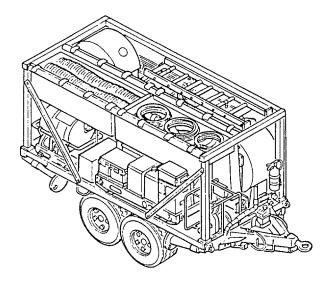
UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL



LAUNDRY UNIT, TRAILER MOUNTED, M85 MODEL: M85-200 NSN 3510-01-365-5687

EQUIPMENT DESCRIPTION AND DATA	1-5	
UNIT MAINTENANCE	2-1	
UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)	2-6	
UNIT TROUBLESHOOTING	2-17	
DIRECT SUPPORT MAINTENANCE	3-1	
DIRECT SUPPORT TROUBLESHOOTING	3-4	
GENERAL SUPPORT MAINTENANCE	4-1	
MAINTENANCE ALLOCATION CHART	B-1	

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited

CHANGE

NO. 1

HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON, D.C., 29 November 1994

Unit, Direct Support, and General Support Maintenance Manual

LAUNDRY UNIT, TRAILER MOUNTED, M85 MODEL: M85-200 NSN: 3510-01-365-5687

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

TM 10-3510-222-24, dated 30 December 1993, 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

3-77 through 3-80 3-77 through 3-80 3-93 and 3-94 3-93 and 3-94

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

By Order of the Secretary of the Army:

Official:

mitte of dento

GORDON R. SULLIVAN General, United States Ann y Chief of Staff

MILTON H. HAMILTON

Adm inistrative Assistant to the

Secretary of the Arm y

07729

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25-E, block no. 6193, requirements for TM 10-3510-222-24.

CARBON MONOXIDE (EXHAUST GAS) CAN KILL YOU

Carbon monoxide is without color or smell, but can kill you. Breathing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, a sleepy feeling, and coma. Brain damage or death can result from heavy exposure. Carbon monoxide occurs in the exhaust fumes of fuel-burning heaters and internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of no ventilation.

Precautions must be followed to ensure operator's safety when the Laundry Unit is in operation.

- DO NOT operate Laundry Unit in an enclosed area without proper ventilation.
- BE ALERT at all times during operating procedures for carbon monoxide poisoning. If exposure is present IMMEDIATELY evacuate personnel to fresh air.
- BE AWARE the field protection mask used for nuclearbiological-chemical attack WILL NOT protect you from carbon monoxide poisoning.

THE BEST DEFENSE AGAINST CARBON MONOXIDE POISONING IS GOOD VENTILATION.

WARNING

ELECTRICAL HIGH VOLTAGE CAN KILL YOU

Electrical high voltage cannot be seen but it can kill you. Electricity is unlike most other dangerous things you can come in contact with because it gives no warning and no symptoms to be wary of. Its effect is immediate. It can kill you, render you unconscious, or severely burn you. To ensure your safety and that of other maintenance personnel, always observe the following precautions:

- DO NOT perform any maintenance on electrical equipment unless all power is removed.
- BE CERTAIN that there is someone assisting you who can remove power immediately.
- ALWAYS place POWER OFF warning tags on power supply switches so that no one will apply power while you are performing maintenance.
- FOR ARTIFICIAL RESPIRATION, REFER TO FM 21-11.

JEWELRY

Remove rings, bracelets, wristwatches, and neck chains before working around or on the Laundry Unit. Jewelry can catch on equipment and cause injury, or may short across an electrical circuit and cause severe burns or electrical shock.

WARNING

GROUNDING BEFORE OPERATION

Do not operate the unit until the ground terminal stud of the enginegenerator set has been connected to a suitable ground. Electrical faults in the engine-generator set, load lines, or load equipment can cause death by electrocution from contact with an ungrounded system.

WARNING

DURING OPERATION

Do not make or change electrical connections while the unit is in operation. The voltage generated by the engine-generator can cause death by electrocution. Keep moisture away from the engine-generator and keep the surrounding area dry when operating the unit. Failure to observe this warning may result in death by electrocution.

WARNING

COMPRESSED AIR

Death or serious injury could occur if compressed air is directed against the skin. Do not use compressed air for cleaning or drying unless the pressure is/has been reduced to 30 psi (211 kPag) or less. When working with compressed air, always use chip guards, eye protection and other personnel protective equipment.

WARNING

FROSTBITE

Do not touch cold metal parts with bare hands. Frostbite can cause permanent injury to personnel.

CLEANING

Do not direct high-pressure water hose nozzles or steam cleaner nozzles into electrical connections/junction boxes. Electrical shock can kill you.

WARNING

MOVING PARTS

Be careful not to come in contact with rotating belts or other moving parts. To do so will cause serious injury.

WARNING

FLAMMABLE FUELS

Fuels are toxic and flammable. Wear protective goggles and refuel only in a well ventilated area. Avoid contact with skin, eyes, and clothes and don't breathe vapors. Do not use near open flame or excessive heat. If you become dizzy, get fresh air immediately and get medical aid. If contact with eyes or skin is made, immediately flush with clean water and get medical aid for eyes immediately.

WARNING

EAR PROTECTION

Serious hearing loss or deafness could occur if this equipment is operated without professionally-fitted ear protection for operating and maintaining personnel. The noise level for this equipment exceeds the allowable limits for unprotected personnel. Unprotected/unnecessary personnel must be kept out of the immediate area.

WARNING

LIFTING AND HOISTING

Do not allow anyone under equipment suspended from a lifting device. Do not allow the unit to swing while suspended from a lifting device. Components of this laundry are heavy and may be awkward to handle. Serious injury could occur if heavy equipment is moved/lifted without sufficient personnel to do the job. Use proper physical lifting procedures or use a suitable lifting device or dolly. Wear safety shoes, gloves, and other suitable protective clothing.

SOLDER/WELDING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied. Death can result.

WARNING

FLAMMABLE SOLVENT

Drycleaning solvent P-D-680 is toxic and flammable. Wear protective goggles and gloves and use only in a well-ventilated area. Avoid contact with skin, eyes, and clothes. Do not breathe vapors. Do not use near open flame or excessive heat. The flash point is 100°-138°F (38°-59°C). If you become dizzy while using cleaning solvent, get fresh air immediately and get medical aid. If contact with eyes is made, immediately flush with clean water and get medical aid immediately.

WARNING

PRESSURIZED SYSTEM

Relieve all pressure from laundry unit air system before disconnecting air system lines and fittings. Wear safety glasses and stand clear of loosened air line fitting. High pressure air can propel debris at high speeds, causing eye injury or blindness.

TECHNICAL MANUAL

NO: 10-3510-222-24

HEADQUARTERS DEPARTMENT OF THE ARMY WASHINGTON D.C., 30 December 1993

UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL

LAUNDRY UNIT, TRAILER MOUNTED, M85 MODEL: M85-200 (NSN 3510-01-365-5687)

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

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, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished to you.

TABLE OF CONTENTS

		PAGE
	HOW TO USE THIS MANUAL	viii
CHAPTER 1	INTRODUCTION	1-1
Section I	General Information	1-1
Section II	Equipment Description and Data	1-5
Section III	Principles of Operation	1-12
CHAPTER 2	UNIT MAINTENANCE	2-1
Section I	Lubrication Instructions	2-3
Section II	Repair Parts, Tools, Special Tools; Test, Measurement, and Diagnostic Equipment (TMDE); and Support Equipment	2-4
Section III	Service Upon Receipt	2-5
Section IV	Unit Preventive Maintenance Checks and Services (PMCS)	2-6
Section V	Unit Troubleshooting	2-17
Section VI	Unit Maintenance Procedures	2-31

TM 10-3510-222-24

TABLE OF CONTENTS - continued.

		PAGE
CHAPTER 3	DIRECT SUPPORT MAINTENANCE	3-1
Section I	Direct Support General	3-3
Section II	Direct Support Troubleshooting.	3-4
Section III	Direct Support Maintenance Procedures	3-12
CHAPTER 4	GENERAL SUPPORT MAINTENANCE	4-1
Section I	Lubrication Instructions	4-2
Section II	Repair Parts, Tools, Special Tools; Test, Measurement and Diagnostic Equipment (TMDE); and Support Equipment	4-2
Section III	General Maintenance Procedures	4-3
Section IV	Preparation For Storage Or Shipment	4-10
	LIST OF APPENDICES	
APPENDIX A	REFERENCES	A-1
APPENDIX B	MAINTENANCE ALLOCATION CHART	B-1
APPENDIX C	MANDATORY REPLACEMENT PARTS	C-1
APPENDIX D	EXPENDABLE AND DURABLE ITEMS LIST	D-1
APPENDIX E	TORQUE LIMITS	E-1
APPENDIX F	CABLE DIAGRAMS	F-1
APPENDIX G	ILLUSTRATED LIST OF MANUFACTURED ITEMS	G-1
	INDEX	NDFX 1

LIST OF ILLUSTRATIONS

NUMBER	TITLE
Figure 1-0	Laundry Unit
Figure 1-1	Laundry Unit Components Location
Figure 2-0	Walk-Around PMCS Routing
Figure 2-1	Ladder
Figure 2-2	Basket(s)
Figure 2-3	Strut
Figure 2-4	Right Beam
Figure 2-5	Center Beam
Figure 2-6	Left Beam
Figure 2-7	Front Frame
Figure 2-8	Rear Frame
Figure 2-9	Platform Anchor
Figure 2-10	Upright Rail
Figure 2-11	Sound Controlling Panels
Figure 2-12	Lower Track
Figure 2-13	Lower/Dryer Platforms
Figure 2-14	Quick Disconnect Cap
Figure 2-15	Drain Pipe
Figure 2-16	Tub Pipe
Figure 2-17	Lock Cover and Lock
Figure 2-18	Belt Guard
Figure 2-19	Motor and Plate
Figure 2-20	Air Tank
Figure 2-21	Pressure Gage
Figure 2-22	Air Manifold
Figure 2-23	Air Compressor
Figure 2-24	Filter
Figure 2-25	Pre-Extractor Bin (Wet Wash Bin)
Figure 2-26	Extractor Piping
Figure 2-27	Extractor Lid and Knob
Figure 2-28	Basket and Curb Assembly
Figure 2-29	Indicator Light
Figure 2-30	Drive Unit
Figure 2-31	Motor Assembly
Figure 2-32	Nonmetallic Hoses (Fuel Lines)
Figure 2-33	Modified M85 Water Heater
Figure 2-34	Clamp
Figure 2-35	Piping
	· ·-··- 3 ·····

LIST OF ILLUSTRATIONS- continued

NUMBER	TITLE	Ρ
Figure 2-36	Bracket Assembly (Nonmetallic Hose)	2
Figure 2-37	Fluid Filter	2
Figure 2-38	Adapter	2
Figure 2-39	Blower	2
Figure 2-40	Shutter	2
Figure 2-41	Air Shutter and Plenum	2
Figure 2-42	Rotary Pump	2
Figure 2-43	Gas-Oil Combustion Burner	2
Figure 2-44	Ignition Cables, Sight Eye, Nozzle, Fuel Piping, and Electrodes	2
Figure 2-45	Transformer and Box	2
Figure 2-46	Speed Reducer	2
Figure 2-47	Light	2
Figure 2-48	Light Bulb	2
Figure 2-49	Buzzer	3
Figure 2-50	Thermostatic Switch	3
Figure 2-51	Temperature Control	3
Figure 2-52	Thermometer	3
Figure 2-53	Door	2
Figure 2-54	Door Switch	2
Figure 2-55	Door Switch Installation and Adjustment	2
Figure 2-56	Discharge Spout	2
Figure 2-57	Exhaust Elbow	2
Figure 2-58	Exhaust Adapter	2
Figure 2-59	Fan and Motor	2
Figure 2-60	Solenoid Nonmetallic Hose Valve	2
Figure 2-61	Shield	2
Figure 2-62	Cable (Water Pump)	2
Figure 2-63	Tiedown	2
Figure 2-64	Centrifugal Pump Unit (Water Pump)	2
Figure 2-65	Sediment Strainer and Outlet Piping	2
Figure 2-66	Connector-Switch	2
Figure 2-67	Suction Strainer	2
Figure 2-68	Fire Extinguisher/Bracket	2
Figure 2-69	Bracket	2
Figure 2-70	Tool Box	2
Figure 2-71	Modified Generator	2
Figure 2-72	Cover	2
Figure 2-73	Ground Rod	2

LIST OF ILLUSTRATIONS- continued

NUMBER	TITLE
Figure 2-74	Hose(s) and Quick Coupling Half
Figure 2-75	Modified Trailer
Figure 3-1	Tarpaulin
Figure 3-2	Ladder
Figure 3-3	Basket(s)
Figure 3-4	Front and Rear Frames
Figure 3-5	Strut
Figure 3-6	Right, Center and Left Beams
Figure 3-7	Upright Rail
Figure 3-8	Lower Track
Figure 3-9	Maintenance Platform
Figure 3-10	Short Platform
Figure 3-11	Lower/Dryer Platform
Figure 3-12	Two Step Stair
Figure 3-13	Washer Drain
Figure 3-14	Washer
Figure 3-15	Door and Bar
Figure 3-16	Reducer and Output Quill
Figure 3-17	Seal and Carriage
Figure 3-18	Basket
Figure 3-19	Drum
Figure 3-20	Frame
Figure 3-21	Control Console
Figure 3-22	Control Panel
Figure 3-23	Interval Timer
Figure 3-24	Chassis Control
Figure 3-25	Compressor and Motor
Figure 3-26	Controller Stand
Figure 3-27	Conduit
Figure 3-28	Power Cable
Figure 3-29	Enclosure Box
Figure 3-30	Power Panel
Figure 3-31	Pre-Extractor Bin
Figure 3-32	Extractor Piping
Figure 3-33	Laundry Extractor
Figure 3-34	Hinge Shaft Assembly
Figure 3-35	Pushbutton Switch
Figure 3-36	Indicator Light

LIST OF ILLUSTRATIONS- continued

NUMBER	TITLE	PAGE
Figure 3-37	Extractor Starter Enclosure Removal	3-103
Figure 3-38	Extractor Starter Enclosure Repair	3-104
Figure 3-39	Extractor Starter Enclosure Installation	3-105
Figure 3-40	Drive Unit	3-107
Figure 3-41	Extractor Brake	3-109
Figure 3-42	Oil Housing	3-112
Figure 3-43	Oil Housing Adjustment	3-115
Figure 3-44	Lid Closed Switch	3-117
Figure 3-45	Lid Locked Switch	3-119
Figure 3-46	Overvoltage Absorber (Rotation Monitor)	3-121
Figure 3-47	Solid State Relay	3-123
Figure 3-48	Timer	3-125
Figure 3-49	Terminal Board	3-127
Figure 3-50	Lid Locked Solenoid and Linkage	3-129
Figure 3-51	Control Panel	3-131
Figure 3-52	Skirt and Leveling Arm	3-132
Figure 3-53	Skirt and Leveling Arm Repair	3-134
Figure 3-54	Dryer	3-137
Figure 3-55	Rotary Pump	3-139
Figure 3-56	Speed Reducer	3-141
Figure 3-57	Motor Starter	3-143
Figure 3-58	Dryer Panel	3-145
Figure 3-59	ON/OFF Switch	3-147
Figure 3-60	Timer	3-149
Figure 3-61	UV Scanner and Terminal Box	3-151
Figure 3-62	Flame Control	3-153
Figure 3-63	Plug-in Relay (K4)	3-155
Figure 3-64	Tumbler Motor Control Relay (K2)	3-157
Figure 3-65	Terminal Board	3-159
Figure 3-66	Hot Air Blower	3-161
Figure 3-67	Trunnion	3-163
Figure 3-68	Trunnion Repair	3-165
Figure 3-69	Roller Chain	3-168
Figure 3-70	Heater	3-170
Figure 3-71	Heater Repair	3-172
Figure 3-72	Heater Base	3-174

TM 10-3510-222-24

LIST OF ILLUSTRATIONS- continued

NUMBER	TITLE	PAGE
Figure 3-73	Heater Screen	3-175
Figure 3-74	Tumbler Barrel	3-177
Figure 3-75	Tumbler Barrel Repair	3-178
Figure 3-76	Cylinder	3-181
Figure 3-77	Tumbler Motor-Base Control Box Conduit	3-183
Figure 3-78	Transformer Box - Control Conduit Removal	3-184
Figure 3-79	Transformer Box - Control Conduit Installation	3-186
Figure 3-80	Dryer Base	3-188
Figure 3-81	Dryer Bin	3-189
Figure 4-1	AĆ Motor	4-6
Figure 4-2	AC Motor and Conduit Box	4-9

LIST OF TABLES

TITLE	PAGE
Equipment Specifications	1-9
Unit Preventive Maintenance Checks and Services for M85-200	2-9
Unit Laundry Unit Main Power Troubleshooting Procedures	2-19
Unit Washer Troubleshooting Procedures	2-20
Unit Air Compressor Troubleshooting Procedures	2-23
Unit Dryer Troubleshooting Procedures	2-25
Unit Extractor Troubleshooting Procedures	2-28
Unit Centrifugal Pump Unit Troubleshooting Procedures	2-29
Direct Support Laundry Unit Troubleshooting Procedures	3-6
Direct Support Washer Troubleshooting Procedures	3-7
Direct Support Dryer Troubleshooting Procedures	3-9
Direct Support Extractor Troubleshooting Procedures	3-11
	Unit Preventive Maintenance Checks and Services for M85-200 Unit Laundry Unit Main Power Troubleshooting Procedures Unit Washer Troubleshooting Procedures Unit Air Compressor Troubleshooting Procedures Unit Dryer Troubleshooting Procedures Unit Extractor Troubleshooting Procedures Unit Centrifugal Pump Unit Troubleshooting Procedures Direct Support Laundry Unit Troubleshooting Procedures Direct Support Washer Troubleshooting Procedures Direct Support Dryer Troubleshooting Procedures

HOW TO USE THIS MANUAL

Be sure you read all Warnings before using your equipment.

This manual contains maintenance instructions for the Laundry Unit.

- General Introduction On the cover of the manual are boxes near the right-hand edge with subject titles in them. Bend the pages of the manual and look for a black bar on the right side of the page that corresponds with the subject matter you want. At the beginning of each chapter, there is an index for quick reference for the subject matter of that chapter. The Table of Contents lists the Chapters and Sections of this manual for an easy index. A List of Illustrations and List of Tables follow the Table of Contents for easy reference to illustrations and tables.
- Chapter 1 Introduces you to the equipment and gives you information such as weight, height, length, common abbreviations and information on how the unit works. The chapter is preceded by a full page illustration of the equipment.
- Chapter 2 Provides unit maintenance personnel with troubleshooting procedures for identifying equipment malfunctions, PMCS and maintenance instructions for repair of defective equipment.
- Chapter 3 Provides direct support maintenance personnel with troubleshooting and maintenance instructions for performing repairs on equipment as authorized by the maintenance allocation chart.
- Appendix A List frequently used forms and publications referenced or used in this manual.
- Appendix B Maintenance Allocation Chart identifies repairable components and the maintenance level authorized to perform repairs.
- Appendix C Mandatory Replacement Parts List identifies all parts that have to be changed when maintenance is performed by item number, nomenclature, and part number.
- Appendix D Provides information about expendable supplies such as sealants, lubricants, chemicals, etc. that are used when operating or maintaining equipment.
- Appendix E Torque limits that provide general torque limits for fasteners.
- Appendix F Cable diagrams show the electrical diagrams of the Laundry Unit wiring.
- Appendix G Illustrated List of Manufactured Items.
- The Index can be found at the end of this manual for easy alphabetical reference.

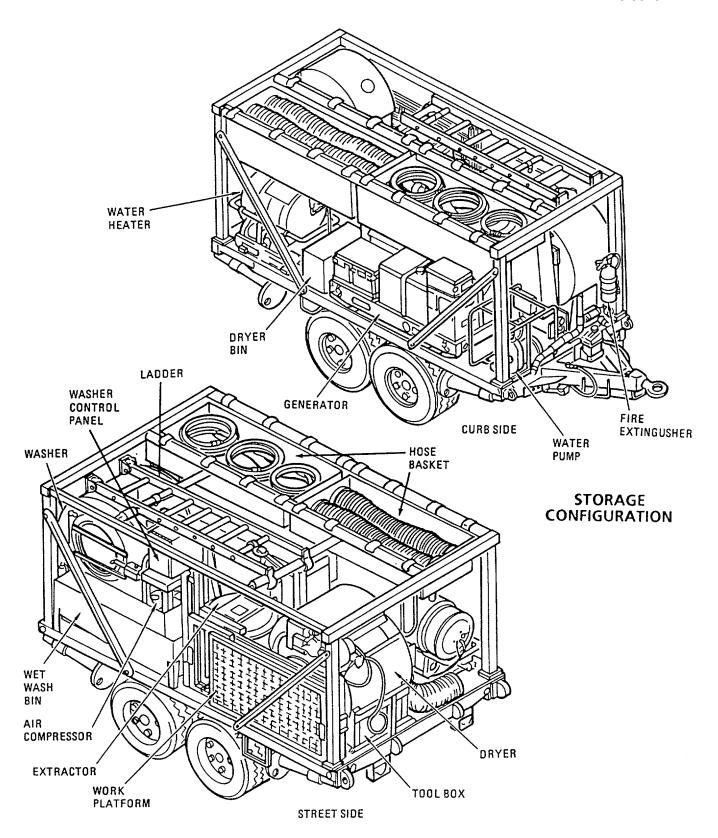


Figure 1-0. Laundry Unit

CHAPTER 1

INTRODUCTION

PARAGRAPH	TITLE	PAGE
Section I.	General Information	1-1
1-1.	Scope	1-1
1-2.	Maintenance Forms, Records and Reports	1-1
1-3.	Corrosion Prevention and Control (CPC)	1-1
1-4.	Destruction Of Army Materiel To Prevent Enemy Use	1-2
1-5.	Reporting Equipment Improvement Recommendations (EIR)	1-2
1-6.	Preparation for Storage or Shipment	1-2
1-7.	Nomenclature Cross-Reference List	1-2
1-8.	List of Abbreviations	1-3
1-9.	Glossary	1-4
Section II.	Equipment Description and Data	1-5
1-10.	Equipment Characteristics, Capabilities and Features	1-5
1-11.	Location and Description of Major Components	1-5
1-12.	Equipment Data	1-9
Section III.	Principles of Operation	1-12
1-13.	Introduction	1-12

Section I. GENERAL INFORMATION

1-1. SCOPE.

This manual describes the unit, direct support, and general support maintenance procedures required to repair and maintain the M85-200 Laundry Unit. The purpose of the equipment is to provide troop units and hospitals with field laundry service.

1-2. MAINTENANCE FORMS, RECORDS AND REPORTS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750 [The Army Maintenance Management System (TAMMS)].

1-3. CORROSION PREVENTION AND CONTROL (CPC).

a. Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any problems with this item be reported so the problem can be corrected and improvements made to prevent the problem in future items.

1-3. CORROSION PREVENTION AND CONTROL (CPC) - continued.

- b. While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.
- c. If a corrosion problem is identified, it can be reported using SF 368, (Product Quality Deficiency Report). Check the box to indicate that the problem may be corrosion-related. Using key words such as "rust", "deterioration", "pitting", or "cracking" or even including color photos of the corroded area will aid problem diagnosis and solution.
- d. Submit completed SF 368 to Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798.

1-4. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

Methods and procedures for destruction of Army materiel to prevent enemy use are covered in TM 750-244-3.

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

If your Laundry Unit needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Product Quality Deficiency Report). Mail it to: Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Boulevard, St. Louis, MO 631201798. We will send you a reply.

1-6. PREPARATION FOR STORAGE OR SHIPMENT.

Refer to paragraph 4-8 for preparation for storage or shipment.

1-7. NOMENCLATURE CROSS-REFERENCE LIST.

This paragraph includes the nomenclature cross-reference list between common names and official nomenclature.

Common Name	Official Nomenclature
Air Compressor	Compressor Assembly, Air
Dryer	Dryer Assembly, Tumbler
Dryer Bin	Bin Assembly, Dryer

1-7. NOMENCLATURE CROSS-REFERENCE LIST -continued.

Common Name Official Nomenclature Extractor..... **Extractor Assembly** Fuel Pump Rotary Pump Generator Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 10 Kw, 3 Phase, 120/208 Volts (60 Hz) Laundry Unit..... Laundry Unit, Trailer Mounted, M85 Power Cable Assembly Main Power Cable Trailer Trailer, Flat-bed, Gen. Purpose, 5 Ton, 4 Wheel, XM1061E1 Washing Machine, Laundry, Open-End Type Washer Washer Control Panel Control Panel, Controller, Washer Stand, Controller, Washer Washer Control Stand Washer Formula Card Uniform Nurse Timer Card Bin Assembly, Pre-Extractor Wet Wash Bin Work Platform Platform Assembly

1-8. LIST OF ABBREVIATIONS.

This paragraph includes a list consisting of all abbreviations, acronyms, signs, or symbols used in this manual.

<u>Abbreviation</u>	<u>Nomenclature</u>
ac	Alternating Current
App	Appendix
AR	As Required
BDU	Battle Dress Uniform
CAGE	Commercial And Government Entity
CW	Clockwise
CCW	Counterclockwise
dia	Diameter
ea	Each
EIR	Equipment Improvement Recommendation
ft	Foot
gpm	Gallons per Minute
Hz	Hertz
hp	Horsepower
in	Inch
kg	Kilogram(s)
kPa	Kilopascal(s)
m	Meter(s)
NA	Not Applicable
QD	Quick Disconnect
qt	Quart
rpm	Revolutions per Minute
ÚV	Ultra Violet

1-8. LIST OF ABBREVIATIONS - continued.

vac	Volts Alternating Current
W	Watt(s)
wt	Weight

1-9. GLOSSARY.

The glossary includes terms that are not adequately defined in this manual.

Extract - To remove most of the water from a wet wash load by spinning load in a perforated drum.

Hertz - Cycles per second of electrical current.

Tumbler - Horizontal, rotating drum that tosses wash load about and effects more efficient washing or drying.

Section II. EQUIPMENT DESCRIPTION AND DATA

1-10. EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES.

- a. <u>Characteristics</u>. The Laundry Unit is to be used in the field to provide troop units and hospitals with field laundry service. The Laundry Unit is mounted on a tandem-wheel trailer.
- b. Capabilities and Features.
 - (1) Capable of providing washing and drying 120 pounds (54 kg) of cotton, woolen, and durable press items in one hour, with two operators.
 - (2) Powered by a generator.
 - (3) Designed to pump water from an available source (e.g. lake, river, or stream).
 - (4) Heat water to desired temperature for washing laundry.
 - (5) Extract water from clothes in the extractor.
 - (6) Completely dries washed and extracted laundry in the dryer.
 - (7) The Laundry Unit can also be used for the decontamination of personnel clothing from chemical and bacteriological warfare agents and radioactive materials.

1-11. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

- a. <u>Over Pack</u>. To provide room for all operating components, material is stored in layers inside the Laundry Unit during transportation and storage. The following figure describes major components which can be identified after unpacking the unit.
- b. <u>Laundry Unit Components</u>. Refer to Figure 1-1.

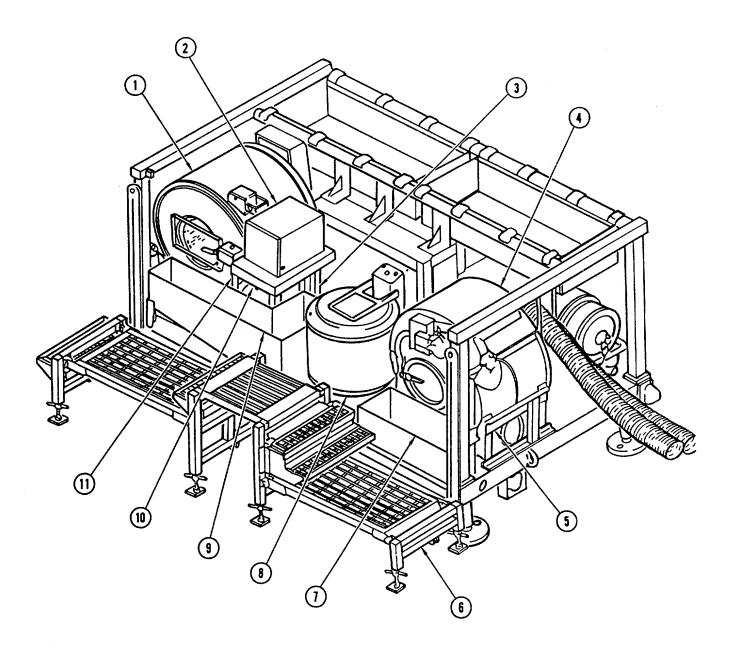


Figure 1-1. Laundry Unit Components Location (Sheet 1 of 2)

1-11. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - continued.

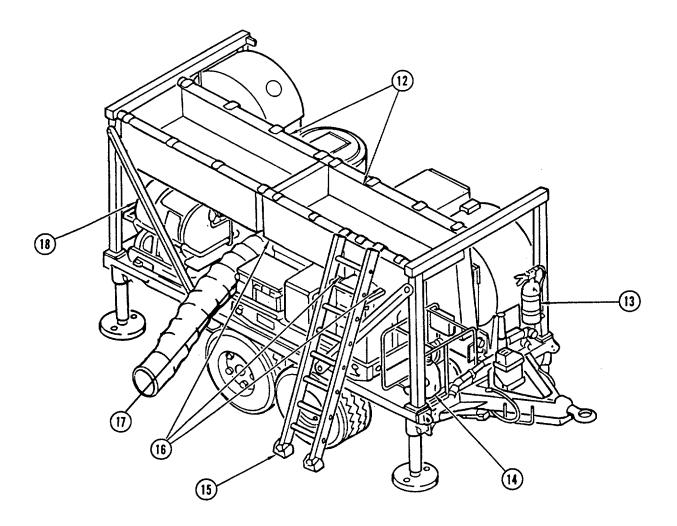


Figure 1-1. Laundry Unit Components Location (Sheet 2)

1-11. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - continued.

- **WASHER.** Washer is an open-end loader, reversible-type cylinder. The washer washes soiled clothes and linens during the wash cycle.
- **WASHER CONTROL PANEL.** Washer control panel controls the operation of the washer assembly.
- **POWER DISTRIBUTION PANEL.** Power distribution panel is located behind control stand and provides safety cutouts for electrical circuits.
- **DRYER.** Dryer assembly is an open-end, nonreversible-type cylinder. The dryer dries the clothes after they are removed from the extractor.
- **TOOL BOX.** Tool box is for storage of tools to be used on Laundry Unit.
- **WORK PLATFORM**. Work platform provides the operator with a place to stand and walk while operating the Laundry Unit.
- **DRYER BIN.** Dryer bin provides a holding place for the dry clothes after they are removed from the dryer. During transport, the dryer bin is stored on the right-hand side of the trailer.
- **EXTRACTOR**. Extractor is a heavy-duty, top-loading-type cylinder. It removes excess water from the clothes before they are placed in the dryer.
- **WET WASH BIN.** Wet wash bin provides a holding place for the wet clothes before they are placed in the extractor.
- AIR COMPRESSOR. Air compressor provides air pressure for the operation of the water valves and washer air tank.
- **WASHER CONTROL STAND.** Washer control stand is the housing for the controller and compressor.
- 12 HOSE BASKET. Hose basket provides storage for hoses, heater ducts, and other equipment.
- **FIRE EXTINGUISHER.** Portable fire extinguisher is provided for emergency use in case of fire.
- **WATER PUMP.** Water pump provides the necessary water needed for the Laundry Unit.
- **LADDER.** Ladder assists operator in reaching hose baskets.
- **SOUND DEADENING PANELS.** Sound deadening panels shield the operator from generator noise.
- 17 GENERATOR. Generator provides electrical power to major components of the Laundry Unit.
- **WATER HEATER.** Water heater heats incoming water to desired temperatures as needed for the washer.

1-12. EQUIPMENT DATA.

The following items are detailed information needed to maintain the equipment. See Table 1-1.

TABLE 1-1. EQUIPMENT SPECIFICATIONS		
Laundry Unit		
Model Number	M85-200	
Length	18 ft 2 in (5.54 m)	
Height	7 ft 10 in (2.39 m)	
Width	8 ft (2.44 m)	
Weight	12,570 lb (5,687 kg)	
Power Requirement	Class L, 60 amps, 208 vac, 3-phase	
Fuel Requirements	Diesel fuel	
Washer		
Model Number	36260EW/NAT 2	
Capacity	60 lb (27 kg)	
Weight	950 lb (428 kg)	
Maximum Speed	33 rpm	
Water Pressure Required	10 psi (69 kPa) minimum, 75 psi (517 kPa)	
·	maximum	
Air Pressure Required	30 psi (207 kPa) minimum, 110 psi (758 kPa)	
	maximum	
Motor		
Volts	208 vac	
Phase	3	
Frequency	60 Hz	
Amps	5.3 - 5/2.5	
Power Rating	1.5 hp (1119 W)	
Motor Speed	1725 rpm	
<u>Extractor</u>		
Model Number	605 MIL	
Capacity	30 lb (14 kg)	
Weight	609 lb (276 kg)	
Motor		
Volts	208/220 vac	
Phase	3	
Frequency	60 Hz	
Amps	9.3 amps	
Power Rating	3 hp (2237 W)	
Motor Speed	1750 rpm	
	•	

TABLE 1-1. EQUIPMENT SPECIFICATIONS - continued. Dryer Model Number LDU-300 Capacity 30 lb (14 kg) Weight 1060 lb (480 kg) Fuel..... Diesel Fuel or JP8 Burner Blower and Fuel Pump Motor Volts 200/230 vac Phase Frequency 60 Hz Amps 1.8 - 2.0/1.0Power Rating 1/2 hp (373 W) Motor Speed 3450 rpm Tumbler Cylinder Motor Volts 208 vac Phase 3 Frequency 60 Hz Amps 2.1 amps 1/2 hp (373 W) Power Rating Motor Speed 1725 rpm **Tumbler Exhaust Motor** Volts 208 vac Phase Frequency 60 Hz Amps 2.2 amps Power Rating 1/2 hp (373 W) Motor Speed 1725 rpm Air Compressor Model Number **GH-510B-PS** Weight 32 lb (14 kg) Motor Volts 208/230 vac Phase 3 Frequency 60 Hz Amps 2.0-1.9/.95 Power Rating 1/2 hp (373 W) Motor Speed 1725 rpm

TABLE 1-1. EQUIPMENT SPECIFICATIONS - continued.

Centrifugal Pump Unit

 Model Number
 4057E-3S

 Weight
 67 lb (30 kg)

head

Type Centrifugal, self-priming after initial prime

Pump Motor

 Amps
 5.0 - 4.6/2.3 amps

 Power Rating
 1.5 hp (1119 W)

 Motor Speed
 3450 rpm

Water Heater

Refer to TM 10-4520-259-13&P for Equipment Data.

Generator

Refer to TM 5-6115-585-12 for Equipment Data.

Trailer

Refer to TM 9-2330-376-14&P for Equipment Data.

Section III. PRINCIPLES OF OPERATION

1-13. INTRODUCTION.

The laundry system consists of the following functional systems:

- a. <u>Washer.</u> The washer is powered by an externally-mounted motor and drive train. The washer is controlled either automatically or manually and has a 60-pound (27 kg) capacity. Two 60-pound (27 kg) loads can be washed per hour in the automatic mode. Automatic operation is provided by a washer control console to regulate all functions of the laundry cycle. These functions are the number of washes and rinses, water level, and water temperature. Washer Formula Cards, used to operate the controller, are pre-punched with standard cycles. Blank Washer Formula Cards (10 each), with a card punch, are also supplied and can be used for different washing cycles depending on the length of cycle desired. Manual operation has a variable wash time of up to 60 minutes.
- b. <u>Extractor</u>. The extractor uses centrifugal force to extract water from the wash load prior to the drying process. It spins at 1700 rpms and is powered by a 3-hp (2237 W) motor. The extractor control has a 10-minute variable timer and has a load capacity of 30 pounds (14 kg) dry weight.
- c. <u>Dryer</u>. The dryer is powered by an externally-mounted motor and drive train. It has a capacity of 30 pounds (14 kg) per load, approximately four loads per hour. Controls provide for an adjustable range of 15 minutes for the drying cycle. Air is heated by a fuel fired air heater mounted on the dryer.
- d. <u>Water Heater</u>. The water heater heats incoming water for the washer. Refer to TM 10-4520259-13&P.
- e. <u>Centrifugal Pump Unit</u>. The portable, centrifugal-type water pump is mounted in a carrying frame. The pump is stored on the right front side of the trailer during transport. During use, it is placed near the water source and connected to the facility by a water output hose and power cable. After the initial prime, the pump will deliver 70 gallons (256 liters) of water per minute at a 25 foot (8 meters) head loss.
- f. <u>Air Compressor</u>. The air compressor provides air pressure for the operation of washer water intake and drain valves and the water heater hot water valve. The adjustable range of compressed air is 20 to 100 psi (138 to 690 kPa).
- g. <u>Generator</u>. The generator is mounted on the right-hand side of the trailer. Refer to TM 5-6115585-12 for general description. The Laundry Unit operates on 60-Hertz, 3-phase, 208 vac power. A power distribution panel provides power distribution from the generator to the components of the Laundry Unit. The panel includes the necessary circuit breakers for power distribution and safety to the facility components.
- h. <u>Trailer</u>. The trailer is the 5-ton, 4-wheel (tandem axle), flatbed type. Leveling jacks are on the four corners of the trailer to provide stability and level during operation of the Laundry Unit. Refer to TM 9-2330-376-14&P.

CHAPTER 2 UNIT MAINTENANCE

PARAGRAPH	TITLE	PAGE
Section I.	Lubrication Instructions	2-3
2-1.	Lubrication Orders	2-3
Section II.	Repair Parts, Tools, Special Tools; Test, Measurement, and Diagnostic Equipment (TMDE); and Support Equipment	2-4
2-2.	Common Tools and Equipment	2-4
2-3.	Special Tools, TMDE, and Support Equipment	2-4
2-4.	Repair Parts	2-4
Section III.	Service Upon Receipt	2-5
2-5.	Service Upon Receipt of Material	2-5
Section IV.	Unit Preventive Maintenance Checks and Services (PMCS).	2-6
2-6.	PMCS	2-6
2-7.	General Maintenance Procedures	2-7
2-8.	PMCS Table	2-8
Section V.	Unit Troubleshooting	2-17
2-9.	General	2-17
2-10.	Troubleshooting	2-17
Section VI.	Unit Maintenance Procedures	2-31
2-11.	General	2-31
2-12.	Ladder	2-33
2-13.	Basket(s)	2-35
2-14.	Strut	2-37
2-15.	Right Beam	2-39
2-16.	Center Beam	2-42
2-17.	Left Beam	2-45
2-18.	Front Frame	2-47
2-19.	Rear Frame	2-49
2-20.	Platform Anchor	2-52
2-21.	Upright Rail	2-53
2-22.	Sound Controlling Panels	2-54
2-23.	Lower Track	2-57
2-24.	Lower/Dryer Platforms	2-59
2-25.	Quick Disconnect Cap	2-62
2-26.	Drain Pipe	2-63
2-27.	Tub Pipe	2-68
2-28.	Lock Cover and Lock	2-72
2-29.	Belt Guard	2-76
2-30.	Motor and Plate	2-78
2-31.	Air Tank	2-81
2-32.	Pressure Gage	2-83
2-33.	Air Manifold	2-85
2-34.	Air Compressor	2-88
2-35.	Filter	2-91

PARAGRAPH	TITLE	Р
Section VI.	Unit Maintenance Procedures - continued	
2-36.	Pre-Extractor Bin (Wet Wash Bin)	
2-37.	Extractor Piping	
2-38.	Extractor Lid and Knob	
2-39.	Basket and Curb Assembly	
2-40.	Indicator Light	
2-41.	Drive Unit	
2-42.	Motor Assembly	
2-43.	Nonmetallic Hoses (Fuel Lines)	
2-44.	Modified M85 Water Heater	
2-45.	Clamp	
2-46.	Piping	
2-47.	Bracket Assembly (Nonmetallic Hose)	
2-47. 2-48.	Fluid Filter	
2-40. 2-49.		
	Adapter	
2-50.	Blower	
2-51.	Shutter	
2-52.	Air Shutter and Plenum	
2-53.	Rotary Pump	
2-54.	Gas-Oil Combustion Burner	
2-55.	Ignition Cables, Sight Eye, Nozzle, Fuel Piping, and Electrodes	
2-56.	Transformer and Box	
2-57.	Speed Reducer	
2-58.	Light	
2-59.	Light Bulb	
2-60.	Buzzer	
2-61.	Thermostatic Switch	
2-62.	Temperature Control	
2-63.	Thermometer	
2-64.	Door	
2-65.	Door Switch	
2-66.	Discharge Spout	
2-67.	Exhaust Elbow	
2-67. 2-68.	Exhaust Adapter	
2-69.	Fan and Motor	
2-70.	Solenoid Nonmetallic Hose Valve	
2-71.	Shield	
2-72.	Cable (Water Pump).	
2-73.	Tiedown	
2-74.	Centrifugal Pump Unit (Water Pump)	
2-75.	Sediment Strainer and Outlet Piping	
2-76.	Connector-Switch	
2-77.	Suction Strainer	
2-78.	Fire Extinguisher/Bracket	
2-79.	Bracket	
2-80.	Tool Box	
2-81.	Modified Generator	
2-82.	Cover	
2-83.	Ground Rod	
2-84.	Hose(s) and Quick Coupling Half	
2-85	Modified Trailer	

Section I. LUBRICATION INSTRUCTIONS

2-1. LUBRICATION ORDERS.

- a. Laundry Unit. Refer to LO-10-3510-222-12 for lubrication order.
- b. Generator. Refer to LO 5-6115-585-12 for lubrication order.
- c. <u>Trailer</u>. Refer to TM 9-2330-376-14&P for lubrication order.
- d. Water Heater. Refer to TM 10-4520-259-13&P for lubrication order.

Section II. REPAIR PARTS, TOOLS, SPECIAL TOOLS; TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE); AND SUPPORT EQUIPMENT

2-2. COMMON TOOLS AND EQUIPMENT.

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE), CTA 50-970 or CTA 8-100, applicable to your unit.

The tool kit SC 5180-90-CL-N26, General Mechanics Tool Kit is assigned to the mechanic by MOS.

2-3. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.

Refer to Appendix B, Maintenance Allocation Chart, TMDE, and Support Equipment and TM 10-3510-222-24P, Repair Parts and Special Tools List.

2-4. REPAIR PARTS.

Repair parts are listed and illustrated in the repair parts and special tools list, TM 10-3510-222-24P, covering repair parts for this equipment. Appendix C lists the Mandatory Replacement Parts which need to be replaced during maintenance.

Section III. SERVICE UPON RECEIPT

2-5. SERVICE UPON RECEIPT OF MATERIAL.

- a. <u>Laundry Unit</u>. Inspect Laundry Unit for damage incurred during shipment. If the equipment has been damaged, report the damage on SF 364, Report of Discrepancy.
- b. <u>Equipment</u>. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions in DA PAM 738-750 or DA PAM 738-751 as applicable.
- c. Trailer. Refer to TM 9-2330-376-14&P for service upon receipt of trailer.
- d. Generator. Refer to TM 5-6115-585-12 for service upon receipt of generator set.
- e: Water Heater. Refer to TM 10-4520-259-13&P for service upon receipt of water heater.
- f. <u>Depreservation</u>. Perform needed depreservation. Prepare Laundry Unit for inspection and operation as outlined in DA Form 2258. Make a thorough visual inspection of the Laundry Unit for loose or missing mounting hardware, parts and components.
- g. <u>Preventive Maintenance Checks and Services (PMCS)</u>. Perform the Before and Weekly preventive maintenance checks and services. (Refer to TM 10-3510-222-10.)
- h. <u>Lubrication Instructions</u>. Lubricate the unit in accordance with LO 10-3510-222-12, Laundry Unit.

Section IV. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

2-6. PMCS.

- a. <u>General</u>. Your Preventive Maintenance Checks and Services Table lists the inspections and care your equipment requires to keep it in good operating condition.
 - (1) <u>Quarterly Checks</u> Always observe the WARNINGS and CAUTIONS while performing your quarterly PMCS. Observe these WARNINGS and CAUTIONS to prevent serious injury to yourself and others or prevent your equipment from being damaged.
 - (2) If Your Equipment Fails To Operate If your equipment does not perform as required, refer to Troubleshooting for possible problems. Report any malfunctions or failures on the proper DA Form 2404 Equipment Inspection and Maintenance Worksheet, or refer to DA PAM 738-750, The Army Maintenance Management System (TAMMS).
- b. PMCS Columnar Entries. See Table 2-1.
 - (1) <u>Item number column</u>. Numbers in this column are for reference. When completing DA Form 2404 (Equipment Inspection and Maintenance Worksheet), include the item number for the check/service indicating a fault. Item numbers also appear in the order that you must do checks and services for the intervals listed.
 - (2) Interval column. This column tells you when you must do the procedure in the procedure column.
 - (3) <u>Location, item to check/service column</u>. This column provides the location and the item to be checked or serviced.
 - (4) <u>Procedure column</u>. This column gives the procedure you must do to check or service the item listed in the item to Check/Service column to know if the equipment is ready or available for its intended mission or for operation. You must do the procedure at the time stated in the interval column.
 - (5) Not fully mission capable if: column. Information in this column tells you what faults will keep your equipment from being capable of performing its primary mission. If you make check and service procedures that show faults listed in this column, do not operate the equipment. Follow standard operating procedures for maintaining the equipment or reporting equipment failure.

c. Special Instructions.

Leakage definitions for Unit PMCS shall be classified as follows:

NOTE

Equipment operation is allowable with minor leakage (Class I or II). Of course, you must consider the fluid capacity in the item/system being checked/inspected. When operating with Class I or II leaks, continue to check fluid levels as required in your PMCS. When in doubt, notify your supervisor.

2-6. PMCS - continued.

c. Special Instructions - continued.

NOTE

Class III leaks should be reported to your supervisor.

- (1) Class I. Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.
- (2) Class II. Leakage of fluid great enough to form drops but not enough to cause drops to drip from item being checked/inspected.
- (3) Class III. Leakage of fluid great enough to form drops that fall from the item being checked/inspected.

2-7. GENERAL MAINTENANCE PROCEDURES.

As you perform your PMCS, keep in mind the following:

- a. Cleanliness. Dirt, grease, oil, and debris only get in the way and may cover up a serious problem.
- b. <u>Bolts, Nuts, and Screws</u>. Check them all for obvious looseness and missing, bent, or broken condition. You cannot try them all with a tool, of course, but look for chipped paint, bare metal, or rust around bolt heads. If you find a problem, report it to your supervisor.
- c. <u>Welds</u>. Look for loose or chipped paint, rust, or gaps where parts are welded together. If you find a bad weld, report it to your supervisor.
- d. <u>Electrical Wires and Connections</u>. Look for cracked or broken insulation, bare wires, and loose or broken connectors. Tighten loose connections and make sure the wires are in good condition. If you find a bad wire or connector, report it to your supervisor.
- e. <u>Water Lines and Fittings</u>. Look for wear, damage, and leaks. Make sure clamps and fittings are tight. Wet spots show leaks, but a stain around a fitting or connector can mean a leak. If a leak comes from a loose fitting or connector, or if something is broken or worn out, report it to your supervisor.

f. Corrosion Control

- (1) Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any problems with this item be reported so the problem can be corrected and improvements made to prevent the problem in future items.
- (2) While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.
- (3) If a corrosion problem is identified, it can be reported using SF 368, (Product Quality Deficiency Report). Check the box to indicate that the problem may be corrosion-related. Using key words such as "rust," "deterioration," "pitting," or "cracking" or even including color photos of the corroded area will aid problem diagnosis and solution.

2-7. GENERAL MAINTENANCE PROCEDURES - continued.

(4) Submit completed SF 368 to Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798.

2-8. PMCS TABLE.

- a. See Table 2-1 for PMCS.
- b. Generator Set. Refer to TM 5-6115-585-12 for PMCS.
- c. Trailer. Refer to TM 9-2330-376-14&P for PMCS.
- d. Water Heater. Refer to TM 10-4520-259-13&P for PMCS.
- e. <u>Walk-Around PMCS</u>. Routing (Figure 2-0) will be of help to complete PMCS. It shows Laundry Unit PMCS routing track which matches the sequence of PMCS to be performed.

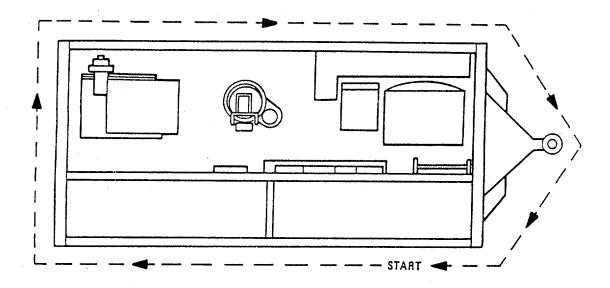


Figure 2-0. Walk-Around PMCS Routing

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200

ltem		Location		Not Fully
No.	Interval Item to Check/Service	Procedure	Mission Capable If:	
	8	REAR FRAME ASKET	FROM	ΛE
		_	TIEDOWN	
1	Quarterly	Tiedown (2 each)	Inspect for broken and/or missing hardware.	
2	Quarterly	Basket (2 each)	Inspect for broken welds.	
3	Quarterly	Front and Rear Frames	Inspect for broken welds, broken, loose and/or missing hardware.	

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued				
Item No.	Interval	Location Item to Check/Service	Procedure	Not Fully Mission Capable If:
	RIGHT		LEFT BEAM STRUT	
			TRAILER	
4	Quarterly	Right, Center and Left Beams	Inspect for broken welds, broken, loose and/or missing hardware.	
5	Quarterly	Strut (2 each)	Inspect for broken welds, broken, loose and/or missing hardware.	Broken, loose or missing hardware.
6	Quarterly	Modified Trailer	Inspect for damaged or loose inserts, loose or frayed tiedown straps and/or missing hardware.	
			2-10	

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued

Item		Location	ice Checks and Services for M85-200 - cont	Not Fully
No.	Interval	Item to Check/Service	Procedure	Mission Capable If:
		DOOR	BRACKET	
7	Quarterly	Bracket (side of dryer) Door	Inspect for broken, loose and/or missing hardware. Inspect for broken, loose and/or missing hardware.	Broken, loose and/or missing hardware.
			2-11	

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued

Item No.	Interval	Location Item to Check/Service	Procedure	Not Fully Mission Capable If:
			SUCTION STRAINER QUICK COUPLING HALF	
9	Quarterly	Suction Strainer	Inspect for broken welds, broken, loose and/or missing hardware, and quick coupling half damaged.	Quick coupling half is damaged or missing.

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued

	Table 2-1.	Unit Preventive Maintenar	nce Checks and Services for M85-200 - cont	inued
Item No.	Interval	Location Item to Check/Service	Procedure	Not Fully Mission Capable If:
	CONTROLI STAND •	CONTROL CONSOLE	ENCLO	SURE
10	Quarterly	Control Console	Inspect interior of console for damaged hardware and/or frayed wiring.	Damaged hardware and/o frayed wiring.
11	Quarterly	Controller Stand	Inspect for broken welds.	
12	Quarterly	Enclosure Box	Inspect for broken, loose, damaged hardware and/or frayed wiring	Damaged hardware and/o frayed wiring.
			2-13	

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued

Item No.	Interval	Location Item to Check/Service	Procedure	Not Fully Mission Capable If:	
BELT GUARD OUICK DISCONNECT CAP PRAME TUB PIPE					
13	Quarterly	Quick Disconnect Cap	Remove cap and inspect gasket for damage.		
14	Quarterly	Drain Piping	Inspect for leaks, broken, loose and/or missing hardware.	Leaks, broken, loose and/or missing hardware.	
15	Quarterly	Tub Pipe	Inspect for leaks, broken, loose and/or missing hardware.	Leaks, broken, loose and/or missing hardware.	
16	Quarterly	Belt Guard	Inspect for broken, loose and/or missing hardware.		
17	Quarterly	Reducer	Inspect for seepage or leaks.	Class III leaks exists.	
18	Quarterly	Frame	Inspect for broken welds.		
2-14					

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued.

Item		Location		Not Fully
No.	Interval	Item to Check/Service	Procedure	Mission Capable If:
			HANGE	WASHER DRAIN
19 20	Quarterly Quarterly	Hanger Washer Drain	Inspect for broken, loose and/or missing hardware. Inspect for leaks.	

Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued.

	Table 2-1. Unit Preventive Maintenance Checks and Services for M85-200 - continued.				
Item No.	Interval	Location Item to Check/Service	Procedure	Not Fully Mission Capable If:	
21	Quarterly	Upright Rail	Inspect for broken, loose and/or missing hardware.		
			2-16		

Section V. UNIT TROUBLESHOOTING

2-9. GENERAL.

This section contains troubleshooting information for the Laundry Unit at Unit Maintenance level. Each malfunction for an individual component, unit, or system is followed by a list of tests or inspections which will help you determine corrective action to take. You should perform the test/inspection and corrective actions in the order listed.

2-10. TROUBLESHOOTING.

The Malfunction Index lists the common malfunctions which you may find during maintenance of the Laundry Unit or its components. Perform these tests inspections and corrective action in the order they appear in the table. This manual cannot list all possible malfunctions that may occur, nor all tests or inspections and corrective actions. If a malfunction is not listed (except where malfunction and cause are obvious) or is not corrected by listed corrective actions, notify Direct Support.

- a. Malfunction Index. For quick access to troubleshooting procedures.
- b. Generator. Refer to TM 5-6115-585-12 for troubleshooting.
- c. Trailer. Refer to TM 9-2330-376-14&P for troubleshooting.
- d. Water Heater. Refer to TM 10-4520-259-13&P for troubleshooting.

NOTE

Be sure to read all Warnings in front of manual before troubleshooting. Before you use the troubleshooting tables, be sure you have performed all applicable operating checks and verified that a malfunction exists. When a corrective action is performed, verify that the action has corrected the malfunction. All malfunctions deferred to the next higher level of maintenance must be reported according to the instructions given in DA PAM 738-750.

UNIT MALFUNCTION INDEX

MA	ALFUNCTION	PAGE
	Table 2-2. UNIT LAUNDRY UNIT MAIN POWER	
	TROUBLESHOOTING PROCEDURES	
1.	No power to component circuit breakers	2-19
	Table 2-3. UNIT WASHER TROUBLESHOOTING PROCEDURES	
1.	Washer will not operate	2-20
	Water will not drain from washer	
3.		
	Washer fill level too high/water runs out of overflow	
5.	Washer door will not open	2-22
6.	Washer does not fill with cold/hot water (automatic or manual mode)	
7.	Washer cylinder will not rotate (automatic or manual mode)	2-22
	Table 2-4. UNIT AIR COMPRESSOR	
	TROUBLESHOOTING PROCEDURES	
1	Air Compressor fails to start	2-23
	Air Compressor fails to deliver air pressure	
	Air pressure below 90 psi or above 100 psi	
	Table 2-5. UNIT DRYER TROUBLESHOOTING PROCEDURES	
1.	,	
2.		
3.	,	
4.		
5.	, , , , , , , , , , , , , , , , , , , ,	
6.	Dryer flame pulsates	
7.	,	
8.	Air leaks from dryer door	2-27
	Table 2-6. UNIT EXTRACTOR TROUBLESHOOTING PROCEDURES	
1.	Extractor fails to start	2-28
	Extractor starts but basket fails to turn	
	Extractor fails to drain	
٠.		
	Table 2-7. UNIT CENTRIFUGAL PUMP	
	UNIT TROUBLESHOOTING PROCEDURES	
	Centrifugal pump unit fails to start	
2.	Centrifugal pump unit fails to deliver water	2-30

Table 2-2. UNIT LAUNDRY UNIT MAIN POWER TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

1. NO POWER TO COMPONENT CIRCUIT BREAKERS.

On electrical connector main power cable, check for continuity.

- a. Remove electrical power, refer to generator TM 5-6115-585-12.
- b. Remove main power cable from generator and power distribution panel.

NOTE

When testing for continuity between wires, disconnect one end of wiring before testing. When testing for grounded wires, disconnect both ends of wiring before testing.

c. Using a multimeter, check for continuity between the following:

	<u>WIRE</u>	CONNECTOR
(1)	Red	A
(2)	White	N
(3)	Blue	В
(4)	Green	G
(5)	Black	С

- d. If no continuity exists, notify Direct Support.
- e. If continuity exists, repair generator (TM 5-6115-585-12).

Table 2-3. UNIT WASHER TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

WASHER WILL NOT OPERATE.

- Step 1. Check motor for overload.
 - a. Reset and operate unit.
 - b. If motor overloads repeatedly, repair or replace as required. Refer to paragraph 2-30, Motor and Plate.
- Step 2. Check if fuse is blown in control panel.

If fuse is blown, replace fuse.

Step 3. Check for damaged or missing belt.

If belt is damaged or missing, refer to paragraph 2-30, Motor and Plate.

Step 4. Check for voltage to control box.

WARNING

High voltage is present on this equipment. When applying power during a test, take proper measures to safeguard personnel. Never work on electrical equipment with power applied unless there is another person with you. Death or serious injury may result.

- a. Apply electrical power, refer to generator TM 5-6115-585-12.
- b. Using a multimeter, check for 120 vac the following:

<u>TB1</u>

- (1) 4 (16) to 19 ground
- (2) 3 (17) to 19 ground
- (3) 2 (18) to 19 ground
- c. Remove electrical power, refer to TM 5-6115-585-12.
- d. If problem persists, notify Direct Support.

2. WATER WILL NOT DRAIN FROM WASHER.

Step 1. Check for clogged drain valve/line.

Remove clog.

Table 2-3. UNIT WASHER TROUBLESHOOTING PROCEDURES - continued

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

2. WATER WILL NOT DRAIN FROM WASHER - continued.

- Step 2. Check for inoperative drain valve.
 - a. Operate manual override on drain solenoid and observe valve operation.
 - b. Check that air supply pressure is correct (90 to 100 psi).
 - c. Replace or repair drain valve. Refer to paragraph 2-26, Drain Pipe.
 - d. If problem persists, notify Direct Support.

3. WASHER FILL LEVEL TOO LOW (below LEVEL LOW/1 switch, number 2)

Step 1. Check for obstruction in float assembly tube.

Clean as required at tee.

Step 2. Check for leaks through drain valve during filling.

Clean clogged drain valve.

- Step 3. Check gage on washer air tank for low air pressure (90 to 100 psi).
 - a. Check drain valve for leaks during filling,
 - b. If air supply is 90 to 100 psi, replace drain valve. Refer to paragraph 2-26, Drain Pipe.
 - c. If problem persists, notify Direct Support.
- 4. WASHER FILL LEVEL TOO HIGH/WATER OUT OF OVERFLOW (LEVEL HIGH/2 switch number 13 positioned above highest setting).
 - Step 1. Check for obstruction in float assembly tube.

Clean as required at tee.

- Step 2. Refer to malfunction 2 and perform step 2.
- Step 3. Check for malfunctioning hot and cold water ball valves. Operate manual override on control solenoids and observe valve operation. Insure valve air supply is adequate (90 to 100 psi).
 - If air supply is adequate, replace defective hot and cold water ball valve. Refer to paragraph 2-46, Piping.
 - b. If problem persists, notify direct support.

Table 2-3. UNIT WASHER TROUBLESHOOTING PROCEDURES - continued

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

5. WASHER DOOR WILL NOT OPEN.

Step 1. Check that water is draining properly.

Remove clog or replace drain valve (Malfunction 2, step 2).

- Step 2. Check for water in air hoses.
 - a. If water is in air hose, repair leak or replace hose.
 - b. If problem persists, notify direct support.

6. WASHER DOES NOT FILL WITH COLD/HOT WATER (AUTOMATIC OR MANUAL MODE).

Step 1. Check for air pressure. Normal is 90 to 100 psi.

If air pressure is incorrect, adjust air system for proper pressure. Refer to paragraph 2-34, Air Compressor.

- Step 2. Check cold/hot water ball valve for binding. Set cold and hot water switches to ON. Operate manual program switches and observe valve operation.
 - a. If ball valve is defective, replace hot and/or cold ball valve. Refer to paragraph 2-46, Piping.
 - b. If problem persists, notify direct support.

7. WASHER CYLINDER WILL NOT ROTATE (AUTOMATIC OR MANUAL MODE).

Check for loose or slipping drive belt.

- a. If drive belt is loose or slipping, adjust drive belt for proper tension. Refer to paragraph 2-30, Motor and
- b. If problem persists, notify direct support.

Table 2-4. UNIT AIR COMPRESSOR TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

AIR COMPRESSOR FAILS TO START.

- Step 1. Check for voltage to full voltage starter.
 - a. Apply electrical power, refer to generator TM 5-6115-585-12.

WARNING

High voltage on this equipment can cause serious injury or death. When applying power during a test, take proper measures to ensure safety of personnel. Never work on electrical equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment.

- b. Using a multimeter, check for 120 vac on the following:
 - (1) TB1 to ground
 - (2) TB2 to ground
 - (3) TB3 to ground
- c. Repair electrical wiring, refer to FO-1 Laundry Unit Interconnect Wiring Diagram.
- d. Remove electrical power, refer to TM 5-6115-585-12.
- Step 2. Check if ON/OFF adjustment is set correct.
 - a. Do adjustment procedures, refer to paragraph 2-34, Air Compressor.
 - b. If compressor fails to start, replace pressure switch.
- Step 3. Check for continuity on wiring.

NOTE

When testing for continuity between electrical wires, disconnect one end of electrical wiring before testing. When testing for grounded electrical wires, disconnect both ends of electrical wiring before testing.

- a. Using a multimeter, check for continuity on the following wires:
 - (1) 34 to 34 FVS-T3 to Wire End

Table 2-4. UNIT AIR COMPRESSOR TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

1. AIR COMPRESSOR FAILS TO START - continued.

- (2) 35 to 35
- (3) 36 to 36
- b. If no continuity exists, repair wiring, per FO-6 Air Compressor Wiring Diagram.
- c. If continuity exists, replace air compressor. Refer to paragraph 2-34, Air Compressor.

2. AIR COMPRESSOR FAILS TO DELIVER AIR PRESSURE.

Check air pressure.

- a. Remove electrical power from generator per TM 5-6115-585-12.
- b. Check for air pressure leaks on all air hose lines, and tighten air hoses as required.
- c. On air tank, open drain cock until pressure on gage is 0 psi. Close drain cock.
- d. Remove air hose from air compressor.

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

- e. Apply electrical power, refer to generator TM 5-6115-585-12.
- f. If air pressure exists at air hose, remove electrical power and connect air hose.
- g. If no air pressure exists at air hose, replace air compressor. Refer to paragraph 2-34.

3. AIR PRESSURE BELOW 90 PSI OR ABOVE 100 PSI.

Check for improperly adjusted pressure switch, on at or below 90 psi; off at 100 psi or higher.

If pressure is incorrect, adjust pressure switch. Refer to paragraph 2-34, Air Compressor.

Table 2-5. UNIT DRYER TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

1. DRYER FAILS TO START.

Check for voltage to START/STOP RESET BUTTON.

- a. Apply electrical power, refer to generator TM 5-6115-585-12.
- b. Remove electrical power, refer to TM 5-6115-585-12.
- c. Notify Direct Support.

2. DRYER FAILS TO DRY LAUNDRY

Notify Direct Support.

3. DRYER BURNER FLAME FAILS.

Step 1. Check for nonmetallic hose(s) leaking.

If nonmetallic fuel hose(s) are leaking, repair per paragraph 2-43, Nonmetallic Hoses.

Step 2. Check for defective rotary pump.

If rotary pump is defective, replace rotary pump. Refer to paragraph 2-53, Rotary Pump.

Step 3. Check for defective fuel solenoid.

If fuel solenoid is defective, replace fuel solenoid. Refer to paragraph 2-70, Solenoid Nonmetallic Hose Valve.

Table 2-5. UNIT DRYER TROUBLESHOOTING PROCEDURES - continued

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

- Step 4. Check for clogged or damaged burner nozzle and electrodes adjustment.
 - Clean clogged burner nozzle and adjust or replace damaged nozzle. Refer to paragraph 2-54, Gas-Oil Combustion Burner.
 - b. If problems still exists, notify Direct Support.

4. DRYER TUMBLER DOES NOT ROTATE.

- Step 1. Check for improperly adjusted or defective door switch.
 - a. If switch needs adjustment, adjust door. Refer to paragraph 2-65, Door Switch.
 - b. If switch is defective, replace door switch. Refer to paragraph 2-65, Door Switch.
- Step 2. Check for cracked, worn, or broken motor parts, damaged shaft threads, and bent shaft and chain.
 - a. If motor or chain is damaged, replace motor or chain. Refer to paragraph 2-69, Fan and Motor.
 - b. If problem persists, notify Direct Support.

5. DRYER FUEL PRESSURE (AS INDICATED ON GAGE) PULSATES.

Step 1. Check for defective fuel pressure gage.

If gage is defective, replace fuel pressure gage. Refer to paragraph 2-53, Rotary Pump.

Step 2. Check for loose bypass plug in rotary pump.

If bypass plug is loose, tighten bypass plug.

Step 3. Check solenoid nonmetallic hose valve for sticking.

If sticking, replace. Refer to paragraph 2-70, Solenoid Nonmetallic Hose Valve.

Step 4. Check rotary pump for binding or sticking.

If rotary pump is binding or sticking, replace per paragraph 2-53, Rotary Pump.

6. DRYER FLAME PULSATES.

Step 1. Check for improper air shutter adjustment. Exhaust gases should be clear after two seconds.

If exhaust gas is not clear, adjust air shutter.

Table 2-5. UNIT DRYER TROUBLESHOOTING PROCEDURES - continued

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

Step 2. Check for water in fuel by draining a small amount of fuel into a clear container. Look for fuel/water separation and cloudy fuel.

If fuel/water separation is present and/or cloudy, drain fuel supply and refill with new fuel.

Step 3. Check for dirty burner nozzle.

If burner nozzle is dirty, clean burner nozzle.

7. EXCESSIVE SMOKE FROM DRYER EXHAUST.

Step 1. Check for improper adjustment of air shutter. Exhaust gases should be clear after two seconds.

If exhaust is not clear, adjust air shutter.

Step 2. Check for blocked air intake screen.

If blockage is found, remove blockage from air intake screen.

Step 3. Check for blocked air exhaust piping.

If blockage is found, remove blockage from exhaust piping.

Step 4. Check for dirty burner nozzle and electrodes.

If burner nozzle is dirty, clean burner nozzle. Refer to 2-55, Electrodes.

- Step 5. Check for worn or broken rotary pump.
 - a. If pump is damaged, replace rotary pump. Refer to paragraph 2-53, Rotary Pump.
 - b. If problem still exists, notify Direct Support.

8. AIR LEAKS FROM DRYER DOOR.

Step 1. Check for damaged dryer door gasket.

Replace door gasket, refer to paragraph 2-64, Door.

Step 2. Check for loose door handle.

If door handle is loose, adjust or replace door handle. Refer to paragraph 2-64, Door.

- Step 3. Check for bent door or broken weld.
 - a. Repair by replacing door. Refer to paragraph 2-64, Door.
 - b. Refer to Direct Support for broken weld.

Table 2-6. UNIT EXTRACTOR TROUBLESHOOTING PROCEDURES - continued

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

1. EXTRACTOR FAILS TO START.

Check for voltage.

- a. Apply electrical power, refer to TM 5-6115-585-12.
- b. Remove electrical power, refer to TM 5-6115-585-12.
- c. If voltage exists, notify Direct Support.

2. EXTRACTOR STARTS BUT BASKET FAILS TO TURN.

Step 1. Check for slipping, broken or missing drive belt or pulley.

If drive belt is slipping, broken or missing, replace belt. Refer to paragraph 2-42, Motor Assembly.

- Step 2. Check for foreign material or clothing wrapped around shaft, above and below the basket.
 - a. If obstruction is found, remove clothing or foreign material.
 - b. If problem persists, notify direct support.

3. EXTRACTOR FAILS TO DRAIN.

Check for a clog in the drain inside the extractor.

If the drain is clogged, unclog the drain.

Table 2-7. UNIT CENTRIFUGAL PUMP UNIT TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

1. CENTRIFUGAL PUMP UNIT FAILS TO START.

- Step 1. Check for continuity on power cable.
 - a. Remove electrical power from water heater, refer to TM 10-4520-259-13&P.
 - b. Remove power cable from centrifugal pump unit and water heater.
 - c. Using a multimeter, check power cable for continuity between the following connectors:
 - (1) X to X
 - (2) Y to Y
 - (3) Z to Z
 - (4) G to G
 - d. If no continuity exists, refer to Direct Support.
- Step 2. Check for continuity on centrifugal pump unit electrical receptacle connector and connector-switch.
 - a. Remove cover on electrical receptacle connector and connector-switch.
 - b. Using a multimeter check for continuity between the following connectors:
 - (1) X to L3
 - (2) Y to L1
 - (3) Z to L2
 - c. If no continuity exists on one wire, repair wiring per FO-5, Centrifugal Pump Unit Wiring Diagram.
- Step 3. Check for continuity on connector switch.
 - a. Set connector switch to ON.
 - b. Using a multimeter check for continuity on connector switch between following contacts:
 - (1) L1 to T1
 - (2) L2 to T2
 - (3) L3 to T3
 - c. If no continuity exists on one contact, replace connector switch (Para 2-76, Connector-Switch.
 - d. If continuity exists, set toggle switch to OFF.

Table 2-7. UNIT CENTRIFUGAL PUMP TROUBLESHOOTING PROCEDURES - continued

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

1. CENTRIFUGAL PUMP UNIT FAILS TO START (continued).

Step 4. On pump, check for continuity on wiring between connector-switch and AC motor.

a. Using a multimeter, check for continuity between the following wiring:

	Toggle Switch	Burk <u>Pump AC Motor</u>	CH&E Pump AC Motor
(1)	T1	2, 8	1, 7
(2)	T2	1, 7	2, 8
(3)	Т3	3, 9	3, 9

Gorman Rupp Pump AC Motor

- (1) T3 T3
- (2) T2 T2
- (3) T1- T1
- b. If no continuity exists, repair wiring per FO-5 Centrifugal Pump Unit Wiring Diagram.
- c. If continuity exists, replace centrifugal pump unit. Refer to paragraph 2-74, Centrifugal Pump Unit.

Step 5. On water heater check for voltage, refer to TM 10-4520-259-13&P.

2. CENTRIFUGAL PUMP UNIT FAILS TO DELIVER WATER.

Check sediment strainer.

- a. Turn connector switch off.
- b. Clean sediment strainer. Refer to paragraph 2-75, Sediment Strainer and Outlet Piping.
- c. Set ON/OFF switch to ON.
- d. If centrifugal pump unit fails to deliver water, replace centrifugal pump unit. Refer to paragraph 2-74, Centrifugal Pump Unit.

Section VI. UNIT MAINTENANCE PROCEDURES

2-11. GENERAL

The procedures in this section have been arranged in order in which the items appear in the Unit (O) Maintenance level column on the Maintenance Allocation Chart (MAC) which is provided in Appendix B. Step by step procedures have been provided for all actions authorized to be performed by Unit, Direct Support and General Support Maintenance in Chapters 3 and 4.

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury to personnel may result to personnel.

a. Wiring

- (1) General. Preferred repair methods consist of replacing wires, terminals, connectors, etc., rather than splicing wires, bending ends to form terminals, and other makeshift procedures, although the latter may be appropriate for emergency field repairs. Determine the proper size and length of wire, or the terminal, or connector to be used for replacement by referring to Appendix F. Cable Diagrams, Wire Run List, and Control Circuits.
- (2) Soldering Connections. Wire connections must be made mechanically sound before they are soldered. Solder alone does not provide sufficient strength to prevent breakage. Joining surfaces of connections to be soldered must be clean and bright. If a separate flux is used, it should be rosin base flux and should be brushed onto the joint before soldering. If a flux-core solder is used, it should be a rosin core electrical solder. If uncored solder is used, it should be a lead-tin solder. Wires should always be heated to the point at which the solder will melt completely and flow into all parts of the joint. Excessive build up of solder "gobs" on the joint should be avoided or removed.
- (3) Insulating Joints. The preferred method of insulating electrical joints is by the use of heat-shrink tubing. To apply, cut a piece of heat-shrink tubing of suitable diameter to a one-inch length for covering joints at terminals or connectors, or to a length about 1/2 inch (1.3 cm) longer than the joint to be insulated, and slide the tubing over the wire before making the joint. After the joint is made, slide the tubing so that it covers the joint, and shrink in place with moderate heat.
- (4) Splicing Wires. To repair broken or cut wires that are otherwise sound, the mating ends can be stripped and spliced. A commercial butt splice can be crimped onto the ends to join them, or a "Western Union" wire splice can be made. The latter is made by stripping 1/41/2 inch (6.5-12.7 mm) of insulation from the wire ends, holding the ends parallel and facing opposite directions, then twisting each end around the other wire at least three turns. Solder and apply insulation as described above.
- (5) Crimping Terminals. To install a terminal on the end of a wire, strip 1/4 1/2 inch (6.5 12.7 mm) of insulation from the end of the wire, apply a one-inch piece of heat-shrinking tubing (if the terminals are of the uninsulated type) and insert wire end into the shank of the terminal. Crimp the shank, and install heat-shrink tubing, if necessary.

2-11. GENERAL - continued.

- b. <u>Cleaning and Inspection of Antifriction Bearings</u>. Refer to TM 9-214, Inspection, Care, and Maintenance of Antifriction Bearings.
- c. Cleaning and Inspection of Mechanical Parts.

WARNING

Drycleaning solvent is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection is required. Avoid repeated/prolonged contact. Use only in well ventilated areas. Keep away from open flames or other sources of ignition.

Compressed air used for cleaning purposes will not exceed 30 psi (kPa). Use only with effective personal protective equipment.

- (1) Clean metal parts in drycleaning solvent. Thoroughly dry the parts with compressed air, observing all safety precautions.
- (2) Fibrous or rubber parts can generally be cleaned with warm, soapy water and dried with compressed air.
- (3) Inspect metal parts for cracks, breaks, bends, worn edges, and rough bearing surfaces. Damage that alters the part or its function is cause for replacement of that part.

d. General Repair

- (1) Repair the Laundry Unit to normal operating condition by replacing or repairing a defective component and/or by needed adjustments.
- (2) Cleaning and lubrication is sometimes all that is needed to return an item to operating condition.
- (3) Remove and replace only those items necessary to make repairs. After replacing the defective components, ensure that the Laundry Unit operates correctly.
- (4) To paint metal, sand bear metal areas with sandpaper and refinish with primer (Appendix D, Item 6) and olive drab paint (Appendix D, Item 7). Refer to TM 43-0139 for proper painting instructions. Allow paint to dry between coats.

This task covers: Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment Tool Kit (App B, Item 2)

Materials/Parts

Blind Rivet (App C, Item 14) Self-locking nut (App C, Item 15) Flat head rivet (App C, Item 16)

REPAIR

NOTE

Both ladder hooks and feet are identical, this procedure is for one of them.

- (1) Ladder hook (2).
 - (a) Remove six blind rivets (1) from ladder hook (2) and-ladder (3).
 - (b) Remove ladder hook (2).
 - (c) Position new ladder hook (2) on ladder (3) and install six blind rivets (1).
- (2) Ladder foot (8).
 - (a) Remove self-locking nut (4) and bolt (5) from ladder foot (8).
 - (b) Remove ladder foot (8) from ladder (3).
 - (c) Remove two flat head rivets (6) from ladder foot (8) and foot pad (7).
 - (d) Remove foot pad (7) from ladder foot (8).
 - (e) Position new foot pad (7) on ladder foot (8) and install two flat head rivets (6).
 - (f) Position ladder foot (8) on ladder (3).
 - (g) Install bolt (5) and self-locking nut (4) on ladder foot (8) and ladder (3).

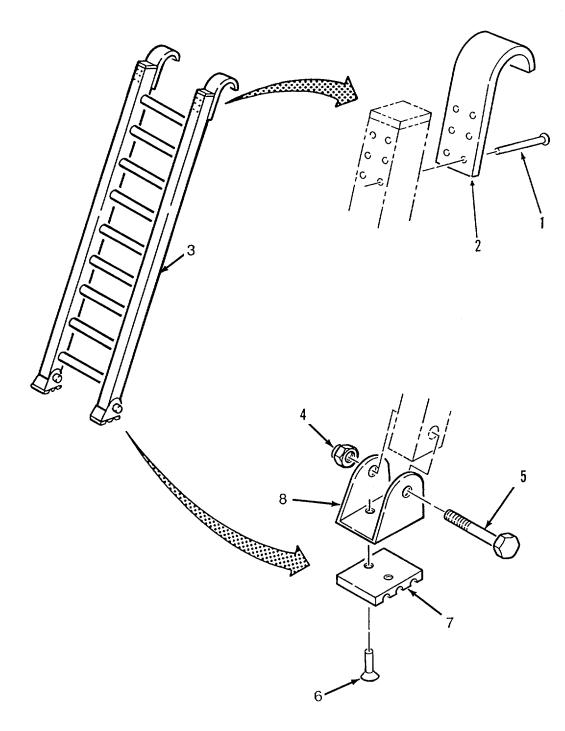


Figure 2-1. Ladder

2-13. BASKET(S).

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

Materials/Parts
Blind Rivet (App C, Item 17)

a. REMOVAL

WARNING

Generator exhaust hoses or water heater may be extremely hot. Be careful when working near them as this could cause serious injury to personnel.

NOTE

Both baskets with attaching strap loops and cargo straps are identical, this procedure is for one of them.

- (1) If basket (2) has contents of the Laundry Unit in it, remove all contents.
- (2) Disconnect eight cargo straps (1) from basket (2).
- (3) Lift and remove basket (2) from left beam (3) and center beam (4).
- b. REPAIR
 - (1) Cargo strap (7).
 - (a) Remove two blind rivets (5) from strap loop (6) and basket (2).
 - (b) Remove cargo strap (7) from strap loop (6).
 - (c) Install new cargo strap (7) on strap loop (6) if applicable.
 - (d) Install two blind rivets (5) in strap loop (6) and basket (2).
 - (2) Strap loop (9).
 - (a) Remove two blind rivets (8) from strap loop (9) and basket (2).
 - (b) Remove strap loop (9).
 - (c) Position new strap loop (9) on basket (2) and install two blind rivets (8).
- c. INSTALLATION
 - (1) Position basket (2) on left beam (3) and center beam (4).
 - (2) Connect eight cargo straps (1) on basket (2) and left beam (3) and center beam (4).

2-13. BASKET(S) - continued.

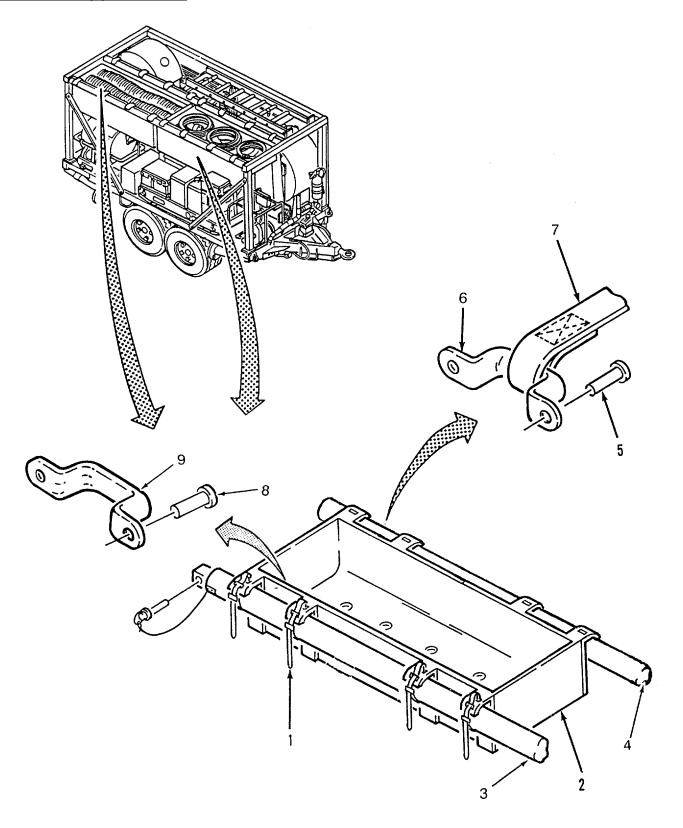


Figure 2-2. Basket(s)

2-14. STRUT.

This task covers: Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Materials/Parts

Blind Rivet (App C, Item 14) Blind Rivet (App C, Item 17)

REPAIR

- (1) Single acting pin (2).
 - (a) Remove one blind rivet (3) from single acting pin (2).
 - (b) Remove single acting pin (2) from strut (1).
 - (c) Position new single acting pin (2) on strut (1) and install blind rivet (3).
- (2) Cargo tiedown (5).
 - (a) Remove two blind rivets (4) from strap loop (6) and strut (1).
 - (b) Remove cargo tiedown (5) from strap loop (6).
 - (c) Install new cargo tiedown (5) on strap loop (6).
 - (d) Install two blind rivets (4) in strap loop (6) and strut (1).

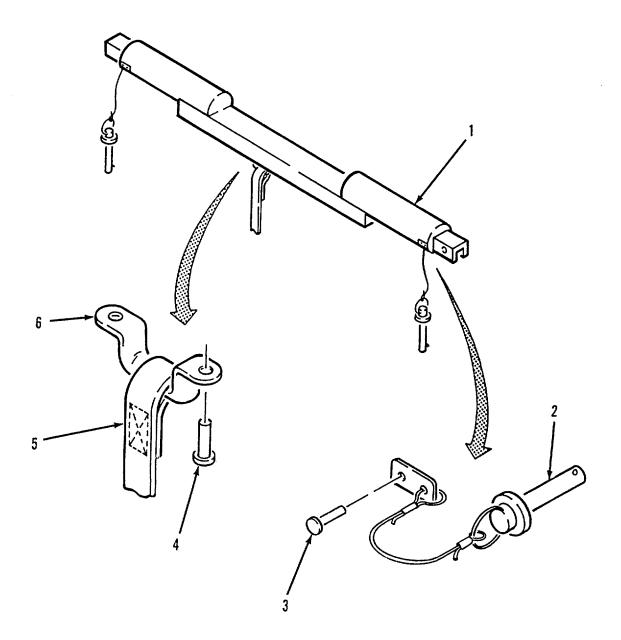


Figure 2-3. Strut

2-15. RIGHT BEAM.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Materials/Parts

Blind Rivet (App C, Item 14) Blind Rivet (App C, Item 17)

Personnel Required

Two (for removal and installation)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)
Basket(s) removed (Para 2-13)
Upper sound controlling panels removed
(Para 2-22)

General Safety Instructions

WARNING

High voltage is present on the generator. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove two single acting pins (1) from right beam (2), front frame (3) and rear frame (4).
- (2) Remove right beam (2) from front frame (3) and rear frame (4).

b. REPAIR

- (1) Cargo Tiedown (5).
 - (a) Remove two blind rivets (6) from strap loop (7) and right beam (2).
 - (b) Remove cargo tiedown (5) from strap loop (7).
 - (c) Install new cargo tiedown (5) on strap loop (7).
 - (d) Install two blind rivets (6) in strap loop (7) and right beam (2).
- (2) Strap (10).
 - (a) Remove two screws (8) from strap loop (9).
 - (b) Remove strap (10) from strap loop (9).
 - (c) Install new strap (10) on strap loop (9).
 - (d) Position strap loop (9) on right beam (2) and install two screws (8).
- (3) Single acting pin (12).
 - (a) Remove one blind rivet (11) from single acting pin (12).
 - (b) Remove single acting pin (12) from right beam (2).
 - (c) Position new single acting pin (12) on right beam (2) and install blind rivet (11).
- (4) Right beam (2).
 - (a) Remove eight cargo tiedowns (5) from right beam (2).
 - (b) Remove strap (10).

