1. INTRODUCTION

1.1 This section of the manual details procedures required in the overall maintenance of the station. Specific troubleshooting and alignment procedures are given in the appropriate section of this manual, such as receiver, transmitter, etc. Maintenance checks for control modules are given in the applicable module section in the separate Control and Audio Instruction Manual 68P81061E40.

1.2 The first section gives the procedures required to locally operate the station during servicing. This allows service personnel to operate all functions of the station without an operator present at the control site.

1.3 The second section provides a list of routine maintenance procedures that should be performed periodically or whenever the station is serviced. Also, a list of recommended test equipment is provided.

1.4 The last section explains how to disassemble and gain access to the various parts of the station and contains the station mechanical parts identification and station intercabling diagrams. This station is designed for easy service access. Usually, all servicing can be performed with the housing in place on the station by removing only the locking front cover.

2. LOCAL OPERATION

2.1 GENERAL

Once power is applied and the station is properly adjusted, the base or repeater station is normally operated entirely unattended from a remote control point. The station may be manually operated utilizing controls on the control modules in the station chassis. This type of operation may be necessary to accomplish station maintenance and testing. The switch functions are given in Table 1.

WARNING

The transmitter can be keyed remotely. To prevent unexpected transmitter keying while servicing the station, be sure the LINE DISABLE switch is actuated (direction of arrow). Also, the TRN5324A Squelch Gate Module must be temporarily removed from the remote control chassis if the station is equipped with any of the following dc transfer modules:

TRN5329A
TRN5240A
TRN5257A

To prevent PA damage, be sure the **LINE DISABLE** switch is actuated and do not locally key the station while having more than one channel element selected.

Table 1. Station Control Module Switch Functions

Switch	Position	Functions Possible
XMIT	Normal (not actuated)	Normal mode of operation
	Actuated (hold to right)	Turns transmitter on with no modulation. Use test microphone connected to Local Mic receptacle to modulate transmitter.
PL DISABLE* (functional only in *Private-Line* stations or *Digital Private-Line)*	Normal (left)	Only PL/DPL-coded on-frequency signals accepted by receiver.
	Actuated (right)	All on-frequency signals accepted by receiver.
LINE DISABLE*	Normal (left)	Transmitter can be operated by: 1. XMIT switch 2. Local microphone 3. Remote control console
	Actuated (right)	Transmitter can *not* be operated by remote control console over control line.

*The DISABLE LIGHT is illuminated when the LINE DISABLE or PL DISABLE switch is actuated.

The following procedures pertain to the local operation of a remotely controlled station or repeater station.

2.2 TRANSMITTER CONTROL

To prevent the transmitter from being keyed remotely, set station control module LINE DISABLE switch in the direction of the arrow. At conclusion of local operation, be sure that the LINE DISABLE switch is returned to its normal position (opposite direction of arrow).

2.3 LOCAL MICROPHONE

Connect a microphone (Motorola Model TMN5064A or equivalent) to the microphone receptacle on the R1 Audio Module. This microphone may be used as a local microphone, and to key the transmitter.

2.4 LOCAL SPEAKER

2.4.1 Stations Without Optional Speaker or Meter and Speaker Box

Connect an 8-ohm, 1-watt test speaker to pins 22 (+) and 23 (-) at the R1 Audio Module edge connector on the station backplane interconnect board. This speaker is used to monitor all received messages.

2.4.2 Stations With Optional Speaker or Meter and Speaker Box

Connect the speaker lead from the speaker box to pins 22 (+) and 23 (-) of the R1 Audio Module edge connector on the station backplane interconnect board. Place the Speaker On-Off switch to the On position. The Speaker On-Off switch is located on the side of the Speaker or Meter and Speaker Box mounted toward the back of the station. The box may be removed from its mounting in the station for access.

2.5. HANDSET

A Motorola handset (Model TMN6057A) may be used to provide local audio, microphone, and transmit push-to-talk. Connect the handset to the microphone receptacle on the R1 Audio Module.

2.6 PORTABLE TEST SET (FOR STATIONS WITHOUT BUILT-IN METERING)

A Motorola S1056-S1059 Series Portable Test Set with TEK-37 or TEK-37A Adapter Cable can be used as a local control facility. Connect the red "control" plug of the adapter cable to the metering receptacle on the unified chassis interconnect board. The speaker in the test set can be used for monitoring received signals and an optional microphone (Model TMN6054A) connected to the microphone receptacle on the test set can be used for originating transmissions. The XMIT button on the test set can be used to key the transmitter without voice modulation.

2.7 FREQUENCY SELECTION

For stations with a two-frequency transmitter, the frequency can be locally selected by the F1-F2 switch on the dc transfer module or on the F2 tone decoder module. For stations with a two-frequency receiver, frequency selection is made by momentarily operating the REC F1 SELECT or REC F2 SELECT switch on the dc transfer module or on the F2 tone decoder module. For four-frequency stations, the frequency is selected by *momentary* operation of the desired frequency select switch on the four-frequency control module *after* the XMIT switch on the station control module is actuated.

2.8 SELECTION OF OTHER MODES

All other functions that can be activated by remote control can also be activated locally. Each module has test switches to activate any such functions, such as RPTR ON and RPTR OFF. Most of these switches are momentary action, which causes the station to operate in the selected mode as long as the switch is held. The station will return to normal operation when the switch is released.

2.9 RECEIVED AUDIO

After the local speaker is turned on, or connected, the station is ready to receive audio. The receiver PL feature, if used, can be defeated by setting the station control module PL DISABLE switch in the direction of the arrow. (At the conclusion of local operation, be sure that the PL DISABLE switch is returned to its normal position.) If necessary, the receiver can be unsquelched utilizing the receiver SQUELCH control on the receiver chassis. The VOLUME control on the receiver chassis sets the audio output level of the local speaker.

2.10 TRANSMITTING

NOTE

Before initiating any local transmissions, monitor the channel to be sure that it is clear of other transmissions.

The transmitter is locally keyed by either activating the station control module XMIT switch or activating the push-to-talk microphone switch. Voice is transmitted using the local microphone.

2.11 CONCLUDING LOCAL OPERATION

At the conclusion of local operation, perform the following operations and checks to be sure that the station is ready for remote operation.

Step 1. Reset receiver squelch level per procedures in the Receiver Alignment section of this manual.

Step 2. Be sure that station control module switches are positioned for normal operation (reference Table 1).

Step 3. Disconnect microphone and test speaker (if used).

Step 4. Set all external power switches ON.

Step 5. Be sure that station is operable from remote location.

Step 6. Turn local speaker OFF (if applicable).

Step 7. Disconnect or remove any metering plugs or test set.

Step 8. Be sure that the cabinet door is locked.

Step 9. Be sure that vents in cabinet are unobstructed.

3. MAINTENANCE TECHNIQUES

3.1 GENERAL

Specific maintenance procedures for individual chassis, which comprise this station, are contained in the latter paragraphs of this section. Control module maintenance information is provided in the separate Control and Audio manual 68P81061E40. As an aid to isolating a malfunction to a specific chassis or module, a variety of general techniques are appropriate. Refer to Table 2 for routine maintenance checklist.

3.2 TRANSMITTER AND RECEIVER

Most troubles in the transmitter or receiver can be quickly isolated with metering checks. A log of normal meter readings *for this station* should be maintained. Each time maintenance is performed, the meter readings should be entered into the log. Variations from the previous readings can help to isolate a malfunction or may indicate an impending failure. If no previous meter readings are available, typical or minimum meter readings may be found in the receiver, exciter, and power amplifier sections as well as metering procedures.

3.3 POWER SUPPLY

A check of power supply voltages under load and no-load conditions (transmit and standby) should quickly isolate any malfunction.

3.4 REMOTE CONTROL UNIT

Isolation of a malfunction in the control portion of the rf control chassis requires a functional understanding of the overall station operation and the interrelationship between the various modules and chassis of the station. The Functional Description section along with the Control Modules section of manual 68P81061E40 provide necessary information. With a basic understanding of station operation, troubles may be isolated by analyzing the following questions:

(1) Can the station be operated locally but not remotely? If so, this eliminates many circuits as possible sources of trouble.

(2) How many modes are inoperable? Concentrate testing on circuits that are common to the inoperable modes.

Table 2. Routine Maintenance Checklist

Item	Check
Receiver	Measure the signal level required to obtain 20 dB quieting.
	Compare meter readings with the minimum value and all previous readings taken. Realign the receiver, if necessary.
	For PL stations, check for proper operation of the PL decoder. Does the squelch open when the proper PL tone or binary code is detected?
	Verify receiver frequency, adjust if necessary.
Transmitter	Measure transmitter output power.
	Compare meter readings with the minimum value and all previous readings taken. Realign the transmitter, if necessary.
	Verify that each transmitter channel is on frequency and adjust if necessary.
	Tune and load the transmitter to the antenna.
	Measure transmitter frequency deviation for both voice and PL coded modulation. Adjust the "IDC" control, if necessary.
	Measure the exciter modulator sensitivity.
System Operation	Measure and adjust the audio input to the exciter.
	Measure and adjust the receiver(s) audio output to the control line.
	Check control line levels and functions for proper operation.
	Adjust receiver(s) on frequency with the distant transmitter(s) in the system.
	Check for proper repeater operation on repeater models.
	Check all accessory equipment for proper operation.
After Performing Maintenance	Check all items listed in the *Concluding Local Operation* paragraph of this section of the instruction manual.

(3) Are adjustments properly set? This includes audio level adjustments at the station *and at the remote control point.*

(4) Are jumpers properly installed? The many jumpers in this station provide vast flexibility, but could be a source of trouble if improperly added, removed, or not removed, as the case may be.

4. RECOMMENDED TEST EQUIPMENT

A list of recommended test equipment for maintenance of this station is given in Table 3.

5. DISASSEMBLY AND SERVICE ACCESS

5.1 FRONT COVER AND LINE FUSE

5.1.1 Access to all circuitry on the *MSR 2000* station is gained through the front of the station. To remove the front door, turn the lock to the left with the key provided with the station. Pull the door panel back, and lift it up slightly to disengage the mounting flanges at the bottom.

5.1.2 The ac line fuse is located on the front side of the junction box at the right-hand side of the cabinet (refer to Figures 1 and 3). To replace the fuse, disconnect the

Table 3. Recommended Test Equipment

Type of Equipment or Type of Measurement	Equipment Characteristics	Recommended Type
Transmitter Frequency Measurement	Frequency — 100-200 MHz Accuracy — ± .00005% or better	Any of the following items of Motorola Test Equipment: Model R2400 Series Service Monitor Model R2001 Systems Analyzer Model S1035 Series Frequency Counter
Transmitter Deviation Measurement (Note 1)	Peak reading type for voice or sinusoidal wave; scales for accurate reading of ± 5 kHz deviation (and ± 1 kHz deviation for *Private Line* models)	Any of the following items of Motorola Test Equipment: Model R2400 Series Service Monitor Model S1035A Series Frequency Counter Model R2001 Series System Analyzer
Transmitter Power Output Measurement	100-200 MHz; 50 ohms: at least 0-125 watts. 50 ohms dummy load: at least 125 watts.	Motorola S1350 Series Wattmeter with appropriate element Motorola Model R2001 Series System Analyzer Motorola Model T1013 Series RF Load Resistor
RF Signal Generator for receiver testing (Note 2)	100-200 MHz; FM; high-stability (± .0002% or better); adjustable output 0 to 1000 microvolts	Motorola Model R2400 Series Service Monitor Motorola Model R2001 Series System Analyzer Motorola Model R1040 Signal Generator
Audio Voltage Measurements	High impedance (10 megohm); dBm scale	Motorola Model S1053 Series Solid State AC Voltmeter
Audio Signal Generator for audio circuit testing in receiver and transmitter	Variable amplitude 0 to 1 volt; 1 kHz tone (300 to 3000 Hz preferred); sinusoidal wave	Motorola Model S1150A Series Solid State Audio Oscillator Motorola Model R2400 Series Service Monitor
DC Voltage Measurements, Resistance Measurements, RF Voltage Measurements	High impedance (11 megohm) DC multimeter	Motorola Model R1047A Series Digital Multimeter Motorola R1024 Solid State DC Multimeter with RTL4103 RF Probe
Waveform Measurements	Oscilloscope:	Motorola Model R1029 Dual Trace Oscilloscope Audio Circuit Measurements: Motorola Model R1004 Series Oscilloscope RF Circuit Measurements: A very high quality instrument is required (at least 50 MHz bandwidth)
Tone *Private-Line* injection for PL decoder circuit measurements	*Private-Line* tone generator using Vibrasender resonant reed for frequency accuracy; or audio oscillator with frequency counter for accurate setting of oscillator.	Motorola Model R1150A Series *Private-Line* Tone Generator
Digital Private-Line Encoder and Decoder measurements	*Digital Private-Line* Encoder and Decoder. Also test digital code plugs.	Motorola Model R1150A Series Code Synthesizer
Tuning Tool	Used for adjusting all tunable components during equipment alignment.	Motorola Part No. 66-83398A01 & 66-82977K01
Contact Removal Tool	Used to remove female wire terminals from metering cable connector	Motorola Part No. 66-84690C01

line cord from the junction box. Unscrew the fuseholder cover from the fuseholder with a screwdriver.

5.2 POWER AMPLIFIER ACCESS AND REMOVAL

5.2.1 Access to Intermittent Duty Power Amplifier

5.2.1.1 To gain access to the power control board for servicing and metering, remove the 5 screws holding the cover over the power control board area of the PA casting (refer to Figure 1).

5.2.1.2 To gain access to the power amplifier board for servicing, remove the two black power amplifier securing screws. Swing the PA chassis assembly out and down (it is hinged at the bottom). Loosen 4 captive screws holding the cover over the power amplifier board (refer to Figure 2).

5.2.2 Access to Continuous Duty Power Amplifier

5.2.2.1 To gain access to the power amplifier boards for servicing and metering, remove the 4 black power amplifier securing screws. Swing the PA chassis assembly out and down (it is hinged at the bottom). Metering is accessible without removing any covers. Remove 12 screws holding the cover over the PA and power control board for servicing the PA (refer to Figures 3 and 4).

5.2.2.2 To gain access to the power control board for servicing, remove the 4 screws holding the power control bracket (refer to Figure 4).

5.2.3 Removal of Power Amplifier

The entire power amplifier chassis may be removed, if desired, for substitution or for access to the power supply. Perform the following steps:

Step 1. Disconnect the two coaxial connectors from J802 and J803 on the PA chassis. Disconnect the two power wires (red and black) from TB601 at the power supply.

Step 2. Swing the power amplifier chassis into the down position as explained above. Disconnect P801, the three-wire connector, from J801 on the PA chassis.

Step 3. With both hands under the PA chassis, lift the chassis approximately 1/2-inch and pull it toward you. Raise the left side of the PA chassis until the hinge pins clear the mounting rails, and pull the PA chassis out of the station cabinet.

Step 4. Installation is the reverse of the above.

