TM 5-6350-264-14&P-11 NAVELEX EE 181-AA-OMI-120/E121 C-7359-60-1 T.O. 31S9-2FSS9-1-11

TECHNICAL MANUAL

OPERATOR'S ORGANIZATIONAL,

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

(INCLUDING REPAIR PARTS AND SPECIAL

TOOLS LIST)

CABINET, MONITOR, TYPE A

CY 7359/FSS-9(V)

NSN 6350-00-228-2690

CABINET, MONITOR, TYPE B

CY-7360/FSS-9(V)

NSN 6350-00-228-2697

CABINET, MONITOR, TYPE C

CY-7361 /FSS-9(V)

NSN 6350-00-228-2705

MONITOR MODULE, STATUS

ID-1921 /FSS-9(V)

NSN 6350-00-228-2661

DEPARTMENT OF THE ARMY, THE NAVY, AND THE AIR FORCE
29 OCTOBER 1982

CHANGE

NO. 2

HEADQUARTERS
DEPARTMENTS OF THE ARMY, NAVY
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WASHINGTON, D.C., 22 JULY 1992

Operators, Organizational, Direct Support and General Support Maintenance Repair Parts and Special Tools List

> CABINET, MONITOR, TYPE A CY-7359/FSS-9(V) NSN 6350-00-228-2690

> CABINET, MONITOR, TYPE B CY-7360/FSS-9(V) NSN 6350-00-228-2697

> CABINET, MONITOR, TYPE C CY-7361/FSS-9(V) NSN 6350-00-228-2705

> MONITOR MODULE, STATUS ID-1 921/FSS-9(V) NSN 6350-00-228-2661

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> CABINET, MONITOR, TYPE A CY-7359/FSS-9(V) NSN 6350-00-228-2690

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TM 5-6350-264-14&P-11
NAVELEX EE 181-AA-OMI-12A/E121 C-7359-60-1
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To be distributed in accordance with DA FORM 12-25A, Operator, Organizational, Direct Support and General Support Maintenance Requirements for Detection System, Joint Service, Interior Intrusion (JSIIDS),



NOISE HAZARD

The Audible Alarm presents a noise hazard to personnel in the area. The noise level exceeds the allowable limits for unprotected personnel. Authorized protective equipment must be worn by all personnel in the work area. If the Audible Alarm is installed, it must be disabled BEFORE any troubleshooting procedures are attempted. Disable the alarm by setting the key operated switch on Control Unit to TEST/RESET position, opening Audible Alarm, removing faceplate, and turning off power switch. After troubleshooting the Audible Alarm must be reactivated. Activate the Alarm by setting the key-operated switch on Control Unit to TEST/RESET position, turn Alarm power switch on, replace faceplate, close and clock Audible Alarm door. Turn key-operated switch on Control Unit to SECURE or ACCESS.



RADIATION HAZARD

The Monitor Cabinet contains trace amounts of radioactive isotope, Promethium 147. The minute amount of ionizing radiation from Pm 147 is no health hazard when the equipment is installed or in storage; however, if it is necessary to dispose of a Monitor Cabinet, the procedures specified in AR755-15 must be observed.



HIGH VOLTAGE

High voltage is used in the operation of this equipment. Death on contact may result if personnel fail to observe safety precautions. A 115-volt ac potential may cause death under certain conditions; therefore, precautions should be taken at all times. Be careful not to contact connections for 115-volt ac input when installing or repairing this equipment. Never work on electronic equipment unless there is another person nearby who is familiar with the hazards of the equipment and who is competent in administering first aid.



HYDROGEN GAS

The Monitor Cabinet contains a rechargeable battery which may generate ignitable amounts of hydrogen gas if certain failures occur. This is a potential safety hazard. Do not smoke when opening the door. After opening, allow the unit to ventilate with the door open for 2 minutes before turning off the Power Switch or performing any other maintenance action. If excessive heat or fumes of any nature are being emitted from the Monitor Cabinet, immediately open the enclosure door and ventilate for 2 minutes before performing any maintenance action.

ARMY TECHNICAL MANUAL NAVY PUBLICATION AIR FORCE TECHNICAL ORDER

HEADQUARTERS DEPARTMENTS OF THE ARMY, NAVY, AND AIR FORCE WASHINGTON, D.C., 29 October 1982

Operators, Organizational, Direct Support, and General Support Maintenance Repair Parts and Special Tools List

Current as of 21 November 1985

REPORTING OF ERRORS

You can help improve this manual If you find any mistakes or if you know of a way to improve the procedures, please let us know. ARMY: Your letter or DA Form 2028, (Recommended Changes to Publications and Blank Forms) should be mailed directly to: Commander, U.S. Army Troop Support Command, ATTN AMSTR-MCTS, 4300 Goodfellow Blvd, St Louis, MO 63120-1798 AIR FORCE:. Completed AFT Form 22 (Technical Order Publication Improvement Report and Reply) should be forwarded to: HO, SA-ALC/MMEDT, Kelly AFB, TX 78241. NAVY: Completed DA Form 2028 (Recommended Changes to Publications and Blank Forms), User Activity Technical Manual Comment Sheet Feedback Report, or other suitable reporting form should be mailed to' Naval Electronics Systems Command Training and Publications Management Office, ATTN: ELEX. Code 8122, Washington, DC 20360.

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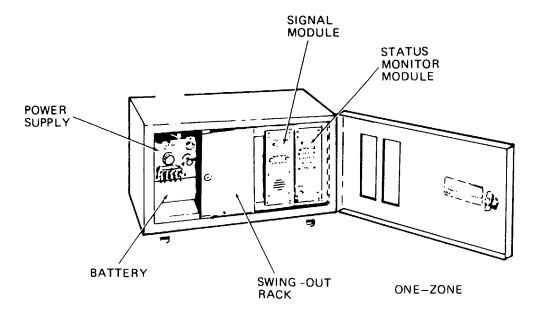
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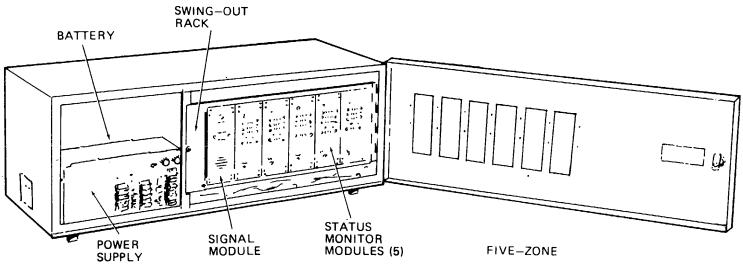


Figure 1-1. Monitor Cabinets, One Zone and Five Zone

INTRODUCTION

Section I. GENERAL

- **1-1. SCOPE.** This manual is for your use in operating and maintaining the Monitor Cabinet, Type A CY-7359/FSS-9(V), Type B CY-7360/FSS-9 (V), Type C CY-7361/FSS-9(V), and Status Monitor Module, Model ID-1921/FSS-9(V), under normal operating conditions. These assemblies are an integral part of the Joint-Services Interior Intrusion Detection System (J-SIIDS). For information on other major assemblies of J-SIIDS, refer to the applicable manual listed in Appendix A.
- **1-2. MAINTENANCE FORMS AND RECORDS.** Equipment maintenance forms and procedures for their use are contained in DA PAM 738-750, The Army Maintenance Management System (TAMMS).
- 1-3. ADMINISTRATIVE STORAGE. Instructions for administrative storage are contained in TM 740-90-1.
- **1-4. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.** Instructions for the destruction of Army material to prevent enemy use are contained in TM 750-244-3.
- **1-5. QUALITY ASSURANCE/QUALITY CONTROL.** There are no Quality Assurance/Quality Control technical manuals applicable to this equipment.
- **1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).** EIR's will be prepared on Standard Form 368, Quality Deficiency Report. Instructions for preparing EIR's are provided in DA PAM 738-750. EIR's should be mailed directly to Commander, U.S. Army Troop Support Command, ATTN: AMSTR-QX, 4300 Goodfellow Blvd., St. Louis, Missouri 63120-1798. A reply will be furnished directly to you.
- 1-7. EQUIPMENT SERVICEABILITY CRITERIA (ESC). This equipment is not covered by an ESC.

Section II. DESCRIPTION AND DATA

1-8. DESCRIPTION. The Monitor Cabinets (fig. 1-1 and 1-2 consist of steel enclosures with hinged, lockable doors. Each one contains a power supply, battery (for emergency power), a Signal Module, and from one to twenty-five Status Monitor Modules (fig. 1-3). The Signal Module and Status Monitor Modules are mounted on swingout racks. A Data Receiver may be plugged into each Status Monitor Module.

1-9. TABULATED DATA.

- a. Identification Data. There are three identification plates located on each monitor cabinet, as follows:
 - (1) Inside the cabinet door (fig. 1-4, view A).
 - (2) On the cover of the power supply (fig. 1-4, view B.

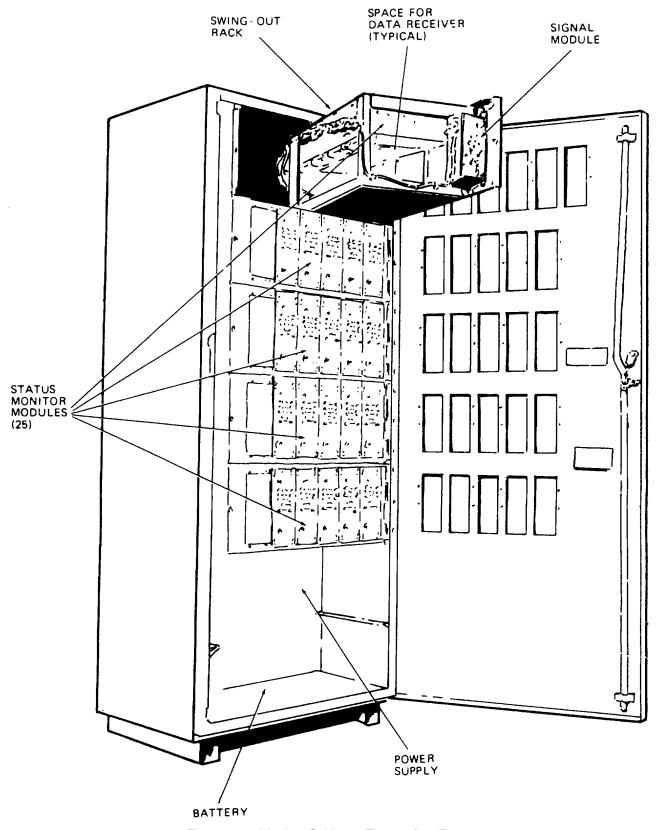


Figure 1-2. Monitor Cabinet. Twenty-five Zone

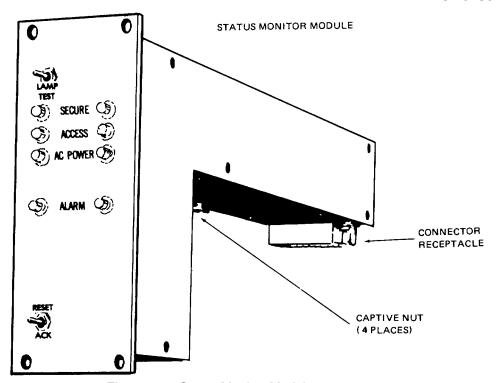


Figure 1-3. Status Monitor Module

(3) On top of the Signal Module (fig. 1-4, view C).

There is also an identification plate located on top of the Status Monitor Module (fig. 1-4, view C).

b. Equipment Characteristics.

(1) Monitor Cabinets.

Weight (without batteries)

Dimensions (overall)

Monitor Cabinet,

Type A, one zone....38 pounds (17.24 kg)

Monitor Cabinet,

Type B, five zone....65 pounds (29.48 kg)

Monitor Cabinet, Type C,

twenty-five zone....200 pounds (90.72 kg)

Dimensions (overall)

Monitor Cabinet, Type A, one zone

Height....11.3750 inches (28.8925 cm)

Width....14.1875 inches (36.0363 cm)

Length....18.9375 inches (48.0917 cm)

Monitor Cabinet, Type B, five zone

Height....13.00 inches (33.020 cm)

Width.....13.25 inches (33.655 cm)

Length....33.625 inches (85.4075 cm)

Monitor Cabinet, twenty-five zone

Height.....59 inches (149.86 cm)

Width.....15.75 inches (40.00 cm)

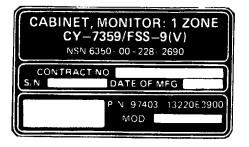
Length.....24.50 inches (62.23 cm)

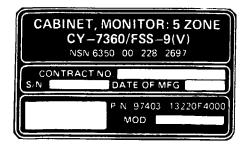
Status Monitor Module

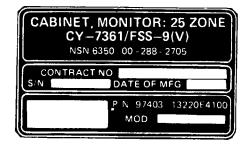
Height.....7.000 inches (17.780 cm)

Width.....2.750 inches (6.985 cm)

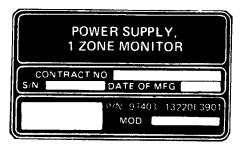
Length.....10.00 inches (25.400 cm)

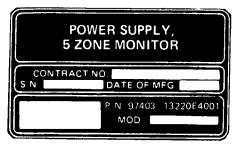


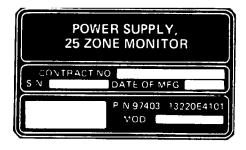




A. MONITOR CABINETS IDENTIFICATION PLATES

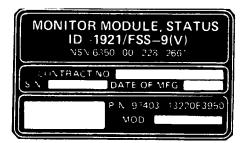






B. POWER SUPPLY IDENTIFICATION PLATES





C. SIGNAL MODULE AND STATUS MONITOR MODULE IDENTIFICATION PLATES

Figure 1-4. Identification Plates, Monitor Cabinets

TM 5-6350-264-14&P-11 NAVELEX EE 181-AA-OMI-120/E121 C-7359-60-1 T.O. 31S9-2FSS9-1-11

Color	Status Monitor Module20g, for
HousingGray per Federal Standard 595,	11 ms and bench handling
color chip 36440, MIL-C-22751	Vibration
Lettering Black per TT-558	Monitor CabinetsWithstands
Power Requirements	transportation conditions (without battery)
Monitor Cabinets	Status Monitor ModuleWithstands
Primary 110 to 125 vac,48 to 62 Hz.	transportation conditions
Emergency (secondary power)24 vdc; supplied by internal battery. Refer to subparagraph (2).	Weather resistance Designed for interior installation
Status Monitor Module19 to 21 vdc	(2) Battery.
@ 100 ma maximum	Monitor Cabinet (one zone)
Fuses	Weight
Monitor Cabinets	Height
One zone, AC 1.5 A, SB	Width 4.8 inches (12.192 cm)
DC0.5 A, FB	Depth6.05 inches (15.367 cm)
Five zone, AC 3.0 A, SB	Voltage capacity24 vdc,
DC1.5 A, FB	5.0 ampere-hour
Twenty-five zone, AC 8.0 A, SB	Monitor Cabinet (five zone and twenty-five zone)
DC7.0 A, FB	Weight 50 pounds (22.68 kg)
Status Monitor Module0.25 A SB	Height6.45 inches (16.3830 cm)
Environmental (operational)	Width6.65 inches (16.8910 cm)
Temperature range20° to +150° F (-29° to +65°C)	Depth12.46 inches (31.6484 cm) Power capacity24 vdc, 28 ampere-hour
Relative humidityUp to 95%	
Environmental (nonoperational and storage)	
Temperature range30° to +150° F (-34° to +74°C)	NOTE Two batteries are required for the one-zone
Relative humidityUp to 95%	Monitor Cabinet, one battery for the five-zone
Shock	Monitor Cabinet, and three batteries for the twenty-five-zone Monitor Cabinet.
Monitor Cabinets20g, for 11 ms	twonty five zone Monitor Gabinet.

and bench handling (without battery)

OPERATING INSTRUCTIONS

Section I. OPERATING PROCEDURES

- **2-1. CONTROLS AND INDICATORS.** The Monitor Cabinet and Status Monitor Module controls and indicators are shown in figure 2-1, and described in table 2-1.
- **2-2. NORMAL OPERATING PROCEDURES.** The Monitor Cabinet(s) are ready for operation after they have been installed, tested, and connected to the J-SIIDS Control Unit. Operating procedures are given in tables 2-3 through 2-7. Table 2-2 is used to select the proper procedures from these tables.

Table 2-1. Operator Controls and Indicators

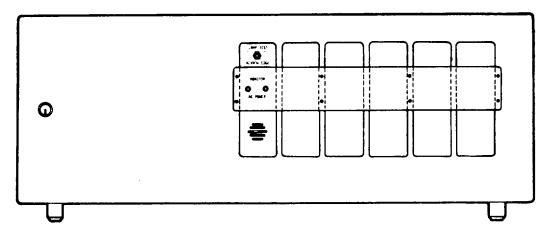
Control or indicator	Function
Monitor Cabinet(s)	
LAMP TEST/ ACKNOWLEDGE switch (3-position toggle)	When placed in the LAMP TEST position, it causes all lamps on the signal module to light. When placed in the ACKNOWLEDGE position, it causes the ac power monitor lamps to stop flashing and silences the audible signal device.
MONITOR AC POWER (indicating lamps)	When on continuously, indicates the cabinet is operating on ac power. When flashing, indicates the power in the cabinet has changed state either from ac to battery, or battery to ac. When off continuously, indicates the cabinet is operating on battery power.
Audible signal device	When the audible signal device is sounding, the power has changed state either from ac to battery, or battery to ac. This is coupled with a change in state of the MONITOR AC POWER lamps. When the audible alarm is sounding and there has been no change in state of the MONITOR AC POWER lamps, this indicates an alarm is being presented at the Status Monitor Module(s).

Table 2-1. Operator Controls and Indicators

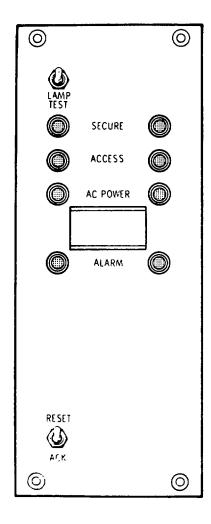
Control or indicator	Function
Status Monitor Module LAMP TEST (2-position toggle switch)	Provides method for checking all indicator lamps.
RESET/ACK (3-position toggle switch)	<u>a.</u> Acknowledges an alarm condition and silences audible signal device.
	b. Resets the system to an alarm monitoring status.
ALARM (lamps, red)	Flashes to indicate an alarm condition.
SECURE (lamps, green)	Constantly on when a secure condition exists. Flashes with changes in status.
ACCESS (lamps, amber)	Constantly on when an access condition exists. Flashes with change in status.
AC POWER (lamps, white)	Constantly on when operating on ac power. Flashes with change in status.

Table 2-2. Guide for Selection of Proper Monitor Cabinet and Status Monitor Module Operating Procedures

Alarm display option used				Status monitor module used		Audible alarm used		Proper monitor cabinet and status monitor
Instantaneous	Non-latched	Latched delayed	Instantaneous with latched delay	Yes	No	Yes	No	module operating procedure
X X	X	X X	X X	X X X X X	X	X X X	X X X	M-1 (Table 2-3) M-2 (Table 2-4) M-3 (Table 2-5) M-4 (Table 2-6) M-4 (Table 2-7) M-2 (Table 2-4) M-2 (Table 2-4)



A. MONITOR CABINET



B. STATUS MONITOR MODULE

Figure 2-1. Monitor Cabinet and Status Monitor Module Controls and Indicators

Table 2-3. Monitor Cabinet and Status Monitor Module Operating Procedure M-1

NOTE

When assuming responsibility for attending the Monitor Cabinet(s); ensure that all ALARM (red) lights are extinguished, that all AC POWER (white) lights are on, and that proper operating mode (ACCESS or SECURE) is indicated on all Status Monitor Modules. Also verify that all indicator bulbs are operable by momentarily placing each lamp test switch in the LAMP TEST position. If lights are burned out, request responsible maintenance personnel to replace bulbs at earliest opportunity.

	Indication	Operator response
1.	ALARM indicator lights (red) flashing and audible tone sounding.	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
		b. If alarm is not generated during a time of prearranged opening or securing of protected area or system test, direct security personnel to indicated protected area (NOTE 1).
		c. After security personnel have investigated cause of alarm, momentarily place RESET/ACK switch in RESET position to extinguish ALARM indicator lights.
2.	MONITOR AC POWER indicator	a. Momentarily place LAMP TEST/ACKNOWLEDGE switch on Monitor Cabinet Signal Module in ACKNOWLEDGE position.
		b. If lights extinguish, inform designated personnel that ac power to Monitor Cabinet has just been lost (NOTE 2) (NOTE 3).
		c. If lights stay on steady state, ac power has been restored to Monitor Cabinet.
3.	ACCESS indicator lights(amber) flashing and audible signal device sounding.	a. Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
		b. If change to ACCESS is not part of a prearranged opening of protected area, direct security personnel to indicated protected area.

Table 2-3. Monitor Cabinet and Status Monitor Module Operating
Procedure M-1 - Continued

Indication	Operator response
SECURE indicator lights (green) flashing and audible signal device sounding.	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
	b. If change to SECURE is not part of a prearranged securing of protected area, direct security personnel to indicated protected area to ensure that area is physically secure.
 AC POWER indicator lights(white) flashing and audible signal device sounding. 	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
	b. If lights extinguish, inform designated personnel that ac power to associated protected area has just been lost (NOTE 2) (NOTE 4).
	c. If lights stay on steady state, ac power has been restored to Control Units.

NOTE 1

If alarm occurs when SECURE lights (green) are on, a high probability exists that personnel are tampering with the system in the protected area or that personnel in the protected area are in danger. Security personnel responding to the alarm should be provided with this information if possible.

NOTE 2

Abnormal conditions shall be reported to the f	ollowing personnel:
,telephon	e
,telephon	e

NOTE 3

At normal operating temperatures [$60^{\circ}F$ to $100^{\circ}F$ ($15.6^{\circ}0C$ to $37.8^{\circ}C$)], Monitor Cabinet battery will supply power for at least the following times:

One-zone, 24 hours. Five-zone, 20 hours. Twenty-five-zone, 12 hours.

Table 2-3. Monitor Cabinet and Status Monitor Module Operating
Procedure M-1-Continued

NOTE 3-Continued

Lower operating temperatures will provide less battery power and shortened Monitor Cabinet operating time. If ac power is not anticipated to be restored within these times, arrangements should be made to station guards at the associated protected area(s).

NOTE 4

Ac power failure at protected area may be an indication of attempted intrusion. Personnel investigating power failure should proceed with caution. At normal operating temperature [60°F to 100°F (15.6°C to 37.8°C)], Control Unit battery will supply power for at least 24 hours. If battery power is exhausted prior to restoration of ac power, an alarm will be transmitted.

Table 2-4. Monitor Cabinet and Status Monitor Module Operating Procedure M-2

NOTE

When assuming responsibility for attending the Monitor Cabinet(s); ensure that all ALARM (red) lights are extinguished, that all AC POWER (white) lights are on, and that proper operating mode (ACCESS or SECURE) is indicated on all Status Monitor Modules. Also verify that all indicator bulbs are operable by momentarily placing each lamp test switch in the LAMP TEST position. If lights are burned out, request responsible maintenance personnel to replace bulbs at earliest opportunity.

Indication	Operator response	
ALARM indicator lights (red) flashing and audible tone signal device sounding.	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.	
	 If alarm is not generated during a time of prearranged opening or securing of protected area or system test, direct security personnel to indicated protected area (NOTE 1) (NOTE 5). 	
	c. After security personnel have investigated cause of alarm and reset the Control Unit, momentarily place RESET/ACK switch in RESET position to extinguish ALARM indicator lights.	

