

**TM 9-4940-547-14&P**

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**TECHNICAL MANUAL**

**OPERATOR' S, ORGANIZATIONAL, DIRECT SUPPORT  
AND GENERAL SUPPORT MAINTENANCE MANUAL  
INCLUDING REPAIR PARTS LISTS**

**FOR**

**SHOP EQUIPMENT  
ELECTRONIC REPAIR  
SEMI-TRAILER MOUNTED  
(NSN 4940-01-110-7422)**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

The following summary is adapted from Warnings within the manual. However, all warnings should be observed as noted in the text.

WARNING

Dangerous voltages, capable of causing death, are present in this vehicle, and the equipment provided in its tool load. Use extreme caution when handling, testing, or adjusting any electrical equipment.

- Ground the vehicle and instruments prior to operation.
- Do not operate in an explosive atmosphere.
- Keep away from live circuits.
- Do not service or adjust alone.
- Do not substitute or modify parts or equipment.

WARNING

HEARING PROTECTION REQUIRED

WHEN OPERATING

- Electric Drill
- Vacuum Cleaner

WARNING

Dangerous chemical solvents are used with this equipment. Avoid prolonged breathing of vapors; insure that there is adequate ventilation at all times. Avoid skin contact. Wash hands immediately after contact with solvent. If solvent gets into your eyes, flush your eyes immediately with clean water. Seek medical attention if necessary.

CHANGE  
NO. 1

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, DC 25 SEPTEMBER 1992

Operator's, Organizational, Direct Support  
and General Support Maintenance Manual  
Including Repair Parts Lists  
for  
SHOP EQUIPMENT, ELECTRONIC REPAIR  
SEMI-TRAILER MOUNTED  
(NSN 4940-01-110-7422)

TM 9-4940-547-14&P, 28 June 1984, is changed as indicated below:

**NOTE**

New or changed text is indicated by a change bar at the outer margin of the page and the designation "Change 1" at the bottom of the page next to the page number. On pages with this designation but without the change bar, the entire page is new or changed.

1. Remove old pages and insert new pages as follows:

**Remove Pages**

iii and iv  
2-1/(2-2 blank)

**Insert Pages**

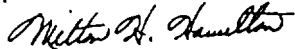
iii and iv  
2-1 thru 2-12

2. File this change sheet in back of the publication for reference purposes.

By Order of the Secretary of the Army:

**GORDON R. SULLIVAN**  
General, United States Army  
chief of Staff

Official:



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

02713

**DISTRIBUTION:**

TO BE DISTRIBUTED IN ACCORDANCE WITH DA FORM 12-25-E, (BLOCK 2743),  
REQUIREMENTS FOR TM 9-4940-547-14&P.

Technical Manual

No. 9-4940-547-14&P

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
Washington, DC 28 June 1984

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT  
AND GENERAL SUPPORT MAINTENANCE MANUAL  
INCLUDING REPAIR PARTS LIST  
FOR

SHOP EQUIPMENT, ELECTRONIC REPAIR  
SEMI-TRAILER MOUNTED  
(NSN 4940-01-110-7422)

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. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2, located in the back of this manual direct to: Commander, US Army Armament, Munitions and Chemical Command, ATTN: DRSMC-MAS, Rock Island, IL 61.299. A reply will be furnished directly to you.

INSTRUCTIONS FOR REQUISITIONING PARTS

NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 - Manufacturer's Federal Supply Code Number - 08294.
- 2 - Manufacturer's Part Number exactly as listed herein.
- 3 - Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 - Manufacturer's Model Number -
- 5 - Manufacturer's Serial Number (End Item).
- 6 - Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 - If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

- (a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code Number - 08294 followed by a colon and manufacturer's Part Number for the repair part.
- (b) Complete Remarks field as follows:

Noun: (nomenclature or repair part)  
For: NSN : 4940-01-110-7422  
Manufacturer: Boyertown Auto Body Works  
Third and Walnut Streets  
Boyertown, PA 19512

Model:  
Serial: (of end item)

Any other pertinent information such as Frame Number, Type, Dimensions, etc.

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Section 1. INTRODUCTION

1-1. General. This manual is intended as a guide for users of the electronic repair shop set manufactured in accordance with ARRCOM drawing 19204 - F13217E8200, revision B, dated 10 December 1980, and loaded with tools and equipment in accordance with set components list SC 4940-95-CL-B06 and SC 4940-95-CL-B06-HR, dated 31 October 1982.

1-2. Semitrailer.

a. The shop set is installed in a semitrailer, van, shop, folding sides, 6 ton, 4-wheel, Model M447C, NSN 2330-00-472-9999.

b. Refer to the M447C reference data sheets in regard to the physical characteristics of the semitrailer and TM 9-2330-238-14&P for operation and maintenance procedures and TM 9-2330-238-14&P for parts.

1-3. Warranty. The shop set and semitrailer are warranted for a period of one year from the date of manufacture. All warranty problems should be referred to the manufacturer.

1-4. Maintenance Forms and Record, Equipment maintenance forms and procedures for their use are contained in DA PAM 738-750 as contained in Maintenance Management Update.

1-5. Administrative Storage. For information necessary to meet administrative storage requirements refer to TM 740-90-1.

1-6. Equipment Serviceability Criteria (ESC). There are no equipment serviceability criteria (ESC) technical manuals in existence pertinent to the end item of equipment being covered in this publication.

1-7. Destruction of Army Material to Prevent Enemy Use. For procedures required to render this end item unusable by the enemy refer to TM 750-244-3.

1-8. Quality Assurance/Quality Control (QA/QC).

a. Refer to MIL-STD-109 and MIL-M-38784 for QA/QC terms and definitions.

b. Refer to TM 9-2330-238-14&P and DMWR 9-4940-451 for the applicable QA/QC requirements.

1-9. Reporting Quality Deficiency Reports (QDR). QDRs will be prepared on SF 368, Quality Deficiency Report. Instructions for preparing QDRs are provided in DA PAM 738-750 as contained in Maintenance Management Update. QDRs should be mailed directly to: Commander, US Army Armament, Munitions and Chemical Command, ATTN: DRSMC-MAO (R), Rock Island, IL 61299. A reply will be furnished directly to you.

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1-10. Description and Data.

a. For description of the semitrailer van refer to TM 9-2330-238-14&P :

b. For major component location on shop set van refer to figure 1.

Identification plate. The US Army identification is located on the curbside front panel of the van body (see fig 1). It contains the information listed below:

Part No. - 13217E8200  
NSN - 4940-01-110-7422  
Manufacturer -  
Facility Code - 08294 (FSCM)  
Serial No. - G1-285-  
Date of Manufacture -  
Warranty - 1 year  
Contract No. - DAAA09-81-C-2420

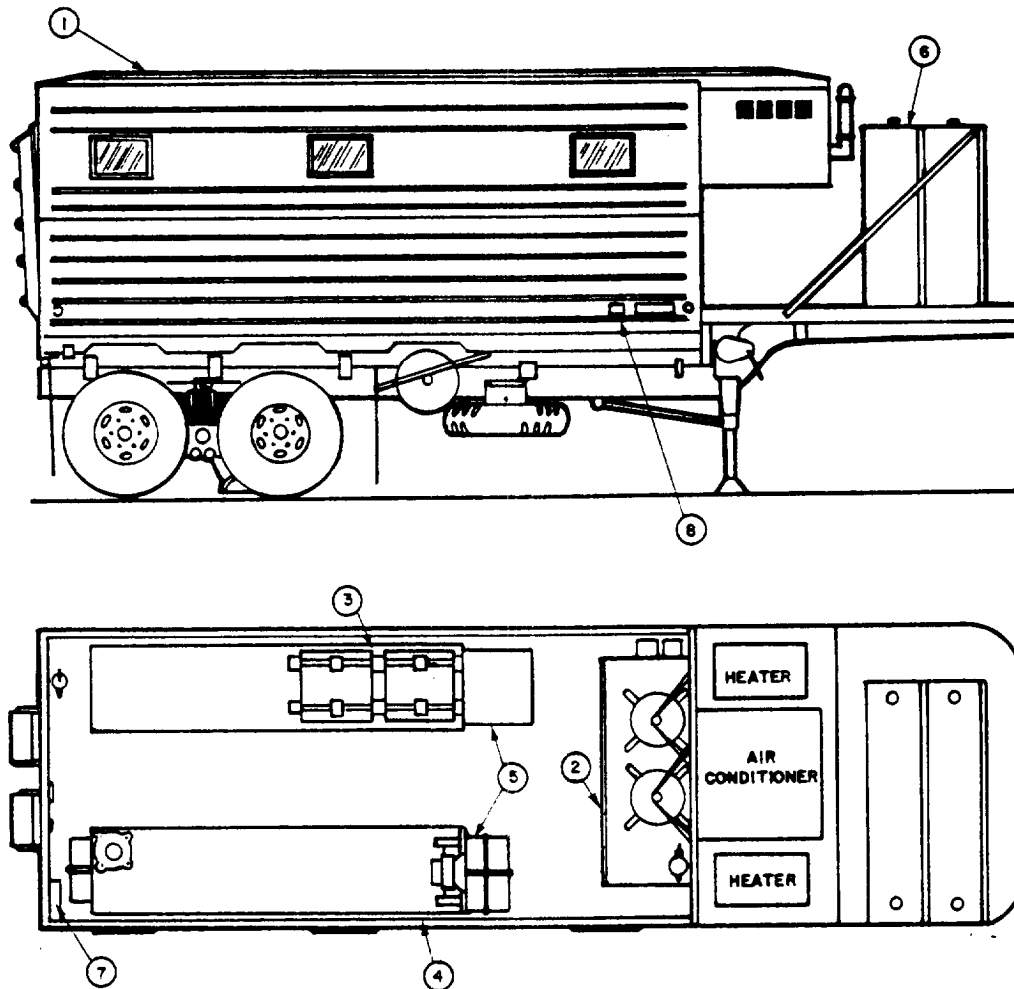


Figure 1. Major component location.

ITEM	NAME	QTY	PART NUMBER	(FSCM)
1	Semitrailer	1	13217E8200	(59678)
2	Workbench, Front	1	13217E8118	(59678)
3	Workbench, Left Side	1	13217E8106-8	(59678)
4	Workbench, Right Side	1	13217E8106-8	(59678)
5	Equipment Installation	1	760B0-0003	(08294)
6	Stowage Assembly	1	10881810	(19207)
7	Electrical Installation		13217E8175	(59678)
8	Nameplate, Identification	1	13217E8200-2	(59678)

## Section 2. OPERATING INSTRUCTIONS

## 2-1. Semitrailer - M447C.

a. Operation of the M447C semitrailer is covered by TM 9-2330-238-14&P. Refer to that technical manual for information.

b. Maintenance, cleaning, lubrication, troubleshooting, and performance verifications are covered by TM 9-2330-238-14&P. Refer to that technical manual for information.

## 2-2. Tools and Equipment Load.

## CAUTION

This equipment is not suppressed for electromagnetic interference. DO NOT operate within 100 feet of sensitive electronic communications and surveillance equipment.

a. Operation, maintenance, cleaning, lubrication, troubleshooting, and performance verifications for the electrical and electronic equipment is covered in their respective operator's manuals. Please refer to appendix A of this manual for the list of technical manuals provided with this shop set.

b. Installation and removal of the tools and equipment load is covered in section 4 of this manual.

## 2-3. Operator/Crew Preventive Maintenance Checks and Services (PMCS).

a. General.

(1) Before You Operate. Always keep in mind the CAUTIONS and WARNINGS. Perform your "Before" PMCS prior to the equipment leaving its containment area or performing its intended mission.

(2) While You Operate. Always keep in mind the CAUTIONS and WARNINGS. Perform your "During" PMCS when the equipment is being used in its intended mission.

(3) After You Operate. Be sure to perform your "After" PMCS after the equipment has been taken out of its mission mode or returned to its containment area.

(4) If Your Equipment Fails to Operate. Troubleshoot with proper equipment. Report any deficiencies using the proper forms and procedures. See DA Pam 738-750.

## b. PMCS Procedures.

(1) Table 2-1 lists the inspections and care of your equipment required to keep it in good operating condition.

(2) The "interval" column tells you when to do a certain check or service.

(3) The "location" column tells you where in the shop set the check or service is performed.

(4) The "procedure" column tells you how to do the required checks and services. Carefully follow these instructions. If you do not have the tools, or if the procedure tells you to, have organizational maintenance do the work.

NOTE

The term "mission capable" means that the equipment is on hand and ready to perform its combat missions (see AR 700-138) .

(5) The "Not Fully Mission Capable If:" column tells you when the shop set is non-mission capable and why.

(6) If your equipment does not perform as required, refer to Section 3, MAINTENANCE INSTRUCTIONS. Report any malfunctions or failures on DA Form 2404, or refer to DA Pam 738-750.

(7) The "Item No. column shall be used as a source of item numbers for the TM Number column on DA Form 2404, Equipment Inspection and Maintenance Worksheet, in recording results of PMCS.

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
1	Before	Chassis, Semitrailer	Refer to TM 9-2330-238-14&P for PMCS procedures .	Stated PMCS requirements are not met.
2	Before	Heaters	Refer to applicable heater TM for PMCS procedures.	Stated PMCS requirements are not met.
3	Before	Air Conditioner	Refer to applicable air conditioner TM for PMCS procedures.	Stated PMCS requirements are not met.
4	Before	Ground Rod and Wire Installation	Check that ground rod (p. 3-11) is properly installed and connected to trailer grounding terminal before connecting to facility power.	Trailer chassis is not properly grounded before connecting van to facility power.

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
5	Before	Utility Grinding Machine	Check grinding wheels for cracks or breaks. If either grinding wheel is cracked or broken notify organizational maintenance to replace it before using utility grinding machine.	Either grinding wheel is cracked or broken.
6	During	Battery Charger	Note whether or not battery charger (p. 3-5) is fully operable.	Battery charger is not operating as designed or is operating intermittently.
7	During	Utility Grinding Machine	Check utility grinding machine (p. 3-7) for normal operation and listen for unusual noise or vibration.	Utility grinding machine is inoperative or makes unusual noise or vibration.
8	During	Test Equipment	<p>Frequency Converter (p. 3-7), Sweep Oscillator (p. 3-7), Oscilloscope (p. 3-11), DC Power Supply (p. 3-11), Spectrum Analyzer (p. 3-27), Semiconductor Test Set (p. 3-28), Voltmeters (pp. 3-30 and 3-32), Power Meter (p. 3-34), Digital Multimeter (p. 3-35), Multimeters (pp. 3-39 and 3-40) .</p> <p>Note whether or not each of the above items of test equipment is fully operable.</p>	Test equipment items are not operating as designed or are operating intermittently.

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
9	During	Vacuum Cleaner	Note whether or not vacuum cleaner (p. 3-37) has normal amount of suction, and listen for unusual noise or vibration.	Vacuum cleaner is inoperative, has inadequate suction, or if the vacuum cleaner is producing unusual noise or vibration during operation.
10	After	Shop Van and Equipment	<p>Report any needed repairs or inoperative equipment to organizational maintenance.</p> <p style="text-align: center;">WARNING</p> <p>Ensure that trailer chassis is grounded before connecting to facility power. Failure to do so could cause death or injury to personnel.</p>	Needed repairs or problems are not reported to organizational maintenance.
11	Quarterly	AC Electrical System	<p><u>Overhead Lights.</u> Check operation of all overhead fluorescent lights. Replace any burned out or flickering tubes and/or defective starters.</p> <p><u>Distribution Panel and Circuit Breakers.</u> Check that distribution panel (p. 3-14) is intact and that all circuit breakers show proper on/off operation. Tighten any loose mounting hardware. Notify organizational maintenance of any defective circuit breakers.</p>	<p>Any fluorescent tubes are inoperative or flickering or if any starters are defective.</p> <p>Any circuit breakers are broken, hard to operate, will not stay on, or cut off when there is no short/overload.</p>

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
		AC Electrical System (Cent)	<p><u>Blackout Light.</u> Check operation of blackout light and blackout mode switch. Replace bulb if burned out. Notify organizational maintenance if mode switch is defective.</p> <p><u>Emergency Light.</u> Check operation of emergency light. Replace bulb if burned out. Notify organizational maintenance if emergency light is inoperative.</p> <p><u>Switches and Service Receptacles.</u> Check all service receptacles with an outlet tester to see that they are live and properly wired. Check that switches and service receptacles are not cracked or broken. Tighten any loose switches or receptacles and their cover plates. Report any defective switches or receptacles or missing mounting hardware to organizational maintenance.</p>	<p>Blackout light is burned out or inoperative, if there is no spare blackout light bulb on board the shop van, or if shop lights will not go off when rear door is opened during blackout mode.</p> <p>Emergency light is burned out or inoperative, or if there is no spare emergency light bulb on board the shop van.</p> <p>Switches or service receptacles are cracked or broken; if any service receptacles are dead, intermittent, or improperly wired or grounded; if switches or service receptacles and their cover plates are loose; or if hardware is missing.</p>



Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
12	Quarterly	Fire Extinguishers	<p>Check that fire extinguisher (p. 3-1) seals are not broken, that gage reads within the normal range, and that the fire extinguisher is not corroded or leaking. Tighten any loose mounting hardware on fire extinguisher bracket. Notify organizational maintenance to replace fire extinguisher if gage reads below normal or if there is corrosion or evidence of leakage.</p>	<p>Fire extinguishers are missing, if seals are broken, if gage does not read within normal range, if fire extinguishers are corroded or show evidence of leakage, or if mounting bracket is loose.</p>
13	Quarterly	First Aid Kit	<p>Check that first aid kit (p. 3-1) is intact and contains the proper kind and amount of supplies. Tighten any loose mounting hardware and replace any missing or deteriorated supplies.</p>	<p>First aid kit is loose or missing or if supplies are missing or deteriorated.</p>
14	Quarterly	Stools and Retaining Straps	<p>Check that stools (p. 3-3) are securely held by the retaining straps. Remove stools and check them for loose or missing hardware. Tighten hardware as necessary. Check strap mounting brackets for loose or missing hardware. Tighten hardware as necessary. Notify organizational maintenance to replace retaining straps if broken or deteriorated and to replace any missing mounting hardware.</p>	<p>Stool hardware is loose or missing such that stool is unsafe to sit on, or if retaining straps are cut or broken such that stools cannot be secured for travel.</p>

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
15	Quarterly	Small Parts Cabinet and Tool Box	Check that small parts Cabinet (p. 3-3) and tool box (p. 3-33) are securely mounted and that small parts cabinet drawers operate freely. tighten any loose hardware. Notify organizational maintenance to replace any missing mounting hardware. Lubricate drawer sliding surfaces with grease as needed.	Small parts cabinet is loose or if drawers do not open and close freely.
16	Quarterly	Front Workbench	Check that front workbench (p. 3-5) is secure, that drawers operate freely, and that drawer stops function properly. Tighten any Loose hardware, and notify organizational maintenance to replace any missing hardware. Lubricate drawer slides with grease as needed.	Workbench is not securely mounted; if drawers are stuck, binding, or have broken stops; or if hardware is loose or missing.
17	Quarterly	Machinist Vise	Check that machinist vise (p. 3-7) is securely mounted to workbench and operates freely. tighten mounting hardware as needed. Notify organizational maintenance of any missing hardware. Clean machinist vise with a solvent-dampened cloth as needed. Lubricate drive screw and sliding surfaces of vise with grease as needed.  NOTE It is convenient to perform PMCS items 18 and 19 concurrently.	Machinist vise is loose or does not operate freely.

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
18	Quarterly	Left and Right Side Workbench	Check that workbenches (p. 3-12) are securely mounted, that drawers operate freely, that drawer stops are functional, and that all mounting hardware is present and secure. Lubricate drawer slides with grease as needed. Tighten any loose hardware and notify organizational maintenance to replace any missing hardware. Notify organizational maintenance if any drawer is inoperative.	Workbench mountings are loose, if any drawers are stuck or difficult to open/close, have inoperative stops, or loose or missing hardware.
19	Quarterly	Common Tool and Components Inventory.	Check drawers (p. 3-23) which contain the common tools and components authorized for the shop. Estimate the actual percentage of common tools and components versus the authorized quantity. Replenish any missing common tools or any components that are exhausted or in short supply.	The estimated total amount of common tools and components present is less than 90 percent of that authorized for the shop.
20	Quarterly	Frequency Converter and Sweep Oscillator	Unfasten frequency converter and sweep oscillator storage case (p. 3-7) retaining straps. Inspect cases for breaks and cracks. Notify organizational maintenance to replace case if it contains breaks or cracks such that the frequency converter or sweep oscillator are not adequately protected from dust,	Frequency converter and/or sweep

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
		Frequency Converter and Sweep Oscillator (Cont)	humidity, etc. Inspect retaining straps for cuts or breaks. Notify organizational maintenance to replace broken or defective retaining straps. Wipe off case with clean cloth dampened with water. Remove frequency converter and sweep oscillator from case and wipe off with clean cloth dampened with water. Check that all accessories supplied with the frequency converter and sweep oscillator are present. Notify organizational maintenance to replace any missing accessories. Check calibration label, and notify organizational maintenance if calibration label has expired.	be secured for movement; if any supplied accessories are missing; or if calibration Label(s) is expired.
21	Quarterly	Oscilloscope	Unfasten oscilloscope storage case (p. 3-11) retaining straps. Inspect case for breaks and cracks. Notify organizational maintenance to replace case if it contains breaks or cracks such that the oscilloscope is not adequately protected from damage due to dust, humidity, etc. Inspect retaining straps for cuts or breaks. Notify organizational maintenance to replace any defective retaining straps. Wipe off case with clean cloth dampened with water. Remove oscilloscope from storage case and wipe off with clean	Oscilloscope storage case is cracked or broken such that the equipment is not protected from infiltration of dust, humidity, etc; if retaining straps are cut or broken such that equipment cannot be secured for movement; if any supplied accessories are missing; or if calibration label is expired.