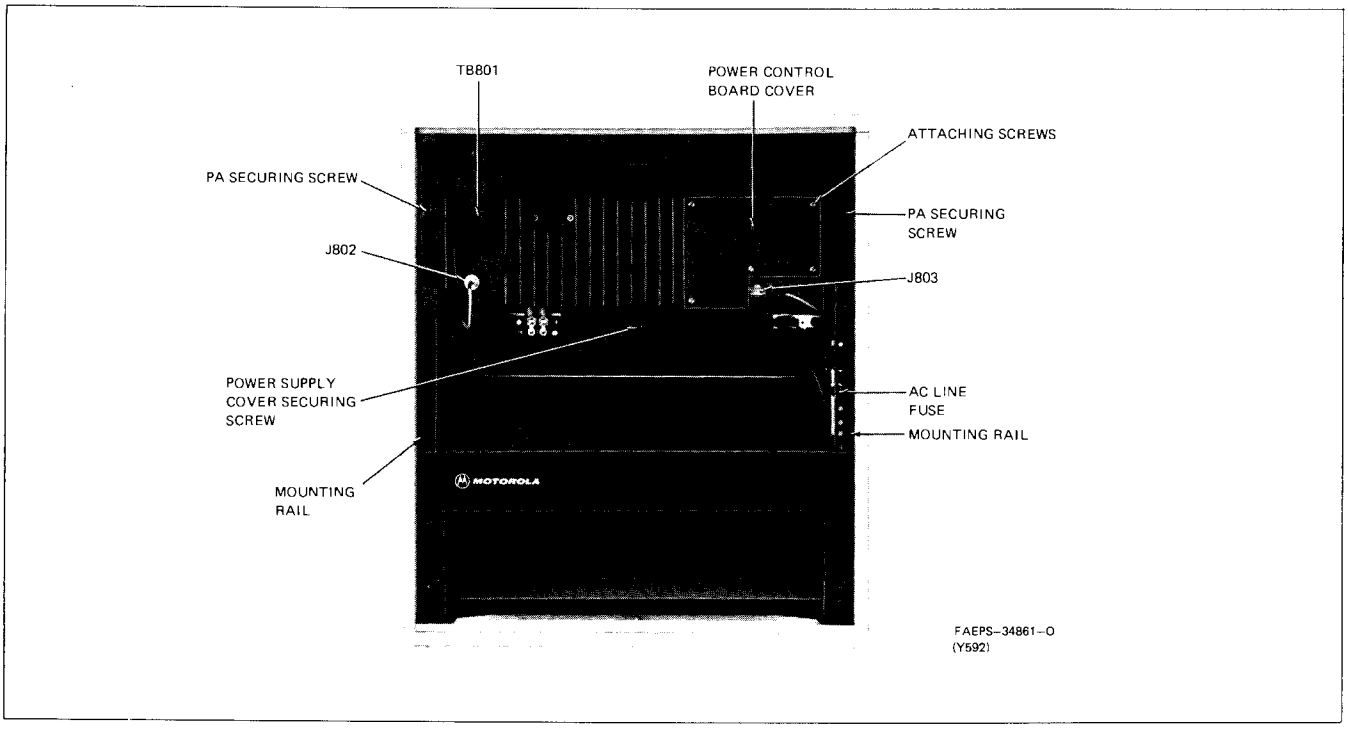


Figure 1. PA and Power Supply Detail of Intermittent Duty Station

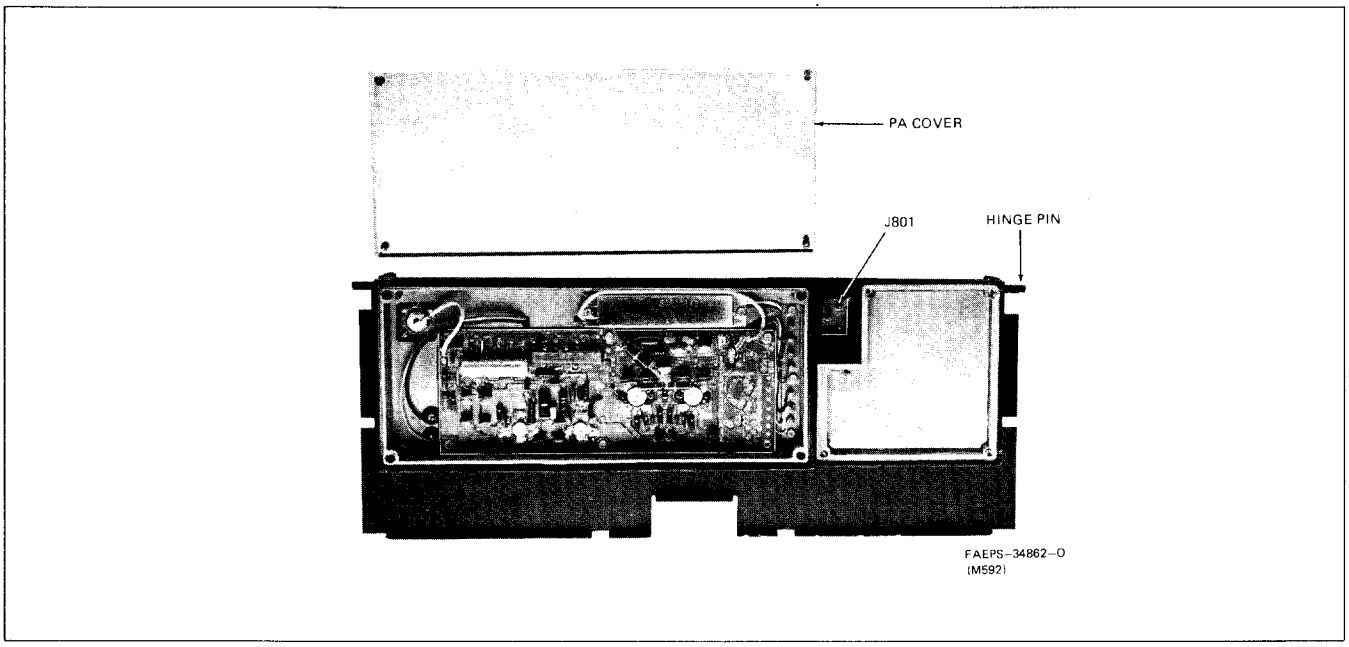


Figure 2. Power Amplifier Detail of Intermittent Duty Station

5.3 RF CONTROL CHASSIS ACCESS AND REMOVAL

(Refer to Figures 1 and 3.)

5.3.1 The rf control chassis may be opened or lowered for service access. The control module cover panel must be removed for access to control and audio modules, and the chassis may tilted out for access to the back of the backplane interconnect board and the rf boards.

5.3.2 To remove the control module cover panel, pull outward on the lip at the top of the panel. The panel snaps and pivots outward. The control and audio modules may be removed for servicing with a Motorola part no. 66-83574F01 Card Puller, supplied with the station.

5.3.3 To tilt out the rf control chassis, remove two black Phillips head screws securing the rf control chassis in place. Pull the chassis out from the top and tilt downward. In this position, all exciter and receiver metering connections are accessible, and the backplane interconnect board may be serviced.

5.3.4 To remove the rf control chassis, tilt out the chassis to the service position and perform the following steps:

Step 1. Mark and disconnect all wiring from the terminal screws on the backplane interconnect board.

Step 2. Remove two screws securing each rf coaxial connector to the exciter and receiver positions.

Step 3. Disconnect main wiring harness connector P1 from J1 on the backplane interconnect board.

Step 4. Cut all wire ties and remove any cable clamps securing cables to the rf control chassis.

Step 5. Lift up the rf control chassis approximately 1/2 inch and pull toward you. Raise the left-hand end of the chassis until the hinge pins clear the mounting rails, and pull the chassis out of the station housing.

Step 6. Installation is the reverse of the above. Be sure to replace all wire ties and cable clamps in the position originally supplied.

5.4 EXCITER AND RECEIVER ACCESS AND REMOVAL

5.4.1 RF Cover — Base Station Models

To remove the rf cover to gain access to the exciter and receiver circuit boards, remove 4 Phillips head screws (with plastic covers) as shown in Figure 5. Slide the cover out slightly and lift up while pulling toward you. Pull the cover out of the station cabinet. Tilt out the rf control chassis as explained in paragraph 5.3 for easy access to the exciter and receiver circuit boards. The exciter and receiver circuit boards may be removed by

pulling the ejector handles and then pulling the boards out of the chassis.

5.4.2 RF Covers — Fully Optionable Repeater Station Models or Stations with Shield Option

5.4.2.1 To remove the front rf cover, remove 4 Phillips head screws (with plastic covers) as shown in Figures 6 and 7. The exciter and receiver boards may now be removed by pulling the ejector handles and then pulling the boards out of the chassis.

5.4.2.2 To remove the top rf cover (front rf cover must be removed first), remove two black Phillips head screws securing the rf control chassis in place. Tilt the chassis out from the top by pulling toward you. Loosen 15 hex-head screws holding the cover in place, and slide the cover down so that the large end of the keyhole slots clear the securing screws. Lift the panel away from the chassis.

5.5 SPEAKER INTERCOM WITH SPEAKER AND DC METERING CHASSIS ACCESS

Instructions for use of the station service accessory boxes are given in the Accessories section of this manual. For ease in servicing, the box may be removed from the station cabinet.

5.6 DUPLEXER REMOVAL

Instructions for servicing and adjusting the duplexer are provided in the Duplexer instruction section in this manual. To remove the duplexer from the *MSR 2000* station cabinet, remove four black Phillips-head screws securing the duplexer to the mounting rails. Pull the duplexer partially out of the cabinet, until the rf connectors are accessible. Disconnect three UHF-type connectors, and remove the duplexer from the station cabinet. Installation is the reverse of this procedure.

5.7 POWER SUPPLY ACCESS

5.7.1 The power supply may usually be serviced without removing it from the cabinet. If removal is necessary, refer to the Power Supply instruction section of this manual for the recommended removal procedure.

5.7.2 To gain access to the power supply chassis, remove the power supply cover plate located under the PA chassis. It is retained by a single screw in the upper center of the cover (refer to Figures 1 and 3). For continuous duty stations, remove the top power supply cover plate located directly behind the PA chassis. It is re-