Table 2-4. Monitor Cabinet and Status Monitor Module Operating Procedure M-2-Continued

Indication	Operator response
MONITOR AC POWER indicator lights (white) flashing and audible signal device sounding.	Momentarily place LAMP TEST/ACKNOWLEDGE switch on Monitor Cabinet Signal Module in ACKNOWLEDGE position.
	b. If lights extinguish, inform designated personnel that ac power to Monitor Cabinet has just been lost (NOTE 2) (NOTE 3).
	c. If lights stay on steady state, ac power has been restored to Monitor cabinet.
 ACCESS indicator lights (amber) flashing and audible signal device sounding. 	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
	b. If change to ACCESS is not part of prearranged opening of protected area, direct security personnel to indicated protected area.
SECURE indicator lights (green flashing and audible signal device sounding.)	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
	b. If change to SECURE is not part of a prearranged securing of protected area, direct security personnel to indicated protected area to ensure that area is physically secure.
 AC POWER indicator lights (white) flashing and audible signal device sounding. 	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
	b. If lights extinguish, inform designated personnel that ac power to associated protected area has just been lost (NOTE 2) (NOTE 4).
	c. If lights stay on steady state, ac power has been restored to Control Unit.

NOTE 1

If alarm occurs when SECURE lights (green) are on, a high probability exists that an intrusion is in progress. If alarm occurs when ACCESS (amber) lights are on, a high probability exists that personnel are tampering with the system in the protected area or that personnel in the protected area are in danger. Security personnel responding to the alarm should be provided with this information if possible.

Table 2-4. Monitor Cabinet and Status Monitor Module Operating Procedure M-2-Continued

NOTE 2

Abnormal conditions shall be reported to the following personnel:
,telephone,telephone
NOTE 3
At normal operating temperatures [60°F to 100°F (15.6°C to 37.8° C)], Monitor Cabine battery will apply power for at least the following times:
One-zone, 24 hours. Five-zone, 20 hours. Twenty-five-zone, 12 hours.
Lower operating temperatures will provide less battery power and shortened Monitor Cabinet operating time. If ac power is not anticipated to be restored within these times arrangements should be made to station guards at the associated protected area(s).
NOTE 4
Ac power failure at protected area may be an indication of attempted intrusion. Personne investigating power failure should proceed with caution. At normal operating temperatures [60°F to 100°F (15.6°C to 37.8°C)], Control Unit battery will supply power for at least 24 hours. If battery power is exhausted prior to restoration of ac power, an alarm will be transmitted.
NOTE 5
Inform the following personnel that protected area must be opened and associated Contro Unit mode switch key must be taken to protected area to reset the Control Unit:
,telephone
,telephone

Table 2-5. Monitor Cabinet and Status Monitor Module Operating Procedure M-3

NOTE

When assuming responsibility for attending the Monitor Cabinet(s); ensure that all ALARM (red) lights are extinguished, that all AC POWER (white) lights are on, and that proper operating mode (ACCESS or SECURE) is indicated on all Status Monitor Modules. Also verify that all indicator bulbs are operable by momentarily placing each lamp test switch in the LAMP TEST position. If lights are burned out, request responsible maintenance personnel to replace bulbs at earliest opportunity.

Indication	Operator response
ALARM indicator lights (red) flashing and audible signal device sounding.	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
	 If alarm is not generated during a time of prearranged opening or securing of protected area or system test, direct security personnel to indicated protected area (NOTE 1) (NOTE 5).
	c. After security personnel have investigated cause of alarm and reset the Control Unit, momentarily place RESET/ACK switch in RESET position to extinguish ALARM indicator lights.
MONITOR AC POWER indicator lights (white) flashing and audible signal device sounding.	 Momentarily place LAMP TEST/ACKNOWLEDGE switch on Monitor Cabinet Signal Module in ACKNOWLEDGE position.
	b. If lights extinguish, inform designated personnel that ac power to Monitor Cabinet has just been lost (NOTE 2) (NOTE 3).
	c. If lights stay on steady state, ac power has been restored to Monitor Cabinet.
ACCESS indicator lights (amber) flashing and audible signal device sounding.	a. Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.
	b. If change to ACCESS is not part of prearranged opening of protected area, direct security personnel to indicated protected area.

Table 2-5. Monitor Cabinet and Status Monitor Module Operating Procedure M-3--Continued

Indication	Operator response	
SECURE indicator lights (green flashing and audible signal) device sounding.	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.	
	b. If change to SECURE is not part of a prearranged securing of protected area, direct security personnel to indicated protected area to ensure that area is physically secure.	
AC POWER indicator lights (white) flashing and audible signal device sounding.	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.	
	b. If lights extinguish, inform designated personnel that ac power to associated protected area has just been lost (NOTE 2) (NOTE 4).	
	c. If lights stay on steady state, ac power has been restored to Control Unit.	

NOTE 1

If alarm occurs when SECURE lights (green) are on, a high probability exists that an intrusion is in progress. If alarm occurs when ACCESS (amber) lights are on, a high probability exists that personnel are tampering with the system in the protected area or that personnel in the protected area are in danger. Security personnel responding to the alarm should be provided with this information if possible.

NOTE 2

Abnormal conditions shall be reported to the follo	wing personnel:
,telephone	
,telephone	

NOTE 3

At normal operating temperatures [60° F to 100°F (15.6°C to 37.8° C)], Monitor Cabinet battery will apply power for at least the following times:

One-zone, 24 hours. Five-zone, 20 hours. Twenty-five-zone, 12 hours.

Table 2-5. Monitor Cabinet and Status Monitor Module Operating Procedure M-3-Continued

NOTE 3-Continued

Lower operating temperatures will provide less battery power and shortened Monitor Cabinet operating time. If ac power is not anticipated to be restored within these times, arrangements should be made to station guards at the associated protected area(s).

NOTE 4

Ac power failure at protected area may be an indication of attempted intrusion. Personnel investigating power failure should proceed with caution. At normal operating temperatures [60°F to 100°F (15.6°C to 37.8°C)], Control Unit battery will supply power for at least 24 hours. If battery power is exhausted prior to restoration of ac power, an alarm will be transmitted.

Table 2-6. Monitor Cabinet and Status Monitor Module Operating Procedure M-4

NOTE

When assuming responsibility for attending the Monitor Cabinet(s); ensure that all ALARM (red) lights are extinguished, that all AC POWER (white) lights are on, and that proper operating mode (ACCESS or SECURE) is indicated on all Status Monitor Modules. Also verify that all indicator bulbs are operable by momentarily placing each lamp test switch in the LAMP TEST position. If lights are burned out, request responsible maintenance personnel to replace bulbs at earliest opportunity.

Indication	Operator response	
ALARM indicator lights (red) flashing and audible signal device sounding.	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.	
	 If alarm is not generated during a time of prearranged opening or securing of protected area or system test, direct security personnel to indicated protected area (NOTE 1) (NOTE 5). 	
	c. After security personnel have investigated cause of alarm and reset the Control Unit, momentarily place RESET/ACK switch in RESET position to extinguish ALARM indicator lights.	

Table 2-6. Monitor Cabinet and Status Monitor Module Operating Procedure M-4-Continued

Indication	Operator response	
MONITOR AC POWER indicator lights (white) flashing and audible signal device sounding.	Momentarily place LAMP TEST/ACKNOWLEDGE switch on Monitor Cabinet Signal Module in ACKNOWLEDGE position.	
	b. If lights extinguish, inform designated personnel that ac power to Monitor Cabinet has just been lost (NOTE 2) (NOTE 3).	
	c. If lights stay on steady state, ac power has been restored to Monitor Cabinet.	
 ACCESS indicator lights (amber) flashing and audible signal device sounding. 	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.	
	b. If change to ACCESS is not part of prearranged opening of protected area, direct security personnel to indicated protected area.	
 SECURE indicator lights (green flashing and audible signal) device sounding. 	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.	
	b. If change to SECURE is not part of a prearranged securing of protected area, direct security personnel to indicated protected area to ensure that area is physically secure.	
 AC POWER indicator lights (white) flashing and audible signal device sounding. 	Momentarily place RESET/ACK switch on associated Status Monitor Module in the ACK position.	
	b. If lights extinguish, inform designated personnel that ac power to associated protected area has just been lost (NOTE 2) (NOTE 4).	
	c. If lights stay on steady state, ac power has been restored to Control Unit.	

NOTE 1

If alarm occurs when SECURE lights (green) are on, a high probability exists that an intrusion is in progress. If alarm occurs when ACCESS (amber) lights are on, a high probability exists that personnel are tampering with the system in the protected area or that personnel in the protected area are in danger. Security personnel responding to the alarm should be provided with this information if possible.

Table 2-6. Monitor Cabinet and Status Monitor Module Operating Procedure M-4-Continued

NOTE 2

Abnormal conditions shall be reported to the following personnel:
,telephone,telephone
NOTE 3
At normal operating temperatures [60°F to 100°F (15.6°C to 37.8°C)], Monitor Cabinet Battery will apply power for at least the following times:
One-zone, 24 hours. Five-zone, 20 hours. Twenty-five-zone, 12 hours.
Lower operating temperatures will provide less battery power and shortened Monitor Cabinet operating time. If ac power is not anticipated to be restored within these times arrangements should be made to station guards at the associated protected area(s).
NOTE 4
Ac power failure at protected area may be an indication of attempted intrusion. Personnel investigating power failure should proceed with caution. At normal operating temperatures [60°F to 100°F (15.6°C to 37.8°C)], Control Unit battery will supply power for at least 24 hours. If battery power is exhausted prior to restoration of ac power, an alarm will be transmitted.
NOTE 5
Inform the following personnel that protected area must be opened and associated Control Unit mode switch key must be taken to protected area to reset the Control Unit:
,telephone,telephone

Section II. THEORY OF OPERATION

2-3. Functional Description.

- a. The Monitor Cabinets and Status Monitor Modules interface directly with the Control Unit via hard-wire interconnecting lines, or a Data Transmission System. The Data Transmission System can use either a single-pair transmission line, or dedicated, voice-grade telephone lines. Status and mode of operation of secured areas are continuously displayed on the Status Monitor Module. There are six different status and mode of operation conditions which are displayed by means of four pairs of status lights. The lights are labeled SECURE, ACCESS, AC POWER, and ALARM. The no-alarm condition is indicated by absence or flashing of AC POWER lights. Each change of status is accompanied by the flashing light associated with the new state and the sounding of an audible signal until ACKNOWLEDGE switch is momentarily depressed. When this switch is depressed, the flashing light associated with the new state changes to a continuously illuminated light, except for ac-fail and no-alarm status conditions, and audible signal is silenced.
- b. The Monitor Cabinet provides primary and emergency power to Status Monitor Modules. The cabinet contains a Signal Module which consists of an audible signaling device and a logic subassembly printed wiring board. The signaling device is actuated by the Status Monitor Module or logic subassembly printed wiring board.
 - Signal Module lamps are continuously on when Monitor Cabinet is operated on external ac power. If cabinet is operated by emergency power, lamps are extinguished. When external ac power to the Monitor Cabinet fails for more than 3 seconds, or when ac power is reapplied to Monitor Cabinet after having failed, lamps will begin to flash and the audible signaling device will be actuated. When ACKNOWLEDGE switch is momentarily depressed, and ac power is absent, flashing lights will go to continuously off and audible signal device will be silenced. When ACKNOWLEDGE switch is momentarily depressed, and ac power has been restored, lights will go to continuously on and audible signal will be silenced.
- c. Emergency power supply is sufficient for 24 hours of operation for single-zone cabinet, 20 hours of operation for five-zone cabinet, and 12 hours of operation for twenty-five-zone cabinet. Status Monitor Modules interface with the Monitor Cabinets by means of plug-in connectors. The modules have an additional connector for interfacing with the Data Transmission System. Status information may be transmitted between the Control Unit and Monitor Cabinet by the Data Transmission System. The Data Receiver plugs into Status Monitor Module.

OPERATOR MAINTENANCE INSTRUCTIONS

Section I. LUBRICATION

This section is not applicable.

Section II. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

3-1. Clean exterior surfaces with a cloth dampened in water and a mild detergent. Rinse with a cloth dampened in cold water. Dry with lint free cloth.

Section III. TROUBLESHOOTING

This section is not applicable.

Section IV. MAINTENANCE

This section is not applicable.

ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

This chapter is not applicable to this equipment.

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

Section I. REPAIR PARTS, SPECIAL TOOLS and EQUIPMENT

- 5-1. SPECIAL TOOLS. No special tools are required for maintenance of the Monitor Cabinet or Status Monitor Module.
- **5-2. REPAIR PARTS.** Repair parts are listed and illustrated in the repair parts and special tools list covering direct and general support maintenance for this equipment in appendix C of this manual.

Section II. TROUBLESHOOTING



The Monitor Cabinets contain trace amounts of radioactive isotope, Promethium 147. The minute amount of ionizing radiation from Pm 147 is no health hazard when the equipment is installed or in storage; however, if it is necessary to dispose of a Monitor Cabinet, the procedures specified in AR755-15 must be observed.

5-3. GENERAL.

- a. This section contains troubleshooting information for locating and correcting most of the operating troubles which may develop in the Monitor Cabinets and Status Monitor Modules. Each malfunction for an individual component, unit, or system is followed by a list of tests or inspections which will help you to determine corrective actions to take. You should perform the test/inspections in the corrective actions column in the order listed.
- b. This manual cannot list all malfunctions that occur, nor all tests or inspections and corrective actions. If a malfunction is not listed or is not corrected by listed corrective actions, notify your supervisor.
- c. Table 5-1 lists the common malfunctions which you may find during the operation or maintenance of the Monitor Cabinets and Status Monitor Modules. You should perform the test/inspections in the corrective actions column in the order listed.

NOTE

Before you use table 5-1, be sure you have performed all applicable operating checks.

- d. Check all available information on the equipment for aid in diagnosing problems.
- e. Make a visual inspection of the equipment.
 - (1) Inspect the equipment for evidence of physical damage.

- (2) Inspect the terminal strips for clean and secure connections.
- (3) Inspect all wiring and cabling for worn or frayed insulation and broken wires.
- (4) Inspect all resistors for discoloration due to overheating.
- (5) Inspect the complete subsystem for the presence of dirt, corrosion, moisture, and bits of wire or solder inside the housings.

NOTE

Touchup paint is recommended instead of refinishing whenever practical.

- (6) Inspect all metal surfaces intended to be painted for condition of finish and legibility of panel lettering.
- f. Inspect varistors for evidence of physical damage or overheating. Check varistors by disconnecting one lead of each varistor from TB1. Set multimeter to ohms and connect meter leads to varistor. Meter should indicate over 100,000 ohms.
- g. To disable the Audible Alarm (AA) for maintenance or troubleshooting, notify proper authorities per installation/site security procedures. Enter the Control Unit area and turn the operating mode switch (key operated) to TEST/RESET position. If the audible signal device in the CU sounds, ignore it for a moment. Inspect the Control Unit door to ensure that it is flat, straight, and completely closed. Open the door, pull out the Tamper Alarm Switch (TAS) plunger all the way out, and ensure that there is no debris between the door and enclosure.

NOTE

There are six Light Emitting Diodes (LED's) on PC board A12 in the upper right corner of the Control Unit. Note any of these LED's that are on. Any LED that is on indicates a sensor that has been activated and should be investigated before troubleshooting the Audible Alarm.

Turn the operating mode switch to ACCESS.

- (1) If the AA is silent, put on ear protection and open the AA door. Pull the TAS plunger all the way out. Remove screws that secure faceplate, and remove faceplate. Turn off power switch located in the upper left corner of the AA. Tag, disconnect, and insulate speaker wire from TB3-7.
- (2) If the AA continues to sound, tag, disconnect, and insulate green wire (from status processor) from TB4-1 in the Control Unit. Install a jumper between TB4-4 and TB4-1. AA should be silenced. Put on ear protection and open AA door. Pull the TAS plunger all the way out. Remove screws that secure the faceplate, and remove the faceplate. Turn off power switch located in the upper left corner of the AA. Tag, disconnect and insulate speaker wire from TB3-7 in the Control Unit, remove the AA interconnecting wire from TB4-3 and connect a jumper wire from TB4-4 and TB4-3. Turn on power switch in AA. The AA speaker is now disabled and maintenance and troubleshooting may be performed.
- (3) When maintenance or troubleshooting has been completed turn off power switch in AA. In the Control Unit, remove jumper wire from TB4-4 and TB4-3. Connect AA interconnecting wire to TB4-3. In the AA, connect speaker wire to TB3-7. Turn on power switch. Install and secure faceplate. Close door on AA. On Control Unit, turn operating mode switch to TEST/RESET and then to SECURE.

NOTE

Troubleshooting procedures listed in table 5-1 may require more than one person to perform corrective action.

Covers should be removed as necessary to perform troubleshooting procedures.

Never disconnect a wire without first marking that wire to assure proper reconnection.

Table 5-1. Troubleshooting Procedures

Trouble	Probable cause	Corrective Action
1. Set Control Unit mode switch to TEST/RE-SET. With CU door tamper switch in nonalarm position, Status Monitor Module in Monitor Cabinet does not respond to sensor alarm condition.	Defective Status Monitor Module	a. Remove Status Monitor Module from one-zone Monitor Cabinet. To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure status monitor module to rack and remove module through front of rack.
		b. Connect jumper between terminals 1-I, 1-L, and 4 of associated Status Monitor Module input terminal board. Replace Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.
		 Actuate ACKNOWLEDGE then RESET switch on Status Moni- tor Module.
		 d. If an alarm condition is displayed, Status Monitor Module is defective.
		e. To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure status monitor module to rack and remove module through front of rack.

Table 5-1. Troubleshooting Procedures - Continued

f. Remove jumper from terminal 4 of input terminal board. Replace Status Monitor Module in swing-out rack and secure with screws. Secure swingout rack. Turn on switch 51 on power supply. g. If a no-alarm condition is displayed, Status Monitor Module, unlock and open Monitor Cabinet and turn off switch 51 on power supply. h. To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch 51 on power supply. Secure status monitor module to rack and remove module through front of rack. Remove jumper from terminals 1-1 and 1-1. of SMM intogrout rack. Turn on switch 51 on power supply. Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch 51 on power supply. Release swingout rack and pen Monitor Cabinet and turn off switch 51 on power supply. Release swingout rack. Remove screws that secure status monitor module from one-zone Monitor Cabinet and turn off switch 51 on power supply. Release surgout rack. Remove screws that secure status monitor module to rack and remove module through front of rack. b. Connect jumper between terminals 1-1, 1-1, and 4 of associated Status Monitor Module in swingout rack and secure with screws. Se-
cure swirigout rack. Turn on switch S1 on power supply.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
		c. Actuate ACKNOWLEDGE then RESET switch on Status Mon- itor Module.
		 d. If an alarm condition is displayed, Status Monitor Module is defective.
		e. To remove Status Monitor Mod- ule, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure status monitor mod- ule to rack and remove module through front of rack.
		f. Remove jumper from terminal 4 of input terminal board. Replace Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.
		g. If a no alarm condition is dis- played, Status Monitor Module is defective.
		h. To remove Data Receiver and Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure Status Monitor Module to rack and remove module through front of rack. Remove jumper from terminals 1-I and 1-L of Status Monitor Module input terminal board. Install new Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.

Table 5-1. Troubleshooting Procedures - Continued

	Trouble	Probable cause		Corrective Action
3.	Changing mode switch from SECURE to ACCESS does not cause corresponding change at Status Monitor Module in Monitor Cabinet.	Defective Status Monitor Module	a.	Remove Status Monitor Module from one-zone Monitor Cabinet. To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure status monitor Module to rack and remove module through front of rack.
			b.	Connect jumper between terminal 2 and 4 of associated Monitor Cabinet terminal board. Replace Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.
			c.	Actuate ACKNOWLEDGE switch on Status Monitor Module.
			d.	If access condition is not displayed, Status Monitor Module is defective.
			e.	To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure Status Monitor Module through front of rack.
			f.	Remove jumper from Monitor Cabinet terminal board. Replace Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply. Actuate ACKNOW-LEDGE switch on SMM.
			g.	If secure condition is not di- played, Status Monitor Module is defective.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
		h. To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure Status Monitor Module to rack and remove module through front of rack.
		 i. Install new Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.
4. Status Monitor Module does not correspond to ac power condition at Control Unit.	Defective Status Monitor Module	a. Remove Status Monitor Module from one-zone Monitor Cabinet. To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure Status Monitor Module to rack and remove module through front of rack.
		b. Connect jumper between terminals 3 and 4 of applicable Status Monitor Module terminal board. Replace Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.
		c. Actuate ACKNOWLEDGE then RESET switch on Status Mon- itor Module.
		 d. If AC POWER lights are lit, Status Monitor Module is defective.
		e. To remove Status Monitor Module, unlock and open Monitor Cabi- net and turn off switch S1 on power supply. Release swingout

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
5. In SECURE mode Status Monitor Module does not display a tamper condition.	Defective Status Monitor Module.	rack. Remove screws that secure Status Monitor Module to rack and remove module through front of rack. f. Remove jumper from terminals 3 and 4 of Status Monitor Module terminal board. Replace Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply. g. If AC POWER lights are not lit, Status Monitor Module is defective. h. To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure status monitor module to rack and remove module through front of rack. Install new Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply. a. Remove Status Monitor Module from one-zone Monitor Cabinet. To remove Status Monitor Module from one-zone Monitor Cabinet. To remove Status Monitor Module to rack and open Monitor Cabinet and turnoff switch S1 on power supply. Release swingout rack. Remove screws that secure Status Monitor Module to rack and remove module through front of rack. b. Connect jumper between terminals 1-1, 1-L, and 4 of associated Monitor Cabinet input terminal strip. Replace Status

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
		Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.
		Actuate ACKNOWLEDGE then the RESET switch on Status Monitor Module.
		 d. If alarm condition is displayed, Status Monitor Module is defective.
		e. To remove Status Monitor Mod- ule, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swing- out rack. Remove screws that secure Status Monitor Module to rack and remove module through front of rack.
		 f. Remove jumper from terminal 4 of input terminal strip. Replace Status Monitor Module in swing- out rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.
		g. If a no-alarm condition is dis- played, Status Monitor Module is defective.
		h. To remove Status Monitor Module, unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure Status Monitor Module to rack and remove module through front of rack. Install new Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply. Actuate ACKNOW-LEDGE switch on SMM.

