

**\*TM 10-3510-222-24**

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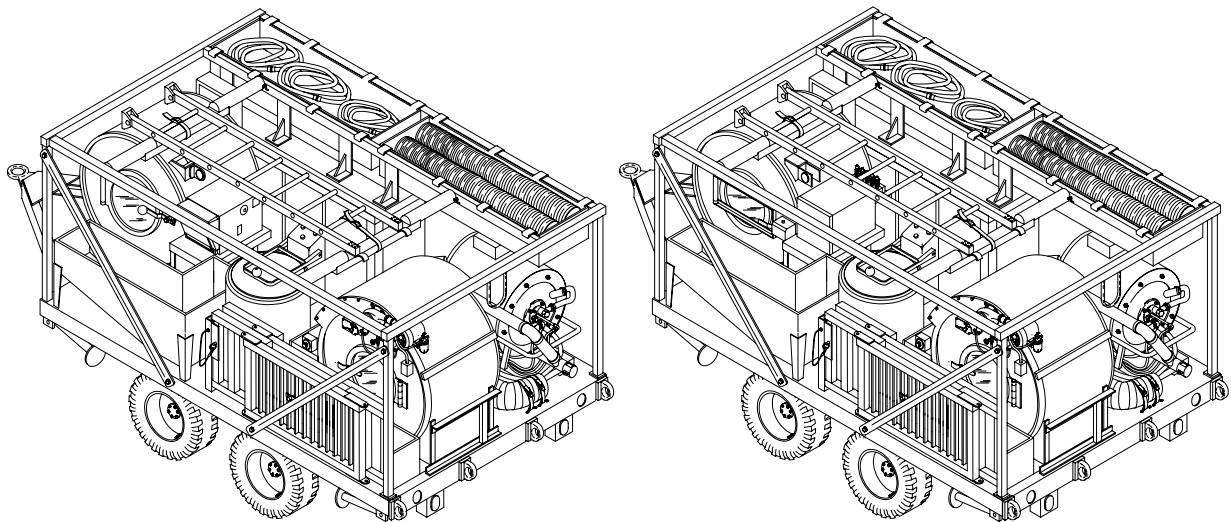
**TECHNICAL MANUAL**

**UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT  
MAINTENANCE MANUAL FOR**

**LAUNDRY UNIT,  
TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200**

**M85-100 NSN: 3510-01-291-8169**

**M85-200 NSN: 3510-01-365-5687**



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

\*This manual supersedes TM 10-3510-209-24, 17 March 1988, TM 10-3510-220-24, 27 August 1990, and TM 10-3510-222-24, 30 December 1993, including all changes.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY  
30 MAY 2005**



## WARNING SUMMARY

This warning summary contains general safety warnings and hazardous materials warnings that must be understood and applied during operation of this equipment. Failure to observe these precautions could result in serious injury or death to personnel. Also included are explanations of safety and hazardous materials icons used within this technical manual.

### EXPLANATION OF SAFETY WARNING ICONS



**BIOLOGICAL** - abstract symbol bug shows that a material may contain bacteria or viruses that present a danger to life or health.



**ELECTRICAL** - electrical wire to arm with electricity symbol running through human body shows that shock hazard is present.



**SHARP OBJECT** - pointed object in hand shows that a sharp object presents a danger to limb.



**HEAVY PARTS** - heavy object on human figure shows that heavy parts present a danger to life or limb.



**HEAVY OBJECT** – human figure stooping over heavy object shows physical injury potential from improper lifting technique.



**CARBON MONOXIDE** – human figure showing gaseous substance being inhaled into respiratory system, demonstrating potential hazard.



**FLYING PARTICLES** - arrows bouncing off face with face shield shows that particles flying through the air will harm face.



**HEAVY PARTS** - hand with heavy object on top shows that heavy parts can crush and harm.



**HEAVY PARTS** - heavy object pinning human figure against wall shows that heavy, moving parts present a danger to life or limb.



**EXPLOSION** - rapidly expanding symbol shows that the material may explode if subjected to high temperatures, sources of ignition, or high pressure.



**FIRE** - flame shows that a material may ignite and cause burns.

**EXPLANATION OF SAFETY WARNING ICONS - continued**



HOT AREA - hand over object radiating heat shows that part is hot and can burn.



HELMET PROTECTION - arrow bouncing off head with helmet shows that falling parts present a danger.



EAR PROTECTION – headphones over ears shows that noise level will harm ears.

**GENERAL SAFETY WARNINGS DESCRIPTION**



**WARNING**

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 symptoms are present, IMMEDIATELY evacuate personnel to fresh air.

BE AWARE the field protection mask used for nuclear-biological-chemical attack WILL NOT protect you from carbon monoxide poisoning.

THE BEST DEFENSE AGAINST CARBON MONOXIDE POISONING IS GOOD VENTILATION.



**WARNING**

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**

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



**WARNING**

Do not make or change electrical connections while the laundry 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**

Ensure that the power distribution cable is not frayed or damaged and does not lie in water. Serious injuries or electrocution could result.



**WARNING**

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, or 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**

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



**WARNING**

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



**WARNING**

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



**WARNING**

Do not service the unit with fuel while the unit is in operation. Failure to observe this warning may result in serious injury or death to personnel.

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**

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**

Do not disconnect Quick Disconnect (QD) couplings while water system is pressurized. Hose end may whip causing injury to personnel and damage to equipment.



**WARNING**

Exhaust ducts are hot. Avoid touching exhaust ducts during shutdown to prevent burns.



**WARNING**

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 INFORMATION ON ARTIFICIAL RESPIRATION, REFER TO FM 21 –11.





CHANGE  
NO. 1

HEADQUARTERS,  
DEPARTMENT OF THE ARMY  
WASHINGTON, D.C., 30 SEPTEMBER 2005

TECHNICAL MANUAL

UNIT, DIRECT SUPPORT AND GENERAL SUPPORT  
MAINTENANCE MANUAL  
FOR  
LAUNDRY UNIT, TRAILER MOUNTED, M-85  
MODELS: M85-100, M85-200  
M85-100 NSN: 3510-01-291-8169  
M85-200 NSN: 3510-01-365-5687

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TM 10-3510-222-24, dated 30 May 2005, is changed as follows:

1. File this sheet in the front of the manual for reference.
2. This change implements Army Maintenance Transformation and changes the Maintenance Allocation Chart (MAC) to Support Field and Sustainment Maintenance.
3. New or updated text is indicated by a vertical bar in the outer margin.
4. Added illustrations are indicated by a vertical bar adjacent to the figure number. Changed illustrations are indicated by a miniature hand adjacent to the updated area and a vertical bar adjacent to the figure number.
5. Remove old pages and insert new pages as indicated below.

**Remove Pages**  
A/(B Blank)

**Insert Pages**  
A/B  
DA 2028 Front/Back

6. Replace the following work packages with their revised version.


**Work Package**  
**Number**  
WP 0187 00  
WP 0188 00

C1

By Order of the Secretary of the Army:

**PETER J. SCHOOMAKER**  
*General, United States Army*  
Chief of Staff

Official:

  
**SANDRA R. RILEY**  
*Administrative Assistant to the*  
*Secretary of the Army*  
0523001

Distribution:

To be distributed in accordance with initial distribution number (IDN) 256193 requirements for TM 10-3510-222-24.

**INSERT LATEST CHANGED PAGES/WORK PACKAGES. DESTROY SUPERSEDED PAGES.**

**LIST OF EFFECTIVE PAGES/WORK PACKAGES**

NOTE: The portion of text affected by the update is indicated by a vertical line in the outer margins of the page. Updates to illustrations are indicated by miniature pointing hands or vertical lines in the outer margins of the page in the area of the illustration. Zero in the "Change No." column indicates an original page.

Dates of issue for original manual and changed pages / work packages are:

Original 30 May 2005  
 Change 1 30 September 2005

**TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 52 AND TOTAL NUMBER OF WORK PACKAGES IS 193, CONSISTING OF THE FOLLOWING:**

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DEPARTMENT OF THE ARMY  
WASHINGTON, D.C., 30 May 2005

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**REPORTING 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) directly to Commander, U.S. Army Tank-automotive & Armament Command, ATTN: AMSTA-LC-CECT, Kansas St., Natick, MA 01760. You may also submit your recommended changes by E-mail directly to: [amssbriml@natick.army.mil](mailto:amssbriml@natick.army.mil). A reply will be furnished directly to you. Instructions for sending electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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## HOW TO USE THIS MANUAL

This manual contains General Information, Unit Maintenance Troubleshooting Instructions, Unit Maintenance Instructions, Direct Support Troubleshooting Instructions, Direct Support Maintenance Instructions, and General Support Maintenance Instructions for the M85 Series Trailer Mounted Laundry.

Chapter 1 contains introductory information on the laundry and its associated equipment as well as a Theory of Operation. Chapter 2 includes Unit Maintenance Troubleshooting Instructions. Chapter 3 contents include Unit Maintenance Instructions. Chapter 4 contains Direct Support Troubleshooting Instructions. Chapter 5 contains Direct Support Maintenance Instructions. Chapter 6 contains General Support Maintenance Instructions. Chapter 7 contains references and other supporting information.

**Manual Organization and Page Numbering System.** The manual is divided into seven major chapters that detail the topics mentioned above. Within each chapter are work packages covering a wide range of topics. Each work package is numbered sequentially starting at page 1. The work package has its own page numbering scheme and is independent of the page numbering used by other work packages. Each page of a work package has a page number of the form XXXX YY-ZZ where XXXX is the work package number (e.g. 0010 is work package 10) and YY is the revision number for that work package and ZZ represents the number of the page within that work package. A page number such as 0010 00-1/2 blank means that page 1 contains information but page 2 of that work package has been intentionally left blank.

**Finding Information.** The Table of Contents permits the reader to find information in the manual quickly. The reader should start here first when looking for a specific topic. The Table of Contents lists the topics contained within each chapter and the Work Package Sequence Number where it can be found.

Example: If the reader were looking for instructions on “Preventive Maintenance Checks and Services”, which is an Operator Maintenance topic, the Table of Contents indicates that Operator Maintenance information can be found in Chapter 3. Scanning down the listings for Chapter 3, “Preventive Maintenance Checks and Services” information can be found in WP 0009 00 (i.e. Work Package 9).

An Alphabetical Index can be found at the back of the manual. It lists specific topics with the corresponding work package.



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**UNIT, AND DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
GENERAL INFORMATION**

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## SCOPE

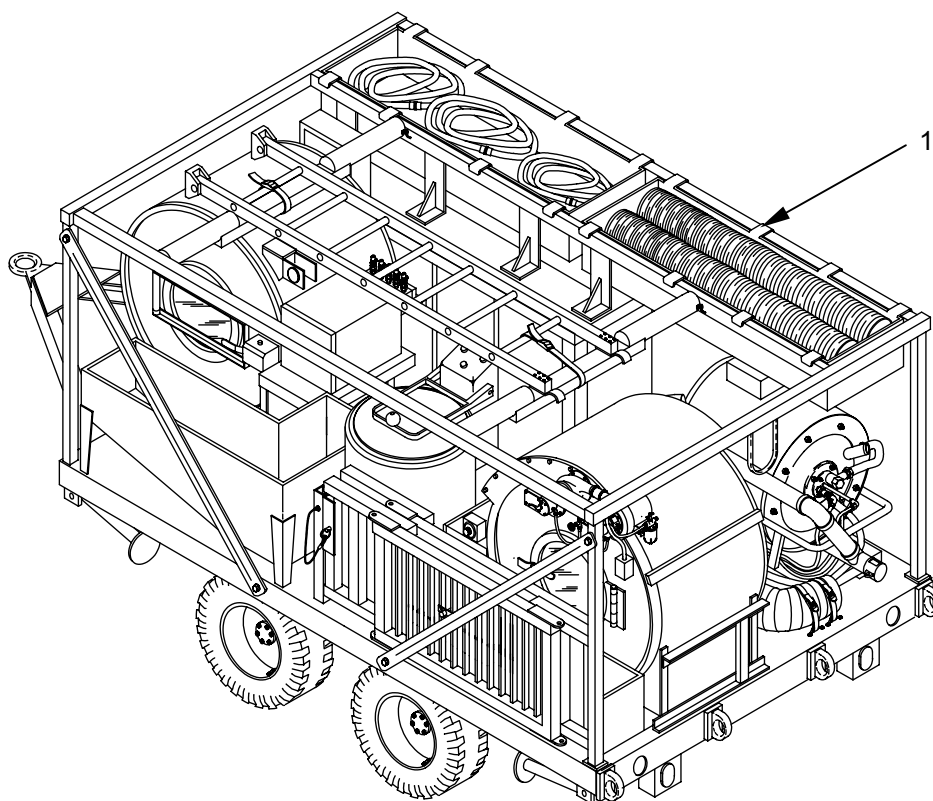
This technical manual describes the Unit, Direct Support, and General Support maintenance procedures for the M85 Series Trailer Mounted Laundry Units. The information and procedures in this manual are applicable to all versions of the M85 Series Trailer Mounted Laundry, except where noted.

The Model M85 Series Trailer Mounted Laundries are usually found in support of field hospital and reconstitutive operations.

Type of Manual: Maintenance

Model Number and Equipment Name: Laundry Unit, Trailer Mounted, Model M85-100 NSN 3510-01-291-8169, and M85-200, NSN 3510-01-365-5687 (1).

Purpose of Equipment: The M85 Series Trailer Mounted Laundry Units provide troop units and field hospitals with on-site laundry service for cotton, woolen, and durable press items. Each laundry unit has a washing and drying capacity of 120 lbs (54kg) of laundry per hour.



## **MAINTENANCE FORMS RECORDS AND REPORTS**

Department of the Army forms and procedures for equipment maintenance will be those prescribed by DA PAM 738-750, Functional Users Manual for The Army Maintenance Management System (TAMMS) (Maintenance Management Update).

### **REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs)**

If your M85 Series Laundry 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 Tank-automotive and Armament Command. ATTN: AMSTA-LC-R, Kansas St. Natick MA 01760-5052. We will send you a reply.

### **CORROSION PREVENTION AND CONTROL (CPC)**

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.

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.

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.

Submit completed SF 368 specifying a corrosion problem to the address specified in DA PAM 738-750

### **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, Procedures for Destruction of Equipment to Prevent Enemy Use.

### **PREPARATION FOR STORAGE AND SHIPMENT**

Before placing the M-85 Series Trailer Mounted Laundry in administrative storage or preparing the system for shipment, current maintenance services must be applied; defects and failures corrected; and Modification Work Orders (MWO's) applied. Prepare the system for storage and shipment as described in Chapter 2 of TM 10-3510-222-10.

**Placement of equipment in storage.** Equipment should be placed in storage for limited periods only, when a shortage of maintenance capability exists. Items should be mission ready within 24 hours, or within time factors set by directing authority. During storage periods, maintenance records must be kept current.

**Storage site selection.** Covered space is preferred. When sufficient covered space is not available, priority should be given to items that are most susceptible to deterioration from the elements. Open sites should be improved hardstand, if available. Unimproved sites should be firm, well-drained locations, free of excessive vegetation.

NOMENCLATURE CROSS-REFERENCE LIST	
Common Name	Official Nomenclature
Air Compressor Controller (Panel)	Compressor Assembly, Air Control, Programmer (Washer)
Dryer	Dryer Assembly, Tumbler
Dryer Bin	Bin Assembly, Dryer
Extractor	Extractor Assembly
Generator	Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 10 Kw, 3 Phase, 120/208 Volts (60 Hz)
Platform Trailer	Platform Assembly, Work Trailer, Flat-bed, Gen. Purpose 5 Ton, 4 Wheel, XM1061E1
Washer	Washing Machine, Laundry, Open-End Type Model 360 EW/ACJ, 3626 OEW/NAT, or 36260EW/EASIW2
Washer Formula Card	Uniform Nurse Timer Card
Water Pump	Water Pump and Motor Assembly
Water Heater	Heater, Water, Liquid Fuel: M-85
Wet Wash Bin	Bin Assembly Pre-extract
Water Tank	Tank, Fabric, Self-Supporting, 3000 Gallon

LIST OF ABBREVIATIONS/ACRONYMS			
AAL	Additional Authorization List	in	Inches
AC	Alternating Current	Kg	Kilogram
AR	As Required	kPa	Kilopascal(s)
BDU	Battle Dress Uniform	Lbs	Pounds
BII	Basic Issue Item	lt	Liter
COEI	Component of end item	m	Meter
CAGE	Commercial And Government Entity	MSDS	Material Safety Data Sheet
CPC	Corrosion Prevention Control	MTOE	Modified Table of Org and Equipment
CW	Clockwise	N/A	Not Applicable
CCW	Counterclockwise	NBC	Nuclear, Biological, Chemical
		NIIN	National Item Identification Number
CSSL	Containerized Self-service Laundry	POL	Petroleum, Oil and Lubricant
cm	Centimeter	QD	Quick Disconnect
°C	Degrees Celsius (Centigrade)	qt	Quart
°F	Degrees Fahrenheit	rpm	Revolutions per Minute
dia	Diameter	RPSTL	Repair Parts and Special Tools List
ea	Each	TMDE	Test, Measurement, and Diagnostic Equipment
EIR	Equipment Improvement Recommendation	TOE	Table of Organization and Equipment
ft	Foot	U/M	Unit of Measure
GFCI	Ground Fault Circuit Interrupt	UOC	Usable On Code
GPM	Gallons per Minute	UV	Ultra Violet
hr	Hour	VAC	Volt Alternating Current
Hz	Hertz	W	Watt(s)
IAW	In Accordance With	WP	Work Package
hp	Horsepower	wt	Weight

**SAFETY, CARE AND HANDLING**

Always pay attention to **Warnings, Cautions** and **Notes** appearing throughout the manual. They will appear prior to applicable procedures. Ensure you read and understand their content to prevent serious injury to yourself and others, or damage to equipment. A summary of Warnings appears at the front of this manual.



## **CHAPTER 1**

# **DESCRIPTION AND THEORY OF OPERATION FOR M85 TRAILER MOUNTED LAUNDRY UNIT**



**UNIT, DIRECT SUPPORT, AND GENERAL MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
EQUIPMENT DESCRIPTION AND DATA**

**EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES**

CHARACTERISTICS	CAPABILITIES AND FEATURES
<ul style="list-style-type: none"> <li>• Self-contained laundry center.</li> <li>• Can be operated with municipal water, or any approved natural source.</li> <li>• Suitable for unprotected operation in temperatures above 32° F.</li> <li>• Requires protection for operation in sustained temperatures below 32° F.</li> <li>• Trailer mounted, off-road mobility.</li> <li>• Requires JP-8 fuel for operation.</li> <li>• Generator powered.</li> </ul>	<ul style="list-style-type: none"> <li>• Capable of washing and drying 120 pounds (54 kg) of cotton, woolen, and durable press items in one hour, with two operators.</li> <li>• Capable of variable temperature hot and cold water washing.</li> <li>• Can be used for the decontamination of clothing from chemical and bacteriological warfare agents and radioactive materials.</li> </ul>

**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS**

**Washer.** The washer (1) is an open-end loader, reversible cylinder type. It can be operated manually or automatically. An interlock switch is mounted to the front of the washer (2) to engage the door handle that is mounted to a bar frame (3).

**Washer Control Panel.** The control panel (4) controls the automatic operation of these washers, using washer formula cards.

**Power Distribution Panel.** The power distribution panel (5) is located behind the control stand and contains one main and five subsystem circuit breakers.

**Dryer.** The dryer assembly (6) is an open-end loader, nonreversible cylinder type. The dryer dries the clothes after they are removed from the extractor.

**Tool Box.** The toolbox (7) is intended for storage of tools to be used on the laundry unit.

**Work Platform.** The work platform (8) supports personnel operating the washer, extractor, and dryer. It also provides access to other laundry unit components on the trailer bed.

**Dryer Bin.** The dryer bin (9) provides a holding place for the dry clothes after they are removed from the dryer. In the packed configuration the dryer bin is stored on the curbside of the trailer.

**Extractor.** The extractor (10) is a heavy-duty, top-loading, spinning cylinder that removes excess water from the clothes before they are placed in the dryer.

**Wet Wash Bin.** Wet clothes taken out of the washer are deposited in the wet wash bin (11) before they are placed in the extractor.

**Air Compressor.** The air compressor (12) provides air pressure for the operation of the water valves and washer air tank. It is mounted to the bottom of the controller stand.

**Washer Control Stand.** The washer control stand (13) houses the washer controller and supports the air compressor.

**Hose Basket.** The hose basket (14) provides storage for hoses, heater ducts, and other equipment.

**Fire Extinguisher.** The portable fire extinguisher (15) is provided for emergency use in case of fire.

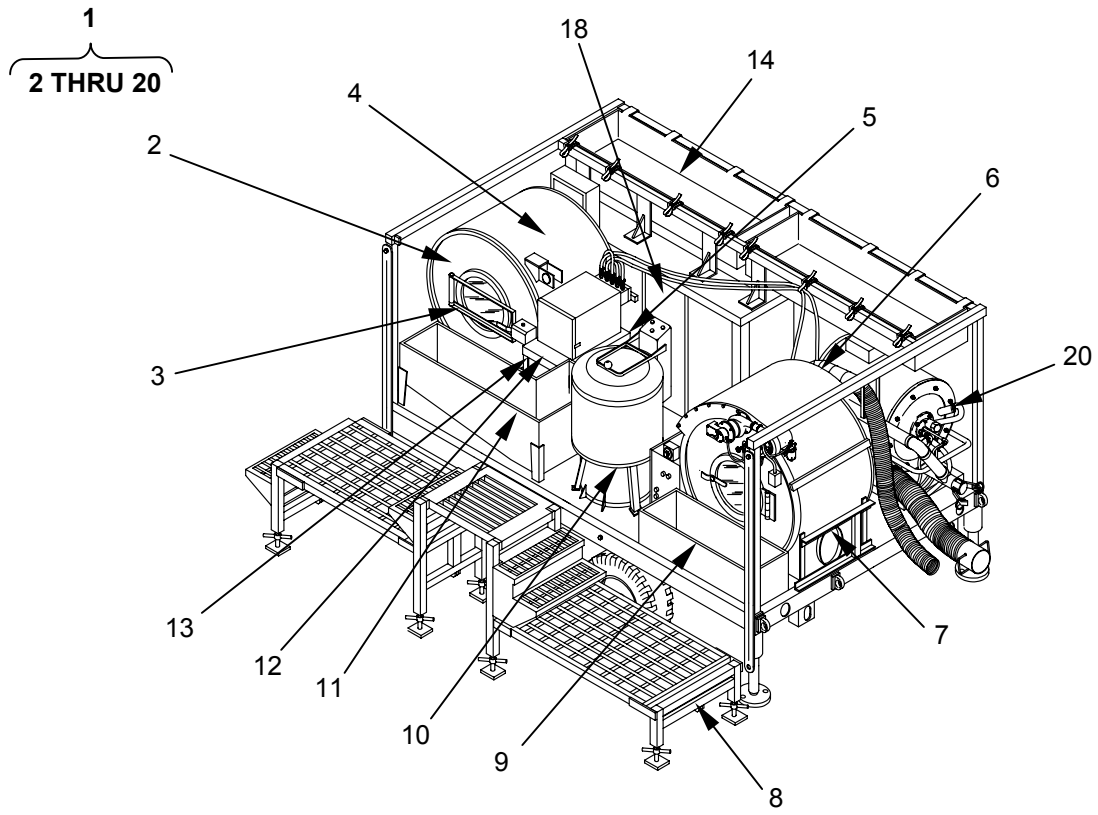
**Water Pump.** The water pump (16) provides fresh water from the source to the laundry unit at the rate of 70 gpm. It requires priming when first used.

**Ladder.** The Ladder (17) provides personnel access to the hose baskets located atop the support frame.

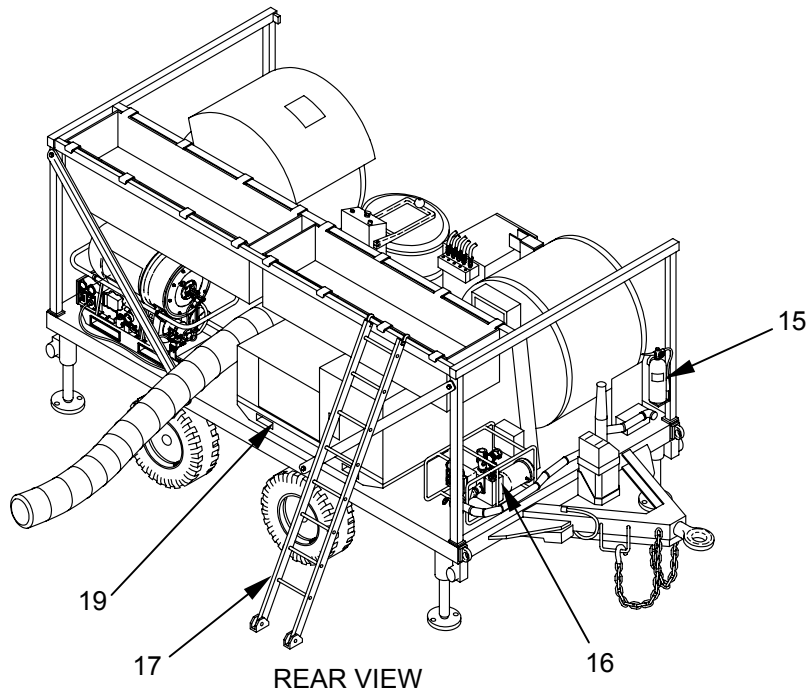
**Sound Controlling Panels.** The sound controlling panels (18) are installed behind the generator and shield the operator from the noise produced by the generator motor.

**Generator.** The 10kw skid-mounted generator (19) provides electrical power to major components of the laundry unit.

**Water Heater.** The water heater (20) heats incoming water to the temperature required by the washer.



FRONT VIEW



REAR VIEW

**COMMON TOOLS AND EQUIPMENT**

For authorized common tools and equipment, refer to the applicable Modified Table of Organization and Equipment (MTOE), CTA 50-970, Expendable/Durable Items (Except: Medical, Class V, Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items, as applicable to your unit.

**EQUIPMENT DATA**

The following technical and identification data pertains to the M85 Series Trailer Mounted Laundry Unit and its installation hardware.

**Equipment Specification Data**

The following data pertains to the components indicated. Full data is provided in the M85-200 column, with difference for other Models indicated. Comparable data for the XM1061E1 Trailer, and the 10kw skid mounted generator can be found in the equipment publications referenced in Work Package 0191 00).

**Table 1. Equipment Data**

<b>LAUNDRY UNIT</b>	<b>M85-100</b>	<b>M85-200</b>
Length	18ft 2in (5.54m)	18ft 2in (5.54m)
Height	7 ft 10in (2.3gm)	7 ft 10in (2.3gm)
Width	8ft (2.44m)	8ft (2.44m)
Weight	12,645 lb (5,748 kg)	12,570 lb (5,687 kg)
Power Requirement	Class L, 60 AMP, 208VAC, 3-phase	Class L, 60 AMP, 208VAC, 3-phase
Fuel Requirements	Diesel	Diesel
<b>WASHER</b>		
Model Number	3626 OEW/NAT	3626 OEW/EASIW2
Capacity	60 lb (27 kg)	60 lb (27 kg)
Weight	950 lb (428 kg)	950 lb (428 kg)
Maximum Speed	33 rpm	33 rpm
Water Pressure Required	10 psi (69 kPa) minimum, 75 psi (517 kPa) maximum	10 psi (69 kPa) minimum, 75 psi (517 kPa) maximum
Air Pressure Required	30 psi (207 kPa) minimum, 110 psi (758 kPa) max.	30 psi (207 kPa) minimum, 110 psi (758 kPa) max.
<b>WASHER MOTOR</b>		
Volt	208VAC	208VAC
Phase	3	3
Frequency	60Hz	60Hz
AMP	5.3-5/2.5 amps	5.3-5/2.5 amps
Power Rating	1.5hp (1119W)	1.5hp (1119W)
Motor Speed	1725 rpm	1725 rpm

Table 1. Equipment Data - continued

<b>LAUNDRY UNIT EXTRACTOR</b>	<b>M85-100</b>	<b>M85-200</b>
Model Number	605 MIL	605 MIL
Capacity	30 lb (14 kg)	30 lb (14 kg)
Weight	609 lb (276 kg)	609 lb (276 kg)
Volt	208/220VAC	208/220VAC
Phase	3	3
Frequency	60 Hz	60 Hz
AMP	9.3 amps	9.3 amps
Power Rating	3 hp (2237W)	3 hp (2237W)
Motor Speed	1750 rpm	1750 rpm
<b>DRYER</b>		
Model Number	LDU-200	LDU-300
Capacity	30 lb (14Kg)	30 lb (14Kg)
Weight	1060 lb (480 Kg)	1060 lb (480 Kg)
Burner Blower and Fuel Pump Motor		
Volt	200/230VAC	200/230VAC
Phase	3	3
Frequency	60 Hz	60 Hz
AMP	1.8-2.0/1.0 amps	1.8-2.0/1.0 amps
Power Rating	1/2 hp (373 W)	1/2 hp (373 W)
Motor Speed	3450 rpm	3450 rpm
Tumbler Cylinder Motor		
Volts	208VAC	208VAC
Phase	3	3
Frequency	60HZ	60HZ
AMP	2.1amps	2.1amps
Power Rating	1/2 hp (373 W)	1/2 hp (373 W)
Motor Speed	1725 rpm	1725 rpm
Tumbler Exhaust Motor		
Volt	208VAC	208VAC
Phase	3	3
Frequency	60HZ	60HZ
AMP	2.2 amps	2.2 amps
Power Rating	1/2 hp (373 W)	1/2 hp (373 W)
Motor Speed	1725 rpm	1725 rpm
<b>AIR COMPRESSOR</b>		
Model Number	GH-510B	GH-510B-PS
Weight	32 lb (14 Kg)	32 lb (14 Kg)
Volts	208/230VAC	208/230VAC
Phase	3	3
Frequency	60Hz	60Hz
Amps	2.0 - 1.9/.95 amps	2.0 - 1.9/.95 amps
Power Rating	1/2 hp (373 W)	1/2 hp (373 W)
Motor Speed	1725 rpm	1725 rpm

**Table 1. Equipment Data - continued**

<b>WATER PUMP</b>		
Model Number	3SCE-22/27458-CA-T	4057E-3S
Weight	67 lb (30 kg)	67 lb (30 kg)
Capacity	18-20 gpm (68-76 lt/ min) at 65- foot (19.8 m) head.	18-20 gpm (68-76 lt/ min) at 65- foot (19.8 m) head.
Type	Centrifugal, self-priming after initial prime.	Centrifugal, self-priming after initial prime.
Pump Motor		
Volts	208/230 vac	208/230 vac
Phase	3	3
Frequency	60 Hz	60 Hz
Amps	5.0 - 4.6/2.3 amps	5.0 - 4.6/2.3 amps
Power Rating	1.5hp(1119 W)	1.5hp(1119 W)
Motor Speed	3450 rpm	3450 rpm

**REFERENCES**

The following list contains publications necessary, or helpful, to support the M85 Series Laundry Units operation.

<b>Item/Function</b>	<b>Technical Manual Title</b>	<b>TM Number</b>
Heater, Water, Liquid Fuel: M-85	Operator's, Unit and Direct Support Maintenance Manual including RPSTL for Heater, Water, Liquid Fuel: M-80/M85	TM 10-4520-259-13&P
Generator Set, Diesel Engine Driven, Tactical Skid Mounted, 10 Kw, 3 Phase, 120/208 Volts (60 Hz)	Operator and Organizational Maintenance Manual for Generator Set, Diesel (60 Hz), Engine Driven, Tactical Skid MTD, 10kW, 3 Phase, 120/208 Volts (60 Hz)	TM 5-6115-585-12
Trailer, Flat-bed, Gen. Purpose 5 Ton, 4 Wheel, XM1061E1	Operator, Unit, Intermediate, Direct Support and General Maintenance (including Repair Parts and Special Tools List), Trailer, Flatbed, 5-Ton, 4-Wheel, XMIO61E1	TM 9-2330-376-14&P
Water Tank, 3000 Gallon (Optional)	Operator's and Unit Maintenance Manual (Including RPSTL) Tank, Fabric, Self Supporting, 3000 Gallon Water	TM 5-5430-227-12&P
100 AMP, 50ft Power Supply Cable	Operator's, Unit and Direct Support Maintenance Manual for Distribution Illumination Systems, Electrical (DISE), and Power Distribution Illumination Systems, Electrical (PDISE) consisting of Electrical Feeder System M200, M200 A/P, M100, M100 A/P, M40, M40 A/P, M60, M60 A/P and Electrical Utility Assembly M46.	TM 9-6150-226-13



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**UNIT, DIRECT SUPPORT, AND GENERAL MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**THEORY OF OPERATION**

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**General.** The M85 Series Field Laundries were designed for support of field hospital and reconstitutive operations. The design provides for the assembly of all necessary components needed for a batch laundry operation on an open 5-ton trailer that affords rough terrain transportability. The system operates on 208VAC, 3 Phase, 60 Hz power which is provided by an onboard 10kw generator. Hot water is provided by an M-85 Water Heater that is interconnected with the external water supply. The laundry operation includes a wash, extraction, and drying phase.

**Washer.** The front-loading washer is powered by an externally mounted motor and drive train. The washer can be controlled either automatically or manually and has a 60-pound (27 kg) capacity. In manual operation, the wash time is variable up to 60 minutes. In the automatic mode, two loads can be washed per hour. Automatic operation is accomplished by use of the washer control console that regulates all functions of the laundry cycle. The functions being controlled are the number of washes and rinses, water level, and the water temperature. Washer Formula Cards, used to operate the controller, are pre-punched with standard wash cycles. Blank Washer Formula Cards and a cardpunch provided with the system, can be used to program different washing cycles, as desired.