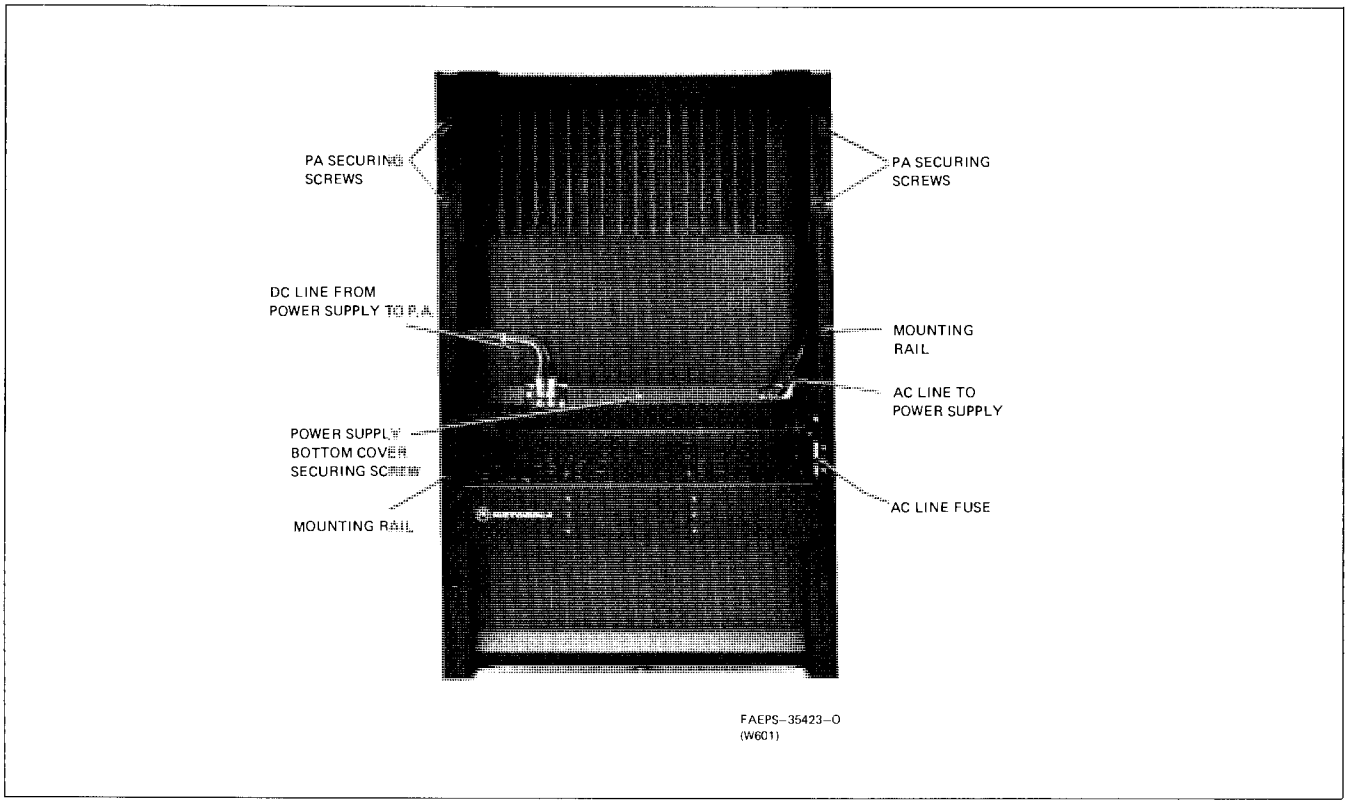


Figure 3. PA and Power Supply Detail of Continuous Duty Station

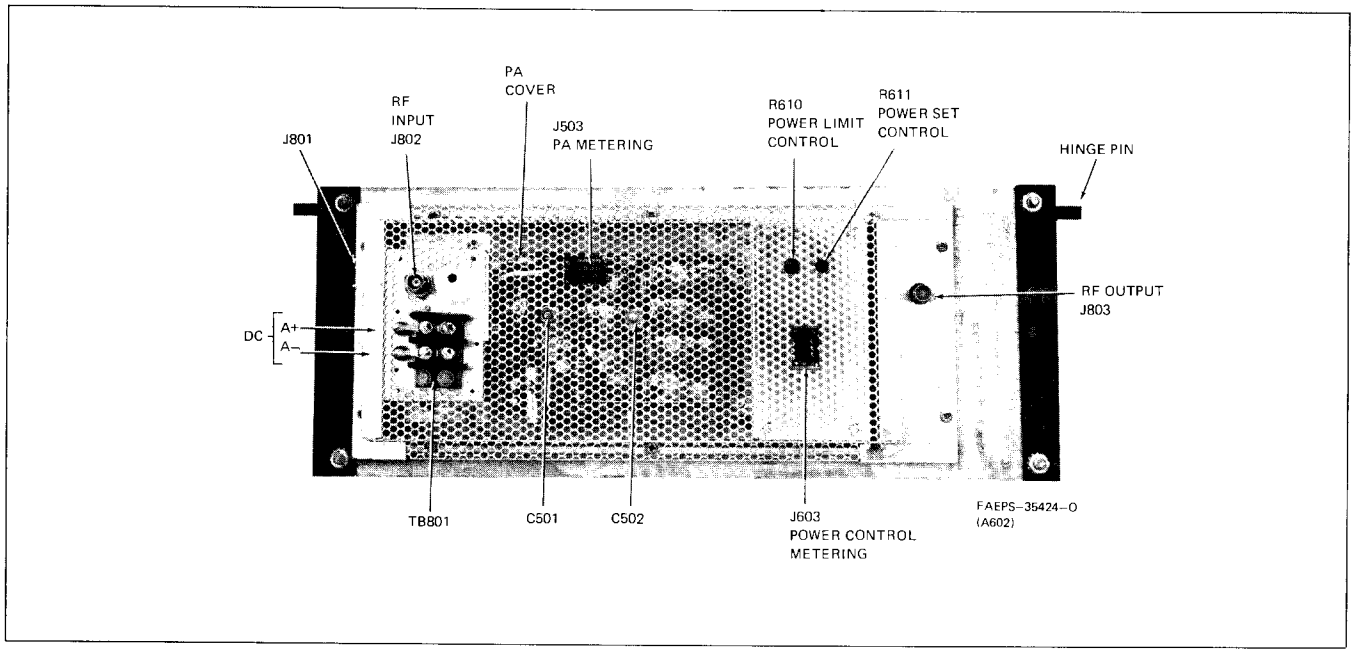


Figure 4. Power Amplifier Detail of Continuous Duty Station

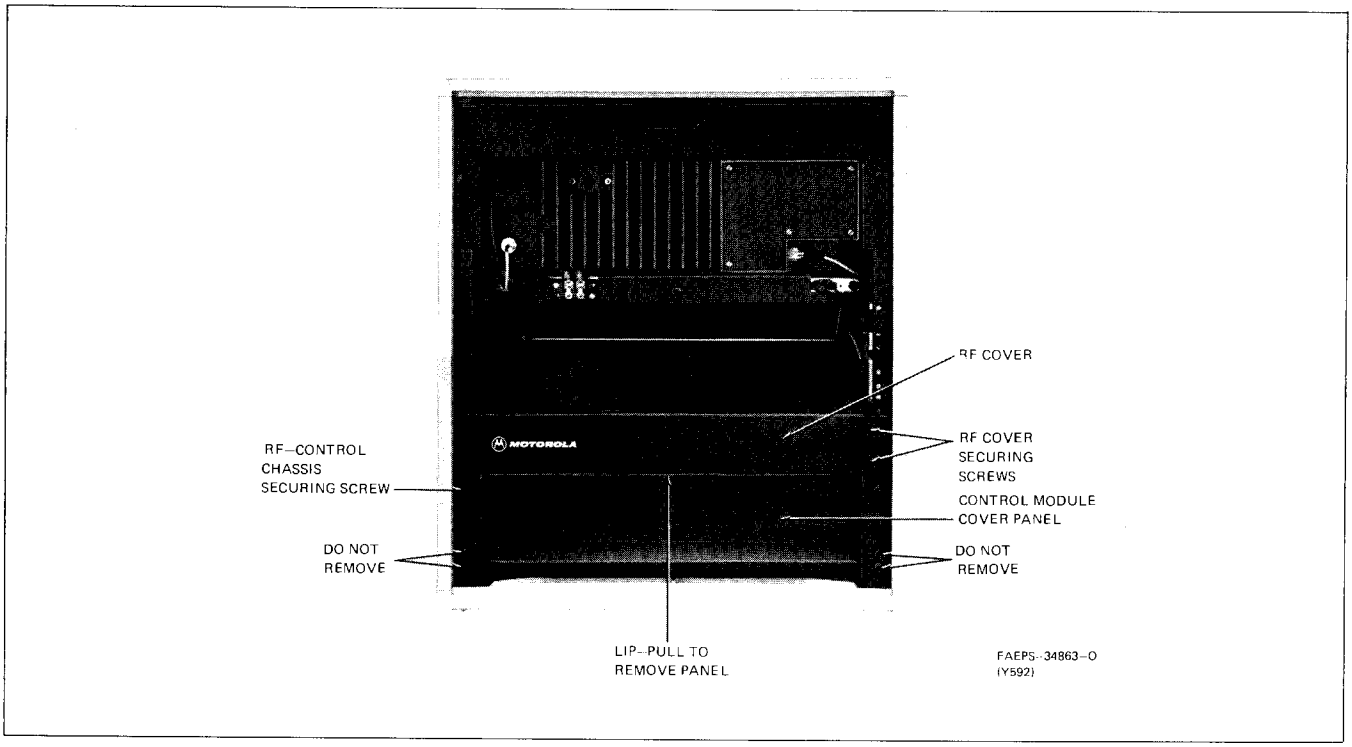


Figure 5. Basic Intermittent Duty Station Chassis Access

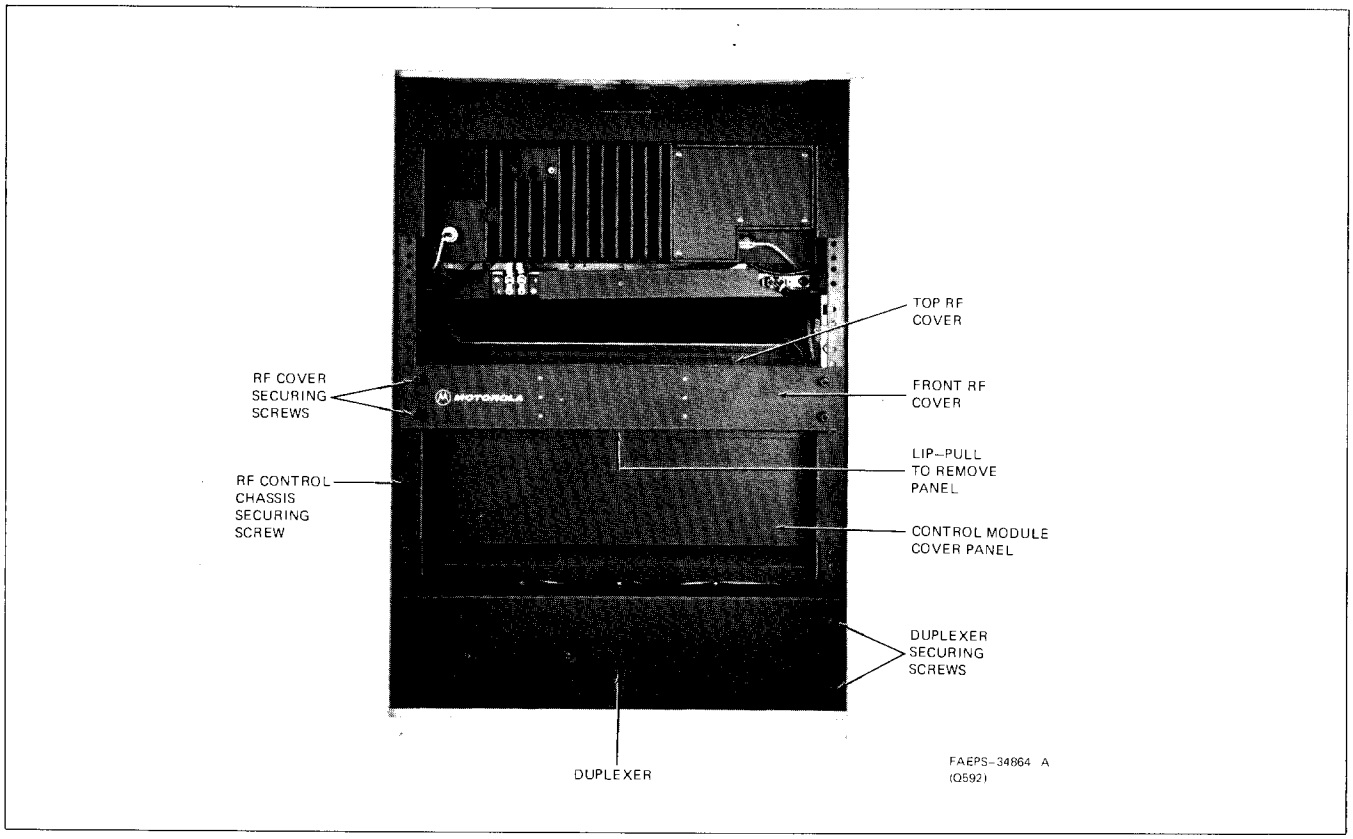


Figure 6. Fully Optionable Intermittent Duty Station Chassis Access

tained by two screws located in the lower left and right hand corners. It may also be necessary to remove the PA chassis from the station housing, refer to the Power Amplifier Removal and Access paragraph in this section.

5.8 TWO-RECEIVER COUPLER REMOVAL

The two-receiver coupler is located along the left-hand side of the station housing, and is accessible only with the rf control chassis removed from the station housing. Refer to the RF Control Chassis Access and Removal paragraph for the correct procedure. To remove the two-receiver coupler from the station housing, remove 2 screws securing it to the mounting rails. Lift the two-receiver coupler away from the mounting rails and disconnect the 3 phono-type rf connectors from the coupler plate.

5.9 JUNCTION BOX ACCESS

The back side of the junction box (TRN5350A or TRN5351A) can be reached by removing only the locking station cover. The line cord connection panel may be removed from the outside of the station housing by removing 2 screws holding the panel in place. To remove the entire junction box assembly from the station, remove the station wraparound cover following the procedure in the Wraparound Cover Removal paragraph. Remove 4 screws holding the junction box to the mounting rails.

5.10 WRAPAROUND COVER REMOVAL

The station wraparound cover is secured in place by the top and bottom covers of the station. To remove the station wraparound cover, perform the following steps:

Step 1. Remove six TORX®-type (T45) screws holding the top cover in place, using a Motorola part number 66-84071N02 TORX® wrench.

Step 2. Lift the wraparound cover approximately 1/2-inch up and out of the bottom cover channel.

Step 3. Spread the sides of the wraparound cover enough to clear the mounting rails of the station housing, and slide the housing toward the back of the station and remove.

Step 4. Installation is the reverse of the above.

6. MECHANICAL PARTS IDENTIFICATION

The mechanical parts identification photos are used to identify certain mechanical parts that are not identified elsewhere in the manual.

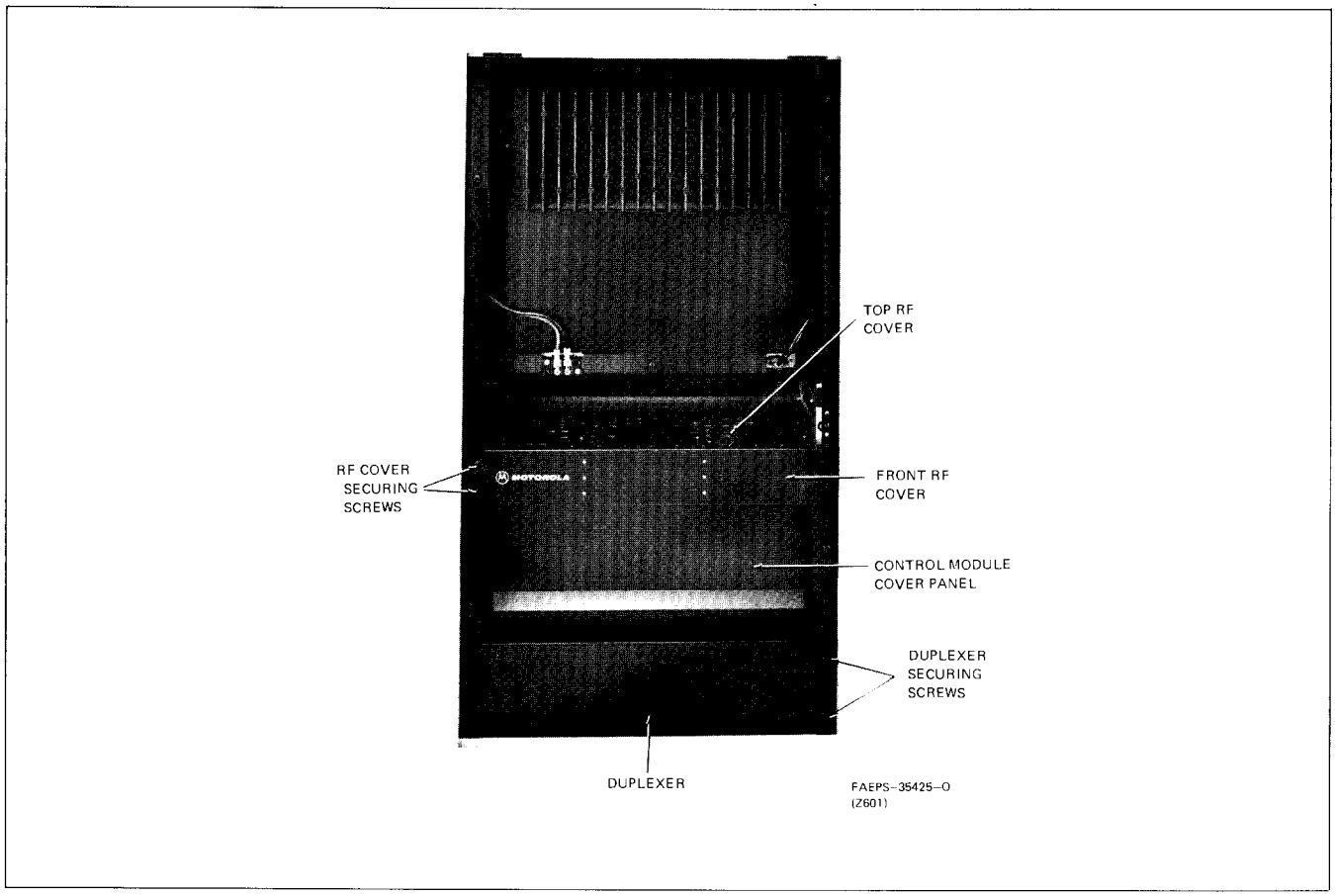
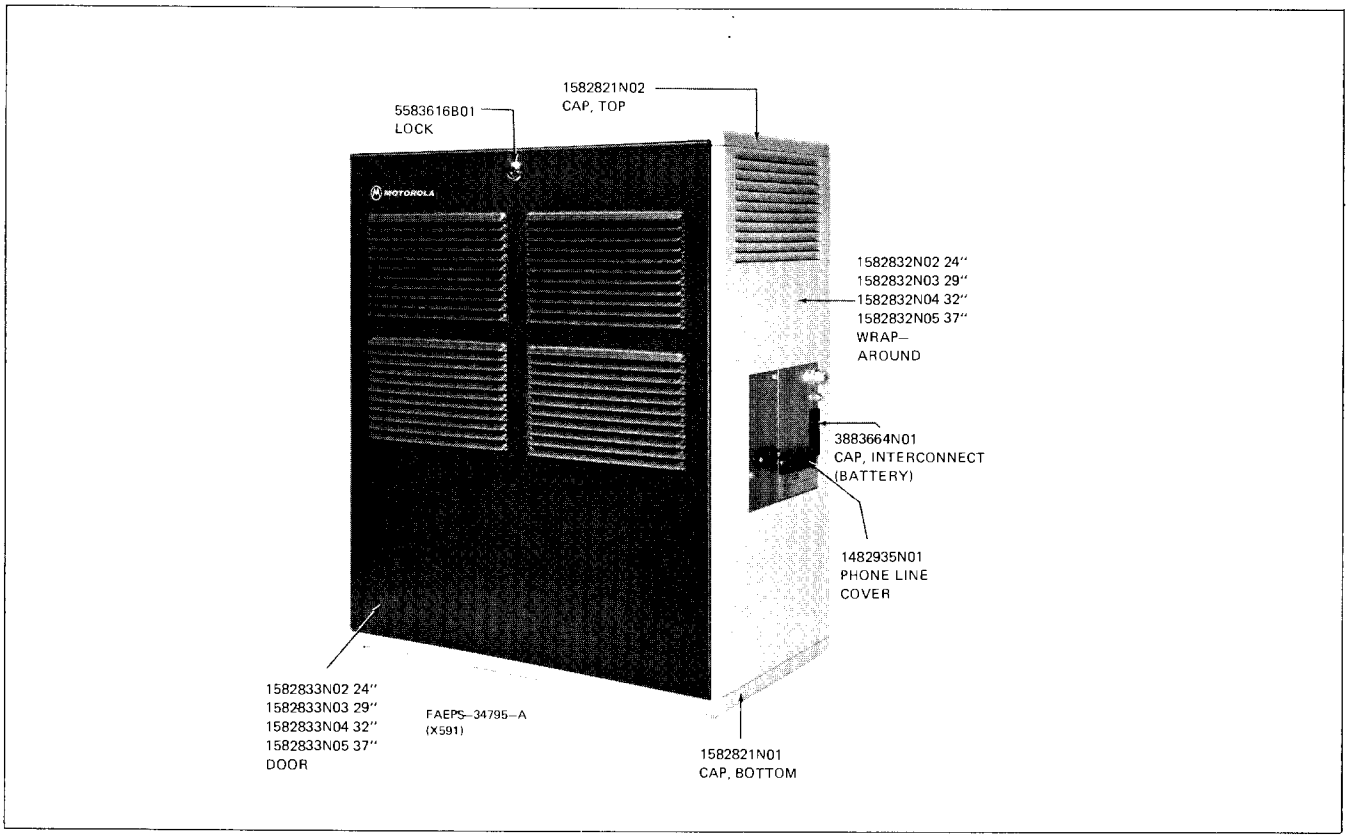


Figure 7. Fully Optionable Continuous Duty Station Chassis Access



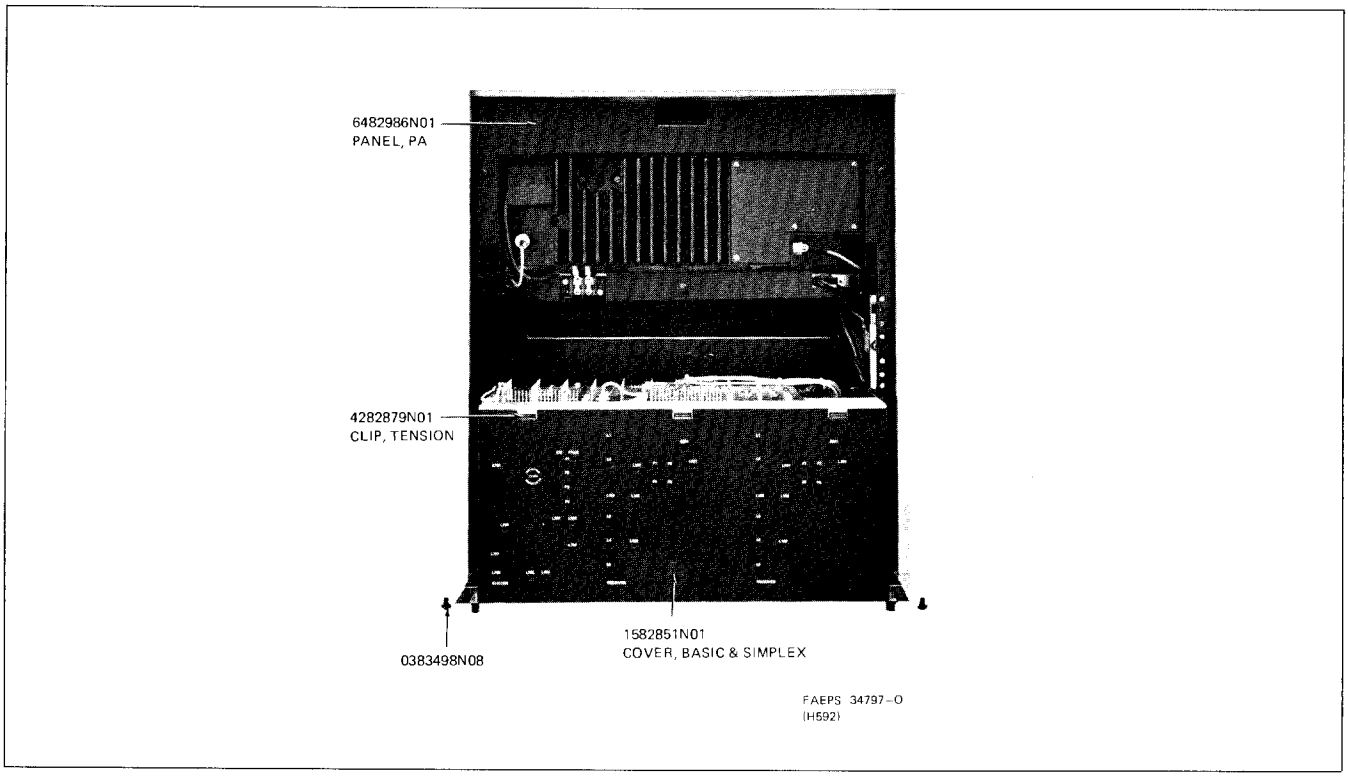
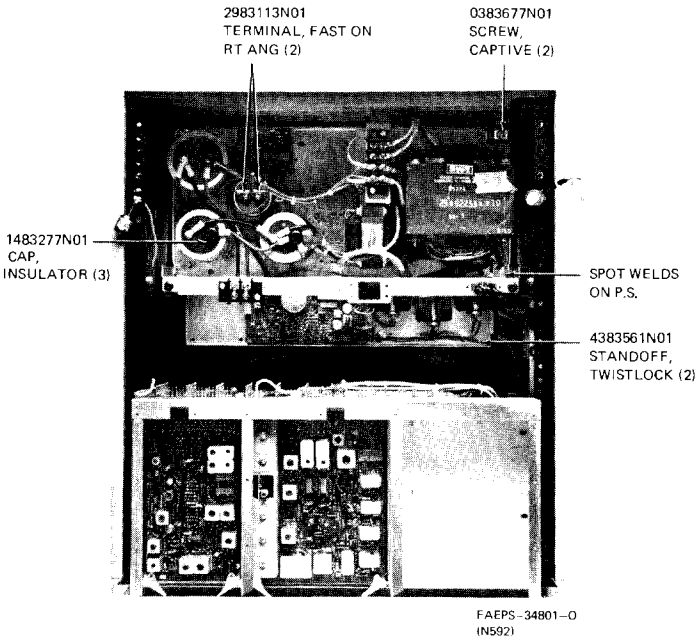