Table 5-1. Troubleshooting Procedures - Continued

	Trouble	Probable cause	Corrective Action
6.	One lamp in pair does not light on Signal Module or Status Monitor Module.	a. Defective lamp.	Replace lamp. (1) To remove lamp, unscrew and remove lens. Pull lamp straight out of socket. (2) To install new lamp, insert lamp straight into socket Place lens over lamp and screw in to tighten.
		b. Broken wire or loose connection.	Repair or replace broken wire. Tight- en or resolder loose connection.
7.	One or more pairs of lamps out.	Broken wire or loose connection.	Reconnect wire or resolder connection.
8.	Signal Module lights flashing and an audible signal device sounding. When ACKNOWLEDGE is initiated, audible signal device is silenced and lights are continuously on.	Momentary disruption of AC line power for over 3 seconds.	No corrective action necessary; a common input power fault.
9.	Signal Module lights flashing and audible signal device sounding. When ACK-NOWLEDGE is initiated, audible signal device is silenced and lights are continuously off. System is in emergency operation.	 a. Failure of facility AC power. b. Blown fuse F2 on power supply. c. Defective switch S1 on power supply or defective power supply. 	Continue operating on emergency power. Locate fault and repair or notify proper authorities. Remove fuse and check. If blown, replace fuse. If new fuse blows, replace power supply. CAUTION Interrupt main ac power to cabinet at circuit breaker or disconnect before checking switch S1, or equipment may be damaged. a. Replace one-zone power supply or switch S1. (1) To remove one-zone Monitor Cabinet power supply, unlock and open cabinet door.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
9. (Cont)	c. (Cont)	Unlatch and swing out mounting rack. Remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack. Disconnect battery terminal leads. Slide batteries to the right and remove from cabinet. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws. Slide power supply to the right and remove from cabinet. (2) Remove screws securing cover of power supply and remove cover. (3) Set multimeter to ohms. With switch S1 set to POWER OFF, connect meter leads to S1-3 and S1-4 (black wires). Meter should indicate 100,000 ohms or more. If meter does not indicate 100,000 ohms or more, replace power supply. (4) Set switch S1 to POWER ON. Meter should indicate 0 ohms. If meter does not indicate 0 ohms. If meter does not indicate 0 ohms, replace power supply. (5) If meter indicates switch S1 is good, replace power supply.
ı	J 5-11	•

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
9. (Cont)	c. (Cont)	(6) To remove switch S1 from power supply, tag, identify, and disconnect wires on switch S1. Remove nut securing switch to chassis and remove switch.
		(7) To install new switch position switch and secure with nut. Connect wires on switch terminals. Install cover and secure with screws.
		(8) To install one-zone Monitor Cabinet power supply, position power supply in cabinet and install nuts on captive screws. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position batteries in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Turn on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cabinet door.
		b. Replace five-zone Monitor Cabinet power supply or switch S1.
		(1) To remove five-zone Monitor Cabinet power supply, un- lock and open cabinet door. Unlatch and swing out mounting rack. Discon- nect battery terminal leads
I	5-12	

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
9. (Cont)	c. (Cont)	and remove battery. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws that secure power supply in cabinet. Lift power supply up and to the right and remove from cabinet. (2) Remove screws securing cover of power supply and remove cover. (3) Set multimeter to ohms. With switch S1 set to POWER OFF, connect meter leads to S1-3 and S1-4 (black wires). Meter should indicate 100,000 ohms or more. If meter does not indicate 100,000 ohms or more, replace power supply. (4) Set switch S1 to POWER ON. Meter should indicate 0 ohms. If meter does not indicate 0 ohms, replace power supply. (5) If meter indicates switch S1 is good, replace power supply.
		power supply, tag, identify, and disconnect wires on switch S1. Remove nut securing switch to chassis and remove switch.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
9. (Cont)	c. (Cont)	(7) To install new switch position, switch and secure with nut. Connect wires of switch terminals. Install cover and secure with screws.
		(8) To reinstall five-zone Monitor Cabinet power supply, position power supply in cabinet and install four mounting nuts. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position battery in cabinet and connect terminal leads. Close and latch mounting rack. Close and lock cabinet door. c. Replace twenty-five-zone power supply or switch S1. CAUTION Twenty-five-zone power supply is heavy. Use caution when lifting. (1) To remove twenty-five-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out the two mounting racks just above power supply. Remove nuts from captive screws that secure power supply in cabinet. Slide power supply forward. Tag and disconnect wires from TB3. Remove cable clamp from power supply cover. Remove

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause		Corrective Action
9. (Cont)	c. (Cont)		screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and discon- nect all interconnecting wires from TB1 and TB2. Lift power supply at left end and lower right end off of ledge. Remove power supply from cabinet.
		(2)	Remove screws securing cover of power supply and remove cover.
		(3)	Set multimeter to ohms. With switch S1 set to POWER OFF, connect meter leads to S1-3 and S1-4 (black wires). Meter should indicate 100,000 ohms or more. If meter does not indicate 100,000 ohms or more, replace power supply.
		(4)	Set switch S1 to POWER ON. Meter should indicate 0 ohms. If meter does not indicate 0 ohms, replace power supply.
		(5)	If meter indicates switch S1 is good, replace power supply.
		(6)	To remove switch S1 from power supply, tag, identify, and disconnect wires on switch S1. Remove nut securing switch to chassis and remove switch.
		(7)	To install new switch, position switch and secure with nut. Connect wires on switch terminals. Install cover and secure with screws.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
9. (Cont)	c. (Cont)	(8) To install twenty-five-zone Monitor Cabinet power supply, position power sup- ply in cabinet. Connect all interconnecting wires to TB1 and TB2. Position ter- minal board cover on TB1. Install cable clamp on power supply cover. Con- nect interconnecting wires to TB3. Install mounting screws. Close and latch mounting racks. Close and lock cabinet door.
10. Signal Module lights flashing and audible signal device sounding. Audible signal device can not be reset. AC power is present at TB1.	a. Defective power supply.	Set multimeter to ac volts. Remove monitor module from one-zone Monitor Cabinet to reach TB3. Connect meter lead to TB3-1 and TB3-5. Meter should indicate 22 vac. If meter does not indicate 22 vac, replace power supply. (1) To remove one-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Tag and remove wires from terminal board TB1, located on back of Signal Module. Remove the mounting screws and remove Signal Module. Remove the mounting screws that hold Status Monitor Module in position. Remove module from mounting rack. Disconnect battery terminal leads. Slide batteries to the right and remove two

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
Trouble 10. (Cont)	a. (Cont)	screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws. Slide power supply to the right and remove from cabinet. (2) To install new one-zone Monitor Cabinet power supply in cabinet and install nuts on captive screws. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position batteries in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Position Signal Module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Turn on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cabinet door.
		door. Unlatch and swing out mounting rack. Position power supply switch S1 to POWER OFF. Turn

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
10. (Cont)	a. (Cont)	external ac power by turning off circuit breaker. Disconnect battery terminal leads and remove battery. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws that secure power supply in cabinet. Lift power supply in cabinet. Lift power supply in cabinet and install mounting nuts. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position battery in cabinet and connect terminal leads. Turn on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cab cabinet door. CAUTION Twenty-five-zone power supply, unlock and open cabinet door. Unlatch and swing out the two mounting racks just above power

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
10. (Cont)	a. (Cont)	supply. Position power supply switch S1 to POW-ER OFF. Turn off external ac power by turning off circuit breaker. Remove nuts from captive screws that secure power supply in cabinet. Slide power supply forward. Tag and disconnect wires from TB3. Remove cable clamp from power supply cover. Remove cable clamp from power supply cover. Remove screws and lock washers and remove terminal from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1 and TB2. Lift the power supply at left end and lower right end off of ledge. Remove power supply from cabinet. (6) To install new twenty-fivezone Monitor Cabinet power supply, position power supply in cabinet. Connect all interconnecting wires to TB1 and TB2. Position terminal board cover on TB1. Install cable clamp on power supply cover. Connect interconnecting wires to TB3. Install mounting screws. Turn on external ac power by turning on circuit breaker. Close and latch mounting racks. Close and lock cabinet door.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
10. (Cont)	b. Defective intercon- necting wiring.	Connect positive meter lead to TB1-2 and negative meter lead to TB1-4 on Signal Module. Meter should indicate 22 vac. If meter does not indicate 22 vac, check interconnecting wiring for breaks or loose connections.
11. Signal Module lights flashing and audible signal device silent.	Defective intercon- necting wiring.	Set multimeter to dc volts. Connect positive meter lead to audible signal device DS1 (+) and negative meter lead to DS1 (-). Meter should indicate 19.5 vdc. If meter does not indicate 19.5 vdc, check wiring from logic subassembly printed wiring board to DS1. Repair or replace defective wiring.
	b. Defective audible signal device DS1 on Signal Module.	If meter indicates 19.5 vdc, connect a jumper between TB1-4 on Signal Module and DS1 (-). Alarm should be heard. If alarm is not heard, replace DS1. If alarm is heard, replace Signal Module. (1) To remove DS1, tag wires, unscrew terminal screws, and disconnect wires from DS1. Unscrew knurled nut and and slide DS1 from Signal Module. (2) To install new DS1, position DS1 in Signal Module and install knurled nut. Connect wires to terminals and install terminal screws. Close and lock Monitor Cabinet door. (3) To remove Signal Module, tag and remove wires from terminal board TB1, located on back of Signal Module. Remove the mounting screws and remove Signal Module.
	5-20	

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
11. (Cont)	b. (Cont)	(4) To install new Signal Module, position module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Close and latch mounting rack. Close and lock cabinet door.
12. Status Monitor Module lamps flashing, Signal device silent.	Defective Status Monitor Module.	a. Connect jumper from terminal 1 to terminal 4 on Signal Module Terminal board.
		 b. If audible signal device sounds, Status Monitor Module is defective.
		c. Remove Status Monitor Module from Monitor Cabinet. Unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swing-out rack. Remove screws that secure Status Monitor Module to rack and remove module through front of rack.
		d. Install new Status Monitor Module in swingout rack and secure with screws. Secure swingout rack. Turn on switch S1 on power supply.
13. Audible signal device sounding and Signal Module lights not flashing. board.	Defective logic subassembly PC board.	Set multimeter to ac volts. Connect meter to TB1-2 and 4 on Signal Module. If meter indicates 0 vac, replace logic subassembly PC
		(1) To remove logic subassembly PC board, tag and remove wires from terminal board TB1 located on back of Signal Module. Remove screws holding it in the

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
13. (Cont)		rack and pull module out of rack. Place Sigrial Module on bench. Remove screws and lock washers from Signal Module cover and remove cover. Tag wires and use a soldering iron of 50 watts maximum to disconnect wires from logic subassembly PC board. Remove mounting screws and lock washers. Remove logic subassembly PC board from Signal Module. (2) To install new logic subassembly PC board in Signal Module and install mounting screws and lock washers. Use a soldering iron of 50 watts maximum to solder wires to PC board. Position Signal Module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Close and latch mounting rack. Close and lock Monitor Cabinet door.
14. LAMP TEST or ACKNOWLEDGE cannot be initiated on Signal Module.	Defective switch S1 on Signal Module.	 a. Turn off switch S1 on power supply. Set multimeter to ohms. Connect meter leads to TB1-4 (Signal Module) and S1-2 (center terminal). Meter should indicate 0 ohms. If meter does not indicate 0 ohms, replace switch S1. b. Connect meter leads to S1-2 and S1-1, then S1-2 and S1-3. Both meter indications should be 100,000 ohms or more. If meter does not indicate 100,000 ohms, replace switch S1.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
14. (Cont)	Defective switch S1 on Signal Module (Cont).	c. Connect meter leads to S1-2 and S1-1. Hold switch S1 in ACKNOWLEDGE position. Meter should indicate 0 ohms. Connect meter leads to S1-2 S1-3. Hold switch S1 in LAMP TEST position. Meter should indicate 0 ohms in positions, replace switch S1.
		(1) To remove switch Si, remove screws that secure Signal Module to rack. Tag and disconnect wires from TB1. Remove hex nut and washer that secure switch to front panel. Push switch through panel. Tag wires and use a soldering iron of 50 watts maximum to remove them from switch terminals.
		(2) To install new switch S1, use a soldering iron of 50 watts maximum to solder wires to switch terminals. Place locating washer over threaded portion of switch. Insert switch through hole in panel. Ensure that tang on washer goes into small hole in panel. Place washer and hex nut over switch from front of panel. Tighten nut to secure. Connect wires to TB1. Place Signal Module in mounting rack. Insert screws and tighten to secure.
15. Signal Module inoperable. Indicator lamps off on Signal Module.	a. Blown fuse F1 on Signal Module.	Replace fuse. If fuse blows again, replace Signal Module. (1) To remove Signal Module, tag and remove wires from terminal board TB1,

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
15. (Cont)	a. (Cont)	located on back of Signal module. Remove the mounting screws and remove Signal Module. (2) To install new Signal Module, position module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Close and lock cabinet door.
	b. Defective power supply.	a. Set multimeter to dc volts. Connect meter leads to the following points in the power supply. Meter should indicate 20 vdc at each point. Power (+) (-) Supply Lead Lead 1 Zone TB2-2 TB2-1 1 Zone TB2-2 TB2-3 5 Zone TB2-2 TB2-1 5 Zone TB2-2 TB2-1 5 Zone TB2-2 TB2-1 25 Zone TB2-4 TB2-3 25 Zone TB2-4 TB2-3 25 Zone TB2-6 TB2-5 b. If meter does not indicate 20 vdc at each point, replace power supply. (1) To remove one-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Tag and remove wires from terminal board TB1, located on back of Signal Module.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause		Corrective Action
15. (Cont)	b. (Cont)	(2)	Remove the mounting screws that hold Status Monitor Module in position. Remove module from mounting rack. Disconnect battery terminal leads. Slide batteries to the right and remove from cabinet. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws. Slide power supply to the right and remove from cabinet. To install new one-zone Monitor Cabinet power supply, position power supply in cabinet and install nuts on captive screws. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position batteries in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Connect wires to terminal board TB1. Turn on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cabinet door. To remove five-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
15. (Cont)	b. (Cont)	and swing out mounting rack. Position power supply switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Disconnect battery terminal leads and remove battery. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws that secure power supply in cabinet. Lift power supply up and to the right and remove from cabinet. (4) To install new five-zone Monitor Cabinet power supply in cabinet and install mounting nuts. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position battery in cabinet and connect terminal leads. Turn on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cabinet door. CAUTION Twenty-five-zone power supply is heavy. Use caution when lifting.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
15. (Cont)	b. (Cont)	 (5) To remove twenty-five-zone power supply, unlock and open cabinet door. Unlatch and swing out two mounting racks just above power supply. Position power supply switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Remove nuts from captive screws that secure power supply in cabinet. Slide power supply forward. Tag and disconnect wires from TB3. Remove cable clamp from power supply cover. Remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1 and TB2. Lift power supply at left end and lower right end off of ledge. Remove power supply from cabinet. (6) To install new twenty-five-zone Monitor Cabinet power supply in cabinet. Connect all interconnecting wires to TB1 and TB2. Position terminal board cover on TB1. Install cable clamp on power supply cover. Connect interconnecting wires to TB3. Install mounting screws. Turn on external ac power by turning on circuit breaker. Close and latch mounting racks. Close and lock cabinet door.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
15. (Cont)	c. Defective interconnecting wiring.	 a. Ensure power supply is off. Set multimeter to ohms. Remove Status Monitor Module from one zone Monitor Cabinet for access to TB3. Connect meter leads to TB1-4 on Signal Module and TB3-7 on power supply, then to TB1-3 on Signal Module and TB3-3 on power supply. Both meter indications should be 0 ohms. b. If meter does not indicate 0 ohms,
		repair or replace defective wire.
16. Signal Module inoperable and 20 vdc is present.	Defective Signal Module.	 a. Set multimeter to dc volts. Connect positive meter lead to emitter of Q7 on logic subassembly PC and negative meter lead to TB1-4 on Signal Module. Meter should indicate 6.35 ±0.25 vdc.
		 b. If meter does not indicate 6.35 ±0.25 vdc, replace Signal Module.
		(1) To remove Signal Module, tag and remove wires from ter- minal board TB1, located on back of Signal Module. Remove the mounting screws and remove Signal Module.
		(2) To install new Signal Module, position module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Close and latch mounting rack. Close and lock cabinet door.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
17. Audible signal device does not sound when lamps are flashing on Status Monitor Module.	a. Defective interconnecting wiring.	Set multimeter to dc volts. Connect positive meter lead to audible signal device DS1 (+) and negative meter lead to DS1 (-). Meter indicate 19.5 vdc. If meter does not indicate 19.5 vdc, check wiring from logic subassembly printed wiring board to DS1. Repair or replace defective wiring.
	b. Defective audible signal device DS1 on Signal Module.	If meter indicates 19.5 vdc, connect a jumper wire between TB1-4 on Signal Module an DS1 (-). Alarm should be heard. If alarm is not heard, replace DS1. If alarm is heard, replace Signal Module. (1) To remove DS1, unlock and open Monitor Cabinet door. Unlatch and swing out mounting rack. Tag wires, unscrew terminal screws, and disconnect wires from DS1. Unscrew knurled nut and slide DS1 from Signal Module. (2) To install new DS1, position DS1 in Signal Module and install knurled nut. Connect wires to terminals and install terminal screws. Close and latch mounting rack. Close and lock Monitor Cabinet door. (3) To remove Signal Module, unlock and open Monitor Cabinet door. Unlatch and swing out mounting rack. Tag and remove wires from terminal board TB1, located on back of Signal Module. Remove the mounting screws and remove Signal Module.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
17. (Cont)	b. (Cont)	(4) To install new Signal Module, Position module in mount- ing rack and install mount- ing screws. Connect wires to terminal board TB1. Close and latch mounting rack. Close and lock cab- inet door.
	c. Loose connections or broken wires.	Ensure power is off. Set multimeter to ohms. Connect one meter lead to pin 14 on each connector, J1 through J25 on Monitor Cabinet. Any broken wire or bad connection should be repaired. All pins numbered 14 are connected in series and a break may affect one or more modules.
18. LAMP TEST initiated and lamps do not	Loose or broken wire on switch.	Repair wire or connection.
light on Status Monitor Module.	b. Defective switch S2.	a. Turn off switch S1 on power supply. Set multimeter to ohms. Connect meter leads to wired terminals on switch. Meter should indicate 100,000 ohms or more.
		 b. If meter does not indicate 100,000 ohms or more, replace switch S2.
		Momentarily depress switch to LAMP TEST. Meter should indicate 0 ohms.
		d. If meter does not indicate 0 ohms, replace switch S2.
		(1) To remove switch S2, remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack and place on bench. Remove

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
18. (Cont)	b. (Cont)	hex nut from switch. Pull switch to the rear. Tag wires and use a soldering iron of 50 watts maximum to disconnect wires from switch. Remove switch. (2) To install a new switch S2, use a soldering iron of 50 watts maximum to connect wire to switch. Position switch in front of panel with locating washer next to panel and internal tooth lock washer next to switch. Position Status Monitor Module in mounting rack and install mounting screws. Close and latch mounting rack. Close and lock cabinet door.
	c. Defective Status Monitor Module	a. Unlock and open Monitor Cabinet and turn off switch S1 on power supply. Release swingout rack. Remove screws that secure status monitor module to rack and remove module through front of rack. Turn on switch S1 on power supply.
		 b. Set multimeter to dc volts. Connect positive lead to pin 9 and negative lead to pin 10 on connector at rear of swing- out rack. The rear connector is connector J1 on one-zone Monitor Cabinet, connector J1 through J5 on five-zone Monitor Cabinet, or J1 through J25 on twenty-five- zone Monitor Cabinet.
		c. Meter should indicate 20 ±2 vdc. If this indication is correct, replace Status Monitor Module.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
18. (Cont)	c. (Cont)	d. Install new Status Monitor Module in swingout rack and secure with screws. Secure swing-out rack. Turn on switch S1 on power supply.
19. False alarms.	Broken wire or loose connection.	Set multimeter to ohms. Connect meter leads to the following points. Meter indications are given in the chart.
		NOTE
		All channels on all cabinets are wired identically, therefore only one channel is shown. If troubleshooting fivezone Monitor Cabinet, connect meter leads from TB-A through TB-E to J1 through J5. If troubleshooting twenty-fivezone Monitor Cabinet, connect meter leads from TB-A through TB-B to J1 through J25. One-zxone Monitor Cabinet
		To To Term Nos. Pin Nos.
		TB-A J1 1I 1 1L 2 2 3 3 4
		b. If meter does not indicate 0 ohms replace Status Monitor Mod- ule.
		(1) To remove Status Monitor Module, remove mounting screws that hold Status

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
19. (Cont)	Broken wire or loose connection. (Cont)	Monitor Module in position. Remove module from mounting rack. (2) To install new Status Monitor Module, position module in rack and install mounting screws. Close and latch mounting rack. Close and lock cabinet door.
20. System will not operate on dc power	a. Defective battery	Do not short battery terminals. Replace battery. (1) To remove one-zone Monitor Cabinet battery, position power supply switch S1 to POWER OFF. Remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack. Disconnect battery terminal leads. Slide battery to the right and remove from cabinet. (2) To install new one-zone Monitor Cabinet battery, position battery in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Close and latch mounting

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
20. (Cont)	a. (Cont)	rack. Close and lock cabinet door. NOTE When ac power is restored, check battery charging circuit.
	b. Defective power supply.	 a. Remove wire terminals from battery. Set multimeter to dc volts. Connect positive meter lead to (+) wire terminal and negative meter lead to (-) wire terminal. Meter should indicate 28 ±2 vdc. b. If meter indicates less than 26 vdc, or more than 30 vdc, replace power supply. (1) To remove one-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power switch \$1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Tag and remove wires from terminal board TB1, located on back of Signal Module. Remove the mounting screws and remove Signal Module. Remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack. Disconnect battery terminal leads. Slide batteries to the right and remove screws and remove terminal board cover from TB1 on power

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
20. (Cont)	b. (Cont)	supply. Tag and discon- nect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws. Slide pow- er supply to the right and remove from cabinet.
		(2) To install new one-zone Monitor Cabinet power supply, position power supply in cabinet and install nuts on captive screws. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position batteries in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Position Signal Module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Turn on external ac power by turning on circuit breaker. Close and lock cabinet door.
		(3) To remove five-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power supply switch S1 to POWER OFF. Turn external ac power by turning off circuit breaker. Disconnect battery terminal leads and remove battery.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
20. (Cont)	b. (Cont)	Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws that secure power supply in cabinet. Lift power supply up and to the right and remove from cabinet. (4) To install new five-zone Monitor Cabinet power supply, position power supply in cabinet and install mounting nuts. Connect all interconnecting wires to TB1, TB2, and TB3. Position-terminal board cover on TB1 and install mounting screws and lock washers. Position battery in cabinet and connect terminal leads. Turin on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cabinet door. CAUTION Twenty-five-zone power supply is heavy. Use caution when lifting. (5) To remove twenty-five-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out the two mounting racks just above power supply. Position power supply switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Remove

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
20. (Cont)	b. (Cont)	nuts from captive screws that secure power supply in cabinet. Slide power supply in cabinet. Slide power supply forward. Tag and disconnect wires from TB3. Remove cable clamp from power supply cover. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1 and TB2. Lift power supply at left end and lower right end and lower right end and lower right off of ledge. Remove power supply from cabinet. (6) To install new twenty-fivezone Monitor Cabinet power supply in cabinet. Connect all interconnecting wires to TB1 and TB2. Position terminal board cover on TB1. Install cable clamp on power supply cover. Connect interconnecting wires to TB3. Install mounting screws. Turn on external ac power by turning on circuit breaker. Close and latch mounting racks. Close and lock cabinet door. c. If meter indicates more than 30 vdc, replace battery. (1) To remove one-zone Monitor Cabinet battery, position power supply switch S1 to POWER OFF. Remove mounting screws that hold Status Monitor Module in

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
20. (Cont)	b. (Cont)	position. Remove module from mounting rack. Disconnect battery terminal leads. Slide battery to the right and remove from cabinet.
		(2) To install new one-zone Monitor Cabinet battery, position battery in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Close and latch mounting rack. Close and lock cabinet door.
		(3) To remove five-zone Monitor Cabinet battery, position power supply switch S1 to POWER OFF. Disconnect battery terminal leads and remove battery.
		(4) To install new five-zone Monitor Cabinet battery, position battery in cabinet and connect terminal leads. Close and latch mounting rack. Close and lock cabinet door.
		(5) To remove twenty-five-zone Monitor Cabinet battery, position power supply switch S1 to POWER OFF. Disconnect battery leads. Lift battery and remove from cabinet.
		(6) To install new twenty-five- zone Monitor Cabinet bat- tery, position battery in

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
20. (Cont)	b. (Cont)	cabinet and connect termi- nal leads. Close and lock cabinet door.
21. Percolating noises or fumes coming from MC.	Loss of regulation from 27 vdc charge supply.	Open door, wait two minutes and then turn off switch S1 on power supply. Replace power supply. Replace power supply, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Tag and remove wires from terminal board TB1, located on back of Signal Module. Remove the mounting screws and remove Signal Module. Remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack. Disconnect battery terminal leads. Slide batteries to the right and remove from cabinet. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws. Slide power supply to the right and remove from cabinet.
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Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
	s of regulation on 27 vdc charge supply (Cont).	 (2) To install new one-zone Monitor Cabinet power supply, position power supply in cabinet and install nuts on captive screws. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position batteries in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Position Signal Module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Turn on external ac power by turning on circuit breaker. Close and lock cabinet door. (3) To remove five-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power supply switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Disconnect battery terminal leads and remove battery. Remove screws and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws that secure power

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
21. (Cont)	Loss of regulation on 27 vdc charge supply (Cont).	supply in cabinet. Lift power supply up and to the right and remove from cabinet.
		(4) To install new five-zone Monitor Cabinet power supply, position power supply in cabinet and install mounting nuts. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position battery in cabinet and connect terminal leads. Turn on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cabinet door. CAUTION Twenty-five-zone power supply is heavy. Use caution when lifting.
		Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out the two mount-racks just above power supply. Position power supply switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Remove nuts from captive screws that secure power supply in cabinet. Slide power supply forward. Tag and disconnect wires from TB3. Remove

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause		Corrective Action
21. (Cont)	Loss of regulation on 27 vdc charge supply (Cont).	(6)	cable clamp from power supply cover. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1 and TB2. Lift power supply at left end and lower right end off of ledge. Remove power supply from cabinet. To install new twenty-fivezone Monitor Cabinet power supply, position power supply in cabinet. Connect all interconnecting wires to TB1 and TB2. Position terminal board cover on TB1. Install cable clamp on power supply cover. Connect interconnecting wires to TB3. Install mounting screws. Turn on external ac power by turning on circuit breaker. Close and latch mounting racks. Close and lock cabinet door.