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
22	Quarterly	Oscilloscope (Cont)  DC Power Supply	cloth dampened with water. Check that all accessories supplied with the oscilloscope are present. Notify organizational maintenance to replace any missing accessories. Check calibration label, and notify organizational maintenance if calibration label has expired.  Check that DC power supply (p. 3-11) is securely fastened. Tighten any loose control knobs or hardware. Notify organizational maintenance to replace any missing knobs or hardware. Wipe off DC power supply case with a clean cloth dampened with water. Remove any corrosion from painted surfaces with sandpaper and spot paint (see TM 43-0139) as required.	DC power supply control knobs or hardware is loose or missing.
23	Quarterly	Spectrum Analyzer	Wipe off spectrum analyzer (p. 3-27) case with a clean cloth dampened with water. Check that all accessories supplied with the spectrum analyzer are present. Notify organizational maintenance to replace any missing accessories. Check calibration label, and notify organizational maintenance if calibration label has expired.	Any supplied accessories are missing, or if calibration label has expired.

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
24	Quarterly	Semiconductor Test Set	Wipe off semiconductor test set (p. 3-28) case with a clean cloth dampened with water. Check that all accessories supplied with the semiconductor test set are present. Notify organizational maintenance to replace any missing accessories. Check calibration label, and notify organizational maintenance if calibration label has expired. Open battery compartment and check for leakage or corrosion. Clean any corrosion from battery compartment contacts. Test batteries and replace with fresh ones if they are leaking or spent .	Any supplied accessories are missing, if calibration label has expired, or if batteries are leaking or spent.
25	Quarterly	Voltmeters	Wipe off voltmeter (pp. 3-30 and 3-32) cases with a clean cloth dampened with water. Check that all accessories supplied with the voltmeters are present. Notify organizational maintenance to replace any missing accessories. Check calibration labels, and notify organizational maintenance if calibration label(s) has expired. Open battery compartment and check for battery leakage or corrosion. Clean any corrosion from battery compartment contacts. Test batteries and replace with fresh ones if they are leaking or spent.	Any supplied accessories are missing, if calibration label has expired, or if batteries are leaking or spent.

Table 2-1. Operator/Crew Preventive Maintenance Checks and Services (Cont)

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
26	Quarterly	Power Meter	Wipe off power meter (p. 3-34) case with a clean cloth dampened with water. Check that all accessories supplied with power meter are present. Notify organizational maintenance to replace any missing accessories. Check calibration label, and notify organizational maintenance if calibration label has expired.	Any supplied accessories are missing, or if calibration label has expired.
27	Quarterly	Digital Multimeter	Wipe off digital multimeter (p. 3-35) case with a clean cloth dampened with water. Check that all accessories supplied with the digital multimeter are present, Notify organizational maintenance to replace any missing accessories. Check calibration label, and notify organizational maintenance if calibration label has expired.	Any supplied accessories are missing or if calibration label has expired.
28	Quarterly	Multimeters	Wipe off multimeters (pp. 3-39 and 3-40) with a clean cloth dampened with water. Check that all accessories supplied with the multimeters are present. Notify organizational maintenance to replace any missing accessories. Check calibration labels, and notify organizational maintenance if calibration label(s) have expired. Open battery compartment and check for leakage or corrosion. Clean any corrosion from battery compartment contacts. Test batteries and replace with fresh ones if they are leaking or spent.	Any supplied accessories are missing, if calibration label is expired, or if batteries are leaking or spent.

Section 3. MAINTENANCE INSTRUCTIONS

3-1. Reference Instructions. Refer to TM 9-2330-238-14&P for instructions pertaining to service upon receipt of equipment, movement to a new worksite, repair parts (special tools and equipment) and lubrication instructions for the shop sets. Refer to appendix A for instructions manuals.

3-2. Repair Parts. The following paragraphs/procedures refer to figures located in Section 4, Repair Parts List, page 4-1.

3-3. *Fire Extinguisher and Bracket.*

a. General. The fire extinguishers are mounted on the wall at the front and rear of the van.

b. Removal (fig 2 and 3).

(1) Release the latch and remove the fire extinguisher.

(2) Remove mounting hardware and bracket.

c. Installation. Install the fire extinguisher and bracket in reverse order of removal, b above.

3-4. *First Aid Kit.*

a. General. The first aid kit is mounted on the wall in back of the left side workbench.

b. Removal (fig 2). Release latch and remove the first aid kit.

c. Installation. Install kit in the reverse order of removal, b above.

3-5. *Data Plates.* The data plates are located on the rear door and wall .

a. Removal. Refer to figure 2 and remove data plates.

b. Cleaning, Inspection and Repair.

WARNING

Dangerous chemical solvents are used with this equipment. Avoid prolonged breathing of vapors; insure that there is adequate ventilation at all times. Avoid skin contact. Wash hands immediately after contact with solvent. If solvent gets into your eyes, flush your eyes immediately with clean water. Seek medical attention if necessary.

(1) Clean data plates with cleaning solvent (P-D-680) and dry thoroughly.



- (2) Inspect for dents and other damage.
  - (3) Replace damaged data plates.
- c. Installation. Refer to figure 2 and install data plates.

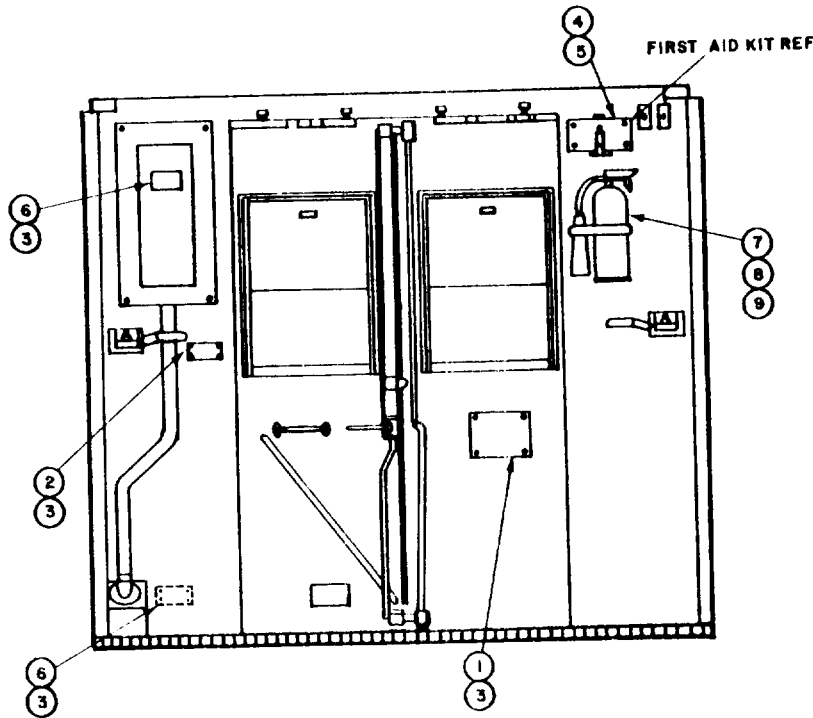


Figure 2. Rear wall mounted equipment.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Plate, Wiring	1	13217E8172	59678
2	Plate, B.O. Warning	1	13217E8133	59678
3	Rivet	16	MIL-R-24243/6	96906
4	Bracket	1	13217E8126	59678
5	Screw	4	MS 51861-65	96906
6	Plate, EMI	2	13217E8303	59678
7	Fire Extinguisher	1	12255633-1	19207
8	Bracket	1	12255634	19207
9	Screw	4	MS 51861-67	96906

3-6. Stools .

a. General. Two stools are located under the front workbench and two stools are located on top of the front workbench.

b. Removal (fig 3). Unfasten four straps (16) and remove stools.

c. Installation. Install in reverse order of removal, b above.

3-7. Clock.

a. General. The clock is located on the front wall above the front workbench.

b. Removal (fig 3). Remove clock from mounting bracket. Remove two screws (15) and the bracket (17).

c. Installation. Install in reverse order of removal, b above.

3-8. Small Parts Cabinet.

a. General. The small parts cabinet is located under the front workbench in back of the stools.

b. Removal (fig 3).

(1) Remove two stools under the front workbench (para 3-6).

(2) Remove the ten (10) rubber electrical insulation mats.

(3) Remove strap (13), two each screws (10), washers (11), and nuts (12).

(4) Remove four screws (15) and two loops (14).

(5) Remove the cabinet.

c. Installation. Install the small parts cabinet in reverse order of removal, b above.

3-9. Tool Box Appendix A.

a. General. Tool box A is located on the roadside of the front workbench.

b. Removal (fig 3).

(1) Remove tool box A by loosening strap (13).

(2) Remove strap (16), four screws (15), and two loops (14).

c. Installation. Install in reverse order of removal, b above.

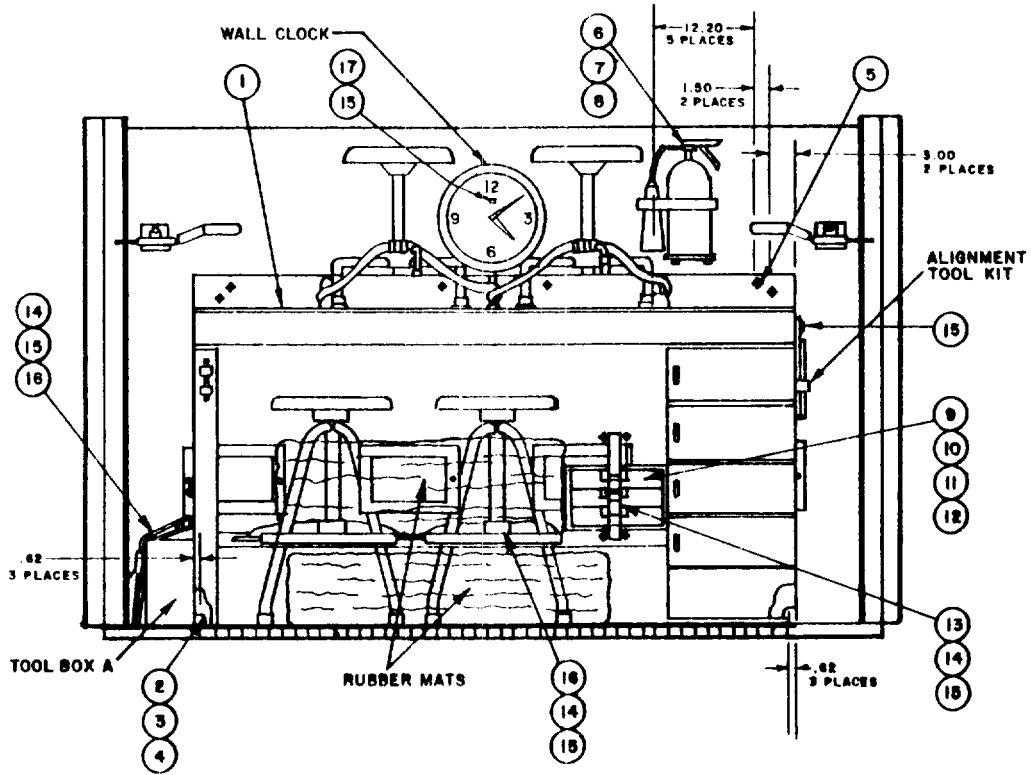


Figure 3. Front wall mounted equipment.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Workbench	1	13217E8118	59678
2	Nut, Blind, Rivet	6	MS 27130-S56	96906
3	Screw	6	MS 90725-64	96906
4	Washer	6	MS 35338-46	96906
5	Screw	8	MS 51851-85	96906
6	Fire Extinguisher	1	12255633-1	19207
7	Bracket	1	12255634	19207
8	Screw	4	MS 51861-67	96906
9	Cabinet, Small Parts	1	13217E8211	59678
10	Screw	2	MS 35190-275	96906
11	Washer	2	MS 35338-43	96906
12	Nut	2	MS 35649-202	96906
13	Strap	1	11020947-16	59678
14	Loop, Strap	10	MS 51939-1	96906
15	Screw	28	MS 51861-46	96906
16	Strap	5	11020947-20	59678
17	Bracket	1	76004-0006	08294

3-10. Front Workbench.

a. General. The front workbench is located in front of the two center workbenches.

b. Removal (fig 3).

(1) Remove four (4) stools (para 3-6) and one small parts storage cabinet (para 3-8), tool box A (para 3-9), clock (para 3-7), and fire extinguisher (para 3-3).

(2) Remove the ten (10 ea) rubber electrical insulation sheets.

(3) Disconnect electrical receptacle and conduit from workbench (para 3-19).

(4) Refer to figure 3 and remove six screws (3) and six washers (4).

(5) Remove eight screws (5) and remove workbench.

c. Cleaning, Inspection and Repair.

WARNING

Dangerous chemical solvents are used with this equipment. Avoid prolonged breathing of vapors; insure that there is adequate ventilation at all times. Avoid skin contact. Wash hands immediately after contact with solvent. If solvent gets into your eyes, flush your eyes immediately with clean water. Seek medical attention if necessary.

(1) Clean all metal parts with cleaning solvent (P-D-680) and dry thoroughly. Clean other parts with a clean dry cloth.

(2) Inspect for dents, nicks and burrs, cracks, breaks and other damage.

(3) Remove distortions or replace damaged items. Replace missing hardware.

d. Installation. Install the front workbench in the reverse order of removal, b above.

3-11. Battery Charger.

a. General. The charger is located at the rear of the right side workbench on the floor (see fig 4).

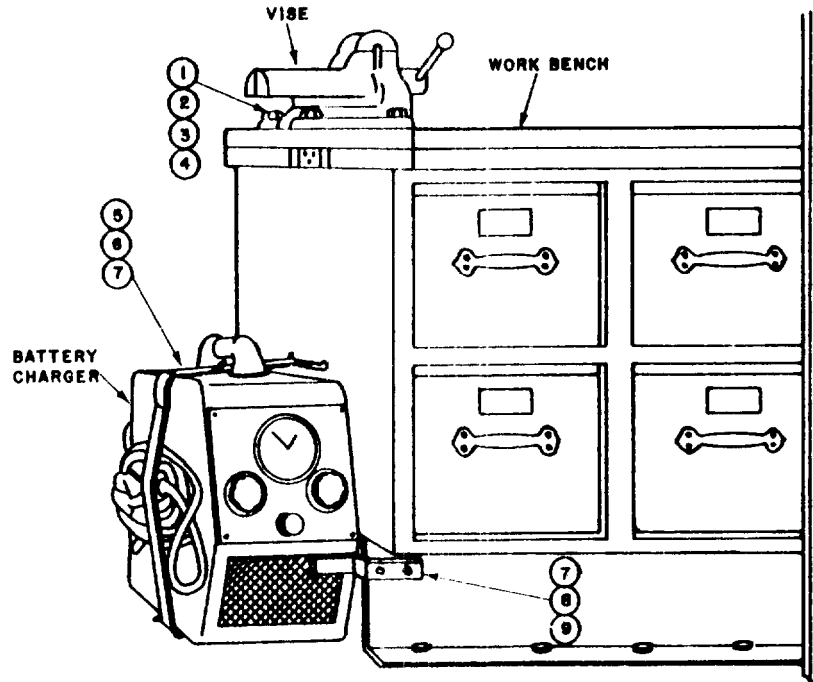


Figure 4. Battery charger and machinist's vise.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Screw	3	MS 90725-119	96906
2	Washer	3	MS 27183-17	96906
3	Washer	3	MS 35338-48	96906
4	Nut	3	MS 51967-14	96906
5	Strap	1	11020947-20	59678
6	Loop	2	MS 51939-1	96906
7	Screw	8	MS 51861-46	96906
8	Bracket	1	13217E8200-1	69578
9	Bracket	1	13217E8200-2	59678

b. Removal. Refer to figure 4 and unfasten straps and remove battery charger.

c. Installation. Refer to figure 4 and install battery charger and secure straps.

### 3-12. Machinist Vice.

a. General . The vise is located on top of the right side workbench above the battery charger.

b. Removal (fig 4).

(1) Remove drawer number 13.

(2) Remove four nuts (4), four flatwashers (2), four lockwashers (3) and four screws (1).

(3) Remove vise.

c. Installation. Install in reverse order of b above.

### 3-13. Utility Grinding Machine.

a. General. The grinding machine is located on the front of the right side workbench.

b. Removal.

(1) Remove drawer number 1.

#### WARNING

Dangerous voltages, capable of causing death are present in this vehicle, and the equipment provided in its tool load. Use extreme caution when handling, testing, or adjusting any electrical equipment.

(2) Disconnect electrical power at circuit breaker #4 in power panel (para 3-19).

(3) Remove two nuts (1), two lockwashers (2), two flatwashers (3), and two screws (4) (fig 5).

(4) Disconnect electrical connections to grinder (para 3-19).

(5) Remove grinding machine (fig 5).

c. Installation. Install in reverse order of removal, b above.

### 3-14. Frequency Convertor and Sweep Oscillator Electronic Cases.

a. General. The electronic cases are located on top of the left side workbench.

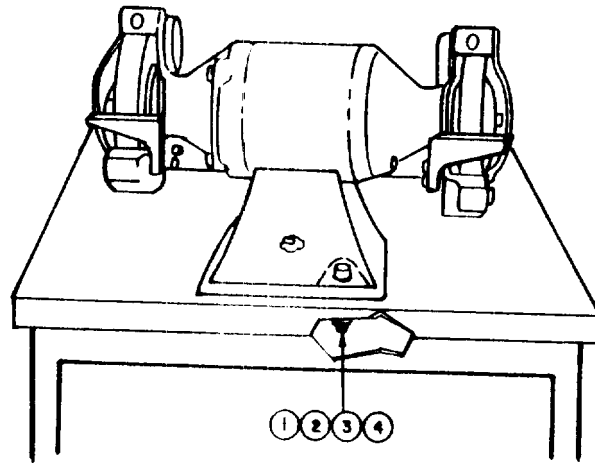


Figure 5. Disconnecting and removing utility grinding machine.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Nut			
2	Washer, Lock	2	MS 51967-5	96906
3	Washer, Flat	2	MS 35338-45	96906
4	Screw	2	MS 27183-11	96906
		2	MS 90725-42	96906

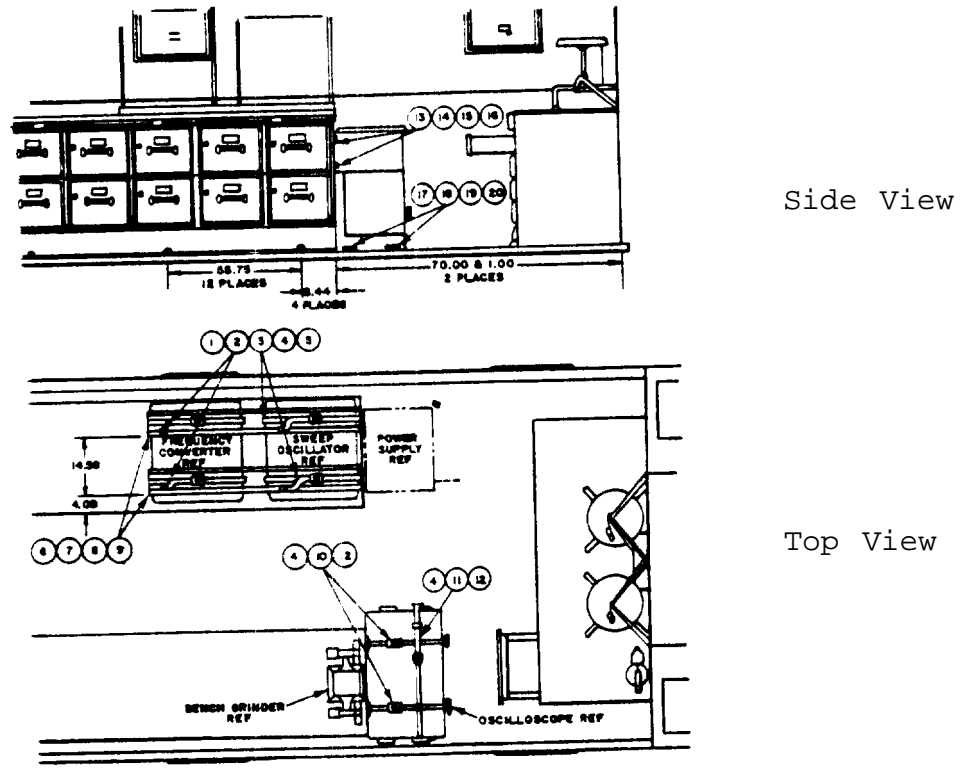


Figure 6. Electronic cases and power supply mounting.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Nut	8	MS 35649-202	96906
2	Washer, Lock	8	MS 35338-43	96906
3	Screw	8	MS 35206-263	96906
4	Loop, Strap	15	MS 51939-1	96906
5	Strap	4	11020947-33	59678
6	Screw	16	MS 90725-68	96906
7	Nut	16	MS 51967-8	96906
8	Washer, Flat	16	MS 27183-14	96906
9	Base	2	13217E8213	59678
10	Strap	2	11020947-30	59678
11	Strap	1	11020947-31	59678
12	Screw	12	MS 51861-46	96906
13	Screw	4	MS 90725-6	96906
14	Nut	4	MS 51967-2	96906
15	Washer, Lock	4	MS 35338-44	96906
16	Washer, Flat	4	MS 27183-9	96906
17	Screw	4	MS 90725-60	96906
18	Washer, Lock	4	MS 35338-46	96906
19	Washer, Flat	4	MS 27183-13	96906
20	Rivnut	4	MS 27130-56	96906



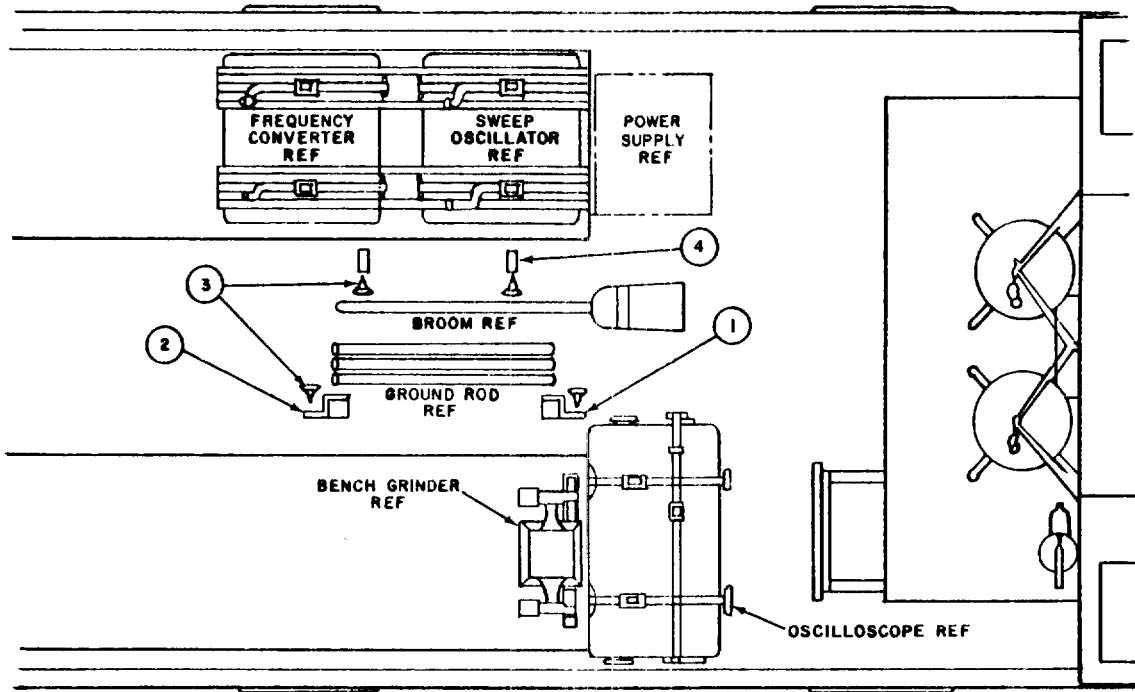


Figure 7. Ground rod and upright broom.

