

# Maintenance Manual

## MDX™ And ORION™ WALL MOUNT STATION



### TABLE OF CONTENTS

Interconnect Board . . . . .	LBI-39046
	LBI-39052
Keypad/Frequency Select Board . . . . .	LBI-39047
	LBI-39195
Remote Interface Board . . . . .	LBI-39048

## TABLE OF CONTENTS

	<u>Page</u>
SYSTEM SPECIFICATIONS . . . . .	1
DESCRIPTION . . . . .	1
MECHANICAL PACKAGE . . . . .	1
RADIO PACKAGE . . . . .	1
TONE AND EDACS REMOTE . . . . .	2
POWER SUPPLY . . . . .	2
CONTROL PANEL . . . . .	2
PROGRAMMING . . . . .	2
BATTERY STANDBY OPTION . . . . .	2
OPERATION . . . . .	2
MAINTENANCE . . . . .	3
PREVENTIVE MAINTENANCE . . . . .	3
ASSEMBLY AND DISASSEMBLY . . . . .	3
OPTION INSTALLATION INSTRUCTIONS . . . . .	3
INITIAL ADJUSTMENT AND CHECKOUT . . . . .	3
STATION ADJUSTMENT PROCEDURES . . . . .	3
INTERCONNECTION DIAGRAMS . . . . .	4
ASSEMBLY DIAGRAMS . . . . .	10
MECHANICAL LAYOUT . . . . .	13
OUTLINE DIAGRAM . . . . .	14
PARTS LIST . . . . .	15

### NOTICE!

This manual covers Ericsson and General Electric products manufactured and sold by Ericsson Inc.

### NOTICE!

Repairs to this equipment should be made only by an authorized service technician or facility designated by the supplier. Any repairs, alterations or substitution of recommended parts made by the user to this equipment not approved by the manufacturer could void the user's authority to operate the equipment in addition to the manufacturer's warranty.

### NOTICE!

The software contained in this device is copyrighted by the Ericsson Inc. Unpublished rights are reserved under the copyright laws of the United States.

This manual is published by **Ericsson Inc.**, without any warranty. Improvements and changes to this manual necessitated by typographical errors, inaccuracies of current information, or improvements to programs and/or equipment, may be made by **Ericsson Inc.**, at any time and without notice. Such changes will be incorporated into new editions of this manual. No part of this manual may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose, without the express written permission of **Ericsson Inc.**

## SYSTEM SPECIFICATIONS\*

FREQUENCY RANGE	(Refer to Mobile Radio Specification)
INPUT VOLTAGE	90-130 VAC @ 50-65 Hz 180-260 VAC @ 50-65 Hz
INPUT POWER	
Standby	60 Watts
Receive	100 Watts
Transmit	500 Watts
POWER OUTPUT RATINGS	(Refer to Mobile Radio Specification)
DUTY CYCLE (EIA)	Receiver 100%, Transmitter 20%
TEMPERATURE RANGE	-30°C to +60°C (-22°F to +140°F) (Performance specified per EIA)
SPEAKER	4 ohms
DIMENSIONS (HxWxD)	54 x 57.2 x 17.5 cm. (21 x 22 x 6 inches)
WEIGHT	66 pounds with MDX Radio 58 pounds with ORION radio

\*For detailed transmitter and receiver specifications, refer to the appropriate mobile Maintenance Manual.

## DESCRIPTION

The Wall Mount Station Combination utilizes state-of-the-art microcomputer technology for high value and reliability. The most advanced manufacturing techniques are used to provide the highest quality radio possible.

The Tone Remote conventional station provides four (4) frequency and the EDACS system provides five (5) frequency operation.

The Wall Mount Station is available in:

- All frequency bands and power levels of MDX
- All frequency bands of the Orion low power package
- All frequency bands of the Orion mid power package

The Wall Mount Station is **not** available in:

- All frequency bands of the Orion high power package
- Low Band Orions

It operates from 120 or 240 VAC power supplies at frequencies of 50 or 60 Hz. Input power variations of  $\pm 20\%$  are tolerated.

## MECHANICAL PACKAGE

The station is housed in a slim (less than 7 inches) and compactly built cabinet, occupying a minimum of space. It consists of a Mobile Radio, Remote Board, Interconnect

Board and Power Supply. The Interconnect Board has the Interface (19D902931G1) Board with the station three (3) watt audio stage on it. The Keypad Frequency Select Board is mounted on the Interconnect Board. The power on-off switch (circuit breaker) is located on the Power Supply. The radio has its own power on-off switch. A System Interconnect cable connects the Interconnect board, Remote board and Power Supply with the radio.

The station radio combination can be equipped with:

- RF Channel Synthesizer
- Microcomputer Control System
- Two Channel Tx/Rx
- $\pm 0.0002\%$  or  $\pm 0.0005\%$  stability
- Ultra High Sensitivity Preamp
- Tone or Digital Channel Guard
- Microphone

## RADIO PACKAGE

The Mobile Radio is a synthesized, wideband radio that uses integrated circuits and microcomputer technology to provide high performance trunked operation. The radio operates in the Enhanced Digital Access Communications System (EDACS) trunking environment and/or conventional communications systems.

All radio functions are stored in a programmable Electrically Erasable **PROM (EEPROM)**. The radio is field programmable using an IBM compatible personal computer with the following equipment.

- Serial Programming Interface Module TQ3370
- Programming Cable (19B801417P10) TQ3372

With correct cable and software, any PC can be used to program (or re-program) customer system frequencies, Channel Guard Tones, and options. Option selection is done during radio initialization using the PC programmer.

\* For Mobile information see appropriate Mobile LBI.

### **TONE AND EDACS REMOTE**

The EDACS remote boards provide the electrical interface between the Local Controller and the Base Station. They generate the required tones for selecting remotely controlled functions. Refer to the Maintenance Manual for the individual remote board for detailed information. The manuals for these boards are:

- Four Frequency Tone Remote - 19A704686P6 . . . . . LBI-31552
- EDACS Five Function Tone Remote - 19A704686P8 . . . . . LBI-38119

### **POWER SUPPLY**

The Power Supply is a self-contained module that provides a single output of 13.8 VDC. Refer to the Power Supply Maintenance Manual LBI-38751 for detailed information on the 13A Supply and LBI-38893 on the 30 Amp supply.

### **CONTROL PANEL**

Both the Power Supply and Radio have power ON-OFF switches. Operating controls located on the station control panel on the System board are: (1) the REMOTE On-Off switch, (2) the INTERCOM On-Off-Mom switch, (3) the SPEAKER On-Off switch, (4) VOLUME control, (5) Power LED, and (6) Microphone connection.

**REMOTE** Permits the serviceman to communicate through, or monitor, the operating channels.

**INTERCOM** Provides Intercom capability between the station and remote controller when ON. Intercom is disabled when OFF. Provides momentary connection for Intercom calls in the MOM position.

**SPEAKER** Connects the speaker to the receiver audio from the radio.

**VOLUME** Adjusts the station audio level.

### **PROGRAMMING**

The radio in the Wall Mount Station is programmed by an IBM compatible personal computer equipped with a serial port. The Wall Mount Station connects to the computer with a MDX TQ3372 programming cable through a TQ3370 Interface Box. The TQ3370 Interface provides the RS232 to TTL level conversion needed by the radio and the 12V Vpp voltage needed to program some radios.

#### **IMPORTANT:**

**The MDX programming cable connects to the Wall Mount Station's mic connector.** It does **NOT** connect to the radio's mic connector. The computer must run the programming software appropriate to the radio inside the Wall Mount Station.

After programming the station, power must be turned OFF and then back ON. This is to reset the radio and if installed, the keypad frequency select board. Note the keypad frequency select board is disable during programming and must be reset before it resumes communicating with the radio.

### **MDX PROGRAMMING CONSIDERATIONS:**

The MDX radio will operate in the Wall Mount Station with all versions of radio flash software. Wall mount operation has a minimal effect on radio personality. The main difference between a Wall Mount Station personality and a Mobile personality is the ability to add four channels if used with a conventional tone remote board or five system/group combinations if used in an EDACS environment with an EDACS tone remote board.

### **ORION PROGRAMMING CONSIDERATIONS:**

The ORION radio requires Group 22 or later radio flash software to operate properly in the Wall Mount/Desktop station. Further, its personality must be programmed with EDACS 3 Version 12 or later. Earlier versions of software may not recognise a keyboard/frequency select board and may not operate the RX mute line.

The personality also depends on whether the Wall Mount Station is set for single frequency remote or a multi-frequency remote operation. For single frequency operation,

- OUT1 must be programmed as a "RX Mute" line with a sense of "High".
- INP2 must be programmed as a "PTT" input.

For multi-frequency operation,

- OUT1 must be programmed as a "RX Mute" line with a sense of "High".
- INP2 must be programmed as a "Disabled".
- Up to four channels may be defined in the system/group key menu for a conventional only radio or up to five system/group combinations may be defined in an EDACS radio.
- A radio "keyboard" must be defined and loaded which has the desired number of remote channel or system/group combinations.

### **BATTERY STANDBY OPTION**

A battery standby option is available to permit continued station operation in the event of an AC power failure. The option provides internal switching in the station to a customer-supplied 13.8VDC battery supply.

**NOTE**

The battery standby option does not charge the standby batteries.

The standby battery option consists of a relay (K1) mounted on the station chassis, with a cable that interconnects the station power supply, the station power cable, and the external power supply. When the station is powered by an AC voltage, relay K1 of the battery standby option is energized and the station receives DC power from the internal power supply. If the AC line power fails, relay K1 is no longer energized, and DC power is supplied from the back-up battery. When the AC power returns, K1 reenergizes and DC power is again supplied from the internal power supply.

### **OPERATION**

The station ON-OFF switch is located on the power supply. When this ON-OFF switch is ON, all controls on the radio should be active except for the volume control.

**NOTE**

Before leaving the station make sure the REMOTE switch is ON and all other switches are OFF.

### **Monitoring a Channel**

1. Set the power supply ON-OFF switch to ON.
2. Set the radio power ON-OFF switch to ON.
3. Set the SPKR switch to ON.
4. Select the desired channel.