WARNING

HIGH VOLTAGE is used in the operation of this equipment. DEATH ON CONTACT may result if personnel fail to observe safety precautions. Learn areas containing high voltage in each piece of equipment. Be careful not to contact high-voltage connections when installing or operating this equipment. Never work on electronic equipment unless there is another person nearby who is familiar with the hazards of the equipment and competent in administering first aid.

h. Refer to figures 5-1, 5-2, and 5-3 for all test points found in troubleshooting table 5-1. Figure 5-4 is the wiring diagram for the one-zone Monitor Cabinet, and figures FO-1 and FO-2 are wiring diagrams for the five and twenty-five-zone Monitor Cabinets. Step-by-step troubleshooting procedures, including Trouble, Probable cause, and Corrective action, are listed in table 5-1.

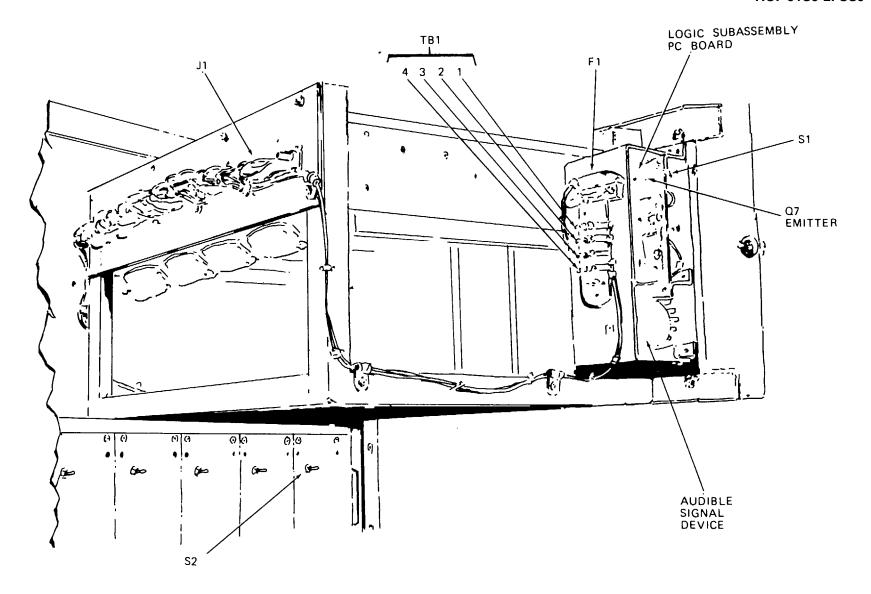


Figure 5-1. Monitor Cabinet with Troubleshooting Test Points (Typical)

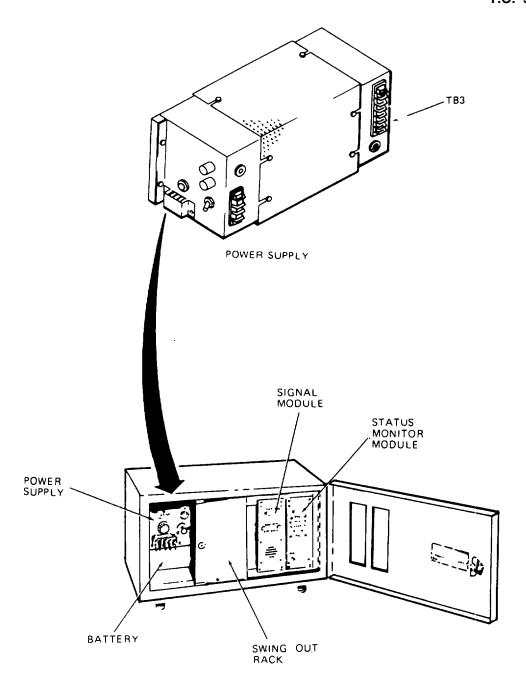


Figure 5-2. Power Supply (one-zone) with Troubleshooting Test Points (Typical)

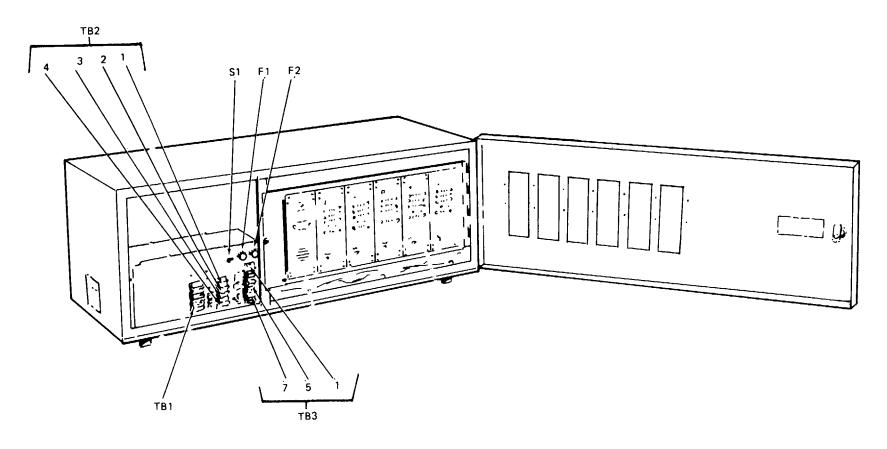


Figure 5-3. Power Supply (five zone) with Troubleshooting Test Points (Typical)

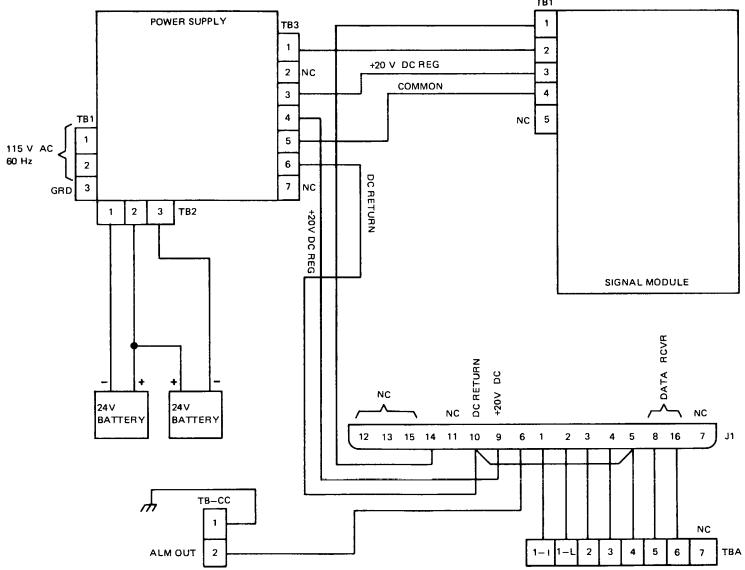


Figure 5-4. One-zone Monitor Cabinet Wiring Diagram

Section III. GENERAL MAINTENANCE

5-4. MAINTENANCE ACTION. The extent of direct and general support maintenance is governed by the Maintenance Allocation Chart (MAC), Appendix B. The MAC provides for on-site test and replacement of batteries, Signal Modules, Sta- tus Monitor Modules, connectors, power supplies, fuses, lamps, and switches. The MAC also provides for repair of the Signal Module by on site test and replacement of the logic subassembly PC board and the audible signal device. The MAC provides for inspection and replacement of batteries and lamps.

Section IV. REMOVAL AND REPLACEMENT OF MAJOR COMPONENTS AND ASSEMBLIES

5-5. REMOVAL AND INSTALLATION PROCEDURES.

- a. To remove one-zone Monitor Cabinet battery, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power supply switch S1 to POWER OFF. Remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack. Disconnect battery terminal leads. Slide battery to the right and remove from cabinet.
- b. To install new one-zone Monitor Cabinet battery, position battery in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Close and latch mounting rack. Close and lock the cabinet door.
- c. To remove five-zone Monitor Cabinet battery, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power supply switch S1 to POWER OFF. Disconnect battery terminal leads and remove battery.
- d. To install new five-zone Monitor Cabinet battery, position battery in cabinet and connect terminal leads. Close and latch mounting rack. Close and lock cabinet door.
- e. To remove twenty-five-zone Monitor Cabinet battery, unlock and open cabinet door. Position power supply switch S1 to POWER OFF. Disconnect battery leads. Lift battery and remove from cabinet.
- f. To install new twenty-five-zone Monitor Cabinet battery, position battery in cabinet and connect terminal leads. Close and lock cabinet door.
- g. To remove Signal Module, unlock and open Monitor Cabinet door. Unlatch and swing out mounting rack. Tag and remove wires from terminal boards TB1, located on back of Signal Module. Remove the mounting screws and remove Signal Module.
- h. To install new Signal Module, position module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Close and latch mounting rack. Close and lock cabinet door.
- i. To remove connector, unlock and open cabinet door. Unlatch and swing out mounting rack. Remove mounting screws that hold Status Monitor Module in position. Remove module from the mounting rack. Tag wires and use a soldering iron of 50 watts maximum to disconnect wires from connector.

Remove mounting screws and remove connector from mounting rack.

- j. To install new connector, position connector in mounting rack and install mounting screws. Use a soldering iron of 50 watts maximum to solder wires to connector. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Close and latch mounting rack. Close and lock cabinet door.
- k. To remove one-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Tag and remove wires from terminal board TB1, located on back of Signal Module. Remove the mounting screws and remove Signal Module. Remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack. Disconnect battery terminal leads. Slide batteries to the right and remove from cabinet. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws. Slide power supply to the right and remove from cabinet.
 - (1) To remove switch S1 from power supply, remove screws that secure cover and remove cover. Tag, identify and disconnect wires on switch S1. Remove nut securing switch and remove switch.
 - (2) To install new switch, insert new switch and secure with nut. Connect wires to switch. Install cover and secure with screws.
- I. To install new one-zone Monitor Cabinet power supply, position power supply in cabinet and install nuts on captive screws. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lockwashers. Position batteries in cabinet and connect terminal leads. Position Status Monitor Module in mounting rack (ensure that connector is properly engaged) and install mounting screws. Position Signal Module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Turn on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cabinet door.
- m. To remove five-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out mounting rack. Position power supply switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Disconnect battery terminal leads and remove battery. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1, TB2, and TB3. Remove nuts from captive screws that secure power supply in cabinet. Lift power supply up and to the right and remove from cabinet.
 - (1) To remove switch S1 from power supply, remove screws that secure cover and remove cover. Tag, identify and disconnect wires on switch S1. Remove nut securing switch and remove switch.
 - (2) To install new switch, insert new switch and secure with nut. Connect wires to switch. Install cover and secure with screws.
- n. To install new five-zone Monitor Cabinet power supply, position power supply in the cabinet and install mounting nuts. Connect all interconnecting wires to TB1, TB2, and TB3. Position terminal board cover on TB1 and install mounting screws and lock washers. Position battery in cabinet and connect terminal leads. Turn on external ac power by turning on circuit breaker. Close and latch mounting rack. Close and lock cabinet door.

CAUTION

Twenty-five-zone power supply is heavy. Use caution when lifting.

- o. To remove twenty-five-zone Monitor Cabinet power supply, unlock and open cabinet door. Unlatch and swing out the mounting racks just above power supply. Position power supply switch S1 to POWER OFF. Turn off external ac power by turning off circuit breaker. Remove nuts from captive screws that secure power supply in cabinet. Slide power supply forward. Tag and disconnect wires from TB3. Remove cable clamps from power supply cover. Remove screws and lock washers and remove terminal board cover from TB1 on power supply. Tag and disconnect all interconnecting wires from TB1 and TB2. Lift the power supply at left end and lower right end off of ledge. Remove power supply from cabinet.
 - (1) To remove switch S1 from power supply, remove screws that secure cover and remove cover. Tag, identify and disconnect wires on switch S1. Remove nut securing switch and remove switch.
 - (2) To install new switch, insert new switch and secure with nut. Connect wires to switch. Install cover and secure with screws.
- p. To install new twenty-five-zone Monitor Cabinet power supply, position power supply in cabinet. Connect all interconnecting wires to TB1 and TB2. Position terminal board cover on TB1. Install cable clamps on power supply cover. Connect interconnecting wires to TB3. Install mounting screws. Turn on external ac power by turning on circuit breaker. Close and latch mounting racks. Close and lock cabinet door.
- q. To remove Status Monitor Module, unlock and open cabinet door. Unlatch and swing out the mounting rack. Remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack.
- r. To install new Status Monitor Module, position module in rack and install mounting screws. Close and latch mounting rack. Close and lock cabinet door.
- s. To remove Status Monitor Module switch S1 or S2, unlock and open cabinet door. Unlatch and swing out mounting rack. Remove mounting screws that hold Status Monitor Module in position. Remove module from mounting rack and place on bench. Remove mounting screws and remove side cover. Remove hex nut from switch. Pull switch to the rear. Tag wires and use a soldering iron of 50 watts maximum to disconnect wires from switch. Remove switch.
- t. To install new Status Monitor Module switch S1 or S2, use a soldering iron of 50 watts maximum to connect wires to switch. Position switch in front panel with locating washer next to panel and internal tooth lock washer next to switch. Install hex nut on switch. Position side cover on module and install mounting screws. Position Status Monitor Module in mounting rack and install mounting screws. Close and latch mounting rack. Close and lock cabinet door.
- u. After replacement of major components or assemblies, test the MC for proper operation as follows.
 - (1) Turn mode switch on CU to ACCESS, open CU door, and pull Tamper Alarm Switch (TAS) plunger all the way out. Turn mode switch to TEST/RESET and then to SECURE. Monitor cabinet should indicate a secure condition.

- (2) If an Ultrasonic Motion Sensor (UMS) is installed near the CU, ensure that it does not cause an alarm to be activated when a secure condition is desired. Create an alarm condition (by activating a nearby sensor). After expiration of the time delay period, the Monitor Cabinet should indicate an alarm condition.
- (3) Remove cause of alarm, turn mode switch to TEST/RESET and then to SECURE. At the Monitor Cabinet, go to the Status Monitor Module with alarm lights flashing and move reset switch to ACK and then to RESET. Monitor Cabinet should indicate a secure condition.
- (4) Turn mode switch to ACCESS. Monitor Cabinet should indicate an access condition.
- (5) Remove ac power fuse F1 from CU power supply. AC POWER indicator lights on Monitor Cabinet should change from on-steady to flashing, and the audible signal device should sound.
- (6) Move reset switch on Status Monitor to ACK. Indicator lights should go out and audible signal device should be silenced.
- (7) Reinstall ac power fuse F1 in CU power supply. AC POWER indicator lights should flash and the audible signal device should sound.
- (8) Move reset switch on Status Monitor Module to ACK. AC POWER indicator lights should change from flashing to on steady and the audible signal device should be silenced.
- (9) Remove ac power fuse F2 from Monitor Cabinet power supply. Signal Module lights should change from on-steady to flashing and the audible signal device should sound.
- (10) Momentarily depress ACKNOWLEDGE switch. Signal Module lights should go out and the audible signal device should be silenced.
- (11) Reinstall ac power fuse F1 in Monitor Cabinet power supply. Signal Module lights should flash and the audible signal device should sound.
- (12) Momentarily depress ACKNOWLEDGE switch. Signal Module lights should change from flashing to onsteady and the audible signal device should be silenced.

CHAPTER 6

REPAIR OF SIGNAL MODULE

- **6-1. REPAIR OF SIGNAL MODULE.** Repair of the Signal Module is restricted to removal and replacement of the audible signal device and the logic subassembly printed circuit board.
 - a. To remove the audible signal device, unlock and open the Monitor Cabinet door. Unlatch and swing out the mounting rack. Tag wires, unscrew terminal screws, and disconnect wires from audible signal device. Unscrew knurled nut and slide audible signal device from Signal Module.
 - b. To install new audible signal device, position audible signal device in Signal Module. Screw knurled nut on signal device. Connect wires to terminals and install terminal screws. Close and latch mounting rack. Close and lock Monitor Cabinet door.
 - c. To remove the logic subassembly printed wiring board, unlock and open the Monitor Cabinet door. Unlatch and swing out the mounting rack. Tag and remove wires from terminal board TB1 located on back of signal module. Remove the screws holding it in the rack and pull the module out of the rack. Place signal module on the bench. Remove four screws and lock washers from the signal module cover and remove the signal module cover. Tag wires and use a soldering iron of 50 watts maximum to disconnect wires from logic subassembly PC board. Remove mounting screws and lock washers. Remove logic subassembly PC board from Signal Module.
 - d. To install new logic subassembly PC board, position board in Signal Module and install mounting screws and lock washers. Use a soldering iron of 50 watts maximum to solder wires to printed wiring board. Position Signal Module cover and install screws and lock washers. Position Signal Module in mounting rack and install mounting screws. Connect wires to terminal board TB1. Close and latch mounting rack. Close and lock Monitor Cabinet door.

6-2. CHECKOUT PROCEDURE.

- a. After repair, test Signal Module for proper operation.
- b. Interrupt ac power by removing fuse F2 from Monitor Control power supply. Module lamps should be flashing and audible signal should sound. Momentarily depress ACKNOWLEDGE switch. The lamps should be extinguished and the audible signal should be silenced. Restore ac power by reinstalling fuse F2 in Monitor Control Power Supply. Signal Module lamps should be flashing and audible signal should sound. Momentarily depress ACKNOWLEDGE switch. The lamps should be on-steady and the audible signal device should be silenced.

APPENDIX A

REFERENCES

1.	DEMOLITION TM 750-244-3	Procedures for Destruction of Equipment to Prevent Enemy Use
2.	FIRE PROTECTION TB5-4200-200-10	Hand Portable Fire Extinguishers Approved for Army Use
3.	MAINTENANCE DA PAM 738-750	The Army Maintenance Management System
4.	TRI-SERVICE MANUALS DMWR 5-6350-264 NAVELEX EE181-AA-MMD-101/E121 J-SIIDS MWR AIR FORCE T.O. 31S9-4-1-213	Depot Maintenance Work Requirement
	TM 5-6350-264-14-1 NAVELEX EE181-AA-INM-020/E121 J-SIIDS INS AIR FORCE T.O. 31S9-4-1-201	Installation, Operation and Checkout Procedures
	TM 5-6350-264-14&P-2 NAVELEX EE181-AA-OMI-030/E121 RT1161 M9443 AIR FORCE T.O. 31S9-2FSS9-1-2	Transceiver, Ultrasonic Signal and Processor, Ultrasonic Motion Signal
	TM 5-6350-264-14&P-3 NAVELEX EE181-AA-OMI-040/E121 R1860 M9443 AIR FORCE T.O. 31S9-2FSS9-1-3	Receiver Passive Signal, Ultrasonic and Processor, Passive Signal, Ultrasonic
	TM 5-6350-264-14&P-4 NAVELEX EE181-AA-OMI-050/E 121 DT546 M9442 AIR FORCE T.O. 31S9-2FSS9-1-4	Detector, Vibration Signal and Processor, Vibration Signal
	TM 5-6350-264-14&P-5 NAVELEX EE 181-AA-OMI-060/E121 SA-1955 AIR FORCE T.O. 31S9-2FSS9-1-5	Switch, Balanced Magnetic
	TM 5-6350-264-14&P-6 NAVELEX EE181-AA-OMI-070/E121 DT-545 AIR FORCE T.O. 31S9-2FSS9-1-6	Sensor, Grid Wire
	TM 5-6350-264-14&P-7 NAVELEX EE181-AA-OMI-080/E121 DT-548 AIR FORCE T.O. 31S9-2FSS9-1-7	Sensor, Capacity Proximity

TM 5-6350-264-14&P-11 NAVELEX EE 181-AA-OMI-12A/E121 C-7359-60-1 T.O. 31S9-2FSS9-1-11

TM 5-6350-264-14&P-8 NAVE LEX EE 181-AA-OMI-090/E121 SA-1954 AIR FORCE T.O. 31S9-2FSS-1-8

Switch, Alarm Latching

TM 5-6350-264-14&P-9 NAVELEX EE181-AA-OMI-100/E121 DZ-204 AIR FORCE T.O. 31S9-2FSS-1-9

Alarm, Audible

TM 5-6350-264-14&P-10 NAVELEX EE 181-AA-OMI-110/E121

C-9412 AIR FORCE T.O. 31S9-2FSS-1-10 Control Unit, Alarm Set

TM 5-6350-264-14&P-11

NAVELEX EE181-AA-OMI-120/E 121 C-7359-60-1 AIR FORCE T.O. 31S9-2FSS-1-11

Cabinet, Monitor, Type A, Type B, Type C and Monitor Module, Status.

TM 5-6350-264-14&P-12 NAVELEX EE181-AA-OMI-130/E121 R1861-T1257 AIR FORCE T.O. 31S9-2FSS-1-12

Receiver, Data and Transmitter, Data

TM 5-6350-264-14&P-13 NAVELEX EE181-AA-OMI-140/E121

DT-547 AIR FORCE T.O. 31S9-2FSS9-1-13 Sensor, Magnetic Weapons (DT-547)

Selection and Application of Joint Services Interior

TB 5-6350-264 NAVELEX EE181-AB-OMI-010/E121 J-SIIDS

AIR FORCE T.O. 31S9-4-1-111

Instusion Detection System

TM 5-6350-264-14&P-11 NAVELEX EE 181-AA-OMI-120/E121 C-7359-60-1 T.O. 31S9-2FSS9-1-11

5. PAINTING
SB 11-573
Painting and Preservation Supplies
Available for Field Use for Electronic
Equipment

TM 43-0139
Painting Instructions for Field Use

6. RADIOACTIVE MATERIAL
TB 43-0141
Instructions for Safe Handling, Maintenance, Storage, and Disposal of Radioactive Commodities

7. SHIPMENT AND STORAGE TM 740-90-1

Administrative Storage of Equipment

APPENDIX B

MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

B-1. GENERAL.

- a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance levels.
- b. Section II designates overall responsibility for the performance of maintenance functions on the identified end item or component. The implementation of the maintenance functions upon the end item or component will be consistent with the assigned maintenance functions.
- c. Section III lists the special tools and test equipment required for each maintenance function as referenced from section II.
- d. Section IV contains supplemental instructions or explanatory notes for a particular maintenance function. (Not Applicable)

B-2. MAINTENANCE FUNCTIONS. Maintenance functions are defined as follows:

- a. <u>Inspect.</u> To determine the serviceability of an item by comparing its physical, mechanical and/or electrical characteristics with established standards through examination.
- b. <u>Test.</u> To verify serviceability and detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.
- c. <u>Service.</u> Operations required periodically to keep an item in proper operating condition, i.e., to clean, to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.
- d. <u>Adjust.</u> To maintain, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.
 - e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.
- f. <u>Calibrate.</u> To determine and cause corrections to be made, or to be adjusted on instruments for test, measuring and diagnostic equipments used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standing of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.
- g. <u>Install.</u> The act of emplacing, seating, or fixing into position an item, part, or module in a manner to allow the proper functioning of an equipment or system.
- h. Replace. The act of substituting a serviceable like part, subassembly, or module for an unserviceable counterpart.
- i. <u>Repair.</u> The application of maintenance services (inspect, test, service, adjust, align, calibrate, or replace) or other maintenance actions (welding, grinding, riveting, straightening, facing, remachining, or resurfacing) to restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module, end item or system.

