMEPLATE, ETC.
- 123. MOUNT THIRD STATION WITH SIMILAR SPACING AS SECOND STATION.

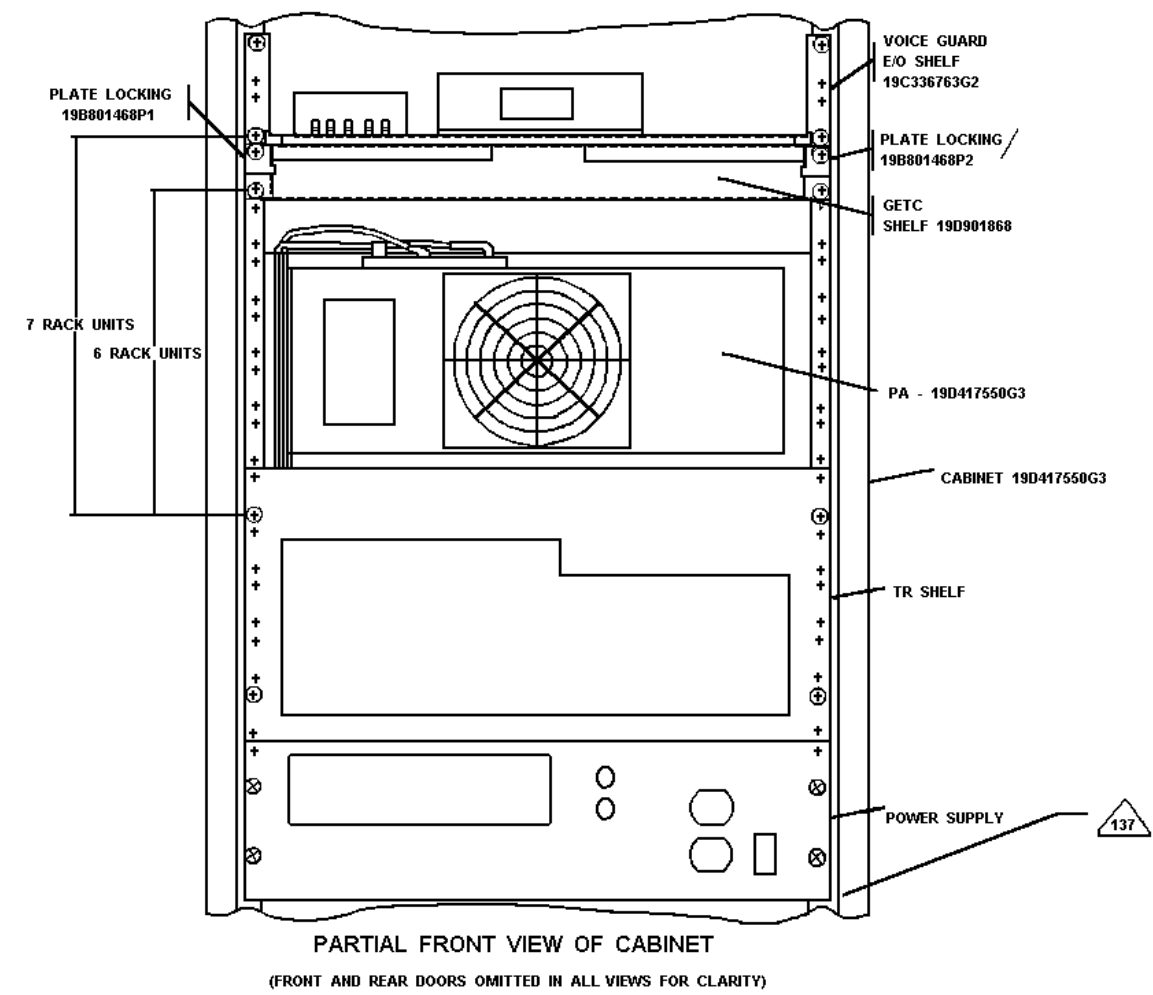
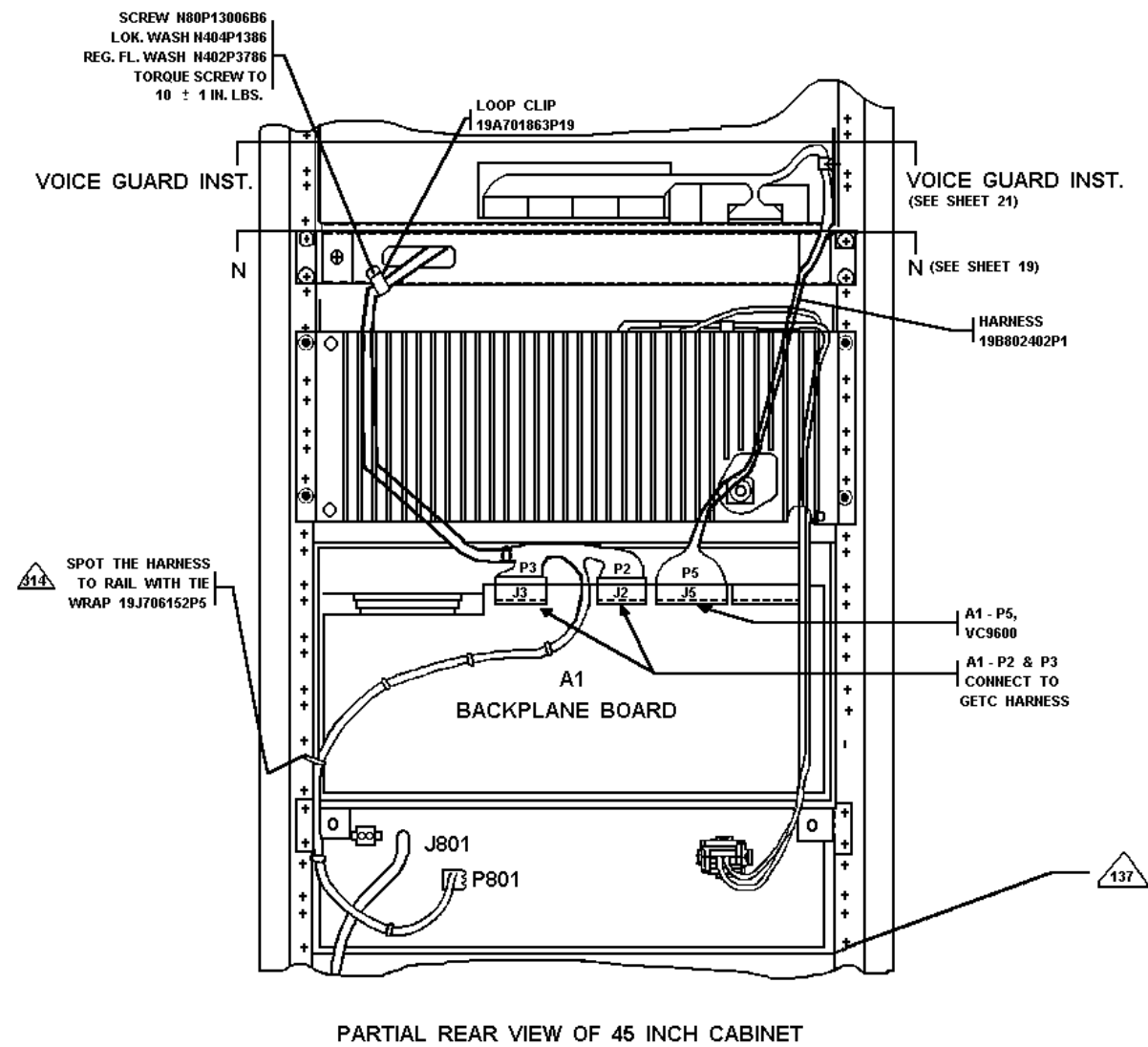
- 124. PLUG AC POWER CABLES INTO HORIZONTAL OUTLET STRIP 19B235073 / 19B801967.
- 125. TIE STRAP CABLES TO MOUNTING RAILS.
- 125. FOR 83" CABINET (19D9026630), MOUNT STATIONS AS SHOWN WITH EDACS INTERFACE PANEL IN TOP RACK UNITS AS SHOWN.
- 126. LOCATE 50Hz AC OUTLET STRIP 19B801967 IN BOTTOM RACK UNIT.
- 130. WHEN POWER SUPPLY IS REPLACED BY 19C327027 DC FUSE PANEL, MOUNT PANEL WITH TOP IN THE SAME LOCATION AS TOP OF POWER SUPPLY.