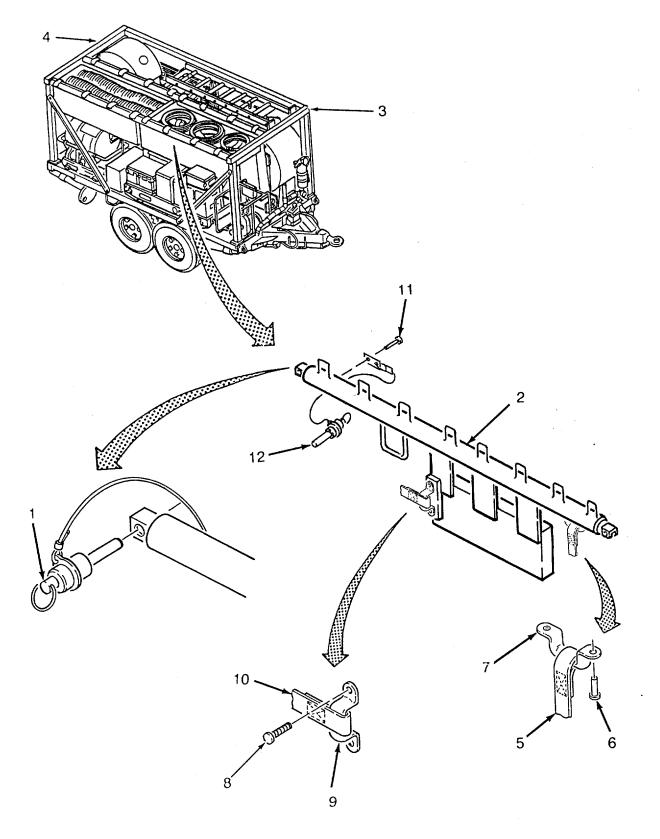


Figure 2-4. Right Beam

2-15. RIGHT BEAM - continued.

- (c) Remove two single acting pins (12).
- (d) Install eight cargo tiedowns (5) on new right beam (2).
- (e) Install strap (10).
- (f) Install two single acting pins (12).

c. INSTALLATION

- (1) Position right beam (2) on front and rear frames (3 and 4).
- (2) Install two single acting pins (1) in the right beam (2), front frame (3) and rear frame (4).
- (3) Install upper sound controlling panels (Para 2-22).
- (4) Install baskets (Para 2-13).

This task covers:

- a. Removal
- b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Hand Blind Riveter (App B, Item 7)

Materials/Parts

Blind Rivet (App C, Item 14) Blind Rivet (App C, Item 17) Tiedown Straps (App D, Item 11)

Personnel Required

Two (for removal and installation)

Equipment Condition

Laundry Unit shut down.(TM 10-3510-222-10)

Basket(s) removed (Para 2-13)

Upper sound controlling panels removed (Para 2-22)

General Safety Instructions

WARNING

High voltage is present on the generator. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove tiedown straps on air hoses from center beam (1).
- (2) Remove two single acting pins (2) from center beam (1), front frame (4) and rear frame (5).
- b. REPAIR
 - (1) Cargo tiedown (8).
 - (a) Remove two blind rivets (6) from strap loop (7) and center beam (1).
 - (b) Remove cargo tiedown (8) from strap loop (7).
 - (c) Install new cargo tiedown (8) on strap loop (7).
 - (d) Install two blind rivets (6) in strap loop (7) and center beam (1).
 - (2) Cargo tiedown (11).
 - (a) Remove two blind rivets (9) from strap loop (10).
 - (b) Remove cargo tiedown (11) from strap loop (10).
 - (c) Install new cargo tiedown (11) on strap loop (10).
 - (d) Position strap loop (10) on center beam (1) and install two screws (9).
 - (3) Single acting pin (13).
 - (a) Remove one blind rivet (12) from single acting pin (13).
 - (b) Remove single acting pin (13) from center beam (1).
 - (c) Position new single acting pin (13) on center beam (1) and install blind rivet (12).

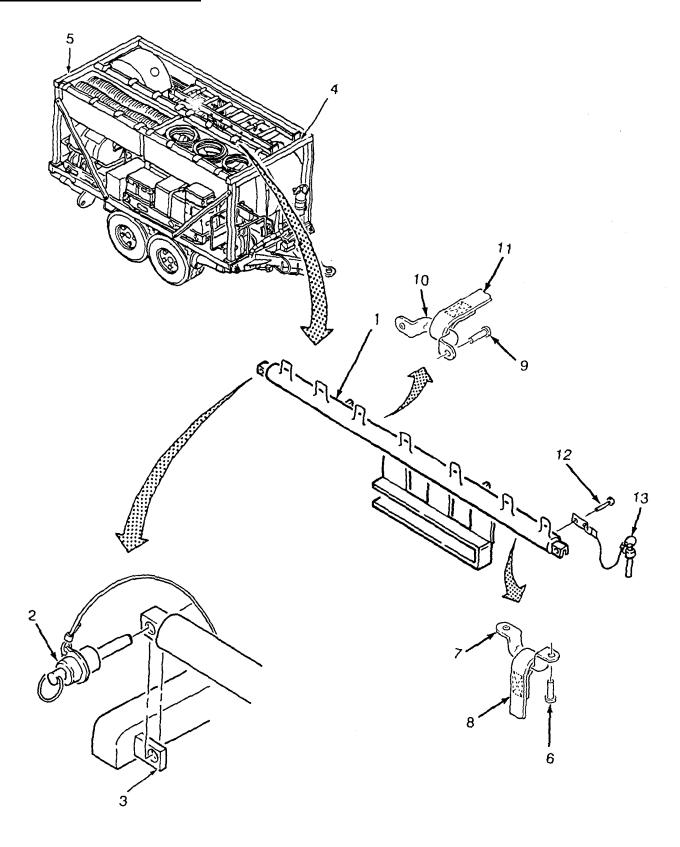


Figure 2-5. Center Beam

2-16. CENTER BEAM - continued.

- (4) Center beam (1).
 - (a) Remove eight cargo tiedowns (11) from center beam (1).
 - (b) Remove cargo tiedown (8).
 - (c) Remove single acting pin (13).
 - (d) Install cargo tiedown (11) on new center beam (1).
 - (e) Install cargo tiedown (8).
 - (f) Install single acting pin (13).

c. INSTALLATION

- (1) Position center beam (1) on front frame (4) and rear frame (5).
- (2) Install two single acting pins (13) in the center beam (1) through the clip (3) and front frame (4) and rear frame (5).
- (3) Position air hoses along center beam (1) and secure with tiedown straps, as required.
- (4) Install upper sound controlling panels (Para 2-22).
- (5) Install baskets (Para 2-13).

2-17. LEFT BEAM.

This task covers: Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

Materials/Parts

Blind Rivet (App C, Item 14)

REPAIR

- (1) Single acting pin (3).
 - (a) Remove one blind rivet (2) from single acting pin (3).
 - (b) Remove single acting pin (3) from left beam (1).
 - (c) Position single acting pin (3) on left beam (1) and install blind rivet (2).
- (2) Left beam (1).
 - (a) Remove two single acting pins (3).
 - (b) Install two single acting pins (3) on new left beam (1).

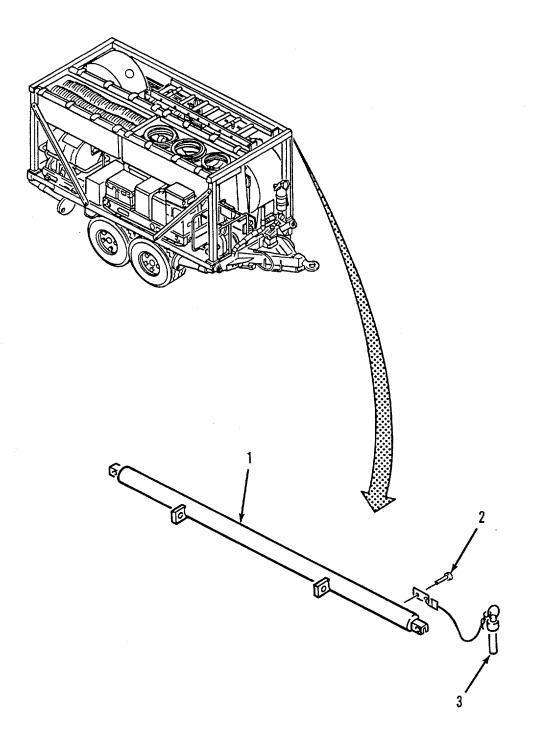


Figure 2-6. Left Beam

2-18. FRONT FRAME.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Personnel Required

Two

Equipment Condition

Right Beam removed (Para 2-15) Center Beam removed (Para 2-16) Fire Extinguisher removed (Para 2-78) **General Safety Instructions**

WARNING

Front frame is heavy and may be awkward to handle. Use correct lifting procedures to avoid injury to personnel.

NOTE

Shims may be used to achieve 90° between front frame and trailer if needed.

a. REMOVAL

- (1) Remove nut (9), lockwasher (10) and bolt (11) from tarpaulin frame support (2) and Laundry Unit.
- (2) Support front frame (1) and remove twelve nuts (8), lockwashers (7), flat washers (6) and bolts (5).
- (3) Remove front frame (1) from Laundry Unit.
- (4) If required, remove tarpaulin frame support (2) from curb or street side or both. Remove nut (13), lockwasher (12), spacer (3) and bolt (4) from front frame (1) and tarpaulin frame support (2).

b. REPAIR

Repair consists of replacing damaged or missing components of the front frame (1).

c. INSTALLATION

- (1) If tarpaulin frame support(s) (2) were removed, install bolt (4), spacer (3), lockwasher (12) and nut (13) on tarpaulin frame support (2) and front frame (1).
- (2) Position and support front frame (1) on Laundry Unit.
- (3) Install twelve bolts (5), flat washers (6), lockwashers (7) and nuts (8) on front frame (1) and Laundry Unit.
- (4) Install bolt (11), lockwasher (10) and nut (9) on tarpaulin frame support (2) and Laundry Unit.
- (5) Install right beam (Para 2-15).
- (6) Install center beam (Para 2-16).
- (7) Install fire extinguisher (Para 2-78).

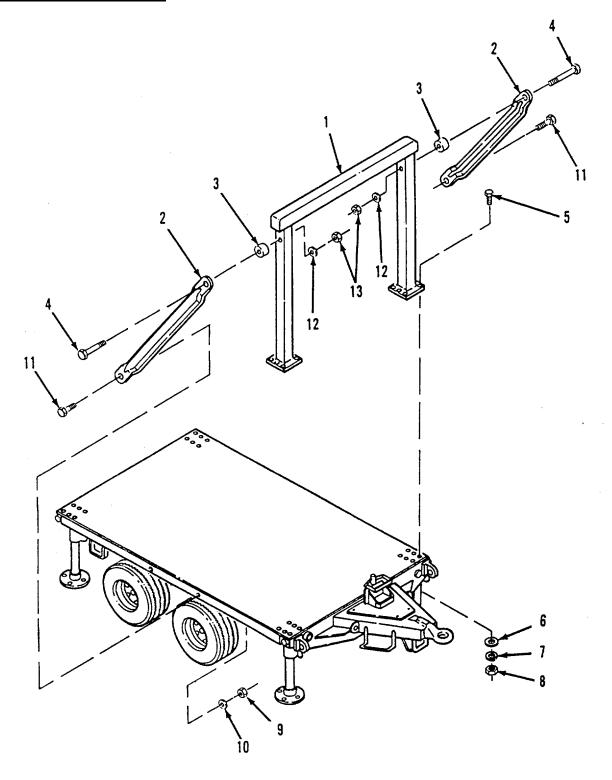


Figure 2-7. Front Frame

2-19. REAR FRAME.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

Blind Hand Riveter (App B, Item 7)

Materials/Parts

Blind rivet nut (App C, Item 20)

Equipment Condition

Right beam removed (Para 2-15) Center beam per removed (Para 2-16) Platform anchor removed if required (Para 2-20)

WARNING

Rear frame is heavy and may be awkward to handle. Use correct lifting procedures to avoid injury to personnel.

Personnel Required

Two (for removal and installation)

a. REMOVAL

- (1) Remove nut (6), lockwasher (7) and bolt (11) from tarpaulin frame support (3) and Laundry Unit.
- (2) Support rear frame (1) and remove eight nuts (8), twelve lockwashers (9), flat washers (10) and bolts (12).
- (3) Remove rear frame (1) from Laundry Unit.
- (4) If required, remove tarpaulin frame support (3) from curb or street side or both. Remove nut (14), lockwasher (13), spacer (2) and bolt (4) from rear frame (1) and tarpaulin frame support (3).

b. REPAIR

NOTE

Shims may be used to achieve 90° between rear frame and trailer if needed.

Blind rivet nut(s) (5).

- (a) Remove blind rivet nut (5) using .50 drill bit.
- (b) Insert blind rivet nut (5) in hole of rear frame.
- (c) Set blind rivet nut (5) in place.

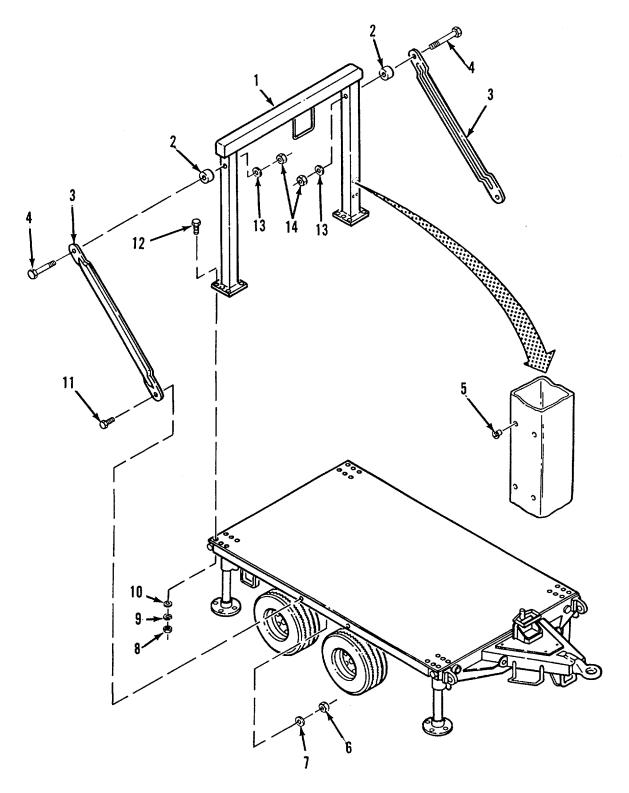


Figure 2-8. Rear Frame

2-19. REAR FRAME - continued.

c. INSTALLATION

(1) If tarpaulin frame support(s) (3) was removed, install bolt (4), spacer (2), lockwasher (13) and nut (14) on tarpaulin frame support (3) and rear frame (1).

NOTE

Shims may be used to achieve 90° between rear frame and trailer if needed.

- (2) Position and support rear frame (1) on Laundry Unit.
- (3) Install twelve bolts (12), flat washers (10), lockwashers (9) and nuts (8) on rear frame (1) and Laundry Unit.
- (4) Install bolt (11), lockwashers (7) and nut (6) on tarpaulin frame support (3) and Laundry Unit.
- (5) Install right beam (Para 2-15).
- (6) Install center beam (Para 2-16).
- (7) Install platform anchor (Para 2-20).

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

a. REMOVAL

Remove four bolts (4), lockwashers (3) and platform anchor (2) from rear frame (1).

b. REPAIR

Repair consists of replacing damaged or missing platform anchor (2).

c. INSTALLATION

Position platform anchor (2) on rear frame (1) and install four bolts (4) and lockwashers (3).

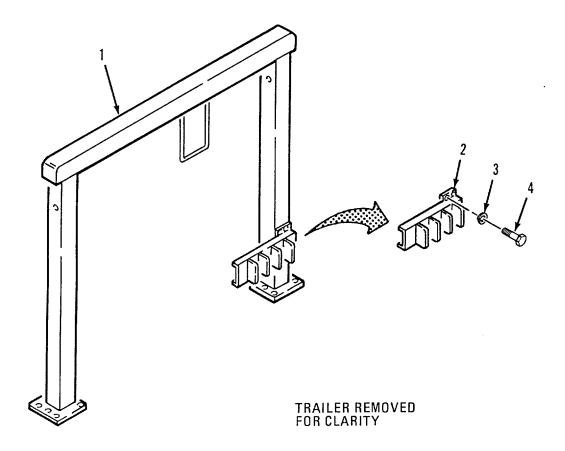


Figure 2-9. Platform Anchor

This task covers: Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

REPAIR

- (1) Single acting pin (2).
 - (a) Remove screw (1).
 - (b) Remove single acting pin (2).
 - (c) Position single acting pin (2) on upright rail (3) and install screw (1).
- (2) Upright rail (3).
 - (a) Remove single acting pin (2).
 - (b) Install single acting pin (2).

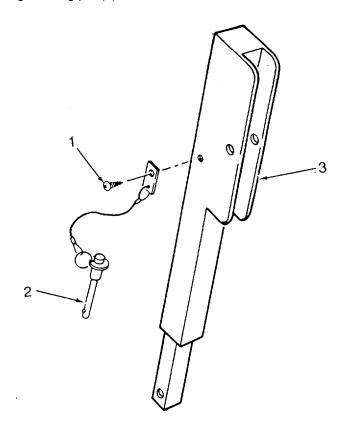


Figure 2-10. Upright Rail

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Materials/Parts

Blind rivet (App C, Item 21)

High voltage is present on the generator. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

WARNING

Generator exhaust hoses may be extremely hot. Be careful when working near and/or removing them as this could cause serious injury to personnel.

- (1) Remove top sound controlling panels (1), do substeps below:
 - (a) Release strap (10) from right and center beams (2 and 13).
 - (b) Remove three top sound controlling panels (1) from right and center beams (2 and 13).
- (2) Remove side sound controlling panels (3, 5 and 6), do substeps below:
 - (a) Release strap (12) from lower track (11).
 - (b) Remove sound controlling panels (5 and 6) from lower track (11) and center beam (13).
 - (c) Remove spacer plate (4).
 - (d) Remove sound controlling panel (3) from lower track (11) and center beam (13).

b REPAIR

NOTE

Both handles are identical. This procedure is for one of them.

- (1) Handle(s) (9).
 - (a) Remove four blind rivets (7) from sound controlling panel (6).
 - (b) Remove handle (9) and four flat washers (8).
 - (c) Install handle (9), four flat washers (8) and blind rivets (7) on sound controlling panel (6).

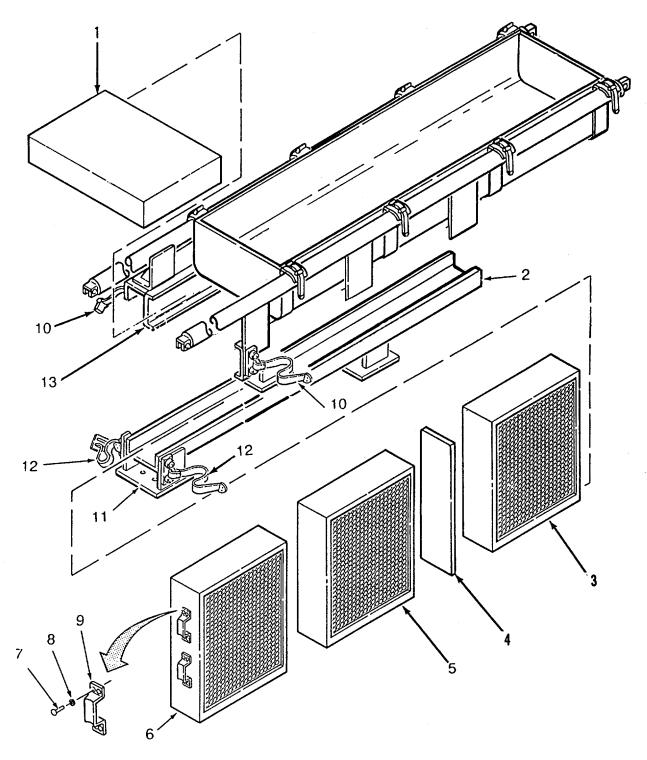


Figure 2-11. Sound Controlling Panels

2-22. SOUND CONTROLLING PANELS - continued.

c. INSTALLATION

- (1) Install top sound controlling panels (1), do substeps below:
 - (a) Install three top sound controlling panels (1) on right and center beams (2 and 13), with screen facing generator.
 - (b) Connect strap (10) on right and center beams (2 and 13).
- (2) Install side sound controlling panels (3, 5 and 6), do substeps below:
 - (a) Install one side sound controlling panel (3) screen facing generator in lower track (11) and center beam (13).
 - (b) Install spacer plate (4) and sound controlling panels (5 and 6) in lower track (11) and center beam (13).
 - (c) Connect strap (12) on lower track (11).

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

<u>Tools</u>

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Sound controlling panels (side) removed (Para 2-22)

- a. REMOVAL
 - (1) Remove six nuts (5), lockwashers (6), flat washers (7) and bolts (8) from lower track (1) and Laundry Unit.
 - (2) Remove lower track (1) from Laundry Unit.
- b. REPAIR

NOTE

Both ends of the cargo tiedown strap are attached identically, this procedure is for one of them.

Cargo tiedown strap (2).

- (a) Remove two screws (3) and strap loop (4) from lower track (1).
- (b) Remove cargo tiedown strap (2) from strap loop (4).
- (c) Install cargo tiedown strap (2) on strap loop (4).
- (d) Install strap loop (4) and two screws (3) on lower track (1).

c. INSTALLATION

- (1) Position lower track (1) on Laundry Unit.
- (2) Install six bolts (8), flat washers (7), lockwashers (6) and nuts (5) on lower track (1) and Laundry Unit.
- (3) Install side sound controlling panels (Para 2-22).

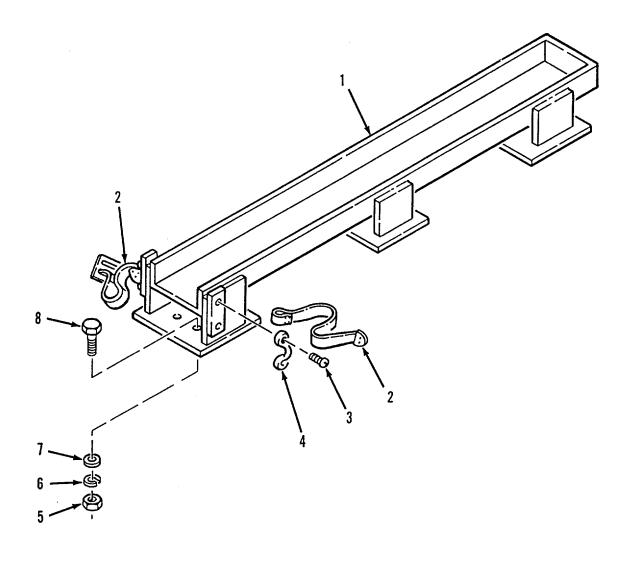


Figure 2-12. Lower Track

This task covers: Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Materials/Parts

Self-locking nut (App C, Item 15) Blind Rivet (App C, Item 22)

REPAIR

- (1) Quick release pin (4).
 - (a) Position lower and/or dryer platform (1) on its side.
 - (b) Remove quick release pin (4) from mounting bracket (2).
 - (c) Remove one blind rivet (3) from quick release pin (4).
 - (d) Remove quick release pin (4) from lower and/or dryer platform (1).
 - (e) Position quick release pin (4) on lower and/or dryer platform (1) and install blind rivet (3).
 - (f) Install quick release pin (4) in mounting bracket (2) and lower and/or dryer platform (1).
- (2) Lower or high frame (9).
 - (a) Position lower and/or dryer platform (1) on its side.
 - (b) Remove quick release pin (4) from mounting bracket (2).
 - (c) Remove two self-locking nuts (6), four washers (7) and two bolts (8) from mounting bracket (2) and lower and/or high frame (9).
 - (d) Remove two self-locking nuts (6), four washers (7) and two bolts (10) from lower and/or dryer platform (1) and lower and/or high frame (9).
 - (e) Remove lower and/or high frame (9).
 - (f) Position lower and/or high frame (9) on platform/dryer footing (5) and install two bolts (10), four washers (7) and two self-locking nuts (6).
 - (g) Position mounting bracket (2) on lower and/or high frame (9) and install bolt (8), two washers (7) and self-locking nut (6).
 - (h) Install quick release pin (4) in mounting bracket (2) and lower and/or dryer platform (1).

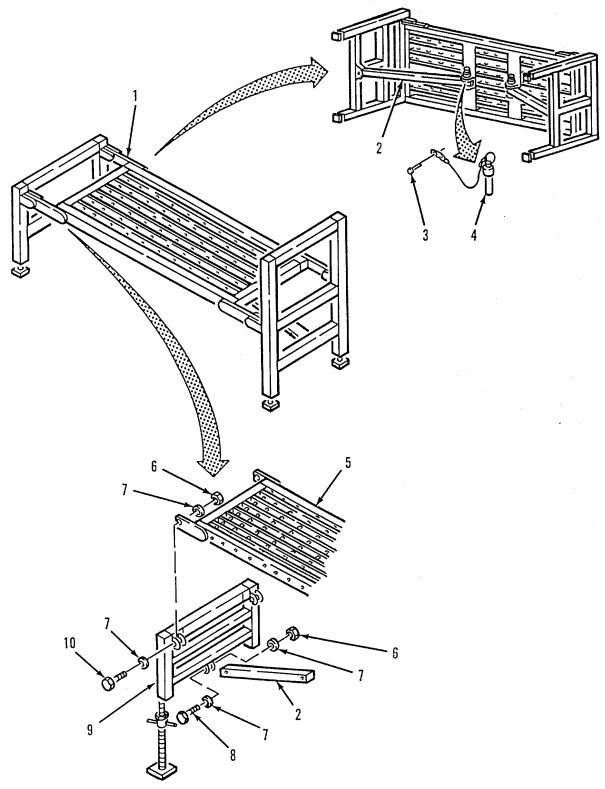


Figure 2-13. Lower/Dryer Platforms

2-24. LOWER/DRYER PLATFORM - continued.

- (3) Lower and/or Dryer platform (1).
 - (a) Remove lower and/or high frames (9).
 - (b) Remove lower and/or dryer platform (1).
 - (c) Position lower and/or dryer platform (1) for installation of lower and high frame (9).
 - (d) Install lower and high frames (9).
- (4) Mounting bracket (2).
 - (a) Position lower and/or dryer platform (1) on its side.
 - (b) Remove quick-release pin (4) from mounting bracket (2).
 - (c) Remove self-locking nut (6), two washers (7) and bolt (8) from mounting bracket (2) and lower or high frame (9).
 - (d) Remove mounting bracket (2).
 - (e) Position mounting bracket (2) on lower or high frame (9) and install bolt (8), two washers (7) and self-locking nut (6).
 - (f) Install quick release pin (4) in mounting bracket (2) and lower and/or dryer platform (1).

2-25. QUICK DISCONNECT CAP.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

a. REMOVAL

Remove key ring (1) from quick coupling half (6).

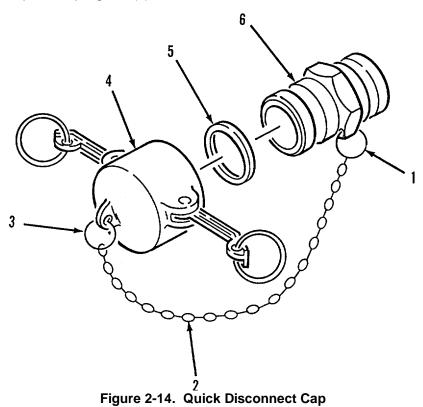
b. REPAIR

Repair consists of replacing damaged or missing components of the quick-disconnect cap (4).

- (a) Gasket (5).
- (b) Retaining ring (3).
- (c) Sash Chain (2) (6 inches).
- (d) Key ring (1).

c. INSTALLATION

Install key ring (1) on quick coupling half (6).



2-26. DRAIN PIPE.

This task covers:

- a. Removal
- c. Repair

- b. Cleaning
- d. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Materials/Parts

Antiseize Compound (App D, Item 24)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove four nuts (1), lockwashers (2) and two U-clamps (3) from bracket (4).
- (2) Remove hose clamp (5) from drain hose (7).
- (3) Remove drain hose (7) from nipple (6).
- (4) Remove air hose (8) from union (9).
- (5) Remove air hose (10) from union (11).
- (6) Remove hose clamp (12) from hose (14).
- (7) Remove hose (14) from nipple (15).
- (8) Unscrew union (16) from nipple (23).
- (9) Remove drain pipe (45).
- (10) Remove clamp (13) from hose (14).
- (11) Remove hose (14) from nipple (17).
- (12) Remove nipple (17) from elbow (18).
- (13) Remove elbow (18) from nipple (19).
- (14) Remove nipple (19) from elbow (20).
- (15) Remove elbow (20) from bushing (21).
- (16) Remove bushing (21) from tee (22).
- (17) Remove union (16) from nipple (23).
- (18) Remove nipple (23) from bushing (24).
- (19) Remove bushing (24) from tee (22).
- (20) Remove tee (22) from nipple (25).

2-26. DRAIN PIPE - continued.

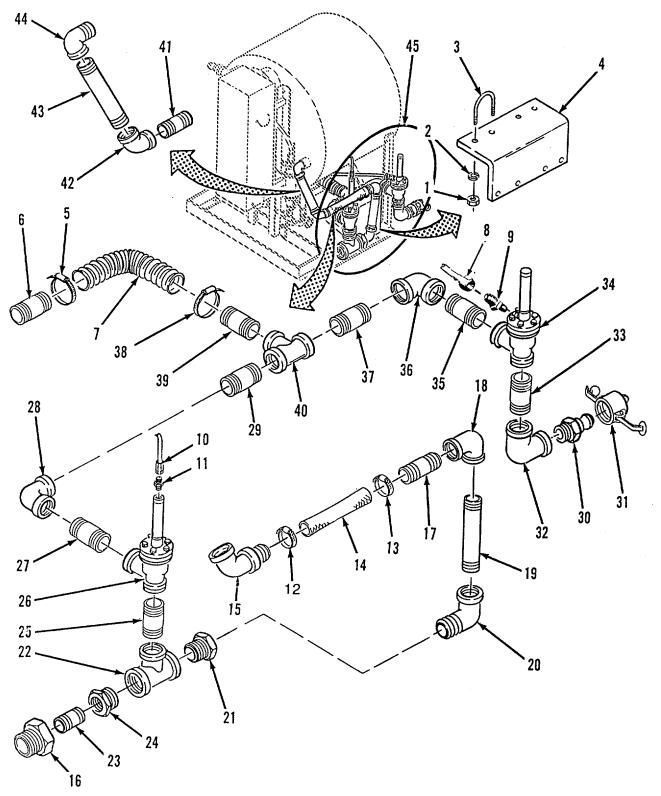


Figure 2-15. Drain Pipe

2-26. DRAIN PIPE -continued.

- (21) Remove nipple (25) from normal open valve (26).
- (22) Remove union (11) from normal open valve (26).
- (23) Remove normal open valve (26) from nipple (27).
- (24) Remove nipple (27) from elbow (28).
- (25) Remove elbow (28) from nipple (29).
- (26) Remove nipple (29) from tee (40).
- (27) Remove cap (31).
- (28) Remove quick disconnect coupling (30) from elbow (32).
- (29) Remove elbow (32) from nipple (33).
- (30) Remove nipple (33) from normal closed valve (34).
- (31) Remove union (9) from normal closed valve (34).
- (32) Remove normal closed valve (34) from nipple (35).
- (33) Remove nipple (35) from elbow (36).
- (34) Remove elbow (36) from nipple (37).
- (35) Remove nipple (37) from tee (40).
- (36) Remove clamp (38) from drain hose (7).
- (37) Remove drain hose (7) from nipple (39).
- (38) Remove nipple (39) from tee (40).
- (39) Remove nipple (41) from elbow (42).
- (40) Remove elbow (42) from nipple (43).
- (41) Remove nipple (43) from elbow (44).
- (42) Remove elbow (44) from washer.

b. CLEANING

Clean threads of hardware with wire brush.

c. REPAIR

Repair consists of replacing damaged or missing components of the drain pipe.

d. INSTALLATION

NOTE

Apply antiseize compound to all male threads before installing piping. Do not apply to unions connected to air hose.

- (1) Install elbow (44) in washer.
- (2) Install nipple (43) on elbow (44).
- (3) Install elbow (42) on nipple (43).

2-26. DRAIN PIPE - continued.

- (4) Install nipple (41) on elbow (42).
- (5) Install nipple (39) in tee (40).
- (6) Install drain hose (7) on nipple (39).
- (7) Install clamp (38) on drain hose (7).
- (8) Install nipple (37) in tee (40).
- (9) Install elbow (36) on nipple (37).
- (10) Install nipple (35) on elbow (36).
- (11) Install normal closed valve (34) on nipple (35).

NOTE

Apply antiseize compound to all male threads before installing piping. Do not apply to unions connected to air hose.

- (12) Install union (9) on normal closed valve (34).
- (13) Install nipple (33) on normal closed valve (34).
- (14) Install elbow (32) on nipple (33).
- (15) Install quick disconnect coupling (30) on elbow (32).
- (16) Install cap (31).
- (17) Install nipple (29) on tee (40).
- (18) Install elbow (28) on nipple (29).
- (19) Install nipple (27) on elbow (28).
- (20) Install normal open valve (26) on nipple (27).

NOTE

Apply antiseize compound to all male threads before installing piping. Do not apply to unions connected to air hose.

- (21) Install union (11) on normal open valve (26).
- (22) Install nipple (25) on normal open valve (26).
- (23) Install tee (22) on nipple (25).
- (24) Install bushing (24) on tee (22).
- (25) Install nipple (23) on bushing (24).
- (26) Install union (16) on nipple (23).
- (27) Install bushing (21) on tee (22).
- (28) Install elbow (20) in bushing (21).
- (29) Install nipple (19) in elbow (20).
- (30) Install elbow (18) on nipple (19).

2-26. DRAIN PIPE - continued.

- (31) Install nipple (17) on elbow (18).
- (32) Install hose (14) on nipple (17).
- (33) Install clamp (13) on hose (14).
- (34) Install drain pipe (45).
- (35) Install drain hose (7) on nipple (6).
- (36) Install hose (14) on nipple (15).
- (37) Connect union (16) together.
- (38) Install two U-clamps (3) on drain pipe (45) and bracket (4) with four lockwashers (2) and nuts (1).
- (39) Install clamp (5) on drain hose (7).
- (40) Install clamp (12) on hose (14).
- (41) Install air hose (8) on union (9).
- (42) Install air hose (10) on union (11).

2-27. TUB PIPE.

This task covers:	a. Removal	b. Cleaning	
	c. Repair	d. Installation	

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Materials/Parts
Antiseize Compound (App D, Item 24)
Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove hose (1) from adapter (2).
- (2) Remove adapter (2) from bushing (3).
- (3) Remove bushing (3) from reducer (4).
- (4) Remove reducer (4) from nipple (5).
- (5) Remove nipple (5) from reducer (6).
- (6) Remove reducer (6) from nipple (7).
- (7) Remove nipple (7) from tee (8).
- (8) Remove plug (9) from tee (8).
- (9) Remove tee (8) from nipple (10).
- (10) Remove nipple (10) from tee (20).
- (11) Remove nipple (12) from plug (13).
- (12) Unscrew conduit (11) from plug (13).
- (13) Unscrew plug (13) from reducer (15).

CAUTION

Be careful when removing sensor switch not to damage electrical wiring.

- (14) Lift sensor switch plug (13) and conduit (11) from reducer (15).
- (15) Remove clamp (14) from bracket (32) and reducer (15).
- (16) Remove reducer (15) from nipple (16).
- (17) Remove nipple (16) from reducer (17).
- (18) Remove reducer (17) from bushing (18).
- (19) Remove bushing (18) from nipple (19).

2-27. TUB PIPE- continued.

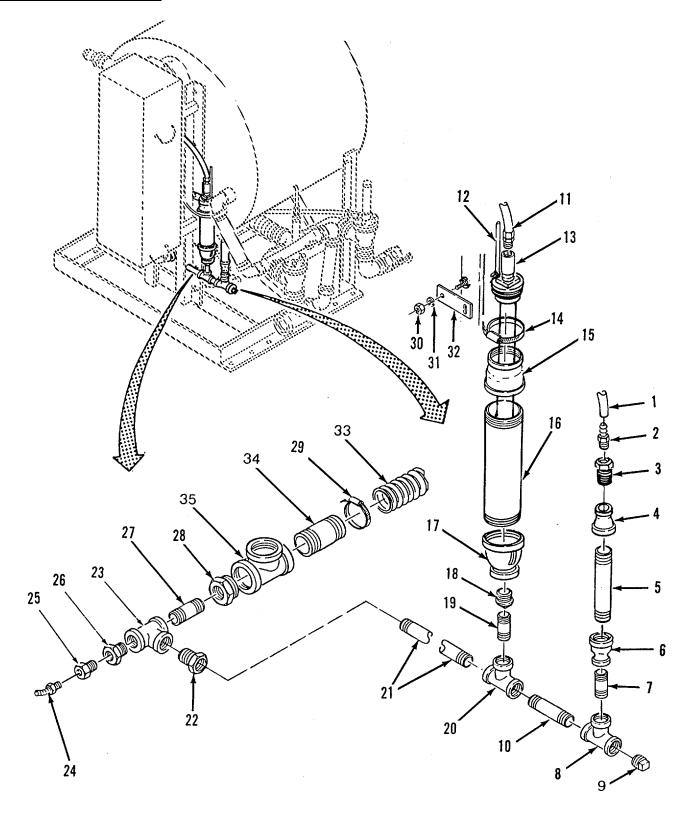


Figure 2-16. Tub Pipe

2-27. TUB PIPE - continued.

- (20) Remove nipple (19) from tee (20).
- (21) Remove tee (20) from nipple (21).
- (22) Remove nipple (21) from bushing (22).
- (23) Remove bushing (22) from tee (23).
- (24) Remove sensor (24) from bushing (25).
- (25) Remove bushing (25) from bushing (26).
- (26) Remove bushing (26) from tee (23).
- (27) Remove tee (23) from nipple (27).
- (28) Remove nipple (27) from bushing (28).
- (29) Remove bushing (28) from tee (35).
- (30) Remove clamp (29) from hose (33).
- (31) Remove hose (33) from nipple (34).
- (32) Remove nipple (34) from tee (35).
- (33) Remove tee (35) from washer.
- (34) Remove one nut (30), lockwasher (31) and bracket (32) from washer.

b. CLEANING

- (1) Clean threads of piping with wire brush.
- (2) Ensure piping is not clogged and clean as required.

c. REPAIR

Repair consists of replacing damaged or missing components of the tub pipe.

d. INSTALLATION

(1) Install bracket (32), one lockwasher (31) and nut (30) on washer.

NOTE

Apply antiseize compound to all male threads before installing hardware.

- (2) Install tee (35) on washer.
- (3) Install nipple (34) on tee (35).
- (4) Install hose (33) on nipple (34).
- (5) Install clamp (29) on hose (33).
- (6) Install bushing (28) on tee (35).
- (7) Install nipple (27) on bushing (28).
- (8) Install tee (23) on nipple (27).
- (9) Install bushing (26) on tee (23).

2-27. TUB PIPE - continued.

- (10) Install bushing (25) on bushing (26).
- (11) Install sensor (24) on bushing (25).
- (12) Install bushing (22) on tee (23).
- (13) Install nipple (21) on bushing (22).
- (14) Install tee (20) on nipple (21).
- (15) Install nipple (19) on tee (20).
- (16) Install bushing (18) on nipple (19).
- (17) Install reducer (17) on bushing (18).
- (18) Install nipple (16) on reducer (17).
- (19) Install reducer (15) on nipple (16).
- (20) Install clamp (14) on bracket (32) and reducer (15).
- (21) Insert sensor switch plug (13) and conduit (11) in reducer (15).
- (22) Screw plug (13) in reducer (15).
- (23) Screw conduit (11) on plug (13).
- (24) Install nipple (12) on plug (13).
- (25) Install nipple (10) on tee (20).
- (26) Install tee (8) on nipple (10).
- (27) Install plug (9) on tee (8).
- (28) Install nipple (7) on tee (8).
- (29) Install reducer (6) on nipple (7).
- (30) Install nipple (5) on reducer (6).
- (31) Install reducer (4) on nipple (5).
- (32) Install bushing (3) on reducer (4).
- (33) Install adapter (2) on bushing (3).
- (34) Install hose (1) on adapter (2).

2-28. LOCK COVER AND LOCK.

This task covers:	a. Removal	b. Repair
	c. Installation	d. Adjustment

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)

Materials/Parts

Connector (App C, Item 26)
Sealing Washer (App C, Item 64)
Plumbing Fixture Setting Compound
(App D, Item 20)
Tags (App D, Item 4)

General Safety Instructions

WARNING
High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Lock cover (3).
 - (a) Remove four screws (1) and washers (2) from lock cover (3).
 - (b) Remove lock cover (3) from lock (4).
 - (c) Tag electrical wiring (5) and remove two connectors (6).
 - (d) Remove nut (7), washer (8) and connector (9). Discard washer (8).
- (2) Lock (4).
 - (a) Remove lock cover (3).
 - (b) Remove four screws (32) from lock (4) and remove lock.

b. REPAIR

- (1) Switch (11).
 - (a) Remove boot (10) from switch (11).
 - (b) Remove switch (11) from lock cover (3).
 - (c) Position new switch (11) in lock cover (3).
 - (d) Install boot (10) on switch (11).
- (2) Door Solenoid (31).
 - (a) Remove two nuts (28), washers (29) and screws (30).
 - (b) Remove nut (23), washer (24), screw (26), washer (25) from door solenoid (31) and remove bar (27).

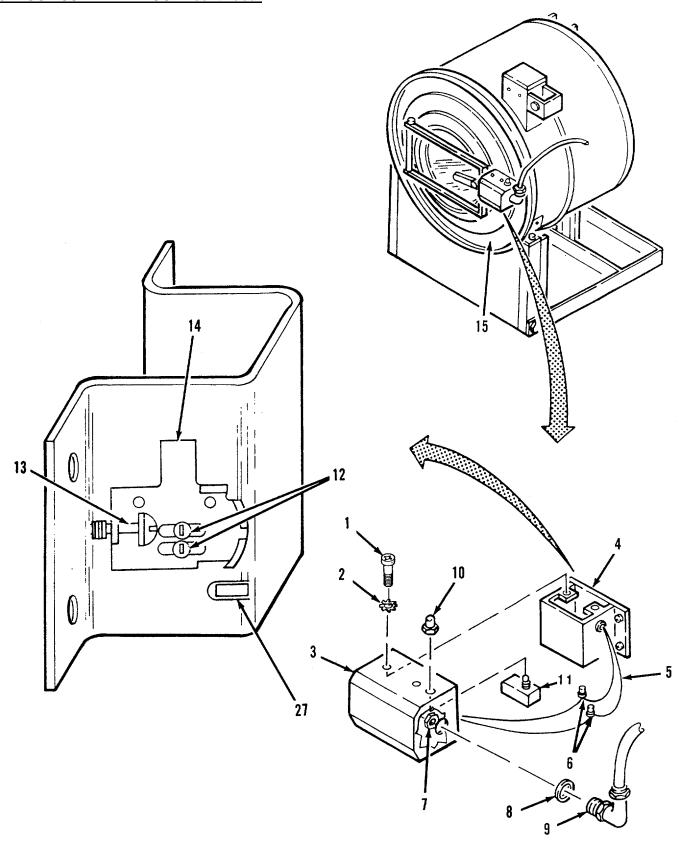


Figure 2-17. Lock Cover and Lock (Sheet 1 of 2)

2-28. LOCK COVER AND LOCK - continued.

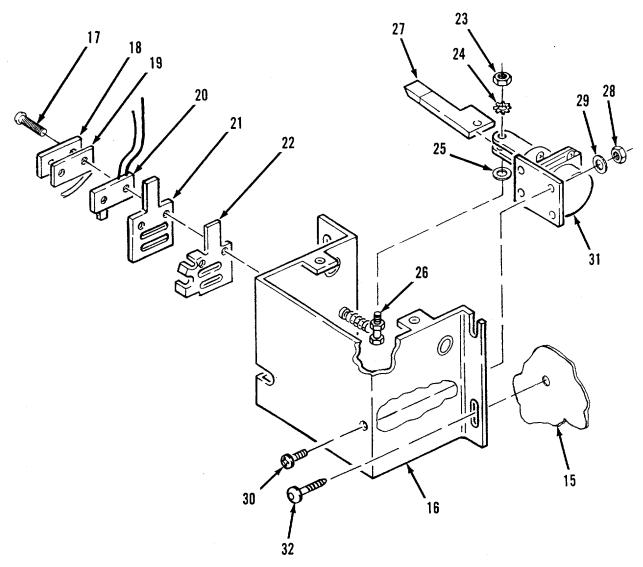


Figure 2-17. Lock Cover and Lock (Sheet 2)

2-28. LOCK COVER AND LOCK - continued.

- (c) Position bar (27) on new door solenoid (31) and install screw (26), washer (25), washer (24) and nut (23).
- (d) Position door solenoid (31) on bracket (16) and install two screws (30), washers (29) and nuts (28).
- (3) Door Switch (20).
 - (a) Remove two screws (17), gasket (18) and strike plate (19).
 - (b) Remove switch (20) and insulator (21) from latch strike (22).
 - (c) Position latch strike (22), insulator (21), new switch (20), strike plate (19), gasket (18) and install two screws (17).

c. INSTALLATION

- (1) Lock (4)
 - (a) Apply plumbing fixture setting compound around the four mounting holes on washer that the screws (32) will be installed in.
 - (b) Position lock (4) on washer door (15) and install four screws (32).
 - (c) Install lock cover (3).
- (2) Lock Cover (3).
 - (a) Position connector (9), new washer (8) on lock cover (3) and install nut (7).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (b) Connect electrical wiring (5) with two connectors (6).
- (c) Position lock cover (3) on lock (4).
- (d) Install four screws (1) and washers (2) on lock cover (3).

d. ADJUSTMENT

- (1) Manually retract bar (27) and open washer door (15).
- (2) Loosen two screws (12) on latch strike (14).
- (3) Place paper material between door and washer and close door.
- (4) Pull on paper material, it should barely move, adjust by turning screw (13) in or out.
- (5) Manually retract bar (27) and open washer door (15).
- (6) Tighten screws (12) on latch strike (14).
- (7) Install lock cover (3).

2-29. BELT GUARD.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)

General Safety Instructions

WARNING

Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove four studs (4) from guard (5).
- (2) Remove guard (5) from washer (6).

b. REPAIR

(1) Stud (4).

NOTE

All four studs are identical, this procedure is for one of them.

- (a) Remove nut (1), star washer (2), chain and stud (4) and screw (3) from guard (5).
- (b) Install screw (3), new chain and stud (4), star washer (2) and nut (1) on guard (5).
- (2) Guard (5).
 - (a) Remove four studs (4) from guard (5).
 - (b) Install four studs (4) on new guard (5).

c. INSTALLATION

- (1) Position guard (5) on washer (6).
- (2) Install four studs (4) on guard (5).

2-29. BELT GUARD - continued.

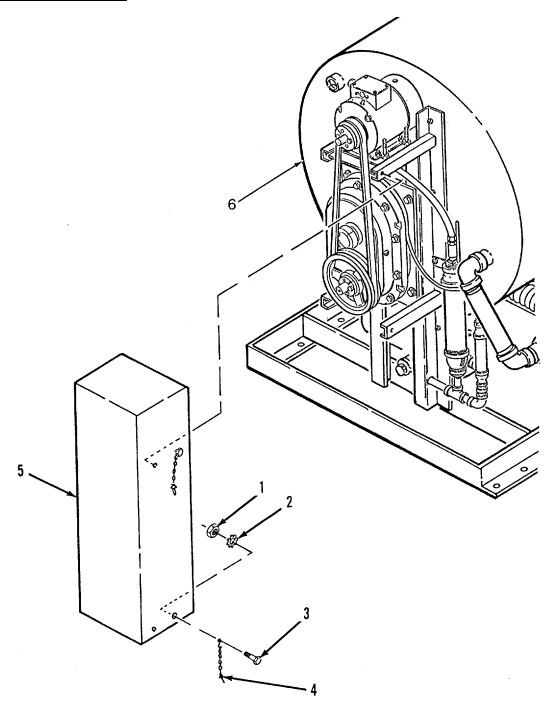


Figure 2-18. Belt Guard

2-30. MOTOR AND PLATE.

This task covers: a. Removal b. Installation c. Adjustment

INITIAL SETUP

Tools

Equipment Condition

Belt guard removed (Para 2-29)

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Closed End Connector (App C, Item 4)

a. REMOVAL

- (1) AC Motor (8).
 - (a) Loosen four nuts (1) on screws (2).
 - (b) Back off four nuts (3) on screws (2) enough to remove V-belt (4).
 - (c) Remove V-belt (4) from pulley (5).
 - (d) Remove four screws (6), and cover (7) from ac motor (8).
 - (e) Tag and remove electrical wiring from ac motor (8) and remove conduit (9) with wiring.
 - (f) Remove four nuts (10), lockwashers (11) and bolts (12) from ac motor (8) and plate (13).
 - (g) Remove ac motor (8) from plate (13).
 - (h) Measure distance between pulley (5) and ac motor (8) and record distance.
 - (i) Remove two bolts (14) and bushing (15).
 - (j) Remove pulley (5) and key (16) from ac motor (8).
 - (k) Position cover (7) on ac motor (8) and install four screws (6).
- (1) Remove four nuts (1) and plate (13) from screws (2).
- (2) V-belt (4).
 - (a) Loosen four nuts (1) from screws (2).
 - (b) Turn four nuts (3) to lower plate (13) until V-belt (4) can be removed.
 - (c) Remove V-belt (4) from pulleys (5 and 17).

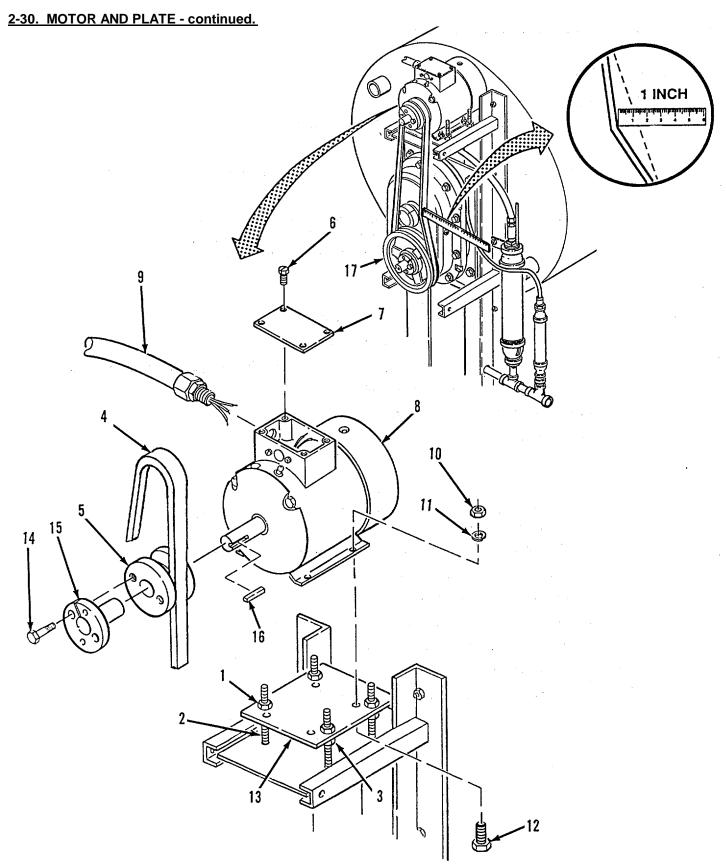


Figure 2-19. Motor and Plate 2-79

2-30. MOTOR AND PLATE - continued.

b. INSTALLATION

- (1) AC Motor (8)
 - (a) Remove four screws (6) and cover (7) on ac motor (8).
 - (b) Position ac motor (8) on plate (13).
 - (c) Install four bolts (12), lockwashers (11) and nuts (10) on ac motor (8) and plate (13).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (d) Position motor (8) on washer.
- (e) Connect conduit (9) and wiring to ac motor (8).
- (f) Install cover (7) on ac motor (8) and install four screws (6).
- (g) Position key (16) and pulley (5) on ac motor (8) at same distance pulley (5) was removed.
- (h) Install bushing (15) and two bolts (14).
- (i) Install V-belt (4) on pulley (5 and 17).
- (j) Proceed to adjustment.

c. ADJUSTMENT

NOTE

V-belt deflection is measured midway between motor pulley and gear box pulley.

- (1) Measure V-belt (4) deflection of one inch (2.54 cm) from center of V-belt.
- (2) If less than one inch, do substeps below:
 - (a) Loosen four nuts (1) on screws (2) if not already loose.
 - (b) Turn four nuts (3) until one inch deflection is achieved on V-belt (4).
 - (c) Tighten four nuts (1) on screws (2) and plate (13).
- (3) If more than one inch, do substeps below:
 - (a) Loosen four nuts (1) on screws (2) if not already loose.
 - (b) Turn four nuts (3) until one inch deflection is achieved on V-belt (4).
 - (c) Tighten four nuts (1) on screws (2) and plate (13).

2-31. AIR TANK.

This task covers:	a. Removal	b. Repair	c. Installation	
INITIAL SETUP		Equipment Condition Laundry Unit shut down (TM 10-3510-222-10)		
Tools General Mechanics Tool Kit (App B, Item 1)		General Safety Instructions		
Materials/Parts Antiseize Compound (App D, Item 24)		WARNING High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.		

a. REMOVAL

- (1) Open drain cock (5) until pressure gage (7) reads 0 psi.
- (2) Close drain cock (5).
- (3) Remove air hose (1) from adapter (6).
- (4) Remove four nuts (2), lockwashers (3) and two U-bolts (4) from air tank (8).
- (5) Remove air tank (8).

b. REPAIR

Air Tank (8).

- (a) Remove adapter (6) from air tank (8).
- (b) Remove pressure gage (7) from air tank (8).
- (c) Remove drain cock (5) from air tank (8).

NOTE

Apply antiseize compound to all male threads (except adapter and U-clamps) before installing hardware.

- (d) Install drain cock (5) on air tank (8).
- (e) Install pressure gage (7) on air tank (8).
- (f) Install adapter (6) on air tank (8).

2-31. AIR TANK - continued.

c. INSTALLATION

- (1) Position air tank (8) on washer and install two U-bolts (4), four lockwashers (3) and nuts (2).
- (2) Install air hose (1) on adapter (6).

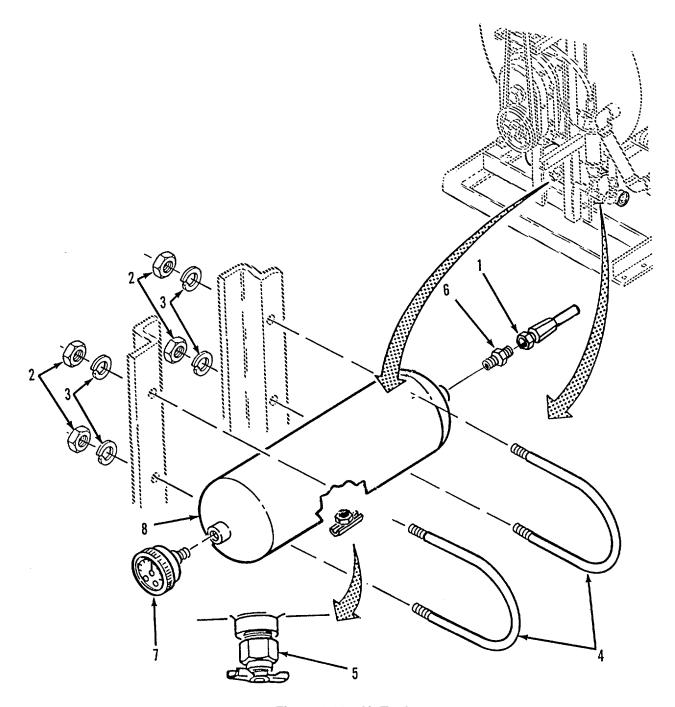


Figure 2-20. Air Tank

2-32. PRESSURE GAGE.

This task covers:	a. Removal	b. Installation	
INITIAL SETUP		Equipment Condition Laundry Unit shut down (TM 10-3510-222-10)	
<u>Tools</u> General Mechanics Tool	Kit (App B, Item 1)	General Safety Instructions WARNING	
Materials/Parts Antiseize Compound (App D, Item 24)		High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.	

a. REMOVAL

- (1) Remove sensor (1) from bushing (5).
- (2) Remove two nuts (2) and brackets (3) from pressure gage (4).
- (3) Remove pressure gage (4) from drum (6).

b. INSTALLATION

- (1) Position pressure gage (4) on drum (6) and install two brackets (3) and nuts (2).
- (2) Apply antiseize compound to male threads of sensor (1).
- (3) Install sensor (1) on bushing (5).

2-32. PRESSURE GAGE - continued.

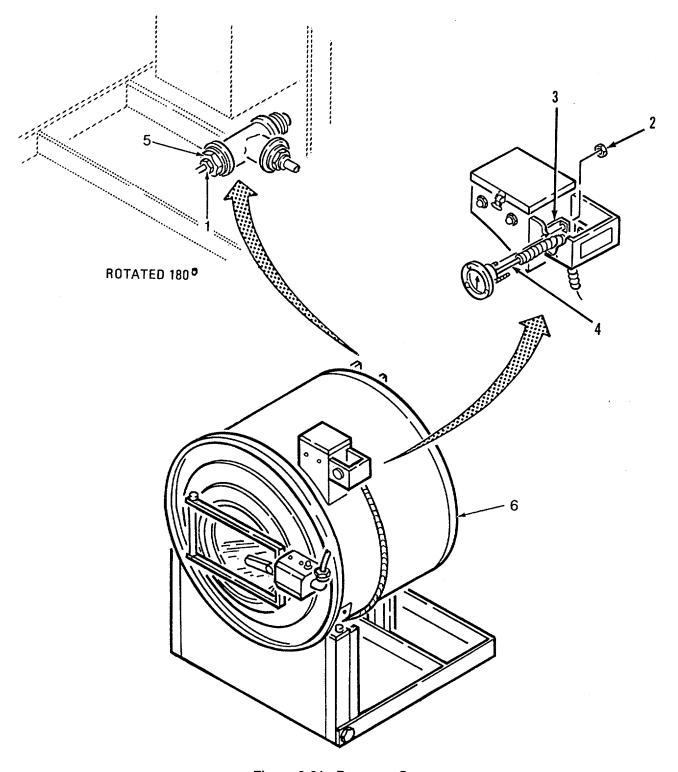


Figure 2-21. Pressure Gage

2-33. AIR MANIFOLD.

This task covers:

a. Removal
b. Disassembly
c. Repair
d. Assembly
e. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Antiseize Compound (App D, Item 24)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) On washer air tank, open drain cock until pressure gage reads 0 psi.
- (2) Close drain cock (Para 2-31, Air Tank).
- (3) Remove five hose clamps (1) from air hoses (2, 3, 4, 5 and 6).
- (4) Remove air hoses (2, 3, 4, 5 and 6) from air manifold (24).
- (5) Remove hose (7) from adapter (12).
- (6) Remove hose (8) from adapter (13).
- (7) Remove four nuts (9), lockwashers (10), two plates (11) and air manifold (24).

b. DISASSEMBLY

- (1) Remove adapter (12) from tee (14).
- (2) Remove adapter (13) from tee (14).
- (3) Remove tee (14) from nipple (15).
- (4) Remove adapter (16) from pipe cross (18).
- (5) Remove adapter (17) from pipe cross (18).
- (6) Remove pipe cross (18) from nipple (19).
- (7) Remove nipple (19) from pipe cross (23).
- (8) Remove adapter (20) from pipe cross (23).
- (9) Remove adapter (21) from pipe cross (23).
- (10) Remove adapter (22) from pipe cross (23).

2-33. AIR MANIFOLD - continued.

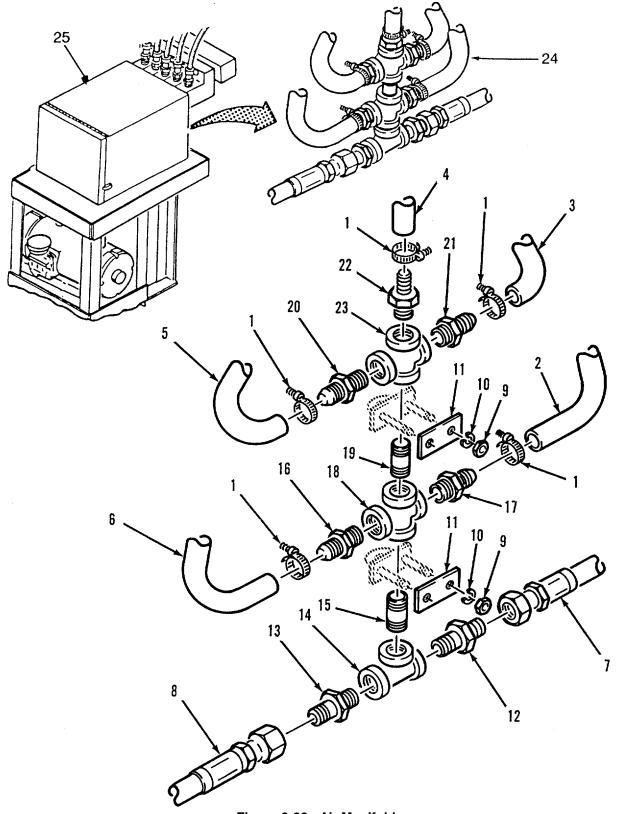


Figure 2-22. Air Manifold

2-33. AIR MANIFOLD - continued.

c. REPAIR

Repair consists of replacing damaged or missing components of the air manifold.

d. ASSEMBLY

NOTE

Apply antiseize compound to all male threads (except flare fitting side of the adapters) before installing piping.

- (1) Install adapter (22) on pipe cross (23).
- (2) Install adapter (21) on pipe cross (23).
- (3) Install adapter (20) on pipe cross (23).
- (4) Install nipple (19) on pipe cross (23).
- (5) Install pipe cross (18) on nipple (19).
- (6) Install adapter (17) on pipe cross (18).
- (7) Install adapter (16) on pipe cross (18).
- (8) Install nipple (15) on pipe cross (18).
- (9) Install tee (14) on nipple (15).
- (10) Install adapter (13) on tee (14).
- (11) Install adapter (12) on tee (14).

e. INSTALLATION

- (1) Position air manifold (24) on control panel (25).
- (2) Install two plates (11), four lockwashers (10) and nuts (9).
- (3) Install hose (8) on adapter (13).
- (4) Install hose (7) on adapter (12).
- (5) Install five hose clamps (1) on air hoses (2, 3, 4, 5 and 6). Do not tighten.
- (6) Install air hoses (2, 3, 4, 5 and 6) on air manifold (24).
- (7) Position five hose clamps (1) over adapters (12, 13, 16, 17, 20 and 21) and tighten.

2-34. AIR COMPRESSOR.

This task covers:	a. Removal d. Adjustment	b. Repair	c. Installation
INITIAL SETUP		Equipment Condition	
Tools		Laundry Unit shut down (TM 10-3510-222-10)	
General Mechanics Tool	Kit (App B, Item 1)	·	,
	,	General Safety Instructions	
Personnel Required		•	
Two (for Adjustment)			WARNING
,		High voltage	e is present on this
Materials/Parts		equipment.	Do not perform
Tags (App D, Item 4)		• •	with power on. Death or

a. REMOVAL

- (1) On washer air tank (under rear of washer), open drain cock until pressure gage reads 0 psi.
- (2) Close drain cock.
- (3) Remove hose (1) from elbow (16).
- (4) Loosen captive nut (2) on cover (3) and remove cover (3) from switch (4).
- (5) Tag and disconnect electrical wiring to switch (4).
- (6) Loosen screws (5) and rotate plate (6).
- (7) Remove nut (7) from 90° adapter (8) and remove adapter (8).
- (8) Remove four nuts (9), lockwashers (10), flat washers (11 and 12) and bolts (13) from bracket (15).
- (9) Remove air compressor (14) from control stand (18).

b. REPAIR

- (1) Handle (20).
 - (a) Remove two screws (19) and handle (20).
 - (b) Install new handle (20) with two screws (19).
- (2) Fan (23).
 - (a) Remove two screws (21) and cover (22).
 - (b) Pull fan (23) from shaft (24).
 - (c) Push new fan (23) on shaft (24) 1/8 inch from end of shaft.
 - (d) Install cover (22) with two screws (21).

2-34. AIR COMPRESSOR continued.

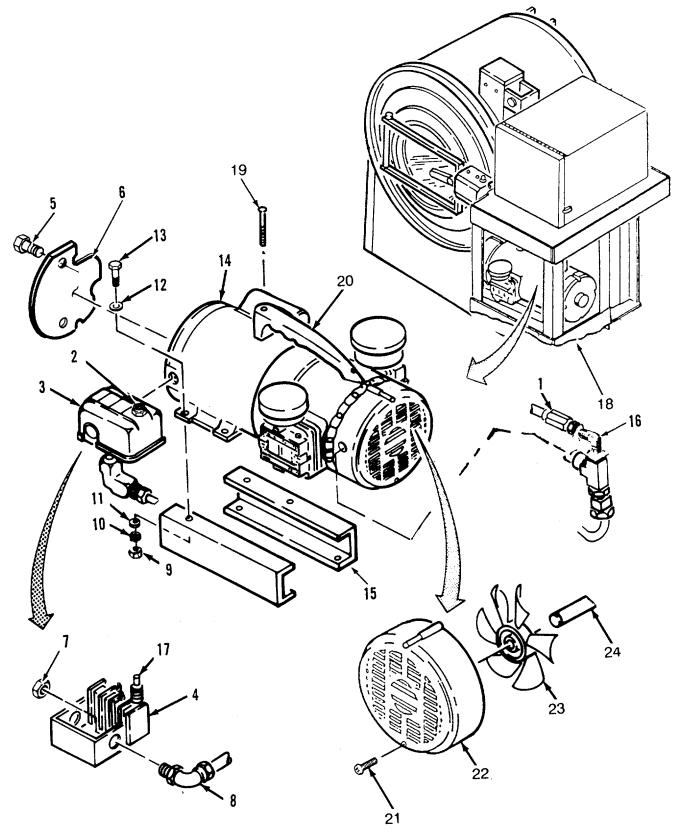


Figure 2-23. Air Compressor 2-89

2-34. AIR COMPRESSOR - continued.

c. INSTALLATION

- (1) Position air compressor (14) on control stand (18) and install four flat washers (12), bolts (13), flat washers (11), lockwashers (10) and nuts (9).
- (2) Position 90° adapter (8) on switch (4) and install nut (7).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-6 Air Compressor Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (3) Connect electrical wiring to switch (4).
- (4) Position cover (3) on switch (4) and tighten captive nut (2).
- (5) Rotate plate (6) and tighten screw (5).
- (6) Install hose (1) on fitting (16).
- (7) Do adjustment procedure, if air compressor (14) or switch (4) was replaced.

d. ADJUSTMENT

(1) Loosen captive nut (2) on cover (3) and remove cover (3) from air compressor (14).

WARNING

High voltages in this equipment can cause serious injury or death. When applying power during a test, take proper measure to ensure safety of personnel. Never work on electrical equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment.

- (2) Apply electrical power, refer to TM 10-3510-222-10.
- (3) If washer air tank gage (under rear of washer) reads 105 or above psi and air compressor does not turn off, do substeps below:
 - (a) On washer air tank, open drain cock. Reading on gage is approximately 50 psi.
 - (b) Close washer air tank drain cock.
 - (c) Adjust nut (17) to turn off air compressor (14) at 100 psi on washer air tank gage.
 - (d) Repeat substeps until air compressor shuts off at 100 psi.
- (4) If washer air tank gage (under rear of washer) reads below 90 psi and air compressor is not on, adjust nut (17) to turn on air compressor (14) at 90 psi.
- (5) Install cover (3) and tighten captive nut (2).

2-35. FILTER.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools None

NOTE

Both left and right filters are identical, only one is shown.

- a. REMOVAL
 - (1) Remove by pulling up on top (1).
 - (2) Remove filter (2).
 - (3) Unscrew body (3) from air compressor (4).
- b. REPAIR

Repair consists of replacing damaged or missing filter(s).

- c. INSTALLATION
 - (1) Screw in body (3) on air compressor (4).
 - (2) Install filter (2).
 - (3) Install top (1) on body (3).

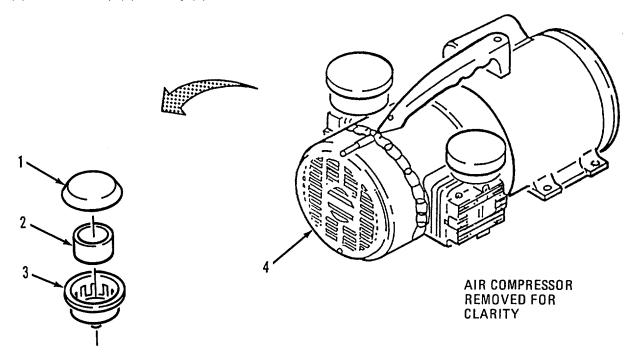


Figure 2-24. Filter

2-36. PRE-EXTRACTOR BIN (WET WASH BIN).

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Personnel Required
Two

Materials/Parts

Antiseize Compound (App D, Item 24)

a. REMOVAL

- (1) Remove hose (1) from quick coupling half (2).
- (2) Remove two nuts (3), lockwashers (4), flat washers (5) and bolts (6) at location B on figure.
- (3) Remove three bolts (7), lockwashers (8) and flat washers (9) at location A on figure.
- (4) Remove wet wash bin (10) from trailer (15).

b. REPAIR

- (1) Repair consists of replacing damaged or missing components of the wet wash bin.
- (2) Drain bin plate (11 and/or 12).
 - (a) Remove drain bin plate (11 and/or 12).
 - (b) Install drain bin plate (11 and/or 12).
- (3) Drain hookup.
 - (a) Remove quick coupling half (2).
 - (b) Remove pipe (13).
 - (c) Remove elbow (14).
 - (d) Apply antiseize compound to male threads of wet wash bin (10) and pipe (13).

2-36. PRE-EXTRACTOR BIN (WET WASH BIN) - continued.

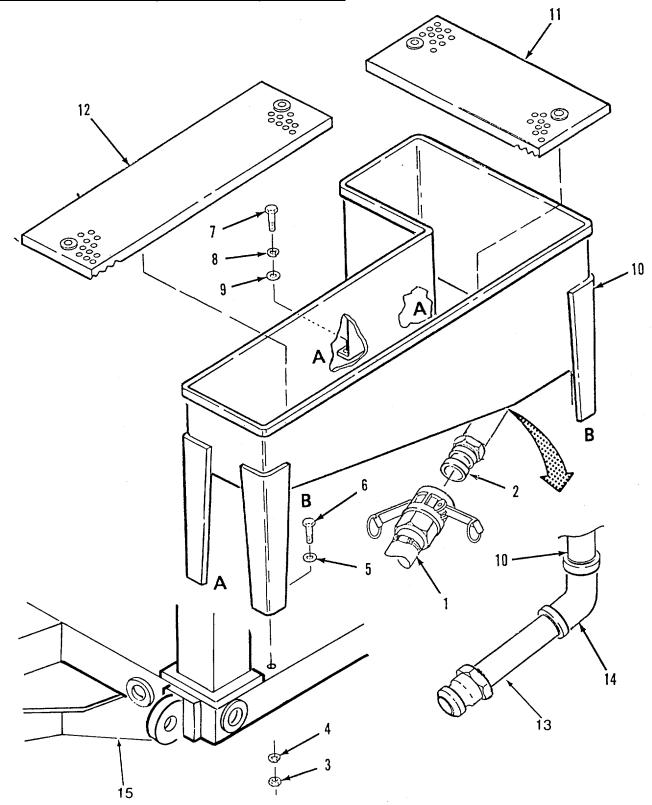


Figure 2-25. Pre-Extractor Bin (Wet Wash Bin)

2-36. PRE-EXTRACTOR BIN (WET WASH BIN) - continued.

- (e) Install elbow (14).
- (f) Install pipe (13).
- (g) Install quick disconnect coupling (2).

c. INSTALLATION

- (1) Position wet wash bin (10) on trailer (15).
- (2) Install three flat washers (9), lockwashers (8) and bolts (7) at location A on figure.
- (3) Install two bolts (6), flat washers (5), lockwashers (4) and nuts (3) at location B on figure.
- (4) Install hose (1) on quick coupling half (2).

2-37. EXTRACTOR PIPING.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Antiseize Compound (App D, Item 24)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

- a. REMOVAL
 - (1) Remove coupling half (1) from adapter (2).
 - (2) Remove four bolts (3).
 - (3) Remove flange (4) with attached piping (6) and gasket (5) from extractor (7).
 - (4) Remove flange (4) from piping (6).
 - (5) Remove adapter (2) from piping (6).
- b. REPAIR

Repair consists of replacing damaged or missing components of the extractor piping.

- c. INSTALLATION
 - (1) Clean threads and apply antiseize compound to all male threads.
 - (2) Install flange (4) on piping (6).
 - (3) Install adapter (2) on piping (6).
 - (4) Install gasket (5) and flange (4) on extractor (7) with four bolts (3).
 - (5) Install coupling half (1).

2-37. EXTRACTOR PIPING - continued.

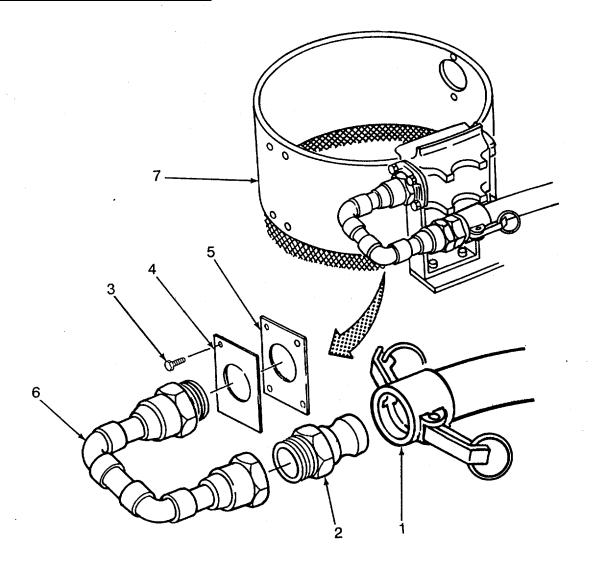


Figure 2-26. Extractor Piping

2-38. **EXTRACTOR LID AND KNOB.**

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Materials/Parts

Lockwasher (App C, Item 77)

REMOVAL a.

- Remove six screws (1), lockwashers (2) and lid (3) from lid frame (8). Discard lockwashers (2). (1)
- (2) Remove screw (4), flat washer (5) and ball (6) from lid frame (8).
- Remove seal (7) from lid (3). (3)

INSTALLATION b.

- (1) Install seal (7) on lid (3).
- Position ball (6) on lid frame (8) and secure with (2) flat washer (5) and screw (4).
- Position lid (3) on lid frame (8) and secure with (3)

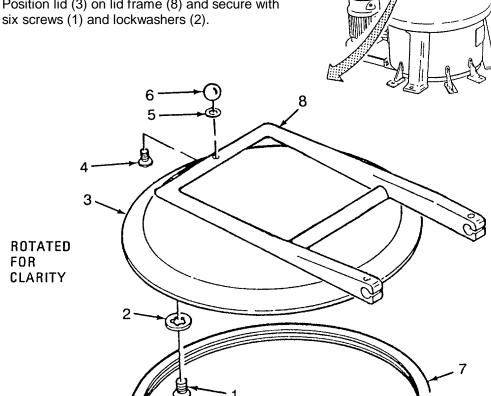


Figure 2-27. Extractor Lid and Knot

2-39. BASKET AND CURB ASSEMBLY.

This task covers: a. Removal b. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

General Safety Instructions

Personnel Required

Four

Materials/Parts

Gasket (App C, Item 59) Gasket (App C, Item 60) Basket is heavy and requires at least four people to lift.

Using less than four people may result in injury.

WARNING

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

a. REMOVAL

(1) Remove basket (1) from curb assembly (11).

CAUTION

Put chocks on side of basket to keep from rolling.

- (2) Tip basket (1) over to its side and remove eight screws (2), lockwashers (3) and post (4).
- (3) Remove two bolts (5), flat washers (6) and gaskets (7).
- (4) Remove nut (8), lockwasher (9) and drain clamp (10).
- (5) Remove curb assembly (11) from drive unit (15)
- (6) Remove two gaskets (12), gasket (13) and stud (14).

b. INSTALLATION

- (1) Install stud (14) and position two gaskets (12) and gasket (13) on drive unit assembly (15).
- (2) Position curb assembly (11) on drive unit (15) and install drain clamp (10), lockwasher (9), nut (8), two bolts (5), flat washers (6) and gaskets (7).
- (3) Install post (4) on basket (1) with eight screws (2) and lockwashers (3).
- (4) Position basket (1) in curb assembly (11).

2-39. BASKET AND CURB ASSEMBLY - continued.

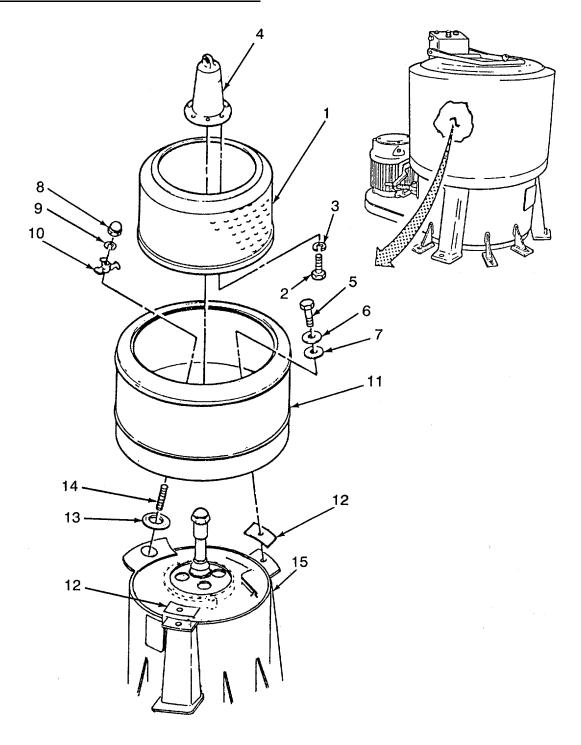


Figure 2-28. Basket and Curb Assembly

2-40. INDICATOR LIGHT.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Lamp Extractor (App B, Item 14)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not replace light bulb with power on.

a. REMOVAL

- (1) Unscrew shade lens (1) from indicator light (3).
- (2) Using lamp extractor, push lamp (2) in, twist counterclockwise and pull out.

b. INSTALLATION

- (1) Install lamp (2) in indicator light (3).
- (2) Install shade lens (1).

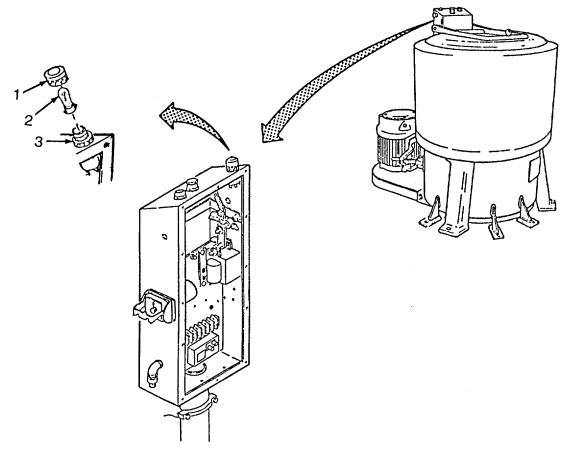


Figure 2-29. Indicator Light

2-41. DRIVE UNIT.

This task covers: Adjustment

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

ADJUSTMENT

- (1) Remove two screws (1), lockwashers (2) and plate (3) from laundry extractor (4).
- (2) Loosen nut (5) and bolt (6) until basket cannot be turned by hand, then loosen bolt (6) an additional turn.
- (3) Tighten nut (5) against lever (7).
- (4) Install plate (3) with two lockwashers (2) and screws (1).

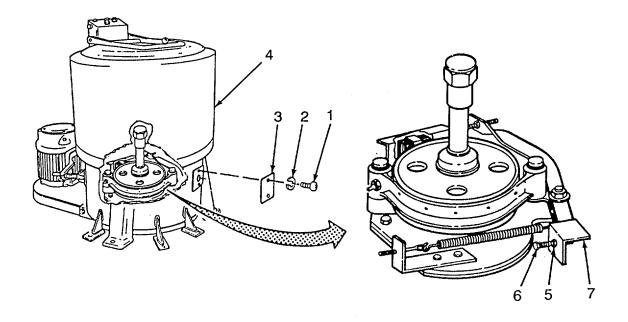


Figure 2-30. Drive Unit

2-42. MOTOR ASSEMBLY.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3)

Material/Parts

Gasket (App C, Item 71) Tags (App D, Item 4)

Personnel Required

Two

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Remove bolt (1), lockwasher (2) and belt cover (4).
- (2) Remove belt guard (3).
- (3) Push motor (8) toward extractor to compress spring (21), mounted on belt tension bolt (20) and remove belt (5).
- (4) Remove four screws (6), lockwashers (7) and motor (8) from motor mounting plate (23).
- (5) Remove two caps (9) and cover (10) from conduit box (22).
- (6) Disconnect and tag wires.
- (7) Remove nut (11), gasket (12) and box connector (13) from conduit box (22).

NOTE

To remove pulley from hub, it is necessary to thread pulley mounting screws into threaded holes on pulley.

- (8) Remove three screws (14), lockwashers (15) and pulley (16) from shaft of motor (8).
- (9) Mark position of hub (18) on shaft of motor (8), loosen setscrew (17) and remove hub (18).
- (10) Remove key (19) from shaft of motor (8).

2-42. MOTOR ASSEMBLY - continued.