**Extractor.** The extractor uses centrifugal force to extract water from the wash load prior to the drying process. Its perforated drum spins at 1700 rpm and is powered by a 3-hp motor. The extractor control has a 10-minute variable timer and has a load capacity of 30 pounds (14 kg) dry weight.

**Dryer.** The front-loading dryer is powered by an externally mounted motor and drive train. It has a capacity of 30 pounds (14 kg) per load. Operating controls provide for an adjustable running time of 15 minutes for each drying cycle. It can process approximately four loads per hour. The dryer uses a fuel fired air heater mounted onto the dryer to provide hot air for the drying operation. During operation, a flexible exhaust hose is attached to the dryer to channel away the hot air from the operators.

**Water Heater.** The M-85 Water Heater operation is explained in TM 10-4520-259-13&P. The washer can be operated using hot water provided by the water heater, or cold water, bypassing the water heater.

**Water Pump.** The portable, centrifugal-type water pump is mounted in a carrying frame. During use, it is placed near the water source and connected to M-85 Water Heater with a water hose and power cable. After the initial prime, the pump will deliver 70 gallons (256 liters) of water per minute at a 25-foot head loss. In the M85 transport configuration the pump is stored on the right front side of the trailer.

**Air Compressor.** The air compressor provides air pressure for the operation of the valves that control washer water intake, washer drain valves, and the water heater hot water supply. The adjustable range of compressed air is 20 to 100 psi (138 to 690 kPa).

**Generator.** The Laundry Unit operates on 60-Hertz, 3-phase, 208VAC power. This is supplied by a 10kw generator, mounted on the right-hand side of the trailer. The power supply is connected to a power distribution panel that distributes power to the components of the laundry unit. The panel includes the necessary circuit breakers for the safe operation of each major component of the laundry. Refer to TM 5-6115-585-12 for a general description and operating procedures for the generator.

**Trailer.** The trailer on which the M85 series laundries are mounted is a 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 for general description and operating procedures.



**CHAPTER 2**

**UNIT MAINTENANCE TROUBLESHOOTING  
FOR  
M85 TRAILER MOUNTED LAUNDRY UNIT**



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**UNIT, DIRECT SUPPORT, AND GENERAL MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
UNIT MAINTENANCE TROUBLESHOOTING**

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## **TROUBLESHOOTING PROCEDURES**

The troubleshooting procedures contain tables listing the malfunctions, tests or inspections, and corrective action required to return the Laundry Unit or its components to normal operation. Perform the steps in the order they appear in the tables. Each procedure is headed by an initial setup. This setup outlines what is needed as well as certain conditions which must be met before starting the task. **DO NOT START THE TASK UNTIL:**

- You understand the task.
- You understand what you are to do.
- You understand what is needed to do the work.

**Malfunction Index.** Refer to Malfunction Index for quick access to troubleshooting procedures.

**Generator.** Refer to TM 5-6115-585-12 for troubleshooting.

**Trailer.** Refer to TM 9-2330-376-14&P for troubleshooting.

**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, DIRECT SUPPORT, AND GENERAL MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
UNIT MALFUNCTION SYMPTOM INDEX**

**GENERAL**

This chapter provides unit maintenance information and includes troubleshooting and general maintenance procedures. Refer to appropriate technical manuals for associated equipment maintenance instructions and item-specific troubleshooting instructions (See work package 0186 00 for References). Troubleshooting instructions covered in this section are unique to the M85 Series Trailer Mounted Laundry Unit.

**MALFUNCTION SYMPTOM INDEX**

The malfunction symptom index lists common malfunctions that may occur during M85 Series Trailer Mounted Laundry Unit inspection and operation. Find the malfunction to be eliminated and go to the indicated troubleshooting paragraph that follows. The index cannot list all malfunctions that may occur, all tests or inspections needed to find the fault, nor all actions required to correct the fault. If the existing malfunction is not listed, or cannot be corrected through this troubleshooting index, notify Direct Support maintenance.

**UNIT LAUNDRY UNIT MAIN POWER TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
No power to component circuit breakers	0006 00	1

**UNIT WASHER TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
Washer will not operate	0007 00	1
Water will not drain from washer	0007 00	2
Washer fill level too low	0007 00	3
Washer fill level too high/water runs out of overflow	0007 00	4
Washer door will not open	0007 00	5
Washer does not fill with cold/hot water (automatic or manual mode)	0007 00	6
Washer cylinder will not rotate (automatic or manual mode)	0007 00	7

**UNIT AIR COMPRESSOR TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
Air Compressor fails to start	0008 00	1
Air Compressor fails to deliver air pressure	0008 00	2
Air pressure below 90 psi or above 100 psi	0008 00	3

**UNIT DRYER TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
Dryer fails to start	0009 00	1
Dryer fails to dry laundry	0009 00	2
Dryer burner flame fails	0009 00	3
Dryer tumbler does not rotate	0009 00	4
Dryer fuel pressure (as indicated on gage) pulsates	0009 00	5
Dryer flame pulsates	0009 00	6
Excessive smoke from dryer exhaust	0009 00	7
Air leaks from dryer door	0009 00	8

**UNIT EXTRACTOR TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
Extractor fails to start	0010 00	1
Lid lock light comes on, but motor fails to start	0010 00	2
Lid lock light comes on; motor starts for 2 seconds; but then stops	0010 00	3
Machine runs by basket fails to spin	0010 00	4
Basket fails to accelerate	0010 00	5
Braking time too long	0010 00	6
Lid stays located at end of cycle; light goes out; machine stops	0010 00	7
Lid stays locked; light stays on after basket has stopped	0010 00	8
Cycle is longer than anticipated	0010 00	9
Machine runs in wrong direction (should be counterclockwise)	0010 00	10
Lid can be partially opened when locked	0010 00	11
Lid falls too freely	0010 00	12
Clashing noise during acceleration	0010 00	13
Rattle during cycle	0010 00	14
Basket gets up to full speed immediately—or too much torque	0010 00	15
Scored brake hub or noise when brake is applied	0010 00	16
Excessive noise or vibration	0010 00	17
Starting amps excessive	0010 00	18
Water on center unit	0010 00	19
2 Amp circuit breaker blowing	0010 00	20


**UNIT CENTRIFUGAL PUMP UNIT TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
Centrifugal pump unit fails to start	0011 00	1
Centrifugal pump unit fails to deliver water	0011 00	2



**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
TROUBLESHOOTING PROCEDURES-MAIN POWER**


**Table 1. Main Power Troubleshooting Procedures**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>												
<p>NO POWER TO COMPONENT CIRCUIT BREAKERS</p>	<div style="text-align: center;">  <p><b><u>WARNING</u></b></p> <p>The equipment being tested or corrected operates at voltage and current that can cause serious injury or death.</p> <p>On electrical connector main power cable, test for continuity.</p> </div>	<p>Remove electrical power, refer to generator TM 5-6115-585-12.</p> <p>Remove main power cable from generator and power distribution panel.</p> <p align="center"><b>NOTE</b></p> <p>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.</p> <p>Using a multimeter, test for continuity between the following:</p> <table border="0"> <tr> <td>WIRE</td> <td>CONNECTOR</td> </tr> <tr> <td>Red</td> <td>A</td> </tr> <tr> <td>White</td> <td>N</td> </tr> <tr> <td>Blue</td> <td>B</td> </tr> <tr> <td>Green</td> <td>G</td> </tr> <tr> <td>Black</td> <td>C</td> </tr> </table> <p>If no continuity exists, notify Direct Support.</p> <p>If continuity exists, repair generator (TM 5-6115-585-12).</p>	WIRE	CONNECTOR	Red	A	White	N	Blue	B	Green	G	Black	C
WIRE	CONNECTOR													
Red	A													
White	N													
Blue	B													
Green	G													
Black	C													



**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
TROUBLESHOOTING PROCEDURES-WASHER**

**Table 1. Washer Troubleshooting Procedures**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>1. WASHER WILL NOT OPERATE.</p>	<p>Step 1. Check motor for overload.</p> <p>Step 2. Check if fuse is blown in control panel.</p> <p>Step 3. Check for damaged or missing belt.</p> <p>Step 4. Check for voltage to control box.</p>	<p>Reset and operate unit.</p> <p>If motor overloads repeatedly, repair or replace as required. Refer to WP 0046 00, Motor and Plate.</p> <p>If fuse is blown, replace fuse.</p> <p>If belt is damaged or missing, refer to WP 0046 00, Motor and Plate.</p> <div style="text-align: center;">  <p><b>WARNING</b></p> </div> <p>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.</p> <p>Apply electrical power, refer to generator TM 5-6115-585-12.</p> <p>Using a multimeter, test for 120 VAC the following:</p> <p align="center"><b>TB1</b></p> <p align="center">4(16) to 19 ground 3(17) to 19 ground 2(18) to 19 ground</p> <p>Remove electrical power, refer to TM 5-6115-585-12.</p> <p>If problem persists, notify Direct Support.</p>
<p>2. WATER WILL NOT DRAIN FROM WASHER.</p>	<p>Step 1. Check for clogged drain valve/line.</p>	<p>Remove clog.</p>

**Table 1. Washer Troubleshooting Procedures – continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>2. WATER WILL NOT DRAIN FROM WASHER - continued.</p>	<p>Step 2. Check for inoperative drain valve.</p>	<p>Operate manual override on drain solenoid and observe valve operation.</p> <p>Check that air supply pressure is correct (90 to 100 psi).</p> <p>Replace or repair drain valve. Refer to WP 0040 00, Drain Pipe.</p> <p>If problem persists, notify Direct Support.</p>
<p>3. WASHER FILL LEVEL TOO LOW (below LEVEL LOW/1 switch, number 2)</p>	<p>Step 1. Check for obstruction in float assembly tube. Refer to WP 0040 00, Drain Pipe Removal.</p> <p>Step 2. Check for leaks through drain valve during filling.</p> <p>Step 3. Check gage on washer air tank for low air pressure (90 to 100 psi).</p>	<p>Clean as required at tee.</p> <p>Clean clogged drain valve.</p> <p>Check drain valve for leaks during filling,</p> <p>If air supply is 90 to 100 psi, replace drain valve. Refer to WP 0040 00, Drain Pipe.</p> <p>If problem persists, notify Direct Support.</p>
<p>4. WASHER FILL LEVEL TOO HIGH/WATER OUT OF OVERFLOW (LEVEL HIGH/2 switch number 13 positioned above highest setting).</p>	<p>Step 1. Check for obstruction in float assembly tube. Refer to WP 0040 00, Drain Pipe Removal.</p> <p>Step 2. Refer to malfunction 2 and perform step 2.</p> <p>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).</p>	<p>Clean as required at tee.</p> <p>If air supply is adequate, replace defective hot and cold water ball valve. Refer to WP 0054 00, Extractor Piping.</p> <p>If problem persists, notify direct support.</p>


**Table 1. Washer Troubleshooting Procedures – continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
5. WASHER DOOR WILL NOT OPEN.	<p>Step 1. Check that water is draining properly.</p> <p>Step 2. Check for water in air hoses.</p>	<p>Remove clog or replace drain valve (Malfunction 2, step 2).</p> <p>If water is in air hose, repair leak or replace hose.</p> <p>If problem persists, notify direct support.</p>
6. WASHER DOES NOT FILL WITH COLD/HOT WATER (AUTOMATIC OR MANUAL MODE).	<p>Step 1. Check for air pressure. Normal is 90 to 100 psi.</p> <p>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.</p>	<p>If air pressure is incorrect, adjust air system for proper pressure. Refer to WP 0050 00, Air Compressor.</p> <p>If ball valve is defective, replace hot and/or cold ball valve. Refer to WP 0054 00, Extractor Piping.</p> <p>If problem persists, notify direct support.</p>
7. WASHER CYLINDER WILL NOT ROTATE (AUTOMATIC OR MANUAL MODE).	<p>Check for loose or slipping drive belt.</p>	<p>If drive belt is loose or slipping, adjust drive belt for proper tension. Refer to WP 0046 00, Motor and Plate Assembly.</p> <p>If problem persists, notify direct support.</p>



**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
TROUBLESHOOTING PROCEDURES-AIR COMPRESSOR**

**Table 1. Air Compressor Troubleshooting Procedures**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>1. AIR COMPRESSOR FAILS TO START.</p>	<p>Step 1. Using a multimeter, check for voltage to full voltage starter. Use FO-2, 5 of 5 and check for 120 VAC on the following: L1 to ground L2 to ground L3 to ground</p> <p>a. If voltage is not found, test voltage at power distribution panel and repair. If voltage is found, go to step 2.</p> <p>b. Remove all power from the Laundry Unit and test for continuity between L1 to T1, L2 to T2, L3 to T3 by manually pressing the contacts closed. If continuity is not found, remove two screws on heaters, then test each heater for continuity. Replace damaged heaters or starter relay. If continuity is found, go to step 3.</p> <p>c. Apply power to the Laundry Unit and test for 120 VAC on full voltage starter relay at T2 wire 35 to ground. Test for 120 VAC on pressure switch wire 34 to ground. Test for 120 VAC on pressure switch wire 36. If voltage is found, perform pressure switch adjustment procedures.</p>	<div style="text-align: center;">   <b>WARNING</b> </div> <p>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.</p> <p>Apply electrical power, refer to generator TM 5-6115-585-12.</p> <p>Using a multimeter, check for 120 VAC on the following:</p> <ol style="list-style-type: none"> <li>1) TB1 to ground</li> <li>2) TB2 to ground</li> <li>3) TB3 to ground</li> </ol> <p>Repair electrical wiring, refer to FO-1 Laundry Unit Interconnect Wiring Diagram.</p>

**Table 1. Air Compressor Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>1. AIR COMPRESSOR FAILS TO START - continued</p>	<p>If compressor fails to start, remove all power and check for loose connections of wires at motor. Replace compressor. If all tests are made and voltage is found at all tests.</p> <p>Step 2. Check if ON/OFF adjustment is set correctly.</p> <p>Step 3. Check for continuity of wiring.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>When testing for continuity between electrical wires, disconnect one end of electrical wire before testing. When testing for grounded electrical wires, disconnect both ends of electrical wiring before testing.</p>	<p>Remove electrical power, refer to TM 5-6115-585-12.</p> <p>Do adjustment procedures, refer to WP 0050 00, Air Compressor.</p> <p>If compressor fails to start, replace pressure switch.</p> <p>Using a multimeter, test for continuity on the following wires:                      (1) 34 to 34 FVS-T3 to wire end.                      (2) 35 to 35                      (3) 36 to 36</p> <p>If no continuity exists, repair wiring, per FO-6 Air Compressor Wiring Diagram.</p> <p>If continuity exists, replace air compressor. Refer to WP 0050 00, Air Compressor.</p>
<p>2. AIR COMPRESSOR FAILS TO DELIVER AIR PRESSURE.</p>	<p>Check air pressure.</p>	<p>Remove electrical power from generator per TM 5-6115-585-12.</p> <p>Check for air pressure leaks on all air hose lines and tighten air hoses as required.</p> <p>On air tank, open drain cock until pressure on gage is 0 psi. Close drain cock.</p> <p>Remove air hose from compressor.</p>



Table 1. Air Compressor Troubleshooting Procedures-continued

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
2. AIR COMPRESSOR FAILS TO DELIVER AIR PRESSURE – continued.		If no air pressure exists at air hose, replace air compressor. Refer to WP 0050 00. (To do this check, you need to restore power and activate compressor.)
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 WP 0050 00, Air Compressor.



**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
TROUBLESHOOTING PROCEDURES-DRYER**

**Table 1. Dryer Troubleshooting Procedures**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. DRYER FAILS TO START.	Check for voltage to START/STOP RESET BUTTON.	Apply electrical power, refer to generator TM 5-6115-585-12.  Notify Direct Support.
2. DRYER FAILS TO DRY LAUNDRY.	Check temperature Control for proper setting.	If problem persists, notify Direct Support.
3. DRYER BURNER FLAME FAILS.	Step 1. Check dryer burner on start-up. Flame starts and then goes out or does not start at all.	If flame starts and then goes out, refer to WP 0012 00 Flame Control Troubleshooting.
	Step 2. Check for a clogged or damaged burner nozzle and electrodes damaged or out of adjustment.	Clean clogged burner nozzle and adjust or replace damaged electrodes. Refer to WP 0074 00, Gas-Oil Combustion Burner.
	Step 3. Check for a defective rotary fuel pump by observing the fuel pressure gage.	Adjust fuel pump pressure or replace pump. Refer to WP 0071 00, Rotary Pump.
	Step 4. Check for a defective fuel solenoid. Refer to Malfunction 5, Step 3.	If defective, replace fuel solenoid. Refer to WP 0060 00, Solenoid Valve.
	Step 5. Check for fuel hose(s) leaking.	Repair or replace per WP 0060 00, Nonmetallic Hoses.  If problem persists, notify Direct Support.
4. DRYER TUMBLER DOES NOT ROTATE.	Step 1. Check for improperly adjusted or defective door switch.	If switch needs adjustment, adjust door. Refer to WP 0084 00, Door Switch.  If switch is defective, replace door switch. Refer to WP 0084 00, Door Switch.
	Step 2. Check for cracked, worn, or broken motor parts, damaged shaft threads, and bent shaft and chain.	If motor or chain is damaged, replace motor or chain. Refer to WP 0088 00, Fan and Motor.  If problem persists, notify Direct Support.

**Table 1. Dryer Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>5. DRYER FUEL PRESSURE (AS INDICATED ON GAGE) PULSATES.</p>	<p>Step 1. Check for defective fuel pressure gage.</p> <p>Step 2. Check for loose bypass plug in rotary pump.</p> <p>Step 3. Check solenoid. A click is heard if the solenoid is working. If no click is heard, remove the top nut on the coil, slide the coil off and insert a steel screwdriver tip into the hole in the coil while it is operating. If a magnetic field is felt, the electrical side is working correctly. Reassemble the coil.</p> <p>Step 4. Check rotary pump for binding or sticking.</p>	<p>If gage is defective, replace fuel pressure gage. Refer to WP 0071 00, Rotary Pump.</p> <p>If bypass plug is loose, tighten bypass plug.</p> <p>If sticking, replace. Refer to WP 0074 00, Solenoid Nonmetallic Hose Valve.</p> <p>If rotary pump is binding or sticking, replace per WP 0071 00, Rotary Pump.</p>
<p>6. DRYER FLAME PULSATES.</p>	<p>Step 1. Check for improper air shutter and air nozzle adjustment. Exhaust gases should be clear after two seconds.</p> <p>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.</p> <p>Step 3. Check for dirty burner nozzle.</p>	<p>If exhaust gas is not clear, adjust air shutter.</p> <p>If fuel/water separation is present and/or cloudy, drain fuel supply and refill with new fuel.</p> <p>If burner nozzle is dirty, clean burner nozzle.</p>
<p>7. EXCESSIVE SMOKE FROM DRYER EXHAUST.</p>	<p>Step 1. Check for improper air shutter and air nozzle adjustment. Exhaust gases should be clear after two seconds.</p> <p>Step 2. Check for blocked air intake screen.</p>	<p>If exhaust is not clear, adjust air shutter.</p> <p>If blockage is found, remove blockage from air intake screen.</p>

**Table 1. Dryer Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
7. EXCESSIVE SMOKE FROM DRYER EXHAUST-continued.	<p>Step 3. Check for blocked air exhaust piping.</p> <p>Step 4. Check for dirty burner nozzle and electrodes.</p> <p>Step 5. Check for worn or broken rotary pump.</p>	<p>If blockage is found, remove blockage from exhaust piping.</p> <p>If burner nozzle is dirty, clean burner nozzle. Refer to WP 0073 00, Electrodes.</p> <p>If pump is damaged, replace rotary pump. Refer to WP 0071 00, Rotary Pump.</p> <p>If problem still exists, notify Direct Support.</p>
8. AIR LEAKS FROM DRYER DOOR.	<p>Step 1. Check for damaged dryer door gasket.</p> <p>Step 2. Check for loose door handle.</p> <p>Step 3. Check for bent door or broken weld.</p>	<p>Replace door gasket, refer to WP 0083 00, Door.</p> <p>If door handle is loose, adjust or replace door handle. Refer to WP 0083 00, Door.</p> <p>Repair by replacing door. Refer to WP 0083 00, Door.</p> <p>Refer to Direct Support for broken weld.</p>



**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
TROUBLESHOOTING PROCEDURES-EXTRACTOR**

**Table 1. Extractor Troubleshooting Procedures**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. EXTRACTOR FAILS TO START, LID IS FULLY CLOSED, START BUTTON ACTIVATED NOTHING HAPPENS.	Step 1. Check for incoming power and fusing on machine.	Apply electrical power, refer to TM 5-6115-585-12.  Replace defective fuses, refer to TM 5-6115-585-12.
	Step 2. Check for voltage.	Apply electrical power, refer to TM 5-6115-585-12.  Remove electrical power, refer to TM 5-6115-585-12.
	Step 3. Check Timer.	Replace Timer as described in WP 0157 00.
	Step 4. Check lid closed micro switch.	Adjust micro switch as described in WP 0153 00.  Replace micro switch as described in WP 0153 00
	Step 5. Check time delay relay	Replace time delay relay as described in WP 0169 00.
	Step 6. Check that Emergency stop is pushed in.	Pull out Emergency stop and restart.
	Step 7. Check for failure of heater coils.	Replace defective heater coils as described in WP 0175 00.
	Step 8. Check with lid closed, if cam loose.	Tighten lid cam as described in WP 0153 00.
2. LID LOCK LIGHT COMES ON BUT MOTOR FAILS TO START.	Step 1. Check lid closed micro switch.	Adjust micro switch as described in WP 0153 00.  Replace micro switch as described in WP 0153 00.
	Step 2. Check that Emergency stop is pushed in.	Pull out Emergency stop and restart.

**Table 1. Extractor Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>2. LID LOCK LIGHT COMES ON BUT MOTOR FAILS TO START-continued.</p>	<p>Step 3. Check lid lock micro switch.</p> <p>Step 4. Check for burned out lid lock solenoid or jammed linkage.</p> <p>Step 5. Check for loose or broken cam lid lock.</p>	<p>Adjust lid lock micro switch as described in WP 0154 00.</p> <p>Replace lid lock micro switch as described in WP 0154 00.</p> <p>Repair jammed lid lock solenoid linkage as described in WP 0159 00.</p> <p>Replace lid lock solenoid as described in WP 0159 00.</p> <p>Tighten loose cam lid lock as described in WP 0154 00.</p> <p>Replace defective cam lid lock as described in WP 0154 00.</p>
<p>3. LID LOCK LIGHT COMES ON, MOTOR STARTS FOR 2 SECONDS, THEN STOPS, LID UNLOCKS.</p>	<p>Step 1. Check Timer.</p> <p>Step 2. Check lid lock micro switch.</p> <p>Step 3. Check for burned out lid lock solenoid or jammed linkage.</p> <p>Step 4. Check for malfunctioning overvoltage absorber.</p> <p>Step 5. Check for loose or broken cam lid lock.</p>	<p>Replace Timer as described in WP 0157 00.</p> <p>Adjust lid lock micro switch as described in WP 0154 00.</p> <p>Replace lid lock micro switch as described in WP 0154 00.</p> <p>Repair jammed lid lock solenoid linkage as described in WP 0159 00.</p> <p>Replace lid lock solenoid as described in WP0159 00.</p> <p>Replace malfunctioning overvoltage absorber as described in WP 0155 00.</p> <p>Tighten loose cam lid lock as described in WP 0159 00.</p> <p>Replace defective cam lid lock as described in WP 0159 00.</p>



**Table 1. Extractor Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>4. MACHINE RUNS BUT BASKET FAILS TO SPIN.</p>	<p>Step 1. Check for slipping, broken or missing drive belt or pulley.</p> <p>Step 2. Check that brake is working properly.</p> <p>Step 3. Check for foreign material or clothing wrapped around shaft, above and below the basket.</p> <p>Step 4. Check that brake is releasing. Check solenoid.</p> <p>Step 5. Check that basket is fully engaged on the hex ball.</p> <p>Step 6. Check for failing top or bottom bearing.</p> <p>Step 7. Check oil quantity in center unit.</p> <p>Step 8. Check runner gap in center unit.</p> <p>Step 9. Check for slipping drive belt.</p> <p>Step 10. Check brake linkage and spring.</p>	<p>If drive belt is slipping, broken or missing, replace belt. Refer to WP 0059, Motor Assembly.</p> <p>Adjust brake as described in WP 0051 00.</p> <p>If obstruction is found, remove clothing or foreign material.</p> <p>Replace solenoid as described in WP 0151 00.</p> <p>Ensure that basket is fully engaged on the hex ball.</p> <p>Replace defective bearing as described in WP 0152 00.</p> <p>Add oil as needed.</p> <p>Adjust gap as described in WP 0152 00.</p> <p>Replace drive belt as described in WP 0055 00.</p> <p>Replace brake linkage and/or spring as described in WP 0151 00.</p>
<p>5. BASKET FAILS TO ACCELERATE.</p>	<p>Step 1. Check that brake is working properly.</p> <p>Step 2. Check for foreign material or clothing wrapped around shaft, above and below the basket.</p> <p>Step 3. Check oil quantity in center unit.</p> <p>Step 4. Check runner gap in center unit.</p>	<p>Adjust brake as described in WP 0051 00.</p> <p>If obstruction is found, remove clothing or foreign material.</p> <p>Add oil as needed.</p> <p>Adjust gap as described in WP 0152 00.</p>

**Table 1. Extractor Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
5. BASKET FAILS TO ACCELERATE - continued	Step 5. Check for slipping drive belt.	Replace drive belt as described in WP 0055 00.
	Step 6. Check brake linkage and spring.	Replace brake linkage and/or spring as described in WP 0151 00.
6. BRAKING TIME TOO LONG.	Step 1. Check that brake is working properly.	Adjust brake as described in WP 0151 00.
	Step 2. Check brake shoe for wear.	Replace worn brake shoe as described in WP 0151 00.
	Step 3. Check brake linkage and spring.	Replace brake linkage and/or spring as described in WP 0154 00.
7. LID STAYS LOCKED AT END OF CYCLE; LIGHT GOES OUT, MACHINE STOPS.	Step 1. Check for burned out lid lock solenoid or jammed linkage.	Repair jammed lid lock solenoid linkage as described in WP 0154 00.
	Step 2. Check for broken lid solenoid spring.	Replace broken lid solenoid spring as described in WP 0154 00.
8. LID STAYS LOCKED; LIGHT STAYS ON AFTER BASKET HAS STOPPED.	Step 1. Check timer.	Replace timer as described in WP 0168 00.
	Step 2. Check for malfunctioning overvoltage absorber.	Replace overvoltage absorber as described in WP 0155 00.
9. CYCLE IS LONGER THAN ANTICIPATED.	Step 1. Check timer.	Replace timer as described in WP 0168 00.
	Step 2. Check that brake is working properly.	Adjust brake as described in WP 0051 00.
	Step 3. Check brake shoe for wear.	Replace worn brake shoe as described in WP 0151 00.
	Step 4. Check brake linkage and spring.	Replace brake linkage and/or spring as described in WP 0051 00.

**Table 1. Extractor Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
10. MACHINE RUNS IN WRONG DIRECTION. (SHOULD BE COUNTER-CLOCKWISE)		Reverse two power leads on phase 3 machines.
11. LID CAN BE PARTIALLY OPENED WHEN LOCKED.		No action required.
12. LID FALLS TOO FREELY.		Adjust lid lock adjusting screw. Adjust lid hinge break.
13. CLASHING NOISE DURING ACCELERATION.	Step 1. Check for foreign material or clothing wrapped around shaft, above and below the basket.  Step 2. Check runner gap in center unit.  Step 3. Check for bad bushing in center unit.	If obstruction is found, remove clothing or foreign material.  Adjust gap as described in WP 0152 00.  Replace defective bushing as described in WP 0152 00.
14. RATTLE DURING CYCLE.	Step 1. Check for bad bushing in center unit.	Replace defective bushing as described in WP 0152 00.
15. BASKET GETS UP TO FULL SPEED IMMEDIATELY OR TOO MUCH TORQUE.	Step 1. Check oil quantity in center unit.  Step 2. Check runner gap in center unit.	Add oil as needed.  Adjust gap as described in WP 0152 00.
16. SCORED BRAKE HUB OR NOISE WHEN BRAKE IS APPLIED.	Step 1. Check brake shoe for wear.  Step 2. Inspect hex ball and/or center post.  Step 3. Check brake linkage and spring.	Replace worn brake shoe as described in WP 0151 00.  Replace hex ball and/or center post as described in WP 0151 00.  Replace brake linkage and/or spring as described in WP 0151 00.
17. EXCESSIVE NOISE OR VIBRATION.	Step 1. Check for foreign material or clothing wrapped around shaft, above and below the basket.  Step 2. Check that basket is fully engaged on the hex ball.	If obstruction is found, remove clothing or foreign material.  Ensure that basket is fully engaged on the hex ball.

**Table 1. Extractor Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>17. EXCESSIVE NOISE OR VIBRATION – continued.</p>	<p>Step 3. Check for bad bushing in center unit.</p>	<p>Replace defective bushing as described in WP 0152 00.</p>
	<p>Step 4. Check for worn shaft.</p>	<p>Replace worn shaft as described in WP 0152 00.</p>
	<p>Step 5. Check condition of pulleys.</p>	<p>Replace pulleys as described in WP 0134 00.</p>
	<p>Step 6. Check condition of bumper and trunnion rubbers.</p>	<p>Replace bumper and trunnion rubbers as described in WP 0173 00.</p>
	<p>Step 7. Inspect hex ball and/or center post.</p>	<p>Replace hex ball and/or center post as described in WP 0151 00.</p>
	<p>Step 8. Check for inadequate or loose machine mounting.</p>	<p>Install or replace machine mounting as described in WP 0130 00.  Tighten loose machine mounting as necessary.</p>
<p>18. STARTING AMPS EXCESSIVE.</p>	<p>Step 1. Check for foreign material or clothing wrapped around shaft, above and below the basket.</p>	<p>If obstruction is found, remove clothing or foreign material.</p>
	<p>Step 2. Check for foreign material or clothing wrapped around shaft, above and below the basket.</p>	<p>If obstruction is found, remove clothing or foreign material.</p>
	<p>Step 3. Check oil quantity in center unit.</p>	<p>Add oil as needed.</p>
	<p>Step 4. Check runner gap in center unit.</p>	<p>Adjust gap as described in WP 0152 00.</p>
	<p>Step 5. Check for bad bushing in center unit.</p>	<p>Replace defective bushing as described in WP 0152 00.</p>
<p>19. WATER ON CENTER UNIT.</p>	<p>Step 1. Check for a clog in the drain inside the extractor.</p>	<p>If the drain is clogged, unclog the drain.</p>

**Table 1. Extractor Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
<p>20. 2 AMP CIRCUIT BREAKER BLOWING.</p>	<p>Step 1. Check for burned out lid lock solenoid or jammed linkage.</p> <p>Step 2. Check that brake is working properly.</p> <p>Step 3. Check brake linkage and spring.</p>	<p>Repair jammed lid lock solenoid linkage as described in WP 0151 00.</p> <p>Adjust brake as described in WP 0051 00.</p> <p>Replace brake linkage and/or spring as described in WP 0151 00.</p>





**Table 1. Centrifugal Pump Troubleshooting Procedures-continued**

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>																						
<p>1. CENTRIFUGAL PUMP UNIT FAILS TO START - continued</p>	<p>Step 4. On pump, check for continuity on wiring between connector-switch and AC motor.</p> <table border="0" style="margin-left: 40px;"> <tr> <td></td> <td>Toggle Switch</td> <td>Burk Pump AC Motor</td> <td>CH&amp;E Pump AC Motor</td> </tr> <tr> <td>(1)</td> <td>T1</td> <td>2,8</td> <td>1,7</td> </tr> <tr> <td>(2)</td> <td>T2</td> <td>1,7</td> <td>2,8</td> </tr> <tr> <td>(3)</td> <td>T3</td> <td>3,9</td> <td>3,9</td> </tr> </table> <p style="margin-left: 40px;">Gorman Rupp Pump AC Motor</p> <table border="0" style="margin-left: 40px;"> <tr> <td>(1)</td> <td>T3-T3</td> </tr> <tr> <td>(2)</td> <td>T2-T2</td> </tr> <tr> <td>(3)</td> <td>T1-T1</td> </tr> </table>		Toggle Switch	Burk Pump AC Motor	CH&E Pump AC Motor	(1)	T1	2,8	1,7	(2)	T2	1,7	2,8	(3)	T3	3,9	3,9	(1)	T3-T3	(2)	T2-T2	(3)	T1-T1	<p>Using a multimeter, test for continuity between the following wiring:</p> <p>If no continuity exists, repair wiring per Centrifugal Pump Unit Wiring Diagram (see foldout pages).</p> <p>If continuity exists, replace centrifugal pump unit. Refer to WP 0092 00, Centrifugal Pump Unit. Step 5 on water heater check for voltage, refer to TM 10-4520-259-13&amp;P.</p>
	Toggle Switch	Burk Pump AC Motor	CH&E Pump AC Motor																					
(1)	T1	2,8	1,7																					
(2)	T2	1,7	2,8																					
(3)	T3	3,9	3,9																					
(1)	T3-T3																							
(2)	T2-T2																							
(3)	T1-T1																							
<p>2. CENTRIFUGAL PUMP UNIT FAILS TO DELIVER WATER.</p>	<p>Check for correct rotation of pump.</p>	<p>Turn connector switch off.</p> <p>Clean sediment strainer. Refer to WP 0093 00, Sediment Strainer and Outlet Piping.</p> <p>Set ON/OFF switch to ON.</p> <p>If centrifugal pump unit fails to deliver water, replace centrifugal pump unit. Refer to WP 0092 00, Centrifugal Pump Unit.</p>																						



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**UV AND IR FLAME SAFEGUARD CONTROL ASSEMBLY**  
**TEST, REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

Tool Kit, Electronic Equipment (Item 3, WP 0038 00)  
Multimeter (Item 1, WP 0038 00)

**Personnel Required**

One

**Materials/Parts**

Cloth, Cleaning (Item 1, WP 0057 00)  
Tag (Item 13, WP 0057 00)

**Equipment Condition**

Dryer set up for operation and cool.