- 131. ADD 10 MHZ REF OSCILLATION CONNECTION
 - A) REMOVE BUTTON PLUG ABOVE RX SYN. MOD.
 - B) ADD FEED THRU CONNECTOR 19A115938P13 TO CONN. SUPPORT BRACKET BEHIND BUTTON PLUG.
 - C) ATTACH RF CABLE 344A3052P1 FROM RX SYNTHESIZER MODULE 19D902781 J4 TO FEED THRU CONNECTOR.
 - D) ATTACH 19B801454P16 CABLE FROM FEED THRU CONNECTOR TO CONNECTOR 19A115938P13 AS SHOWN.
- 132. IF ERICSSON NAMEPLATE IS SUPPLIED, RETURN GE NAMEPLATE TO STOCK OR DISCARD.
- 133. SEE SECTION C-C SHEET 3A FOR CONNECTION OF 801454P21 CABLE.

DETAIL #1

MASTR III STATION
19D902845P22

(19D902845, Sh. 28, Rev. 2)



25 45 INCH WEATHER PROOF CABINET
APPLICATION ASSEMBLY DRAWING

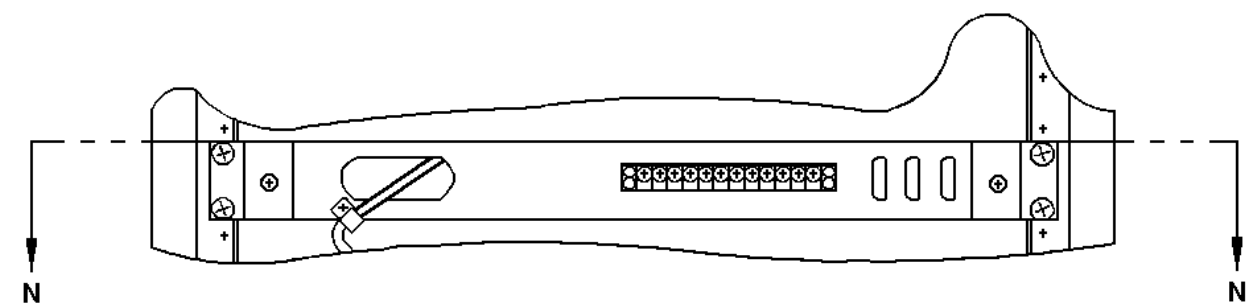
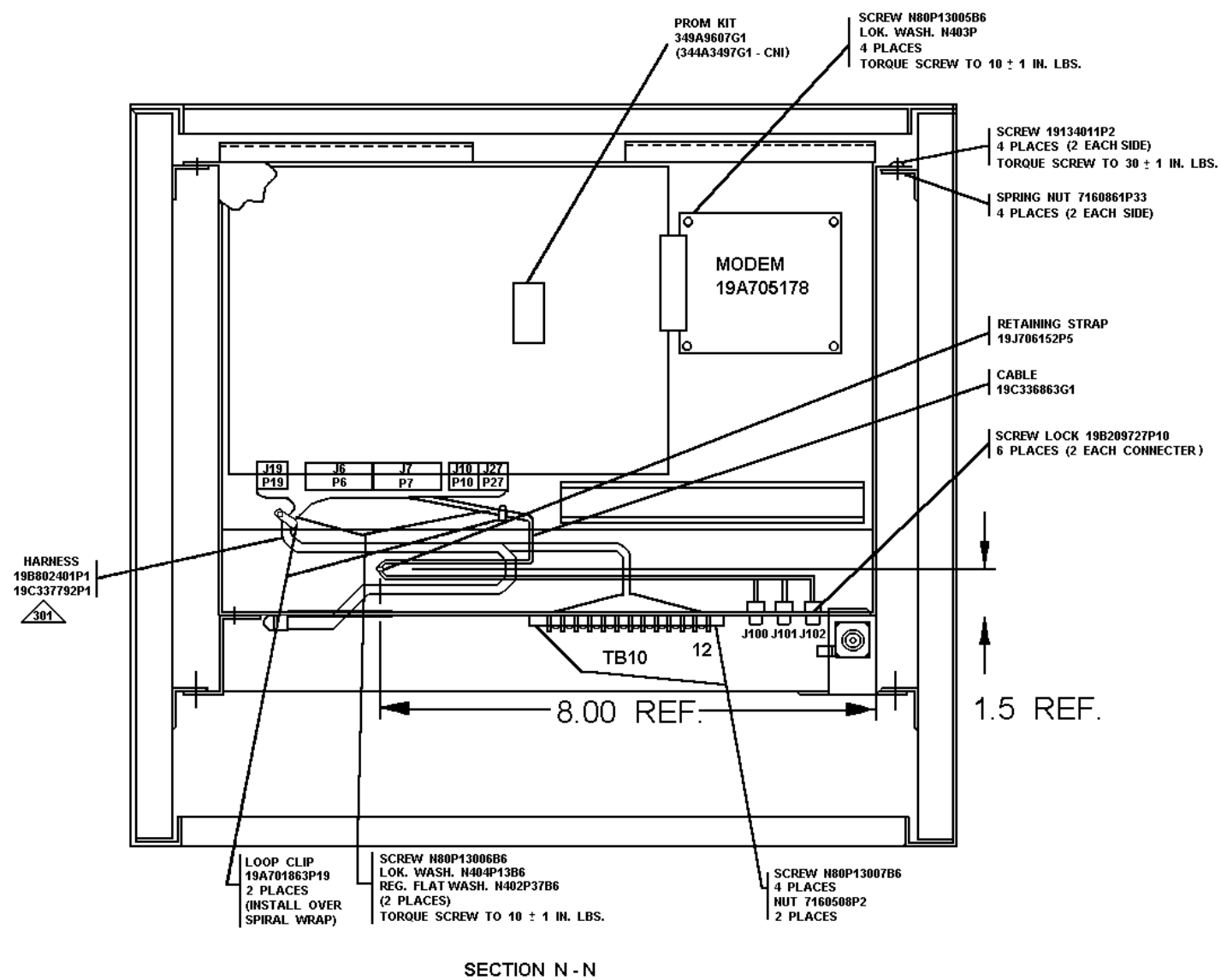
NOTES:

133. MOUNT PA AND TR SHELVES SIMILAR TO 19D902845P1 SHEET 1 EXCEPT AS POSITIONED ABOVE.
134. MOUNT DUPLEXER SHELF (344A3371 OR 344A4047) ABOVE VOICE GUARD SHELF OR IN VOICE GUARD LOCATION IF VG IS NOT PRESENT (SIMILAR TO 19D902845P4 SHEET 9).
135. MOUNT AUTOMOBILE BATTERY EMERGENCY POWER SIMILAR TO 19D902845P5 SHEET 10.
136. MOUNT GEL CELL BATTERY SHELF AND CHARGER SIMILAR TO 19D902845P6 SHEET 11.

137 LOCATE BOTTOM OF POWER SUPPLY 6 RACK UNITS ABOVE THE BOTTOM OF THE CABINET. THIS DIMENSION MAY BE CHANGED DEPENDING ON OPTIONS BEING ADDED ABOVE AND BELOW THE TR/PA/POWER SUPPLY GROUP (6 RACK UNITS ARE THE MINIMUM NECESSARY FOR THE ADDITION OF GEL CELL BATTERIES AND CHARGER).

MASTR III STATION
19D902845P25

(19D902845, Sh. 29, Rev. 1)



PARTIAL REAR VIEW OF CABINET

P26 MODEM VOTING INSTALLATION

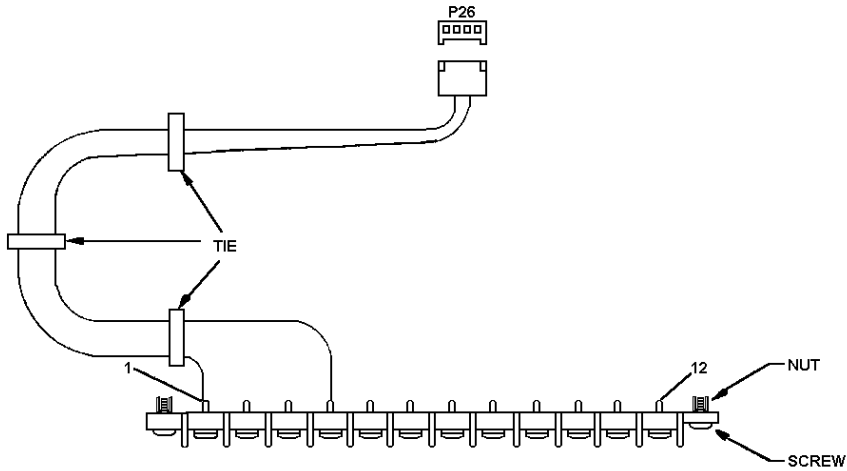
301 REMOVE CONTACTS FROM J26 - 6, 7, 8, 9 OF THE 19B802401 HARNESS. REMOVE CONTACTS FROM HEADER P26 ON 19C337792P1 HARNESS AND INSTALL IN 19B802401 HARNESS PER 19B803755 INTERCONNECT DIAGRAM.

P27 CNI INSTALLATION

301 REMOVE CONTACTS FROM J26 - 6, 7, 8, 9 OF THE 19B802401 HARNESS. REMOVE CONTACTS FROM HEADER P26 ON 19C337792P1 HARNESS AND INSTALL IN 19B802401 HARNESS PER 19B803755 INTERCONNECT DIAGRAM.

MASTR III STATION
19D902845P26 & P27

(19D902845, Sh. 30, Rev. 4)



NOTE:
CABLE LENGTH FROM TB10 TO P26 IS 20 INCHES.