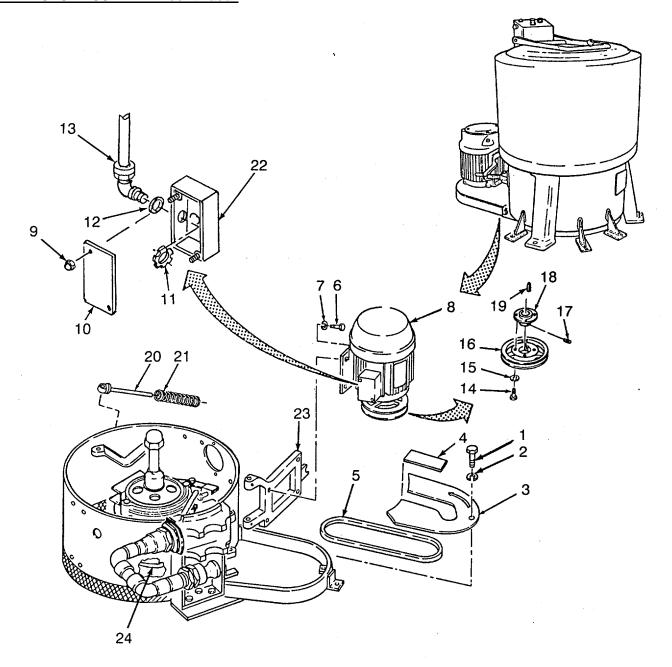


Figure 2-31. Motor Assembly

2-42. MOTOR ASSEMBLY - continued.

b. INSTALLATION

- (1) Position key (19) on shaft of motor (8).
- (2) Install hub (18) on shaft of motor (8) as marked at disassembly and secure with setscrew (17).
- (3) Install pulley (16) on hub (18) and secure with three screws (14) and lockwashers (15).
- (4) Position motor (8) on motor mounting plate (23) and secure with four lockwashers (7) and bolts (6).

NOTE

When tension bolt and spring are engaged in groove of motor mounting plate, belt tension is maintained by tension of spring between motor mounting bolt and motor mounting plate.

- (5) Engage belt tension bolt (20) in groove of motor mounting plate (23).
- (6) Position belt (5) on pulley (16) and pulley of extractor drive (24).
- (7) Install gasket (12) and box connector (13) on conduit box (22) with nut (11).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3 Extractor Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (8) Connect wires as tagged.
- (9) Position cover (10) on conduit box (22) and secure with two caps (9).
- (10) Position belt guard (3) and belt cover (4) over belt (5) and secure with lockwashers (2) and bolt (1).

2-43. NONMETALLIC HOSES (FUEL LINES).

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Material/Parts

Hose(s) (App G, Items 1, 2, 3)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Fuel is toxic and flammable. Avoid contact and breathing of fuel vapors. Death or serious injury may result to personnel.

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

Remove nonmetallic hose (1) as required from dryer (5), and/or water heater (6), blower to fluid filter (2), burner to solenoid valve (3) and rotary pump to solenoid valve (4).

b. REPAIR

Refer to Appendix G for repair of hose(s).

c. INSTALLATION

Install nonmetallic hose (1) on dryer (5), and/or water heater (6), blower to fluid filter (2), burner to solenoid valve (3), and rotary pump to solenoid valve (4).

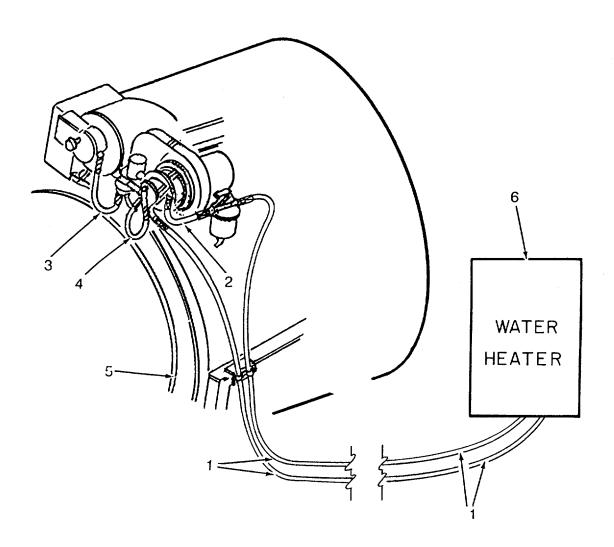


Figure 2-32. Nonmetallic Hoses (Fuel Lines)

2-44. MODIFIED M85 WATER HEATER.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Forklift

Personnel Required

Two

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Exhaust duct removed (TM 10-3510-222-10) Fuel lines removed (TM 10-3510-222-10)

Piping removed (Para 2-46)

Materials/Parts

Sealing washer (App C, Item 64) Tags (App D, Item 4)

General Safety Instructions

WARNING

High voltage is maintenance with power on. Death or serious injury may present on this equipment. Do not perform result.

a. REMOVAL

- (1) Disconnect hose (1) from water heater (10).
- (2) Tag and disconnect electrical wiring (power in) from water heater control box (5).
- (3) Remove nut (2) and remove sealing washer (4) and connector (3).
- (4) Remove eight bolts (6), lockwashers (7), flat washers (8) and four tiedowns (9) from water heater (10).
- (5) Remove water heater (10) (using forklift) from Laundry Unit.

b. REPAIR

Repair of the water heater is covered in TM 10-4520-259-13&P.

c. INSTALLATION

- (1) Position water heater (10) on Laundry Unit using forklift.
- (2) Position four tiedowns (9) on water heater (10) and install eight flat washers (8), lockwashers (7) and bolts (6).
- (3) Position connector (3) and sealing washer (4) on water heater control box (5) and install nut (2).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-1 Laundry Unit Interconnect Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (4) Connect electrical wiring as tagged.
- (5) Connect hose (1) to water heater (10).
- (6) Install piping (Para 2-46).
- (7) Connect fuel lines, refer to TM 10-3510-222-10.
- (8) Install exhaust duct, refer to TM 10-3510-222-10.

2-44. MODIFIED M85 WATER HEATER - continued.

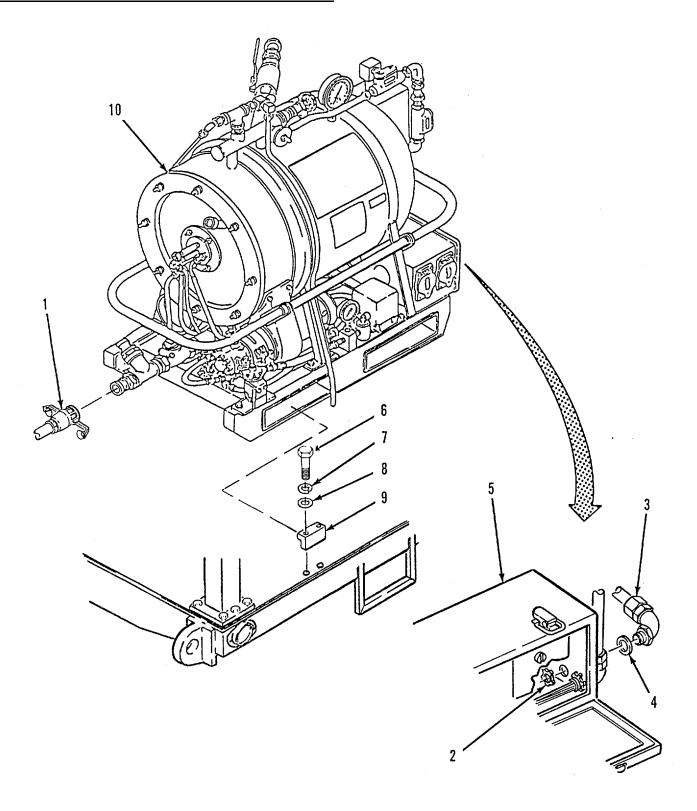


Figure 2-33. Modified M85 Water Heater

2-45. CLAMP.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

NOTE

Both clamps are identical, only one is shown.

- a. REMOVAL
 - (1) Upper clamp (supporting pipe) (3 and 5).
 - (a) Remove two nuts (1), lockwashers (2), clamp (3) from rods (4).
 - (b) Remove piping (13) (Para 2-46).
 - (c) Remove clamp (5) and two lockwashers (6).
 - (2) Lower clamp (attaching to guard) (9 and 10).
 - (a) Remove four nuts (7) and two lockwashers (8).
 - (b) Remove clamp (9), two rods (4), clamp (10), lockwashers (11) and two nuts (12).
- b. REPAIR

Repair consists of replacing damaged or missing components of the clamp.

- c. INSTALLATION
 - (1) Upper clamp (supporting piping) (3 and 5).
 - (a) Install two lockwashers (6) and clamp (5) on rods (4).
 - (b) Install piping (13) (Para 2-46).
 - (c) Install clamp (3), two lockwashers (2) and nuts (1).
 - (2) Lower clamp (attaching to guard) (9 and 10).
 - (a) Install two nuts (12), lockwashers (11), clamp (10), two rods (4) and clamp (9) at same position as removed.
 - (b) Install two lockwashers (8) and four nuts (7).

2-45. CLAMP - continued.

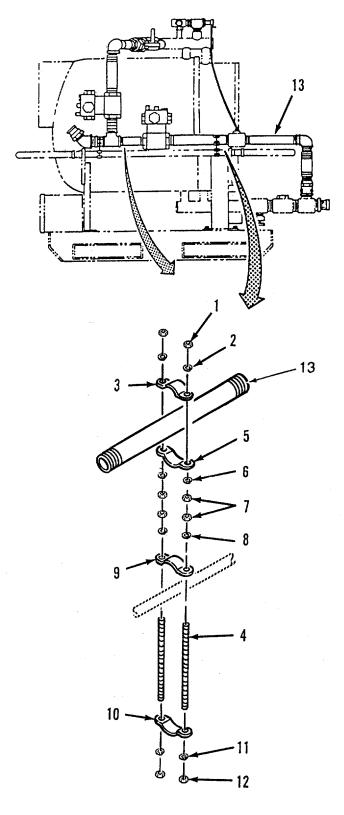


Figure 2-34. Clamp

2-46. PIPING.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2) Band-it Jr. (App B, Item 10)

Materials/Parts

Antiseize Compound (App D, Item 24) Clamp (App C, Item 73) Rubber Hose (App D, Item 19)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)
Water Heater Exhaust Pipe removed (TM 10-3510-222-10)
Upper clamp removed (Para 2-45)
Modified M85 Water Heater drained (TM 10-4520-259-13&P)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove hose (1) from quick coupling half (13).
- (2) Remove hose (2) from adapter (37).
- (3) Remove hose (3) from adapter (38).
- (4) Remove coupling nut (4) from adapter (25).
- (5) Remove guick coupling half (5) from coupling half (39).
- (6) Remove quick coupling half (6) from quick coupling half (40).
- (7) Remove piping from water heater.
- (8) If water heater is being replaced, remove coupling nut (7) and tube (8).

b. REPAIR

- (1) Piping Hardware.
 - (a) Remove piping.
 - (b) Remove only as needed for replacement or repair (15, 16, 17, 20,21, 26, 27, 28, 29 and 30).
 - (c) Clean male threads of replaced piping with wire brush.

NOTE

Apply antiseize compound to all male threads before installing hardware.

- (d) Apply antiseize compound to male threads of piping.
- (e) Install piping.

2-46. PIPING. - continued.

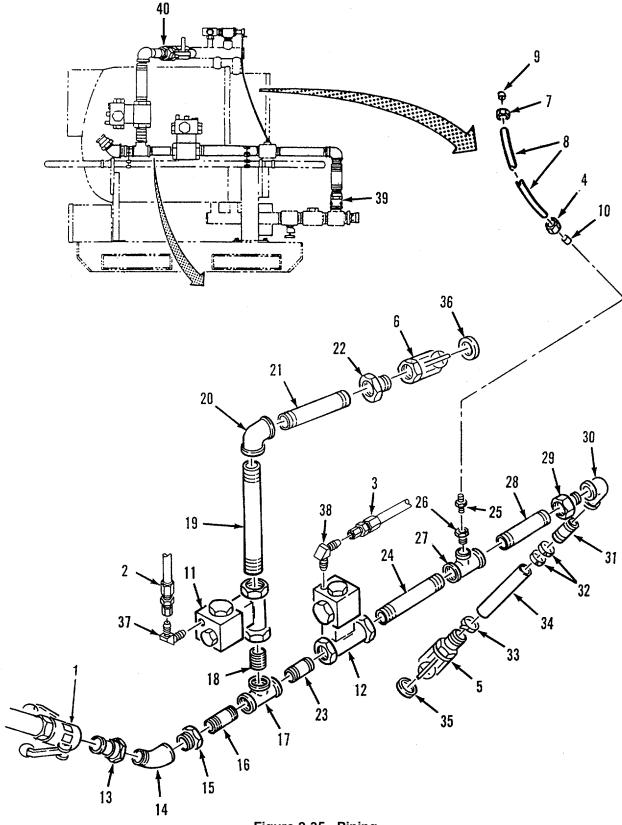


Figure 2-35. Piping

2-46. PIPING - continued.

- (2) Hot Water Ball Valve (11).
 - (a) Remove piping.
 - (b) Remove pipe (19) from ball valve (11).
 - (c) Remove ball valve (11) from pipe nipple (18).
 - (d) Remove elbow (37) from ball valve (11).
 - (e) Clean male threads of pipe nipple (18) and pipe (19) with wire brush.
 - (f) Apply antiseize compound to male threads on pipe nipple (18) and pipe (19).
 - (g) Install elbow (37) on new ball valve (11).
 - (h) Install ball valve (11) on pipe nipple (18).

NOTE

Arrow on bracket of ball valve (11) should be pointing down.

- (i) Install pipe (19) on ball valve (11).
- (j) Install piping.
- (3) Cold Water Ball Valve (12).
 - (a) Remove piping.
 - (b) Remove pipe (24) from ball valve (12).
 - (c) Remove ball valve (12) from pipe nipple (23).
 - (d) Remove elbow (38) from ball valve (12).
 - (e) Clean male threads of pipe nipple (23) and pipe (24) with wire brush.
 - (f) Apply antiseize compound to male threads on pipe nipple (23) and pipe (24).
 - (g) Install elbow (38) on new ball valve (12).

NOTE

Arrow on bracket of ball valve (12) should be pointing to the front of the Laundry Unit.

- (h) Install ball valve (12) on pipe nipple (23).
- (i) Install pipe (24) on ball valve (12).
- (j) Install piping.
- (4) Quick Coupling Half (6).
 - (a) Remove piping.
 - (b) Remove quick coupling half (6).
 - (c) Clean threads of bushing (22).
 - (d) Apply antiseize compound to male threads on bushing (22).
 - (e) Install new quick coupling half (6).
 - (f) Install piping.

2-46. PIPING - continued.

- (5) Quick Coupling Half (5).
 - (a) Remove piping.
 - (b) Remove clamp (33) from hose (34).
 - (c) Remove quick coupling half (5).
 - (d) Install new quick coupling half (5).
 - (e) Using Band-it Jr., install clamp (33) on hose (34).
 - (f) Install piping.
- (6) Quick Coupling Half (5 and 6).

Repair consists of replacing gaskets (35 and 36).

- (7) Rubber Hose (34).
 - (a) Remove piping.
 - (b) Remove three clamps (32 and 33).
 - (c) Remove quick coupling half (5) from rubber hose (34).
 - (d) Remove rubber hose (34) from adapter (31).
 - (e) Cut new rubber hose (34) to eight inches.
 - (f) Install rubber hose (34) on adapter (31).
 - (g) Install quick coupling half(5) on hose (34).
 - (h) Using Band-it Jr., install three clamps (32 and 33).
 - (i) Install piping.

c. INSTALLATION

- (1) Position piping on water heater.
- (2) If water heater was replaced, install nut (4) and tube (8).

NOTE

Piping should be placed between the threaded rods (refer to Para 2-45).

- (3) Lock quick coupling half (5 and 6).
- (4) Install coupling nut (4) on adapter (25).
- (5) Install hose (3) on elbow (38).
- (6) Install hose (2) on elbow (37).
- (7) Install hose (1) on quick coupling half (13).
- (8) Install upper clamps (Para 2-45).
- (9) Install water heater exhaust pipe (TM 10-3510-222-10).

2-47. BRACKET ASSEMBLY (NONMETALLIC HOSE).

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools Equipment Condition
General Mechanics Tool Kit (App B, Item 1) Equipment Condition
Dryer shut down (TM 10-3510-222-10)

- a. REMOVAL
 - (1) Remove screw (1), lockwashers (2), flat washers (3) and clamp (4).
 - (2) Remove two nuts (5), lockwashers (6), screws (7) and bracket (8).
- b. REPAIR

Repair consists of replacing damaged or missing components of the bracket assembly.

- c. INSTALLATION
 - (1) Position bracket (8) on dryer and secure with two screws (7), lockwashers (6) and nuts (5).
 - (2) Position hose line on bracket (8) and install clamp (4), two flat washers (3), lockwasher (2) and screw (1).

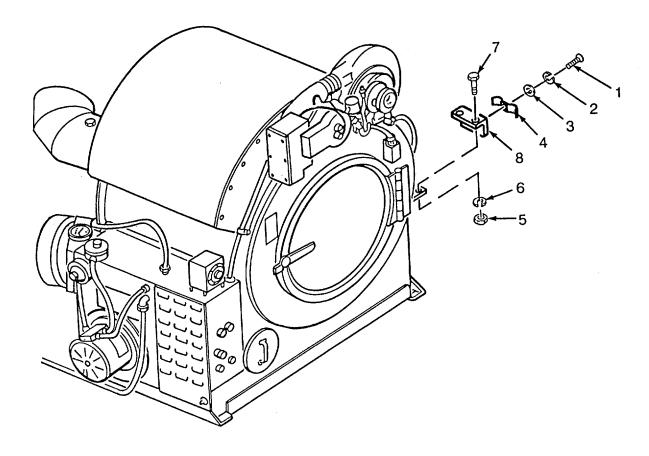


Figure 2-36. Bracket Assembly (Nonmetallic Hose)

2-48. FLUID FILTER.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials /Parts

Gasket (App C, Item 30) Antiseize Tape (App D, Item 17) Parts Kit (App C, Item 31)

Equipment Condition

Dryer shut down (TM 10-3510-222-10)

Nonmetallic hoses (fuel lines) disconnected from filter (Para 2-43)

General Safety Instructions

WARNING

Fuel is toxic and flammable. Avoid contact and breathing of fuel vapors. If fuel is spilled accidentally, wipe up spills as much as possible to avoid fire hazard.

a. REMOVAL

- (1) Remove two nuts (1), lockwashers (2), flat washers (3), screws (4) and filter (7).
- (2) Remove adapters (5 and 6) from filter (7).
- (3) If required, remove two nuts (8), lockwashers (9), flat washers (11), screws (10) and filter bracket (12).

b. REPAIR

- (1) Disassembly.
 - (a) Remove four screws (13).
 - (b) Remove retaining ring (14), bowl (15) and gasket (16) from filter head (17).
- (2) Assembly.

Position gasket (16), bowl (15) and retaining ring (14) on filter head (17) and install six screws (13).

c. INSTALLATION

- (1) If removed, install bracket (12) with two screws (10), flat washers (11), lockwashers (9) and nuts (8).
- (2) Apply antiseize tape to smaller threads of adapters (5 and 6) and install on filter (7).
- (3) Position filter (7) on bracket (12) and secure with two lockwashers (2), flat washers (3), screws (4) and nuts (1).

2-48. FLUID FILTER - continued.

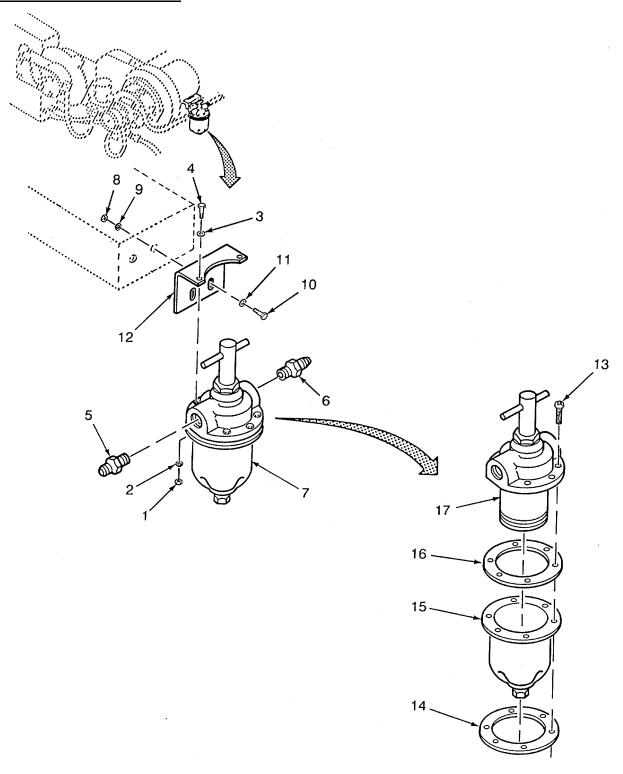


Figure 2-37. Fluid Filter

2-49. ADAPTER.

This task covers: Repair

INITIAL SETUP

Equipment Condition

Adapter removed (TM 10-3510-222-10)

Tools

General Mechanics Tool Kit (App B, Item 1)

Gen

General Safety Instructions

Materials /Parts

Compound, Antiseize (App D, Item 24)

WARNING

Fuel is toxic and flammable. Avoid contact and breathing of fuel vapors. If fuel is spilled accidentally, wipe up spills as much as possible to avoid fire hazard.

REPAIR

- (1) Disassembly.
 - (a) If installed, remove caps (1 and 2).
 - (b) Remove connectors (3 and 4).
 - (c) Unscrew fill box (5) from nipple (12).
 - (d) Remove pipe (6).
 - (e) Remove pipe (8).
 - (f) Remove coupling (7) from pipe (8).
 - (g) Remove two screws (9), lockwashers (10), flat washers (11) and block (13) from nipple (12).
- (2) Assembly.
 - (a) Position block (13) on nipple (12) and secure with two flat washers (11), lockwashers (10) and screws (9).
 - (b) Apply antiseize compound to threads of pipe (8) and install on block (13).
 - (c) Connect coupling (7) to pipe (8).
 - (d) Install pipe (8).
 - (e) Install extension assembly (6).
 - (f) Apply antiseize compound to top threads of nipple (12) and install filler box (5) on nipple.
 - (g) Apply antiseize compound to smaller threads of connectors (3 and 4) and install on block (13).
 - (h) If available, install caps (1 and 2).

2-49. ADAPTER - continued.

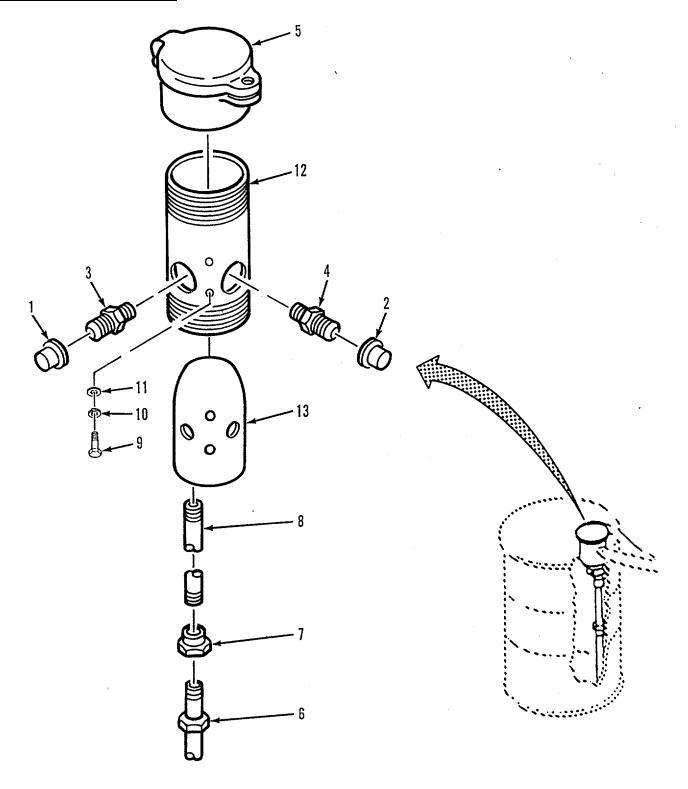


Figure 2-38. Adapter

2-50. BLOWER.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Automotive Vehicle Shop Equipment (App B, Item 2)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Remove Nonmetallic Hoses (Fuel Lines) (Para 2-43)

Personnel Required

Two

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

(1) Remove two screws (1) and plate (2) from motor (9).

NOTE

It is not necessary to remove wire nut, combining motor wires T5, T6 and T7.

- (2) Tag and disconnect wires from motor (9).
- (3) Unscrew nut (3) from elbow (4) and remove wires from motor (9).
- (4) Remove screw (5), lockwasher (6) and clamp (7).
- (5) Loosen hose clamp (8).
- (6) Support blower assembly (12) and remove four screws (10), lockwashers (11) and blower assembly (12).

b. REPAIR

Repair consists of replacement of fan and motor (Para 2-64), shutter assembly (Para 2-51) and repair of rotary pump (Para 2-53).

c. INSTALLATION

- (1) Position blower assembly (12) on mounting bracket of dryer and secure with four screws (10) and lockwashers (11).
- (2) Tighten hose clamp (8).
- (3) Feed wires through elbow (4) into motor (9).
- (4) Install elbow (4) and nut (3) onto motor (9).

2-50. BLOWER - continued.

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (5) Connect wires as tagged.
- (6) Position conduit on clamp (7) and install clamp with lockwasher (6) and screw (5).

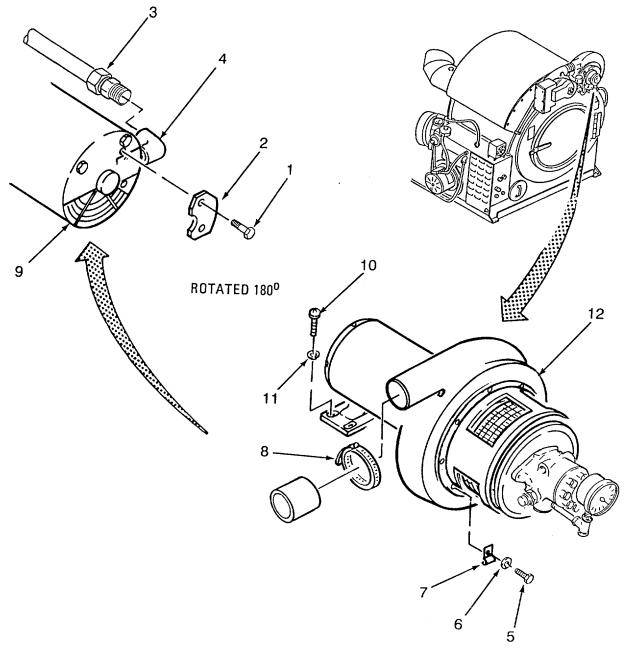


Figure 2-39. Blower

2-51. SHUTTER.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanic's Tool Kit (App B, Item 1)

Equipment Condition

Dryer shut down (TM 10-3510-222-10) Rotary Pump removed (Para 2-53)

a. REMOVAL

- (1) Remove four screws (1), lockwashers (2) and adapter (3) from blower assembly (7).
- (2) Loosen screw (4) and remove cover (5) from adapter (3).
- (3) Remove screen (6).

b. INSTALLATION

- (1) Position screen (6) into adapter (3).
- (2) Position adapter (3) on blower assembly (7) and secure with four lockwashers (2) and screws (1).
- (3) Position cover (5) on adapter (3).
- (4) Adjust cover (5) for maximum open position on adapter (3) and tighten screw (4).
- (5) Install rotary pump (Para 2-53).

2-51. SHUTTER continued.

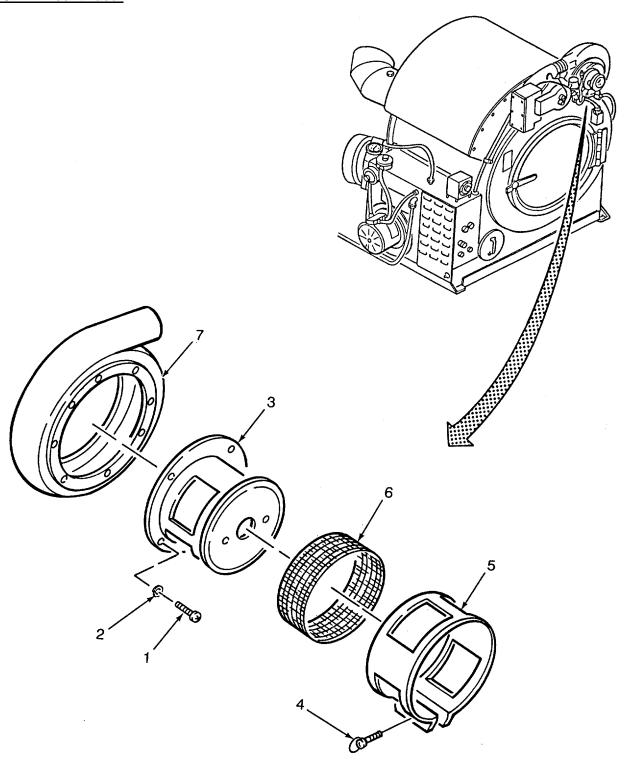


Figure 2-40. Shutter

2-123

2-52. AIR SHUTTER AND PLENUM.

This task covers

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Materials/Parts
Gasket (App C, Item 63)
Sealing Compound (App D, Item 2)

Equipment Condition

Dryer shut down (TM 10-3510-222-10)
Gas-Oil Combustion Burner removed (Para 2-54)
Transformer and Box removed (Para 2-56)
Solenoid Nonmetallic Hose Valve removed
(Para 2-70)

a. **REMOVAL**

- (1) Remove screw (1) and nut (2). As required, remove nut (2) from screw (1).
- (2) Remove four nuts (3), lockwashers (4), screws (5) and bracket (7).
- (3) Remove air nozzle (6) and shutter assembly (8).
- (4) Loosen clamp (9) and remove hose (10) and clamps (9) and (11).
- (5) Remove six nuts (12) and lockwashers (13).
- (6) Remove plenum (14) and gasket (15) from dryer. Discard gasket (15).

b. **REPAIR**

Repair consists of replacing damaged or missing components of the air shutter and plenum.

c. **INSTALLATION**

- (1) Position gasket (15) and plenum (14) on mounting studs (16) and secure with six lockwashers (13) and nuts (12).
- (2) Install hose (10) and two clamps (9 and 11).
- (3) Position shutter assembly (8) on air nozzle (6).

NOTE

Apply a small bead of sealing compound between the air nozzle and the plenum. Do not apply between the two top holes

- (4) Position air nozzle (6) in plenum (14).
- (5) Position bracket (7) on plenum (14) and install four screws (5), lockwashers (4) and nuts (3).
- (6) Thread nut (2) approximately halfway up screw (1) and install screw in shutter assembly (6), tightening it sufficiently to keep air shutter (8) from turning due to vibration.
- (7) When screw (1) is sufficiently tight, turn nut (2) to lock screw.
- (8) Install solenoid nonmetallic hose valve (Para 2-70).

2-52. AIR SHUTTER AND PLENUM - continued.

- (9) Install gas-oil combustion burner (Para 2-54).
- (10) Install transformer and box (Para 2-56).

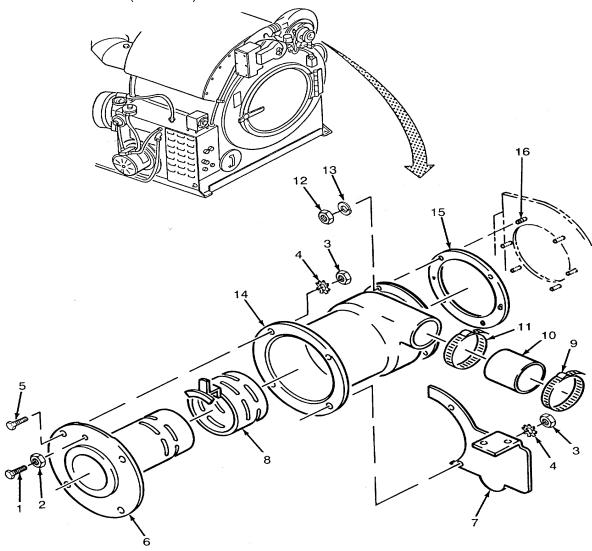


Figure 2-41. Air Shutter and Plenum

2-53. ROTARY PUMP.

This task covers

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanic's Tool Kit (App B, Item 1)

Equipment Condition

Dryer shut down (TM 10-3510-222-10)

Nonmetallic Hoses (fuel lines) disconnected from Rotary Pump Assembly (Para 2-43)

Materials/Parts

Antiseize Compound (App D, Item 24)

General Safety Instructions

WARNING

Fuel is toxic and flammable. Avoid contact and breathing of fuel vapors. If fuel is spilled accidentally, wipe up spills as much as possible to avoid fire hazard

a. REMOVAL

- (1) Rotate shutter (13) and slide screen (14) toward motor for access to setscrew (15).
- (2) Loosen setscrew (15).
- (3) Remove two screws (1), lockwashers (2) and pump assembly (3) from blower assembly.
- (4) Remove adapter (5) and elbows (4, 6 and 7) from pump assembly (3).
- (5) Remove gage (8) and drain cock (9) from tee (10).
- (6) Remove tee (10) and nipple (11) from pump assembly (3).
- (7) As required, remove plug (12) from elbow (4).

b. INSTALLATION

- (1) Apply antiseize compound to all male threads of fittings.
- (2) Install nipple (11) and tee (10) on rotary pump assembly (3).
- (3) Install gage (8) on tee (10).
- (4) Install drain cock (9) on tee (10).
- (5) Install elbows (4, 6 and 7) on rotary pump assembly (15).
- (6) Install adapter (5).
- (7) Position rotary pump (3) on blower assembly and secure with two lockwashers (2) and screws (1).
- (8) Tighten setscrew (15) and adjust screen (14).
- (9) Connect nonmetallic hoses to rotary pump (Para 2-43).

c. ADJUSTMENT

Refer to (TM 10-3510-222-10) initial adjustments and checks for adjustment of the rotary pump (fuel pump).

2-53. ROTARY PUMP- continued.

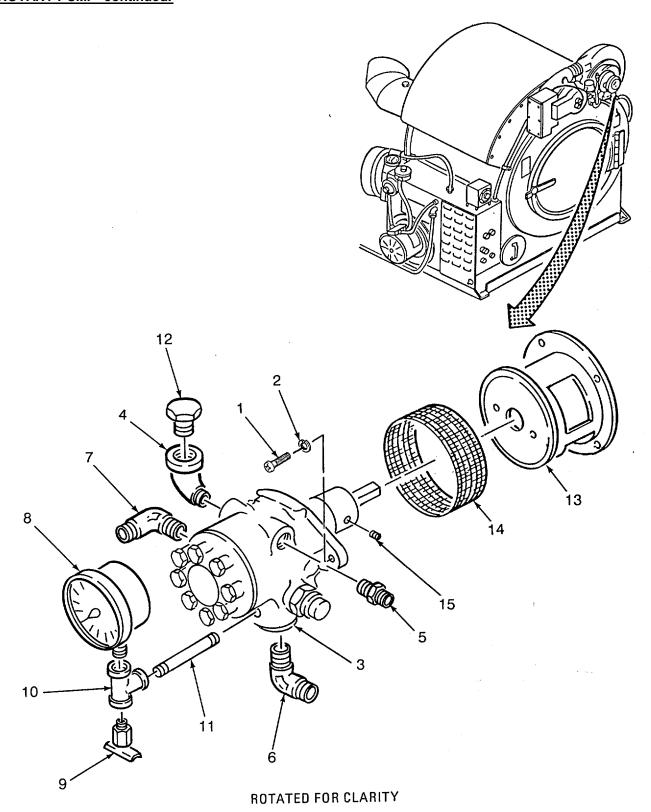


Figure 2-42. Rotary Pump

2-127

2-54. GAS-OIL COMBUSTION BURNER.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanic's Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Equipment Condition

Dryer shut down (TM 10-3510-222-10) Nonmetallic Hoses (Fuel Lines) disconnected (Para 2-43)

Solenoid Nonmetallic Hose Valve removed (Para 2-70)

Transformer and Box removed (Para 2-56)

Personnel Required

Two

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

- (1) Disconnect flame control (1).
- (2) Loosen two clamps (2) on hose (7).
- (3) Support burner assembly (6) and remove six nuts (3) and lockwashers (4) and disconnect grounding strap (5) from burner assembly.
- (4) Remove burner assembly (6) and gasket (8) from dryer.

b. REPAIR

Repair of burner assembly consists of replacement of solenoid nonmetallic hose valve (Para 2-65) ignition cable, sight eye and piping, electrode and nozzle assembly (Para 2-55).

c. INSTALLATION

- (1) Position gasket (8) on studs of dryer.
- (2) Position burner assembly (6) on dryer, making sure hose (7) mates with air duct on burner assembly and secure with six lockwashers (4) and nuts (3), using top nut to secure ground strap
- (5) to burner assembly (6).
- (3) Tighten two clamps (2).
- (4) Install transformer and box (Para 2-56).
- (5) Install solenoid nonmetallic hose valve (Para 2-70).
- (6) Connect nonmetallic hoses (fuel lines) (Para 2-43).

NOTE

Flame control is fragile. Do not force on or overtighten.

(7) Install flame control (1) finger tight.

2-54. GAS-OIL COMBUSTION BURNER - continued.

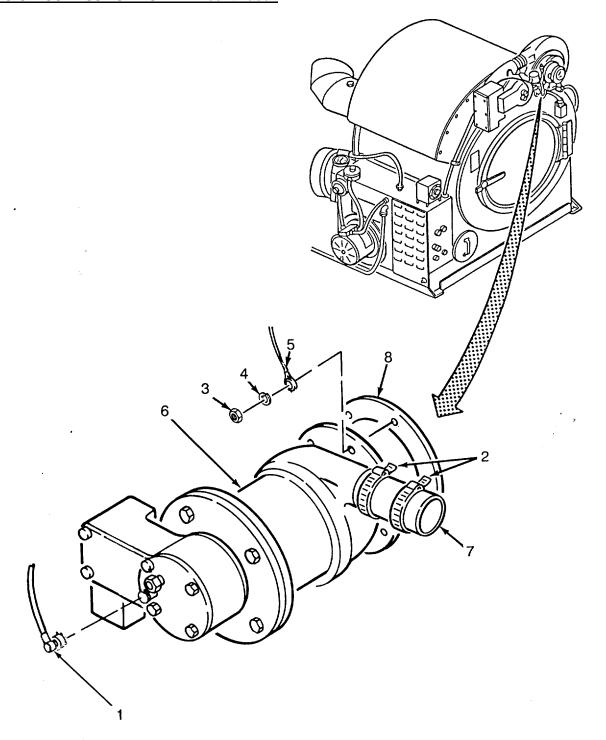


Figure 2-43. Gas-Oil Combustion Burner

2-55. IGNITION CABLES, SIGHT EYE, NOZZLE, FUEL PIPING, AND ELECTRODES.

This task covers: a. Removal b. Repair c. Installation d. Adjustment

INITIAL SETUP

Tools
General Mechanic's Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

Equipment Condition
Dryer shut down (TM 10-3510-222-10)

Materials/Parts
Antiseize Tape (App D, Item 17)
Antiseize Compound (App D, Item 24)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. **REMOVAL**

- (1) Remove cap (1), window (2), gasket (3) and disconnect flame control (4) from pipes (20) and sight eye (21).
- (2) Remove six screws (5), lockwashers (6) and cover (7) from base (24).
- (3) Remove nuts (8 and 9) and disconnect ignition cables (10 and 11) from electrodes (15).
- (4) Pull ignition cables (10 and 11) from transformer contacts (22 and 23).
- (5) Remove three screws (12), lockwashers (13) and base (24) from shutter assembly (25).
- (6) Loosen two setscrews (14) on each electrode (15) and remove electrodes.
- (7) Remove nozzle (16) from adapter (17).
- (8) Remove adapter (17) from pipe (18).
- (9) Remove elbow (19) from base (24).

b. **REPAIR**

Repair consists of replacing damaged or missing components of the ignition cables, sight eye, nozzle, fuel piping and electrodes.

2-55. IGNITION CABLES, SIGHT EYE, NOZZLE, FUEL PIPING, AND ELECTRODES - continued.

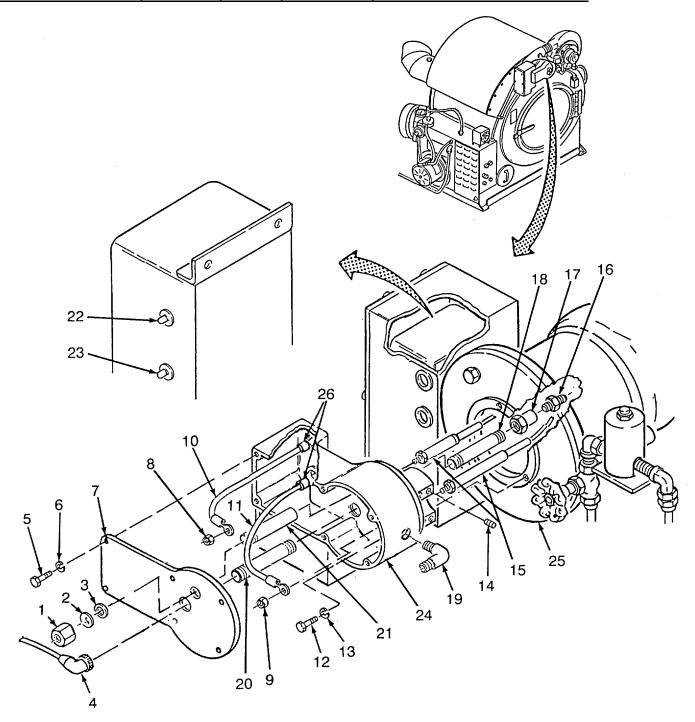


Figure 2-44. Ignition Cables, Sight Eye, Nozzle, Fuel Piping and Electrodes (Sheet 1 of 2)

2-55. IGNITION CABLES, SIGHT EYE, NOZZLE, FUEL PIPING, AND ELECTRODES - continued.

NOTE:

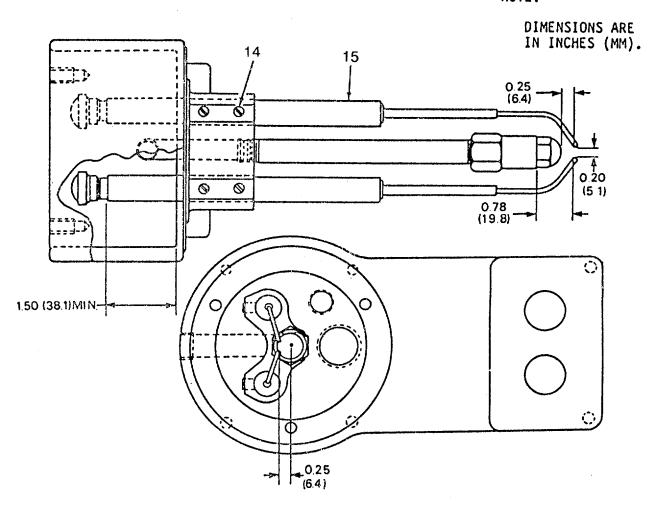


Figure 2-44. Ignition Cables, Sight Eye, Nozzle, Fuel Piping and Electrodes (Sheet 2)
2-132

2-55. IGNITION CABLES, SIGHT EYE, NOZZLE, FUEL PIPING, AND ELECTRODES - continued.

c. INSTALLATION

- (1) Install elbow (19) on base (24) using teflon tape on the male pipe threads.
- (2) Install adapter (17) on pipe (18).
- (3) Install nozzle (16) on adapter (17).
- (4) Position electrodes (15) in base (24) and tighten setscrews (14) handtight.
- (5) Go to adjustment procedure to correctly position electrodes (15) in base (24).
- (6) Connect female terminal (26) of cable (10) to transformer contact (22) and cable (11) to contact (23).
- (7) When electrodes (15) are correctly positioned in base (24), position cables (10 and 11) on electrodes (15) and install nuts (8 and 9) on each electrode.
- (8) Position burner base (24) on shutter assembly (25) and install three lockwashers (13) and screws (12).
- (9) Position cover (7) on base (24) and install six lockwashers (6) and screws (5).
- (10) Install gasket (3), window (2) and cap (1) on pipe (20).

CAUTION

Flame control is fragile. Do not force on or overtighten.

(11) Connect flame control (4) on sight eye (21) fingertight.

d. ADJUSTMENT

NOTE

Adjustment of electrodes is necessary when fuel nozzle/piping components or electrodes are replaced Electrodes may also require adjustment because of wear and vibration

- (1) Remove base in accordance with removal procedure this paragraph.
- (2) Check adjustment of electrodes (15). If adjustment is correct, go to step 4.
- (3) If adjustment is required, loosen setscrews (14) and position electrodes (15), turning them in their base (24), or pulling them in or out for correct gaps.
- (4) When adjustment is satisfactory, tighten setscrews (14) and complete assembly of burner in accordance with installation procedure.

2-56. TRANSFORMER AND BOX.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Equipment Condition

Ignition Cables removed (Para 2-55)
Solenoid wires removed from box
Dryer door switch wires removed from box
Motor wires removed from box

Materials /Parts

Adhesive (App D, Item 23) Grommet (App C, Item 72) Blind Nut (App C, Item 75) Blind Nut (App C, Item 76) Tags (App D, Item 4)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

- (1) Remove six screws (1) and cover (2). As required, remove gasket (3).
- (2) Tag and disconnect transformer wires.
- (3) Remove screw (4) and lockwasher (5).
- (4) Remove screw (6), lockwasher (7) and transformer (12) from box (14).
- (5) Remove two screws (8) and bracket (9) from transformer (12).
- (6) Remove two screws (10) and bracket (11) from transformer (12).
- (7) Unscrew three nuts (13) and remove three adapters (15) and gasket (16) from box (14).
- (8) Remove nut (17), elbow (18) and gasket (19) from box (14).
- (9) Remove two screws (20), lockwashers (21), nut (22) and box (14).
- (10) As required, remove grommets (23) and blind nuts (24).

b. REPAIR

Repair consists of replacing damaged or missing components of the transformer and box.

c. INSTALLATION

- (1) If removed, install blind nuts (24) and grommets (23).
- (2) Install box (14) and secure with two screws (20), lockwashers (21) and nut (22).
- (3) Position gasket (19) and elbow (18) on box (14) and secure with nut (17).
- (4) Install three gaskets (16) and adapters (15) on box (14) and secure with nuts (13).
- (5) Position bracket (11) on transformer (12) and install two screws (10).

2-56. TRANSFORMER AND BOX- continued.

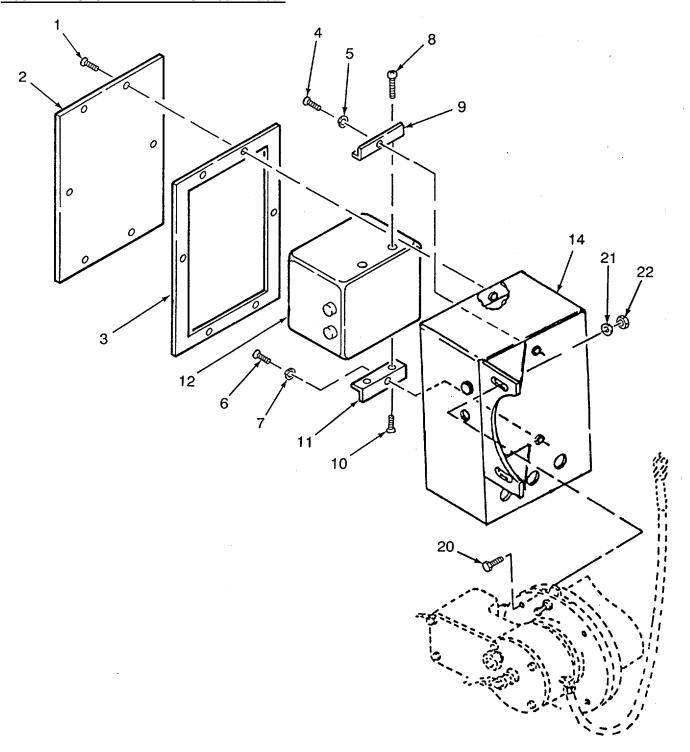


Figure 2-45. Transformer and Box (Sheet 1 of 2)

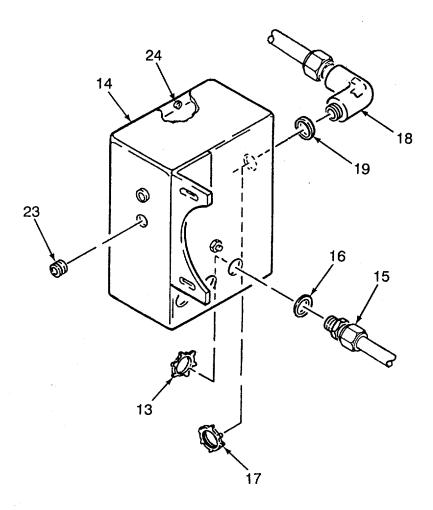


Figure 2-45. Transformer and Box (Sheet 2)

2-136

2-56. TRANSFORMER AND BOX - continued.

- (6) Position bracket (9) on transformer (12) and install two screws (8).
- (7) Position transformer (12) in box (14), and install screw (4), lockwasher (5), screw (6) and lockwasher (7).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (8) Connect transformer wires as tagged.
- (9) Install door switch wires.
- (10) Install solenoid wires.
- (11) Install motor wires.
- (12) Install ignition cables (Para 2-55).
- (13) If required, position gasket (3) and secure with adhesive.
- (14) Install cover (2) on front of box (14) and install six screws (1).

2-57. SPEED REDUCER.

This task covers: Adjustment

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Equipment Condition Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result

ADJUSTMENT

- (1) Remove three screws (1), lockwashers (2) and chain guard (3).
- (2) Using thumb, push inward on chain (4) about midpoint between sprockets.
- (3) If chain moves inward about 1/2 inch, chain is adjusted correctly. Go to step 8. If not, go to step 4.
- (4) Loosen two screws (5).
- (5) If chain is too loose, turn nut (7) and nut (6) downward an equal amount until chain tension is correct.
- (6) If chain is too tight, turn nut (7) and nut (6) upward an equal amount until tension on chain is correct.
- (7) Tighten two screws (5).
- (8) Install chain guard (3) with three lockwashers (2) and screws (1).

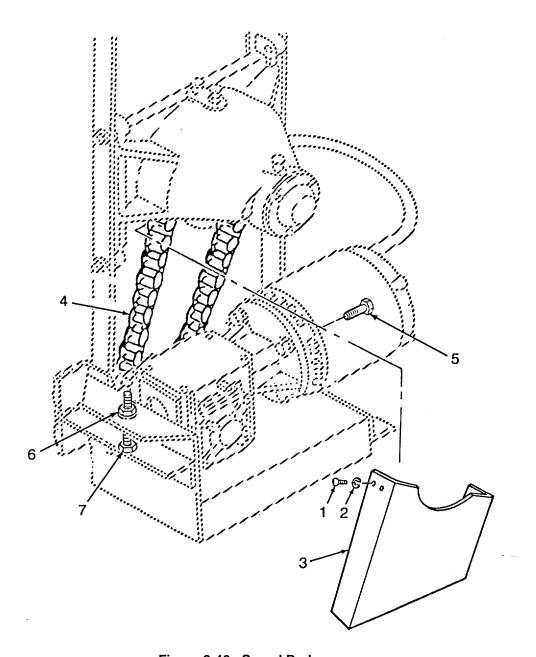


Figure 2-46. Speed Reducer

2-139

2-58. LIGHT.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Lamp Extractor (App B, Item 14)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Material/Parts

Tags (App D, Item 4)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

CAUTION

Care must be exercised when panel is opened to prevent strain on wiring connected to electrical components on panel. Complete removal of panel is possible only after wires are disconnected

- (1) Remove six screws (1) and lockwashers (2) and open panel (3).
- (2) Tag and disconnect wires from body (7) of light assembly.
- (3) Remove lens (4).
- (4) Using the lamp extractor, remove light bulb (5).
- (5) Remove nut (6).
- (6) Remove body (7) of light assembly from panel (3).
- (7) Remove nut (8) and lockwasher (9).

b. REPAIR

Repair consists of replacing damaged and/or missing components of the light.

c. INSTALLATION

- (1) Position lockwasher (9) and nut (8) on body (7) of light assembly.
- (2) Position body (7) of light assembly in panel (3) and secure with nut (6).
- (3) Install light bulb (5) and lens (4).

2-58. LIGHT- continued.

NOTE

Wire numbers are stamped on each electrical wire This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (4) Position wires on terminals of switch body (7) as tagged.
- (5) Position panel (3) on unit and secure with six screws (1) and lockwashers (2).

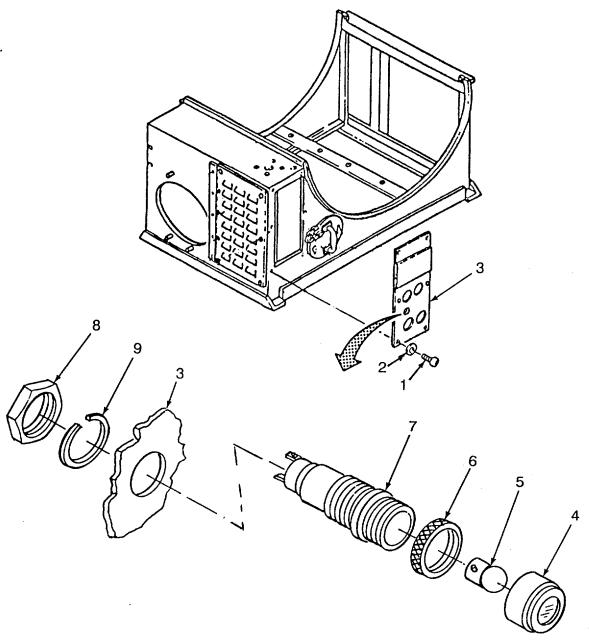


Figure 2-47. Light

2-59. LIGHT BULB.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

General Safety Instructions

Tools

Lamp Extractor (App B, Item 14)

Equipment Condition

Dryer shut down (TM 10-3510-222-10)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

- (1) Unscrew lamp shade (1).
- (2) Using lamp extractor, push lamp (2) in, twist counterclockwise and pull out.

b. INSTALLATION

- (1) Install lamp (2).
- (2) Install lamp shade (1).

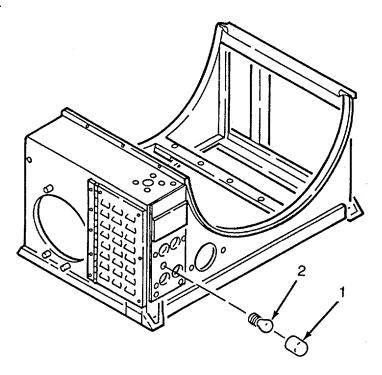


Figure 2-48. Light Bulb

2-60. BUZZER.

This task covers:

a. Removal b.

b. Installation

INITIAL SETUP

General Safety Instructions

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Material/Parts

Tags (App D, Item 4)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

CAUTION

Care must be exercised when panel is opened to prevent strain on wiring connected to electrical components on panel. Complete removal of panel is possible only after wires are disconnected

NOTE

This procedure covers the replacement of the warning buzzer. The timing buzzer, next to it, is replaced in the same manner

- (1) Remove six screws (1) and lockwashers (2) and open panel (3).
- (2) Tag and disconnect wires from body of buzzer (5).
- (3) Remove cap (4) and body of buzzer (5) from panel (3).

b. INSTALLATION

(1) Position buzzer body (5) in cutout of panel (3) and secure with cap (4).

NOTE

Wire numbers are stamped on each electrical wire This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (2) Position wires on terminals of body (5) as tagged and secure with screws.
- (3) Position panel (3) on unit and secure with six screws (1) and lockwashers (2).

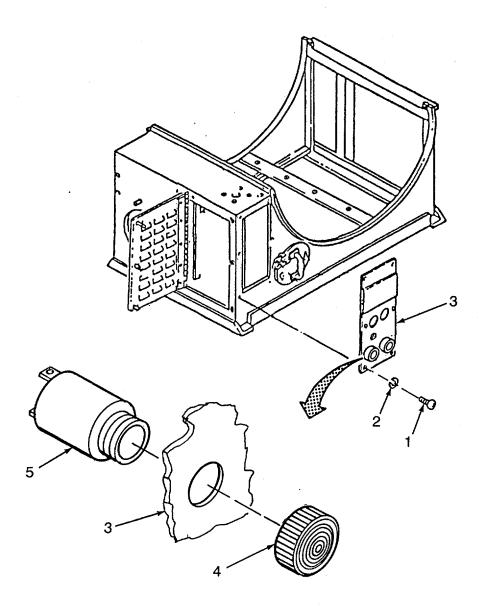


Figure 2-49. Buzzer

2-144

2-61. THERMOSTATIC SWITCH.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Materials/Parts

Tags (App D, Item.4)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

- (1) Remove nut (1), washer (2) and cover (3).
- (2) Tag and disconnect wires from switch (7).
- (3) Remove nut (4) and pull adapter (5) from switch (7) housing.
- (4) Remove gasket (6).

NOTE

Temperature control probe may have fins installed. Remove as required.

(5) Unscrew switch (7) from dryer base (8).

b. INSTALLATION

- (1) Install switch (7) on base (8).
- (2) As required, install fins on switch (7) probe, if fins were previously removed.
- (3) Install adapter (5) and gasket (6) on switch (7) housing and secure with nut (4).

NOTE

Wire numbers are stamped on electrical wires in dryer. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (4) Connect wires as tagged.
- (5) Position cover (3) on switch (7) housing and secure with washer (2) and nut (1).

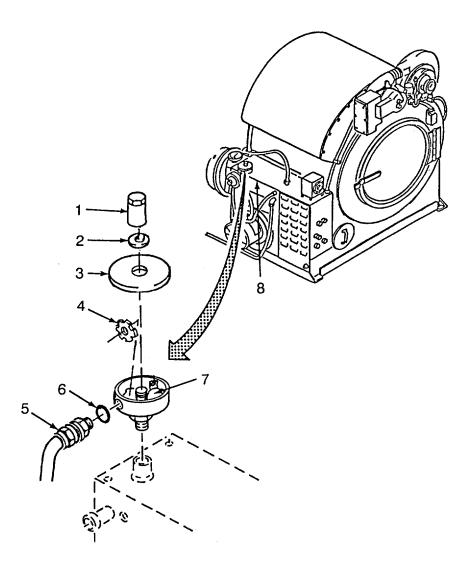


Figure 2-50. Thermostatic Switch 2-146

2-62. TEMPERATURE CONTROL.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials /Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

- (1) Loosen setscrew on knob (1) and remove knob from shaft (9) of temperature control (7).
- (2) Remove nut (2) and cover (3).
- (3) Tag and disconnect wires.
- (4) Remove nut (4).
- (5) Remove adapter (5) from temperature control (7).
- (6) Remove gasket (6).

NOTE

Temperature control probe may have fins installed. Remove as required.

(7) Unscrew temperature control (7) from dryer base (8).

b. INSTALLATION

- (1) Install temperature control (7) on dryer base (8).
- (2) As required, install fins on temperature control (7) probe if fins were previously removed.
- (3) Install adapter (5), gasket (6) and nut (4) on temperature control (7).

NOTE

Wire numbers are stamped on each electrical wire This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (4) Connect wires as tagged.
- (5) Position cover (3) on shaft (9) and install nut (2).
- (6) Rotate shaft (9) so that the flat side is 180° away from zero.
- (7) Position knob (1) on shaft (9) with arrow pointing to zero and tighten setscrew on knob.
- (8) As you turn the knob (1) up from zero, you should hear a clicking sound when it gets to correct temperature. If not, proceed to the next step.

2-62. TEMPERATURE CONTROL -continued.

(9) Remove knob (1) and rotate shaft (9) completely around one revolution clockwise. Repeat steps (5) through (8).

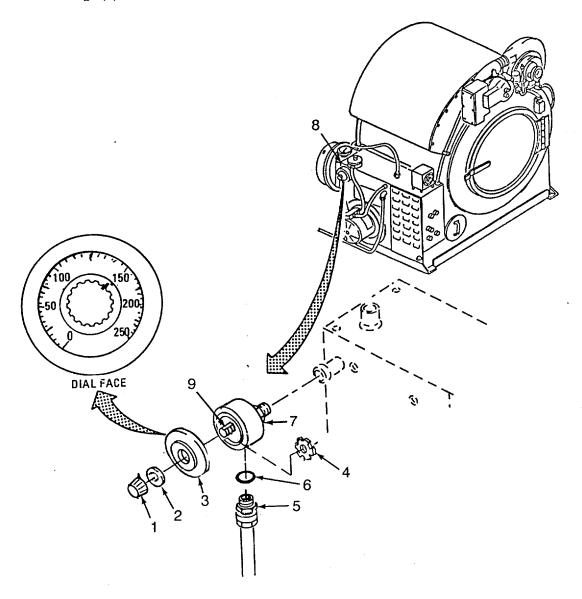


Figure 2-51. Temperature Control

2-148

2-63. THERMOMETER.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

a. **REMOVAL**

Unscrew thermometer (1) from duct (2) of dryer base.

b. INSTALLATION

Install thermometer (1) on duct (2) of dryer base.

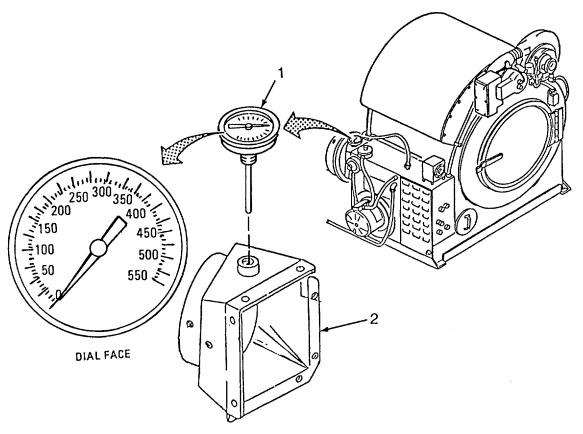


Figure 2-52. Thermometer

12-64. DOOR.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Equipment Condition

Tools

Dryer shut down (TM 10-3510-222-10)

General Mechanics Tool Kit (App B, Item 1)

General Safety Instructions

Materials /Parts

Sealing Compound (App D, Item 5)

Gasket (App C, Item 61)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with

power on

Personnel Required

Two

a. REMOVAL

- (1) Remove roll pin (1).
- (2) Support door (7) and punch out hinge pin (2) from bottom up. Remove door (7).
- (3) Remove screw (5) and lockwasher (6) from collar (4).
- (4) Unscrew setscrew (3) and remove collar (4) from hinge pin (2).
- (5) Remove nut (8), screw (9) and handle (10) from door (7).
- (6) Remove gasket (11) from door (7).
- (7) If required, remove two screws (12) and arrow (13).

b. REPAIR

Repair consists of replacing damaged or missing components of the door.

c. INSTALLATION

- (1) If required, position arrow (13) on door and secure with two screws (12).
- (2) Cut gasket (11) material to size.
- (3) Apply adhesive to door (7).
- (4) Install gasket (11) on door (7).
- (5) Install handle (10), screw (9) and nut (8).
- (6) Position door (7) on dryer and insert hinge pin (2). Secure with roll pin (1).
- (7) Install lockwasher (6) and screw (5) on collar (4) and position collar (4) on top of pin (2).
- (8) Secure collar (4) to top of pin (2) with setscrew (3).
- (9) Adjust door switch (Para 2-65).

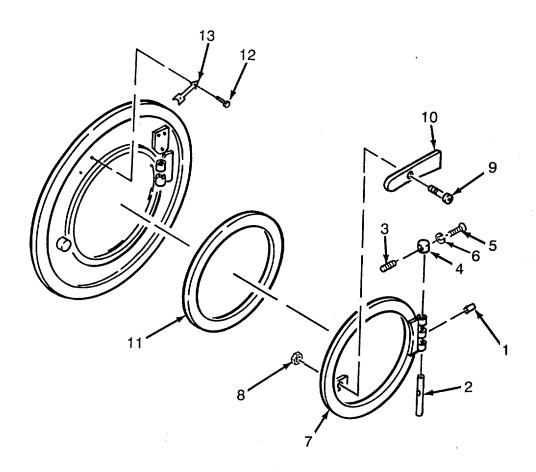


Figure 2-53. Door

2-65. DOOR SWITCH.

This task covers:

a. Removal

- b. Installation
- c. Adjustment

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Dryer shut down (TM 10-3510-222-10)

Materials/Parts

Tags (App D, Item 4)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

- (1) Remove four screws (1), lockwashers (2) and cover (3).
- (2) Tag and disconnect wires.
- (3) Unscrew nut (4) and pull wires out of switch.
- (4) As required, remove adapter (5).
- (5) Remove three screws (6), lockwashers (7) and bracket (8) from dryer.
- (6) Remove three nuts (9) and screws (10) to separate switch body (11) from bracket (8).

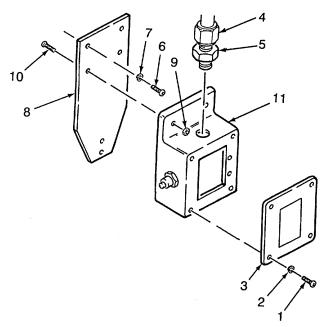


Figure 2-54. Door Switch

2-65. DOOR SWITCH - continued.

b. INSTALLATION

- (1) Position switch (11) on bracket (8) and install three screws (10) and nuts (9).
- (2) Position bracket (8) on dryer and install three lockwashers (7) and screws (6) finger tight.
- (3) Install adapter (5).
- (4) Feed wires (12) through conduit (17), connect nut (4) and gasket (18) to adapter (5).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (5) Connect wires, as tagged.
- (6) Install cover (3) with four lockwashers (2) and screws (1).
- (7) Adjust switch for proper operation in accordance with adjustment procedure below.

c. ADJUSTMENT

- (1) Open dryer door and check for proper operation of switch. Switch and cam operate properly if you can hear a click when door is opened and closed.
- (2) If switch operates correctly, no adjustment is required. If not, proceed with step (3).
- (3) Loosen setscrew (13) and turn cam (14), or raise and lower it, so that screw (16) is centered on plunger (15) when door is fully open.
- (4) Tighten setscrew (13).
- (5) If screw (16) is fully centered on plunger (15), but plunger is not fully depressed or door cannot be fully opened because plunger (15) is too close to screw (16), turn screw (16) in or out for correct plunger (15) travel.

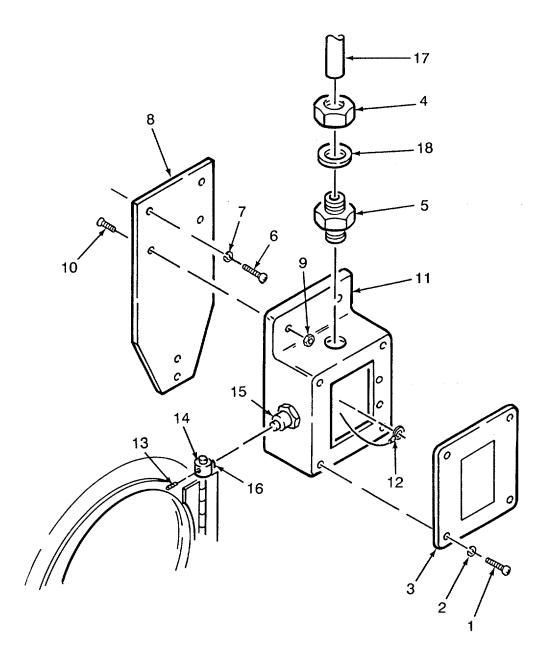


Figure 2-55. Door Switch Installation and Adjustment

2-66. DISCHARGE SPOUT.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

<u>Tools</u>

General Mechanics Tool Kit (App B, Item 1)

General Safety Instructions

Equipment Condition

Exhaust Adapter removed (Para 2-68)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

a. REMOVAL

- (1) Remove four nuts (1), lockwashers (2) and screws (3).
- (2) Remove four screws (4) and lockwashers (5).
- (3) Remove spout and duct (6) from dryer base.
- (4) Remove nut (7), lockwasher (8), screw (9) and chain (10) from spout and duct (6).
- (5) Disconnect S-hooks (11 and 12) from chain (10) and separate pin (13) from S-hook (12).

b. REPAIR

Repair consists of replacing damaged or missing components of the discharge spout.

- (1) Connect S-hook (12) to pin (13) and chain (10).
- (2) Connect S-hook (11) to other end of chain (10).
- (3) Attach S-hook (11) to spout and duct (6), using screw (9), lockwasher (8) and nut (7).
- (4) Position spout and duct (6) on dryer base and secure with four screws (4) and lockwashers (5) and four screws (3), lockwashers (2) and nuts (1).
- (5) Install exhaust adapter (Para 2-68).

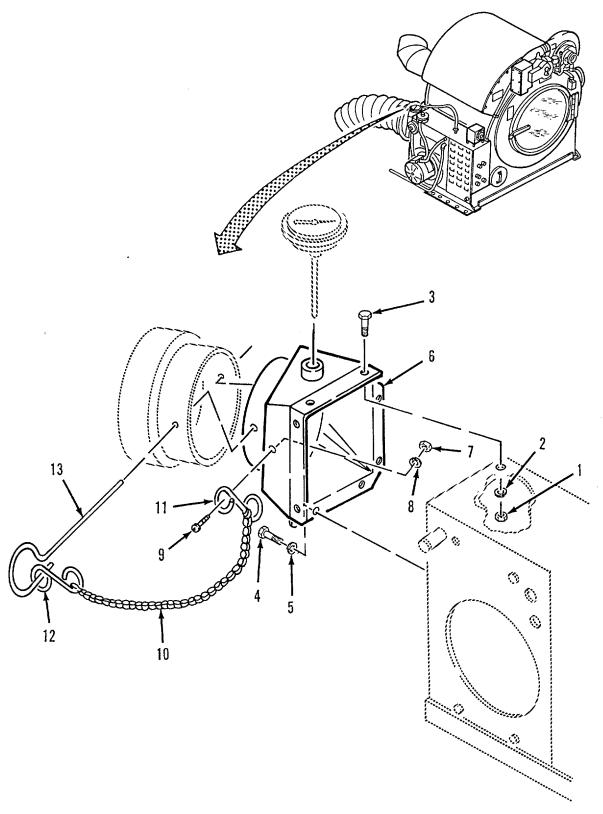


Figure 2-56. Discharge Spout

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Exhaust Hoses disconnected and Dryer shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Elbow may be hot if dryer was running. To prevent burns allow sufficient time for elbow to cool before replacement.

a. REMOVAL

- (1) Remove three nuts (1), lockwashers (2) and screws (3).
- (2) Remove elbow (4) from dryer (5).

- (1) Position replacement elbow (4) on dryer (5).
- (2) Secure elbow (4) with three screws (3), new lockwashers (2) and nuts (1).

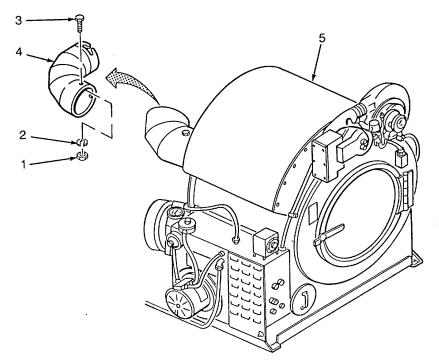


Figure 2-57. Exhaust Elbow

2-68. EXHAUST ADAPTER.

This task covers:

- a. Removal
- b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Exhaust Hoses disconnected and Dryer shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Adapter may be hot if dryer was running. To prevent burns, allow sufficient time for adapter to cool before replacement

- a. REMOVAL
 - (1) Remove pin (1).
 - (2) Remove adapter (2).
- b. INSTALLATION
 - (1) Position replacement adapter (2) on dryer (3).
 - (2) Align holes on adapter (2) with the slots in the dryer (3).
 - (3) Install pin (1).

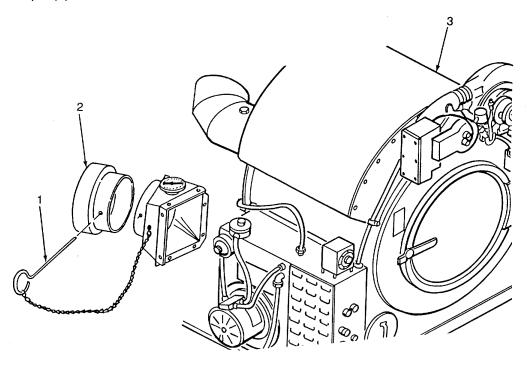


Figure 2-58. Exhaust Adapter

2-69. FAN AND MOTOR.

This task covers: a. Removal b. Installation

INITIAL SETUP

<u>Tools</u>

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Dryer shut down (TM 10-3510-222-10)

Blower removed (Para 2-50)

Rotary Pump removed (Para 2-53)

a. REMOVAL

- (1) Remove eight screws (1) and lockwashers (2).
- (2) Remove fan housing (3).
- (3) Loosen setscrew (4) and remove collar (5).
- (4) Loosen setscrew (6) and remove fan (7) and key (8).
- (5) Remove four screws (10) and lockwashers (11).
- (6) Remove motor (12) from adapter plate (9).

b. INSTALLATION

(1) Position adapter plate (9) on motor (12) and install four lockwashers (11) and screws (10).

NOTE

A gap of 1/4" between adapters and fan is required.

- (2) Position key (8) on motor (12) and install fan (7). Tighten setscrew (6).
- (3) Install collar (5) and secure with setscrew (4).
- (4) Position fan housing (3) on adapter plate (9) and install eight screws (1) and lockwashers (2).
- (5) Install blower (Para 2-50).
- (6) Install rotary pump (Para 2-53).

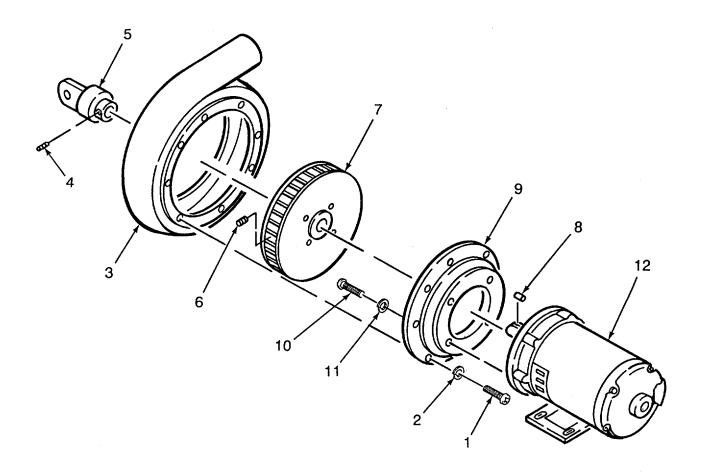


Figure 2-59. Fan and Motor

2-70. SOLENOID NONMETALLIC HOSE VALVE.

This task covers: a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanic's Tool Kit (App B, Item 1)

Equipment Condition

Dryer shut down (TM 10-3510-222-10) Nonmetallic Hoses (Fuel Lines) disconnected (Para 2-43)

Transformer Cover removed (Para 2-56)

Materials/Parts

Tags (App D, Item 4)

Antiseize Compound (App D, Item 24)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect solenoid wires in transformer box.
- (2) Disconnect conduit (11) at transformer box.
- (3) Remove two screws (1) and lockwasher (2).
- (4) Remove solenoid (3) (including wires) from bracket (10).
- (5) Remove elbow (4) and gasket (5) from solenoid (3).
- (6) Remove elbows (6 and 7).
- (7) Remove connector (8) and elbow (6) from valve (9).

b. INSTALLATION

- (1) Apply antiseize compound to threads of elbows (6 and 7) and install on solenoid valve (3).
- (2) Apply antiseize compound to all male fittings and install elbow (6) and connector (8) on shutoff valve (9).
- (3) Connect elbow (6) to solenoid (3).
- (4) Position solenoid (3) on bracket (10) and secure with two lockwashers (2) and screws (1).
- (5) Position gasket (5) and elbow (4) on solenoid (3).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (6) Feed wires of solenoid through elbow (4) and conduit (11); connect conduit (Para 2-56) to transformer box and connect wires as tagged.
- (7) Install nonmetallic hoses (fuel lines) (Para 2-43).
- (8) Install transformer cover (Para 2-56).

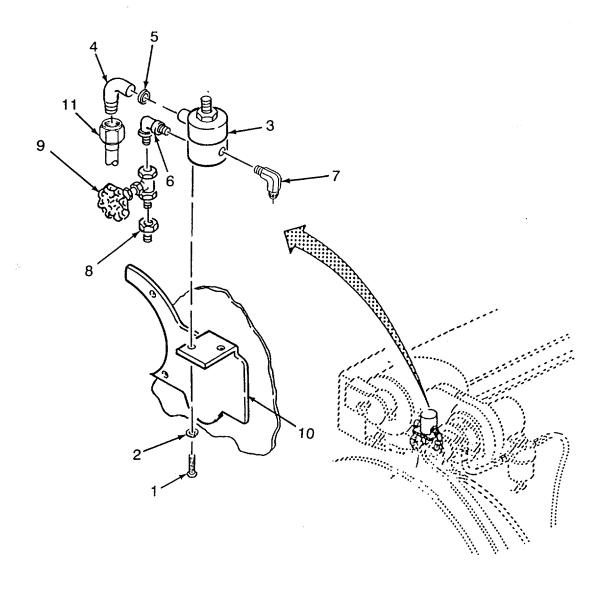


Figure 2-60. Solenoid Nonmetallic Hose Valve

2-71. SHIELD

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Dryer shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Loosen three captive screws (1) and open door (2).
- (2) Support shield (6) and remove four screws (3), lockwashers (4) and flat washers (5).
- (3) Remove shield (6).
- b. REPAIR

Repair consists of replacing the damaged or missing shield.

- (1) Position shield (6) on dryer base and secure with four flat washers (5), lockwashers (4) and screws (3).
- (2) Close door (2) and secure with three captive screws (1).

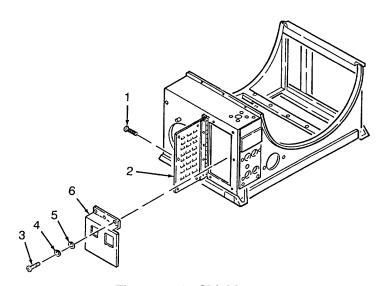


Figure 2-61. Shield

2-72. CABLE (WATER PUMP).

This task covers: Repair

INITIAL SETUP

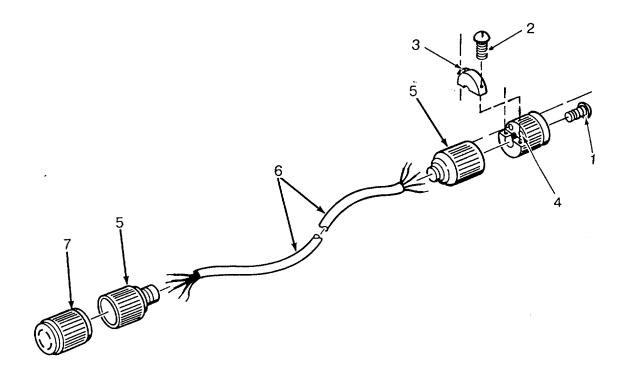
<u>Tools</u>
General Mechanics Tool Kit (App B, Item 1)

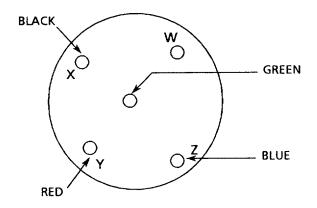
Equipment Condition

Cable removed (TM 10-3510-222-10)

REPAIR

- (1) Repair consists of replacing damaged or missing components of the power cable.
- (2) Electrical plug (4) and/or connector (7).
 - (a) Position cover (5) on cable (6).
 - (b) Remove two screws (1) from electrical plug (4) and/or connector (7).
 - (c) Remove two screws (2) and holder (3).
 - (d) Disconnect electrical wiring from electrical plug (4) and/or electrical connector (7).
 - (e) Install electrical wiring on new electrical plug (4) and/or electrical connector (7).
 - (f) Install holder (3) and two screws (2).
 - (g) Install two screws (1).
 - (h) Position covers (5) on electrical plug (4) and electrical connector (7).
- (3) Cable (6).
 - (a) Position cover (5) on cable (6).
 - (b) Remove electrical plug (4) and electrical connector (7) from cable (6).
 - (c) Remove covers (5) from cable (6).
 - (d) Install covers (5) on new cable (6).
 - (e) Install electrical plug (4) and electrical connector (7).
 - (f) Position covers (5) on electrical plug (4) and electrical connector (7).





DISTRIBUTION CABLE(BOTH ENDS)

LEGEND

1. WIRING FOR POWER DISTRIBUTION CABLE IS 25 FEET ;LONG AND MIL-C-3432; PART NUMBER:CO-05HOF (5/12) 0740.

Figure 2-62. Cable (Water Pump)

2-73. TIEDOWN.

This task covers:

Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Tiedown removed (TM 10-3510-222-10)

Materials/Parts

Wire Rope (App C, Item 58) Sleeve (App C, Item 57)

REPAIR

NOTE

Both tiedowns are identical, this procedure is for one of them.

- (1) Wire rope (2) and/or bolt (3) (one side).
 - (a) Remove wire rope (2) from bolt (3) and tiedown angle (4).
 - (b) Measure and cut wire rope (2) to 14 inches long.
 - (c) Install wire rope (2) and sleeve (1) on tiedown angle (4).
 - (d) Install wire rope (2) and sleeve (1) on bolt (3).
- (2) Tiedown angle (4).
 - (a) Remove wire rope (2) from both sides of tiedown angle (4).
 - (b) Install wire rope (2) on both sides of tiedown angle (4).

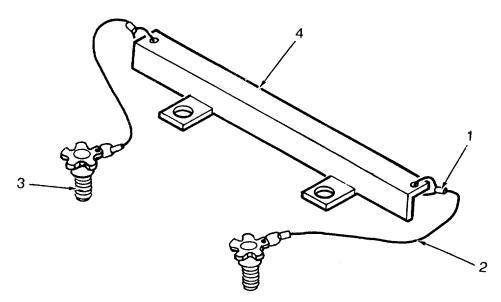


Figure 2-63. Tiedown

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

Equipment Condition
Pump removed (TM 10-3510-222-10)
Sediment Strainer and Outlet Piping removed
(Para 2-75)

Materials/Parts

Angle Connector (App C, Item 3) Self-locking nut (App C, Item 18) Shaft Seal (App C, Item 5) Preformed Packing (App C, Item 6) Tags (App D, Item 4)

a. REMOVAL

- (1) Remove two screws (1) from cover (2) and remove cover.
- (2) Tag and remove wiring from centrifugal pump unit (3).
- (3) Remove nut (4) from angle connector (5), washer (6) and remove connector (5).
- (4) Remove four self-locking nuts (7) and bolts (9). Discard nuts (7).
- (5) Remove centrifugal pump unit (3) from frame (8).
- (7) Remove drain cock (10) from centrifugal pump unit (3).

b. REPAIR

Repair consists of replacing damaged or missing components of the centrifugal pump unit.

c. INSTALLATION

- (1) Install drain cock (10) on centrifugal pump unit (3).
- (2) Position centrifugal pump unit (3) on frame (8).
- (3) Install four bolts (9), self-locking nuts (7) on centrifugal pump unit (3) and frame (8).
- (4) Install angle connector (5), washer (6) and nut (4) on centrifugal pump unit (3).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-5 Centrifugal Pump Unit Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (5) Connect wiring to centrifugal pump unit (3).
- (6) Install cover (2) on centrifugal pump unit (3) with two screws (1).
- (7) If installing new centrifugal pump unit (3), install warning decal (11).
- (8) Install sediment strainer and outlet piping (Para 2-75).