ITEM	NAME	Qty	PART NUMBER	FSCM
1	Bracket	1	59301-003	08294
2	Bracket	2	59301-0002	08294
3	Screws	6	MS 51861-46	96906
4	Clip	2	11021007-6	59678

b. Removal (fig 6).

(1) Unfasten four straps (5) and remove the electronic cases.

(2) Remove sixteen each screws (6), nuts (7), washers (s), and mounting bases (9).

c. Installation. Install in reverse order of removal, b above.

3-15. Oscilloscope Electronic Case.

a. General. The electronic case is located forward of the right side workbench on the floor.

b. Removal (fig 6). Unfasten two straps (10) and one strap (11) and remove electronic case.

c. Installation. Install in reverse order of removal, b above.

3-16. DC Power Supply.

a. General. The DC power supply is located forward of the left side workbench on the floor.

b. Removal (fig 6).

WARNING

Dangerous voltages, capable of causing death are present in this vehicle, and the equipment provided in its tool load. Use extreme caution when handling, testing, or adjusting any electrical equipment.

(1) Shut-off power to the DC power supply in the circuit breaker panel on the left rear interior wall (see fig 9).

(2) Remove four each screws (13), nuts (14), lockwasher (15), flat washers (16), screws (17), lockwasher (18), and flat washers (19).

(3) Slide power supply forward and remove rear access panel (see fig 14).

(4) Disconnect electrical connections and conduit, and remove power supply (para 3-19).

c. Installation. Install in reverse order of removal, b above.

3-17. Ground Rod and Upright Broom.

a. General. The ground rod is mounted on the forward inner rail of the right side workbench, and the broom on the left.

b. Removal (fig 7).

(1) Remove ground rods and broom by lifting out of brackets.

(2) Remove brackets by removing six screws (3).

c. Installation. Install in the reverse order of removal, b above.

3-18. Left and Right Side Workbench.

a. General. The two workbenches are located in the center of the trailer and are mounted to the van floor.

b. Removal (fig 8).

(1) Remove battery charger (para 3-11).

(2) Remove machinist vise (para 3-12).

(3) Remove utility grinding machine (para 3-13).

(4) Remove frequency convertor electronic case (para 3-14).

(5) Remove sweep oscillator electronic case (para 3-14).

(6) Remove power supply (para 3-16).

(7) Remove oscilloscope electronic case (para 3-15).

(8) Remove upright broom and brackets (para 3-17).

(9) Remove ground rod and brackets (para 3-17).

(10) Remove all drawers from workbenches.

(11) Disconnect electrical connections from both workbenches (para 3-19).

(12) Remove 16 bolts and 16 washers (8 for each workbench) securing workbenches to van floor, and remove the two benches.

c. Disassembly. Refer to figure 8 and disassemble the workbenches and related parts.

d. Cleaning, Inspection and Repair.

WARNING

Dangerous chemical solvents are used with this equipment. Avoid prolonged breathing of vapors; insure that there is adequate ventilation at all times. Avoid skin contact. Wash hands immediately after contact with solvent. If solvent gets into your eyes, flush your eyes immediately with clean water. Seek medical attention if necessary.

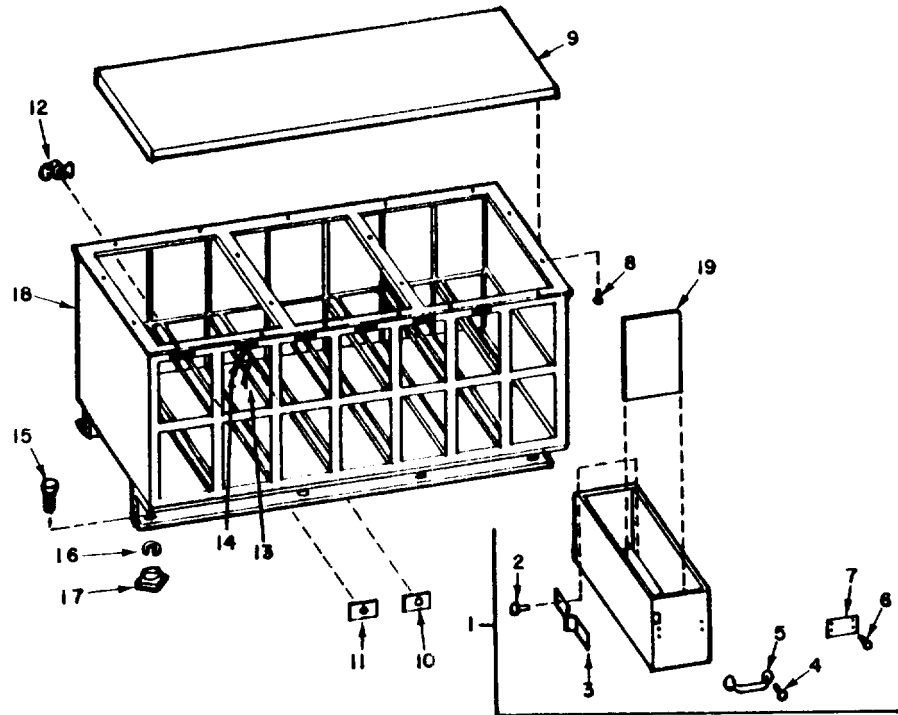


Figure 8. Left and right side workbench.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Drawer, Work Bench	14	13217E8105	69578
2	Rivet, Spring Mounting	2	MS 20613-4P5	96906
3	Spring, Drawer Retainer	1	13217E8135	59678
4	Rivet, Handle Mounting	8	MS 35744-18	96906
5	Handle, Grab	2	13212E0135	59678
6	Rivet, Holder Mounting	6	MS 20613-2P3	96906
7	Holder, Label	2	13217E8104	59678
8	Screw, Bench Top Mounting	18	MS 35493-113	96906
9	Top, Bench	1	11021004	59678
10	Cover, Conduit Mounting	1	13217E8106-4	59678
11	Cover, Receptacle	13	13217E8106-5	59678
12	Receptacle, Electrical	13	13217E8106-5	59678
13	Wire, 25' Long	3	13217E8106-3	59678
14	Wire, 11' Long	3	13217E8106-7	59678
	(used on right side)			
15	Screw, Work Bench Mounting	8	MS 90725-64	96906
16	Washer, Work Bench Mounting	8	MS 35338-46	96906
17	Nut, Work Bench Mounting	8	MS 27130-s56	96906
18	Frame, Bench	1	11021008	59678
	(used on 13217E8106-8)			
19	Divider, Drawer	28	13217E8131	59678

(1) Clean all metal parts with cleaning solvent (P-D-680) and dry thoroughly. Clean other parts with a clean cloth.

(2) Inspect items for cracks, breaks, bends, dents and other damage.

(3) Check mounting hardware for damaged threads and distortion. Replace damaged and missing hardware.

(4) Straighten bends and dents. Remove nicks, burrs and distortions.

(5) Replace all items beyond repair.

e. Assembly. Refer to figure 8 and reassemble the workbenches and related parts.

f. Installation. Install the left and right side workbench in the reverse order of removal, b above.

### 3-19. Electrical Installation.

a. General. Refer to TM 9-2330-238-14&P for repair instructions. In addition, shop set componets not covered in above manual are covered below.

b. Load Centers and Related Components.

#### WARNING

Dangerous voltages, capable of causing death. are present in this vehicle and the equipment provided in its tool load. Use extreme caution when handling, testing or adjusting any electrical component.

#### NOTE

Before removal and after installation test the wiring, paragraph (2)(f) below.

(1) Removal and Disassembly. Refer to figures 9 through 16 to disconnect, remove, and disassemble the electrical installation.

(2) Cleaning, Inspection and Repair.

(a) Clean electrical parts with a clean dry cloth.

#### WARNING

Dangerous chemical solvents are used with this equipment. Avoid prolonged breathing of vapors; insure that there is adequate ventilation at all times. Avoid skin contact. Wash hands immediately after contact with solvent. If solvent gets into your eyes, flush your eyes immediately with clean water. Seek medical attention if necessary.

- (b) Clean metal parts with cleaning solvent (P-D-680) and dry thoroughly.
- (c) Inspect all parts of load centers for damage and replace as necessary.
- (d) Inspect the wiring covers and mounting brackets for dents, cracks, breaks, loose or missing hardware and other defects.
- (e) Tighten or replace loose or missing mounting hardware. Straighten minor bends. Replace damaged or defective mounting brackets, wiring covers, and flexible conduit.
- (f) Test the wire for continuity. Disconnect each end of the wire from the components to which it is attached as shown by the wiring diagram (fig FO-1). Touch the test probes of a multimeter to each end of the wire. If the multimeter does not indicate continuity, replace the wire.

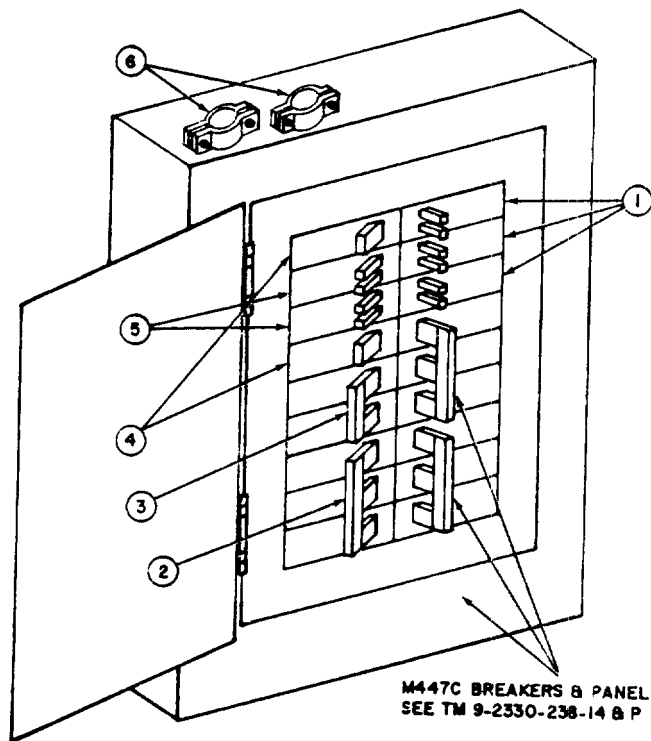
WARNING

Dangerous voltages, capable of causing death, are present in this vehicle and the equipment provided in its tool load. Use extreme caution when handling, testing, or adjusting any electrical component.

NOTE

The ceiling lights, bench grinder, and workbench receptacles are supplied with power by 120-volt, single-phase circuit. Wiring for each circuit in this system must be replaced individually. Refer to the wiring diagrams (fig FO-1) when testing and replacing wiring in the individual circuits.

- c. Assembly and Installation. Refer to figures 9 through 15 to reassemble, install and reconnect electrical components.



Circuit Breaker Legend

1. Front Workbench Receptacle
2. Bench Receptacles, Streetside
3. Heater, Streetside
4. Bench Grinder
5. Heater, Curbside
6. Bench Receptacles, Curbside
7. Ceiling Receptacle
8. Power Supply
- 9.
10. DC Power Supply
- 11.
12. Ceiling Receptacle
13. Ceiling Receptacle
14. Emergency Light
15. Door Switch, Blackout
16. Ceiling Receptacles
17. Ceiling Receptacles
- 18.
19. Air Conditioning
- 20.
- 21.
22. Main
- 23.

Figure 9. Distribution panel.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Circuit Breaker, Duplex 15-15A	3	13217E8114-2	59678
2	Circuit Breaker, 3 Pole, 20A	3	13217E8114-5	59678
3	Circuit Breaker 2 Pole, 15A	1	13217E8114-4	59678
4	Circuit Breaker, Single, 15A	2	13217E8114-1	59678
5	Circuit Breaker, Duplex, 15-20A	2	13217E8114-3	59678
6	Connector, Snap-In	2	8764986	19207

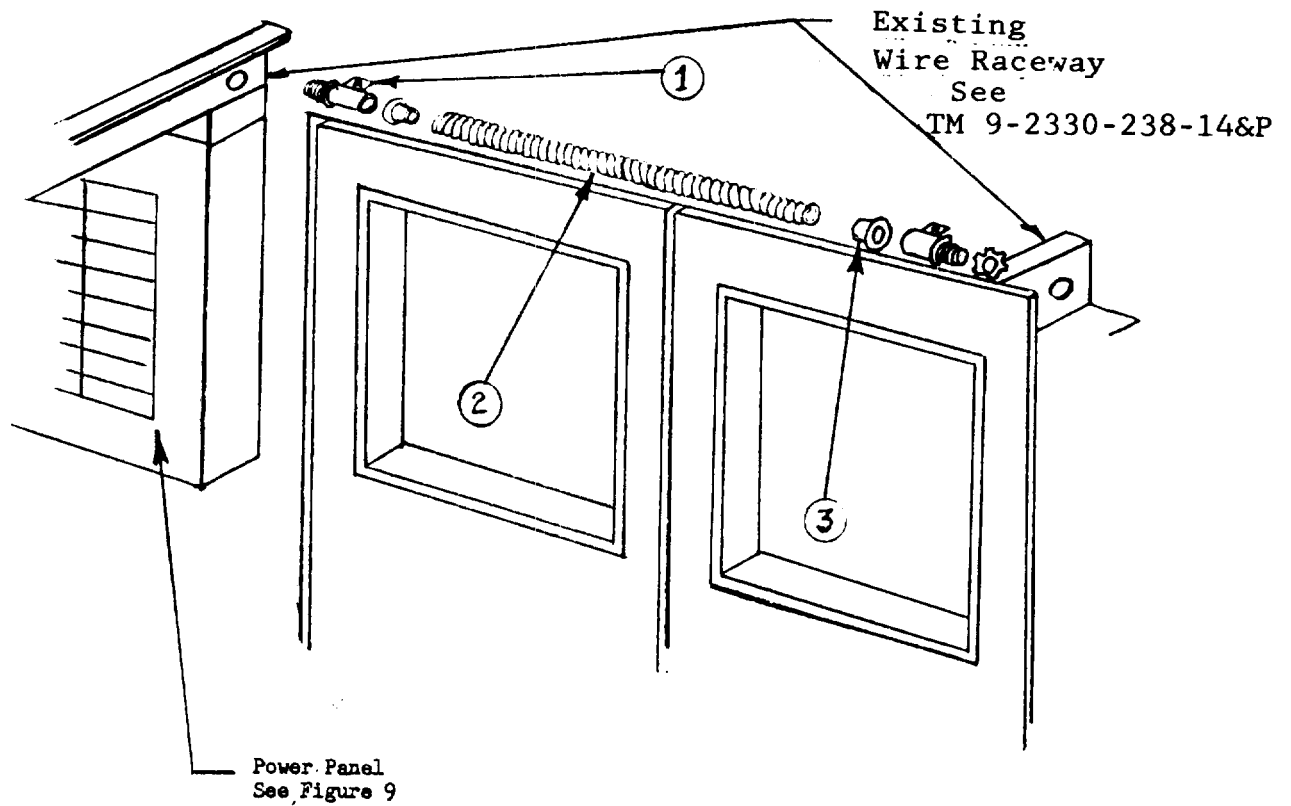


Figure 10. Rear crossover conduit.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Connector, Straight	2	13218E0003-2	59678
2	Conduit, Flexible	4.9 ft	13217E8174-8	59678
3	Bushing, Anti-Short	2	128-104	56446



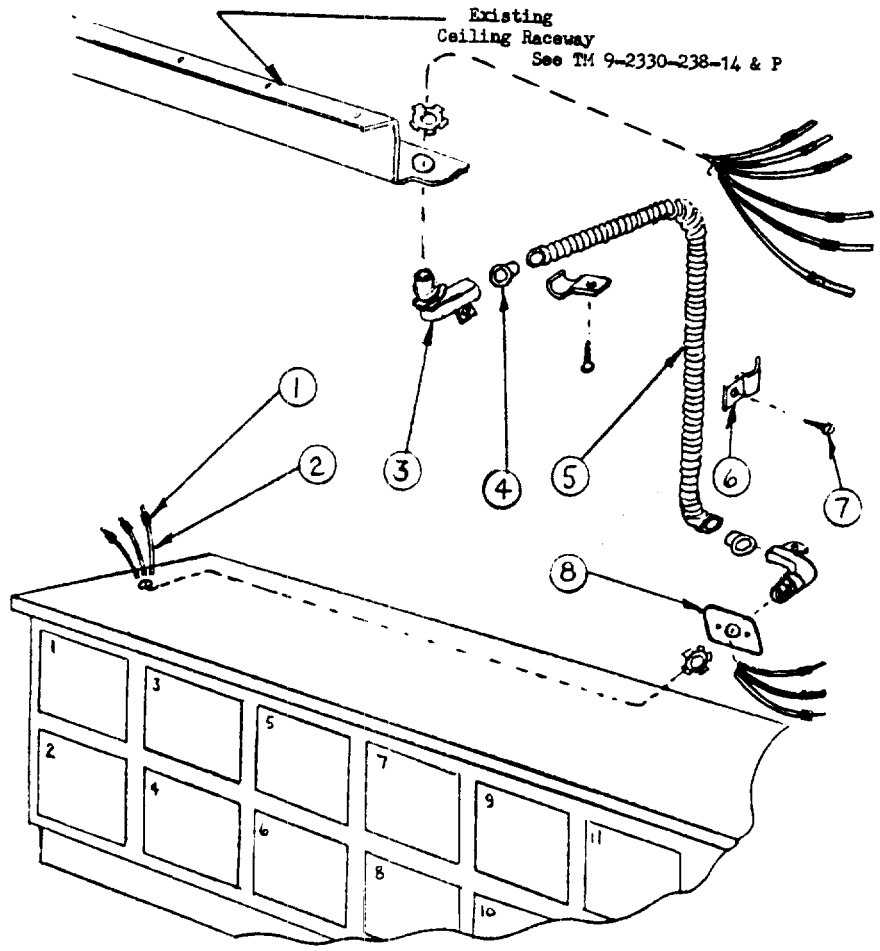


Figure 11. Right side workbench and bench grinder conduit,

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Wire Marker	16	MS 39020-1	96906
2	Wire	95 ft	MIL-W-5086/2-12-9	96909
3	Connector, 90° Elbow	2	13218E0003-23	59678
4	Bushing, Antishort	2	128-104	56446
5	Conduit, Flexible	4.8 ft	13217E8175-8	59678
6	Strap, Retaining	2	MS 35140-10	96906
7	Screw	2	MS 51861-65	96906
8	Cover Plate	1	13217E8106-4	59678

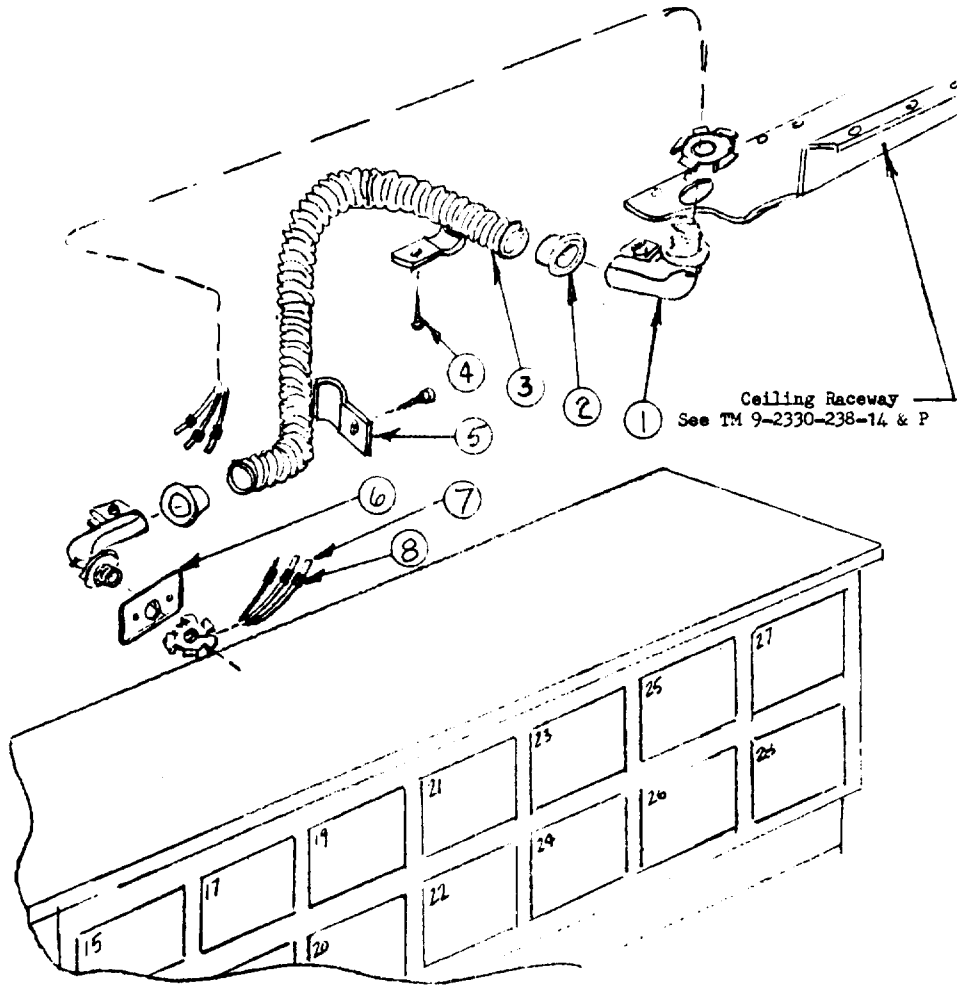


Figure 12. Left side workbench conduit.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Connector, 90° Elbow w/nut	2	13218 E0003-23	59678
2	Bushing, Anti-Short Conduit , Flexible	2 4.8 ft	128-140 13217E8175-8	56446 59678
4	Screw	2	MS 51861-65	96906
5	Strap , Retaining	2	MS 35140-10	96906
6	Cover Plate	1	13217E8106-4	59678
7	Wire	50 ft	MIL-w-5086/2-12-9	96906
8	Wire Marker	8	MS 39020-1	96906