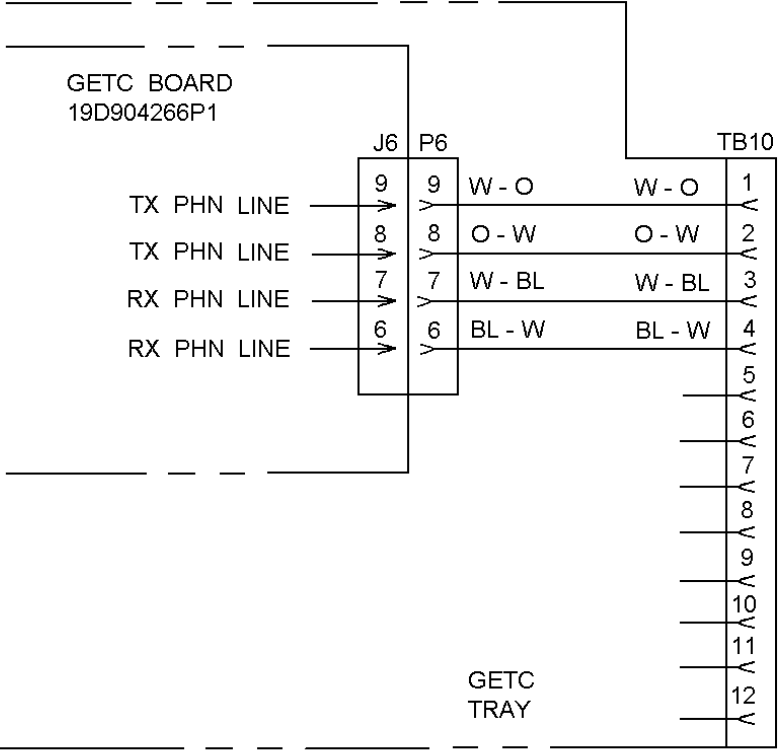
| P26 | | TB10 |
|-----|--------|------|
| 1 | W - O | 1 |
| 2 | O - W | 2 |
| 3 | W - BL | 3 |
| 4 | BL - W | 4 |

J6
HOUSING
EGE PART NO. 19A700041P30
SIMILAR TO MOLEX CAT. NO.
22-01-2045
CONTACT: (4) #24 EGE PART NO.
19A704779P26, SIMILAR TO
MOLEX CAT. NO. 08-55-0101
OR EQUIVALENTS

1

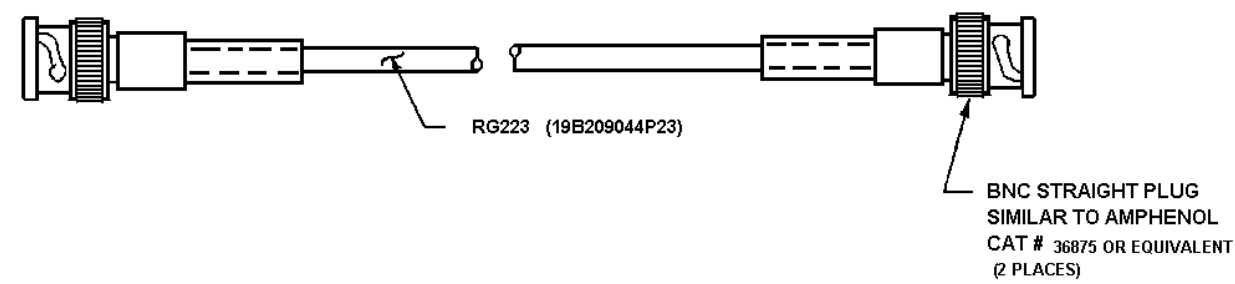
MATERIAL LIST:

| | | |
|----------------------|------------|---|
| MODEM VOTING HARNESS | | |
| 19C301086P8 | TB | 1 |
| N80P13007B6 | SCR, MACH | 4 |
| 7160508P2 | NUT, SH | 2 |
| C&M CAT# 19523 | WIRE, STRD | 4 |
| 19A704779P26 | CNT, CRMP | 4 |
| 19A700041P30 | HEADER | 1 |



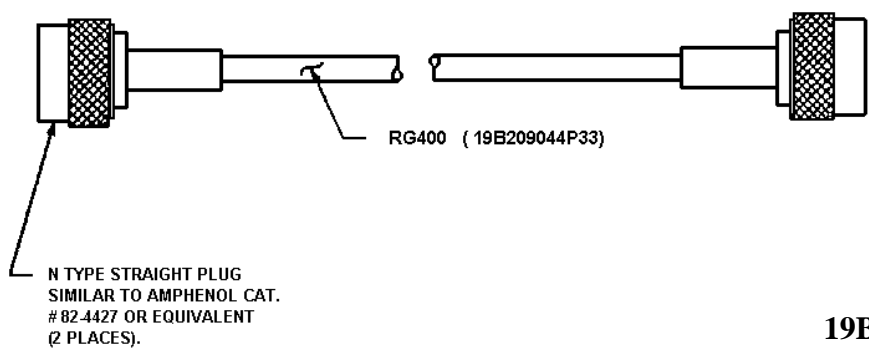
HARNESS
19C337792P1

(19C337792, Sh. 1, Rev.2), (19B803755, Sh.1, Rev. 3)