*Figure 8. **MSR 2000** Basic Model Station Mechanical Parts Identification*



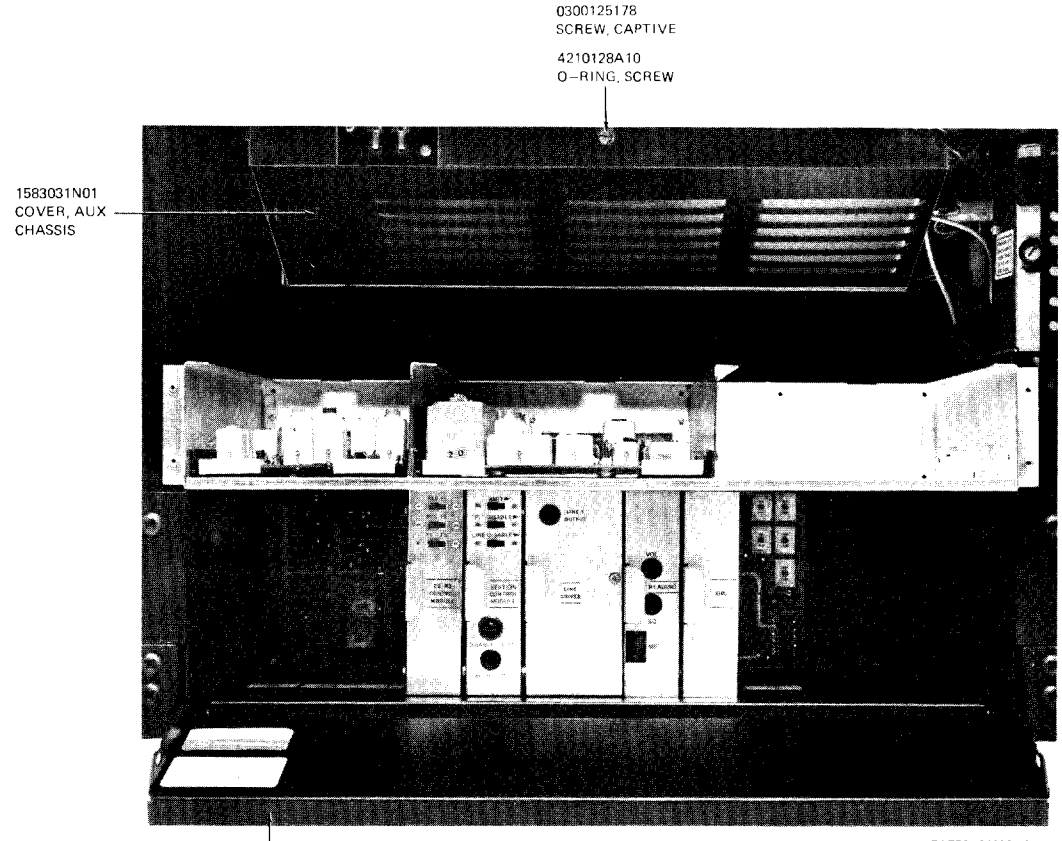
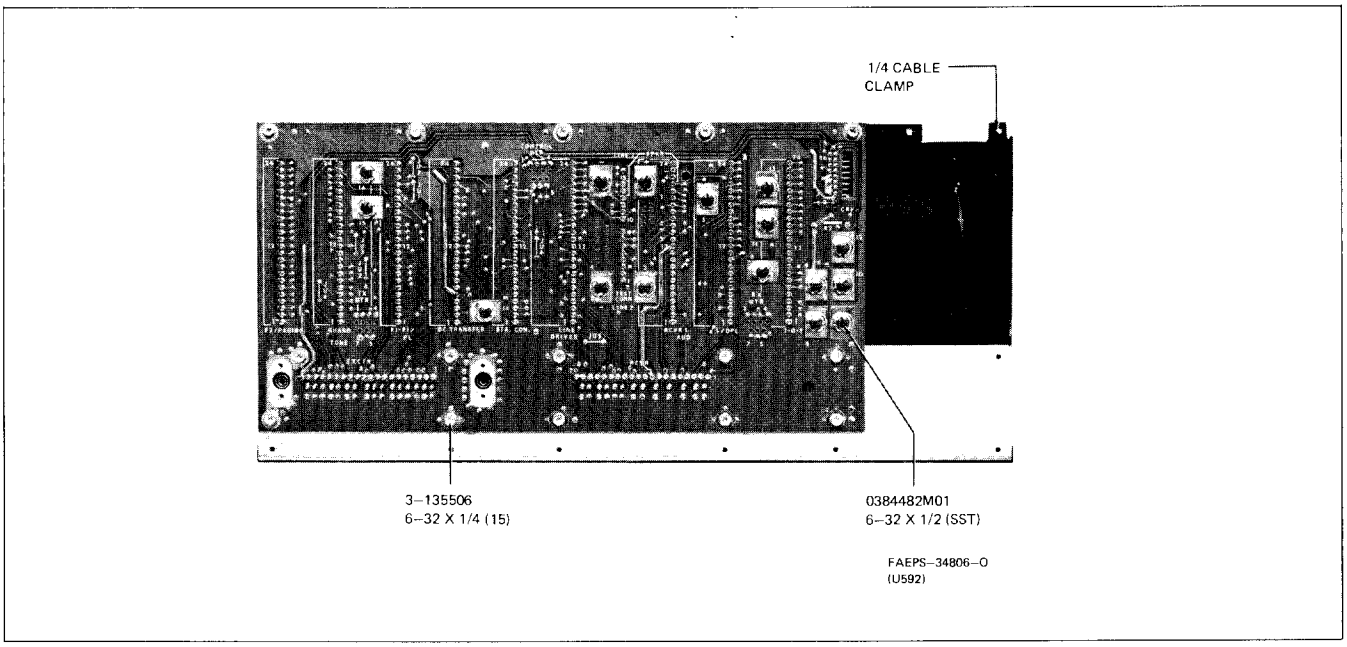


Figure 9. ***MSR 2000*** *Basic Model Station Mechanical Parts Identification*



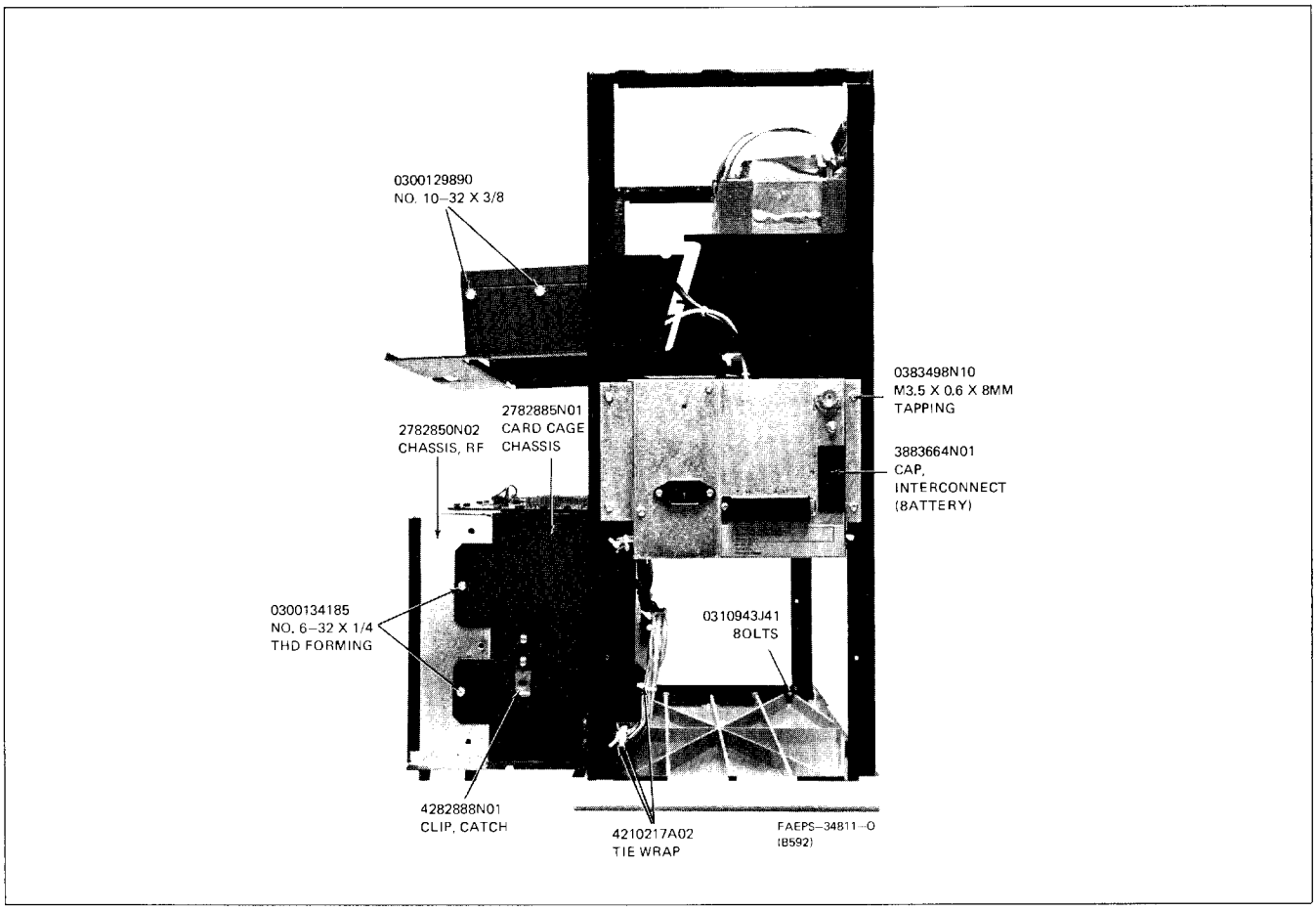
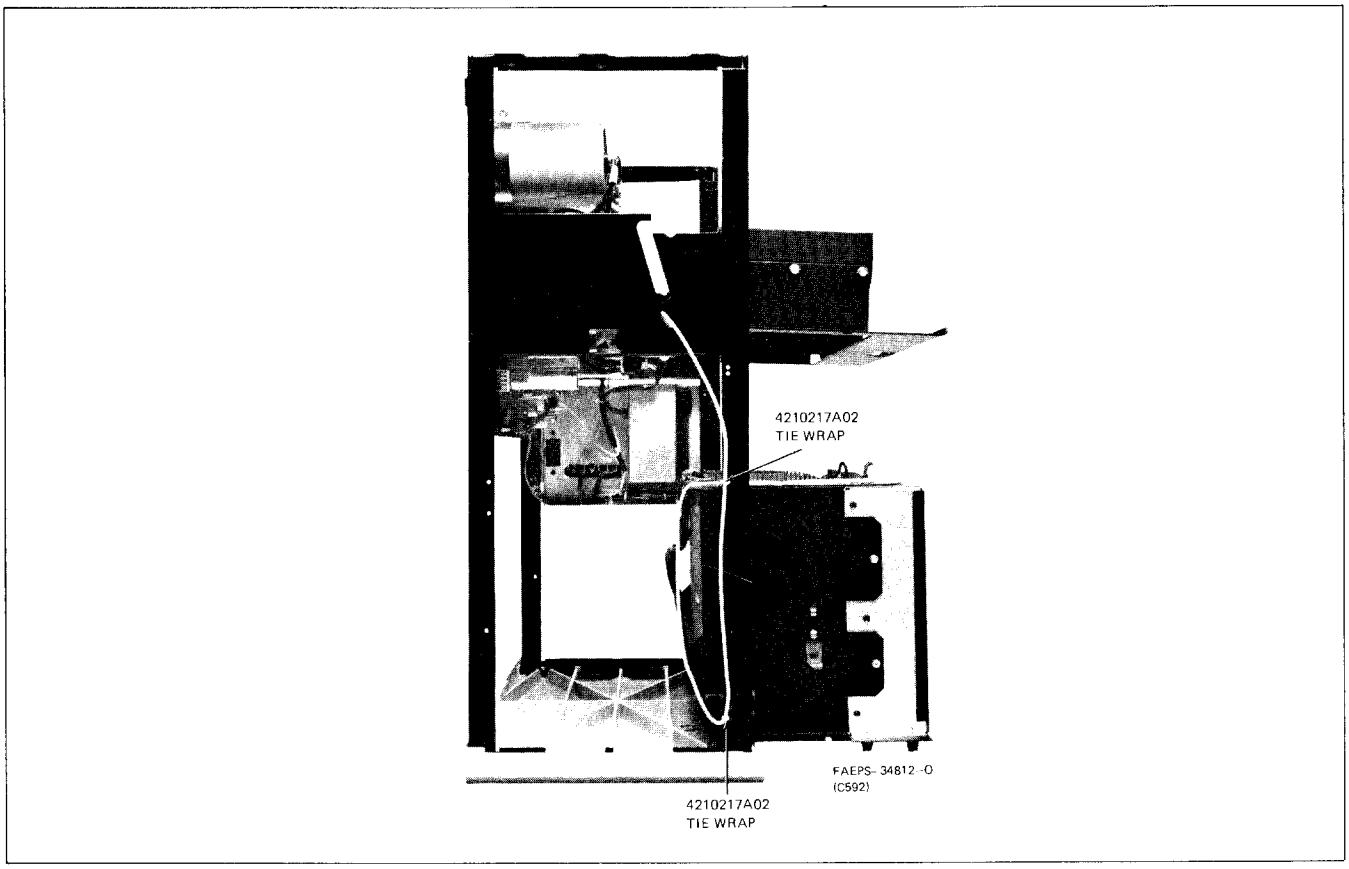


*Figure 10. **MSR 2000** Basic Model Station Mechanical Parts Identification*



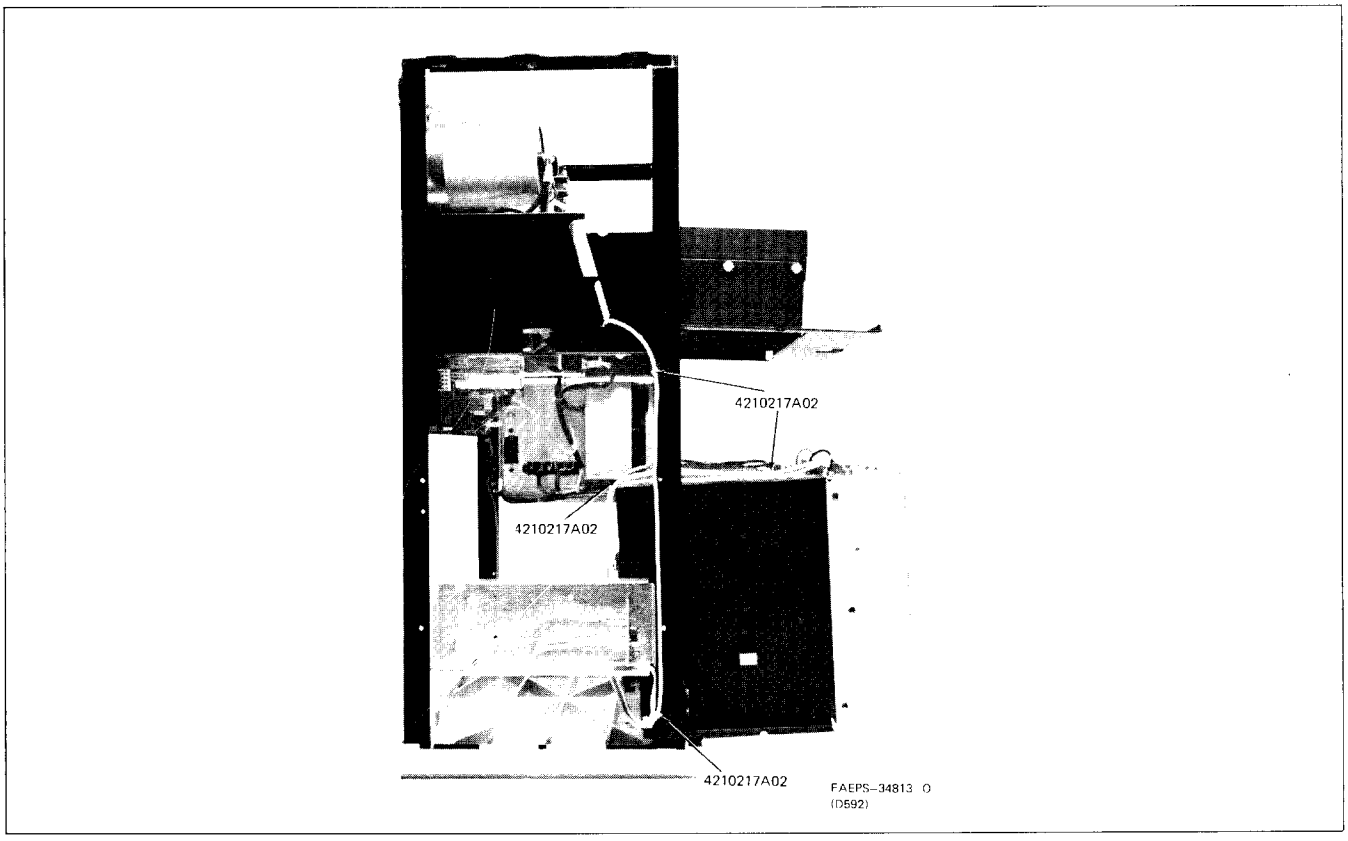
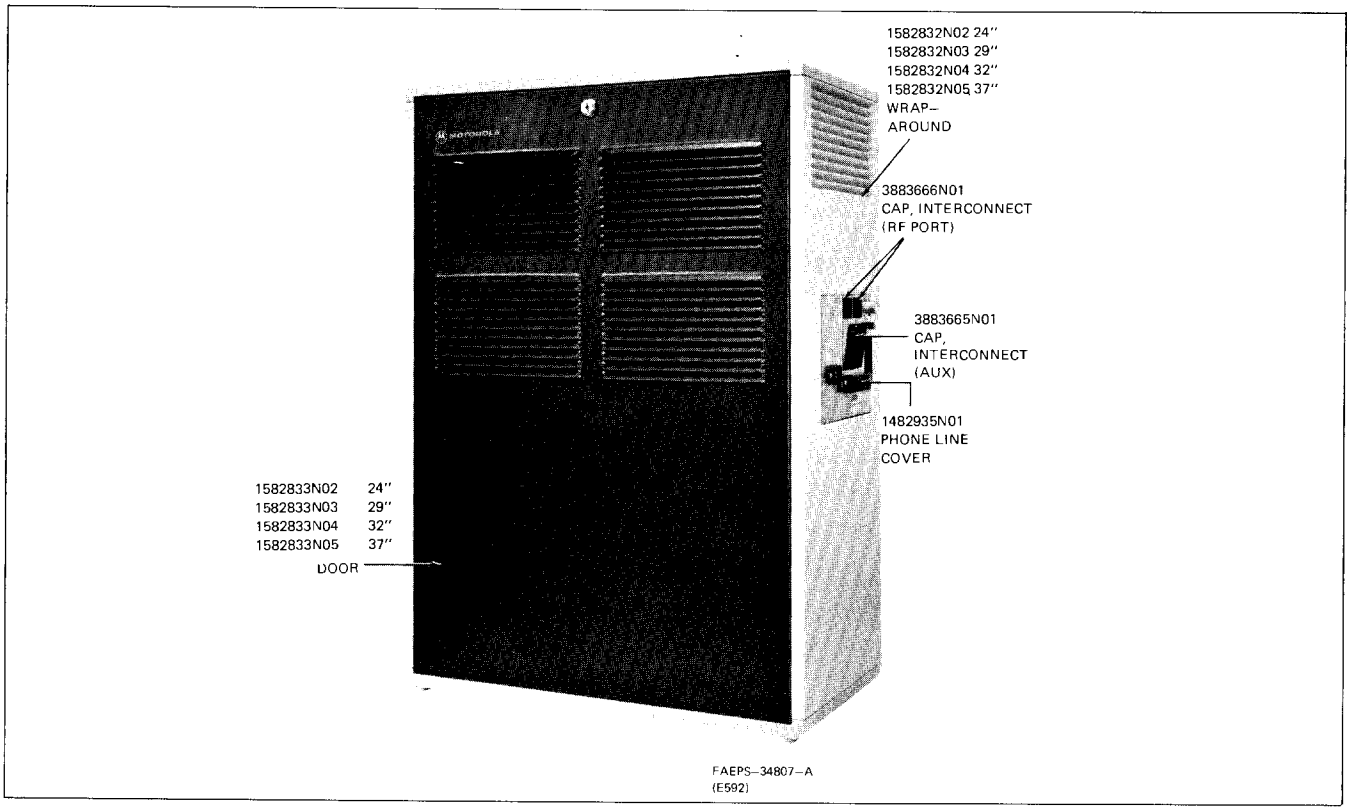