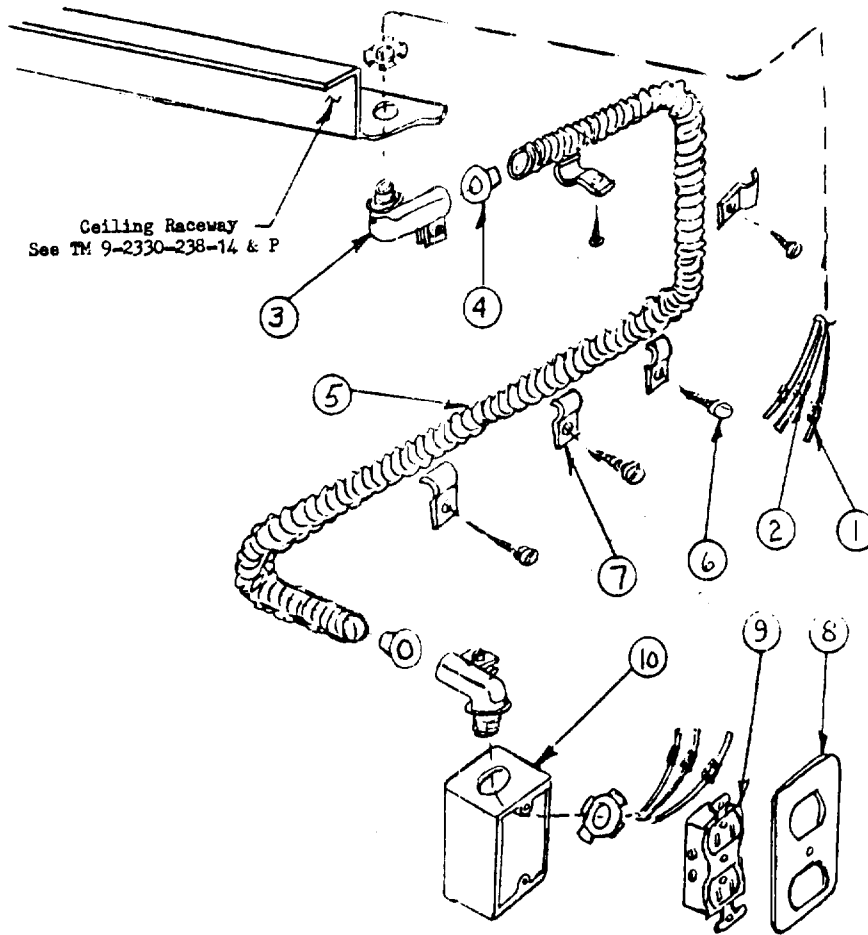


Figure 13. Front workbench conduit.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Wire	101 ft	MIL-W-5086/2-12-9	96906
2	Wire Marker	8	MS 39020-1	96906
3	Connector, 90° Elbow	2	13218E0003-23	59678
4	Bushing, Anti-Short	2	128-140	56446
5	Conduit, Flexible	13 ft	13217E8175-8	59678
6	Screw	5	MS 51861-65	96906
7	Strap, Retaining	5	W-J-800	96906
8	Cover Plate	1	69-691	81348
9	Receptacle	1	69-691	30554
10	Box, Junction	1	13217E8175-3	59678

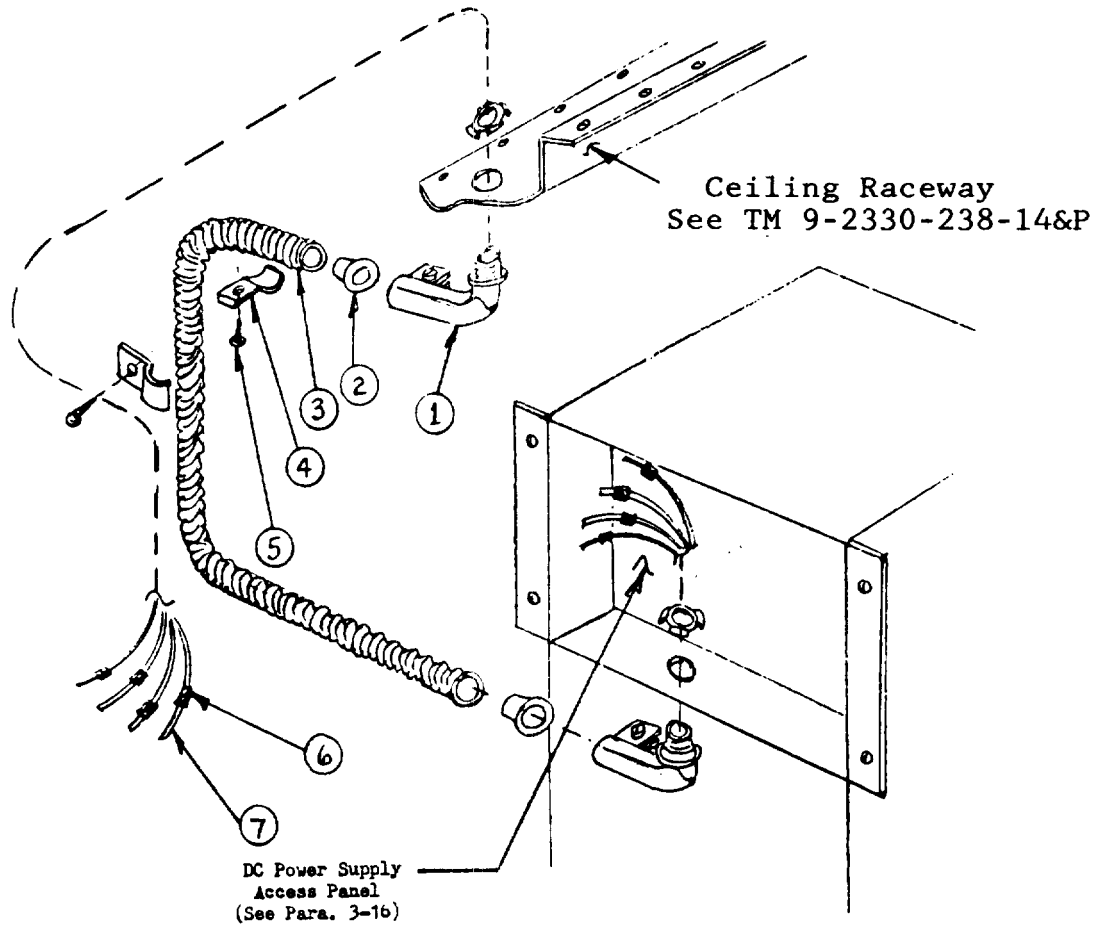


Figure 14. DC power supply conduit.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Connector, 90° Elbow	2	13218E0003-23	59678
2	Bushing, Anti-Short	2		56446
3	Conduit, Flexible	7.1 ft	13217E8175-8	59678
4	Strap, Retaining	2	MS 35140 10	96906
5	Screw	2	MS 51861-65	96906
6	Wire Marker	14	MS 39020-1	96906
7	Wire	110 ft	MIL-W-5086/2-12-9	96906

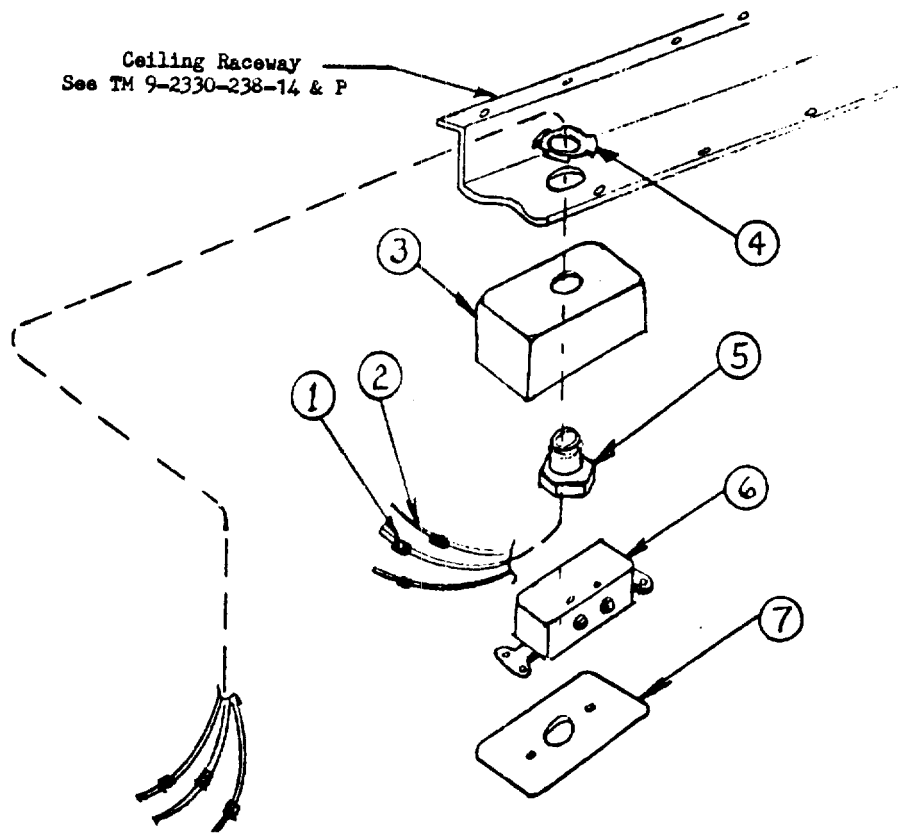


Figure 15. Ceiling outlet wiring.

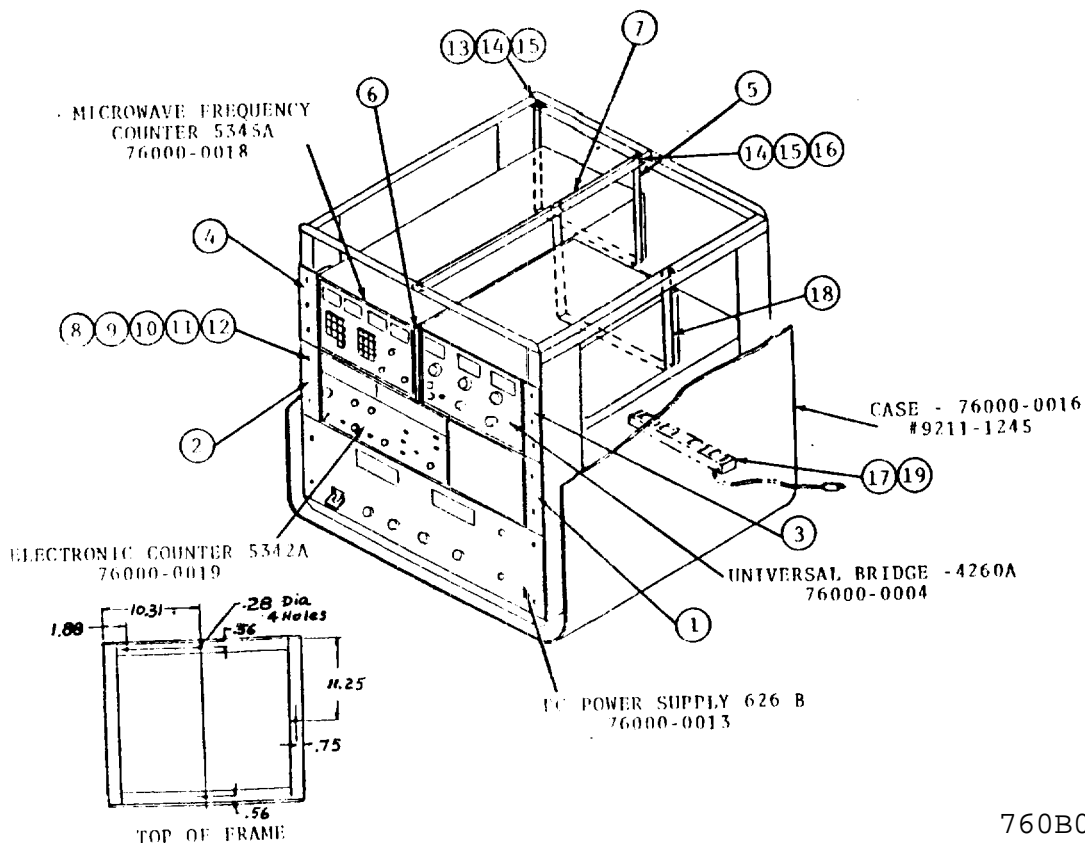
ITEM	NAME	QTY	PART NUMBER	FSCM
1	Wire Marker	10	MS 39020-1	96906
2	Wire	43.5 ft	MIL-W-5086/2-12-9	96906
3	Box, Junction	1	13217E8175-3	59678
4	Locknut	1	11021010-8	59678
5	Nipple, Chase	1	1102101-7	59678
6	Receptacle	1	W-C-596/85-1	81348
7	Cover	1	13217E8106-5	59678

3-20. Tools and Equipment. Tools and equipment not previously listed which requires special installation of drawer loading is included in this section. Illustrations provided are as follows:

<u>Figure</u>	<u>Description</u>
16	Inst., Frequency Converter
17	Inst., Sweep Oscillator
18	Inst., Oscilloscope
19	Inst., Drawer No. 1
20	Inst., Drawer No. 3
21	Inst., Drawer No. 4
22	Inst., Drawer No. 5
23	Inst., Drawer No. 6
24	Inst., Drawer No. 7
25	Inst., Drawer No. 8
26	Inst., Drawer No. 9
27	Inst., Drawer No. 11
28	Inst., Drawer No. 13
29	Inst., Drawer No. 15
30	Inst., Drawer No. 19
31	Inst., Drawer No. 23
32	Inst., Drawer No. 25
33	Inst., Drawer No. 27

NOTE

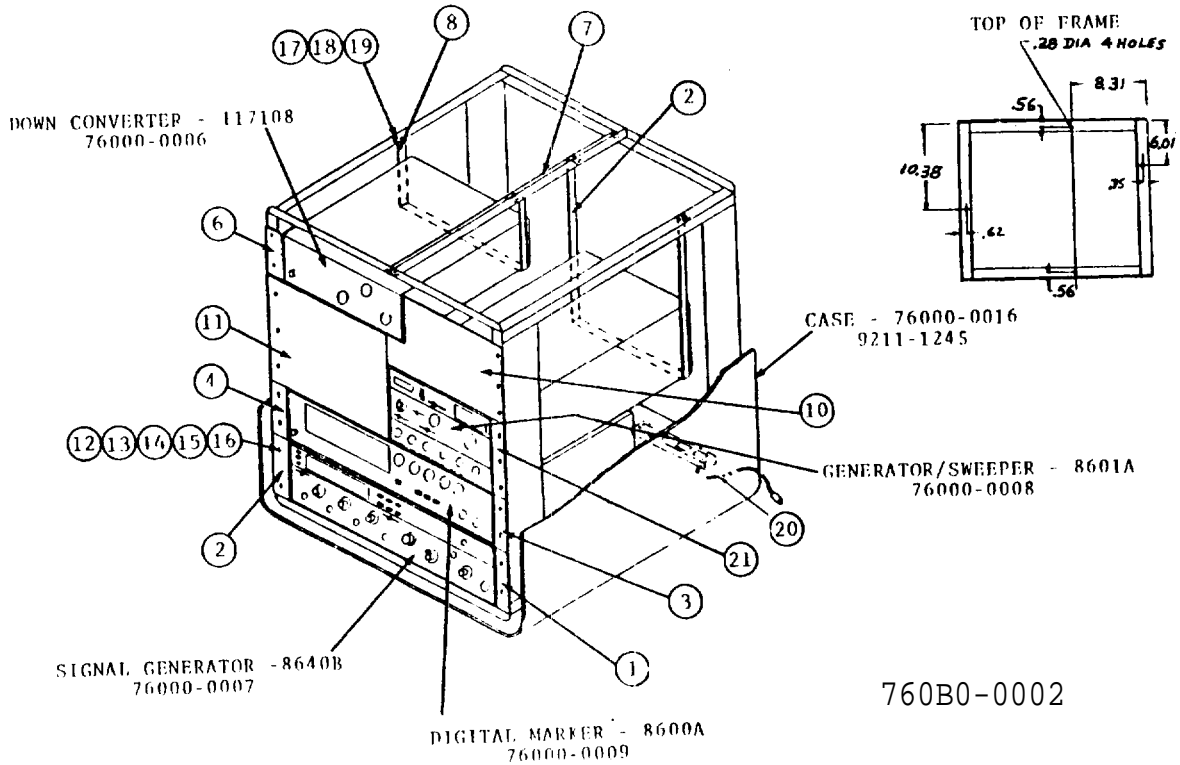
All components shown on the following figures which are not listed in the legend are components of SC 4940-95-CL-B06. These items are listed in chapter 6.



760B0-0001

Figure 16. Inst., Frequency converter.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Angle, Mounting	1	76002-0001	08294
2	Angle, Mounting	1	76002-0002	08294
3	Angle, Mounting	1	76002-0006	08294
4	Angle, Mounting	1	76002-0007	08294
5	Bracket, Mounting	1	76001-0008	08294
6	Bracket, Mounting	1	76001-0010	08294
7	Angle, Mounting	1	76002-0009	08294
8	Screw	14	MS 35207-265	96906
9	Washer, Flat	14	MS 27183-42	96906
10	Washer, Lock	14	MS 35333-39	96906
11	Screw (fasteners for equipment)	13	MS 35206-245	96906
12	Washer, Lock	13	MS 35333-38	96906
13	Screw	4	MS 90725-6	96906
14	Washer, Lock	5	MS 35338-25	96906
15	Nut	5	MS 51967-2	96906
16	Screw	1	MS 90725-8	96906
17	Power Cord Assembly	1	96500-0011	08294
18	Bracket Assembly	1	76004-0005	08294
19	Screw	2	MS 51861-96	96906



760B0-0002

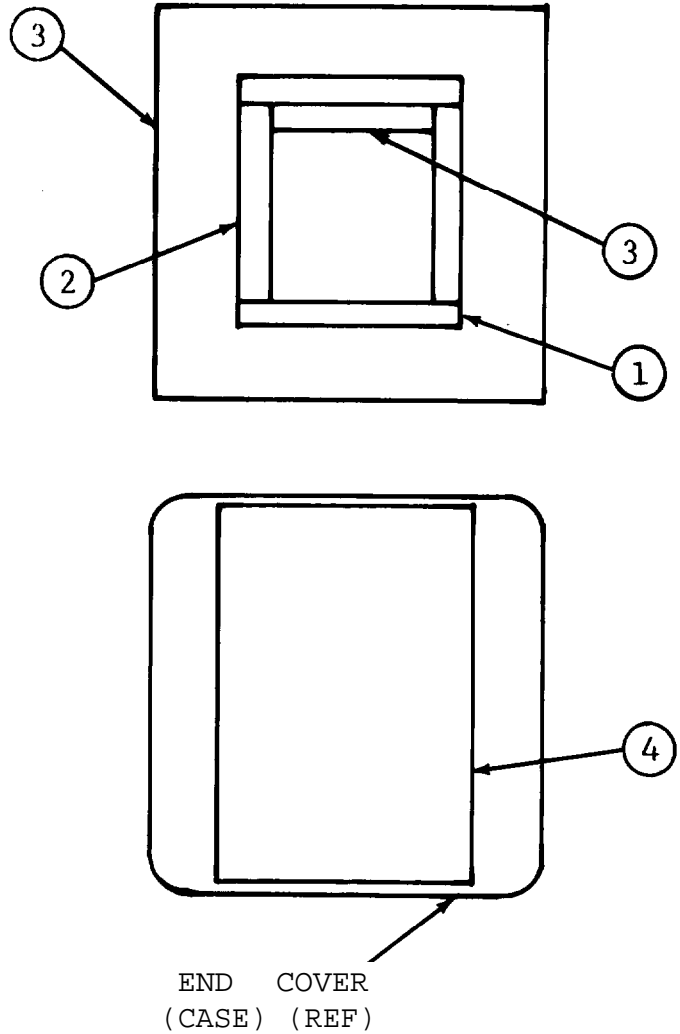
Figure 17. Inst., Sweep oscillator.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Angle, Mounting	1	76002-0001	08294
2	Angle, Mounting	1	76002-0002	08294
3	Angle, Mounting	1	76002-0003	08294
4	Angle, Mounting	1	76002-0004	08294
5*	Angle, Mounting	1	76002-0005	08294
6	Angle, Mounting	1	76002-0008	08294
7	Angle, Mounting	1	76002-0009	08294
8	Bracket Assembly	1	76004-0001	08294
9*	Bracket Assembly	1	76004-0002	08294
10	Panel Assembly	1	76004-0003	08294
11	Panel Assembly	1	76004-0004	08294
12	Screw	19	MS 35207-265	96906
13	Washer, Flat	19	MS 27183-42	96906
14	Washer, Lock	19	MS 35333-39	96906
15	Screw	15	MS 35206-245	96906
16	Washer, Lock	10	MS 35333-38	96906
17	Screw	6	MS 90725-6	96906
18	Washer, Lock	6	MS 35338-25	96906
19	Nut	6	MS 51967-2	96906
20	Power Cord Assembly	1	76500-0011	08294
21	Screw	2	MS 51861-96	96906

\*Not Shown.