5. Adjust the VOLUME control to a comfortable listening level.
6. When monitoring is complete return the REMOTE switch to ON and all other switches to the OFF position.

### **Intercom To Local Controller**

1. Set the power supply ON-OFF switch to ON.
2. Set the radio power ON-OFF switch to ON.
3. Plug microphone into mic jack J1 on left side of the control panel.
4. Set SPKR switch to ON.
5. Set INTERCOM switch to ON.
6. When receiving, set VOLUME control for comfortable listening level.
7. When communications are completed return the REMOTE switch to ON and all other switches to the OFF position.

### **Radio Communications**

#### **To Receive A Message**

1. Set the power supply ON-OFF switch to ON.
2. The microphone PTT switch keys the transmitter on the channel indicated. If more than one frequency is available, select the desired frequency using the radio frequency selector.
3. Set the SPKR switch to ON.
4. The station is now ready to receive messages from other radios in the system. When the first call is received, it may be necessary to adjust the VOLUME control for the desired listening level.

#### **To Transmit A Message**

1. If more than one channel is available, select the proper channel using the radio frequency selector.
2. Monitor the channel to make sure no one else is using the channel.
3. Press the PTT switch on the microphone. Then speak into the microphone using a normal speaking voice. Always release the PTT switch as soon as the message is completed, and listen for an answer to the call.

## MAINTENANCE

### PREVENTIVE MAINTENANCE

To ensure high operating efficiency and to prevent mechanical and electrical failures from interrupting system operations, routine checks should be made of all mechanical and electrical parts at regular intervals. This preventive maintenance should include the checks as listed in the table of Maintenance Checks that follows.

### ASSEMBLY AND DISASSEMBLY

Easy access to the station is inherent in this design. Simply unlock the door and swing it open. The station and radio package are hinged so that they can swing out for servicing.

To release the entire station and allow it to swing out, remove the three screws on the left that secure the chassis to the cabinet brace. Then press the spring clip.

Loosening the right side radio mounting screws allows the radio package to hinge open, providing access to the Remote Board, Interconnect Board, and Option Boards.

#### Remote Board

To remove the Remote Board, remove the POZIDRIVOR® screw in the four corners of the board and remove the board. Unplug cabling as necessary.

#### Interconnect Board

To remove the Interconnect Board, remove the four screws securing it to the chassis and disconnect all cabling. Remove the Interface Board and/or the Keypad Board if necessary.

## OPTION INSTALLATION INSTRUCTIONS

Most options are radio options, and are thus the same in both installation and operation when the radio is used in the Wall Mount application. Refer to the applicable Maintenance Manual for mobile radio options.

### BATTERY STANDBY OPTION

An external battery can be used to power the station in the event of AC power failure. The battery and charger must be supplied by the customer. The standby option consists of Option Cable Assembly 19B802942. Refer to the Battery Standby Option Application Assembly for installation.

#### NOTE

The battery standby option does not recharge the battery.

## INITIAL ADJUSTMENT AND CHECKOUT

After the station has been installed as described in the Installation Manual, the following adjustments should be made by an authorized electronics technician.

### TEST EQUIPMENT REQUIRED

1. Deviation Monitor
2. Wattmeter, 50 ohms, 150 Watts
3. RF Generator, (Station RF Frequencies)
4. AC Voltmeter
5. 30 dB Decoupler

### TRANSMITTER ADJUSTMENT

The adjustment for the transmitter includes measuring the forward and reflected power, adjusting the antenna length for optimum ratio, and then setting the transmitter to rated power output. Next, measure and record the frequency and modulation for future reference. For complete transmitter adjustment, refer to the Alignment Procedure in the applicable radio unit Maintenance Manual.

### RECEIVER ADJUSTMENT

Initial adjustment for the receiver includes adjusting the audio output power for 3 watts across the speaker. Refer to the Maintenance Manual for the radio being used for Troubleshooting and Alignment Procedures, or Adjustments.

## STATION ADJUSTMENT PROCEDURES

Your station was adjusted at the factory. If adjustment is needed due to board replacement, or other reasons, perform the following steps.

### REMOTE SETUP

#### Receiver to Line

1. Turn ON Power and Speaker switches.
2. Set REMOTE and INTERCOM switches to OFF.
3. Connect the RF Generator to the station. Set the proper RF frequency and a 1 kHz tone at 3 kHz deviation.
4. Connect the proper RCN1000 Remote Controller to J11 on the rear of the station chassis.
5. No tone should be present at the Remote Controller.

## TABLE OF MAINTENANCE CHECKS

	INTERVAL BETWEEN CHECKS	
	Every Six Months	As Required
Transmitter Alignment - Compare meter readings with voltages read during initial tune up. Check power output. (See Alignment Procedure for Transmitter.)		X
Receiver - Retune the front end and check meter readings taken during initial tune-up. (See Alignment Procedure for Receiver.)		X
Transmission Line - Check for positive indication of pressure on transmission line pressure gauge (if pressurized line is used).	X	
Antenna - Check antenna and mast for mechanical stability.	X	
Mechanical Inspection - Visually check cables, plugs, sockets, terminal boards, and components for good electrical connection. Check for tightness of nuts, bolts, and screws to make sure that nothing is working loose from its mounting.	X	
Cleaning - Use a vacuum cleaner to remove accumulated dust inside the cabinet.	X	
Frequency Check - Check transmitter frequency and deviation as required.		X

6. Turn on the REMOTE switch. A tone should be present at the Remote Controller.

- a. On the Tone Remote Board (19A704686P6) set R35 for 0 dBm at J1-3 and J1-4.
- b. On the EDACS Tone Remote Board (19A704686P8) set R66 for 0 dBm at TB1-2 and TB1-5.

7. Turn OFF the station REMOTE switch. Disconnect the RF Generator and connect the wattmeter to the station through the 30 dB decoupler.

8. Apply a 30 mVRMS 1 kHz tone across J101-1 Desk Mic Hi and J101-2 Desk Mic Lo.

9. Ground J101-3 Desk Mic PTT. Measure the RF power on the wattmeter.

10. With J101-3 grounded, check for 20 to 43 mVRMS, 1 kHz tone across J209-5 (Mic Hi) and J209-7 (Mic Lo). Check to verify that no tone is present at the Remote Controller. Remove the ground. (An isolation transformer may be required.)

11. Switch the INTERCOM switch ON. Ground J101-3 Desk Mic PTT. Check to verify that the radio does not key (no power on the wattmeter). Check to verify that a tone is present at the Remote Controller. Press the INTERCOM switch to the MOM position and check for a tone at the Remote Controller. Release the INTERCOM switch.

a. On the (931) Interface Board, set R323 for 0 dBm at J1-3 and J1-4 on the (686P6) Tone Remote Board..

b. On the (931) Interface Board, set R323 for 0 dBm at TB1-2 and TB1-5 on the (686P8) PST Remote Board.

### Line to TX

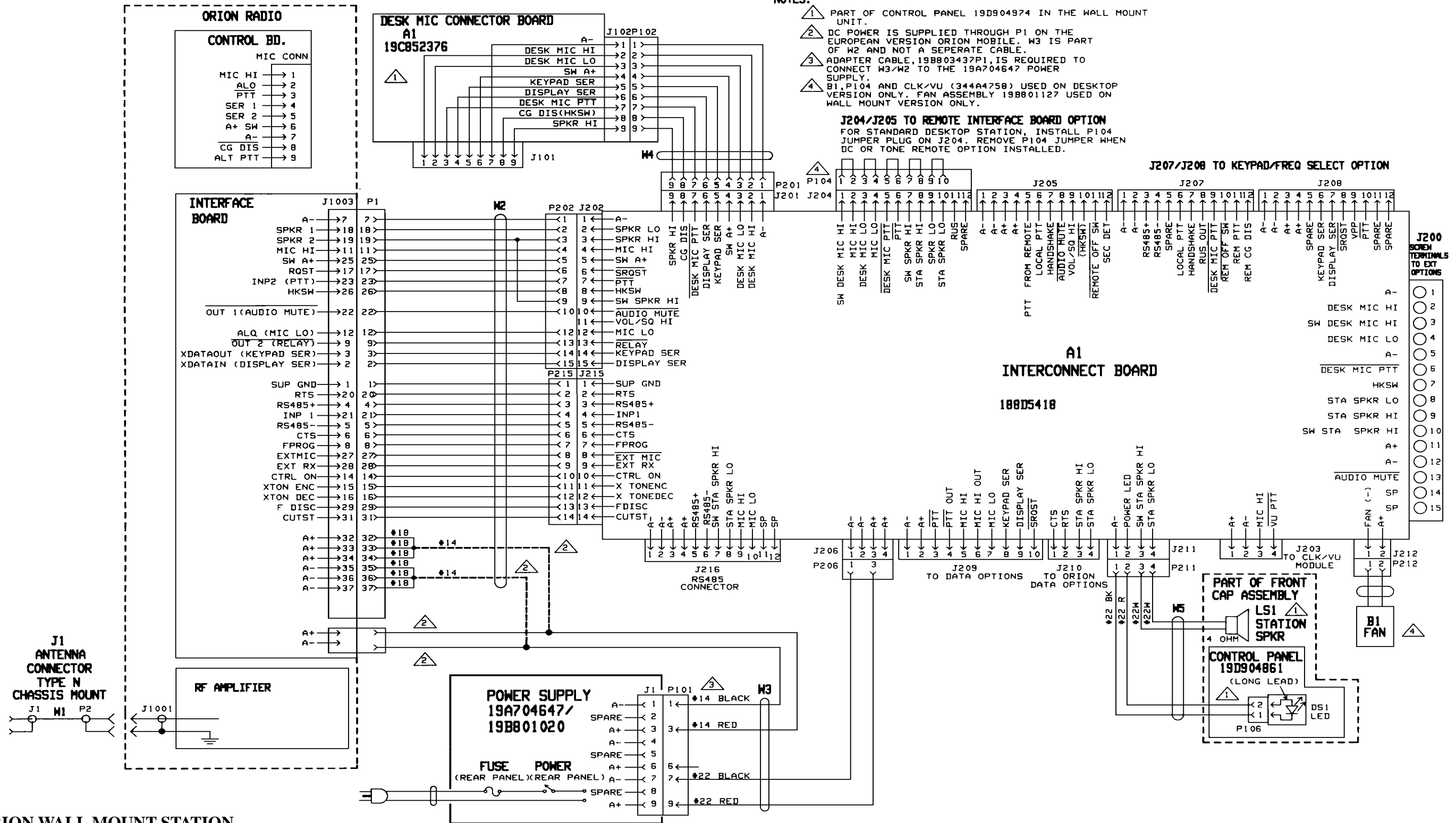
1. Set Station Remote switch and InterCom switch to OFF.
2. Apply 1 kHz at 120 mV to Microphone input of the Controller.
3. On the Controller, press SF5 on EDACS only, and ground PTT. Check to see that the Radio is not keyed.
4. Switch the Station Remote switch ON. Key the Controller. Check to see that the radio is keyed.
5. The Controller should be preset to 0 dBm.
  - a. On the 686P6 PST Remote Board, set R60 for 60 mVRMS at J209-5 and J209-7.
  - b. On the 686P8 PST Remote Board, set R82 for 60 mVRMS at J209-5 and J209-7.
6. Before leaving the station, make sure the INTERCOM and SPEAKER switches are OFF, and the REMOTE switch is ON.