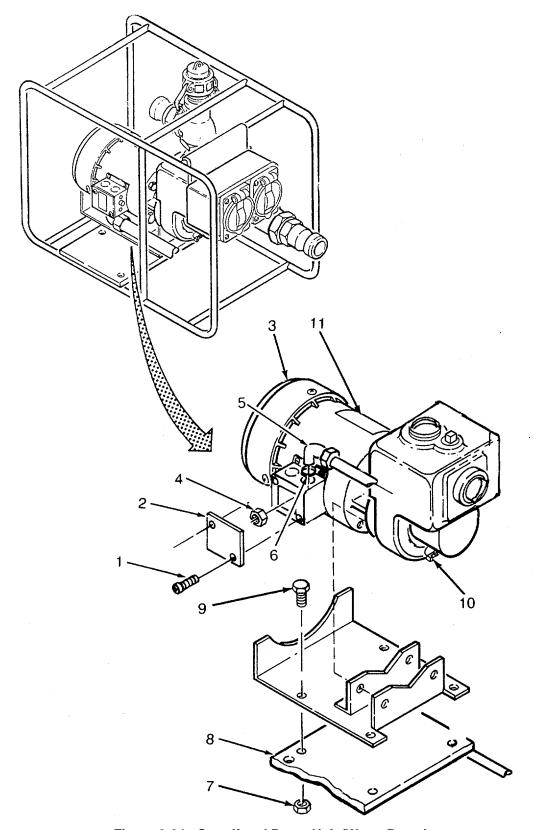


Figure 2-64. Centrifugal Pump Unit (Water Pump)

2-75. SEDIMENT STRAINER AND OUTLET PIPING.

This task Covers:

a. Servicing
b. Removal
c. Disassembly
d. Repair
e. Assembly
f. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2) Equipment Condition
Centrifugal Pump Unit removed
(TM 10-3510-222-10)

Materials/Parts

Preformed Packing (App C, Item 1) Antiseize Tape (App D, Item 17)

a. SERVICING

- (1) Remove strainer cap (1) from body (4). Discard preformed packing (2).
- (2) Remove strainer (3) from body (4).
- (3) Clean strainer thoroughly with water.
- (4) Install strainer (3) in body (4).
- (5) Install new preformed packing (2) on cap (1).
- (6) Install cap (1) on body (4).

b. REMOVAL

(1) Sediment Strainer (7).

Remove sediment strainer (7) from centrifugal pump unit (6).

(2) Coupling half (13).

Remove coupling half (13) from centrifugal pump unit (6).

c. DISASSEMBLY

- (1) Sediment strainer (7).
 - (a) Disassemble sediment strainer (7) per servicing.
 - (b) Remove coupling half (5) from body (4).
 - (c) Remove pipe nipple (15) from body (4).
- (2) Coupling Half (13).
 - (a) Remove cap (8).
 - (b) Remove coupling half (9) and gasket (10).
 - (c) Remove coupling half (1).
 - (d) Remove tee (12) from nipple (13).

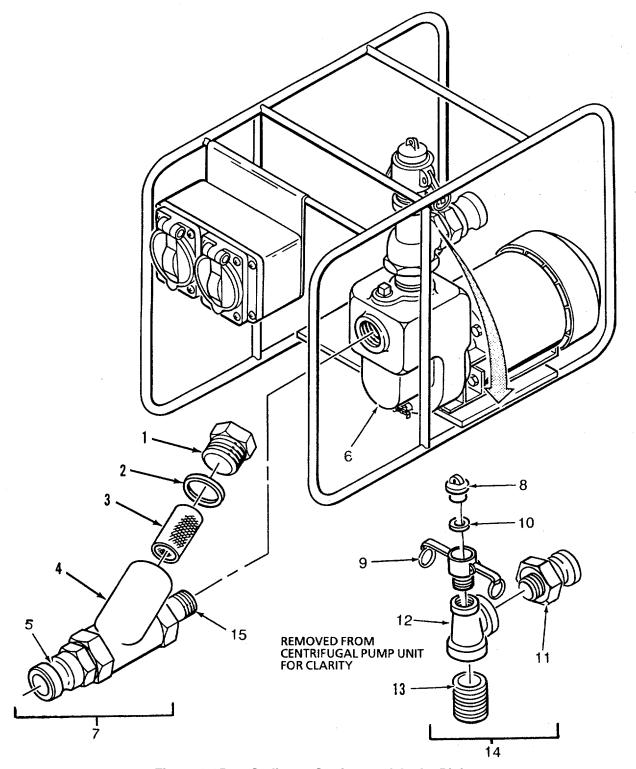


Figure 2-65. Sediment Strainer and Outlet Piping

2-75. SEDIMENT STRAINER AND OUTLET PIPING - continued.

d. REPAIR

Repair consists of replacing damaged or missing components of the sediment strainer (7) and/or outlet piping (14).

e. ASSEMBLY

NOTE

Install antiseize tape (teflon tape) on all male threads. Always wrap tape in the direction of the threads.

- (1) Sediment Strainer (7).
 - (a) Install coupling half (5) in body (4).
 - (b) Install pipe nipple (15) in body (4).
- (2) Outlet Piping (14).
 - (a) Install nipple (13) on tee (12).
 - (b) Install coupling half (11) on tee (12).
 - (c) Install coupling half (9) and gasket (10).
 - (d) Install cap (8).

f. INSTALLATION

NOTE

Install antiseize tape (teflon tape) on all male threads. Always wrap tape in the direction of the threads.

- (1) Sediment Strainer (7). Install sediment strainer (7) on centrifugal pump unit (6).
- (2) Outlet Piping (14). Install outlet piping (14) on centrifugal pump unit (6).

2-76. CONNECTOR-SWITCH.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment (App B, Item 2)

Equipment Condition
Centrifugal Pump Unit removed
(TM 10-3510-222-10)

Materials/Parts

Straight Connector (App C, Item 2) Gasket (App C, Item 62) Tags (App D, Item 4)

a. REMOVAL

- (1) Remove six screws (1), cover (2) and gasket (3) from switch box (4).
- (2) Tag and remove electrical wiring from switch (5) and receptacle (6).
- (3) Remove nut (7), connector (8), washer (9) and wiring from switch box (4).
- (4) Remove two nuts (10) and screws (11) from switch box (4) and remove switch box (4) from frame (16).

b. REPAIR

- (1) Repair consists of replacing damaged or missing components of the connector-switch.
- (2) Receptacle (6).
 - (a) Remove two screws (12) from receptacle (6).
 - (b) Tag and disconnect electrical wiring from receptacle (6).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-5 Centrifugal Pump Unit Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (c) Install wiring on new receptacle as tagged (6).
- (d) Install receptacle (6) in cover (2) with two screws (12).
- (3) Switch (5).
 - (a) Remove four screws (13) and cover (14).
 - (b) Remove two screws (15).
 - (c) Tag and disconnect wiring from switch (5) and remove switch.

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-5 Centrifugal Pump Unit Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (d) Connect wiring to new switch (5) as tagged.
- (e) Install two screws (15).
- (f) Install cover (14) and four screws (13).

c. INSTALLATION

- (1) Position switch box (4) on water pump frame (16) and install two screws (11) and nuts (10).
- (2) Install connector (8), washer (9) and nut (7) on switch box (4).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-5 Centrifugal Pump Unit Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (3) Connect wiring to switch (5) and receptacle (6) as tagged.
- (4) Install gasket (3) and cover (2) on switch box (4) with six screws (1).

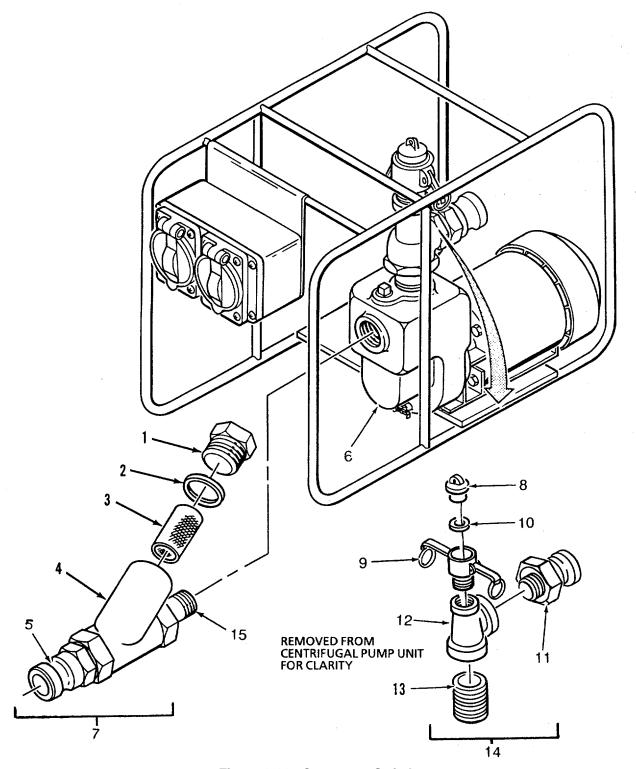


Figure 2-66. Connector-Switch

Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Suction strainer removed (TM 10-3510-222-10)

REPAIR

- (1) Remove quick-disconnect coupling (2) from suction strainer (1).
- (2) Install quick-disconnect coupling (2) on suction strainer (1).

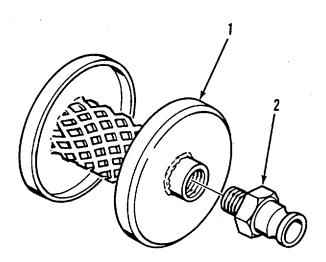


Figure 2-67. Suction Strainer

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

a. REMOVAL

- (1) Fire Extinguisher (2).
 - (a) Unlatch fire extinguisher bracket (1).
 - (b) Remove fire extinguisher (2).
- (2) Bracket (1).

With fire extinguisher (2) removed, remove four bolts (3) and lockwashers (4) from bracket (1) and remove bracket.

b. REPAIR

Repair consists of replacing damaged or missing components of the fire extinguisher/bracket.

- (1) Fire Extinguisher (2).
 - (a) Remove bracket (that comes with fire extinguisher (2) and discard bracket.
 - (b) Position fire extinguisher (2) on bracket (1).
 - (c) Latch bracket (1) around fire extinguisher (2).
- (2) Bracket (1).
 - (a) Position bracket (1) on frame upright (5) and install four lockwashers (4) and bolts (3).
 - (b) Install fire extinguisher (2).

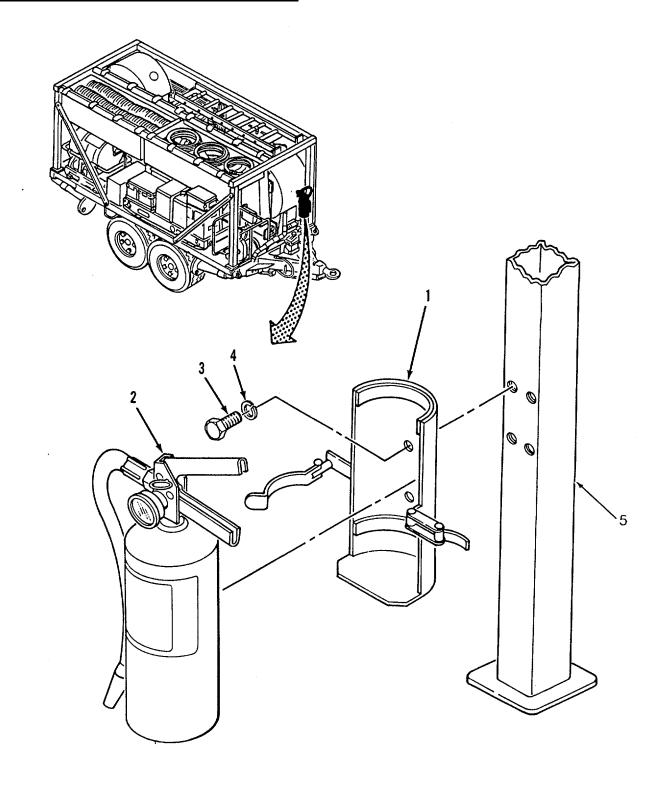


Figure 2-68. Fire Extinguisher/Bracket

a. Removal

- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

a. REMOVAL

- (1) Remove seven nuts (1), lockwashers (2), washers (3) and bolts (4) from bracket (5).
- (2) Remove mounting bracket (5) from trailer (6).

b. REPAIR

Repair consists of replacing damaged or missing components of the bracket (5).

- (1) Webbing Strap (7).
- (2) Base (8).

- (1) Position mounting bracket (5) on trailer (6).
- (2) Install seven bolts (4), washers (3), lockwashers (2) and nuts (1) on bracket (5) and trailer (6).

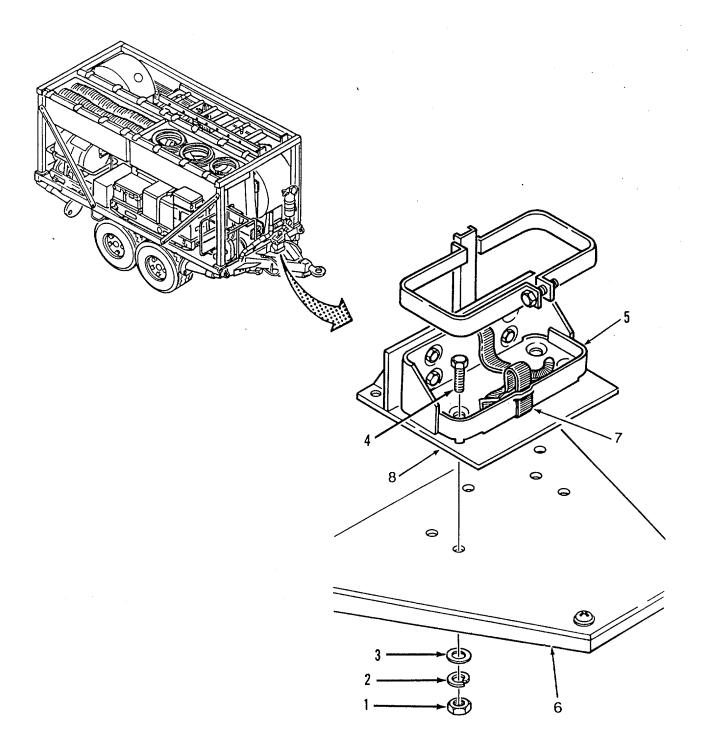


Figure 2-69. Bracket

2-179

a. Removal

- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2)

Materials/Parts

Rivet (App C, Item 10).

a. REMOVAL

- (1) Remove two nuts (1), lockwashers (2), washers (3) and bolts (4) from tool box (5).
- (2) Remove two lockwashers (6), washers (7) and bolts (8) from tool box (5).
- (3) Remove tool box (5) from trailer (9).
- (4) Remove four spacers (10) from trailer (9).

b. REPAIR

Repair consists of replacing the damaged or missing components of the tool box (5).

- (a) Steel chain (13), 6 inches long.
- (b) Ring (12).
- (c) Snap hook (11).
- (d) Rivet (14).

- (1) Position four spacers (10) on trailer (9) to align for installation of bolts (4 and 8).
- (2) Position tool box (5) on trailer (9).
- (3) Install two bolts (4) on right side of the tool box (5) with washers (3), lockwashers (2) and nuts (1).
- (4) Install two bolts (8), washers (7) and lockwashers (6) in tool box (5).

2-80. TOOL BOX - continued.

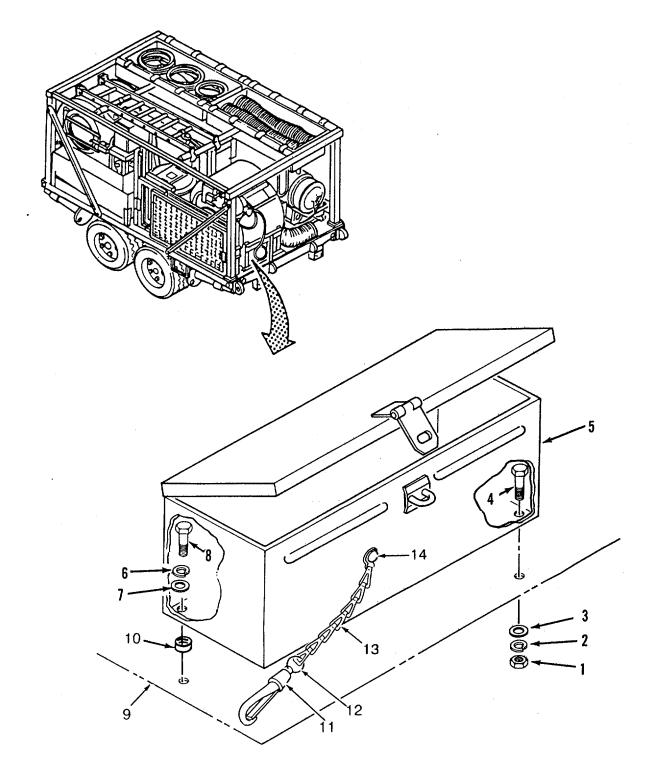


Figure 2-70. Tool Box

2-81. MODIFIED GENERATOR.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)
Forklift

Materials/Parts
Self-locking nut (App C, Item 13)

Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)
Cover removed (Para 2-82)
Detach bottom of tarpaulin support frame
(TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

(1) Rotate tarpaulin support frame (1) down.

WARNING

Generator exhaust hoses may be extremely hot. Be careful when working near and /or removing them as this could cause serious injury to personnel.

- (2) Remove generator exhaust hoses (17) from generator (3).
- (3) Disconnect pigtail of main power cable (4) from generator (3).
- (4) Remove eight nuts (11), lockwashers (12), washers (13), blocks (14) and bolts (15) from generator
- (3) and Laundry Unit.
- (5) Remove generator (3) (using forklift) from Laundry Unit.
- (6) Remove union (19) and pipe (18) as one piece from generator (3).
- (7) Remove three battery hooks (16).
- (8). Remove hose (6) from gage (9).

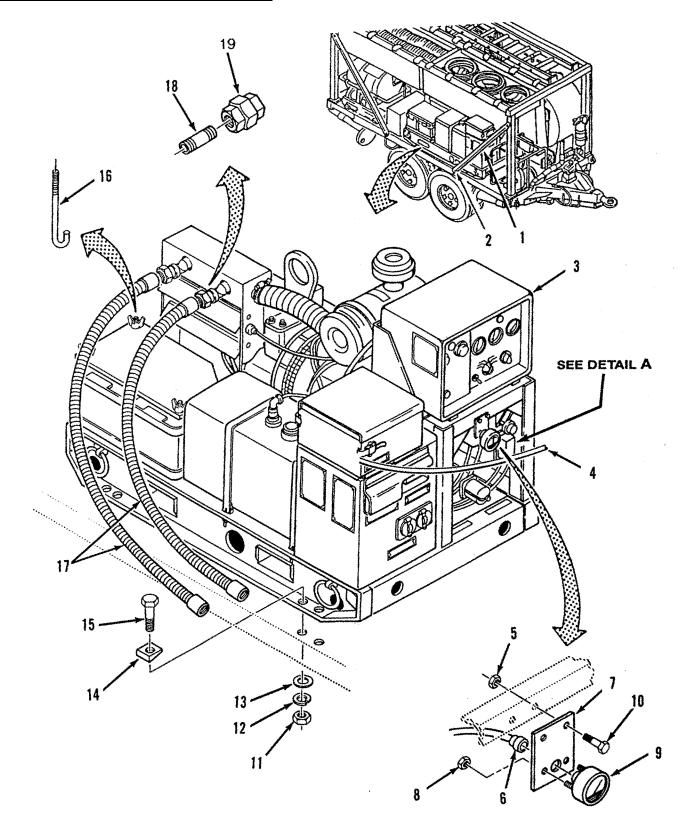


Figure 2-71. Modified Generator (Sheet 1 of 2)

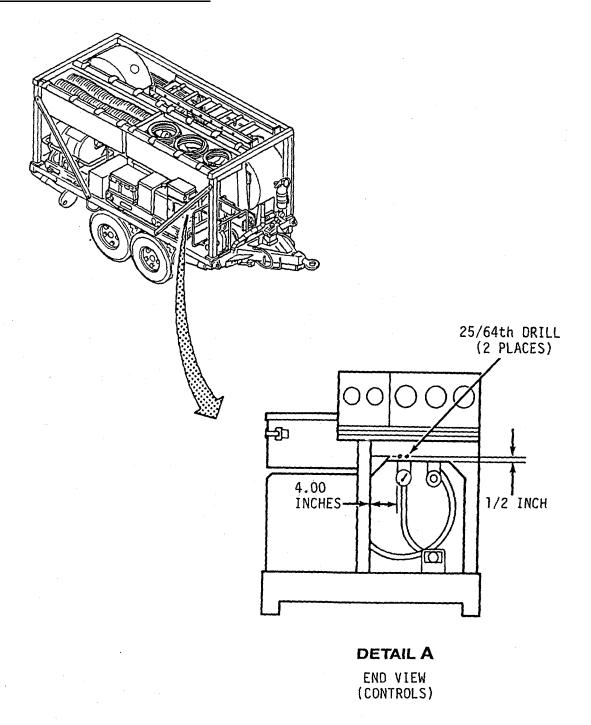


Figure 2-71. Modified Generator (Sheet 2)

- (9) Remove two nuts (5) and bolts (10) from oil gage bracket (7) and generator (3) and remove oil gage bracket.
- (10) Remove hose (6) from generator (3).
- (11) Remove two nut; (8) from gage (9) and remove gage (9) from oil gage bracket (7).
- (12) Mount gage (9) on generator bracket. Refer to TM 5-6115-585-12.
- (13) Remove oil gage hose (6) from replacement generator.
- (14) Remove three battery hooks (16) from replacement generator.
- (15) Install three battery hooks (16) on generator (3) with washers and wing nuts.

b. REPAIR

Repair consists of replacing damaged or missing components of the modified generator.

- (a) Exhaust hoses (17)
- (b) Union (19)
- (c) Pipe (18)
- (d) Hose (6)
- (e) Hooks (16)
- (f) Oil gage bracket (7)

- (1) Remove gage (9) from replacement generator mounting bracket. Refer to TM 5-6115-585-12.
- (2) Using oil gage bracket (7) as a template, drill two 25/64th inch holes in generator per view A of Figure 2-71.
- (3) Install gage (9) on oil gage bracket (7) with two nuts (8).
- (4) Position oil gage bracket (7) on generator (3) and install two bolts (10) and nuts (5).
- (5) Connect hose (6) to gage (9) and generator (3).
- (6) Install union (19) and pipe (18) as one piece on generator (3).
- (7) Position generator (3) (using forklift) on Laundry Unit.
- (8) Install eight bolts (15), blocks (14), washers (13), lockwashers (12) and nuts (11) on generator (3) and Laundry Unit.
- (9) Install two generator exhaust hoses (17) on generator (3).
- (10) Install three battery hooks (16) on generator (3).
- (11) Install battery cover (Para 2-82).

(12) Connect pigtail end of main power cable to generator, refer to FO-1 Laundry Unit Wiring Diagram.

<u>Generator</u>	Main Power Cable
L1	BLACK
L2	RED
L3	BLUE
LO	WHITE
GROUND	GREEN

- (13) Rotate tarpaulin support frame (1) for installation of hardware (2).
- (14) Install tarpaulin support frame (1) (TM 10-3510-222-10).

2-82. COVER.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove three wing nuts (1) and washers (2) from battery hooks (4).
- (2) Remove cover (3) from battery hooks (4).
- b. REPAIR

Repair consists of replacing damaged or missing components of the cover (3), screws (5) and/or wood blocks (6).

- (1) Position cover (3) on battery hooks (4).
- (2) Install three washers (2) and wing nuts (1) on cover (3).

2-82. COVER - continued.

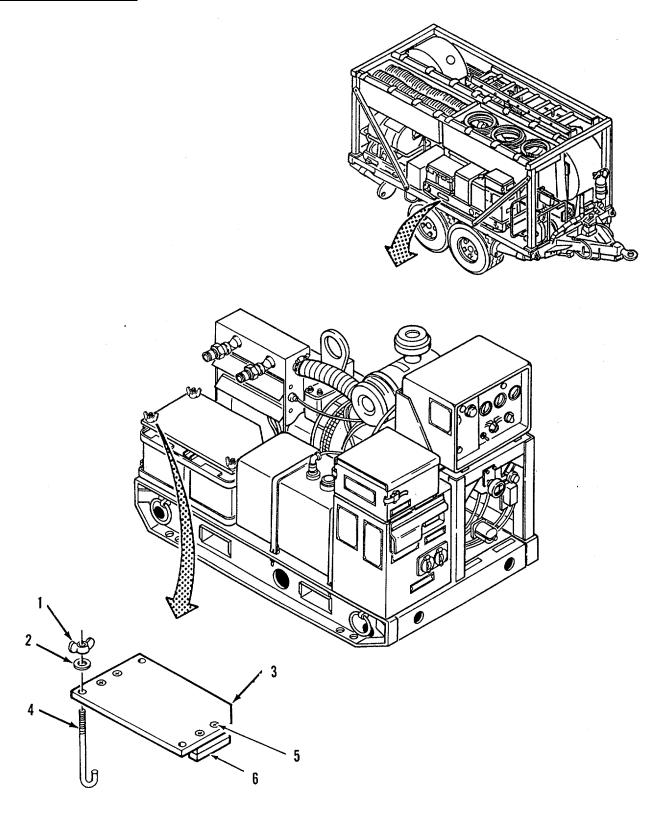


Figure 2-72. Cover

2-83. GROUND ROD.

This task covers:

Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition
Ground rod removed (TM 10-3510-222-10)

REPAIR

Repair consists of replacing damaged or missing components of the ground rod (1).

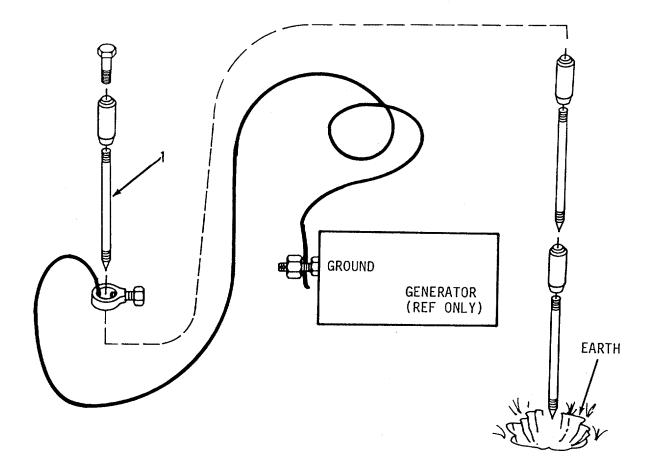


Figure 2-73. Ground Rod

2-84. HOSE(S) AND QUICK COUPLING HALF.

This task covers: Repair

INITIAL SETUP

<u>Tools</u>
General Mechanics Tool Kit (App B, Item 1)
Gasket (App C, Items 7 and 8)

Equipment Condition
Water/drain hose removed (TM 10-3510-222-10)

REPAIR

NOTE

Repair on hoses is for all hoses on the Laundry Unit. Repair consists of replacing damaged or missing components of the hose(s).

- (1) Hose (3).
 - (a) Loosen hose clamps (1) and remove quick coupling halves (2) from hose (3).
 - (b) Remove hose clamps (1) from hose (3).
 - (c) Position hose clamps (1) on hose (3).
 - (d) Install quick coupling halves (2) in hose (3).
 - (e) Tighten hose clamps (1) on hose (3) and quick coupling halves (2).
- (2) Clamp (1).
 - (a) Remove clamp (1) on hose (3).
 - (b) Install clamp (1) on hose (3).
- (3) Quick Coupling Halves (2).
 - (a) Loosen clamp (1) on hose (3).
 - (b) Remove quick coupling halves (2) from hose (3).
 - (c) Install quick coupling halves (2) in hose (3).
 - (d) Tighten clamp (1) on hose (3).
- (4) Gasket (4).
 - (a) Remove gasket (4) from quick coupling halves (2).
 - (b) Install new gasket (4) in quick coupling halves (2).

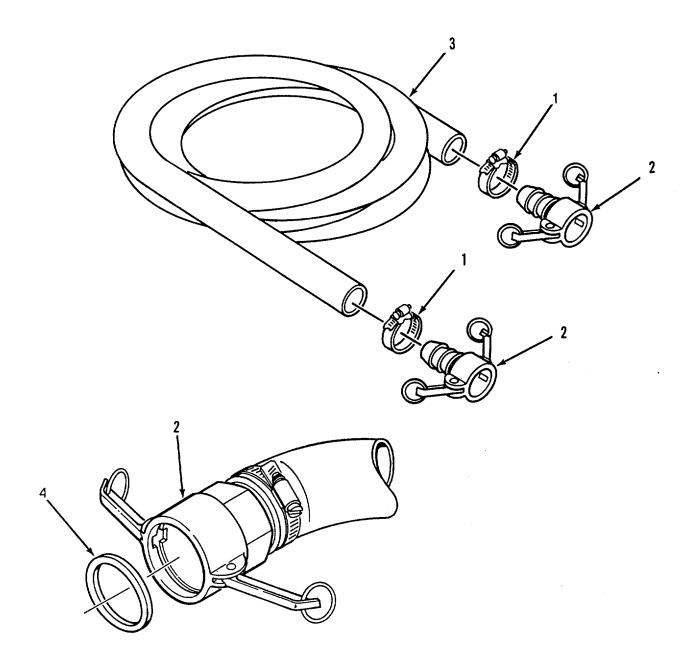


Figure 2-74. Hose(s) and Quick Coupling Half

2-85. MODIFIED TRAILER.

This task covers: Repair

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)

Hand Blind Rivet (App B, Item 7) Hand Blind Rivet (App B, Item 11)

Installation Tool (App B, Item 12)

Installation Tool (App B, Item 13)

Forklift

Materials/Parts
Blind Rivet (App C, Item 69)
Blind Rivet (App C, Item 70)
Second Thread Insert (App C, Item 66)

Screw Thread Insert (App C, Item 66) Screw Thread Insert (App C, Item 67)

Screw Thread Insert (App C, Item 68)

- (1) Strap (3)
 - (a) Remove four screws (1) from strap loops (2).
 - (b) Remove strap (3) from strap loops (2).
 - (c) Install new strap (3) on strap loops (2).
 - (d) Position strap loops (2) on trailer (7) and install four screws (1).
- (2) Blind nut (6)
 - (a) Remove components as required to repair trailer (7).
 - (b) Remove blind nut (6), using .500 drill bit.
 - (c) Insert new blind nut (6) in hole on trailer (7).
 - (d) Using blind hand riveter, set blind nut (6) in place.
 - (e) Install components as required if removed.
- (3) Screw thread insert (4)
 - (a) Remove components as required to repair trailer (7).
 - (b) Remove screw thread insert (4), using 23/32 for ½ x 13 and 17/32 for 3/8-16 drill bit to the depth of 3/16.
 - (c) Deflect four kees inward and break off of thread insert (4).
 - (d) Remove insert (4).
 - (e) Screw in insert (4) until slightly below surface (kees position insert (4) at correct depth).
 - (f) Drive kees down with several light taps on installation tool.

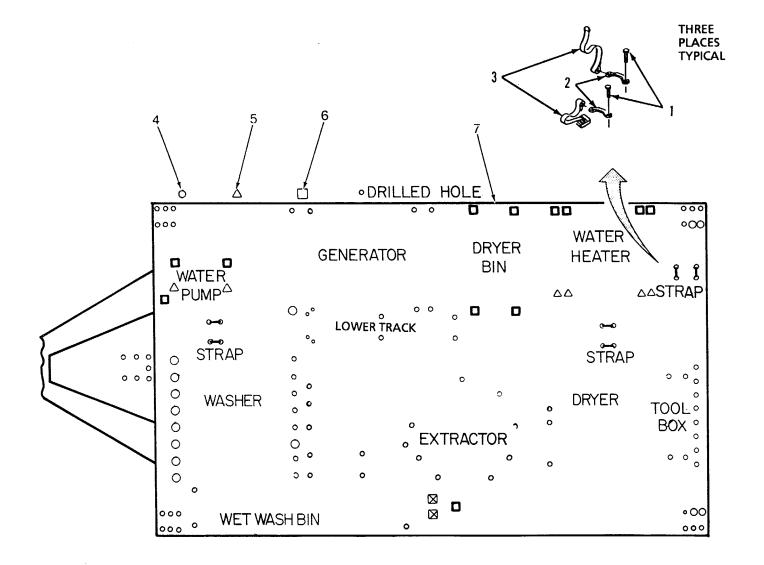


Figure 2-75. Modified Trailer 2-193

2-85. MODIFIED TRAILER - continued

- (4) Screw thread insert (5) (helical coil).
 - (a) Remove components as required to repair trailer (7).
 - (b) Remove screw thread insert (5).
 - (c) Install screw thread insert (5).
 - (d) Install components as required if removed.

CHAPTER 3

DIRECT SUPPORT MAINTENANCE

PARAGRAPH	TITLE	PAGE
Section I.	Direct Support General	3-3
3-1.	Introduction	3-3
3-2.	Scope	3-3
3-3.	Common Tools and Equipment	3-3
3-4.	Special Tools, TMDE, and Support Equipment	3-3
3-5.	Repair Parts	3-3
Section II.	Direct Support Troubleshooting	3-4
3-6.	Introduction	3-4
3-7.	Troubleshooting	3-4
Section III.	Direct Support Maintenance Procedures	3-12
3-8.	General Maintenance Procedures	3-12
3-9.	Tarpaulin	3-14
3-10.	Ladder	3-16
3-11.	Basket(s)	3-17
3-12.	Front and Rear Frames	3-18
3-13.	Strut	3-19
3-14.	Right, Center and Left Beams	3-20
3-15.	Upright Rail	3-22
3-16.	Lower Track	3-23
3-17.	Maintenance Platform	3-24
3-18.	Short Platform	3-25
3-19.	Lower/Dryer Platform	3-26
3-20.	Two Step Stair	3-27
3-21.	Washer Drain	3-28
3-22.	Washer	3-31
3-23.	Door and Bar	3-36
3-24.	Reducer and Output Quill	3-40
3-25.	Seal and Carriage	3-48
3-26.	Basket	3-50
3-27.	Drum	3-53
3-28.	Frame	3-58
3-29.	Control Console	3-60
3-30	Control Panel	3-65
3-31.	Interval Timer	3-70
3-32.	Chassis Control	3-73
3-33.	Compressor and Motor	3-78
3-34.	Controller Stand	3-80
3-35.	Conduit	3-82
3-36.	Power Cable	3-84
3-37.	Enclosure Box	3-86
3-38.	Power Panel	3-89

TM 10-3510-222-24

PARAGRAPH	TITLE	PAGE
Section III.	Direct Support Maintenance Procedures - continued	
3-39.	Pre-Extractor Bin (Wet Wash Bin)	3-93
3-40.	Extractor Piping	3-94
3-41.	Laundry Extractor	3-95
3-42.	Hinge Shaft Assembly	3-97
3-43.	Pushbutton Switch	3-99
3-44.	Indicator Light	3-101
3-45.	Starter Enclosure	3-103
3-46.	Drive Unit Assembly	3-106
3-47.	Extractor Brake	3-108
3-48.	Oil Housing	3-111
3-49.	Lid Closed Switch	3-116
3-50.	Lid Locked Switch	3-118
3-51.	Overvoltage Absorber (Rotation Monitor)	3-120
3-52.	Solid State Relay	3-122
3-53.	Timer	3-124
3-54.	Terminal Board	3-126
3-55.	Lid Locked Solenoid and Linkage	3-128
3-56.	Control Panel	3-130
3-57.	Skirt and Leveling Arm	3-132
3-58.	Dryer	3-136
3-59.	Rotary Pump	3-138
3-60.	Speed Reducer	3-140
3-61.	Starter Motor	3-142
3-62.	Dryer Panel	3-144
3-63.	ON/OFF Switch	3-146
3-64.	Timer	3-148
3-65.	UV Scanner and Terminal Box	3-150
3-66.	Flame Control	3-152
3-67.	Plug-in Relay	3-154
3-68.	Tumbler Motor Control Relay (K2)	3-156
3-69.	Terminal Board	3-158
3-70.	Hot Air Blower	3-160
3-71.	Trunnion	3-163
3-72.	Roller Chain	3-167
3-73.	Heater	3-169
3-74.	Heater Base	3-174
3-75.	Heater Screen	3-175
3-76.	Tumbler Barrel	3-176
3-77.	Cylinder	3-180
3-78.	Dryer Conduits	3-182
3-79.	Dryer Base	3-187
3-80	Dryer Rin	3-189

Section I. DIRECT SUPPORT GENERAL

3-1. INTRODUCTION.

This chapter contains some important information that you need to know about the direct support maintenance requirements of the Laundry Unit. This information includes but is not limited to troubleshooting and maintenance of the various systems and subsystems which comprise the unit.

3-2. SCOPE.

This chapter contains maintenance instructions for removing, installing, and repairing the Laundry Unit at the direct support maintenance level. Maintenance personnel should become familiar with the information in this section.

3-3. COMMON TOOLS AND EQUIPMENT.

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE) applicable to your unit.

3-4. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.

Refer to Appendix B (Maintenance Allocation Chart) for a list of special tools, TMDE, and support equipment.

3-5.REPAIR PARTS.

Repair parts are listed and illustrated in the repair parts and special tools list, TM 10-3510-222-24P, covering repair parts for this equipment. Appendix C lists the Mandatory Replacement Parts which need to be replaced during maintenance.

Section II. DIRECT SUPPORT TROUBLESHOOTING

3-6. INTRODUCTION.

The Malfunction Index lists the common malfunctions which you may find during maintenance of the Laundry Unit or its components. You should perform test/inspections and corrective actions in the order listed.

3-7. TROUBLESHOOTING.

NOTE

Be sure to read all Warnings in front of manual before troubleshooting. Before you use the troubleshooting tables, be sure you have performed all applicable operating checks and verified that a malfunction exists. When a corrective action is performed, verify that the action has corrected the malfunction.

- a. Malfunction Index. For quick access to troubleshooting procedures.
- b. Generator. Refer to TM 5-6115-585-12 for troubleshooting.
- c. <u>Trailer</u>. Refer to TM 9-2330-376-14&P for troubleshooting.
- d Water Heater. Refer to TM 10-4520-259-13&P for troubleshooting.

DIRECT SUPPORT MALFUNCTION INDEX

MA	ALFUNCTION	P
	Table 3-1. DIRECT SUPPORT LAUNDRY UNIT MAIN	
1	POWER TROUBLESHOOTING PROCEDURES	
١.	No power to component circuit breaker	•••
	Table 3-2. DIRECT SUPPORT WASHER TROUBLESHOOTING PROCEDURES	
1.	Washer will not operate	
2.	Washer will not fill with cold/hot water in automatic/manual mode	
3.	Washer cylinder will not rotate in automatic/manual mode	
4.	Washer cylinder rotates only in one direction	
5.	Washer cylinder rotates, automatic function does not operate	
6.	Washer rotates in one direction only without stopping	
7.	Washer fill level too low	
8.	Washer fill level too high	
	Washer door will not open	
10.	Washer will not drain	
	Table 3-3. DIRECT SUPPORT DRYER TROUBLESHOOTING PROCEDURES	
1.	Dryer cylinder does not operate	
2.	Dryer hot air blower does not operate	
3.	Drying takes too long	
4.	Dryer's heated air is not drawn through tumbler	
5.	Dryer fails to operate for selected time	
6.	Dryer fails to dry laundry	
7. 8.	Dryer fails to start	
o. 9.	Dryer burner flame fails	
-	Excessive smoke from dryer	
	Air leaks from dryer door	
	. All loaks from dryor door	
	Table 3-4. DIRECT SUPPORT EXTRACTOR TROUBLESHOOTING PROCEDURES	
1.	Extractor fails to start	
	Extractor starts but basket fails to turn	
	Extractor runs too long	

Table 3-1. DIRECT SUPPORT LAUNDRY UNIT TROUBLESHOOTING PROCEDURES **MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION** 1. NO POWER TO COMPONENT CIRCUIT BREAKERS. Repair power cable. Refer to paragraph 3-36, Power Cable.

Table 3-2. DIRECT SUPPORT WASHER TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

WASHER WILL NOT OPERATE.

Step 1. Check for blown fuse inside control box.

If fuse is blown, replace fuse. Refer to paragraph 3-32, Chassis Control.

Step 2. Check for broken wiring. Use a multimeter and test wiring for continuity.

If wire is broken, replace defective wire. Refer to FO-2 Washer Wiring Diagram.

2. WASHER WILL NOT FILL WITH COLD/HOT WATER IN AUTOMATIC MODE.

Check relay.

Replace K11, K12, K13 if defective. Refer to paragraph 3-32, Chassis Control.

3. WASHER CYLINDER WILL NOT ROTATE IN AUTOMATIC MODE.

Step 1. Check K9 relay.

Replace relay if defective. Refer to 3-32, Chassis Control.

Step 2. Check for defective gear reducer. Check for rough or high-friction turning of shafts.

Repair or replace reducer. Refer to paragraph 3-24, Reducer and Output Quill.

4. WASHER CYLINDER ROTATES ONLY IN ONE DIRECTION.

Check reversing contactors in control panel.

Replace reversing contactor. Refer to paragraph 3-32, Chassis Control.

5. WASHER CYLINDER ROTATES, AUTOMATIC FUNCTION DOES NOT OPERATE.

Step 1. Check card for damage.

Replace card.

Step 2. Check for power on cycle timer.

Replace cycle timer. Refer to paragraph 3-32, Chassis Control.

Step 3. Check functioning of AUTO/MANUAL switch.

Replace AUTO/MANUAL switch. Refer to paragraph 3-30, Control Panel.

6. WASHER ROTATES IN ONE DIRECTION ONLY WITHOUT STOPPING.

Step 1. Check that the movement timing motor is turning.

Replace movement timing motor. Refer to 3-32, Chassis Control.

Step 2. Check operation of movement timing switches.

Replace switches. Refer to 3-32, Chassis Control.

Step 3. Check functioning of reversing contactor.

Replace reversing contactor. Refer to 3-32, Chassis Control.

Table 3-2. DIRECT SUPPORT WASHER TROUBLESHOOTING PROCEDURES - continued

MALFUNCTION TEST OR INSPECTION

CORRECTIVE ACTION

7. WASHER FILL LEVEL TOO LOW (well below lowest setting).

WARNING

High voltage is present inside control console. Do not perform maintenance with power on. Death or serious injury may result.

- Step 1. Check for inoperative water level switches with power off, perform continuity check from common to normally closed.
 - a. If switch is defective, replace water level switch. Refer to paragraph 3-30, Control Panel.
 - b. Check for clog in level sensor inhibiting float movement. Remove clog.
- Step 2. Check for damaged solenoid valve.

If damaged, replace solenoid valve. Refer to paragraph 3-29, Control Console.

8. WASHER FILL LEVEL TOO HIGH (well above setting or water overflowing into the overflow line).

WARNING

High voltage is present inside control console. Do not perform maintenance with power on. Death or serious injury may result.

- Step 1. Check for inoperative water level switches with power off, perform continuity check from common to normally closed.
 - a. If switch is defective, replace water level switch. Refer to paragraph 3-30, Control Panel.
 - b. Check for clog in level sensor inhibiting float movement.

Remove clog.

Step 2. Check for damaged solenoid valve.

If damaged, replace solenoid valve. Refer to paragraph 3-29, Control Console.

9. WASHER DOOR WILL NOT OPEN

- Step 1. Check for clog in pressure switch air sensing line. Remove clog.
- Step 2. Check for defective pressure switch, replace pressure switch in control console. Refer to paragraph 3-29, Control Console.

10. WASHER WILL NOT DRAIN

Check for clog in washer drain.

Remove clog.

Table 3-3. DIRECT SUPPORT DRYER TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

1. DRYER CYLINDER DOES NOT OPERATE.

Step 1. Check for defective starter circuit and relay wiring. Using a multimeter, test wiring for continuity.

If wiring is damaged, repair or replace defective wiring. Refer to FO-4, Dryer Wiring Diagram.

Step 2. Check for damaged roller chain.

If roller chain is damaged, replace roller chain. Refer to paragraph 3-72, Roller Chain.

Step 3. Check for cracked, worn, or broken cylinder drive motor parts, damaged or loose shaft threads, and bent shaft.

If motor is damaged, replace motor. Refer to paragraph 3-33, Compressor and Motor.

Step 4. Check for defective trunnion. Check for rough rotation of shafts and sprockets.

If trunnion is damaged, replace or repair trunnion. Refer to paragraph 3-71, Trunnion.

2. DRYER HOT AIR BLOWER DOES NOT OPERATE.

Step 1. Check for broken starter wiring. Use a multimeter and test wiring for continuity.

If starter wiring is defective, repair or replace defective wiring. Refer to FO-4, Dryer Wiring Diagram.

Step 2. Check for cracked, broken, or worn hot air blower parts and bent motor shaft.

If hot air blower is damaged, repair. Refer to paragraph 3-70, Hot Air Blower.

3. DRYING TAKES TOO LONG.

Check for cracked, worn, or broken exhaust motor parts.

If motor is damaged, replace motor. Refer to paragraph 3-70, Hot Air Blower.

4. DRYER'S HEATED AIR IS NOT DRAWN THROUGH TUMBLER.

Step 1. Check for defective hot air blower. Check for loose coupling and for missing or damaged parts.

If defective, replace hot air blower. Refer to paragraph 3-70, Hot Air Blower.

Step 2. Check for defective dryer hot air blower motor. With power off, remove hot air blower motor connection box cover. With power on, measure 120 vac between each leg and ground.

If hot air blower motor voltage is present and motor does not turn, replace hot air blower motor. Refer to paragraph 3-70, Hot Air Blower.

Table 3-3. DIRECT SUPPORT DRYER TROUBLESHOOTING PROCEDURES - continued

MALFUNCTION

TEST OR INSPECTION CORRECTIVE ACTION

5. DRYER FAILS TO OPERATE FOR SELECTED TIME.

Check for needle slippage by rotating needle around clockwise until it clicks.

- a. If needle does not click at zero, loosen setscrews and tighten with the needle at the zero position.
- b. If problem persists, replace timer. Refer to paragraph 3-64: Timer.

6. DRYER FAILS TO DRY LAUNDRY.

Check to see if there is a flame in sight eye.

If no flame, check UV scanner with UV scanner control box tester (App B, Item 6).

7. DRYER FAILS TO START.

Check for damaged On/Off switch.

Replace On/Off switch. Refer to paragaph 3-63, ON/OFF Switch.

8. DRYER BURNER FLAME FAILS.

- Step 1. Check to see if there is a flame in sight eye. If flame is present, but goes out:
 - a. Check UV scanner pipe for soot/clog. If pipe has soot or is clogged, clean out.
 - Check flame control for broken lens. If lens is broken, replace flame control. Refer to paragraph 3-66, Flame Control.
 - c. Check UV scanner with UV scanner control box tester (App B, Item 6).

If UV scanner fails, replace IV scanner. Refer to paragraph 3-65, UV Scanner and Terminal Box.

Step 2. Check flame control and UV scanner for damage.

Replace flame control and UV scanner. Refer to paragraphs 3-65 and 3-66.

9. DRYER TUMBLER DOES NOT ROTATE.

Check speed reducer for damage.

Replace speed reducer. Refer to paragraph 3-60, Speed Reducer.

10. EXCESSIVE SMOKE FROM DRYER EXHAUST.

Check for blocked or clogged pipe assemblies.

Remove clogs. Refer to paragraph 3-73, Heater.

11. AIR LEAKS FROM DRYER DOOR.

Check for cracks or broken welds.

Repair cracks and welds. Refer to paragraph 3-76, Tumbler Barrel.

Table 3-4. DIRECT SUPPORT EXTRACTOR TROUBLESHOOTING PROCEDURES

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION

1. EXTRACTOR FAILS TO START.

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

- Step 1. Check for tripped drive motor breaker.
 - a. Remove box cover on side of extractor.
 - b. If breaker is tripped, set to OFF, then back to ON position.
 - c. If breaker will not reset, replace circuit breaker.
- Step 2. Check for improper function and/or improper adjustment of lid closed switch. With power off, measure continuity of lid closed switch as lid is opened and closed.

If switch does not work, replace or adjust switch. Refer to paragraph 3-49, Lid Closed Switch.

Step 3. Check for improper function and sticking of lid locked solenoid and/or linkage.

If solenoid or linkage is defective, replace lid locked solenoid and tighten or replace linkage. Refer to paragraph 3-55, Lid Locked Solenoid and Linkage.

Step 4. Check continuity of push-to-start button.

If continuity doesn't exist, change push-to-start button. Refer to paragraph 3-43, Pushbutton Switch.

2. EXTRACTOR STARTS BUT BASKET FAILS TO TURN.

Step 1. Check brake linkage, solenoid, and spring for improper adjustment and improper function. Brake should release during spin cycle.

If brake assembly is improperly adjusted, adjust brake. Refer to paragraph 3-47 Extractor Brake.

Step 2. Check drive unit for damage and oil leaks.

If drive unit is damaged or leaking, repair drive unit. Refer to paragraph 3-46, Drive Unit.

Step 3. Check for broken wiring. Use a multimeter and test wiring. Refer to FO-3, Extractor Wiring Diagram.

3. EXTRACTOR RUNS TOO LONG.

Check for improper function of timer. Observe movement of red pointer during spin cycle.

If pointer fails to move, replace timer. Refer to paragraph 3-53, Timer.

Section III. DIRECT SUPPORT MAINTENANCE PROCEDURES

3-8. GENERAL MAINTENANCE PROCEDURES.

- a. <u>Electrical Motor and Generator Repair</u>. Repair electric motors and generators in accordance with TM 5-764.
- b. Wiring.

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result to personnel.

- (1) General. Wires on Laundry Units, whether run individually or in a harness, are color coded. Be sure to tag all wires upon disconnection to ensure proper installation. Preferred repair methods consist of replacing wires, terminals, connectors, etc., rather than splicing wires, bending ends to form terminals, and other makeshift procedures, although the latter may be appropriate for emergency field repairs. Determine the proper size and length of wire, or the terminal, or connector to be used for replacement by referring to Appendix F. Cable Diagrams, Wire Run List, and Control Circuits.
- (2) Inspection. Inspect insulation for cracks or frayed material. Pay particular attention to wires passing through holes in the frame over rough metal edges. If wire is cut or broken and the break in the wire is exposed, the wire must be repaired as in substep (5) below. If the break in the wire is in a harness, conduit, or inaccessible area, replace the wire as in substep (6) below.
- (3) Testing for broken wires. Set multimeter to low ohms scale and zero the meter. Isolate the wire to be tested by disconnecting at least one end. Connect the multimeter probes to each end of the wire. A measurement of zero ohms indicates continuity (wire is unbroken). A measurement of high resistance (infinity) indicates no continuity (wire is defective). If the wire is defective, repair or replace it in accordance with substep (5) or (6).
- (4) Testing for grounded wires. Set multimeter to high ohms scale and zero the meter. Isolate the wire to be tested by disconnecting at both ends. Connect the multimeter probe to frame ground, and connect remaining probe to either end of the wire. A measurement of high resistance (infinity) indicates no continuity (not grounded). If the wire is defective, replace it in accordance with substep (6).
- (5) Repair. Use electrical repair kit or shave the insulation on the wire to expose 1/2 inch (1.27 cm) of bare wire at both ends of the break. Twist the bare wire together and solder the connection. Cover the break with electrical friction tape (Appendix D, Item 13). Be sure to leave no bare wire exposed. If a terminal lug breaks off a wire, replace it with an exact duplicate.
- (6) Replacement. Replace a wire by disconnecting it from the component or components it is attached to and remove the wire. Connect a new wire to the component or components. If a broken wire is part of a harness, disconnect the wire at each end and tape the loose ends with electrical tape. Install a new wire and attach it to the outside of the wiring harness.
- c. Bearings. For cleaning and inspection of antifriction bearings, refer to TM 9-214.

3-8. GENERAL MAINTENANCE PROCEDURES - continued.

d. Cleaning and Inspection of Mechanical Parts.

WARNING

Drycleaning solvent is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection is required. Avoid repeated/prolonged contact. Use only in well-ventilated areas. Keep away from open flames or other sources of ignition. Compressed air used for cleaning purposes will not exceed 30 psi (207 kPa). Use only with effective personal-protective equipment.

- (1) Clean metal parts in drycleaning solvent. Thoroughly dry the parts with compressed air, observing all safety precautions.
- (2) Clean fibrous or rubber parts with warm, soapy water and dry with compressed air.
- (3) Inspect metal parts for cracks, breaks, bends, worn edges, and rough bearing surfaces. Replace the part if damage alters the part or its functions.

e. General Repair.

- (1) Repair the Laundry Unit by replacing or repairing a defective component and/or by making needed adjustments.
- (2) Clean and lubricate the Laundry Unit as needed to return the item to operating condition.
- (3) Remove and replace only those items necessary to make repairs. After replacing the defective components, ensure that the Laundry Unit operates correctly.
- (4) To paint metal, sand bear metal areas with sandpaper and refinish with primer (Appendix D, Item 6) and olive drab paint (Appendix D, Item 7). Refer to TM 43-0139 for proper painting instructions. Allow paint to dry between coats.

3-9. TARPAULIN.

This task covers: Repair

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Grommet Press (App B, Item 15)

Materials/Parts
Cord, Braided (App D, Item 12)
Thread (App D, Item 14)
Metallic grommet(s) (App C, Item 32)
Tape, Textile (App D, Item 22)

REPAIR

(1) Tarpaulin (1).

Repair consists of replacing damaged or missing components of the tarpaulin (1). Refer to FM 10-16, Repair of Tents, Canvas and Webbing.

- (a) Braided cord (2).
- (b) Metallic grommet(s) (3).
- (c) Hook tape fastener (4) (60 inches).
- (d) Flap (5).
- (e) Becket Flap (6).
- (2) Becket Flap (6).

Repair consists of replacing damaged or missing components of the becket flap (6). Refer to FM 10-16, Repair of Tents, Canvas and Webbing.

- (a) Becket (9).
- (b) Grommet (3).
- (c) Textile Tape (10) (60 inches).
- (d) Body (8).
- (3) Flap (7).

Repair consists of replacing damaged or missing components of the flap (7). Refer to FM 10-16, Repair of Tents, Canvas and Webbing.

Pile tape (11) (60 inches).

3-9. TARPAULIN - continued.

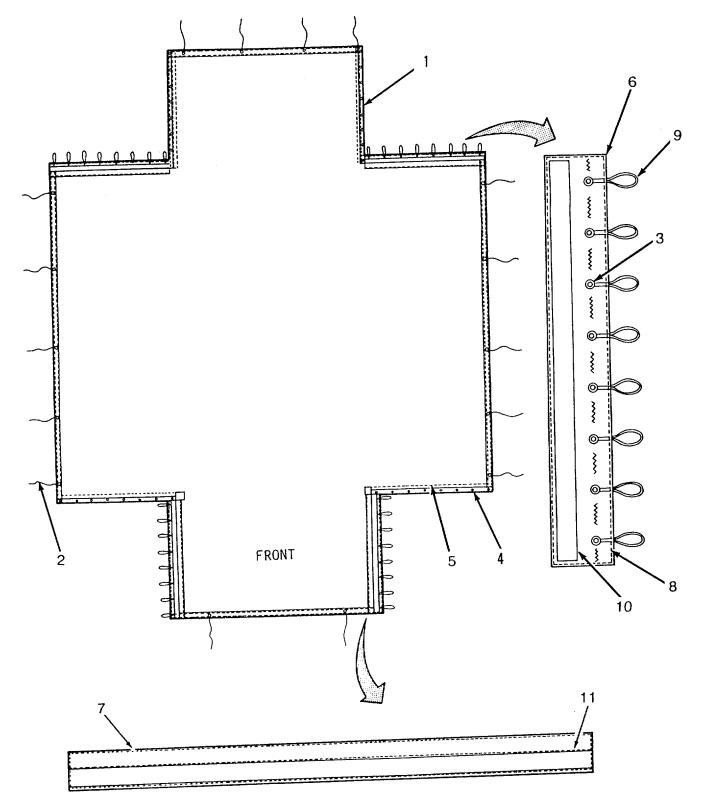


Figure 3-1. Tarpaulin 3-15

3-10. LADDER.

This task covers: Repair

INITIAL SETUP

<u>Tools</u>

Trailer mounted welding shop (App B, Item 8)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

REPAIR

Repair consists of ladder rail (1) or the rung extrusion (2) being straightened and/or welded. Refer to TM9-237 Welding Theory and Application.

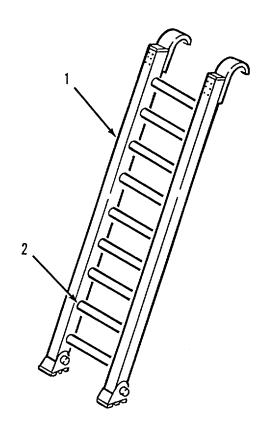


Figure 3-2. Ladder

3-11. BASKET(S).

This task covers: Repair

INITIAL SETUP

Tools

Trailer mounted welding shop (App B, Item 8)

Equipment Condition

Basket(s) removed, if required (Para 2-13)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

- (1) Repair consists of basket(s) (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install basket(s) (1) if removed (Para 2-13).

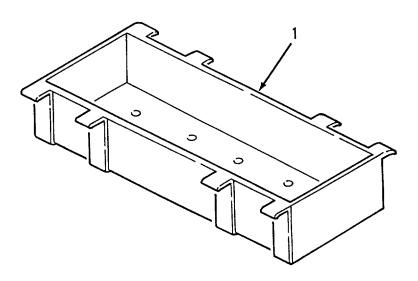


Figure 3-3. Basket(s)

3-12. FRONT AND REAR FRAMES.

This task covers:

Repair

INITIAL SETUP

Tools

Trailer mounted welding shop (App B, Item 8)

Equipment Condition

Front and/or rear frames removed if required (Paras 2-18 and 2-19)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

- (1) Repair consists of front frame (1) and/or rear (2) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install front frame (1) and/or rear frame (2) (Paras 2-18 and 2-19).

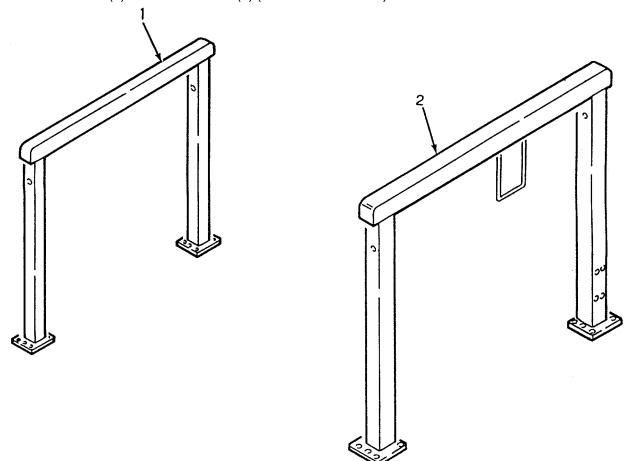


Figure 3-4. Front and Rear Frames

3-13. STRUT.

This task covers:

Repair

INITIAL SETUP

Tools

Trailer mounted welding shop (App B, Item 8)

Equipment Condition

Ladder removed (TM 10-3510-222-10)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

REPAIR

Repair consists of strut (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.

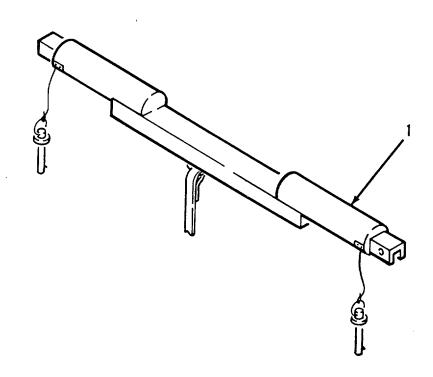


Figure 3-5. Strut

3-14. RIGHT, CENTER, AND LEFT BEAMS.

This task covers: Repair

INITIAL SETUP

<u>Tools</u>

Trailer mounted welding shop (App B, Item 8)

Equipment Condition
Right and Center Beams removed
(Para 2-15 and/or 2-16)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

- (1) Repair consists of beams (1, 2 and 3) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install right beam (1) and/or center (2) (Paras 2-15 and 2-16).
- (3) If required, install left beam (3) (TM 10-3510-222-10).

3-14. RIGHT, CENTER, AND LEFT BEAMS - continued.

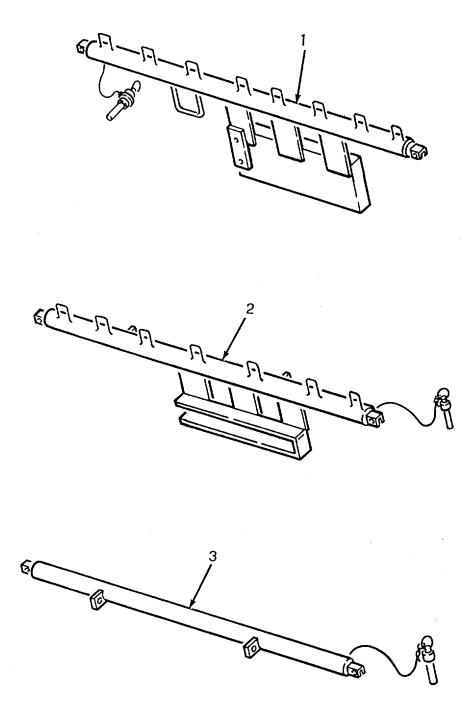


Figure 3-6. Right, Center, and Left Beams

3-15. UPRIGHT RAIL.

This task covers:

Repair

INITIAL SETUP

Tools

Trailer mounted welding shop (App B, Item 8)

General Safety Instructions WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

REPAIR

Repair consists of upright rail (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.

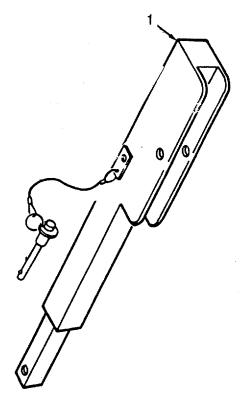


Figure 3-7. Upright Rail

3-16. LOWER TRACK.

This task covers:

Repair

INITIAL SETUP

General Safety Instructions

Tools

Trailer mounted welding shop (App B, Item 8)

Equipment Condition

Lower track removed (Para 2-23)

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

- (1) Repair consists of lower track (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install lower track (1) (Para 2-23).

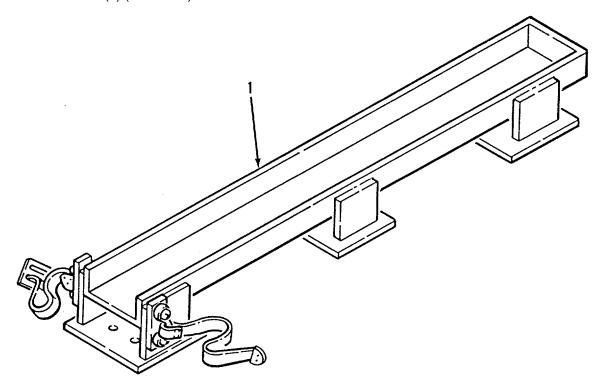


Figure 3-8. Lower Track

3-17. MAINTENANCE PLATFORM.

This task covers:

Repair

INITIAL SETUP

Tools

Trailer mounted welding shop (App B, Item 8)

Equipment Condition

Maintenance platform removed (TM 10-3510-222-10)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

- (1) Repair consists of maintenance platform (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install maintenance platform (1) (TM 10-3510-222-10).

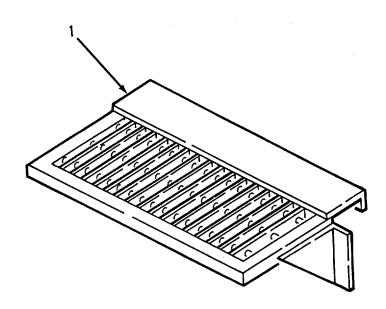


Figure 3-9. Maintenance Platform

3-18. SHORT PLATFORM.

This task covers:

Repair

INITIAL SETUP

Tools

Trailer mounted welding shop (App B, Item 8)

Equipment Condition

Short platform removed (TM 10-3510-222-10)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

- (1) Repair consists of short platform (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install short platform (1) (TM 10-3510-222-10).

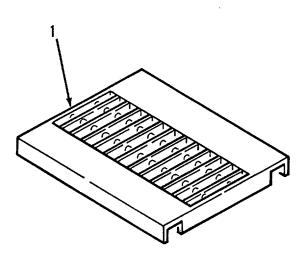


Figure 3-10. Short Platform

3-19. LOWER/DRYER PLATFORM.

This task covers:

Repair

INITIAL SETUP

Tools

Trailer mounted welding shop (App B, Item 8)

Equipment Condition

Lower/dryer platform removed (TM 10-3510-222-10)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

- (1) Repair consists of lower frame (3) or high frame (1) and/or lower/dryer platform (2) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install lower/dryer platform (TM 10-3510-222-10).

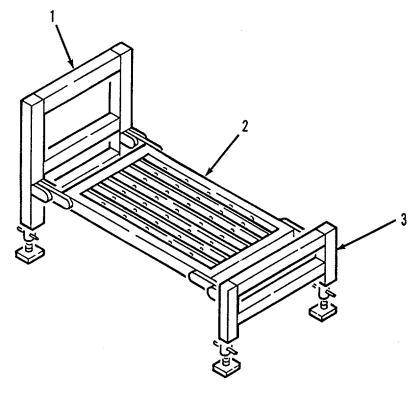


Figure 3-11. Lower/Dryer Platform

3-20. TWO STEP STAIR.

This task covers:

Repair

INITIAL SETUP

Tools

Trailer mounted welding shop (App B, Item 8)

Equipment Condition

Two step stair removed (TM 10-3510-222-10)

General Safety Instructions WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

- (1) Repair consists of two step stair (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install two step stairs (1) (TM 10-3510-222-10).

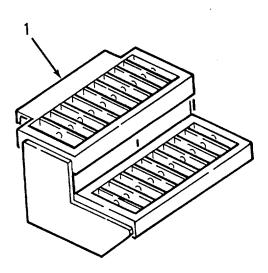


Figure 3-12. Two Step Stair

3-21. WASHER DRAIN.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3)

Materials/Parts

Solder (App D, Item 9)
Flux (App D, Item 15)
Antiseize Compound (App D, Item 24)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Upper washer drain (1).
 - (a) Remove hose (2) from coupling half (3).
 - (b) Remove screw (4) from pipe holder (5).
 - (c) Disconnect union (6) from lower washer drain (7).
 - (d) Remove upper washer drain (1) from Laundry Unit.
- (2) Lower washer drain (7).
 - (a) Remove hose (8) from coupling half (9).
 - (b) Remove two nuts (10), lockwashers (11), bolts (12) and bracket (13).
 - (c) Disconnect union (6) from upper washer drain (1).
 - (d) Disconnect union (14) from nipple (15).
 - (e) Remove lower washer drain (7) from Laundry Unit.
- (3) Pipe holder (5).
 - (a) Remove upper washer drain (1).
 - (b) Remove nut (16), lockwasher (17), two flat washers (18) and pipe holder (5) from bracket.
- (4) Hanger (22).
 - (a) Remove lower washer drain (7).
 - (b) Loosen nut (19) on hanger (22) and remove hanger (22).
- (5) Swing check valve (20).
 - (a) Remove upper washer drain (1).

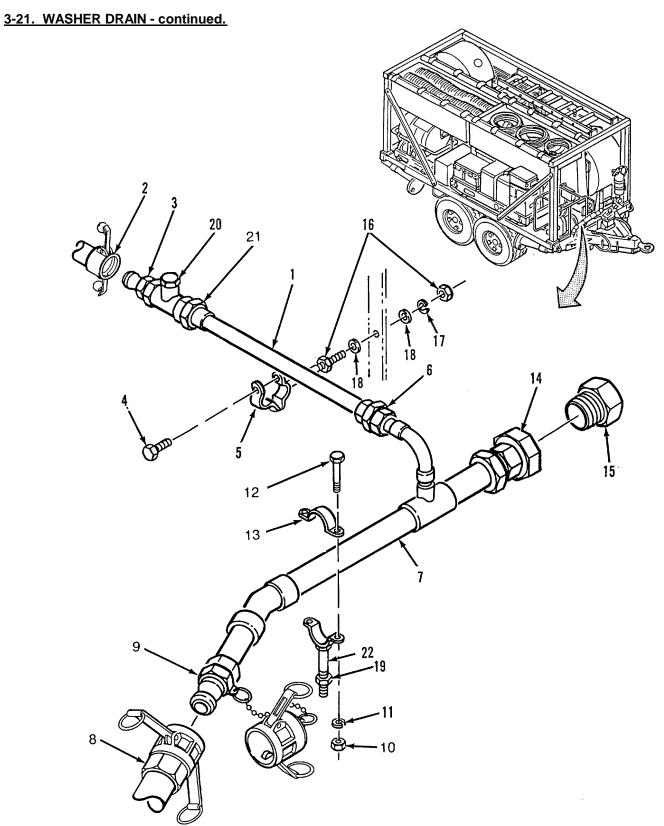


Figure 3-13. Washer Drain 3-29

3-21. WASHER DRAIN - continued.

- (b) Remove coupling half (3) from swing check valve (20).
- (c) Remove swing check valve (20) from adapter (21).

b. REPAIR

(1) Copper fitting(s).

Remove damaged sections of copper tubing on washer drain using torch. Refer to TM 10- 3510-222-24P for breakdown of copper tubing.

(2) Threaded fitting(s).

Remove damaged fitting(s). Before installing fitting(s), apply antiseize compound to male threads.

(3) Pipe holder (5).

Repair consists of replacing components on the pipe holder (5).

c. INSTALLATION

- (1) Upper washer drain (1).
 - (a) Position upper washer drain (1) on Laundry Unit and connect union (6) to lower washer drain (7).
 - (b) Install screw (4) on pipe holder (5).
 - (c) Connect hose (2) to coupling half (3).
- (2) Lower washer drain (7).
 - (a) Position lower washer drain (7) on Laundry Unit and connect union (14) on nipple (15).
 - (b) Connect union (6) on upper washer drain (1).
 - (c) Install two bolts (12), lockwashers (11) and two nuts (10) on bracket (13).
 - (d) Install hose (8) on coupling half (9).
- (3) Pipe holder (5).
 - (a) Install flat washer (18) on pipe holder (5) and position on bracket (22).
 - (b) Install flat washers (18), lockwasher (17) and nut (16) on pipe holder (5) and bracket.
 - (c) Install upper washer drain (1).
- (4) Hanger (22).
 - (a) Install hanger (22) and tighten nut (19) on Laundry Unit.
 - (b) Install lower washer drain (7).
- (5) Swing check valve (20).
 - (a) Apply antiseize compound to threads of male adapter (21) and coupling half (3).
 - (b) Install swing check valve (20) on male adapter (21).
 - (c) Install coupling half (3) on swing check valve (20).
 - (d) Install upper washer drain (1).

3-22. WASHER.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)
Automotive Vehicle Shop Equipment
(App B, Item 3)
Electrical Repair Shop Equipment (App B, Item 4)
Suitable Lifting Device

Personnel Required

Two

Materials/Parts

Antiseize compound (App D, Item 24) Tie down straps (App D, Item 11) Electrical connector (App C, Item 24) Tags (App D, Item 4) Sealing washer (App C, Item 64) **Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10) Front frame removed (Para 2-18) Wet wash bin removed (Para 2-36) Washer drain (upper and lower), and lower washer hookup removed (Para 3-21)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Open drain cock (13) on washer air tank (12).
- (2) When gauge on washer air tank (12) reads 0 psi, close drain cock (13).
- (3) Disconnect air hoses (2 and 3) from normal open valve (8) and normal closed valve (4).
- (4) Remove quick disconnect cap (5) from quick coupling half (6).
- (5) Remove quick coupling half(6) from elbow (7).
- (6) Remove four mounting studs (14) from belt guard (15).
- (7) Remove belt guard (15) from washer (1).
- (8) Remove quick disconnect coupling (16) from coupling half (17).
- (9) Remove coupling half(17) from elbow (18).
- (10) Remove elbow (18) from washer (1).
- (11) Remove fifteen bolts (11), lockwashers (10) and flat washers (9) from washer (1) and Laundry Unit.
- (12) Remove one nut (25), lockwasher (26), flat washer (27) and bolt (28) from washer (1) and Laundry Unit.

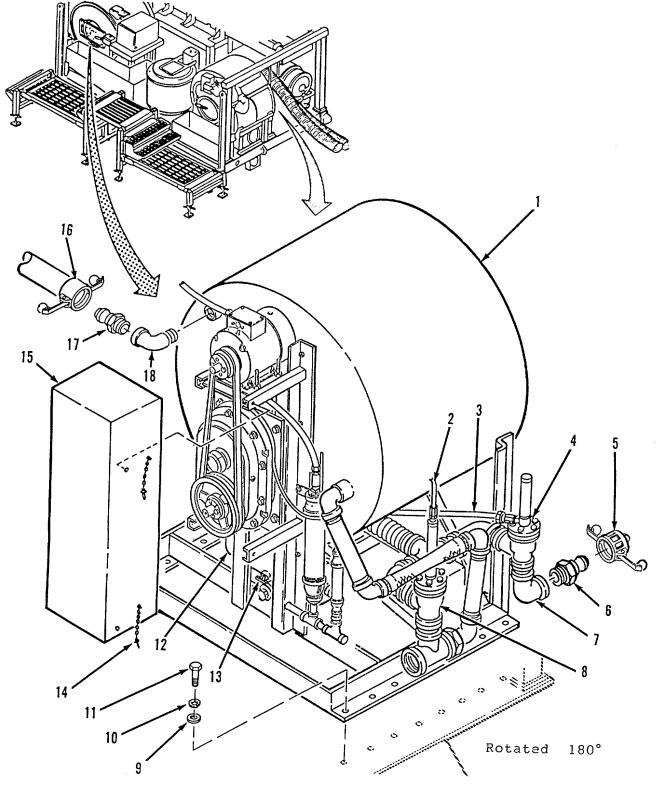
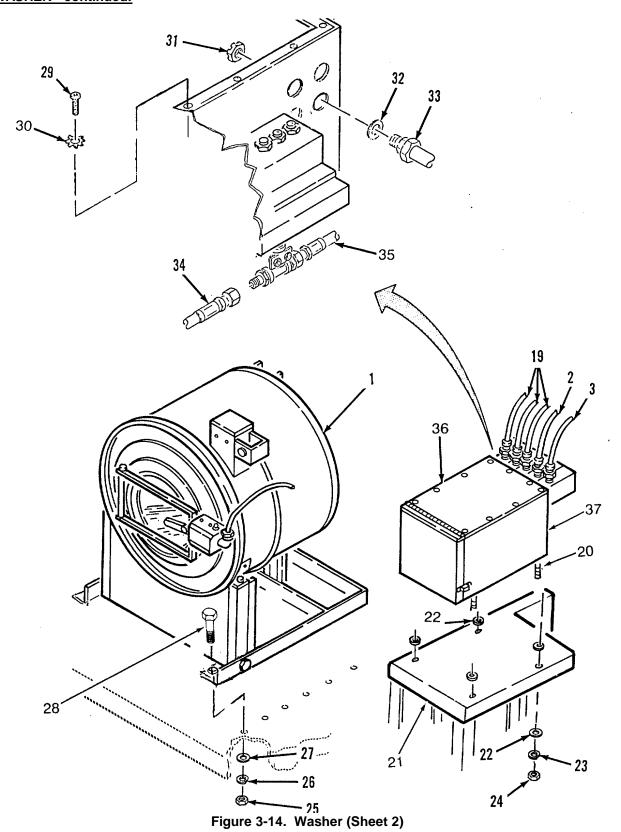


Figure 3-14. Washer (Sheet 1 of 2)



3-33

- (13) Remove air hoses (2 and 3) from washer control panel (37).
- (14) Disconnect three air hoses (19) from washer control panel (37).
- (15) Remove twelve screws (29) and washers (30), top cover (36) and washer control panel (37).
- (16) Tag and disconnect electrical wiring to conduit (33) and control panel (37) from Laundry Unit.
- (17) Remove connector nut (31), gasket (32) and flexible conduit (33) from washer control panel (37).
- (18) Disconnect air hoses (34 and 35) from washer control panel (37).

WARNING

Washer is heavy and awkward to handle. Serious injury could occur if moved without sufficient personnel.

- (19) Remove four nuts (24), lockwashers (23), eight flat washers (22) and bolts (20) from washer control panel (37) and washer control stand (21).
- (20) Support washer control panel (37) and remove washer (1) from Laundry Unit using suitable lifting device.
- (21) Position belt guard (15) on washer (1) and install four mounting studs (14).

b. REPAIR

NOTE

Washer repairs are covered in Paragraphs 3-23 thru 3-32.

c. INSTALLATION

- (1) Remove four mounting studs (14) from belt guard (15).
- (2) Remove belt guard (15) from washer (1).
- (3) Position washer (1) on Laundry Unit using suitable lifting device.
- (4) Install eight flat washers (22), four lockwashers (23) and nuts (24) on bolts (20) of washer control panel (37).
- (5) Install flat washer (27), lockwasher (26) and nut (25) on bolt (28) on washer (1) and Laundry Unit.
- (6) Install fifteen flat washers (9), lockwashers (10) and bolts (11) on washer (1) and Laundry Unit.
- (7) Connect air hoses (34 and 35) to washer control panel (37).
- (8) Install gasket (32), electrical connector and flexible conduit (33) and wiring in washer control panel (37). Secure with nut (31).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

(9) Connect Laundry Unit electrical wiring to washer control panel (37).

- (10) Position top cover (36) on washer control panel (37) and install twelve washers (30) and screws (29).
- (11) Connect three air hoses (19) on washer control panel (37).
- (12) Install air hoses (2 and 3) on washer control panel (37).
- (13) Apply antiseize compound to male threads of elbow (18) and install on washer (1).
- (14) Apply antiseize compound to male threads of coupling half (17) and install in elbow (18).
- (15) Connect quick disconnect coupling (16) to coupling half (17).
- (16) Position belt guard (15) on washer (1) and install four mounting studs (14).
- (17) Apply antiseize compound to male threads of quick coupling half (6) and install in elbow (7).
- (18) Install quick disconnect cap (5) on quick coupling half (6).
- (19) Route-air hoses (2 and 3) behind washer (1) and use tie down straps as required to support hoses (2 and 3).
- (20) Connect air hose (2) to normal open valve (8).
- (21) Connect air hose (3) to normal close valve (4).
- (22) Install front frame (Para 2-18).
- (23) Install wet wash bin (Para 2-36).
- (24) Install washer drain (upper and lower) and lower washer hookup (Para 3-21).

3-23. DOOR AND BAR.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

<u>Tools</u>
General Mechanics Tool Kit (App B, Item 1)

Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)

Materials/Parts
Plumbing Fixture Setting Compound
(App D, Item 20)
Gasket (App C, Item 33)
Gasket (App C, Item 37)
Adhesive (RTV) (App D, Item 1)

a. REMOVAL

- (1) Remove four screws (1) and flat washers (2) from washer (3).
- (2) Remove door and bar (4) and shim (5).

b. REPAIR

- (1) Latch handle (6).
 - (a) Remove screw (7) and handle stop (8) from block (9).
 - (b) Remove four screws (10) from block (9) and bar (11).
 - (c) Remove latch handle (6) from bar (11).
 - (d) Remove set screw (12) from block (9).
 - (e) Remove screw (13), washer (14), bushing (15), handle (6) and washer bearing (16) from block (9).
 - (f) Remove set screw (17), screw (18) and bushing (19) from handle (6).
 - (g) Install bushing (19), screw (18) and set screw (17) on handle (6).
 - (h) Install washer bearing (16), handle (6), bushing (15), washer (14) and screw (13) on block (9).

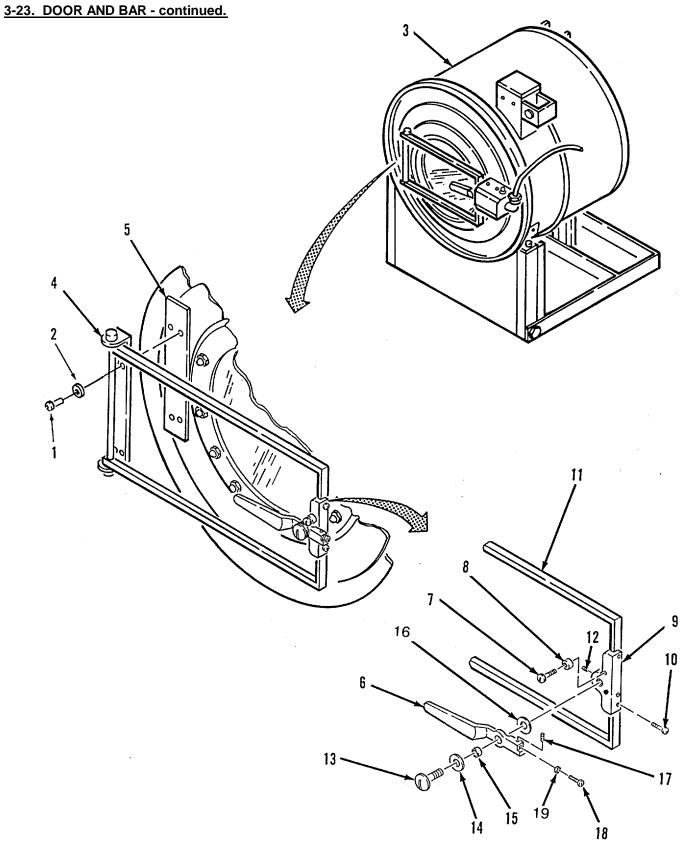


Figure 3-15. Door and Bar (Sheet 1 of 2)

3-23. DOOR AND BAR - continued.

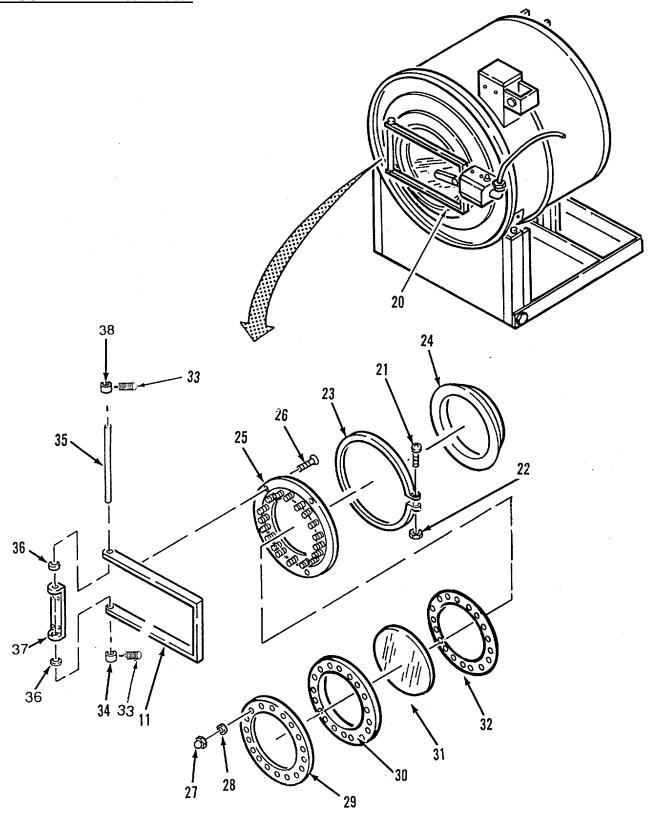


Figure 3-15. Door and Bar (Sheet 2)

3-23. DOOR AND BAR - continued.