- j. <u>Overhaul.</u> That maintenance effort (service/actions) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e., DMWR) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.
- k. <u>Rebuild.</u> Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours/miles, etc.) considered in classifying Army equipments/components.

B-3. COLUMN ENTRIES.

- a. <u>Column 1, Group Number.</u> Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.
- b. <u>Column 2, Component/Assembly.</u> Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.
- c. <u>Column 3, Maintenance Function.</u> Column 3 lists the functions to be performed on the item listed in column 2.
- d. <u>Column 4, Maintenance Level.</u> Column 4 specifies, by the listing of a "work time" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in column 3. This figure represents the active time required to perform the maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate "work time" figures will be shown for each level. The number of man-hours specified by the "work time" figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance levels are as follows:

C	Operator or crew
O	Organization maintenance
F	Direct support maintenance
Н	General support maintenance
ח	Depot maintenance

- e. <u>Column 5, Tools and Equipment.</u> Column 5 specifies, by code, those common tool sets (not individual tools) and special tools, test, and sup- port equipment required to perform the designated function.
- f. <u>Column 6, Remarks.</u> Column 6 contains an alphabetic code which leads to the remark in section IV, Remarks, which is pertinent to the item opposite the particular code.

Section II. MAINTENANCE ALLOCATION CHART

for

Monitor Cabinet, Type A (CY-7359); Monitor Cabinet, Type B (CY-7360); Monitor Cabinet, Type C (CY-7361); Status Monitor Module (ID-1921)

(1) GROUP	(2) COMPONENT/	(3) MAINTENANCE FUNCTION		MAIN	(4) TENANC	E LEVE	(5) TOOLS AND	(6) REMARKS	
NUMBER	ASSEMBLY	FUNCTION	С	0	F	н	D	EQUIPMENT	
01	Monitor Cabinet (Type A)	Inspect Test Repair Replace			0.5 0.7 1.5 2.2				
	Battery	Inspect Test Replace			0.1 0.5 0.5			1.	
	Signal Module	Test Repair Replace			0.5 0.5 0.7			1.	
	Status Indicator	Test Replace			0.5			1.	
	Connector	Test Replace			0.2 0.5			1.	
	Power Supply	Test Replace Repair			0.4 0.9 0.7			1.	

Section II. MAINTENANCE ALLOCATION CHART-Continued

	(2) COMPONENT/	(3) MAINTENANCE	(4) MAINTENANCE LEVEL					(5) TOOLS AND	(6)
	ASSEMBLY	FUNCTION	С	О	F	Н	D	EQUIPMENT	
02	Monitor Cabinet (Type B)	Inspect Test Repair Replace			0.5 0.7 1.5 2.0				
	Battery	Inspect Test Replace			0.1 0.5 0.5			1.	
	Signal Module	Test Repair Replace			0.5 0.5 0.7			1.	
	Status Indicator	Test Replace			0.5 0.7			1.	
	Connector	Test Replace			0.2 0.5			1.	
	Power Supply	Test Replace Repair			0.4 0.9 0.7			1.	

Section II. MAINTENANCE ALLOCATION CHART-Continued

(1) GROUP	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND	(6) REMARKS
NUMBER	ASSEMBLI	TONCTION	С	0	F	н	D	EQUIPMENT	
03	Monitor Cabinet (Type C)	Inspect Test Repair Replace			0.5 0.7 1.5 2.0				
	Battery	Inspect Test Replace			0.1 0.5 0.5		1.		
	Signal Module	Test Repair Replace			0.5 0.5 0.7		1.		
	Status Indicator	Test Replace			0.5 0.7				
	Connector	Test Replace			0.2 0.5		1.		
	Power Supply	Test Replace Repair			0.4 0.9 0.7		1.		

Section II. MAINTENANCE ALLOCATION CHART-Continued

(1) GROUP	(2) COMPONENT/	(3) MAINTENANCE	(4) MAINTENANCE LEVEL					(5) TOOLS AND	(6)
NUMBER ASSEMBLY	FUNCTION	С	О	F	Н	D	EQUIPMENT		
04	Status Monitor Module	Inspect Test Repair Replace			0.1 0.5 1.5				
	Printed Wiring Board (A-1)	Test Replace			0.5 1.0			1.	
	Printed Wiring Board (A-2)	Test Replace			1.5 1.0			1.	

Section III. TOOL AND TEST EQUIPMENT REQUIREMENTS

for

Monitor Cabinet, Type A (CY-7359); Monitor Cabinet, Type B (CY-7360);

Monitor Cabinet, Type C (CY-7361); Status Monitor Module (ID-1921)

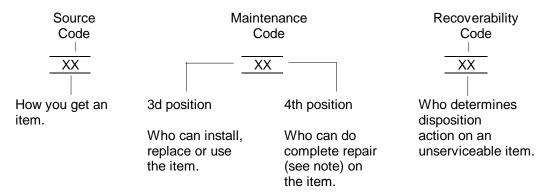
(1) Reference code	(2) Maintenance category	(3) Nomenclature	(4) National stock number (NSN)	(5) Tool number
1.	F	Multimeter	6625-00-019-0815	Vom
2.	D	Oscilloscope	6625-00-127-0079	475

APPENDIX C

ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

Section I. INTRODUCTION

- 1. SCOPE. This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of organizational, direct support and general support of the Cabinet, Monitor, Type A, B, C, and Monitor Module status. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.
- **2. GENERAL.** In addition to this section, Introduction, this Repair Parts and Special Tools List is divided into the following sections:
- a. Section II. Repair Parts List. A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Repair parts kits are listed separately in their own functional group within Section II. Repair parts for repairable special tools are also listed in this section. Items listed are shown on the associated illustration(s)/figure(s).
- **b. Section III. Special Tools List.** A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.
- c. Section IV. National Stock Number and Part Number Index. A list, in National item identification number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance.
- EXPLANATION OF COLUMNS (SECTIONS II AND III).
 - a. ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration.
- **b. SMR Code (Column (2)).** The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



^{*}Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

(1) Source Code. The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follows:

Code Explanation

PA PB PC** PD PE PF PG Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3d position of the SMR code.

**NOTE: Items coded PC are subject to deterioration.

KD KF KB Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3d position of the SMR code. The complete kit must be requisitioned and applied.

MO-(Made at org/ AVUM Level) MF-(Made at DS/ AVUM Level) MH-(Made at GS Level) ML-(Made at Specialized Repair

Activity (SRA))

MD-(Made at Depot)

Explanation

Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION and USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in the RPSTL. If the item is authorized to you by the 3d position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.

AO-(Assembled by org/ AVUM Level) AF-(Assembled by DS/ AVUM Level) AH-(Assembled by GS Level) AL-(Assembled by (SRA) AD-(Assembled by

Depot)

Explanation

Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3d position code of the SMR code authorizes you to replace the item, but the source code indicates the items are assembled at a higher level, order the item from the higher level of maintenance.

Code Explanation

- XA Do not requisition an "XA" -coded item. Order its next higher assembly. (Also, refer to the NOTE below.)
- XB —- If an "XB" item is not available from salvage, order it using the FSCM and part number given.
- XC —Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
- XD Item is not stocked. Order an "XD" -coded item through normal supply channels using the FSCM and part number given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 700-42.

- (2) Maintenance Code. Maintenance codes tells you the level(s) of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the SMR Code as follows:
 - (a) The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance.

Code	Application/Explanation
С	—Crew or operator maintenance done within organizational or aviation unit maintenance.
0	—Organizational or aviation unit category can remove, replace, and use the item.
F	—Direct support or aviation intermediate level can remove, replace, and use the item.
Н	—General support level can remove, replace, and use the item.
L	—Specialized repair activity can remove, replace, and use the item.
D	—Depot level can remove, replace, and use the item.

(b) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized repair functions.) NOTE: Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes. This position will contain one of the following maintenance codes.

Code	Application/Explanation
0	—Organizational or (aviation unit) is the lowest level that can do complete repair of the item.
F	—Direct support or aviation intermediate is the lowest level that can do complete repair of the item.

Code	Application/Explanation
Н	—General support is the lowest level that can do complete repair of the item.
L	—Specialized repair activity (designate the specialized repair activity) is the lowest level that can do complete repair of the item.
D	—Depot is the lowest level that can do complete repair of the item.
Z	—Nonreparable. No repair is authorized.
В	—-No repair is authorized. (No parts or special tools are authorized for the maintenance of a "B" coded item). However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

(3) Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the SMR Code as follows:

Recoverability Codes	Application/Explanation
Z	—Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3d position of SMR Code.
Ο	—Reparable item. When uneconomically reparable, condemn and dispose of the item at organizational or aviation unit level.
F	—Reparable item. When uneconomically reparable, condemn and dispose of the item at the direct support or aviation intermediate level.
Н	—Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
D	—Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
L	—Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
Α	—Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

- c. FSCM (Column (3)). The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.
- d. PART NUMBER (Column (4)). Indicates the primary number used by the manufacturer, (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

NOTE

When you use a NSN to requisition an item, the item you receive may have a different part number from the part ordered.

- e. DESCRIPTION AND USABLE ON CODE (UOC) (Column (5)). This column includes the following information:
 - (1) The Federal item name and, when required, a minimum description to identify the item.
 - (2) The physical security classification of the item is indicated by the parenthetical entry, e.g., Phy Sec C1 Confidential, Phy Sec C1 (S) Secret, Phy Sec C1 (T) Top Secret.
 - (3) Items that are included in kits and sets are listed below the name of the kit or set.
 - (4) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.
 - (5) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured/fabricated.
 - (6) When the item is not used with all serial numbers of the same model, the effective serial numbers are shown on the last line(s) of the description (before UOC).
 - (7) The usable on code, when applicable (see paragraph 5, Special Information).
 - (8) In the Special Tools List section, the basis of issue (BOI) appears as the last line(s) in the entry for each special tool, special TMDE, and other special support equipment. When density of equipments supported exceeds density spread indicated in the basis of issue, the total authorization is increased proportionately.
 - (9) The statement "END OF FIGURE" appears just below the last item description in Column 5 for a given figure in both Section II and Section III.
- f. QTY (Column (6)). The QTY (quantity per figure column) indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that the quantity is variable and may vary from application to application.
- 4. EXPLANATION OF COLUMNS (SECTION IV).
 - a. NATIONAL STOCK NUMBER (NSN) INDEX.
 - (1) STOCK NUMBER column. This column lists the NSN by National item identification number

NSN

(NIIN) sequence. The NIIN consists of the last nine digits of the NSN, i.e

(5305-01-574-1467).

NIIN

When using this column to locate an item, ignore the first 4 digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

- (2) FIG. column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in Section II and Section III.
- (3) ITEM column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

- **b. PART NUMBER INDEX.** Part numbers in this index are listed by part number in ascending alphanumeric sequence (i.e., vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).
 - (1) **FSCM column.** The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.
 - (2) PART NUMBER column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.
 - (3) STOCK NUMBER column. This column lists the NSN for the associated part number and manufacturer identified in the PART NUMBER and FSCM columns to the left.
 - (4) FIG. column. This column lists the number of the figure where the item is identified/located in Sections II and III.
 - (5) ITEM column. The item number is that number assigned to the item as it appears in the figure referenced in adjacent figure number column.
- **5. SPECIAL INFORMATION.** The usable on code appears in the lower left corner of the Description column heading. Usable on codes are shown as "UOC: "in the Description Column (justified left) on the first line applicable item description/nomenclature. Uncoded items are applicable to all models.

6. HOW TO LOCATE REPAIR PARTS.

- a. When National Stock Number or Part Number is NOT Known.
 - (1) First. Using the table of contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.
 - (2) Second. Find the figure covering the assembly group or subassembly group to which the item belongs.
 - (3) Third. Identify the item on the figure and note the item number.
 - (4) Fourth. Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.
 - (5) Fifth. Refer to the Part Number Index to find the NSN, if assigned.

b. When National Stock Number or Part Number is Known:

- (1) First. Using the Index of National Stock Numbers and Part Numbers, find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence (see 4a(1)). The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see paragraph 4b). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.
- (2) **Second.** After finding the figure and item number, verify that the item is the one you are looking for, then locate the item number in the repair parts list for the figure.
- 7. ABBREVIATIONS. Abbreviations used in this manual are listed in MIL-STD-12.

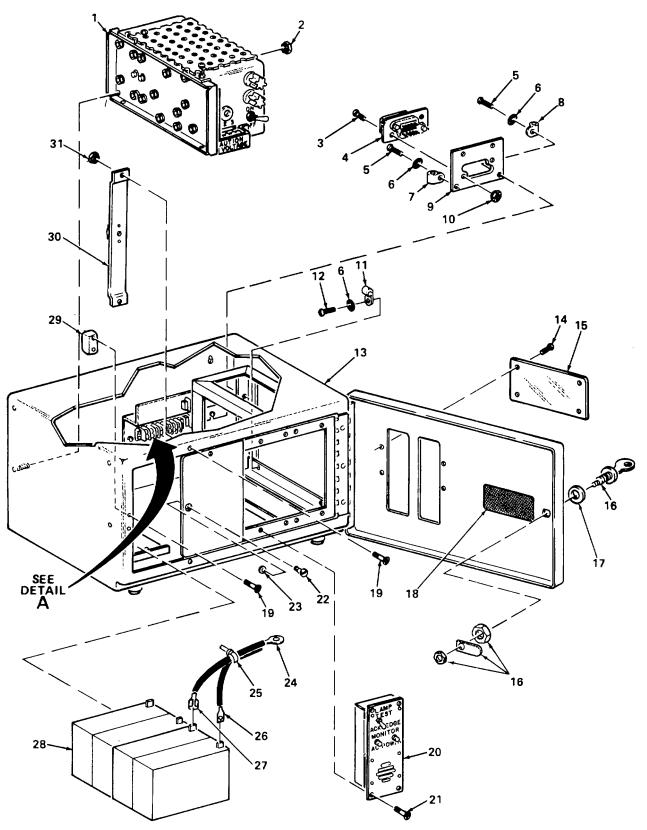


Figure C-1. Cabinet, Monitor, Type A CY-7359/FSS-9(V) (Sheet 1 of 2)

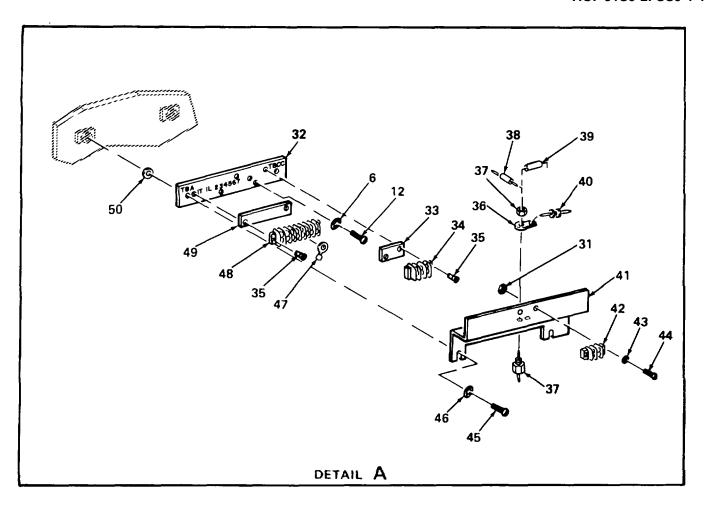


Figure C-1. Cabinet, Monitor, Type A CY-7359/FSS-9(V) (Sheet 2 of 2)

SECTION II. REPAIR PARTS AND SPECIAL TOOLS LIST

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
1 2 3 4 5 6 7 8 9 10 11 2 13 14 15 16 17 18 19 20 1 22 23 24 25 26 27 28 29 30 31 32 33 43 5 6 37 8 39 40 41 42 43	PAFFF XBFZZ PAFZZ PAFZZ PAFZZ PAFZZ XBFZZ PAFZZ XBFZZ PAFZZ XBFZZ PAFZZ XBFZZ XBFZZ XBFZZ PAFZZ XBFZZ PAFZZ XBFZZ PAFZZ PAFZZ PAFZZ XBFZZ	97403 97403 96906 97403 96906 96906 09922 09922 97403 97403 96906 97403	13220E3901 13220E3910-3 MS35206-214 13220E3909 MS35206-228 MS35333-37 HP-2N HP-4N 13220E3918 13220E3910-1 13220E3913 MS35206-227 13220E3913 MS18212-14 13220E3919-3 60-4055-104-1012 13220E4071-1 13220E3917 MS24693-S25 13220E3902 MS35190-236 13220E3922 13220E3910-2 13220E3916 13220E3916 13220E3916 13220E3916 13220E3916 13220E3916 13220E3916 13220E3965 MS75089-3 13220E3965 MS75089-3 13220E3068-1 MS27183-6	GROUP 01 MONITOR CABINET (TYPE A) FIG. C-1 CABINET MONITOR TYPE A CY-7359/ FSS-9(V) POWER SUPPLY, CABINET NUT, LOCK WASHER SCREW. CONNECTOR, RECEPTACLE. SCREW. WASHER, LOCK. CLAMP, CABLE. CLAMP, CABLE. CLAMP, CABLE. CLAMP, CABLE. SCREW. ENCLOSURE, 1 ZONE MONITOR UNIT SCREW, PAN HEAD. COVER, LAMPS, MONITOR LOCK, SECURITY CAM. SHIM, LOCK. PLATE, IDENTIFICATION. SCREW. SIGNAL MODULE ASSY. SCREW. STUD. RETAINER. TERMINAL, MINI-LOCKING FORK. STRAP, TIEDOWN. TAB, CRIMP. RECEPTACLE CRIMP. BATTERY, MONITOR CAB PLATE. SUPPORT. NUT, LOCK-WASHER. PLATE, MOUNTING. INSULATOR. BARRIER STRIP RIVET, BLIND. TERMINAL, LUG. FILTER, RADIO FREQUENCY. COIL, RADIO FREQUENCY. SEMICONDUCTOR DEVICE, DIODE ARRESTER, ELECTRICAL. BRACKET. BARRIER STRIP WASHER, STRIP WASHER, FLAT-ROUND.	001 004 002 001 004 012 001 001 001 001 001 001 001 001 001

SECTION II.

(1) (2) (3) (3) (4) PART NUMBER NO. CODE (DOC) (GOC) (<u> </u>	1	1	
45 PAFZZ 96906 MS35206-243 SCREW, MACHINE 002 46 PAFZZ 96906 MS35333-38 WASHER, LOCK 002 47 XDFZZ 97403 13220E3829-1 TERMINAL, MINI-LOCKING FORK 017 48 XBFZZ 97403 13220E3823-8 BARRIER STRIP 001 49 XBFZZ 97403 13220E4093-6 INSULATOR 001 50 PAFZZ 96906 MS35338-41 WASHER, LOCK 015	ITEM	SMR		(4) PART NUMBER	DESCRIPTION AND USABLE	
	44 45 46 47 48 49	PAFZZ PAFZZ PAFZZ XDFZZ XBFZZ XBFZZ	96906 96906 96906 97403 97403	MS35206-243 MS35333-38 13220E3829-1 13220E3823-8 13220E4093-6	SCREW, MACHINE, PNH	002 002 017 001 001

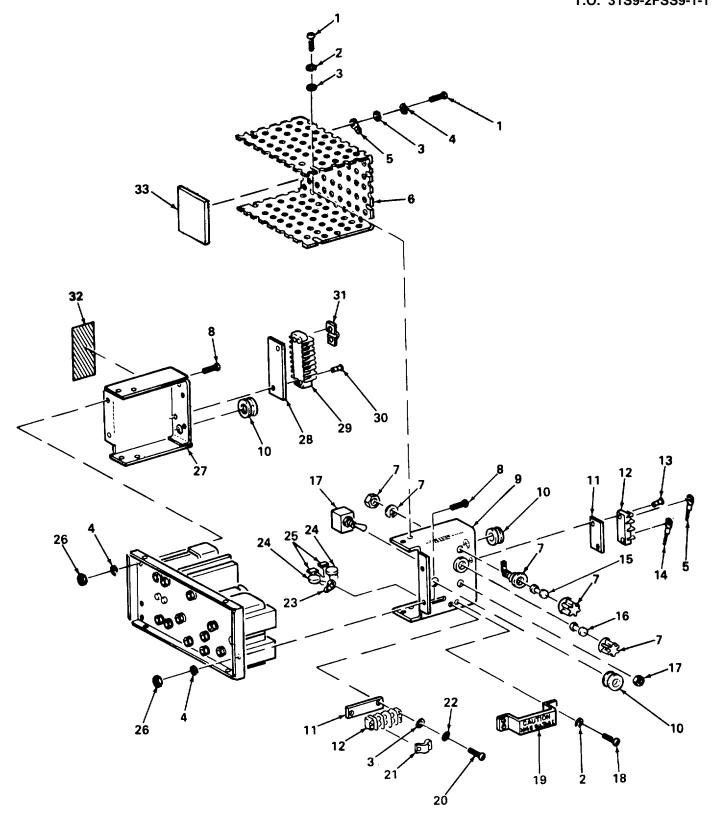


Figure C-2. Power Supply, Cabinet, Monitor Type A CY-7359/FSS-9(V) (Sheet 1 of 2)

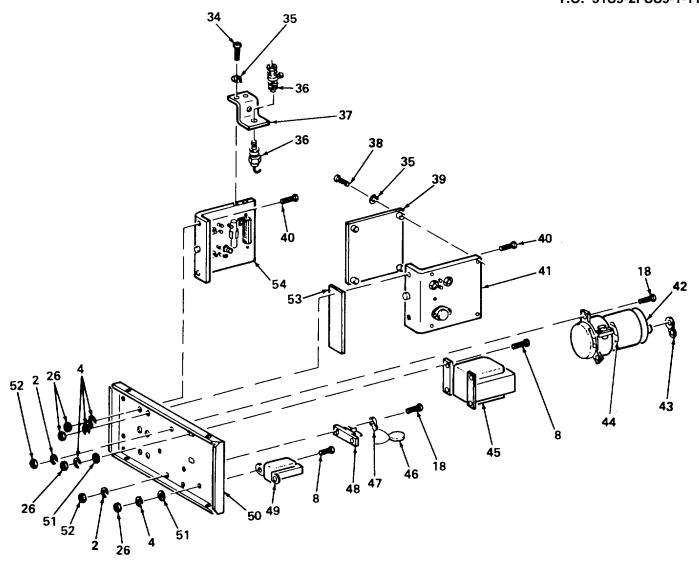


Figure C-2. Power Supply, Cabinet, Monitor Type A CY-7359/FSS-9(V) (Sheet 2 of 2)

SECTION II.

	1				
(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	PAFZZ PAFZZ PAFZZ PAFZZ XBFZZ PAFZZ XBFZZ	96906 96906 96906 96906 97403 97403 97403 97403 97403 97403 97403 97403 96906 97403 96906 97403 96906 97403	MS35206-225 MS35338-41 MS27183-5 MS35338-42 13220E3829-1 13220E3995 FHN 20G MS35206-243 13220E3986 MS35489-11 13220E4026-3 13220E3982-2 F02B250V1-1/2A F02A250V1/2A 13220E3987 MS35206-228 13220E3987 MS35206-228 13220E3966 MS35333-37 13220E3966 MS35333-37 13220E3966 MS35333-37 13220E3966 MS35333-37 13220E3967 MIL-C-39014/1 MS35649-282 13220E3967 MIL-I-695-TYPE F 4"X1 1/2X.015 13220E3986 13220E3987 13220E3987 13220E3987 13220E3987 13220E3994 TYPE F, FORM R MS35206-215 MS35338-40 13220E4142 13220E3973 MS35206-220 13220E3993 MS35206-245 13220E3992 13220E3715-2 MS35431-7	GROUP 01 MONITOR CABINET (TYPE A) FIG. C-2 POWER SUPPLY CABINET MONITOR TYPE A CY-7359/FSS-9(V) SCREW, MACHINE	004 004 010 018 012 001 002 014 001 002 002 003 001 001 002 003 002 002 003 002 002 003 001 001 001 001 001 001 001 001 001

SECTION II.