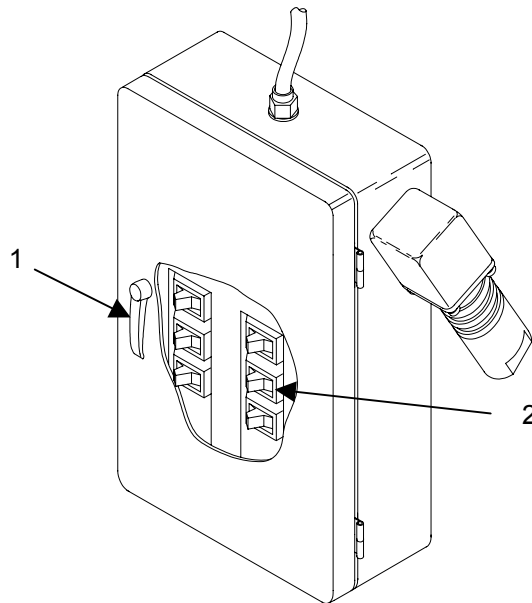
**TEST**

1. Initiate start up in accordance with TM 10-3510-222-10. Make sure the dryer door is closed. Push dryer start button.
2. Dryer hot air blower (B2) should start immediately. If it does not, go to the next step. Wait approximately 30 seconds for burner motor (B1) to start. If burner motor does not start, continue to Step 5. If burner ignition occur momentarily and then go out or the audible alarm sounds, continue to step 8. If burner motor starts and ignition continues, resume normal operation.

**NOTE**

If the alarm sounds and indicator illuminates, an ignition failure is indicated.

3. Open laundry electrical distribution panel (1) and check the dryer circuit breaker (2). If breaker is tripped, reset by turning OFF and then ON, check for normal operation. If breaker continues to trip, determine cause of overload. If breaker is not tripped, continue to the next step.





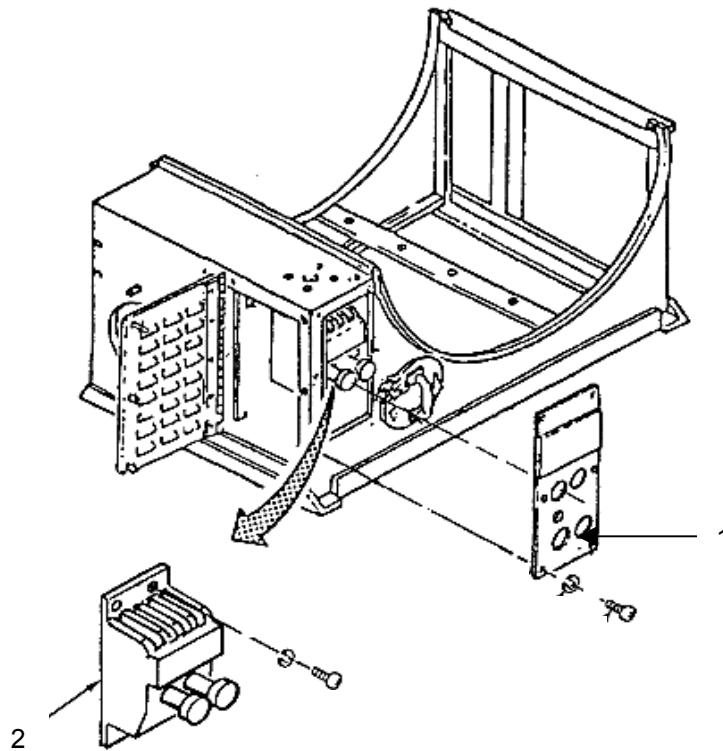
### **WARNING**

High voltage is present on this equipment.  
Death or serious injury to personnel may result.

### **CAUTION**

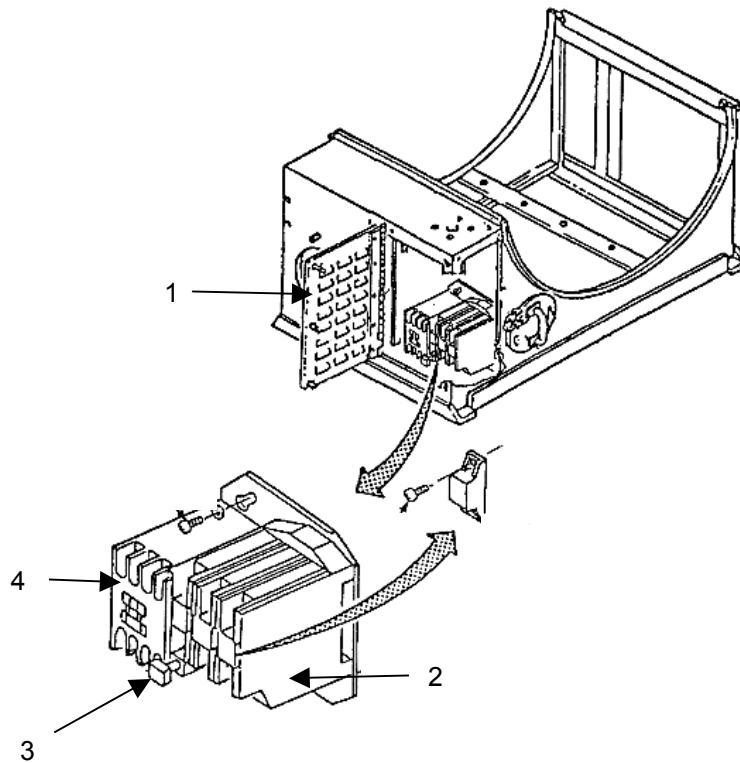
Ensure that power is **OFF** before making any continuity check. Damage to test equipment could result. Isolate any electrical components before starting continuity check.

4. Turn dryer circuit breaker OFF. Remove dryer control front panel (1). Push stop/reset button. Use a multimeter to test the resistance from each input terminal to the output terminal on the start/stop/reset switch (S1). Meter should indicate an open circuit ( $\Omega$ ) at each set of terminals. Push start button. Meter should indicate continuity (0 ohms) at each set of terminals. If contact reads a high resistance or is open, replace the start/stop switch as described in WP 0160 00. If tests indicate a good start/stop reset switch, turn circuit breaker ON at distribution panel and test for electrical power at each terminal of the dryer start/stop reset switch (2). Refer to Foldout Pages in TM 10-3510-222-24 for laundry interconnect wiring diagram. Turn OFF circuit breaker and replace panel if start/stop switch has electrical power. If start/stop/reset button tests good and has power to each terminal, test the hot air blower motor (B2) and circuits.



**Dryer Base**

5. Open dryer electrical control access panel **(1)** and reset burner motor overload **(2)** by pushing reset button **(3)**. Check for normal operation by pushing dryer start button. If overload continues to trip, test the motor starter and overload operation as described in the next two steps. If overload is not tripped, continue to step 8.
6. Turn dryer circuit breaker OFF at laundry power distribution panel. Use a multimeter to test resistance from each input to output terminal of the burner motor contactor **(4)**. Meter should indicate an open circuit ( $\Omega$ ) at each set of terminals. Manually actuate the motor contactor by pushing in contactor. Meter should indicate continuity (0 ohms) at each set of terminals. If contact reads a high resistance or is open, replace the motor starter as described in WP 0158 00. Test resistance of contactor pull-in coil. Meter should indicate a low resistance value. If coil reads infinity ( $\Omega$ ) or 0 (zero) ohms, replace the motor starter.
7. Reset overload by pushing reset button **(3)** and test for continuity on each input to output terminal of the overload **(2)**. If no continuity is read, replace the heaters or motor starter as described in WP 0158 00. If motor starter test indicates a good contactor and overload and continues to trip, test the burner motor (B1) and circuits. Refer to WP 0198 00 for dryer wiring schematic.



Dryer Base

### Determine Type of Flame Control and Scanner

1. The dryer has either an **Ultraviolet (UV) flame safeguard control and UV flame scanner** or **Infrared (IR) flame safeguard control and IR flame scanner**.

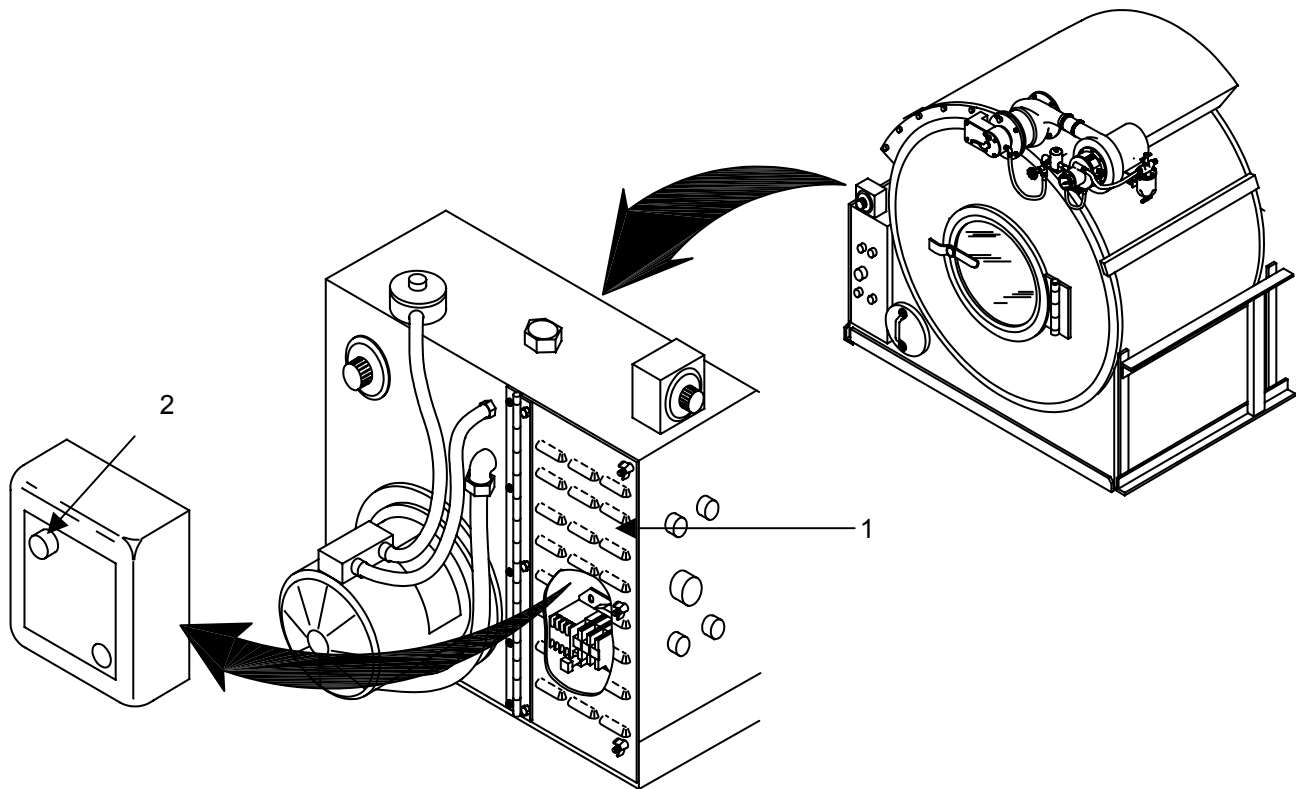
The Micro M Series **IR flame safeguard control** has light indicators to indicate the operating status of the flame control. If the dryer is equipped with an IR flame safeguard control ( $\mu$ M) continue to step 16.

The **UV flame safeguard control** only has a reset button on the cover. If the dryer is equipped with an UV flame safeguard control (M Series, UVM-2), test the flame control system as follows.

2. Does burner ignition occur momentarily and then go out, continue to step 14. If burner motor will not start, open control panel on left side of dryer (1). If an ignition failure has occurred or a safety shutdown, manual reset of the flame control is required by pressing the reset button (2) on the flame control. If burner motor does not start after reset of lockout, continue to the next step.

### NOTE

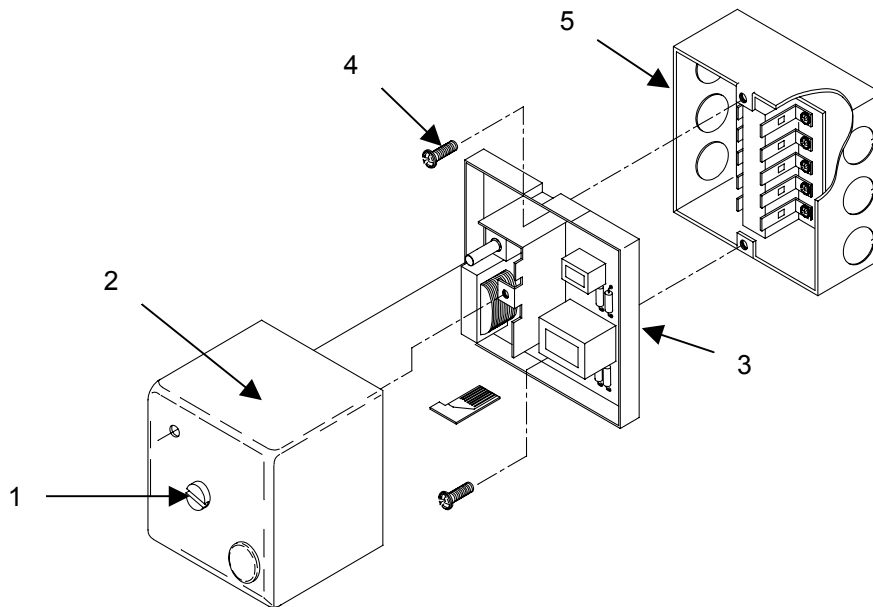
In the event of ignition failure or safety shutdown, the flame control will lockout and must be reset by pushing the button on front of the flame control. Electrical power must be on for reset of flame control lockout.



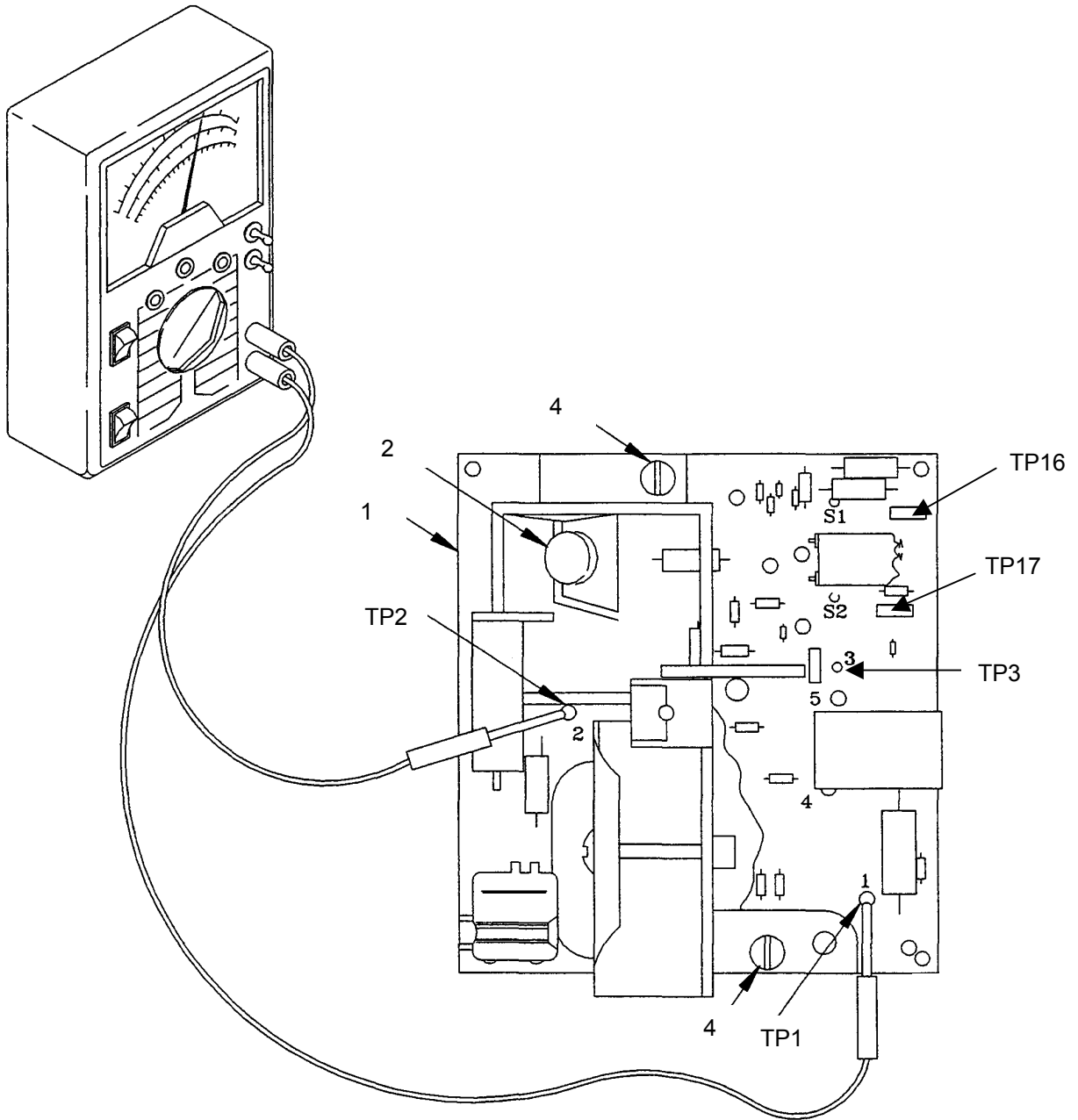
**WARNING**

Remove all jewelry before working on the water heater. Jewelry can catch on equipment and cause injury, or may short across an electrical circuit and cause severe burns or electrical shock and death. Use caution when performing any test with power on. Electrical current can cause severe injury or death.

3. Loosen screw **(1)** on flame control cover **(2)** and remove cover from chassis **(3)**. Use a voltage meter and test for 120 VAC at test points, TP 1 and TP 2, on flame control chassis. See the second illustration following for test point location on control chassis. If voltage is as indicated, continue to step 15. If voltage is not present, continue to next step.
4. Turn OFF dryer circuit breaker at laundry electrical distribution box. Remove two screws **(4)** and control chassis **(3)** from terminal box **(5)**.



**UV flame Safeguard Control and Terminal Box**



**UV Flame Safeguard Control Chassis**

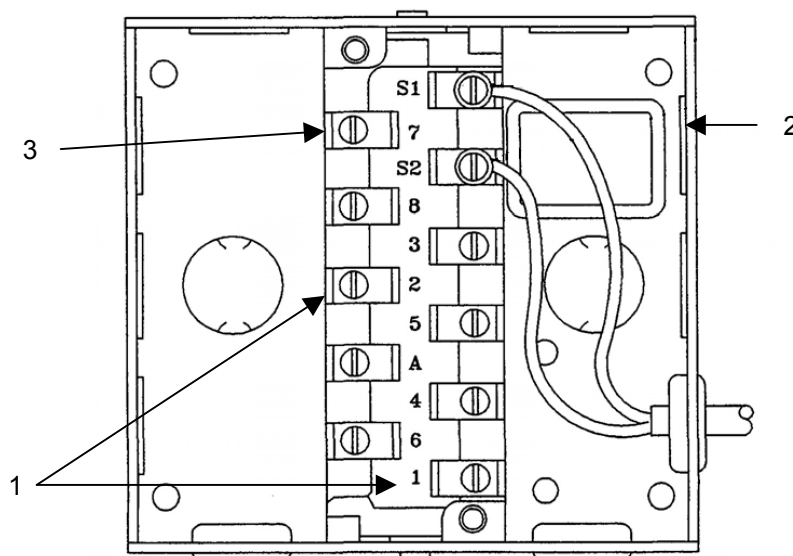
**Test Point Locations**

5. Turn ON dryer circuit breaker, press dryer start button and test for 120 VAC across terminals # 1 and #2 (neutral) of base terminal board (1) in terminal box (2). If voltage is not present, turn OFF circuit breaker and repair power circuit.

### NOTE

Confirm that there is no measurable voltage present between chassis ground and terminal # 2 (neutral). Correct by tightening all electrical power connections if voltage is read.

6. Test for 120 VAC on terminal # 7 of base terminal board (3) in terminal box (2). If voltage is not present on # 7, turn OFF circuit breaker and check temperature control (TH1), thermostat switch (TH2), and overheat sensor in hot air blower motor (B2) for continuity. Refer to WP 0198 00 for dryer wiring diagram. If voltage at terminal # 7 is as indicated, continue to step 15.



**Flame Control Terminal Box**

7. If it has been determined that burner ignition takes place momentarily but system shuts down immediately after ignition, test as follows:
  - a. Push dryer switch OFF. Loosen center screw of flame control cover and remove from flame control chassis (1). Set voltage meter to read DC volts, insert BLACK (-) meter test lead at test point TP16 and RED (+) meter test lead in TP17. See illustration following for test point locations on control chassis.

### NOTE

Ensure the flame scanner is clean and the sight tube is free of obstructions. Remove flame scanner from the burner assembly sight tube. Clean the flame sensor window with a soft cloth, removing all oil and soot. Flame must be even and steady, adjust air shutter if necessary.

- b. Push dryer switch ON. Push flame control reset **(2)**, if ignition does not occur. Meter should read 4.0 to 6.0 VDC when UV flame control detects flame in burner. Let the burner shutdown. Voltage should be zero (0) VDC when no flame is present in burner. If readings are not as indicated, install a new IR flame safeguard control and IR flame scanner as described under REMOVE and INSTALL of this work package. If reading are as indicated and control still does not function continue to the next step.

#### NOTE

If a defective UV flame safeguard control or UV flame scanner is installed on the dryer, it must be replaced with an Infrared (IR) flame safeguard controller and IR scanner.

UV and IR components (control and scanner) are not interchangeable. Do not mix these flame control system components.

If any component of the UV flame safeguard control system is found to be defective, order P/N PL6-1-8949-1, CAGE 81337, MODIFICATION KIT, ELECTRIC POWER to convert the system to IR flame control. Kit contains all parts necessary to convert system to IR flame control. After conversion, individual IR flame control repair parts may be ordered separately.

8. If it has been determined that burner ignition does not occur after pressing reset pushbutton **(2)**, set voltage meter for AC operation. Test for 120 VAC at test points, TP 2 and TP 3, after pressing flame control reset button. If no voltage is indicated, turn dryer circuit breaker OFF and install a new IR flame safeguard control and flame scanner as described under REMOVE and INSTALL of this work package.

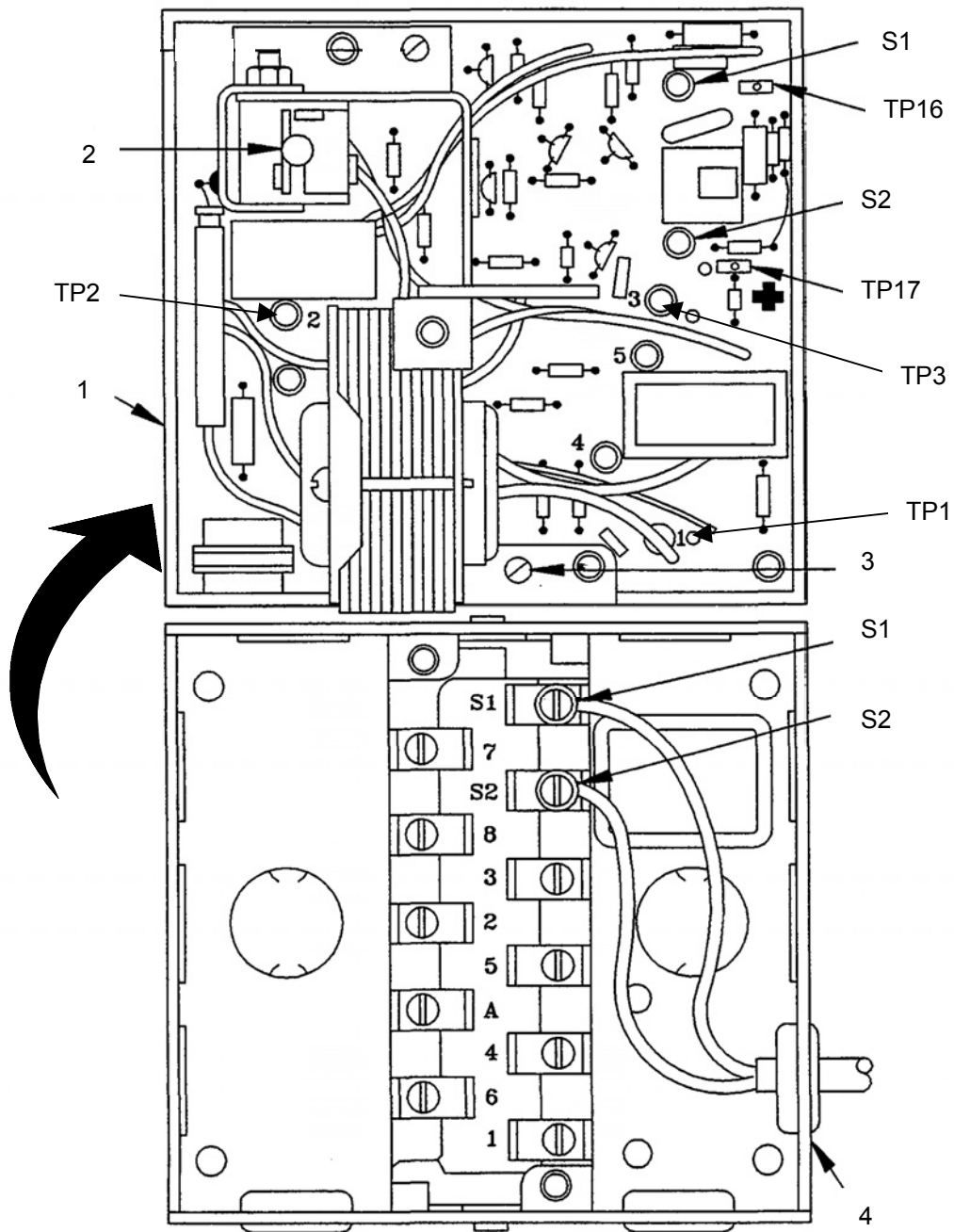
#### NOTE

If a defective UV flame safeguard control or UV flame scanner is installed on the dryer, it must be replaced with an Infrared (IR) flame safeguard controller and IR scanner.

UV and IR components (control and scanner) are not interchangeable. Do not mix these flame control system components.

If any component of the UV flame safeguard control system is found to be defective, order P/N PL6-1-8949-1, CAGE 81337, MODIFICATION KIT, ELECTRIC POWER to convert the system to IR flame control. Kit contains all parts necessary to convert system to IR flame control. After conversion, individual IR flame control repair parts may be ordered separately.





**UV Flame Safeguard Control and Terminal Box**

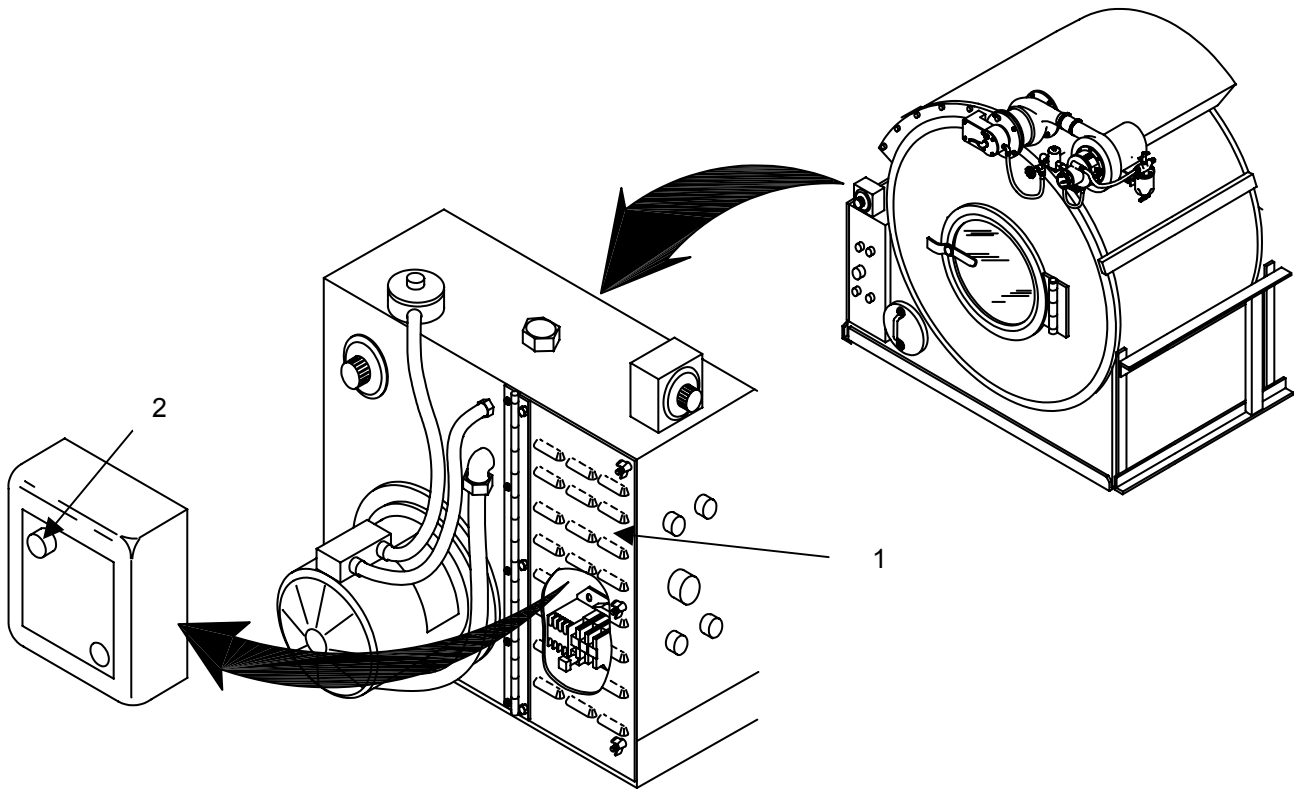
(Flame Control Chassis (1) is removed from terminal box (4) for illustration only)

9. If the dryer is equipped with an **IR flame safeguard control** ( $\mu\text{M}$ ), test the flame control system as follows.

10. The flame safeguard control has five indicators that indicate the status of the control. They are also used as an aid to troubleshoot the control.
- OPERATING CONTROL – illuminated whenever there is a call for heat.
  - INTERLOCK – illuminated when power is output to K3 relay.
  - PTFI – illuminated only during initial start-up when control is allowing flame to stabilize.
  - FLAME – illuminated only when a flame is detected.
  - ALARM – flashes when an alarm condition is indicated, buzzer sounds.
11. Does burner ignition occur momentarily and then go out, continue to step 15. If burner motor (B1) will not start, open control panel (1) on the left side of dryer. If an ignition failure has occurred or a safety shutdown, manual reset of the flame control is required by pressing the reset button (2) on the flame control. If burner motor does not start after reset of lockout, continue to the next step.

#### NOTE

In the event of ignition failure or safety shutdown, the flame control will lockout and must be reset by pushing the button on front of the flame control. Electrical power must be on for flame control reset.



12. Observe the OPERATING CONTROL, INTRLCK and PTFI indicators **(3)** on the programmer module **(3)**. If all three are on, there is a blown fuse **(4)** on the chassis **(2)** by the transformer. Push dryer power switch OFF. Refer to the REPAIR section of this Work Package to replace fuse. A blown fuse may be an indication of a problem with the fuel solenoid valve or high voltage transformer. After fuse replacement, check for normal system operation. If normal operation is not obtained, continue to the next step.
13. If all indicators are blinking and the ALARM indicator is on steady, replace the programmer module **(5)** as described under REMOVE and INSTALL of this work package. Replace module and check for normal operation.

#### NOTE

The IR flame control programmer module dipswitch settings will be stored after approximately 8 hours of operation. Changing the switch setting after 8 hours of operation will cause the programmer to malfunction and the control become inoperable. Once stored, the settings cannot be altered.

14. Observe the status indicators **(3)**. A lit OPERATING CONTROL indicates that there is a call for heat. If the OPERATING CONTROL is on, continue to the next step. If the OPERATING CONTROL is not on, continue to step 25.
15. Observe the FLAME indicator, it should not be on if flame is not present. Initiate start-up by pushing button **(6)** on front of the flame control. PTFI should illuminate for a few seconds until the flame stabilizes and the FLAME indicator will illuminate if a flame is detected by the control. Continue to the next step if not observed.

#### NOTE

Ensure the flame scanner is clean and the sight tube is free of obstructions. Remove flame scanner from the burner assembly sight tube. Clean the flame sensor window with a soft cloth, removing all oil and soot. Flame must be even and steady, adjust air shutter, if necessary.

16. Loosen center screw **(7)** on flame control cover **(8)** and remove cover from chassis **(2)**. Set voltage meter to read DC volts, insert meter test leads into test jacks **(9)** on the amplifier module **(10)**. RED (+) meter test lead into the top test jack and BLACK (-) meter test lead into the bottom test jack. A reading of 0 (zero) VDC should be obtained when no flame is present. Press reset button **(6)** on flame control chassis to initiate a restart. Meter should read 4.0 VDC to 10 VDC when the control detects flame. Wildly fluctuating readings are an indication of an unstable flame or a bad flame sensor. Adjust burner flame, if necessary. Replace flame sensor as described under REMOVE and INSTALL of this work package if there is no reading or erratic. If there is no reading or it continues to be erratic, continue to the next step.

