ARMY TECHNICAL MANUAL
NAVY PUBLICATION
AIR FORCE TECHNICAL ORDER

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

D E P A R T M E N T O F T H E A R M Y , T H E N A V Y , A N D T H E A I R F O R C E

29 OCTOBER 1982

CHANGE

NO. 2

HEADQUARTERS
DEPARTMENTS OF THE ARMY, NAVY
AND AIR FORCE
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

Approved for public release; distribution is unlimited

TM 5-6350-264-14&P-11, NAVELEX EE 181-AA-OMI-12A/E121 C-7359-60-1, T.O. 31S9-2FSS9-1-11, 29 October 1982, is changed as follows:

1. Remove and insert pages as indicated below. New or changed text material is indicated by a vertical bar in the margin. An illustration change is indicated by a miniature pointing hand.

Remove pages	Insert pages
C-31 and C-32/(C-33 blank)	C-31 and C-32/(C-33 blank)
C-41 and C-42	C-41 and C-42
C-45 and C-46	C-45 and C-46
C-49 and C-50	C-49 and C-50

2. Retain this sheet in front of manual for reference purposes.

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

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:

MILTON H. HAMILTON
Administrative Assistant to the
Secretary of the Army
02028

MERRILL A. McPEAK
General, USAF
Chief of Staff

Official:

CHARLES C. McDONALD
General, USAF
Commander, Air Force Logistics Command

DAVID E. BOTTORFF
Rear Admiral, CEC, US Navy
Commander
Navy Facilities Engineering Command

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25E, qty rqr block no. 3885.

CHANGE

No. 1

HEADQUARTERS
DEPARTMENTS OF THE ARMY, NAVY, AND AIR FORCE
WASHINGTON, D.C., 1 May 1986

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-1921/FSS-9(V)
NSN 6350-00-228-2661

TM 5-6350-264-14&P-11, NAVELEX EE 181-AA-OMI-12A/E121 C-7359-60-1, T.O. 31S9-2FSS9-1-11, 29 October 1982, is changed as follows:

1. Remove and insert pages as indicated below. New or changed text material is indicated by a vertical bar in the margin. An illustration change is indicated by a miniature pointing hand.

Remove pages	Insert pages
i and ii	i and ii
-----	iii/iv
1-1 and 1-2	1-1 and 1-2
A-1 and A-2	A-1 and A-2
B-3 through B-6	B-3 through B-6
C-1 through C-6	C-1 through C-51/C-52

2. Retain this sheet in front of manual for reference purposes.

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

Official:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

R. L. DILWORTH
Brigadier General, United States Army
The Adjutant General

GLENWOOD CLARK
Vice Admiral, United States Navy
Commander, Naval Electronic
Systems Command

Official:

CHARLES A. GABRIEL, *General USAF*
Chief of Staff

EARL T. O'LOUGHLIN
General, USAF, Commander, Air Force
Logistics Command

DISTRIBUTION:
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),

WARNING

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.

WARNING

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.

WARNING

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.

WARNING

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.

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

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

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

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.

Table of Contents

Table of Contents (Continued)

List of Illustrations

List of Tables

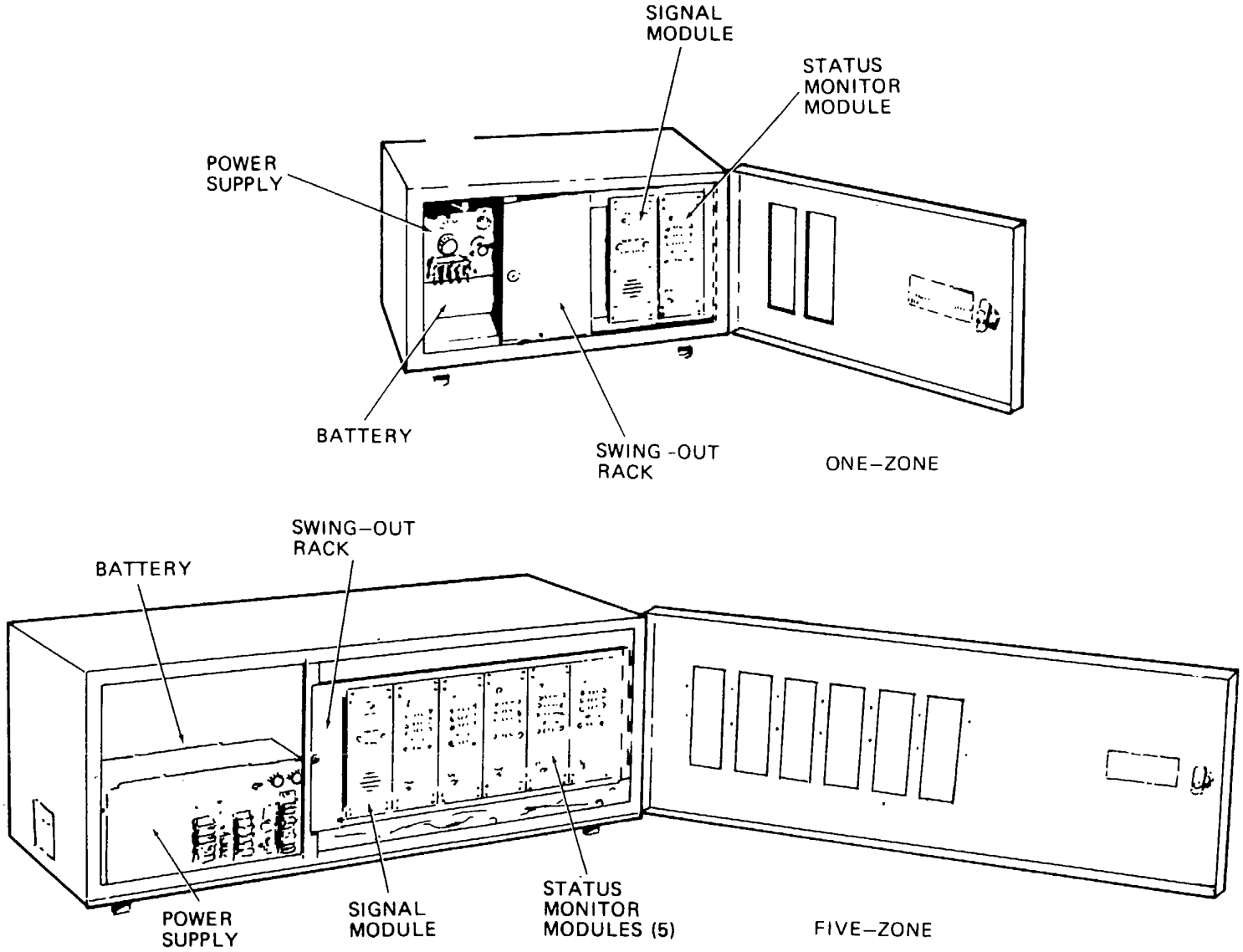


Figure 1-1. Monitor Cabinets, One Zone and Five Zone

CHAPTER 1

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.

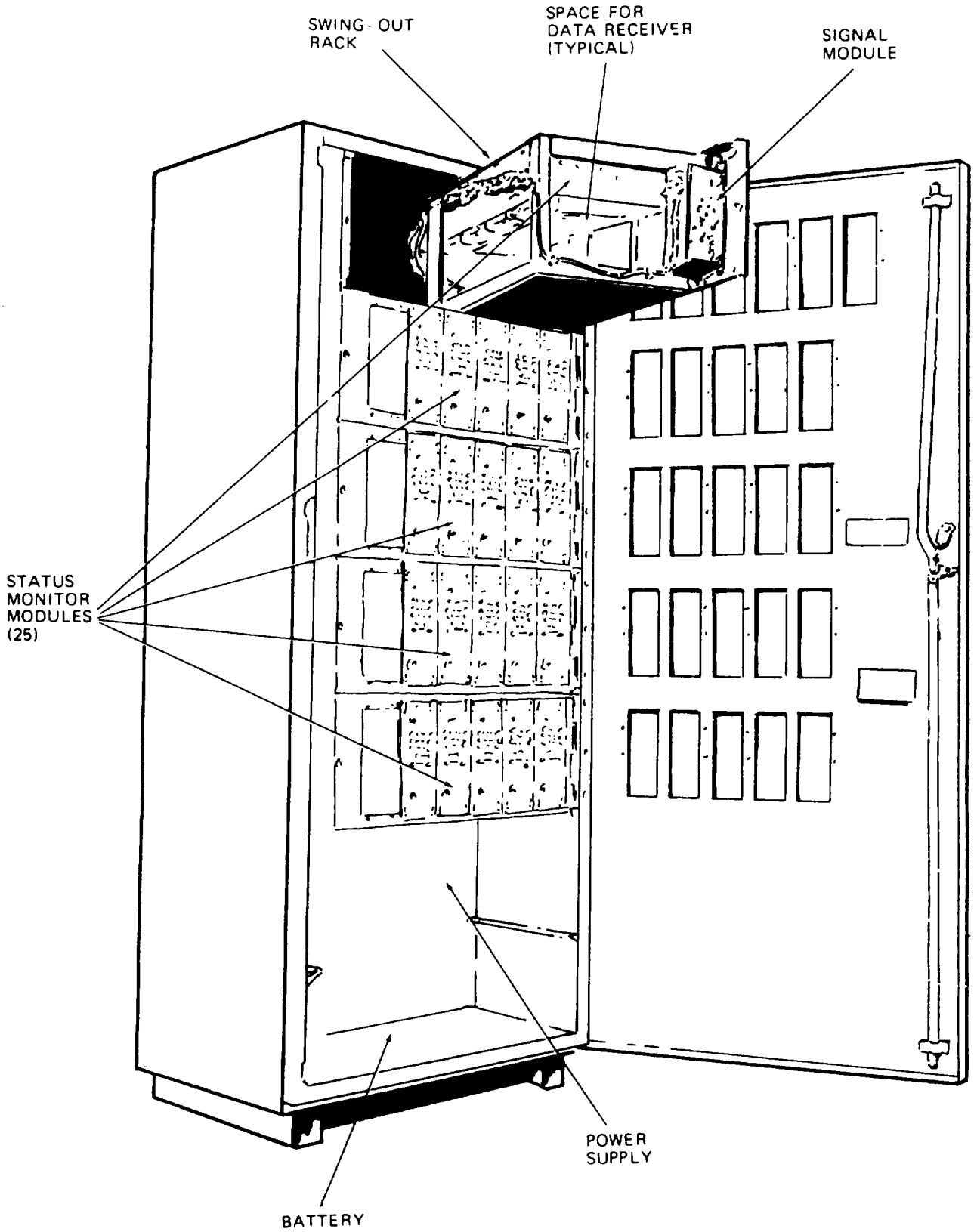


Figure 1-2. Monitor Cabinet. Twenty-five Zone

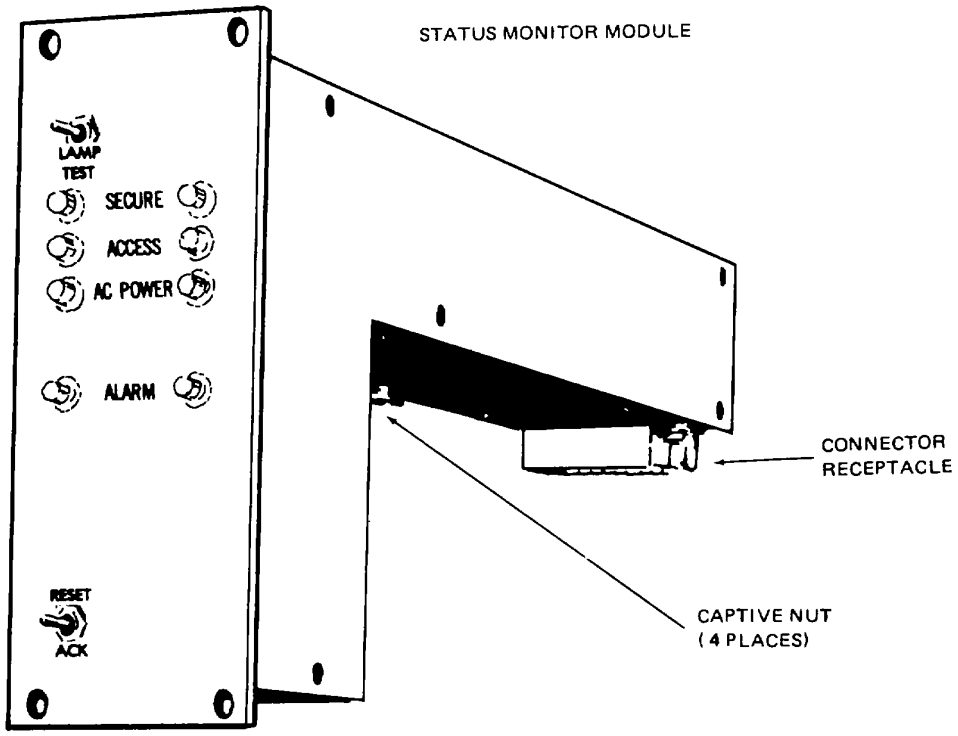


Figure 1-3. Status Monitor Module

(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)

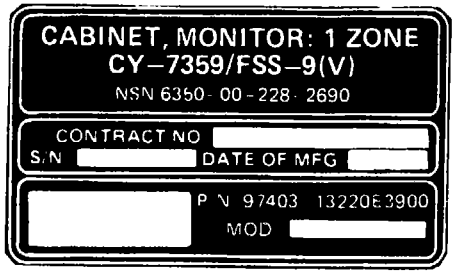
Length.....24.50 inches (62.23 cm)

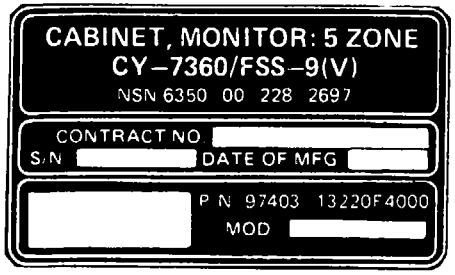
Status Monitor Module

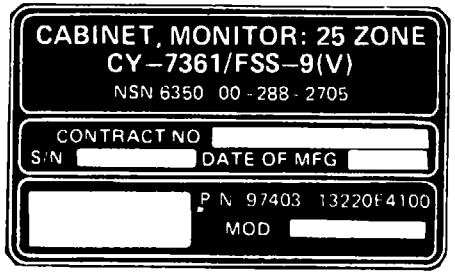
Height.....7.000 inches (17.780 cm)

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

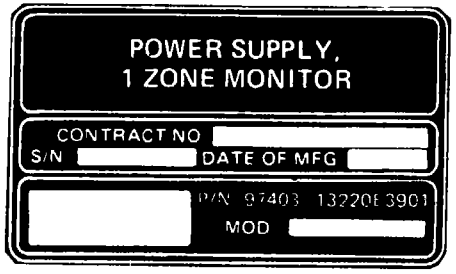
Length.....10.00 inches (25.400 cm)

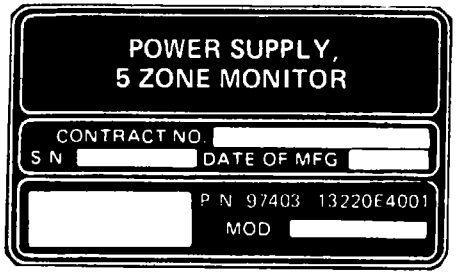


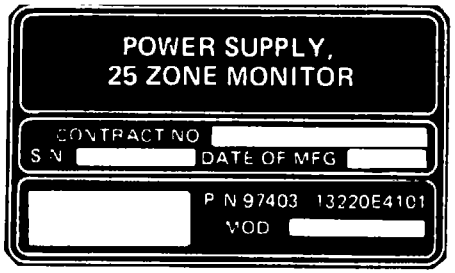




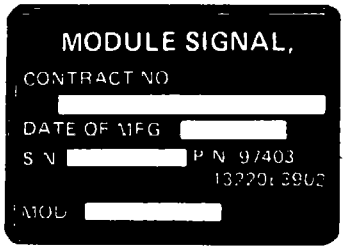
A. MONITOR CABINETS IDENTIFICATION PLATES

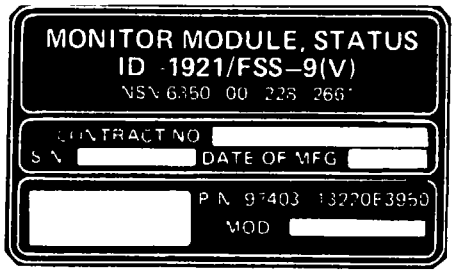






B. POWER SUPPLY IDENTIFICATION PLATES





C. SIGNAL MODULE AND STATUS MONITOR MODULE IDENTIFICATION PLATES

Figure 1-4. Identification Plates, Monitor Cabinets

Color

Housing ..... Gray per Federal Standard 595, color chip 36440, MIL-C-22751

Lettering ..... Black per TT-558

Power Requirements

Monitor Cabinets

Primary ..... 110 to 125 vac,48 to 62 Hz.

Emergency (secondary power)..... 24 vdc; supplied by internal battery. Refer to subparagraph (2).

Status Monitor Module ..... 19 to 21 vdc @ 100 ma maximum

Fuses

Monitor Cabinets

One zone, AC ..... 1.5 A, SB

DC ..... 0.5 A, FB

Five zone, AC ..... 3.0 A, SB

DC ..... 1.5 A, FB

Twenty-five zone, AC ..... 8.0 A, SB

DC ..... 7.0 A, FB

Status Monitor Module ..... 0.25 A SB

Environmental (operational)

Temperature range ..... -20° to +150° F (-29° to +65°C)

Relative humidity ..... Up to 95%

Environmental (nonoperational and storage)

Temperature range ..... -30° to +150° F (-34° to +74°C)

Relative humidity ..... Up to 95%

Shock

Monitor Cabinets ..... 20g, for 11 ms and bench handling (without battery)

Status Monitor Module ..... 20g, for 11 ms and bench handling

Vibration

Monitor Cabinets ..... Withstands transportation conditions (without battery)

Status Monitor Module ..... Withstands transportation conditions

Weather resistance ..... Designed for interior installation

(2) Battery.

Monitor Cabinet (one zone)

Weight ..... 9.5 pounds (4.31 kg)

Height ..... 3.9 inches (9.906 cm)

Width ..... 4.8 inches (12.192 cm)

Depth ..... 6.05 inches (15.367 cm)

Voltage capacity ..... 24 vdc, 5.0 ampere-hour

Monitor Cabinet (five zone and twenty-five zone)

Weight ..... 50 pounds (22.68 kg)

Height ..... 6.45 inches (16.3830 cm)

Width ..... 6.65 inches (16.8910 cm)

Depth ..... 12.46 inches (31.6484 cm)

Power capacity ..... 24 vdc, 28 ampere-hour

NOTE

Two batteries are required for the one-zone Monitor Cabinet, one battery for the five-zone Monitor Cabinet, and three batteries for the twenty-five-zone Monitor Cabinet.