	(6)	(6)	,,,	(5)	(0)
(1) ITEM	(2) SMR	(3)	(4) PART NUMBER	(5) DESCRIPTION AND USABLE	(6) QTY
NO.	CODE	FSCM		ON CODE (UOC)	
44	XDFZZ	81349	MIL-1-695 TYPE F	.INSULATION ELEC PAPER	001
45	PAFZZ	97403	1.5"X1 "X.005 THK 13220E3998	.TRANSFORMER, POWER	001
46 47	PAFZZ XDFZZ	97403 96906	13220E3971-1 MS35431-1	SEMICONDUCTOR DEVICE	002 002
48 49	XDFZZ PAFZZ	97403 97403	13220E4022	.DIODE, RECTIFIER	001
50	XBFZZ	97403	13220E3999 13220E3985	.INDUCTOR	001 001
51 52	PAFZZ PAFZZ	96906 96906	MS27183-7 MS35649-262	.WASHER, FLAT .NUT, PLAIN HEX	006 005
53 54	XBFZZ XBFZZ	97403 97403	13220E4093-5 13220E3991	.INSULATOR .PLATE SUBASSEMBLY	001 001
				END OF FIGURE	

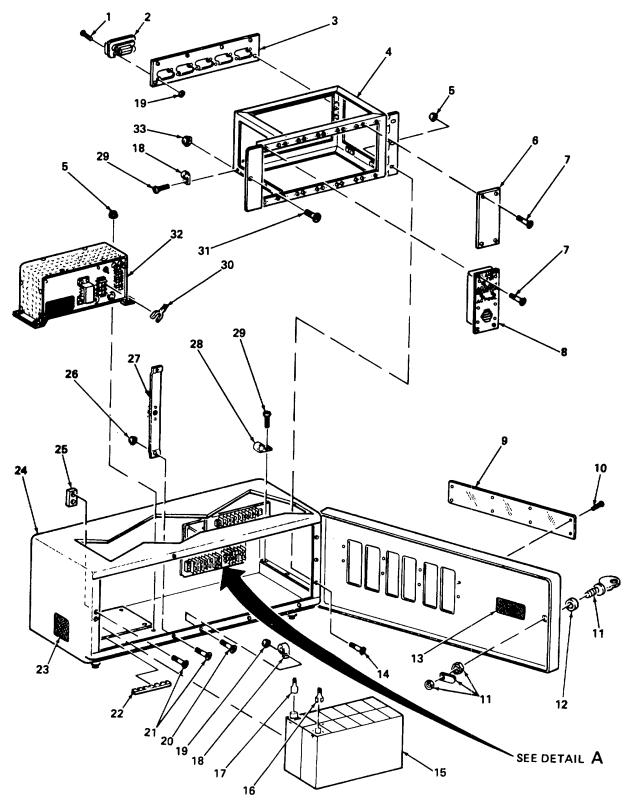


Figure C-3. Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 1 of 2)

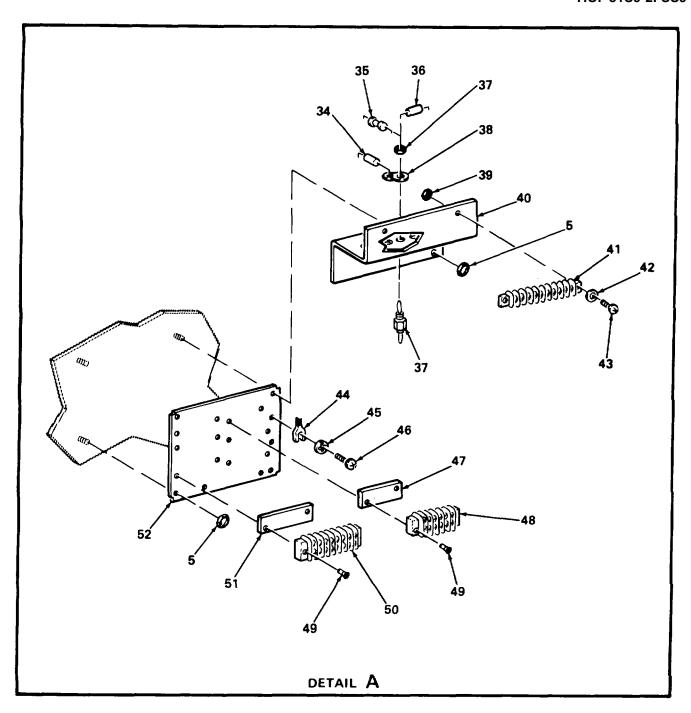


Figure C-3. Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 2 of 2)

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	XBFZZ PAFZZ XBFZZ XBFZZ XDFZZ XDFZZ PAFZZ XBFZZ	96906 29587 97403 97403 97403 97403 96906 97403	MS35206-214 26190-16S 13220E4014 13220E3910-4 13220E3910-4 13220E3902 13220E3919-1 MS18212-14 60-4055-104-1012 13220E4071-2 13220E4008 13220E3622 13220E3622 13220E3622 13220E3621-1 13220E3621-1 13220E3910-1 MS24693-S4 MS24693-S25 MS21266-2N 13220E4005 13220E4005 13220E4005 13220E4012 13220E3910-2 13220E3910-2 13220E3910-2 13220E3927-2 13220E3927-2 13220E3927-2 13220E3921-2 13220E3921-2 13220E3921-2 13220E3921-2 13220E39970 13220E4001 85-31-093-15 MS75089-3 13220E3970 13220E3970 13220E3965 MS77066-3 MS35649-262 13220E3968-2 MS27183-6 MS35206-231 13220E3829-1	GROUP 02 MONITOR CABINET (TYPE B) FIG. C-3 CABINET, MONITOR, TYPE B CY-7360/FSS-9(V) SCREW, MACHINE PNH CONNECTOR, RECEPTACLE PLATE, CONNECTOR INNER FRAME ASSY. NUT, LOCK WASHER PLATE, BLANK. SCREW, MACHINE, FLAT SIGNAL MODULE ASSY COVER, LAMPS, MONITOR SCREW, MACHINE, PNH LOCK, SECURITY CAM SHIM, LOCK. PLATE, IDENTIFICATION SCREW, MACHINE, FLAT BATTERY, STORAGE RECEPTACLE, CRIMP. TERMINAL, QUICK DISCONNECT. CRIMP, CABLE NUT, LOCK WASHER SCREW, MACHINE, FLAT SCREW, MACHINE, FLAT SCREW, MACHINE, FLAT GROMMET, PLASTIC LABEL, WEIGHT AND LIFT POINT ENCLOSURE, 5 ZONE MONITOR PLATE NUT, LOCK WASHER SUPPORT CLAMP, CABLE SCREW, MACHINE PNH TERMINAL, MINI-LOCKING FORK. STUD. POWER SUPPLY EYELET, TURNLOCK. COIL, RADIO FREQUENCY ARRESTOR ELEC SURGE SEMICONDUCTOR DEVICE FILTER, FEED-THRU LOW PASS TERMINAL LUG, SOLDER NUT, PLAIN HEX. BRACKET BARRIER STRIP. WASHER, FLAT, ROUND SCREW, MACHINE PNH. TERMINAL, MINI LOCKING FORK.	010 005 001 001 001 001 001 001

(1) (2) (3) PART NUMBER DESCRIPTION AND USABLE ON CODE (UOC) 45 PAFZZ 96906 MS353206-226 SCRW, MACHINE, PNH						
46 PAFZZ 96906 MS35206-226 SCREW, MACHINE, PNH 001 47 XBFZZ 97403 13220E4093-4 INSULATOR 001 48 XBFZZ 97403 13220E3823-6 BARRIER STRIP 001 49 XDFZZ 97403 13220E2998-6 RIVET, BLIND 012 50 XBFZZ 97403 13220E3823-8 BARRIER STRIP 005 51 XBFZZ 97403 13220E4093-6 INSULATOR 005 52 XBFZZ 97403 13220E4013 PLATE, MOUNTING 001	ITEM	SMR		(4) PART NUMBER	DESCRIPTION AND USABLE	
	45 46 47 48 49 50 51	PAFZZ PAFZZ XBFZZ XBFZZ XDFZZ XBFZZ XBFZZ	96906 96906 97403 97403 97403 97403	MS35206-226 13220E4093-4 13220E3823-6 13220E2998-6 13220E3823-8 13220E4093-6	WASHER, LOCK, INTERNAL TOOTH	001 001 001 012 005 005

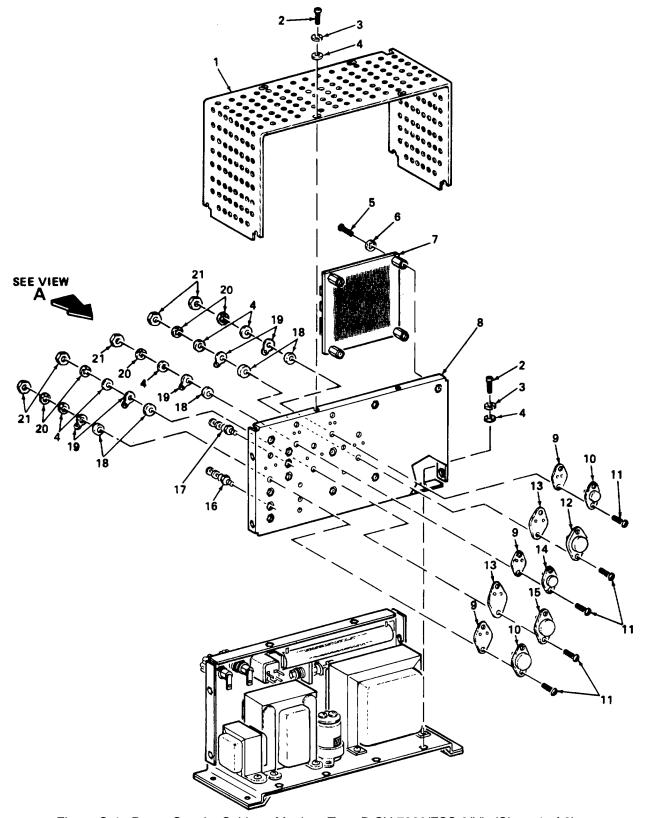


Figure C-4. Power Supply, Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 1 of 3)

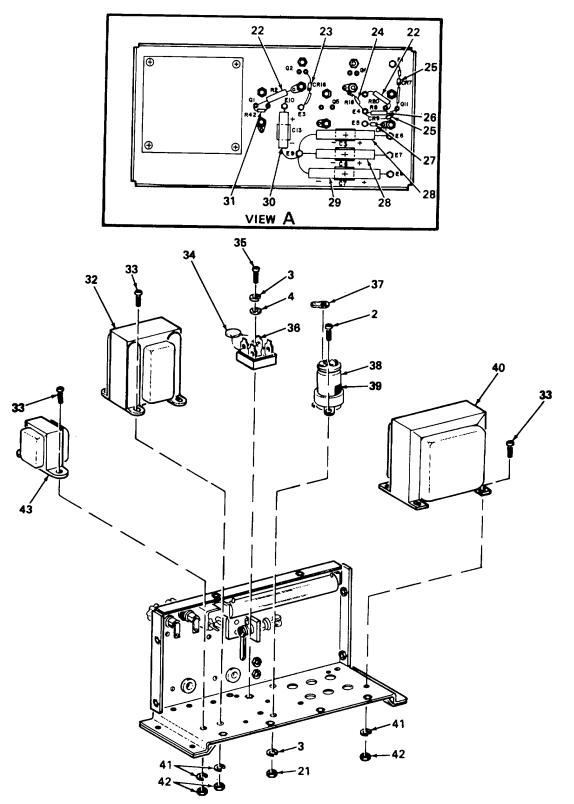


Figure C-4. Power Supply, Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 2 of 3)

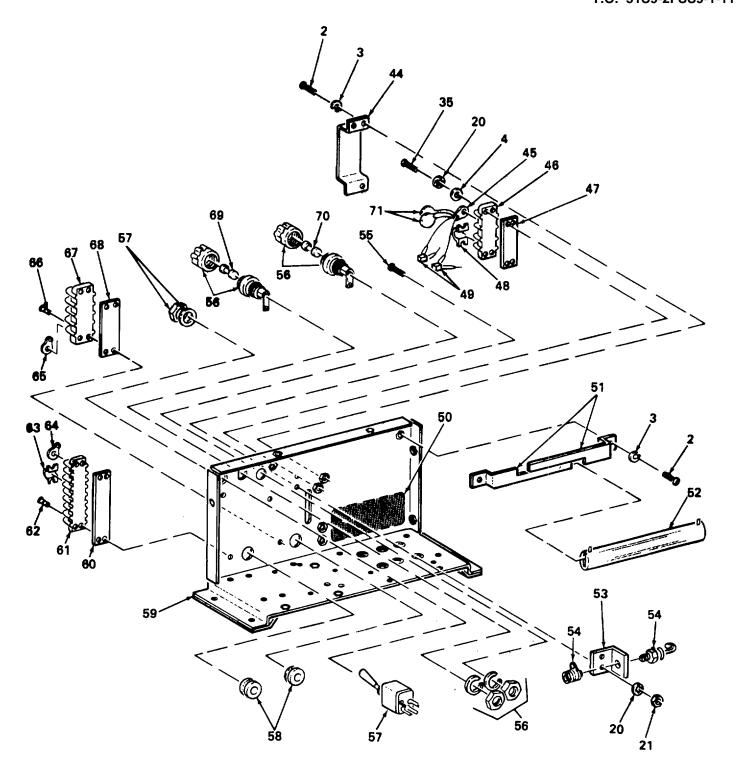


Figure C-4. Power Supply, Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 3 of 3)

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	XBFZZ PAFZZ	97403 96906 96906 96906 96906 97403 97403 97403 97403 97403 81349 81349 81349 97403 96906 96906 81349 97403 96906 97403 96906 97403 96906 97403 96906 97403 96906 97403 96906 97403 96906 97403 96906 97403 96906 97403 96906	13220E4035 MS35206-226 MS35338-41 MS27183-5 MS35206-219 MS35333-36 13220E4046 13220E4027 13220E3929-2 13220E4029 13220E4029 13220E3929-1 JAN 2N3055 JAN 2N3740 SE09XE03 SE09XE02 13220E3928-1 MS35431-3 MS35333-37 MS35649-262 MIL-R-39007/6 13220E4033-2 RCR07G102JS 13220E4033-1 RWR89S4ROOFM 13220E3904-2 13220E4124 M39018/01-0638 13220E3746-2 RCR07G471JS C-47U MS35206-243 13220E3971-2 MS35206-231 13220E4041 MS35431-7 88F235ALA MIL-I-695 TYPE F 3/4"X1 1/2 "X.015 P602260 MS35338-42 MS35338-42 MS35649-282	GROUP 02 MONITOR CABINET (TYPE B) FIG. C-4 POWER SUPPLY, CABINET, MONITOR, TYPE B CY-7360/FSS-9(V) COVER, POWER SUPPLY	001 022 023 024 004 004 001 001 002 001 001 005 014 014 002 001 001 002 001 001 002 001 001 002 001 001

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71	PAFZZ XBFZZ XBFZZ XBFZZ XBFZZ XBFZZ XDFZZ XDFZZ XBFZZ PAFZZ PAFZZ PAFZZ PAFZZ PAFZZ PAFZZ XDFZZ XBFZZ XDFZZ XBFZZ XDFZZ XBFZZ XDFZZ XBFZZ XDFZZ XBFZZ PAFZZ PAFZZ	14407 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 96906 81349 27193 96906 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403	CT602 13220E3987 13220E4093-9 13220E4093-9 13220E4018 13220E4047 13220E4042 13220E3974 13220E4142 MS35206-228 FHN20G 7590K6 MS35489-11 13220E4093-5 13220E3823-7 13220E2987 13220E2987 13220E3829-1 13220E3829-1 13220E3829-1 13220E3829-2 13220E398-7 13220E398-7 13220E4093-10 F02A250V1-1/2A F02B250V3A 13220E3967	REACTOR SHIELD, POWER SUPPLY TERMINAL, LUG, SOLDER BARRIER STRIP INSULATOR LINK, TERMINAL CAPACITOR, FIXED, CERAMIC PLATE, IDENTIFICATION BRACKET, RESISTOR IRRIDITE PER MIL-C-5541, CLASS 3 RESISTOR, FIXED, WIRE HEAT SINK SEMICONDUCTOR DEVICE SCREW, MACHINE, PNH FUSEHOLDER SWITCH, TOGGLE GROMMET, NONMETALLIC HOUSING, POWER SUPPLY INSULATOR BARRIER STRIP RIVET, BLIND LINK, TERMINAL TERMINAL, MINI-LOCKING FORK TERMINAL, MINI-LOCKING FORK RIVET, BLIND BARRIER STRIP INSULATOR SARRIER STRIP INSULATOR FUSE, 1.5 AMP FUSE, CARTRIDGE RESISTOR END OF FIGURE	001 001 003 001 001 002 001 002 001 002 001 001 002 004 011 003 002 001 001 001 001 001 002

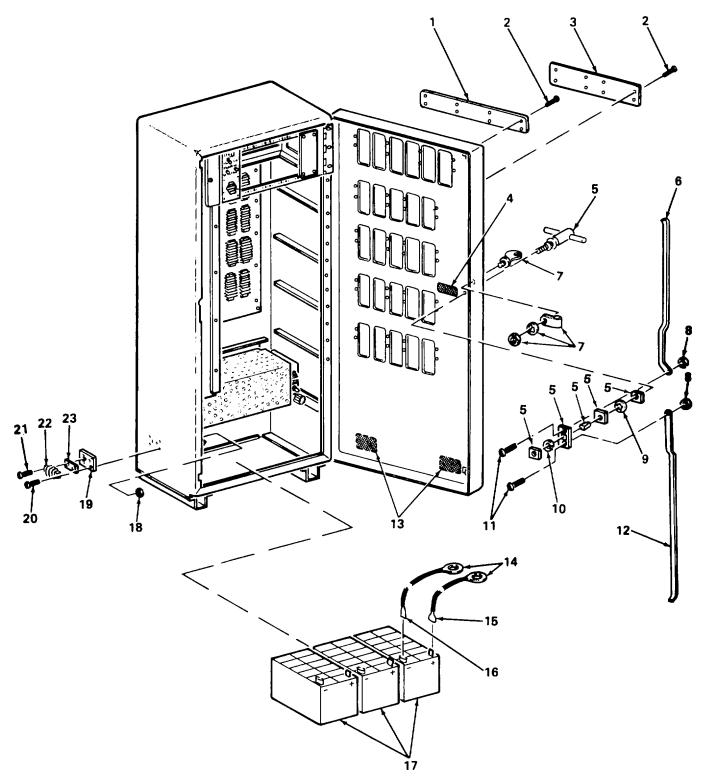


Figure C-5. Cabinet, Monitor, Type C CY-7361/FSS-9(V) (Sheet 1 of 2)

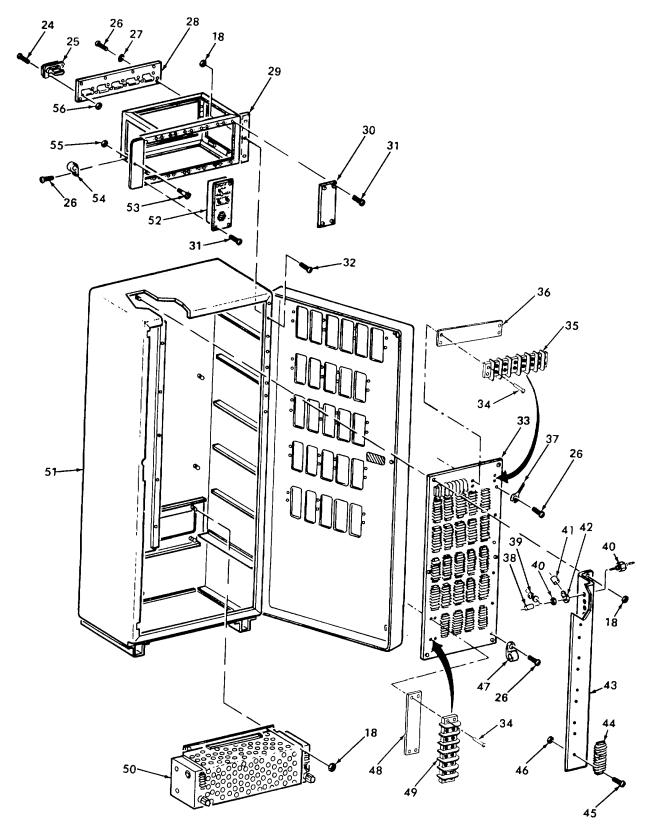


Figure C-5. Cabinet, Monitor, Type C CY-7361/FSS-9(V) (Sheet 2 of 2)

		,	•	1	1
(1)	(2)	(3)	(4)	(5)	(6)
ITÉM	SMR		PART NÚMBER	DESCRIPTION AND USABLE	QTY
NO.	CODE	FSCM		ON CODE (UOC)	
				GROUP 03 MONITOR CABINET (TYPE C)	
				GROOF 03 MONITOR CABINET (TIFE C)	
				FIG. C-5 CABINET, MONITOR, TYPE C	
				CY-7361/FSS-9(V)	
1	XBFZZ	97403	13220E3919-1	COVER, LAMPS, MONITOR	001
2	PAFZZ XBFZZ	96906 97403	MS18212-14	SCREW, MACHINE, PNH COVER, LAMPS, MONITOR	040 004
3 4	XDFZZ	97403	13220E3919-2 13220E4109	PLATE, IDENTIFICATION	004
5	XBFZZ	97403	13220E4103	LATCH, T-HANDLE	001
6	XBFZZ	97403	13220E4105-1	BAR, LATCH	001
7	PAFZZ	24153	60-4055-105-1012	LOCK, SECURITY SWITCH	001
8	PAFZZ	96906	MS21083-N4	NUT, SELF-LOCKING HEX	002
9	PAFZZ	96906	MS35333-42	WASHER LOCK	001
10	PAFZZ PAFZZ	96906 96906	MS35338-46 MS35207-280	WASHER, LOCKSCREW, MACHINE, PNH	001 002
12	XBFZZ	97403	13220E4105-2	BAR, LATCH	002
13	XDFZZ	97403	13220E4048-1	LABEL, WEIGHT AND LIFT POINT	002
14	XDFZZ	97403	13220E3829-2	TERMINAL, MINI LOCKING FORK, BLUE	010
15	PAFZZ	97403	13220E3622	TERMINAL, QUICK DISCONNECT	003
16	PAFZZ	97403	13220E3623	TERMINAL, QUICK DISCONNECT	003
17	PCFZZ	97403	13220E4008	BATTERY, STORAGE	003
18 19	XBFZZ XBFZZ	97403 97403	13220E3910-4 13220E4104	NUT, LOCK WASHER BRACKET, EXTERNAL	027 001
20	PAFZZ	96906	MS35206-228	SCREW, MACHINE, PNH	004
21	PAFZZ	96906	MS35206-230	SCREW, MACHINE, PNH	004
22	XBFZZ	97403	13220E4145-2	BARRIER STRIP	001
23	XBFZZ	97403	13220E4093-12	INSULATOR	001
24	PAFZZ	96906	MS35206-214	SCREW, MACHINE, PNH	050
25 26	PAFZZ PAFZZ	29587 96906	26-190-16S MS35206-227	CONNECTOR, RECEPTACLESCREW, MACHINE, PNH	025 001
27	XBFZZ	96906	MS35333-37	WASHER, LOCK, INTERNAL TOOTH	033
28	XBFZZ	97403	13220E4014	PLATE, CONNECTOR	005
29	XBFZZ	97403	13220E4010	INNER FRAME ASSY	005
30	XBFZZ	97403	13220E4015	PLATE, BLANK	024
31	PAFZZ	96906	MS35190-236	SCREW, MACHINE	100
32	PAFZZ	96906	MS35191-270	SCREW, MACHINEPLATE, MOUNTING	015
33 34	XDFZZ PAFZZ	97403 97403	13220E4112 13220E2998-6	RIVET, BLIND	001 054
35	PAFZZ	97403	13220E3823-13	BARRIER STRIP	002
36	XDFZZ	97403	13220E4093-8	INSULATOR	002
37	XDFZZ	97403	13220E3829-1	TERMINAL, MINI-LOCKING FORK	259
38	PAFZZ	97403	13220E4072	SEMICONDUCTOR DEVICE, DIODE	002
39	PAFZZ	97403	13220E3970	ARRESTOR ELEC SURGE	050
40	PAFZZ	97403	13220E3965	FILTER, FEED-THRU, LOW PASS, HI- FREQUENCY	050
41	PAFZZ	96906	MS75089-3	COIL, RADIO FREQUENCY	050
42	XBFZZ	96906	MS77066-3	TERMINAL LUG	050
43	XBFZZ	97403	13220E8168	BRACKET	001
44	XBFZZ	97403	13220E3968-2	BARRIER STRIP	005
•		•	•	•	