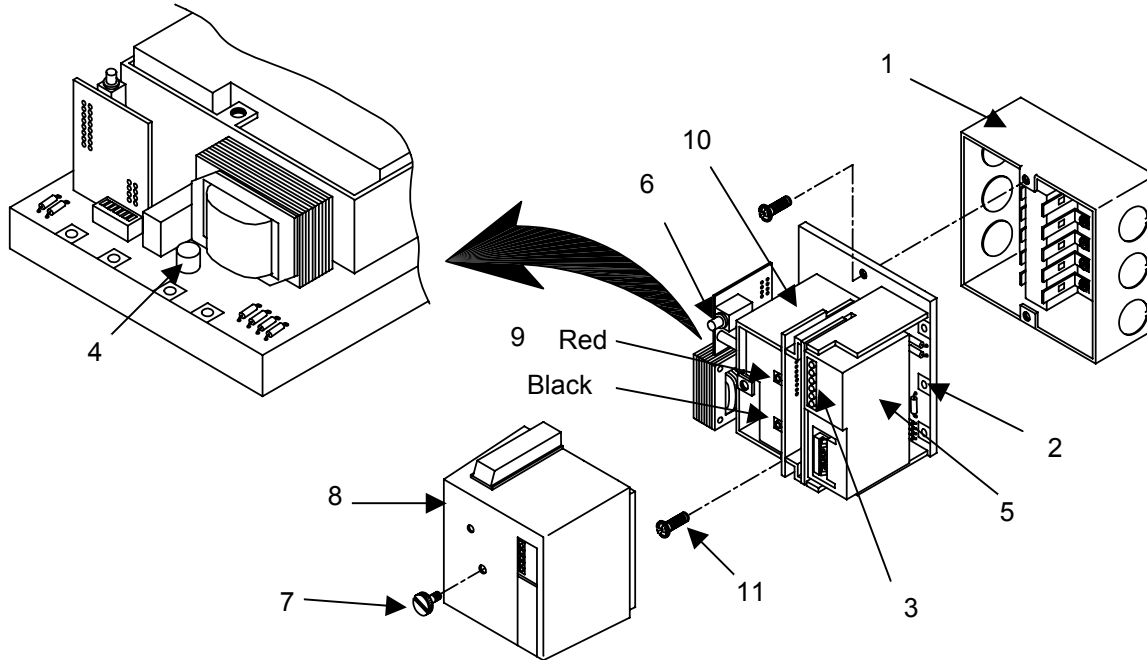
#### NOTE

As a quick test, substitute a known good amplifier module **(10)** before replacing the flame sensor. Check for indicated readings, if normal, removed amplifier is bad.

17. If the readings are not obtained after replacement of the flame sensor, replace the amplifier module **(10)** as described under REMOVE and INSTALL of this work package. Check for normal system operation.
18. Turn OFF dryer circuit breaker at laundry distribution box. Loosen center screw **(7)** on cover **(8)** and remove from flame control chassis **(2)**. Amplifier **(10)** and programmer **(5)** module may be removed or left in place. Remove two screws **(11)** and flame control chassis **(2)** from terminal box **(1)**.

**NOTE**

UV and IR components (control and scanner) are not interchangeable.  
Do not mix these control system sensors.



**IR Flame Safeguard Control and Terminal Box**

19. Turn ON dryer circuit breaker, press dryer start button and test for 120 VAC across terminals # 1 and # 2 (neutral) of base terminal board (1) in terminal box (2). See illustration following for terminal location. If voltage is not present, turn OFF circuit breaker and repair power circuit. Refer to WP 0198 00 for electrical schematic of dryer.

**NOTE**

Confirm that there is no measurable voltage present between chassis ground and terminal # 2 (neutral). Correct by tightening all electrical power connections if voltage is read.

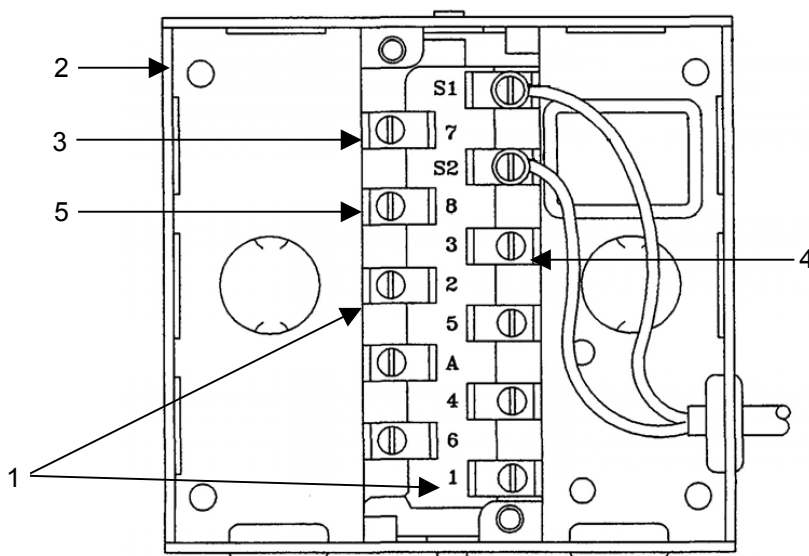
20. Test for 120 VAC on terminal # 7 of base terminal board (3) in terminal box (2). If voltage is not present on #7, remove electrical power and test temperature control (TH1), thermostat switch (TH2), and overload in hot air blower motor (B2) for continuity. If voltage at terminal #7 is as indicated, continue to the next step.

**NOTE**

Some base terminal board inputs or outputs may be accessed on the IR flame controller chassis to the left of the transformer without removing chassis from the terminal box. Top to bottom terminals on the chassis are:

- 7 - Operating control input from TH1, TH2
- 8 - Contactor output to K3
- 2 - Neutral
- A - Alarm output to buzzer & indicator
- 6 - Interlock, tied to terminal # 8

21. Additional tests that may determine if controller is bad. Turn OFF dryer circuit breaker and install flame control on terminal box as described in the INSTALL section of this Work Package. Turn ON dryer circuit breaker. Push dryer ON button and flame control reset button. Test for 120 VAC on terminal # 3 of base terminal board (4) in terminal box (2). Terminal # 3 is the flame control output to the fuel solenoid valve. Test for 120 VAC on terminal # 8 of base terminal board (5) in terminal box (2). Terminal # 8 is the output for K3 relay, K3 activates K4 timed relay, which will pull in the motor starter. If voltages are not as indicated, refer to the REPAIR section of this work package. Refer to the electrical schematic in WP 0198 00.

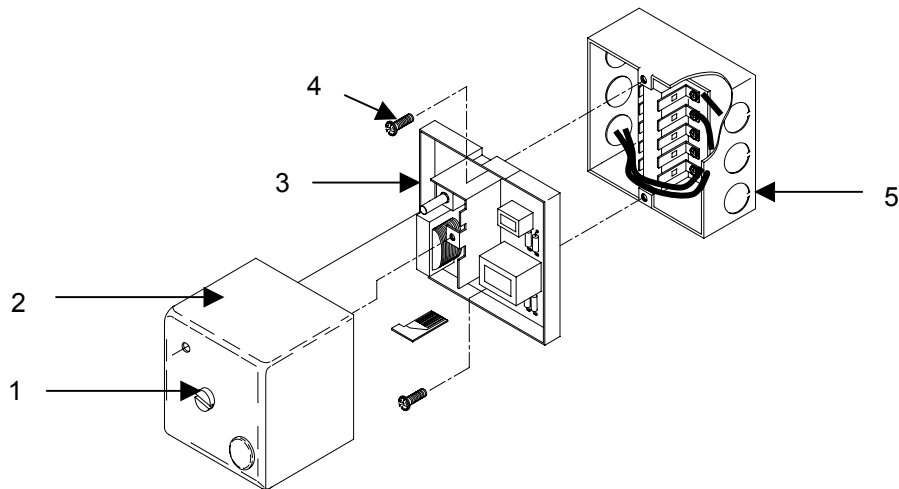


**Flame Control Terminal Box**

**REMOVE**

Removal of an **UV flame safeguard control**:

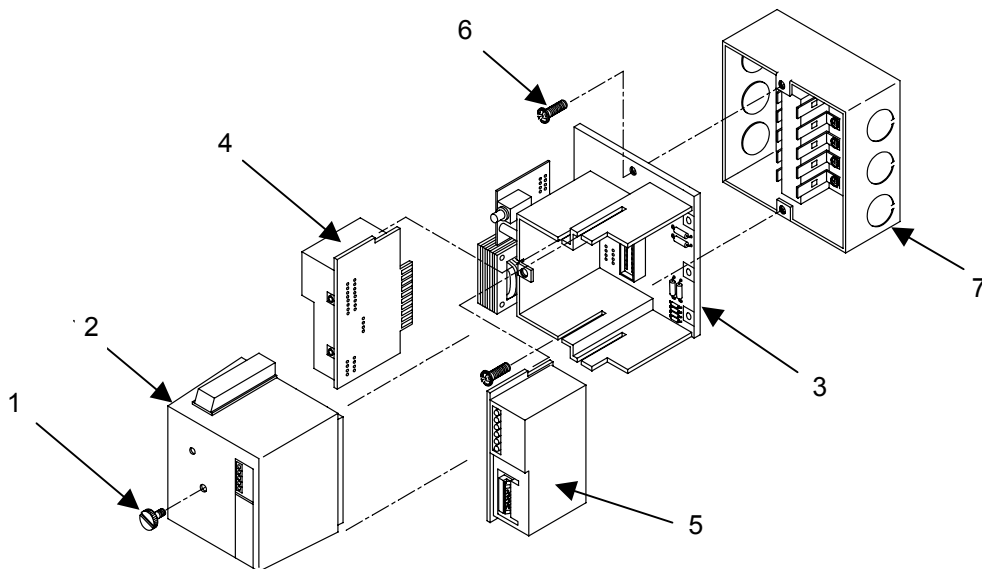
Turn OFF dryer circuit breaker. Loosen screw (1) and remove cover (2) from chassis (3). Unscrew two screws (4) and remove the flame control chassis (3) from terminal box (5).



**UV Flame Safeguard Control**

Removal of an **IR flame safeguard control**:

Turn OFF dryer circuit breaker. Loosen screw (1) and remove cover (2) from chassis (3). Amplifier (4) and programmer (5) module may be removed, if desired or left in place. Handle modules only by the edges of the printed circuit board. Remove two screws (6) and flame control chassis (3) from terminal box (7).



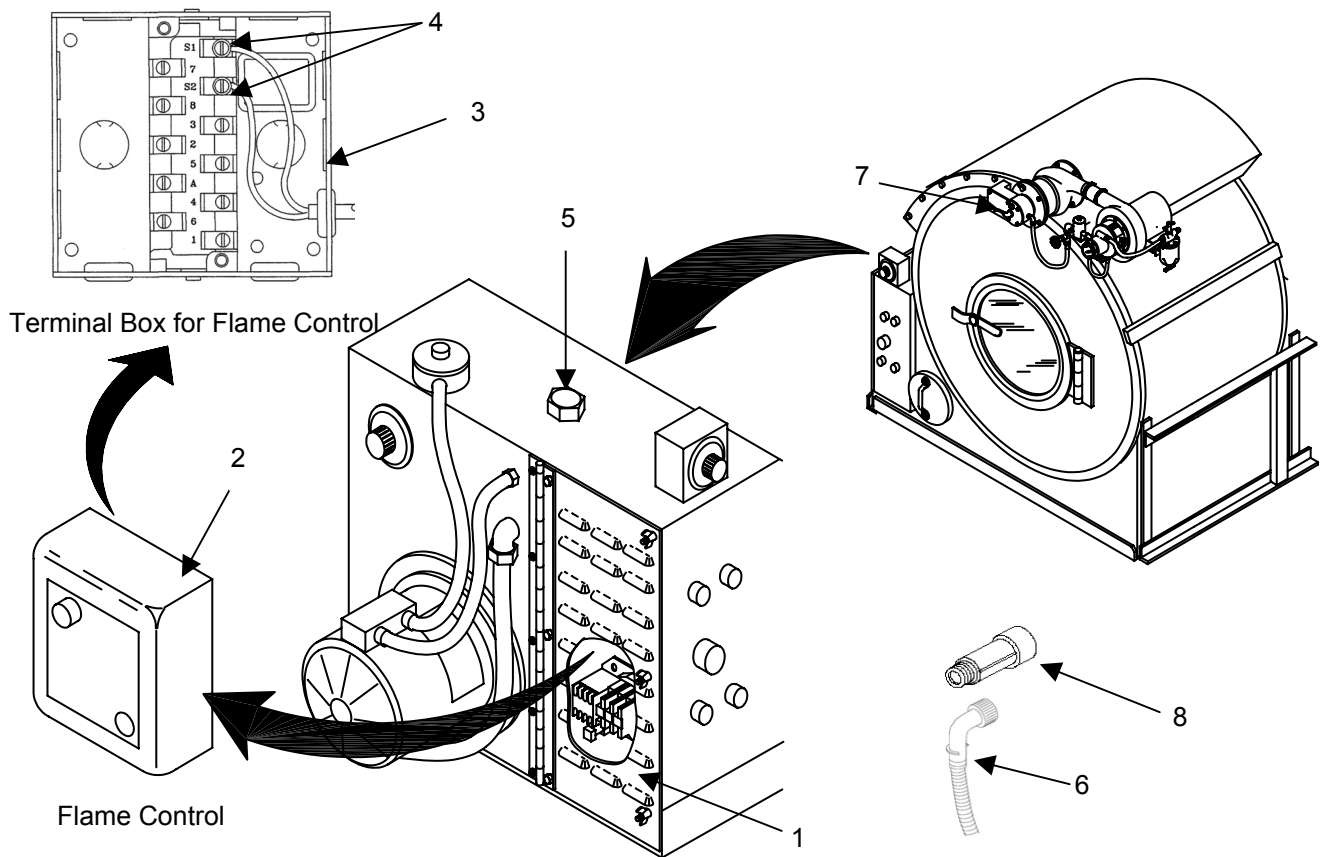
**IR Flame Safeguard Control**

To remove an **UV or IR flame scanner and cable assembly**:

1. Turn OFF dryer circuit breaker at laundry distribution box. Open dryer electrical control access door (1). Remove flame control chassis (2) from terminal box (3) as described in REMOVE UV or IR flame safeguard control.
2. Disconnect flame scanner wires from S1 and S2 on terminal board (4) in terminal box (3). Pull wires from terminal box.
3. Loosen electrical cable nut on weatherproof fitting (5) and pull cable out of dryer electrical control box. Note routing of scanner cable along front of dryer. Cut any cable ties that secure cable.
4. Remove the flame scanner from the burner head assembly by unscrewing scanner (6) from the burner sight tube (7) or heat insulator (8) on sight tube (7). Remove heat insulator from sight tube, if installed.

### NOTE

Ensure the burner sight tube is free of obstructions or build-up of soot.  
Clean if necessary.



**REPAIR**

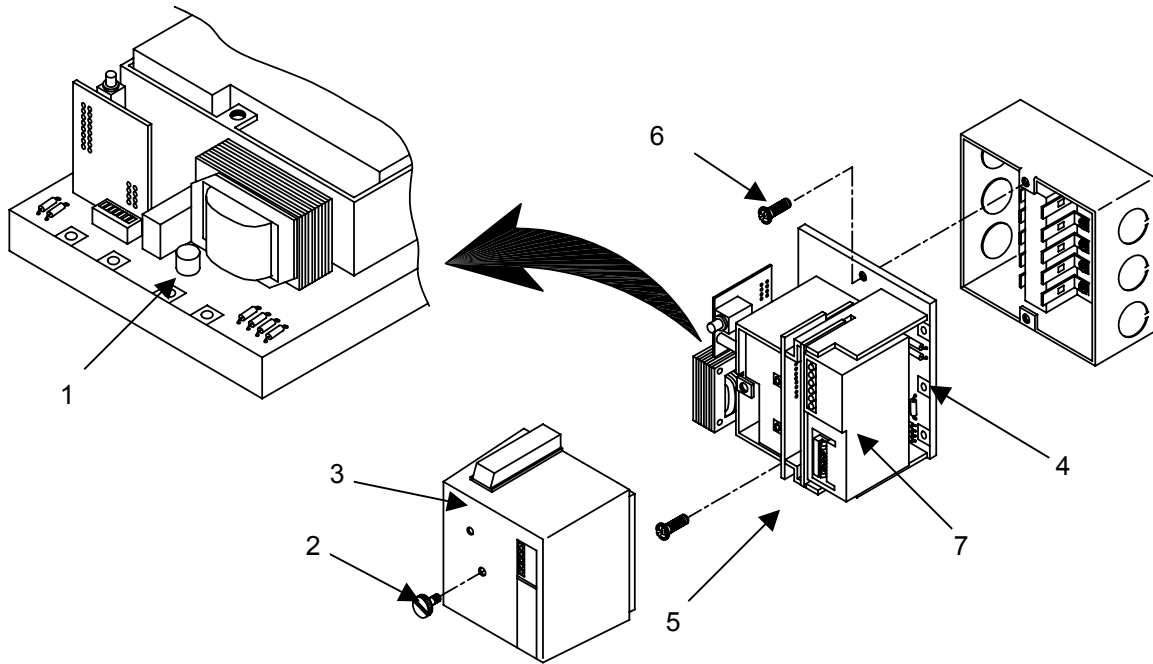
1. A defective **UV flame safeguard control** is not repairable. Replace a defective UV flame control with an IR flame safeguard control and scanner as described under REMOVE and INSTALL of this work package.

**NOTE**

If any component of the UV flame safeguard control is found to be defective, order P/N PL6-1-8949-1, CAGE 81337, MODIFICATION KIT, ELECTRIC POWER to convert the system to IR control. After conversion individual IR flame control repair parts may be separately ordered.

2. Repair a defective **IR flame safeguard control** as follows.
3. Observe the OPERATING CONTROL, INTRLCK and PTFI LED indicators on the flame safeguard control. If all three are on, there is a blown fuse **(1)** on the flame control chassis board by the transformer.
4. Turn dryer circuit breaker OFF. Loosen screw **(2)** and remove cover **(3)** from IR flame control chassis **(4)**. Use a small flat screwdriver to remove fuse from chassis. Check the fuse **(1)**, with a multimeter and replace if open. Replace with Fireye, part number 23-197 or Wickmann, part number 3732100041. Fuse will open if there is an overload on the fuel solenoid or high voltage transformer circuit. Refer to WP 0198 00 for dryer electrical circuits.
5. After fuse replacement, install IR flame safeguard control **(4)** on terminal box **(5)** with two screws **(6)**. Initiate start-up in and check for normal operation.
6. If all LED indicators are blinking and ALARM indicator is on steady then replace the programmer **(7)** module as described under REMOVE and IINSTALL of this work package. Replace module and check for normal operation in accordance with TM 10-3510-222-10.
7. Replace chassis **(4)** if amplifier and programmer replacement does not repair flame control.





### IR Flame Safeguard Control

#### INSTALL

Install an **IR Scanner and cable assembly**, as follows.

#### NOTE

If any component of the UV flame safeguard control is found to be defective, order P/N 6-1-8949-1, CAGE 81337, MODIFICATION KIT, ELECTRIC POWER to convert the system to IR flame safeguard control. After conversion individual IR flame control repair parts may be separately ordered.

#### NOTE

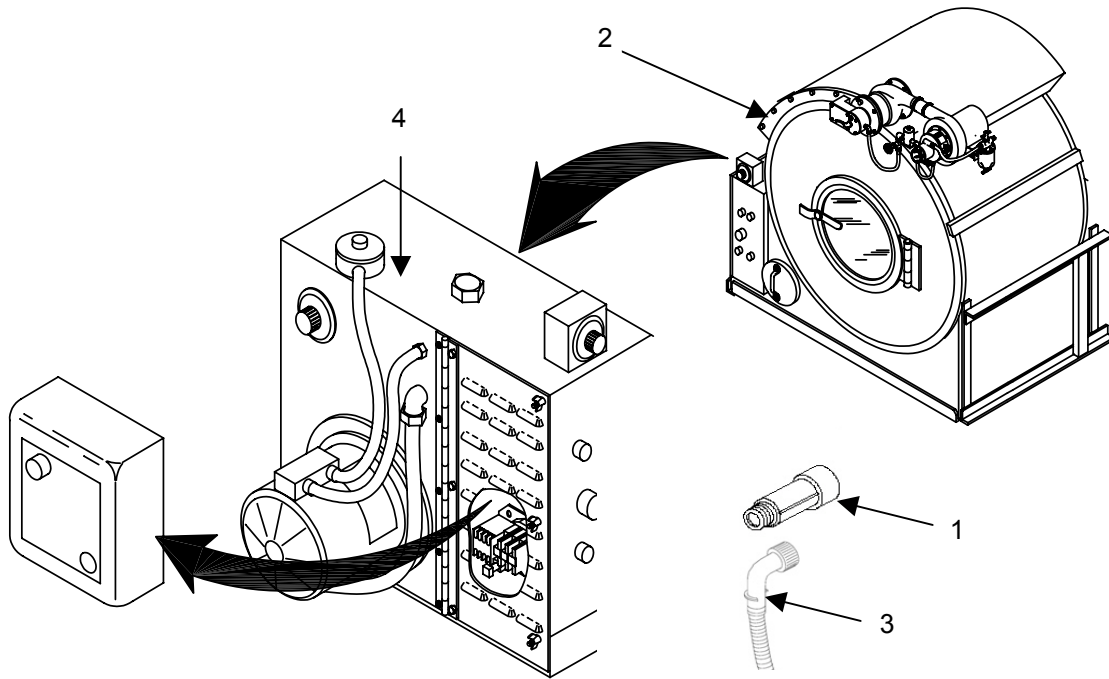
UV and IR components are not interchangeable.  
Do not mix these control system sensors.

1. Screw heat insulator **(1)** onto sight tube on the dryer burner head assembly **(2)**. Secure heat insulator only hand-tight to sight tube. Over-tightening will crack insulator.
2. Screw flame scanner **(3)** onto heat insulator **(1)** at burner head assembly. Hand-tighten only. Remove bushing from end of flame scanner cable where wires extend and secure for later use.

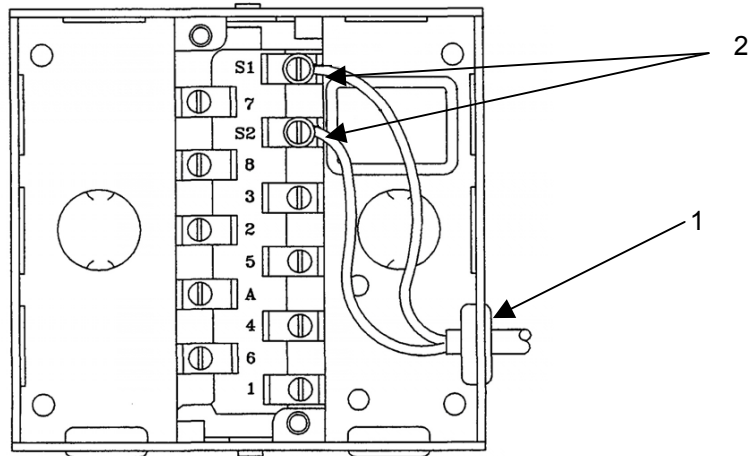
#### NOTE

Modification kit comes with a strain relief fitting for the flame scanner.  
It is not used on the dryer.

3. Route flame scanner cable as was removed previously and secure along front of dryer with electrical cable ties. Push wire into control box thru the electrical fitting **(4)** and tighten fitting.



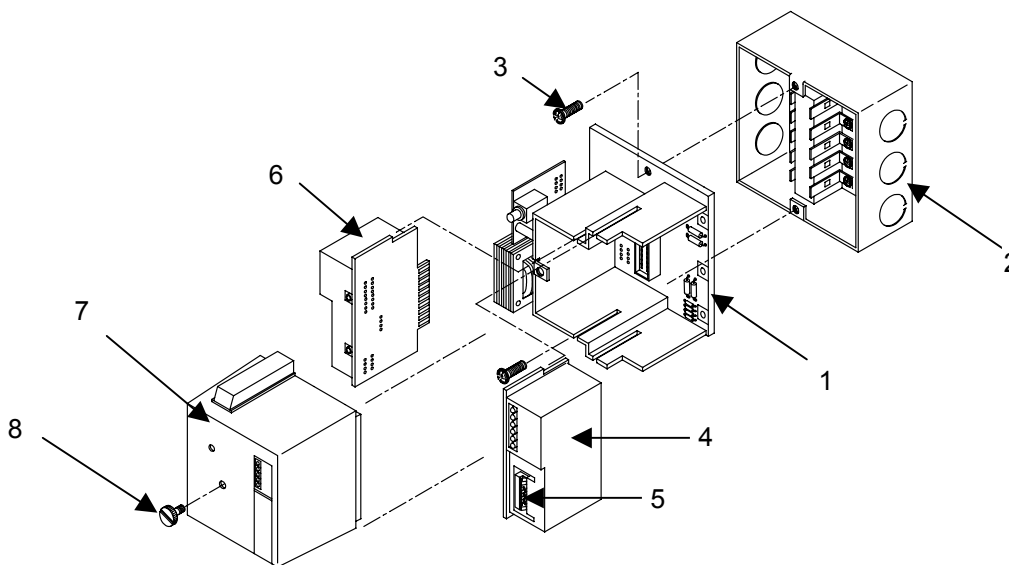
4. Tightly coil any excess flame sensor cable and wire, leaving about 6 inches free and secure with electrical wire ties. Install conduit bushing, removed earlier from scanner cable end, so wires are protected from the sharp edges of the conduit. Place coiled wire under flame control terminal box so it does not interfere with other components.
5. Push wires into terminal box (1) and install wires onto S1 and S2 terminals (2). Replace flame control onto terminal box as described under INSTALL flame control. Check for normal operation.



**Flame Control Terminal Box**

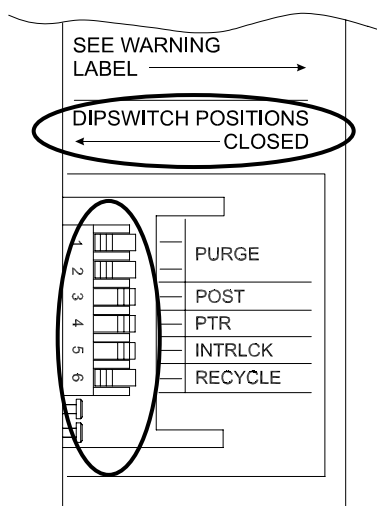
Install an **IR flame safeguard control** as follows:

1. Turn dryer circuit breaker OFF.
2. Install IR flame safeguard control chassis (1) onto terminal box (2) using two screws (3).
3. The programmer module (4) has a series of switches (5) that must be set to the correct position before the programmer can be installed in the control chassis (1). Using a pen or small instrument move the switches into the positions shown. Note that switches 3, 4, and 5 are in the **OPEN** position, switches 1, 2, and 6 are in the **CLOSED** position. Refer to the label on the module for guidance on the open and closed position.



**NOTE**

The IR flame control programmer module dipswitch settings will be stored after approximately 8 hours of operation. Changing the switch setting after 8 hours of operation will cause the programmer to malfunction and the control become inoperable. Once stored, the settings cannot be altered.



**Programmer Label**

- After the switches have been set, install the programmer module (4) into the control chassis (1). The programmer module is inserted into the guide slot farthest from the transformer.

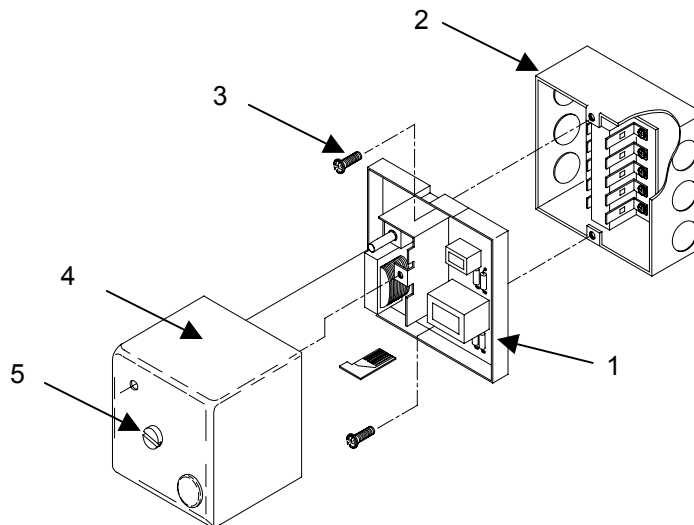
### NOTE

Install modules by carefully holding the edges of the printed circuit board and aligning the modules with the guide slots. Do not force modules into slots

- Install the amplifier module (6) into the control chassis (1). The amplifier module is installed into the slot in the middle of the chassis next to the transformer.
- Place the cover (7) over the control chassis (1) and secure with screw (8). Turn on dryer circuit breaker. Push dryer start button and check for normal operation in accordance with TM 10-3510-222-10.

Install an **UV Flame Safeguard Control** as follows:

- Turn OFF power switch and remove power source and power cable from water heater.
- Install UV flame safeguard control chassis (1) onto terminal box (2) using two screws (3).
- Place the cover (4) over the control chassis (1) and secure with screw (5). Restore power and check for normal operation in accordance with WP 0005 00. Close and latch control panel cover



**UV Flame Safeguard Control and Terminal Box**

**END OF WORK PACKAGE**

**CHAPTER 3**

**UNIT MAINTENANCE INSTRUCTIONS  
FOR  
M85 TRAILER MOUNTED LAUNDRY UNIT**



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**LUBRICATION INSTRUCTIONS**

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**LUBRICATION INSTRUCTIONS****LUBRICATION ORDERS**

**Laundry Unit.** Refer to LO10-3510-222-12 for lubrication order.

**Generator.** Refer to LO 5-6115-585-12 for lubrication order.

**Trailer.** Refer to TM 9-2330-376-14&P for lubrication order.

**Washer.** Refer to LO 10-3510-220-12 for lubrication order.

**Water Heater.** Refer to TM 10-4520-259-13&P for lubrication order.





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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**REPAIR PARTS, TOOLS, SPECIAL TOOLS; TEST, MEASUREMENT, AND**  
**DIAGNOSTIC EQUIPMENT (TMDE) AND SUPPORT EQUIPMENT**

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**SPECIAL TOOLS. TMDE. AND SUPPORT EQUIPMENT**

Refer to WP 0189 00, Maintenance Allocation Chart, TMDE, and Support Equipment and TM 10-3510-222-24P, Repair Parts and Special Tools List.

**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. WP 0189 00 lists the Mandatory Replacement Parts, which need to be replaced during maintenance.

**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.



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**SERVICE UPON RECEIPT OF MATERIAL**

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**Laundry Unit.** Inspect Laundry Unit for damage incurred during shipment. If the equipment has been damaged, report the damage on SF 364, Report of Discrepancy.

**Equipment.** 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.

**Trailer.** Refer to TM 9-2330-376-14&P for service upon receipt of trailer.

**Generator.** Refer to TM 5-6115-585-12 for service upon receipt of generator set.

**Water Heater.** Refer to TM 10-4520-259-13&P for service upon receipt of water heater.

**Depreservation.** 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.

**Preventive Maintenance Checks and Services (PMCS).** Perform the Before and Weekly preventive maintenance checks and services. (Refer to TM 10-3510-222-10.)

**Lubrication Instructions.** Lubricate the unit in accordance with LO 10-3510-222-12, Laundry Unit.



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**UNIT MAINTENANCE INSTRUCTIONS**

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## 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 WP 0188 00. 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.

## WIRING

**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 WP 0192 00. Cable Diagrams, Wire Run List, and Control Circuits.

**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 uncured 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.

**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.

**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 inch to 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.

**Crimping Terminals.** To install a terminal on the end of a wire, strip 1/4 to 1/2 inch (6.5 to 12.7 mm) of insulation from the end of the wire, apply a one-inch piece of heat-shrink 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.

## CLEANING AND INSPECTION OF ANTIFRICTION BEARINGS

Refer to TM 9-214, Inspection, Care, and Maintenance of Antifriction Bearings.

## CLEANING AND INSPECTION OF MECHANICAL PARTS



Dry-cleaning 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 must not exceed 30 psi (kPa). Use only with personal protective equipment.

Clean metal parts in dry-cleaning solvent. Thoroughly dry the parts with compressed air, observing all safety precautions.

Fibrous or rubber parts can generally be cleaned with warm, soapy water and dried with compressed air.

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.

## GENERAL REPAIR

Return the Laundry Unit to normal operating condition by replacing or repairing a defective component and/or by making needed adjustments.

Cleaning and lubrication is sometimes all that is needed to return an item to operating condition.

Remove and replace only those items necessary to make repairs. After replacing the defective components, ensure that the Laundry Unit operates correctly.

To paint metal, sand exposed metal areas with sandpaper and refinish with primer and olive drab paint. Refer to TM 43-0139 for proper painting instructions. Allow the paint to dry between coats.

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

---

**GENERAL**

Your Preventive Maintenance Checks and Services Table lists the inspections and care your equipment requires to keep it in good operating condition.

**Quarterly Checks.** 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.

**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).

**PMCS COLUMNAR ENTRIES (See Table 1. located in WP 0018 00)**

**Item number column.** 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.

**Interval column.** This column tells you when you must do the procedure in the procedure column.

**Location, item to check/service column.** This column provides the location and the item to be checked or serviced.

**Procedure column.** 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.

**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.

**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.

**NOTE**

Class III leaks should be reported to your supervisor.

**Class I.** Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.

**Class II.** Leakage of fluid great enough to form drops but not enough to cause drops to drip from item being checked/inspected.

**Class III.** Leakage of fluid great enough to form drops that fall from the item being checked/inspected.

**GENERAL MAINTENANCE PROCEDURES**

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

**Cleanliness.** Dirt, grease, oil, and debris only get in the way and may cover up a serious problem.

**Bolts, Nuts, and Screws.** 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.

**Welds.** 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.

**Electrical Wires and Connections.** 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.

**Water Lines and Fillings.** 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 filling or connector, or if something is broken or worn out, report it to your supervisor.

**Corrosion Control.**

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.

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.

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.