Figure 11. ***MSR 2000*** *Basic Model Station Mechanical Parts Identification*



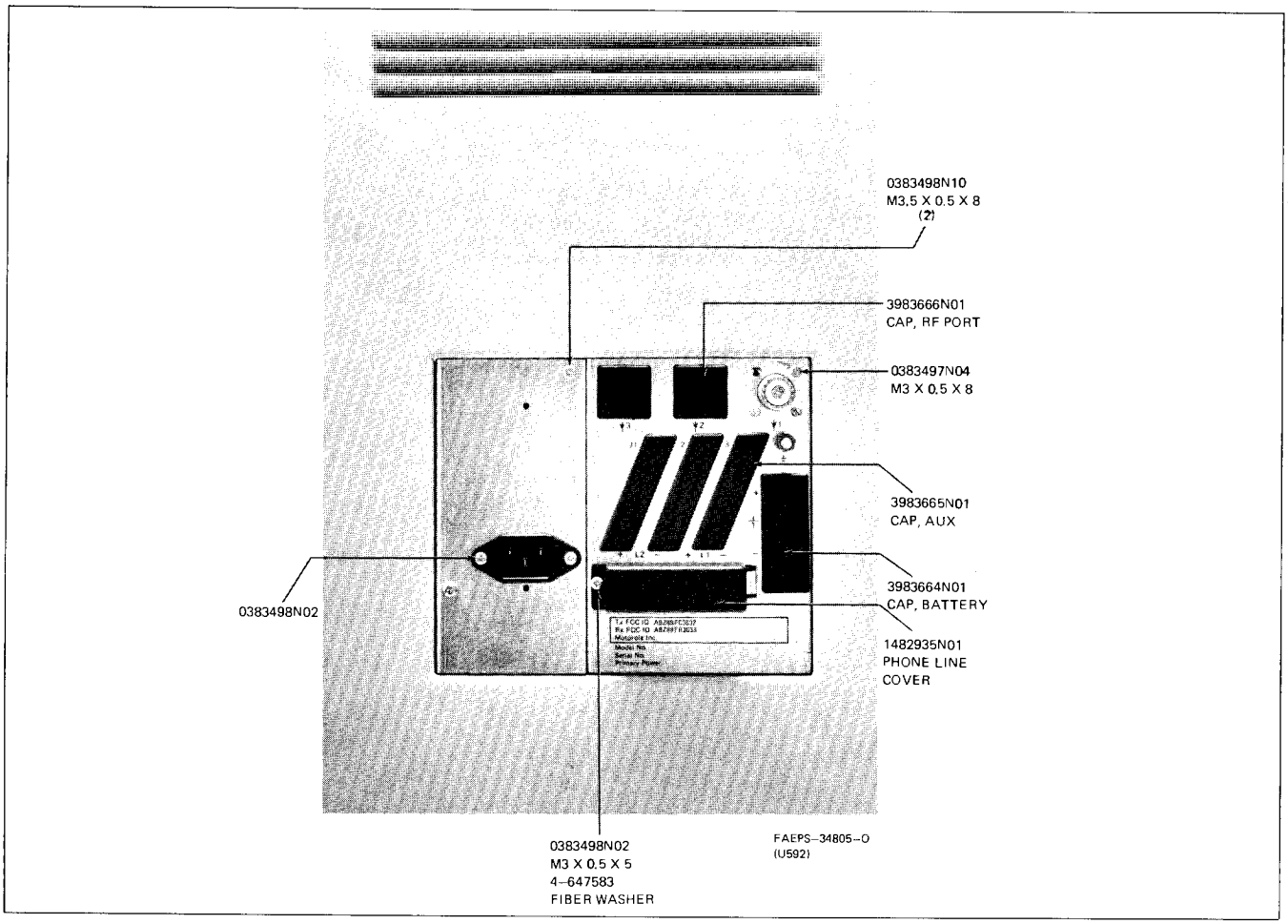
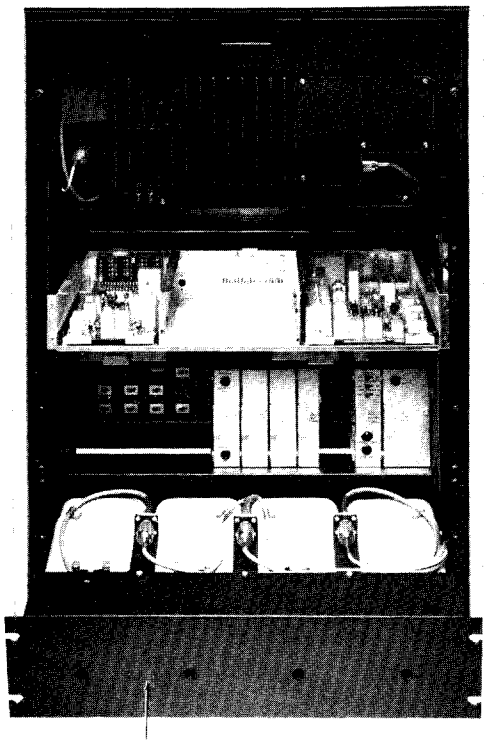


*Figure 12. **MSR 2000** Fully Optionable Model Station Mechanical Parts Identification*



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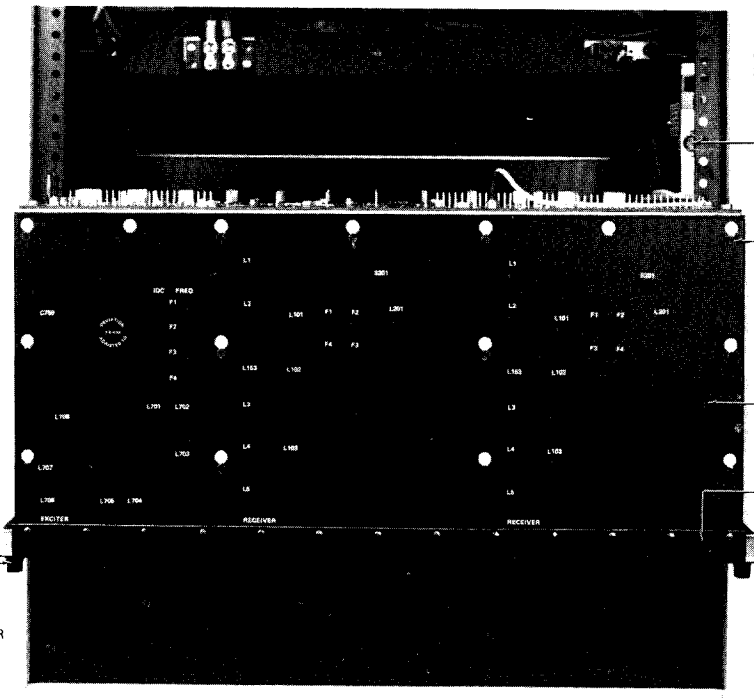
FAEPS-34798-A
(1592)



1582891N01
FUSE HOLDER
& NUT
3882892N01
FUSE HOLDER CAP

0300136932
NO. 4–40 X 3/8
PHL HEX (15)

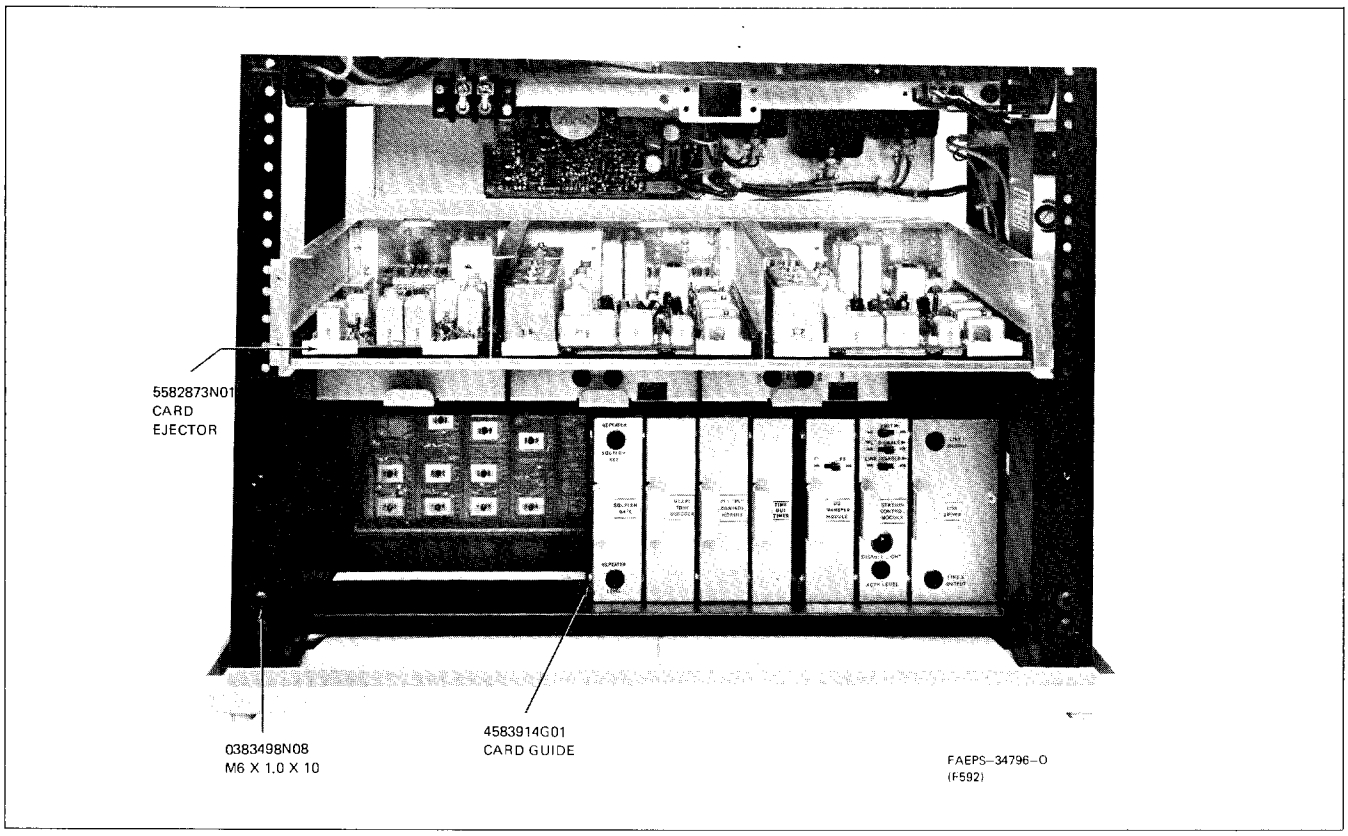
1582852N01
COVER, TOP

1582853N01
COVER,
FRONT

4283123F01 (4)
PLASTIC RETAINER
0583124F01 (4)
EYELET NO. 6
0300138430 (4)
NO. 4–24 X 3/8

FAEPS-34799-A
(K592)

Figure 13. ***MSR 2000*** *Fully Optionable Model Station Mechanical Parts Identification*



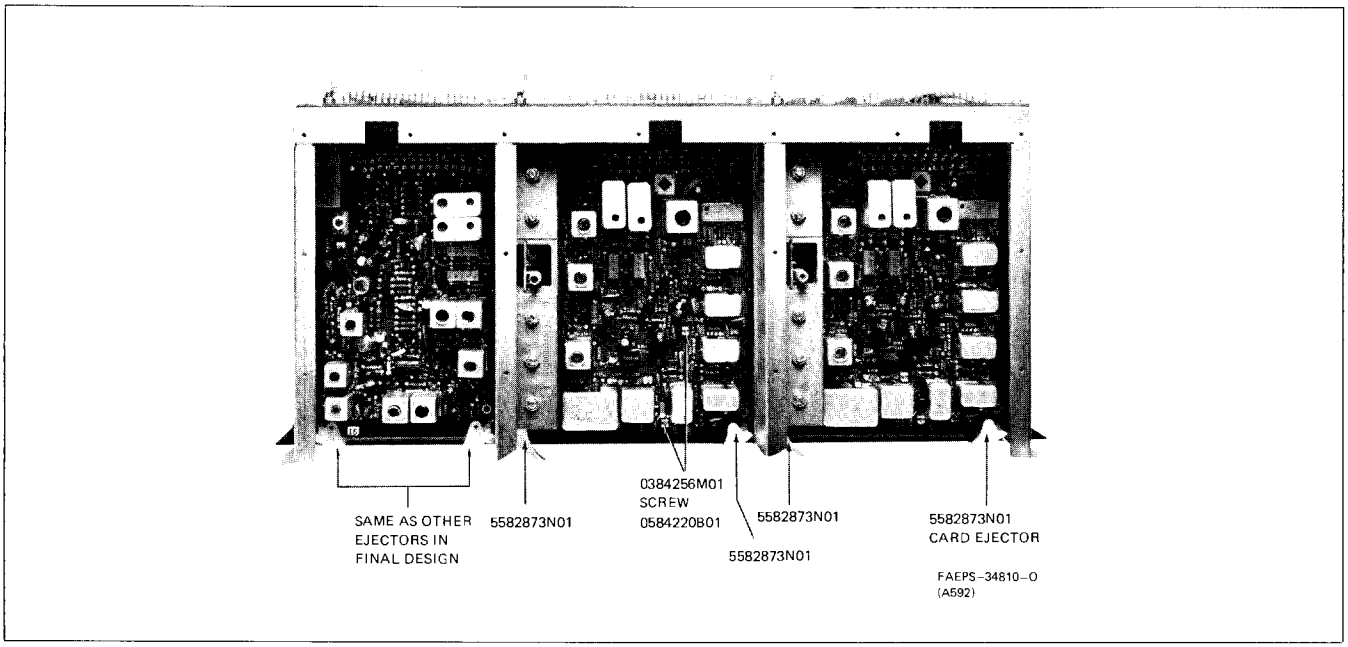
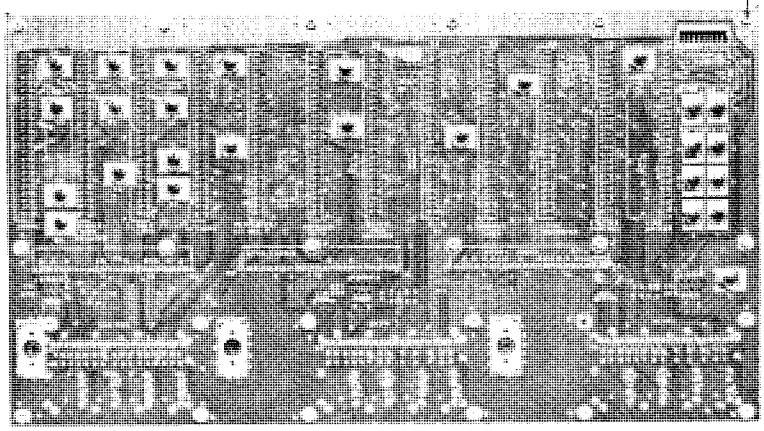


Figure 14. ***MSR 2000*** *Fully Optionable Model Station Mechanical Parts Identification*