NOTES:

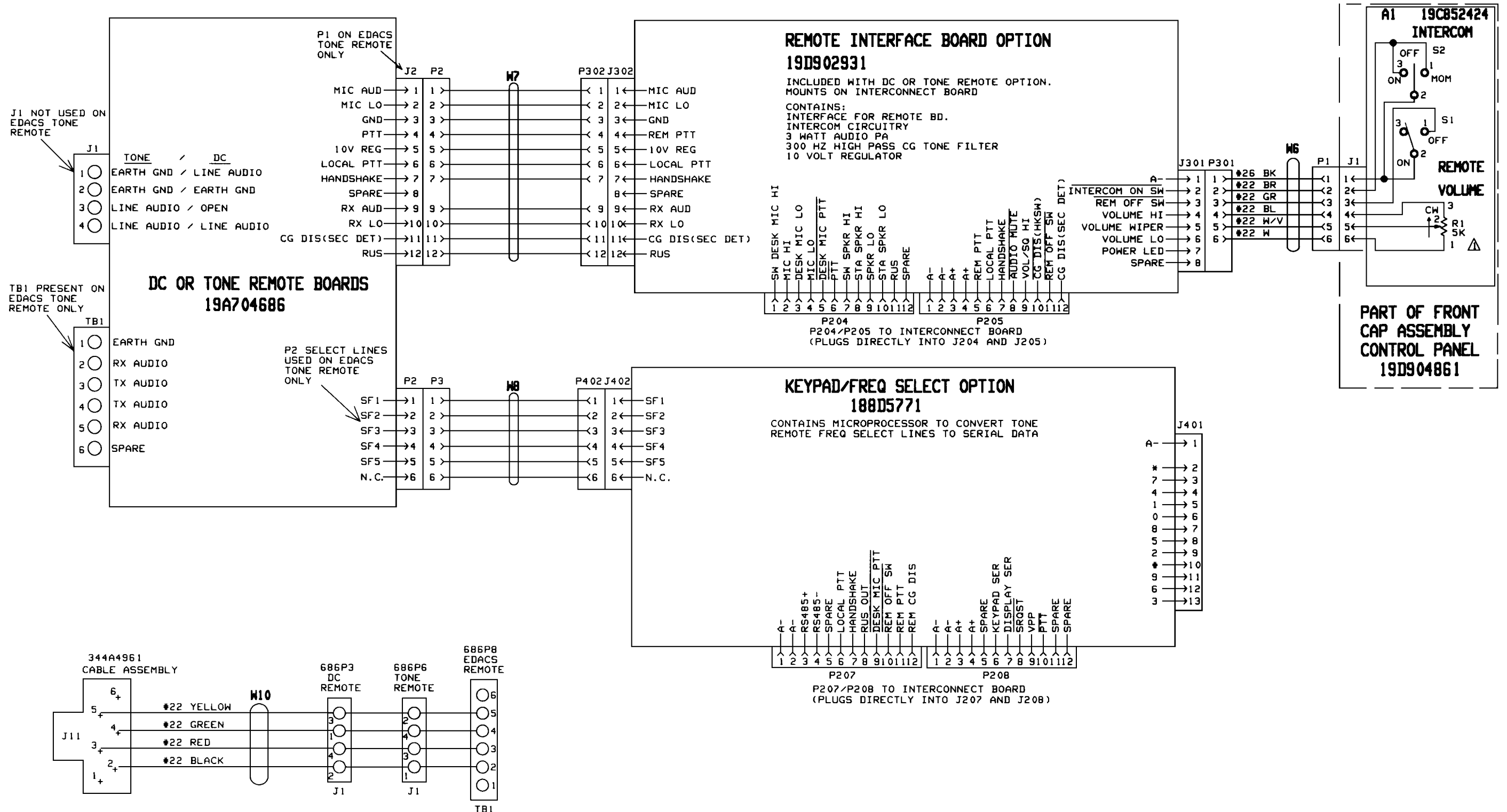
- 1 PART OF CONTROL PANEL 19D904974 IN THE WALL MOUNT UNIT.
- 2 DC POWER IS SUPPLIED THROUGH P1 ON THE EUROPEAN VERSION ORION MOBILE. W3 IS PART OF W2 AND NOT A SEPERATE CABLE.
- 3 ADAPTER CABLE, 19B803437P1, IS REQUIRED TO CONNECT W3/W2 TO THE 19A704647 POWER SUPPLY.
- 4 B1, P104 AND CLK/VU (344A4758) USED ON DESKTOP VERSION ONLY. FAN ASSEMBLY 19B801127 USED ON WALL MOUNT VERSION ONLY.

**J204/J205 TO REMOTE INTERFACE BOARD OPTION**  
 FOR STANDARD DESKTOP STATION, INSTALL P104 JUMPER PLUG ON J204. REMOVE P104 JUMPER WHEN DC OR TONE REMOTE OPTION INSTALLED.

**J207/J208 TO KEYPAD/FREQ SELECT OPTION**

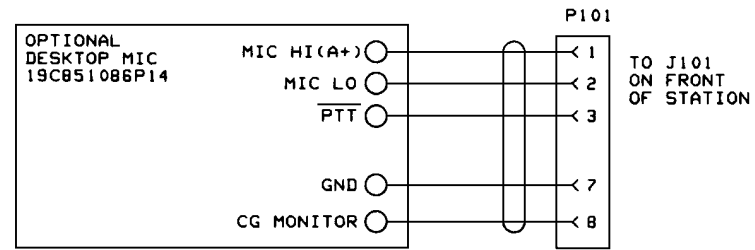
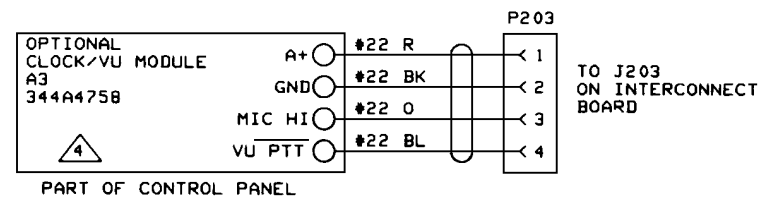


ORION WALL MOUNT STATION

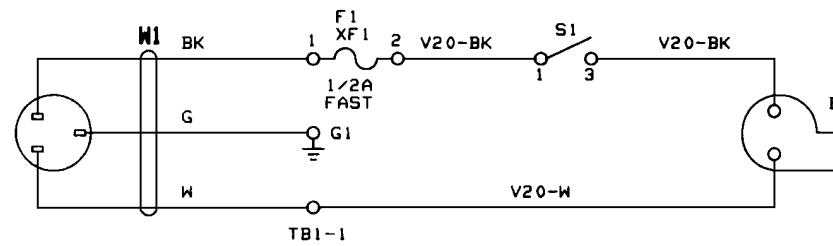


ORION WALL MOUNT STATION

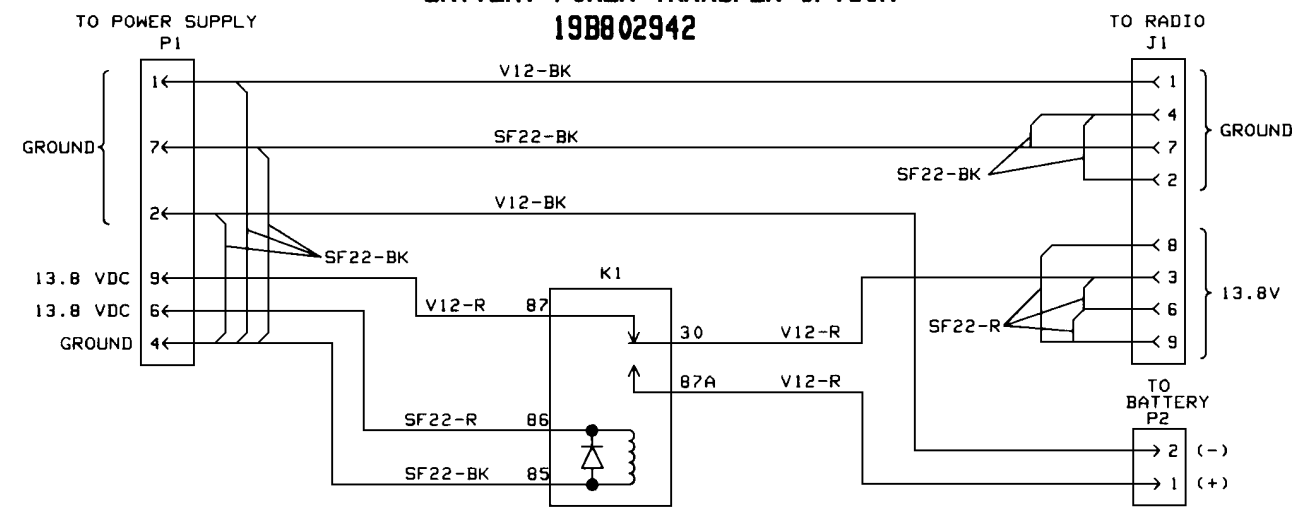
(188D5407, Sh. 2, Rev. 3)