CHAPTER 2

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

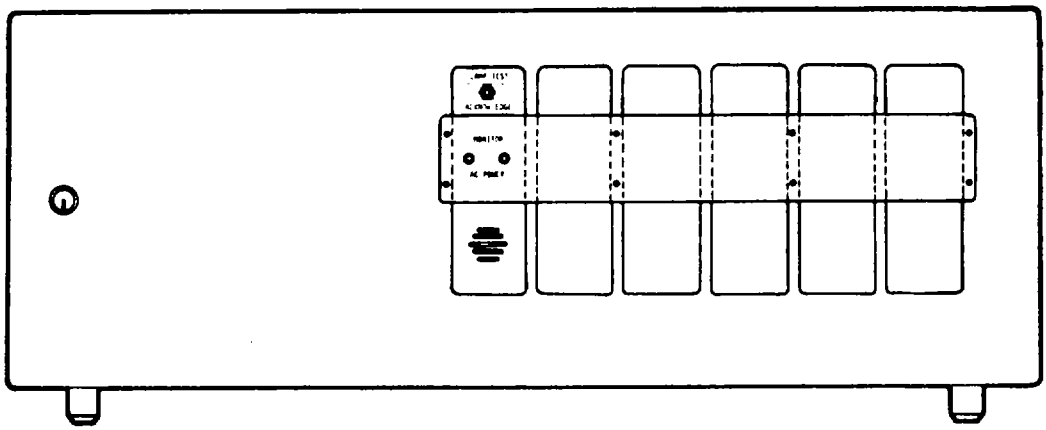
Control or indicator	Function
Monitor Cabinet(s)	
LAMP TEST/ ACKNOWLEDGE switch (3-position toggle)	When placed in the LAMP TEST position, it causes all lamps on the signal module to light. When placed in the ACKNOWLEDGE position, it causes the ac power monitor lamps to stop flashing and silences the 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

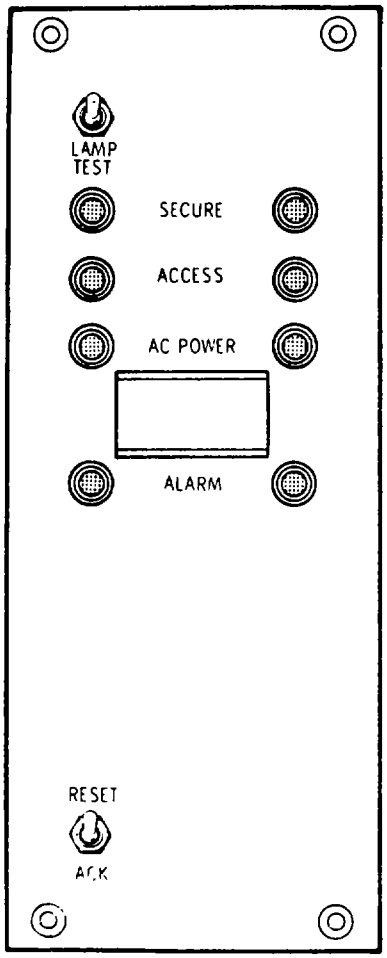
Control or indicator	Function
Status Monitor Module	
LAMP TEST (2-position toggle switch)	Provides method for checking all indicator lamps.
RESET/ACK (3-position toggle switch)	a. Acknowledges an alarm condition and silences audible signal device.
	b. Resets the system to an alarm monitoring status.
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 module operating procedure
Instantaneous	Non-latched	Latched delayed	Instantaneous with latched delay	Yes	No	Yes	No	
X				X			X	M-1 (Table 2-3)
X				X		X		M-2 (Table 2-4)
	X			X			X	M-3 (Table 2-5)
		X		X		X		M-4 (Table 2-6)
		X		X			X	M-4 (Table 2-7)
			X	X		X		M-2 (Table 2-4)
			X	X			X	M-2 (Table 2-4)
					X	X		



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.	a. 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
4. SECURE indicator lights (green) 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 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.
5. AC POWER indicator lights(white) flashing and audible signal device sounding.	a. 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 following personnel:

_____ ,telephone _____
_____ ,telephone _____

NOTE 3

At normal operating temperatures [60°F to 100°F (15.6°0C to 37.8°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
1. ALARM indicator lights (red) flashing and audible tone signal device sounding.	a. 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) (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
2. MONITOR AC POWER indicator lights (white) flashing and audible signal device sounding.	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 prearranged opening of protected area, direct security personnel to indicated protected area.
4. SECURE indicator lights (green 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 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.
5. AC POWER indicator lights (white) flashing and audible signal device sounding.	a. 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 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 _____

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
1. ALARM indicator lights (red) flashing and audible signal device sounding.	a. 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) (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.
2. MONITOR AC POWER indicator lights (white) flashing and audible signal device sounding.	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 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
4. SECURE indicator lights (green 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 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.
5. AC POWER indicator lights (white) flashing and audible signal device sounding.	a. 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 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.

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
1. ALARM indicator lights (red) flashing and audible signal device sounding.	a. 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) (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
2. MONITOR AC POWER indicator lights (white) flashing and audible signal device sounding.	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 prearranged opening of protected area, direct security personnel to indicated protected area.
4. SECURE indicator lights (green 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 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.
5. AC POWER indicator lights (white) flashing and audible signal device sounding.	a. 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.

CHAPTER 3

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.

CHAPTER 4

ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

This chapter is not applicable to this equipment.

CHAPTER 5

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

WARNING

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/RESET. 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. c. Actuate ACKNOWLEDGE then RESET switch on Status Monitor 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

Trouble	Probable cause	Corrective Action
		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 S1 on power supply. g. If a no-alarm condition is displayed, 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 swing-out 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 SMM 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.
2. Set Control Unit mode switch to ACCESS. Status Monitor Module does not respond to tamper condition.	Defective Status Monitor Module	a. Remove Data Receiver and 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 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 Monitor 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. 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 displayed, 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 ACKNOWLEDGE switch on SMM. g. If secure condition is not displayed, 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 Monitor Module. d. If AC POWER lights are lit, 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

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
		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.
5. In SECURE mode Status Monitor Module does not display a tamper 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 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-I, 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. c. 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 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. f. Remove jumper from terminal 4 of input terminal strip. 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 displayed, 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 ACKNOWLEDGE 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. Tighten 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 ACKNOWLEDGE is initiated, audible signal device is silenced and lights are continuously off. System is in emergency operation.	a. Failure of facility AC power.	Continue operating on emergency power. Locate fault and repair or notify proper authorities.
	b. Blown fuse F2 on power supply.	Remove fuse and check. If blown, replace fuse. If new fuse blows, replace power supply.
	c. Defective switch S1 on power supply or defective 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, replace power supply. (5) If meter indicates switch S1 is good, replace power supply.

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, unlock and open cabinet door. Unlatch and swing out mounting rack. Disconnect battery terminal leads

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. (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.

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 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. (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 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. 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 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 two

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
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, 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 latch mounting rack. 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

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 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 cab 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

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
10. (Cont)	a. (Cont)	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 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-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 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 interconnecting 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.	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 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.

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, position 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 / TB2-4 / TB2-3 25 Zone / TB2-2 / TB2-1 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)	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. (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 latch mounting rack. Close and lock cabinet door. (3) 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, 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.

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, 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
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 terminal 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 mounting rack and install mounting screws. Connect wires to terminal board TB1. Close and latch mounting rack. Close and lock cabinet 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 light on Status Monitor Module.	a. Loose or broken wire on switch.	Repair wire or connection.
	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. c. 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 swing-out 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.	a. 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 five-zone Monitor Cabinet, connect meter leads from TB-A through TB-E to J1 through J5. If troubleshooting twenty-five-zone Monitor Cabinet, connect meter leads from TB-A through TB-BB to J1 through J25. One-zxone Monitor Cabinet To Term Nos. — To Pin Nos. TB-A — J1 1l — 1 1L — 2 2 — 3 3 — 4 b. If meter does not indicate 0 ohms replace Status Monitor Module. (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	**WARNING** 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 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 screws and lock washers 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 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, 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 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 off of ledge. Remove power supply from cabinet. (6) 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 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 battery, position battery in

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
20. (Cont)	b. (Cont)	cabinet and connect terminal leads. Close and lock cabinet door.
21. Percolating noises or fumes coming from MC.	Loss of regulation from 27 vdc charge supply.	**WARNING** Open door, wait two minutes and then turn off switch S1 on power supply. 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 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.

Table 5-1. Troubleshooting Procedures - Continued

Trouble	Probable cause	Corrective Action
21. (Cont)	Loss 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. (5) To remove twenty-five-zone 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).	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. (6) 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 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.

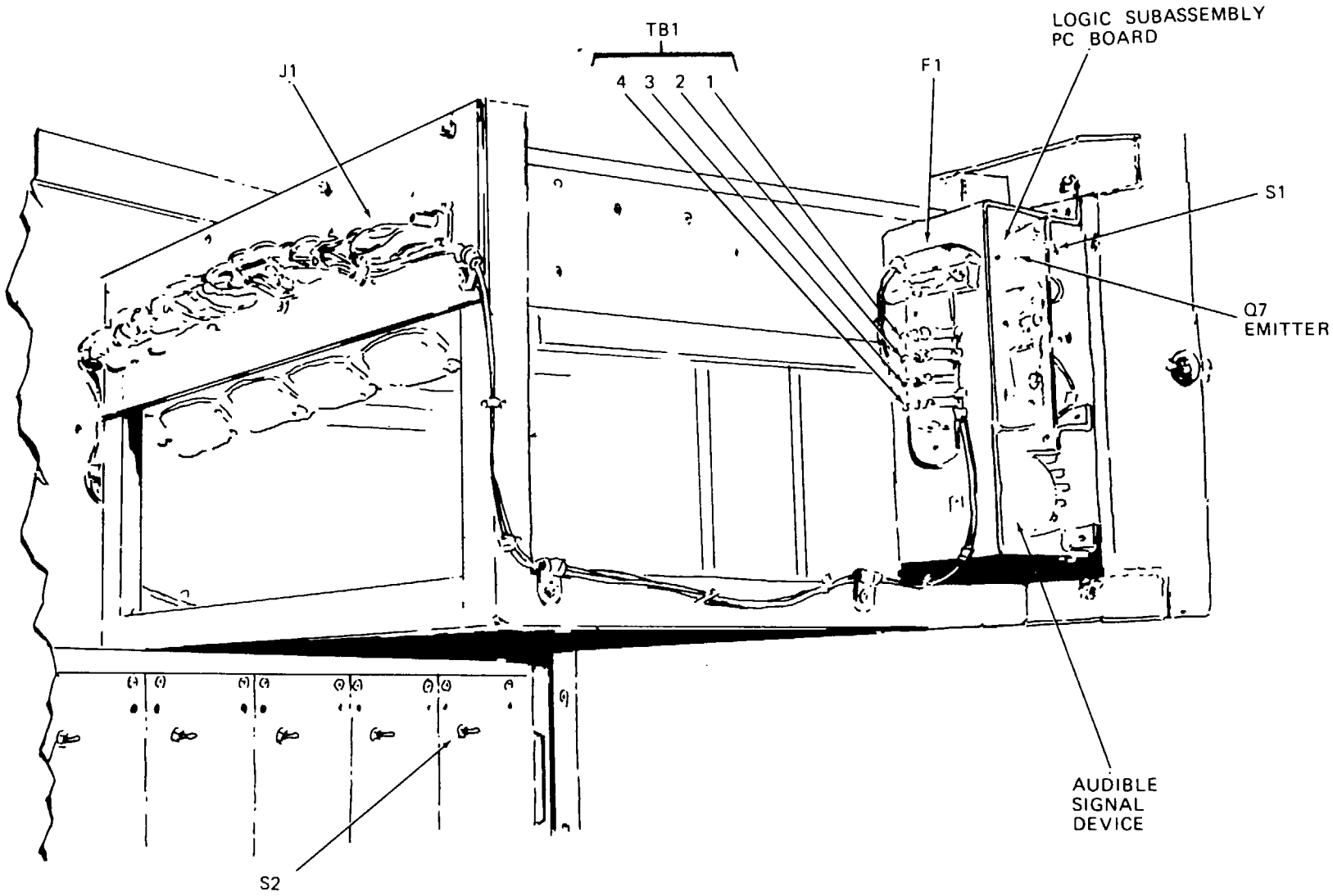


Figure 5-1. Monitor Cabinet with Troubleshooting Test Points (Typical)

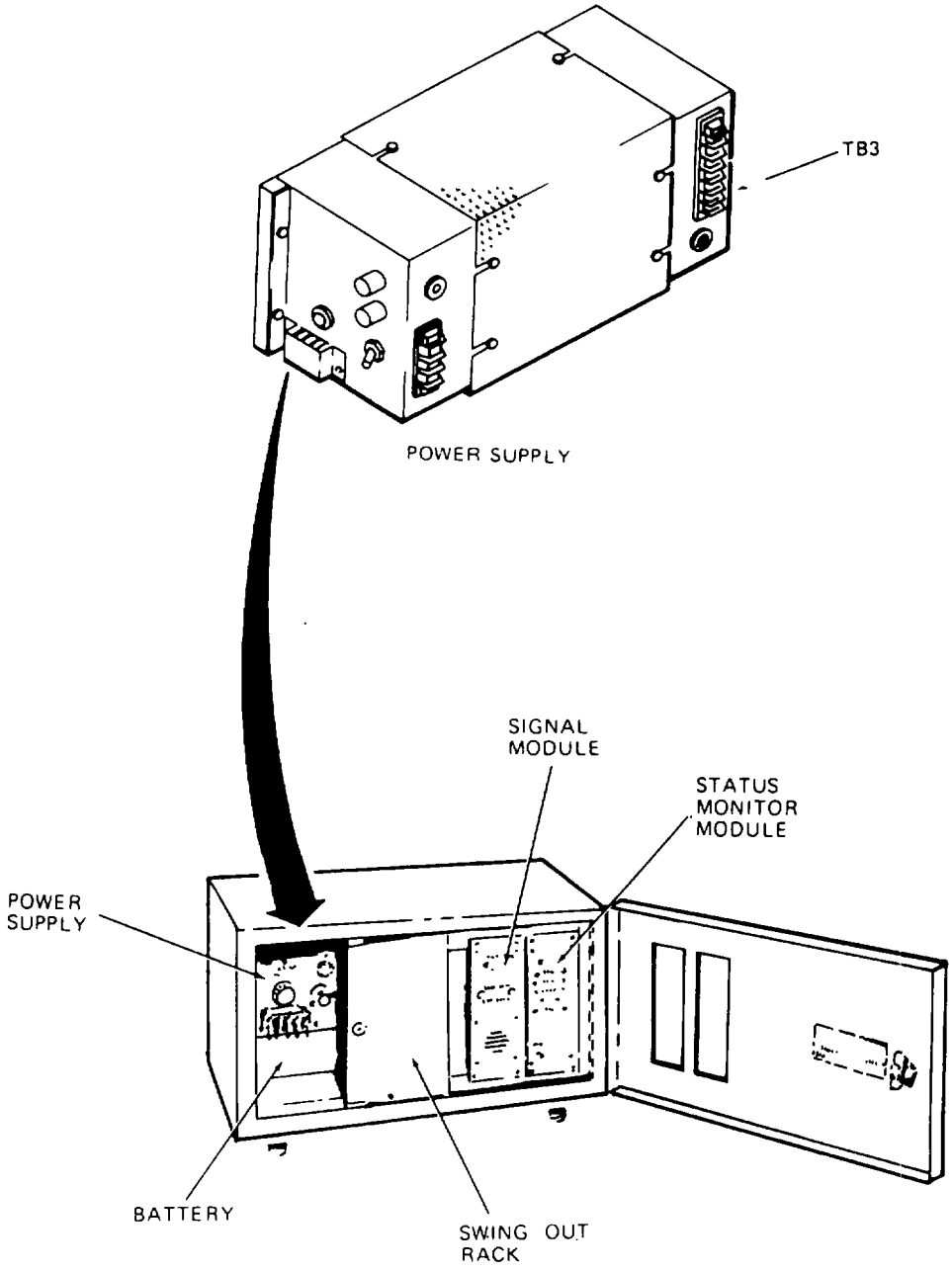


Figure 5-2. Power Supply (one-zone) with Troubleshooting Test Points (Typical)

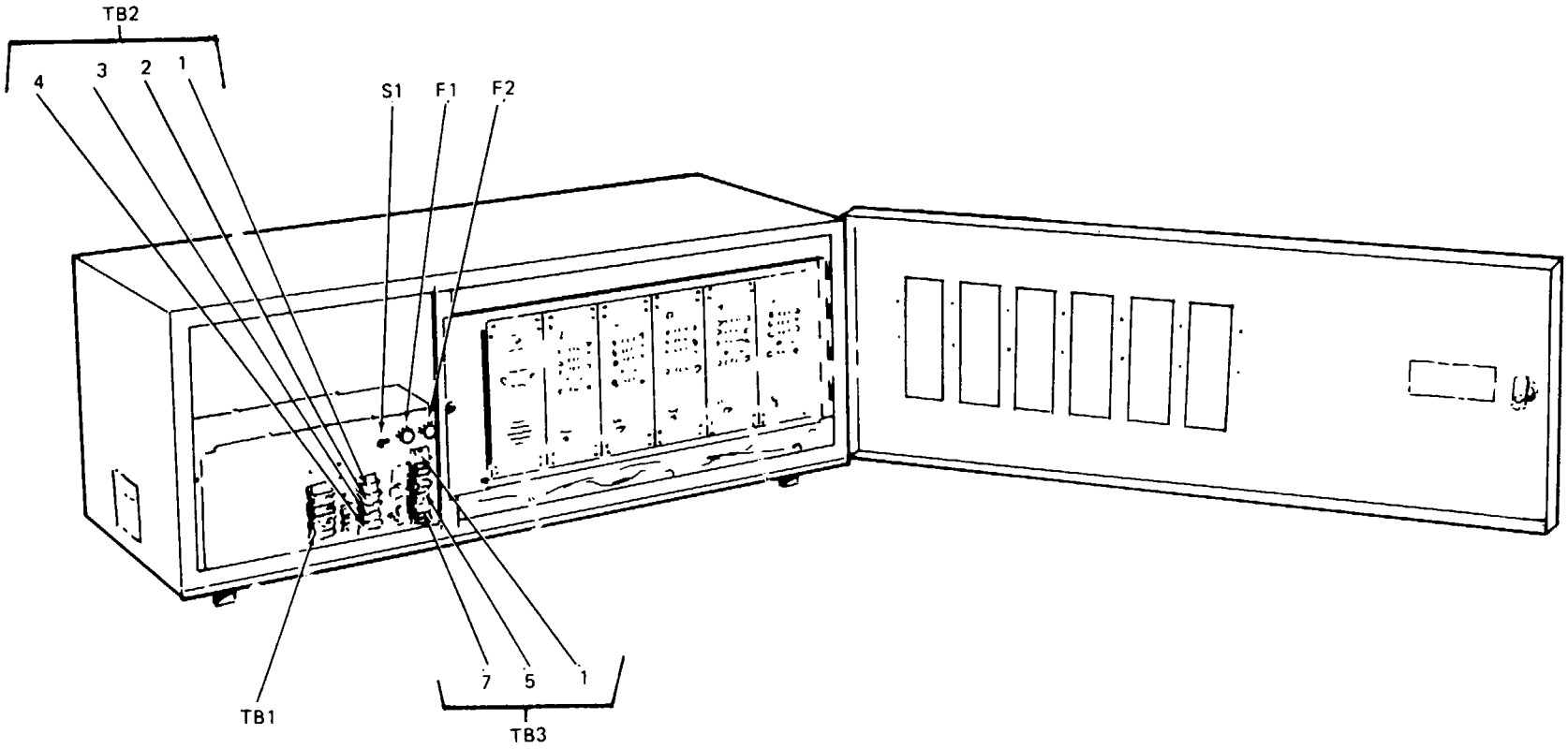


Figure 5-3. Power Supply (five zone) with Troubleshooting Test Points (Typical)