PART NO.	DESCRIPTION	QTY
76000-0001	Amplifier # 1801A	1
76000-0017	Main Frame #180C	1
76000-0012	Plug In Unit # 1831A	1
76000-0005	Case, Carrying	1
03000-0028	Pad	4
03000-0029	Pad	4
03000-0030	Pad	2
03000-0031	Pad	1
MMM-A-1617 03001-0008	Adhesive	.001

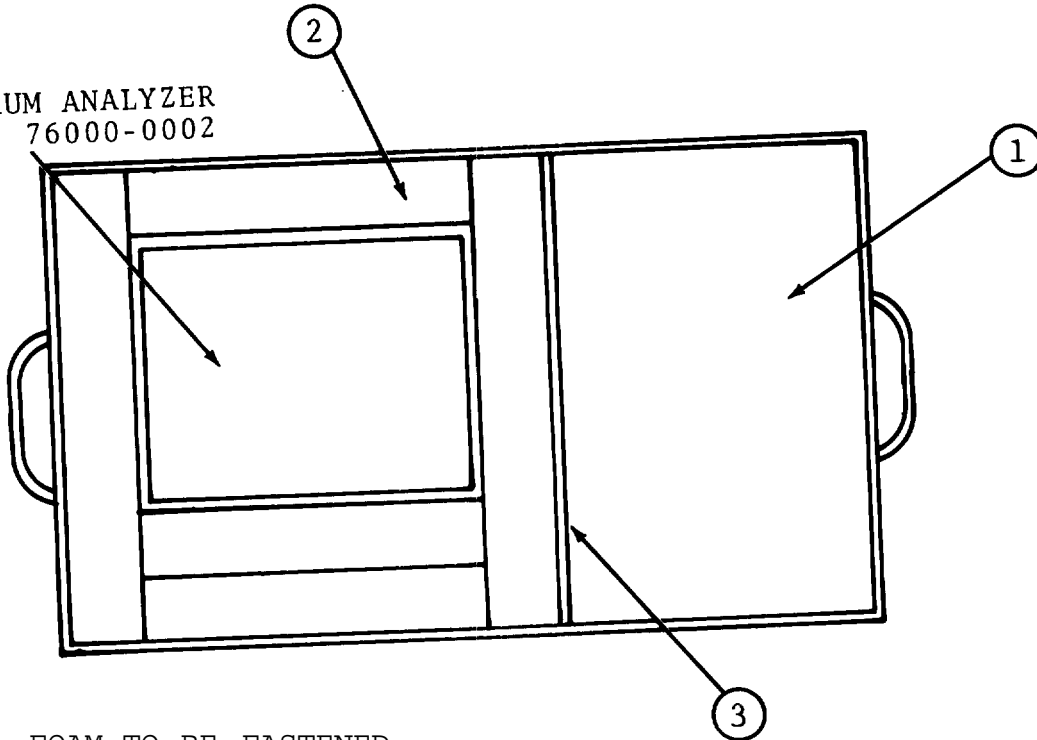


760B0-0004

Figure 18. Inst. , Oscilloscope

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	4	03000-0028	08294
2	Pad, Foam	4	03000-0029	08294
3	Pad, Foam	2	03000-0030	08294
4	Pad, Foam	1	03000-0031	08294
5	Adhesive	AR	MMM-A-1617	81348

SPECTRUM ANALYZER  
8557A 76000-0002

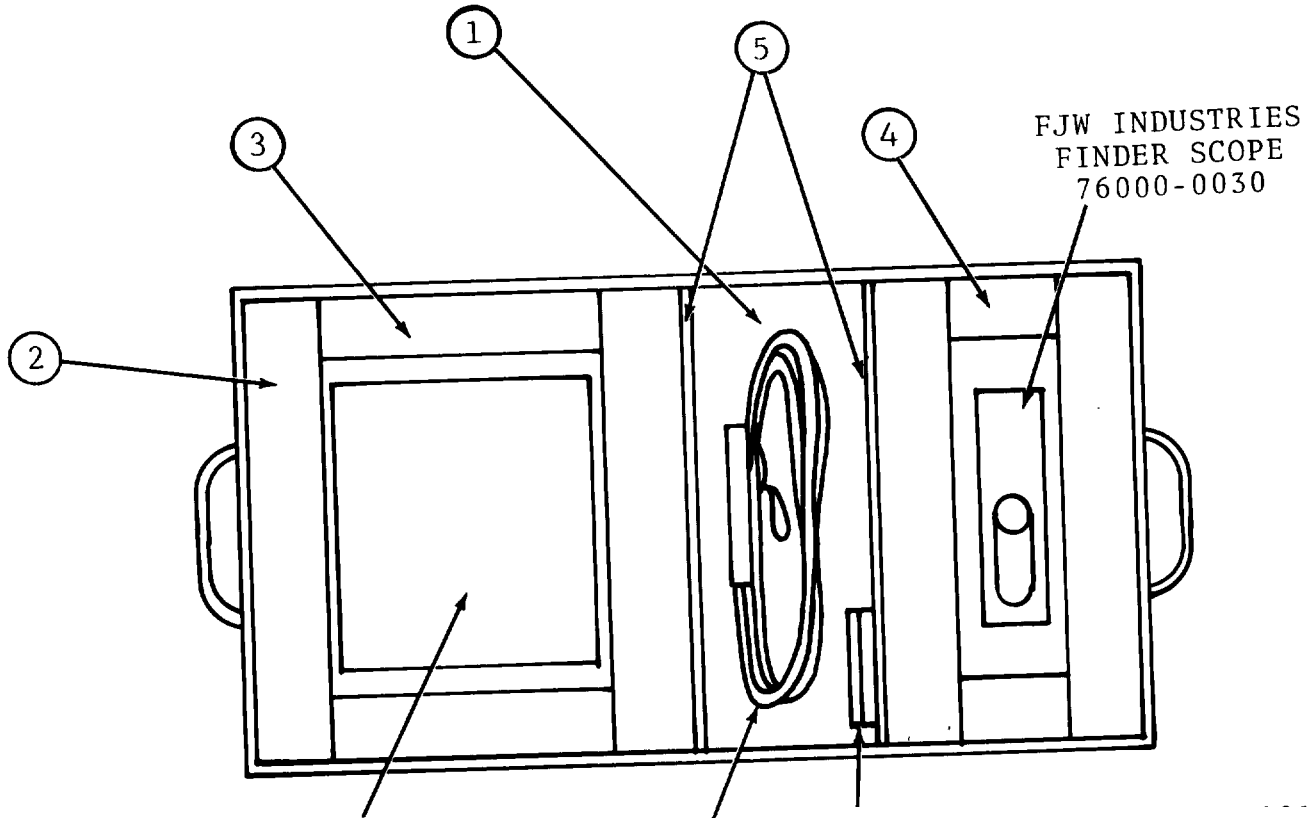


FOAM TO BE FASTENED  
WITH CARBOLINE F-1  
NEOPRENE ADHESIVE

970B0-0006

Figure 19. Inst. , Drawer no. 1

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	5	03000-0021	08294
3	Divider	1	13217E8131	59678
4	Adhesive	AR	MMM-A-1617	81348



AEL 259C SEMI-CONDUCTOR  
TEST SET 76000-0021

2-PAPER, LENS 08002-0001

NOTE

ACCESSORIES (REF)

970B0-0011

FOAM TO BE FASTENED  
WITH CARBOLINE F-1

NEOPRENE ADHESIVE 03001-0008

Figure 20. Inst., Drawer no. 3

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	4	03000-0021	08294
3	Pad, Foam	2	03000-0024	08294
4	Pad, Foam	2	03000-0025	08294
5	Divider	2	13217E8131	59678
6	Adhesive	AR	MMM-A-1617	81348

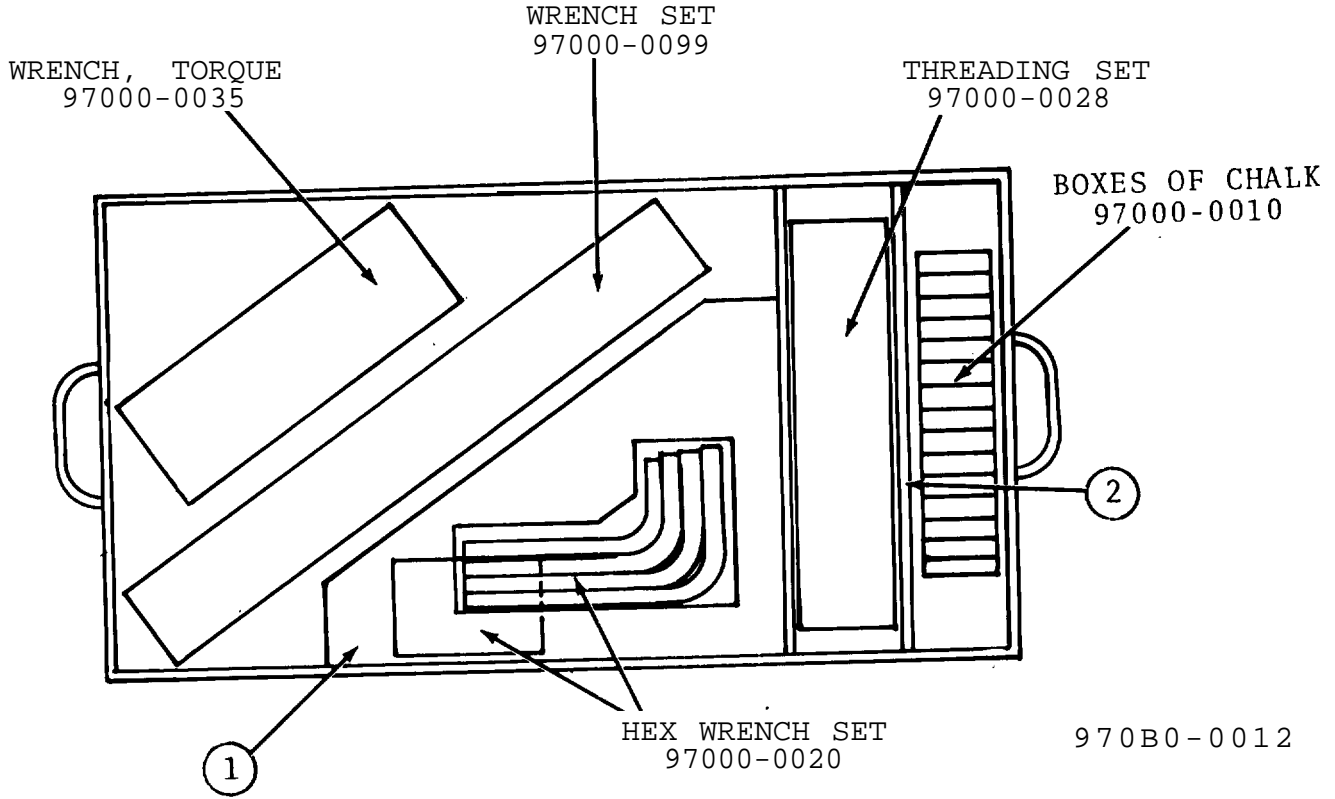
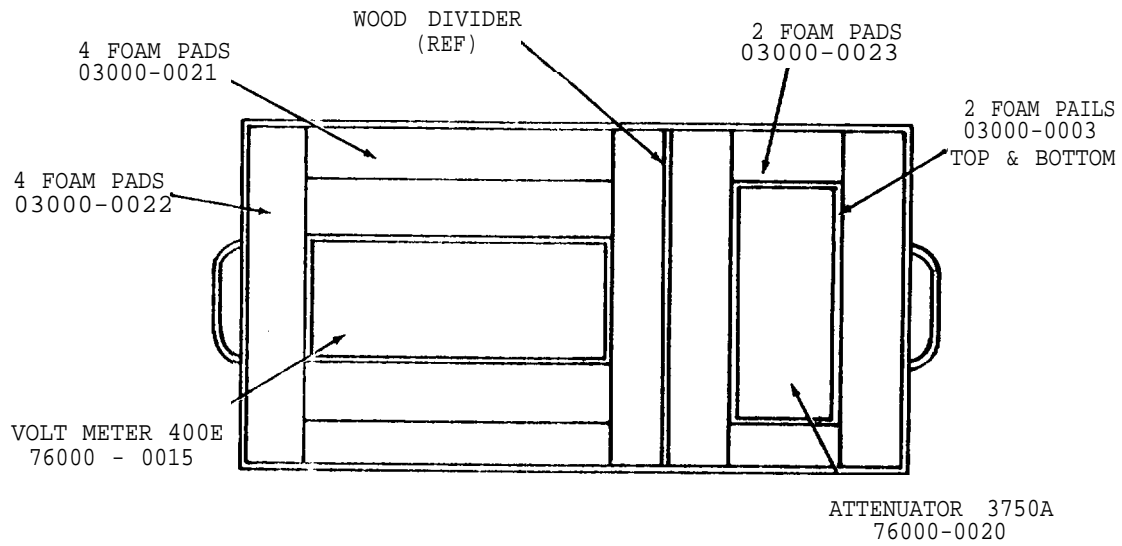


Figure 21. Inst., Drawer no. 4

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Wood Block	1.	59016-0003	08294
2	Divider	2	13217E8131	59678

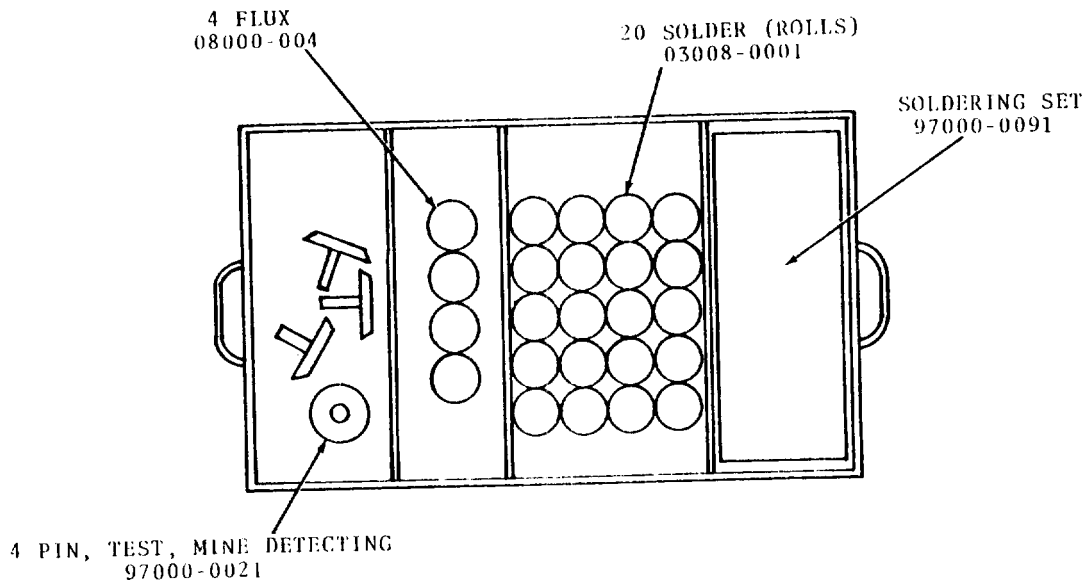


FOAM TO BE EASTENED  
 WITH CARBOLINE F-1  
 NEOPRENE ADHESIVE  
 03001-008

970B0-0013

Figure 22. Inst. , Drawer no. 5.

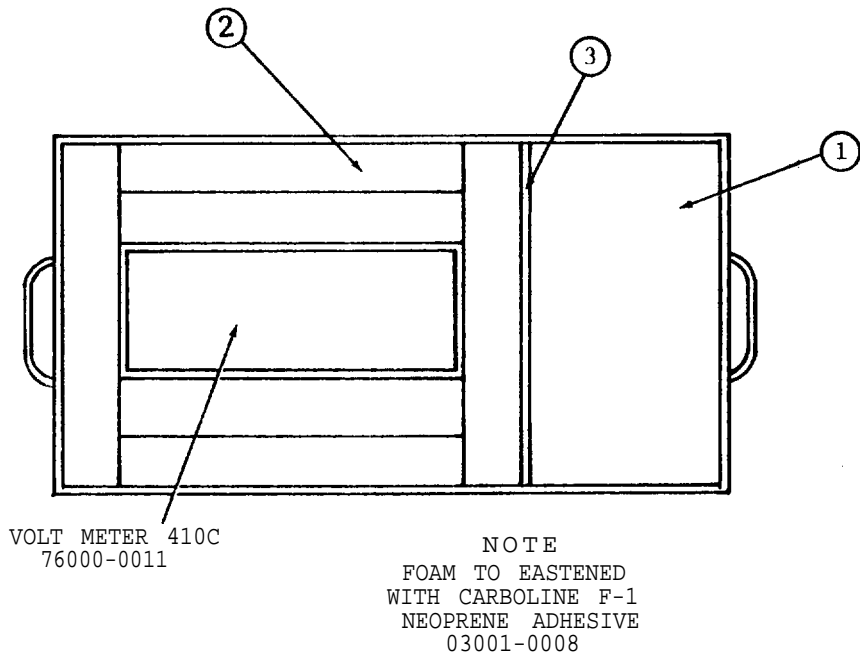
ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	4	03000-0021	08294
3	Pad, Foam	4	03000-0022	08294
4	Pad, Foam	2	03000-0023	08294
5	Divider	1	13217E8131	59678
6	Adhesive	AR	MMM-A-1617	81348



970B0-0014

Figure 23. Inst., Drawer no. 6.

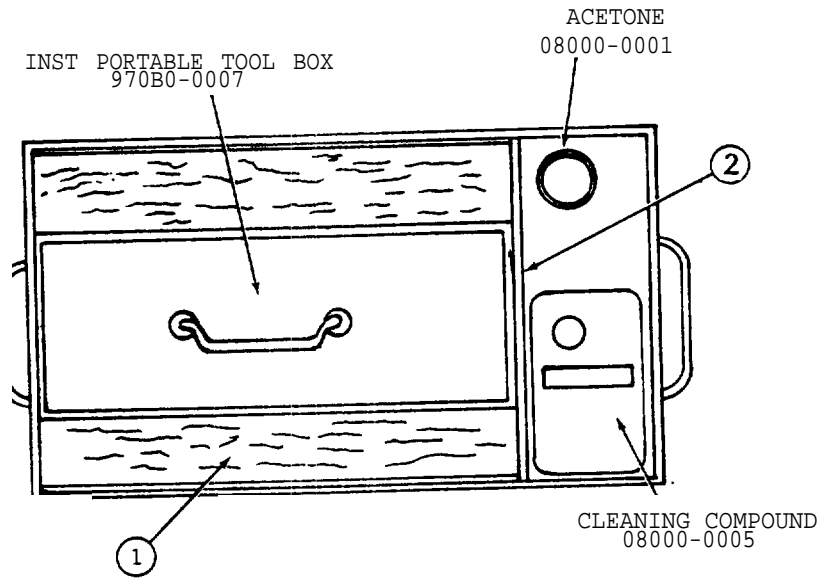
ITEM	NAME	QTY	PART NUMBER	FSCM
1	Divider	3	13217E8131	59678



970B0-0015

Figure 24. Inst. , Drawer no. 7.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	6	03000-0021	08294
3	Divider	1	13217E8131	59678
4	Adhesive	AR	MMM-A-1617	81348

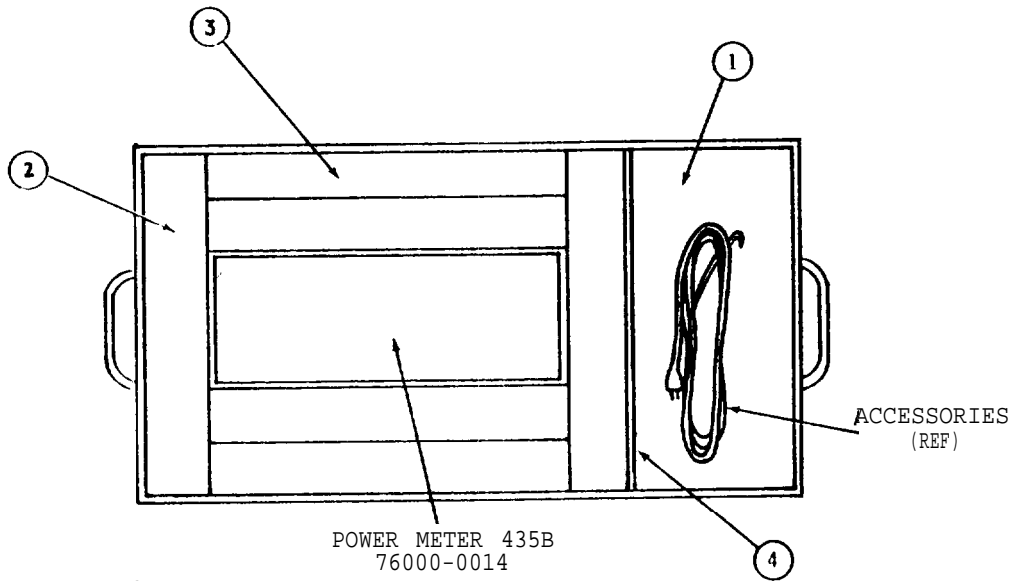


970B0-0017

Figure 25. Inst., Drawer no. 8.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Spacer, Wood	2	59106-0002	08294
2	Divider	1	13217E8131	59678