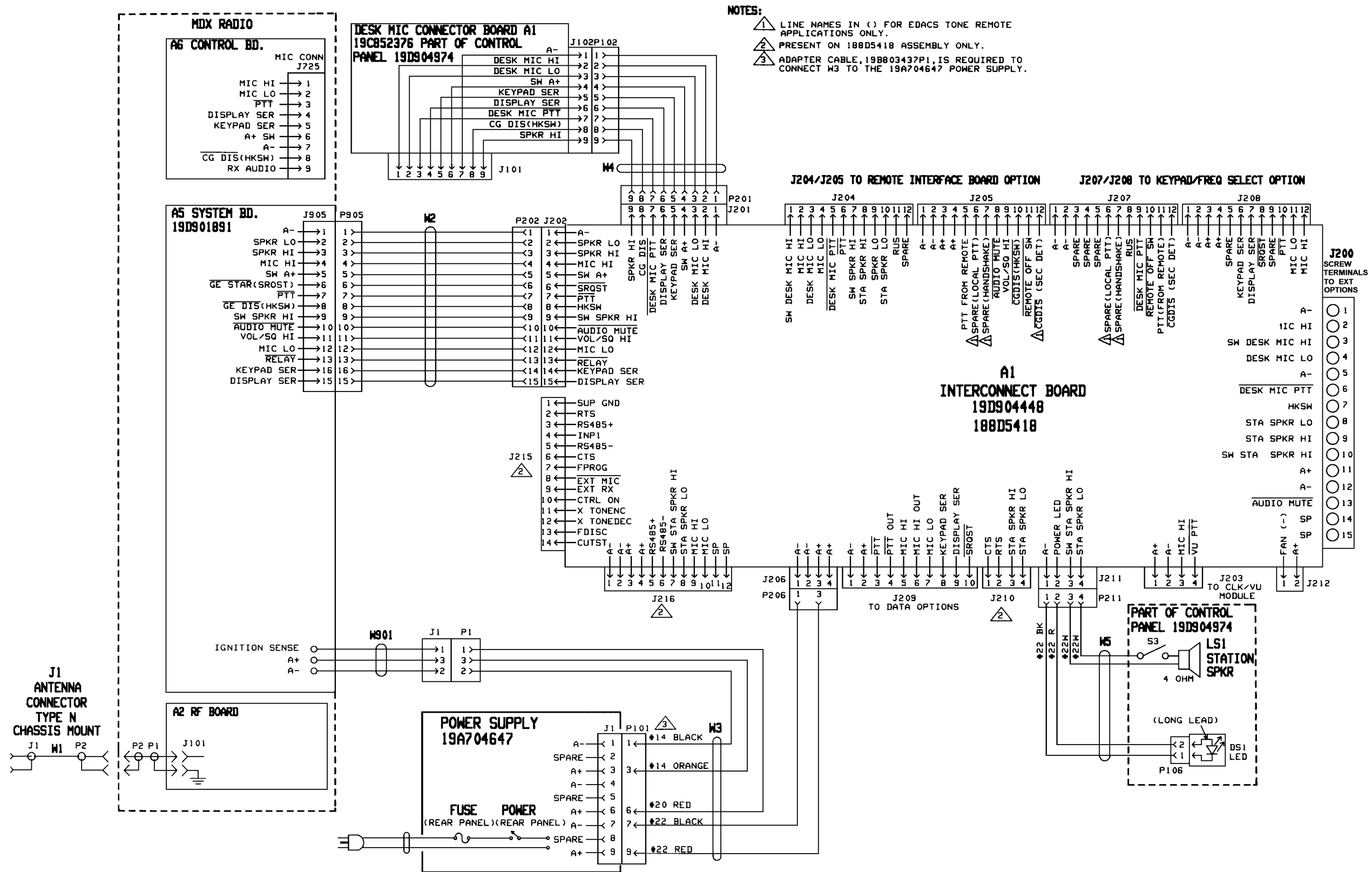
⚠ THERMOSTAT/FAN  
19B801127



BATTERY POWER TRANSFER OPTION  
19B802942

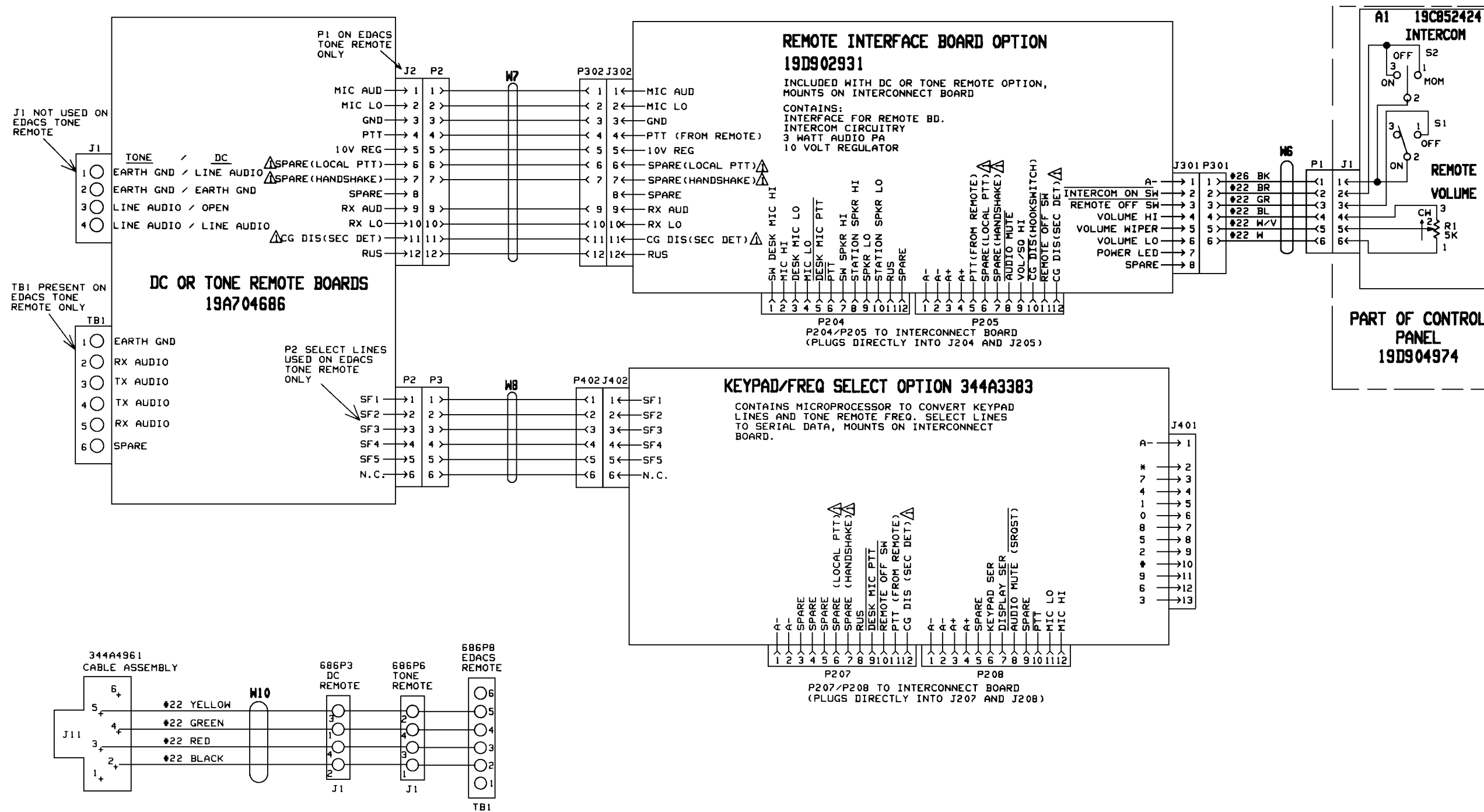


ORION WALL MOUNT STATION



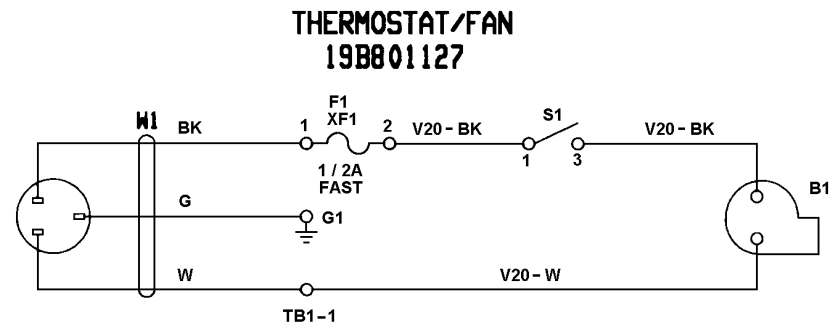
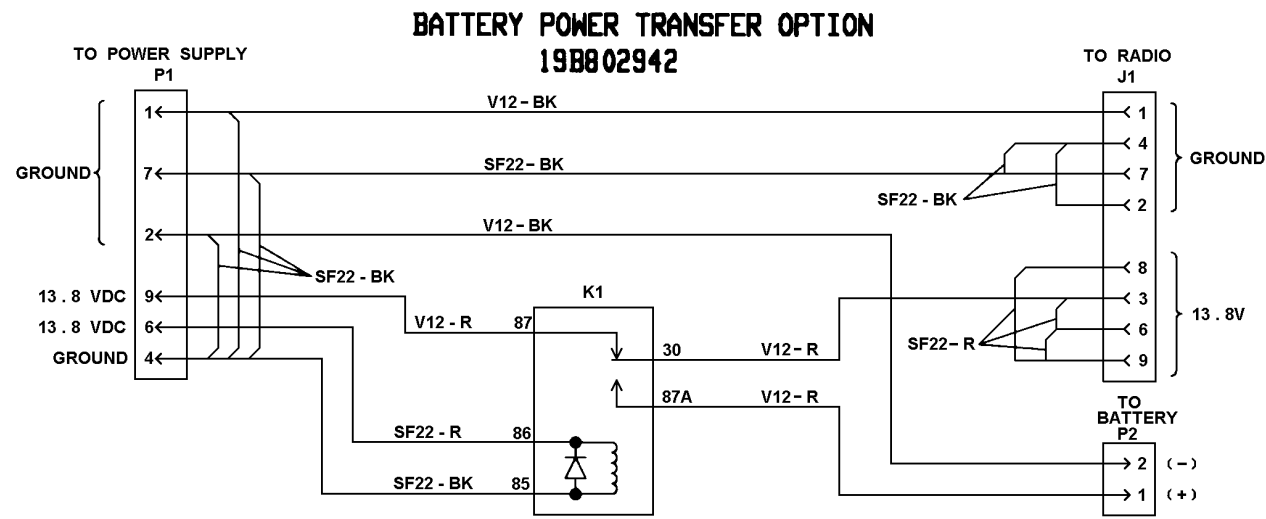
MDX WALL MOUNT STATION