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
46 47 48 49 50 51 52 53 54	PAFZZ XBFZZ PAFZZ PAFZZ PAFFF XBFZZ PAFZZ XBFZZ XBFZZ XBFZZ	96906 97403 97403 97403 97403 97403 97403 97403 97403	MS35206-231 13220E3910-2 13220E3621-3 13220E4093-6 13220E3823-8 13220E4101 13220E3902 13220E3902 13220E3921-2 13220E3921-3 13220E3922 13220E3910-1	SCREW, MACHINE, PNH	010 010 035 025 025 001 001 005 003 005 050

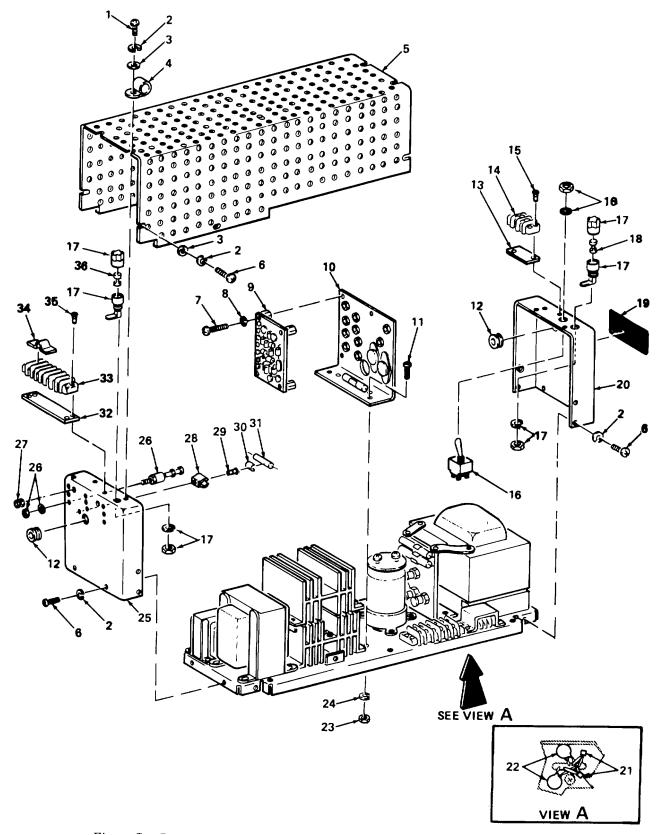


Figure C-6. Power Supply, Cabinet, Monitor, Type C CY-7361/FSS-9(V) (Sheet 1 of 2)

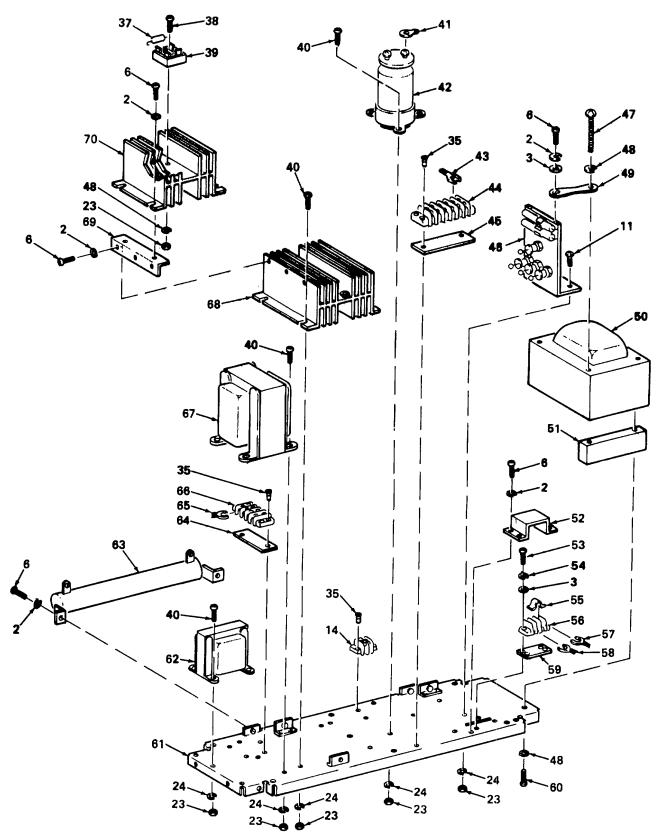


Figure C-6. Power Supply, Cabinet, Monitor, Type C CY-7361/FSS-9(V) (Sheet 2 of 2)

	T		•		
(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	PAFZZ XDFZZ XBFZZ XDFZZ XDFZZ XBFZZ XDFZZ	96906 96906 96906 96906 97403 97403 96906 96906 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 96906 96906 97403 81349 96906 81349 96906 81349 97403	MS35206-229 MS35338-41 MS27183-5 13220E3621-3 13220E4117 MS35206-227 MS35206-227 MS35206-219 MS35338-40 13220E4116 13220E4114 MS35206-246 MS35489-11 13220E4998-6 13220E4998-6 13220E4141 TYPE FHN20G F03B125V8A 13220E4998-6 13220E4125 13220E4131 M39014/01-1238 13220E3967 MS35649-282 MS35338-42 13220E4130 SE09XE03 MS35489-4 M24066/2-108 MS20604AD3W1 MIL-1-695 TYPE F .62"X1 "X.005 THK 13220E4124 13220E4124 13220E4093-5 13220E3823-7 13220E2987 AD8ABS F03A250V7A 13220E3971-2 MS35206-248 13220E4041 MS35206-243 MS35431-7 88F250ALA 13220E3829-3	GROUP 03 MONITOR CABINET (TYPE C) FIG. C-6 POWER SUPPLY, CABINET, MONITOR, TYPE C, CY-7361/FSS-9(V) SCREW, MACHINE HEAD	003 037 015 003 001 034 004 004 001 002 002 002 002 001 001 001 002 002
I	I	I	I		I

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70	XBFZZ XBFZZ XDFFF XDFZZ PAFZZ XBFZZ XBFZZ PAFZZ XBFZZ	97403 97403 97403 81348 96906 97403 97403 96906 96906 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403	13220E4026-6 13220E4093-11 13220E4115 FF-S-92 MS35338-44 13220E4144 P602259 13220E4139 13220E3987. MS35206-231 MS35333-37 13220E3966 13220E4026-3 13220E4093-9 MS35206-279 13220E4126 13220E4137 13220E4143 13220E4143 13220E4143 13220E4128 13220E4128 13220E4128	BARRIER STRIP INSULATOR PLATE, SUBASSEMBLY SCREW, MACHINE WASHER, LOCK BRACKET TRANSFORMER, POWER BRACKET, TRANSFORMER SHIELD, POWER SUPPLY SCREW, MACHINE WASHER, LOCK LIINK, TERMINAL BARRIER STRIP TERMINAL INSULATOR SCREW, MACHINE, PAN PLATE, BASE, POWER REACTOR RESISTOR, FIXED, WIRE INSULATOR TERMINAL BARRIER STRIP CHOKE, POWER SUPPLY HEAT SINK BRACKET, ANGLE HEAT SINK END OF FIGURE	001 001 004 008 002 001 002 001 002 001 001 001 001 001

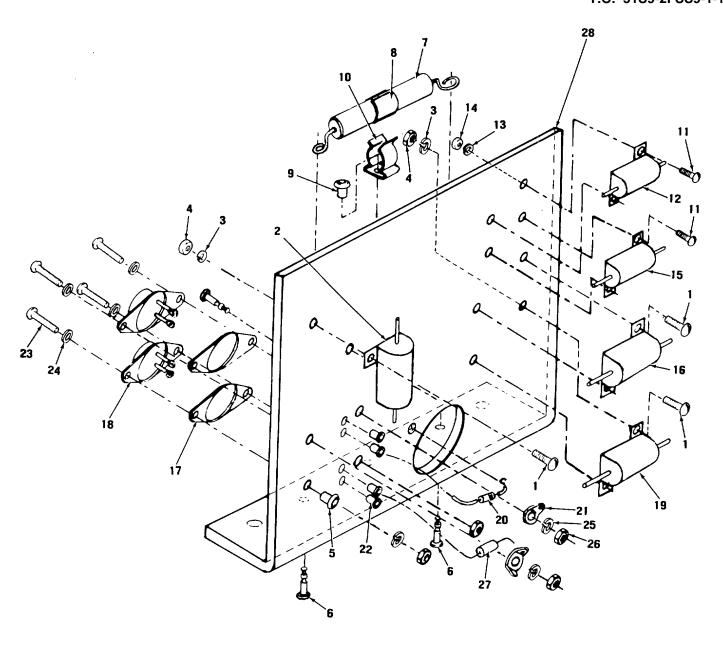


Figure C-7. Monitor, Cabinet, Type C (CY-7361) Printed Wiring Board Mounting Plate

TM 5-6350-264-14&P-11 NAVELEX EE 181-AA-OMI-12A/E121 C-7359-60-1 T.O. 31S9-2FSS9-1-11

_						
	(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	PAFZZ PAFZZ PAFZZ PAFZZ PAFZZ XDFZZ XDFZZ XBFZZ PAFZ PAF	96906 90213 96906 97403 96906 81349 81349 07707 96906 96906 96906 00213 97403 97403 97403 97403 97403 97403 97403 97403 97403 97403	MS35206-323 3225M600-3 MS35338-40 MS35649-242 13220E3928-1 SE09XE03 M3901R/01-0638 TYPE F, FORM R AD45ABS M24066/2-108 MS35206-207 3105M3753 MS35338-39 MS35649-222 3010M4-3 3225M800-3 13220E3929-1 13220E4029 3225M.25-3 13220E3904-2 MS35431-3 13220E4070 MS35206-231 MS27183-6 MS35338-41 MS35649-262 M39014/01-1575 13220E4133	GROUP 03 MONITOR CABINET (TYPE C) FIG. C-7 MONITOR CABINET, TYPE C, PRINTED WIRING BOARD MOUNTING PLATE SCREW, MACHINE	006 001 006 006 004 003 001 001 001 004 004 001 002 002 001 001 003 004 004 004 004 004 001 001

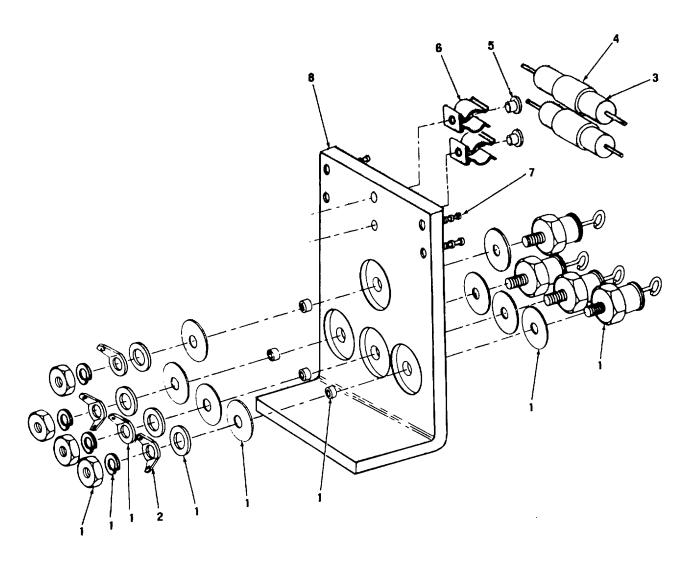


Figure C-8. Monitor Cabinet, Type C (CY-7361) Plate Subassembly, Component Mounting

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
1 2 3 4 5 6 7 8	PAFZZ PAFZZ XDFZZ XDFZZ XBFZZ PAFZZ XBFZZ	97403 81349 97403 96906 96906 97403	13220E4142 TYPE S, DWN, ANL, TND 13220E4124 TYPE F, FORM R 13220E2998-5 M24066/2-108 SE09XE03 13220E4135	GROUP 03 MONITOR CABINET (TYPE C) FIG. C-8 MONITOR CABINET, TYPE C, PLATE SUBASSEMBLY, COMPONENT MOUNTING SEMICONDUCTOR DEVICE	004 004 002 002 002 004 001

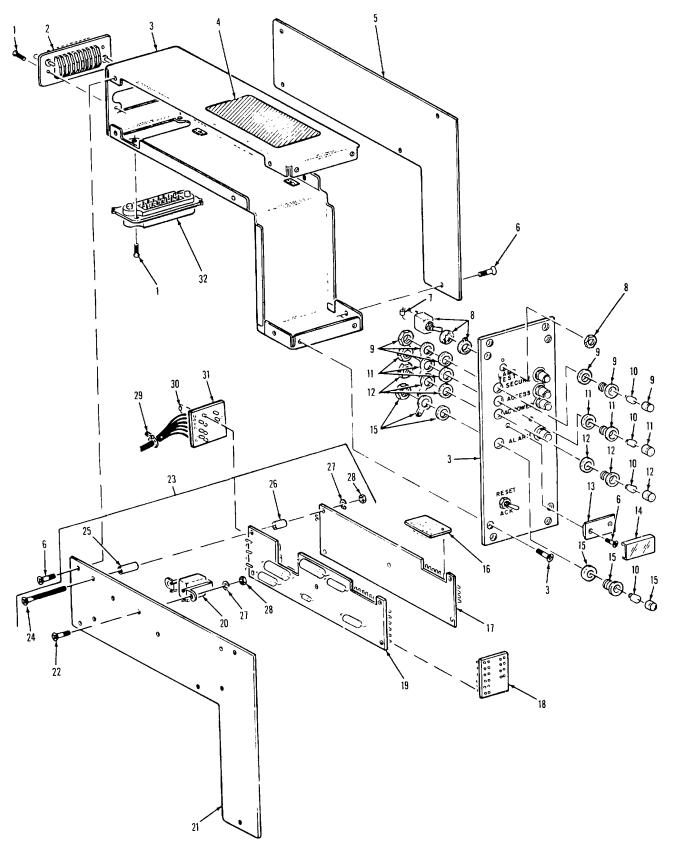


Figure C-9. Monitor Module, Status ID-1921/FSS-9(V)

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32	PAFZZ PAFZZ XBFZZ XBFZZ PAFZZ	96906 97403 97403 97403 96906 81349 96906 97403	MS35206-214 13220E3541 13220E4058 13220E3951 MS35190-221 M39014/01-1593 MS75028-27 13220E3955-3 MS24515-685 13220E3955-4 13220E3955-2 13220E4054 13220E3955-1 13220E3953 13220E3953 13220E3957 13220E3957 13220E3954 MS35190-222 SD-B-806503 MS35190-231 13220E3538-3 13220E3538-2 MS35338-40 MS35649-242 MS367-4-9 FM04-125V2A 13220E3909	GROUP 04 STATUS MONITOR MODULE FIG. C-9 MONITOR MODULE, STATUS ID-1921/FSS-9(V) SCREW	004 001 001 001 002 002 003 001 001 001 001 001 001 001

Section III. SPECIAL TOOLS LIST

(Not Applicable)

			AND PART NUMBER INDE	ΣX	
STOCK NUMBER	FIG.	ITEM	K NUMBER INDEX STOCK NUMBER	FIG.	ITEM
5910-00-010-8666	4	49	5970-00-426-1054	4	13
0010 00 010 0000	6	21	0070 00 120 100 1	7	17
5910-00-010-8717	9	7	5905-00-430-1446	7	16
5310-00-045-3299	2	4	5905-00-456-9175	7	15
0010 00 010 0200	4	41	5905-00-471-2458	4	26
	6	24	5905-00-487-1614	2	24
5310-00-045-4007	1	50		4	71
	2	2			22
	4	3	5310-00-543-2410	6 6 7	8
	6	2		7	3
	7	25	5310-00-543-5060	7	13
5920-00-050-4953	4	69	5920-00-556-0144	4	56
5305-00-051-6521	1	19	5310-00-559-0070	1	46
	3	21	6350-00-561-6502	3	32
5910-00-052-7632	4	28	5310-00-579-0079	1	6
	6	31		2	22
	8	3		2 3	45
5310-00-082-1404	1	43		4	20
	3	42		6	54
	7	24	5310-00-582-5965	6	48
5930-00-106-5211	9	8	5310-00-595-7237	5	9
5905-00-110-7620	4	24	5920-00-636-0964	6	18
6350-00-111-0508	1	28	5310-00-637-9541	5	10
6140-00-111-0520	3	15	5930-00-655-1575	2	17
	5	17		4	57
5910-00-113-5278	2	25	5950-00-660-9499	4	32
5905-00-120-9154	4	31	6145-00-669-6642	8	2
5910-00-124-0659	7	27	6240-00-752-2581	9	10
5961-00-133-0473	2	36	5325-00-762-9099		33
	4	54	5310-00-809-8544	3 2	51
	8	1	5305-00-833-8626	1	14
5961-00-139-1931	4	15		3	10
5310-00-193-7577	4	6		5	2
5920-00-227-6179	2	15	5940-00-874-9033	1	27
5305-00-253-7841	7	1		3	16
5920-00-280-8344	2	16		5	15
5325-00-291-9366	4	58	5305-00-889-2997	2	34
5905-00-308-6468	7	12	5305-00-889-3001	1	44
5905-00-331-7775	7	19		2	20
6350-00-360-7758	9	17		3	43
6350-00-368-8205	9	20		4	35
6350-00-368-8209	9	19		5	42
6350-00-368-8211	1	1		6	53
6350-00-368-8212	1	20		7	23
	3	8	5320-00-903-8778	6	15
	5	47	6210-00-916-2702	9	14
6350-00-368-8220	9	16	5310-00-934-9738	7	14
6350-00-372-3744	5	45	5310-00-934-9739	7	4
5961-00-383-1149	4	25	5310-00-934-9747	2	52
5920-00-413-1337	9	30		3	39

NATIONAL STOCK NUMBER AND PART NUMBER INDEX NATIONAL STOCK NUMBER INDEX								
STOCK NUMBER	FIG.	ITEM	K NUMBER INDEX STOCK NUMBER	FIG.	ITEM			
5310-00-934-9747	4	21	5950-01-008-8645	3	34			
3310-00-334-3747	7	26	3930-01-000-0043	5	38			
5310-00-934-9757	2	26	5940-01-025-7766	1	26			
0010 00 004 0707	4	42	0040 01 020 7700	3	17			
	6	23		5	16			
5305-00-957-7815	3	20	5940-01-026-9639	4	16			
5305-00-958-5453	1	21	00 10 01 020 0000	6	26			
	3	7	5920-01-028-5727	4	70			
	5	31	5930-01-062-0695	3	11			
5305-00-958-5483	9	6	5940-01-065-0779	2	49			
5310-00-983-8483	2	3	5950-01-065-0782	2	45			
	4	4	6350-01-073-8286	9	13			
	6	3	5910-01-080-1732	2	42			
5305-00-984-4976	4	5	5935-01-080-6321	9	2			
	6	7	5935-01-080-6328	1	4			
5305-00-984-4977	2	38	0000 01 000 0020	9	32			
5305-00-984-4982	2	1	5961-01-081-4207	2	46			
5305-00-984-4983	3	45	5999-01-083-1353	9	18			
	4	2	5950-01-092-2990	6	62			
5305-00-984-4984	1	12	5920-01-092-4233	6	36			
	5	26	5950-01-092-9123	4	40			
	6	6	5950-01-092-9124	4	43			
5305-00-984-4988	1	5	5905-01-092-9355	6	63			
	2	18	5905-01-093-4333	4	52			
	4	55	5915-01-094-1776	1	37			
	5	20		3	37			
5305-00-984-4989	4	11		5	37			
	6	1	6350-01-099-0237	9	31			
5305-00-984-6191	1	45	5905-01-100-6872	4	22			
	2	8	5950-01-117-1540	6	50			
	4	33	5961-01-141-5110	1	39			
	6	40		3	36			
5305-00-984-6193	2	40		5	35			
5305-00-984-6194	6	11						
5305-00-984-6196	6	38						
5305-00-984-7361	3	14						
	5	32						
5305-00-988-1723	6	60						
5305-00-993-0190	1	3						
	5	24						
	9	1						
5305-00-993-2738	5	11						
5305-00-995-6653	9	22						
5905-01-005-6371	1	40						
	3	35						
	5	36						
6120-01-006-5077	9	15						
6210-01-006-5078	9	12						
6210-01-006-5079	9	9						
6210-01-007-1903	9	11						

		IBER INDEX		
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEN
07707	AD45ABS		7	9
07707	AD8ABS		6	35
26667	C-47U	5950-00-660-9499	4	32
14407	CT602	5950-01-092-9124	4	43
81348	FF-S-92		6	47
81349	FHN 20G		2	7
81349	FHN20G	5920-00-556-0144	4	56
81349	FM04-125V2A	5920-00-413-1337	9	30
81349	F02A250V1-1/2A	5920-00-050-4953	4	69
81349	F02A250V 112A	5920-00-280-8344	2	16
81349	F02B250V1-1/2A	5920-00-227-6179	2	15
81349	F02B250V3A	5920-01-028-5727	4	70
81349	F03A250V7A	5920-01-092-4233	6	36
81349	F03B125V8A	5920-00-636-0964	6	18
09922	HP-2N	0020 00 000 000 .	1	7
09922	HP-4N		i i	8
81349	JAN 2N3055		4	14
81349	JAN 2N3740	5961-00-139-1931	4	15
81349	MIL-C-39014/1	5910-00-113-5278	2	25
81349	MIL-I-695 TYPE F .62" X 1"	3910-00-113-3270	6	30
01349	X.005 THK		0	30
01240	MIL-I-695 TYPE F 1.5" X .005 THK		2	4.4
81349	MIL-I-695 TYPE F 1.5 X .005 THK		2	44
81349			4	39
81349	MIL-I-695 TYPE F 4" X 11/2" X .015	5005 04 400 0070	2	28
81349	MIL-R-39007/6	5905-01-100-6872	4	22
96906	MS18212-14	5305-00-833-8626	1	14
			3	10
			5	2
96906	MS20604AD3T4		1	35
96906	MS20604AD3W1		6	29
96906	MS21083-N4		5	8
96906	MS21266-2N		3	22
96906	MS24515-685	6240-00-752-2581	9	10
96906	MS24693-S25	5305-00-051-6521	1	19
			3	21
96906	MS24693-S4	5305-00-957-7815	3	20
96906	MS27183-5	5310-00-983-8483	2	3
			4	4
			6	3
96906	MS27183-6	5310-00-082-1404	1	43
			3	42
			7	24
96906	MS27183-7	5310-00-809-8544	2	51
96906	MS3367-4-9		1	25
30000			9	29
96906	MS35190-221	5305-00-958-5483	9	6
96906	MS35190-222	5305-00-995-6653	9	22
96906	MS35190-222 MS35190-231	0000 00 000 0000	9	24