- (i) Install set screw (12) on block (9).
- (j) Position latch handle (6) on bar (11).
- (k) Install four screws (10) on block (9) and door and bar (11).
- (I) Install handle stop (8) and screw (7) on block (9).

(2) Door (20).

- (a) Remove screw (21) and nut (22) from band (23).
- (b) Remove band (23) and gasket (24) from rim (25).
- (c) Remove four screws (26) from rim (25) and bar (11).
- (d) Remove eighteen nuts (27) and flat washers (28) from rim (25).
- (e) Remove retainer (29), gasket (30), window (31) and gasket (32) from rim (25). Discard gaskets (30 and 32).
- (f) Loosen set screw (33) and remove collar (34) from pin (35).
- (g) Remove pin (35), two bushings (36) and hinge (37).
- (h) Loosen set screw (33) and remove collar (38) from pin (35).
- (i) Install collar (38), tighten set screw (33) on pin (35).
- (j) Install pin (35), two bushings (36) and hinge (37) on bar (11).
- (k) Install collar (34), tighten set screw (33) on pin (35).
- (I) Position new gasket (32), window (31), new gasket (30) and retainer (29) on rim (25).
- (m) Install eighteen flat washers (28) and nuts (27) on rim (25).
- (n) Position rim (25) on bar (11) and install four screws (26).
- (o) Position gasket (24) on rim (25) and band (23). Install screw (21) and nut (22).

c. INSTALLATION

- Apply plumbing fixture setting compound around the four mounting holes on washer where screws (1) will be installed.
- (2) Position shim (5) and door and bar (4) on washer (3) and install four washers (2) and screws (1).
- (3) Close washer door (20).

3-24. REDUCER AND OUTPUT QUILL.

This task covers: a. Rem

a. Removalb. Disassemblye. Repairf. Assembly

c. Cleaning d.g. Installation

d. Inspection

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment

(App B, Item 3)

Materials/Parts

Seal (App C, Item 41)

Seal (App C, Item 42)

Cleaning Cloth (App D, Item 3)

Drycleaning Solvent (App D, Item 10)

Adhesive (RTV) (App D, Item 1)

Suitable Bucket

Manila Folder

Lubricant (See LO 10-3510-222-12 for reducer)

Shims (App C, Item 11, 12, 19, 23, 25, 27, 28 and 29)

Equipment Condition

V-belt removed (Para 2-30)

Personnel Required

Two

NOTE

For seal replacement only, see REMOVAL and INSTALLATION

a. REMOVAL

- (1) Remove two allen screws (1) from collar (2) and remove collar (2).
- (2) With a scribe, mark front position of bushing (9) on reducer input shaft (19).
- (3) Measure distance between bushing (9) and reducer (20) and record distance.
- (4) Remove two bolts (8) and lockwasher (18) from bushing (9).
- (5) Remove bushing (9) from pulley (10).
- (6) Remove pulley (10) from reducer input shaft (19).
- (7) Remove key (11) from reducer input shaft (19).
- (8) Loosen three allen screws (3) from front of reducer (20) and three allen screws (3) on back side of reducer (20).

NOTE

Flat washers are between plate and frame for alignment of reducer.

- (9) Record position of flat washers (7) under plate (17).
- (10) With a scribe, mark position of plate (17) on frame (21).
- (11) Remove four bolts (4), lockwashers (5) and flat washers (6) from plate (17) and frame (21).

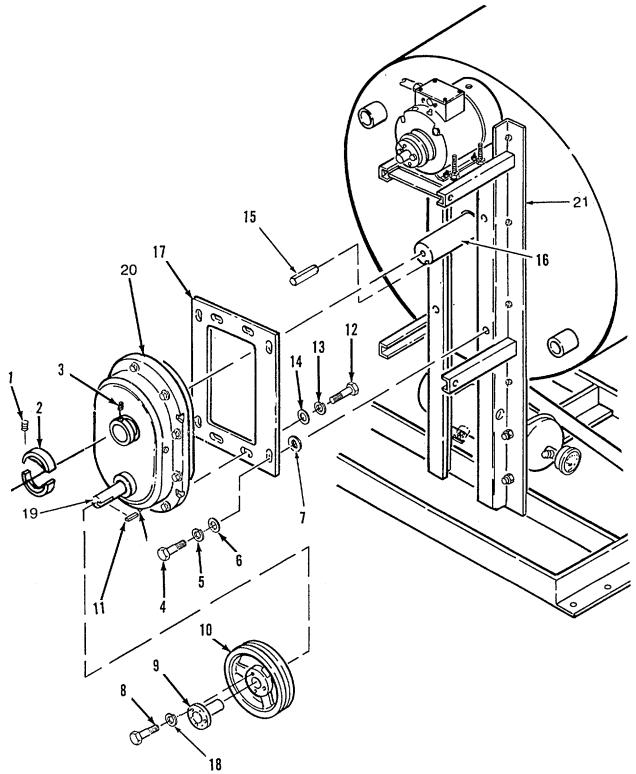


Figure 3-16. Reducer and Output Quill (Sheet 1 of 3)

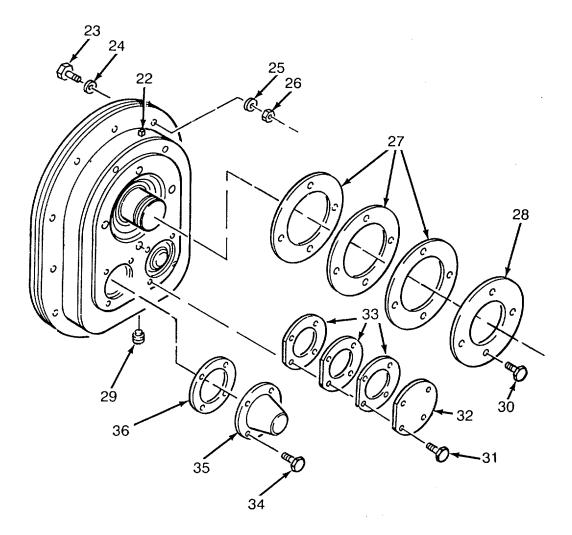


Figure 3-16. Reducer and Output Quill (Sheet 2)

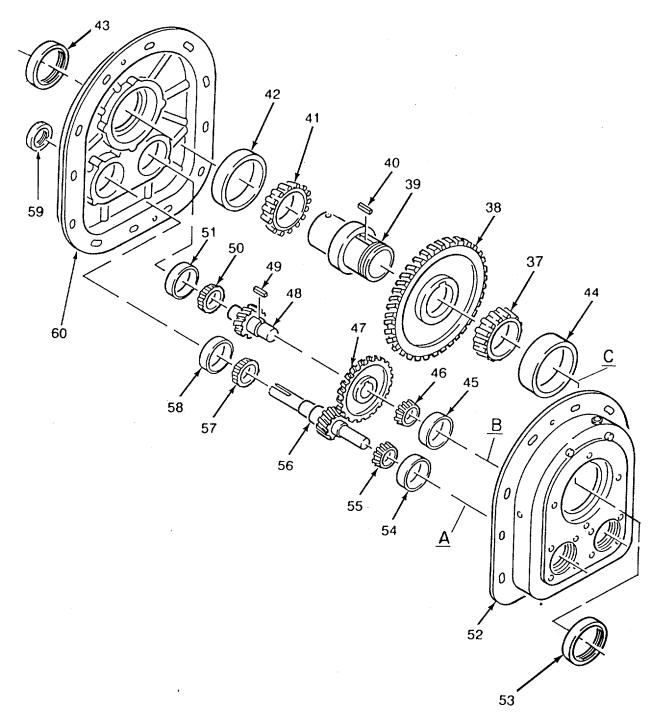


Figure 3-16. Reducer and Output Quill (Sheet 3)

- (12) Remove reducer (20) from basket shaft (16).
- (13) Remove key (15) if basket shaft (16) is being replaced.
- (14) To remove seals, perform the following:
 - (a) Remove V-belt (Para 2-30).
 - (b) Remove seals (43) and/or (59) if leaking from cover (60). Discard seals (43 and/or 59).
 - (c) Remove reducer (20) if rear seal (53) is leaking.
 - (d) Remove seal (53) if leaking from cover (52). Discard seal (53).

b. DISASSEMBLY

- (1) With a scribe, mark position of plate (17) on reducer (20).
- (2) Remove four bolts (12), lockwashers (13) and flat washers (14) from reducer (20).
- (3) Remove reducer (20) from plate (17).

NOTE

Do not lay reducer on its side, lubricant will drain out of reducer.

- (4) If removing reducer for an internal problem, drain lubricant per substeps below:
 - (a) Place container under drain plug (29).
 - (b) Remove drain plug (29).
 - (c) Remove breather (22).
 - (d) When all lubricant has drained from reducer (20), install breather (22) and plug (29).
- (5) Remove ten nuts (26), flat washers (25), flat washers (24) and bolts (23) from reducer (20).
- (6) Position reducer (20) with input shaft (19) on top and remove cover (60) from cover (52).
- (7) Remove gears as assembly (55, 56 and 57).
- (8) Remove key (49) from gear (48).
- (9) Remove gears as assembly (46, 47, 48 and 50).
- (10) Remove key (40) from output quill (39).
- (11) Remove gears as assembly (37, 38 and 41).
- (12) Remove seal (53) from cover (52).
- (13) Remove seals (43 and 59) from cover (60).

c. CLEANING

WARNING

Drycleaning solvent is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection is required. Avoid repeated/prolonged contact. Use only in well-ventilated areas.

WARNING

Compressed air will not exceed 30 psi (207 KPa). Use personnel protection equipment. Failure to comply could result in injury to personnel.

Clean all parts in drycleaning solvent and use compressed air or a cleaning cloth to dry parts.

d. INSPECTION

Inspect all parts for damage or wear.

e. REPAIR

Repair consists of replacing damaged components of the gear reducer and output quill.

- (1) Disassembly
 - (a) Remove four bolts (31) from cover (32) and remove cover.
 - (b) Remove shims (33) as required.
 - (c) Remove four bolts (30) from cover (28) and remove cover.
 - (d) Remove shims (27) as required.
 - e) Remove four bolts (34) from cover (35) and remove cover.
 - (f) Remove shim (36) as required.
 - (g) Remove gears as assembly A.
 - (1) Remove cone (55).
 - (2) Remove pinion (56).
 - (3) Remove cone (57).
 - (h) Remove gears as assembly B.
 - (1) Remove cone (46).
 - (2) Remove gear (47).
 - (3) Remove cone (50).
 - (4) Remove key (49) from gear (48).
 - (i) Remove gears as assembly C.
 - (1) Remove cone (37).
 - (2) Remove gear (38).
 - (3) Remove cone (41).
 - (4) Remove key (40) from output quill (39).
 - (j) Remove cups (42, 51 and 58) from cover (60).
 - (k) Remove cups (44, 45 and 54) from cover (52).

(2) Assembly

NOTE

If replacing bearing cups, cones and/or gears, replace as an assembly.

- (a) Install cups (44, 45 and 54) on cover (52).
- (b) Install cups (42, 51 and 58) on cover (60).
- (c) Install gears as assembly C.
 - (1) Install key (40) on output quill (39).
 - (2) Install gear (38).
 - (3) Install cone (37).
 - (4) . Install cone (41).
- (d) Install gears as assembly B.
 - (1) Install key (49) on gear (48).
 - (2) Install gear (47).
 - (3) Install cone (46).
 - (4) Install cone (50).
- (e) Install gears as assembly A.
 - (1) Install cone (55) on pinion (56).
 - (2) Install cone (57).
- (f) Install shim (36) as required.
- (g) Install four bolts (34) on cover (35).
- (h) Install shims (27) as required.
- (i) Install four bolts (30) on cover (28).
- (j) Install shims (33) as required.
- (k) Install four bolts (31) on cover (32).

f. ASSEMBLY

- (1) Install gears as assembly (37, 38, 40 and 41).
- (2) Install gears as assembly (46, 47, 48, 49 and 50).
- (3) Install gears as assembly (55, 56 and 57).
- (4) Apply adhesive to mating surface of cover (52).
- (5) Install cover (60) on cover (52).
- (6) Install ten flat washers (24), bolts (23), flat washers (25) and nuts (26) on reducer (20).
- (7) Install seal (59) on cover (60).
- (8) Cut two pieces of manila folder two inches by ten inches. Apply lubricant on paper and wrap paper around output quill (39).
- (9) Install seals (43 and 53) on cover (52 and 60) and remove paper.
- (10) Position plate (17) on marked position of reducer (20) and install four flat washers (14), lockwashers (13) and bolts (12).
- (11) Install key (11) on reducer input shaft (19).
- (12) Install pulley (10) on reducer input shaft (19).
- (13) Install bushing (9) on reducer input shaft (19) at marked position.
- (14) Install two bolts (8) and lockwasher (18) on bushing (9).

g. INSTALLATION

- (1) Install key (15) on basket shaft (16) if removed.
- (2) Position reducer (20) on basket shaft (16).
- (3) Position flat washers (7) for alignment between plate (17) and frame (21).
- (4) Install four flat washers (6), lockwashers (5) and bolts (4) on plate (17) and frame (21).
- (5) Tighten three allen screws (3) on front of reducer (20) and three allen screws (3) on back side of reducer (20).
- (6) Position collar (2) index pin in index hole of basket shaft (16) and install two allen screws (1).
- (7) Service reducer (20), refer to LO 10-3510-222-12 Lubrication Order.
- (8) Install V-belt (Para 2-30).

3-25. SEAL AND CARRIAGE.

This task covers: a. Removal b. Cleaning c. Inspection

Repair e. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)

d.

Equipment Condition Reducer removed (Para 3-24)

Materials/Parts
Gasket (App C, Item 9)
Adhesive (RTV) (App D, Item 1)
Grease Lube (App D, Item 8)

a. REMOVAL

- (1) Remove two set screws (1) from collar (2).
- (2) Remove collar (2) from shaft of basket (8).
- (3) Remove six nuts (3), lockwashers (4) and flat washers (5) from studs (6).
- (4) Remove carriage (7) from washer (10).
- (5) Remove three seals (9) from carriage (7).

b. **CLEANING**

Clean adhesive from back of washer (10) and from carriage (7).

c. INSPECTION

Inspect carriage (7) for damage or wear.

d. REPAIR

Repair consists of replacing damaged or missing components of the seal (9) and carriage (7).

e. INSTALLATION

- (1) Install three seals (9) on carriage (7).
- (2) Lubricate seals (9).
- (3) Apply adhesive to back of carriage (7).
- (4) Position carriage (7) on studs (6) and install six flat washers (5), lockwashers (4) and nuts (3).
- (5) On collar (2) index pin position on index hole shaft of basket (8) and install two set screws (1).
- (6) Install reducer (Para 3-24).

3-25. SEAL AND CARRIAGE - continued.

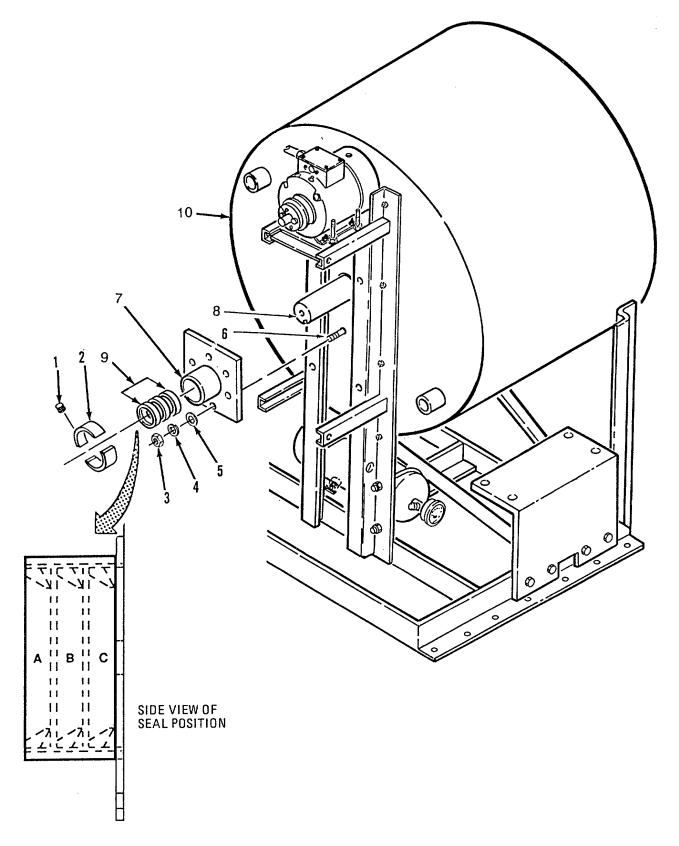


Figure 3-17. Seal and Carriage

3-26. BASKET

This task covers:

- a. Removal
- c. Repair

- b. Inspection
- d. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Took Kit (App B, Item 3)

Welding Shop (App B, Item 8)

Materials/Parts

Gasket (App C, Item 50) Gasket (App C, Item 51) Gasket (App C, Item 9)

Adhesive (RTV) (App D, Item 1)

Equipment Condition

Wet wash bin removed (Para 2-36) Seal and carriage removed (Para 3-25) Lock cover removed (Para 2-28)

Personnel Required

Two

a. REMOVAL

WARNING

Before removing attaching hardware from front drum, be sure to support front drum. Failure to do so may result in serious injury to personnel.

- (1) Remove two nuts (1), screws (2) and draw band (3) from drum (11).
- (2) Remove gasket (4) and discard.
- (3) Remove front drum (5).

WARNING

Be careful when removing basket from drum; basket has sharp edges and may injure personnel.

- (4) If replacing basket (10) do substeps below:
 - (a) Remove two nuts (6) and one bolt (7) from ring (8).
 - (b) Remove ring (8) and gasket (9) from basket (10).

WARNING

Tumbler barrel is heavy/difficult to handle. To prevent injury, use two people to lift.

(c) Remove basket (10) from drum (11).

b. INSPECTION

Inspect parts for damage or wear.

c. REPAIR

Repair consists of basket (10) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.

3-26. BASKET- continued.

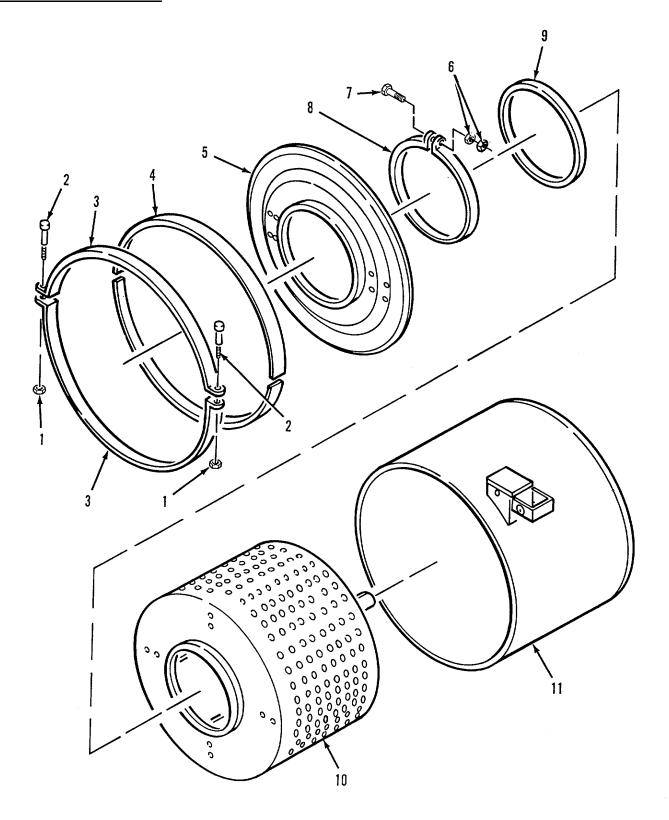


Figure 3-18. Basket

3-26. BASKET - continued.

d. INSTALLATION

WARNING

Be careful when installing basket, basket has sharp edges and may injure personnel.

- (1) If basket was replaced, do substeps below:
 - (a) Install gasket (9) and ring (8) on basket (10).
 - (b) Install bolt (7) and two nuts (6) on ring (8).
 - (c) Position basket (10) on drum (11).
- (2) Install gasket (4) in draw band (3).
- (3) Position draw band (3) on drum (11).
- (4) Position two screws (2) and nuts (1) on draw bands (3).
- (5) Position front drum (5) on drum (11) on draw band (3).
- (6) Tighten draw band (3) and cut excess gasket (4).
- (7) Apply adhesive to gap in gasket (4) on both sides.
- (8) Install lock cover (Para 2-28).
- (9) Install seal and carriage (Para 3-25).
- (10) Install wet wash bin (Para 2-36).

3-27. DRUM.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)
Automotive Vehicle Shop Equipment
(App B, Item 3)
Welding Shop (App B, Item 8)

Materials/Parts

Antiseize Compound (App D, Item 24) Adhesive (RTV) (App D, Item 1)

Equipment Condition

Basket removed (Para 3-26) Pressure gage removed (Para 2-32) Tub pipe removed (Para 2-27)

Personnel Required

Three

a. REMOVAL

- (1) Remove three screws (1) from panel (2).
- (2) Remove two screws (3) from drum (17) and remove panel (2).
- (3) Remove two nuts (4), lockwashers (5) and bolts (6) from strap (7).
- (4) Remove strap (7) from drum (17).
- (5) Remove nut (8), lockwasher (9), flat washer (10) and bolt (11) from drum (17).
- (6) Remove hose clamp (23) from hose (24).
- (7) Remove hose (24) from nipple (25).
- (8) Remove nipple (25) from elbow (26).
- (9) Remove elbow (26) from nipple (27).
- (10) Remove nipple (27) from elbow (28).
- (11) Remove elbow (28) from drum (17).
- (12) Remove hose (29).
- (13) Remove elbow (31) from drum (17).
- (14) Support drum (17), remove eight nuts (18), lockwashers (19), bolts (22) and spacers (20 and 21).
- (15) Remove drum (17).
- (16) Remove disconnect coupling (30) from elbow (31).
- (17) Remove four nuts (12) from guard (13) and remove guard (13).
- (18) Remove two screws (14) from catch (15) and remove catch (15).
- (19) Remove two screws (14) from latch (16) and remove latch (16).

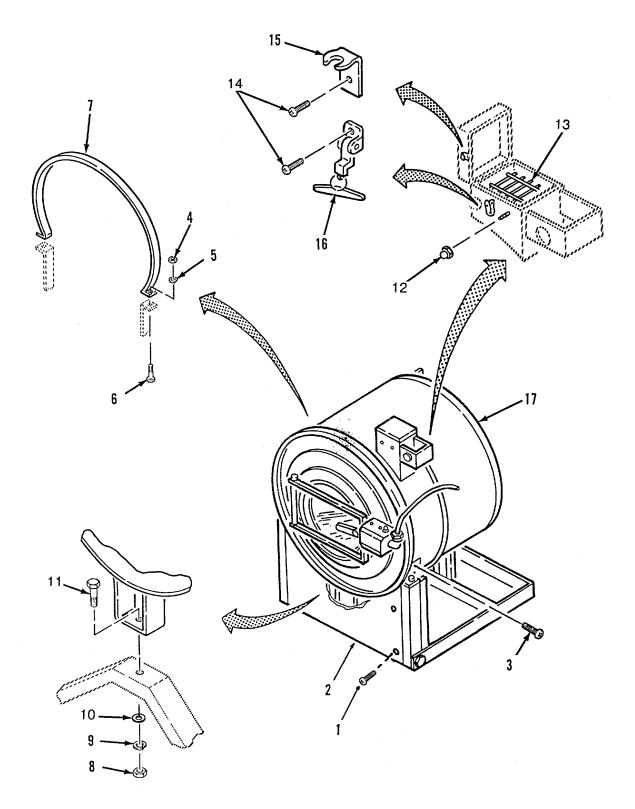


Figure 3-19. Drum (Sheet 1 of 3)

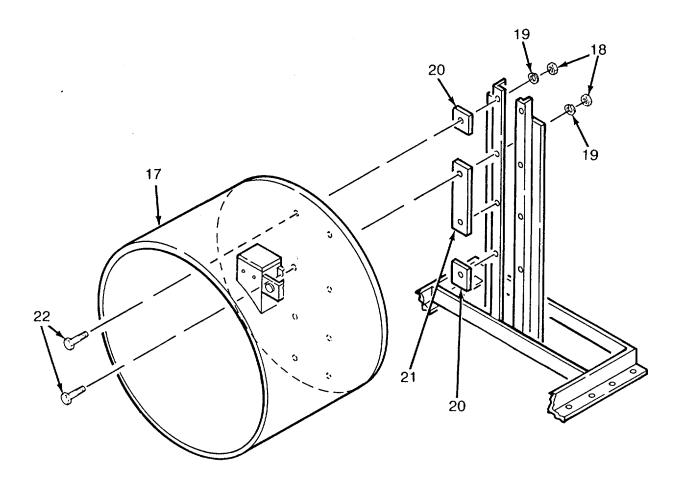


Figure 3-19. Drum (Sheet 2)

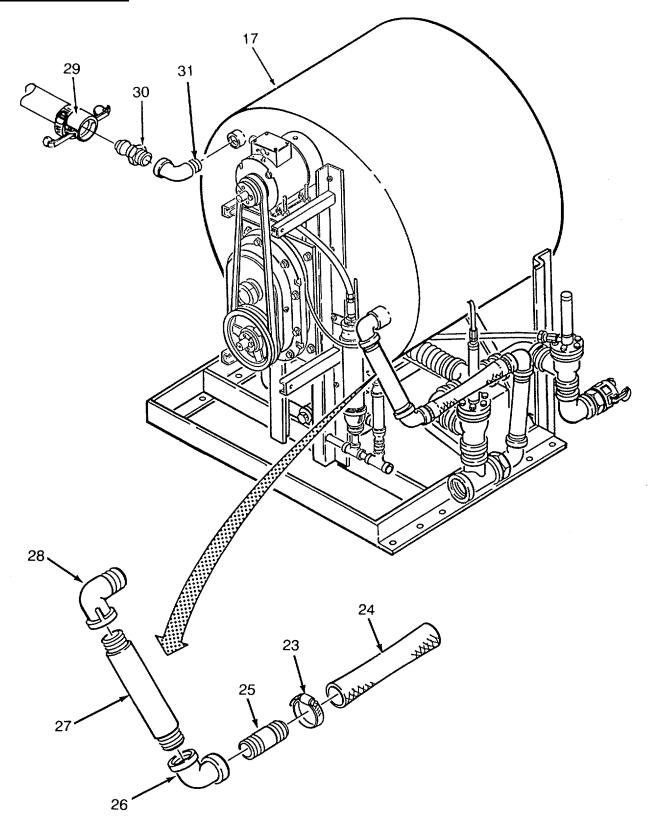


Figure 3-19. Drum (Sheet 3)

b. REPAIR

Repair consists of drum (17) being straightened and/or welded.

c. INSTALLATION

NOTE

Apply antiseize compound to all male threads of piping before installing hardware.

- (1) Position drum (17) on washer.
- (2) Position spacers (20 and 21) between drum (17) and washer frame and install eight bolts (22), lockwashers (19) and nuts (18).
- (3) Apply adhesive around bolts (22).
- (4) Install bolt (11), flat washer (10), lockwasher (9) and nut (8).
- (5) Position strap (7) on drum (17) and install two bolts (6), lockwashers (5) and nuts (4).
- (6) Install panel (2) with three screws (1).
- (7) Install two screws (3) on drum (17).
- (8) Install elbow (28) on drum (17).
- (9) Install nipple (27) on elbow (28).
- (10) Install elbow (26) on nipple (27).
- (11) Install nipple (25) on elbow (26).
- (12) Install hose (24) on nipple (25).
- (13) Install hose clamp (23) on hose (24).
- (14) Install elbow (31) on drum (17).
- (15) Install disconnect coupling (30) on elbow (31).
- (16) Install hose (29) on disconnect coupling (30).
- (17) Position catch (15) on dispenser of drum (17) and install two screws (14).
- (18) Position latch (16) on dispenser of drum (17) and install two screws (14).
- (19) Position guard (13) in dispenser of drum (17) and install four nuts (12).
- (20) Install basket (Para 3-26).
- (21) Install pressure gage (Para 2-32).
- (22) Install tub pipe (2-27).

3-28. FRAME.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Trailer mounted welding shop (App B, Item 8) Equipment Condition
Drum removed (Para 3-27)
Air Tank removed (Para 2-31)

Personnel Required

Two

General Safety Instructions

WARNING

Frame of the Laundry Unit is heavy and awkward to handle. Serious injury could occur if moved without sufficient personnel.

a. REMOVAL

- (1) Remove 15 bolts (1), lockwashers (2), flat washers (3) from frame (8) and modified trailer.
- (2) Remove nut (7), flat washer (5), lockwasher (6) and bolt (4) from frame (8) and modified trailer.
- (3) Remove frame (8) from modified trailer.

b. REPAIR

Repair consists of frame (8) being straightened and/or welded. Refer to TM 9-237 Welding. Theory and Application.

c. INSTALLATION

- (1) Position frame (8) on modified trailer.
- (2) Install bolt (4), flat washer (5), lockwasher (6) and nut (7) on frame (8).
- (3) Install 15 flat washers (3), lockwashers (2) and bolts (1) on frame (8) and modified trailer.
- (4) Install drum (Para 3-27).
- (5) Install air tank (Para 2-31)

3-28. FRAME - continued.

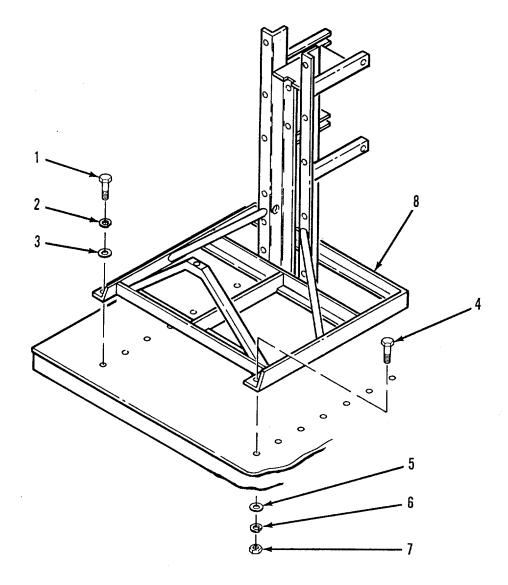


Figure 3-20. Frame

3-29. CONTROL CONSOLE.

This task covers: a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3)

Materials/Parts

Sealing Washer (5) (App C, Item 64) Adhesive (RTV) (App D, Item 1) Tag (App D, Item 4) Gasket (App C, Item 78) Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove twelve screws (1) and cover (2) from washer control console (3).
- (2) Tag and remove five air hoses (4) from washer control console (3).
- (3) Remove air hose (5) from adapter (6).
- (4) Remove air hose (7) from adapter (8).
- (5) Remove hose (9) from pressure switch (10).
- (6) Remove nut (11), seal (12) and connector (13). Discard seal (12).
- (7) Tag and remove electrical wiring (power in) and remove nut (14), seal (15) and connector (16). Discard seal (15).
- (8) Tag and remove electrical wiring (motor) and remove nut (17), seal (18) and connector (19). Discard seal (18).
- (9) Tag and remove electrical wiring (level sensor) and remove nut (20), seal (21) and connector (22). Discard seal (21).
- (10) Tag and remove electrical wiring (door lock) and remove nut (23), seal (24) and 90° connector (25). Discard seal (24).
- (11) Remove four nuts (26), lockwashers (27) and flat washers (28).
- (12) Remove washer control console (3) and four washers (29) from control stand (30).

b. REPAIR

NOTE

Repair consists of replacing damaged or missing components on the control console.

- (1) Pressure switch (10).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).

3-29. CONTROL CONSOLE - continued.

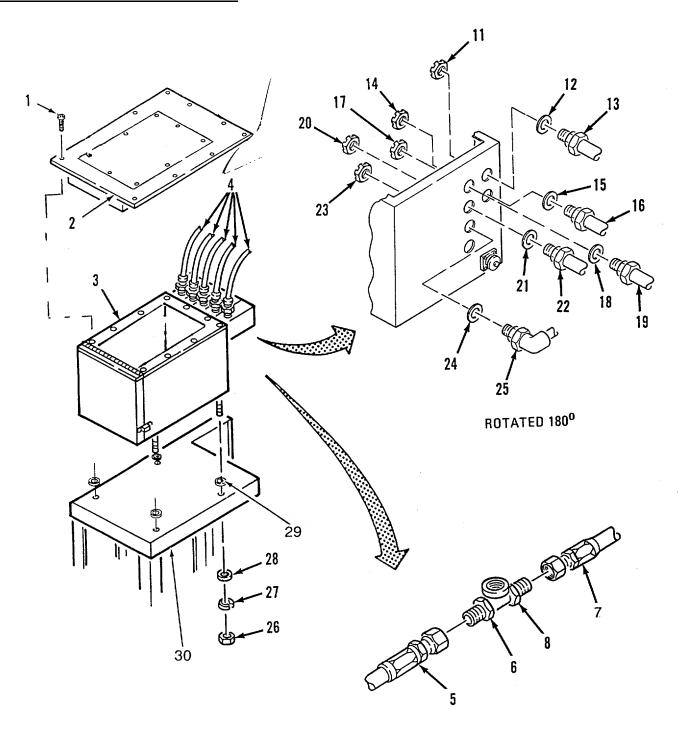


Figure 3-21. Control Console (Sheet 1 of 2)

3-29. CONTROL CONSOLE- continued.

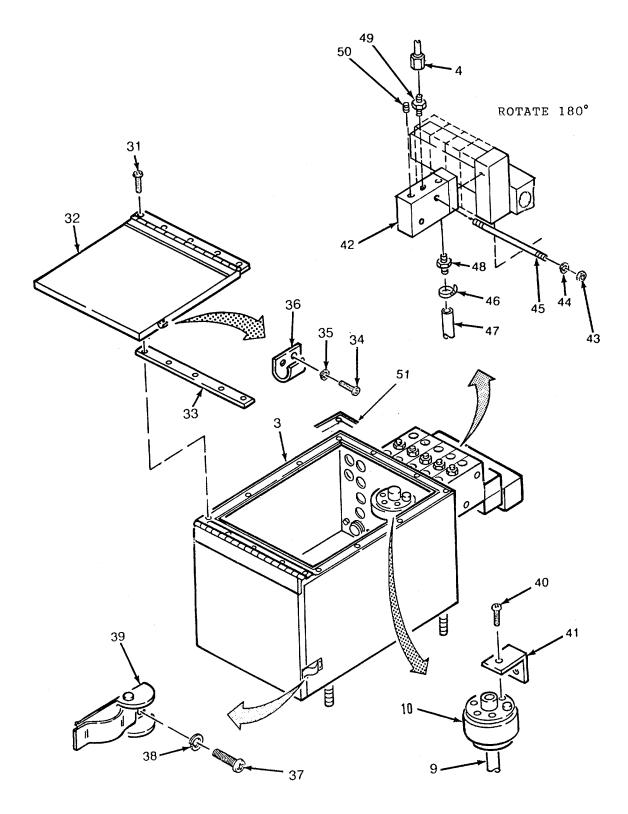


Figure 3-21. Control Console (Sheet 2)

3-29. CONTROL CONSOLE - continued.

- (b) Remove hose (9) from pressure switch (10).
- (c) Remove screw (40) from bracket (41) and pressure switch (10).
- (d) Remove pressure switch (10).
- (e) Position new pressure switch (10) on bracket (41) and install screw (40).
- (f) Install hose (9) on pressure switch (10).
- (g) Position cover (2) on washer control console (3) and install twelve screws (1).
- (2) Solenoid valve (42).

NOTE

All five solenoid valves are identical. This procedure is for one of them.

- (a) Remove twelve screws (1) from cover (2) and remove cover (2).
- (b) Remove four nuts (43), lockwashers (44) and two rods (45).
- (c) Remove hose clamp (46) and hose (47) from adapter (48).
- (d) Remove hoses (4).
- (e) Remove solenoid valve(s) (42).
- (f) Remove adapters (48 and 49).
- (g) Remove plug (50).
- (h) Install plug (50).
- (i) Position new solenoid valve(s) (42) on washer control console (3) and install two rods (45), four lockwashers (44) and nuts (43).
- (j) Install adapters (48 and 49).
- (k) Install hose clamp (46) on hose (47) and adapter (48) and tighten hose clamp (46).
- (1) Position cover (2) on washer control panel (3) and install twelve screws (1).
- (3) Gasket(s) (51).
 - (a) Remove gasket (51) from control console (3).
 - (b) Remove adhesive (RTV) from control console (3).
 - (c) Using old gasket (51) as a guide, cut out new gasket (51).
 - (d) Apply RTV on control console (3).
 - (e) Place gasket (51) on control console (3).
- (4) Cover (32).
 - (a) Remove five screws (31) from cover (32).
 - (b) Remove cover (32) and spacer (33).
 - (c) Position spacer (33), new cover (32) on washer control console (3) and install five screws (31).

3-29. CONTROL CONSOLE - continued.

- (5) Latch (39) and strike (36).
 - (a) Strike (36).
 - (1) Remove two screws (34) and lockwashers (35).
 - (2) Remove strike (36).
 - (3) Position new strike (36) on washer control console (3) and install two lockwashers (35) and screws (34).
 - (b) Latch (39).
 - (1) Remove two screws (37) and lockwashers (38).
 - (2) Remove latch (39).
 - (3) Position new latch (39) on control console (3) and install two lockwashers (38) and screws (37).

c. INSTALLATION

- (1) Position four washers (29) on control stand (30).
- (2) Position washer control console (3) on control stand (30).
- (3) Install four flat washers (28), lockwashers (27) and nuts (26).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (4) Install (door lock) new seal (24), 90° connector (25), nut (23) and electrical wiring as tagged.
- (5) Install (level sensor) new seal (21), connector (22), nut (20) and electrical wiring as tagged.
- (6) Install (motor) new seal (18), connector (19), nut (17) and electrical wiring as tagged.
- (7) Install (power in) new seal (15), power connector (16), nut (14) and electrical wiring as tagged.
- (8) Install new seal (12), connector (13) and nut (11).
- (9) Install hose (9) on pressure switch (10).
- (10) Install air hose (7) on adapter (8).
- (11) Install air hose (5) on adapter (6).
- (12) Install five air hoses (4) on washer control console (3).
- (13) Install cover (2) with twelve screws (1) on washer control console (3).

3-30. CONTROL PANEL.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Trailer Mounted Welding Shop
(App B, Item 8)

Materials/Parts
Adhesive (RTV) (App D, Item 1)
Tags (App D, Item 4)

Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove twelve screws (1) from cover (2) and remove cover (2).
- (2) Tag and disconnect wiring from control panel (3).
- (3) Remove adhesive (RTV) from around control panel (3).
- (4) Remove four screws (4) and washers (5).
- (5) Remove control panel (3).

b. REPAIR

- (1) MASTER ON/OFF, AUTO/MANUAL, DRAIN OPEN/CLOSED, LEVEL SELECT 1 and 2, COLD WATER ON/OFF, HOT WATER ON/OFF switches (7) and SIGNAL CANCEL switch (8).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).
 - (b) Tag and remove electrical wiring to switch (7 or 8) being replaced.
 - (c) Remove boot (6) from switch (7 or 8) and remove switch (7 or 8).
 - (d) Position new switch (7 or 8) on control panel (3) and install boot (6).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (e) Connect electrical wiring as tagged.
- (f) Position cover (2) on control panel box and install twelve screws (1).
- (2) SIGNAL CANCEL (9).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).
 - (b) Tag and remove electrical wiring from SIGNAL CANCEL (9).

3-30. CONTROL PANEL - continued.

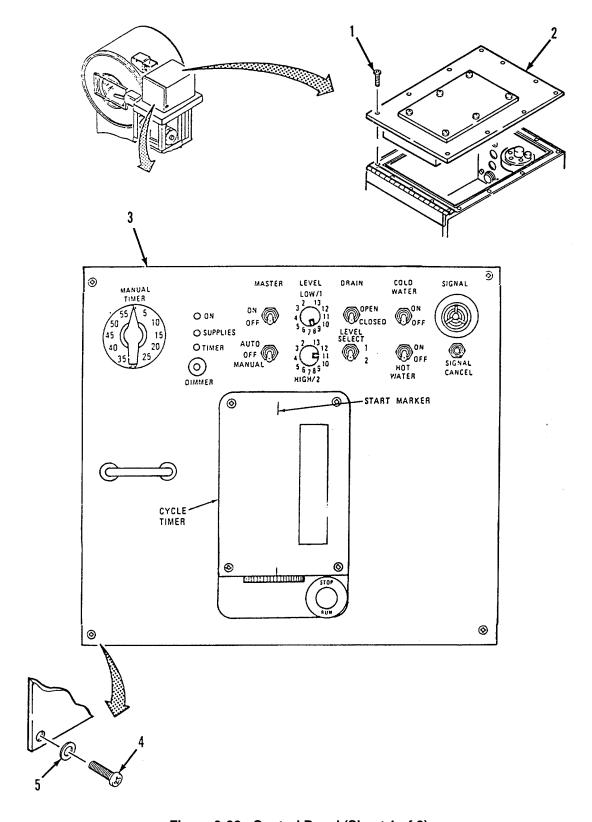


Figure 3-22. Control Panel (Sheet 1 of 2)

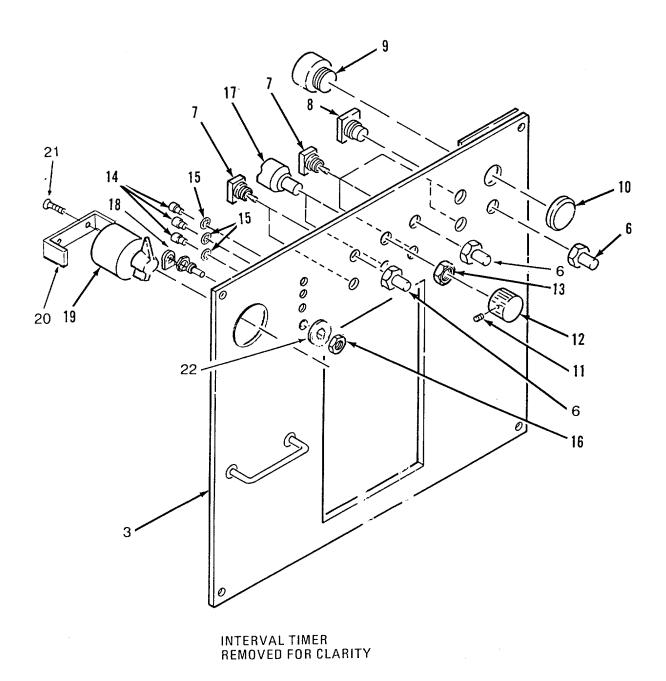


Figure 3-22. Control Panel (Sheet 2)

3-30. CONTROL PANEL - continued.

- (c) Remove SIGNAL CANCEL cover (10) from SIGNAL CANCEL (9) and remove SIGNAL CANCEL (9).
- (d) Position new SIGNAL CANCEL (9) on control panel (3) and install cover (10).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (e) Connect electrical wiring as tagged.
- (f) Position cover (2) on control panel box and install twelve screws (1).
- (3) LEVEL LOW/1 or HIGH/2 (17).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).
 - (b) Tag and remove electrical wiring from switch (17).
 - (c) Loosen setscrew (11) and remove knob (12).
 - (d) Remove nut (13) from switch (17) and remove switch (17).
 - (e) Position new switch (17) on control panel (3) and install nut (13).
 - (f) Position knob (12) on switch (17) and tighten setscrew (11).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (g) Connect electrical wiring as tagged.
- (h) Position cover (2) on control panel box and install twelve screws (1).
- (4) ON, SUPPLIES, TIMER Light(s) (14).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).
 - (b) Tag and remove electrical wiring from light (14).
 - (c) Remove light (14).
 - (d) Remove clip (15).
 - (e) Install clip (15) on new light (14).
 - (f) Install light (14) in control panel (3).

NOTE

- (g) Connect electrical wiring as tagged.
- (h) Position cover (2) on control panel box and install twelve screws (1).

3-30. CONTROL PANEL - continued.

- (5) DIMMER (18).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).
 - (b) Tag and remove electrical wiring from DIMMER (18).
 - (c) Remove nut (16) and flat washer (22) from DIMMER (18) and remove DIMMER.
 - (d) Position new DIMMER (18) on control panel (3) and install nut (16) and flat washer (22).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (e) Connect electrical wiring as tagged.
- (f) Position cover (2) on control panel box and install twelve screws (1).
- (6) MANUAL TIMER (19).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).
 - (b) Tag and remove electrical wiring from MANUAL TIMER (19).
 - (c) Remove two screws (21), bracket (20) and MANUAL TIMER (19).
 - (d) Position new MANUAL TIMER (19) on control panel (3) and install bracket (20) and two screws (21).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (e) Connect electrical wiring as tagged.
- (f) Position cover (2) on control panel (3) and install twelve screws (1).

c. INSTALLATION

- (1) Install control panel (3).
- (2) Install four screws (4) and washers (5).
- (3) Install adhesive (RTV) around control panel (3).

NOTE

- (4) Connect wiring as tagged.
- (5) Install twelve screws (1) on cover (2).

3-31. INTERVAL TIMER.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

<u>Tools</u> General Mechanics Tool Kit (App B, Item 1)

Materials/Parts
Tags (App D, Item 4)

Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)
General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove twelve screws (1) from cover (2).
- (2) Tag and remove electrical wiring from interval timer (7).
- (3) Remove two nuts (3), clamps (4), four screws (5) and washers (6).
- (4) Remove interval timer (7) from front of control panel (8).

b. REPAIR

- (1) Motor (12).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).
 - (b) Tag and remove electrical wiring to motor (12).
 - (c) Remove two nuts (9), washers (10) and screws (11) from motor (12).
 - (d) Remove motor (12).
 - (e) Position new motor (12) on interval timer (7) and install two screws (11), washers (10) and nuts (9).

NOTE

- (f) Connect electrical wiring as tagged.
- (g) Position cover (2) on control panel box and install twelve screws (1).
- (2) Knob (14).
 - (a) Loosen setscrew (13) and remove knob (14).
 - (b) Position new knob (14) on interval timer (7) and tighten setscrew (13).

3-31. INTERVAL TIMER - continued.

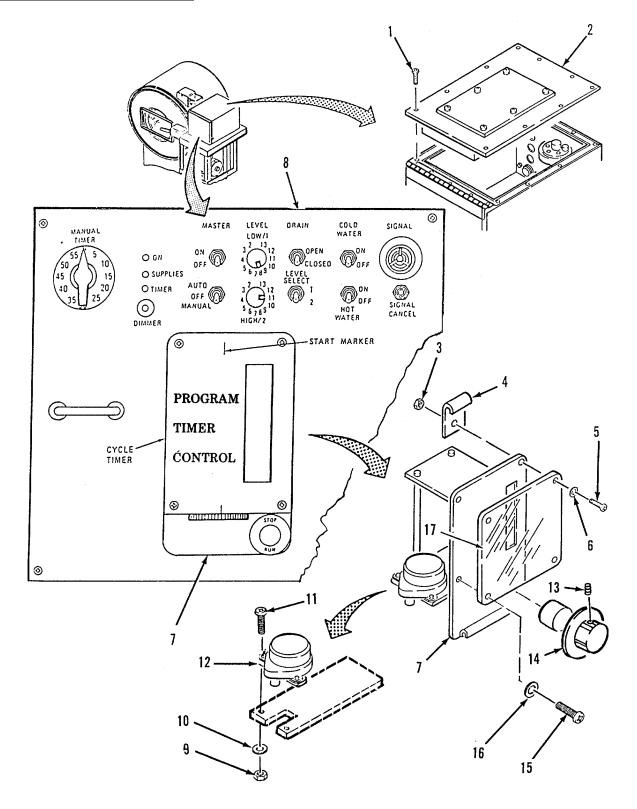


Figure 3-23. Interval Timer

3-31. INTERVAL TIMER - continued.

- (3) Window (17).
 - (a) Remove twelve screws (1) from cover (2) and remove cover (2).
 - (b) Remove four screws (15), washers (16) and remove window (17).
 - (c) Position new window (17) on interval timer (7) and install four washers (16) and screws (15).

c. INSTALLATION

- (1) Position interval timer (7) on front of control panel (8).
- (2) Install four washers (6), screws (5), clamps (4) and two nuts (3).

NOTE

- (2) Connect electrical wiring as tagged.
- (3) Position cover (2) and install twelve screws (1).

3-32. CHASSIS CONTROL.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Electrical Repair Shop Equipment (App B, Item 4)

Materials/Parts
Adhesive (RTV) (App D, Item 1)
Tags (App D, Item 4)
Tiedown Straps (App D, Item 11)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Control Console and Pressure Switch removed (Para 3-29)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Remove four nuts (5) and flat washers (6) from bolts (2) which protrude through the control stand (1).
- (2) Tag and remove electrical wiring to chassis control (9).
- (3) Remove chassis control (9) and washers (7) from control console (8).
- (4) Remove four nuts (10) and bolts (2) from chassis control (9).

b. REPAIR

- (1) Relay(s) (12).
 - (a) Remove twelve screws (3) from cover (4) and remove cover (4).
 - (b Release two clips (11) from relay(s) (12) and remove relay(s) (12).
 - (c) Install new relay(s) (12) in socket(s) (13).
 - (d) Connect two clips (11) on relay(s) (12).
 - (e) Position cover (4) on control console (8) and install twelve screws (3).

3-32. CHASSIS CONTROL- continued.

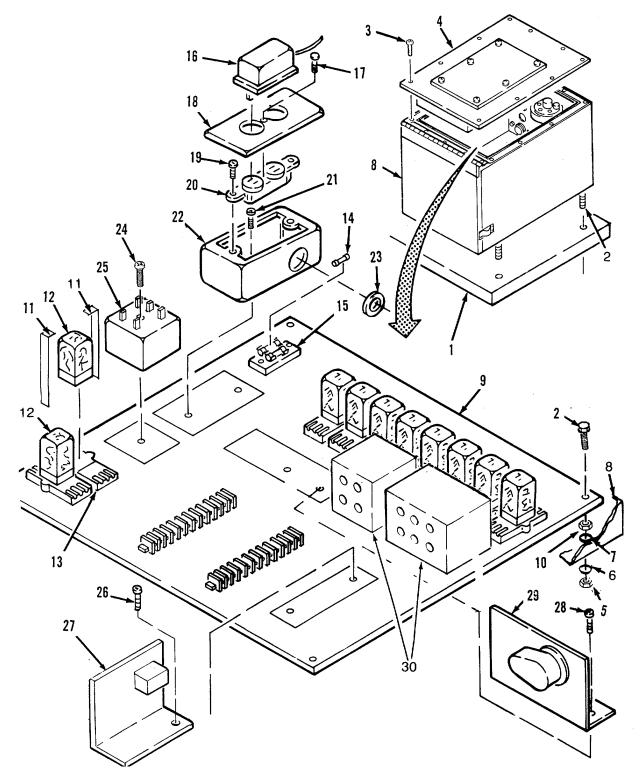


Figure 3-24. Chassis Control

3-32. CHASSIS CONTROL- continued.

- (2) Fuse (14).
 - (a) Remove twelve screws (3) from cover (4) and remove cover (4).
 - (b) Remove fuse(s) (14) from fuse block (15).
 - (c) Install new fuse(s) (14) on fuse block (15).
 - (d) Position cover (4) on control console (8) and install twelve screws (3).
 - (3) Transformer (16).
 - (a) Remove twelve screws (3) from cover (4) and remove cover (4).
 - (b) Tag and remove electrical wiring to transformer (16).
 - (c) Remove transformer (16).
 - (d) Install new transformer (16).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (e) Connect electrical wiring to transformer (16).
- (f) Position cover (4) on control console (8) and install twelve screws (3).
- (4) Junction Box (22).
 - (a) Remove twelve screws (3) from cover (4) and remove cover (4).
 - (b) Remove screw (17) and plate (18).
 - (c) Remove two screws (19).
 - (d) Tag and remove electrical wiring to connector (20).
 - (e) Remove two screws (21) and junction box (22).
 - (f) Remove bushing (23) from junction box (22).
 - (g) Install bushing (23) on new junction box (22).
 - (h) Position junction box (22) on chassis control (9) and install two screws (21).

NOTE

- (i) Connect electrical wiring to connector (20).
- (j) Install two screws (19).
- (k) Position plate (18) on junction box (22) and install screw (17).
- (I) Position cover (4) on control console (8) and install twelve screws (3).

3-32. CHASSIS CONTROL- continued.

- (5) Interval Timer (25).
- (a) Remove twelve screws (3) from cover (4) and remove cover (4).
- (b) Tag and remove electrical wiring to interval timer (25).
- (c) Remove screw (24) from interval timer (25).
- (d) Remove interval timer (25).
- (e) Position new interval timer (25) on chassis control (9) and install screw (24).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (f) Connect electrical wiring to interval timer (25).
- (g) Position cover (4) on control console (8) and install twelve screws (3).
- (6) Relay (27).
 - (a) Remove twelve screws (3) from cover (4) and remove cover (4).
 - (b) Tag and remove electrical wiring to relay (27).
 - (c) Remove two screws (26) from relay (27) and remove relay (27).
 - (d) Position new relay (27) on chassis control (9) and install two screws (26).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (e) Connect electrical wiring to relay (27).
- (f) Position cover (4) on control console (8) and install twelve screws (3).
- (7) Movement Timing (29).
 - (a) Remove twelve screws (3) from cover (4) and remove cover (4).
 - (b) Tag and remove electrical wiring to movement timing (29).
 - (c) Remove two screws (28) and remove movement timing (29).
 - (d) Position new movement timing (29) on chassis control (9) and install two screws (28).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible

(e) Connect electrical wiring to movement timing (29).

3-32. CHASSIS CONTROL - continued.

- (f) Position cover (4) on control console (8) and install twelve screws (3).
- (8) Reversing Contactor (30).
 - (a) Remove twelve screws (3) from cover (4) and remove cover (4).
 - (b) Tag and disconnect electrical wiring to reversing contactor (30).
 - (c) Remove reversing contactor (30).
 - (d) Install new reversing contactor (30).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (e) Connect electrical wiring to reversing contactor (30) as tagged.
- (f) Position cover (4) on control console (8) and install twelve screws (3).

c. INSTALLATION

- (1) Install four bolts (2) and nuts (10) on chassis control (9)
- (2) Apply RTV around bolts (2) on the control console (8).
- (3) Position chassis control (9), flat washers (7) on control console (8) and install flat washers (6) and nuts (5).

NOTE

- (4) Connect electrical wiring to chassis control (9).
- (5) Install pressure switch and control console (Para 3-29).

3-33. COMPRESSOR AND MOTOR.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Air compressor removed (Para 2-34)

Materials/Parts

Tags (App D, Item 4)

Antiseize Tape (App D, Item 17)

a. REMOVAL

- (1) Loosen captive nut (1) and remove cover (2).
- (2) Loosen nuts (6 and 8) on tube and remove tube (7).
- (3) Remove elbow (10).
- (4) Remove adapter (12) from tee (13).
- (5) Remove check valve (14).
- (6) Remove check valve (14) from tee (13).
- (7) Remove nut (3) and pressure switch (4) from compressor and motor (5).

b. REPAIR

Repair consists of replacing damaged or missing components of the compressor and motor.

c. INSTALLATION

NOTE

Apply antiseize compound to all male threads before installing hardware.

- (1) Position pressure switch (4) on compressor and motor (5) and install nut (3).
- (2) Position cover (2) on pressure switch (4) and tighten captive nut (1).
- (3) Install elbow (10).
- (4) Install check valve (14) on tee (13).
- (5) Install check valve (14) on compressor and motor (5).
- (6) Install adapter (12).
- (7) Install two inserts (9) on tubing (7) if tubing was replaced.
- (8) Install tubing (7) and tighten nuts (6 and 8).
- (9) Install air compressor and do adjustment (Para 2-34).

3-33. COMPRESSOR AND MOTOR - continued.

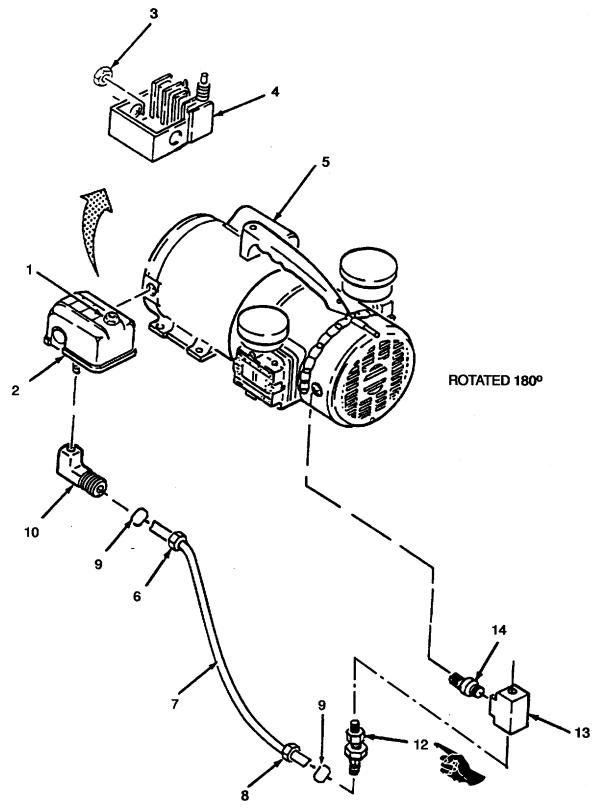


Figure 3-25. Compressor and Motor

Change 1 3-79

3-34. CONTROLLER STAND.

This task covers: a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Trailer Mounted Welding Shop
(App B, Item 8)

Equipment Condition
Air compressor removed (Para 2-34)
Washer control console removed (Para 3-29)
Enclosure box removed (Para 3-37)
Power Panel removed (Para 3-38)

a. REMOVAL

- (1) Remove seven nuts (1), lockwashers (2), flat washers (3) and bolts (4).
- (2) Remove washer controller stand (5) from trailer (6).

b. REPAIR

Repair consists of controller stand (5) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.

c. INSTALLATION

- (1) Position controller stand (5) on trailer (6).
- (2) Install seven bolts (4), flat washers (3), lockwashers (2) and nuts (1).
- (3) Install power panel (Para 3-38).
- (4) Install enclosure box (Para 3-37).
- (5) Install washer control console (Para 3-29).
- (6) Install air compressor (Para 2-34).

3-34. CONTROLLER STAND - continued.

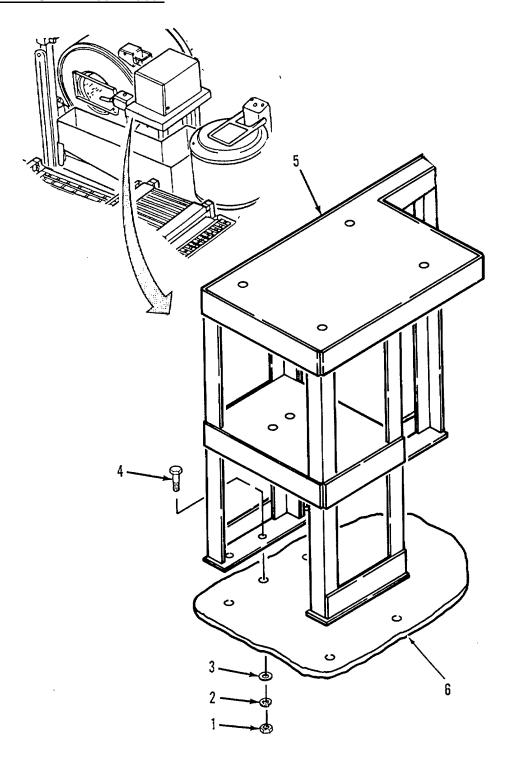


Figure 3-26. Controller Stand

3-35. CONDUIT.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Electrical Repair Shop Equipment
(App B, Item 4)

Materials/Parts

Sealing Washers (App C, Item 64)

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result

a. REMOVAL

- (1) Tag and disconnect electrical wiring from unit.
- (2) Remove nuts (1), sealing washers (2) and connectors (3) from units. Discard sealing washer (2).
- (3) Remove four screws (9), straps (10) and remove conduit (11).

b. **REPAIR**

- (1) Replace conduit (11) or components (4, 5, 6, 7 and 8) as needed if damaged or missing. Removed as a unit.
- (2) If electrical wiring needs replacement, replace as necessary, refer to FO-1 Laundry Unit Interconnect Wiring Diagram. Refer to wiring repair (Para 3-8).

c. INSTALLATION

- (1) Position conduit (11) on Laundry Unit and install four straps (10) and screws (9).
- (2) Install new sealing washer (2), connector (3) and nut (1) as required.

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-1 Laundry Unit Interconnect Wiring Diagram, may be used to connect wires if tags are lost or illegible

(3) Connect electrical wiring as tagged.

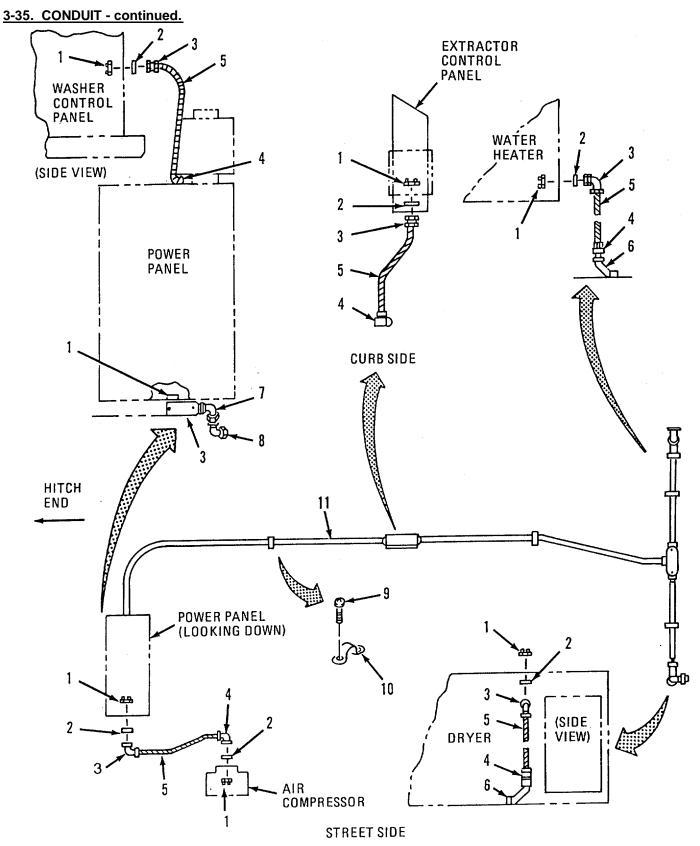


Figure 3-27. Conduit

3-36. POWER CABLE.

This task covers: Repair

Reference

INITIAL SETUP

General Shop Practice Requirement for the Repair and Test of Electronic Equipment (TM 43-0158)

General Mechanics Tool Kit (App B, Item 1)
Electrical Repair Shop Equipment
(App B, Item 4)

Equipment Condition

Power cable removed (TM 10-3510-222-10)

REPAIR

- (1) Remove connector (1) from power cable (2).
- (2) Repair consists of replacing connector (1) or power cable (2).
- (3) Connect electrical wiring per figure.
- (4) Install connector (1) on power cable (2).
- (5) Install power cable, refer to TM 10-3510-222-10.

LEGEND

- 1. CABLE IS 17 FEET \pm 4 INCHES.
- 2. CABLE P/N CO-05HOF (5/6) 1090.
- 3. SOLDER PIG-TAIL ENDS THAT CONNECT TO GENERATOR.

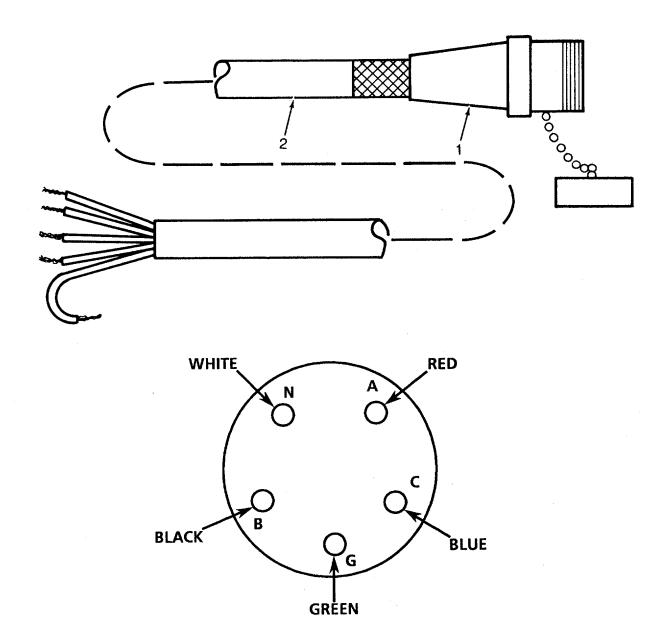


Figure 3-28. Power Cable

3-37. ENCLOSURE BOX.

This task covers:

- a. Removal
- b. Repair
- c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Electrical Repair Shop Equipment (App B, Item 4)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Circuit Breaker bracket removed (Para 3-38)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result

a. REMOVAL

- (1) Open enclosure box (1).
- (2) Remove two screws (2), lockwashers (3), flat washers (4) and shield (5).
- (3) Tag and disconnect all electrical wiring from voltage starter (6).
- (4) Pull electrical wiring into power panel (8).
- (5) Remove chase nipple (7) from power panel (8).
- (6) Remove four screws (15), lockwashers (16) and panel (20).
- (7) Remove three screws (10), lockwashers (11) and nuts (12).
- (8) Remove enclosure box (1).

b. **REPAIR**

- (1) Voltage Starter (6).
 - (a) Remove two screws (2), lockwashers (3), flat washers (4) and shield (5).
 - (b) Tag and disconnect electrical wiring from voltage starter (6).
 - (c) Remove three screws (13), starwashers (14) and voltage starter (6).
 - (d) Remove jumper wire from L1 and A2, refer to FO-6 Air Compressor Wiring Diagram.
 - (e) Remove three heaters (18) and six screws (17) from voltage starter 16).

NOTE

Hold reset button down while installing heaters.

(f) Install three heaters (18) on new voltage starter (6). Secure with six screws (17).

3-37. ENCLOSURE BOX - continued

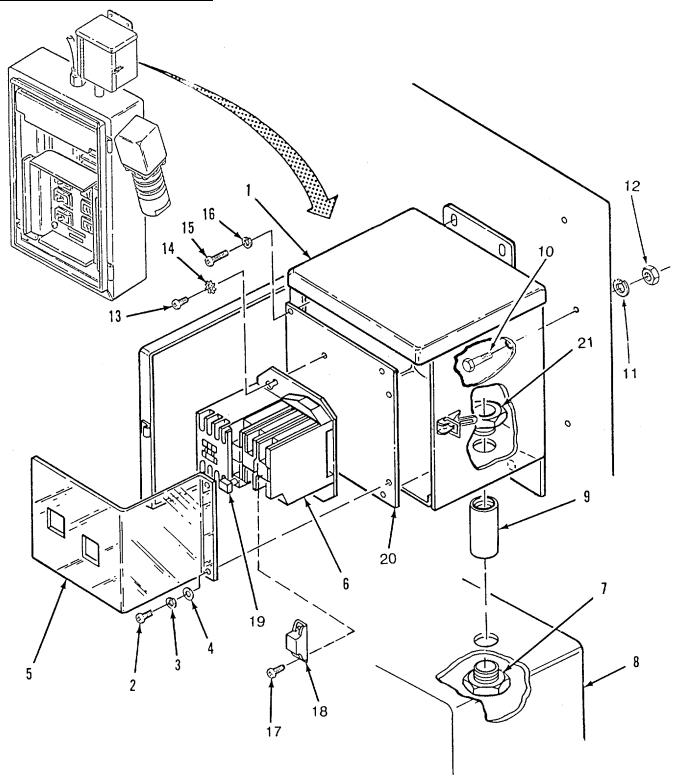


Figure 3-29. Enclosure Box

3-37. ENCLOSURE BOX - continued

- (g) Install jumper wire on L1 and A2. Refer to FO-6, Air Compressor Wiring Diagram.
- (h) Position voltage starter (6) in enclosure box (1) and install three star washers (14) and screws (13).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-6 Air Compressor Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (i) Connect electrical wiring as tagged.
- (j) Position shield (5) in enclosure box (1) and install two flat washers (4), lockwashers (3) and screws (2).
- (2) Heater (12).

NOTE

This procedure is for one heater, all other heaters are identical.

- (a) Remove two screws (2), lockwashers (3), flat washers (4) and shield (5).
- (b) Remove two screws (17) and remove heater (18).
- (c) Press reset button (19) and position heater (18) on voltage starter (6) and install two screws (17).
- (d) Position shield (5) in enclosure box (1) and install two flat washers (4), lockwashers (3) and screws (2).
- (3) Enclosure Box (1).
 - (a) Remove case nipple (21) and coupling (9).
 - (b) Position coupling (9) on new enclosure box (1) and install case nipple (21).

c. INSTALLATION

- (1) Position enclosure box (1) on power panel (8) and install chase nipple (7).
- (2) Install three screws (10), lockwashers (11) and nuts (12).
- (3) Install panel (20), four lockwashers (16) and screws (15).
- (4) Pull electrical wiring into enclosure box (1).

NOTE

- (5) Connect electrical wiring to voltage starter (6) as tagged.
- (6) Install shield (5) with two screws (2), lockwashers (3) and flat washers (4).
- (7) Press reset button (19) and close enclosure box (1).
- (8) Install circuit breaker bracket (Para 3-38).

3-38. POWER PANEL.

This task covers: a. Removal b. Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Electrical Repair Shop Equipment (App B, Item 4)

Materials/Parts

Sealing Washer (App C, Item 64)

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Enclosure Box removed (Para 3-37)

General Safety Instructions

c. Installation

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

a. REMOVAL

- (1) Open power panel door (21).
- (2) Remove four screws (1), top and bottom brackets (2) and right and left brackets (3).
- (3) Remove four screws (4) and circuit breaker bracket (5).
- (4) Tag and disconnect electrical wiring from flexible conduit (8).
- (5) Tag and disconnect wiring from flexible conduit (11).
- (6) Tag and disconnect wiring from conduit (14).
- (7) Remove nut (6), sealing washer (7) and flexible conduit (8).
- (8) Remove nut (9), sealing washer (10) and flexible conduit (11).
- (9) Remove nut (12), sealing washer (13) and conduit (14).
- (10) Remove two nuts (15), lockwashers (16) and flat washers (17).
- (11) Remove power panel (31).
- (12) Remove two nuts (18), bolts (19) and flat washers (20).

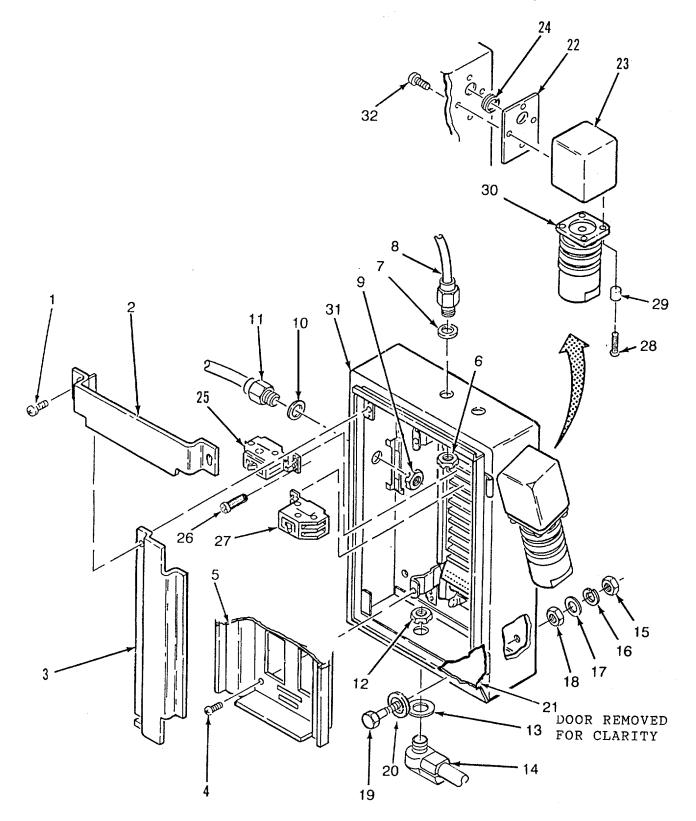


Figure 3-30. Power Panel

3-38. POWER PANEL - continued

b. REPAIR

- (1) Circuit breakers, one 60 amp (25), five 20 amp (27).
 - (a) Open power panel door (21).
 - (b) Remove four screws (1), top and bottom brackets (2) and right and left brackets (3).
 - (c) Remove four screws (4) and circuit breaker bracket (5).
 - (d) Tag and disconnect electrical wiring to circuit breaker (25 and/or 27).
 - (e) Remove three screws each (26).
 - (f) Remove circuit breaker (25 and/or 27).
 - (g) Install new circuit breaker (25 and/or 27).

NOTE

- (h) Connect electrical wiring to circuit breaker (25 and/or 27).
- (i) Position circuit breaker bracket (5) on power panel (31) and install four screws (4).
- (j) Position right and left brackets (3), top and bottom brackets (2) and install four screws (1).
- (k) Close power panel door (21).
- (2) Connector (30).
 - (a) Open power panel door (21).
 - (b) Remove four screws (1), top and bottom brackets (2) and right and left brackets (3).
 - (c) Remove four screws (4) and circuit breaker bracket (5).
 - (d) Tag and disconnect electrical wiring to connector (30).
 - (e) Remove four screws (28), connector (30) and cap (29).
 - (f) Remove electrical wiring from connector (30).
 - (g) Remove four screws (32), gasket (22), cover (23) and grommet (24).
 - (h) Install electrical wiring on new connector (30).
 - (i) Install grommet (24), gasket (22), cover (23) and four screws (32).
 - (j) Position connector (30) on power panel (31) and install four screws (28) and cap (29).

3-38. POWER PANEL- continued

NOTE

Wire numbers are stamped on each electrical wire This information, in conjunction with data on FO-1 Laundry Unit Interconnect Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (k) Connect electrical wiring to connector (30).
- (I) Position circuit breaker bracket (5) on power panel (31) and install four screws (4).
- (m) Position right and left brackets (3), top and bottom brackets (2) and install four screws (1).
- (n) Close power panel door (31).

c. INSTALLATION

- (1) Install two bolts (19), flat washers (20) and nuts (18).
- (2) Position power panel (31) on washer control stand and install two flat washers (17), lockwashers (16) and nuts (15).
- (3) Install sealing washer (13), conduit (14) and nut (12).
- (4) Install sealing washer (10), flexible conduit (11) and nut (9).
- (5) Install sealing washer (7), flexible conduit (8) and nut (6).

NOTE

- (6) Connect electrical wiring to circuit breakers (25 and 27) as tagged.
- (7) Position circuit breaker bracket (5) on power panel (31) and install four screws (4).
- (8) Position right and left brackets (3), top and bottom brackets (2) on power panel (31) and install four screws (1).
- (9) Close power panel door (21).
- (10) Install enclosure box (Para 3-37).

3-39. PRE-EXTRACTOR BIN (WET WASH BIN).

This task covers:

Repair

INITIAL SETUP

General Safety Instructions

Tools

Trailer Mounted Welding Shop (App B, Item 8)

Equipment Condition

Wet wash bin removed (Para 2-36)

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

REPAIR

- (1) Repair consists of wet wash bin (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
- (2) Install wet wash bin (1) (Para 2-36).

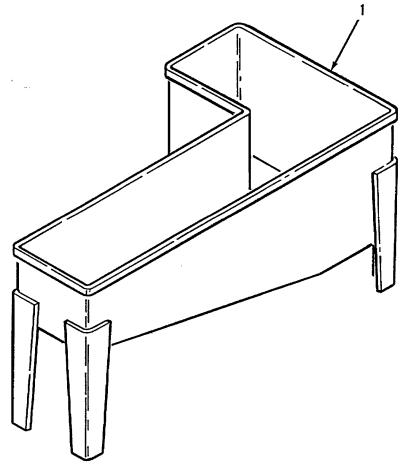


Figure 3-31. Pre-Extractor Bin

3-40. EXTRACTOR PIPING.

This task covers:

Repair

INITIAL SETUP

Materials/Parts
Solder (App D, Item 9)
Flux (App D, Item 15)
Antiseize Compound (App D, Item 24)

Tools
General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 2)
Automotive Vehicle Shop Equipment

Equipment Condition Extractor piping removed (Para 2-37)

General Safety Instructions

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied

REPAIR

(App B, Item 3)

1. Copper fittings(s).

Remove damaged sections of copper tubing on extractor piping (1) using torch Refer to TM 10-3510-209-24P for breakdown of copper tubing.

2. Threaded coupling.

Remove damaged coupling (2). Before installing coupling, apply antiseize compound to male threads.

3. Install extractor piping (1) (Para 2-37).

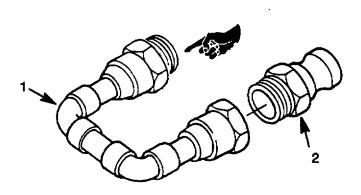


Figure 3-32. Extractor Piping

*U.S. GOVERNMENT PRINTING OFFICE: 1955-655-028/20032

PIN: 072150-001

3-41. LAUNDRY EXTRACTOR.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment (App B,
Item 2)
Automotive Vehicle Shop Equipment (App B,
Item 3)
Electrical Repair Shop Equipment (App B, Item 4)
Suitable Lifting Device

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)
Water hose disconnected from extractor
(TM 10-3510-222-10)
Power input wires/conduit disconnected from
extractor (Para 3-35)

Personnel Required

Two

General Safety Instructions

WARNING

Extractor weighs 609 lbs and requires a lifting device for removal and installation. Attempt to remove or install Laundry Extractor without a lifting device may result in injury to personnel

a. REMOVAL

- (1) Remove five nuts (1), lockwashers (2), screws (3) and flat washers (4).
- (2) Remove three nuts (5), lockwashers (6), bolts (7), sleeves (9) and flat washers (8).
- (3) Using a suitable lifting device, remove extractor (10) from Laundry Unit.

b. REPAIR

NOTE Extractor repairs are covered in Paragraphs 3-42 thru 3-57.

c. INSTALLATION

- (1) Using a suitable lifting device, position extractor (10) on Laundry Unit.
- (2) Install three sleeves (9), flat washers (8), bolts (7), lockwashers (6) and nuts (5).
- (3) Install five flat washers (4), screws (3), lockwashers (2) and nuts (1).
- (4) Power input wires/conduit connected to extractor (Para 3-35).

3-41. LAUNDRY EXTRACTOR - continued.

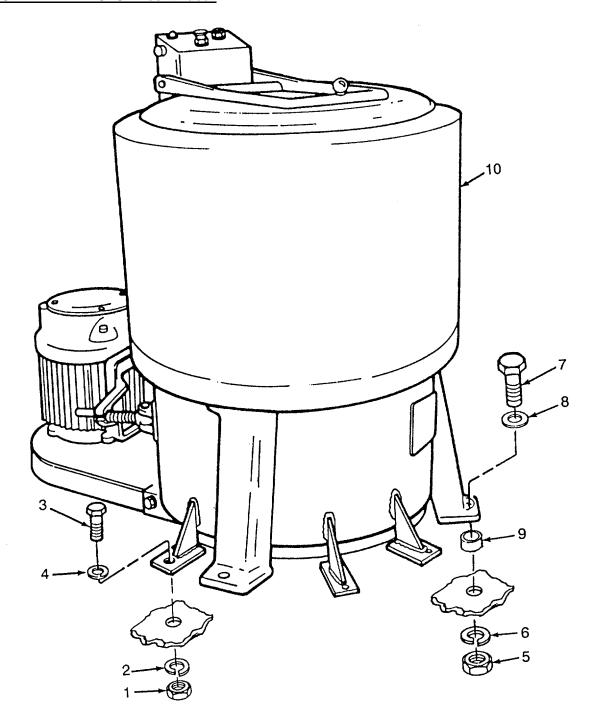


Figure 3-33. Laundry Extractor

3-42. HINGE SHAFT ASSEMBLY.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automobile Vehicle Shop Equipment (App B, Item 3) Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)
Lid Closed Switch removed (Para 3-49)
Lid Locked Switch removed (Para 3-50)

Materials/Parts

Grease (App D, Item 16) Adhesive (App D, Item 23)

a. REMOVAL

- (1) Remove twelve bolts (1), lockwashers (2), seal washers (3) and cover (4). As required, remove gasket (5).
- (2) Remove two nuts (6) and bolts (7).
- (3) Loosen setscrews (8 and 9).
- (4) Move cam (15) on shaft (11) and remove key (10).
- (5) Loosen brake adjustment screw (19).
- (6) Remove shaft (11), two washers (12), frame (13) and cams (14 and 15).
- (7) Remove screw (16), lockwasher (17) and brake (18). As required, remove grease fitting (27) and adjustment screw (19) from brake (18).
- (8) Remove two bushings (20).
- (9) If required, remove two nuts (21), lockwashers (22), screws (23), bracket (24), screws (25) and bumper (26).

b. REPAIR

Repair consists of replacing damaged and/or missing components of the hinge shaft assembly.

c. INSTALLATION

- (1) If removed, install bumper (26) on bracket (24) with two screws (25) and install bracket with two screws (23), lockwashers (22) and nuts (21).
- (2) Install two bushings (20).
- (3) Install shaft (11), two washers (12), frame (13), key (10), cam (15), brake (18), screw (16), lockwasher (17) and cam (14).
- (4) Close lid (28).
- (5) With lid closed, turn cam (14) until stud on cam is level and points to the rear of the extractor.
- (6) Tighten setscrews (8 and 9).
- (7) Install two bolts (7) and nuts (6), securing frame (13) to shaft (11).
- (8) If removed, install grease fitting (27) and adjustment screw (19) and lubricate brake (18) (LO 10-3510-222-12).

3-42. HINGE SHAFT ASSEMBLY - continued.

- (9) Open and close extractor lid (28) several times and note if lid opens and closes properly.
- (10) If excessive force must be used to open/close lid or lid is too loose (lid closes on its own), tighten or loosen adjustment screw (19) on brake (18) as required for proper operation.
- (11) If required, install gasket (5) using adhesive.
- (12) Install cover (4) with lockwashers (2), seal washers (3) and twelve bolts (1).
- (13) Install lid closed switch (Para 3-49) and lid locked switch (Para 3-50).