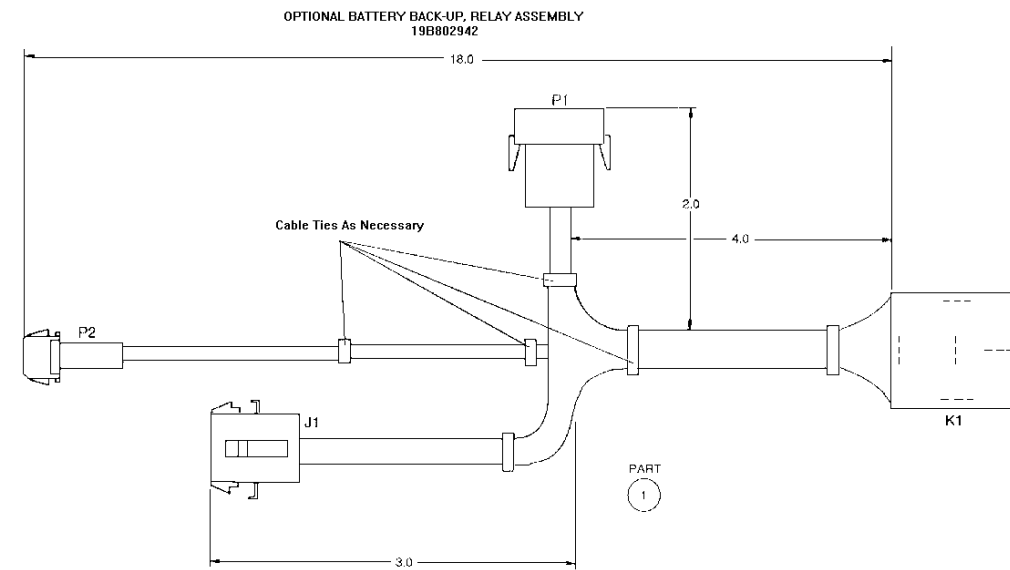
MDX WALL MOUNT STATION

(19D904992, Sh. 2, Rev. 1)

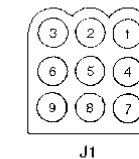


MDX WALL MOUNT STATION

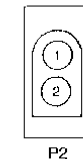
(19D904992, Sh. 3, Rev. 1)



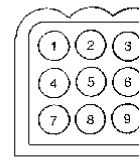
PIN IDENTIFICATION FOR J1, P1, P2, AND K1 FOR PART 1 AS SHOWN FROM WIRE INSERTION SIDE:



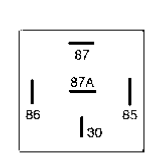
EGE #19A134201P4  
AMP CAT. #1-480672-0



EGE #19A134201P2  
AMP CAT. #1-350345-0



EGE #19A134281P3  
AMP CAT. #1-480673-0



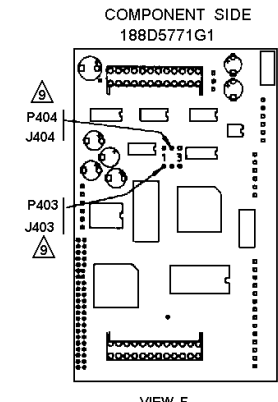
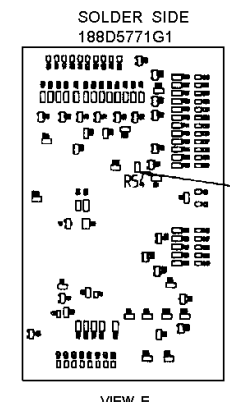
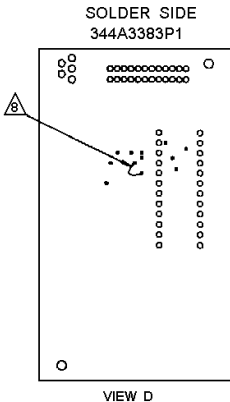
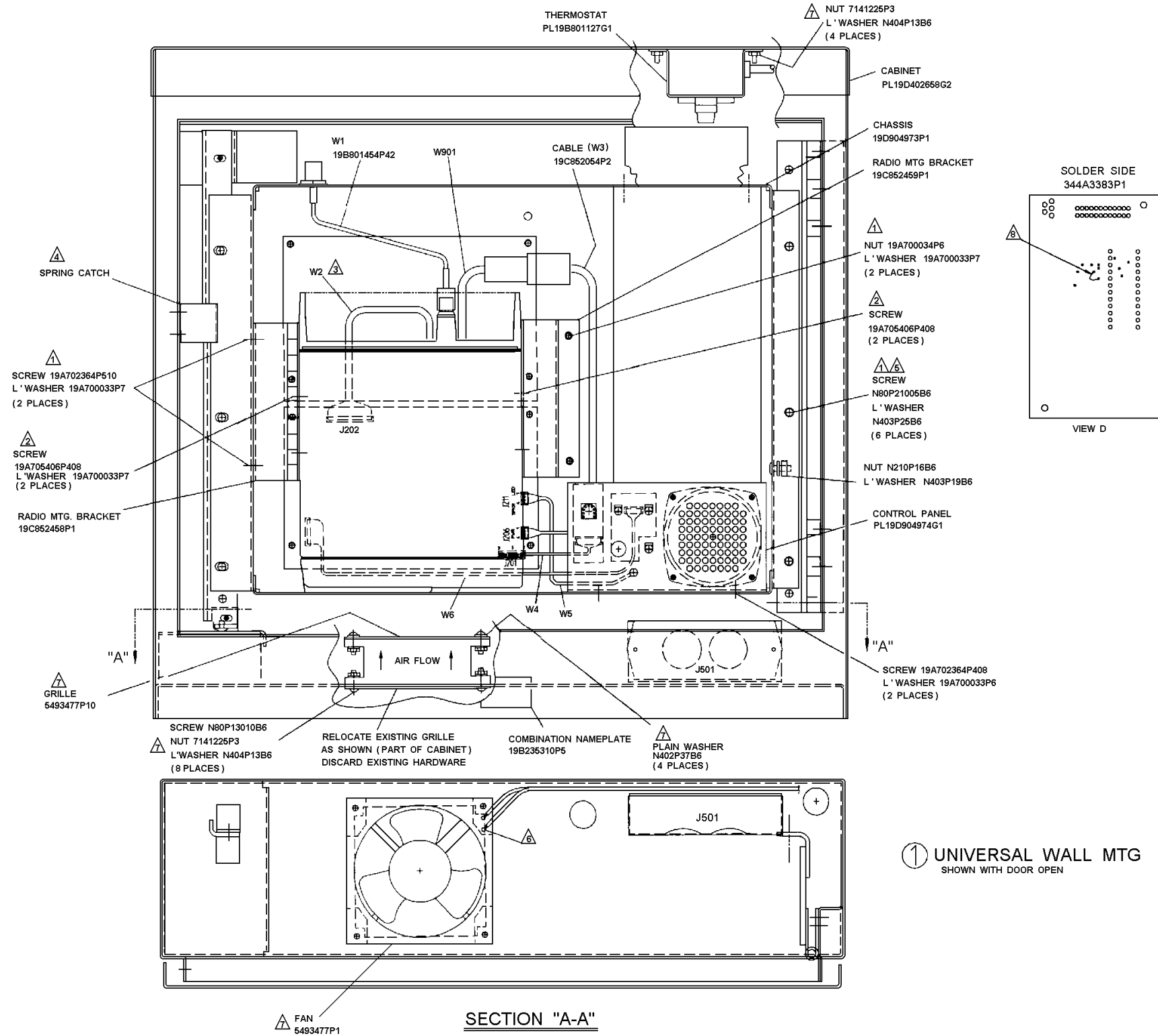
EGE #19A149299P1  
POTTER & BRUMFIELD  
CAT. #VF4-45F11-S05  
OR  
SIEMENS  
CAT. #V23134-X0266

WIRE CONNECTION CHART FOR PART 1				
FROM	TERMINATE WITH ITEM	TO	TERMINATE WITH ITEM	WIRE
J1-1	4	P1-1*	6	V12-BK
J1-3*	4	K1-30*	9	V12-R
J1-4*	5	J1-2	5	SF22-BK
J1-6*	5	J1-3*	4	SF22-R
J1-7*	5	J1-4*	5	SF22-BK
J1-7*	5	P1-7*	7	SF22-BK
J1-9*	5	J1-6*	5	SF-22R
J1-9*	5	J1-8	3	SF22-R
P1-1*	6	P1-4*	7	SF22-BK
P1-2*	6	P2-2	6	V12-BK
P1-2*	6	P1-4*	7	SF22-BK
P1-4*	7	K1-85	8	SF22-BK
P1-4*	7	P1-7*	7	SF22-BK
P1-6	7	K1-86	8	SF22-R
P1-9	6	K1-87	9	V12-R
P2-1	6	K1-87A	9	V12-R

\* MORE THAN ONE CONNECTION AT THIS LOCATION

[Optional] Battery Back-Up Relay Assembly

(19B802942, Shs. 1&2, Rev. 0)