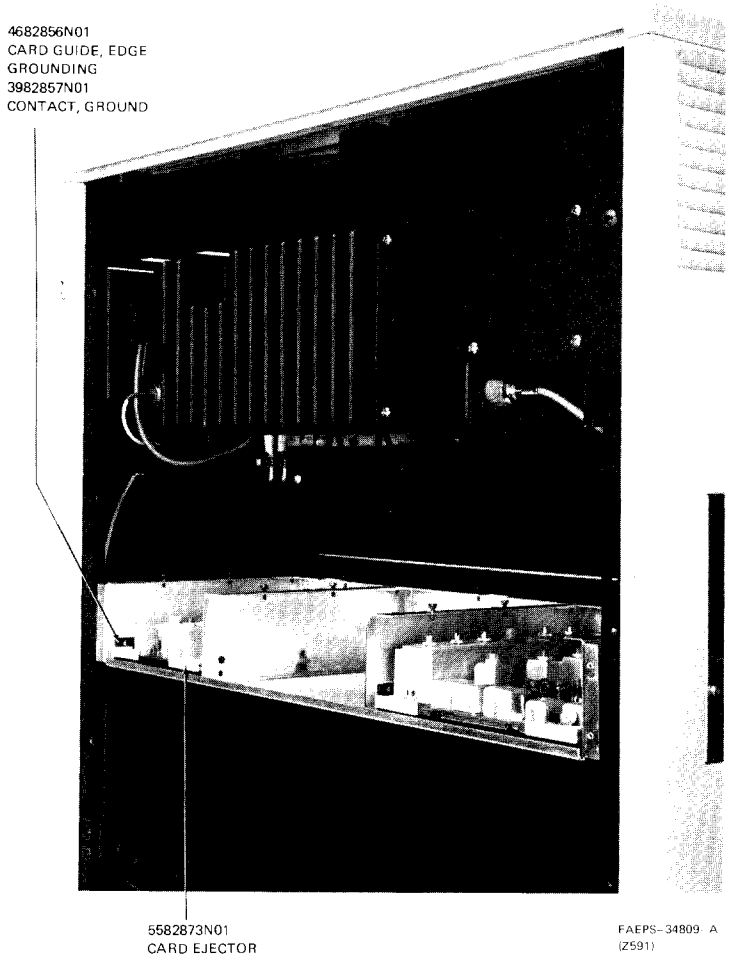


*Figure 15. **MSR 2000** Fully Optionable Model Station Mechanical Parts Identification*

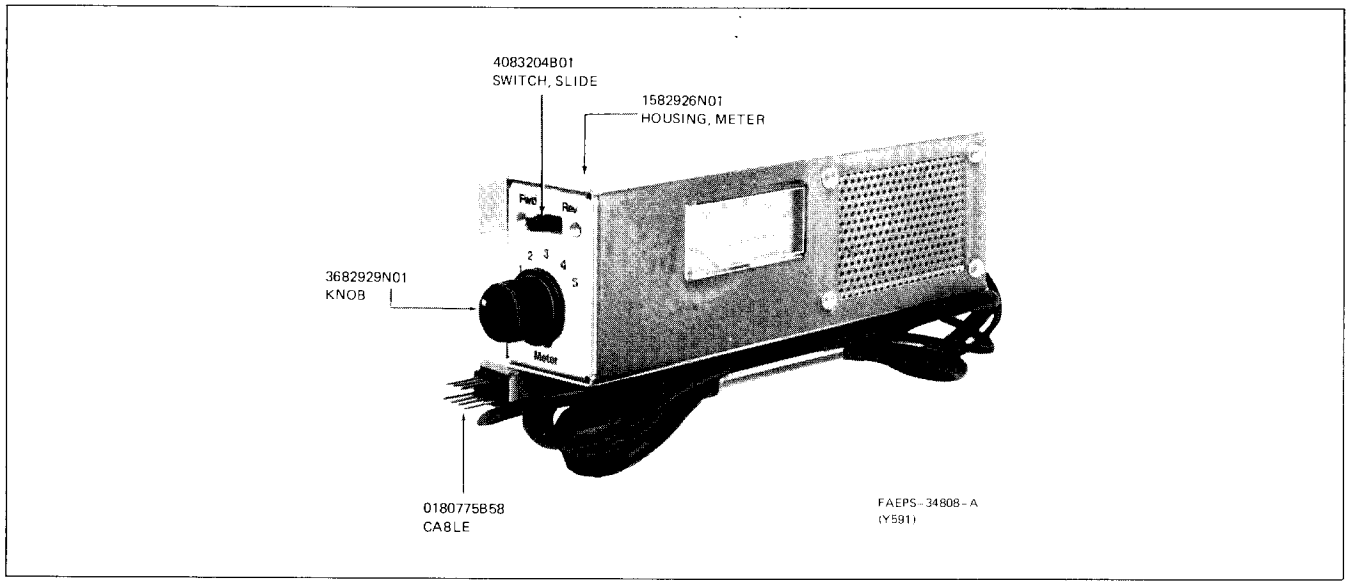
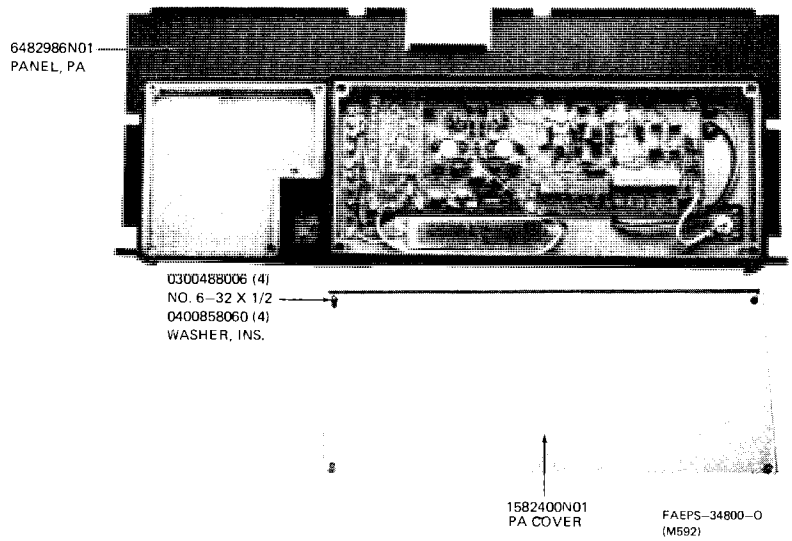


*Figure 16. **MSR 2000** Base Station Service Intercom with Speaker and DC Metering Chassis Mechanical Parts Identification*

INTERMITTENT DUTY POWER AMPLIFIER



CONTINUOUS DUTY POWER AMPLIFIER

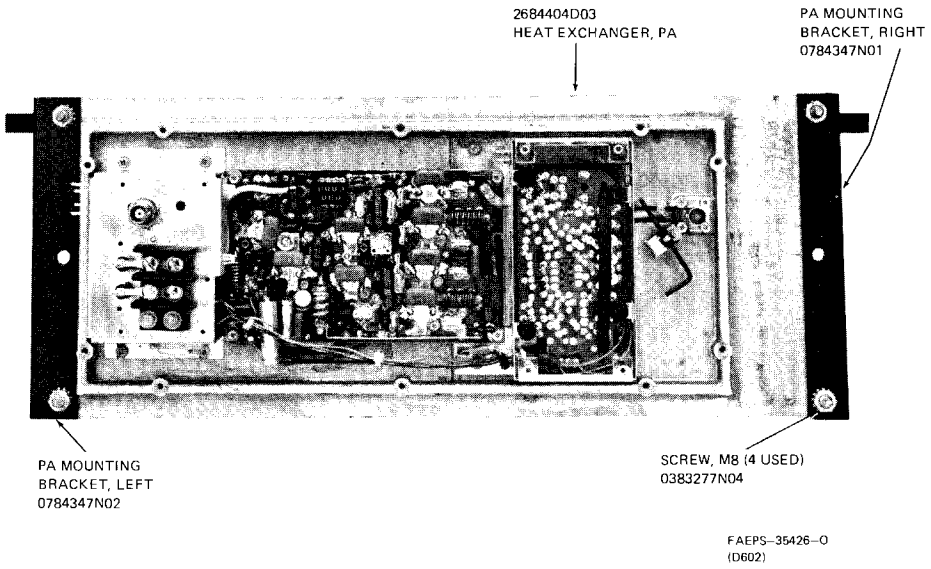


Figure 17. ***MSR 2000***
Base Station Power Amplifier
Mechanical Parts Identification

MSR 2000 BASE STATION
MISCELLANEOUS PARTS LISTS

parts list

TRN5423A 24" Cabinet Hardware — PL-8041-C

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-83677N01	SCREW, captive: M6 × 1.0 × 2.0; 2 used
	42-10128A10	RETAINER, ring; 2 used
	43-84510G01	SPACER; 2 used
	4-10058B37	WASHER, nylon; 6 used
	3-10943J41	SCREW, tapping: TT8 × 1.25 × 16; 4 used
	3-83498N08	SCREW, tapping: M6 × 1.0 × 10; 10 used
	3-83498N10	SCREW, tapping: M3.5 × 0.6 × 8; 6 used
	7-82831N17	FRAME, cabinet
	7-82831N18	FRAME, cabinet
	7-82881N01	BRACKET, pivot: right
	7-82881N02	BRACKET, pivot: left
	15-82821N01	HOUSING, bottom
	42-10217A02	TIE WRAPS (21 used)
	42-82143C09	CABLE CLAMPS, clear (7 used)
	42-82143C02	CABLE CLAMPS, 1/4" (2 used)
	3-134186	SCREW, tapping (2 used)
	3-135500	SCREW, tapping 4-40 × 1/4 (4 used)

TRN5425A 24" Cabinet Shell — PL-8042-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-10943J41	SCREW, tapping: TT8 × 1.25 × 16; 4 used
	3-10943J45	SCREW, tapping; TT8 × 1.25 × 40 (2 used)
	15-82821N02	HOUSING, top
	15-82832N02	COVER, wraparound
	75-82154D17	PAD, foam; 2 used

TRN5424A Cabinet 29" Hardware — PL-8070-C

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-10943J41	SCREW, tapping; TT8 x 1.25 x 16; 4 used
	3-83498N08	SCREW, tapping; M6 x 1.0 x 10; 10 used
	3-83498N10	SCREW, tapping; M3.5 x 0.6 x 8; 6 used
	7-82831N19	FRAME, cabinet
	7-82831N20	FRAME, cabinet
	7-82881N01	BRACKET, right
	7-82881N02	BRACKET, left
	15-82821N01	HOUSING, plastic
	42-10217A02	TIE WRAPS (21 used)
	42-82143C09	CABLE CLAMPS, clear (7 used)
	42-82143C02	CABLE CLAMPS, 1/4" (2 used)
	3-134186	SCREW, tapping (2 used)
	3-135500	SCREW, tapping 4-40 x 1/4 (6 used)
	4-10058B37	WASHER, nylon; 6 used

TRN5426A Cabinet 29" Shell — PL-8071-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-10943J41	SCREW, tapping; TT8 x 1.25 x 16; 4 used
	3-10943J45	SCREW, tapping; TT8 x 1.25 x 40; 2 used
	15-82821N02	HOUSING, plastic top
	15-82832N03	COVER, cabinet
	75-82154D17	PAD, foam; 2 used

TRN5569A Cabinet 32" Shell — PL-8224-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-10943J41	SCREW, tapping TT8 x 1.25 x 16; 4 used
	3-10943J45	SCREW, tapping; TT8 x 1.25 x 40; 2 used
	15-82821N02	HOUSING, tap
	15-82832N04	COVER, cabinet
	75-82154D17	PAD; 2 used

TRN5428A Power Control Board Cover — PL-8044-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-488006	SCREW, machine: 6-32 × 1/2"; 5 used
	4-858060	WASHER, insulator; 7/32 × 0.125 × .062; 5 used
	15-82401N01	COVER, control

TRN5567A Cabinet 32" Hardware — PL-8222-B

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-134186	SCREW, tapping; 6-32 x 5/16"; 2 used
	3-10943J41	SCREW, tapping; TT8 x 1.25 x 16"; 4 used
	3-83498N08	SCREW, tapping; star; 12 used
	3-83498N10	SCREW, tapping; star; 6 used
	7-82831N21	FRAME, cabinet
	7-82831N22	FRAME, cabinet
	7-82881N01	BRACKET, pivot right
	7-82881N02	BRACKET, pivot left
	15-82821N01	HOUSING, bottom
	42-10217A02	STRAP, tie: 0.91 x 3.62 nylon WHT; 23 used
	42-82143C09	CLAMP, cable; 7 used
	3-135500	SCREW, tapping; 4-40 x 1/4"; 4 used
	42-82143C05	CLAMP, cable; 2 used
	4-10058B37	WASHER, nylon; 6 used
	42-83215P01	TWIST CLAMP; 11 used

TRN5570A Cabinet 37" Shell — PL-8228-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-10943J41	SCREW, tapping: TT8 × 1.25 × 16; 4 used
	3-10943J45	SCREW, tapping: TT8 × 1.25 × 40; 2 used
	15-82821N02	HOUSING, top
	15-82832N05	COVER, cabinet
	75-82154D17	PAD; 2 used

TRN5568A Cabinet 37" Hardware — PL-8227-B

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-134186	SCREW, tapping: 6-32 × 5/16"; 2 used
	3-135500	SCREW, tapping: 4-40 × 1/4"; 4 used
	3-10943J41	SCREW, tapping: TT8 × 1.25 × 16; 4 used
	3-83498N08	SCREW, tapping: star; 12 used
	3-83498N10	SCREW, tapping: star; 6 used
	7-82831N23	FRAME, cabinet
	7-82831N24	FRAME, cabinet
	7-82881N01	BRACKET, pivot right
	7-82881N02	BRACKET, pivot left
	15-82821N01	HOUSING, bottom
	42-10217A02	STRAP, tie: .091 × 3.62 nylon; 23 used
	42-82143C05	CLAMP, cable; 2 used
	42-82143C09	CLAMP, cable; 7 used
	4-10058B37	WASHER, nylon; 6 used
	42-83215P01	TWIST CLAMP; 11 used

TRN5435A Hardware Optionable Control Chassis, Duplex — PL-8051-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-134185	SCREW, tapping: 6-32 × 1/4"; 4 used
	3-134186	SCREW, tapping: 6-32 × 5/16"
	3-135506	SCREW, tapping: 6-32 × 1/4"; 23 used
	27-82850N01	CHASSIS, rf
	27-82876N01	CHASSIS, card cage
	39-82857N01	CONTACT, ground; 6 used
	42-82888N01	CLIP, detent; 2 used
	46-82856N01	GUIDE, circuit board card; 6 used
	46-82877N01	GUIDE, skt, bd. mtg: (3 used; TRN5434A) (2 used; TRN5435A)
	54-83570K01	LABEL

parts list

TRN5431A Cover Repeater — PL-8088-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	2-82360B35	NUT, speed
	3-125178	SCREW, machine: 8-32 x 3/4"
	3-83498N02	SCREW, tapping: M3 x 0.5 x 5
	4-647583	WASHER, fiber
	14-82935N01	INSULATOR, terminal block
	15-82858N01	COVER, mode F0
	15-83031N01	COVER, aux, chassis
	42-10128A10	RETAINER, ring rubber

TRN5433A Hardware Optional Control Chassis (1-Receiver) — PL-8089-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-134185	SCREW, tapping: 6-32 x 1/4"; 4 used
	3-134186	SCREW, tapping: 6-32 x 5/16"
	3-135506	SCREW, tapping: 6-32 x 1/4"; 23 used
	27-82850N01	CHASSIS, rf
	27-82876N01	CHASSIS, card cage
	39-82857N01	CONTACT, ground; 4 used
	42-82888N01	CLIP, detent; 2 used
	46-82856N01	GUIDE, circuit board card; 4 used
	46-82877N01	GUIDE, circuit board mounting; 2 used
	54-83570K01	LABEL

TKN8326A Cable Kit — PL-8226-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	1-80763D70	CABLE, coaxial assembly includes:
	28-84282D01	PLUG, single contact (1 used)
	28-82875N01	PLUG, phono; board mount (1 used)
	30-83794C01	COAX CABLE; 45" long
	1-80757D15	CABLE, coaxial assembly includes:
	28-82331G01	PLUG, single contact (1 used)
	30-83794C01	COAX CABLE; 3 1/2" long
	42-10217A02	STRAP, tie (6 used)

TRN5575A Power Supply Cover — PL-8206-O

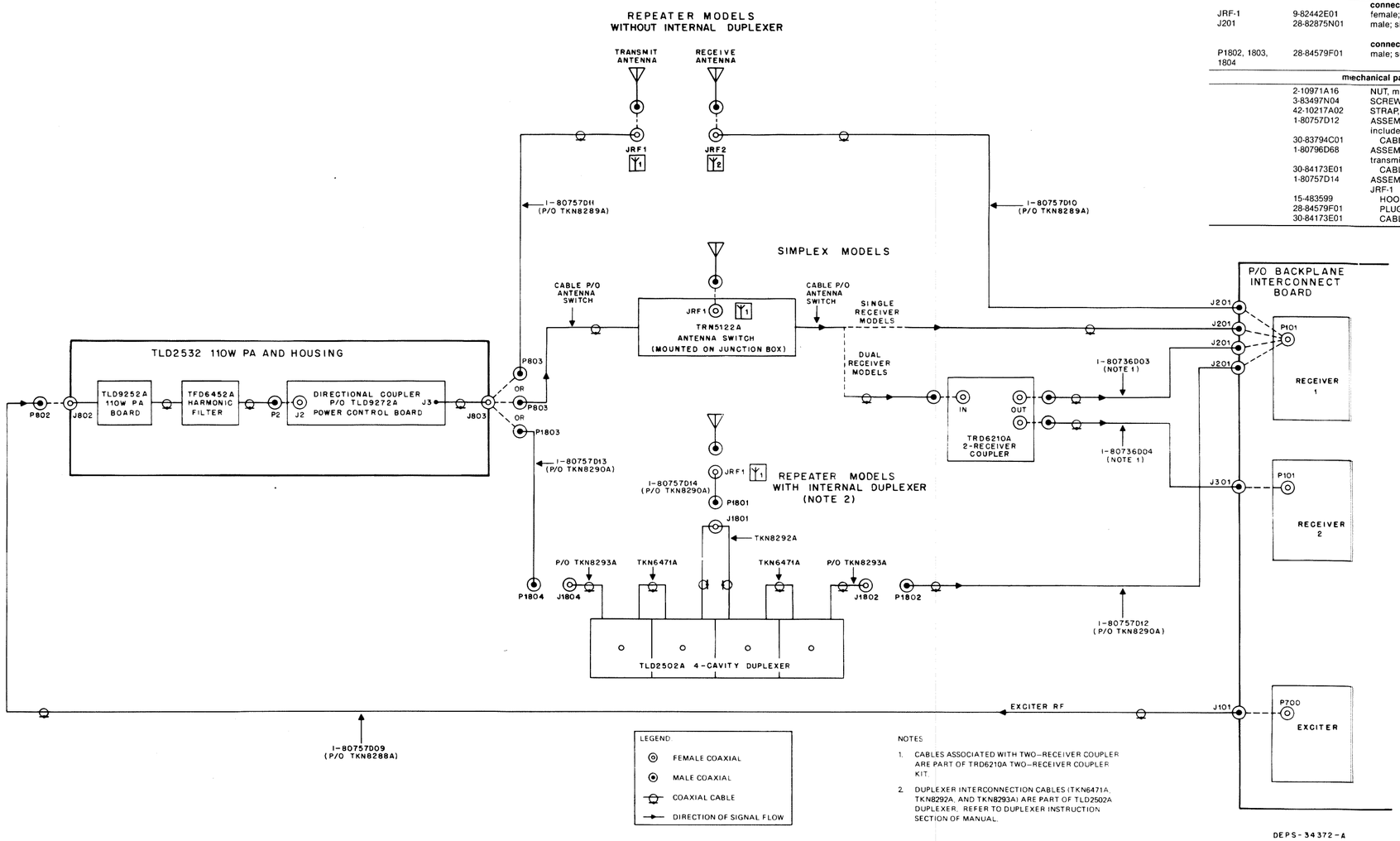
REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	3-83498N08	SCREW, tapping; star; 5 used
	26-84448N01	SHIELD, top
	26-84384N01	SHIELD