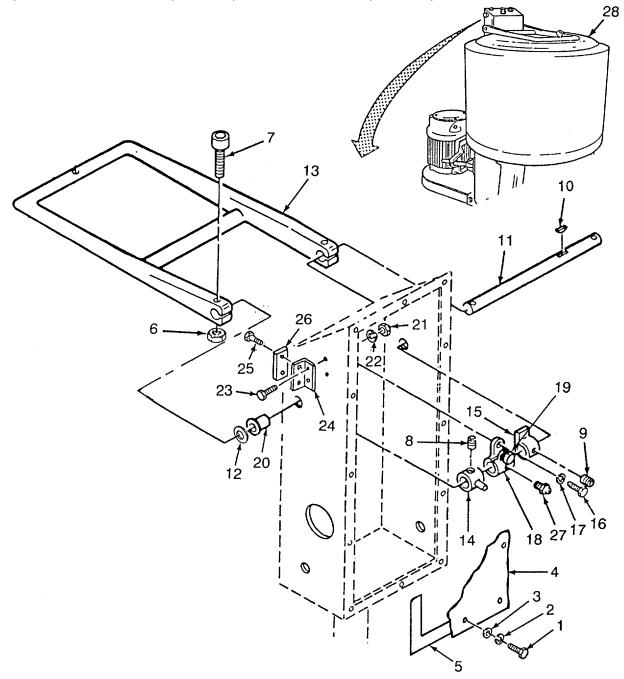


Figure 3-34. Hinge Shaft Assembly

3-43. PUSHBUTTON SWITCH.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Electrical Repair Shop Equipment (App B, Item 4)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Cover removed (Para 3-42)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

NOTE

This procedure covers the replacement of the push to start switch. The emergency stop switch, next to it, is replaced in a similar manner

a. REMOVAL

- (1) Remove nut (1) from control panel (4).
- (2) Remove switch body (2) and teflon washer (3).
- (3) Tag and disconnect wires from switch body (2).

b. INSTALLATION

- (1) Position teflon washer (3) on switch body (2).
- (2) Position switch body (2) on control panel (4).
- (3) Install nut (1).

NOTE

- (4) Connect wires as tagged.
- (5) Install cover (Para 3-42).

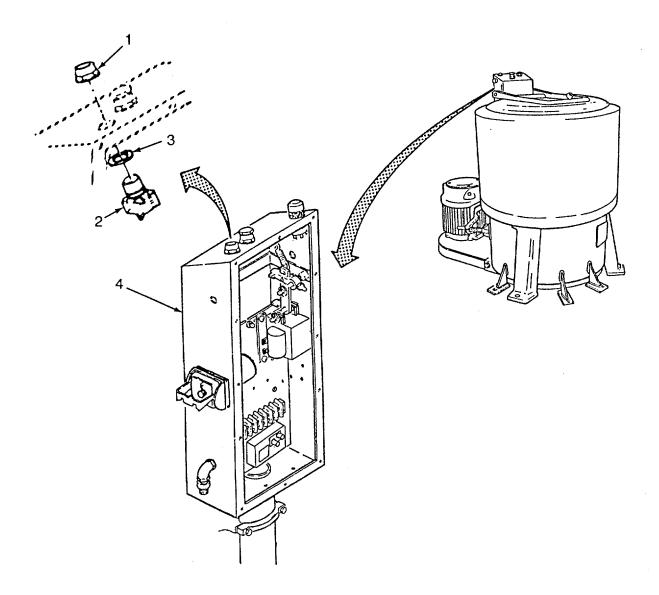


Figure 3-35. Pushbutton Switch 3-100

3-44. INDICATOR LIGHT.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Electrical Repair Shop Equipment (App B, Item 4) Lamp Extractor (App B, Item 14)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Cover removed (Para 3-42)

a. REMOVAL

- (1) Unscrew lens (1).
- (2) Using a lamp extractor, remove lamp (2) (Para 2-40).
- (3) Remove nut (3) and seal (4).
- (4) Remove switch body (5) and lockwasher (6) from control panel (7).
- (5) Tag and disconnect wires from switch body (5).

b. INSTALLATION

(1) Position switch body (5) and lockwasher (6) on panel (7) and secure with seal (4) and nut (3).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3 Extractor Wiring Diagram, may be used to connect wires if tags are lost or illegible

- (2) Install wires on switch body (5) as tagged.
- (3) Install lamp (2) (Para 2-40).
- (4) Install lens (1).
- (5) Install cover (Para 3-42).

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on

3-44. INDICATOR LIGHT - continued.

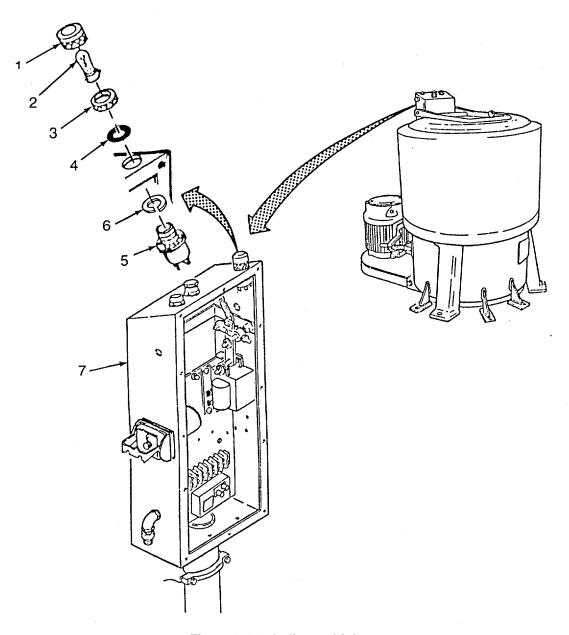


Figure 3-36. Indicator Light

3-102

3-45. STARTER ENCLOSURE.

This task covers: a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Electrical Repair Shop Equipment
(App B, Item 4)

Materials/Parts
Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Turn four captive screws (1) 1/4 turn to unlock. Then remove cover assembly (8).
- (2) Remove four screws (2), lockwashers (3), flat washers (4) and enclosure (11) from extractor (12).
- (3) Tag and disconnect all wires.
- (4) Remove three nuts (5) and box connectors (7) with attached wires. Remove three gaskets (6).
- (5) Remove nut (10) and plunger (9) from cover assembly (8).

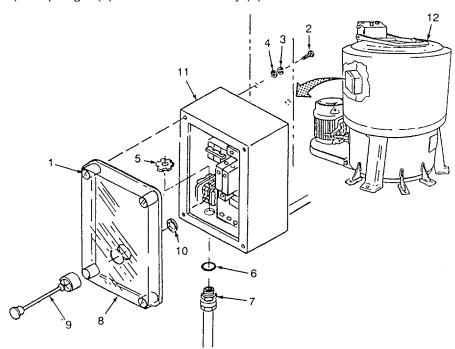


Figure 3-37. Extractor Starter Enclosure Removal

3-45. STARTER ENCLOSURE - continued

b. REPAIR

(1) Disassembly

- (a) Remove four screws (13) and remove panel (29) from enclosure (30).
- (b) Remove end bracket (14), divider (15), seven terminal blocks (16) and end bracket (17) from rail (25).
- (c) Remove end bracket (20), circuit breaker (19), two end brackets (18), motor starter (21) and stop (22) from rail (28).
- (d) Remove two screws (23), lockwashers (24) and rail (25).
- (e) Remove two screws (26), lockwashers (27) and rail (28).

(2) Assembly

- (a) Position rail (28) on panel (29) and secure with two lockwashers (27) and screws (26).
- (b) Position rail (25) on panel (29) and secure with lockwashers (24) and screws (23).
- (c) Position circuit breaker (19) on rail (28) and install bracket (20) on end of rail (28) and two end brackets (18) to the right of circuit breaker (19).
- (d) Install motor starter (21) on rail (25) and secure with end bracket (22).
- (e) Position end bracket (17), seven terminal blocks (16), divider (15) and end bracket (14) on rail (25).
- (f) Position panel (29) in enclosure (30) and secure with four screws (13).

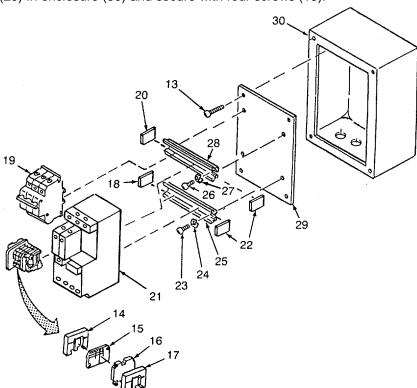


Figure 3-38. Extractor Starter Enclosure Repair

3-45. STARTER ENCLOSURE - continued.

c. INSTALLATION

- (1) Position enclosure (11) on extractor (12) and secure with four lockwashers (3), flat washers (4) and screws (2).
- (2) Install three gaskets (6) and box connector (7) on enclosure (11), secure with nuts (5).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3, Extractor Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (3) Install plunger (9) on cover assembly (8) and secure with nut (10).
- (4) Position cover (8) on enclosure (11) and turn captive screws (1) 1/4 turn clockwise to lock cover in place.

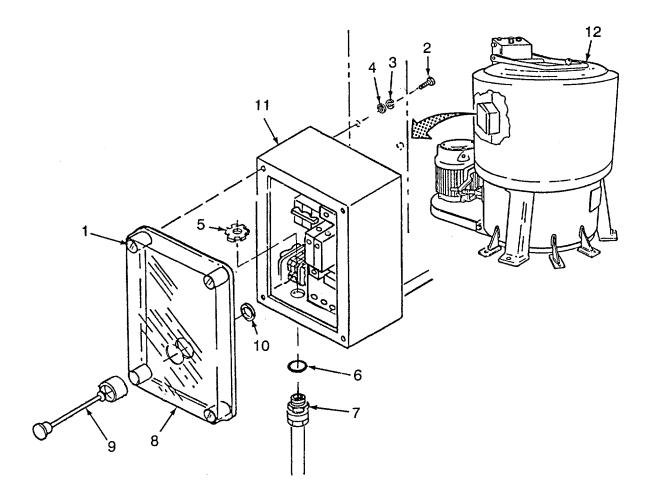


Figure 3-39. Extractor Starter Enclosure Installation

3-46. DRIVE UNIT ASSEMBLY.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3)

Materials/Parts

Tags (App D, Item 4)

Personnel Required

Two

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Basket and Curb removed (Para 2-39)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect wires from solenoid (12).
- (2) Remove six screws (1), lockwashers (2) and three caps (3).
- (3) Remove four screws (4), lockwashers (5) and two caps (6).
- (4) Mark position of drive unit assembly in relation to frame (9).
- (5) Lift drive unit assembly (7) out of frame (9).
- (6) Remove three bumper caps (8) from drive unit assembly (7).
- (7) Mark frame (9) in relation to skirt (11).
- (8) Remove frame (9) from skirt (11).
- (9) Remove two rubber trunnions (10) from frame (9).

b. REPAIR

Repair of drive unit consists of repair of brake (Para 3-47) and oil housing (Para 3-48).

c. INSTALLATION

- (1) Position two rubber trunnions (10) on frame (9).
- (2) Position frame (9) in skirt (11) as marked.
- (3) Position three bumper caps (8) on drive unit assembly (7).
- (4) Position drive unit assembly (7) on frame (9).
- (5) Install two caps (6), four lockwashers (5) and screws (4).
- (6) Install three caps (3), six lockwashers (2) and screws (1).

3-46. DRIVE UNIT ASSEMBLY - continued.

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3 Extractor Unit Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (7) Connect wires to solenoid (12) as tagged.
- (8) Install basket and curb assembly (Para 2-39).

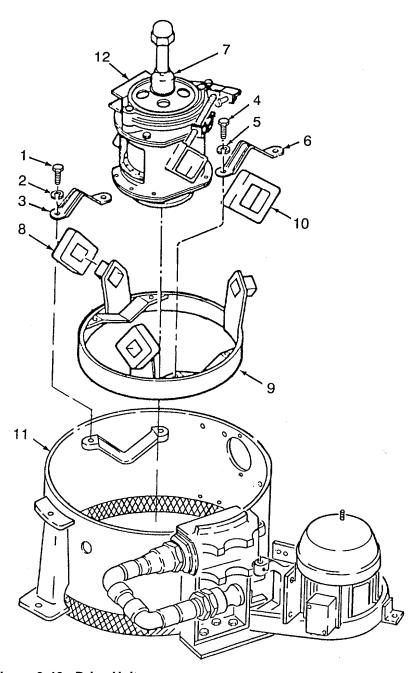


Figure 3-40. Drive Unit

3-47. EXTRACTOR BRAKE.

This task covers: a. Disassembly b Repair c. Assembly

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3)

Materials/Parts

Cotter Pin (App C, Item 74)

Personnel Required

Two

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Basket and Curb removed (Para 2-39)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. DISASSEMBLY

- (1) Remove screw (1) and lockwasher (2). Loosen screw (56) and pivot bracket (58) to loosen spring (3).
- (2) Remove spring (3).
- (3) Remove two retaining rings (4) and flat washers (5).
- (4) Remove brake shoe (6).
- (5) Remove insert (7) and basket ball (8).
- (6) Remove seal (9).
- (7) Loosen three setscrews (10) on collar (11) and remove collar.
- (8) Loosen two setscrew (12) on drum (13) and remove drum and key (14).
- (9) Remove two screws (15) and lockwashers (16), flat washers (17) and bracket (18).
- (10) Remove cotter pin (19), shoulder pin (20) and three spacers (21 and 22) and link (23).
- (11) Remove nut (24), unscrew hook (25) and remove nut (26) from hook (25).
- (12) Remove nuts (27) and flat washer (28) from stud (55).
- (13) Remove arm (29) and remove nut (30) and bolt (31) from arm (29). Disconnect hook (25) from link (23).
- (14) Remove nuts (32 and 33) and hook (34).
- (15) Tag and disconnect wires from solenoid (35) and remove four screws (36), lockwashers (37) and solenoid (35).
- (16) Remove two screws (38) and lockwashers (39), plate (40) and two spacers (41).
- (17) Remove pin (42) and stud (43).
- (18) Remove screw (44), nut (45) and bracket (46).
- (19) Remove nut (47), lockwasher (48) and stud (49).
- (20) Remove bell crank (50) and flat washer (51). Remove grease fitting (52) from bell crank (50).

3-47. EXTRACTOR BRAKE - continued.

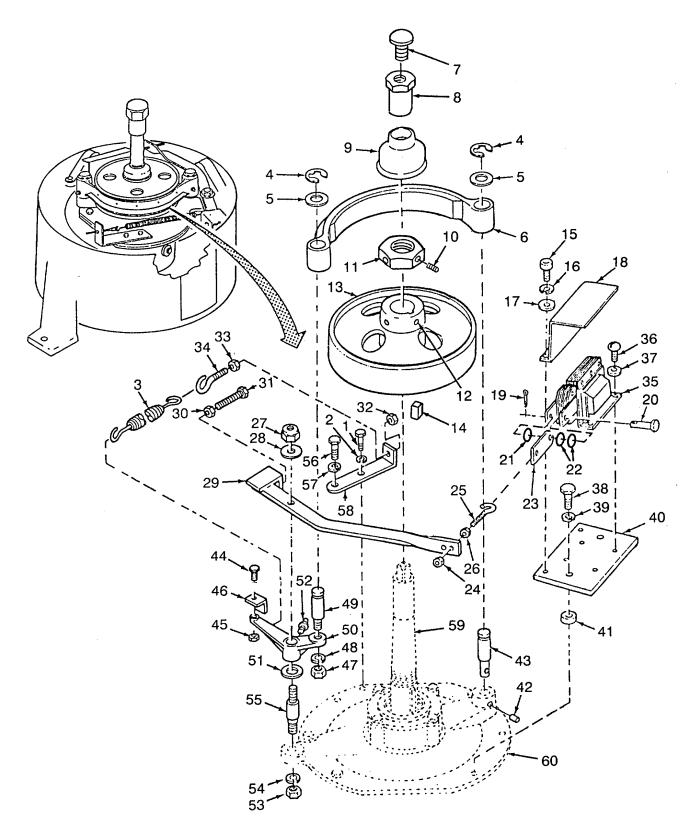


Figure 3-41. Extractor Brake

3-47. EXTRACTOR BRAKE - continued.

- (21) Remove nut (53), lockwasher (54) and stud (55).
- (22) Remove screw (56), lockwashers (57) and pivot bracket (58).

b. REPAIR

Repair consists of replacing damaged and/or missing components of the extractor brake.

c. ASSEMBLY

- (1) Position bracket (58) on oil drive housing (60) and loosely install lockwashers (57) and screws (56).
- (2) Position stud (55) on oil drive housing (60) and secure with lockwasher (54) and nut (53).
- (3) Position flat washer (51) and bell crank (50) on stud (55). Install grease fitting (52) on bell crank (50).
- (4) Position stud (49) on bell crank (50) and secure with lockwasher (48) and nut (47).
- (5) Position bracket (46) on bell crank (50) and install screw (44) and nut (45).
- (6) Position stud (43) on drive housing (60) and install pin (42).
- (7) Position plate (40) on oil drive housing (60) and secure with two spacers (41), lockwashers (39) and screws (38).
- (8) Position solenoid (35) on plate (40) and secure with four lockwashers (37) and screws (36).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3 Extractor Unit Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (9) If removed, connect wires to solenoid (35) as tagged.
- (10) Position three grommets (21 and 22) and link (23) on solenoid (35) and install shoulder pin (20) with cotter pin (19).
- (11) Thread nut (30) about halfway up on screw (31) and install screw in arm (29).
- (12) Install nuts (24 and 26) and hook (25) on arm (29).
- (13) Connect hook (25) to link (23).
- (14) Position arm (29) on stud (55). Secure with flat washer (28) and nut (27).
- (15) Install hook (34) and nuts (33 and 32) on bracket (58).
- (16) Install spring (3), connecting it to bell crank (50) and hook (34). Tighten screw (56) and install screw (1) and lockwasher (2).
- (17) Install bracket (18) on plate (40) with two flat washers (17), lockwashers (16) and screws (15).
- (18) Position key (14), drum (13) and setscrews (10) on drive shaft (59) and tighten two setscrews (12).
- (19) Install seal (9), basket ball (8) and insert (7).
- (20) Position brake shoe (6) on studs (43 and 49) and install flat washers (5) and clips (4).
- (21) Install curb and basket (Para 2-39).
- (22) Adjust brake (TM 10-3510-222-10).

3-48. OIL HOUSING.

This task covers:

- a. Disassembly
- c. Assembly
- b. Repair
- d. Adjustment

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automobile Vehicle Shop Equipment (App B, Item 3) Drain Pan (App B, Item 16) Equipment Condition
Laundry Unit shut down (TM 10-3510-222-10)
Drive Assembly removed (Para 3-46)
Brake removed (Para 3-47)

Materials/Parts

Lubricant (App D, Item 18)

a. DISASSEMBLY

- (1) Remove plug (1) and drain oil from unit.
- (2) Remove screw (2), lockwasher (3) and flat washer (4).
- (3) Remove three screws (5) on pulley (6).
- (4) Thread screws (5) into holes on hub (7) to loosen hub.
- (5) Remove hub (7) and key (8).
- (6) Remove six screws (9), lockwashers (10) and cover (11).
- (7) Remove retaining ring (12) and bearing (13) from cover (11).
- (8) Remove six screws (14) and lockwashers (15).
- (9) Remove drive housing (16).
- (10) Remove sixteen screws (17) and lockwashers (18).
- (11) Remove lower housing (19). As required, remove any additional oil left in housing.
- (12) Remove packing (20), six screws (24) and clutch drive (25) from lower housing (19).

NOTE

If bushing is defective, discard bushing and lower housing.

- (13) As required, drill out bushing (21) from lower housing (19).
- (14) Remove nut (22), lockwasher (23), runner (26), key (27) and upper housing (28) from shaft (36).
- (15) Remove bushing (29) from upper housing (28).
- (16) Remove four screws (30), lockwashers (31) and bearing retainer (32).
- (17) Remove bearing (34) from housing (35).
- (18) Remove bearing seal (33) from bearing retainer (32).

3-48. OIL HOUSING - continued.

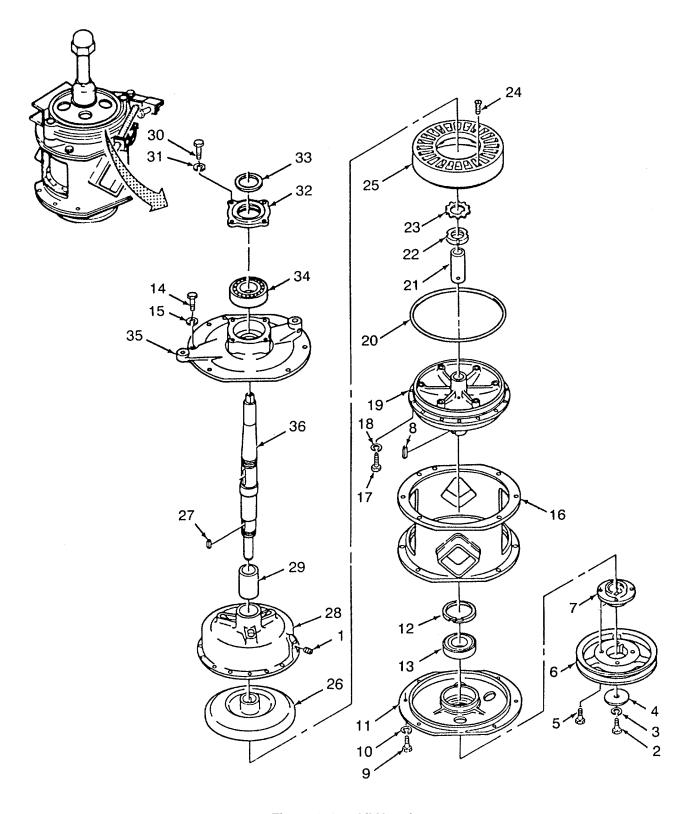


Figure 3-42. Oil Housing

3-48. OIL HOUSING - continued.

b. REPAIR

Repair consists of replacing damaged and/or missing components of the extractor drive.

c. ASSEMBLY

- (1) Install bearing (34) in plate (32).
- (2) Install shaft (36) thru bearing (34).
- (3) Install seal (33) in bearing retainer (32) and install retainer on housing (35) with four screws (30) and lockwashers (31).
- (4) Install bushing (29) in upper housing (28).
- (5) Position upper housing (28), key (27), runner (26) and lockwasher (23) on shaft (36) and secure with nut (22).
- (6) Install bushing (21) in lower housing (19), and position packing (20) and clutch driver (25) on top of lower housing (19). Secure clutch driver with screws (24) and peene screws using a center punch.
- (7) Position lower housing (19) over shaft (36) and on upper housing (28). Secure lower housing (19) to upper housing (28) with fourteen screws (17) and lockwasher (18).
- (8) Position drive housing (16) on top plate (35) and secure to top plate with four screws (14) and lockwashers (15). Do not install two additional screws that secure solenoid to cover (35).
- (9) Install bearing (13) and retainer (12) in bottom cover (11).
- (10) Position bottom cover (11) on shaft (36) and on drive housing (16) and secure with six screws (9) and lockwashers (10).
- (11) Position key (8) on shaft (36) and install hub (7) flush with end of shaft.
- (12) Install pulley (6) on hub (7) with three screws (5).
- (13) Install flat washer (4), lockwasher (3) and screw (2).
- (14) Install 40 ounces of oil thru hole of plug (1) and install plug.

NOTE

Unit must be adjusted for a gap of 0.090 inch gap between runner (26) and clutch driver (25). This adjustment cannot be performed until brake is installed on top of unit.

- (15) Install brake assembly on top of drive unit (Para 3-46 and 3-47).
- (16) Go to adjustment procedure below.

3-48. OIL HOUSING- continued

d. ADJUSTMENT

CAUTION

Incorrect gap will damage drive unit.

NOTE

Adjustment consists of checking/obtaining correct gap between runner and clutch driver and requires that brake assembly is installed on unit

(1) Remove fill plug (1).

CAUTION

If oil is spilled, drain oil and replace 40 ounces of lubricant. Too much or too little oil will result in damage to drive unit.

- (2) Use feeler gage thru fill hole and measure gap between runner (26) and clutch driver (25). Gap should be 0.088 to 0.092 inch.
- (3) If gap is less than 0.088 or greater than 0.092, proceed as follows:
 - (a) Remove rubber shaft seal (37).
 - (b) Loosen three setscrews on shaft nut (38) and two setscrews on hub (39).
 - (c) Loosen or tighten shaft nut (38). Tighten nut to widen gap and loosen nut and strike shaft with plastic hammer to make gap smaller.
 - (e) Measure gap to see if it changed. Adjust again, if necessary.
 - (f) When gap is correct, turn nut (38) a maximum of 1/6 a turn either way to align any setscrew hole with flat on shaft. Install a setscrew in this hole and tighten.
 - (g) Install additional setscrews in any of the five additional holes to prevent loss of screws.
 - (h) Tighten two setscrews on hub (39).
 - (i) Install rubber shaft seal (37).
- (4) Install fill plug (1).

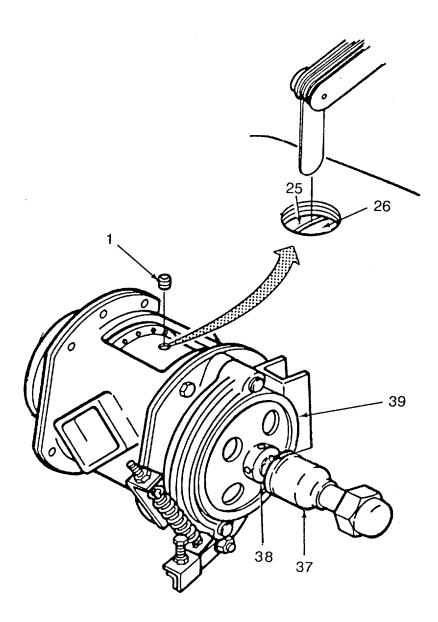


Figure 3-43. Oil Housing Adjustment

3-49. LID CLOSED SWITCH.

This task covers: a. Removal b. Installation c. Adjustment

INITIAL SETUP

General Safety Instructions

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Cover removed (Para 3-42)

Material/Parts

Tags (App D, Item 4)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Loosen two screws (1) and remove plate (6) with attached switch (5) from control panel (11).
- (2) Tag and disconnect electrical wires from switch (5).
- (3) Remove two nuts (2), lockwashers (3) and screws (4) and separate switch (5) from plate (6).

b. INSTALLATION

(1) Position switch (5) on plate (6) and secure with two screws (4), lockwashers (3) and nuts (2).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3, Extractor Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (2) Connect electrical wires to switch (5) as tagged.
- (3) Install plate (6) on control panel (11). Tighten screws (1) finger tight.
- (4) Go to switch adjustment procedure below.

c. ADJUSTMENT

NOTE

Switch adjustment is necessary when cam or switch is replaced and when switch is out of adjustment due to vibration.

(1) Slowly close extractor lid and check if stud (7) on cam (8) is depressing switch actuator (9) enough to close switch when lid is fully closed. If stud (7) comes down level and depresses switch actuator (9) as indicated in illustration, switch is properly adjusted. If switch (5) or cam (8) need adjustment, go to step 2 or 3 as appropriate.

3-49. LID CLOSED SWITCH - continued.

- (2) If stud (7) is level, but switch (5) is positioned too high to sufficiently depress switch actuator (9), or switch is depressed too much, loosen screws (1) and move switch plate (9) up or down for correct adjustment.
- (3) If stud (7) is not level, loosen setscrew (10) on cam (8) and rotate cam until stud (7) is level when lid is closed. Tighten setscrew (10) and restart adjustment procedure at step 1.
- (4) Install cover (Para 3-42).

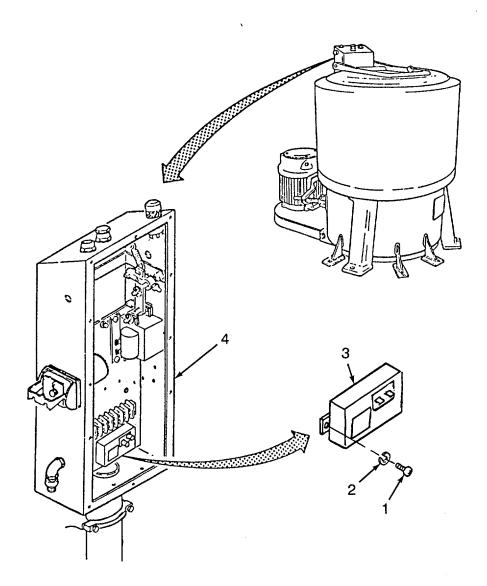


Figure 3-44. Lid Closed Switch

3-50. LID LOCKED SWITCH.

This task covers: a. Removal b. Installation c. Adjustment

INITIAL SETUP

General Safety Instructions

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Cover removed (Para 3-42)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Loosen two screws (1), lockwashers (2), flat washers (3) and remove plate (8) with attached switch (7) from control panel (14).
- (2) Tag and disconnect electrical wires from switch (7).
- (3) Remove two nuts (4), lockwashers (5) and screws (6) and separate switch (7) from plate (8).

b. INSTALLATION

(1) Position switch (7) on plate (8) and secure with two screws (6), lockwashers (5) and nuts (4).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3, Extractor Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (2) Connect electrical wires to switch (7) as tagged.
- (3) Install plate (8) on control panel (14). Secure with screws (1), lockwashers (2) and flat washers (3). Tighten screws (1) finger tight.
- (4) Do adjustment procedure below.

c. ADJUSTMENT

NOTE

Switch adjustment is necessary when cam, switch or solenoid linkage is replaced or when switch has become out of adjustment due to vibration.

(1) Close extractor lid and manually arm (9) down. Note that adjustment screw (10) is centered on cam ear (11), gap between adjustment screw and cam ear is 1/32 inch (approximately) and switch actuator (12) is depressed enough to close switch contacts. If these conditions exist, switch is properly adjusted. If adjustment is not correct, go to steps 2 thru 4 as appropriate.

3-50. LID LOCKED SWITCH - continued.

- (2) If adjustment screw (10) is not centered on cam ear (11), loosen setscrew (13) on cam and move cam left or right until adjustment screw is centered, then restart adjustment procedure, starting with step 1 above.
- (3) If adjustment sew (10) does not fit between arm (9) and cam ear (11), loosen locknut and thread adjustment screw (10) further in or out of arm (9) for a 1/32 in gap between face of adjustment screw (10) and cam ear (11). Then tighten locknut and restart adjustment procedure, starting with step 1 above.
- (4) If cam and adjustment screw (10) are properly adjusted, but switch actuator (12) is either not depressed enough or too much, loosen two screws (1) and adjust plate (8) up or down for correct adjustment. Tighten screws (1).
- (5) Install cover (Para 3-42).

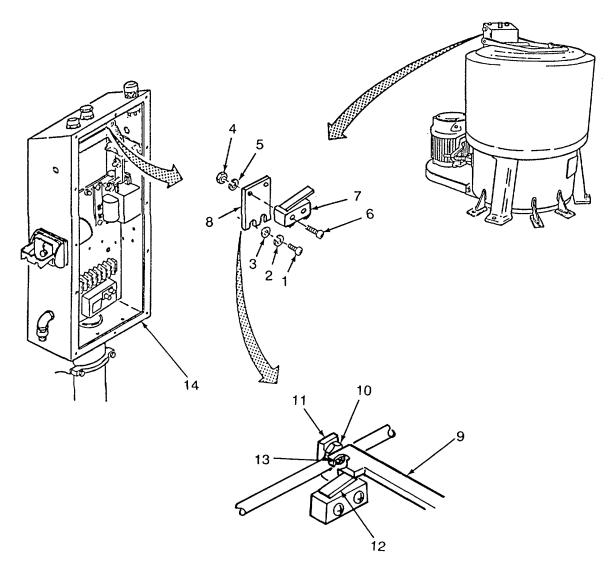


Figure 3-45. Lid Locked Switch

3-51. OVERVOLTAGE ABSORBER.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

General Safety Instructions

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Cover removed (Para 3-42)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect wires from overvoltage absorber (3).
- (2) Remove two screws (1) and lockwashers (2).
- (3) Remove overvoltage absorber (3) from control panel (4).

b. INSTALLATION

(1) Position overvoltage absorber (3) on control panel (4) and install two screws (1) and lockwashers (2).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3, Extractor Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (2) Connect wires as tagged.
- (3) Install cover (Para 3-42).

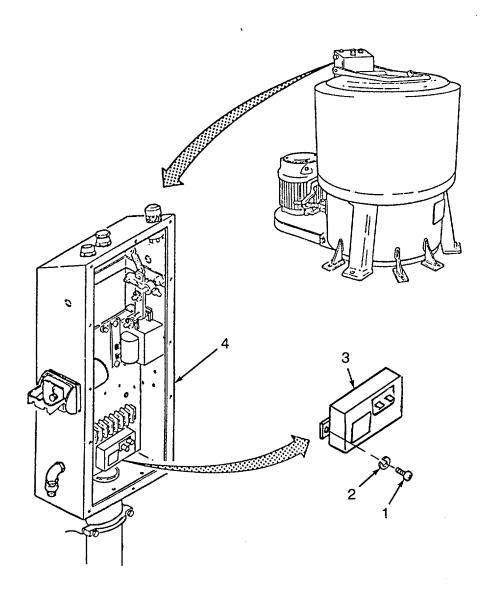


Figure 3-46. Overvoltage Absorber (Rotation Monitor)

3-52. SOLID STATE RELAY.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

General Safety Instructions

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Cover removed (Para 3-42)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect wires from solid state relay (3).
- (2) Remove screw (1), lockwasher (2) and solid state relay (3).

b. INSTALLATION

(1) Position solid state relay (3) in control box (4) and secure with screw (1) and lockwasher (2).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3 Extractor Unit Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (2) Connect wires to solid state relay (3) as tagged.
- (3) Install cover (Para 3-42).

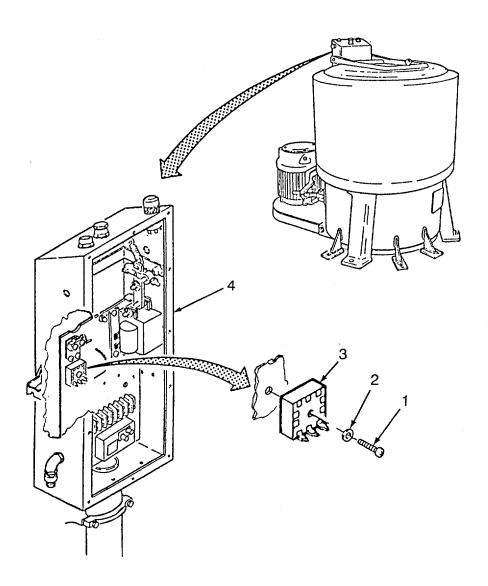


Figure 3-47. Solid State Relay

3-53. TIMER.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

SETUP General Safety Instructions

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Cover removed (Para 3-42)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect wires from timer case (7).
- (2) Loosen screw (1) and pull up on handle (2).
- (3) Pull timer (3) out of control panel (8).
- (4) Remove four nuts (5), lockwashers (6) and screws (4).
- (5) Remove timer case (7) from control panel (8).

b. INSTALLATION

- (1) Position timer case (7) in control panel (8) and secure with four screws (4), lockwashers (6) and nuts (5).
- (2) Insert timer (3) in timer case (7) and pull down handle (2).
- (3) Tighten screw (1).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3, Extractor Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (4) Connect wires to timer case (7) as tagged.
- (5) Install cover (Para 3-42).

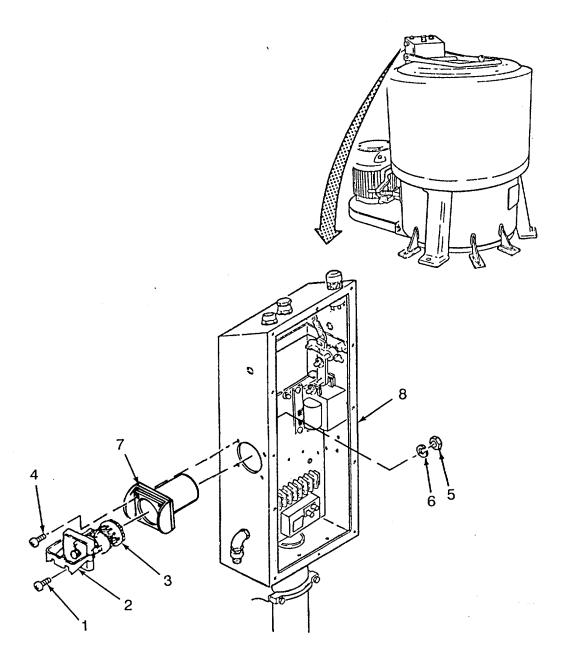


Figure 3-48. Timer

3-54. TERMINAL BOARD.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

General Safety Instructions

Tools

General Mechanics Tool Kit (App B, Item 1)

Material/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Cover removed (Para 3-42)

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect wires from terminal board (3).
- (2) Remove two screws (1), lockwashers (2) and terminal board (3).

b. INSTALLATION

(1) Position terminal board (3) in control panel (4) and secure with two screws (1) and lockwashers (2).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3, Extractor Wiring Diagram, may be used to connect wire, if tags are lost or illegible.

- (2) Connect wire as tagged.
- (3) Install cover (Para 3-42).

3-54. TERMINAL BOARD - continued.

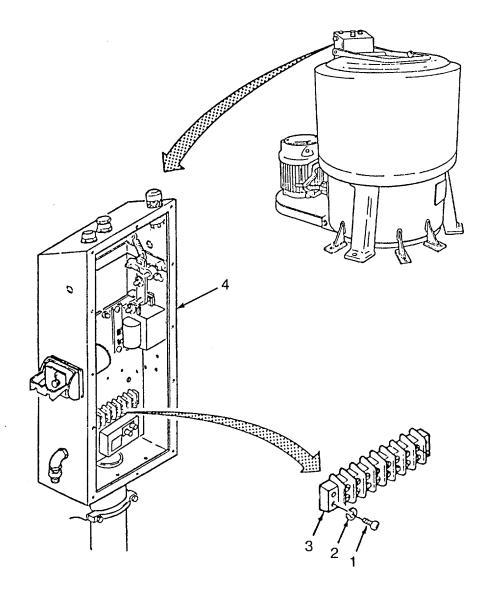


Figure 3-49. Terminal Board

3-55. LID LOCKED SOLENOID AND LINKAGE.

This task covers: a. Removal b. Installation

INITIAL SETUP Equipment Condition

Tools
General Mechanics Tool Kit (App B, Item 1)
Laundry Unit shut down (TM 10-3510-222-10)
Cover removed (Para 3-42)

Materials/Parts General Safety Instructions

Cotter Pin (App C, Item 56) Tags (App D, Item 4) WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect wires from solenoid (8).
- (2) Remove cotter pin (1), grommets (2 and 3) and shoulder pin (4).
- (3) Remove four screws (5), lockwashers (6), flat washers (7) and solenoid (8) from enclosure (20)
- (4) Remove retaining ring (9), spring (10) and arm (16).
- (5) Remove cotter pin (11), pin (12), link (13), screw (14) and grease fitting (15) from arm (16).

b. INSTALLATION

- (1) Install screw (14), grease fitting (15), pin (12), link (13) and cotter pin (11) on arm (16). Screw (14) will almost touch cam (19).
- (2) Position arm (16) on stud (17) in control panel (20) and secure with retaining ring (9).
- (3) Position solenoid (8) in enclosure (20) and secure with four screws (5), lockwashers (6) and flat washers (7).
- (4) Line up link (13) with holes on top of solenoid (8) and install shoulder pin (4), two grommets (2 and 3) and cotter pin (1).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-3 Extractor Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (5) Connect wires to solenoid (8) as tagged.
- (6) Install spring (10) onto link (13) and bracket (18) in top of enclosure (20).
- (7) Perform adjustment procedure (Para 3-50).
- (8) Install cover (Para 3-42).

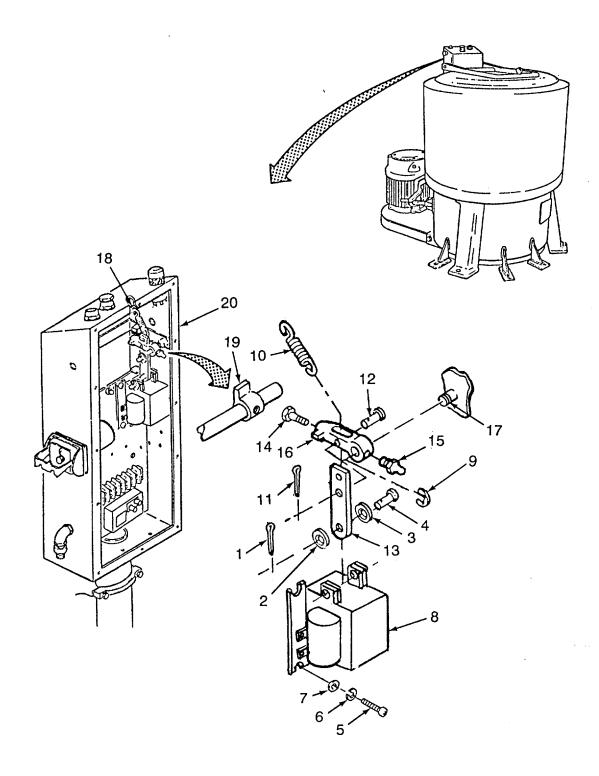


Figure 3-50. Lid Locked Solenoid and Linkage

3-56. CONTROL PANEL.

This task covers: a. Removal

b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)
Electrical Components removed (Para 3-51 thru 3-55)
Starter Box removed (Para 3-45)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Remove locknut (1).
- (2) Remove elbow (2) from control panel (12) and remove gasket (3).
- (3) Support control panel (12) and remove four screws (4), lockwashers (5) and two clamps (6).
- (4) Remove control panel (12).
- (5) Remove three nuts (7), lockwashers (8) and flat washers (9).
- (6) Remove components board (10) and flat washers (11).

b. REPAIR

WARNING

Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

Repair consists of welding of control panel (12). Refer to TM 9-257, Welding Theory Application.

c. INSTALLATION

- (1) Position flat washers (11) and components board (10) on studs inside control panel (12) and secure with three flat washers (9), lockwashers (8) and nuts (7).
- (2) Position control panel (12) on extractor (13) and install two clamps (6) with two lockwashers (5) and screws (4).
- (3) Install gasket (3) on elbow (2) and secure into control panel (12) with locknut (1).
- (4) Install electrical components (Para 3-51 thru 3-55).
- (5) Install starter box (Para 3-45).

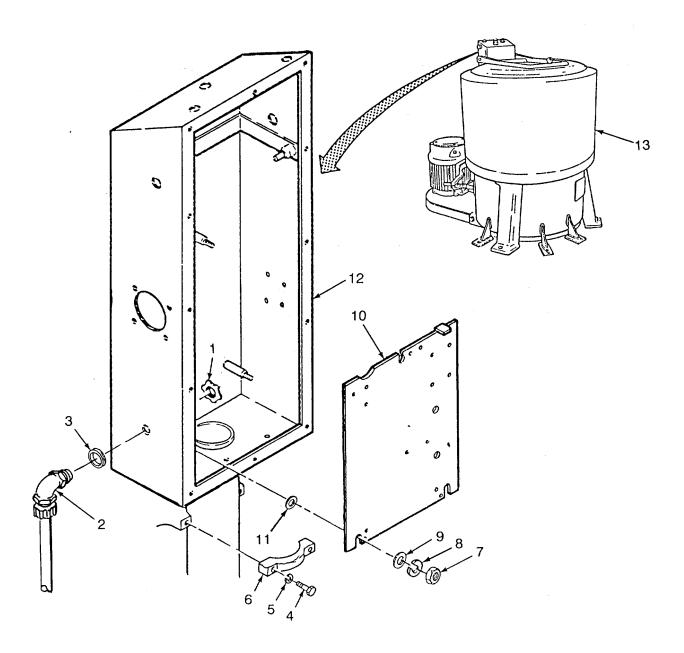


Figure 3-51. Control Panel

3-57. SKIRT AND LEVELING ARM.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Drive Unit removed (Para 3-46) Motor removed (Para 2-42) Extractor Piping removed (Para 2-37)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Remove six nuts (1), lockwashers (2), screws (3) and flat washers (4).
- (2) Remove three nuts (5), lockwashers (6), sleeves (9), flat washers (8) and screws (7).
- (3) Remove four bolts (10), lockwashers (11) and two clamps (12).
- (4) Remove nut (13) and gasket (14) and pull conduit (15) and wires out of skirt (16).
- (5) Remove skirt (16) and leveling arm (17).

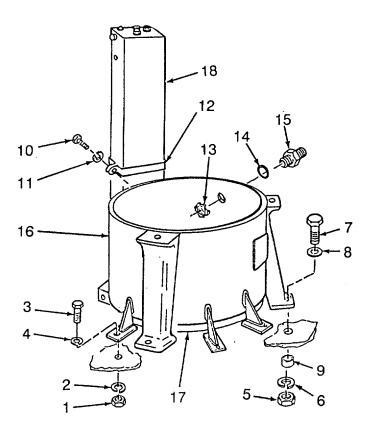


Figure 3-52. Skirt and Leveling Arm

3-57. SKIRT AND LEVELING ARM - continued.

b. REPAIR

- (1) Disassembly
 - (a) Remove six screws (19), lockwashers (20), three bolts (21), lockwashers (22) and leg (23) from skirt (50).
 - (b) Remove nut (24), lockwasher (25), screw (26) and bracket (27) from leg (23).
 - (c) Remove spring (28), pin (29), rod (30), three nuts (31), lockwashers (32), screws (33) and base (34).
 - (d) Remove eight bolts (35), lockwashers (36) and two legs (37).
 - (e) Remove two screws (38), lockwashers (39) and plate (40).
 - (f) Remove two bolts (41) and lockwashers (42) and separate bracket (43) from skirt (50).
 - (g) Remove screw (44), lockwasher (45) and bracket (46).
 - (h) Remove three screws (47), lockwashers (48) and bracket (49) from skirt (50).

(2) Assembly

- (a) Install bracket (49) with three screws (47) and lockwashers (48).
- (b) Install bracket (46) with screws (44) and lockwashers (45).
- (c) Position plate (40) on skirt (50) and secure with two lockwashers (39) and screws (38).
- (d) Position two legs (37) on skirt (50) and secure with eight bolts (35) and lockwashers (36).
- (e) Position bracket (43) on leg (23) and install three bolts (21), lockwashers (22), two bolts (41) and lockwashers (42).
- (f) Position base (34) on skirt (50) and install with three screws (33), lockwashers (32) and nuts (31).
- (g) Position rod (30) on base (34) and install pin (29).
- (h) Position spring (28) on rod (30).
- (i) Install bracket (27) on leg (23) with screw (26), lockwasher (25) and nut (24).
- (j) Position leg (23) on skirt (50) and secure with six lockwashers (20) and screws (19).

3-57. SKIRT AND LEVELING ARM- continued.

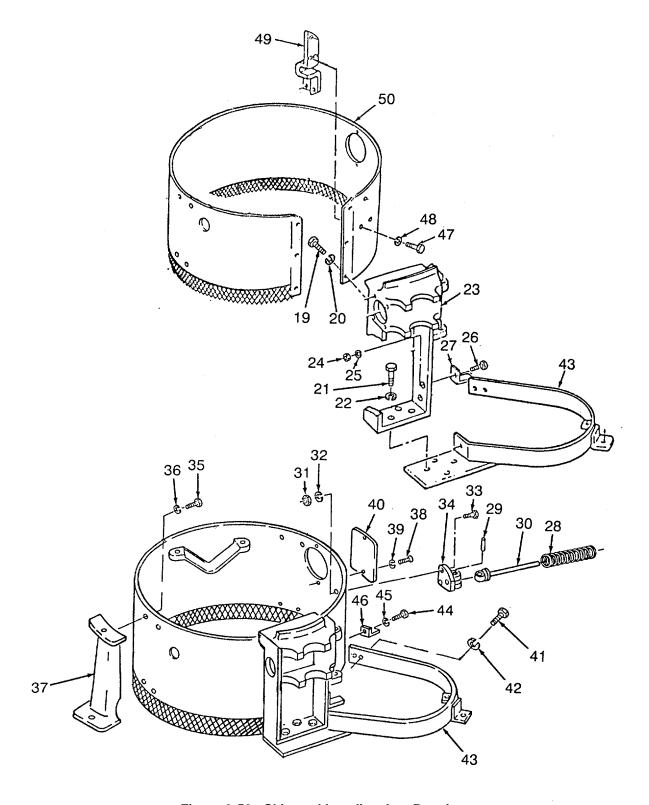


Figure 3-53. Skirt and Leveling Arm Repair

3-57. SKIRT AND LEVELING ARM - continued.

- c. INSTALLATION (Figure 3-52)
 - (1) Position skirt (16) and leveling arm (17) on trailer.
 - (2) Install three screws (7), flat washers (8), sleeve (9), lockwashers (6) and nuts (5).
 - (3) Install six screws (3), flat washers (4), lockwashers (2) and nuts (1).
 - (4) Install two clamps (12), four lockwashers (11) and bolts (10) to secure control panel (18) to skirt (16).
 - (5) Feed wires extending from conduit (15) through hole in skirt (16) and secure conduit (15) with nut (13) and gasket (14).
 - (6) Install drive unit (Para 3-46).
 - (7) Install motor (Para 2-42).
 - (8) Install extractor piping (Para 2-37).

3-58. DRYER.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 2) Automotive Vehicle Shop Equipment (App B, Item 3) Electrical Repair Shop Equipment (App B, Item 4) Trailer Mounted Welding Shop (App B, Item 8) Suitable Lifting Device

Material/Parts

Strap, Tiedown (App D, Item 11) Tags (App D, Item 4)

Personnel Required

Four

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)
Fuel Input Hoses disconnected (TM 10-3510-222-10)
Air Hoses disconnected (TM 10-3510-222-10)
Cover (ON/OFF Switch) open (Para 3-63)
Rear Frame removed (Para 2-19)
General Safety Instructions

WARNING

Dryer weighs 1060 lbs and requires a lifting device for removal and installation. Attempt to remove or install without it may result in injury and/or damage to the equipment.

a. REMOVAL

- (1) Remove eleven nuts (1), sixteen lockwashers (2), flat washers (3) and screws (4 and 5).
- (2) Loosen three screws (6), tag and disconnect wires (7) (wire numbers 29, 30 and 31) from starter switch (8), and disconnect (green) ground wires (wire numbers 32 and 33) from terminal board.
- (3) Remove tiedown straps (9) as required and unscrew nut (10) from elbow (12).
- (4) Pull elbow (12) and wires (7) away from dryer base (13) and remove gasket (11).
- (5) Remove dryer using a suitable lifting device from Laundry Unit.

b. REPAIR

NOTE

Dryer repairs are covered in Paragraphs 3-59 thru 3-84.

c. INSTALLATION

(1) Position dryer using a suitable lifting device on Laundry Unit.

NOTE

If screw goes into threaded hole, install lockwashers and flat washers on top.

- (2) Install eleven screws (4), flat washers (3), lockwashers (2) and nuts (1) in unthreaded holes.
- (3) Install five screws (5), flat washers (3) and lockwashers (2) in threaded holes.
- (4) Position gasket (11) on elbow (12) and feed wires (7) into dryer base (13).
- (5) Secure elbow (12) with nut (10).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer A zing Diagram, may be used to connect wires if tags are lost or illegible.

(6) Route wires to start switch, connect to starter switch (8) as follows and tighten screws (6):

Wire 31 - L1 Wire 30 - L2 Wire 29 - L3

(7) Connect ground wires to terminal board as follows:

Wire 33 to TB-8 Wire 32 to Grounding Lug

- (8) As required, install tiedown straps (9).
- (9) Close cover (Para 3-63).
- (10) Install rear frame (Para 2-19).
- (11) Connect fuel input hoses (TM 10-3510-222-10).

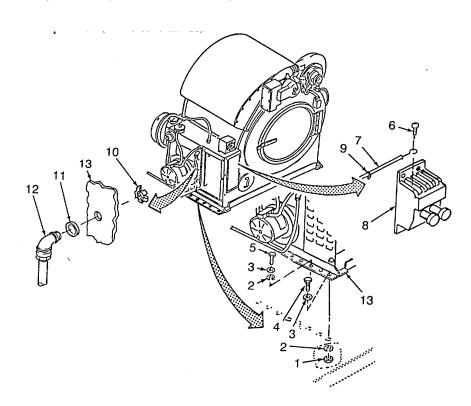


Figure 3-54. Dryer

3-59. ROTARY PUMP.

This task covers: Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Shop Equipment, Automotive Vehicle (App B, Item 3) **Equipment Condition**

Dryer shut down (TM 10-3510-222-10)
Rotary Pump Removed (Para 2-53)
Nonmetallic Hoses (Fuel Lines) disconnected from Pump Assembly (Para 2-43)

REPAIR

- (1) Disassembly.
 - (a) Remove eight capscrews (1), cover (2) and gasket (3).
 - (b) Remove strainer (4) and anti-hum wafer (5).
 - (c) Remove five screws (6), end plate assembly (7), spacer plate assembly (8), port housing (9) and gasket (10).
 - (d) Remove seal cap (11), seal cup (12), seal spring (13), seal washer (14) and seal (15).
 - (e) Remove shaft assembly (16).
 - (f) Remove end plug (24), gasket (25), sleeve retainer (26), washer (27), O-ring (28) and sleeve (29) from fuel pump body (31).
 - (g) Remove acorn nut (17), gasket (18), end plug (20), gasket (21), spring seat (22) and spring (23) from fuel pump body (31).
 - (h) Remove pressure adjusting screw (19) from end plug assembly (20).
 - (i) Remove plug (30) from fuel pump body (31).
- (2) Assembly.
 - (a) Install plug (30) into fuel pump body (31).
 - (b) Install pressure adjusting screw (19) in end plug assembly (20).
 - (c) Install spring (23), spring seat (22), gasket (21), end plug (20), gasket (18) and acorn nut (17) on fuel pump body (31).
 - (d) Install sleeve (29), O-ring (28), washer (27), sleeve retainer (26), gasket (25) and end plug (24) on fuel pump body (31).
 - (e) Install gasket (10) and port housing (9).
 - (f) Install shaft assembly (16) and then install seal (15), seal washer (14), seal spring (13), seal cup (12) and seal cap (11).
 - (g) Install spacer plate assembly (8) and end plate assembly (7) and secure with five screws (6).
 - (h) Install strainer (4) and anti-hum wafer (5).
 - (i) Install gasket (3) and cover (2) and secure with eight capscrews (1).

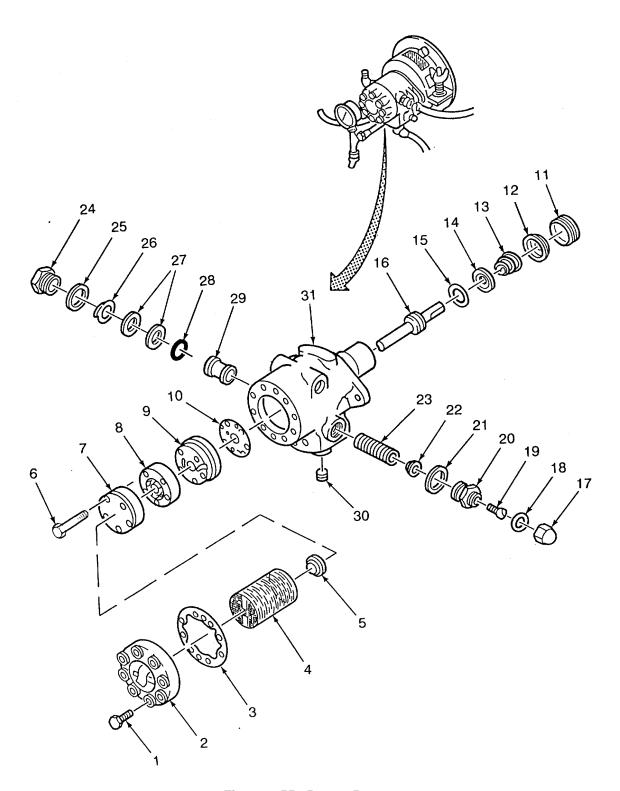


Figure 3-55. Rotary Pump

3-60. SPEED REDUCER.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

<u>Tools</u>
General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 3)

Equipment Condition
Roller Chain removed (Para 3-72)

a. REMOVAL

- (1) Remove four screws (1), lockwashers (2), flat washers (3) and motor (4) from speed reducer (9).
- (2) Remove key (5).
- (3) Remove four screws (6), lockwashers (7) and flat washers (8).
- (4) Remove speed reducer (9).
- (5) Loosen setscrew (10) and remove sprocket (11) and key (12) from speed reducer (9).
- (6) If replacement of bracket (24) is required, remove two nuts (13), lockwashers (14), flat washer (15) and screws (16).
- (7) Support bracket (24) and remove nut (17), flat washers (18), nut (19), flat washers (20) and return nuts (21 and 22) from stud (23).
- (8) Remove bracket (24).

b. REPAIR

Repair consists of replacing damaged and/or missing components of the speed reducer.

c. INSTALLATION

- (1) If removed, position bracket (24) on dryer and install two screws (16), flat washers (15), lockwashers (14) and nuts (13).
- (2) Position stud (23) in bracket (24) and install nuts (21 and 22), flat washers (20), nut (19), flat washers (18) and nut (17).
- (3) Install key (12) and sprocket (11) on speed reducer (9).
- (4) Position speed reducer (9) on bracket (24) and secure with four flat washers (8), lockwashers (7) and screws (6).
- (5) Align sprocket (11) on speed reducer (9) with drive sprocket (25) on trunnion, tapping it in or out on shaft of speed reducer (9), as required.
- (6) When sprockets are aligned, tighten setscrew (10).
- (7) Position key (5) on shaft of motor (4) and install motor on speed reducer (9), securing it with four lockwashers (2), flat washers (3) and screws (1).
- (8) Install roller chain (Para 3-72).

3-60. SPEED REDUCER - continued.

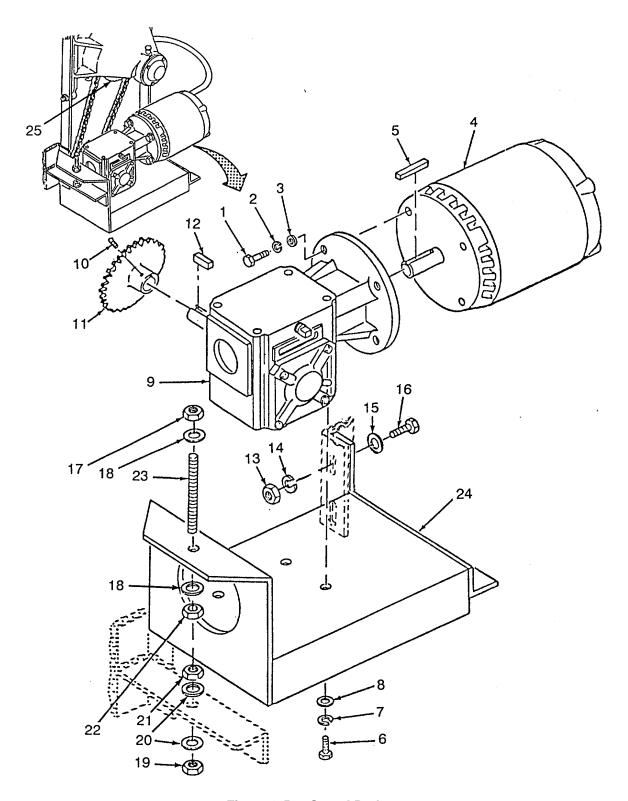


Figure 3-56. Speed Reducer

3-61. STARTER MOTOR.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Shield removed (Para 2-71)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect wires from starter motor (3).
- (2) Remove screws (1), washers (2) and starter motor (3).
- (3) As required, remove screws (4) and heaters (5).

b. INSTALLATION

(1) Position starter motor (3) on dryer base and secure with four screws (1) and lockwashers (2).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

(2) Connect wires as tagged.

NOTE

Hold reset button down while installing heaters.

- (3) As required, install heaters (5) with screws (4).
- (4) Install shield (Para 2-71).

3-61. STARTER MOTOR - continued.

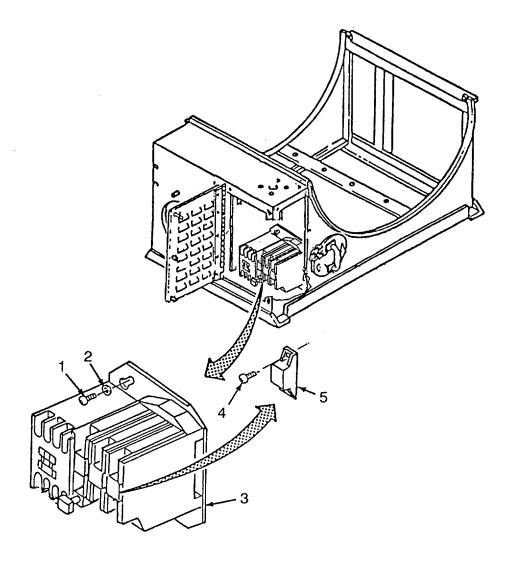


Figure 3-57. Starter Motor

3-62. DRYER PANEL.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3)

Materials/Parts

Grommets (App C, Item 34) Nut, Blind (App C, Item 35) Nut, Blind (App C, Item 36) Nut, Blind (App C, Item 38) **Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10) Shield removed (Para 2-71) Electrical Components removed from panel (Para. 3-63 to 3-70)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Remove four screws (1) and lockwashers (2).
- (2) Remove panel (3).
- (3) Remove grommets (4).
- (4) As required, remove blind nuts (5, 6 and 7) from panel.

b. REPAIR

Repair consists of replacing damaged and/or missing components of the dryer panel.

c. INSTALLATION

- (1) If removed, install blind nuts (5, 6 and 7).
- (2) Install grommets (4).
- (3) Position panel (3) on base of dryer and secure with four screws (1) and lockwashers (2).
- (4) Install electrical components (Paras 3-63 to 3-70).
- (5) Install shield (Para 2-71).

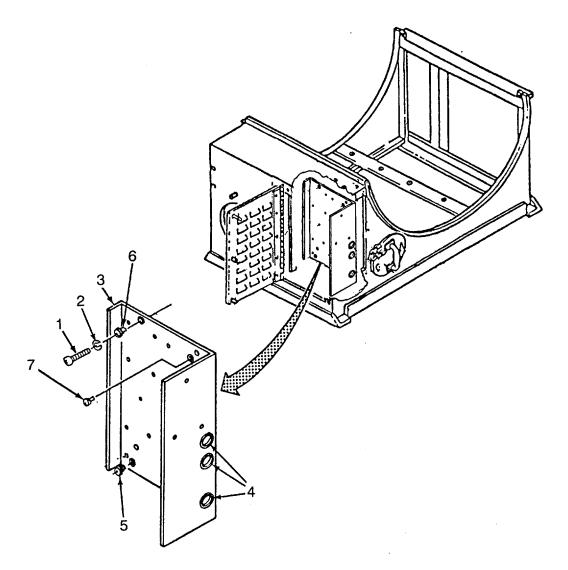


Figure 3-58. Dryer Panel

3-63. ON/OFF SWITCH.

This task covers: a. Removal b. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)

Materials/Parts Tags (App D, Item 4) **Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

CAUTION

Care must be exercised when panel is opened to prevent strain on wiring connected to electrical components on panel. Complete removal of panel is possible only after wires are disconnected.

- (1) Remove six screws (1), lockwashers (2) and open panel (3).
- (2) Tag and disconnect wires from switch assembly (6).
- (3) Remove three screws (4), lockwashers (5) and switch assembly (6).

b. INSTALLATION

(1) Position switch assembly (6) on dryer and secure with three lockwashers (5) and screws (4).

NOTE

- (2) Connect wires as tagged.
- (3) Position panel (3) on unit and secure with six screws (1) and lockwashers (2).

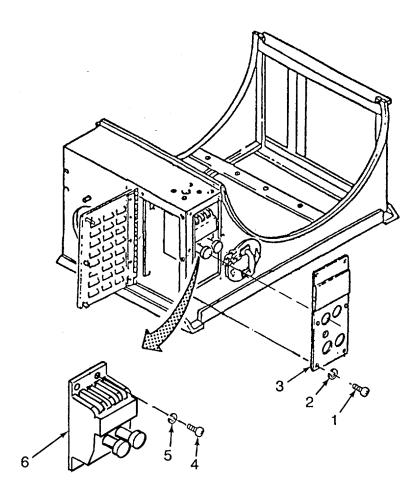


Figure 3-59. ON/OFF Switch

3-64. TIMER.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Material/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10). Shield removed (Para 2-71)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Remove three screws (1) and remove timer (2) from box (10).
- (2) Tag and disconnect wires.
- (3) Remove conduit nuts (3 and 4).
- (4) Remove four nuts (5), lockwashers (6) and screws (7).
- (5) Remove nipple (8), four spacers (9) and box (10).

b. INSTALLATION

- (1) If removed, install box (10) as follows:
 - (a) Position nipple (8), four spacers (9) and box (10) on unit and secure with four nuts (5), lockwashers (6) and screws (7).
 - (b) Install two conduit nuts (3 and 4).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

(2) Connect wires as follows:

Numbered wires	<u>Timer wires</u>
32	Red
35	Green
38	Yellow
31	Brown

3-64. TIMER - continued.

- (3) Secure timer (2) to box (10) with three screws (1).
- (4) Install shield (Para 2-71).

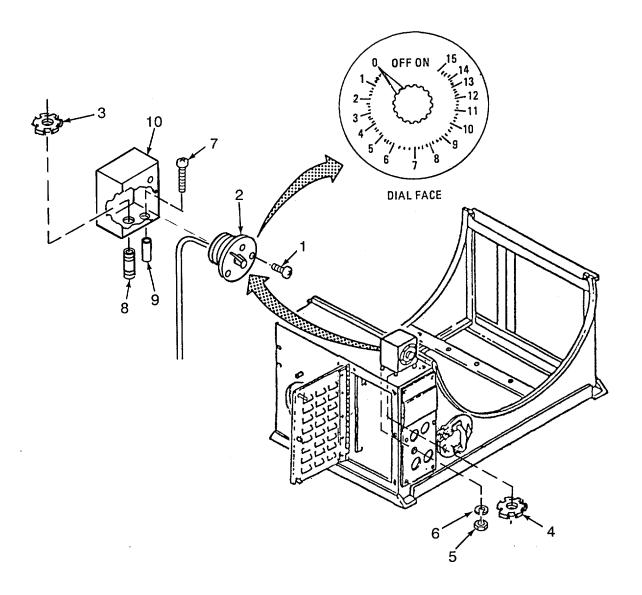


Figure 3-60. Timer

3-65. UV SCANNER AND TERMINAL BOX.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Door open (Para 2-71)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Unscrew captive screw (1) and remove cover (2).
- (2) Unscrew two screws (3) and remove UV scanner (4) from terminal box (8).
- (3) Tag and disconnect all wires from terminal board (9).
- (4) Remove plug-in program board (5). Retain for installation on replacement UV scanner (4).
- (5) Remove four screws (6), lockwashers (7) and terminal box (8).

b. INSTALLATION

(1) Position terminal box (8) on dryer and secure with four screws (6) and lockwashers (7).

NOTE

- (2) Connect wires to terminal board (9) as tagged.
- (3) Position UV scanner (4) in front of terminal box (8) and align screws (3) with mounting holes on box. Tighten screws (3).
- (4) Install plug-in program board (5) on UV scanner (4).
- (5) Position cover (2) on top of UV scanner (4) and secure with captive screw (1).
- (6) Close door (Para 2-71).

3-65. UV SCANNER AND TERMINAL BOX - continued.

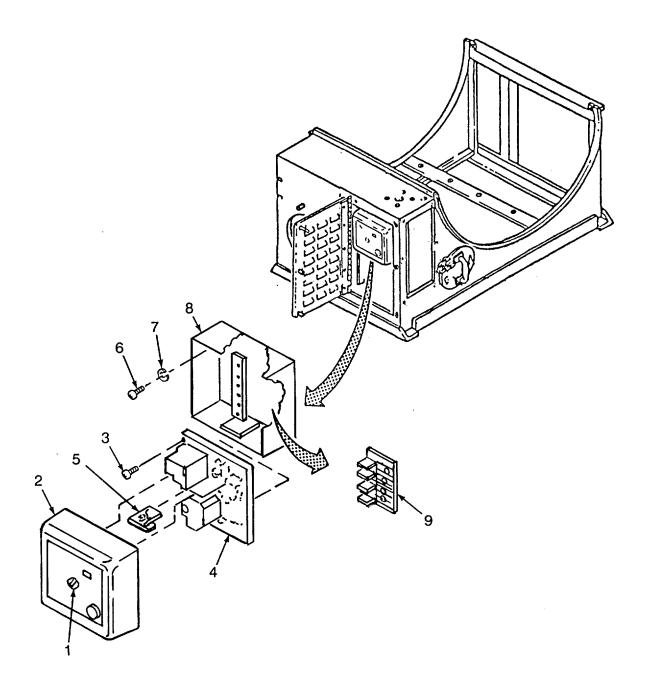


Figure 3-61. UV Scanner and Terminal Box

3-66. FLAME CONTROL.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment Set (App B, Item 3)

Materials/Parts
Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Open control cover (18), unscrew nut (1) and remove cover (2) from base (7) of terminal box.
- (2) Unscrew two captive screws (3) and remove UV scanner (4) for access to base (7).
- (3) Tag two wires (6) connected to contacts S1 and S2 on base (7).
- (4) Loosen two screws (5) and remove tagged wires (6).
- (5) Unscrew nut (8) from box connector (10).
- (6) Remove gasket (9), box connector (10), seal (11), washer (12) and nut (13) from flame control (15).
- (7) Unscrew flame control (15) from burner assembly (16) and remove from dryer.
- (8) As required, remove installation sleeving (14).

b. REPAIR

Repair consists of replacing damaged or missing components of the flame control.

c. INSTALLATION

- (1) Install heat shrink tubing (14) over replacement flame control (15) wires.
- (2) Position nut (13), washer (12), gasket (9), box connector (10) and seal (11) on wire end of flame control (15).
- (3) Feed wires (6) of flame control (15) into control panel (17) and install nut (8).

NOTE

- (4) Connect wires (6) to terminal board of base (7) as tagged, using two screws (5).
- (5) Secure nut (13) to box connector (10) and install UV scanner (4) with two captive screws (3).
- (6) Position cover (2) on scanner (4), tighten nut (1) and close control cover (18).

3-66. FLAME CONTROL- continued.

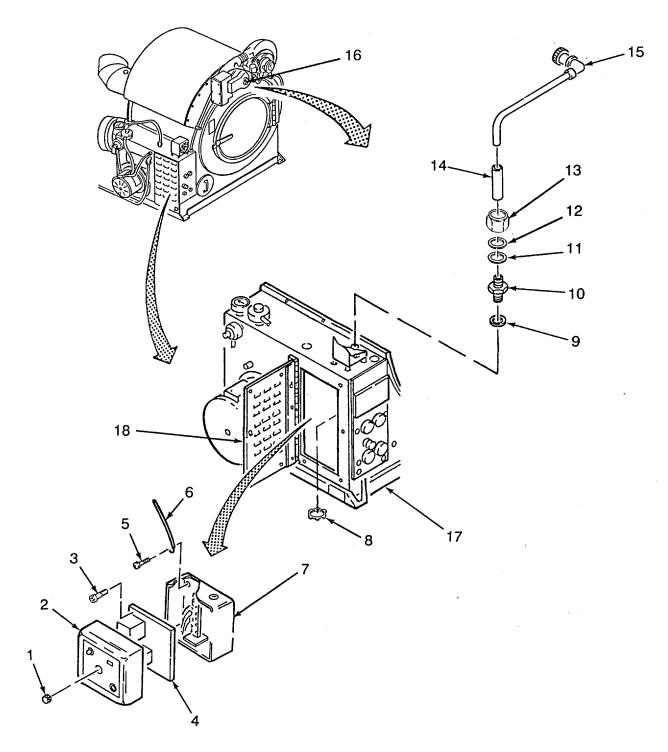


Figure 3-62. Flame Control

3-67. PLUG-IN RELAY.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Door open (Para 2-71)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

NOTE

This procedure covers the replacement of timing relay K4. Relay K3 is replaced in a similar manner.

- (1) Pull out plug-in relay (1).
- (2) If replacement of relay socket (4) is required, proceed as follows:
 - (a) Tag and remove wires from relay socket (4).
 - (b) Remove screws (2), lockwashers (3) and relay socket (4).

b. INSTALLATION

(1) If removed, position relay socket (4) on dryer and secure with screws (2) and lockwashers (3).

NOTE

- (2) Connect wires as tagged.
- (3) Line up pins of relay (1) with holes in relay socket (4) and push in on relay (1) until it is firmly seated.
- (4) Close door (Para 2-71).

3-67. PLUG-IN RELAY- continued.

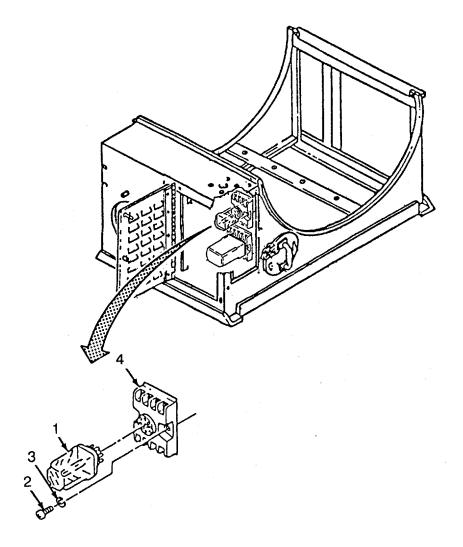


Figure 3-63. Plug-in Relay (K4)

3-155

3-68. TUMBLER MOTOR CONTROL RELAY (K2).

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts
Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Shield removed (Para 2-71)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

- a. REMOVAL
 - (1) Tag and disconnect wires from relay (3).
 - (2) Remove two screws (1), lockwashers (2) and relay (3)
- b. INSTALLATION
 - (1) Position relay (3) on dryer and secure with two screws (1) and lockwashers (2).

NOTE

- (2) Connect wires as tagged.
- (3) Install shield (Para 2-71).

3-68. TUMBLER MOTOR CONTROL RELAY (K2) - continued.

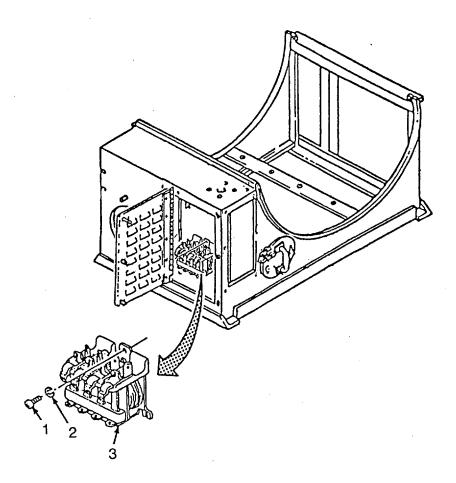


Figure 3-64. Tumbler Motor Control Relay (K2)

3-69. TERMINAL BOARD.

This task covers:

a. Removal

b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Materials/Parts

Tags (App D, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Shield removed (Para 2-71)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tag and disconnect wires from terminal board (3).
- (2) Remove four screws (1), lockwashers (2) and terminal board (3).

b. INSTALLATION

(1) Position terminal board (3) on dryer and secure with four screws (1) and lockwashers (2).

NOTE

- (2) Connect wires as tagged.
- (3) Install shield (Para 2-71).

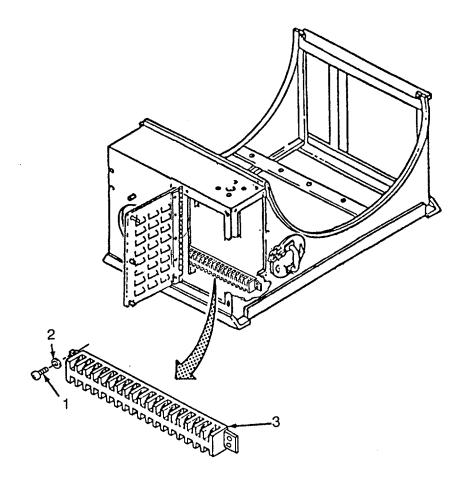


Figure 3-65. Terminal Board

3-70. HOT AIR BLOWER.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)
Automotive Vehicle Shop Equipment
(App B, Item 3)

Materials /Parts
Tags (App D, Item 4)
Sealing Washer (App C, Item 64)

<u>Equipment Condition</u> Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Remove two screws (1) and cover (2).
- (2) Remove wire nut (3) from wires (4).
- (3) Tag and disconnect wires from motor (23).
- (4) Remove locknut (5) and remove elbow (6) and sealing washer (7) from motor (23).
- (5) Remove two locknuts (8) and remove sealing washers (9) and adapters (10) from motor (23).
- (6) Remove four screws (11), lockwashers (12) and cover (13) with attached parts from dryer base.
- (7) Remove cotter pin (14), nut (15), lockwasher (16), spacer (17) and exhaust blower (18) from shaft of motor (23).
- (8) Remove key (19) from shaft of motor (23).
- (9) Remove four nuts (20), lockwashers (21), screws (22) and cover (13) from motor (23).

b. REPAIR

Repair consists of replacing damaged and/or missing components of the hot air blower.

c. INSTALLATION

- (1) Position motor (23) on cover (13) and secure with four screws (22), lockwashers (21) and nuts (20).
- (2) Position key (19) on shaft of motor (23) and install exhaust blower (18), spacer (17), lockwasher (16), nut (15) and cotter pin (14).
- (3) Position cover (13) on base of dryer and install four screws (11) and lockwashers (12).

3-70. HOT AIR BLOWER - continued.

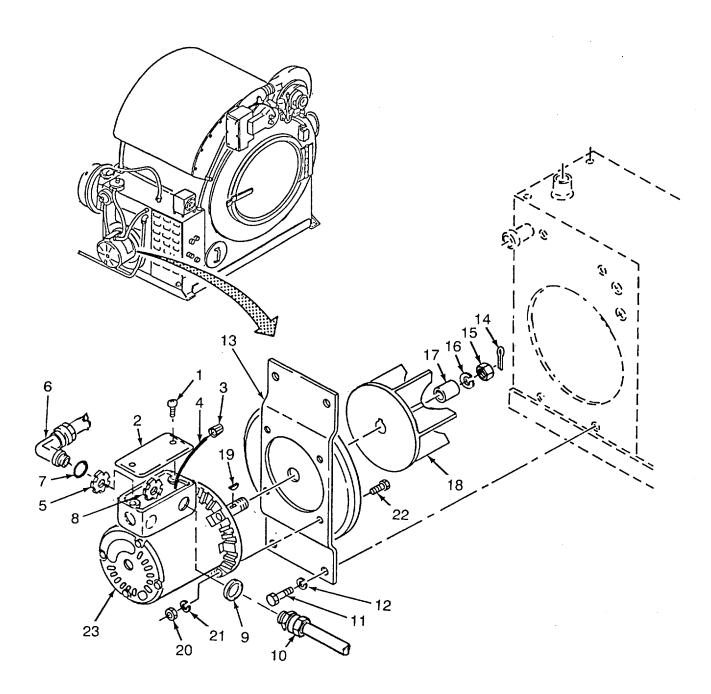


Figure 3-66. Hot Air Blower

3-70. HOT AIR BLOWER - continued.

- (4) Install two adapters (10) and sealing washers (9) on motor and secure with locknuts (8).
- (5) Install elbow (6) and sealing washer (7) on motor (23) with locknut (5).

NOTE

- (6) Connect wires as tagged.
- (7) Install wire nut (3).
- (8) Install cover (2) with two screws (1).

3-71. TRUNNION.

This task covers:

a. Removal

b. Repair

c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3)

Materials /Parts

Safety Wire, .0625 Dia. (App D, Item 21)

Personnel Required

Two

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Roller Chain removed (Para 3-72)

General Safety Instructions

WARNING

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer, while performing this task could cause injury.

a. REMOVAL

- (1) Remove three screws (1), lockwashers (2) and cover (3).
- (2) Cut safety wire (5) and remove two screws (4), flat washers (6) and retaining plate (7).
- (3) Remove four screws (8), lockwashers (9) and flat washers (10).
- (4) Loosen setscrew (13) on sprocket (14) and remove trunnion assembly (11) from tumbler shaft (15).
- (5) Remove key (12) from tumbler shaft (15).

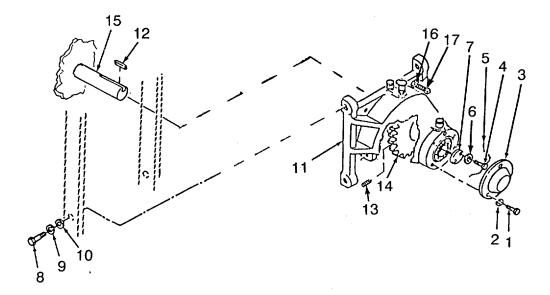


Figure 3-67. Trulnnion

3-71. TRUNNION -continued.

b. REPAIR (Figure 3-68)

- (1) Disassembly
 - (a) Open retaining rings (18) and slide onto spacer (23).
 - (b) Loosen two setscrews (19).
 - (c) Apply pressure between sprocket (21) and spacer (23) to remove bearing (20).
 - (d) Remove sprocket (21), collar (22), spacer (23) and two retaining rings (18) from housing (31).
 - (e) Remove seal (24) and bearing (25).
 - (f) Remove grease caps (26 and 27) and oil cap (28).
- (2) Assembly
 - (a) Press bearing (25) in housing (31).
 - (b) Install seal (24).
 - (c) Measure distance between retaining ring grooves (17) and ends of spacer (23) on both sides as illustrated.

NOTE

Position spacer in housing with smallest distance away from the sprocket.

- (d) Position retaining rings on spacer (23) but not in grooves (17).
- (e) Position sprocket (21), spacer (23) and collar (22) in housing (31).
- (f) Install bearing (20).
- (g) Position retaining rings (18) in grooves (17).
- (h) Tighten two setscrews (19).
- (i) Install oil cap (28) and two grease caps (26 and 27).

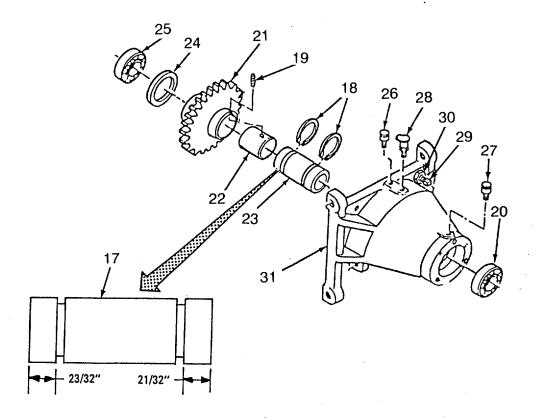


Figure 3-68. Trunnion Repair 3-165

3-71. TRUNNION - continued.

c. INSTALLATION (Figure 3-67)

- (1) Position key (12) on tumbler shaft (15).
- (2) With one person holding the dryer drum from inside of dryer and aligning shaft (15) with trunnion assembly (11), slide trunnion assembly (11) over shaft (15).
- (3) Install four screws (8), lockwashers (9) and flat washers (10).
- (4) Position plate (7) on end of shaft (15) and install two screws (4) and flat washers (6).

NOTE Use 4" of safety wire.