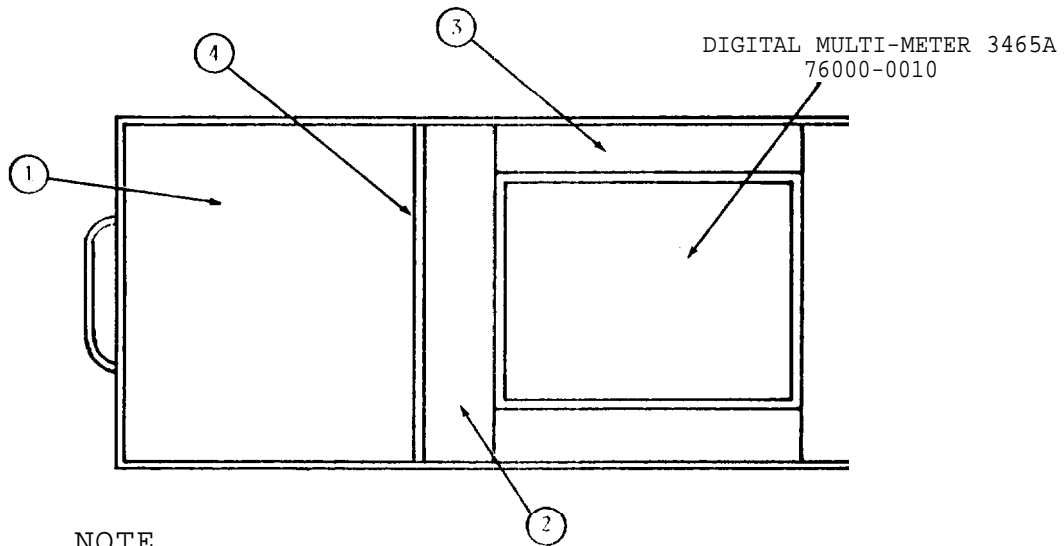


**NOTE**  
 FOAM TO BE FASTENED  
 WITH CARBOLINE F-1  
 NEOPRENE ADHESIVE  
 (ITEM 5)

970B0-0018

Figure 26. Inst. , Drawer no. 9

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	2	03000-0021	08294
3	Pad, Foam	4	03000-0022	08294
4	Divider	1	13217E8131	59678
5	Adhesive	AR	MMM-A-1617	81348

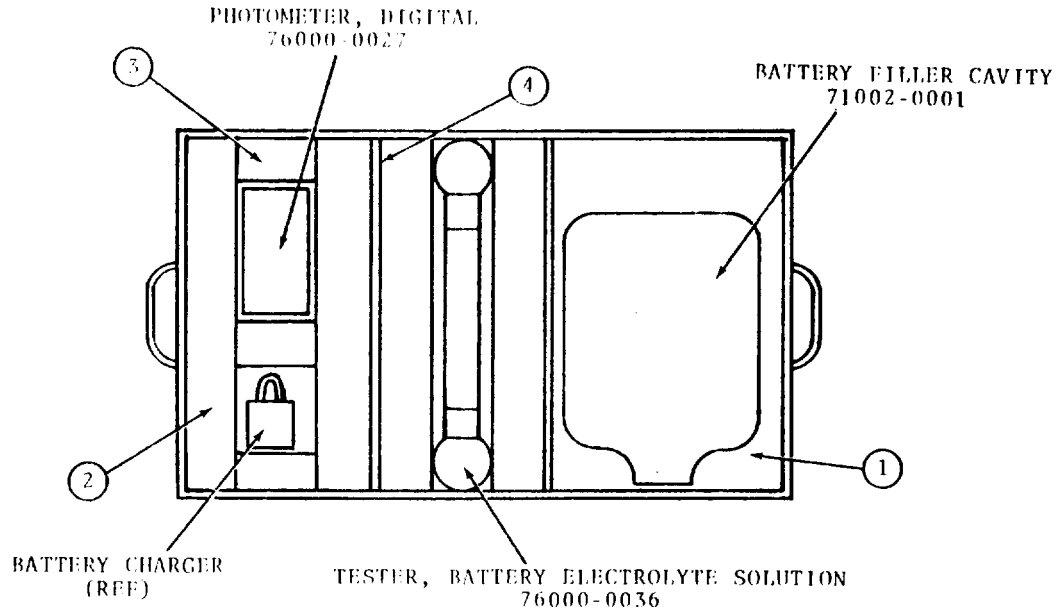


NOTE  
 FOAM TO BE EASTENED WITH  
 CARBOLINE F-1 NEOPRINE ADHESIVE  
 (ITEM 5)

970B0-0020

Figure 27. Inst. , Drawer no. 11.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	2	03000-0021	08294
3	Pad, Foam	2	03000-0022	08294
4	Divider	1	13217E8131	59678
5	Adhesive	AR	MMM-A-1617	81348



NOTE  
FOAM TO EASTENED WITH  
CARBOLINE F-1 NEOPRENE ADHESIVE  
(ITEM 5)

970B0-0022

Figure 28. Inst. , Drawer no. 13.

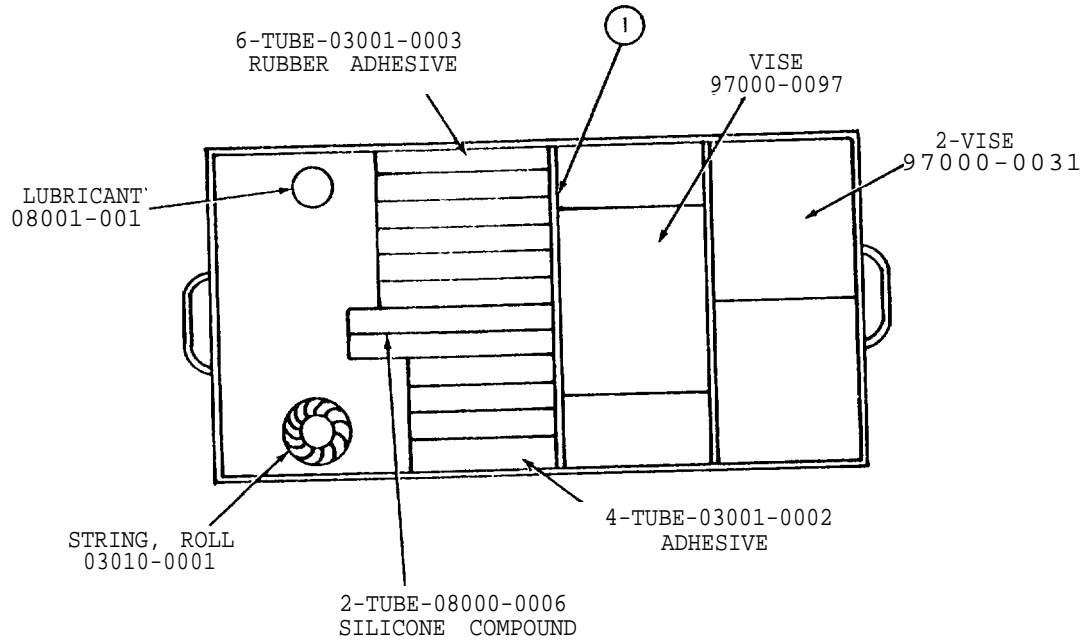
ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	4	03000-0021	08294
3	Pad, Foam	3	03000-0026	08294
4	Divider	1	13217E8131	59678
5	Adhesive	AR	MMM-A-1617	81348

PART NO.	DESCRIPTION	QTY
97000-0012	VACUUM CLEANER	1
03000-0003	BOTTOM PAD	1
03001-0008	ADHESIVE	.001

970B0-0024

Figure 29. Inst., Drawer no. 15.

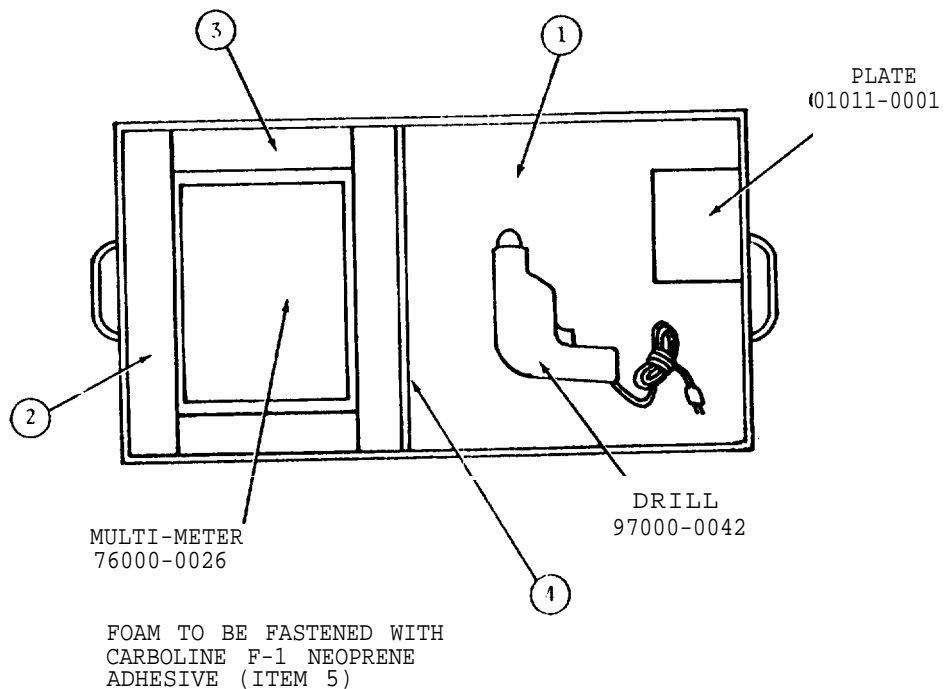
ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	1	03000-0003	08294
2	Adhesive	AR	MMM-A-1617	81348



970B0-0028

Figure 30. Inst., Drawer no. 19.

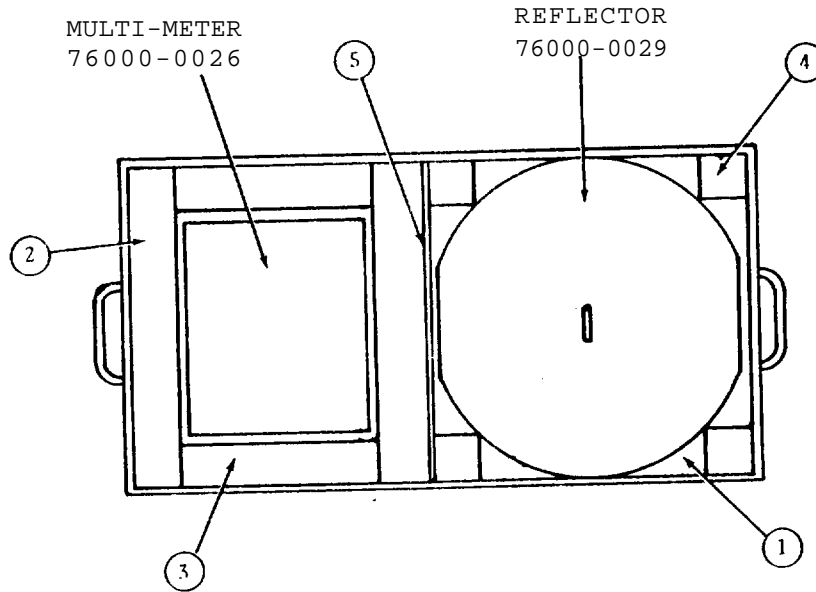
ITEM	NAME	QTY	PART NUMBER	FSCM
1	Divider	2	13217E8131	59678



970B0-0032

Figure 31. Inst., Drawer no. 23.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	2	03000-0021	08294
3	Pad, Foam	2	03000-0024	08294
4	Divider	1	13217E8131	59678
5	Adhesive	AR	MMM-A-1617	81348



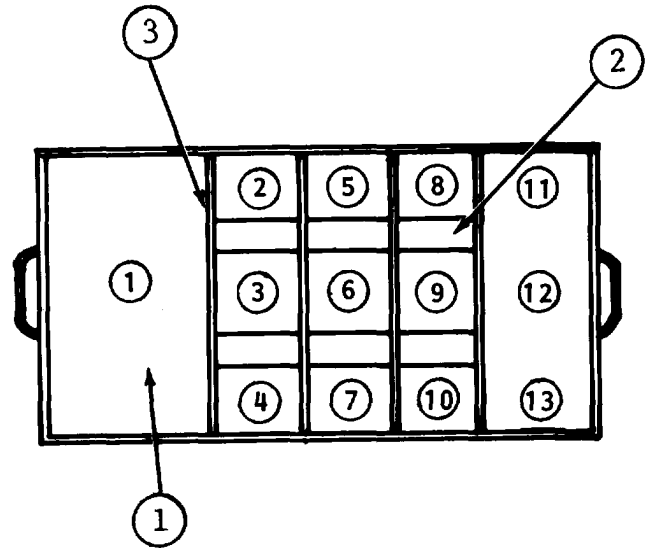
FOAM TO BE FASTENED WITH  
CARBOLINE F-1 NEOPRENE  
ADHESIVE (ITEM 6)

970B0-0034

Figure 32. Inst., Drawer no. 25.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	2	03000-0003	08294
2	Pad, Foam	2	03000-0021	08294
3	Pad, Foam	2	03000-0024	08294
4	Pad, Foam	4	03000-0025	08294
5	Divider	1	13217E8131	59678
6	Adhesive	AR	MMM-A-1617	81348

Part No.	Description	Qty	Location
02008-0001	Adapter, Connector	6	3
02008-0002	Adapter, Connector	4	4
02008-0003	Adapter, Connector	4	13
02008-0004	Adapter, Connector	2	10
02008-0005	Adapter, Connector	2	9
02008-0006	Adapter, Connector	2	8
02008-0007	Adapter, Connector	4	11
02008-0008	Adapter, Connector	2	7
02008-0009	Adapter, Connector	8	2
02008-0010	Binding Post	1	11
02008-0011	Binding Post	1	11
02009-0001	Clip	2	1
02009-0002	Banana Plug	10	6
02009-0003	Clip	4	1
02009-0004	Clip	4	1
02009-0005	Clip	4	1
02009 0007	Plug Tip	10	5
02009-0009	Battery	20	1
02009 0010	Battery	2	1
76000-0003	Attenuator	1	12
76000-0022	Adapter	1	1



FOAM TO BE FASTENED WITH  
CARBOLINE F-1 NEOPRINE ADHESIVE  
(ITEM 4)

970B0-0036

Figure 33. Inst., Drawer no. 27.

ITEM	NAME	QTY	PART NUMBER	FSCM
1	Pad, Foam	1	03000-0003	08294
2	Pad, Foam	6	03000-0027	08294
3	Divider	4	13217E8131	59678
4	Adhesive	AR	MMM-A-1617	81348



## Section 4. COMPONENTS LIST, TOOLS AND EQUIPMENT

## 4-1. Component Location, Table 4-1.

LEGEND	CODE	LOCATION	PART NUMBERS	
EC	1	Installation, Frequency Convertor	760B0-0001	16
EC	2	Installation, Sweep Oscillator	760B0-0002	17
EC	3	Installation, Oscilloscope	760B0-0004	18
TB	1	Installation, Tool Box, Appendix A	970B0-0001	N/S
TB	2	Installation, Tool Box, Appendix B	970B0-0007	N/S
PC	1	Installation, Small Parts Cabinet	970B0-0016	N/S
DR	1	Installation, Drawer #1	970B0-0006	19
DR	2	Installation, Drawer #2	970B0-0010	N/S
DR	3	Installation, Drawer #3	970B0-0011	20
DR	4	Installation, Drawer #4	970B0-0012	21
DR	5	Installation, Drawer #5	970B0-0013	22
DR	6	Installation, Drawer #6	970B0-0014	23
DR	7	Installation, Drawer #7	970B0-0015	24
DR	8	Installation, Drawer #8	970B0-0017	25
DR	9	Installation, Drawer #9	970B0-0018	26
DR	10	Installation, Drawer #10	970B0-0019	N/S
DR	11	Installation, Drawer #11	970B0-0020	27
DR	12	Installation, Drawer #12	970B0-0021	N/S
DR	13	Installation, Drawer #13	970B0-0022	28
DR	14	Installation, Drawer #14	970B0-0023	N/S
DR	15	Installation, Drawer #15	970B0-0024	29
DR	16	Installation, Drawer #16	970B0-0025	N/S
DR	17	Installation, Drawer #17	970B0-0026	N/S
DR	18	Installation, Drawer #18	970B0-0027	N/S
DR	19	Installation, Drawer #19	970B0-0028	30
DR	20	Installation, Drawer #20	970B0-0029	N/S
DR	21	Installation, Drawer #21	970B0-0030	N/S
DR	22	Installation, Drawer #22	970B0-0031	N/S
DR	23	Installation, Drawer #23	970B0-0032	31
DR	24	Installation, Drawer #24	970B0-0033	N/S
DR	25	Installation, Drawer #25	970B0-0034	32
DR	26	Installation, Drawer #26	970B0-0035	N/S
DR	27	Installation, Drawer #27	970B0-0036	33
DR	28	Installation, Drawer #28	970B0-0037	N/S
WM	1	Mounted Equipment, Rear Wall		2
WM	2	Mounted Equipment, Front Wall		3
BM	1	Mounted Equipment, Workbench		4-7

## LOCATION LEGEND

EC - Electronic Case	DR - Drawer
TB - Tool Box	WM - Wall Mounted
PC - Small Parts Cabinet	BM - Workbench Mounted
N/S - Not Shown on a Figure	

TABLE 4-2. TOOLS AND EQUIPMENT LIST

4-2. TOOLS AND EQUIPMENT LIST. THE TOOLS AND EQUIPMENT USED IN THE SHOP SET ARE LISTED IN TABLE 4-2 IN ALPHABETICAL SEQUENCE AND INCLUDE NATIONAL STOCK NUMBER (NSN), QUANTITY AND UNIT OF MEASURE, LOCATION LEGEND, PART NUMBER, AND FEDERAL SUPPLY CODE FOR MANUFACTURES (FSCM) NUMBER.

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
6810-00-223-2739	ACETONE	1 PT.	DR 8	0-A-51	81348
5935-00-280-1454	ADAPTER, MIL-A-55339/16	6 EA.	DR 27	MIL-A-55339/16	81349
5935-00-732-1919	ADAPTER, UG 349 B/U	4 EA.	DR 27	UG 349 B/U	80058
5935-00-201-3509	ADAPTER, UG 641/U	4 EA.	DR 27	UG 641/U	80058
5935-00-149-3914	ADAPTER, UG 225/U	2 EA.	DR 27	UG 225/U	80058
5935-00-149-3534	ADAPTER, MS 90577-273	2 EA.	DR 27	MS 90577-273	81349
5935-00-681-5013	ADAPTER, MIL-A-55339/15	2 EA.	DR 27	MIL-A-55339/15	81349
5935-00-240-5098	ADAPTER, MIL-A-55339/18	4 EA.	DR 27	MIL-A-55339/18	81349
5935-00-847-2600	ADAPTER, MIL-A-55339/14	2 EA.	DR 27	MIL-A-55339/14	81349
5935-00-926-7523	ADAPTER, MIL-A-55339/17	8 EA.	DR 27	MIL-A-55339/17	81349
5985-00-892-0732	ADAPTER, MIL-A-22641/16	1 EA.	DR 27	MIL-A-22641/16	81349
8040-00-270-8150	ADHESIVE, CELLULOSIC	4 TU.	DR 19	MMM-A-105	81348
8040-NO NIIN	ADHESIVE, RUBBER	6 TU.	DR 19	20	86839
6675-00-035-3903	ADJUSTING TOOL, GYRO	1 EA.	TB 1	13218E3373	97403
6810-00-753-4993	ALCHOHOL, ISOPROPYL	1 CN.	TB 1	TT-I-735	81348
5180-01-074-9436	ALIGNMENT TOOL KIT	1 EA.	TB 1	18-530	72653
6625-00-135-6978	AMPLIFIER, PLUG-IN	1 EA.	EC 3	1801A	28480
6625-01-096-3693	ANALYZER, SPECTRUM	1 EA.	DR 1	8557A	28480
5120-00-240-1532	ATTACHMENT, EXTENSION	1 EA.	TB 2	GG-W-641	81348
5985-00-455-4487	ATTENUATOR, FIXED	1 EA.	DR 27	8491B	28480
6625-00-047-9555	ATTENUATOR, VARIABLE	1 EA.	DR 5	3750A	28480
5935-00-930-2096	BANANA PLUG	10 EA.	DR 27	211	83330
6140-00-635-3824	BATTERY FILLER, GRAVITY	1 EA.	DR 13	W-B-177	81348