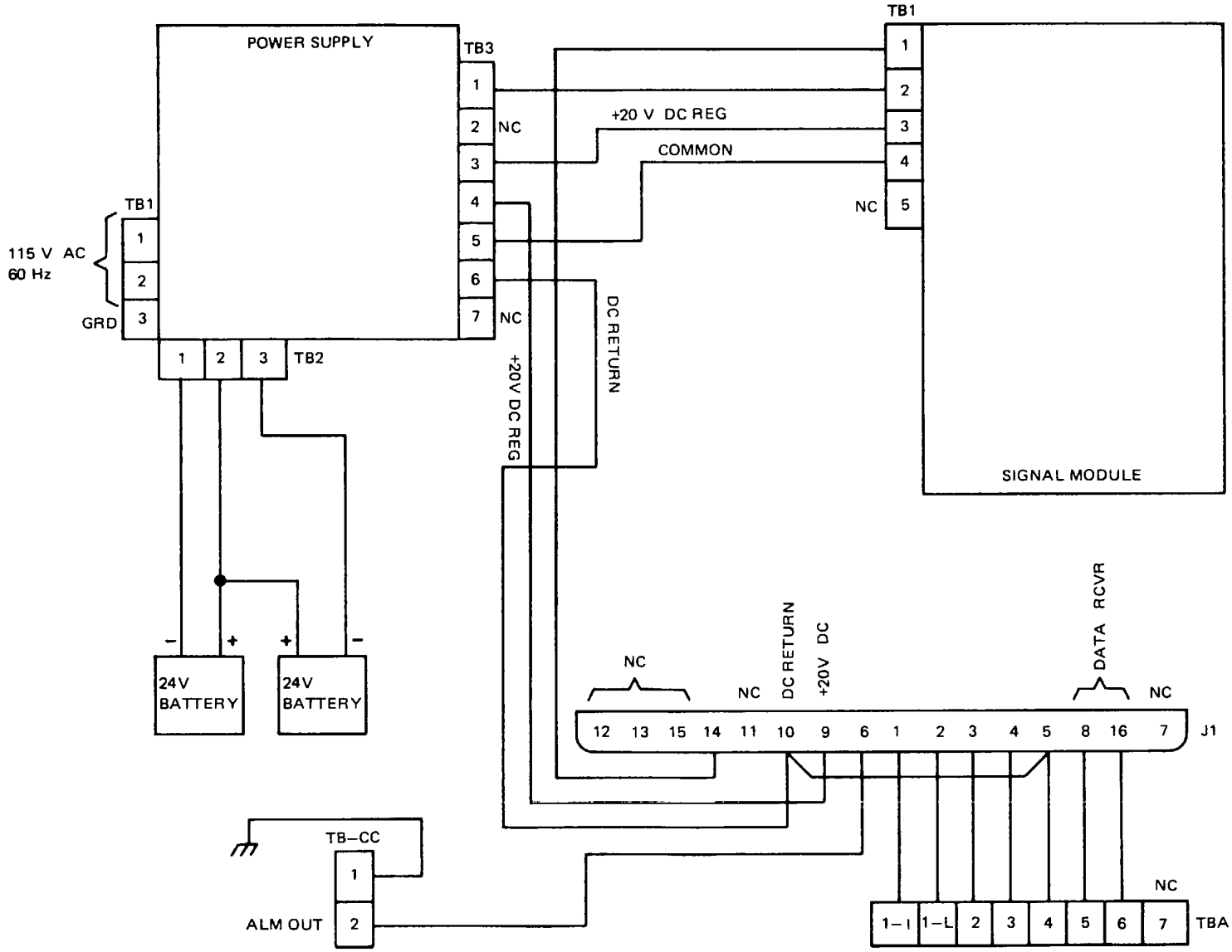


Figure 5-4. One-zone Monitor Cabinet Wiring Diagram

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.

l. 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 on-steady 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-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)
TB 5-6350-264 NAVELEX EE181-AB-OMI-010/E121 J-SIIDS AIR FORCE T.O. 31S9-4-1-111	Selection and Application of Joint Services Interior Instusion Detection System

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. Inspect. To determine the serviceability of an item by comparing its physical, mechanical and/or electrical characteristics with established standards through examination.

b. Test. 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. Service. 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. Adjust. 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. Calibrate. 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. Install. 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. Repair. 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. Overhaul. 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. Rebuild. 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. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2, Component/Assembly. Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

c. Column 3, Maintenance Function. Column 3 lists the functions to be performed on the item listed in column 2.

d. Column 4, Maintenance Level. 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

H.....General support maintenance

D.....Depot maintenance

e. Column 5, Tools and Equipment. 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. Column 6, Remarks. 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 NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT	(6) REMARKS
			C	O	F	H	D		
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

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

Section II. MAINTENANCE ALLOCATION CHART-Continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT	(6) REMARKS
			C	O	F	H	D		
04	Status Monitor Module	Inspect Test Repair Replace			0.1 0.5 1.5 .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).

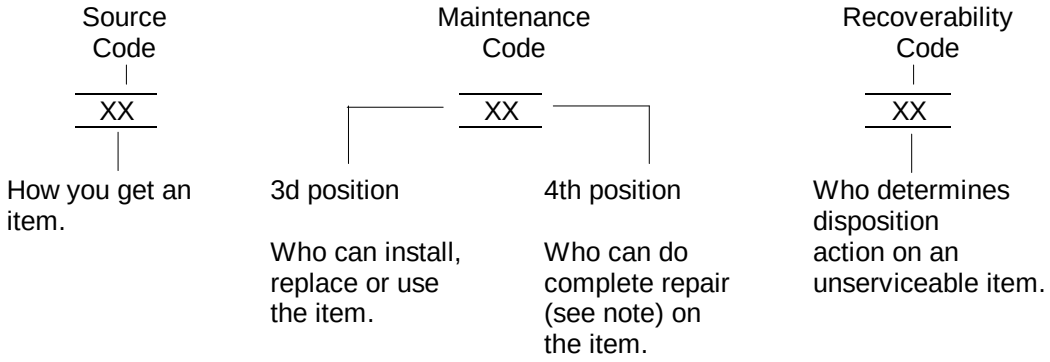
b. Section III. Special Tools List. A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

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.

3. 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
C	—Crew or operator maintenance done within organizational or aviation unit maintenance.
O	—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.
H	—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
O	—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
H	—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.
B	—-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.
O	—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.
H	—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).
A	—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 (NIIN) sequence. The NIIN consists of the last nine digits of the NSN, i.e (5305-01-574-1467). 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.

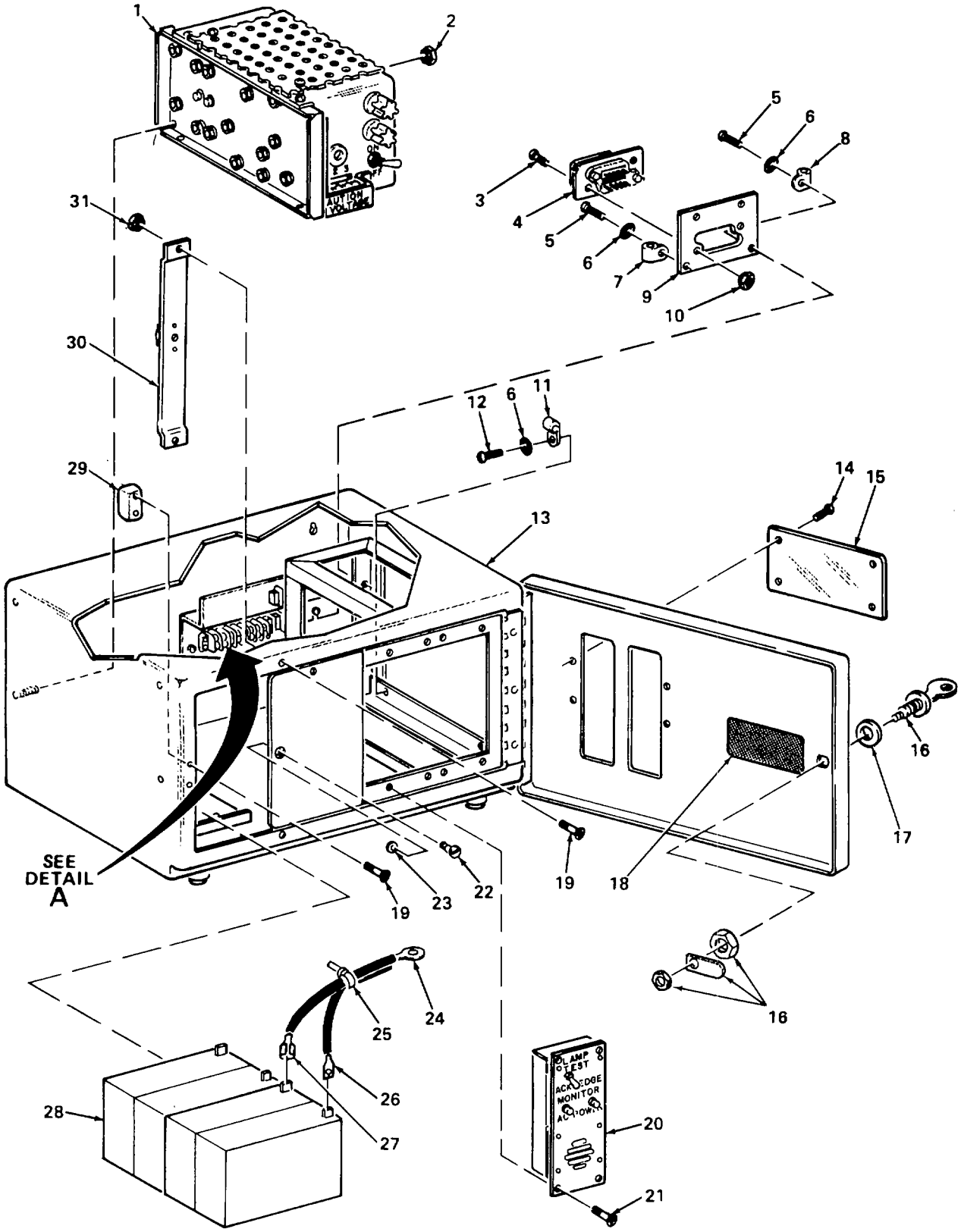


Figure C-1. Cabinet, Monitor, Type A CY-7359/FSS-9(V) (Sheet 1 of 2)

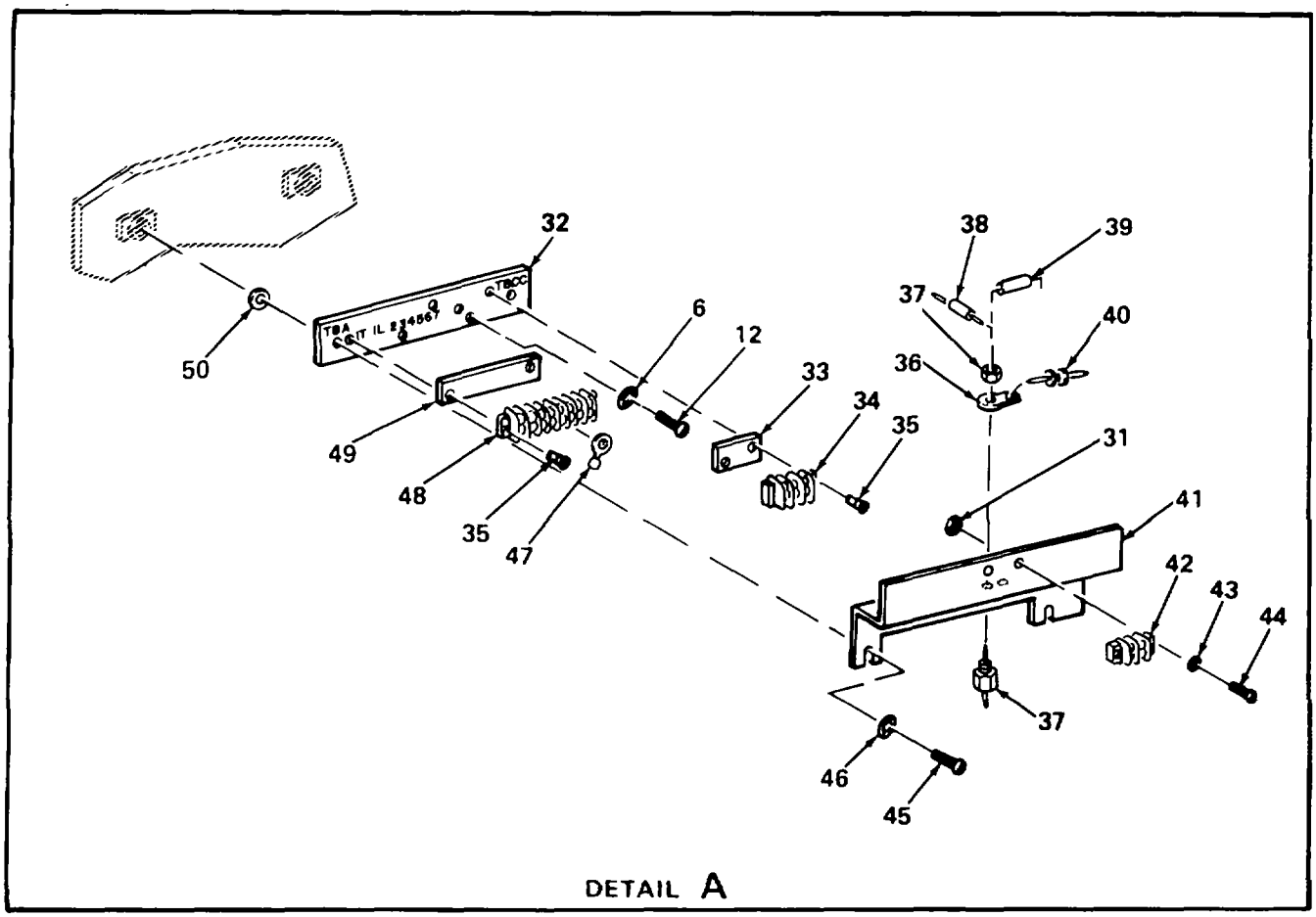


Figure C-1. Cabinet, Monitor, Type A CY-7359/FSS-9(V) (Sheet 2 of 2)

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
				GROUP 01 MONITOR CABINET (TYPE A)	
				FIG. C-1 CABINET MONITOR TYPE A CY-7359/ FSS-9(V)	
1	PAFFF	97403	13220E3901	POWER SUPPLY, CABINET	001
2	XBFZZ	97403	13220E3910-3	NUT, LOCK WASHER	004
3	PAFZZ	96906	MS35206-214	SCREW	002
4	PAFZZ	97403	13220E3909	CONNECTOR, RECEPTACLE	001
5	PAFZZ	96906	MS35206-228	SCREW	004
6	PAFZZ	96906	MS35333-37	WASHER, LOCK	012
7	XBFZZ	09922	HP-2N	CLAMP, CABLE	001
8	XBFZZ	09922	HP-4N	CLAMP, CABLE	001
9	XBFZZ	97403	13220E3918	PLATE, CONNECTOR	001
10	XBFZZ	97403	13220E3910-1	NUT, LOCK WASHER	002
11	XBFZZ	97403	13220E3621-3	CLAMP, CABLE	007
12	PAFZZ	96906	MS35206-227	SCREW	008
13	XBFZZ	97403	13220E3913	ENCLOSURE, 1 ZONE MONITOR UNIT	001
14	PAFZZ	96906	MS18212-14	SCREW, PAN HEAD	004
15	XBFZZ	97403	13220E3919-3	COVER, LAMPS, MONITOR	001
16	PAFZZ	24153	60-4055-104-1012	LOCK, SECURITY CAM	001
17	XBFZZ	97403	13220E4071-1	SHIM, LOCK	001
18	XBFZZ	97403	13220E3917	PLATE, IDENTIFICATION	001
19	PAFZZ	96906	MS24693-S25	SCREW	004
20	PAFZZ	97403	13220E3902	SIGNAL MODULE ASSY	001
21	PAFZZ	96906	MS35190-236	SCREW	004
22	XBFZZ	97403	13220E3921-2	STUD	001
23	XBFZZ	97403	13220E3922	RETAINER	001
24	XDFZZ	97403	13220E3829-2	TERMINAL, MINI-LOCKING FORK	004
25	XBFZZ	96906	MS3367-4-9	STRAP, TIEDOWN	001
26	PAFZZ	97403	13220E3623	TAB, CRIMP	002
27	PAFZZ	97403	13220E3622	RECEPTACLE CRIMP	002
28	PCFZZ	97403	13220E3912	BATTERY, MONITOR CAB	002
29	XBFZZ	97403	13220E4012-1	PLATE	001
30	XBFZZ	97403	13220E3927-1	SUPPORT	001
31	XBFZZ	97403	13220E3910-2	NUT, LOCK-WASHER	004
32	XBFZZ	97403	13220E3916	PLATE, MOUNTING	001
33	XBFZZ	97403	13220E4093-1	INSULATOR	001
34	XBFZZ	97403	13220E3823-2	BARRIER STRIP	001
35	PAFZZ	96906	MS20604AD3T4	RIVET, BLIND	002
36	XDFZZ	96906	MS77066-3	TERMINAL, LUG	002
37	PAFZZ	97403	13220E3965	FILTER, RADIO FREQUENCY	002
38	PAFZZ	96906	MS75089-3	COIL, RADIO FREQUENCY	002
39	PAFZZ	97403	13220E4072	SEMICONDUCTOR DEVICE, DIODE	002
40	PAFZZ	97403	132203E3970	ARRESTER, ELECTRICAL	002
41	XBFZZ	97403	13220E8166	BRACKET	001
42	XBFZZ	97403	13220E3968-1	BARRIER STRIP	001
43	PAFZZ	96906	MS27183-6	WASHER, FLAT-ROUND	002

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
44	PAFZZ	96906	MS35206-231	SCREW, MACHINE, PNH.....	002
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
				END OF FIGURE	