- (5) Install safety wire (5) on screws (4).
- (6) Tighten setscrew (13) on sprocket (14).
- (7) Position cover (3) on trunnion assembly (11) and install three lockwashers (2) and screws (1).
- (8) From inside of dryer, spin dryer barrel in any direction and note if dryer drum turns freely. If drum turns freely, go to step (10).
- (9) If dryer drum does not turn freely, turn nuts (16) toward head of screw (17) about one inch and turn screws in or out on dryer until drum turns freely.
- (10) When drum turns freely, tighten nuts (16) against outer surfaces of dryer housing.
- (11) Install chain (Para 3-72).

3-72. ROLLER CHAIN.

This task covers: a. Removal b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.

a. REMOVAL

- (1) Remove three screws (1), lockwashers (2) and chain guard (3).
- (2) Loosen two nuts (4).
- (3) Loosen nut (8) and tighten nut (5) until chain (6) is loose on sprockets.
- (4) Turn hub to expose master link (7). Remove master link (7).
- (5) Remove chain (6).

b. INSTALLATION

- (1) Position chain (6) on sprockets and install master link (7) as illustrated.
- (2) Loosen nut (5) and tighten nut (8) until chain is tight.
- (3) Do roller chain adjustment procedure (Para 2-57).
- (4) Tighten two nuts (4).
- (5) Install three screws (1), lockwashers (2) and chain guard (3).

3-72. ROLLER CHAIN - continued.

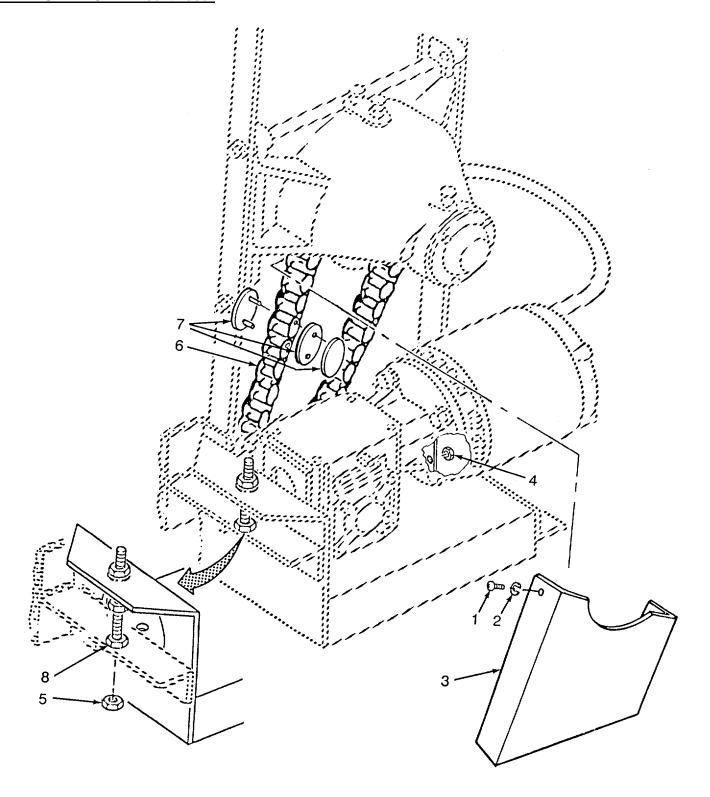


Figure 3-69. Roller Chain

3-73. **HEATER**.

This task covers: a. Removal b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Heat Exchanger Installation Kit (App B, Item 5)

Materials /Parts

Rope Gasket (App C, Item 48) Rope Gasket (App C, Item 49)

Rope Gasket (App C, Item 52)

Rope Gasket (App C, Item 53)

Rope Gasket (App C, Item 54)

Rope Gasket (App C, Item 55)

Personnel Required

Four

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Beams and baskets removed (Para 2-13 to 2-17)

Screen removed (Para 3-75)

Blower and burner assembly removed (Para 3-70)

General Safety Instructions

WARNING

Heater assembly may be hot if dryer was running. To prevent burns allow sufficient time for heater to cool before replacement.

a. REMOVAL

- (1) Remove twenty screws (1), lockwashers (2) and rear cover (3).
- (2) Remove nineteen screws (4), lockwashers (5) and front cover (6).
- (3) Remove six screws (7), lockwashers (8) and ground strap (21).
- (4) Remove four screws (9), lockwashers (10), flat washers (11) and plate (12).
- (5) Remove two nuts (13), screws (14) and lockwashers (15).
- (6) Remove two screws (16), lockwashers (17) and flat washers (18).

WARNING

Heater assembly is heavy and requires four people to remove. Attempts to lift alone may cause injury.

- (7) Remove cover (19) from rear of dryer.
- (8) Remove heater assembly (20) from top of dryer.

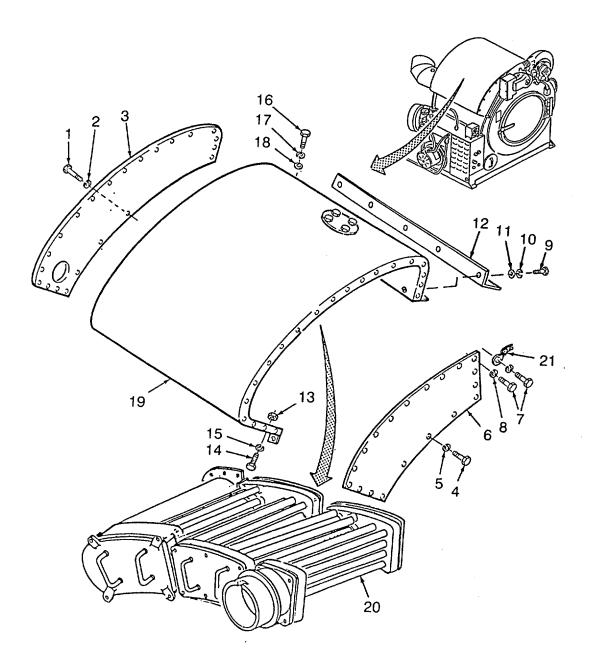


Figure 3-70. Heater 3-170

3-73. HEATER - continued.

b. REPAIR

- (1) Disassembly
 - (a) Remove four screws (1), lockwashers (2) and cover (3).
 - (b) Remove 3/8" rope gasket (4) and adapter (5) from pipe assembly (6).
 - (c) Remove six screws (7), lockwashers (8), cover (9) and 3/8" rope gasket (10) from pipe assembly (6).
 - (d) Separate pipe assembly (6) from pipe assembly (11).
 - (e) Remove six screws (12), lockwashers (13), cover (14) and 3/8" rope gasket (15) from pipe assembly (11).
 - (f) Separate pipe assembly (11) from pipe assembly (16) and remove screws (17), lockwashers (18), cover (19) and 3/8" rope gasket (20).
 - (g) Separate pipe assembly (16) from pipe assembly (25).
 - (h) Remove four nuts (21) and lockwashers (22), cover (23) and 1/4" rope gasket (24) from pipe assembly (25).
 - (i) Remove mounting assembly (26) from pipe assembly (25) and remove 1/4" rope gasket (27) from mounting assembly (26).
- (2) Assembly

NOTE

Ensure rope gasket makes a complete seal.

(a) Install 1/4" rope gasket (27) into mounting assembly (26) and install mounting assembly (26) onto pipe assembly (25).

NOTE

Ensure rope gasket makes a complete seal.

- (b) Install cover (23) and 1/4" rope gasket (24) on pipe assembly (25) with four lockwashers (22) and nuts (21).
- (c) Position the pipes on pipe assembly (25) on pipe assembly (16) using the heat exchanger installation kit.

NOTE

Ensure rope gasket makes a complete seal around the outside edge of the pipe assembly.

- (d) Install 3/8" rope gasket (20) and cover (19) with six lockwashers (18) and screws (17).
- (e) Position the pipes on pipe assembly (16) on pipe assembly (11) using the heat exchanger installation kit

NOTE

Ensure rope gasket makes a complete seal around the outside edge of the pipe assembly.

- (f) Install 3/8" rope gasket (15) and cover (14) with six lockwashers (13) and screws (12).
- (g) Position the pipes on pipe assembly (11) on pipe assembly (6) using the heat exchanger installation kit.

NOTE Ensure rope gasket makes a complete seal around the outside edge of the pipe assembly.

(h) Install 3/8" rope gasket (10) and cover (9) with six lockwashers (8) and screws (7).

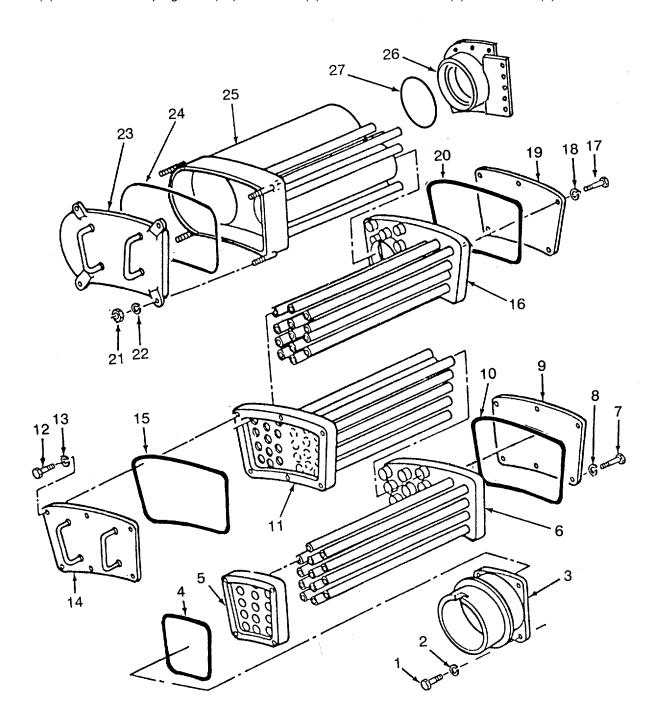


Figure 3-71. Heater Repair

3-73. HEATER - continued.

(i) Position the pipes on pipe assembly (6) on box (5) using the heat exchanger installation kit.

NOTE

Ensure rope gasket makes a complete seal around the outside edge of the pipe assembly.

(j) Install 3/8" rope gasket (4) and cover (3) on pipe assembly (6) with four screws (1) and lockwashers (2).

c. INSTALLATION (Figure 3-70)

WARNING

Heater assembly is heavy and requires four people to lift. Attempts to lift alone may cause injury.

- (1) Position heater assembly (20) on top of dryer.
- (2) Position cover (19) on top of heater (20).
- (3) Secure cover (19) to dryer with two flat washers (18), lockwashers (17) and screws (16) and two lockwashers (15), screws (14) and nuts (13).
- (4) Install plate (12) and secure with four screws (9), lockwashers (10) and flat washers (11).
- (5) Install six screws (7) and lockwashers (8) making sure ground strap (21) is also secured on front cover (6).
- (6) Position front cover (6) on cover (19) and secure with nineteen lockwashers (5) and screws (4).
- (7) Position rear cover (3) on cover (19) and secure with twenty lockwashers (2) and screws (1).
- (8) Install blower and burner assembly (Para 3-70).
- (9) Install screen (Para 3-75).
- (10) Install beams and baskets (Para 2-13 to 2-17).

3-74. HEATER BASE

This task covers: a. Removal b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Heater Assembly removed (Para 3-73) **General Safety Instructions**

WARNING

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.

a. REMOVAL

- (1) Remove four screws (1), lockwashers (2) and flat washers (3).
- (2) Remove four screws (4), lockwashers (5) and flat washers (6).
- (3) Remove base (7) from cylinder assembly (8).

b. INSTALLATION

- (1) Position base (7) on cylinder assembly (8).
- (2) Install four flat washers (6), lockwashers (5) and screws (4).
- (3) Install four flat washers (3), lockwashers (2) and screws (1).
- (4) Install heater assembly (3-73).

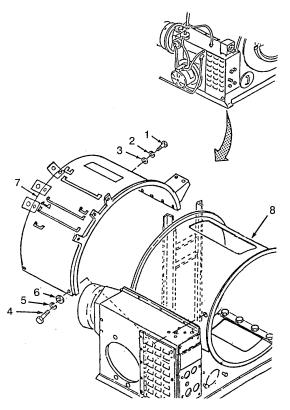


Figure 3-72. Heater Base

3-75. HEATER SCREEN.

This task covers: a. Removal b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer, while performing this task could cause injury.

a. REMOVAL

- (1) Remove four screws (1) and lockwashers (2).
- (2) Remove screen (3) from heater assembly (4).

b. INSTALLATION

- (1) Position screen (3) on heater assembly (4).
- (2) Install four screws (1) and lockwashers (2).

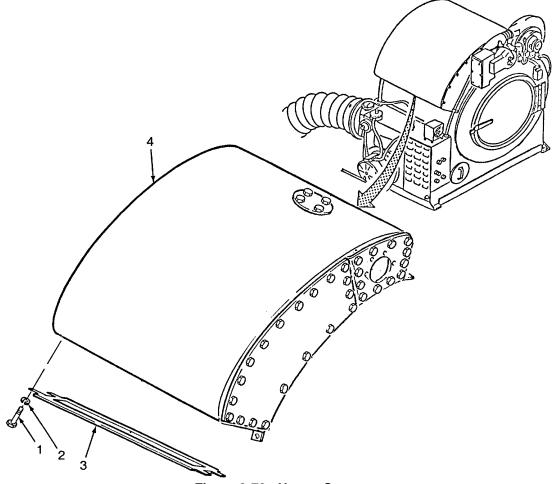


Figure 3-73. Heater Screen

3-76. TUMBLER BARREL.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Trailer Mounted Welding Shop (App B, Item 8)

Materials /Parts

Safety Wire, .0625 Dia (App D, Item 21)

Personnel Required

Four

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10) Platform Anchor removed (Para 2-20)

General Safety Instructions

WARNING

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer, while performing this task could cause injury.

a. REMOVAL

NOTE

Clamp may be one or two pieces.

- (1) Remove two nuts (1), lockwashers (2), screws (3), clamp(s) (4) and front cover plate (5).
- (2) Remove three screws (6), lockwashers (7) and cover plate (8).
- (3) Cut safety wire on screws (9) and remove two screws (9), flat washers (10) and retaining plate (11).
- (4) Loosen setscrew (12) on sprocket (17) of trunnion assembly (18).

WARNING

Tumbler barrel is heavy/difficult to handle. To prevent injury, use two people to lift.

- (5) Remove tumbler barrel (13) from dryer cylinder (16).
- (6) Remove key (14) from shaft (15).

3-76. TUMBLER BARREL - continued.

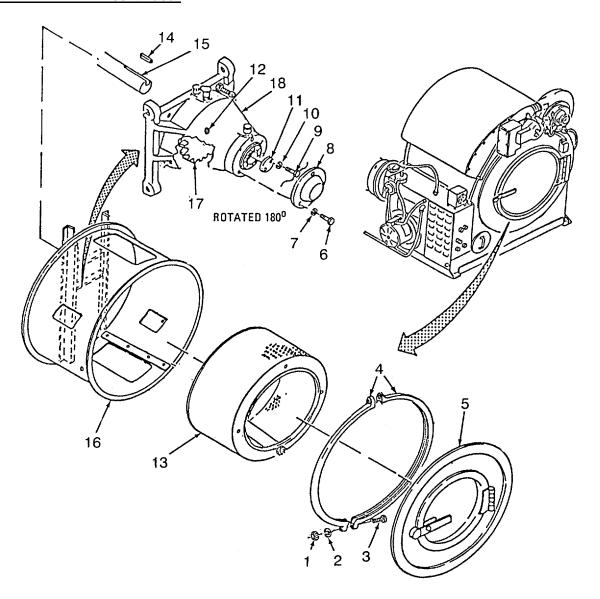


Figure 3-74. Tumbler Barrel

3-76 TUMBLER BARREL - continued.

b. REPAIR

- (1) Disassembly
 - (a) Remove four nuts (1) and lockwashers (2).
 - (b) Remove four rods (3), lockwashers (4) and ribs (5).
 - (c) Remove four nuts (6), lockwashers (7) and screws (8).
 - (d) Remove spider (9) from barrel (10).

WARNING

Chemical Agent Resistant Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied. Death can result.

Repair consists of tumbler barrel components being straightened and/or welded. Refer to TM 9-237, Welding Theory and Application.

(2) Assembly

- (a) Position spider (9) on barrel (10) and install four screws (8), lockwashers (7) and nuts (6).
- (b) Install four ribs (5), rods (3) and lockwashers (4) in barrel (10).
- (c) Install four lockwashers (2) and four nuts (1).

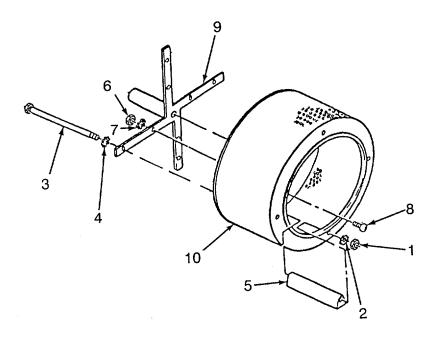


Figure 3-75. Tumbler Barrel Repair

3-76. TUMBLER BARREL - continued.

c. INSTALLATION (Figure 3-74)

(1) Position key (14) in trunnion assembly (18).

WARNING

Tumbler barrel is heavy/difficult to handle. To prevent injury, use two people to lift.

- (2) Position tumbler barrel (13) in cylinder (16), making sure that shaft (15) of tumbler spider slides into the sprocket (17) of trunnion assembly (18).
- (3) Install retaining plate (11) with two flat washers (10) and screws (9) on shaft (15) of spider.
- (4) Secure screws (9) with safety wire.
- (5) Position cover plate (8) on trunnion assembly (18) and secure with three lockwashers (7) and screws (6).

NOTE

Clamp ring may be one or two pieces.

- (6) Position front cover plate (5) on cylinder (16) and install clamp(s) (4), screw (3), lockwasher (2) and nut (1) to secure cover to cylinder.
- (7) Install platform anchor (Para 2-20).

3-77. CYLINDER.

This task covers: a. Removal b. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1)

Personnel Required

Two

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Tumbler Barrel removed (Para 3-76)

Heater Assembly removed (Para 3-73)

Heater Base removed (Para 3-74)

General Safety Instructions

WARNING

Dryer cylinder is heavy and requires two people to lift.

a. REMOVAL

- (1) Remove three screws (1) and lockwashers (2).
- (2) Remove fourteen nuts (3), lockwashers (4), screws (5) and flat washers (6).
- (3) Remove four screws (7), flat washers (8), lockwashers (9) and plate (10).
- (4) Remove dryer cylinder (11) from dryer base (12).

b. INSTALLATION

- (1) Position cylinder (11) on base of dryer (12).
- (2) Position plate (10) on inside of cylinder (11) and install four lockwashers (9), flat washers (8) and screws (7).
- (3) Install fourteen flat washers (6), screws (5), lockwashers (4) and nuts (3).
- (4) Install three screws (1) and lockwashers (2).
- (5) Install tumbler barrel (Para 3-76).
- (6) Install heater base (Para 3-74).
- (7) Install heater assembly (Para 3-73).

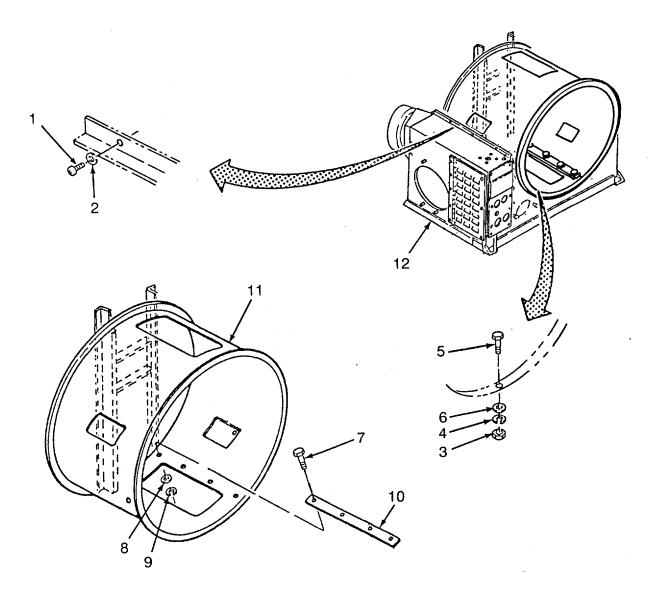


Figure 3-76. Cylinder

3-78. DRYER CONDUITS.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment, (App B, Item 3)

Material/Parts

Tags (App D, Item 4)

Equipment Condition

Dryer shut down (TM 10-3510-222-10)

General Safety Instructions

WARNING

Voltage in this equipment is high enough to cause serious injury or death. Do not perform this task with power on.

a. REMOVAL

- (1) Tumbler Motor Base Control Box Conduit.
 - (a) Tag and disconnect wires (wire #19, #20 and #21) at relay (10).
 - (b) Remove nut (1).
 - (c) Pull adapter (2) with attached parts from electrical enclosure.
 - (d) Remove gasket (3) from adapter (2).
 - (e) Loosen two screws (4) from tumbler motor (9) and remove cover (5).
 - (f) Tag and disconnect wires from tumbler motor (9).

NOTE

Disconnecting wires, combining only motor wires (T4, T5 and T6) is not necessary to replace conduit.

- (g) Remove locknut (6) and pull adapter (7) with attached parts away from tumbler motor (9).
- (h) Remove gasket (8).

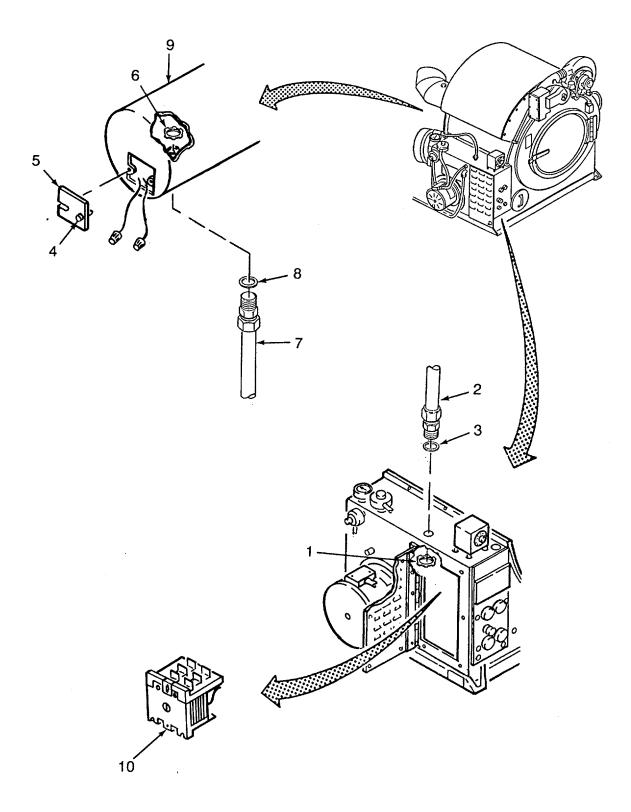


Figure 3-77. Tumbler Motor - Base Control Box Conduit

3-78. DRYER CONDUITS - continued.

- (2) Transformer Box Control Box Conduit.
 - (a) Tag wires (2) connected to terminals 3 and 4 at scanner terminal box (3), loosen screws (1) and remove wires (2).
 - (b) Tag wires (5) connected to terminals T1, T2 and T3 at motor starter (6). Remove screws (4) and remove wires (5).
 - (c) Tag wires (8) connected to terminals NR (wire #40), CG (wire #30) and TR3 (wire #29) at terminal board (9). Remove screws (7) and disconnect wires (8).
 - (d) Remove nut (10) and pull adapter (11) with attached parts out of control box (14).
 - (e) As required, remove gasket (12) from adapter (11).
 - (f) Remove conduit (13) from transformer box (Para 2-56).

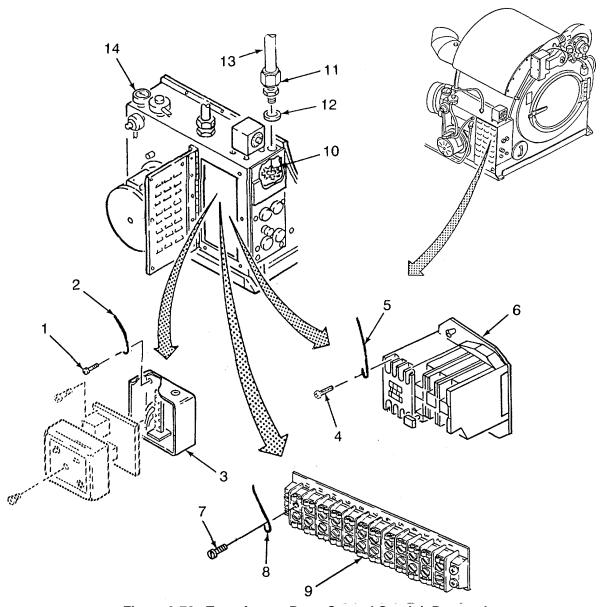


Figure 3-78. Transformer Box - Control Conduit Removal

3-78. DRYER CONDUITS - continued.

b. REPAIR

Repair consists of replacing damaged and/or missing components of the dryer conduits.

c. INSTALLATION

- (1) Tumbler Motor Base Control Box Conduit. (Figure 3-78)
 - (a) Position gasket (3) on adapter (2).
 - (b) Feed wires into control panel and install nut (1).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (c) Connect wires to relay (10) as tagged.
- (d) Position gasket (8) on adapter (7), feed wires into tumbler motor (9) and install locknut (6).
- (e) Connect wires to tumbler motor (9) as tagged.
- (f) Install cover (5) and secure with two screws (4).
- (2) Transformer Box Control Box Conduit.
 - (a) Install conduit (13) to the transformer box (Para 2-56).
 - (b) Position gasket (12) on adapter (11), feed wires through conduit (13) into control box (14).
 - (c) Install nut (10).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (d) Connect wires (8) to terminal board (9) as tagged and secure with screws (7).
- (e) Connect wires (5) to motor starter (6) as tagged and secure with screws (4).
- (f) Connect wires (2) to terminal box (3) as tagged and secure with screws (1).

3-78. DRYER CONDUITS - continued.

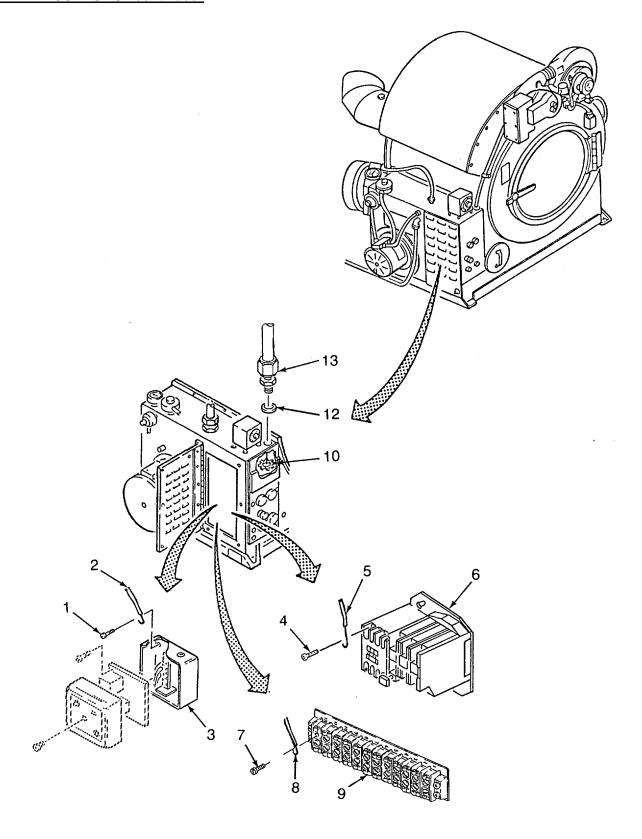


Figure 3-79. Transformer Box - Control Conduit Installation

3-79. DRYER BASE.

This task covers: a. Removal b. Repair c. Installation

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B,

Item 3)

Installation Fastener Tool (App B, Item 9)

Materials /Parts

Adhesive (App D, Item 23)

Rivet, Blind (App C, Item 39)

Rivet, Blind (App C, Item 14)

Screw, Captive (App C. Item 40)

Rivet, Solid (App C, Item 43)

Nut, Blind (App C, Item 44)

Nut, Blind (App C, Item 45)

Nut, Blind (App C, Item 46)

Nut Blind (App C, Item 47)

Equipment Condition

Dryer Cylinder removed (Para 3-77)
Cover (ON/OFF Switch) removed (Para 3-63)
Electrical components removed (Paras 3-63 thru 3-70)

a. REMOVAL

- (1) Remove five rivets (1).
- (2) Support control box cover (2) and loosen three captive screws (12) from base (17).
- (3) As required, remove five rivets (3) and separate hinge (4) from base (17).
- (4) Remove rivet (5).
- (5) Remove door (9) and gasket (6). As required, remove rivet (7) and chain (8) from door (9).
- (6) Remove two solid rivets (10).
- (7) As required, remove insulation sheet (11).
- (8) As required, remove three captive screws (12) from control box cover (2). Discard captive screws (12).
- (9) As required, remove blind nuts (13, 14, 15 and 16).
- (10) Remove eleven nuts (18), sixteen lockwashers (19), flat washers (20) and screws (21).
- (11) Remove base (17).

b. REPAIR

Repair consists of replacing damaged and/or missing components of the dryer base.

c. INSTALLATION

- (1) Install base (17), secure with eleven nuts (18), sixteen lockwashers (19), flat washers (20) and screws (21).
- (2) If removed, install blind nuts (13,14,15 and 16) on base (17).

3-79. DRYER BASE-continued.

- (3) Apply adhesive to insulation sheet (11) and install on the side of base (17) behind the dryer control panel.
- (4) Install two solid rivets (10).
- (5) Install chain (8) on door (9) with rivet (7).
- (6) Install gasket (6) and cover (2) on base (17).
- (7) Position chain (8) on base (17) and install rivet (5).
- (8) Install hinge (4) on cover (2) with five rivets (1).
- (9) If required, install captive screws (12) onto control box cover (2) using Installation Fastener Tool.
- (10) Place control box cover (2) on base (17) and secure with three captive screws (12).
- (11) Install hinge (4) on base (17) using five rivets (3).
- (12) Install electrical components (Paras 3-63 thru 3-70).
- (13) Install panel (Para 3-63).
- (14) Install dryer cylinder (Para 3-77).

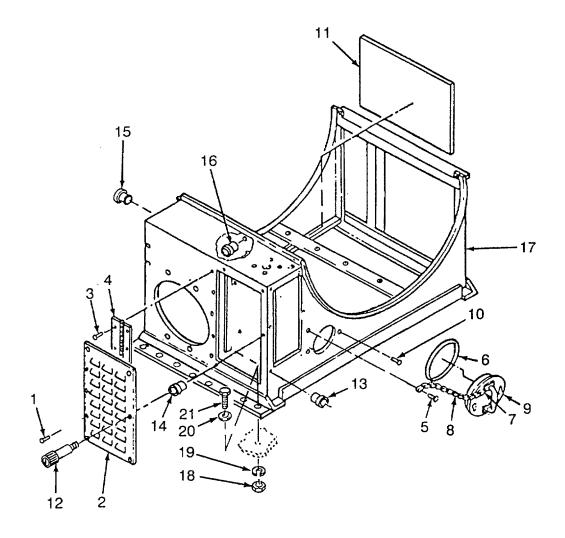


Figure 3-80. Dryer Base

3-80. DRYER BIN.

This task covers: Repair

INITIAL SETUP

Tools

Trailer Mounted Welding Shop (App B, Item 8)

General Safety Instructions

WARNING

Chemical Agent Resistant Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied. Death can result.

REPAIR

(1) Repair consists of dryer bin (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.

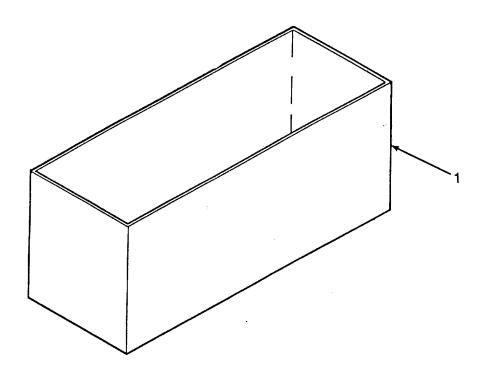


Figure 3-81. Dryer Bin

CHAPTER 4

GENERAL SUPPORT MAINTENANCE

PARAGRAPH	TITLE	PAG	GΕ
Section I.	Lubrication Instructions	4-2	
4-1.	Lubrication Orders	4-2	
Section II.	Repair Parts, Tools, Special Tools; Test, Measurement, and Diagnostic Equipment (TMDE); and Support Equipment		
4-2.	Common Tools and Equipment		
4-3.	Special Tools, TMDE, and Support Equipment	4-2	
4-4.	Repair Parts		
Section III.	General Maintenance Procedures	4-3	
4-5.	General		
4-6.	AC Motor	4-5	
4-7.	AC Motor and Conduit Box	4-8	
Section IV.	Preparation for Storage or Shipment	4-10	
4-8.	Administrative Storage		
4-9.	Shipment		

Section I. LUBRICATION INSTRUCTIONS

4-1. LUBRICATION ORDERS.

- a. <u>Laundry Unit</u>. Refer to LO-10-3510-222-12 for lubrication order.
- b. Generator. Refer to LO 5-6115-585-12 for lubrication order.
- c. Trailer. Refer to TM 9-2330-376-14&P for lubrication order.
- d. Water Heater. Refer to TM 10-4520-259-13&P for lubrication order.

Section II. REPAIR PARTS, TOOLS, SPECIAL TOOLS; TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE); AND SUPPORT EQUIPMENT

4-2. COMMON TOOLS AND EQUIPMENT.

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE), CTA 50-970 or CTA 8-100, applicable to your unit.

The tool kit SC 5180-90-CL-N26, General Mechanics Tool Kit is assigned to the mechanic by MOS.

4-3. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.

Refer to Appendix B, Maintenance Allocation Chart, TMDE, and Support Equipment and TM 10-3510-222-24P, Repair Parts and Special Tools List.

4-4. REPAIR PARTS.

Repair parts are listed and illustrated in the repair parts and special tools list TM 10-3510-222-24P covering repair parts for this equipment. Appendix C lists the Mandatory Replacement Parts which need to be replaced during maintenance.

Section III. GENERAL MAINTENANCE PROCEDURES

4-5. GENERAL.

The procedures in this section have been arranged in order in which the items appear in the General Support (H) Maintenance level column on the Maintenance Allocation Chart (MAC) which is provided in Appendix B. Step by step procedures have been provided for all actions authorized to be performed by Unit, Direct Support Maintenance in Chapters 2 and 3, and General Support in Chapter 4.

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury to personnel may result.

a. Wiring

- (1) General. Preferred repair methods consist of replacing wires, terminals, connectors, etc., rather than splicing wires, bending ends to form terminals, and other makeshift procedures, although the latter may be appropriate for emergency field repairs. Determine the proper size and length of wire, or the terminal, or connector to be used for replacement by referring to Appendix F. Cable Diagrams, Wire Run List, and Control Circuits.
- (2) Soldering Connections. Wire connections must be made mechanically sound before they are soldered. Solder alone does not provide sufficient strength to prevent breakage. Joining surfaces of connections to be soldered must be clean and bright. If a separate flux is used, it should be rosin base flux and should be brushed onto the joint before soldering. If a flux-core solder is used, it should be a rosin core electrical solder. If uncored solder is used, it should be a lead-tin solder. Wires should always be heated to the point at which the solder will melt completely and flow into all parts of the joint. Excessive build up of solder "gobs" on the joint should be avoided or removed.
- (3) Insulating Joints. The preferred method of insulating electrical joints is by the use of heat-shrink tubing. To apply, cut a piece of heat-shrink tubing of suitable diameter to a one-inch length for covering joints at terminals or connectors, or to a length about 1/2 inch (1.3 cm) longer than the joint to be insulated, and slide the tubing over the wire before making the joint. After the joint is made, slide the tubing so that it covers the joint, and shrink in place with moderate heat.
- (4) Splicing Wires. To repair broken or cut wires that are otherwise sound, the mating ends can be stripped and spliced. A commercial butt splice can be crimped onto the ends to join them, or a "Western Union" wire splice can be made. The latter is made by stripping 1/4-1/2 inch (6.5-12.7 mm) of insulation from the wire ends, holding the ends parallel and facing opposite directions, then twisting each end around the other wire at least three turns. Solder and apply insulation as described above.
- (5) Crimping Terminals. To install a terminal on the end of a wire, strip 1/4 1/2 inch (6.5 12.7 mm) of insulation from the end of the wire, apply a one-inch piece of heat-shrinking tubing (if the terminals are of the uninsulated type) and insert wire end into the shank of the terminal. Crimp the shank, and install heat-shrink tubing, if necessary.

4-5. GENERAL - continued.

- b. <u>Cleaning and Inspection of Antifriction Bearings</u>. Refer to TM 9-214, Inspection, Care, and Maintenance of Antifriction Bearings.
- c. <u>Cleaning and Inspection of Mechanical Parts</u>.

WARNING

Drycleaning solvent is flammable and toxic to eyes, skin, and respiratory tract. Skin/eye protection is required. Avoid repeated/prolonged contact. Use only in well-ventilated areas. Keep away from open flames or other' sources of ignition.

Compressed air used for cleaning purposes will not exceed 30 psi (kPa). Use only with effective personal-protective equipment.

- (1) Clean metal parts in drycleaning solvent. Thoroughly dry the parts with compressed air, observing all safety precautions.
- (2) Fibrous or rubber parts can generally be cleaned with warm, soapy water and dried with compressed air.
- (3) Inspect metal parts for cracks, breaks, bends, worn edges, and rough bearing surfaces. Damage that alters the part or its function is cause for replacement of that part.

d. General Repair

- (1) Repair the Laundry Unit to normal operating condition by replacing or repairing a defective component and/or by needed adjustments.
- (2) Cleaning and lubrication is sometimes all that is needed to return an item to operating condition.
- (3) Remove and replace only those items necessary to make repairs. After replacing the defective components, ensure that the Laundry Unit operates correctly.
- (4) To paint metal, sand bear metal areas with sandpaper and refinish with primer (Appendix D, Item 6) and olive drab paint (Appendix D, Item 7). Refer to TM 43-0139 for proper painting instructions. Allow paint to dry between coats.

4-6. AC MOTOR.

This task covers: Repair

INITIAL SETUP

Tools

General Mechanics Tool Kit (App B, Item 1) Automotive Vehicle Shop Equipment (App B, Item 3) Reference
Repair of Electric Motors and Generators
(TM 5-764)
Equipment Condition
Motor and Plate removed (Para 2-30)

Materials/Parts

Tags (App D, Item 4) Gasket (App C, Item 79)

REPAIR

(1) **DISASSEMBLY**

- (a) Remove three screws (1) from cover (2).
- (b) Remove cover (2) from endplate (3).

CAUTION

Fan is made of plastic and may break. Be careful when handling.

- (c) Remove nut (4), bolt (5) and fan (6).
- (d) Remove four nuts (7), bolts (8) from endplate (3) and stator band (9).
- (e) Remove endplate (3) from stator band (9).
- (f) Remove fitting (10) from endplate (3).
- (g) Remove spring (11) from rotor (12).
- (h) Remove bearing (13) from rotor (12).
- (i) Remove rotor (12) from stator band (9).
- (j) Remove bearing (14).
- (k) Remove fitting (15) from stator band (9).
- (I) Remove four screws (16) from cover (17) and remove cover (17) and gasket (18).
- (m) Tag and remove electrical wiring from protector (21).
- (n) Remove two screws (19) from electrical box (20).
- (o) Remove protector (21) and boot (22).

4-6. AC MOTOR - continued

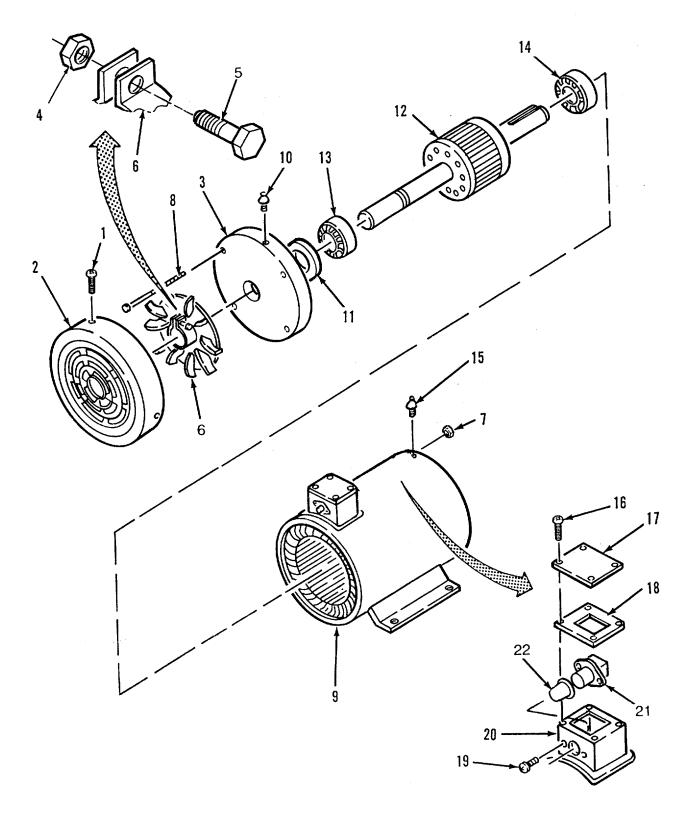


Figure 4-1. AC Motor

4-6. AC MOTOR - continued.

- (2) ASSEMBLY
- (a) Install boot (22) and protector (21) in electrical box (20), with two screws (19).

NOTE

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- (b) Connect wiring to protector (21) as tagged.
- (c) Position gasket (18) and cover (17) on electrical box (20) and install four screws (16).
- (d) Install fitting (15) on stator band (9).
- (e) Install bearing (14) on rotor (12).
- (f) Install rotor (12) in stator band (9).
- (g) Install bearing (13) on rotor (12).
- (h) Install spring (11) on rotor (12).
- (i) Install fitting (10) on endplate (3).
- (j) Install endplate (3) on stator band (9).
- (k) Install four bolts (8), nuts (7) on endplate (3) and stator band (9).

CAUTION

Fan is made of plastic and may break. Be careful when handling.

- (I) Install fan (6) approximately 1/8 inch on rotor (12).
- (m) Install bolt (5) and nut (4) on fan (6).
- (n) Position cover (2) on endplate (3) and install three screws (1).
- (o) Install motor and plate (Paragraph 2-30).

4-7. AC MOTOR AND CONDUIT BOX.

This task covers: a. Disassembly b. Repair c. Assembly

INITIAL SETUP

Tools
General Mechanics Tool Kit (App B, Item 1)

Electrical Repair Shop Equipment

(App B, Item 4)

Equipment Condition

Laundry Unit shut down (TM 10-3510-222-10)

Motor Assembly removed (Para 2-42)

Materials/Parts

Gasket (App C, Item 65)

General Safety Instructions

WARNING

High voltage is present on this equipment. Do not perform maintenance with power on. Death or

serious injury may result.

a. **DISASSEMBLY**

- (1) Remove two caps (1) and cover (3).
- (2) Remove gasket (4) from conduit box (5). Discard gasket (4).
- (3) Remove two studs (2).
- (4) Remove conduit box (5) and gasket (6). Discard gasket (6).
- (5) Remove four nuts (7 and 8), lockwashers (9) and rods (10).
- (6) Remove cover (11).
- (7) Remove fan (12) and slinger (13).
- (8) Remove end bracket (14) and two spring washers (15).
- (9) Remove slinger (16) and end bracket (17).
- (10) Remove rotor (20) from stator (21).
- (11) Remove bearings (18 and 19) from rotor (20).

b. **REPAIR**

Repair is limited to replacement of parts on the ac motor and conduit box.

c. **ASSEMBLY**

- (1) Press bearings (18 and 19) onto shaft of rotor (20).
- (2) Position rotor (20) in stator (21).
- (3) Position end bracket (17) over shaft of rotor (20) and on end of stator (21).
- (4) Install slinger (16) on end bracket (17).
- (5) Position two spring washers (15) and end bracket (14) over shaft of rotor (20) and on stator (21).
- (6) Install slinger (13).
- (7) Install fan (12).

4-7. AC MOTOR AND CONDUIT BOX - continued.

- (8) Position cover (11) on fan end of stator (21) and install four rods (10), nuts (7 and 8) and lockwashers (9).
- (9) Install gasket (6), conduit box (5), gasket (4), cover (3), two studs (2) and caps (1).
- (10) Install motor assembly (Para 2-42).

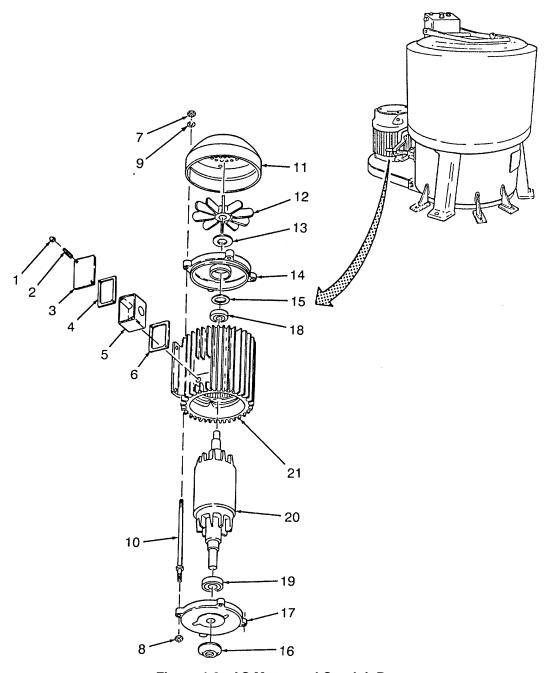


Figure 4-2. AC Motor and Conduit Box

Section IV. PREPARATION FOR STORAGE OR SHIPMENT

4-8. ADMINISTRATIVE STORAGE.

Placement of equipment in administrative storage should be for short periods of time when a shortage of maintenance effort exists. Items should be in mission readiness within 24 hours or within the time factors as determined by the directing authority. During the storage period, appropriate maintenance records will be kept. Before placing equipment in administrative storage, current maintenance services and equipment serviceable criteria (ESC) evaluations should be completed, shortcomings and deficiencies should be corrected and all modification work orders (MWO's) should be applied.

Inside storage is preferred for items selected for administrative storage. If inside storage is not available, trucks, vans, conex containers and other containers may be used.

4-9. SHIPMENT

After preparation for movement reference (TM 10-3510-222-10) has been accomplished, equipment is ready for shipment.

APPENDIX A

REFERENCES

A-1. SCOPE.

This appendix lists all forms, field manuals, technical manuals, and miscellaneous publications referenced in this manual. Also listed are those publications that should be consulted for additional information about the Laundry Unit and its major components.

A-2. FORMS.

Recommended Changes to Publications and Blank Forms	DA FORM 2028
Recommended Changes to Equipment Technical Publications	DA FORM 2028-2
Depreservation Guide for Vehicles and Equipment	DA FORM 2258
Equipment Inspection and Maintenance Worksheet	DA FORM 2404
Maintenance Request	DA FORM 2407
Equipment Log Assembly (Records)	DA FORM 2408-9
Product Quality Deficiency Report	SF 368
Report of Item Discrepancy	SF 364
A-3. FIELD MANUALS.	
First Aid for Soldiers	FM 21-11
Metal Body Repair and Related Operations	FM 43-2
Repair of Tents, Canvas, and Webbing	FM 10-16

A-4. TECHNICAL MANUALS.

Painting Instruction For Army Material	TM 43-0139
Unit, Direct Support, and General Support Maintenance Repair Parts and Special Tools List, Laundry Unit, Trailer-Mounted, Model M85-200	TM 10-3510-222-24P
Operator's and Organizational Maintenance Manual for Generator Set, Diesel (60 Hz), Engine Driven, Tactical Skid MTD, 10kW, 3 Phases, 120/208 Volts (60 Hz)	TM 5-6115-585-12
Operator's, Organizational, Direct Support and General Support Maintenance Manual (including Repair Parts and Special Tools List) for Trailer, Flatbed, 5-Ton, 4-Wheel, XM1061E1	TM 9-2330-376-14&P
Procedures for Destruction of Tank-Automotive Equipment to Prevent Enemy Use	TM 750-244-3
Operator's, Unit, and Direct Support Maintenance Manual (including Repair Parts and Special Tools List), for Water Heater, Liquid Fuel	TM 10-4520-259-13&P
Inspection, Care, and Maintenance of Antifriction Bearings	TM 9-214
Operator's Manual for Welding Theory and Application	TM 9-237
Materials Used for Cleaning, Preserving, Abrading, and Cementing Ordinance Material and Related Materials Including Chemicals	TM 9-247
Operator's Manual for: Laundry Unit, Trailer Mounted, M-85, Model: M85-200	TM 10-3510-222-10
Direct and General Support Maintenance Manual for Generator Set, Diesel, 10 kw	TM 5-6115-585-34
Packaging of Material: Preservation (VOL I)	TM 38-230-1
Packaging of Material: Preservation (VOL II)	TM 38-230-2
Storage and Materials Handling	TM 743-200-1
Storage Modernization	TM 743-200-2
Storage and Materials Handling	TM 743-200-3
General Shop Practice Requirements for the Repair and Test of Electronic Equipment	TM 43-0158

A-5. LUBRICATION ORDER.	
Lubrication Order, Laundry Unit, Trailer-Mounted, M85	LO 10-3510-222-12
Lubrication Order, Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 10 kw	LO 5-6115-585-12
A-6. TECHNICAL BULLETINS.	
Preservation for USAMECOM Mechanical Equipment For Shipment and Storage (US Army)	TB 740-97-2
A-7. MISCELLANEOUS PUBLICATIONS.	
Accident Reporting and Records	AR 385-40
Army Material Maintenance Policy and Retail Maintenance Operations	AR 750-1
The Army Maintenance Management System (TAMMS)	DA PAM 738-750
Functional User's Manual for the Army Maintenance Management System Aviation (TAMMS-A)	DA PAM 738-751
Preservation, Packaging, Packing, and Marking Materials, Supplies, and Equipment Used By The Army	SB 38-100

APPENDIX B MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

B-1. GENERAL.

- a. This section provides a general explanation of all maintenance and repair function authorized at various maintenance categories.
- b. The Maintenance Allocation Chart (MAC) in Section II designates overall authority and responsibility for performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component will be consistent with the capacities and capabilities of the designated maintenance categories.
- c. Section III lists the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from Section II.
- d. Section IV contains supplemental instructions and explanatory notes for a particular maintenance function.

B-2. MAINTENANCE FUNCTIONS.

Maintenance functions will be limited to and are defined as follows:

- a. <u>Inspect</u>. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel).
- b. <u>Test</u>. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards.
- c. <u>Service</u>. Operations required periodically to keep an item in proper operating condition, i.e., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases.
- d. <u>Adjust</u>. To maintain or regulate, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.
- e. Aline. To adjust specified variable elements of an item to bring about a optimum performance.
- f. <u>Calibrate</u>. To determine and cause corrections to be made or to be adjusted on instruments or test, measuring, and diagnostic equipments used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

B-2. MAINTENANCE FUNCTIONS - continued.

- g. <u>Remove/Install</u>. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
- h. <u>Replace</u>. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and is shown as the 3rd position code of the SMR code.
- i. <u>Repair</u>. The application of maintenance services, including fault location/troubleshooting, removal/installation, and disassembly/assembly procedures, and maintenance actions to identify troubles, and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly) end item, or system.
- j. <u>Overhaul</u>. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/ operational condition as required by maintenance standards in appropriate technical publications (i.e., DMWR). Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.
- k. <u>Rebuild</u>. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material 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 equipment/components.

B-3. EXPLANATION OF COLUMNS IN THE MAC - SECTION II.

- a. <u>Column 1, Group Number</u>. Column 1 lists functional group code numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the next higher assembly. End item group numbers are "00".
- b. <u>Column 2, Component/Assembly</u>. Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.
- c. <u>Column 3, Maintenance Function</u>. Column 3 lists the functions to be performed on the item listed in Column 2. (For a detailed explanation of these functions, see paragraph B-2).
- d. <u>Column 4, Maintenance Level</u>. Column 4 specifies, by the listing of a work time figure (expressed as man-hours shown as whole hours or decimals) in the appropriate subcolumn(s), the level of maintenance authorized to perform the function listed in Column (3). This figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or the complexity of the tasks within the listed maintenance function vary at different maintenance levels, appropriate work time figures will be shown for each level. 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 item including any necessary disassembly/assembly time), troubleshooting/fault

B-3. EXPLANATION OF COLUMNS IN THE MAC - SECTION II.

location 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 system designations for the various maintenance levels are shown on the following page.

C Operator or crew

O Unit Maintenance

F Direct Support Maintenance

H General Support Maintenance

D Depot Maintenance

- e. <u>Column,5, Tools and Equipment</u>. Column 5 specifies, by code, those common tool sets (not individual tools) common TMDE, and special tools, special TMDE, and support equipment required to perform the designated function.
- f. <u>Column 6, Remarks</u>. This column, when applicable, contains a letter code, in alphabetic order, which is keyed to the remarks contained in Section IV.

B-4. EXPLANATION OF COLUMNS IN TOOL AND TEST EQUIPMENT REQUIREMENTS, SECTION III.

- a. <u>Column 1, Reference Code</u>. The tool and test equipment reference code correlates with a code used in the MAC, Section II, Column 5.
- b. Column 2, Maintenance Level. The lowest category of maintenance authorized to use the tool or test equipment.
- c. Column 3, Nomenclature. Name or identification of the tool or test equipment.
- d. Column 4, National Stock Number. The national stock number of the tool or test equipment.
- e. Column 5, Tool Number. The manufacturer's part number.

B-5. EXPLANATION OF COLUMNS IN REMARKS, SECTION IV.

- a. Column 1, Reference Code. The code recorded in column 6, Section II.
- b. <u>Column 2, Remarks</u>. This column lists information pertinent to the maintenance function being performed as indicated in the MAC, Section II.

Section II. MAINTENANCE ALLOCATION CHART

(1)	(2)	(3)		MAINTE	(4) ENANCE (CATEGOR	.Y	(5)	(6)
				INIT	DS		DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
00	LAUNDRY UNIT, TRAILER MOUNTED MODEL 85-200								
01	TARPAULIN	INSPECT REPLACE REPAIR	0.5 0.5		2.0			1,15	С
0101	•FLAP	INSPECT REPLACE REPAIR	0.5		1.0 1.0			1,3 1,3	С
0102	•FLAP, BECKET	INSPECT REPLACE REPAIR	0.5		1.0 1.0			1,3 1,3	С
02	LADDER ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5	1.0	1.0			1,2,8	А, В
0201	•LADDER FOOT ASSEMBLY	INSPECT REPLACE REPAIR	0.2	0.5 1.0				1 1,2	A
03	BASKET ASSEMBLY	INSPECT REPLACE REPAIR		0.5 0.5 1.0	1.0			1,2,8	A, B
04	STRUT ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0	1.0			1,2,8	A, B
05	RIGHT BEAM ASSEMBLY	INSPECT REPLACE REPAIR		0.5 0.5 1.0	1.0			1,2,8	A, B
06	CENTER BEAM ASSEMBLY	INSPECT REPLACE REPAIR		0.5 0.5 1.0	1.0			1,2,7,8	А, В
		INELY MIX		1.0	1.0			1,2,1,0	7, 5

Section II. MAINTENANCE ALLOCATION CHART

(1)	(2)	(3)			(4)			(5)	(6)
				MAINTE JNIT	DS DS	CATEGORY GS DEPOT		TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION		0	F F	Н Н	DEPOT	EQUIPMENT	REMARKS CODE
	7.66252								
07	LEFT BEAM ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0	1.0			1,2,8	A, B
08	FRONT FRAME ASSEMBLY	INSPECT REPLACE REPAIR		0.5 1.0 1.0	1.0			1 8	В
09	REAR FRAME ASSEMBLY	INSPECT REPLACE REPAIR		0.5 1.0 1.0	1.0			1 1,2,7,8	В
10	UPRIGHT RAIL ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0	1.0			1,8	А, В
11	SOUND CONTROLLING PANEL WITH HANDLE	INSPECT REPLACE REPAIR	0.5	0.5 0.5				1,2	A
12	LOWER TRACK ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0	1.0			1 1,8	А, В
1201	•TIE DOWN, CARGO	INSPECT REPLACE REPAIR	0.2	0.5 0.5				1 1	A
13	MAINTENANCE PLATFORM	INSPECT REPLACE REPAIR	0.5 0.5		1.0			8	В
14	SHORT PLATFORM ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5		1.0			8	В

Section II MAINTENANCE ALLOCATION CHART

(1)	(2)	(3)		MAINTE	(4)	CATEGOR		(5)	(6)
				MAINTE JNIT	DS		DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION		0	F	Н	D	EQUIPMENT	REMARKS CODE
15	LOWER PLATFORM ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5	1.0	1.0			1,8	A, B
1501	•LOWER FRAME ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5	1.0			1,2 8	В
1502	•HIGH FRAME ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5	1.0			1,2 8	В
1503	•LOWER PLATFORM	INSPECT REPLACE REPAIR	0.5	1.0	1.0			1 8	В
16	TWO STEP STAIR ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5		1.0			8	В
17	DRYER PLATFORM ASSEMBLY	INSPECT REPLACE REPAIR	0.5 1.0	1.0	1.0			1,2,8	A, B
1701	•HIGH FRAME ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0	1.0			1 8	В
1702	•LOW FRAME ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0	1.0			1 8	В
1703	•DRYER PLATFORM	INSPECT REPLACE REPAIR	0.5	1.0	1.0			1 8	В
18	QUICK DISCONNECT CAP	INSPECT REPLACE REPAIR		0.2 0.5 0.5				1	A

Section II. MAINTENANCE ALLOCATION CHART

(1)	(2)	(3)		MAINT	(4) ENANCE (CATEGOR	Y	(5)	(6)
			U	INIT	DS		DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
19	WASHER DRAIN ASSEMBLY	INSPECT REPLACE REPAIR		0.5	1.0 2.0			1 1,3	С
20	WASHING MACHINE	INSPECT REPLACE REPAIR	0.5	3.0	5.0 8.0			1,2,3,4	A, C
2001	•DRAIN PIPE ASSEMBLY	INSPECT REPLACE REPAIR		0.5 2.0 3.0				1,2	A
2002	•TUB PIPE ASSEMBLY	INSPECT REPLACE REPAIR		0.5 2.0 2.0				1,2	А
2003	•LOCK COVER ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0				1,2	А
2004	•LOCK ASSEMBLY	INSPECT ADJUST REPLACE REPAIR	0.5	0.5 1.0 1.0				1 1 1,2	A
2005	•DOOR AND BAR ASSEMBLY	INSPECT ADJUST REPLACE REPAIR	0.5	1.0	1.0 2.0			1 1 1	С
200501	••LATCH HANDLE ASSEMBLY	INSPECT REPLACE REPAIR	0.5		1.0 2.0			1 1	С
200502	••DOOR ASSEMBLY	INSPECT REPLACE REPAIR	0.5		1.0 2.0			1 1	С
2006	•BELT GUARD ASSEMBLY	INSPECT REPLACE REPAIR		0.5 1.0 1.5				1	А

Section II. MAINTENANCE ALLOCATION CHART

(1)	(2)	(3)			(4)			(5)	(6)
			l —	MAINTE INIT		NANCÉ CATEGORY DS GS DEPOT		TOOLS AND	
GROUP NO.	COMPONENT/	MAINTENANCE FUNCTION				<u> </u>		EQUIPMENT	REMARKS CODE
110.	ASSEMBLY		С	0	F	Н	D		COBL
2007	•MOTOR AND PLATE ASSEMBLY	INSPECT ADJUST REPLACE REPAIR	0.5	0.5 1.0 1.0				1 1 1	A
200701	••AC MOTOR	INSPECT REPLACE REPAIR	0.5	1.0		2.0		1 1,3	A G
2008	•AIR TANK ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1 1	A
2009	REDUCER ASSEMBLY	INSPECT SERVICE REPLACE REPAIR		0.5 0.5	2.0 4.0			1 1,3 1,3	С
200901	••GEAR REDUCER	INSPECT REPLACE REPAIR			0.5 2.0 4.0			1,3	С
2010	•SEAL AND CARRIAGE	INSPECT REPLACE REPAIR			0.2 0.5 0.5			1 1	С
2011	•BASKET ASSEMBLY	INSPECT REPLACE REPAIR			0.5 2.0 1.0			1 1,3,8	В
2012	•DRUM	INSPECT REPLACE REPAIR		0.5	2.0 1.0			1,2 1,3,8	B, C
2013	• FRAME	INSPECT REPLACE REPAIR		0.5	2.0 1.0			1 1,8	В
2014	•AIR MANIFOLD ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 2.0				1 1	A
2015	CONTROL CONSOLE ASSEMBLY	INSPECT REPLACE REPAIR		0.5	2.0 4.0			1 1,3	С

(1)	(2)	(3)		MAINTE	(4) ENANCE (CATEGOR		(5)	(6)
			U	INIT	DS		DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
201501	•• CONTROL PANEL ASSEMBLY	INSPECT REPLACE REPAIR	0.5		1.0 3.0			1 1,8	B, C
20150101	•••INTERVAL TIMER ASSEMBLY	INSPECT REPLACE REPAIR			0.5 0.5 1.0			1 1	С
2015010101	•••••INTERVAL TIMER	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1 1	С
201502	••CHASSIS CONTROL ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,4 1	С
21	AIR COMPRESSOR ASSEMBLY	INSPECT ADJUST REPLACE REPAIR	0.5 1.0	1.0 1.0 0.5	3.0			1 1 1,3	A A, C
2101	COMPRESSOR AND MOTOR	INSPECT REPLACE REPAIR	0.5		1.0 2.0			1 1	С
210101	••FILTER ASSEMBLY	INSPECT REPLACE REPAIR	0.2	0.5 0.5					
210102	••COMMON CYLINDER HEAD (LEFT SIDE)	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	С
210103	••COMMON CYLINDER HEAD (RIGHT SIDE)	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	С
210104	••AIR COMPRESSOR HOUSING	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1 1,3	С
22	CONTROLLER STAND	INSPECT REPLACE REPAIR		0.5	1.0 1.5			1 8	B, C

(1)	(2)	(3)		MAINTE	(4) ENANCE (CATEGOR	XY	(5)	(6)
			- ι	JNIT	DS		DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
23	CONDUIT ASSEMBLY	INSPECT REPLACE REPAIR	0.5		3.0 4.0			1,4 1,4	С
24	POWER CABLE ASSEMBLY	INSPECT REPLACE REPAIR	0.5 1.0		2.0			1,4	С
2401	•ELECTRICAL PLUG CONNECTOR	INSPECT REPLACE REPAIR	0.5		1.0 1.0			1,4 1,4	С
25	ELECTRICAL WIRING	INSPECT REPLACE REPAIR	0.5		2.0 4.0			1,4	С
26	ENCLOSURE BOX ASSEMBLY	INSPECT REPLACE REPAIR		0.5	2.0 3.0			1 1,4	С
27	POWER PANEL ASSEMBLY	INSPECT REPLACE REPAIR	0.5		1.5 3.0			1 1,4	С
28	PRE-EXTRACTOR BIN ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0	2.0			1 1,8	А, В
29	EXTRACTOR PIPING	INSPECT REPLACE REPAIR	0.5	1.0 1.0	1.0			1 1,2,3	A, C
30	LAUNDRY EXTRACTOR	INSPECT SERVICE ADJUST REPLACE REPAIR	0.5	0.5 1.0 2.0	2.0 8.0			1 1,2 1,2 1,2,3,4	A, C

(1)	(2)	(3)		MAINTE	(4) ENANCE (CATEGOR	Y	(5)	(6)
			U	INIT	DS		DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
3001	•HINGE SHAFT ASSEMBLY	INSPECT REPLACE REPAIR			0.2 0.5 0.5			1 1,3	С
3002	•PUSH BUTTON SWITCH	INSPECT REPLACE REPAIR	0.2		0.5 0.5			1 1,4	С
3003	•PUSH EMERGENCY SWITCH	INSPECT REPLACE REPAIR	0.2	0.5 0.5				1	С
3004	•INDICATOR LIGHT	INSPECT REPLACE REPAIR	0.2	0.2	0.5 0.2			1,4,14	A, C
3005	•STARTER ENCLOSURE	INSPECT REPLACE REPAIR			0.5 1.0 1.0			1,4	С
3006	DRIVE UNIT ASSEMBLY	INSPECT ADJUST REPLACE REPAIR		0.5	0.5 1.0 4.0			1 1,3 1,3	С
300601	••UPPER SHAFT NUT	INSPECT REPLACE REPAIR			0.2 0.5 0.5			1 1,3	С
300602	••BRAKE DRUM	INSPECT REPLACE REPAIR			0.2 0.5 0.1			1,3 1	С
300603	•• OIL HOUSING ASSEMBLY	INSPECT ADJUST REPLACE REPAIR			0.5 1.0 1.0 2.0			1,3 1,3 1,3,16	С
3007	•• MOTOR ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1,3	С

(2)	(3)		MAINTE	(4) ENANCE (CATEGO	PV	(5)	(6)
				DS	GS	DEPOT	TOOLS AND	
COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
•• AC MOTOR	INSPECT REPLACE REPAIR	0.5	1.0		2.0		1 1.4	G
NONMETALLIC HOSE ASSEMBLY	INSPECT REPLACE REPAIR	0.2 0.5	1.0				1 1,2	A
MODIFIED M85 WATER HEATER	INSPECT REPLACE REPAIR	0.5	3.0 2.0				1 1,2	А
CLAMP ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0				1 1	А
PIPING ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1,2 1,2,10	А
••QUICK COUPLING HALF	INSPECT REPLACE REPAIR	0.2	0.5 0.5				1	А
•WATER LIQUID FUEL HEATER								D
DRYER ASSEMBLY	INSPECT ADJUST REPLACE REPAIR	0.5	1.0	3.0 8.0			1 1,4 1,2,3,4,8	A, B, C
•DRYER	INSPECT REPLACE REPAIR	0.5	2.0	4.0 8.0			1 1,2,3,5,6,8	A, B, C
	COMPONENT/ ASSEMBLY •• AC MOTOR NONMETALLIC HOSE ASSEMBLY MODIFIED M85 WATER HEATER • CLAMP ASSEMBLY • PIPING ASSEMBLY ••QUICK COUPLING HALF •WATER LIQUID FUEL HEATER DRYER ASSEMBLY	COMPONENT/ ASSEMBLY MAINTENANCE FUNCTION INSPECT REPLACE REPAIR NONMETALLIC HOSE ASSEMBLY MODIFIED M85 WATER HEATER OCLAMP ASSEMBLY INSPECT REPLACE REPAIR INSPECT ADJUST REPLACE REPAIR INSPECT REPLACE REPAIR INSPECT REPLACE REPAIR	COMPONENT/ ASSEMBLY MAINTENANCE FUNCTION C INSPECT REPLACE REPAIR NONMETALLIC HOSE ASSEMBLY INSPECT REPLACE REPAIR MODIFIED M85 WATER HEATER INSPECT REPLACE REPAIR INSPECT REPLACE REPAIR O.5 REPLACE REPAIR INSPECT REPLACE REPAIR INSPECT REPLACE REPAIR O.5 INSPECT REPLACE REPAIR O.5 INSPECT REPLACE REPAIR O.5 INSPECT REPLACE REPAIR O.5 INSPECT REPLACE REPAIR INSPECT ADJUST REPLACE REPAIR O.5 INSPECT ADJUST REPLACE REPAIR O.5	MAINTENANCE FUNCTION C O	MAINTENANCE C UNIT DS	MAINTENANCE CATEGO	MAINTENANCE CATEGORY UNIT DS GS DEPOT	MAINTENANCE CATEGORY

(1)	(2)	(3)		MAINTE	(4) ENANCE (CATEGO	RY	(5)	(6)
			L	INIT	DS	GS	DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
330101	●BRACKET ASSEMBLY	INSPECT REPLACE REPAIR		0.5 1.0 1.0				1 1	A
330102	••NONMETALLIC HOSE ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0				1 1	А
330103	••FLUID FILTER	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1 1	A
330104	••ADAPTER ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5	1.0				1 1	А
330105	••BLOWER ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 2.0				1 1,2	А
33010501	•••SHUTTER ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 2.0				1 1,2	А
33010502	•••ROTARY PUMP	INSPECT ADJUST REPLACE REPAIR	0.5	0.5 1.5	3.0			1 1 1,3	С
330106	••GAS-OIL COMBUSTION BURNER	INSPECT REPLACE REPAIR		0.5 2.0 3.0				1 1,2	A
33010601	•••NONMETALLIC HOSE ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0				1 1	А
33010602	•••IGNITION CABLE	INSPECT REPLACE REPAIR		0.5 1.0 1.0				1,2 1,2	А

(1)	(2)	(3)		MAINTE	(4) ENANCE (CATEGO		(5)	(6)
			U	INIT	DS	GS	DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
33010603	•••SIGHT EYE ASSEMBLY	INSPECT REPLACE REPAIR		0.5 1.0 1.0				1,2 1,2	А
33010604	•••ELECTRODE AND NOZZLE	INSPECT ADJUST REPLACE REPAIR		0.5 0.5 1.0 1.0				1 1,2 1,2	A
330107	••TRANSFORMER ASSEMBLY	REPLACE REPAIR		1.0 2.0				1 1,2	А
33010701	•••BOX ASSEMBLY	REPLACE REPAIR		1.0 1.0				1 1,2	А
330108	••SPEED REDUCER ASSEMBLY	INSPECT SERVICE ADJUST REPLACE REPAIR		0.5 0.5 1.0	2.0 4.0			1 1 1,3	С
330109	••LIGHT ASSEMBLY	INSPECT REPLACE REPAIR	0.2	1.0 1.5				1 1,14	A
330111	••STARTER MOTOR	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1 1	С
330112	••PANEL ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 1.0			1 1,3	С
330113	●HOT AIR BLOWER ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1 1,3	С
330114	••TUMBLER ASSEMBLY	INSPECT REPLACE REPAIR			0.5 2.0 4.0			1 1	B, C

(1)	(2)	(3)			(4)			(5)	(6)
(' '	(2)	. ,			NANCE (CATEGOR		<u>L</u>	(0)
GROUP	COMPONENT/	MAINTENANCE		NIT	DS	GS	DEPOT	TOOLS AND EQUIPMENT	REMARKS
NO.	COMPONENT/ ASSEMBLY	FUNCTION	C	0	F	н	D		CODE
33011401	•••TRUNNION	INSPECT			0.5				
	ASSEMBLY	SERVICE REPLACE REPAIR		0.5	2.0 4.0			1 1,3	С
33011402	•••AIR HEAT TUMBLER	INSPECT REPLACE REPAIR			0.5 2.0 4.0			1,3 1,3	С
3301140201	••••MOUNTING ASSEMBLY	INSPECT REPLACE REPAIR			0.5 0.5 0.5			1 1,3	С
3301140202	••••HOOD ASSEMBLY	INSPECT REPLACE REPAIR	0.5		2.0 3.0			1 1,3,8	С
3301140203	••••NO. 1 BOX ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	С
3301140204	••••NO. 2 BOX ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	С
3301140205	••••NO. 3 BOX ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	С
3301140206	••••NO. 5 BOX ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	С
3301140207	••••NO. 4 BOX ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	С
33011403	•••BARREL ASSEMBLY	INSPECT REPLACE REPAIR			0.5 2.0 3.0			1 1,8	В, С

(1)	(2)	(3)			(4)			(5)	(6)
	(2)		l —,			CATEGOR		TOOLS AND	. ,
GROUP	COMPONENT/	MAINTENANCE		INIT	DS	GS	DEPOT	EQUIPMENT	REMARKS
NO.	ASSEMBLY	FUNCTION	С	0	F	Н	D		CODE
33011404	•••CYLINDER	INSPECT			0.5				
	ASSEMBLY	REPLACE			2.0			1	
		REPAIR			3.0			1	С
3301140401	••••SHELL ASSEMBLY	INSPECT		0.5					
		REPLACE REPAIR		2.0 3.0	2.0			1 1,8	A, B
								,	,
330114040101	•••••HINGE ASSEMBLY	INSPECT REPLACE		0.5 2.0				1	
		REPAIR		3.0				1	А
3301140402	•••DOOR ASSEMBLY	INSPECT		0.5					
		REPLACE		2.0				1	4.5
		REPAIR		3.0	2.0			1,8	A, B
33011405	•••DRYER BASE	INSPECT			0.5				
	ASSEMBLY	REPLACE REPAIR			3.0 2.0			1 1,3,9	С
3301140501	••••DISCHARGE SPOUT	INSPECT	0.5						
3301140501	••••bischarge spout	REPLACE	0.5	1.0				1	
		REPAIR		1.0				1	Α
3301140502	••••BASE ASSEMBLY	INSPECT	0.5						
		REPLACE REPAIR			1.0 2.0			1 1,3,9	С
		KLFAIK			2.0			1,3,9	
3302	••ELECTRICAL WIRING	INSPECT REPLACE			0.5 2.0			1,4	
		REPAIR			3.0			1,4	С
34	DRYER BIN ASSEMBLY	INSPECT	0.5						
"	2111 211 2111 110 22 111 22 1	REPLACE	1.0						_
		REPAIR			1.0			8	В
35	CABLE ASSEMBLY	INSPECT	0.5						
		REPLACE REPAIR	0.5		1.0			1	A
36	TIEDOWN ASSEMBLY	INSPECT		0.2					
36	TIEDOWN ASSEMBLY	REPLACE	0.5	0.2					
		REPAIR		1.0				1,2	Α
		I				l			

(1)	(2)	(3)		ΜΔΙΝΙΤΕ	(4)	CATEGOR	·Y	(5)	(6)
			ι	INIT	DS		DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
3601	•BOLT AND LANYARD	INSPECT REPLACE REPAIR		0.2 0.5 0.5				1 1,2	А
37	CENTRIFUGAL PUMP UNIT	INSPECT REPLACE REPAIR	0.5 0.5	1.0				1,2	А
3701	COUPLING HALF	INSPECT REPLACE REPAIR	0.5	0.5 0.5				1 1	A
3702	•SEDIMENT STRAINER	INSPECT REPLACE REPAIR	0.2	1.0 1.0				1 1,2	A
3703	• CONNECTOR-SWITCH	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1 1,2	A
38	SUCTION STRAINER ASSEMBLY	INSPECT REPLACE REPAIR		0.2 0.5 0.5				1	A
39	FIRE EXTINGUISHER	INSPECT REPLACE	0.2	0.5					
40	BRACKET ASSEMBLY	INSPECT REPLACE	0.2	0.5				1	
41	TOOL BOX ASSEMBLY	INSPECT REPLACE REPAIR	0.2	0.5 1.0				1 1,2	A
42	MODIFIED GENERATOR	INSPECT SERVICE REPLACE REPAIR	0.5 0.5	2.0 1.0				1 1,2	A

(1)	(2)	(3)		MAINTE	(4) ENANCE (CATEGO	RY	(5)	(6)
			U	INIT	DS	GS	DEPOT	TOOLS AND	
GROUP NO.	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	0	F	Н	D	EQUIPMENT	REMARKS CODE
4201	•COVER ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1	A
4202	•GENERATOR SET								F
43	GROUND ROD	INSPECT REPLACE REPAIR	0.5 0.5	1.0				1	A
44	HOSE ASSEMBLY	INSPECT REPLACE REPAIR	0.2 0.5	0.5				1	A
4401	•COUPLING HALF	INSPECT REPLACE REPAIR	0.5	0.5 0.5				1	A
45	MODIFIED TRAILER	INSPECT REPLACE		0.5	8.0			1	
		REPAIR		5.0	0.0			1,2,7,11, 12,13	A, C
4501	• FLAT BED TRAILER								E

Section III. TOOLS AND TEST EQUIPMENT

(1) REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL/NATO STOCK NUMBER	(5) TOOL NUMBER
1	0	Tool Kit, General Mechanics	5180-00-177-7033	SC5180-90-CL-N26
2	0	Shop Equipment,	4910-00-754-0654	SC-4910-95-CL-A74
3	F	Automotive Vehicle Shop Equipment, Automotive Vehicle	4190-00-754-0705	SC-4910-95-CL-A31
4	F	Shop Equipment,	4940-00-294-9517	SC-4940-95-CL-B05
5	F	Electrical Repair Heat Exchanger		MFG0676-100 (CAGE 90598)
6	F	Installation Kit (Dryer) UV Scanner Control, Box Tester	4940-01-025-5289	57AV7-1000 (CAGE 98317)
7	0	Riveter, Blind, Hand	5120-00-102-6847	C -845 (1/4 x 28) (CAGE 03481)
8	F	Welding Shop, Trailer Mounted	3431-01-090-1231	SC-3431-95-CL-A04
9	F	Installation Fastener Tool (Dryer, Elec door)		T1563-10C (CAGE 58794)
10 11	0	Band-it Jr. Riveter, Blind, Hand	5120-01-020-7814	C002 (CAGE 70847) C-722 (5/16 x 24)
12	0	Installation Tool		(CAGE 03481) THXHD 813L (1 x 13)
13	0	(Keensert) Installation Tool		(CAGE 29372) THXHD 616L (3/8 x
14	0	(Keensert) Extractor, Lamp	5120-00-288-7679	16) (CAGE 29372) MIL-R-6855CL4 (81349)
15	F	Grommet Press Assembly		6-1-9557-30 (CAGE 90598)
16	0	Drain Pan	4910-01-077-7845	(CAGE 90598) 4191T3 (39428)

Section IV. REMARKS

REFERENCE CODE	REMARKS
A	Unit level for replacement of components.
В	Weld and straighten at direct support.
С	Direct Support level for replacement of components.
D	For repair of water heater refer to TM 10-4520-259-13&P.
E	For repair of trailer refer to TM 9-2330-376-14&P.
F	For repair of generator refer to TM 5-6115-585-12.
G	General Support level for replacement of components.

APPENDIX C

MANDATORY REPLACEMENT PARTS

C-1. SCOPE.

The mandatory replacement parts referenced in the task setups and procedures are listed here.

ITEM	NOMENCLATURE	PART NUMBER
NO.		
1	Preformed Packing	5-45-4887-4
2	Straight Connector	6-1-9932-6
3	Angle Connector	6-1-9932-25
4	Closed End Connector	995-1618
5	Shaft Seal Assembly	W105-7
6	Preformed Packing	P3397
7	Gasket (1 1/2 dia Hose)	MS27030-5
8	Gasket (2 1/2 dia Hose)	MS27030-7
9	Gasket	63X1399
10	Rivet	AD 46 BS
11	Shim	A3219839
12	Shim	A3219821
13	Self-locking nut	MS51988-5
14	Blind rivet	MS20600B6W5
15	Self-locking nut	MS21044C6
16	Flat head rivet (3/16 dia .050 long)	6-2-2420-3 (SAEJ492, CAGE 81343)
17	Blind rivet	RV250-6-6
18	Self-locking nut	MS51922-17
19	Shim	A3219813
20	Blind rivet nut	MS27130-CR18K
21	Blind rivet	M24243/1D604
22	Blind rivet	MS20600M6W6
23	Shim	A3219862
24	Electrical Connector	25211

MANDATORY REPLACEMENT PARTS

ITEM	NOMENCLATURE	PART NUMBER
NO.		1,111,110,110
25	Shim	A3219854
26	Connector	35115
27	Shim	A3219896
28	Shim	A3219888
29	Shim	A3219870
30	Gasket	32845-31
31	Parts kit	98801-01
32	Grommet	MILG16491TY3CL3
33	Gasket	102-9041
34	Grommet	MS35489-7
35	Blind Nut	MS27330-CR7
36	Blind Nut	MS27130-CR13K
37	Gasket	102-8051
38	Blind Nut	MS27130-CR19K
39	Blind Rivet	SD64BS
40	Captive Screw	FT1600-10-C-1-7
41	Seal	A3219763
42	Seal	A4068268
43	Solid Rivet	6-2-2309-20-269
44	Blind Nut	MS27130-S32K
45	Blind Nut	MS27130-S22K
46	Blind Nut	MS27130-S20K
47	Blind Nut	MS27130-S31K
48	Rope Gasket	6-2-2348-20-324
49	Rope Gasket	6-2-2346-20-315
50	Gasket	174-8133
51	Gasket	102-8043
52	Rope Gasket	6-2-2352-20-338

MANDATORY REPLACEMENT PARTS

ITEM NO.	NOMENCLATURE	PART NUMBER
53	Rope Gasket	6-2-2341-20-331
54	Rope Gasket	6-2-2343-20-351
55	Rope Gasket	6-2-2357-20-309
56	Cotter Pin	MS24665-134
57	Sleeve	MS51844-23
58	Wire Rope	6-1-9447-4 (MIL-W-83420, TY II,
	'	COMP A, DÌA 1/16, CON 7X7, DIA
		JACKET 3/32)
59	Gasket	2400-149G
60	Gasket	3168
61	Gasket	6-2-2334-20-127 (M46087FSB3)
62	Gasket	6-1-744-2-9-3
63	Gasket	6-2-2366-20-394
64	Sealing Washer	995-1189
65	Gasket	KM91-46
66	Screw Thread Insert	MS124738, .375-24
67	Screw Thread Insert	MS51832-106
68	Screw Thread Insert	MS51832-104
69	Blind Rivet	MS27130-CR65
70	Blind Rivet	MS27130-CR63
71	Box Gasket	KM91-46
72	Grommet	MS35489-14
73	Clamp	6-1-9914-22(J207, CAGE 70847)
74	Cottor Pin	2568
75	Blind Nut	MS27130-A26
76	Blind Nut	MS27130-A32
77	Lockwasher	MS35333-125
78	Gasket	999-1231
79	Cover with Gasket	36CB4500

C-3/(C-4 blank)

APPENDIX D

EXPENDABLE AND DURABLE ITEMS LIST

Section I. INTRODUCTION

D-1. SCOPE.

This appendix lists expendable and durable items you will need to maintain the Laundry Unit. This listing is for informational purposes only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

D-2. EXPLANATION OF COLUMNS.