\* LOCATION LEGEND

- BM - BENCH MOUNTED
- DR - DRAWER
- EC - ELECTRONIC CASE
- PC - PARTS CABINET
- TB - TOOL BOX
- WM - WALL MOUNTED

TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
5120-00-180-0876	BIT, SCREWDRIVER	1 EA.	TB 1	GGG-B-00/ 222	81348
5120-00-044-1718	BIT, SCREWDRIVER	1 EA.	TB 1	TMS 4-1/2	55719
5110-00-277-4589	BLADE, HACKSAW	6 EA.	TB 1	GGG-B-451	81348
8115-00-663-0212	BOX, SMALL PARTS	1 EA.	TB 2	46	74274
6625-00-236-1536	BRIDGE, CAPACITANCE	1 EA.	EC1	4260A	28480
7920-00-291-8305	BROOM, UPRIGHT	1 EA.	BM 1	H-B-51	81348
7920-00-178-8315	BRUSH, DUSTING	1 EA.	DR 2	H-B-190	81348
7920-00-224-7987	BRUSH, FILE CLEANER	1 EA.	TB 1	H-C-421	81348
8020-00-260-1304	BRUSH, VARNISH	2 EA.	TB 1	H-B-695	81348
8020-00-260-1306	BRUSH, VARNISH	1 EA.	TB 2	H-B-695	81348
5130-00-596-0673	BRUSH, WIRE, ROTARY	1 EA.	DR 2	H-B-771	81348
7920-00-282-9246	BRUSH, WIRE	1 EA.	DR 2	H-B-178	81348
5995-00-121-6334	CABLE ASSEMBLY, 6 FT.	2 EA.	DR 14	11501A	28480
6150-00-866-2358	CABLE ASSEMBLY, 50 FT.	1 EA.	DR 10	PD 241A	81336
5995-00-070-8747	CABLE ASSEMBLY, 4 FT.	6 EA.	DR 14	10503A	28480
4920-00-918-4730	CABLE ASSEMBLY, 3 FT.	2 EA.	DR 14	2BC-36	05276
NIIN	CABLE ASSEMBLY, 3 FT.	2 EA.	DR 14	2239-C-36	05276
5995-00-686-4683	CABLE ASSEMBLY, 6 FT.	1 EA.	DR 14	11500A	28480
5995-00-724-9599	CABLE ASSEMBLY, 3 FT.	4 EA.	DR 14	11001A	28480
6675-00-035-3771	CABLE ASSEMBLY, EXTENDER	2 EA.	DR 14	13218E3058	97403
6145-00-542-6092	CABLE, RADIO, RG 58/CU	100 FT.	DR 12	MIL-C-17/28	81349
6145-00-660-8711	CABLE, RADIO, RG 213/U	5 FT.	DR 12	MIL-C-17/74	81349
5840-00-856-2954	CARD HOLDER	1 EA.	TB 1	SK-105	11988
6625-00-454-9497	CASE, ELECTRONIC	2 EA.	EC 1	9211-1245	28480
6625-00-432-7189	CASE, OSCILLOSCOPE	1 EA.	EC 3	9211-1297	28480
7510-00-223-6706	CHALK, MARKING	1 GR.	DR 4	SS-C-266	81348
8330-00-965-1722	CHAMMOIS LEATHER	1 EA.	TB 1	KK-C-300	81348
6130-00-669-6659	CHARGER, BATTERY	1 EA.	BM 1	5190	15309
5110-00-221-8132	CHISEL, COLD	1 EA.	TB 1	GG-C-313	81348
5120-00-875-6663	CLAMP, SCREW JACK	1 EA.	TB 1	SK-102	11988
7910-00-205-3400	CLEANER VACUUM	1 EA.	DR 15	MIL-C-21101	81349
6850-00-597-9765	CLEANING COMPOUND	1 GL.	DR 8	O-C-1889	81348
5999-00-204-5206	CLIP, ELECTRICAL	2 PG.	DR 27	W-C-440/TC	81348
5999-00-878-4311	CLIP, ELECTRICAL	4 PG.	DR 27	W-C-440/TCC	81348
5999-00-263-1051	CLIP, ELECTRICAL	4 EA.	DR 27	W-C-440/TCI	81348
5999-00-501-8365	CLIP, ELECTRICAL	4 EA.	DR 27	W-C-440/TCI	81348
5999-00-220-9775	CLIP, ELECTRICAL	20 EA.	DR 27	W-C-440/PC	81348
5999-00-204-8350	CLIP, ELECTRICAL	2 PG.	DR 27	W-C-440/PC	81348
5999-00-879-6320	CLIP, ELECTRICAL	1 PG.	DR 27	34C	76545
6645-01-046-8849	CLOCK, WALL	1 EA.	WH 2	GG-C-001072	81348
5350-00-221-0872	CLOTH, ABRASIVE	3 SH.	TB 1	P-C-458	81348
8305-00-267-3015	CLOTH, CHEESECLOTH	1 YD.	TB 1	CCC-C-440	81348
5935-00-786-9208	CONNECTOR, PLUG	6 EA.	DR 10	W-C-596/ 13-3	81348

## TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
6625-01-081-3402	COUNTER, ELECTRONIC	1 EA.	EC 1	5342A	28480
6625-00-531-4752	COUNTER, ELECTRONIC	1 EA.	EC 1	5345A	28480
5120-00-223-9952	DRESSER, ABRASIVE WHEEL	1 EA.	DR 2	GG-D-631	81348
5345-00-250-1345	DRESSER, CONTACT POINT	1 DZ.	TB 2	GA-43	55719
6625-01-063-8267	DOWN CONVERTER	1 EA.	EC 2	11710B	28480
5130-00-889-8994	DRILL, ELECTRIC	1 EA.	DR 23	W-D-661	81348
5133-00-449-6775	DRILL SET	1 SE.	TB 1	GG-D-751	81348
5133-00-618-7783	DRILL SET	1 SE.	TB 1	GG-D-751	81348
5120-00-243-7325	EXTENSION, SOCKET WRENCH	1 EA.	TB 1	GG-W-641	81348
5120-00-227-8107	EXTENSION, SOCKET WRENCH	1 EA.	TB 1	GG-W-641	81348
5120-00-168-5278	EXTRACTOR, D. I. P. PILER	1 EA.	TB 1	4916	30239
5120-00-293-0808	EXTRACTOR, ELECTRON TUBE	1 EA.	TB 2	GGG-E-930	81348
5120-00-596-1071	FACE, HAMMER	2 EA.	TB 1	GGG-H-33	81348
4240-00-202-9473	FACESHIELD, INDUST- RIAL	1 EA.	DR 2	L-F-36	81348
5110-00-234-6534	FILE, HAND	1 EA.	TB 1	GGG-F-325	81348
5110-00-241-9148	FILE, HAND	1 EA.	TB 1	GGG-F-325	81348
5110-00-806-1000	FILE, HAND	1 EA.	TB 1	GGG-F-325	81348
3455-00-892-4677	FILE, ROTARY	1 EA.	TB 1	GGG-F-340	81348
5110-00-204-2684	FILE SET W/CASE	1 SE.	TB 1	GGG-F-331	81348
5120-00-288-8716	FINGER, MECHANICAL	1 EA.	TB 1	GGG-F-360	81348
6545-00-922-1200	FIRST AID KIT	1 EA.	WM 1		18162
6230-00-635-4998	FLASHLIGHT	1 EA.	TB 2	W-L-1418	81348
3439-00-260-1264	FLUX, SOLDERING	4 C.	DR 6	O-F-506	81348
6675-01-025-3292	FOCUS SCOPE TOOL	1 EA.	TB 1	639-9006	94987
5110-00-289-9657	FRAME, HAND, HACKSAW	1 EA.	TB 1	GGG-F-671	81348
5210-00-238-3106	GAGE, WIRE	1 EA.	TB 1	GG-G-86	81348
6625-00-500-6525	GENERATOR, SIGNAL	1 EA.	EC 2	8640B	28480
6625-00-135-9866	GENERATOR, SIGNAL	1 EA.	EC 2	8601A	28480
3415-00-517-7754	GRINDING MACHINE	1 EA.	BM 1	W-G-656	81348
5120-00-061-8540	HAMMER, HAND, MACHINISTS	1 EA.	TB 1	GG-H-86	81348
3439-00-973-2249	HEATSINK, PLIERS	1 EA.	TB 1	46	71612
5120-00-903-8555	HOLDER, HAMMER, INSERT	1 EA.	TB 1	GGG-H-33	81348
5120-00-723-4746	HOLDER, SCREWDRIVER BIT	2 EA.	TB 1	4990 3/16	93389
6625-00-414-6626	INDICATOR, DIGITAL	1 EA.	EC 2	8600A	28480
5970-00-266-2268	INSULATION SLEEVING	5 FT.	DR 12	MIL-I-3190	81349
5970-00-266-2263	INSULATION SLEEVING	5 FT.	DR 12	MIL-I-3190	81349
5970-00-581-3894	INSULATION SLEEVING	2 FT.	DR 12	MIL-I-3190	81349

## TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
6675-00-035-3774	INTERCONNECT BREAK- OUT BOX	1 EA.	DR 17	13218E3055	97403
3460-00-214-5577	KEY, DRILL CHUCK	1 EA.	DR 23	GGG-C-350	81348
5120-00-935-4641	KEY SET, SOCKET HEAD	1 SE.	DR 4	GGG-K-275	81348
5120-00-529-1475	KEY SET, SOCKET HEAD	1 SE.	TB 1	GGG-K-275	01348
5120-00-679-4460	KEY SET, SOCKET HEAD	1 SE.	TB 1	SC-D-131809	80063
5120-00-729-6392	KEY SET, SOCKET HEAD	1 SE.	TB 2	GGG-K-275	81348
5120-00-585-6257	KEY SET, SOCKET HEAD	1 SE.	TB 2	GGG-K-275	81348
5110-00-240-5943	KNIFE, POCKET	1 EA.	TB 2	GGG-K-484	81348
6625-00-079-1426	LEAD SET, TEST	4 EA.	DR 14	11002A	28480
6230-00-901-9755	LIGHT, EXTENSION	1 EA.	DR 10	W-L-661	81348
9150-00-273-2389	LUBRICATING OIL, GENERAL PURPOSE	1 CN.	DR 19	W-L-800	81348
6650-00-252-6271	MAGNIFIER, MONOCULAR	1 EA.	TB 1	81-41-92	06175
6650-00-964-9470	MAGNIFIER, FOLDING	1 EA.	TB 2	81-23-64	06175
9515-00-892-1773	METAL PLATE	1 EA.	DR 23	QQ-S-741	81348
5120-00-596-1098	MIRROR, INSPECTION	1 EA.	TB 2	GG-M-350	81348
6625-00-999-7465	MULTIMETER	2 EA.	DR 23	AN/USM-223	80058
6625-01-039-7922	MULTIMETER	1 EA.	DR 11	3465A	28480
6625-00-969-4105	MULTIMETER	1 EA.	DR 7	410D	28480
5310-00-934-9738	NUT, PLAIN, HEX NO. 2-56	275 EA.	PC 1	MS 35649- 222	96906
5310-00-934-9739	NUT, PLAIN, HEX NO. 4-40	275 EA.	PC 1	MS 35649- 242	96906
5310-00-934-9747	NUT, PLAIN, HEX NO. 6-32	275 EA.	PC 1	MS 35649- 262	96906
5310-00-934-9758	NUT, PLAIN, HEX NO. 10-24	275 EA.	PC 1	MS 35649- 202	96906
5310-00-997-1888	NUT, PLAIN, HEX 1/4-20	275 EA.	PC 1	MS 35649- 2252	96906
6625-00-135-6977	OSCILLOSCOPE SUB- ASSEMBLY	1 EA.	EC 3	180C	28480
5350-00-264-3485	PARER, ABRASIVE	3 SH.	TB 1	P-P-105	81348
6640-00-597-6745	PAPER, LENS	2 BK.	DR 3	NNN-P-40	81348
6650-00-548-8067	PHOTOMETER, DIGITAL	1 EA.	DR 13	J16 W/J6502	80009
6665-00-893-0023	PIN, TEST, MINE DETECTING	4 EA.	DR 6	13204E8857	97403
5110-00-239-8253	PLIERS, DIAGONAL CUTTING	1 EA.	TB 1	GGG-P-468	81348
5110-00-965-0974	PLIERS, DIAGONAL CUTTING	1 EA.	TB 2	GGG-P-471	81348
5110-00-240-6209	PLIERS, DIAGONAL CUTTING	1 EA.	TB 2	GGG-P-471	81348
5120-01-029-8063	PLIERS, INSERTION TOOL	1 EA.	TB 1	639-9007	94987
5120-01-085-5290	PLIERS, LOG NOSE	1 EA.	TB 1	LC 55	19915
5120-00-595-9550	PLIERS, RETAINING RING	1 EA.	TB 1	639-9012	94987

TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
5120-00-293-3486	PLIERS, ROUND NOSE	1 EA.	TB 2	GGG-P-471	81348
5120-00-239-8250	PLIERS, ROUND NEEDLE, CURVED	1 EA.	TB 2	GGG-P-471	81348
5120-00-293-3481	PLIERS, ROUND NEEDLE, STRAIGHT	1 EA.	TB 2	GGG-P-471	81348
5120-00-278-0352	PLIERS, SLIP JOINT	1 EA.	TB 1	GGG-P-471	81348
3439-00-973-2249	PLIER TYPE HEATSINK	1 EA.	TB 2	46	71612
5935-00-581-1385	PLUG, TIP	10 EA.	DR 27	213	83330
6625-00-229-7041	PLUG IN, TIME BASE	1 EA.	EC 3	1821A	28480
5940-00-781-9240	POST, BINDING, BLACK	1 EA.	DR 27	220B	83330
5940-00-410-8295	POST, BINDING, RED	1 EA.	DR 27	220R	83330
6130-00-504-0327	POWER SUPPLY	1 EA.	BM 1	PP4606G	80058
6130-00-249-2748	POWER SUPPLY	1 EA.	EC 1	6268B	28480
5120-00-293-3512	PUNCH, CENTER	1 EA.	TB 1	GGG-P-831	81348
5120-00-242-5966	PUNCH, DRIVE PIN, 1/8 DIA.	1 EA.	TB 1	GGG-P-831	81348
5120-00-293-0791	PUNCH, DRIVE PIN, 3/16 DIA.	1 EA.	TB 1	GGG-P-831	81348
5120-00-242-3434	PUNCH, DRIVE PIN, 1/4 DIA.	1 EA.	TB 1	GGG-P-831	81348
5110-00-186-4214	REAMER, HAND	1 EA.	TB 1	GGG-R-180	81348
6675-00-420-4751	REFLECTOR ASSEMBLY	1 EA.	DR 25	330F902	95036
5975-00-878-3791	ROD, GROUND	1 EA.	DR 10	W-R-550	81348
5350-00-240-2213	ROUGE, ABRASIVE	1 LB.	DR 2	MIL-B- 16909B	81349
9320-00-244-7045	RUBBER SHEET, .25 IN.	4 SH.	WM 2	MIL-R-5001	81349
9320-00-244-7048	RUBBER SHEET, .75 IN.	3 SH.	WM2	MIL-R-5001	81349
9320-00-232-2474	RUBBER SHEET, 1 IN.	3 SH.	WM 2	MIL-R-5001	81349
5210-00-273-1965	RULE, STEEL	1 EA.	TB 1	GGG-R-791	81348
5110-00-255-0420	SCISSORS, ELEC- TRICIANS	1 EA.	TB 1	GGG-S-278	81348
6650-00-148-5878	SCOPE, FINDER	1 EA.	DR 3	80045	34870
5305-00-071-2235	SCREW, CAP, HEX 1/4-20, 2 1/2	25 EA.	PC 1	MS 90725- 16	96906
5305-00-958-5462	SCREW, MACH, STEEL, FLAT, NO. 2-56, 1/2	50 EA.	PC 1	MS 35190- 215	96906
5305-00-959-2345	SCREW, MACH, STEEL, FLAT, NO. 2-56, 1/4	50 EA.	PC 1	MS 35190- 211	96906
5305-00-958-5483	SCREW, MACH, STEEL, FLAT, NO. 4-40, 1/4	50 EA.	PC 1	MS 35190- 221	96906
5305-00-957-6264	SCREW, MACH, STEEL, FLAT, NO. 4-40, 1/2	50 EA.	PC 1	MS 35190- 225	96906
5305-00-059-4544	SCREW, MACH, STEEL, FLAT, NO. 4-40, 3/4	40 EA.	PC 1	MS 35190- 227	96906
5305-00-059-4553	SCREW, MACH, STEEL, FLAT, NO. 6-32, 1/2	15 EA.	PC 1	MS 35190- 238	96906
5305-00-958-5450	SCREW, MACH, STEEL, FLAT, NO. 6-32, 3/4	15 EA.	PC 1	MS 35190- 240	96906

TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
5305-00-958-5460	SCREW, MACH, STEEL, FLAT, NO. 6-32, 1	15 EA.	PC 1	MS 35190-242	96906
5305-00-958-5458	SCREW, MACH, STEEL, FLAT, NO. 6-32, 1 1/2	20 EA.	PC 1	MS 35190-244	96906
5305-00-957-6265	SCREW, MACH, STEEL, FLAT, NO. 6-32, 1/4	15 EA.	PC 1	MS 35190-234	96906
5305-00-088-8358	SCREW, MACH, STEEL, FLAT, NO. 6-32, 2	20 EA.	PC 1	MS 35190-246	96906
5305-00-059-4568	SCREW, MACH, STEEL, FLAT, NO. 8-32, 1/2	20 EA.	PC 1	MS 35190-253	96906
5305-00-954-2728	SCREW, MACH, STEEL, FLAT, NO. 8-32, 3/4	20 EA.	PC 1	MS 35190-255	96906
5305-00-953-5481	SCREW, MACH, STEEL, FLAT, NO. 8-32, 1	20 EA.	PC 1	MS 35190-275	96906
5305-00-957-6640	SCREW, MACH, STEEL, FLAT, NO. 8-32, 1 1/2	20 EA.	PC 1	MS 35190-259	96906
5305-00-957-6646	SCREW, MACH, STEEL, FLAT, NO. 8-32, 2	20 EA.	PC 1	MS 35190-261	96906
5305-00-958-5471	SCREW, MACH, STEEL, FLAT, NO. 10-24, 3/4	20 EA.	PC 1	MS 35190-273	96906
5305-00-954-3487	SCREW, MACH, STEEL, FLAT, NO. 10-24, 1/2	20 EA.	PC 1	MS 35190-271	96906
5305-00-957-6269	SCREW, MACH, STEEL, FLAT, NO. 10-24, 1	20 EA.	PC 1	MS 35190-275	96906
5305-00-957-6270	SCREW, MACH, STEEL, FLAT, NO. 10-24, 1 1/2	20 EA.	PC 1	MS 35190-277	96906
5305-00-952-7756	SCREW, MACH, STEEL, FLAT, NO. 10-24, 2	20 EA.	PC 1	MS 35190-279	96906
5305-00-954-4295	SCREW, MACH, STEEL, FLAT, 1/4-20, 1/2	15 EA.	PC 1	MS 35190-287	96906
5305-00-958-5246	SCREW, MACH, STEEL, FLAT, 1/4-20, 3/4	15 EA.	PC 1	MS 35190-289	96906
5305-00-958-5247	SCREW, MACH, STEEL, FLAT, 1/4-20, 1	15 EA.	PC 1	MS 35190-291	96906
5305-00-958-5248	SCREW, MACH, STEEL, FLAT, 1/4-20, 1 1/2	15 EA.	PC 1	MS 35190-293	96906
5305-00-958-5249	SCREW, MACH, STEEL, FLAT, 1/4-20, 1 3/4	20 EA.	PC 1	MS 35190-297	96906,
5305-00-958-5482	SCREW, MACH, STEEL, FLAT, 1/4-20, 2	20 EA.	PC 1	MS 35190-295	96906
5305-00-889-3118	SCREW, MACH, STEEL, PAN, NO. 2-56, 1/4	20 EA.	PC 1	MS 35206-203	96906
5305-00-954-3938	SCREW, MACH, STEEL, PAN, NO. 2-56, 1/2	20 EA.	PC 1	MS 35206-207	96906
5305-00-889-3116	SCREW, MACH, STEEL, PAN, NO. 4-40, 1/4	10 EA.	PC 1	MS 35206-213	96906
5305-00-889-2999	SCREW, MACH, STEEL, PAN, NO. 4-40, 1/2	15 EA.	PC 1	MS 35206-217	96906

TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
5305-00-984-4976	SCREW, MACH, STEEL, PAN, NO. 4-40, 3/4	15 EA.	PC 1	MS 35206- 219	96906
5305-00-984-4983	SCREW, MACH, STEEL, PAN, NO. 6-32, 1/4	5 EA.	PC 1	MS 35206- 226	96906
5305-00-889-3000	SCREW, MACH, STEEL, PAN, NO. 6-32, 1/2	5 EA.	PC 1	MS 35206- 230	96906
5305-00-984-4992	SCREW, MACH, STEEL, PAN, NO. 6-32, 3/4	5 EA.	PC 1	MS 35206- 232	96906
5305-00-984-6221	SCREW, MACH, STEEL, PAN, NO. 6-32, 1	5 EA.	PC 1	MS 35206- 234	96906
5305-00-984-6223	SCREW, MACH, STEEL, PAN, NO. 6-32, 1 1/2	10 EA.	PC 1	MS 35206- 236	96906
5305-00-984-6225	SCREW, MACH, STEEL, PAN, NO. 6-32, 2	10 EA.	PC 1	MS 35206- 238	96906
5305-00-984-6193	SCREW, MACH, STEEL, PAN, NO. 8-32, 1/2	5 EA.	PC 1	MS 35206- 245	96906
5305-00-984-6195	SCREW, MACH, STEEL, PAN, NO. 8-32, 3/4	8 EA.	PC 1	MS 35206- 247	96906
5305-00-984-6197	SCREW, MACH, STEEL, PAN, NO. 8-32, 1	8 EA.	PC 1	MS 35206- 249	96906
5305-00-984-6199	SCREW, MACH, STEEL, PAN, NO. 8-32, 1 1/2	8 EA.	PC 1	MS 35206- 251	96906
5305-00-984-6201	SCREW, MACH, STEEL, PAN, NO. 8-32, 2	8 EA.	PC 1	MS 35206- 253	96906
5305-00-984-6210	SCREW, MACH, STEEL, PAN, NO. 10-24, 1/2	8 EA.	PC 1	MS 35206- 263	96906
5305-00-984-6212	SCREW, MACH, STEEL, PAN, NO. 10-24, 3/4	8 EA.	PC 1	MS 35206- 265	96906
5305-00-984-6214	SCREW, MACH, STEEL, PAN, NO. 10-24, 1	8 EA.	PC 1	MS 35206- 267	96906
5305-00-984-6216	SCREW, MACH, STEEL, PAN, NO. 10-24, 1 1/2	8 EA.	PC 1	MS 35206- 269	96906
5305-00-984-6218	SCREW, MACH, STEEL, PAN, NO. 10-24, 2	8 EA.	PC 1	MS 35206- 271	96906
5305-00-988-1723	SCREW, MACH, STEEL, PAN, 1/4-20, 1/2	5 EA.	PC 1	MS 35206- 279	96906
5305-00-988-1725	SCREW, MACH, STEEL, PAN, 1/4-20, 3/4	5 EA.	PC 1	MS 35206- 281	96906
5305-00-988-1727	SCREW, MACH, STEEL, PAN, 1/4-20, 1	5 EA.	PC 1	MS 35206- 283	96906
5305-00-988-1171	SCREW, MACH, STEEL, PAN, 1/4-20, 1 1/2	5 EA.	PC 1	MS 35206- 285	96906
5305-00-988-1728	SCREW, MACH, STEEL, PAN, 1/4-20, 2	10 EA.	PC 1	MS 35206- 287	96906
5305-00-988-1730	SCREW, MACH, STEEL, PAN, 1/4-20, 2 1/2	10 EA.	PC 1	MS 35206- 289	96906
5120-00-832-6221	SCREW STARTER, HAND	1 EA.	TB 2	SN 9	36540
5120-00-421-0498	SCREWDRIVER, CROSS- TIP, NO. 0	1 EA.	TB 1	TMP-01	55719



TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
5120-00-240-8716	SCREWDRIVER, CROSS-TIP, NO. 1, 3 IN.	1 EA.	TB 2	GGG-S-121	81348
5120-00-227-7293	SCREWDRIVER, CROSS-TIP, NO. 2, 1 1/2 IN.	1 EA.	TB 2	GGG-S-121	81348
5120-00-234-8913	SCREWDRIVER, CROSS-TIP, NO. 2, 4 IN.	1 EA.	TB 2	GGG-S-121	81348
5120-00-060-2004	SCREWDRIVER, CROSS-TIP, NO. 0, 4 IN.	1 EA.	TB 2	GGG-S-121	81348
5120-00-287-2129	SCREWDRIVER, DOUBLE OFFSET, 3 IN.	1 EA.	TB 1	GGG-S-121	81348
5120-00-288-9710	SCREWDRIVER, DOUBLE OFFSET, 5 IN.	1 EA.	TB 1	GGG-S-121	81348
5120-00-596-8502	SCREWDRIVER, FLAT, 1/4 IN. W, 1 1/2 IN.	1 EA.	TB 1	GGG-S-121	81348
5120-00-278-1267	SCREWDRIVER, FLAT 9/64 IN. W, 8 IN.	1 EA.	TB 1	GGG-S-121	81348
5120-00-278-1270	SCREWDRIVER, FLAT, 3/16 IN. W, 5 IN.	1 EA.	TB 1	GGG-S-121	81348
5120-00-278-1283	SCREWDRIVER, FLAT 5/16 IN. W, 6 IN.	1 EA.	TB 1	GGG-S-121	81348
5120-00-236-2140	SCREWDRIVER, FLAT 1/8 IN. W, 2 IN.	1 EA.	TB 2	GGG-S-121	81348
5120-00-222-8852	SCREWDRIVER, FLAT, 1/4 IN. W, 4 IN.	1 EA.	TB 2	GGG-S-121	81348
5120-00-260-4837	SCREWDRIVER, FLAT, 3/16 IN. W, 8 IN.	1 EA.	TB 2	GGG-S-121	81348
5120-00-892-5931	SCREWDRIVER, OFFSET, CROSSTIP	1 EA.	TB 1	GGG-S-1408	81348
5120-00-595-9574	SCREWDRIVER, OFFSET, FLAT	1 EA.	TB 1	GGG-S-1408	81348
5120-00-288-8739	SCREWDRIVER SET, JEWELERS	1 SE.	TB 2	GGG-S-121	81348
5120-00-224-9728	SCRIBER, MACHINISTS	1 EA.	TB 1	GGG-S-131	81348
6675-00-035-3875	SETTING TOOL, GEAR	1 EA.	TB 1	13218E3372	97403
5110-00-293-0089	SHEARS, METAL, HAND	1 EA.	TB 1	GGG-S-291	81348
6850-00-880-7616	SILICONE COMPOUND	2 TU.	DR 19	MIL-S-8660	81349
6850-00-927-9461	SILICONE, COMPOUND, 5 OZ.	1 TU.	TB 1	DC-340	71984
3439-00-265-7102	SOLDER, LEAD ALLOY	20 LB.	DR 6	QQ-S-571	81348
3439-00-555-4629	SOLDER, LEAD-TIN ALLOY, .032 DIA.	1 SL.	TB 1	GQ-S-571	81348
3439-00-269-9610	SOLDER, LEAD-TIN ALLOY, 0.63 DIA.	1 SL.	TB 1	QQ-S-571	81348
3439-00-611-7136	SOLDERING AID, 8 IN.	1 EA.	TB 1	9088	72653
3439-00-004-0913	SOLDERING GUN, HOUSING	1 EA.	TB 1	GT-3	97049
3439-00-004-0917	SOLDERING GUN, POWER-HEAD 3/16 IN.	1 EA.	TB 1	7A	97049

TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
3439-00-004-0916	SOLDERING GUN, POWER- HEAD 1/8 IN.	1 EA.	TB 1	6B	97049
3439-00-460-7198	SOLDERING AND RESOLDERING SET	1 SE.	DR 6	W-TCP-K	97049
5345-00-161-9695	STONE, SHARPENING	1 EA.	TB 1	SS-S-736	81348
7110-00-634-8596	STOOL, REVOLVING	4 EA.	WM 2	AA-S-700	81348
5110-00-268-4224	STRIPPER, WIRE	1 EA.	TB 1	GGG-S-665	81348
5970-00-419-4290	TAPE, INSULATION, .50 IN.	1 RL.	TB 1	MIL-I-24391	81349
5970-00-419-4291	TAPE, INSULATION, .75 IN.	1 RL.	TB 1	MIL-I-24391	81349
5210-00-287-3335	TAPE, MEASURING, 6 FT.	1 EA.	TB 1	GGG-T-106	81348
4020-00-656-1125	TAPE, LACING, NYLON 500 YD.	1 SL.	TB 1	MIL-T-43435	81349
3439-00-403-5321	TAPE, SOLDER REMOVAL, 6 FT.	1 EA.	TB 1	886	28493
6625-00-449-9167	TEST SET, RADIO FREQUENCY POWER.	1 EA.	DR 9	435B	28480
6625-01-086-9639	TEST SET, SEMICON- DUCTOR	1 EA.	DR 3	259C	93346
6630-00-105-1418	TESTER, BATTERY ELECTROLYTE	1 EA.	DR 13	GG-T-258A	81348
5180-00-293-2896	THREADING SET, SCREW	1 SE.	DR 4	GGG-T-330B	81348
5140-00-494-2015	TOOL BOX, PORTABLE	1 EA.	TB 1	GGG-T-555	81348
5140-00-315-2747	TOOL BOX, PORTABLE	1 EA.	TB 2	GGG-T-558/ 1A	81348
5180-00-451-4540	TOOL KIT, ALIGNMENT	1 EA.	WM 2	9200	80112
4940-00-528-9145	TRAY, SHOP MAINTENANCE	2 EA.	DR 21	TRAY SHOP MAINTENANCE	37296
5120-00-233-6985	TWEEZER'S CRAFTSMAN	1 EA.	TB 1	GGG-T-870	81348
5120-00-293-0149	TWEEZER'S CRAFTSMAN	1 EA.	TB 2	GGG-T-870	81348
4020-00-231-5878	TWINE, LINEN	1 LB.	DR 19	MIL-T-2520	81349
5120-00-293-3450	VICE, BENCH, 2 IN.	2 EA.	DR 19	GGG-V-410	81348
5120-00-293-1439	VICE, MACHINIST'S, 4 IN.	1 EA.	BM 1	GGG-V-410	81348
3460-00-221-1104	VICE, MACHINIST'S 2.5 IN.	1 EA.	DR 19	PN 12	12052
5120-00-875-6681	VICE, WORK POSITION- ING	1 EA.	TB 1	SK-1061	11988
6625-00-995-7716	VOLTMETER, ELECTRONIC	1 EA.	DR 5	400E	28480
5310-00-582-8769	WASHER, FLAT, BRASS, 1/4	1 LB.	PC 1	FF-W-92	81348
5310-00-087-0057	WASHER, FLAT, STEEL, NO. 2	3 HD.	PC 1	MS 27183-2	96906
5310-00-951-4679	WASHER, FLAT, STEEL, NO. 4	3 HD.	PC 1	MS 27183-3	96906
5310-00-983-8483	WASHER, FLAT, STEEL, NO. 6	2 HD.	PC 1	MS 27183-5	96906

TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
5310-00-082-1404	WASHER, FLAT, STEEL, NO. 6	3 HD.	PC 1	MS 27183-6	96906
5310-00-809-8546	WASHER, FLAT, STEEL, NO. 10	275 HD.	PC 1	MS 27183-8	96906
5310-00-823-8804	WASHER, FLAT, STEEL, NO. 10	3 HD.	PC 1	MS 27183-9	96906
5310-00-950-1310	WASHER, FLAT, STEEL, 1/8	3 HD.	PC 1	MS 27183-4	96906
5310-00-809-8544	WASHER, FLAT, STEEL, 3/16	3 HD.	PC 1	MS 27183-7	96906
5310-00-809-4058	WASHER, FLAT, STEEL, 1/4	3 HD.	PC 1	MS 27183-10	96906
5310-00-596-7693	WASHER, LOCK, STEEL, NO. 8	20 HD.	PC 1	MS 35335-31	96906
5310-00-559-0070	WASHER, LOCK, STEEL, NO. 8	12 HD.	PC 1	MS 35335-38	96906
5310-00-080-9786	WASHER, LOCK, STEEL, NO. 10	7 HD.	PC 1	MS 45904-60	96906
5310-00-728-2044	WASHER, LOCK, STEEL, 5/16	200 EA.	PC 1	MS 45904-73	96906
5310-00-067-6357	WASHER, LOCK, STEEL, 1/4	415 EA.	PC 1	MS 45904-69	96906
5310-00-061-1258	WASHER, LOCK, STEEL, 3/8	140 EA.	PC1	MS 45904-76	96906
5310-00-543-2410	WASHER, LOCK, STEEL, NO. 4	1 HD.	PC 1	MS 35338-40	96906
5310-00-274-8702	WASHER, LOCK, STEEL, NO. 6	1 HD.	PC 1	MS 35338-41	96906
5310-00-045-3299	WASHER, LOCK, STEEL, NO. 8	1 HD.	PC 1	MS 35338-42	96906
5310-00-045-3296	WASHER, LOCK, STEEL, NO. 10	1 HD.	PC 1	MS 35338-43	96906
5310-00-235-7037	WASHER, LOCK, STEEL, NO. 12	HD.	PC 1	MS 122031	96906
6145-00-643-0956	WIRE, ELEC, BARE, 6 AWG.	2 LB.	DR 12	QQ-W-343	81348
6145-00-160-5049	WIRE, ELEC, HOOK- UP, 18 AWG	100 FT.	DR 12	MIL-W-76B	81349
6145-00-284-0001	WIRE, ELEC, HOOK- UP, 18 AWG	100 FT.	DR 12	MIL-W-76B	81349
6145-00-548-0973	WIRE, ELEC, HOOK- UP, 18 AWG	100 FT.	DR 12	MIL-W-76B	81349
6145-00-164-6952	WIRE, ELEC, INSTRU- MENT, 18 AWG	100 FT.	DR 12	MIL-W-13169	81349
6145-00-229-9862	WIRE, ELEC, INSTRU- MENT, 18 AWG	100 FT.	DR 12	1636-2	92194
5120-00-449-8083	WRENCH, ADJ., 10 IN.	1 EA.	TB 1	GGG-W-631	81348
5120-00-264-3795	WRENCH, ADJ., 6 IN.	1 EA.	TB 2	GGG-W-631	81348

TABLE 4-2. TOOLS AND EQUIPMENT LIST (CONT'D)

NSN	DESCRIPTION	QTY	LOC *	PART NUMBER	FSCM
5120-00-148-7917	WRENCH SET, COMB.	1 SE.	DR 4	GGG-W-636	81348
5120-00-148-9488	WRENCH SET, COMB.	1 SE.	TB 1	GGG-W-636	81348
5120-00-089-3663	WRENCH SET, SOCKET	1 SE.	TB 1	PS-120	96508
5120-00-081-2305	WRENCH SET, SOCKET	1 SE.	TB 2	GGG-W-641	81348
5120-00-658-9805	WRENCH SET, SPANNER	1 SE.	TB 2	SC-B-61575	80063
5120-01-029-8032	WRENCH, SPANNER	1 EA.	TB 1	639-9005	94987
5120-00-684-0404	WRENCH, TORQUE	1 EA.	TB 1	GGG-W-686	81348
5120-00-890-7816	WRENCH, TORQUE	1 EA.	DR 4	TQS-6-FU	55719

APPENDIX A - REFERENCES

A-1. MAINTENANCE

TM 9-2330-238-14&P

Operator's Organizational, Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Semi-trailer, van, Shop) Folding Side, 6 Ton, 4-Wheel w/Air Conditioning, M447C.

A-2 . SHIPMENT AND LIMITED STORAGE

TM 740-90-1

Administrative Storage of Equipment.

A-3 . DESTRUCTION OF EQUIPMENT

TM 750-244-3

Procedures for Destruction of Equipment to Prevent Enemy Use.

A-4 . SUPPLY PUBLICATIONS

SC 4940-95-CL-B06

Sets, Kits, Outfits Components List Shop Equipment, Electronic Repair Semi-trailer Mounted.

A-5 . PREVENTIVE MAINTENANCE

DA-PAM 738-750

The Army Equipment Record System and Procedures.

By Order of the Secretary of the Army:

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

Official:

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

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PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
3-9		2	

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Item 9, Screw, Shows QTY 3, should be QTY 4.

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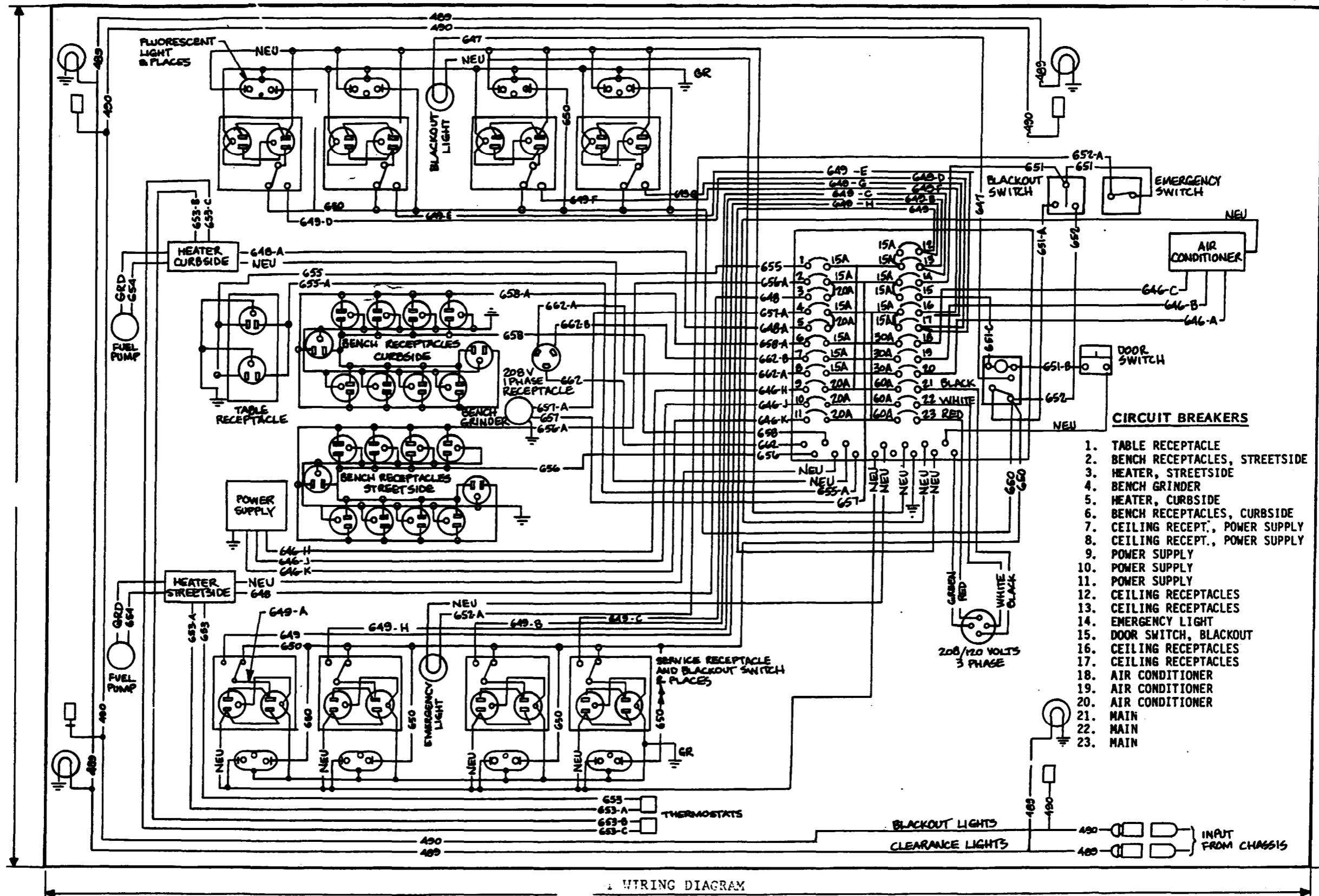
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**THE METRIC SYSTEM AND EQUIVALENTS**

**LINEAR MEASURE**

1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches  
 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches  
 1 Kilometer = 1000 Meters = 0.621 Miles

**SQUARE MEASURE**

1 Sq Centimeter = 100 Sq Millimeters = 0.155 Sq Inches  
 1 Sq Meter = 10,000 Sq Centimeters = 10.76 Sq Feet  
 1 Sq Kilometer = 1,000,000 Sq Meters = 0.386 Sq Miles

**WEIGHTS**

1 Gram = 0.031 Kilograms = 1000 Milligrams = 0.035 Ounces  
 1 Kilogram = 1000 Grams = 2.2 Lb  
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

**CUBIC MEASURE**

1 Cu Centimeter = 1000 Cu Millimeters = 0.06 Cu Inches  
 1 C. Meter = 1,000,000 Cu Centimeters = 35.31 Cu Feet

**LIQUID MEASURE**

1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces  
 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

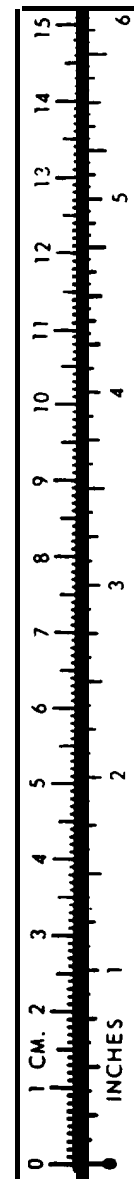
**TEMPERATURE**

$5/9 (°F - 32) = °C$   
 212° Fahrenheit is equivalent to 100° Celsius  
 90° Fahrenheit is equivalent to 32.2° Celsius  
 32° Fahrenheit is equivalent to 0° Celsius  
 $9/5C° + 32 = F°$

**APPROXIMATE CONVERSION FACTORS**

<u>TO CHANGE</u>	<u>TO</u>	<u>MULTIPLY BY</u>
Inches . . . . .	Centimeters . . . . .	2.540
Feet . . . . .	Meters . . . . .	0.305
Yards . . . . .	Meters . . . . .	0.914
Miles . . . . .	Kilometers . . . . .	1.609
Square Inches . . . . .	Square Centimeters . . . . .	6.451
Square Feet . . . . .	Square Meters . . . . .	0.093
Square Yards . . . . .	Square Meters . . . . .	0.836
Square Miles . . . . .	Square Kilometers . . . . .	2.590
Acres . . . . .	Square Hectometers . . . . .	0.405
Cubic Feet . . . . .	Cubic Meters . . . . .	0.028
Cubic Yards . . . . .	Cubic Meters . . . . .	0.765
Fluid Ounces . . . . .	Milliliters . . . . .	29.573
Pints . . . . .	Liters, . . . . .	0.473
Quarts . . . . .	Liters, . . . . .	0.946
Gallons . . . . .	Liters, . . . . .	3.785
Ounces . . . . .	Grams . . . . .	28.349
Pounds . . . . .	Kilograms . . . . .	0.454
Short Tons . . . . .	Metric Tons . . . . .	0.907
Pound-Feet . . . . .	Newton-Meters . . . . .	1.356
Pounds per Square Inch . . . . .	Kilopascals . . . . .	6.895
Miles per Gallon . . . . .	Kilometers per Liter . . . . .	0.425
Miles per Hour . . . . .	Kilometers per Hour . . . . .	1.609

<u>TO CHANGE</u>	<u>TO</u>	<u>MULTIPLY BY</u>
Centimeters . . . . .	Inches . . . . .	0.394
Meters . . . . .	Feet . . . . .	3.280
Meters . . . . .	Yards . . . . .	1.094
Kilometers . . . . .	Miles, . . . . .	0.621
Square Centimeter . . . . .	Square Inches . . . . .	0.155
Square Meters . . . . .	Square Feet . . . . .	10.764
Square Meters . . . . .	Square Yards . . . . .	1.196
Square Kilometers . . . . .	Square Miles . . . . .	0.386
Square Hectometers . . . . .	Acres . . . . .	2.471
Cubic Meters . . . . .	Cubic Feet . . . . .	35.315
Cubic Meters . . . . .	Cubic Yards . . . . .	1.308
Milliliters . . . . .	Fluid Ounces . . . . .	0.034
Liters . . . . .	Pints . . . . .	2.113
Liters . . . . .	Quarts . . . . .	1.057
Liters . . . . .	Gallons . . . . .	0.264
Grams . . . . .	Ounces . . . . .	0.035
Kilograms . . . . .	Pounds . . . . .	2.205
Metric Tons . . . . .	Short Tons . . . . .	1.102
Newton-Meters . . . . .	Pound-Feet . . . . .	0.738
Kilopascals . . . . .	Pounds per Square Inch . . . . .	0.145
Kilometers per Liter . . . . .	Miles per Gallon . . . . .	2.354
Kilometers per Hour . . . . .	Miles per Hour . . . . .	0.621



**TM 9-4940-547-14&P, SHOP EQUIPMENT, ELECTRICAL REPAIR,  
SEMI-TRAILER MOUNTED  
(NSN 4940-01-110-7422)**