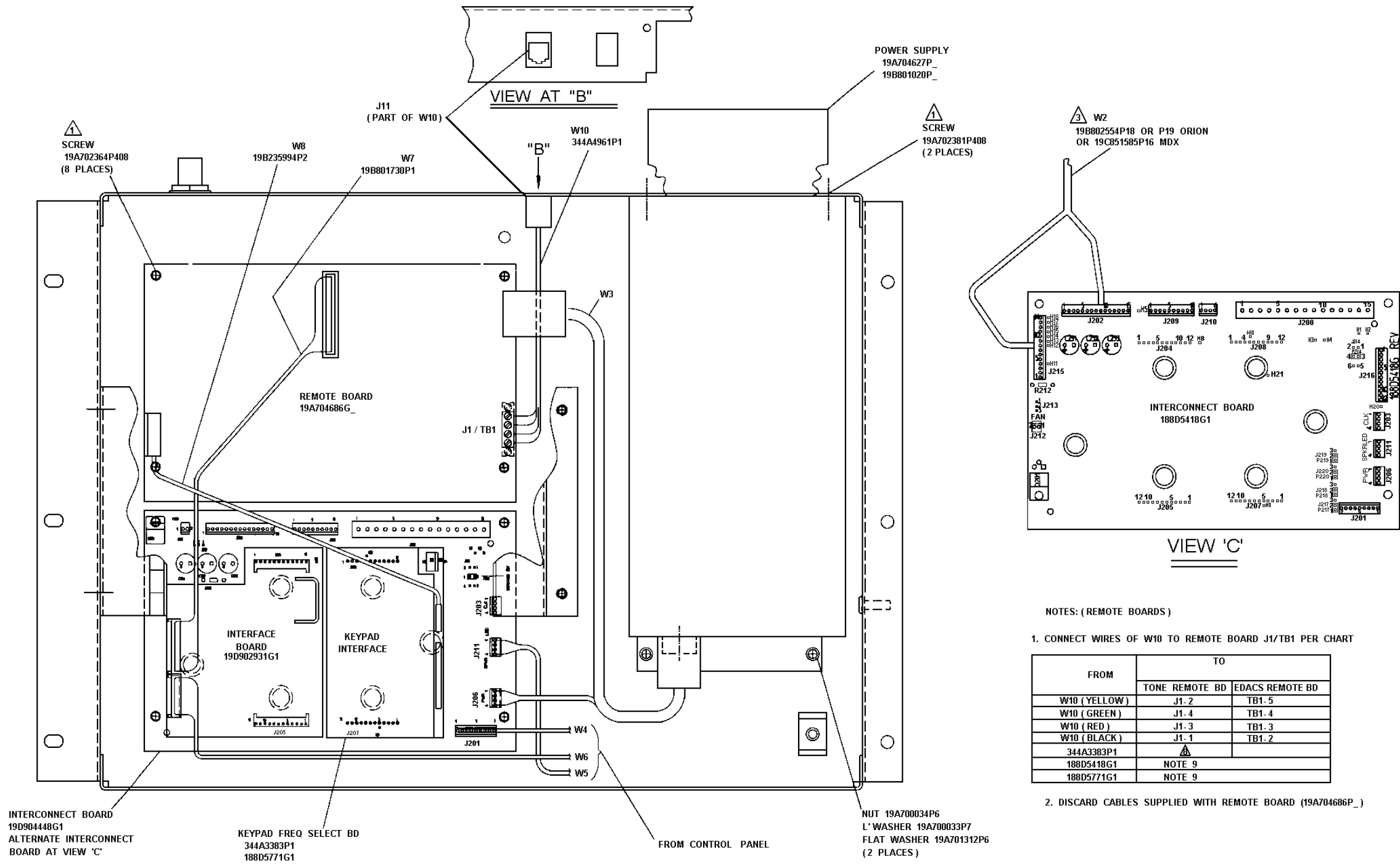
- NOTES:
- ⚠ PART OF HARDWARE KIT 349A9645G.
  - ⚠ THESE ITEMS ARE USED WHEN MOBILE IS FACTORY INSTALLED. IF MOBILE IS NOT FACTORY INSTALLED THESE ITEMS ARE TO REMAIN PACKAGED AND SHIPPED WITH STATION.
  - ⚠ IF STATION IS SHIPPED LESS MOBILE, INSTALL P202 OF W2 (19C851585P16), (19B802554P18 AND P19) ONTO J202 OF INTERCONNECT BOARD AND P215 OF THE 554P18 & P19 CABLE TO J215 ON INTERCONNECT BOARD AND LET P905 OR P1 HANG LOOSE.
  - ⚠ ADJUST SPRING CATCH SO RADIO IS HELD TIGHT IN PLACE IN CLOSED POSITION.
  - ⚠ TORQUE 1/4 - 20 SCREWS TO 1.8128 NEWTON METERS (16-25 INCH-POUNDS).
  - ⚠ SOLDER BLACK AND WHITE WIRES FROM THERMOSTAT PL19B801127 TO EITHER TERMINAL OF FAN 5493477. SLEEVE SOLDER JOINT.
  - ⚠ THESE ITEMS ARE PART OF FAN THERMOSTAT PL19B801127.
  - ⚠ ADD DM JUMPER WIRE 19A115060P30 TO SOLDER SIDE OF 344A3383P1 ASSEMBLY AS SHOWN AT VIEW 'D' TO SHORT H2 TO GROUND FOR MDX CONVENTIONAL TONE REMOTE OPERATION.

⚠ JUMPER / R54 CHART SEE VIEWS C, E & F

188D5418	MDX	ORION
P217 - P220	1&2	2&3
188D5771	N/A	
P403 - P404	N/A	2&3
R54 EDACS	N/A	10K OHM
R54 TONE	N/A	OPEN

WALL MOUNT STATION

(19D904975, Sh. 1, Rev. 3)



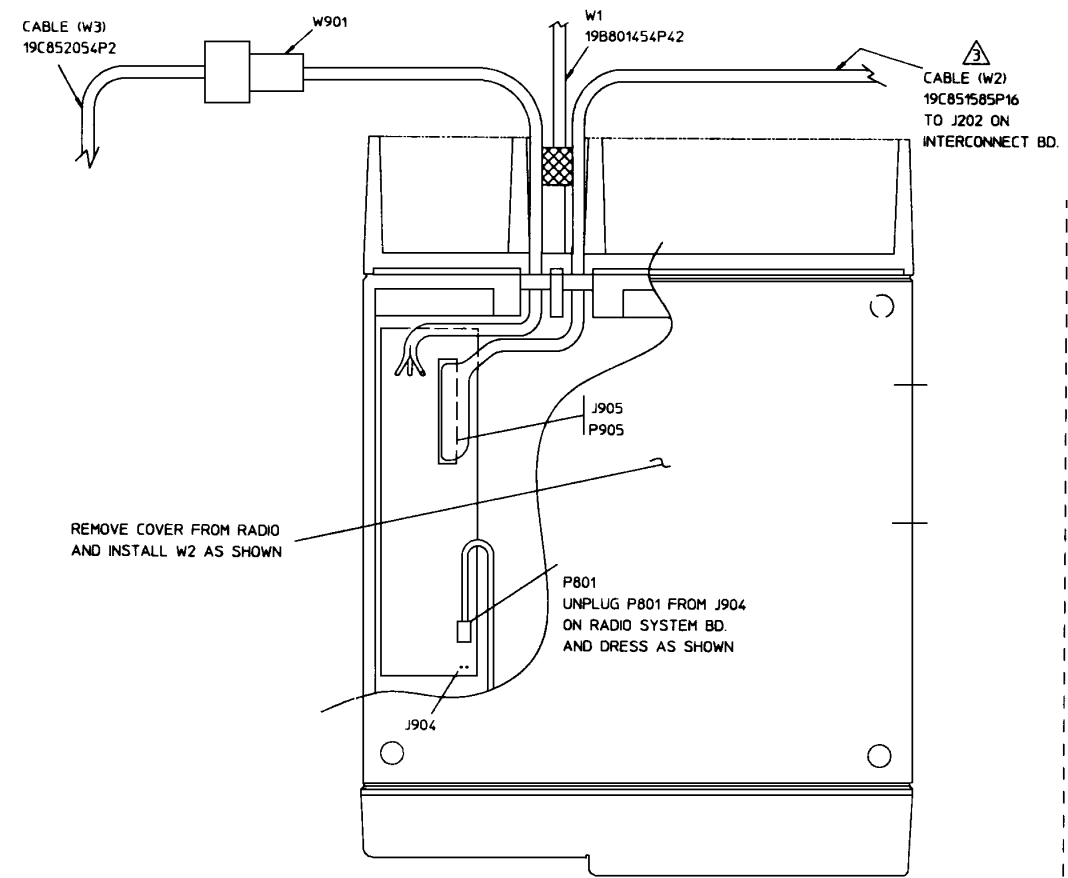
NOTES: (REMOTE BOARDS)

1. CONNECT WIRES OF W10 TO REMOTE BOARD J1/TB1 PER CHART

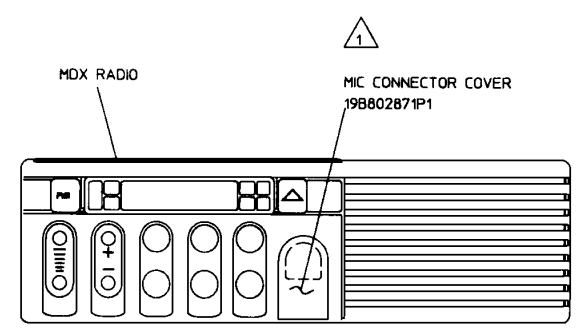
FROM	TO	
	tone REMOTE BD	EDACS REMOTE BD
W10 (YELLOW)	J1-2	TB1-5
W10 (GREEN)	J1-4	TB1-4
W10 (RED)	J1-3	TB1-3
W10 (BLACK)	J1-1	TB1-2
344A3383P1	⚠ NOTE 9	
188D5418G1	NOTE 9	
188D5771G1	NOTE 9	

2. DISCARD CABLES SUPPLIED WITH REMOTE BOARD (19A704686P\_)

PART 1 (CONT FROM SHEET 1)