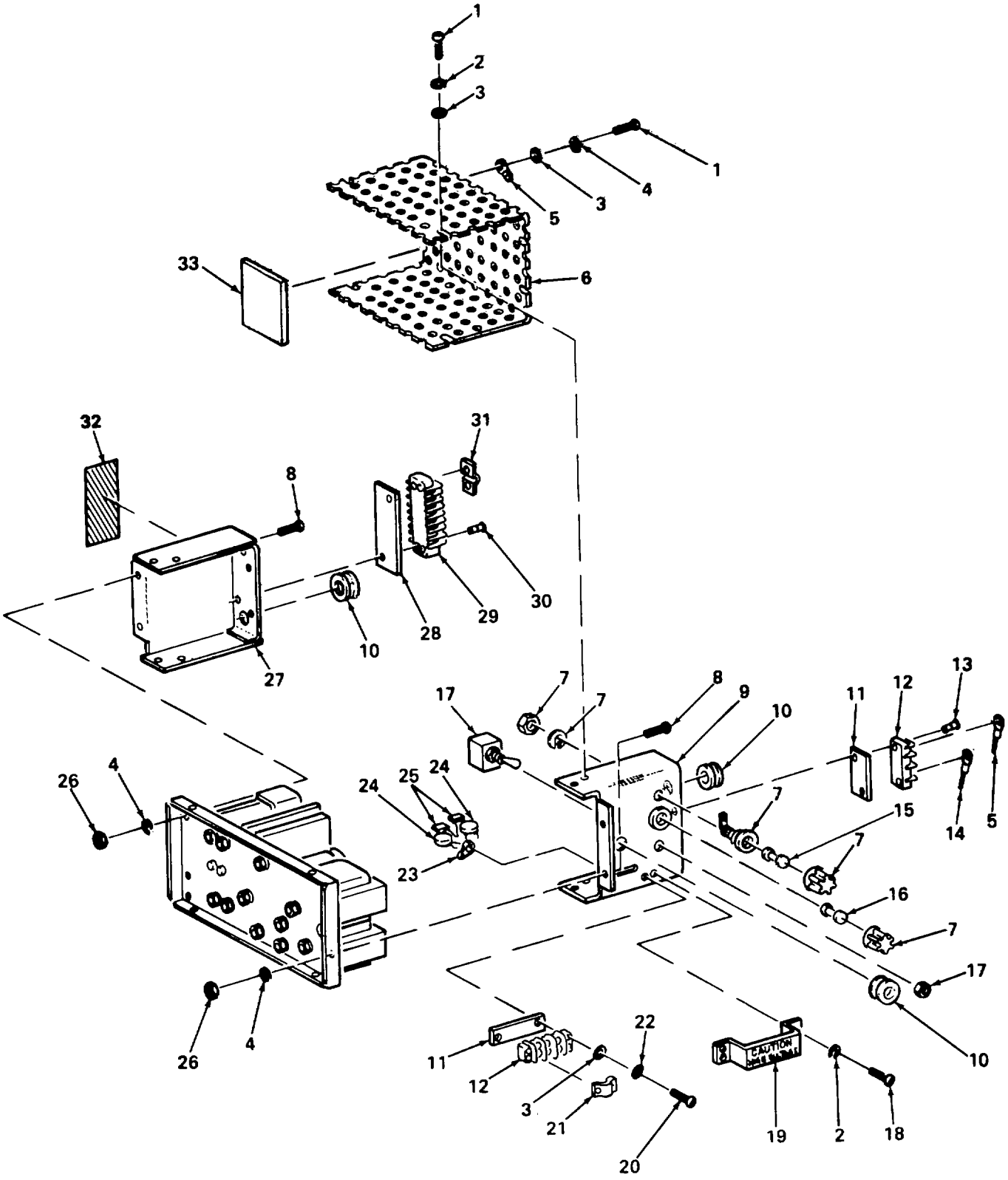


Figure C-2. Power Supply, Cabinet, Monitor Type A CY-7359/FSS-9(V) (Sheet 1 of 2)

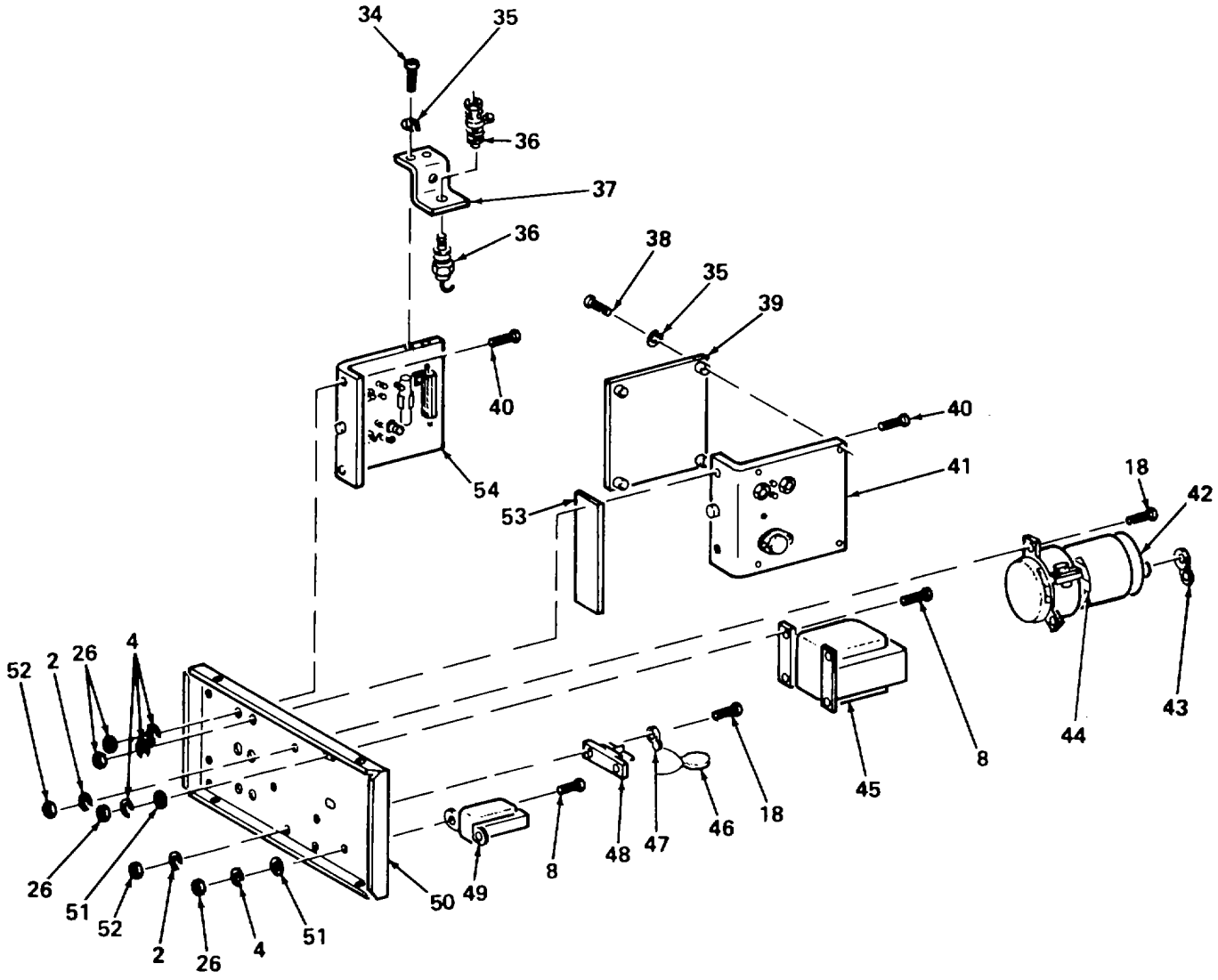


Figure C-2. Power Supply, Cabinet, Monitor Type A CY-7359/FSS-9(V) (Sheet 2 of 2)

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 01 MONITOR CABINET (TYPE A)	
				FIG. C-2 POWER SUPPLY CABINET MONITOR TYPE A CY-7359/FSS-9(V)	
1	PAFZZ	96906	MS35206-225	.SCREW, MACHINE	004
2	PAFZZ	96906	MS35338-41	.WASHER, LOCKSPRING	004
3	PAFZ	96906	MS27183-5	.WASHER, FLAT	010
4	PAFZZ	96906	MS35338-42	.WASHER, LOCK	018
5	XDFZZ	97403	13220E3829-1	.TERMINAL, MINI WIRE RANGE 22-18 AWG RED	012
6	XBFZZ	97403	13220E3995	.COVER, POWER SUPPLY	001
7	PAFZZ	81349	FHN 20G	.FUSEHOLDER	002
8	PAFZZ	96906	MS35206-243	.SCREW, MACHINE PNH	014
9	XBFZZ	97403	13220E3986	.BRACKET SUPPORT	001
10	XBFZZ	96906	MS35489-11	.GROMMET, RUBBER	003
11	XBFZZ	97403	13220E4093-9	.INSULATOR	002
12	XBFZZ	97403	13220E4026-3	.BARRIER STRIP	002
13	XBFZZ	97403	13220E2998-7	.RIVET, BLIND	002
14	XDFZZ	97403	13220E3829-2	.TERMINAL, MINI WIRE RANGE 16-14 AWG BLUE	003
15	PAFZZ	81349	F02B250V1-1/2A	.FUSE, CARTRIDGE	001
16	PAFZZ	81349	F02A250V1/2A	.FUSE	001
17	PAFZZ	97403	13220E3706	.SWITCH, TOGGLE	001
18	PAFZZ	96906	MS35206-228	.SCREW	007
19	XBFZZ	97403	13220E3987	.SHIELD, POWER SUPPLY	001
20	PAFZZ	96906	MS35206-231	.SCREW, MACHINE PNH	002
21	XBFZZ	97403	13220E3966	.LINK, TERMINAL	001
22	PAFZZ	96906	MS35333-37	.WASHER, LOCK, FLAT	002
23	XDFZZ	97403	13220E3969	.TERMINAL, LUG, SOLDER	003
24	PAFZZ	97403	13220E3967	.RESISTOR	002
25	PAFZZ	81349	MIL-C-39014/1	.CAPACITOR, FIXED, CERAMIC	002
26	PAFZZ	96906	MS35649-282	.NUT, PLAIN HEX	018
27	XBFZZ	97403	13220E3956	.BRACKET, SUPPORT	001
28	XDFZZ	81349	MIL-I-695-TYPE F 4"X1 1/2X.015	.INSULATION ELEC PAPER	001
29	XBFZZ	97403	13220E3823-7	.BARRIER STRIP	001
30	XBFZZ	97403	13220E2988-6	.RIVET, BLIND	002
31	XBFZZ	97403	13220E2987	.LINK, TERMINAL	004
32	XBFZZ	97403	13220E3994	.PLATE, IDENTIFICATION	001
33	XDFZZ	81349	TYPE F, FORM R	.INSULATION	001
34	PAFZZ	96906	MS35206-215	.SCREW, MACHINE	002
35	PAFZZ	96906	MS35338-40	.WASHER, LOCK	002
36	PAFZZ	97403	13220E4142	.SEMICONDUCTOR DEVICE	001
37	XBFZZ	97403	13220E3973	.HEAT SINK	001
38	PAFZZ	96906	MS35206-220	.SCREW, MACHINE, PNH	004
39	XDFZZ	97403	13220E3993	.CIRCUIT CARD ASSY, POWER SUPPLY	001
40	PAFZZ	96906	MS35206-245	.SCREW, MACHINE, PNH	004
41	XBFZZ	97403	13220E3992	.PLATE SUBASSEMBLY	001
42	PAFZZ	97403	13220E3715-2	.CAPACITOR, ELECTROLYTIC	001
43	XDFZZ	96906	MS35431-7	.TERMINAL, LUG	004

SECTION II.

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

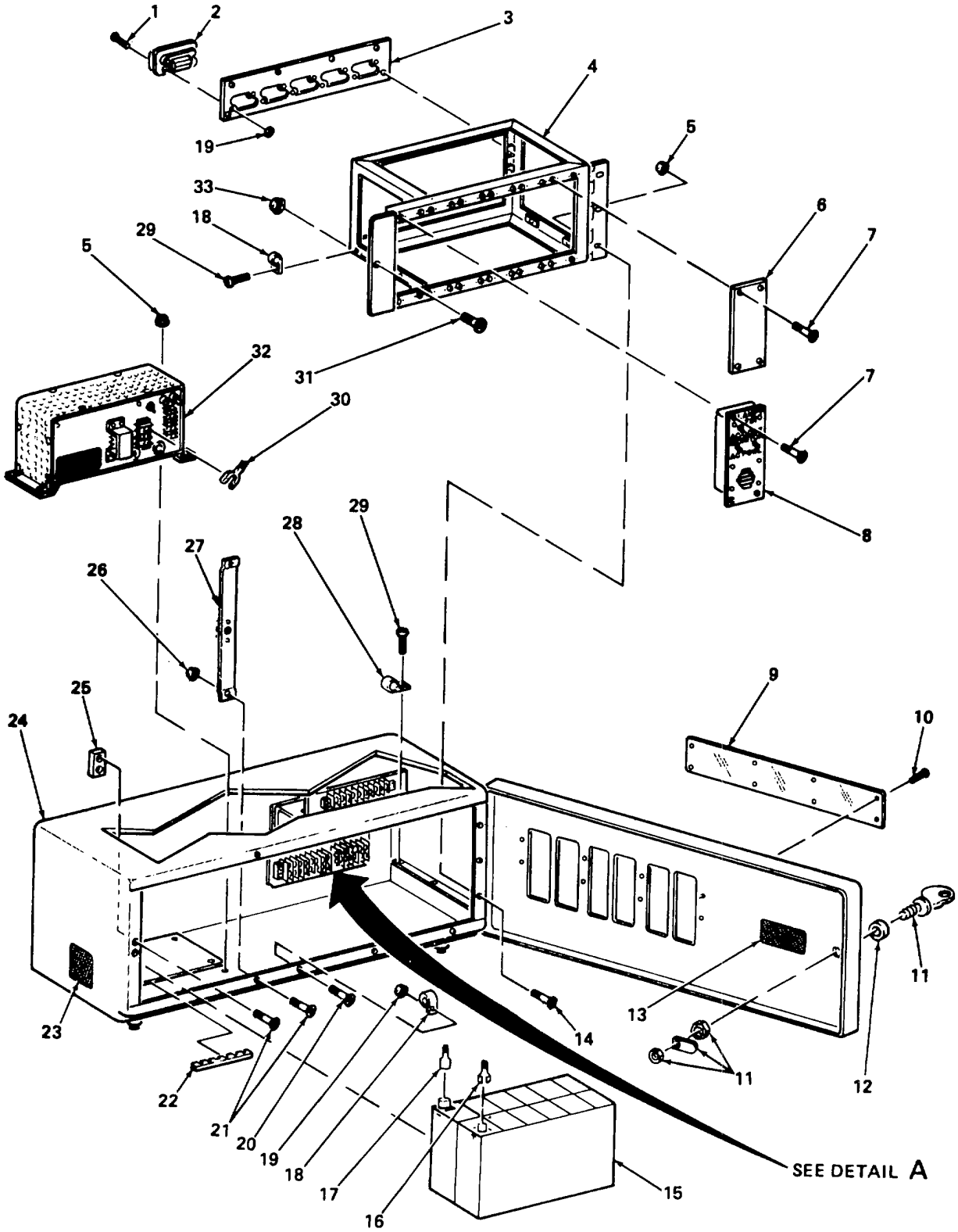


Figure C-3. Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 1 of 2)

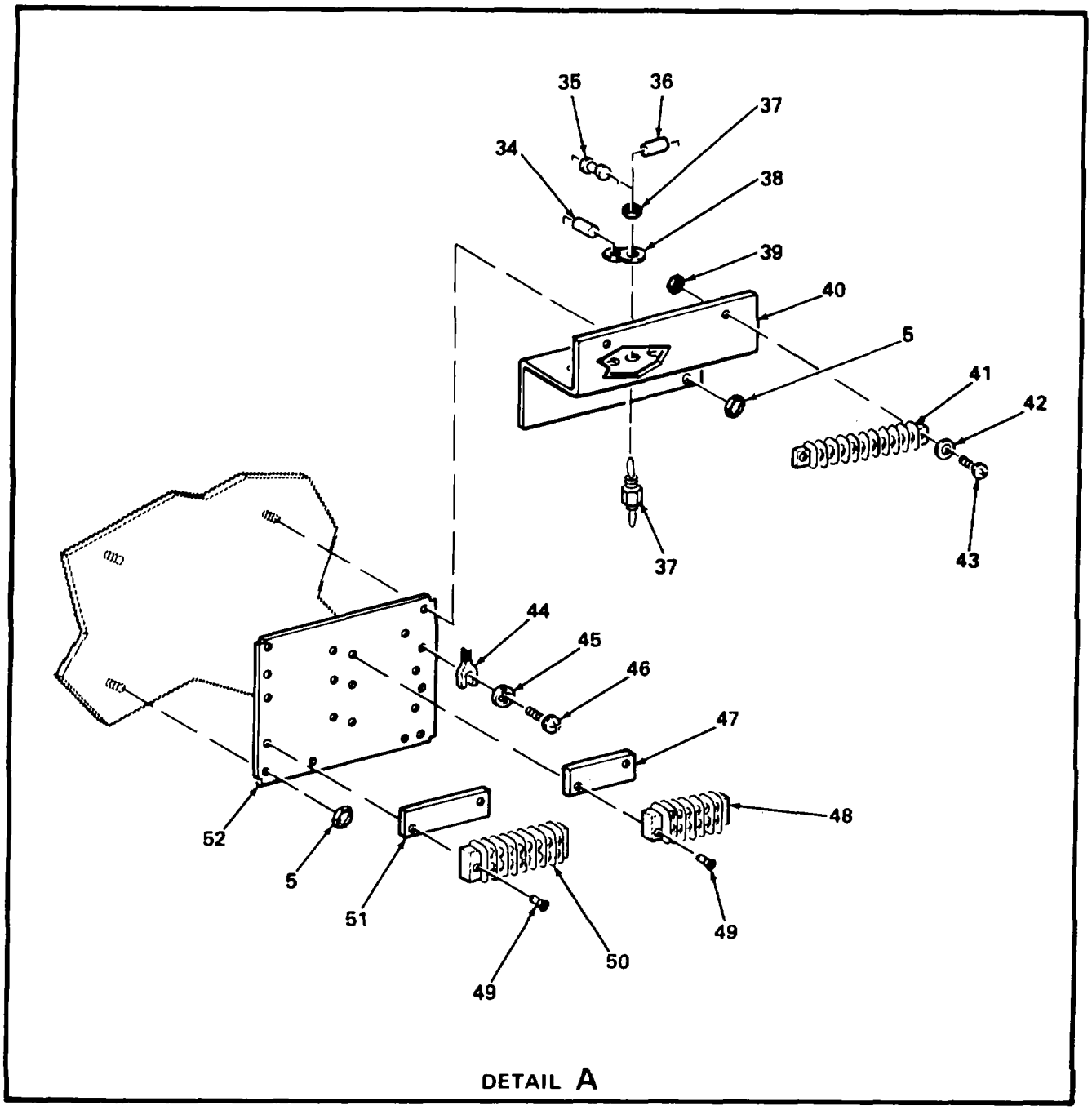


Figure C-3. Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 2 of 2)