Submit completed SF 368 to Commander, U.S. Army Tank-automotive and Armament Command, ATTN: AMSTA-LC-R, Kansas Street, Natick, MA 01760-5052.



## UNIT MAINTENANCE

LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) TABLE

## PMCS TABLE

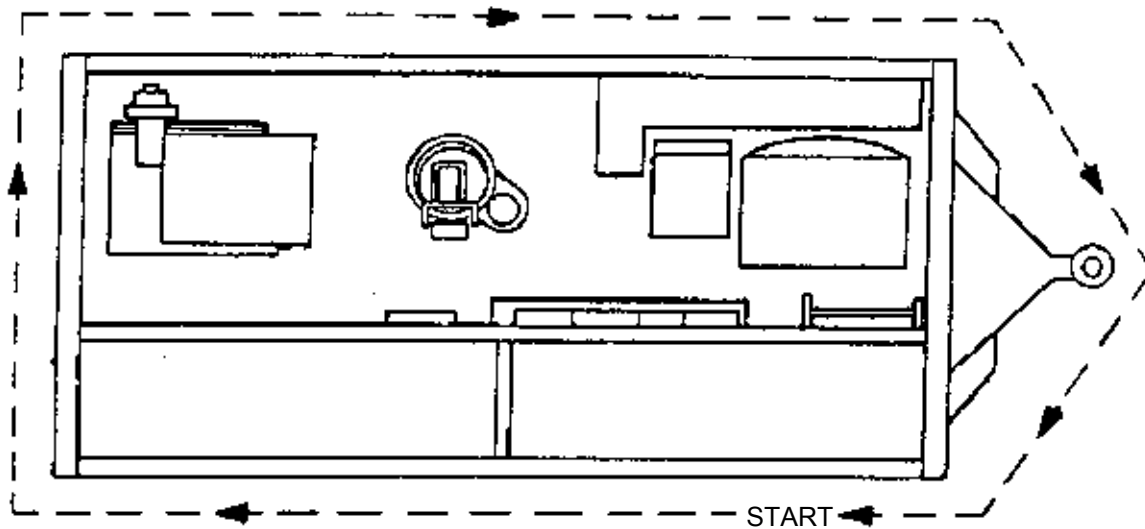
See Table 1. for PMCS.

**Generator Set.** Refer to TM 5-6115-585-12 for PMCS.

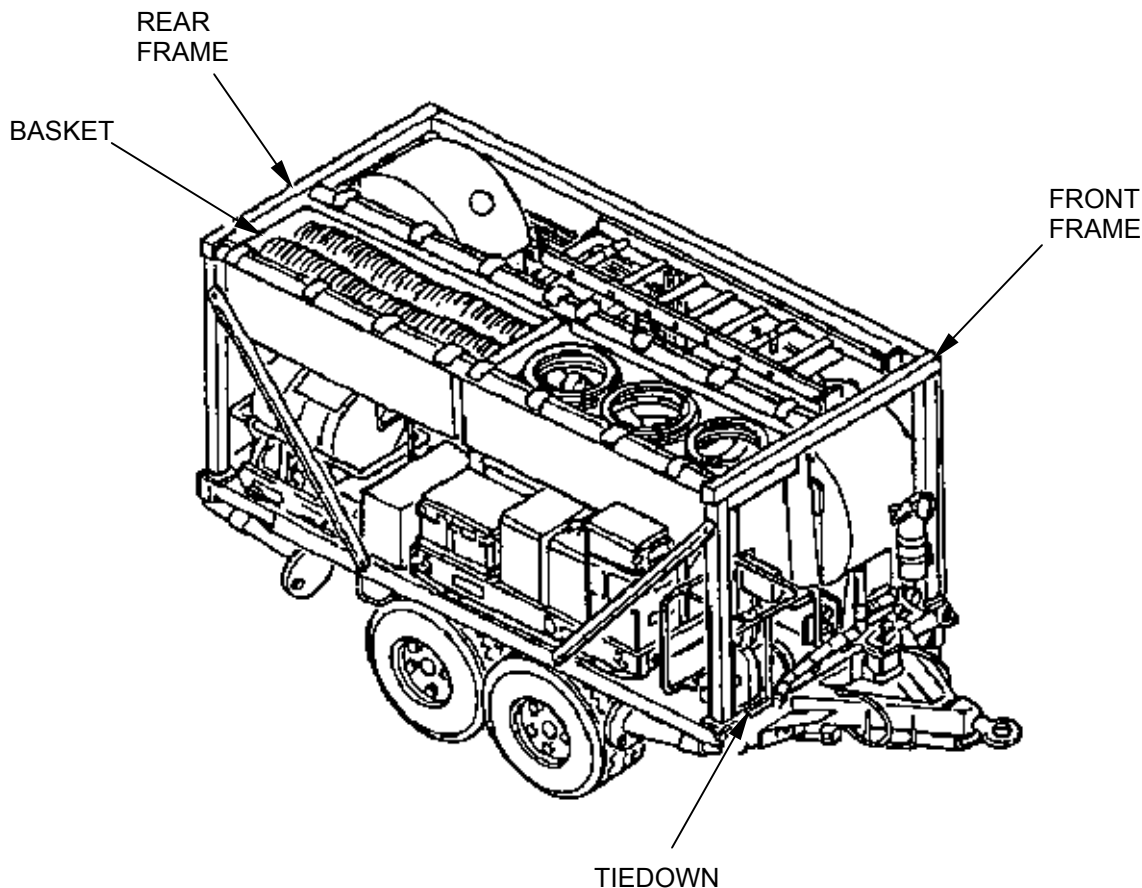
**Trailer.** Refer to TM 9-2330-376-14&P for PMCS.

**Water Heater.** Refer to TM 10-4520-259-13&P for PMCS.

**Walk-Around PMCS.** Routing will be of help to complete PMCS. Illustration shows Laundry Unit PMCS routing track, which matches the sequence of PMCS to be performed.

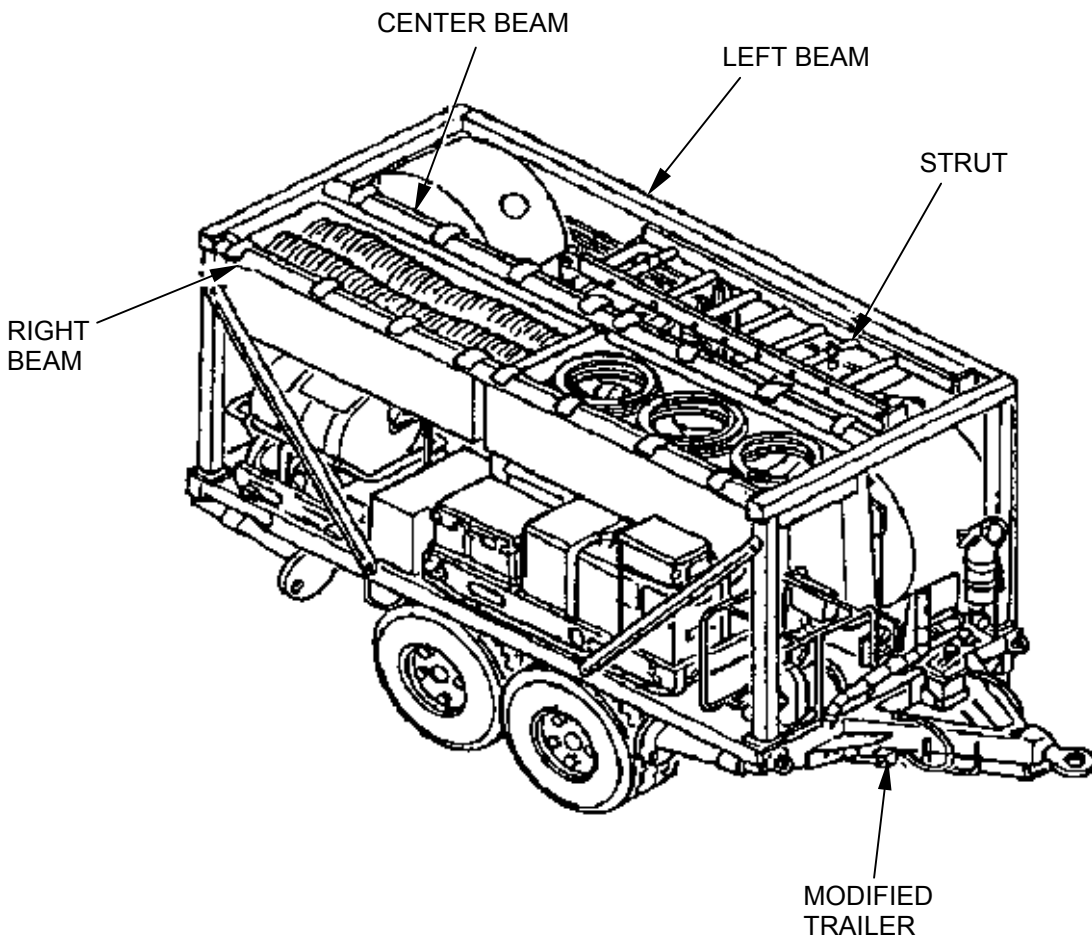


Walk-Around PMCS Routing



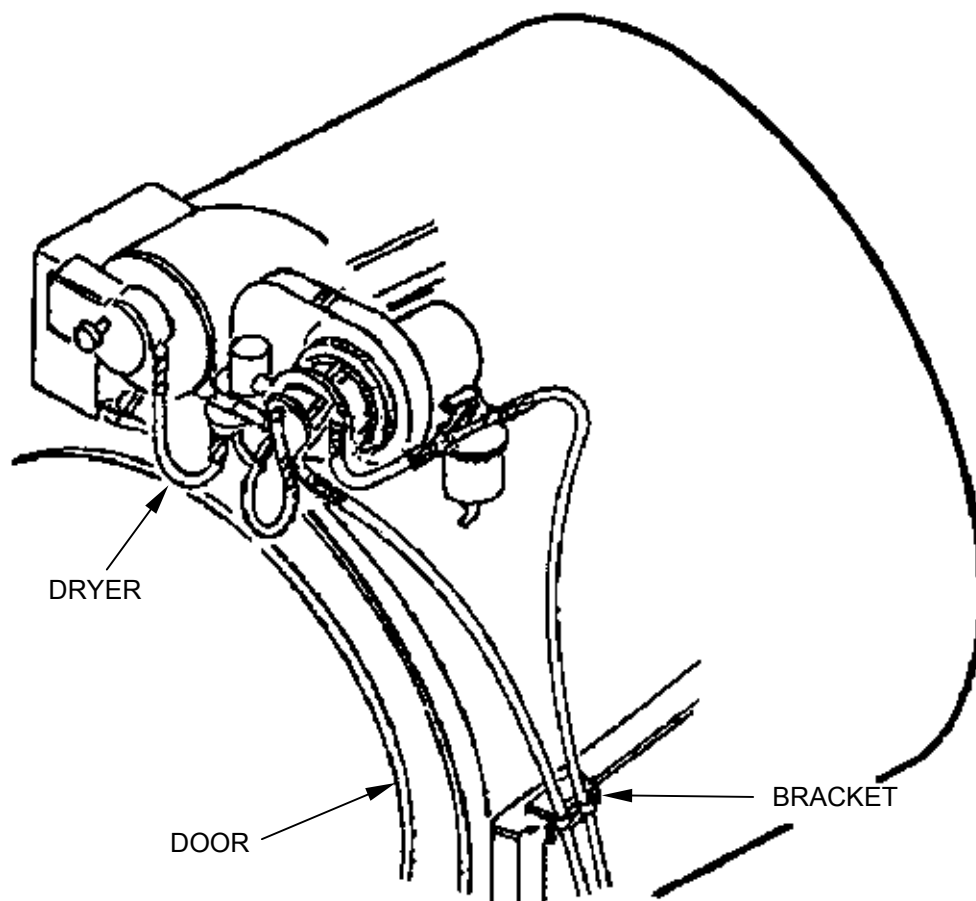
**Table 1. Operator Preventive Maintenance Checks and Services for M85-200**

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
1	Quarterly	Tiedown (2 each)	Inspect for broken and/or missing hardware.	Broken and/or missing hardware.
2	Quarterly	Basket (2 each)	Inspect for broken welds.	Broken welds.
3	Quarterly	Front and Rear Frames	Inspect for broken welds; broken, loose and/or missing hardware.	Broken welds; broken, loose and/or missing hardware.



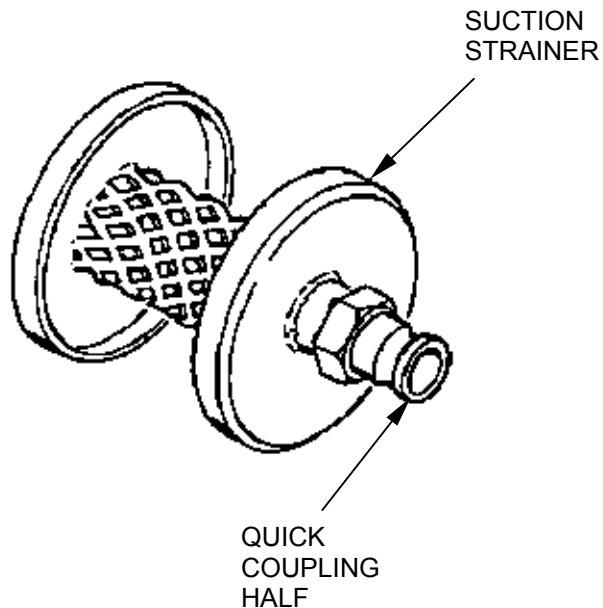
**Table 1. Operator Preventive Maintenance Checks and Services for M85-200-continued**

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
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.	



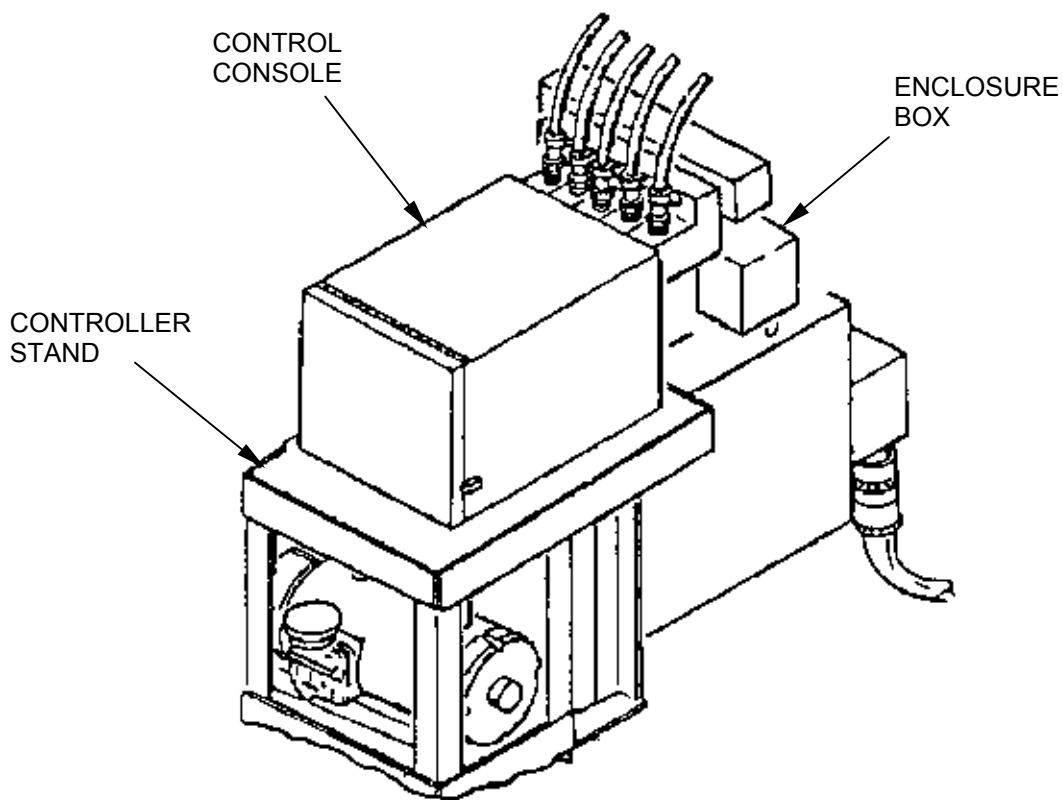
**Table 1. Operator Preventive Maintenance Checks and Services for M85-200-continued**

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
7	Quarterly	Bracket (side of dryer)	Inspect for broken, loose and/or missing hardware.	
8	Quarterly	Door	Inspect for broken, loose and/or missing hardware.	Broken, loose and/or missing hardware.



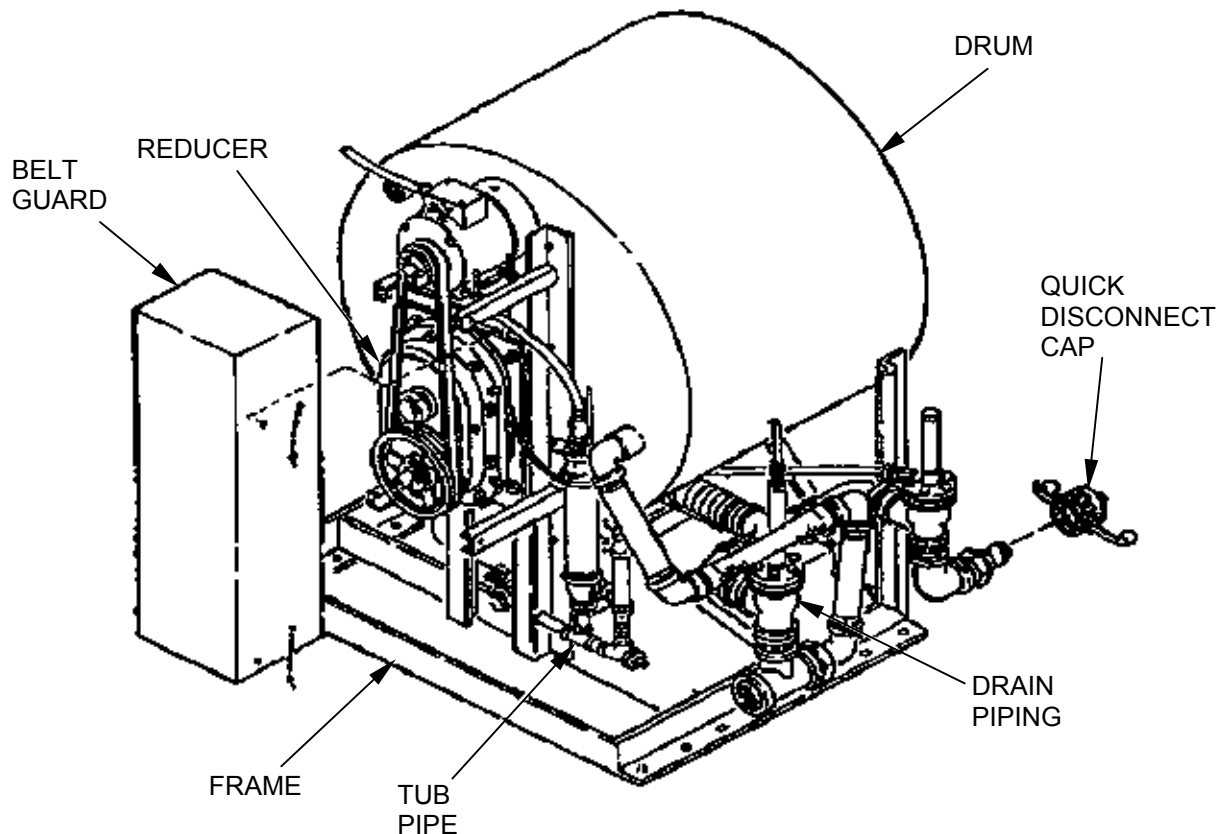
**Table 1. Operator Preventive Maintenance Checks and Services for M85-200-continued**

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
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 1. Operator Preventive Maintenance Checks and Services for M85-200-continued**

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
10	Quarterly	Control Console	Inspect interior of console for damaged hardware and/or frayed wiring.	Damaged hardware and/or 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/or frayed wiring.



**Table 1. Operator Preventive Maintenance Checks and Services for M85-200-continued**

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
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.	

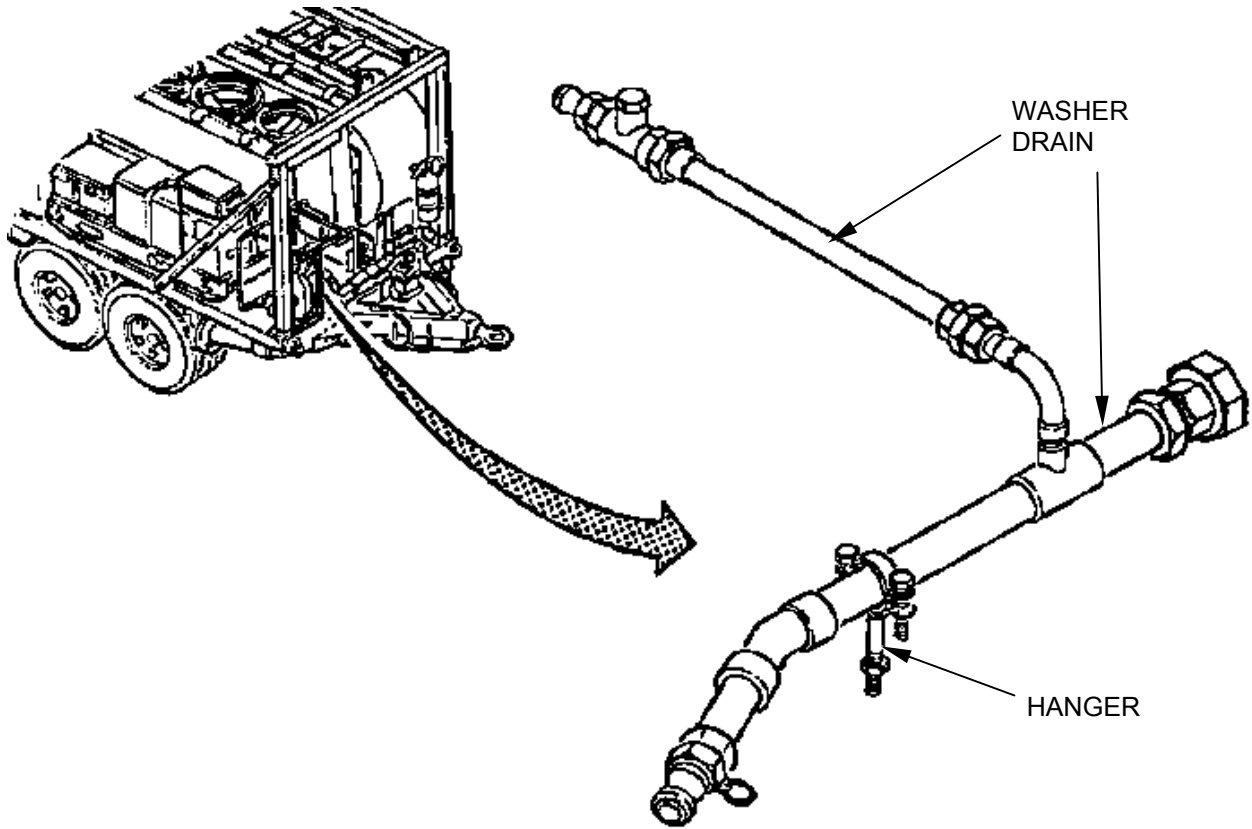
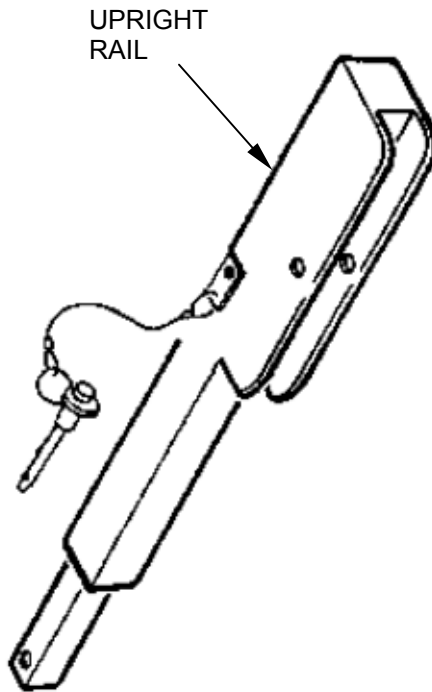


Table 1. Operator Preventive Maintenance Checks and Services for M85-200-continued

ITEM NO.	INTERVAL	LOCATION ITEM TO CHECK/SERVICE	PROCEDURE	NOT FULLY MISSION CAPABLE IF:
19	Quarterly	Hanger	Inspect for broken, loose and/or missing hardware.	
20	Quarterly	Washer Drain	Inspect for leaks.	





**Table 1. Operator 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.	



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**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
NSN (3510-01-291-8169 (M85-100))  
NSN (3510-01-365-5687 (M85-200))  
TARPAULIN  
INSPECT, REPLACE**

---

**INITIAL SETUP:****Tools****Personnel Required**

One

**Materials/Parts****Equipment Condition**

---

**WARNING**

Trailer bed can be cluttered and is slippery if wet. Use care when climbing on or around the mounted equipment.

**INSPECT**

1. Inspect for tears, cuts, dry rot, and loose sewing.
2. Inspect for damaged or missing components.
3. Send tarp to direct support maintenance for repair.

**REPLACE**

If cover is damaged beyond repair, replace with new cover.

**END OF WORK PACKAGE**



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**LADDER ASSEMBLY**  
**INSPECT, REPLACE, REPAIR**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment Tool Kit (Item  
 2, WP 0188 00)  
 Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Blind Rivet (Item 14, WP 0189 00)  
 Flat head rivet (Item 16, WP 0189 00)  
 Self-locking nut (Item 15, WP 0189 00)

**Equipment Condition****INSPECT**

Inspect ladder components as described in WP 0018 00.

**REPLACE**

If ladder assembly is damaged beyond repair, replace ladder assembly.

**REPAIR****NOTE**

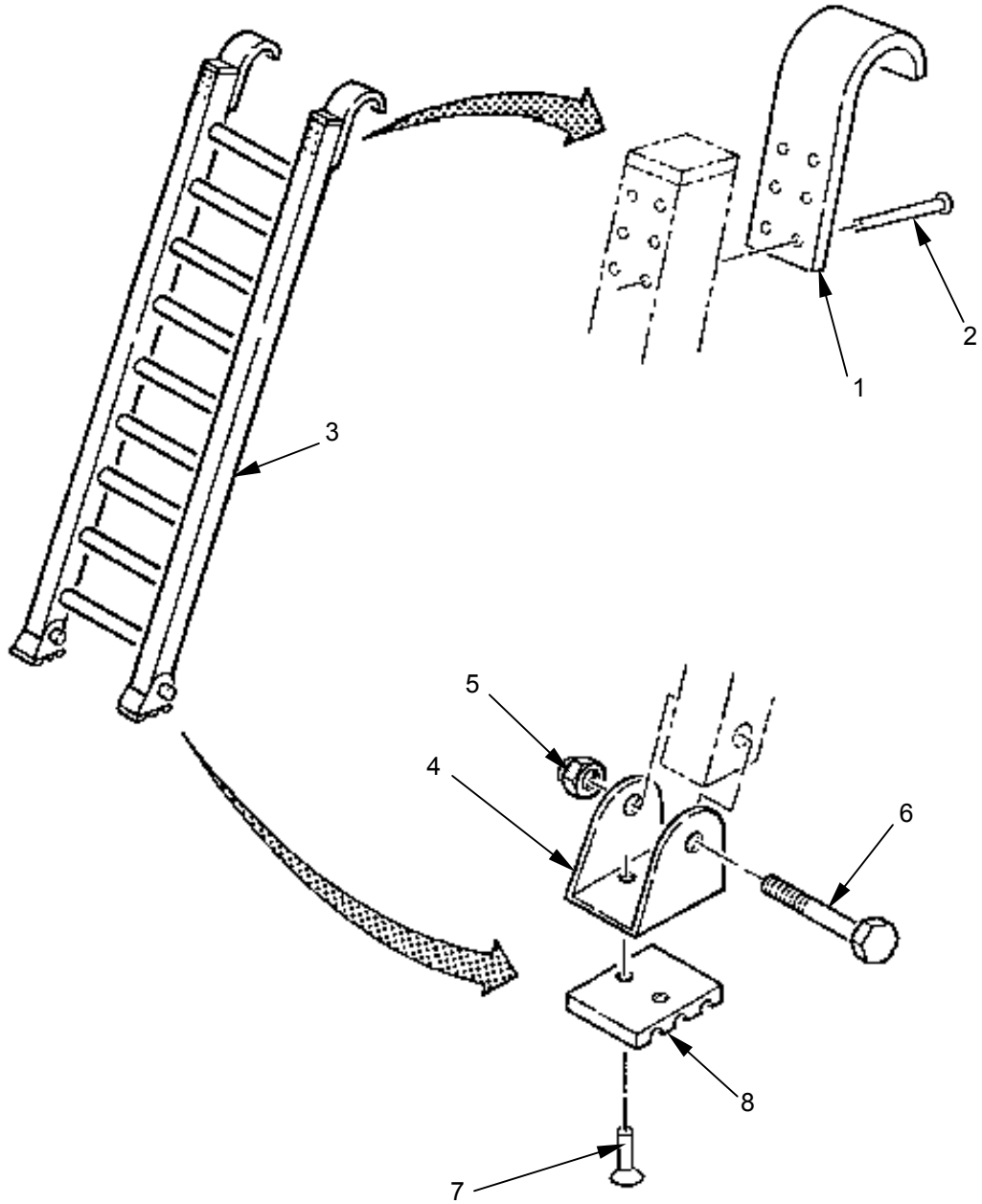
Both ladder hooks and feet are identical, this procedure is for one of them.

Repair ladder hook **(1)** as follows:

1. Remove six blind rivets **(2)** securing the ladder hook **(1)** to the ladder **(3)**.
2. Remove the ladder hook **(1)**.
3. Position a new ladder hook **(1)** on the ladder, align the holes and install six blind rivets **(2)**.

Repair Ladder foot **(4)** as follows:

1. Remove the self-locking nut **(5)** and bolt **(6)** from the ladder foot **(4)**.
2. Remove the ladder foot **(4)** from the ladder **(3)**.
3. Remove two flat head rivets **(7)** securing the rubber foot **(8)** to the foot pad **(4)**.
4. Remove the rubber foot **(8)** from the foot pad **(4)**.
5. Position a new rubber foot **(8)** on the foot pad **(4)**; align holes and install two flat head rivets **(7)**.
6. Position the assembled foot pad **(4)** on the ladder **(3)**.
7. Align the holes and install the bolt **(6)** and self-locking nut **(5)** on ladder foot **(4)** and ladder **(3)**.



END OF WORK PACKAGE

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**BASKET ASSEMBLY**  
**INSPECT, REPLACE, REPAIR**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment Tool Kit (Item  
 2, WP 0188 00)  
 Hand Blind Riveter (Item 7, WP 0189 00)

**Personnel Required**

One

**Materials/Parts**

Blind Rivet (Item 14, WP 0189 00)

**Equipment Condition****INSPECT**

Inspect basket assembly components as described in WP 0017 00 and WP 0018 00.

**REPAIR****WARNING**

Generator exhaust hoses or water heater hoses may be extremely hot. Be careful when working near them as touching them 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.

Remove basket assembly as follows:

1. If either basket **(1)** has contents of the Laundry Unit in it, remove all contents.
2. Disconnect eight cargo straps **(2)** from basket **(1)**.
3. Lift and remove the basket **(1)** from the left beam **(3)** and the center beam **(4)**.

Replace cargo strap (5) as follows:

1. Remove two blind rivets (6) from the strap loop (7) and the basket (1).
2. Remove the cargo strap (5) from the strap loop (7).
3. Install a new cargo strap (5) on the strap loop (7) if applicable.
4. Install two blind rivets (6) to secure the strap loop (7) to the basket (1).

Replace strap loop (8) as follows:

1. Remove two blind rivets (9) from the strap loop (8) and the basket (1).
2. Remove the strap loop (8).
3. Position a new strap loop (8) on the basket (1) and install two blind rivets (9).