TRN5443A Duplex RF Cover — PL-8039-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	1-80756D69	Assembly Front cover eyeleted
	3-136932	SCREW, tapping: 4 x 40 x 3/8"; 15 used
	3-138430	SCREW, tapping: 4-24 x 3/8"; 4 used
	15-82852N01	COVER, top
	42-83123F01	RETAINER; 4 used

TRN5429A Cover, Basic
TRN5430A Cover, Simplex — PL-8040-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	1-80758D68	ASSEMBLY COVER; includes:
	5-83124F01	EYELET: 2 used
	15-82851N01	COVER
	2-82360B35	NUT, speed
	3-125178	SCREW, machine: 8-32 x 3/4"
	3-138430	SCREW, tapping: 4-24 x 3/8"; 2 used
	3-83498N02	SCREW, tapping: M3 x 0.5 x 5
	4-647583	WASHER, fiber
	14-82935N01	INSULATOR, terminal block
	15-82858N01	COVER, mode F0 (TRN5430A)
	15-82858N02	COVER, mode basic (TRN5429A)
	15-83031N01	COVER, aux chassis
	42-10128A10	RETAINER, ring rubber
	42-83123F01	RETAINER; 2 used
	42-82879N01	CLIP; 3 used



parts list

TKN8475A Cable Duplexer — PL-9810-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector:
JRF-1	9-82442E01	female; single contact
J201	28-82875N01	male; single contact
		connector, plug:
P1802, 1803, 1804	28-84579F01	male; single contact
		mechanical parts
	2-10971A16	NUT, machine: M3 × 0.5; 4 used
	3-83497N04	SCREW, machine: M3 × 0.5 × 8; 4 used
	42-10217A02	STRAP, tie; 2 used
	1-80757D12	ASSEMBLY, cable receiver: includes J201, P1804
	30-83794C01	CABLE, coaxial; 38-1/2" used
	1-80796D68	ASSEMBLY cable transmitter: includes: P1802, 1803
	30-84173E01	CABLE, coaxial: 36" used
	1-80757D14	ASSEMBLY, cable antenna: includes JRF-1
	15-483599	HOOD, receptacle
	28-84579F01	PLUG, UHF
	30-84173E01	CABLE, coaxial; 33" used

TKN8290A Cable Duplexer — PL-8046-B

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector:
JRF-1	9-82442E01	female; single contact
J201	28-82875N01	male; single contact
		connector, plug:
P1802, 1803, 1804	28-84579F04	male; single contact
		mechanical parts
	2-10971A16	NUT, machine: M3 × 0.5; 4 used
	3-83497N04	SCREW, machine: M3 × 0.5 × 8; 4 used
	42-10217A02	STRAP, tie; 2 used
	1-80757D12	ASSEMBLY, cable receiver: includes J201, P1804
	30-83794C01	CABLE, coaxial; 40" used
	1-80757D13	ASSEMBLY, cable transmitter: includes: P1802, 1803
	30-82921H01	CABLE, coaxial: 44" used
	1-80757D14	ASSEMBLY, cable antenna: includes JRF-1
	15-483599	HOOD, receptacle
	28-84579F01	PLUG, UHF
	30-84173E01	CABLE, coaxial; 33" used

TKN8289A Cable Non-Duplexer — PL-8058-A

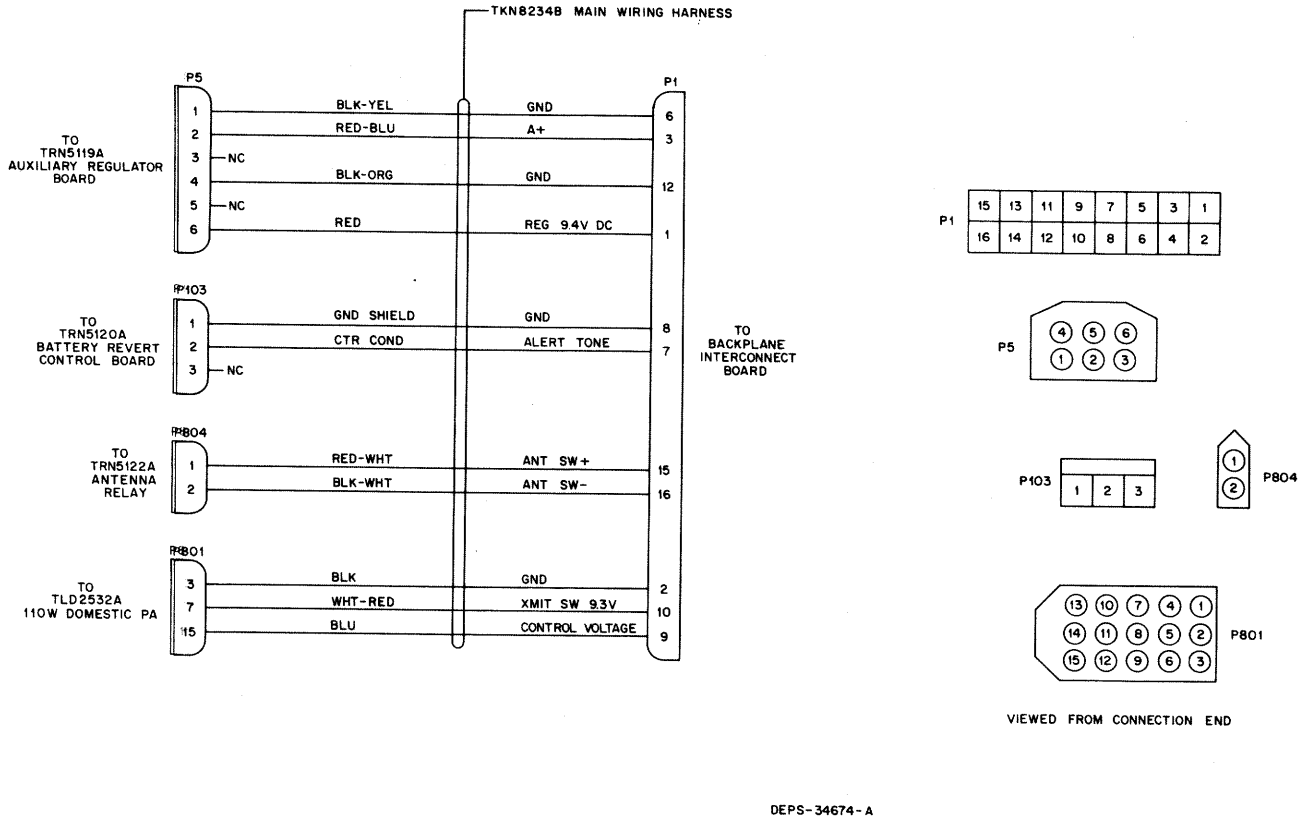
REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, receptacle:
JRF1	9-82442E01	female; single contact
JRF2	9-82442E01	female; single contact
J201	28-82875N01	male; single contact (phono)
P803	28-84579F01	male; single contact (UHF)
		mechanical parts
	2-10971A16	NUT, machine: M3 × 0.5; 8 used
	3-83497N04	SCREW, machine: M3 × 0.5 × 8; 8 used
	1-80757D10	Assembly cable non-duplexer rcvr includes: JRF2,J201
	15-483599	HOOD, receptacle
	30-83794C01	CABLE, coaxial (WHT) 47 1/2" used
	1-80757D11	Assembly cable, non-duplexer xtrm; includes: JRF1,P803
	15-483599	HOOD, receptacle
	30-84173E01	CABLE, coaxial (double shield) 19 1/2" used

TKN8288A Cable PA Power and Exciter — PL-8054-D

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, plug:
J101	28-82875N01	male; single contact (phono)
P802	28-84579F04	male; single contact (UHF)
		mechanical parts
	1-80757D07	Assembly, cable: PA power red; includes:
	29-82907N05	TERMINAL, ring; 2 used
	1-80757D08	Assembly, cable: PA power black; includes:
	29-82709N05	TERMINAL, ring; 1 used
	29-848903	TERMINAL, lug
	1-80757D12	Assembly, cable: exciter; includes J801,P802
	30-82921H01	CABLE, coaxial (WHT) 40" used
	3-134185	SCREW, tapping: 6-32 × 1/4"
	42-10217A02	STRAP, tie: (WHT); 3 used
	42-82143C05	CLIP, cable

MSR 2000 INTERMITTENT DUTY BASE STATION

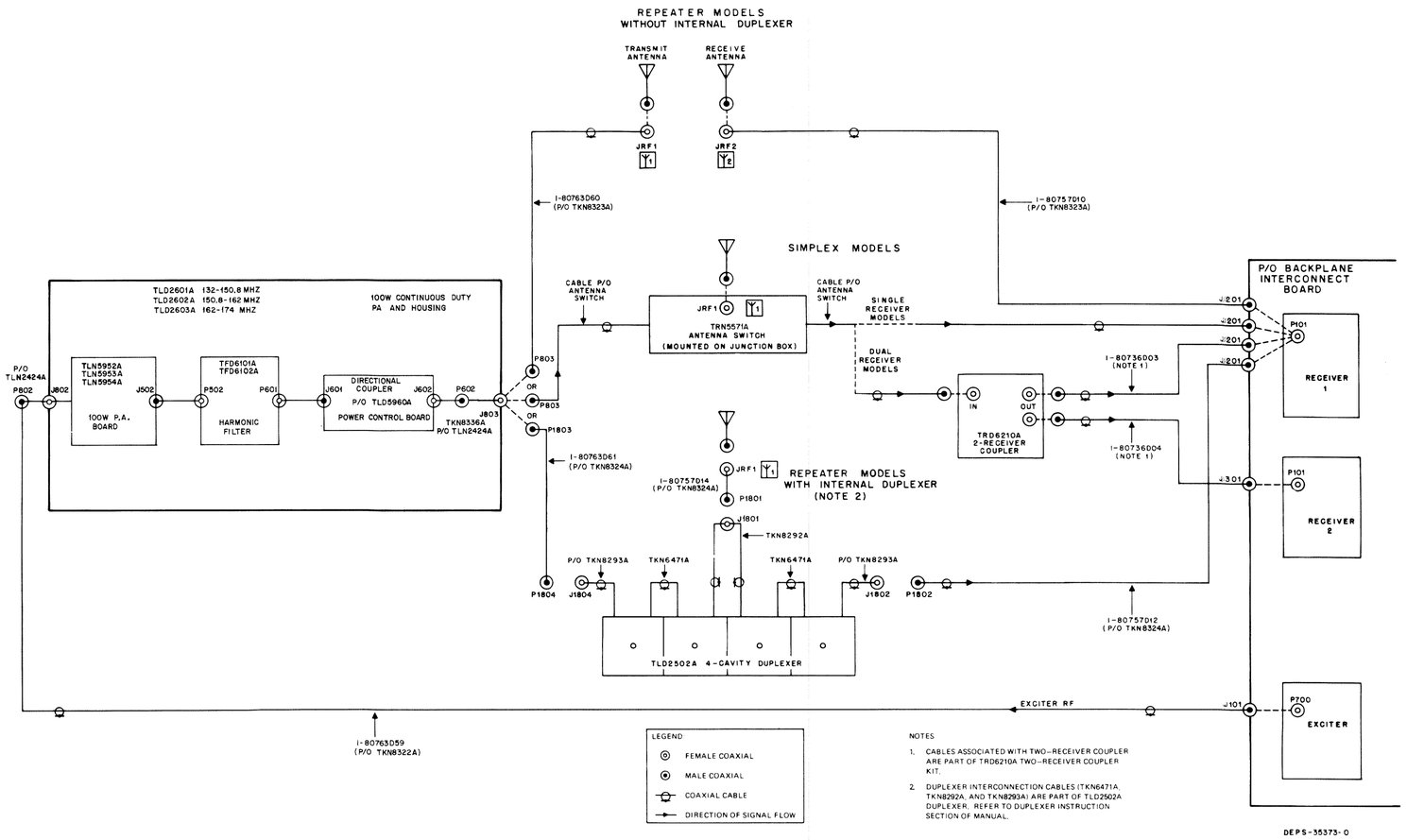
TKN8234B MAIN WIRING HARNESS
SCHEMATIC DIAGRAM AND PARTS LIST



parts list

TKN8234B Main Cable PL-8053-C

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, receptacle:
P1	15-84248N01	16 position
P5	15-84954L01	6 position
P103	15-83498F39	3 position
P801	15-83292K02	15 position
P804	15-84860K02	2 position
		mechanical parts
	29-84249N01	TERMINAL; 11 used
	29-84706E05	TERMINAL: crimp pin; 4 used
	29-84706E06	TERMINAL: crimp socket; 5 used
	30-824278	CABLE, shielded (ORG) 49 1/4" used
	42-10217A02	STRAP, tie; 18 used
	29-83499F01	TERMINAL; 2 used



parts list

TKN8324A Cable Duplexer — PL-8220-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, receptacle:
JRF1	9-82442E01	female; single-contact
J201	28-82875N01	male; single-contact (phono)
		connector, plug:
P1801, 1802	28-84579F04	male; single-contact
P1803	28-84967D01	male; single-contact
P1804	28-84579F01	male; single-contact
		mechanical parts
	1-80757D12	ASSEMBLY CABLE DUPLEXER (RCVR) includes: J201, P1804
	5-82050H04	eyelet
	30-82921H01	CABLE, coaxial (WHT) 30" used
	1-80754D14	ASSEMBLY CABLE ANTENNA DUPLEXER; includes: JRF1, P1801
	15-483599	HOOD, receptacle
	30-84173E01	CABLE, coaxial double shielded; 30-1/2" used
	1-80763D61	ASSEMBLY CABLE DUPLEXER (XMTR) includes: P1802, 1803
	30-8173E01	CABLE, coaxial; 62" used
	2-10971A16	NUT, machine: M3 x 0.5; 4 used
	3-83497N04	SCREW, machine; M3 x 0.5 x 8; 4 used
	42-10217A02	STRAP, tie .091 x 3.62 nylon; 2 used

TKN8328A Cable PA Power and Exciter EIA Rack
TKN8322A Cable PA Power and Exciter — PL-8223-B

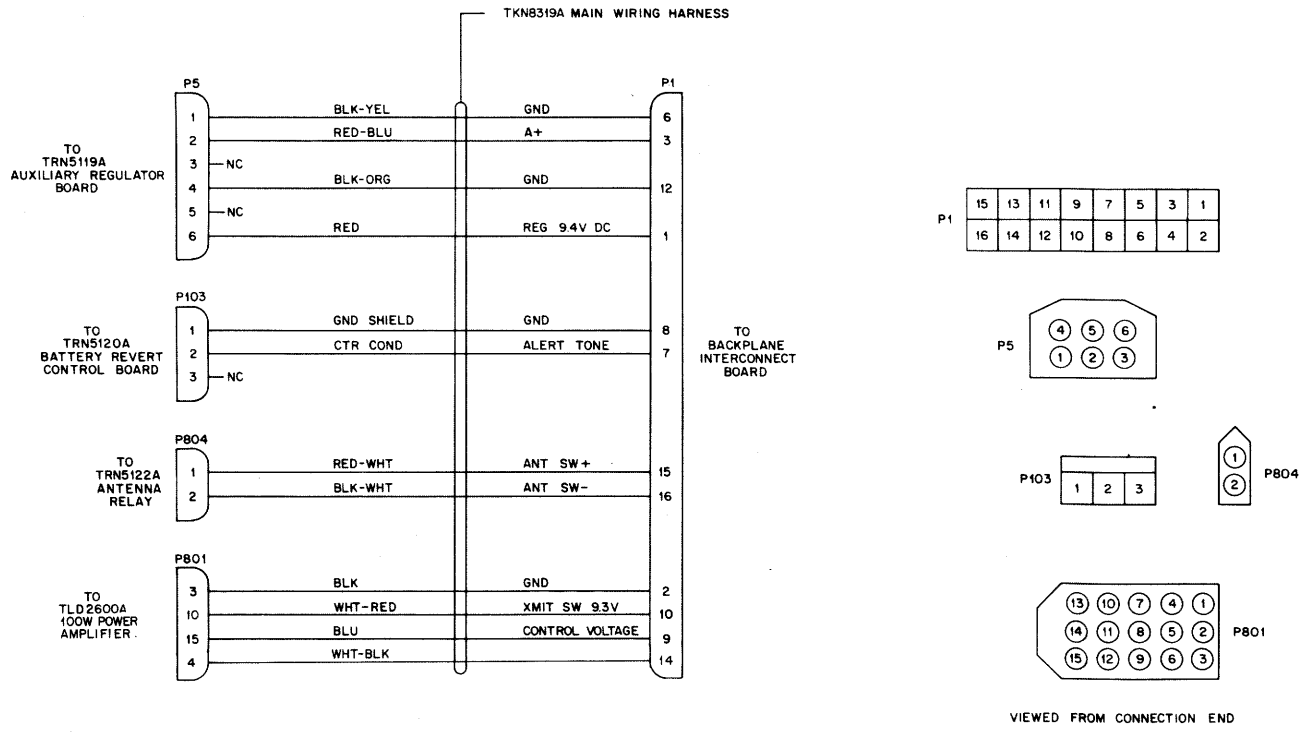
REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, plug:
J101	28-82875N01	male; single-contact (phono)
P802	28-83099K01	male; single-contact (BNC)
		mechanical parts
	1-80763D57	ASSEMBLY CABLE, PA power, RED; includes:
	29-82907N05	TERMINAL, ring; 2 used
	1-80763D58	ASSEMBLY CABLE; PA power, BLK; includes:
	29-848903	LUG, crimp terminal
	1-80763D59	ASSEMBLY CABLE, exciter; includes: J801, P802
	5-82050H04	EYELET
	30-83794C01	CABLE, coaxial (WHT) 51" used (TKN8322A)
	1-80763D64	ASSEMBLY CABLE, exciter; (EIA) includes: J801, P802
	5-82050H04	EYELET
	30-83794C01	CABLE, coaxial (WHT) 64" used (TKN8328A)