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 02 MONITOR CABINET (TYPE B)	
				FIG. C-3 CABINET, MONITOR, TYPE B CY-7360/FSS-9(V)	
1	XBFZZ	96906	MS35206-214	SCREW, MACHINE PNH	010
2	PAFZZ	29587	26190-16S	CONNECTOR, RECEPTACLE	005
3	XBFZZ	97403	13220E4014	PLATE, CONNECTOR	001
4	XBFZZ	97403	13220E4010	INNER FRAME ASSY	001
5	XDFZZ	97403	13220E3910-4	NUT, LOCK WASHER	011
6	XDFZZ	97403	13220E4015	PLATE, BLANK	004
7	PAFZZ	96906	MS35190-236	SCREW, MACHINE, FLAT	020
8	PAFZZ	97403	13220E3902	SIGNAL MODULE ASSY	001
9	XBFZZ	97403	13220E3919-1	COVER, LAMPS, MONITOR	001
10	PAFZZ	96906	MS18212-14	SCREW, MACHINE, PNH	008
11	PAFZZ	56337	60-4055-104-1012	LOCK, SECURITY CAM	001
12	XBFZZ	97403	13220E4071-2	SHIM, LOCK	001
13	XDFZZ	97403	13220E4016	PLATE, IDENTIFICATION	001
14	PAFZZ	96906	MS35191-270	SCREW, MACHINE, FLAT	003
15	PCFZZ	97403	13220E4008	BATTERY, STORAGE	001
16	PAFZZ	97403	13220E3622	RECEPTACLE, CRIMP	001
17	PAFZZ	97403	13220E3623	TERMINAL, QUICK DISCONNECT	001
18	XBFZZ	97403	13220E3621-1	CRIMP, CABLE	006
19	XBFZZ	97403	13220E3910-1	NUT, LOCK WASHER	013
20	PAFZZ	96906	MS24693-S4	SCREW, MACHINE, FLAT	003
21	PAFZZ	96906	MS24693-S25	SCREW, MACHINE, FLAT	004
22	XBFZZ	96906	MS21266-2N	GROMMET, PLASTIC	001
23	XDFZZ	97403	13220E4048-3	LABEL, WEIGHT AND LIFT POINT	002
24	XBFZZ	97403	13220E4005	ENCLOSURE, 5 ZONE MONITOR	001
25	XDFZZ	97403	13220E4012	PLATE	001
26	XBFZZ	97403	13220E3910-2	NUT, LOCK WASHER	004
27	XBFZZ	97403	13220E3927-2	SUPPORT	001
28	XBFZZ	97403	13220E3621-3	CLAMP, CABLE	001
29	XDFZZ	96906	MS35206-227	SCREW, MACHINE PNH	014
30	XDFZZ	97403	13220E3829-2	TERMINAL, MINI-LOCKING FORK	002
31	XBFZZ	97403	13220E3921-2	STUD	001
32	PAFFF	97403	13220E4001	POWER SUPPLY	001
33	PAFZZ	94222	85-31-093-15	EYELET, TURNLOCK	001
34	PAFZZ	96906	MS75089-3	COIL, RADIO FREQUENCY	010
35	PAFZZ	97403	13220E3970	ARRESTOR ELEC SURGE	010
36	PAFZZ	97403	13220E4072	SEMICONDUCTOR DEVICE	002
37	PAFZZ	97403	13220E3965	FILTER, FEED-THRU LOW PASS	010
38	XDFZZ	96906	MS77066-3	TERMINAL LUG, SOLDER	010
39	PAFZZ	96906	MS35649-262	NUT, PLAIN HEX	002
40	XBFZZ	97403	13220E8167	BRACKET	001
41	XBFZZ	97403	13220E3968-2	BARRIER STRIP	001
42	PAFZZ	96906	MS27183-6	WASHER, FLAT, ROUND	002
43	PAFZZ	96906	MS35206-231	SCREW, MACHINE PNH	002
44	XDFZZ	97403	13220E3829-1	TERMINAL, MINI LOCKING FORK	061

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
45	PAFZZ	96906	MS35333-37	WASHER, LOCK, INTERNAL TOOTH	001
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
				END OF FIGURE	

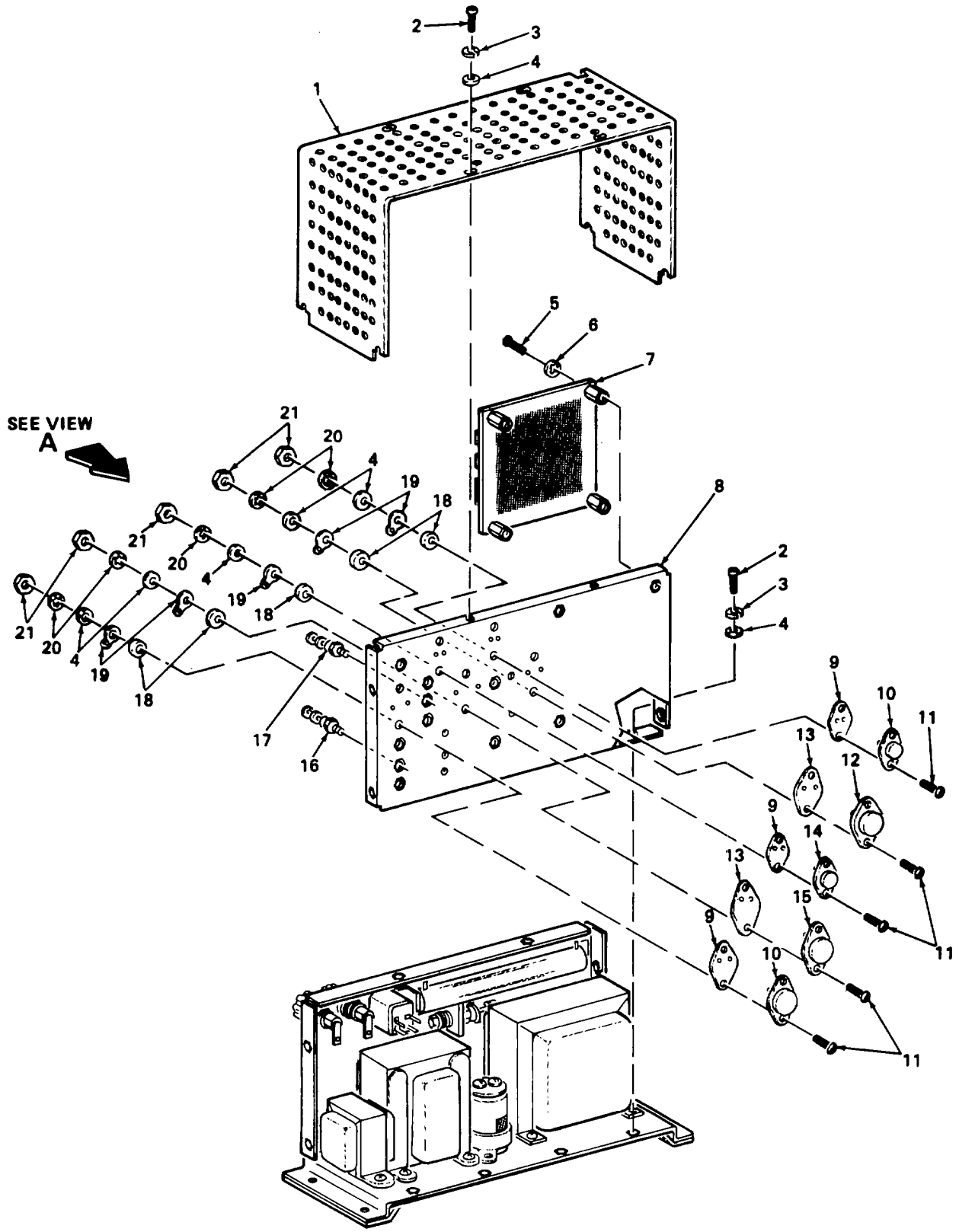


Figure C-4. Power Supply, Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 1 of 3)

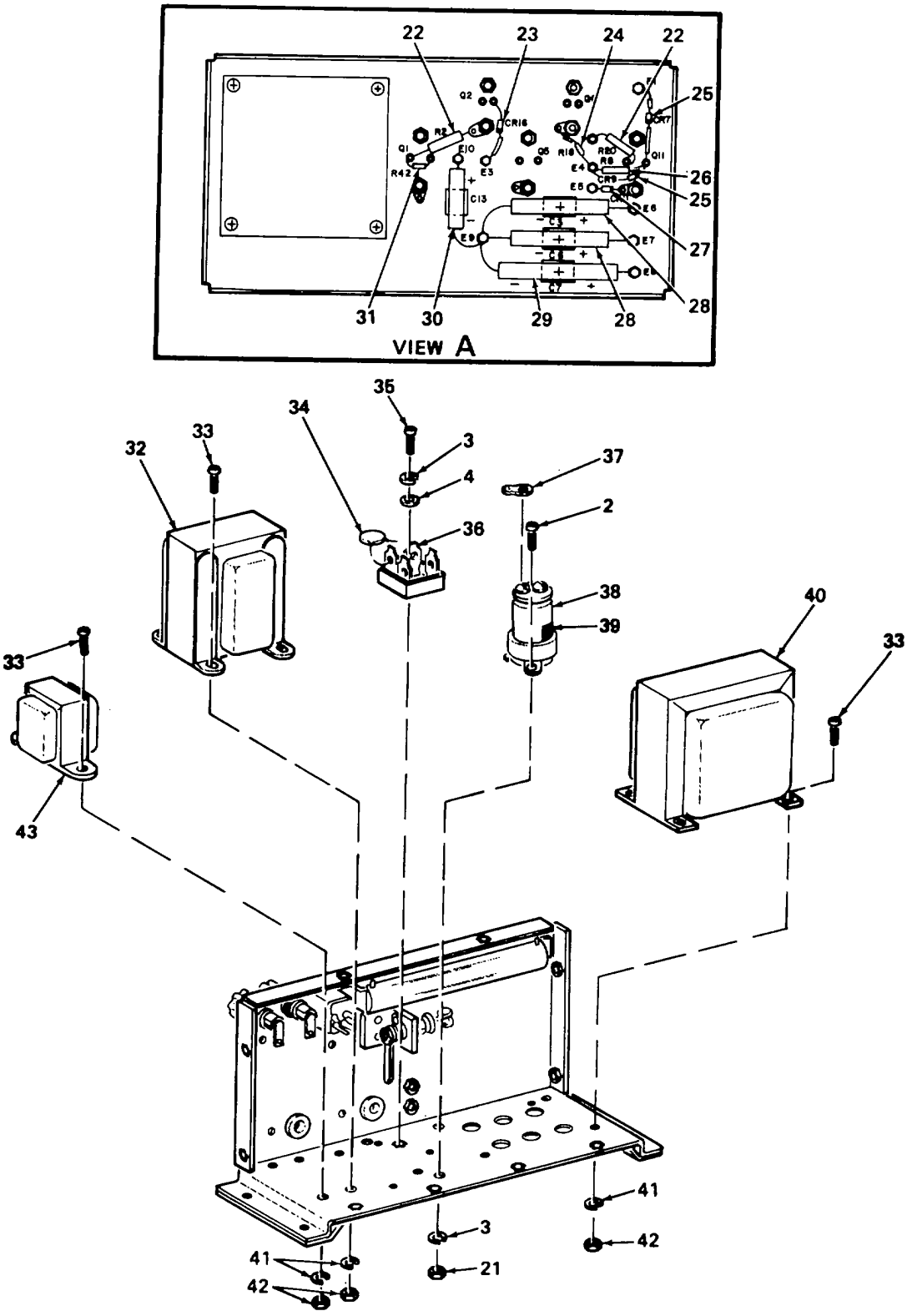


Figure C-4. Power Supply, Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 2 of 3)

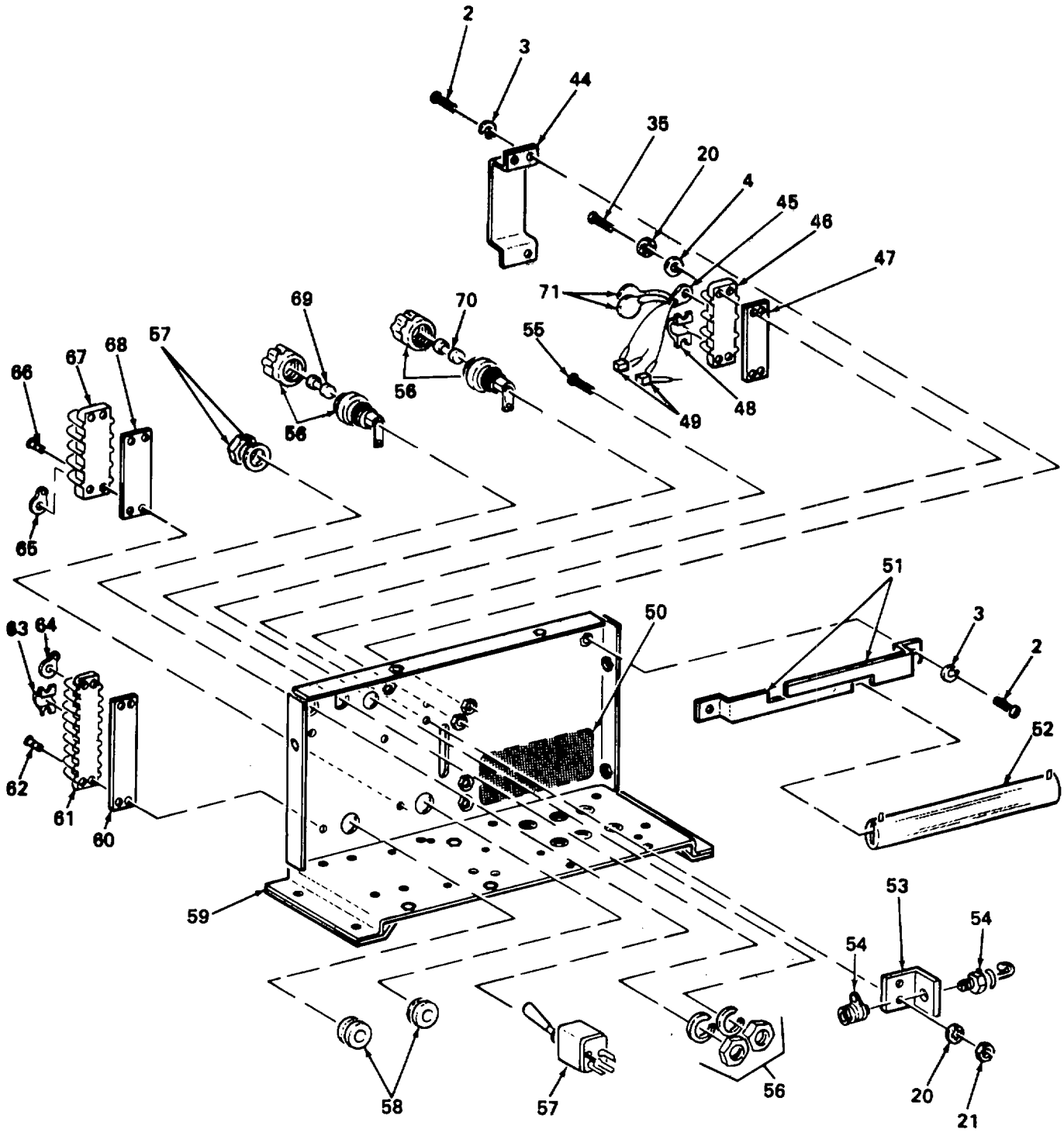


Figure C-4. Power Supply, Cabinet, Monitor, Type B CY-7360/FSS-9(V) (Sheet 3 of 3)

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 02 MONITOR CABINET (TYPE B)	
				FIG. C-4 POWER SUPPLY, CABINET, MONITOR, TYPE B CY-7360/FSS-9(V)	
1	XBFZZ	97403	13220E4035	.COVER, POWER SUPPLY	001
2	PAFZZ	96906	MS35206-226	.SCREW, MACHINE	022
3	PAFZZ	96906	MS35338-41	.WASHER, LOCK	023
4	PAFZZ	96906	MS27183-5	.WASHER, FLAT	024
5	PAFZZ	96906	MS35206-219	.SCREW, MACHINE, PNH	004
6	PAFZZ	96906	MS35333-36	.WASHER, LOCK	004
7	XDFZZ	97403	13220E4046	.CIRCUIT CARD ASSY BOARD	001
8	XBFZZ	97403	13220E4027	.PLATE, SIDE, POWER SUPPLY HOUSING	001
9	XDFZZ	97403	13220E3929-2	.INSULATOR, PLATE	003
10	PAFZZ	97403	13220E4009	.TRANSISTOR, PNP	002
11	PAFZZ	96906	MS35206-229	.SCREW, MACHINE, PNH	010
12	PAFZZ	97403	13220E4029	.TRANSISTOR	001
13	PAFZZ	97403	13220E3929-1	.INSULATOR, PLATE	002
14	PAFZZ	81349	JAN 2N3055	.SEMICONDUCTOR DEVICE	001
15	PAFZZ	81349	JAN 2N3740	.TRANSISTOR	001
16	PAFZZ	81349	SE09XE03	.TERMINAL STUD	008
17	XBFZZ	81349	SE09XE02	.TERMINAL, STUD	002
18	XDFZZ	97403	13220E3928-1	.WASHER, SHOULDERED	010
19	XBFZZ	96906	MS35431-3	.TERMINAL, LUG	005
20	PAFZZ	96906	MS35333-37	.WASHER, LOCK	014
21	PAFZZ	96906	MS35649-262	.NUT, PLAIN, HEXAGON	014
22	PAFZZ	81349	MIL-R-39007/6	.RESISTOR, FIXED, WIRE	002
23	PAFZZ	97403	13220E4033-2	.SEMICONDUCTOR DEVICE, DIODE	001
24	PAFZZ	81349	RCR07G102JS	.RESISTOR, FIXED, COMP SUBSTITUTE: RESISTOR IN MIL-R-39017/1 OF EQUAL VALUE	001
25	PAFZZ	97403	13220E4033-1	.SEMICONDUCTOR DEVICE	002
26	PAFZZ	81349	RWR89S4ROOFM	.RESISTOR	001
27	PAFZZ	97403	13220E3904-2	.SEMICONDUCTOR DEVICE, DIODE	001
28	PAFZZ	97403	13220E4124	.CAPACITOR	002
29	PAFZZ	81349	M39018/01-0638	.CAPACITOR	001
30	PAFZZ	97403	13220E3746-2	.CAPACITOR, FIXED, ELECTROLYTIC	001
31	PAFZZ	81349	RCR07G471JS	.RESISTOR	001
32	PAFZZ	26667	C-47U	.CHOKE	001
33	PAFZZ	96906	MS35206-243	.SCREW, MACHINE	010
34	XDFZZ	97403	13220E3971-2	.VARISTOR	001
35	PAFZZ	96906	MS35206-231	.SCREW, MACHINE	003
36	PAFZZ	97403	13220E4041	.DIODE, RECTIFIER	001
37	XBFZZ	96906	MS35431-7	.TERMINAL, LUG	005
38	PAFZZ	06001	88F235ALA	.CAPACITOR, ELECTROLYTIC	001
39	XDFZZ	81349	MIL-I-695 TYPE F 3/4"X1 1/2 "X.015	.INSULATION ELEC PAPER	001
40	PAFZZ	14407	P602260	.TRANSFORMER, POWER	001
41	PAFZZ	96906	MS35338-42	.WASHER, LOCK	010
42	PAFZZ	96906	MS35649-282	.NUT, PLAIN, HEXAGON	010