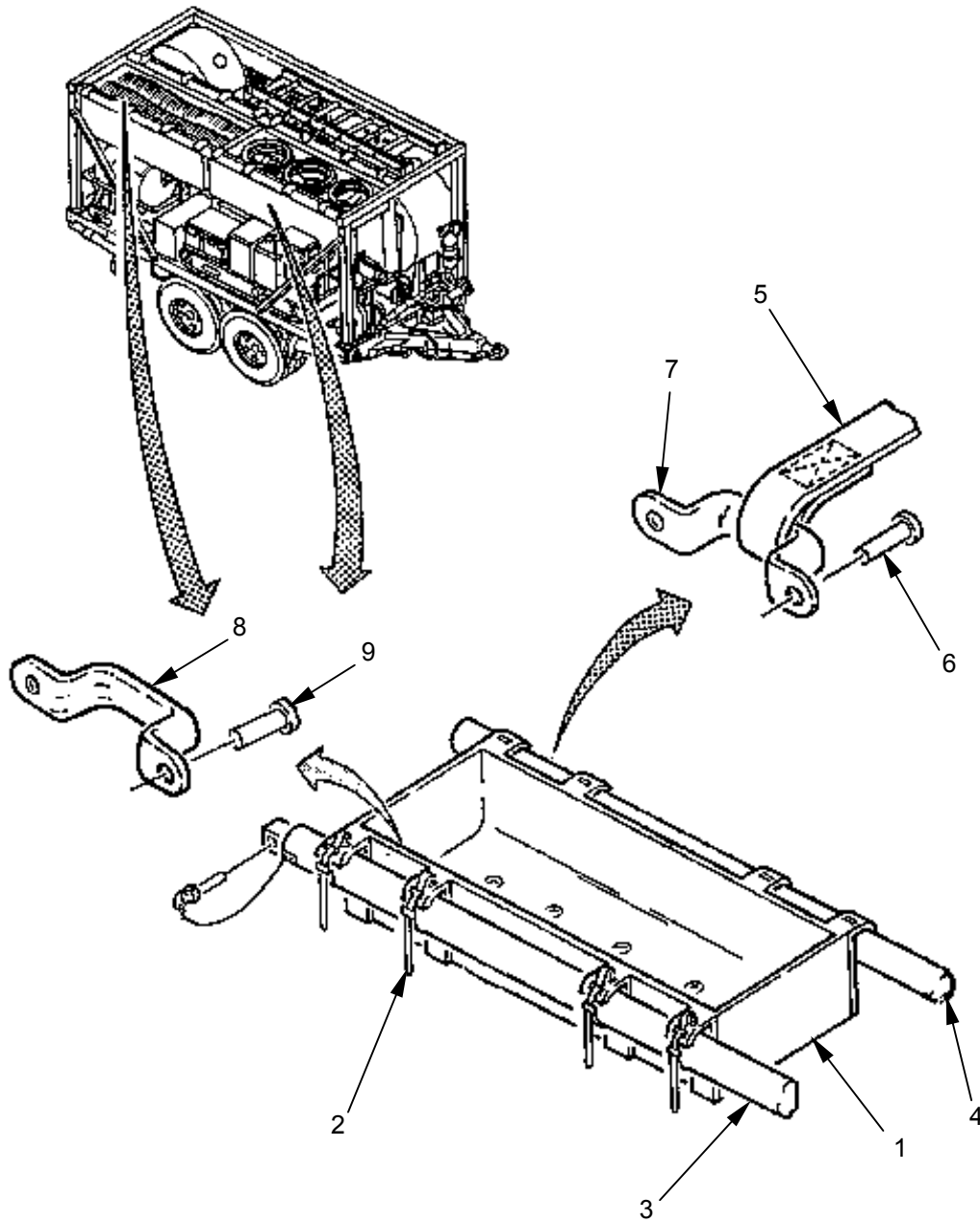
Install basket assembly as follows:

1. Position the basket (1) on the left beam (3) and center beam (4).
2. Connect eight cargo straps (2) on the basket (1), left beam (3) and center beam (4).

#### **REPLACE**

1. Remove unserviceable basket assembly (1) as described above.
2. Install new basket assembly (1) as described above.





END OF WORK PACKAGE



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**STRUT ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment Tool Kit (Item  
 2, WP 0188 00)  
 Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Blind Rivet (Item 14, WP 0189 00)  
 Blind Rivet (Item 17, WP 0189 00)

**Equipment Condition****INSPECT**

Inspect strut assembly components as described in WP 0017 00 and WP 0018 00.

**REPAIR**

Replace single acting pin **(2)**.

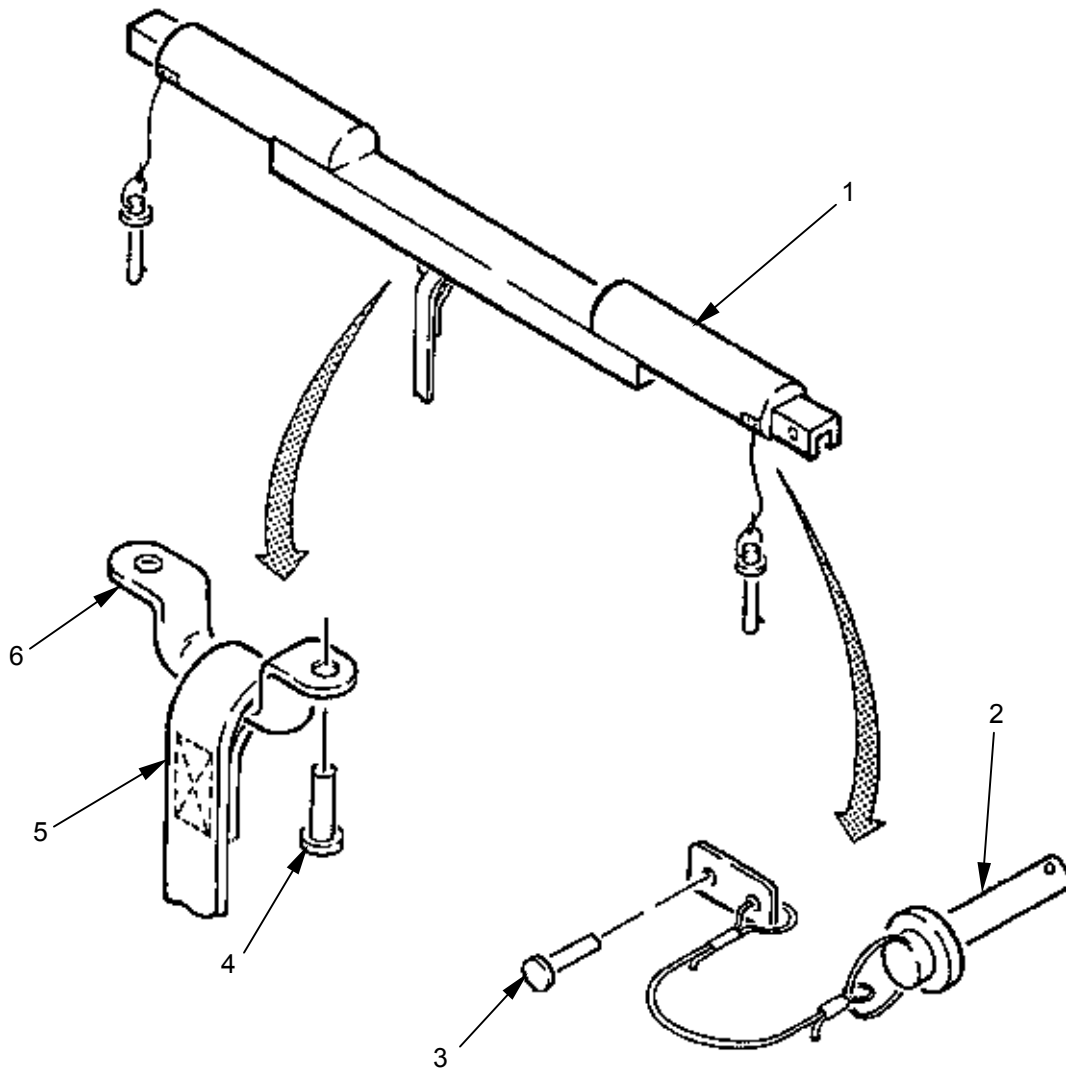
1. Remove one blind rivet **(3)** from the single acting pin **(2)**.
2. Remove the single acting pin **(2)** from the strut **(1)**.
3. Position a new single acting pin **(2)** on the strut **(1)** and install a blind rivet **(3)**.

Replace cargo tiedown **(5)**.

1. Remove two blind rivets **(4)** from the strap loop **(6)** and strut **(1)**.
2. Remove the cargo tiedown **(5)** from the strap loop **(6)**.
3. Install a new cargo tiedown **(5)** on the strap loop **(6)**.
4. Install two blind rivets **(4)** in the strap loop **(6)** and strut **(1)**.

**REPLACE**

1. Remove unserviceable strut **(1)** and its components.
2. Install serviceable components to new strut **(1)**. Install new strut **(1)**.



END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**RIGHT BEAM ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment Tool Kit (Item  
2, WP 0188 00)  
Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

Two (for removal and installation)

**Materials/Parts**

Blind Rivet (Item 14, WP 0189 00)  
Blind Rivet (Item 17, WP 0189 00)  
Flat head rivet (Item 16, WP 0189 00)  
Self-locking nut (Item 15, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Basket(s) removed (WP 0022 00)  
Upper sound controlling panels removed  
(WP 0030 00)

---

**INSPECT**

Inspect right beam assembly components as described in WP 0017 00 and WP 0018 00.

**WARNING**

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

**REPAIR**

Remove right beam assembly as follows:

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

Replace Cargo Tiedown (5) as follows:

1. Remove two blind rivets (6) from the strap loop (7) and right beam (2).
2. Remove the cargo tiedown (5) from the strap loop (7).
3. Install a new cargo tiedown (5) on the strap loop (7).
4. Install two blind rivets (6) in the strap loop (7) and the right beam (2).

Replace Strap (10) as follows:

1. Remove two screws (8) from the strap loop (9).
2. Remove the strap (10) from the strap loop (9).
3. Install a new strap (10) on the strap loop (9).
4. Position the strap loop (9) on the right beam (2) and install two screws (8).

Replace single acting pin (12) as follows:

1. Remove one blind rivet (11) from the single acting pin (12).
2. Remove the single acting pin (12) from the right beam (2).
3. Position a new single acting pin (12) on the right beam (2) and install a blind rivet (11).

Replace right beam (2).

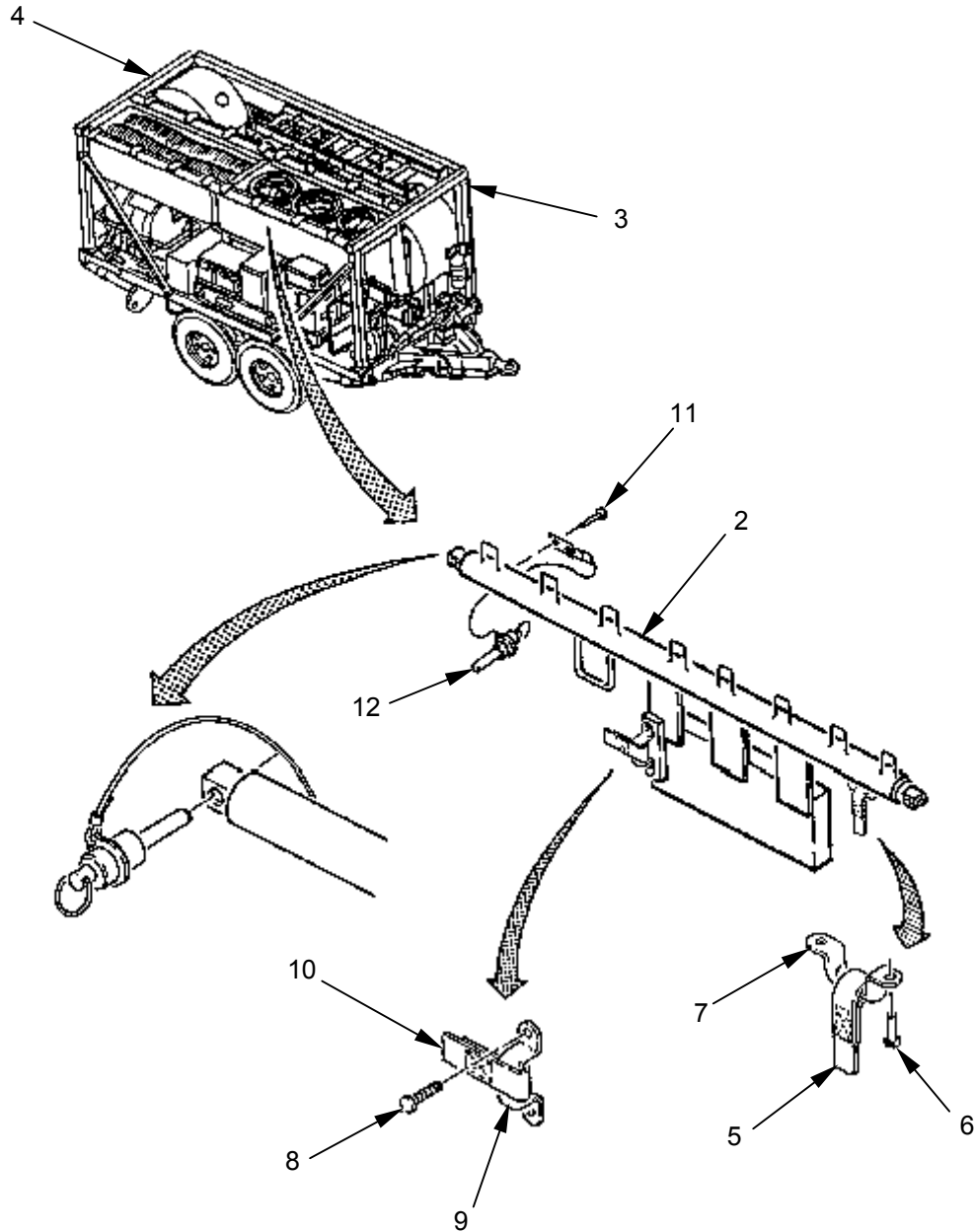
1. Remove eight cargo tiedowns (5) from the right beam (2).
2. Remove the strap (10).
3. Remove two single acting pins (12).
4. Install eight cargo tiedowns (5) on the new right beam (2).
5. Install the strap (10).
6. Install two single acting pins (12).

Install right beam assembly (2).

1. Position the right beam (2) on the 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 the upper sound controlling panels (WP 0030 00).
4. Install the baskets (WP 0021 00).

**REPLACE**

1. Remove unserviceable right beam assembly (2) as described above.
2. Install new right beam assembly (2) as described above.



**END OF WORK PACKAGE**





**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**CENTER BEAM ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment Tool Kit (Item 2, WP 0188 00)  
 Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

Two (for removal and installation)

**Materials/Parts**

Blind Rivet (Item 14, WP 0189 00)  
 Blind Rivet (Item 17, WP 0189 00)  
 Flat head rivet (Item 16, WP 0189 00)  
 Self-locking nut (Item 15, WP 0189 00)  
 Tiedown Straps (Item 11, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
 Basket(s) removed (WP 0021 00)  
 Upper sound controlling panels removed (WP 0030 00)

**INSPECT**

Inspect center beam assembly components as described in WP 0017 00 and WP 0018 00.

**WARNING**

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

**REPAIR**

Remove center beam **(1)** as follows:

1. Remove the tiedown straps on the air hoses from center beam **(1)**.
2. Remove the two single acting pins **(2)** from the center beam **(1)**, front frame **(4)** and rear frame **(5)**.

Replace cargo tiedown **(8)** as follows:

1. Remove two blind rivets **(6)** from the strap loop **(7)** and center beam **(1)**.
2. Remove the cargo tiedown **(8)** from the strap loop **(7)**.
3. Install a new cargo tiedown **(8)** on the strap loop **(7)**.
4. Install two blind rivets **(6)** in the strap loop **(7)** and center beam **(1)**.

Replace cargo tiedown **(11)** as follows:

1. Remove two blind rivets **(9)** from the strap loop **(10)**.
2. Remove the cargo tiedown **(11)** from the strap loop **(10)**.
3. Install a new cargo tiedown **(11)** on the strap loop **(10)**.
4. Position the strap loop **(10)** on the center beam **(1)** and install two screws **(9)**.

Replace single acting pin **(13)** as follows:

1. Remove one blind rivet **(12)** from the single acting pin **(13)**.
2. Remove the single acting pin **(13)** from the center beam **(1)**.
3. Position a new single acting pin **(13)** on the center beam **(1)** and install a blind rivet **(12)**.

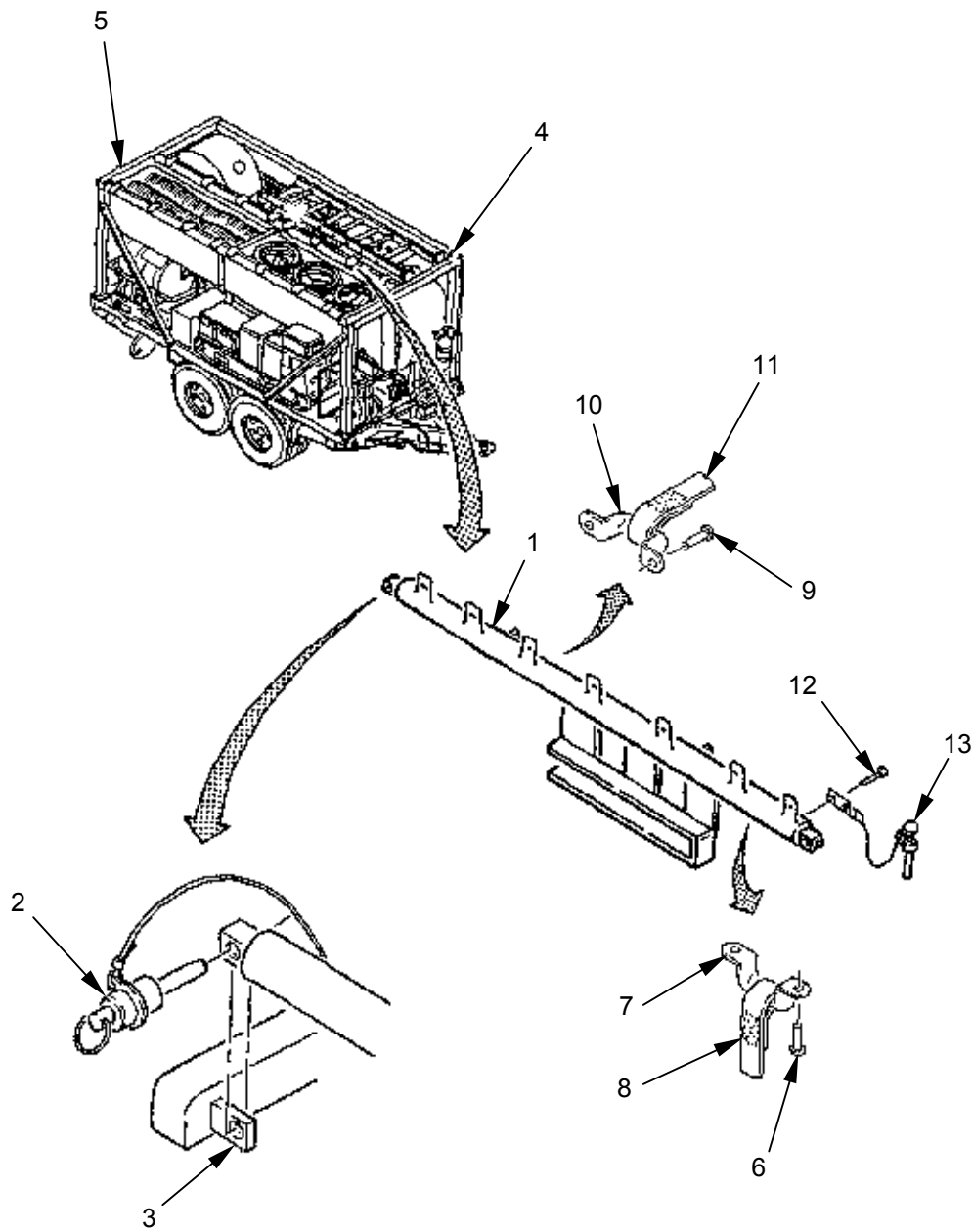
## **REPLACE**

Replace center beam **(1)** as follows:

1. Remove eight cargo tiedowns **(11)** with the strap loops **(10)** from the center beam **(1)**.
2. Remove the single acting pin **(13)**.
3. Install the cargo tiedown **(11)** with the strap loop **(10)** on the new center beam **(1)**.
4. Install the single acting pin **(13)** on the new center beam **(1)**.

Install new center beam **(1)** as follows:

1. Position the center beam **(1)** on the front frame **(4)** and rear frame **(5)**.
2. Install two single acting pins **(13)** in the center beam **(1)** through the clip **(3)**, front frame **(4)** and rear frame **(5)**.
3. Position the air hoses along the center beam **(1)** and secure with tiedown straps, as required.
4. Install the upper sound controlling panels (WP 0030 00).
5. Install the baskets (WP 0021 00).



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**LEFT BEAM ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment Tool Kit (Item  
2, WP 0188 00)  
Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Blind Rivet (Item 14, WP 0189 00)

**Equipment Condition**

---

**INSPECT**

Inspect left beam assembly components as described in WP 0017 00 and WP 0018 00.

**REPAIR**

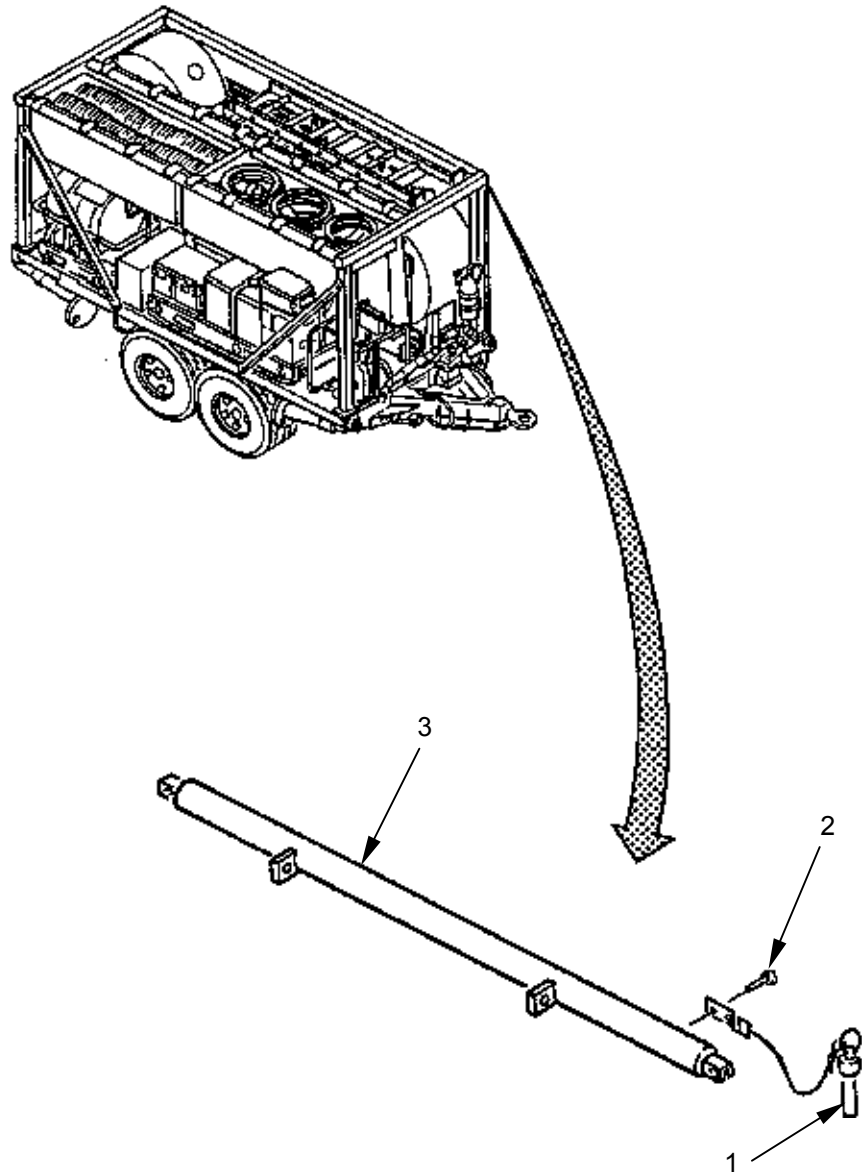
Replace single acting pin **(1)** as follows:

1. Remove one blind rivet **(2)** from the single acting pin **(1)**.
2. Remove the single acting pin **(1)** from the left beam **(3)**.
3. Position the single acting pin **(1)** on the left beam **(3)** and install the blind rivet **(2)**.

**REPLACE**

Replace left beam **(3)** as follows:

1. Remove blind rivets **(2)** from the two single acting pins **(1)**.
2. Install two blind rivets **(2)** in the single acting pins **(1)** on new left beam **(3)**.



END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**FRONT FRAME ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts****Equipment Condition**

Right Beam removed (WP 0023 00)

Center Beam removed (WP 0024 00)

Fire Extinguisher removed (WP 0096 00)

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**INSPECT**

Inspect front frame assembly components as described in WP 0017 00 and WP 0018 00.

**WARNING**

The front frame is heavy and 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 bed if needed.

**REPAIR**

Remove front frame as follows:

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

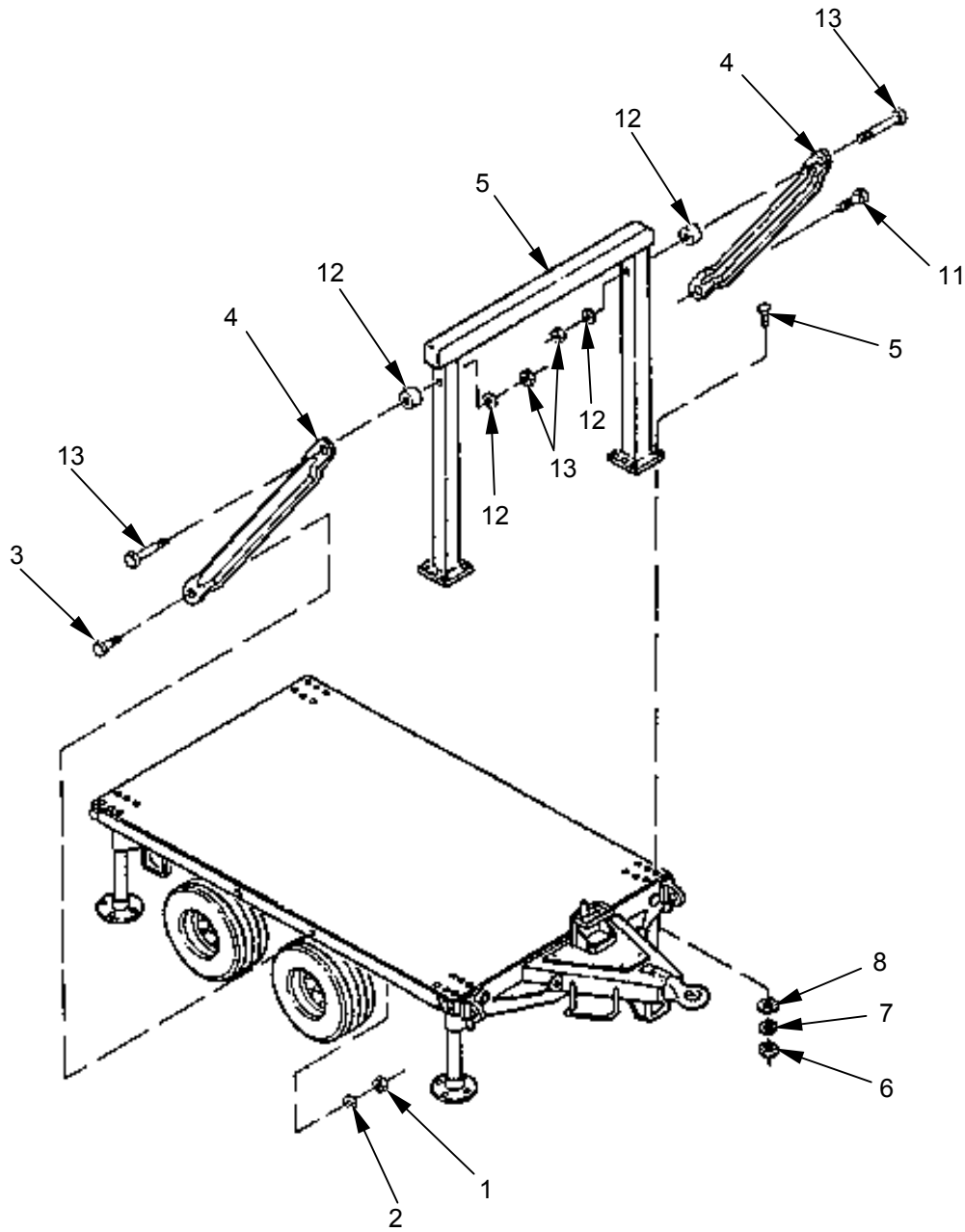
Repair consists of replacing damaged or missing components of the front frame **(5)**.

**REPLACE**

Install front frame **(5)** as follows:

1. If the tarpaulin frame support(s) **(4)** were removed, install the bolt **(14)**, spacer **(12)**, lockwasher **(11)** and nut **(10)** on the tarpaulin frame support **(4)** and the front frame **(5)**.
2. Position and support the front frame **(5)** on the Laundry Unit.
3. Install twelve bolts **(9)**, flat washers **(8)**, lockwashers **(7)** and nuts **(6)** on the front frame **(5)** and Laundry Unit.
4. Install the bolt **(3)**, lockwasher **(2)** and nut **(1)** on the tarpaulin frame support **(4)** and Laundry Unit.
5. Install the right beam (WP 0023 00).
6. Install the center beam (WP 0024 00).
7. Install the fire extinguisher (WP 0096 00).





END OF WORK PACKAGE



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**REAR FRAME ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
 Blind hand Riveter (Item 7, WP 0188 00)

**Personnel Required**

Two (for removal and installation)

**Materials/Parts**

Blind rivet nut (Item 20, WP 0189 00)

**Equipment Condition**

Right Beam removed (WP 0023 00)  
 Center Beam removed (WP 0024 00)  
 Platform anchor removed if required (WP 0028 00)

**INSPECT**

Inspect rear frame assembly components as described in WP 0017 00 and WP 0018 00.



**WARNING**

The rear frame is heavy and awkward to handle. Use correct lifting procedures to avoid injury to personnel.

**REPAIR**

Remove rear frame assembly as follows:

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

**NOTE**

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

Replace blind rivet nut(s) **(5)** as follows:

1. Remove the blind rivet nut **(5)** using a .50 diameter drill bit.
2. Insert the blind rivet nut **(5)** in the hole of rear frame.
3. Set the blind rivet nut **(5)** in place.

Install rear frame assembly as follows:

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

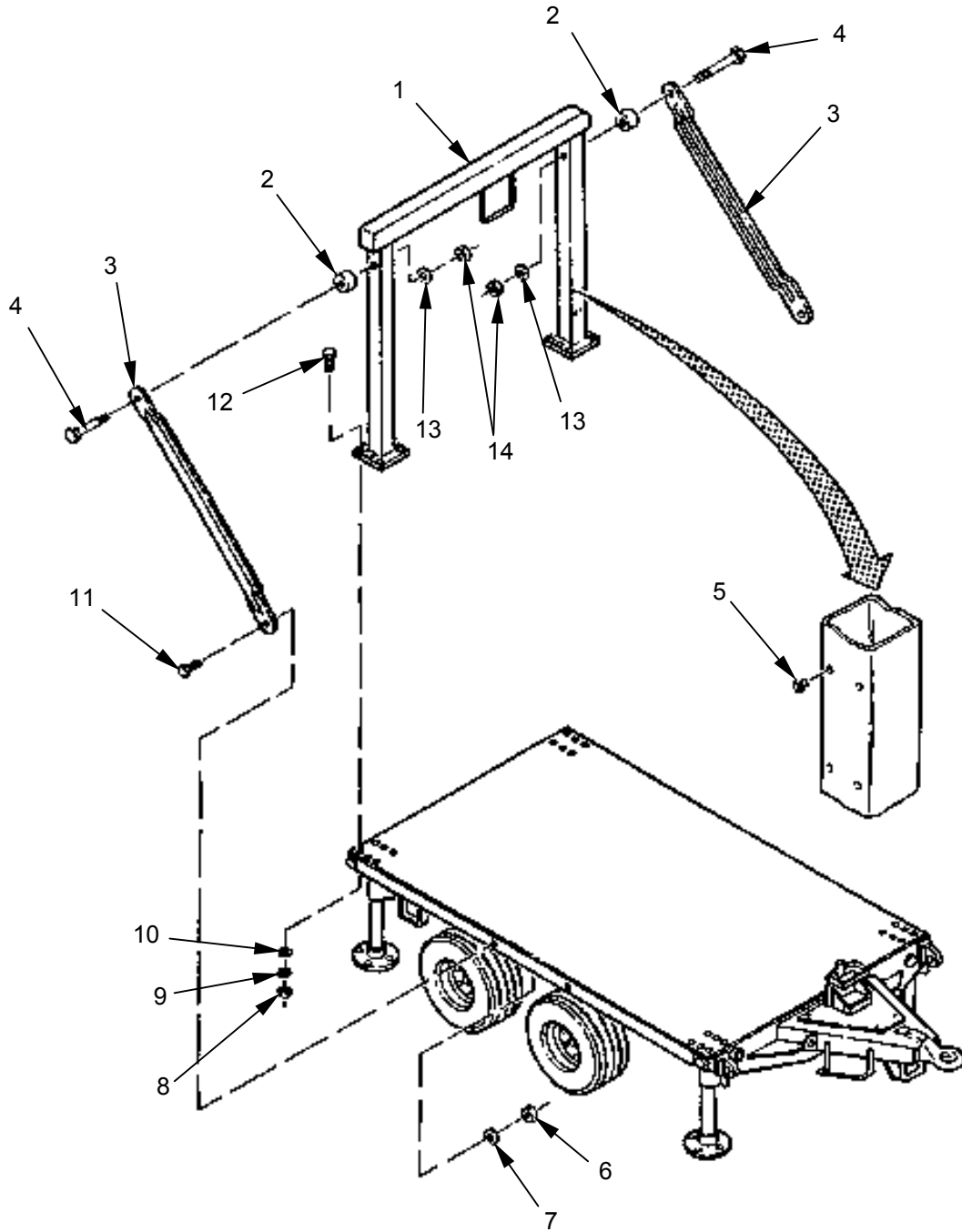
**NOTE**

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

2. Position and support the rear frame **(1)** on the Laundry Unit.
3. Install twelve bolts **(12)**, flat washers **(10)**, lockwashers **(9)** and nuts **(8)** on the rear frame **(1)** and the Laundry Unit.
4. Install the bolt **(11)**, lockwashers **(7)** and nut **(6)** on the tarpaulin frame support **(3)** and the Laundry Unit.
5. Install the right beam (WP 0023 00).
6. Install the center beam (WP 0024 00).
7. Install the platform anchor (WP 0028 00).

**REPLACE**

1. Remove unserviceable rear frame assembly **(1)** as described above.
2. Install new rear frame assembly **(1)** as described above.



END OF WORK PACKAGE



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**PLATFORM ANCHOR**  
**INSPECT, REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition****INSPECT**

Inspect platform anchor components as described in WP 0018 00.