	NATIONAL STOCK NUMBER AND PART NUMBER INDEX PART NUMBER INDEX							
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM				
96906	MS35190-236	5305-00-958-5453	1	21				
			3	7				
			5	31				
96906	MS35191-270	5305-00-984-7361	3	14				
			5	32				
96906	MS35206207	5005 00 000 0400	7	11				
96906	MS35206-214	5305-00-993-0190	1	3 1				
			3 5	24				
			9	1				
96906	MS35206-215	5305-00-889-2997	2	34				
96906	MS35206-219	5305-00-984-4976	4	5				
30300	10000200 210	3303 00 304 4370	6	7				
96906	MS35206-220	5305-00-984-4977	2	38				
96906	MS35206-225	5305-00-984-4982	2	1				
96906	MS35206-226	5305-00-984-4983	3	46				
			4	2				
96906	MS35206-227	5305-00-984-4984	1	12				
			3	29				
			5	26				
			6	6				
96906	MS35206-228	5305-00-984-4988	1	5				
			2	18				
			4	55				
00000	M005000 000	5005 00 004 4000	5	20				
96906	MS35206-229	5305-00-984-4989	4	11				
96906	MS35206-230	5305-00-889-3000	6 5	1 21				
96906	MS35206-231	5305-00-869-3000	1	44				
90900	WIS35200-231	5505-00-669-5001	2	20				
			3	43				
			4	35				
			5	45				
			6	53				
			7	23				
96906	MS35206-243	5305-00-984-6191	1	45				
			2	8				
			4	33				
			6	40				
96906	MS35206-245	5305-00-984-6193	2	40				
96906	MS35206-246	5305-00-984-6194	6	11				
96906	MS35206-248	5305-00-984-6196	6	38				
96906	MS35206-279	5305-00-988-1723	6	60				
96906 96906	MS35206-323 MS35207-280	5305-00-253-7841 5305-00-993-2738	7 5	1 11				
96906	MS35333-36	5310-00-193-7577	4	6				
96906	MS35333-36 MS35333-37	5310-00-193-7577	1 1	6				
30300	1000000-01	3310-00-379-0079	2	22				
			3	45				
			4	20				
			5	27				
			6	54				

	NATIONAL STOCK NUMBER AND PART NUMBER INDEX PART NUMBER INDEX							
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM				
96906	MS35333-38	5310-00-559-0070	1	46				
96906	MS35333-42	5310-00-595-7237	5	9				
96906	MS35338-39	5310-00-543-5060	7	13				
96906	MS35338-40	5310-00-543-2410	2	35				
30300	WCCCCCC 40	0010 00 040 2410	6	8				
			7	3				
			9	27				
00000	MC05000 44	5040 00 045 4007						
96906	MS35338-41	5310-00-045-4007	1	50				
			2	2				
			4	3				
			6	2				
			7	25				
96906	MS35338-42	5310-00-045-3299	2	4				
			4	41				
			6	24				
96906	MS35338-44	5310-00-582-5965	6	48				
96906	MS35338-46	5310-00-637-9541	5	10				
96906	MS35431-3		2	47				
			4	19				
			7	21				
96906	MS35431-7		2	43				
30300	W666461 7		4	37				
			6	41				
96906	MS35489-11		2	10				
90900	101333469-11	E33E 00 304 0300						
		5325-00-291-9366	4	58				
00000	14005400.4		6	12				
96906	MS35489-4		6	27				
96906	MS35649-222	5310-00-934-9738	7	14				
96906	MS35649-242	5310-00-934-9739	7	4				
			9	28				
96906	MS35649-262	5310-00-934-9747	2	52				
			3	39				
			4	21				
			7	26				
96906	MS35649-282	5310-00-934-9757	2	26				
			4	42				
			6	23				
96906	MS75028-27	5930-00-106-5211	9	8				
96906	MS75089-3	5950-01-008-8645	3	34				
00000		333 31 333 33 13	5	41				
			1	38				
96906	MS77066-3		1	36				
30300	W677666 5		3	38				
			5	39				
04040	M24000/2 400		6	28				
81349	M24066/2-108							
			7	10				
04040	M00044/04 4000	5040 00 040 0000	8	6				
81349	M39014/01-1238	5910-00-010-8666	4	49				
			6	21				
81349	M39014/01-1575	5910-00-124-0659	7	27				
81349	M39014/01-1593	5910-00-010-8717	9	7				
81349	M39018/01-0638		4	29				
			7	7				

	NATIONAL STOCK NUMBER AND PART NUMBER INDEX PART NUMBER INDEX							
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM				
14407	P602259	5950-01-117-0540	6	50				
14407	P602260	5950-01-092-9123	4	40				
81349	RCR07G1102JS	5905-00-110-7620	4	24				
81349	RCR07G471JS	5905-00-120-9154	4	31				
81349	RWR89S4R00FM	5905-00-471-2458	4	26				
16250	SC-B-806503	0000 00 11 1 2 100	9	23				
81349	SE09XE02		4	17				
81349	SE09XE03	5940-01-026-9639	4	16				
01343	3E09AE03	3340-01-020-3039	6	26				
			7	6				
			8	7				
81349	TYPE E FORM P		2	33				
01349	TYPE F, FORM R		7					
				8				
0.40.40	T)/DE ELINIOS		8	4				
81349	TYPE FHN20G		6	17				
81349	TYPE S, DWN, ANL, TND	6145-00-669-6642	8	2				
97403	13220E2987		2	31				
			4	63				
			6	34				
97403	13220E2998-5		8	5				
97403	13220E2998-6		2	30				
			3	49				
			4	62				
		5320-00-903-8778	6	15				
97403	13220E2998-7		2	13				
			4	66				
97403	13220E3538-2		9	26				
97403	13220E3538-3		9	25				
97403	13220E3541	5935-01-080-6321	9	2				
97403	13220E3621-1		3	18				
97403	13220E3621-3		1	11				
			3	28				
			5	47				
			6	4				
97403	13220E3621-4		5	49				
97403	13220E3622	5940-00-874-9033	1	27				
000			3	16				
			5	15				
97403	13220E3623	5940-01-025-7766	1	26				
37403	1022020020	0340 01 023 7700	3	17				
			5	16				
97403	13220E3706	5930-00-655-1575	2	17				
97403	13220E3706 13220E3715-2	5910-01-080-1732		42				
97403		3910-01-000-1732	2 4	30				
	13220E3746-2		4					
97403	13220E3823-2		1	34				
97403	13220E3823-6		3	48				
97403	13220E3823-7		2	29				
			4	61				
			6	33				

NATIONAL STOCK NUMBER AND PART NUMBER INDEX PART NUMBER INDEX						
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM		
97403	13220E3823-8		1	48		
			5	49		
			3	50		
97403	13220E3823-13		5	35		
97403	13220E3829-1		1	47		
000			2	5		
			3	44		
			4	64		
			5	34		
			6	58		
97403	13220E3829-2		1	24		
31403	1322013023-2		2	14		
			3	30		
			4	65		
			5	14		
07400	1000050000		6	65		
97403	13220E3829-3	2052 22 222 224	6	43		
97403	13220E3901	6350-00-368-8211	1	1		
97403	13220E3902	6350-00-368-8212	1	20		
			3	8		
			5	52		
97403	13220E3904-2		4	27		
			7	20		
97403	13220E3909	5935-01-080-6328	1	4		
			9	32		
97403	13220E3910-1		1	10		
			3	19		
			5	51		
97403	13220E3910-2		1	31		
			3	26		
			5	43		
97403	13220E3910-3		1	2		
97403	13220E3910-4		3	5		
			5	18		
97403	13220E3912	6350-00-111-0508	1	28		
97403	13220E3913		1	13		
97403	13220E3916		i i	32		
97403	13220E3917		1	18		
97403	13220E3918		1	9		
97403	13220E3919-1		3	9		
37403	1922019919-1		5	1		
97403	13220E3919-2		5	3		
97403	13220E3919-2 13220E3919-3		1	15		
97403	13220E3919-3 13220E3921-2		1 1	22		
97403	13220E3921-2		- I	31		
			3			
07402	1222052022		5	53		
97403	13220E3922		1 5	55		
07400	4000050007.4		5	50		
97403	13220E3927-1		1	30		
97403	13220E3927-2		3	27		
97403	13220E3928-1		4	18		
			7	5		
97403	13220E3929-1	5970-00-426-1054	4	13		

	NATIONAL STOCK NUMBER AND PART NUMBER INDEX PART NUMBER INDEX							
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM				
97403	13220E3929-1	5970-00-426-1054	7	17				
97403	13220E3929-2		4	9				
97403	13220E3951		9	5				
97403	13220E3952	6350-00-368-8209	9	19				
97403	13220E3953	6350-00-360-7758	9	17				
97403	13220E3954		9	21				
97403	13220E3955-1	6210-01-006-5077	9	15				
97403	13220E3955-2	6210-01-006-5078	9	12				
97403	13220E3955-3	6210-01-006-5079	9	9				
97403	13220E3955-4	6210-01-007-1903	9	11				
97403	13220E3956	0210 01 001 1000	2	27				
97403	13220E3957	6350-00-368-8205	9	20				
97403	13220E3961	6210-00-9162702	9	14				
97403	13220E3963	6350-00-368-8220	9	16				
97403	13220E3365	5915-01-094-1776	1	37				
31403	1322013903	3913-01-094-1770	3	37				
			5	37				
		5915-01-036-7978	5	40				
97403	13220E3966	3913-01-030-1910	2	21				
31403	1322023900		4	48				
			6	55				
97403	13220E3967	5905-00-487-1614	2	24				
91403	13220E3907	3903-00-487-1014	4	71				
			6	22				
97403	13220E3968-1		1	42				
97403	13220E3968-1		3	41				
91403	13220E3906-2		5	41				
97403	13220E3969		2	23				
31403	1322023909		4	45				
			6	57				
97403	13220E3970	5905-01-005-6371	1	40				
31403	1322023970	3903-01-003-0371	3	35				
			5	39				
97403	13220E3971-1	5961-01-081-4207	2	46				
97403	13220E3371-1 13220E3971-2	3901-01-001-4201	4	34				
31403	1322023971-2		6	37				
97403	13220E3973		2	37				
97403	13220E3973		4	53				
97403	13220E3374 13220E3985		2	50				
97403	13220E3385 13220E3986		2	9				
97403	13220E3380 13220E3987		2	19				
37403	1322023307		4	44				
			6	52				
97403	13220E3991		2	54				
97403	13220E3331		2	41				
97403	13220E3392		2	39				
97403	13220E3393		2	32				
97403	13220E3394 13220E3995		2	6				
97403	13220E3333	5950-01-065-0782	2	45				
97403	13220E3330	5950-01-065-0779	2	49				
97403	13220E4001	6350-00-561-6502	3	32				
97403	13220E4005		3	24				

	NATIONAL STOCK NUMBER AND PART NUMBER INDEX PART NUMBER INDEX							
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM				
97403	13220E4008	6140-00-111-0520	3	15				
			5	17				
97403	13220E4009		4	10				
97403	13220E4010		3	4				
			5	29				
97403	13220E4012		3	25				
97403	13220E4012-1		1	29				
97403	13220E4013		3	52				
97403	13220E4014		5	28				
97403	13220E4015		3	6				
			3 5 3	30				
97403	13220E4016		3	13				
97403	13220E4018		4	50				
97403	13220E4022		2	48				
97403	13220E4026-3		2	12				
000	102202 1020 0		4	46				
			6	56				
97403	13220E4026-4		4	67				
000	102202 1020 1		6	66				
97403	13220E4026-6		6	44				
97403	13220E4027		4	8				
97403	13220E4029		4	2				
07 100	102202 1020		7	18				
97403	13220E4033-1	5961-00-383-1149	4	25				
97403	13220E4033-2	0001 00 000 1110	4	23				
97403	13220E4035		4	1				
97403	13220E4037		4	59				
97403	13220E4041		4	36				
37 400	1022024041		6	39				
97403	13220E4042	5905-01-093-4333	4	52				
97403	13220E4046	0000 01 000 1000	4	7				
97403	13220E4047		4	51				
97403	13220E4048-1		5	13				
97403	13220E4048-3		3	23				
97403	13220E4054	6350-01-073-8286	9	13				
97403	13220E4054	0000 01 070 0200	9	3				
97403	13220E4059		9	4				
97403	13220E4060	6350-01-099-0237	9	31				
97403	13220E4061	5999-01-083-1353	9	18				
97403	13220E4070	3333 01 003 1333	7	22				
97403	13220E4071-1		1 1	17				
97403	13220E4071-2		3	12				
97403	13220E4072	5961-01-141-5110	1	39				
37 403	1322024072	3301 01 141 3110	3	36				
			5	38				
97403	13220E4093-1		1	33				
31703	102201-10001		6	13				
97403	13220E4093-10		4	68				
31403	102201-1030-10		6	64				
97403	13220E4093-11		6	45				
97403	13220E4093-11 13220E4093-12		5	23				
97403 97403	13220E4093-12 13220E4093-4		3	46				

NATIONAL STOCK NUMBER AND PART NUMBER INDEX PART NUMBER INDEX						
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM		
97403	13220E4093-5		2	53		
			6	32		
97403	13220E4093-6		1	49		
			3	51		
97403	13220E4093-9		2	11		
97403	13220E4093-10		4	60		
			4	47		
			6	59		
97403	13220E4101	6350-00-372-3744	5	45		
97403	13220E4103		5	46		
97403	13220E4104		5	19		
97403	13220E4105-1		5	6		
97403	13220E4105-2		5	12		
97403	13220E4109		5	4		
97403	13220E4110		5	5		
97403	13220E4112		5	33		
97403	13220E4113		6	68		
97403	13220E4114		6	10		
97403	13220E4115		6	46		
97403	13220E4116		6	9		
97403	13220E4110		6	5		
97403	13220E4117	5910-00-052-7632		28		
97403	1322004124	5910-00-052-7632	4			
			6	31		
07400	4000054405		8	3		
97403	13220E4125		6	19		
97403	13220E4126		6	61		
97403	13220E4127		6	70		
97403	13220E4128		6	69		
97403	13220E4130		6	25		
97403	13220E4131		6	20		
97403	13220E4133		7	28		
97403	13220E4135		8	8		
97403	13220E4137	5950-01-092-2990	6	62		
97403	13220E4138		6	67		
97403	13220E4139		6	51		
97403	13220E4141		6	16		
97403	13220E4142	5961-00-133-0473	2	36		
			4	54		
			8	1		
97403	13220E4143	5905-01-092-9355	6	63		
97403	13220E4144		6	49		
97403	13220E4145-2		5	22		
97403	13220E8166		1	41		
97403	13220E8167		3	40		
97403	13220E8168		5	40		
97403	13220E4071-1		1	17		
29587	26-190-16S		3	2		
			5	25		
00213	3010M4-3	5905-00-456-9175	7	15		
00213	3105M3753	5905-00-308-6468	7	12		
00213	3225M.25-3	5905-00-331-7775	7	19		
00213	3225M600-3		7	2		
00213	3225M800-3	5905-00-430-1446	7	16		

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	NATIONAL STOCK NUMBER AND PART NUMBER INDEX PART NUMBER INDEX							
FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM				
24153	60-4055-104-1012		1	16				
		5930-01-062-0695	3	11				
24153	60-4055-105-1012		5	7				
27193	7590K6	5930-00-655-1575	4	57				
94222	85-31-093-15	5325-00-762-9099	3 4	33				
06001	88F235ALA		4	38				
06001	88F250ALA		6	42				

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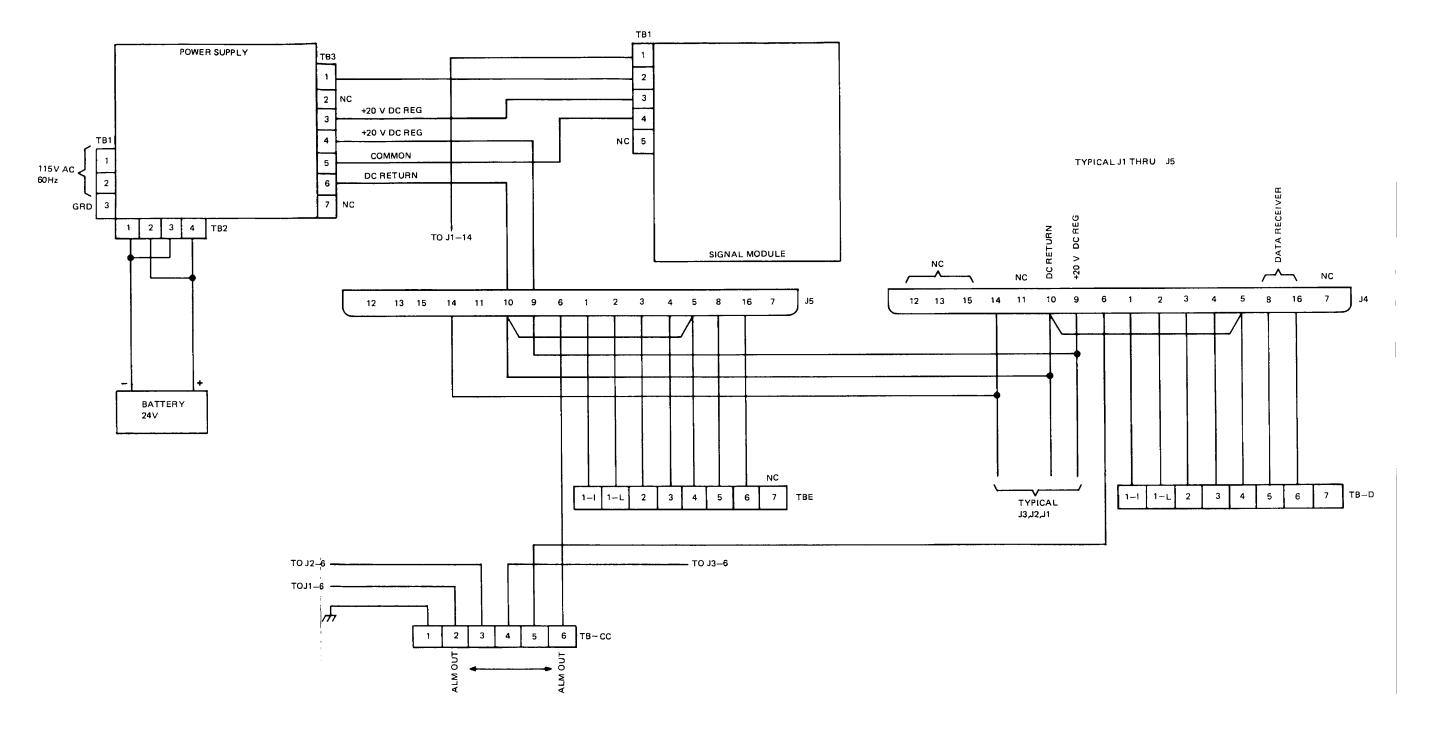


Figure FO-1. Five-Zone Monitor Cabinet Wiring Diagram

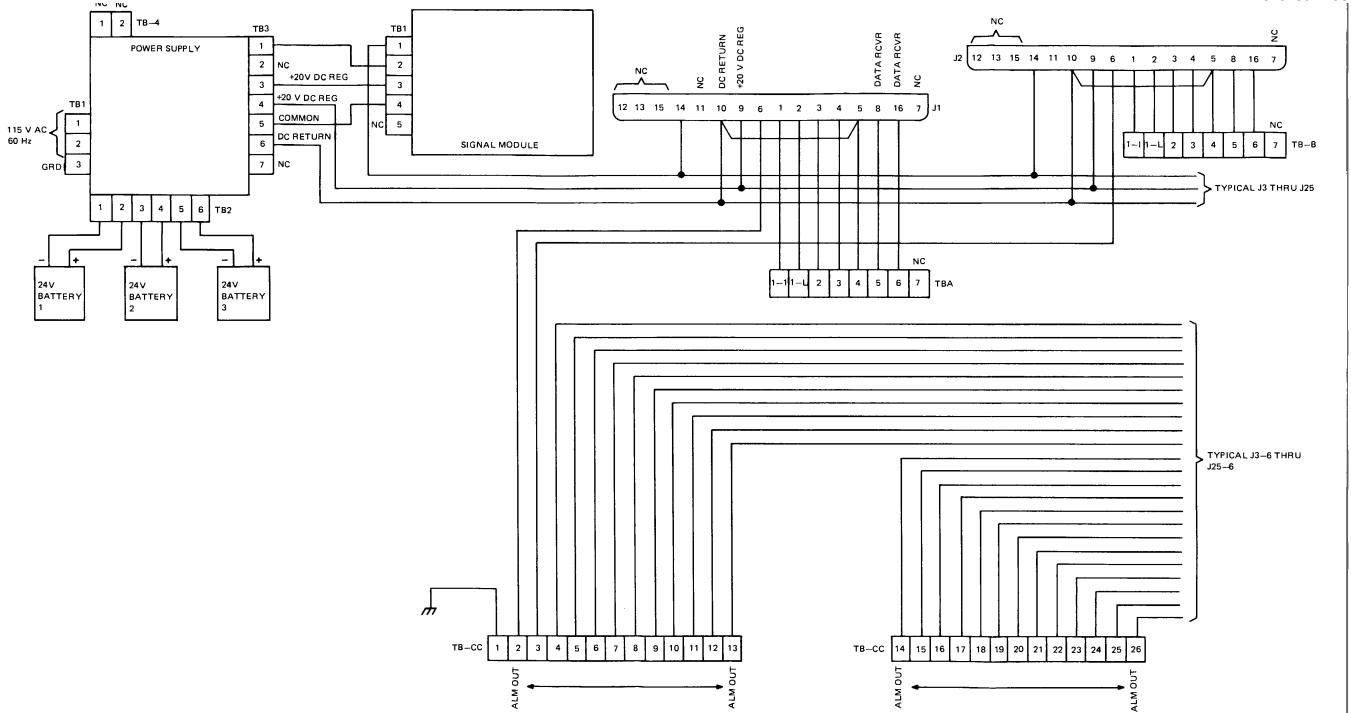


Figure FO-2. Twenty-Five-Zone Monitor Cabinet Wiring Diagram

By Order of the Secretaries of the Army, the Navy, and the Air Force:

E. C. MEYER

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PREVIOUS EDITIONS ARE OBSOLETE. P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

Liquid Measure Linear Measure

1 centimeter = 10 millimeters = .39 inch

1 decimeter = 10 centimeters = 3.94 inches

1 meter = 10 decimeters = 39.37 inches

1 dekameter = 10 meters = 32.8 feet

1 hectometer = 10 dekameters = 328.08 feet

1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain

1 decigram = 10 centigrams = 1.54 grains

1 gram = 10 decigram = .035 ounce

1 decagram = 10 grams = .35 ounce

1 hectogram = 10 decagrams = 3.52 ounces

1 kilogram = 10 hectograms = 2.2 pounds

1 quintal = 100 kilograms = 220.46 pounds

1 metric ton = 10 quintals = 1.1 short tons

1 centiliter = 10 milliters = .34 fl. ounce

1 deciliter = 10 centiliters = 3.38 fl. ounces

1 liter = 10 deciliters = 33.81 fl. ounces

1 dekaliter = 10 liters = 2.64 gallons

1 hectoliter = 10 dekaliters = 26.42 gallons

1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch

1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches

1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet

1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet

1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres

1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch

1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches

1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change To		Multiply by	To change	То	Multiply by	
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062	
feet	meters	.305	centimeters	inches	.394	
yards	meters	.914	meters	feet	3.280	
miles	kilometers	1.609	meters	yards	1.094	
square inches	square centimeters	6.451	kilometers	miles	.621	
square feet	square meters	.093	square centimeters	square inches	.155	
square yards	square meters	.836	square meters	square feet	10.764	
square miles	square kilometers	2.590	square meters	square yards	1.196	
acres	square hectometers	.405	square kilometers	square miles	.386	
cubic feet	cubic meters	.028	square hectometers	acres	2.471	
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315	
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308	
pints	liters	.473	milliliters	fluid ounces	.034	
quarts	liters	.946	liters	pints	2.113	
gallons	liters	3.785	liters	quarts	1.057	
ounces	grams	28.349	liters	gallons	.264	
pounds	kilograms	.454	grams	ounces	.035	
short tons	metric tons	.907	kilograms	pounds	2.205	
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102	
pound-inches	Newton-meters	.11296				

Temperature (Exact)

°F	Fahrenheit	5/9 (after	Celsius	°C
	temperature	subtracting 32)	temperature	

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