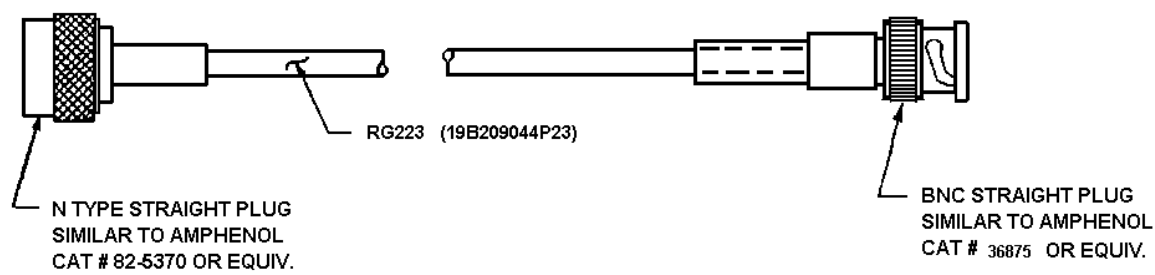
19B801454P16

(19B801454, Sh. 10, Rev. 9)



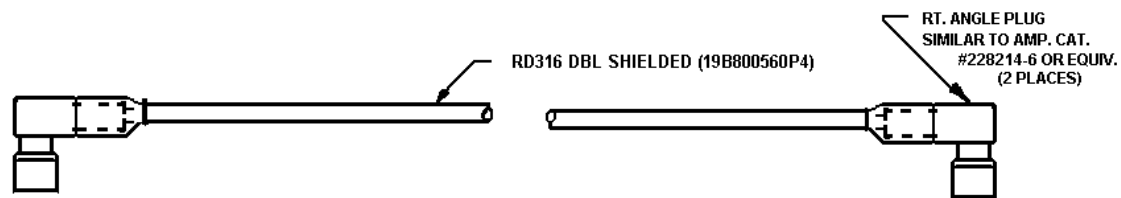
19B801454P17 & P18

(19B801454, Sh. 11, Rev. 9)



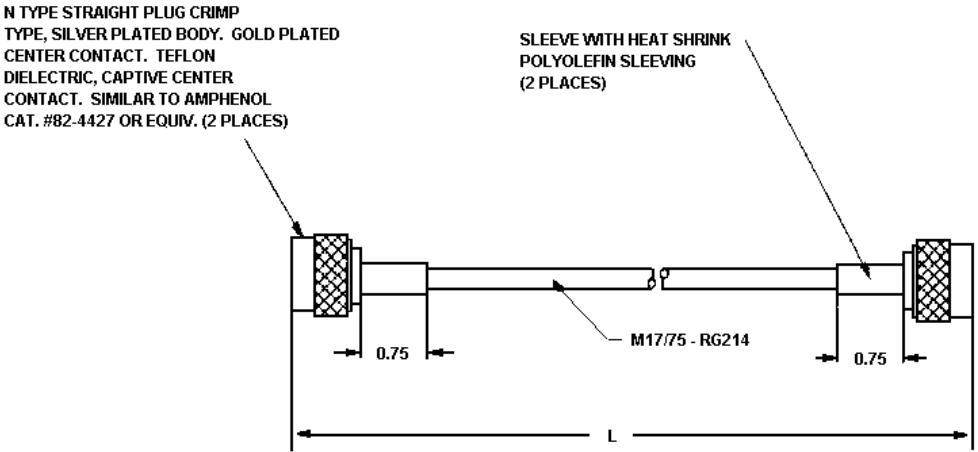
19B801454P19 & P20

(19B801454, Sh. 12, Rev. 9)



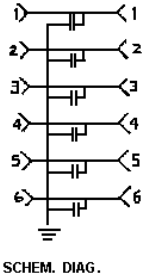
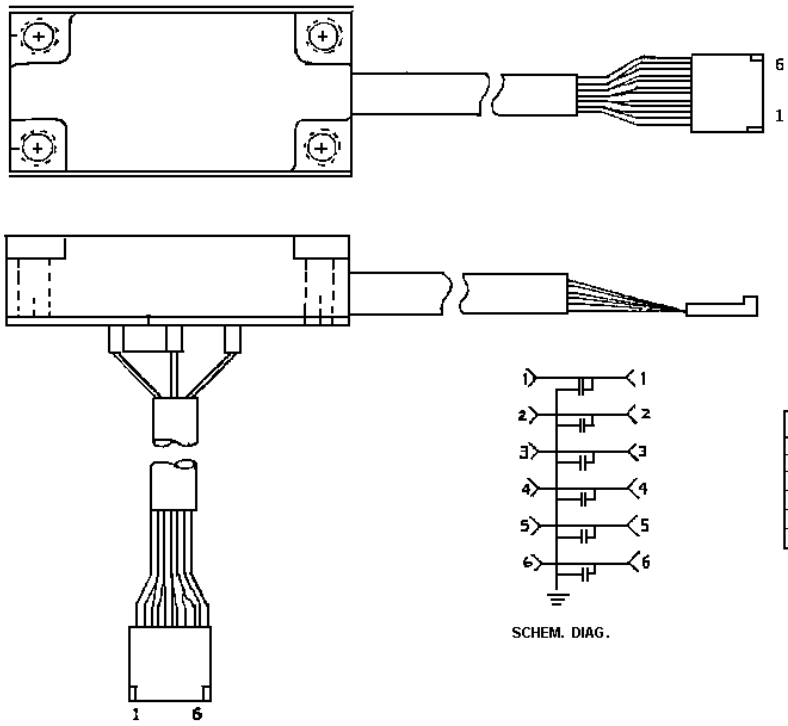
19B801454P24