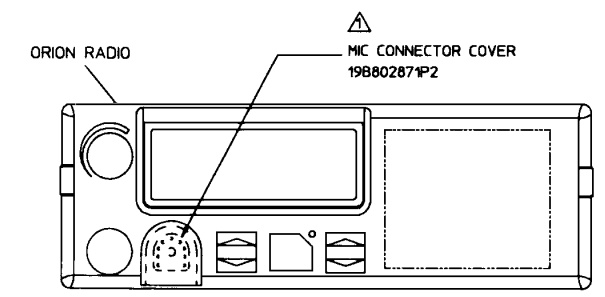
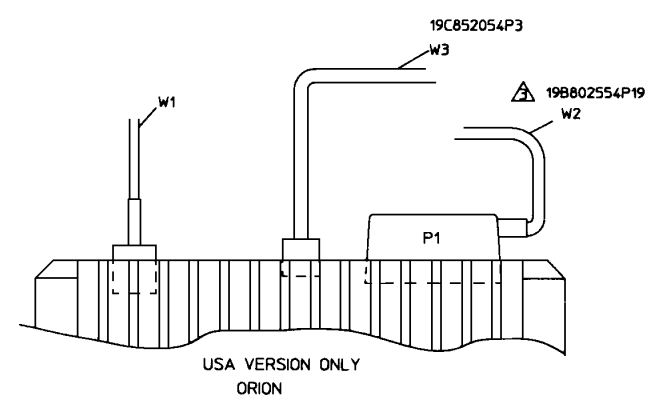
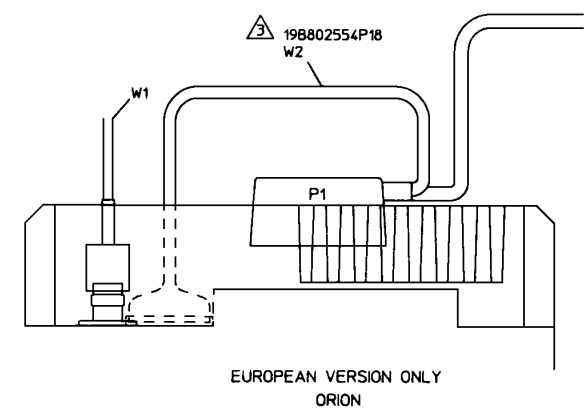


BOTTOM VIEW OF RADIO



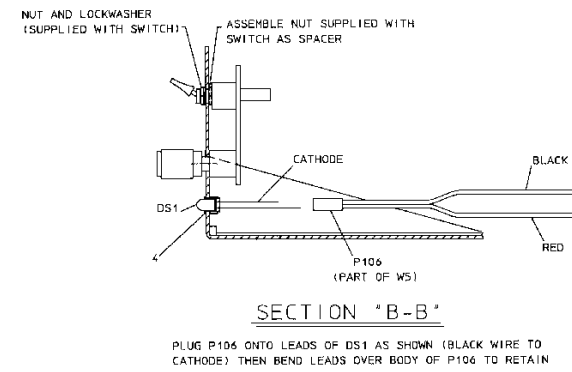
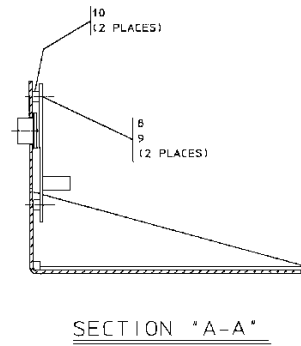
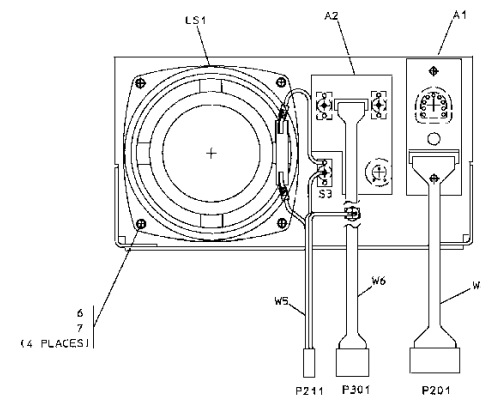
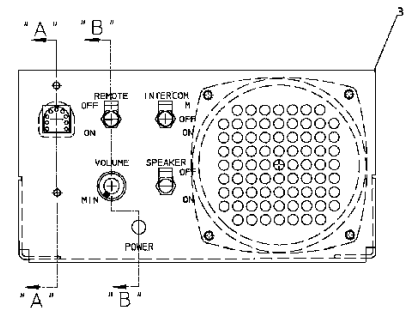
FRONT VIEW OF RADIO

② MDX MOBILE  
INSTALLATION



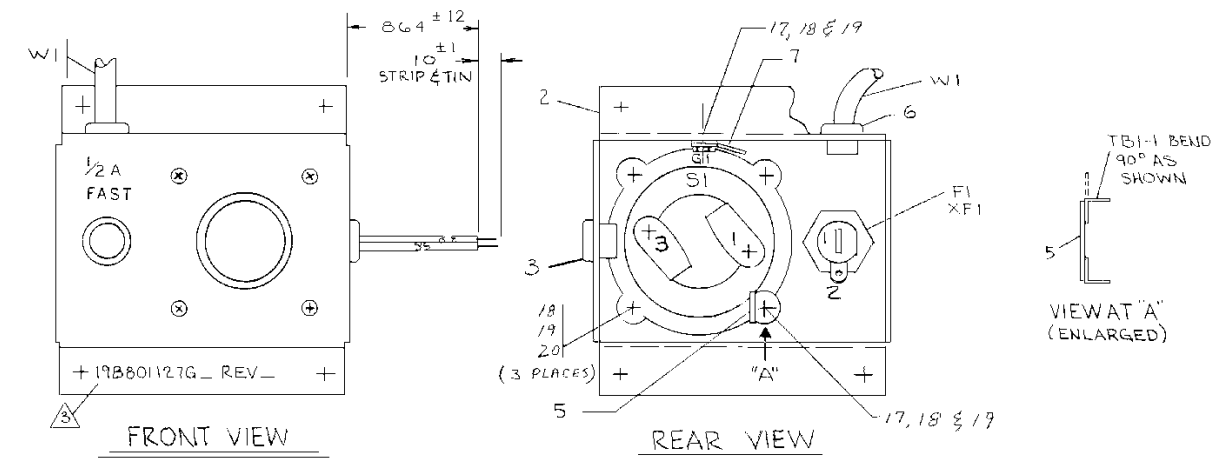
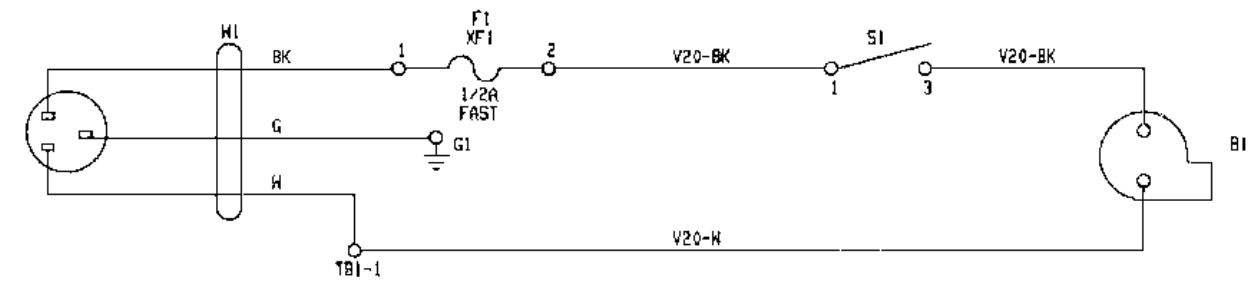
FRONT VIEW OF RADIO

③ ORION MOBILE  
INSTALLATION

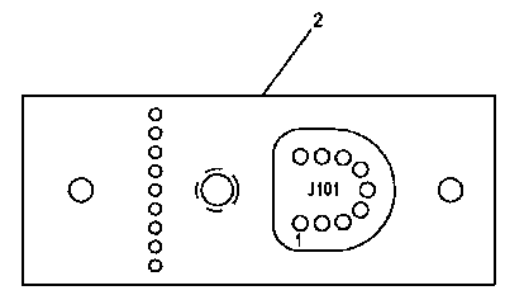
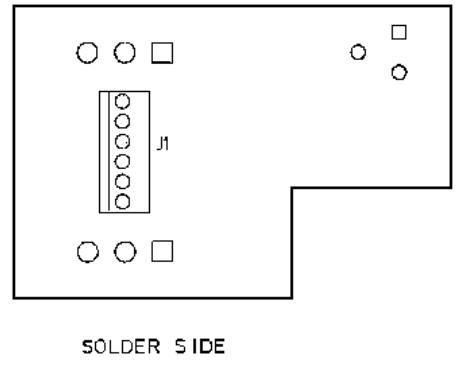
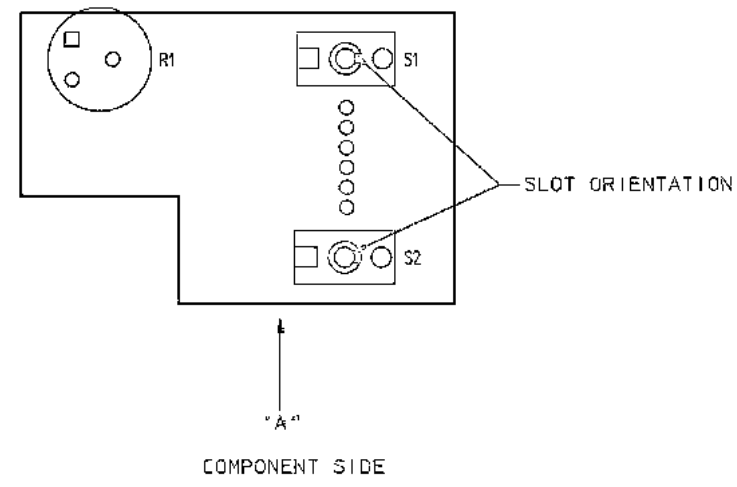


CONTROL PANEL  
(19D904974, Sh. 1, Rev. 1)