TKN8323 Cable Non-Duplexer
TKN8329A Cable Non-Duplexer EIA Rack — PL-8231-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, receptacle:
JRF1, 2	9-82442E01	female; single-contact (UHF)
J201	29-82875N01	male; single-contact (phono)
P803	28-84967D01	male; single-contact (BNC)
		mechanical parts
	1-80757D10	ASSEMBLY CABLE, non-duplexer, RCVR; includes: JRF2, J201
	5-82050H04	EYELET
	15-483599	HOOD, receptacle
	30-83794C01	CABLE, coaxial (WHT) 46" used
	1-80763D65	ASSEMBLY CABLE, non-duplexer EIA rack includes:
	15-483599	HOOD, receptacle
	30-84173E01	CABLE, coaxial shielded; 36" used (TKN8329A)
	1-80763D60	ASSEMBLY CABLE, non-duplexer XMTR includes: JRF1, P803
	15-483599	HOOD, receptacle
	30-84173E01	CABLE, coaxial shielded 28" used (TKN8323A)

MSR 2000 CONTINUOUS DUTY BASE STATION

TKN8319A MAIN WIRING HARNESS
SCHEMATIC DIAGRAM AND PARTS LIST



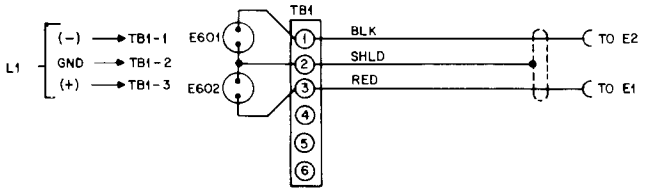
DEPS-35287-O

parts list

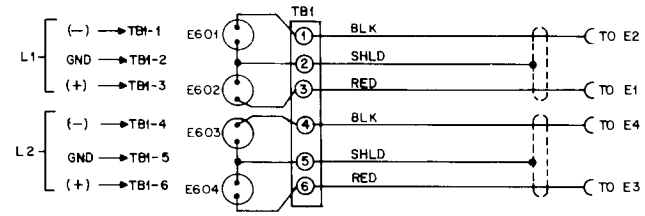
TKN8319A Main Cable — PL-8225-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, receptacle:
P1	15-84248N01	16 position
P5	15-84954L01	6 position
P103	15-83498F39	3 position
P801	15-83292K02	15 position
P804	15-84860K02	2 position
		mechanical parts
	29-84249N01	TERMINAL; 12 used
	29-83499F01	TERMINAL; 2 used
	29-84706E05	TERMINAL: crimp pin; 4 used
	29-84706E06	TERMINAL: crimp socket; 6 used
	30-824278	CABLE, shielded (ORG) 52" used
	42-10217A02	STRAP, tie; 47 used

2-WIRE & 4-WIRE EIA CABLE KIT
TKN8320A AND TKN8321A
2-WIRE & 4-WIRE LINE CABLE KIT
TKN8286A AND TKN8287A
SCHEMATIC DIAGRAM AND PARTS LIST



TKN8286A TWO-WIRE LINE CABLE KIT



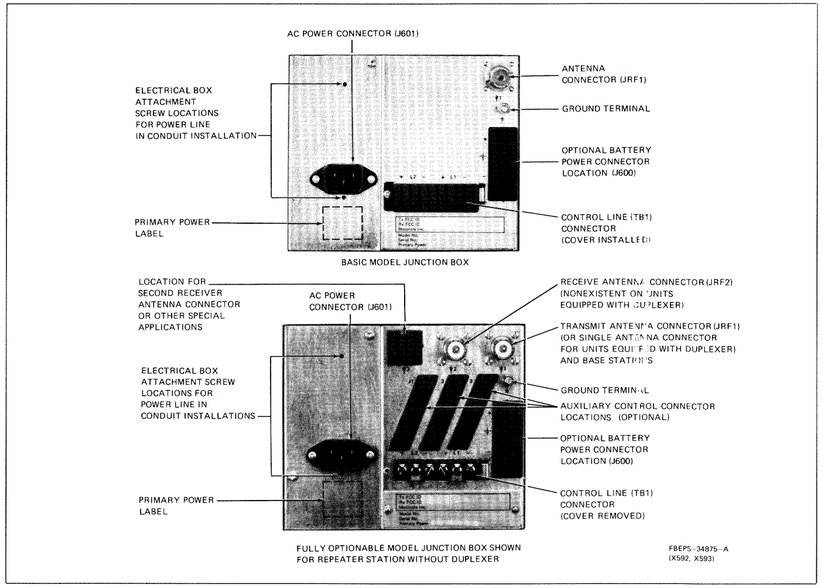
TKN8287A FOUR-WIRE LINE CABLE KIT

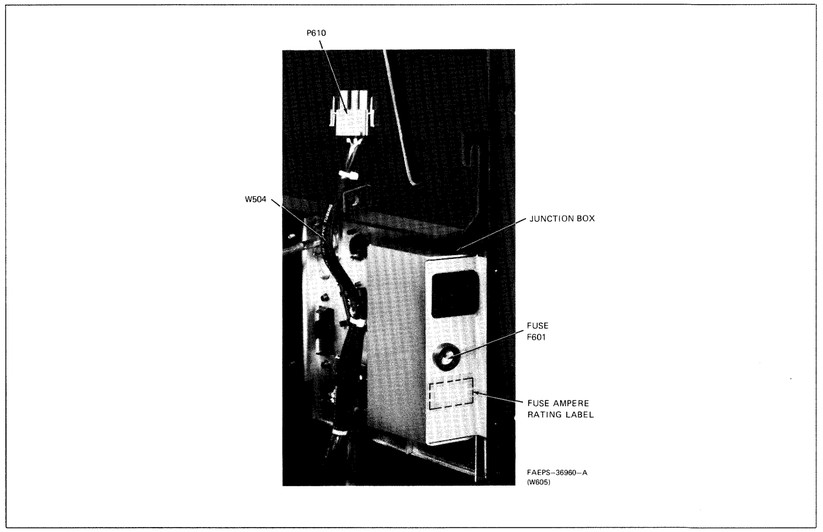
•BEPS-34736-O

parts list

TKN8320A and TKN8321A Two-Wire and Four-Wire EIA Cable Kit
TKN8286A and TKN8287A Two-Wire and Four-Wire Line Cable Kit PL-8052-B

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		spark, gap:
E601 thru 604	80-83029H01	240 V
		mechanical parts
	29-83883C02	LUG, crimp terminal: TKN8286A, TKN8320A; 2 used; TKN8287A, TKN8321A; 4 used
	30-844810	CABLE, 2-conductor shielded; 31-1/2" used (TKN8287A, TKN8286A)
	30-844810	CABLE, 2-conductor shielded; 34" used (TKN8287A)
	30-844810	CABLE, 2-conductor shielded; 38" used (TKN8321A, TKN8320A)
	30-844810	CABLE, 2-conductor shielded; 40-1/2" used (TKN8321A)
	31-84145N03	TERMINAL, block with mounting rings
	42-10217A02	STRAP, tie; TKN8286A, TKN8320A; 2 used: TKN8287A, TKN8321A; 2 used





parts list

TRN9114A Junction Box, Basic
TRN9113A Junction Box, Fully Optionable — PL-8710-A

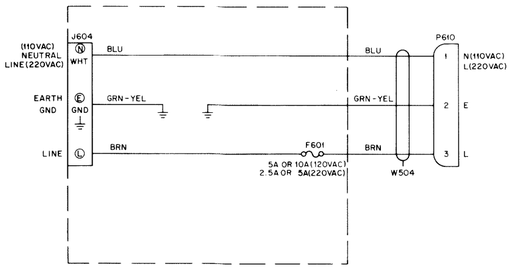
REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, receptacle:
J611	15-82889N01	HOUSING, 3-contact, power cord
		connector, plug:
P610	15-83183N01	HOUSING, 3-contact
		mechanical parts
	2-10971A16	NUT, machine: M3 × 0.5; 2 used
	2-10971A19	NUT, machine: M6 × 1; 2 used
	3-10908A55	SCREW, machine: M6 × 1 × 25mm
	3-83497N04	SCREW, machine: M3 × 0.5 × 8mm; 2 used
	3-10943M10	SCREW, tapping: M3 × 0.5 × 8mm; 2 used
	3-83497N07	SCREW, machine; slotted star
	3-83498N10	SCREW, tapping: M3.5 × 0.6 × 8mm; 2 used
	4-7683	LOCKWASHER, #4 internal; 2 used
	4-119331	LOCKWASHER, 1/4"; split
	15-82834N04	HOUSING, interconnect (TRN9114A)
	15-83834N05	HOUSING, interconnect (TRN9113A)
	15-82835N01	COVER, junction box
	15-82891N01	HOUSING, fuse with mounting hardware
	29-82607B04	LUG, ring tongue; 2 used
	37-106352	GROMMET
	38-83667N01	CAP, convenience outlet
	39-83145N01	CONTACT, plug: (part for P610); 2 used
	39-83145N02	CONTACT, plug (part for P610)
	39-83384N01	CONTACT, plug: (part for J11); 3 used
	42-10217A02	STRAP, tie: .019 × 3.62 nylong; 3 used
	42-82143C01	CLIP, cable; 3/16"

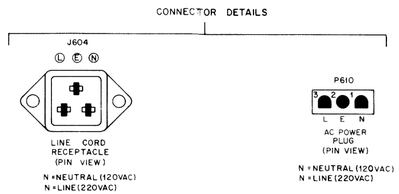
TRN5352A RF Connector Plastic Plug
TRN5353A Auxiliary Connector Plastic Plug
TRN5354A Outlet Connector Plastic Plug
TRN5355A Battery Connector Plastic Plug — PL-8240-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	38-8366N01	CAP, rf port hole (TRN5352A)
	38-83665N01	CAP, auxiliary hole (TRN5353A)
	38-83667N01	CAP, convenience outlet hole (TRN5354A)
	38-83664N01	CAP, battery hole (TRN5355A)

TRN9109A Hardware and Label Kit (50 Hz)
TRN9110A Hardware and Label Kit (60 Hz) — PL-8711-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		fuse:
F601	65-82847N02	5A; 250 V (220 V ac line) (TRN9109A)
	65-138179	10A; 250 V (120 V ac line) (TRN9110A)
		mechanical parts
	13-813618	DECAL, patent no.
	33-83748N02	NAMEPLATE
	38-82892N01	CAP, fuse housing (TRN9110A)
	38-82892N02	CAP, fuse housing (TRN9109A)
	54-82928P01	LABEL, AC power (50 Hz) (TRN9109A)
	54-82928P02	LABEL, AC power (60 Hz) (TRN9110A)
	54-83040C01	LABEL, audio
	54-84126C01	LABEL, replacement parts
	54-83604P01	LABEL, VLTG setting
	54-83609P02	LABEL, VLTG setting

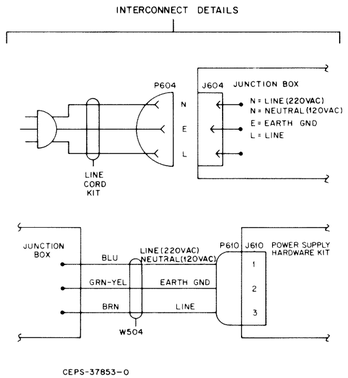




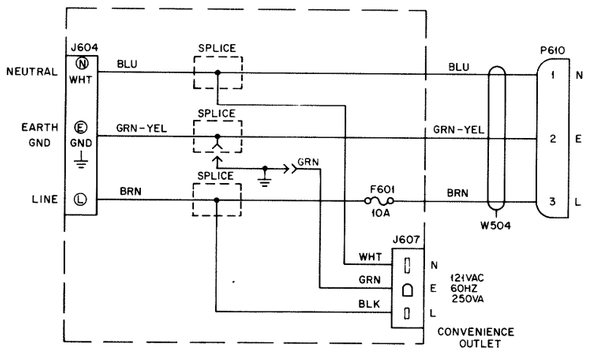
JUNCTION BOX
MODEL TRN9113A/14A

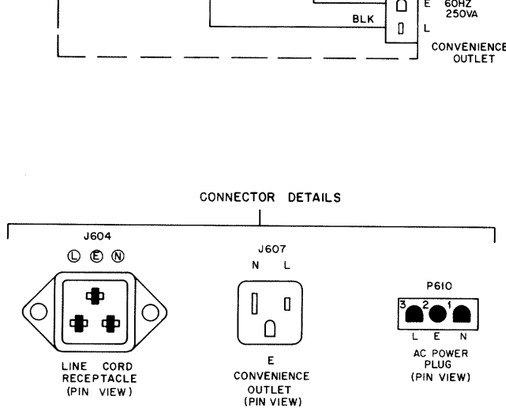
FUNCTION

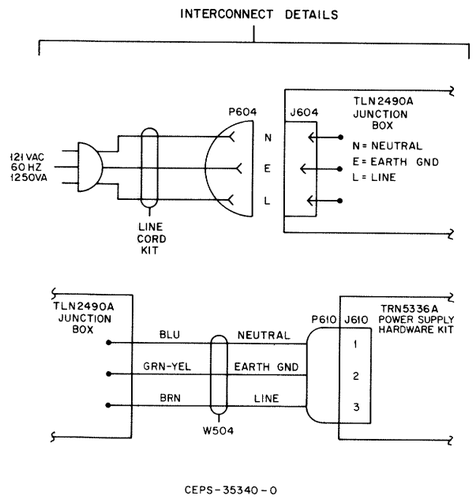
Provides interconnections between station and antenna(s), ac or dc power, and provides a location for installation of 2- or 4-wire control wirelines.



JUNCTION BOX
MODEL TRN5350A/51A







CEPS-35340-O

parts list

TRN5350A Junction Box, Basic
TRN5351A Junction Box, Fully Optionable — PL-8035-C

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		connector, receptacle:
J611	15-82889N01	HOUSING, 3-contact, power cord
J612	1-80758D49	ac outlet w/lug assembly includes:
	9-83238C01	OUTLET, ac; 3-prong
	29-85911B	LUG, fasten
		connector, plug:
P610	15-83183N01	HOUSING, 3-contact
		mechanical parts
	2-10971A16	NUT, machine: M3 × 0.5; 2 used
	2-10971A18	NUT, machine: M5 × 0.8; 2 used
	3-83497N02	SCREW, machine: M5 × 0.8 × 12
	3-83497N04	SCREW, machine: M3 × 0.5 × 8; 1 used
	3-10943M10	SCREW, tapping: M3 × 0.5 × 8; 2 used
	3-83498N10	SCREW, tapping: M3.5 × 0.6 × 8; 2 used
	4-7650	LOCKWASHER, #4 internal; 2 used
	9-82845L01	CONNECTOR, crimp; 2 used
	9-83358N01	CONNECTOR, wire splice
	15-82835N01	COVER, junction box
	15-82891N01	HOUSING, fuse with mounting hardware
	29-10228A06	TERMINAL, connector
	37-106352	GROMMET
	39-83145N01	CONTACT, plug: (part for P610); 2 used
	39-83145N02	CONTACT, plug (part for P610)
	39-83384N01	CONTACT, plug: (part for J11); 3 used
	42-10217A02	CLIP, cable; 3 used
	42-82143C01	CLIP, cable; 3/16"
	15-82834N04	HOUSING, interconnect (TRN5350A)
	15-83834N05	HOUSING, interconnect (TRN5351A)
	3-83497N07	SCREW, machine slotted; 2 used

TRN5452A Hardware and Label Kit (60 Hz) — PL-8242-A

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
		fuse:
F601	65-138179	10 amp; 250 V
		mechanical parts
	13-813618	DECAL, patent no.
	33-83748N01	NAMEPLATE
	38-82892N01	CAP, fuse housing; GRY
	54-850440	LABEL, FCC
	54-83040C01	LABEL, audio
	54-83918N01	LABEL, interconnect housing outlet
	54-83919N01	LABEL, interconnect housing, fuse
	54-83922N01	LABEL, as pwr interconnect
	54-84126C01	LABEL, replacement parts

TRN5427A Power Cord 110 V — PL-8043-O

REFERENCE SYMBOL	MOTOROLA PART NO.	DESCRIPTION
	30-82933N01	LINE CORD; with plug and receptacle