(19D801454, Sh. 15, Rev. 11)



19B801454P43

(19B801454, Sh. 23, Rev. 20)

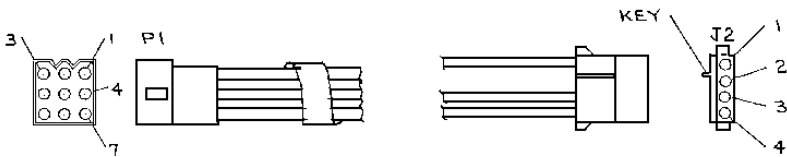


| PIN NO. | WIRE COLOR |
|---------|------------|
| 1 | RED |
| 2 | BLUE |
| 3 | GREEN |
| 4 | BROWN |
| 5 | BLACK |
| 6 | WHITE |

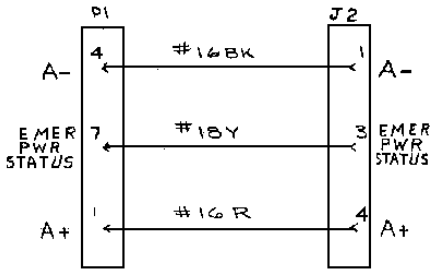
CONNECTOR COLOR CODE

CONTROL CABLE ASSEMBLY (part of Power Amplifier) - 19B801739P1

(19B801739, Sh. 1, Rev. 2)

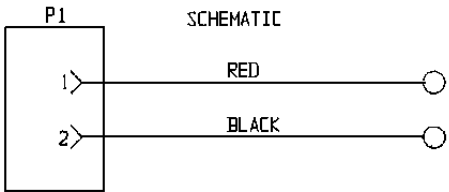
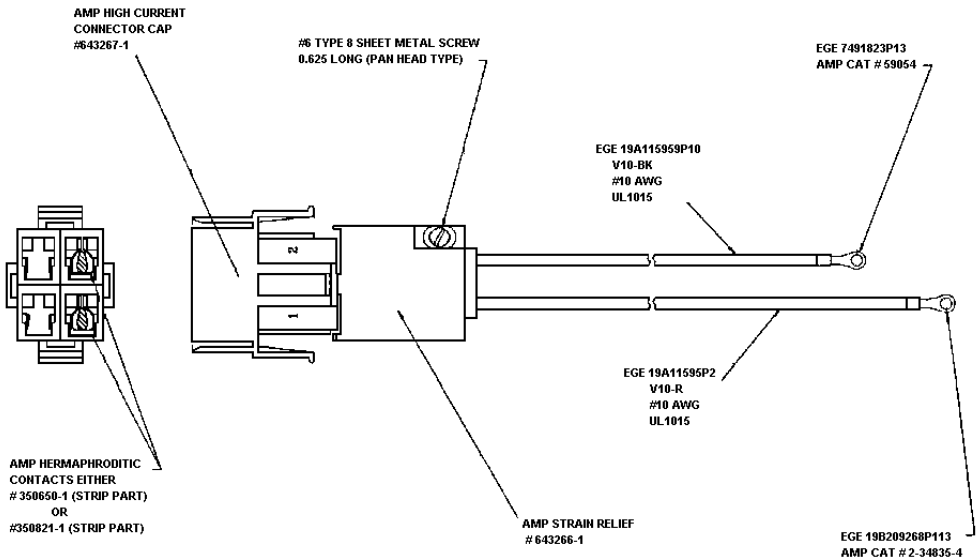


| CONNECTIONS CHART | | | | | | |
|-------------------|--|--|--|------|--|---|
| FROM | CONTACT | CONN HOUSING | WIRE TYPE | TO | CONTACT | CONN HOUSING |
| P1-4 | 19B209288P2 MOLEX CAT # 02-09-2101 | 19B209288P4 MOLEX CAT # 03-09-2092 | 19A16850 P10 UL1015 #16AWG COLOR BLACK | J2-1 | AMP CAT # 61117-1 60419-1 OR 4 POSITION SOCKET | AMP CAT # 1-480424-0 4 POSITION RECEPTACLE |
| P1-7 | | 8 POSITION PLUG | 19A1688AP4 UL1015 #18AWG COLOR YELLOW | J2-3 | | |
| P1-1 | | | 19A16850P2 UL1015 #16AWG COLOR RED | J2-4 | | |