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
43	PAFZZ	14407	CT602	.REACTOR	001
44	XBFZZ	97403	13220E3987	.SHIELD, POWER SUPPLY	001
45	XBFZZ	97403	13220E3969	.TERMINAL, LUG, SOLDER.....	003
46	XBFZZ	97403	13220E4026-3	.BARRIER STRIP	001
47	XBFZZ	97403	13220E4093-9	.INSULATOR	001
48	XBFZZ	97403	13220E3966	.LINK, TERMINAL.....	001
49	PAFZZ	81349	M39014/01-1238	.CAPACITOR, FIXED, CERAMIC	002
50	XDFZZ	97403	13220E4018	.PLATE, IDENTIFICATION	001
51	XBFZZ	97403	13220E4047	.BRACKET, RESISTOR IRRIDITE PER MIL-C-5541, CLASS 3.....	002
52	PAFZZ	97403	13220E4042	.RESISTOR, FIXED, WIRE.....	001
53	XBFZZ	97403	13220E3974	.HEAT SINK	001
54	PAFZZ	97403	13220E4142	.SEMICONDUCTOR DEVICE	001
55	PAFZZ	96906	MS35206-228	.SCREW, MACHINE, PNH	002
56	PAFZZ	81349	FHN20G	.FUSEHOLDER	002
57	PAFZZ	27193	7590K6	.SWITCH, TOGGLE	001
58	PAFZZ	96906	MS35489-11	.GROMMET, NONMETALLIC	002
59	XDFZZ	97403	13220E4037	.HOUSING, POWER SUPPLY	001
60	XBFZZ	97403	13220E4093-5	.INSULATOR	001
61	XBFZZ	97403	13220E3823-7	.BARRIER STRIP	001
62	XDFZZ	97403	13220E2998-6	.RIVET, BLIND	002
63	XBFZZ	97403	13220E2987	.LINK, TERMINAL	004
64	XDFZZ	97403	13220E3829-1	.TERMINAL, MINI-LOCKING FORK	011
65	XDFZZ	97403	13220E3829-2	.TERMINAL, MINI-LOCKING FORK	003
66	XDFZZ	97403	13220E2998-7	.RIVET, BLIND	002
67	XBFZZ	97403	13220E4026-4	.BARRIER STRIP	001
68	XBFZZ	97403	13220E4093-10	.INSULATOR	001
69	PAFZZ	81349	F02A250V1-1/2A	.FUSE, 1.5 AMP	001
70	PAFZZ	81349	F02B250V3A	.FUSE, CARTRIDGE	001
71	PAFZZ	97403	13220E3967	.RESISTOR	002
				END OF FIGURE	

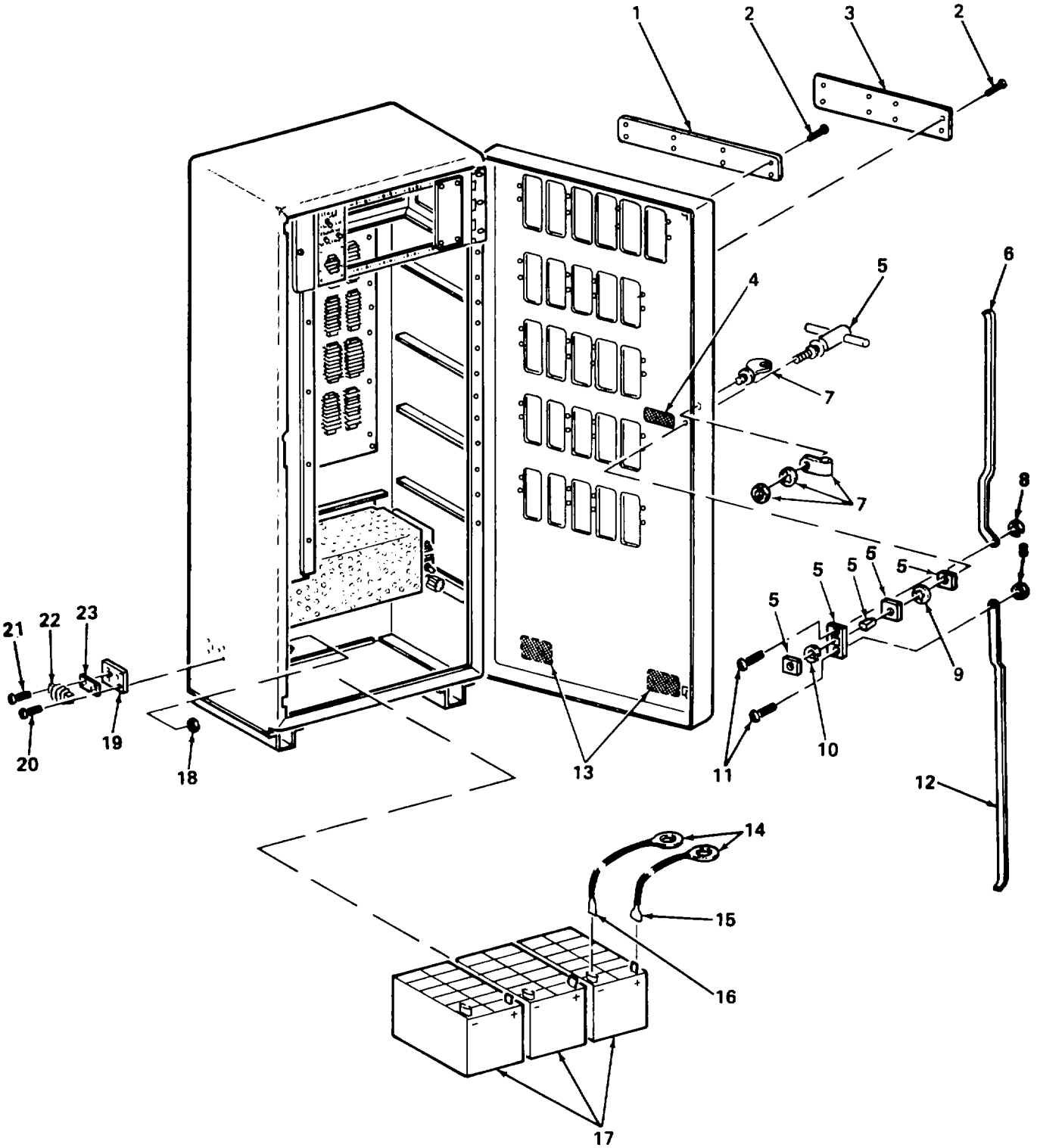


Figure C-5. Cabinet, Monitor, Type C CY-7361/FSS-9(V) (Sheet 1 of 2)

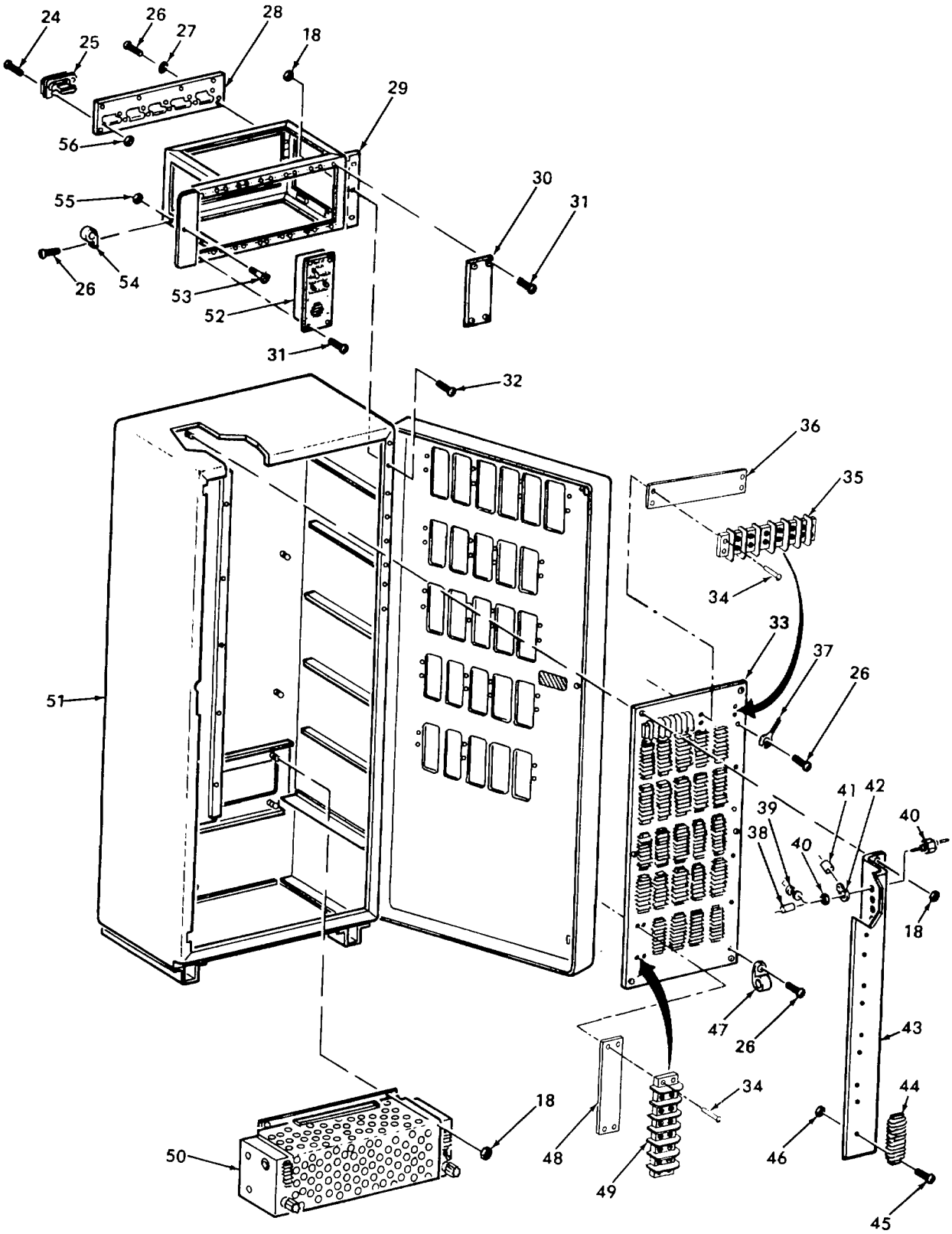


Figure C-5. Cabinet, Monitor, Type C CY-7361/FSS-9(V) (Sheet 2 of 2)

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 03 MONITOR CABINET (TYPE C)	
				FIG. C-5 CABINET, MONITOR, TYPE C CY-7361/FSS-9(V)	
1	XBFZZ	97403	13220E3919-1	COVER, LAMPS, MONITOR	001
2	PAFZZ	96906	MS18212-14	SCREW, MACHINE, PNH	040
3	XBFZZ	97403	13220E3919-2	COVER, LAMPS, MONITOR	004
4	XDFZZ	97403	13220E4109	PLATE, IDENTIFICATION	001
5	XBFZZ	97403	13220E4110	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	96906	MS35338-46	WASHER, LOCK	001
11	PAFZZ	96906	MS35207-280	SCREW, MACHINE, PNH	002
12	XBFZZ	97403	13220E4105-2	BAR, LATCH	001
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	XBFZZ	97403	13220E3910-4	NUT, LOCK WASHER.....	027
19	XBFZZ	97403	13220E4104	BRACKET, EXTERNAL	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	PAFZZ	29587	26-190-16S	CONNECTOR, RECEPTACLE.....	025
26	PAFZZ	96906	MS35206-227	SCREW, MACHINE, PNH.....	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, MACHINE.....	015
33	XDFZZ	97403	13220E4112	PLATE, MOUNTING.....	001
34	PAFZZ	97403	13220E2998-6	RIVET, BLIND	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

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
45	PAFZZ	96906	MS35206-231	SCREW, MACHINE, PNH	010
46	XBFZZ	97403	13220E3910-2	NUT, LOCK WASHER	010
47	PAFZZ	97403	13220E3621-3	CLAMP, LOOP	035
48	XDFZZ	97403	13220E4093-6	INSULATOR	025
49	PAFZZ	97403	13220E3823-8	BARRIER STRIP	025
50	PAFFF	97403	13220E4101	POWER SUPPLY, CABINET	001
51	XBFZZ	97403	13220E4103	ENCLOSURE, 25 ZONE MONITOR	001
52	PAFZZ	97403	13220E3902	SIGNAL MODULE ASSY	001
53	PAFZZ	97403	13220E3921-2	STUD	005
54	XBFZZ	97403	13220E3621-4	CLAMP, CABLE	003
55	PAFZZ	97403	13220E3922	EYELET, TURNLOCK	005
56	XBFZZ	97403	13220E3910-1	NUT, LOCK WASHER	050
				END OF FIGURE	

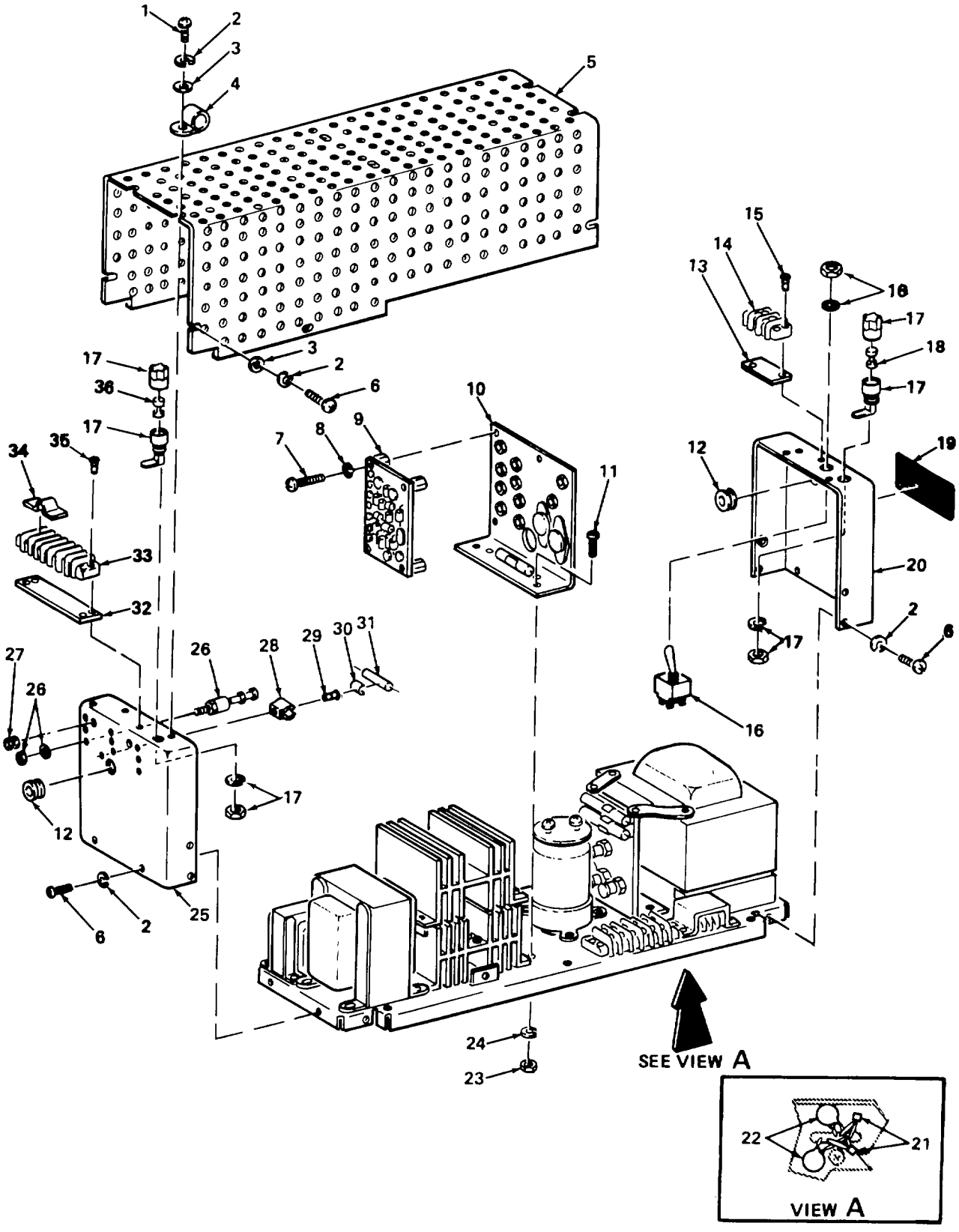


Figure C-6. Power Supply, Cabinet, Monitor, Type C CY-7361/FSS-9(V) (Sheet 1 of 2)

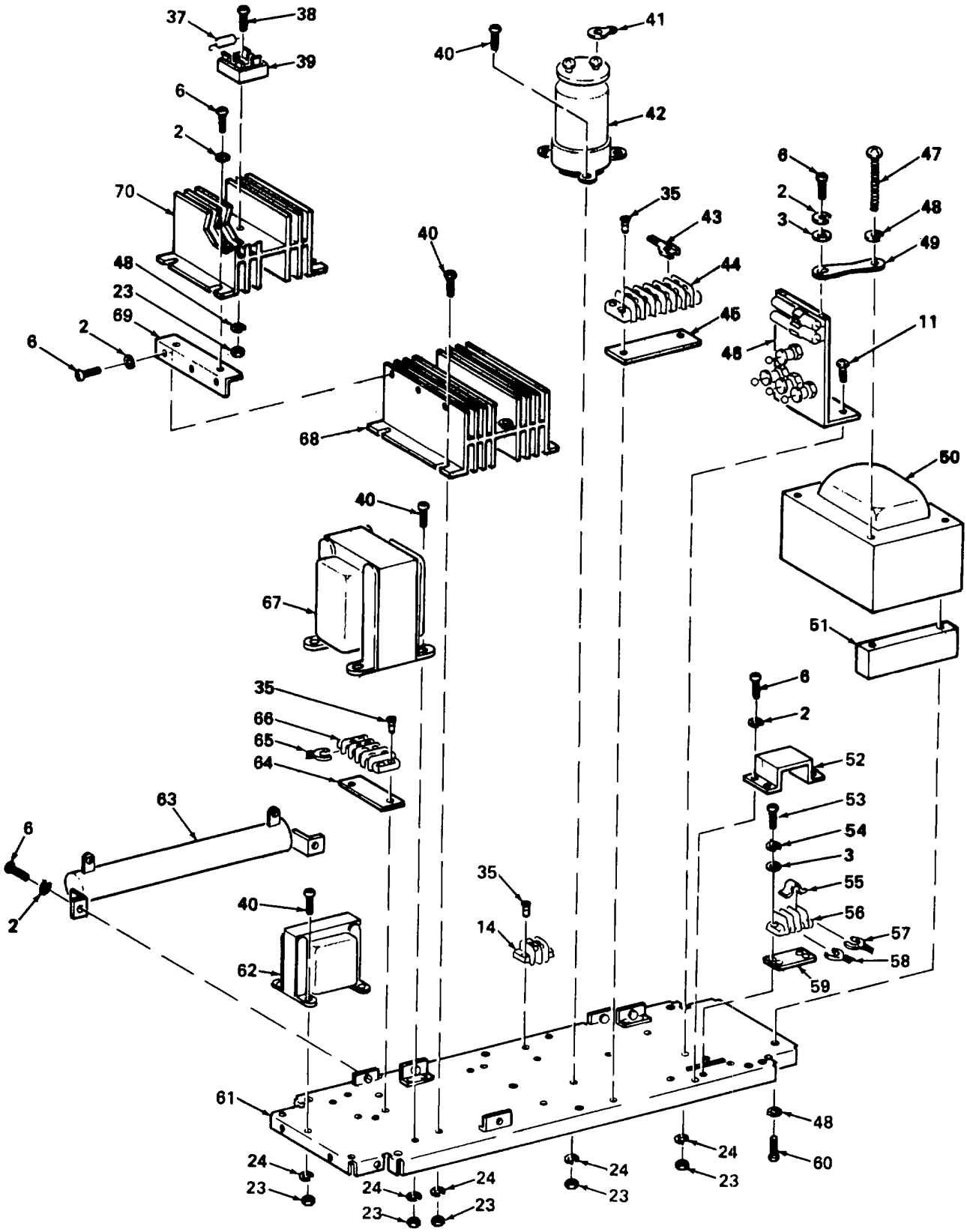


Figure C-6. Power Supply, Cabinet, Monitor, Type C CY-7361/FSS-9(V) (Sheet 2 of 2)