- a. ITEM NUMBER Column (1). This number is assigned to the entry in the listing and is referenced when required.
- b. LEVEL Column (2). This column identifies the lowest level of maintenance that requires the listed item:
 - C Operator/Crew
 - O Unit Maintenance
 - F Direct Support Maintenance
 - H General Support Maintenance
 - c. <u>NATIONAL STOCK NUMBER Column (3)</u>. This is the national stock number assigned to the item; use it to request or requisition the item.
 - d. <u>ITEM NAME, DESCRIPTION, CAGE CODE, PART NUMBER Column (4)</u>. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Commercial And Government Entity (CAGE) Code for Manufacturer in parentheses, followed by the part number.
 - e. <u>UNIT OF MEASURE (UM)/ UNIT OF ISSUE (U/I) Column (5)</u>. This measure is expressed by a two character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II. EXPENDABLE AND DURABLE ITEM LIST

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, CAGE CODE, PART NUMBER	(5) U/I
1	F	8040-00-225-4548	Adhesive (71984) 732 (RTV)	kt
2	0	8030-00-247-2525	Compound, Sealing (81349) MIL-S-45180	tu
3	0	7920-00-292-9204	Cloth, Cleaning (81348) CCC-C-46	mx
4	0	9905-00-537-8954	Tag, Marker (81349) MIL-T-12755 (wire tags)	bd
5	0	8040-00-865-8991	Compound, Sealing, Type I (81349) MIL-A-46106	kt
6	0	8010-01-193-0518	Primer Coating (81349) MIL-P-53022	kt
7	0	8010-01-229-9561	Polyurethane Coating (CARC) (81349) MIL-C-53039	ga
8	0	9150-00-250-0926	Petrolatum, Technical, 1.75 lb (81348) VV-P-236	cn
9	F	3439-00-198-3406	Solder, Tin Alloy, SN50WS, 5 lb (81348) QQ-S-571	lb
10	F	6850-00-281-1985	Drycleaning Solvent, one gal (81348) P-D-680	ga
11	0	9905-00-027-4577	Band Marker (Tiedown Straps) (96906) MS3367-2	ea
12	F	4020-00-515-0064	Cord, Braided (81349) MIL-C-43307, 5/16 dia, olive drab No. 7	ft
13	0	5970-00-644-3167	Tape, Insulation, Electrical, 85 ft (81348) HH-I-510	ro
14	F	8310-00-227-1244	Thread, 1,362.5 yds (81348) V-T-285	tu
15	0		Flux, Paste, ASTM B-486, Grade 77, Allow comp SN 50, Type OA	lb
16	F	9150-00-065-0029	Grease, Automotive and Artillery (81349) MIL-6-10924	tu
17	0	8030-00-889-3535	Tape, Antiseize, 21 ft (81349) MIL-T-27730	ea

Section II. EXPENDABLE AND DURABLE ITEM LIST

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, CAGE CODE, PART NUMBER	(5) U/I
18	0		Hydraulic & Lubrication Oil Mix (07819) HLP-HD46	ga
19	0		Hose, Rubber (81348) ZZ-H-561 AA1015008	
20	0	8030-00-221-3823	Plumbing Fixture Setting Compound, 1 lb (81348) HHC 536 Type 1	lb
21	0	9525-00-529-9196	Wire, Nonelectrical (96906) MS20995NC51 (safety wire).	rl
22	F	8315-00-253-6293	Tape, Textile (81349) MIL-T-43566, TY1, CL4, 2W, OD7	yd
23	0	8040-00-165-8614	Adhesive, one qt (81348) MMM-A-121	qt
24	0	8030-01-009-2590	Compound, Antiseize (08854) SLIC-TITE (thread compound)	pt

APPENDIX E

TORQUE LIMITS

E-1. GENERAL.

This appendix provides general torque limits for fasteners. Special torque values are indicated in the maintenance procedures for applicable components. The general torque values given in this appendix shall be used when specific torque values are not indicated in the maintenance procedures.

E-2. TORQUE LIMITS.

Torque limits are listed below. Dry fasteners are defined as fasteners on which no lubricants are applied to the threads; wet fasteners are defined as fasteners on which specific graphite or moly-disulphide greases or other extreme-pressure lubricants are applied to the threads. There is no difference in Table E-1 between the torque figures for fine or coarse threads. The torque figures for a finely-threaded fastener as compared to a coarsely-threaded fastener of the same diameter may be slightly higher and are not defined.

TORQUE LIMITS

		мимим			-		BODY	SIZE O	ROUTS	IDE DIA	AMETE	R OF FA	ASTENE	R		
FASTENER	TYPE	TENSILE STRENGTH	MATERIAL	#2	#3	#4	#5	#6	#8	#10	1/4	1/10	1/8	1/16	1/2	5/16
NO MARK	SAE 0-1-2	74,000 PSI	LOW CARBON STEEL								6 (8)	12 (16)	20 (27)	32 (44)	47 (64)	69 (94)
0	SAE 3	100,000 PSI	MEDIUM CARBON STEEL								9 (12)	17 (23)	30 (41)	47 (64)	69 (94)	103 (140)
\bigcirc	SAE 5	120,000 PSI	MEDIUM CARBON HEAT TREAT STEEL								10 (14)	19 (26)	33 (45)	54 (73)	78 (106)	114 (155)
0	SAE 6	133,000 PSI	MEDIUM CARBON STEEL QUENCHED TEMPERED								12 (16)	24 (33)	43 (58)	69 (94)	106 (144)	150 (203)
0	SAE 7	133,000 PSI	MEDIUM CARBON ALLOY STEEL								13 (18)	25 (34)	44 (60)	71 (96)	110 (141)	154 (209)
	SAE 8	150,000 PSI	MEDIUM CARBON ALLOY STEEL								14 (19)	29 (39)	47 (64)	78 (106)	119 (161)	169 (229)
	SOCKET HEAD CAP SCREW	160,000 PSI	HIGH CARBON CASE HARDENED STEEL								16 (22)	33 (45)	54 (73)	84 (114)	125 (170)	180 (244)
	SOCKET SET SCREW	212,000 PSI	HIGH CARBON CASE HARDENED STEEL					<u>9</u> (<u>1.0</u>)	<u>16</u> (<u>1.8</u>)	3 <u>0</u> (<u>3.4</u>)	7 <u>0</u> (7.9)	140 (15.8)	<u>18</u> (<u>2.0</u>)	<u>29</u> (<u>3.3</u>)	43 (4.9)	<u>63</u> (<u>7.1</u>)

TORQUE LIMITS

					-	ВОГ	OY SIZE	OR OUT	SIDE DI	AMETER	R OF FAS	TENER				
TYPE	3/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	13/4	17/8	2	21/4	2 1/2	23/4	3
SAE	96	155	206	310	480	675	900	1100	1470	1900	2360	2750	3450	4400	7350	9500
0-1-2	(130)	(210)	(279)	(420)	(651)	(915)	(1220)	(1492)	(1993)	(2576)	(3200)	(3729)	(4678)	(5966)	(9967)	(12882)
SAE 3	145	234	372	551	872	1211	1624	1943	2660	3463	4695	5427	7226	8049	13450	17548
	(197)	(317)	(504)	(747)	(1182)	(1642)	(2202)	(2635)	(3607)	(4696)	(6366)	(7359)	(9798)	(10914)	(18238)	(23795)
SAE 5	154	257	382	587	794	1105	1500	1775	2425	3150	4200	4550	6550	7175	13000	16000
	(209)	(349)	(518)	(796)	(1077	(1498)	(2034)	(2 40 7)	(3288)	(4271)	(5695)	(6170)	(8882)	(9729)	(17628)	(21696)
SAE 6	209	350	550	825	1304	1815	2434	2913	3985	5189	6980	7491	10825	14983	20 151	26286
	(283)	(475)	(746)	(1119)	(1768)	(2461)	(3301)	(3950)	(5404)	(7036)	(9465)	(10158)	(14679)	(20317)	(2 7325)	(35644)
SAE 7	215	360	570	840	1325	1825	2500	3000	4000	5300	7000	7500	11000	15500	21000	27000
	(292)	(488)	(773)	(1139)	(1797)	(2475)	(3390)	(4068)	(5424)	(7187)	(9492)	(10170)	(14916)	(21018)	(28476)	(36612)
SAE 8	230	380	600	900	1430	1975	2650	3200	4400	5650	7600	8200	12000	17000	23000	29000
	(312)	(515)	(814)	(1220)	(1940)	(2678)	(3593)	(4339)	(5966)	(7661)	(10306)	(11119)	(16272)	(23052)	(31188)	(39324)
SOCKET HEAD CAP SCREW	250 (339)	400 (542)	640 (868)	970 (1315)	1520 (2061)	2130 (2888)	2850 (3865)	3450 (4678)	4700 (6373)	6100 (8272)	8200 (11119)	8800 (11933)	13000 (17628)	18000 (24408)	24000 (32544)	31000 (42036)
SOCKET SET SCREW		146 (198)														

TORQUE LIMITS

	TVDC	MINIMUM E TENSILE STRENGTH	A A TERIA	BODY SIZE OR OUTSIDE DIAMETER OF FASTENER												
FASTENER	TYPE				#2	#3	#4	#5	#6	#8	#10	1/4	1/10	1/8	1/16	1/2
	MACHINE SCREW YELLOW BRASS	60,000 PSI	COPPER (CU) 63% ZINC (ZN) 37%	2 (<u>.2</u>)	3.3 (3)	4.4 (<u>.5</u>)	<u>6.4</u> (.7)	8 (<u>9</u>)	1 <u>6</u> (1.8)	<u>20</u> (<u>2.3</u>)	65 (<u>7.3</u>)	110 (12.4)	17 (23)	27 (37)	37 (50)	49 (66)
	SILOCONE BRONZE TYPE "B"	70,000 PSI	COPPER (CU) 96% ZINC (ZN) 2% SILICON (SI) 2%	2.3 (.2)	3.7 (.3)	4.9 (.5)	7.2 (.8)	10 (1.1)	<u>19</u> (2.1)	22 (2.5)	<u>70</u> (<u>7.9</u>)	<u>125</u> (<u>14.1</u>)	20 (27)	30 (41)	41 (56)	53 (72)

TV05		BODY SIZE OR OUTSIDE DIAMETER OF FASTENER														
TYPE	3/8 3/4 7/8 1 1 1/8 1 1/4 1 3/8 1 1/2									1 3/4	17/8	2	2 1/4	2 1/2	2 3/4	3
MACHINE SCREW YELLOW BRASS	78 (106)	104 (141)	160 (217)	215 (292)	325 (441)	400 (542)		595 (807)								
SILOCONE BRONZE TYPE "B"	88 (119)	117 (159)	180 (244)	250 (339)	365 (495)	450 (610)		655 (888)								

LEGEND

- TORQUE VALUES: All numbers are in footpounds except those that are underlined, which are inch-pounds.
- 2. Numbers in parentheses are Newton-Meters.

APPENDIX F

CABLE DIAGRAMS

F-1. SCOPE.

The wiring lists and diagrams show the electrical interconnect wiring components and diagrams used on the Laundry Unit. Fold outs are filed in the back of the technical manual.

SECTI	<u>on</u>	<u>PAGE</u>
Section	I. Laundry Unit Interconnect Wiring List.	F-2
Section	n II. Washer Wiring List.	F-4
Section	n III. Dryer Wiring List.	F-15
FOLD	<u>outs</u>	<u>PAGE</u>
FO-1.	Laundry Unit Interconnect Wiring Diagram.	FP-1
FO-2.	Washer Wiring Diagram.	FP-3
FO-3.	Extractor Unit Wiring Diagram.	FP-13
FO-4.	Dryer Wiring Diagram.	FP-15
FO-5.	Centrifugal Pump Unit Wiring Diagram.	FP-17
FO-6.	Air Compressor Wiring Diagram.	FP-19

REFERENCES

Generator: Refer to TM 5-6115-585-12.

Water Heater: Refer to TM-10-4520-259-13&P.

Trailer: Refer to TM 9-2330-376-14&P.

Section I. LAUNDRY UNIT INTERCONNECT WIRING LIST

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
1	BLUE	GEN L3	CONN-C	182	MIL-C-3432CO- 05 HOF (5/6) 1090	-
2	RED	GEN L2	CONN-A	182"	MIL-C-3432CO- 05 HOF (5/6) 1090	-
3	BLACK	GEN L1	CONN-B	182"	MIL-C-3432CO- 05 HOF (5/6) 1090	-
4	GREEN	GEN GND	CONN-G	206"	MIL-C-3432CO- 05 HOF (5/6) 1090	-
5	WHITE	GEN LO(N)	CONN-N	182"	MIL-C-3432CO- 05 HOF (5/6) 1090	-
6	BLACK	PDP CONN L1	CB,60-L1	32"	M16878/3BPL0	6
7	BLACK	PDP CONN L2	CB,60-L2	32"	M16878/3BPL0	6
8	BLACK	PDP CONN L3	CB,60-L3	32"	M16878/3BPL0	6
9	GREEN	PDP CONN G	PDP GND BUS	26"	M16878/3BPL5	6
10	WHITE	PDP CONN N	PDP NEUT BUS	26"	M16878/3BPL9	6
11	BLACK	WTR HTR CB,20	WTR HTR L1	160"	M16878/2BLE0	12
12	RED	WTR HTR CB, 20	WTR HTR L2	160"	M16878/2BLE2	12
13	BLUE	WTR HTR CB, 20	WTR HTR L3	160"	M16878/2BLE6	12
14	GREEN	PDP GND BUS	WTR HTR GND	160"	M16878/2BLE5	12
15	WHITE	PDP NEUT BUS	WTR HTR LO	160"	M16878/2BLE9	12
16	BLACK	WASH CON UNIT CB, 20-L3	WASH CON UNIT TB1-4	62"	M16878/2BLE0	12
17	RED	WASH CON UNIT CB, 20-L2	WASH CON UNIT TB1-3	62"	M16878/2BLE2	12
18	BLUE	WASH CON UNIT CB, 20-L1	WASH CON UNIT TB1-2	62"	M16878/2BLE6	12

Section I. LAUNDRY UNIT INTERCONNECT WIRING LIST

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
19	GREEN	PDP GND BUS	WASH CON UNIT GND	62"	M16878/2BLE5	12
20	WHITE	PDP NEUT BUS	WASH CON UNIT TB1-1	62"	M16878/2BLE9	12
21	BLACK	COMP CB,20 L3	MOTOR STARTER L3	50"	M16878/2BLE0	12
22	RED	COMP CB, 20 L2	MOTOR STARTER L2	50"	M16878/2BLE2	12
23	BLUE	COMP CB, 20 L1	MOTOR STARTER	50"	M16878/2BLE6	12
24	GREEN	PDP GND BUS	COMP GND	32"	M16878/2BLE5	12
25	BLACK	EXTR CB, 20 L3	EXTR L3	121"	M16878/2BLE0	12
26	RED	EXTR CB,20 L2	EXTR L2	121"	M16878/2BLE2	12
27	BLUE	EXTR CB, 20 L1	EXTR L1	121"	M16878/2BLE6	12
28	GREEN	PDPGNDBUS	EXTR GND	121"	M16878/2BLE5	12
29	BLACK	DRYER CB, 20 L3	DRYER K1R L3	180"	M16878/2BLE0	12
30	RED	DRYER CB, 20 L2	DRYER K1R L2	180"	M16878/2BLE2	12
31	BLUE	DRYER CB, 20 L1	DRYER K1R L1	180"	M16878/2BLE6	12
32	GREEN	PDP GND BUS	DRYER GND	180"	M16878/2BLE5	12
33	WHITE	PDP NEUT BUS	DRYER LO TB1-8	180"	M16878/2BLE9	12
34	BLACK	MOTOR STARTER T3	COMP 3,9	42"	M16878/2BLE0	12
35	RED	MOTOR STARTER T2	COMP 2,8	42"	M16878/2BLE2	12
36	BLUE	MOTOR STARTER T1	COMP 1,7	42"	M16878/2BLE6	12

LEGEND

1. 6-1-9931 REFERENCE

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
1	GREEN	K2 (L1)	GND LUG	32"		14
2	WHITE	K2 (L2)	TB1-1	26"		14
3	BLACK	K2 (L3)	TB1-2	25"		14
4	GREEN	K2 (T1)	REUSE PLUG (A)	22"		14
5	WHITE	K2 (T2)	REUSE PLUG (B)	22"		14
6	BLACK	K2 (T3)	REUSE PLUG (C)	22"		14
7	BLACK	TB1-2	K8 CW (L1)	24"		14
8	BLACK	TB1-3	K8 CW (L2)	24"		14
9	BLACK	TB1-4	K8 CW (L3)	24"		14
10	BLACK	K7 CCW (T3)	MOTOR	80"		14
11	BLACK	K7 CCW (T2)	MOTOR	80"		14
12	BLACK	K7 CCW (T1)	MOTOR	80"		14
13	BLACK	K7 CCW (L1)	K8 CW (L1)	5"		14
14	BLACK	K7 CCW (L2)	K8 CW (L2)	5"		14
15	BLACK	K7 CCW (L3)	K8 CW (L3)	5"		14
16	BLACK	K7 CCW (T3)	K8 CW (T1)	4"		14
17	BLACK	K7 CCW (T2)	K8 CW (T2)	5"		14
18	BLACK	K7 CCW (T1)	K8 CW (T3)	6"		14
19	WHITE	TB1-1	F2	9"		18
20	BLACK	K7 CCW (L1)	F1	19"		18
21	BLACK	F1	P1-1	14"	_	18
22	WHITE	F2	P1-2	14"		18
23	BLACK	MASTER ON/OFF	AUTO/MAN (#2)	3"		18
24	WHITE	MASTER ON/OFF	P1-3	8"		18
25	WHITE	P1-3	TB2-1	26"		18

WIRE	WIRE			WIRE		
NO.	COLOR	FROM	ТО	LENGTH	MIL SPEC	WIRE
						GAUGE
26	BLACK	K11 (6)	P1-13	24"		18
27	BLACK	P1-4	PRESS. SW. (COM)	25"		18
28	BLACK	PRESS.SW. (NC #3)	TB2-2	36"		18
29	BLACK	TB2-2	DOOR OPEN SW (COM)	69"		18
30	BLACK	DOOR OPEN SW	DOOR SOLENOID (NO)	6"		18
31	WHITE	TB2-1	DOOR SWITCH COM	67"		18
32	WHITE	DOOR SOLENOID	WIRE #31	5"		18
33	WHITE	DOOR SW (NO)	TB2-11	69"		18
34	BLACK	AUTO/MAN (#3)	Q.C. SPLICE	9"		18
35	BLACK	K10 (1)	P3-13	27"		18
36	BLACK	AUTO/MAN (#4)	MAN TIMER (L1)	11"		18
37	BLACK	DRAIN SW.	P2-5	18"		18
38	BLACK	K5 (1)	K13 (13)	7"		18
39	BLACK	K11 (1)	P3-6	30"		18
40	BLACK	K13 (2)	K10 (12)	18"		18
41	BLACK	K10 (12)	K11 (10)	4"		18
42	BLACK	K11 (10)	K11 (9)	3"		18
43	BLACK	P1-5	K1 (13)	13"		18
44	BLACK	P3-5	K9 (9)	25"		18
45	BLACK	K9 (1)	TB2-3	5"		18
46	BLACK	K4 (13)	P3-9	25"		18
47	BLACK	P3-4	K9 (2)	35"		18
48	BLACK	K9 (10)	TB2-4	11"		18
49	BLACK	K11 (2)	P3-15	30"		18
50	BLACK	P1-6	K11 (8)	35"		18

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE
						GAUGE
51	BLACK	P1-11	K11 (5)	24"		18
52	BLACK	P1-10	K4 (13)	17"		18
53	BLACK	K9 (11)	K11(12)	14"		18
54	GREEN	GND	GND CONTR CON	61"		14
55	BLACK	K12 (9)	K11(3)	9"		18
56	BLACK	K12 (9)	K11(12)	6"		18
57	BLACK	K11(3)	K9 (6)	23"		18
58	BLACK	K9 (7)	P1-7	27"		18
59	BLACK	P1-12	TB2-6	30"		18
60	BLACK	P1-9	TB2-5	30"		18
61	BLACK	P3-10	K10 (4)	31"		18
62	BLACK	P3-5	K9 (4)	26"		18
63	BLACK	P3-8	K11 (11)	24"		18
64	BLACK	K11(11)	K10 (2)	13"		18
65	BLACK	P3-1	TIMER 3 COM	10"		18
66	WHITE	TIMER MTR	P3-2	10"		18
67	BLACK	TIMER 12 (NC)	P3-3	10"		18
68	BLACK	TIMER 11 (NO)	P3-4	10"		18
69	BLACK	TMR ST/RUN (COM)	P3-5	10"		18
70	BLACK	TIMER 3 (NO)	TIMER 11 (COM)	6"		18
71	BLACK	TIMER 12 (COM)	WIRE #70	6"		18
72	BLACK	P3-6	TIMER 4 (COM)	10"		18
73	BLACK	TIMER 4 (NC)	P3-7	10"		18
74	BLACK	TIMER 9 (COM)	P3-8	10"		18
75	BLACK	TIMER 9 (NC)	P3-9	10"		18

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
76	BLACK	TIMER 6 (COM)	P3-10	10"		18
77	BLACK	TIMER 5 (NC)	P3-11	10"		18
78	BLACK	P3-12	TIMER 6 (NC)	10"		18
79	BLACK	P3-13	TIMER 1(COM)	10"		18
80	BLACK	P3-14	TIMER 1 (NO)	10"		18
81	BLACK	P3-15	TIMER 5 (COM)	10"		18
82	BLACK	P3-11	TB2-6	28"		18
83	BLACK	P3-7	TB2-5	30"		18
84	BLACK	K9 (4)	K2 (A1)	15"		18
85	BLACK	TB2-7	P3-12	20"		18
86	BLACK	K3 (13)	P3-14	22"		18
87	BLACK	K6 (13)	K6 (5)	14"		18
88	BLACK	P2-2	K6-(13)	25"		18
89	BLACK	P2-4	K6 (1)	33"		18
90	BLACK	SIG. TIMER(1)	K6 (9)	14"		18
91	BLACK	K3 (5)	SIG. TIMER (2)	15"		18
92	BLACK	K1 (1)	K3 (5)	4"		18
93	BLACK	K1 (1)	P2-1	25"		18
94	BLACK	K10(6)	K1 (9)	15"		18
95	BLACK	CCW SW (COM)	PS1 (BRASS)	6"		18
96	BLACK	K9 (12)	K10(10)	4"		18
97	BLACK	CW SW (COM)	PS 1 (BRASS)	7"		18
98	BLACK	K9 (12)	K3 (9)	10"		18
99	BLACK	PS1 (BRASS)	K14(COM)	16"		18
100	BLACK	K14 (NC)	K12(13)	28"		18

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
101	BLUE	K4 (9)	K14 (COIL -)	25"		22
102	RED	K1 (10)	K3 (10)	4"		22
103	WHITE	HOT WTR SOL	COLD WTR SOL	7"		18
104	WHITE	COLD WTR SOL	REUSE WTR SOL	5"		18
105	WHITE	REUSE WTR SOL	WASTE DRN SOL	5"		18
106	BLACK	CCW SW (NO)	CCW K7 (A1)	16"		18
107	BLACK	CW SW (NO)	CW K8 (A1)	12"		18
108	WHITE	WASTE DRN SOL	REUSE DRN SOL	5"		18
109	RED	TB3-5	K14 (COIL +)	9"		22
110	WHITE	CW K8 (A2)	CCW K7 (A2)	4"		18
111	WHITE	CCW K8 (A2)	K2 (A2)	6"		18
112	WHITE	K2 (A2)	TB2-10	12"		18
113	-	-	-	-	-	
114	BLACK	K12 (14)	K11(14)	3"		18
115	BLACK	K1 (14)	K10 (14)	3"		18
116	BLACK	K10 (14)	K9 (14)	3"		18
117	BLACK	K9 (14)	K6 (14)	3"		18
118	BLACK	K6 (14)	K4 (14)	3"		18
119	-	-	-	-	-	-
120	BLACK	K4 (14)	K3 (14)	3"		18
121	BLACK	K3 (14)	K1 (14)	3"		18
122	WHITE	K1 (14)	TB2-8	12"		18
123	WHITE	P2-3	TB2-10	32"		18
124	WHITE	P3-2	TB2-9	27"		18
125	WHITE	PS1 (SILVER)	TB2-9	18"		18

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
126	WHITE	SIG. TIMER (3)	TB2-12	21"		18
127	BLACK	P2-5	K9 (8)	28"		18
128	BLACK	K9 (8)	K11 (13)	24"		18
129	BLACK	K11 (13)	K10 (13)	3"		18
130	BLACK	K10 (13)	K9 (13)	3"		18
131	-	-	-	-	-	-
132	-	-	-	-	-	-
133	-	-	-	-	-	-
134	-	-	-	-	-	-
135	-	-	-	-	-	-
136	RED	P2-7	K1 (10)	16"		22
137	RED	P2-8	K3 (6)	20"		22
138	RED	K1 (2)	K10 (11)	14"		22
139	RED	K10 (7)	P2-9	26"		22
140	BLACK	WIRE #36	WIRE #37	9"		18
141	BLACK	P1-7	LEVEL SEL (COM)	9"		18
142	BLACK	LEVEL SEL (NC)	P1-10	9"		18
143	BLACK	MAN. TIMER (T1)	P1-5	15"		18
144	BLACK	P1-11	HOW SW. (COM)	9"		18
145	BLACK	P1-9	HOT SW. (NO)	9"		18
146	BLACK	P1-13	COLD SW. (COM)	10"		18
147	BLACK	COLD SW. (NO)	P1-12	10"		18
148	BLACK	P2-4	SIGNAL	11"		18
149	BLACK	SIGNAL	P2-3	11"		18
150	BLUE	LEVEL 1 #1	P4-1	14"		22

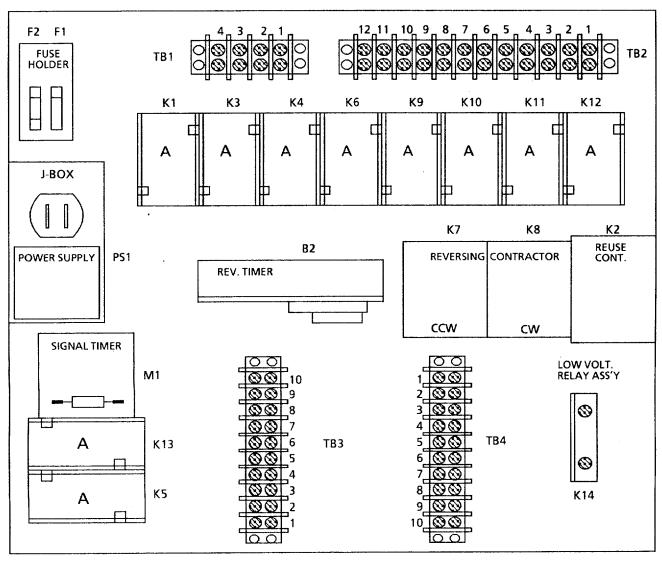
WIRE	WIRE			WIRE		
NO.	COLOR	FROM	ТО	LENGTH	MIL SPEC	WIRE
						GAUGE
151	BLUE	LEVEL 2 #1	WIRE #150	4"		22
152	BLUE	LEVEL 1 #2	P4-2	14"		22
153	BLUE	LEVEL 2 #2	WIRE #152	4"		22
154	BLUE	LEVEL 1 #3	P4-3	14"		22
155	BLUE	LEVEL 2 #3	WIRE #154	4"		22
156	BLUE	LEVEL 1 #4	P4-4	14"		22
157	BLUE	LEVEL 2 #4	WIRE #156	4"		22
158	BLUE	LEVEL 1 #5	P4-5	14"		22
159	BLUE	LEVEL 2 #5	WIRE #158	4"		22
160	BLUE	LEVEL 1 #6	P4-6	14"		22
161	BLUE	LEVEL 2 #6	WIRE #160	4"		22
162	BLUE	LEVEL 1 #7	P4-7	14"		22
163	BLUE	LEVEL 2 #7	WIRE #162	4"		22
164	BLUE	LEVEL 1 #8	P4-8	14"		22
165	BLUE	LEVEL 2 #8	WIRE #164	4"		22
166	BLUE	LEVEL 1 #9	P4-9	14"		22
167	BLUE	LEVEL 2 #9	WIRE #166	4"		22
168	BLUE	LEVEL 1 #10	P4-10	14"		22
169	BLUE	LEVEL 2 #10	WIRE #168	4"		22
170	BLUE	LEVEL 1 #11	P4-I11	14"		22
171	BLUE	LEVEL 2 #11	WIRE #170	4"		22
172	BLUE	LEVEL 1 #12	P4-12	14"		22
173	BLUE	LEVEL 2 #12	WIRE #172	4"		22
174	BLACK	K10 (10)	K11 (13)	18"		18
175	BLUE	LEVEL 1 (COM)	P1-8	14"		22

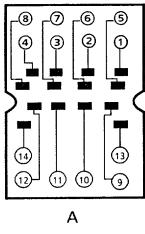
WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
176	BLUE	LEVEL 2 (COM)	P1-14	14"		22
177	BLACK	P1-1	MASTER ON/OFF	7"		18
178	WHITE	P1-2	MASTER ON/OFF	7"		18
179	BLACK	AUTO/MAN #1	AUTO/MAN #5	3"		18
18						
180	BLACK	AUTO/MAN #6	P1-4	7"		18
181	BLACK	SIG. CANCEL (NO)	P2-2	9"		18
182	RED	P2-6	R1 (CCW)	19"		22
183	RED LEAD (LED)	R1 (CENTER)	ON" LED	-		-
184	RED	R1 (CENTER)	P2-7	18"		22
185	RED	P2-9	TIMER " LED	18"		22
186	RED	P2-8	SUPPLY LED	17"		22
187	BLACK LEAD	LED (ON)	-	-	-	
188	BLACK LEAD	LED (SUPPLY)	-	-	-	
189	BLACK LEAD	LED (TIMER)	-	-	-	
190	BLUE	P2-10	COM ALL LEDS	16"		22
191	BLACK	DRAIN SW. (NO)	P1-6	8"		18
192	BLACK	P2-1	SIG. CANCEL (COM)	9"		18
193	BLUE	TB3-1	P4-1	14"		22
194	BLUE	TB3-4	P4-2	14"		22
195	BLUE	TB3-7	P4-3	14"		22
196	BLUE	TB3-8	P4-4	14"		22
197	BLUE	TB3-9	P4-5	14"		22
198	BLUE	TB3-10	P4-6	14"		22
199	BLUE	TB3-3	P4-7	14"		22
200	BLUE	TB4-1	P4-8	14"		22

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
201	BLUE	TB4-2	P4-9	14"		22
202	BLUE	TB3-2	P4-10	14"		22
203	BLUE	TB4-3	P4-11	14"		22
204	BLUE	TB4-4	P4-12	14"		22
205	-	-	-	-	-	-
206	STRIPED	PSI (-)	TB3-6	17"		
207	BLUE	P2-10	TB3-6	14"		22
208	SOLID,	PS1(+)	TB3-5	17"		
	DC					
209	RED	P2-6	TB3-5	12"		22
210	BLUE	P1-4	K4 (1)	20"		22
211	BLUE	P1-8	K4 (5)	20"		22
212	-	TB3-1	LEVEL SENSOR 1	-	-	-
213	-	TB3-4	LEVEL SENSOR 2	-	-	-
214	-	TB3-7	LEVEL SENSOR 3	-	-	-
215	-	TB3-8	LEVEL SENSOR 4	-	-	-
216	-	TB3-9	LEVEL SENSOR 5	-	-	-
217	-	TB3-10	LEVEL SENSOR 6	-	-	-
218	-	TB3-3	LEVEL SENSOR 7	-	-	-
219	BLACK	TB2-3	REUSE DRN SOL	42"		18
220	BLACK	TB2-4	WASTE DRN SOL	42"		18
221	BLACK	TB2-7	REUSE WTR WOL	38"		18
222	BLACK	TB2-5	HOT WTR SOL	36'		18
223	BLACK	TB2-6	COLD WTR SOL	36"		18
224	WHITE	TB2-8	REUSE DRN SOL	36"		18
225	-	-	-	-	-	-

WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE GAUGE
226	-	-	-	-	-	-
227	ı	-	-	-	-	-
228	-	-	-	-	-	-
229	ı	TB4-1	LEVEL SENSOR 8	-	-	-
230	ı	TB4-2	LEVEL SENSOR 9	=	=	-
231	ı	TB3-2	LEVEL SENSOR 10	-		-
232	-	TB4-3	LEVEL SENSOR 11	-	-	-
233	ı	TB4-4	LEVEL SENSOR 12	-	-	-
234	ı	TB3-6	LEVEL (COM)	-	-	-
235	BLACK	SPLICE QC	P3-1	5"		18
236	WHITE	K13 (14)	K5 (14)	3"		18
237	BLACK	K13 (14)	TB2-12	26"		18
238	ı	-	-	-	-	-
239	BLACK	TB2-3	K5 (13)	32"		18
240	BLACK	K12 (5)	K13 (10)	29"		18
241	BLACK	K13 (5)	K5 (9)	7"		18
242	BLACK	K12 (2)	K5 (9)	26"		18
243	BLACK	TB2-4	K12 (10)	8"		18
244	BLACK	K12 (10)	K13 (9)	25"		18
245	BLACK	K13 (7)	K10 (9)	19"		18
246	BLACK	K9(11)	K13 (11)	21"		18

APPENDIX F - continued Section II. WASHER WIRING LIST





F-14

APPENDIX F - continued

Section II. DRYER WIRING LIST

WIRE	WIRE	FDOM	TO	WIRE	MIL CDEC	WIDE
NO.	COLOR	FROM	ТО	LENGTH	MIL SPEC	WIRE GAUGE
1	BLACK	S1-L1	TB-1	26"	MIL -W-16878/2-BLE-0	12
2	RED	S1 - L2	TB-2	26"	MIL -W-16878/2-BLE-2	12
3	BLUE	S1-L3	TB-3	26	MIL -W-16878/2-BLE-6	12
4	BLACK	TB-1	KIR-L1	13"	MIL -W-16878/2-BLE-0	12
5	RED	TB-2	KIR-L2	12"	MIL -W-16878/2-BLE-2	12
6	BLUE	TB-3	KIR-L3	11"	MIL -W-16878/2-BLE-6	12
7	BLACK	K1R-T1	KIL-L1	10"	-	14
8	BLACK	K1R-T2	KIL-L2	10"	-	14
9	BLACK	K1R-T3	KIL-L3	10"	-	14
10	BLACK	KIL-T1	B1-T2, T8	96"	MIL-W-16878/2-BLE-0	12
11	RED	KIL-T2	B1-T1, T7	98"	MIL-W-16878/2-BLE-2	12
12	BLUE	KIL-T3	B1-T3, T9	100"	MIL-W-16878/2-BLE-6	12
13	BLACK	TB-4	B2-T2	42"	MIL-W-16878/2-BLE-0	12
14	RED	TB-5	B2-T1	43"	MIL-W-16878/2-BLE-2	12
15	BLUE	TB-6	B2-T3	44"	MIL-W-16878/2-BLE-6	12
16	BLACK	TB-4	K2-4	13"	MIL-W-16878/2-BLE-0	12
17	RED	TB-5	K2-3	13"	MIL-W-16878/2-BLE-2	12
18	BLUE	TB-6	K2-2	13"	MIL-W-16878/2-BLE-6	12
19	BLACK	K2-9	B3-T1, T7	72"	MIL-W-16878/2-BLE-0	12
20	RED	K2-10	B3-T2, T8	73"	MIL-W-16878/2-BLE-2	12
21	BLUE	K2-11	B3-T3, T9	74"	MIL-W-16878/2-BLE-6	12
22	BLACK	TB-4	S1-T1	21"	MIL-W-16878/2-BLE-0	12
23	RED	TB-5	S1-T2	21"	MIL-W-16878/2-BLE-2	12

APPENDIX F - continued

Section II. DRYER WIRING LIST

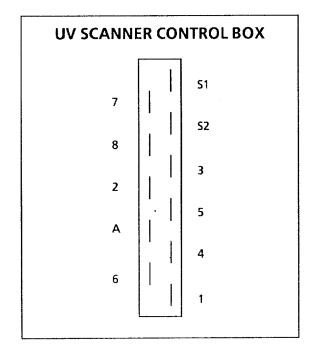
WIRE NO.	WIRE COLOR	FROM	то	WIRE LENGTH	MIL SPEC	WIRE
						GAUGE
24	BLUE	TB-6	S1-T3	21"	MIL-W-16878/2-BLE-6	12
25	WHITE	TB-8	GND-LUG	11"	MIL-2-16878/2-BLE-9	12
26	WHITE	K2-T2	TB-C5	16"	MIL-W-16878/1-BJE-9	16
27	-	TB-6	TB-7	-	-	METAL
						JUMPER
28	-	TB-9	TB-8	-	-	METAL
						JUMPER
29	WHITE	TB-7	S4-1	108"	MIL-W-16878/1-BJE-9	16
30	WHITE	S4-2	TB-16	114"	MIL-W-16878/1-BJE-9	16
31	WHITE	TB-16	B4-BLK	28"	MIL-W-16878/1-BJE-9	16
32	WHITE	TB-14	B4-RED	26"	MIL-W-16878/1-BJE-9	16
33	WHITE	TB-13	UV1-A	26"	MIL-W-16878/1-BJE-9	16
34	WHITE	TB-12	K2-C1	10"	MIL-W-16878/1-BJE-9	16
35	WHITE	TB-12	B4-GREEN	25"	MIL-W-16878/1-BJE-9	16
36	WHITE	TB-11	K2-T4	11"	MIL-W-16878/1-BJE-9	16
37	WHITE	TB-11	B2-L1	44"	MIL-W-16878/1-BJE-9	16
38	WHITE	TB-10	B4-YEL	24"	MIL-W-16878/1-BJE-9	16
39	WHITE	TB-9	K4-10	14.5"	MIL-W-16878/1-BJE-9	16
40	WHITE	TB-9	SV-2	61"	MIL-W-16878/1-BJE-9	16
41	WHITE	TB-9	K2-C2	16"	MIL-W-16878/1-BJE-9	16
42	WHITE	TB-8	UV1-2	24"	MIL-W-16878/1-BJE-9	16
43	WHITE	TB-8	K1R-A2	6"	MIL-W-16878/1-BJE-9	16
44	WHITE	TB-7	UV1-1	21"	MIL-W-16878/1-BJE-9	16
45	WHITE	TB-7	K2-L4	9.5"	MIL-W-16878/1-BJE-9	16
46	WHITE	TB-3	K4-1	19"	MIL-W-16878/1-BJE-9	16

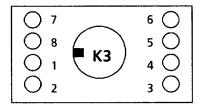
APPENDIX F - continued

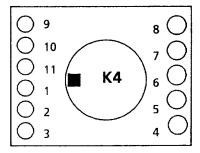
Section II. DRYER WIRING LIST

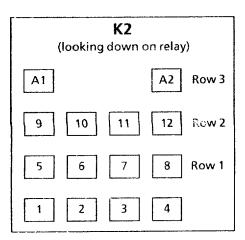
WIRE	WIRE			WIRE		
NO.	COLOR	FROM	ТО	LENGTH	MIL SPEC	WIRE
						GAUGE
47	WHITE	K4-1	K4-2	1.5"	MIL-W-16878/1-BJE-9	16
48	ı	K1R-Al	K1L-A1	-	-	SELF LEAD
49	WHITE	K4-5	K3-3	4.5"	MIL-W-16878/1-BJE-9	16
50	WHITE	K4-6	K3-1	8"	MIL-W-16878/1-BJE-9	16
51	WHITE	K4-10	K3-2	6"	MIL-W-16878/1-BJE-9	16
52	WHITE	K3-7	UV1-8	15"	MIL-W-16878/1-BJE-9	16
53	WHITE	UV1-8	UV1-6	4"	MIL-W-16878/1-BJE-9	16
54	WHITE	UV1-4	XFMR-1	57"	MIL-W-16878/1-BJE-9	16
55	WHITE	XFMR-2	SV-2	-	-	SELF LEAD
56	WHITE	UV1-3	SV-1	60"	MIL-W-16878/1-BJE-9	16
57	BLACK	UV1-S2	UV SCANNER	-	-	SELF LEAD
58	BLACK	UV1-Si	UV SCANNER	-	-	SELF LEAD
59	WHITE	K4-3	KIL-A2	15"	MIL-W-16878/1-BJE-9	16
60	WHITE/	B2-L2	TH1-1	26"	-	B2 WHITE/
	BLACK					BLACK 16
61	WHITE	TH1-2	TH2-1	36"	MIL-W-16878/1-BJE-9	16
62	WHITE	TH2-2	UV1-7	62"	MIL-W-16878/1-BJE-9	16
63	WHITE	TB-9	LS1-2	15"	MIL-W-16878/1-BJE-9	16
64	WHITE	LS1-2	LS2-2	4"	MIL-W-16878/1-BJE-9	16
65	WHITE	LS2-2	DS1-2	2"	MIL-W-16878/1-BJE-9	16
66	WHITE	TB-10	LS1-1	14"	MIL-W-16878/1-BJE-9	16
67	WHITE	TB-13	DS1-1	16"	MIL-W-16878/1-BJE-9	16
68	WHITE	DS1-1	LS2-1	2"	MIL-W-16878/1-BJE-9	16

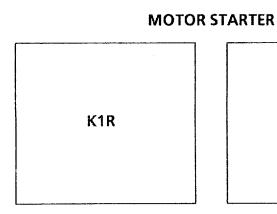
APPENDIX F - continued Section III. DRYER WIRING LIST

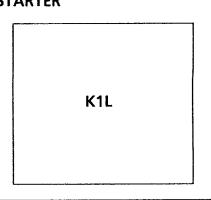












TERMINAL BOARD (TB)

\bigcirc	Θ	\bigcirc	\bigcirc	\bigcirc 5	\bigcirc	\bigcirc	\bigcirc_{8}	9	<u></u>	\bigcup_{11}	<u></u>	<u></u>	14	<u></u>	<u></u>
Θ	Θ		Θ	Θ	\ominus	\ominus	\ominus	\ominus	\ominus	\ominus	\ominus	\ominus	Θ	\bigcirc	Θ

APPENDIX G

ILLUSTRATED LIST OF MANUFACTURED ITEMS

G-1. INTRODUCTION.

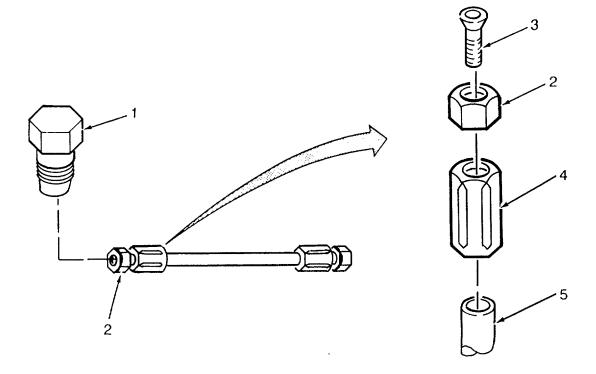
- a. This appendix includes complete instructions for making items authorized to be manufactured or fabricated at Unit, Direct Support, and General Support maintenance.
- b. A part number index in alphanumeric order is provided for cross-referencing the part number of the item to be manufactured to the figure which covers the fabrication criteria.
- c. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list of the illustrations.

G-2. MANUFACTURED ITEMS PART NUMBER INDEX.

PART NUMBER	FIGURE and ITEM NUMBER
MS 28741-5-0120	Figure 1, Item 1.
MS 28741-5-0160	Figure 1, Item 2
MS 28741-8-3000	Figure 1, Item 3

Tools

Plug AN806-5 (88044) Plug AN806-8 (88044)



ITEM NUMBER	NOMENCLATURE	PART NUMBER
1.	Nometallic Hose (burner and rotary pump to solenoid valve)	MS 28741-5-0120 (2 each)
	Adapter Hose	MS 24587-5 (2 each) MIL-H-8794-5-012 (12 inches)
2.	Nometallic Hose (blower to filter hose) Adapter Hose	MS 28741-5-0160 (1 each) MS 24587-5 (2 each) MIL-H-8794-5-016 (16 inches)
3.	Nometallic Hose [dryer (2 each) and water heater (2 each) supply and return hose] Adapter Hose	MS 28741-8-3000 (4 each) MS 24587-8 (2 each) MIL-H-8794-8-0300 (25 feet)

NOTE Both ends of hose are identical, this procedure is for one of them.

- (a) Install steel plug (1) in nut (2) and tighten.
- (b) Remove nut (2) and nipple (3) by turning counterclockwise from adapter (4).
- (c) Remove adapter (4) by turning clockwise from hose (5).
- (d) Install adapter (4) by turning counter

clockwise on hose (5).

(e) Install nut (2) and nipple (3) by turning

clockwise on nut (2),

(f) Remove steel plug (1) from nut (2).

Subject	Paragrap Numbe
Α	
Abbreviations, List of	
AC Motor	
AC Motor and Conduit Box	
Adapter	
Administrative Storage	
Air Compressor	
Air Manifold	
Air Shutter and Plenum	
Air Tank	2-31
В	
Basket and Curb Assembly	2-39
Basket(s)	
Basket	
Basket(s)	
Belt Guard	
Blower	
Bracket	
Bracket Assembly (Nonmetallic Hose)	
Buzzer	
c	
Č	
Cable (Water Pump)	
Cable Diagrams	• •
Center Beam	
Center Beam	
Centrifugal Pump Unit (Water Pump)	
Chassis Control	
Clamp	2-45
Common Tools and Equipment	2-2
Common Tools and Equipment	3-3
Common Tools and Equipment	4-2
Compressor and Motor	
Conduit	3-35

	Paragraph
Subject	Number
Connector-Switch	
Control Console	
Control Panel	
Control Panel	3-56
Controller Stand	
Corrosion Prevention and Control (CPC)	1-3
Cover	
Cross-Reference List, Nomenclature	1-7
Cylinder	3-77
D	
Destruction of Army Materiel to Prevent Enemy Use	
Direct Support Troubleshooting	
Discharge Spout	2-66
Door	2-64
Door and Bar	
Door Switch	2-65
Drain Pipe	2-26
Drive Unit	
Drive Unit Assembly	3-46
Drum	3-27
Dryer	3-58
Dryer Base	3-79
Dryer Bin	3-80
Dryer Conduits	3-78
Dryer Panel	3-62
Durable Items List, Expendable and	App D
E	
Enclosure Box	3-37
Equipment Data	1-12
Equipment Description:	
Equipment Characteristics, Capabilities and Features	1-10
Equipment Data	
Location and Description of Major Components	1-11
	2-68

	Paragrapl
Subject	Number
Exhaust Elbow	
Expendable and Durable Items List	
Extractor Brake	
Extractor Lid and Knob	2-38
Extractor Piping	2-37
Extractor Piping	3-40
F	
Fan and Motor	2-69
Filter	
Fire Extinguisher/Bracket	
Flame Control	
Fluid Filter	
Frame	
Front and Rear Frames	
Front Frame	2-16
G	
Gas-Oil Combustion Burner	
General	2-9
General	2-11
General	4-5
General Information:	
Corrosion Prevention and Control (CPC)	1-3
Destruction of Army Materiel to Prevent Enemy Use	1-4
Glossary	
List Of Abbreviations	
Maintenance Forms, Records and Reports	
Nomenclature Cross-Reference List	
Preparation for Storage or Shipment	
Reporting Equipment Improvement Recommendations (EIR)	
Scope	
General Maintenance Procedures	
General Maintenance Procedures	
Glossary	
Ground Rod	
Cloude 1100	2-00

Subject	Paragraph Number
Н	
Heater	3-73
Heater Base	
Heater Screen	
Hinge Shaft Assembly	
Hose(s) and Quick Coupling Half	
Hot Air Blower	
ı	
Ignition Cables, Sight-Eye, Nozzle, Fuel Piping, and Electrodes	
Illustrated List of Manufactured Items	
Improvement Recommendations (EIR), Reporting Equipment	1-5
Indicator Light	
Indicator Light	
Interval Timer	
Introduction	
Introduction	
Introduction	1-13
L	
Ladder	3-10
Ladder	
Laundry Extractor	
Left Beam	
Left Beam	
Lid Closed Switch	
Lid Locked Solenoid and Linkage	
Lid Locked Switch	
Light	
Light Bulb	
List of Abbreviations	
Location and Description of Major Components	
Lock Cover and Lock	
Lower Track.	
Lower Track	

Subject	Paragraph Number
Lower/Dryer Platforms	2-24
Lower/Dryer Platform	
Lubrication Orders	2-1
Lubrication Orders	4-1
M	
Maintenance Allocation Chart	Арр В
Maintenance Forms, Records and Reports	1-2
Maintenance Platform	
Mandatory Replacement Parts	Арр С
Modified Generator	2-81
Modified M85 Water Heater	
Modified Trailer	
Motor and Plate	
Motor Assembly	2-42
N	
Nomenclature Cross-Reference List	1-7
Nonmetallic Hoses (Fuel Lines)	2-43
0	
Oil Housing	3-48
ON/OFF Switch	3-63
Overvoltage Absorber (Rotation Monitor)	3-51
Р	
Piping	2-46
Platform Anchor	
Plug-in Relay	3-67
PMCS	
PMCS Table	2-8
Power Cable	
Power Panel	3-38
Pre-Extractor Bin (Wet Wash Bin)	
Pre-Extractor Bin (Wet Wash Bin)	2-36

Subject	Paragraph Number
- Cubject	Hamber
Preparation for Storage or Shipment	1-6
Pressure Gage	
Principles of Operation:	
Introduction	1-13
Pushbutton Switch	3-43
Q	
Quick Disconnect Cap	2-25
R	
Rear Frame	2-19
Recommendations (EIR), Reporting Equipment Improvement	
Reducer and Output Quill	
References	Арр А
Repair Parts	2-4
Repair Parts	3-5
Repair Parts	
Reporting Equipment Improvement Recommendations (EIR)	
Right Beam	
Right, Center and Left Beams	3-14
Roller Chain	3-72
Rotary Pump	2-53
Rotary Pump	3-59
S	
Scope	3-2
Scope	1-1
Seal and Carriage	3-25
Sediment Strainer and Outlet Piping	2-75
Service Upon Receipt of Material	2-5
Shield	2-71
Shipment	4-9
Short Platform	
Shutter	
Skirt and Leveling Arm	3-57
Solenoid Nonmetallic Hose Valve	2-70

Subject	Paragraph Number
•	
Solid State Relay	3-52
Sound Controlling Panels	
Special Tools, TMDE, and Support Equipment	2-3
Special Tools, TMDE, and Support Equipment	
Special Tools, TMDE, and Support Equipment	
Speed Reducer	
Speed Reducer	
Starter Enclosure	
Starter Motor	
Strut	
Strut	
Suction Strainer	
Т	
Tarpaulin	3-9
Temperature Control	2-62
Terminal Board	3-54
Terminal Board	3-69
Thermometer	2-63
Thermostatic Switch	2-61
Tiedown	2-73
Timer	3-53
Timer	3-64
Tool Box	2-80
Torque Limits	App E
Transformer and Box	2-56
Troubleshooting:	
Direct Support	3-7
Unit	
Trunnion	3-71
Tub Pipe	
Tumbler Barrel	
Tumbler Motor Control Relay (K2)	
Two Step Stair	

Subject	Paragraph Number
U	
Unit Preventive Maintenance Checks and Services (PMCS) Unit Troubleshooting UV Scanner and Terminal Box Unit Maintenance Procedures Upright Rail Upright Rail	
Upright Rail W	3-15
Washer Washer Drain Wiring Diagrams	3-21

By Order of the Secretary of the Army:

mitte of duto

GORDON R. SULLIVAN General, United States Arm y Chief of Staff

Official:

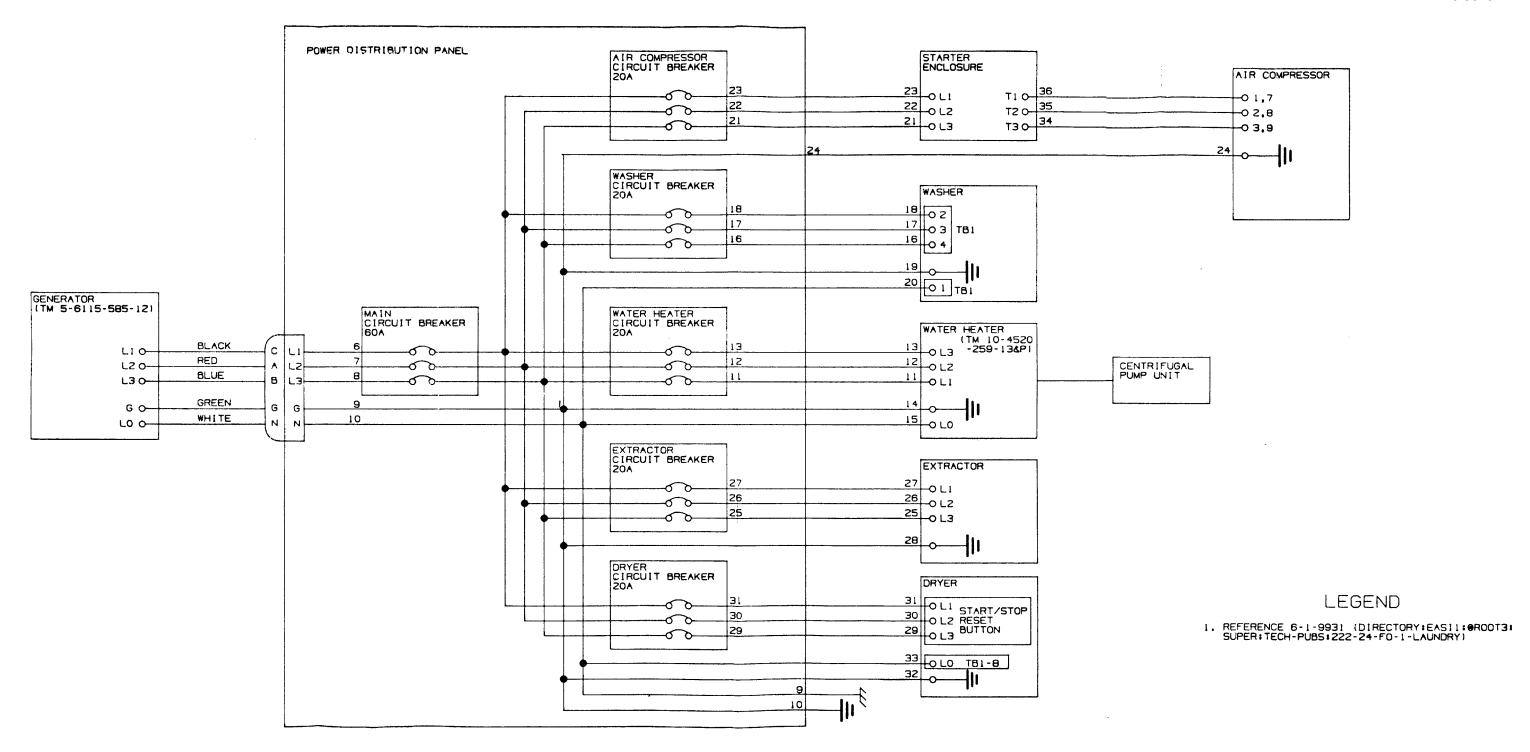
MILTON H. HAMILTON

Adm inistrative Assistant to the
Secretary of the Army
06089

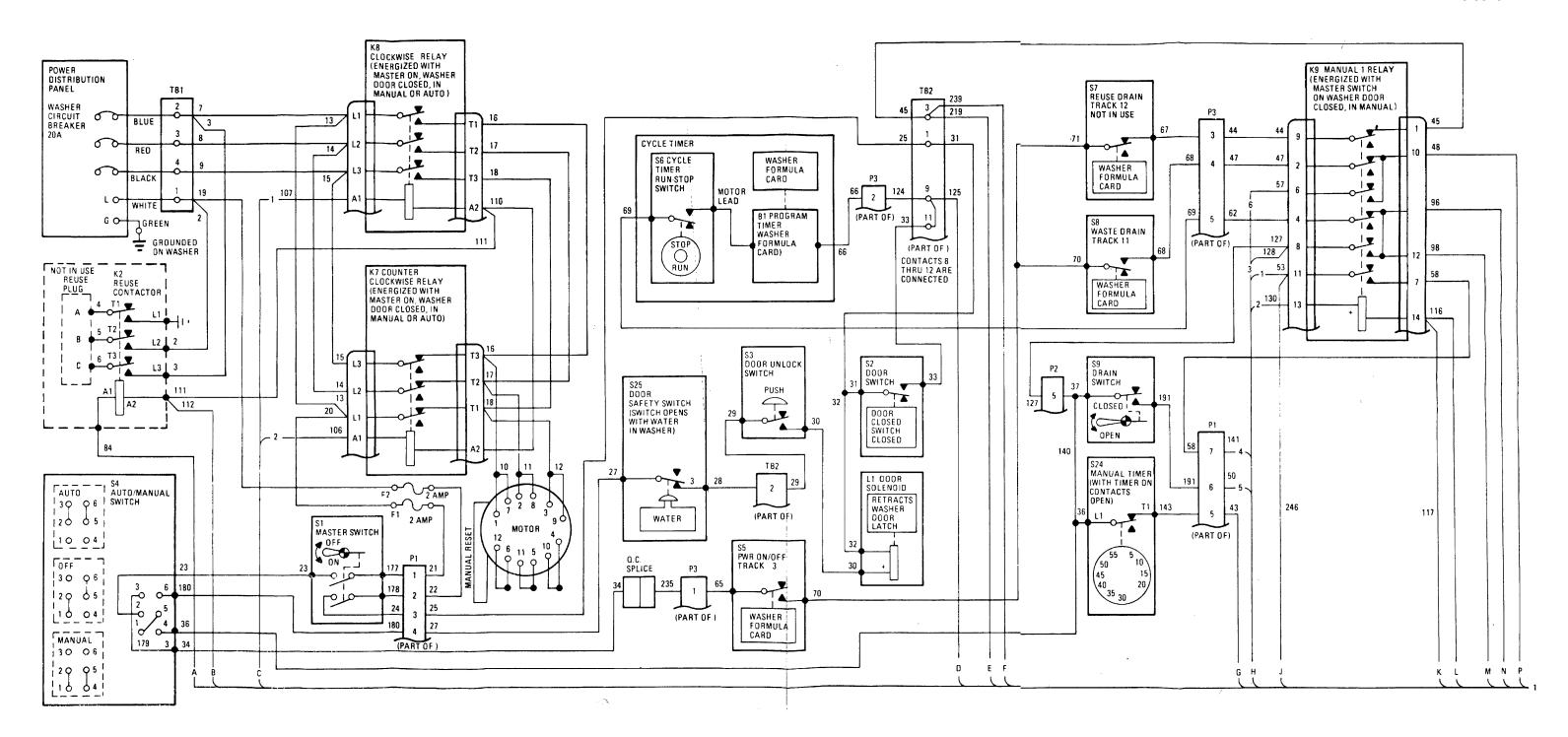
DISTRIBUTION:

To be distributed in accordance with DA Form 12-25-E, block no. 6193, requirements for TM 10-3510-222-24.

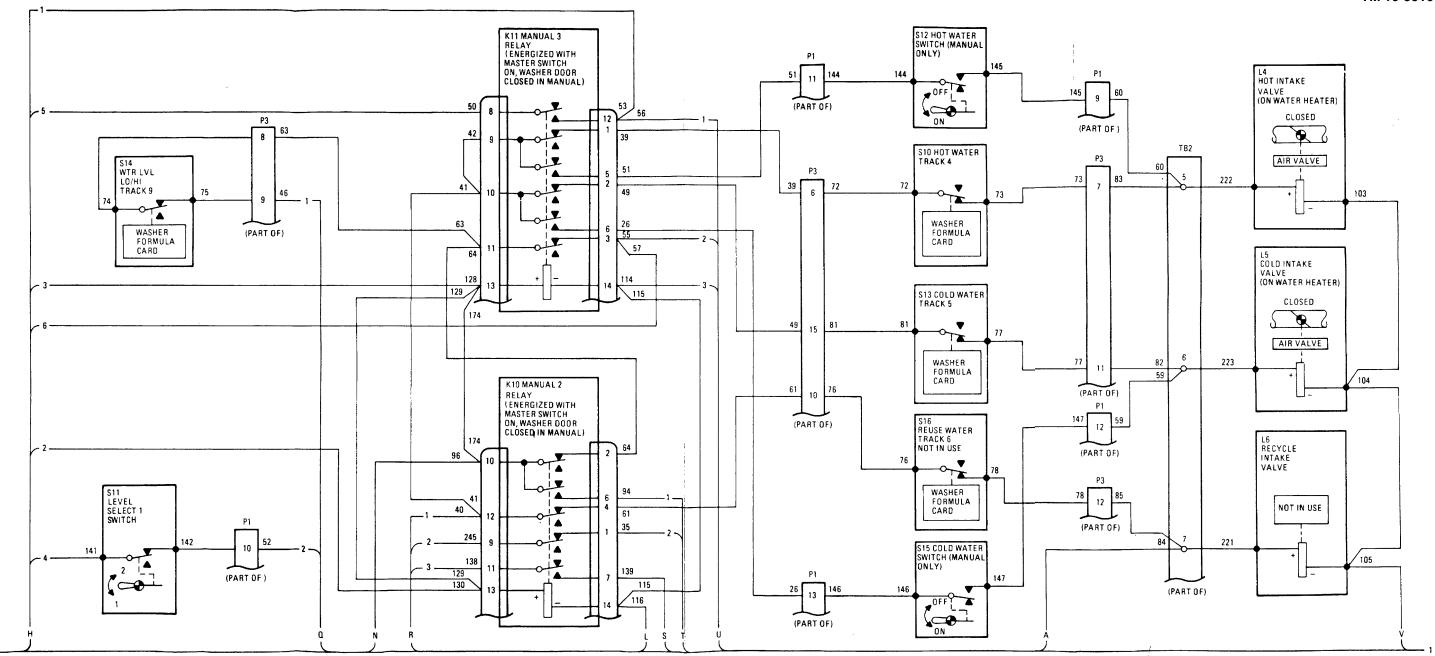
★U.S. GOVERNMENT PRINTING OFFICE: 1995.0 - 392-620

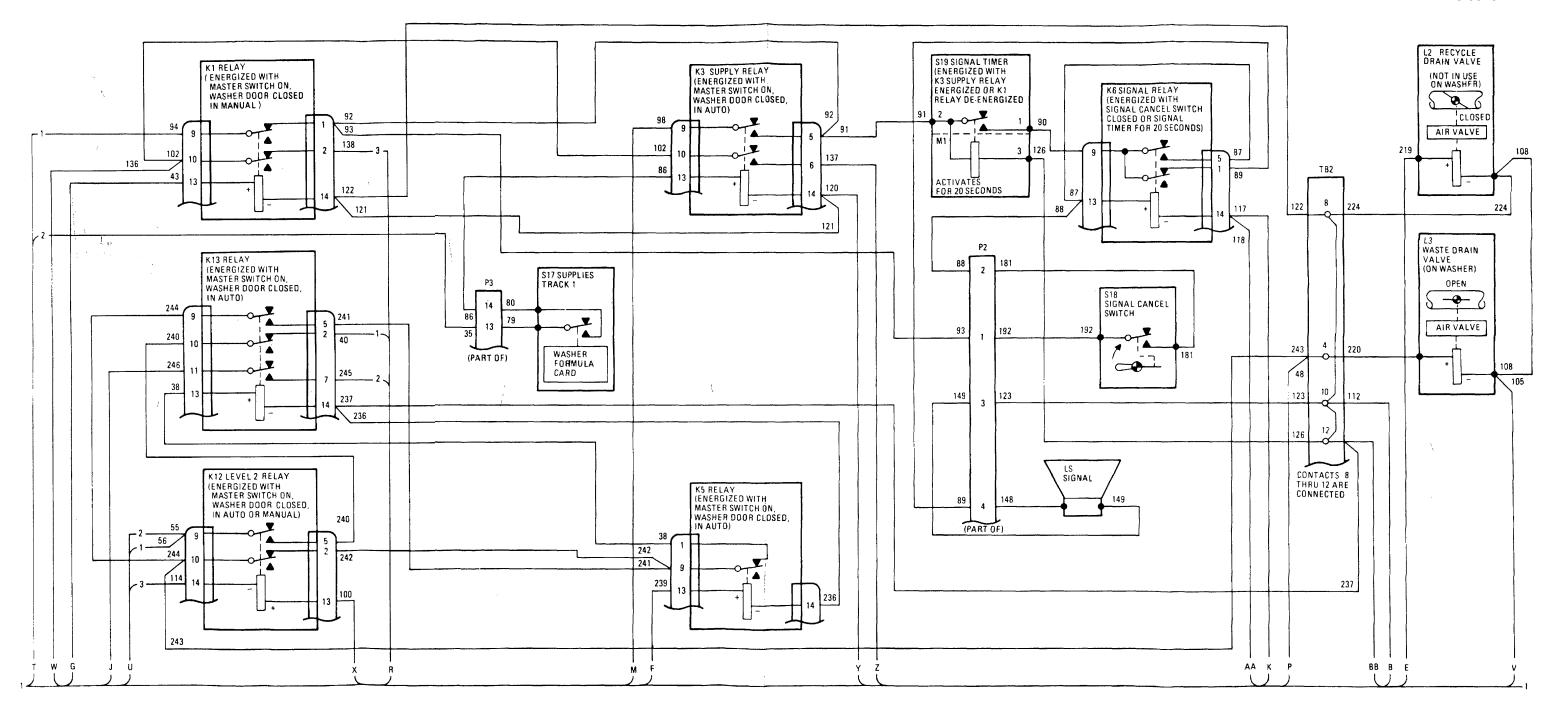


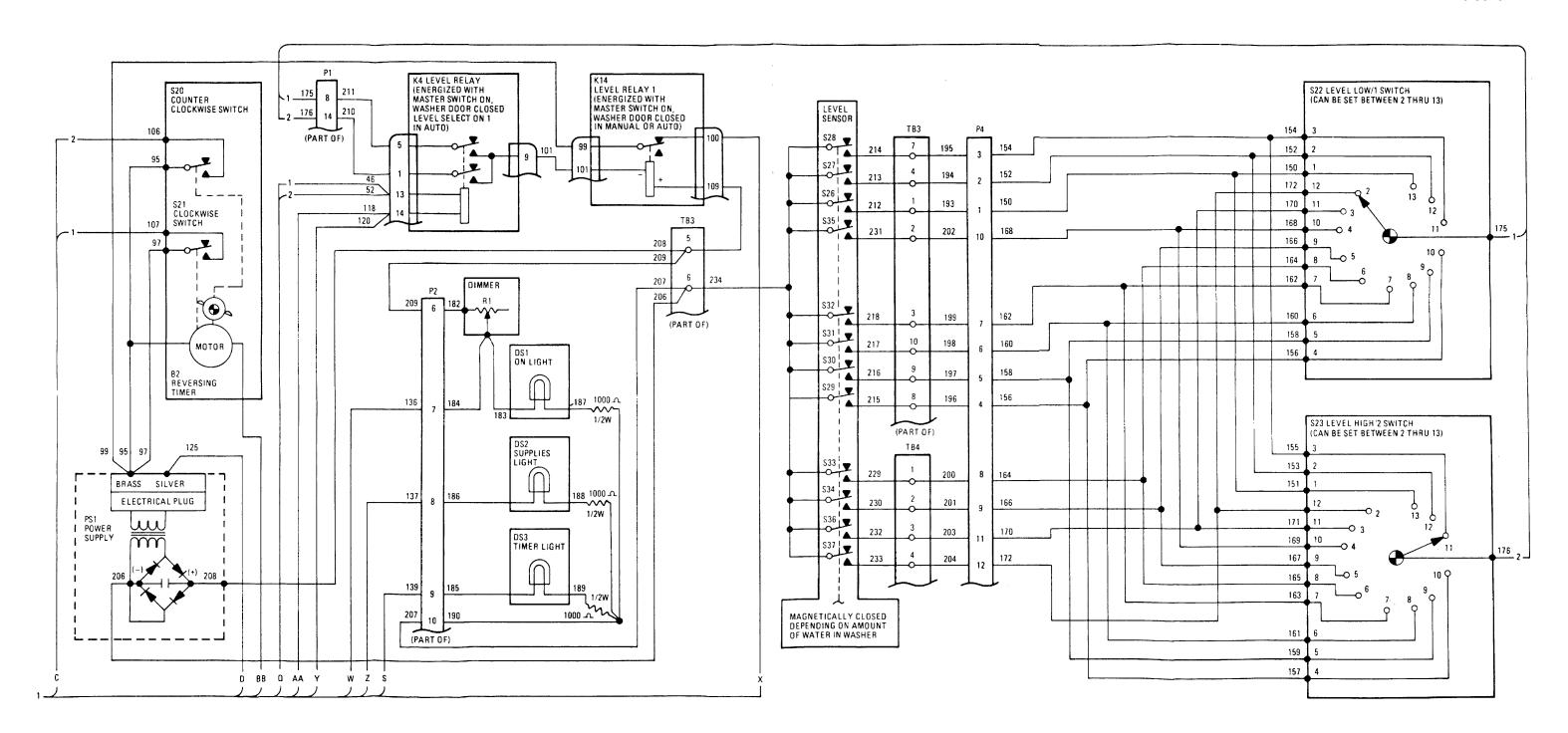
FO-1 Laundry Unit Interconnect Wiring Diagram
FP-1/(FP-2 blank)



FO-2 Washer Wiring Diagram (Sheet 1 of 5) FP-3/(FP-4 blank)

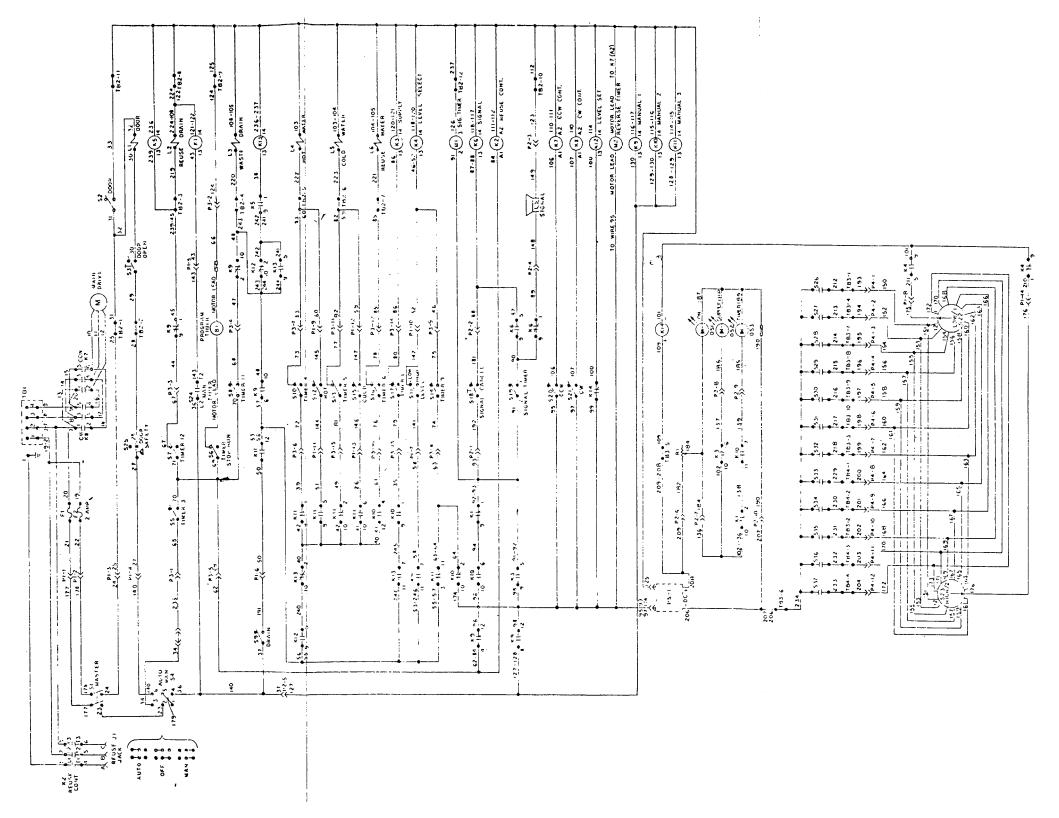






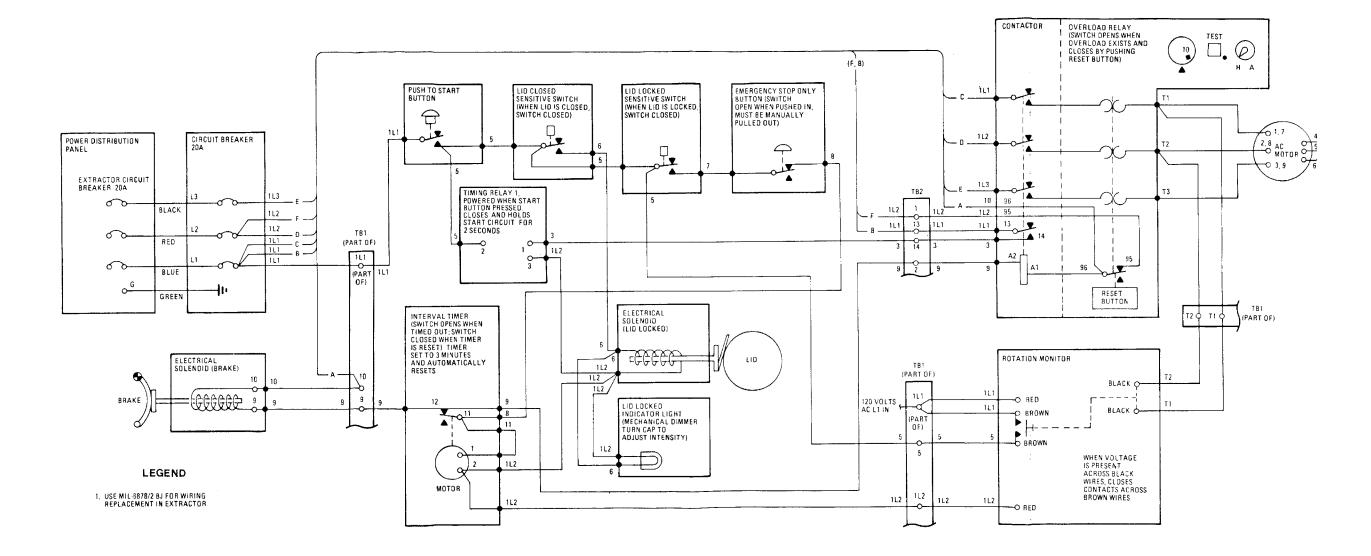
FO-2 Washer Wiring Diagram (Sheet 4)

FP-9/(FP-10 blank)



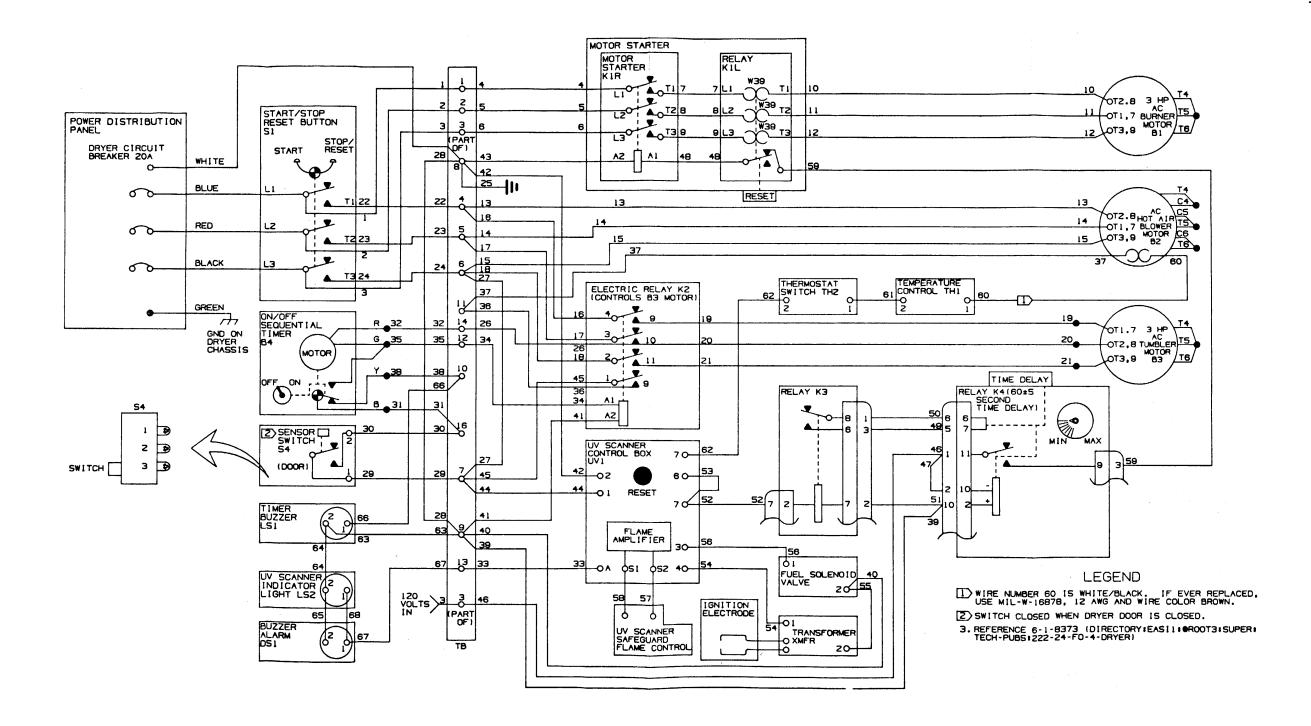
FO-2 Washer Wiring Diagram (Sheet 5)

FP-11/(FP-12 blank)



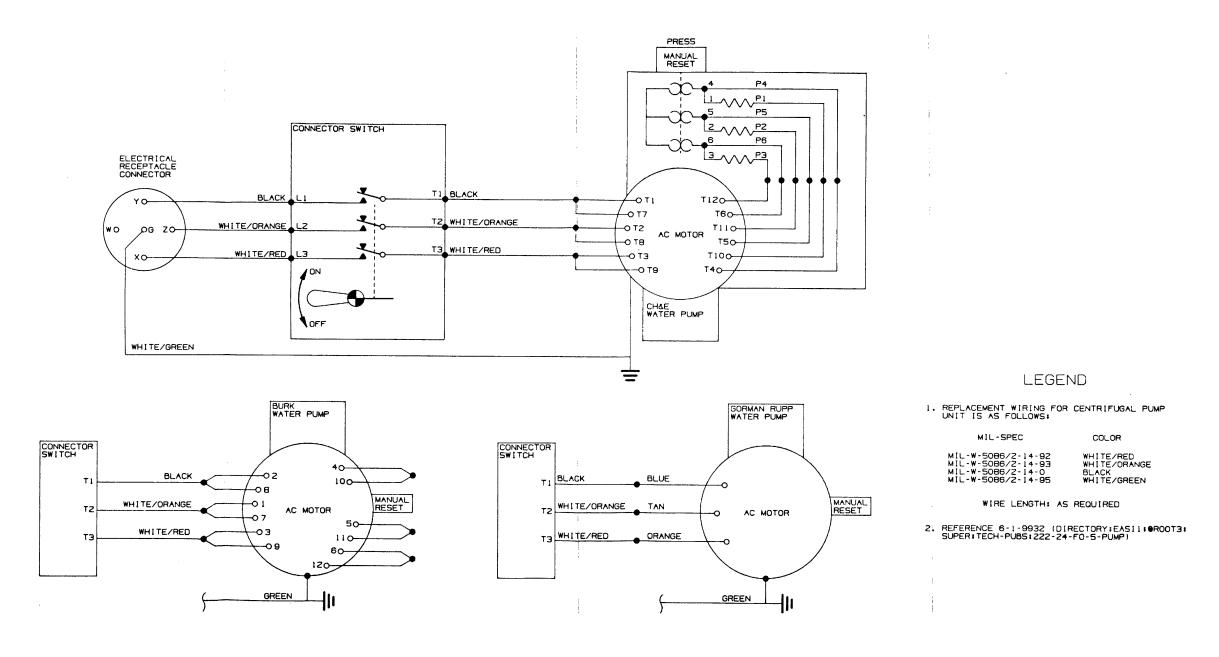
FO-3 Extractor Unit Wiring Diagram

FP-13/(FP-14 blank)



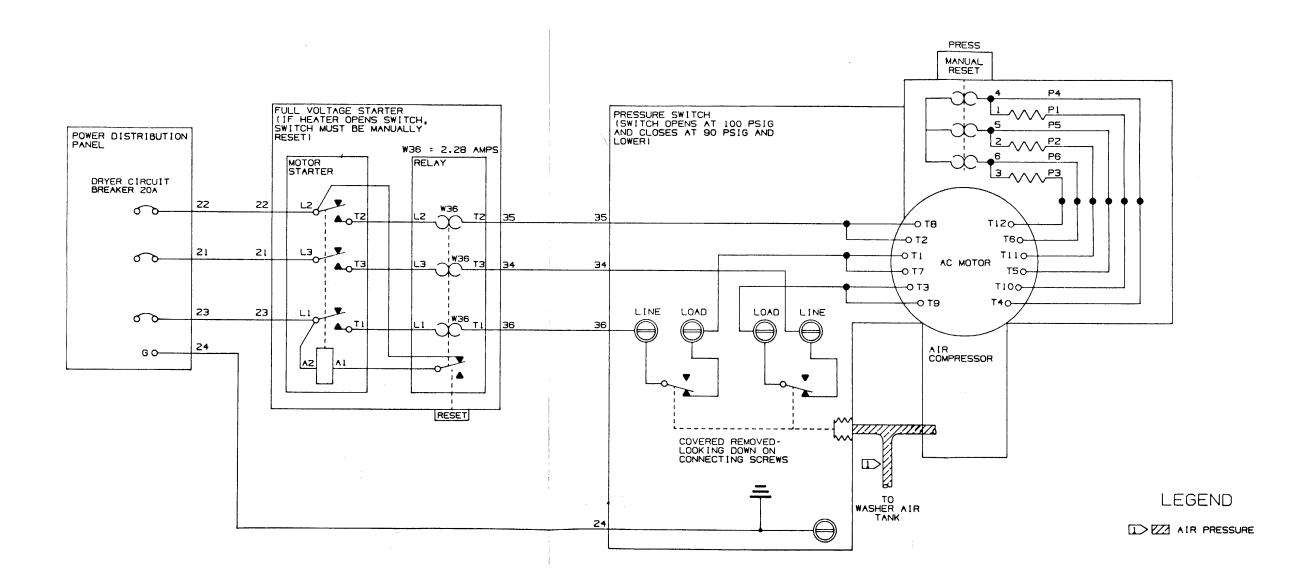
FO-4 Dryer Wiring Diagram

FP-15/(FP-16 blank)



FO-5 Centrifugal Pump Unit Wiring Diagram

FP-17/(FP-18 blank)



FO-6 Air Compressor Wiring Diagram

FP-19/(FP-20 blank)

The Metric System and Equivalents

Linear Measure Liquid Measure

1 c	entimeter =	: 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 acres
- 1 hectogram = 10 decagrams = 3.52 ounces
- 1 kilogram = 10 hectograms = 2.2 pounds
- 1 quintal = 100 kilograms = 220.46 pounds
- 1 metric ton = 10 quintals = 1.1 short tons

- 1 centiliter = 10 milliters = .34 fl. ounce 1 deciliter = 10 centiliters = 3.38 fl. ounces
- 1 liter = 10 deciliters = 33.81 fl. ounces
- 1 dekaliter = 10 liters = 2.64 gallons
- 1 hectoliter = 10 dekaliters = 26.42 gallons
- 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

- 1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
- 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
- 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
- 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
- 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47
- 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	То	Multiply by	To change	То	Multiply by
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	s .405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

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

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS SOMETHING WRONG WITH PUBLICATION FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS) THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT DATE SENT AND DROP IT IN THE MAIL. **PUBLICATION TITLE PUBLICATION NUMBER PUBLICATION DATE** BE EXACT PIN-POINT WHERE IT IS IN THIS SPACE, TELL WHAT IS WRONG PARA-GRAPH FIGURE NO. TABLE NO. AND WHAT SHOULD BE DONE ABOUT IT.

SIGN HERE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

PIN: 072150-000