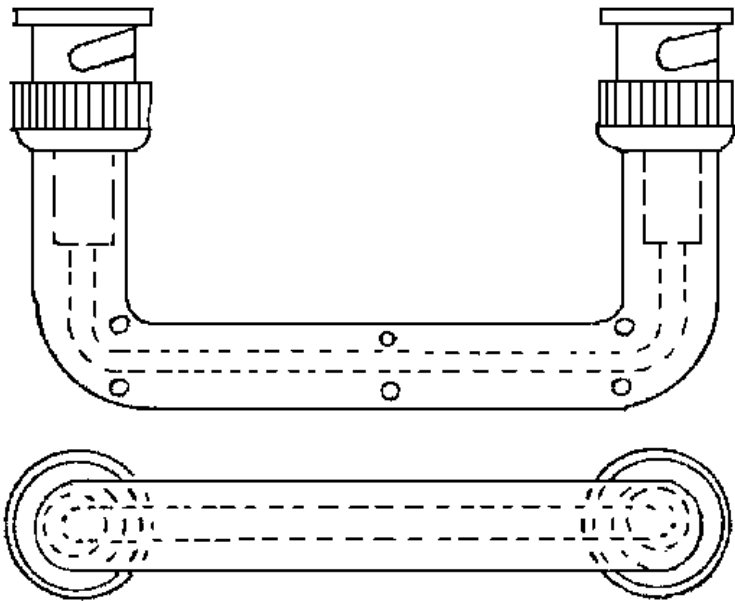
19B235871P1

(19B235871, Sh. 1, Rev. 2)



POWER CABLE (part of Power Amplifier) - 19B801937P1

(19B80937, Sh. 1, Rev. 1)



344A3052P1

(344A3052, Sh. 1, Rev. 1)

MASTR III STATION
ISSUE 2

| SYMBOL | PART NO. | DESCRIPTION |
|--------|--------------|---|
| | | ----- 37" CABINET ----- |
| | 19D902838P1 | 37-inch Cabinet. |
| | 19C852074P1 | Equipment support rail (left side). |
| | 19C852074P2 | Equipment support rail (right side). |
| | 344A3450G1 | Hardware Kit. |
| | 344A3450G2 | Hardware Kit. |
| | 19D902422P4 | Rear Door. |
| | 19D902422P4 | Front Door. |
| | 19J706152P5 | Tie Strap. |
| | 5491682P4 | Key, sim to Yale & Towne #BF-10A |
| | 5490407P29 | Grommet. |
| | | ----- 69" CABINET ----- |
| | 19D417358G3 | 69-inch Cabinet. |
| | 19D417623G2 | Grill, Label. |
| | 19A130031G12 | Hardware Kit. |
| | 19B226318P2 | Plate. |
| | 19B801476P1 | Cover. |
| | 19B801476P2 | Cover. |
| | 19B209539P1 | Lock, rim. |
| | 19B209539P2 | Lock, rim. |
| | 19B209539P3 | Key, lock, rim. |
| | 344A3450G21 | Hardware Kit. |
| | 5490407P29 | Grommet. |
| | | ----- 83" CABINET ----- |
| | 19D902663G1 | 83-inch Cabinet. |
| | 19C337428G1 | Door. |
| | 19C337428G2 | Door. |
| | 19B801476P1 | Cover. |
| | 19B801476P2 | Cover. |
| | 19B209539P2 | Lock, rim. |
| | 19B209239P2 | Lock, rim. |
| | 19B209539P3 | Key, lock, rim. |
| | 19B226318P2 | Plate. |
| | 344A2450P21 | Hardware Kit. |
| | | ----- CABLES ----- |
| | 19B235871P1 | Power Cable: Station Power Supply (J801) to T/R Shelf (A2-P102). |
| | 19B801454P17 | RF Cable: Low Pass Filter (J1) to Power Amplifier (J104). Replaced by 19B801454P43. |
| | 19B801454P20 | RF Cable: T/R Shelf (J2) to Duplexer Shelf (J2) (Used when Duplexer is installed). |
| | 19B801454P19 | RF Cable: T/R Shelf (J2) to Antenna Switch (J2). |
| | 19B801454P16 | RF Cable: T/R Shelf (J1) to Power Amplifier (J101). |
| | 19B801454P43 | RF Cable: Low Pass Filter (J1) to Power Amplifier (J104). |

*COMPONENTS, ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES

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