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 03 MONITOR CABINET (TYPE C)	
				FIG. C-6 POWER SUPPLY, CABINET, MONITOR, TYPE C, CY-7361/FSS-9(V)	
1	PAFZZ	96906	MS35206-229	.SCREW, MACHINE HEAD	003
2	PAFZZ	96906	MS35338-41	.WASHER, LOCK	037
3	PAFZZ	96906	MS27183-5	.WASHER, FLAT	015
4	XBFZZ	97403	13220E3621-3	.CLAMP, CABLE	003
5	XBFZZ	97403	13220E4117	.COVER, POWER SUPPLY	001
6	PAFZZ	96906	MS35206-227	.SCREW, MACHINE, PNH.....	034
7	PAFZZ	96906	MS35206-219	.SCREW, MACHINE, PNH.....	004
8	PAFZZ	96906	MS35338-40	.WASHER, LOCK SPRING	004
9	XDFZZ	97403	13220E4116	.CIRCUIT CARD ASSY, BOARD SUBASSY, PWR SUPPLY	001
10	XDFFF	97403	13220E4114	.PLATE, MOUNTING, PRINTED WIRING BOARD	001
11	PAFZZ	96906	MS35206-246	.SCREW, MACHINE HEAD	004
12	XBFZZ	96906	MS35489-11	.GROMMET, RUBBER	002
13	XBFZZ	97403	13220E4093-1	.INSULATOR	002
14	XBFZZ	97403	13220E3823-2	.BARRIER STRIP	002
15	PAFZZ	97403	13220E2998-6	.RIVET, BLIND	054
16	PAFZZ	97403	13220E4141	.SWITCH, DPST	001
17	PAFZZ	81349	TYPE FHN20G	.FUSEHOLDER	002
18	PAFZZ	81349	F03B125V8A	.FUSE, CARTRIDGE	001
19	XDFZZ	97403	13220E4125	.PLATE, IDENTIFICATION	001
20	XBFZZ	97403	13220E4131	.SUPPORT BRACKET, PWR SUPPLY	001
21	PAFZZ	81349	M39014/01-1238	.CAPACITOR, FIXED, CERAMIC	002
22	PAFZZ	97403	13220E3967	.RESISTOR, VOLTAGE	002
23	PAFZZ	96906	MS35649-282	.NUT, PLAIN HEXAGON	020
24	PAFZZ	96906	MS35338-42	.WASHER, LOCK-SPRING	020
25	XBFZZ	97403	13220E4130	.SUPPORT BRACKET, PWR SUPPLY	001
26	PAFZZ	81349	SE09XE03	.TERMINAL, STUD, INSULATED	002
27	XDFZZ	96906	MS35489-4	.GROMMET, NONMETALLIC	001
28	XBFZZ	81349	M24066/2-108	.CLIP, SPRING TENSION	001
29	XBFZZ	96906	MS20604AD3W1	.RIVET, BLIND	004
30	XDFZZ	81349	MIL-1-695 TYPE F .62"X1 "X.005 THK	INSULATION ELEC PAPER	004
31	PAFZZ	97403	13220E4124	.CAPACITOR	004
32	XBFZZ	97403	13220E4093-5	.INSULATOR	001
33	XBFZZ	97403	13220E3823-7	.BARRIER STRIP	001
34	XDFZZ	97403	13220E2987	.LINK, TERMINAL	004
35	XBFZZ	07707	AD8ABS	.RIVET, BLIND	008
36	PAFZZ	81349	F03A250V7A	.FUSE, CARTRIDGE	001
37	XDFZZ	97403	13220E3971-2	.VARISTOR	001
38	PAFZZ	96906	MS35206-248	.SCREW, MACHINE, PNH	001
39	PAFZZ	97403	13220E4041	.DIODE, RECTIFIER	001
40	PAFZZ	96906	MS35206-243	.SCREW, MACHINE, PNH	015
41	XDFZZ	81349	MS35431-7	.TERMINAL LUG	009
42	PAFZZ	06001	88F250ALA	.CAPACITOR, ELECTROLYTIC	001
43	XDFZZ	97403	13220E3829-3	.TERMINAL	013

SECTION II.

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
44	XBFZZ	97403	13220E4026-6	.BARRIER STRIP	001
45	XBFZZ	97403	13220E4093-11	INSULATOR	001
46	XDFFF	97403	13220E4115	.PLATE, SUBASSEMBLY	001
47	XDFZZ	81348	FF-S-92	.SCREW, MACHINE	004
48	PAFZZ	96906	MS35338-44	.WASHER, LOCK	008
49	XBFZZ	97403	13220E4144	.BRACKET	002
50	PAFZZ	14407	P602259	.TRANSFORMER, POWER	001
51	XBFZZ	97403	13220E4139	.BRACKET, TRANSFORMER	002
52	XBFZZ	97403	13220E3987.	.SHIELD, POWER SUPPLY	001
53	*PAFZZ*	96906	MS35206-231	.SCREW, MACHINE	002
54	PAFZZ	96906	MS35333-37	.WASHER, LOCK	002
55	XBFZZ	97403	13220E3966	.LINK, TERMINAL	001
56	XBFZZ	97403	13220E4026-3	.BARRIER STRIP	001
57	XBFZZ	97403	13220E3969	.TERMINAL, LUG, SOLDER	003
58	XDFZZ	97493	13220E3829-1	TERMINAL	007
59	XBFZZ	97403	13220E4093-9	.INSULATOR	001
60	PAFZZ	96906	MS35206-279	.SCREW, MACHINE, PAN	004
61	XBFZZ	97403	13220E4126	.PLATE, BASE, POWER	001
62	PAFZZ	97403	13220E4137	.REACTOR	001
63	PAFZZ	97403	13220E4143	.RESISTOR, FIXED, WIRE	001
64	XBFZZ	97403	13220E4093-10	.INSULATOR	001
65	XDFZZ	97403	13220E3829-2	.TERMINAL	012
66	XBFZZ	97403	13220E4026-4	.BARRIER STRIP	001
67	PAFZZ	97403	13220E4138	.CHOKE, POWER SUPPLY	001
68	XBFZZ	97403	13220E4113	.HEAT SINK	001
69	XBFZZ	97403	13220E4128	.BRACKET, ANGLE	002
70	XBFZZ	97403	13220E4127	HEAT SINK	001
				END OF FIGURE	

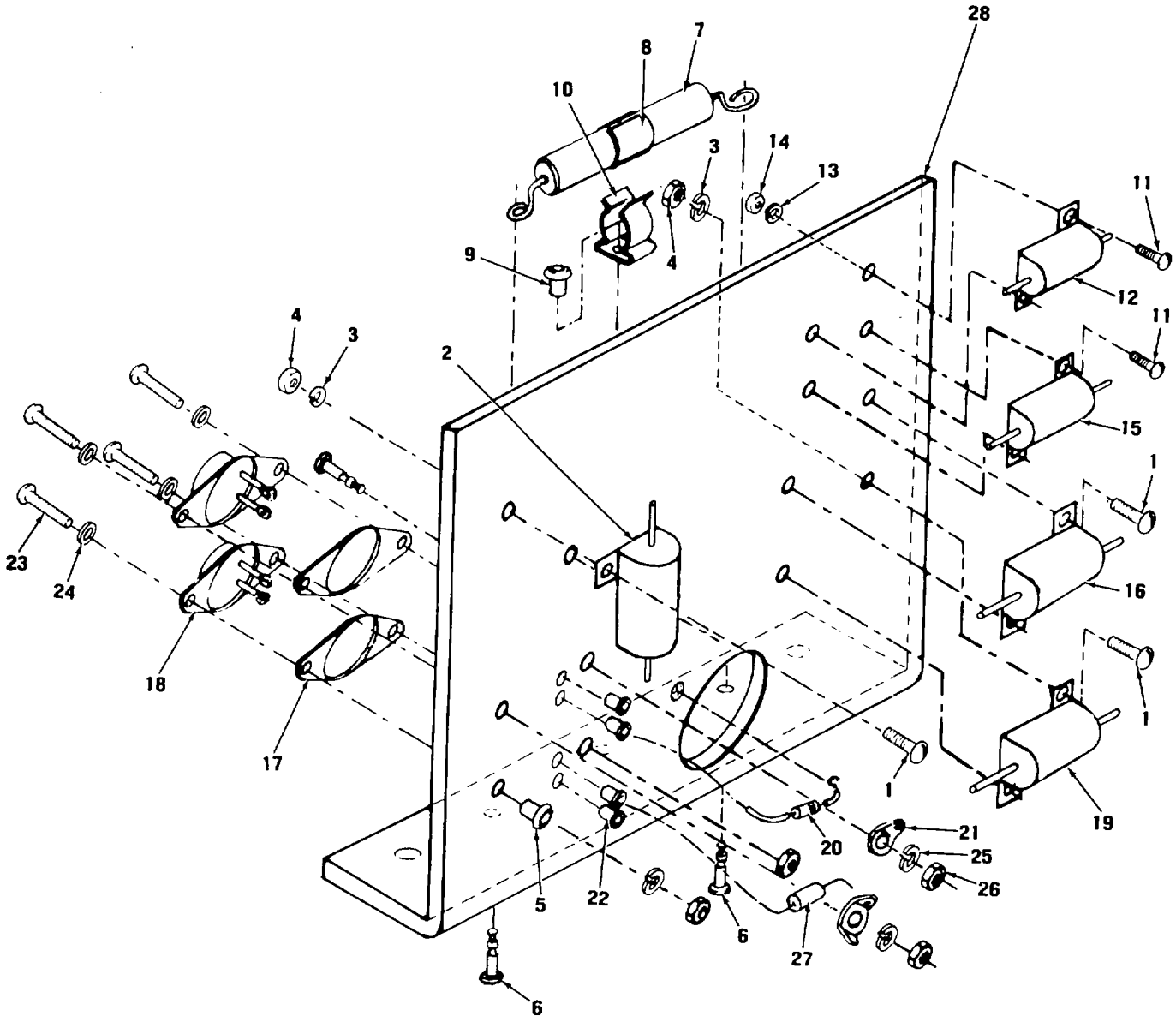


Figure C-7. Monitor, Cabinet, Type C (CY-7361) Printed Wiring Board Mounting Plate

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 03 MONITOR CABINET (TYPE C)	
				FIG. C-7 MONITOR CABINET, TYPE C, PRINTED WIRING BOARD MOUNTING PLATE	
1	PAFZZ	96906	MS35206-323	..SCREW, MACHINE.	006
2	PAFZZ	00213	3225M600-3	..RESISTOR, FIXED, WIRE	001
3	PAFZZ	96906	MS35338-40	..WASHER, LOCK	006
4	PAFZZ	96906	MS35649-242	..NUT, PLAIN, HEXAGON	006
5	XDFZZ	97403	13220E3928-1	..INSULATOR, BUSHING	004
6	PAFZZ	96906	SE09XE03	..TERMINAL, STUD, INSULATED	003
7	PAFZZ	81349	M3901R/01-0638	..CAPACITOR, FIXED, ELECTROLYTIC .	001
8	XDFZZ	81349	TYPE F, FORM R	..INSULATION, .62X100X.005	001
9	XDFZZ	07707	AD45ABS	..RIVET, BLIND	001
10	XBFZZ	96906	M24066/2-108	..CLIP, SOLID, SPRING TENSION .	001
11	XBFZZ	96906	MS35206-207	..SCREW, MACHINE	004
12	PAFZZ	00213	3105M3753	..RESISTOR, FIXED	001
13	PAFZZ	96906	MS35338-39	..WASHER, LOCK .	004
14	PAFZZ	96906	MS35649-222	..NUT, PLAIN, HEXAGON	004
15	PAFZZ	00213	3010M4-3	..RESISTOR, FIXED	001
16	PAFZZ	00213	3225M800-3	..RESISTOR, FIXED, WIRE	001
17	PAFZZ	97403	13220E3929-1	..INSULATOR, PLATE	002
18	PAFZZ	97403	13220E4029	..TRANSISTOR, NPN .	002
19	PAFZZ	00213	3225M.25-3	..RESISTOR, FIXED	001
20	PAFZZ	97403	13220E3904-2	..SEMICONDUCTOR DEVICE, DIODE	001
21	XBFZZ	81349	MS35431-3	..TERMINAL LUG, SOLDER	003
22	XBFZZ	97403	13220E4070	..BUSHING SHOULDERED	004
23	PAFZZ	96906	MS35206-231	..SCREW, MACHINE	004
24	PAFZZ	96906	MS27183-6	..WASHER, FLAT	004
25	PAFZZ	96906	MS35338-41	..WASHER, LOCK	004
26	PAFZZ	96906	MS35649-262	..NUT, PLAIN, HEXAGON	004
27	PAFZZ	81349	M39014/01-1575	..CAPACITOR, FIXED	001
28	XBFZZ	97403	13220E4133	..MOUNTING PLATE	001
				END OF FIGURE	

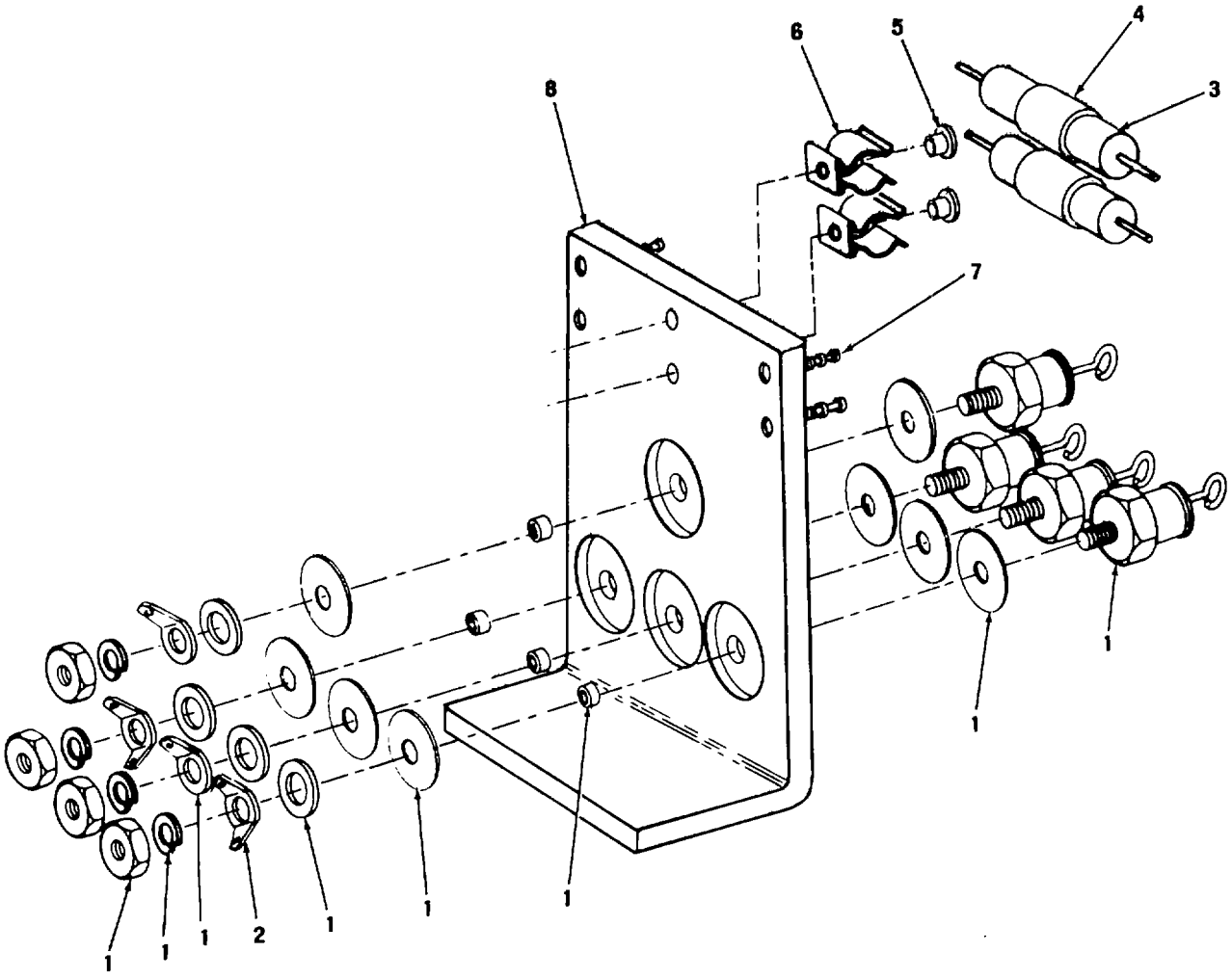


Figure C-8. Monitor Cabinet, Type C (CY-7361) Plate Subassembly, Component Mounting