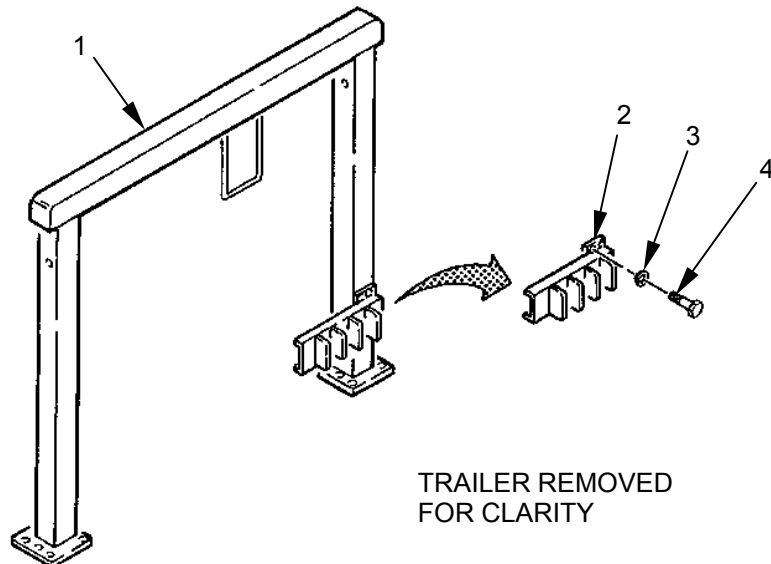
**REPAIR / REPLACE**

Remove platform anchor as follows:

1. Remove four bolts (4), lockwashers (3) and the platform anchor (2) from the rear frame (1).
2. Repair consists of replacing a damaged or missing platform anchor (2).

Install platform as follows:

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

**END OF WORK PACKAGE**





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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**UPRIGHT RAIL ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:**

<b>Tools</b>	<b>Personnel Required</b>
General Mechanic's Tool Kit (Item 1, WP 0188 00)	One
<b>Materials/Parts</b>	<b>Equipment Condition</b>

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**INSPECT**

Inspect upright rail assembly components as described in WP 0018 00.

**REPAIR**

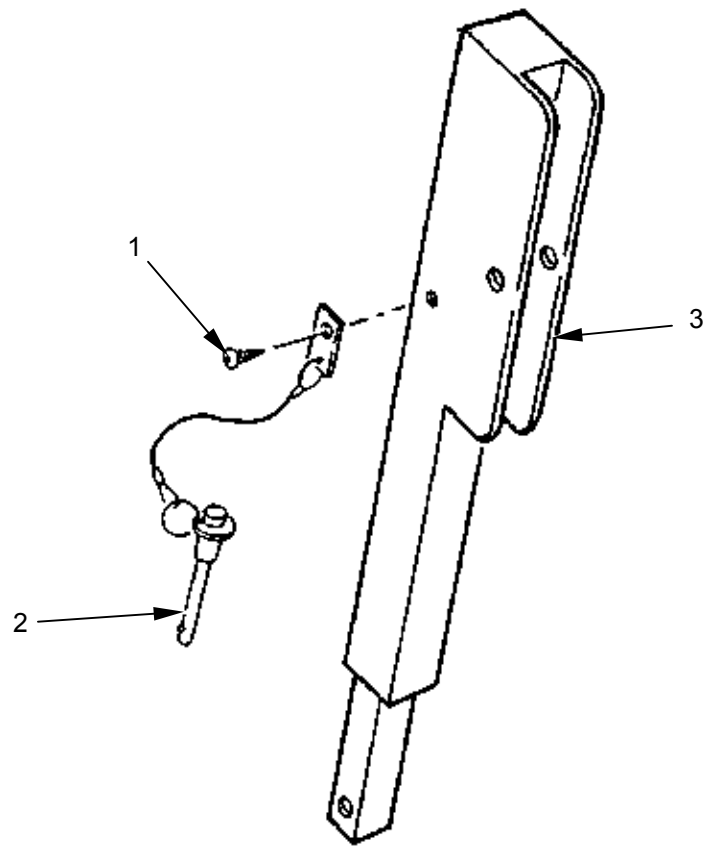
Replace single acting pin **(2)** as follows:

1. Remove the screw **(1)**.
2. Remove the single acting pin **(2)**.
3. Position the single acting pin **(2)** on the upright rail **(3)** and install the screw **(1)**.

**REPLACE**

Replace upright rail **(3)** as follows:

1. Remove the single acting pin **(2)**.
2. Install the single acting pin **(2)**.



END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**SOUND CONTROLLING PANEL WITH HANDLE**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment Tool Kit (Item  
2, WP 0188 00)  
Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

Two (for removal and installation)

**Materials/Parts**

Blind Rivet (Item 14, WP 0189 00)  
Blind Rivet (Item 17, WP 0189 00)  
Flat head rivet (Item 16, WP 0189 00)  
Self-locking nut (Item 15, WP 0189 00)

**Equipment Condition**

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

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**INSPECT**

Inspect sound controlling panel components as described in WP 0017 00.

**WARNING**

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

**REPAIR**

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

Remove the top sound controlling panels **(1)**, per the following steps.

1. Release the strap **(2)** from the right beam **(3)** and center beam **(4)**.
2. Remove the three top sound controlling panels **(1)** from the right beam **(3)** and center beam **(4)**.

Remove the side sound controlling panels **(5, 6 and 7)**, per the following steps.

1. Release the strap **(8)** from the lower track **(9)**.
2. Remove the sound controlling panels **(6 and 7)** from the lower track **(9)** and the center beam **(4)**.
3. Remove the spacer plate **(10)**.
4. Remove the sound controlling panel **(5)** from the lower track **(9)** and the center beam **(4)**.

**NOTE**

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

Remove handle(s) **(11)**.

1. Remove four blind rivets **(12)** from the sound controlling panel **(7)**.
2. Remove the handle **(11)** and four flat washers **(13)**.
3. Install the handle **(11)**, four flat washers **(13)** and blind rivets **(12)** on the sound controlling panel **(7)**.

Install the top sound controlling panels **(1)**, per the following steps.

1. Install three top sound controlling panels **(1)** on right and center beams **(3 and 4)**, with the screen facing the generator.
2. Connect the strap **(2)** on the right and center beams **(3 and 4)**.

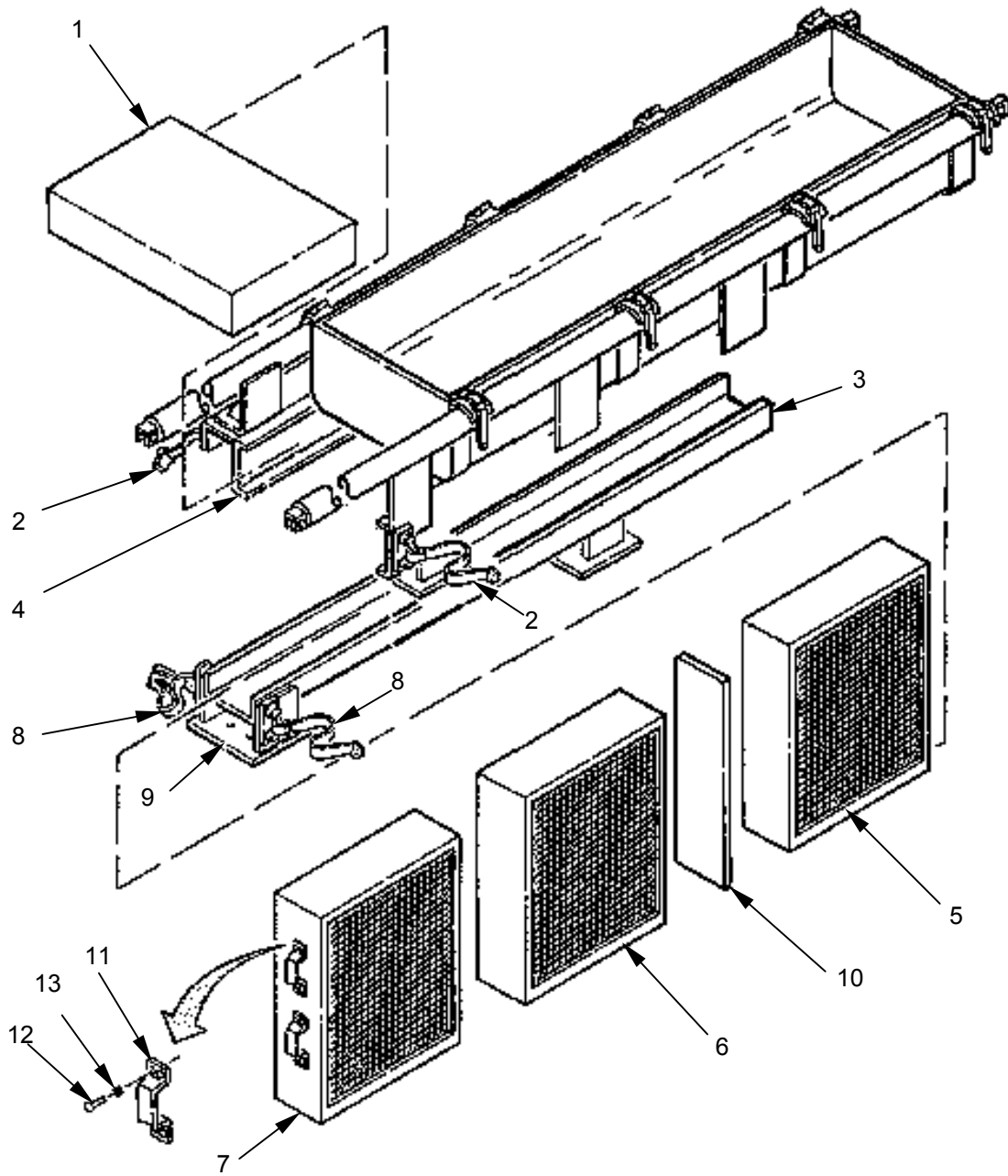
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Install the side sound controlling panels (**5**, **6** and **7**), per the following steps.

1. Install one side sound controlling panel (**5**) with the screen facing the generator in the lower track (**9**) and the center beam (**4**).
2. Install the spacer plate (**10**) and sound controlling panels (**6** and **7**) in the lower track (**9**) and center beam (**4**).
3. Connect the strap (**8**) on the lower track (**9**).

#### **REPLACE**

1. Remove unserviceable sound controlling panels as described above.
2. Install handles to sound controlling panels as described above.
3. Install sound controlling panels and their components as described above.



END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**LOWER TRACK ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Sound controlling panels (side) removed (WP 0030 00)

---

**INSPECT**

Inspect sound controlling panel components as described in WP 0018 00.

**REPAIR**Remove lower track assembly **(1)**.

1. Remove six nuts **(2)**, lockwashers **(3)**, flat washers **(4)** and bolts **(5)** from lower track **(1)** and Laundry Unit.
2. Remove lower track **(1)** from Laundry Unit.

**NOTE**

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

Remove cargo tiedown strap **(6)**.

1. Remove two screws **(7)** and strap loop **(8)** from lower track **(1)**.
2. Remove cargo tiedown strap **(6)** from strap loop **(8)**.
3. Install cargo tiedown strap **(6)** on strap loop **(8)**.
4. Install strap loop **(8)** and two screws **(7)** on lower track **(1)**.

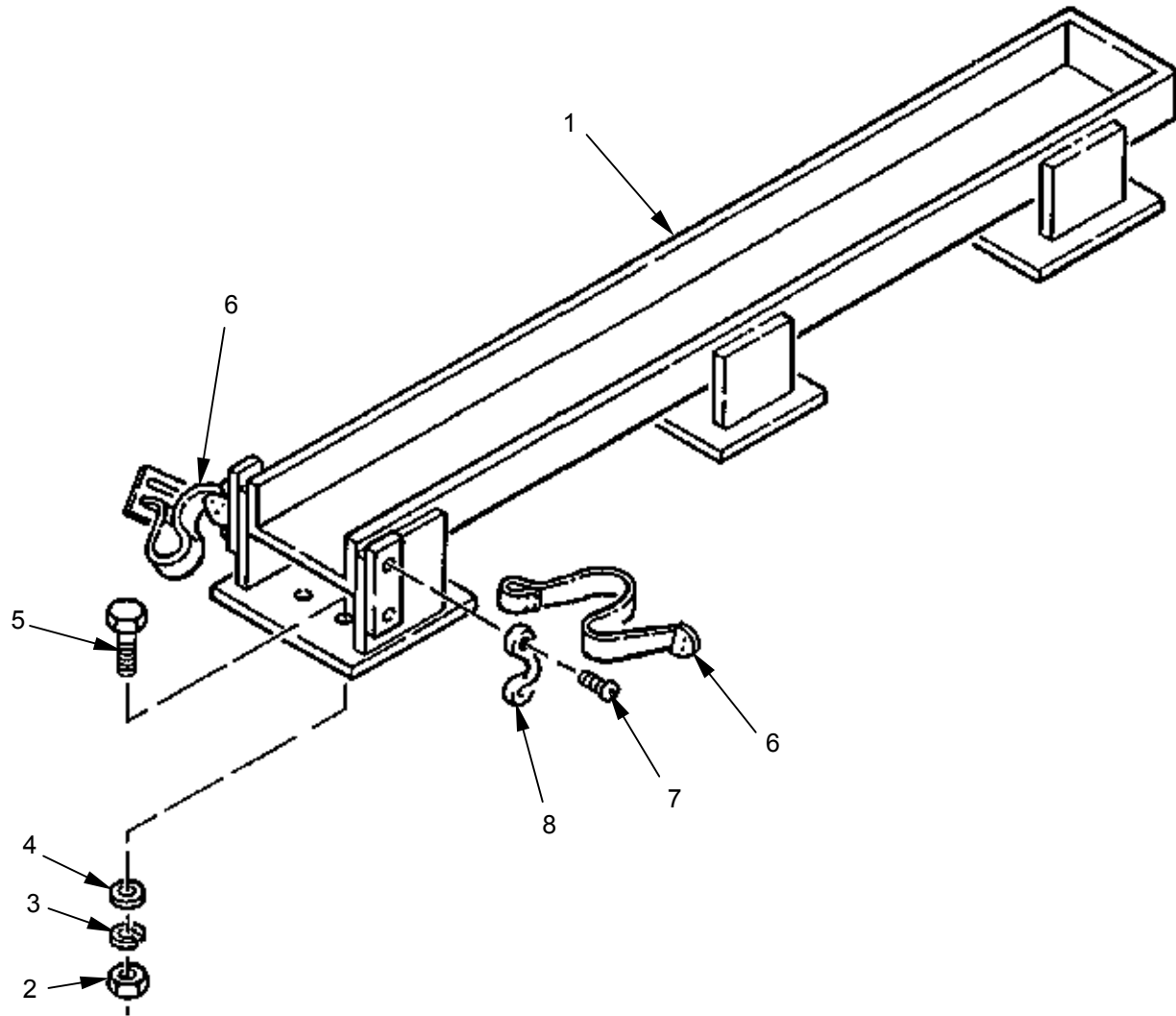
Install lower track assembly **(1)**.

1. Position lower track **(1)** on Laundry Unit.

2. Install six bolts (5), flat washers (4), lockwashers (3) and nuts (2) on lower track (1) and Laundry Unit.
3. Install side sound controlling panels (WP 0030 00).

### REPLACE

1. Remove unserviceable Lower track assembly (1) and its components as described above.
2. Install new lower track assembly (1) and its components as described above.



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**MAINTENANCE PLATFORM**  
**INSPECT, REPLACE**

---

**INITIAL SETUP:****Tools****Personnel Required**

One

**Materials/Parts****Equipment Condition**

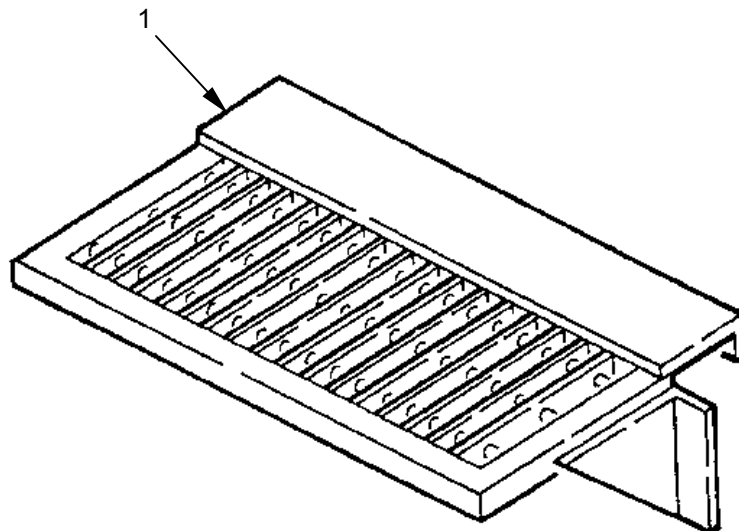
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**INSPECT**

Inspect maintenance platform (1) as described in WP 0018 00.

**REPLACE**

1. Remove unserviceable maintenance platform as described in TM 10-3510-222-10.
2. Install new maintenance platform (1) (TM 10-3510-222-10).

**END OF WORK PACKAGE**



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**SHORT PLATFORM ASSEMBLY**  
**INSPECT, REPLACE**

---

**INITIAL SETUP:****Tools****Personnel Required**

One

**Materials/Parts****Equipment Condition**

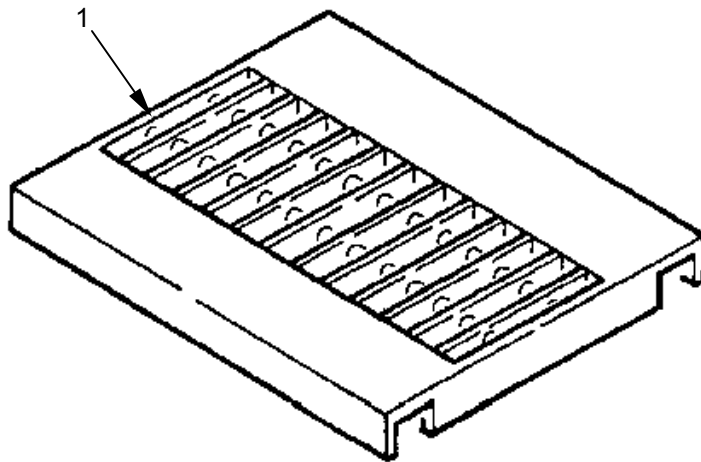
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**INSPECT**

Inspect maintenance platform (1) as described in WP 0018 00.

**REPLACE**

1. Remove unserviceable short platform (1) as described in TM 10-3510-222-10.
2. Install short platform (1) (TM 10-3510-222-10).

**END OF WORK PACKAGE**



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**LOWER DRYER PLATFORM ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
 Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Self-locking nut (Item 15, WP 0189 00)  
 Blind Rivet (Item 22, WP 0189 00)

**Equipment Condition****INSPECT**

Inspect lower dryer platform and its components as described in WP 0018 00.

**REPAIR / REPLACE**

Replace quick release pin **(1)**.

1. Position the lower and/or dryer platform **(2)** on its side.
2. Remove the quick release pin **(1)** from the mounting bracket **(3)**.
3. Remove one blind rivet **(4)** from the quick release pin **(1)**.
4. Remove the quick release pin **(1)** from the lower and/or dryer platform **(2)**.
5. Position the quick release pin **(1)** on the lower and/or dryer platform **(2)** and install the blind rivet **(4)**.
6. Install the quick release pin **(1)** in the mounting bracket **(3)** and the lower and/or dryer platform **(2)**.

Replace lower or high frame **(5)**.

1. Position the lower and/or dryer platform **(2)** on its side.
2. Remove the quick release pin **(1)** from the mounting bracket **(3)**.
3. Remove two self-locking nuts **(6)**, four washers **(7)** and two bolts **(8)** from the mounting bracket **(3)** and the lower and/or high frame **(5)**.
4. Remove two self-locking nuts **(6)**, four washers **(7)** and two bolts **(9)** from the lower and/or dryer platform **(2)** and lower and/or high frame **(5)**.
5. Remove the lower and/or high frame **(5)**.
6. Position the lower and/or high frame **(5)** on the platform/dryer footing **(10)** and install two bolts **(9)**, four washers **(7)** and two self-locking nuts **(6)**.

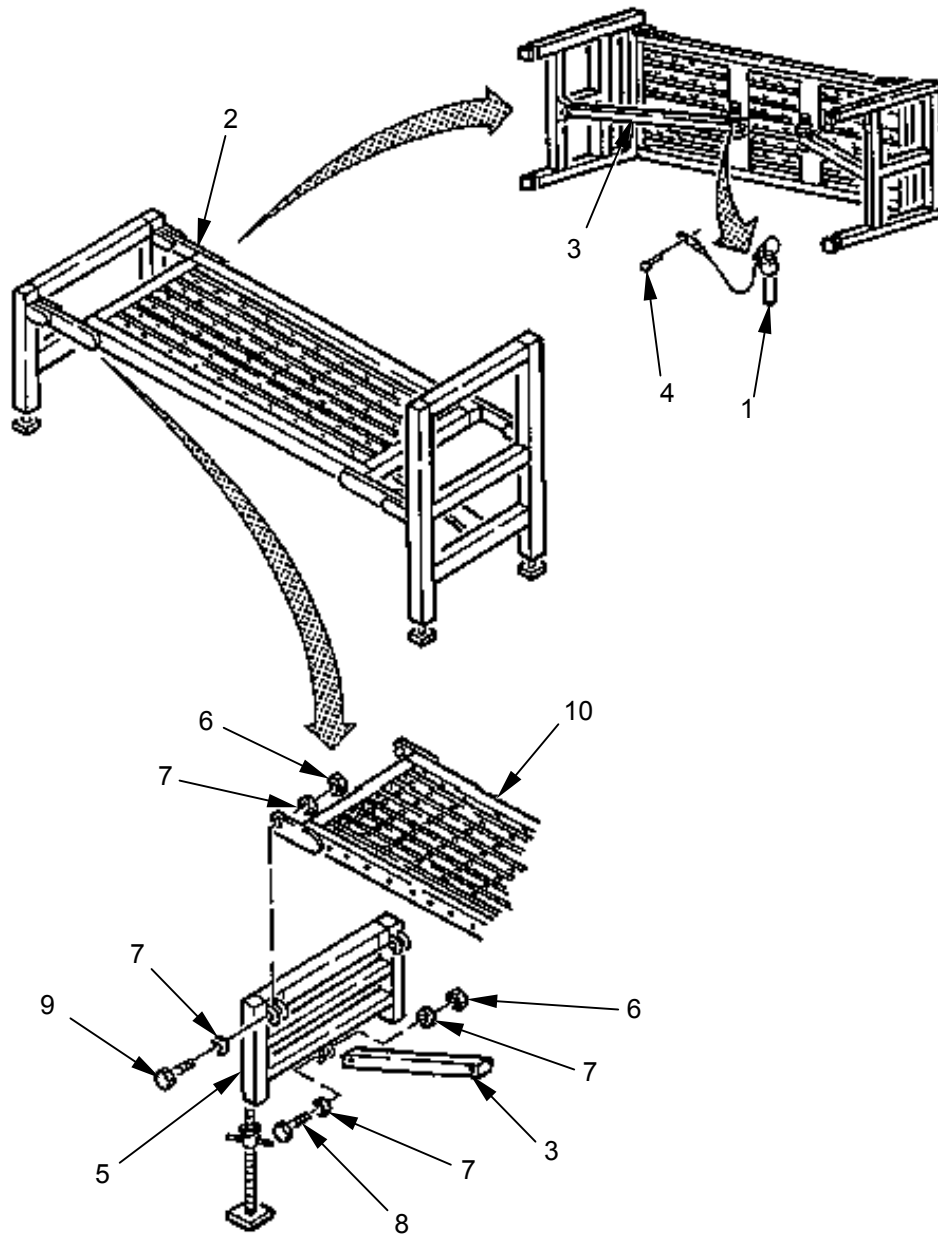
7. Position the mounting bracket **(3)** on the lower and/or high frame **(5)** and install the bolt **(8)**, two washers **(7)**, and self-locking nut **(6)**.
8. Install the quick release pin **(1)** in the mounting bracket **(3)** and the lower and/or dryer platform **(2)**.

Replace lower and/or dryer platform **(2)**.

1. Remove the lower and/or high frames **(5)**.
2. Remove the lower and/or dryer platform **(2)**.
3. Position the lower and/or dryer platform **(2)** for installation of lower and/or high frame **(5)**.
4. Install the lower and/or high frames **(5)**.

Replace mounting bracket **(3)**.

1. Position the lower and/or dryer platform **(2)** on its side.
2. Remove the quick-release pin **(1)** from the mounting bracket **(3)**.
3. Remove the self-locking nut **(6)**, two washers **(7)** and bolt **(8)**, from the mounting bracket **(3)** and lower or high frame **(5)**.
4. Remove the mounting bracket **(3)**.
5. Position the mounting bracket **(3)** on the lower and/or high frame **(5)** and install the bolt **(8)**, two washers **(7)** and self locking nut **(6)**.
6. Install the quick release pin **(1)** in the mounting bracket **(3)** and the lower and/or dryer platform **(2)**.



END OF WORK PACKAGE





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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**TWO STEP STAIR ASSEMBLY**  
**INSPECT, REPLACE**

---

**INITIAL SETUP:****Tools****Personnel Required**

One

**Materials/Parts****Equipment Condition**

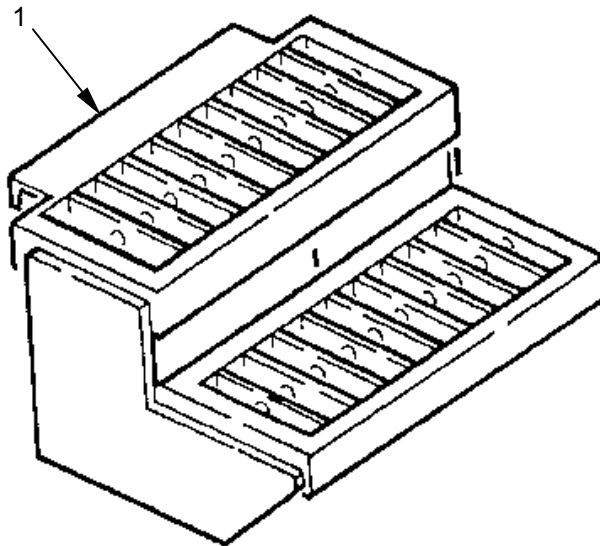
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**INSPECT**

Inspect two step stair assembly and its components as described in WP 0018 00.

**REPLACE**

1. Remove unserviceable two step stair assembly (1) as described in TM 10-3510-222-10.
2. Install new two step stair assembly (1) (TM 10-3510-222-10).

**END OF WORK PACKAGE**



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**DRYER PLATFORM ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
 Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Self-locking nut (Item 15, WP 0189 00)  
 Blind Rivet (Item 22, WP 0189 00)

**Equipment Condition****INSPECT**

Inspect lower dryer platform and its components as described in WP 0018 00.

**REPAIR / REPLACE**

Replace quick release pin **(1)**.

1. Position the dryer platform assembly **(2)** on its side.
2. Remove the quick release pin **(1)** from the dryer platform brace **(3)**.
3. Remove one blind rivet **(4)** from the quick release pin **(1)**.
4. Remove the quick release pin **(1)** from the dryer platform assembly **(2)**.
5. Position the quick release pin **(1)** on the dryer platform assembly **(2)** and install the blind rivet **(4)**.
6. Install the quick release pin **(1)** in the dryer platform brace **(3)** and the dryer platform assembly **(2)**.

Replace lower or high frame **(5)**.

1. Position the dryer platform assembly **(2)** on its side.
2. Remove the quick release pin **(1)** from the dryer platform brace **(3)**.
3. Remove two self-locking nuts **(6)**, four washers **(7)** and two bolts **(8)** from the dryer platform brace **(3)** and the lower and/or high frame **(5)**.
4. Remove two self-locking nuts **(6)**, four washers **(7)** and two bolts **(9)** from the dryer platform assembly **(2)** and lower and/or high frame **(5)**.
5. Remove the lower and/or high frame **(5)**.
6. Position the lower and/or high frame **(5)** on the dryer platform footing **(10)** and install two bolts **(9)**, four washers **(7)** and two self-locking nuts **(6)**.

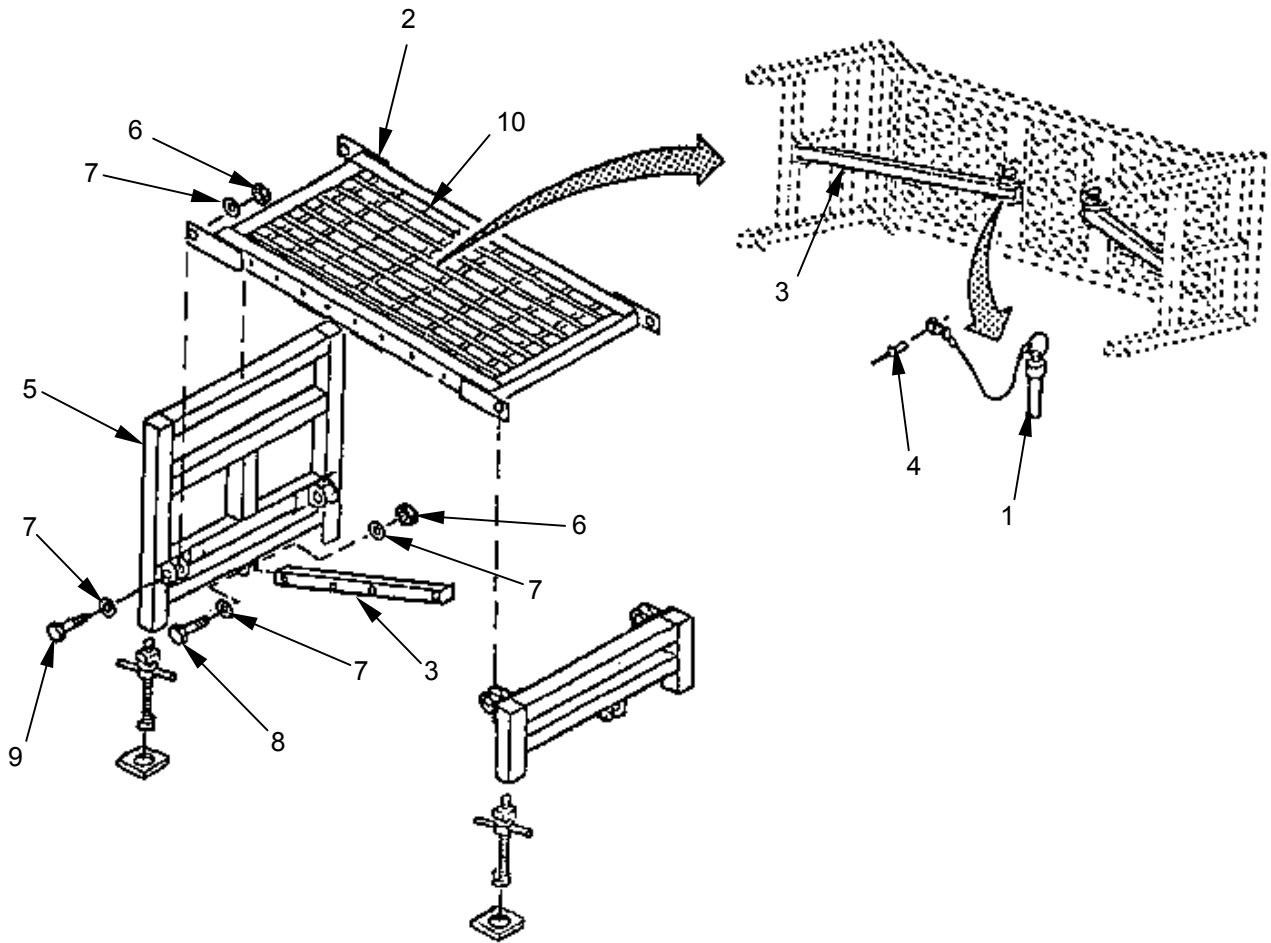
7. Position the dryer platform brace **(3)** on the lower and/or high frame **(5)** and install the bolt **(8)**, two washers **(7)**, and self-locking nut **(6)**.
8. Install the quick release pin **(1)** in the dryer platform brace **(3)** and the dryer platform assembly **(2)**.

Replace dryer platform assembly **(2)**.

1. Remove the lower and/or high frames **(5)**.
2. Remove the dryer platform assembly **(2)**.
3. Position the dryer platform assembly **(2)** for installation of lower and/or high frame **(5)**.
4. Install the lower and/or high frames **(5)**.

Replace dryer platform brace **(3)**.

1. Position the dryer platform assembly **(2)** on its side.
2. Remove the quick-release pin **(1)** from the dryer platform brace **(3)**.
3. Remove the self-locking nut **(6)**, two washers **(7)** and bolt **(8)**, from the dryer platform brace **(3)** and lower or high frame **(5)**.
4. Remove the dryer platform brace **(3)**.
5. Position the dryer platform brace **(3)** on the lower and/or high frame **(5)** and install the bolt **(8)**, two washers **(7)** and self locking nut **(6)**.
6. Install the quick release pin **(1)** in the dryer platform brace **(3)** and the dryer platform assembly **(2)**.