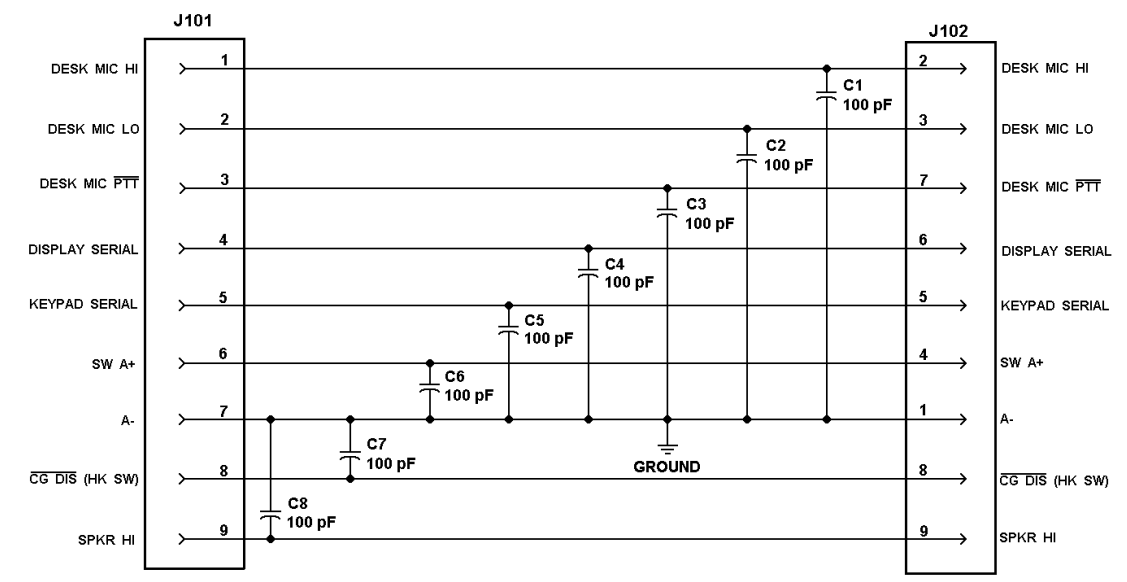
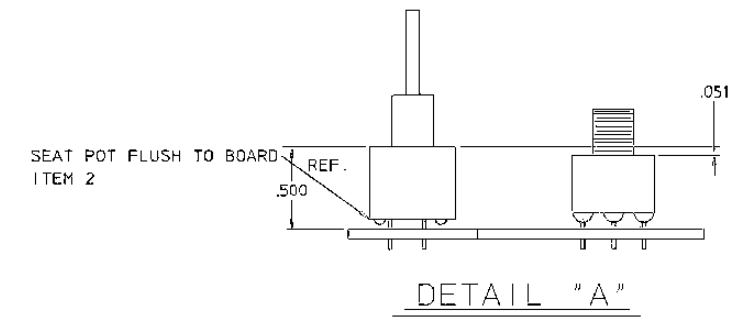
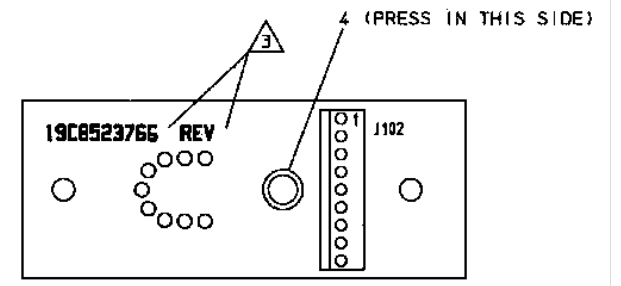
THERMOSTAT/FAN  
19B801127



FAN THERMOSTAT ASSEMBLY  
(19B801127, Sh. 1, Rev. 2)



(19C852376, Rev. 1)



NOTES:  
1. C1-C8 NOT USED.

(19B802699, Rev. 1)

**SWITCH PANEL**  
19C852424G1

**MICROPHONE CONNECTOR BOARD**  
19C852376G1

WALL MOUNT STATION

SYMBOL	PART NO.	DESCRIPTION
<b>WM STATION CABINET 19D402658G2</b>		
----- JACKS -----		
J501	19B209343P1	Connector, Receptacle.
----- MISCELLANEOUS -----		
3	19A122184P1	Grill.
4	19B205311P1	Angle.
6	5491682P14	Rim lock.
7	N130P1410B6	Thread forming hex head screw.
8	19D402658P8	Cabinet Assembly.
9	19A122059P4	Pad.
10	N130P2416B6	Thread forming hex head screw.
11	N402P71B6	Plain wide steel washer.
13	19B205409P1	Latch Spring.
15	4035267P1	Drive rivet.
17	N402AP38B6	Plain steel washer.
18	19B201074P306	Tap screw, Phillips POZIDRIV: No. 6-32 x 3/8.
21	7763541P6	Retaining Strap.
22	19A701863P19	Loop clamp: sim to Weckesser 3/8-6.
---- ASSOCIATED ASSEMBLIES ----		
5	19B205318G1	Hinge support.
19	19B227009G2	Cabinet.
	19D904973P1	Chassis.
	19C852458P1	Right Radio Bracket.
	19C852459P1	Left Radio Bracket.
<b>CONTROL PANEL 19D904974G1</b>		
<b>MICROPHONE CONNECTOR BOARD 19C852376G1</b>		
----- JACKS -----		
J101	344A4485P1	Connector, special; sim to CONXAL E4408.
J102	19A704852P35	PWB Connector.
----- MISCELLANEOUS -----		
4	19A702455P1	Nut, Self-Clinching, M3 x .5: sim to Pen Cat.# KF2-M3.
<b>SWITCH PANEL 19C852424G1</b>		
----- JACKS -----		
J1	19A704852P32	Printed wire, two part: 6 contacts, sim to Molex 22-29-2061.
----- RESISTORS -----		
R1	RELUA316255/5	Potentiometer, Panel Mounting, 5KΩ.
----- SWITCHES -----		
S1	19A700189P11	Toggle Switch.
S2	19A700189P12	Toggle Switch.

\*COMPONENTS, ADDED, DELETED OR CHANGED BY PRODUCTION CHANGES

SYMBOL	PART NO.	DESCRIPTION
----- INDICATING DEVICES -----		
DS1	19A134354P1	Optoelectronic: Red; sim to HP 5082-4655.
----- LOUDSPEAKERS -----		
LS1	344A3269P1	Magnet, Loudspeaker, Permanent.
----- SWITCHES -----		
S3	19A700189P11	Toggle Switch.
----- CABLES -----		
W4	19B801729P2	Microphone cable.
W5	344A3337P3	Cable.
W6	19B801735P2	Cable.
----- MISCELLANEOUS -----		
3	19D904979P1	Bracket.
4	19A116677P1	Bushing: sim to Hewlett-Packard No. 5082-4707.
5	19A134939P4	Knob.
6	19A700034P5	Hex nut: No. M3.5 x 0.6.
7	19A700033P6	Lockwasher, external tooth, M3.5.
8	19A700034P4	Nut, hex: No. M3 x 0.5MM.
9	19A700032P5	Lockwasher, internal tooth: No. 3MM.
10	7150186P3	Spacer: approx 1/8 x 1/8 inches dia.
<b>FAN/THERMOSTAT 19B801127G1</b>		
----- FUSES -----		
F1	19A701881P18	Fuse, Cartridge, Quick Blow, .500A, 250V.
----- SWITCHES -----		
S1	5496655P1	Thermostat, snap-action: SPST, close on temp rise, auto reset, close at 110F ±5F, open at 95F ±5F, 25 amp at 120/240 VAC; sim to Metals and Controls 20400-F17-64-F110-1.5.
----- CABLES -----		
W1	19A134567P1	Power, 3 wire, 13 amps at 125 VAC, approx. 6 ft. long.
----- FUSE SOCKETS -----		
XF1	19B209005P1	Fuseholder: 15 amps at 250 v; sim to Littelfuse 342012.
----- MISCELLANEOUS -----		
2	19B801129G1	Support
3	19A702464P2	Strain relief.
5	7775500P46	Phenolic: 1 insulated, 1 ground terminal.
6	19A702464P4	Bushing, strain relief.
11	B5493477P1	Fan assembly, single phase: 115 VAC, 50/60 Hz, 14 w, ccw rotation; sim to Rotron "Gold Seal Venturi Muffin Fan".
12	B5493477P10	Fan Grille.
13	7141225P3	Hex Nut: No. 6-32.
14	N80P13010B6	Screw, Machine, Pan Head: No. 6-32 x 5/8".
15	N404P13B6	Lockwasher, internal tooth: No. 6.
16	N402P37B6	Flatwasher: No. 6.
17	N80P13005B6	Machine screw, Pan Head: No. 6-32 x 5/16".
18	7141225P3	Hex Nut: No. 6-32.
19	N403P13B6	Lockwasher: No. 6.
20	N80P13004B6	Screw, machine, Pan Head; No. 6-32 x 1/4".
21	19J706152P5	Retainer strap: sim to Panduit Corp. SST-1.

SYMBOL	PART NO.	DESCRIPTION
<b>HARDWARE KIT 349A9645G1</b>		
----- MISCELLANEOUS -----		
1	19A702381P408	Tap screw, TORX Drive, M3-0.5 x 8.
2	19A700034P6	Nut, Hex, M4 x .7.
3	19A702364P408	Machine screw: TORX Drive, M3.5 - 0.6 x 8.
4	19A700033P6	Lockwasher, external tooth, M3.5.
5	344A3480P1	Strain Relief.
6	19A705406P408	Machine bolt, hexagon: M4 x 0.7.
7	19B802871P1	Cover, MIC Connector.
9	19A701312P6	Flatwasher: 1.7 - 1.85 ID.
10	19A700033P7	Lockwasher, external tooth: #4.
11	N210P16B6	Nut, Hex, #10-32.
12	N403P19B6	Washer, Lock, External tooth: #10.
13	N80P21005B6	Machine screw: 1/4(.250)-20 x .312.
14	N403P25B6	Lockwasher, external tooth: 1/4(.250).
15	19A702364P510	Screw, machine, pan head, TORX DRIVE: M4.
----- CABLES -----		
	19B801454P42	Antenna Cable
	19C851585P16	Radio Option Cable
	344A4961P1	RJ Cable
	19B801730P1	Interconnect/Remote
	19B235994P2	Keypad/Remote
DSCE9G	19C852054P2	Standard Power Supply
DSSU3H	19B802942P1	Cable/Relay Assembly
DSSU3H	19B801212G1	Battery Cable
DSCE9R	19B802554P19	Cable, USA Version
	19C852054P3	Power Cable