SECTION II

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

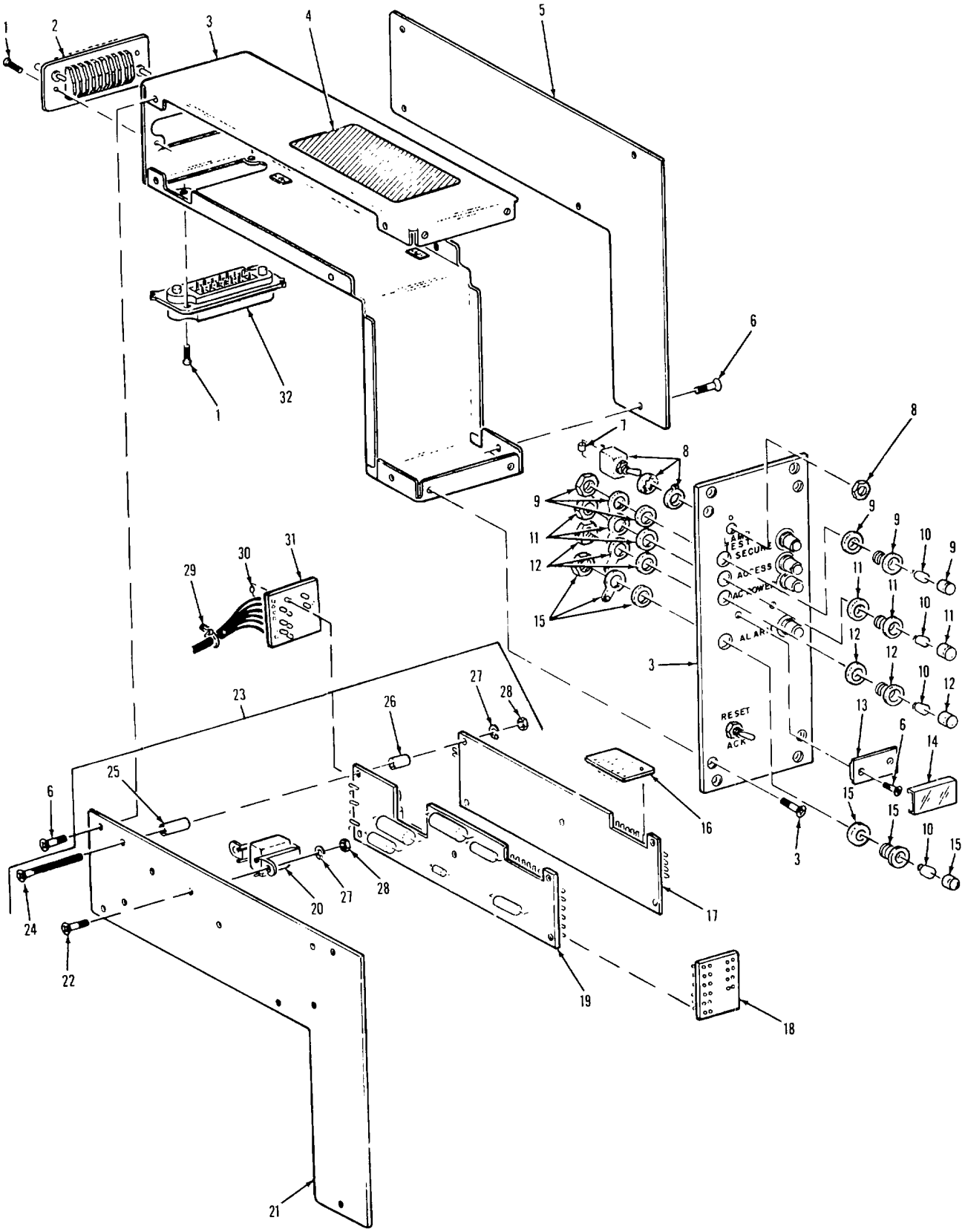


Figure C-9. Monitor Module, Status ID-1921/FSS-9(V)

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 04 STATUS MONITOR MODULE	
				FIG. C-9 MONITOR MODULE, STATUS ID-1921/FSS-9(V)	
1	PAFZZ	96906	MS35206-214	SCREW	004
2	PAFZZ	97403	13220E3541	CONNECTOR, PLUG	001
3	XBFZZ	97403	13220E4058	FRAME	001
4	XBFZZ	97403	13220E4059	PLATE, IDENTIFICATION	001
5	XBFZZ	97403	13220E3951	COVER	001
6	PAFZZ	96906	MS35190-221	SCREW, MACHINE	012
7	PAFZZ	81349	M39014/01-1593	CAPACITOR, FIXED, CERAMIC	001
8	PAFZZ	96906	MS75028-27	SWITCH, TOGGLE	002
9	PAFZZ	97403	13220E3955-3	LIGHT, INDICATOR, GREEN	002
10	PAFZZ	96906	MS24515-685	LAMPS, INCANDESCENT	008
11	PAFZZ	97403	13220E3955-4	LIGHT, INDICATOR, AMBER	002
12	PAFZZ	97403	13220E3955-2	LIGHT, INDICATOR, WHITE	002
13	PAFZZ	97403	13220E4054	PLATE, CARD HOLDER	001
14	PAFZZ	97403	13220E3961	LENS CAP	001
15	PAFZZ	97403	13220E3955-1	LIGHT, INDICATOR, RED	002
16	PAFZZ	97403	13220E3963	PRINTED WIRING BOARD	001
17	PAFZZ	97403	13220E3953	PRINTED WIRING BOARD	001
18	PAFZZ	97403	13220E4061	PRINTED WIRING BOARD	001
19	PAFZZ	97403	13220E3952	PRINTED WIRING BOARD	001
20	PAFZZ	97403	13220E3957	COIL SUBASSEMBLY	001
21	XBFZZ	97403	13220E3954	COVER	001
22	PAFZZ	96906	MS35190-222	SCREW	002
23	PAFZZ	16250	SD-B-806503	KIT ASSEMBLY	001
24	XAFZZ	96906	MS35190-231	.SCREW, MACHINE	005
25	XAFZZ	97403	13220E3538-3	.SPACER, PLATE	005
26	XAFZZ	97403	13220E3538-2	.SPACER, PLATE	005
27	XAFZZ	96906	MS35338-40	.WASHER, LOCK	005
28	XAFZZ	96906	MS35649-242	.NUT, PLAIN, HEXAGON	005
29	XBFZZ	96906	MS3367-4-9	STRAP, TIEDOWN	009
30	PAFZZ	81349	FM04-125V2A	FUSE, CARTRIDGE	001
31	PAFZZ	97403	13220E4060	PRINTED WIRING BOARD	001
32	PAFZZ	97403	13220E3909	CONNECTOR	001
				END OF FIGURE	

Section III. SPECIAL TOOLS LIST

(Not Applicable)

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

NATIONAL STOCK NUMBER INDEX

NATIONAL STOCK NUMBER AND PART NUMBER INDEX

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5310-00-934-9747	4	21	5950-01-008-8645	3	34
	7	26		5	38
5310-00-934-9757	2	26	5940-01-025-7766	1	26
	4	42		3	17
	6	23		5	16
5305-00-957-7815	3	20	5940-01-026-9639	4	16
5305-00-958-5453	1	21		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		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			

NATIONAL STOCK NUMBER AND PART NUMBER INDEX
PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
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		1	7
09922	HP-4N		1	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" X.005 THK		6	30
81349	MIL-I-695 TYPE F 1.5" X .005 THK		2	44
81349	MIL-I-695 TYPE F 3/4" X 11/2" X .015		4	39
81349	MIL-I-695 TYPE F 4" X 11/2" X .015		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
			9	29
96906	MS35190-221	5305-00-958-5483	9	6
96906	MS35190-222	5305-00-995-6653	9	22
96906	MS35190-231		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		7	11
96906	MS35206-214	5305-00-993-0190	1	3
			3	1
			5	24
			9	1
96906	MS35206-215	5305-00-889-2997	2	34
96906	MS35206-219	5305-00-984-4976	4	5
			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
			5	20
96906	MS35206-229	5305-00-984-4989	4	11
			6	1
96906	MS35206-230	5305-00-889-3000	5	21
96906	MS35206-231	5305-00-889-3001	1	44
			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	MS35206-323	5305-00-253-7841	7	1
96906	MS35207-280	5305-00-993-2738	5	11
96906	MS35333-36	5310-00-193-7577	4	6
96906	MS35333-37	5310-00-579-0079	1	6
			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
			6	8
			7	3
			9	27
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
			4	37
			6	41
96906	MS35489-11		2	10
		5325-00-291-9366	4	58
			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
			5	41
			1	38
96906	MS77066-3		1	36
			3	38
			5	39
81349	M24066/2-108		6	28
			7	10
			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		9	23
81349	SE09XE02		4	17
81349	SE09XE03	5940-01-026-9639	4	16
			6	26
			7	6
			8	7
81349	TYPE F, FORM R		2	33
			7	8
			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
			3	16
			5	15
97403	13220E3623	5940-01-025-7766	1	26
			3	17
			5	16
97403	13220E3706	5930-00-655-1575	2	17
97403	13220E3715-2	5910-01-080-1732	2	42
97403	13220E3746-2		4	30
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
			2	5
			3	44
			4	64
			5	34
			6	58
97403	13220E3829-2		1	24
			2	14
			3	30
			4	65
			5	14
			6	65
97403	13220E3829-3		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		1	32
97403	13220E3917		1	18
97403	13220E3918		1	9
97403	13220E3919-1		3	9
			5	1
97403	13220E3919-2		5	3
97403	13220E3919-3		1	15
97403	13220E3921-2		1	22
			3	31
			5	53
97403	13220E3922		1	55
			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		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	13220E3965	5915-01-094-1776	1	37
			3	37
			5	37
		5915-01-036-7978	5	40
97403	13220E3966		2	21
			4	48
			6	55
97403	13220E3967	5905-00-487-1614	2	24
			4	71
			6	22
97403	13220E3968-1		1	42
97403	13220E3968-2		3	41
			5	41
97403	13220E3969		2	23
			4	45
			6	57
97403	13220E3970	5905-01-005-6371	1	40
			3	35
			5	39
97403	13220E3971-1	5961-01-081-4207	2	46
97403	13220E3971-2		4	34
			6	37
97403	13220E3973		2	37
97403	13220E3974		4	53
97403	13220E3985		2	50
97403	13220E3986		2	9
97403	13220E3987		2	19
			4	44
			6	52
97403	13220E3991		2	54
97403	13220E3992		2	41
97403	13220E3993		2	39
97403	13220E3994		2	32
97403	13220E3995		2	6
97403	13220E3998	5950-01-065-0782	2	45
97403	13220E3999	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
			5	30
97403	13220E4016		3	13
97403	13220E4018		4	50
97403	13220E4022		2	48
97403	13220E4026-3		2	12
			4	46
			6	56
97403	13220E4026-4		4	67
			6	66
97403	13220E4026-6		6	44
97403	13220E4027		4	8
97403	13220E4029		4	2
			7	18
97403	13220E4033-1	5961-00-383-1149	4	25
97403	13220E4033-2		4	23
97403	13220E4035		4	1
97403	13220E4037		4	59
97403	13220E4041		4	36
			6	39
97403	13220E4042	5905-01-093-4333	4	52
97403	13220E4046		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	13220E4058		9	3
97403	13220E4059		9	4
97403	13220E4060	6350-01-099-0237	9	31
97403	13220E4061	5999-01-083-1353	9	18
97403	13220E4070		7	22
97403	13220E4071-1		1	17
97403	13220E4071-2		3	12
97403	13220E4072	5961-01-141-5110	1	39
			3	36
			5	38
97403	13220E4093-1		1	33
			6	13
97403	13220E4093-10		4	68
			6	64
97403	13220E4093-11		6	45
97403	13220E4093-12		5	23
97403	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	13220E4117		6	5
97403	13220E4124	5910-00-052-7632	4	28
			6	31
			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

*U.S. GOVERNMENT PRINTING OFFICE: 1"2 -654-02/I60334

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	33
06001	88F235ALA		4	38
06001	88F250ALA		6	42

*U.S. GOVERNMENT PRINTING OmCE: 1990 - 2-692/-31

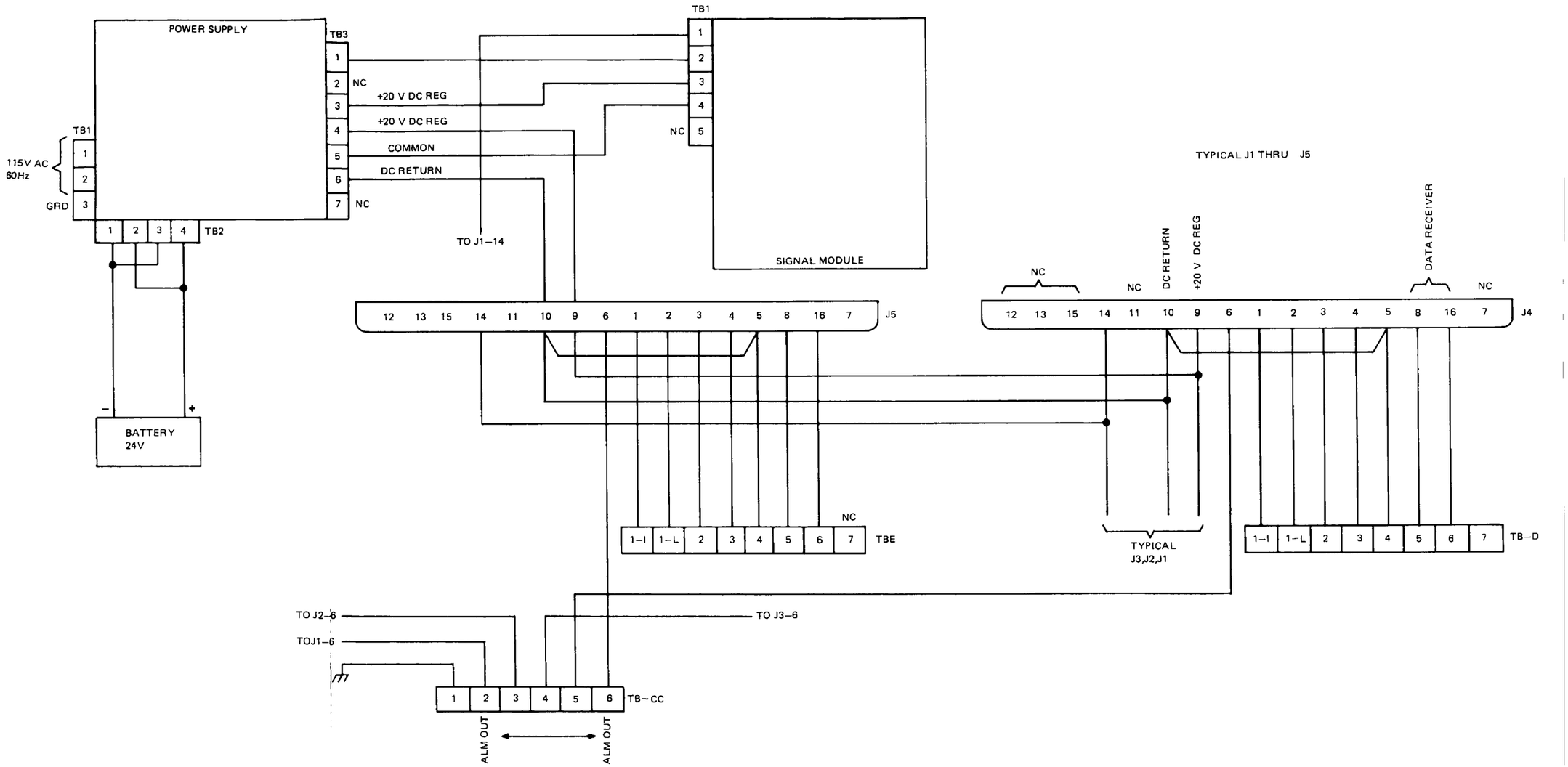


Figure FO-1. Five-Zone Monitor Cabinet Wiring Diagram

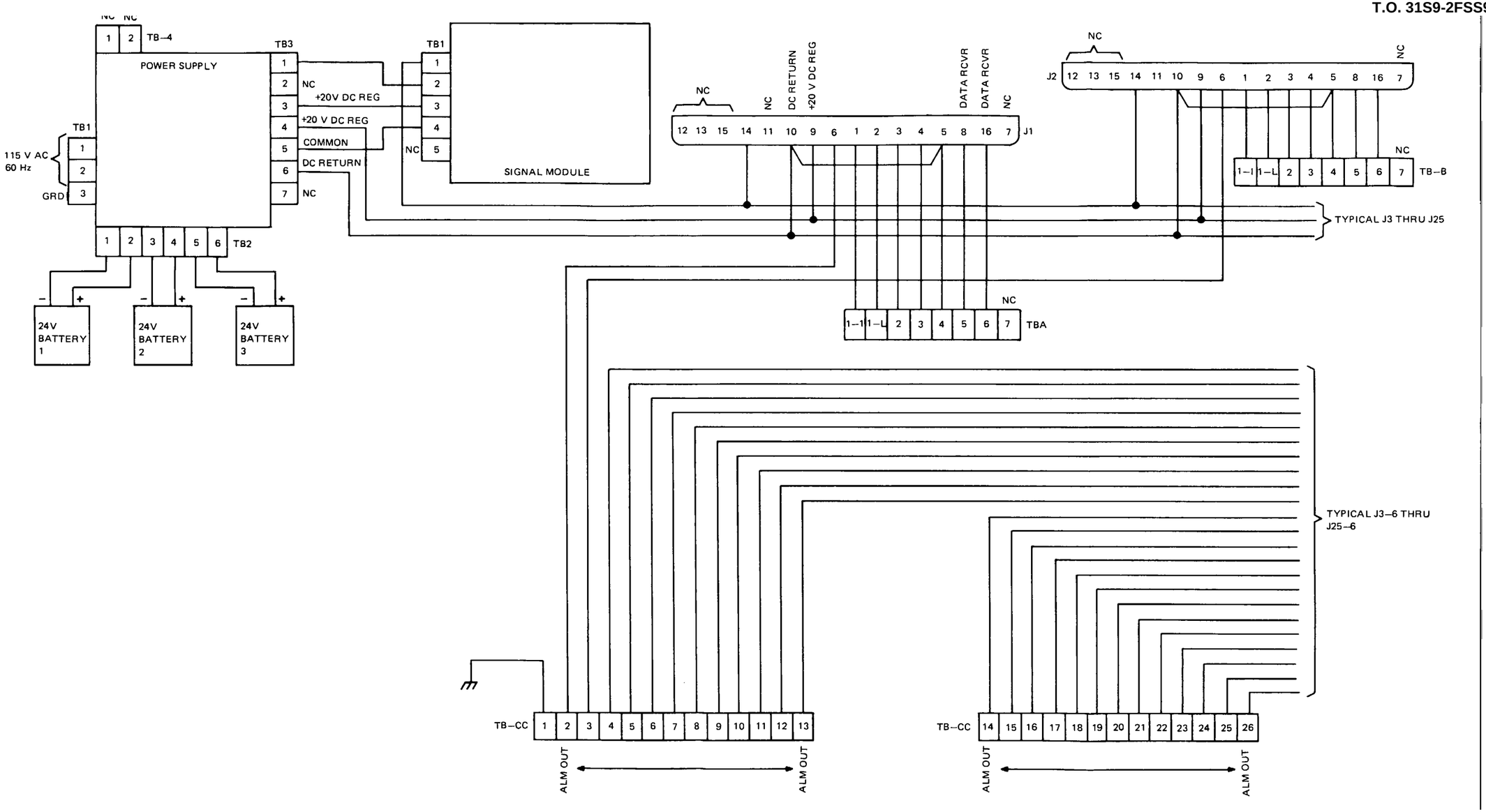


Figure FO-2. Twenty-Five-Zone Monitor Cabinet Wiring Diagram

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

E. C. MEYER
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

H. D. ARNOLD
Rear Admiral, United States Navy
Commander, Naval Electronic
Systems Command

Official:

CHARLES A. GABRIEL, , *General, USAF*
Chief of Staff

JAMES P. MULLINS
General, USAF, Commander, Air Force
Logistics Command

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25A, Operator Maintenance requirements for Intrusion Detection.

' U.S. GOVERNMENT PRINTING OFFICE: 1982-664028/1506

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.

IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER	SIGN HERE

DA FORM 1 JUL 79 2028-2

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.

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

Liquid Measure

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*	*To*	*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 temperature	5/9 (after subtracting 32)	Celsius temperature	°C

PIN: 051808-002