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**QUICK DISCONNECT CAP**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Gasket 2 1/2 dia. Hose (Item 8, WP 0189 00)

**Equipment Condition**

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**INSPECT**

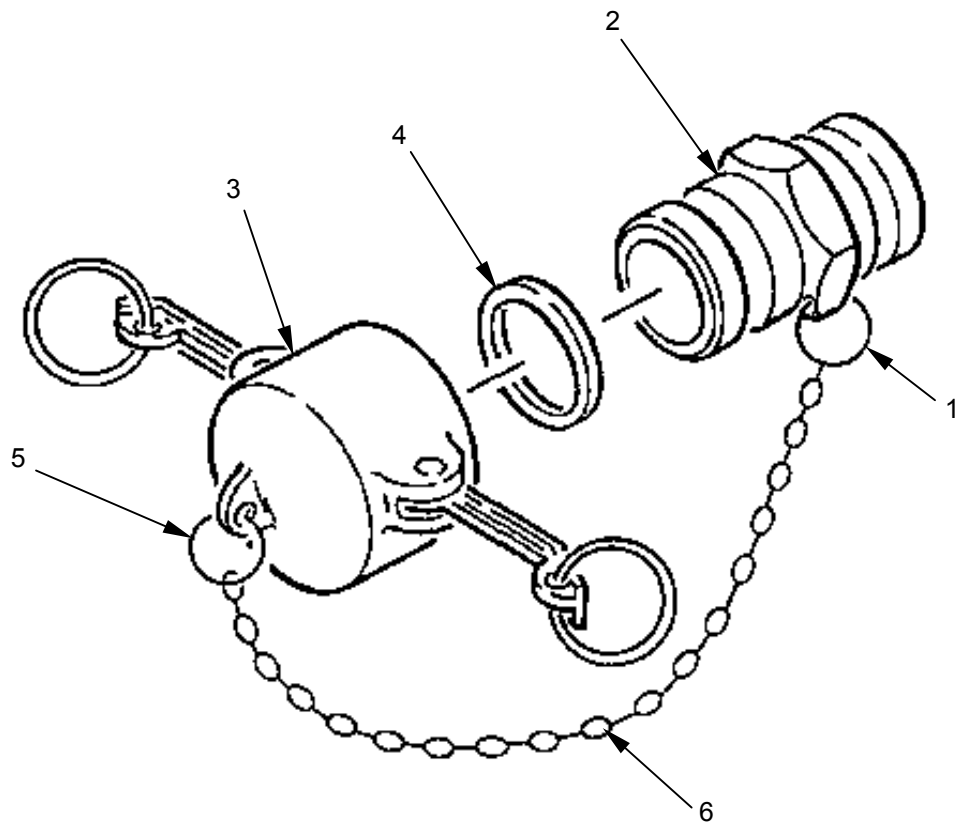
Inspect quick disconnect cap and its components as described in WP 0018 00.

**REPAIR**

1. Remove the key ring **(1)** from the quick coupling half **(2)**.
2. Repair consists of replacing the following damaged or missing components of the quick-disconnect cap **(3)**:
  - a. Gasket **(4)**.
  - b. Retaining ring **(5)**.
  - c. Sash Chain **(6)** (6 inches).
  - d. Key ring **(1)**.
3. Install the key ring **(1)** on quick coupling half **(2)**.

**REPLACE**

1. Remove unserviceable quick disconnect cap and its components as described above.
2. Install new quick disconnect cap and its components as described above.



END OF WORK PACKAGE



**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
NSN (3510-01-291-8169 (M85-100))  
NSN (3510-01-365-5687 (M85-200))  
WASHER DRAIN ASSEMBLY  
INSPECT**

**INITIAL SETUP:**

**Tools**

**Personnel Required**

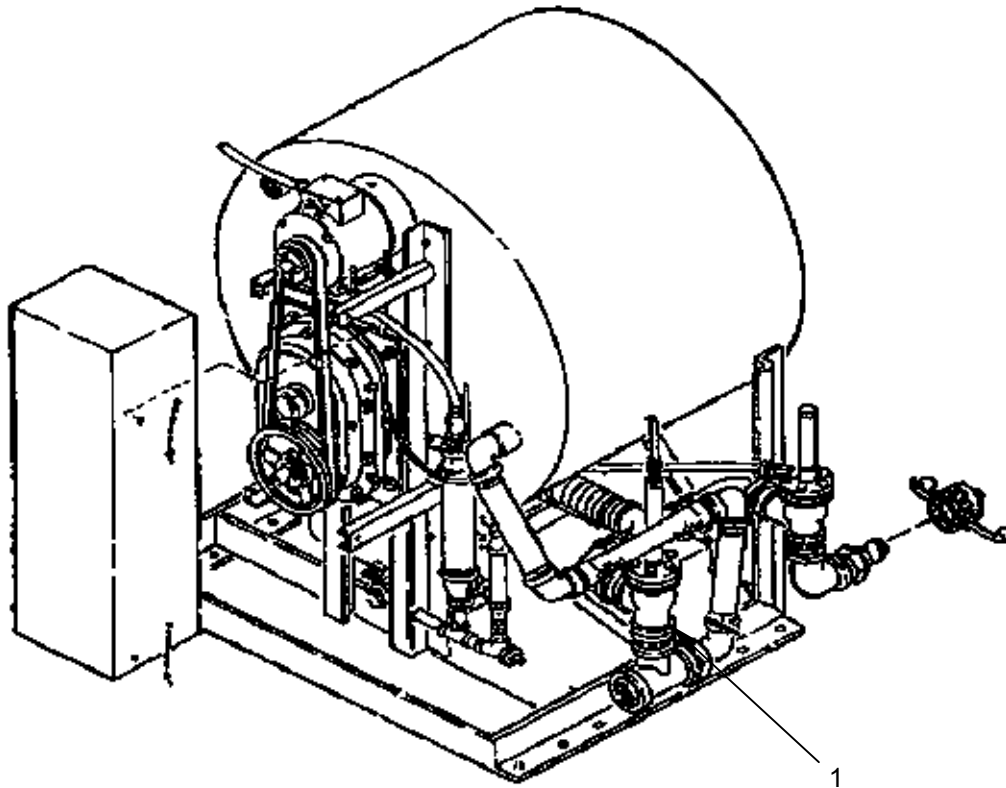
One

**Materials/Parts**

**Equipment Condition**

**INSPECT**

Inspect washer drain assembly (1) and its components as described in WP 0018 00.



**END OF WORK PACKAGE**



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**WASHER**  
**INSPECT, REPAIR**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Lubricating oil (Item 17, WP 0189 00)

**Equipment Conditions**

Washer drained (TM 10-3510-220-10)

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**INSPECT**

Inspect washer (1) as described in WP 0018 00. Inspect washer (1) for dry lubrication points.



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**WARNING**

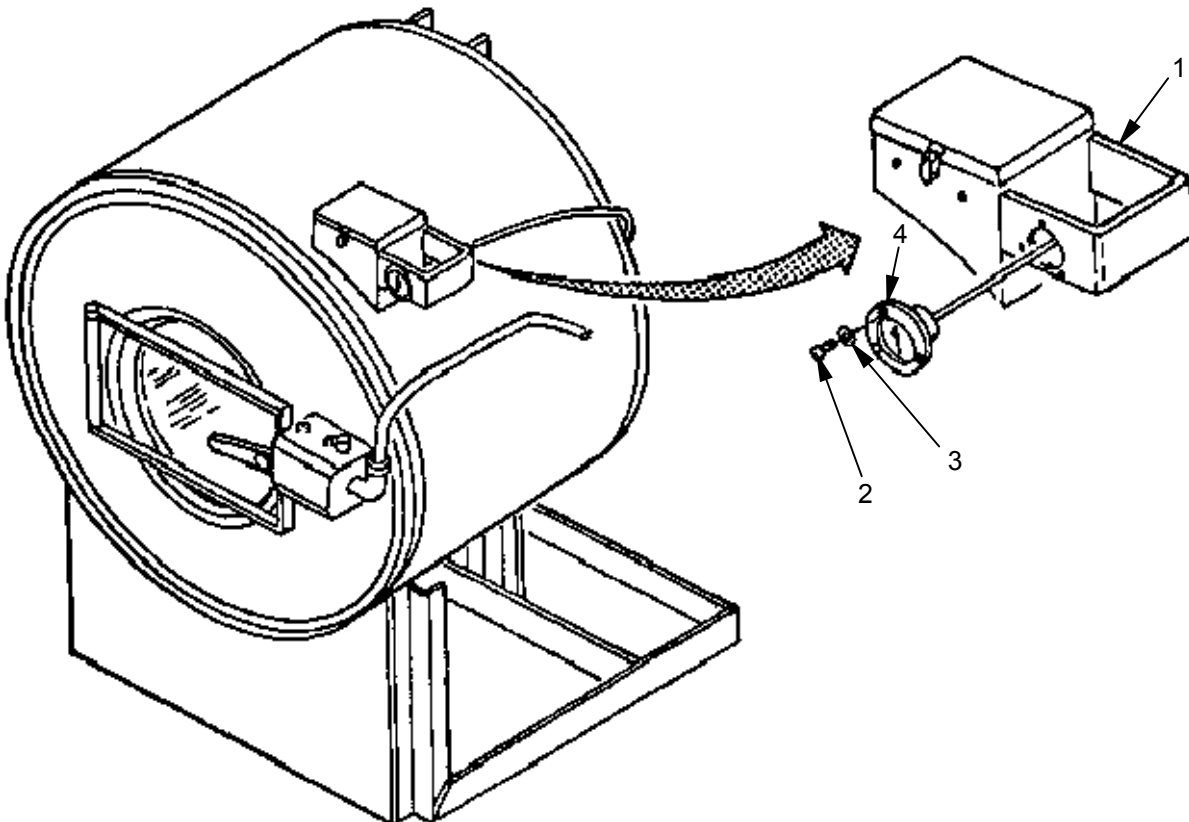
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High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

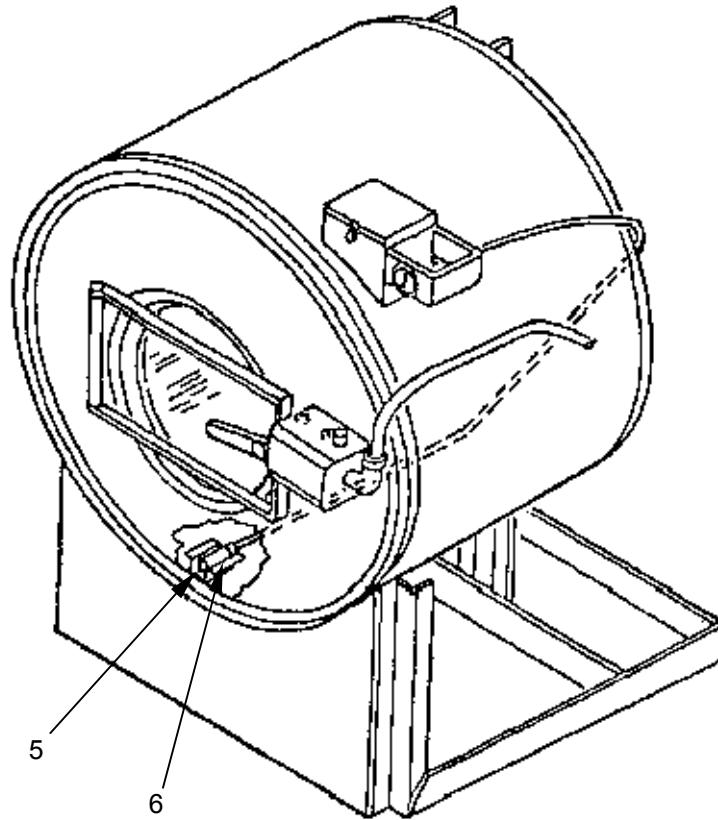
**REPAIR****NOTE**

Repair consists of replacing the washer thermometer.

1. Remove water pump (TM 10-3510-220-10) and washer drivebelt cover (WP 0045 00) for easy access to washer thermometer.
2. Remove three screws (2), and washers (3) securing temperature gage (4) to bracket (1).
3. Remove tiewraps as required.
4. Pull temperature probe out of thermo-well on bottom of washer. Feed temperature probe and cable through gauge mounting bracket to remove.
5. Install new temperature gauge (4) by feeding probe and cable through gauge mounting bracket (1) and out the bottom.
6. Install three screws (2) and washers (3) to secure gauge (4) to bracket (1).



7. Push probe (5) firmly into thermo-well (6).
8. Install tiewraps as required.
9. Install drivebelt cover (WP 0045 00) and water pump (TM 10-3510-220-10).

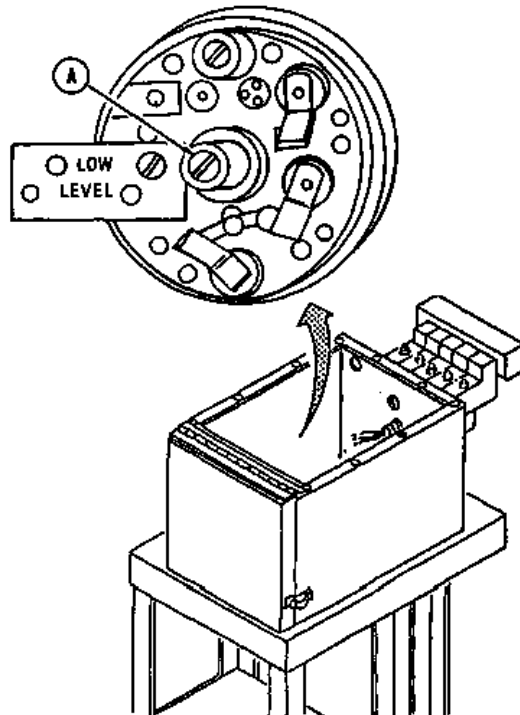


Adjust low water fill level as follows:



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

1. Select low water level and allow washer to fill.
2. Check low water level for a depth of approximately 7-inches (45.1 mm).
3. If water level is incorrect, remove cover of control console and adjust center screw "A" on LOW WATER LEVEL switch.
4. Drain washer.
5. Repeat steps 1 through 4 until a low level of approximately 7-inches (47.7 mm) is reached.

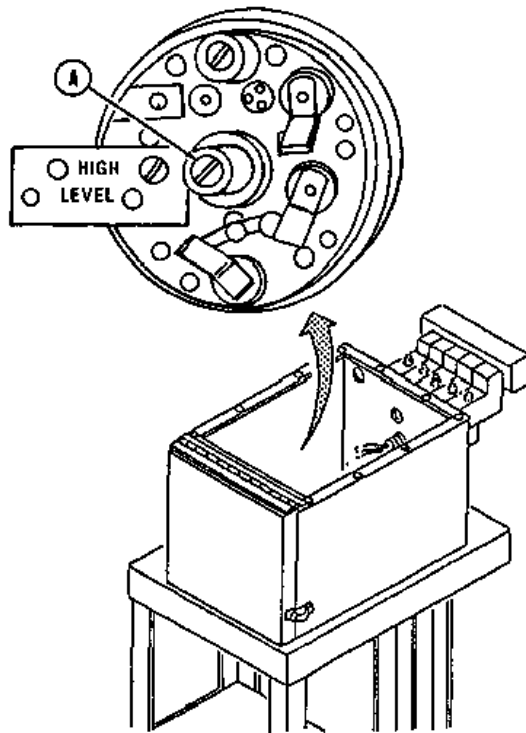


Adjust high water fill level as follows:



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

1. Select high water level and allow washer to fill.
2. Check high water level for a depth of approximately 11-inches (45.6 mm).
3. If level is incorrect, remove cover of control console and adjust center screw "A" on HIGH WATER LEVEL switch.
4. Drain washer.
5. Repeat steps 1 through 4 until the high level of approximately 11-inches (71 mm) is reached.



**END OF WORK PACKAGE**





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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**DRAIN PIPE ASSEMBLY**  
**INSPECT, REPLACE, REPAIR**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)

**Equipment Conditions**

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

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**INSPECT**

Inspect drain pipe assembly as described in WP 0018 00.

**WARNING**

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

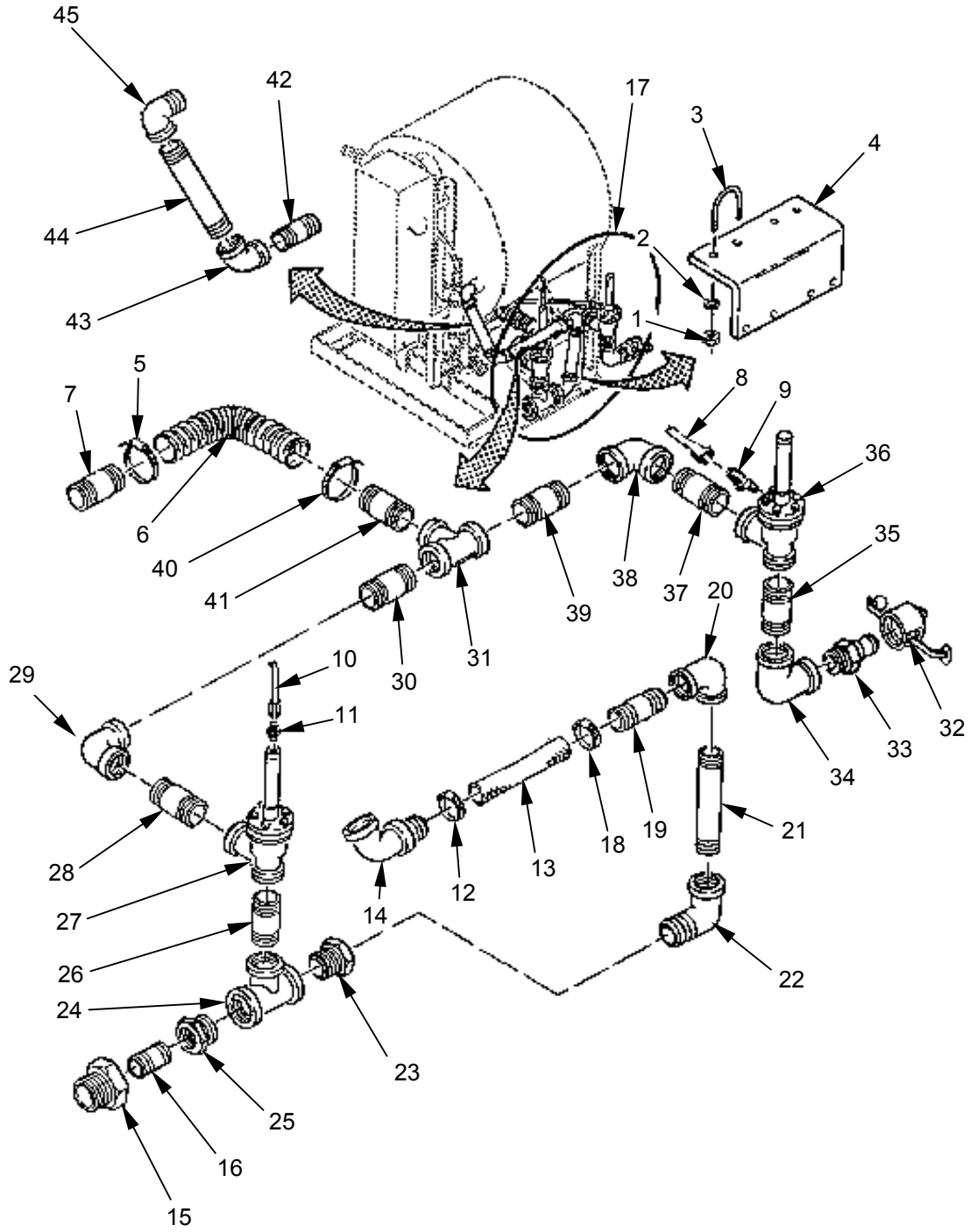
**REPAIR**

Remove drain pipe components as follows:

1. Remove four nuts **(1)**, lock washers **(2)** and two U-clamps **(3)** from the bracket **(4)**.
2. Remove the hose clamp **(5)** from the drain hose **(6)**.
3. Remove the drain hose **(6)** from the nipple **(7)**.
4. Remove the air hose **(8)** from the union **(9)**.
5. Remove the float assembly tube **(10)** from the union **(11)**.
6. Remove the hose clamp **(12)** from the hose **(13)**.
7. Remove the hose **(13)** from the nipple **(14)**.
8. Unscrew the union **(15)** from the nipple **(16)**.
9. Remove the drain pipe **(17)**.
10. Remove the clamp **(18)** from the hose **(13)**.

11. Remove the hose (13) from the nipple (19).
12. Remove the nipple (19) from the elbow (20).
13. Remove the elbow (20) from the nipple (21).
14. Remove the nipple (21) from the elbow (22).
15. Remove the elbow (22) from the bushing (23).
16. Remove the bushing (23) from the tee (24).
17. Remove the union (15) from the nipple (16).
18. Remove the nipple (16) from the bushing (25).
19. Remove the bushing (25) from the tee (24).
20. Remove the tee (24) from the nipple (26).
21. Remove the nipple (26) from the normal open valve (27).
22. Remove the union (11) from the normal open valve (27).
23. Remove the normal open valve (27) from the nipple (28).
24. Remove the nipple (28) from the elbow (29).
25. Remove the elbow (29) from the nipple (30).
26. Remove the nipple (30) from the tee (31).
27. Remove the cap (32).
28. Remove the quick disconnect coupling (33) from the elbow (34).
29. Remove the elbow (34) from the nipple (35).
30. Remove the nipple (35) from the normal closed valve (36).
31. Remove the union (9) from the normal closed valve (36).
32. Remove the normal closed valve (36) from the nipple (37).
33. Remove the nipple (37) from the elbow (38).
34. Remove the elbow (38) from the nipple (39).
35. Remove the nipple (39) from the tee (31).
36. Remove the clamp (40) from the drain hose (6).
37. Remove the drain hose (6) from the nipple (41).
38. Remove the nipple (41) from the tee (31).

39. Remove the nipple **(42)** from the elbow **(43)**.
40. Remove the elbow **(43)** from the nipple **(44)**.
41. Remove the nipple **(44)** from the elbow **(45)**.
42. Remove the elbow **(45)** from the washer.
43. Clean the threads of hardware with wire brush.
44. Repair consists of replacing damaged or missing components of the drain pipe.



Install drain pipe components as follows:

### NOTE

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

1. Install the elbow **(1)** in the washer.
2. Install the nipple **(2)** on the elbow **(1)**.
3. Install the elbow **(3)** on the nipple **(2)**.
4. Install the nipple **(4)** on the elbow **(3)**.
5. Install the nipple **(5)** in the tee **(6)**.
6. Install the drain hose **(7)** on the nipple **(5)**.
7. Install the clamp **(8)** on the drain hose **(7)**.
8. Install the nipple **(9)** in the tee **(6)**.
9. Install the elbow **(10)** on the nipple **(9)**.
10. Install the nipple **(11)** on the elbow **(10)**.
11. Install the normal closed valve **(12)** on the nipple **(11)**.

### NOTE

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

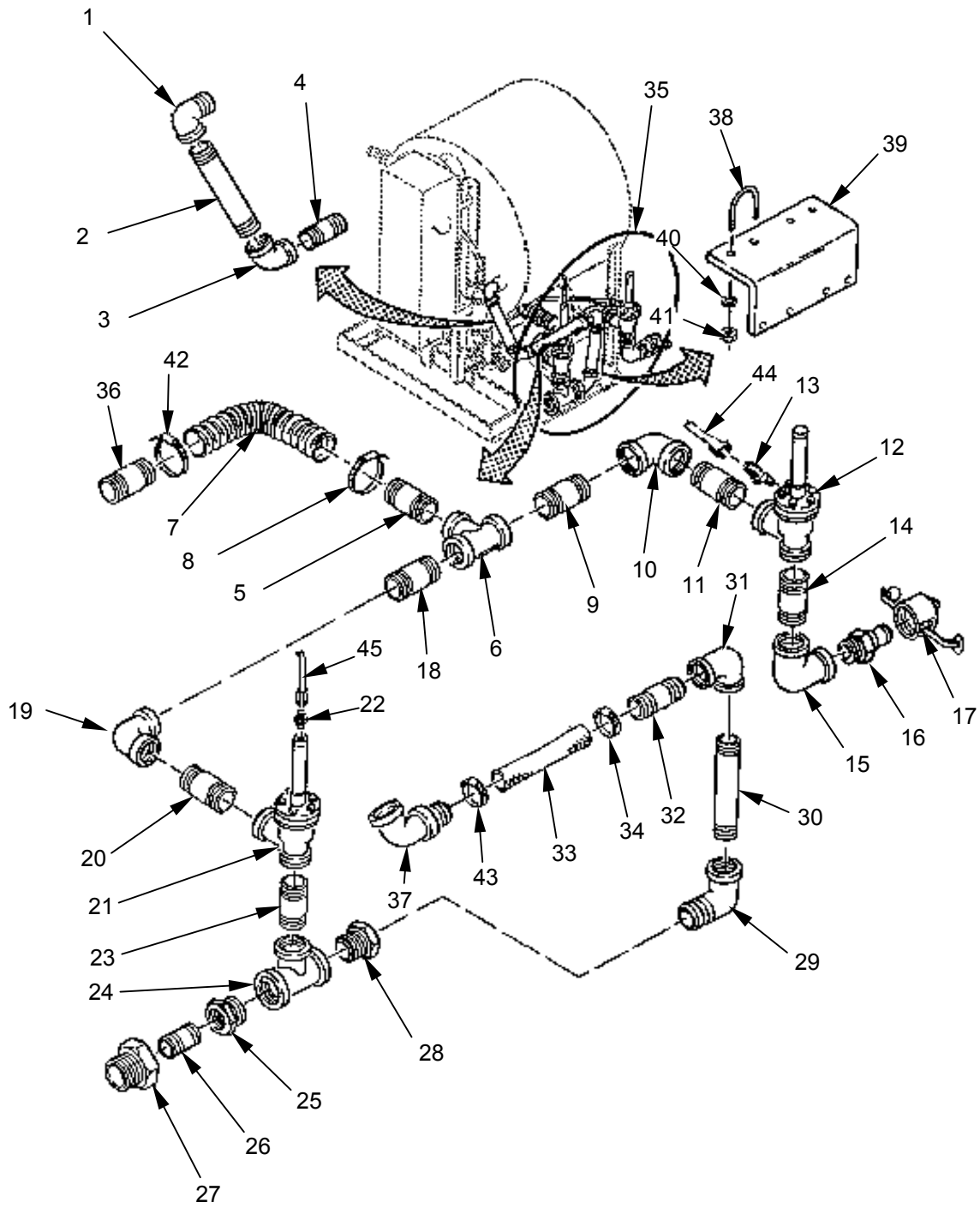
12. Install the union **(13)** on the normal closed valve **(12)**.
13. Install the nipple **(14)** on the normal closed valve **(12)**.
14. Install the elbow **(15)** on the nipple **(14)**.
15. Install the quick disconnect coupling **(16)** on the elbow **(15)**.
16. Install the cap **(17)**.
17. Install the nipple **(18)** on the tee **(6)**.
18. Install the elbow **(19)** on the nipple **(18)**.
19. Install the nipple **(20)** on the elbow **(19)**.
20. Install the normal open valve **(21)** on the nipple **(20)**.

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**NOTE**

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

21. Install the union **(22)** on the normal open valve **(21)**.
22. Install the nipple **(23)** on the normal open valve **(21)**.
23. Install the tee **(24)** on the nipple **(23)**.
24. Install the bushing **(25)** on the tee **(24)**.
25. Install the nipple **(26)** on the bushing **(25)**.
26. Install the union **(27)** on the nipple **(26)**.
27. Install the bushing **(28)** on the tee **(24)**.
28. Install the elbow **(29)** in the bushing **(28)**.
29. Install the nipple **(30)** in the elbow **(29)**.
30. Install the elbow **(31)** on the nipple **(30)**.
31. Install the nipple **(32)** on the elbow **(31)**.
32. Install the hose **(33)** on the nipple **(32)**.
33. Install the clamp **(34)** on the hose **(33)**.
34. Install the drain pipe **(35)**.
35. Install the drain hose **(7)** on the nipple **(36)**.
36. Install the hose **(33)** on the nipple **(37)**.
37. Connect the union **(27)** together.
38. Install two U-clamps **(38)** on the drain pipe **(35)** and bracket **(39)** with four lock washers **(40)** and nuts **(41)**.
39. Install the clamp **(42)** on the drain hose **(7)**.
40. Install the clamp **(43)** on the hose **(33)**.
41. Install the air hose **(44)** on the union **(13)**.
42. Install the float assembly tube **(45)** on the union **(22)**.



**REPLACE**

1. Remove unserviceable drain pipe components as described above.
2. Install new drain pipe components as described above.

**END OF WORK PACKAGE**



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**TUB PIPE ASSEMBLY**  
**INSPECT, REPLACE, REPAIR**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)  
Tags (Item 19, WP 0190 00)

**Equipment Conditions**

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

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**INSPECT**

Inspect tub pipe assembly as described in WP 0018 00.

**WARNING**

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

**REPAIR**

Remove tub pipe components as follows:

1. Remove the hose **(1)** from the adapter **(2)**.
2. Remove the adapter **(2)** from the bushing **(3)**.
3. Remove the bushing **(3)** from the reducer **(4)**.
4. Remove the reducer **(4)** from the nipple **(5)**.
5. Remove the nipple **(5)** from the reducer **(6)**.
6. Remove the reducer **(6)** from the nipple **(7)**.
7. Remove the nipple **(7)** from the tee **(8)**.
8. Remove the plug **(9)** from the tee **(8)**.
9. Remove the tee **(8)** from the nipple **(10)**.

10. Remove the nipple (10) from the tee (11).
11. Remove the nipple (12) from the plug (13).
12. Unscrew the riser tube (14) from the sensor switch plug (13).
13. Unscrew the sensor switch plug (13) from the reducer (15).

### **CAUTION**

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

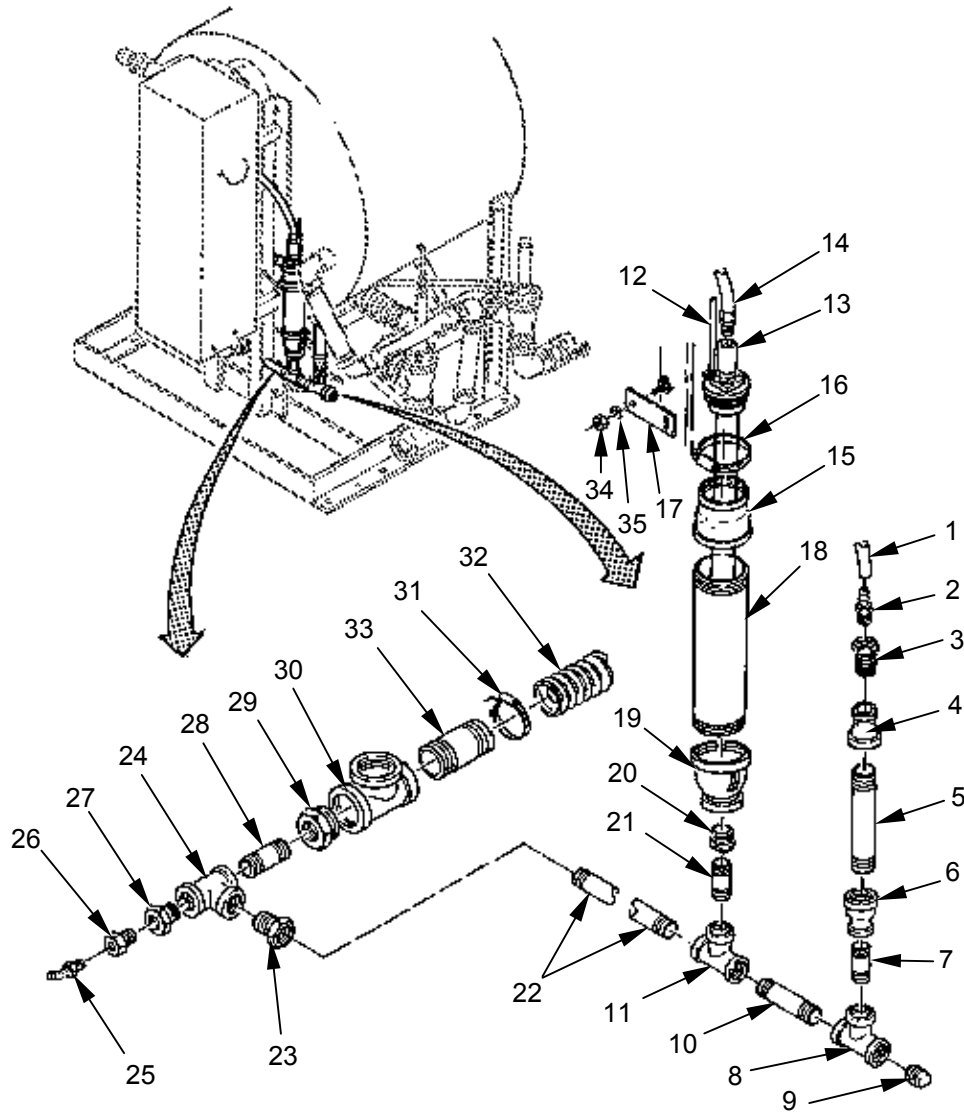
14. Lift the sensor switch plug (13) and riser tube (14) from the reducer (15).
15. Remove the clamp (16) from the bracket (17) and reducer (15).
16. Remove the reducer (15) from the nipple (18).
17. Remove the nipple (18) from the reducer (19).
18. Remove the reducer (19) from the bushing (20).
19. Remove the bushing (20) from the nipple (21).
20. Remove the nipple (21) from the tee (22).
21. Remove the tee (11) from the nipple (22).
22. Remove the nipple (22) from the bushing (23).
23. Remove the bushing (23) from the tee (24).
24. Remove the sensor (25) from the bushing (26).
25. Remove the bushing (26) from the bushing (27).
26. Remove the bushing (27) from the tee (24).
27. Remove the tee (24) from the nipple (28).
28. Remove the nipple (28) from the bushing (29).
29. Remove the bushing (29) from the tee (30).
30. Remove the clamp (31) from the hose (32).
31. Remove the hose (32) from the nipple (33).
32. Remove the nipple (33) from the tee (30).
33. Remove the tee (30) from the washer.
34. Remove one nut (34), lock washer (35) and bracket (17) from the washer.

Clean components as follows:

1. Clean the threads of the piping with a wire brush.
2. Ensure that piping is not clogged and clean it out as required.

**NOTE**

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



Install tub pipe components as follows:

1. Install the bracket **(1)**, one lock washer **(2)** and nut **(3)** on the washer.

### NOTE

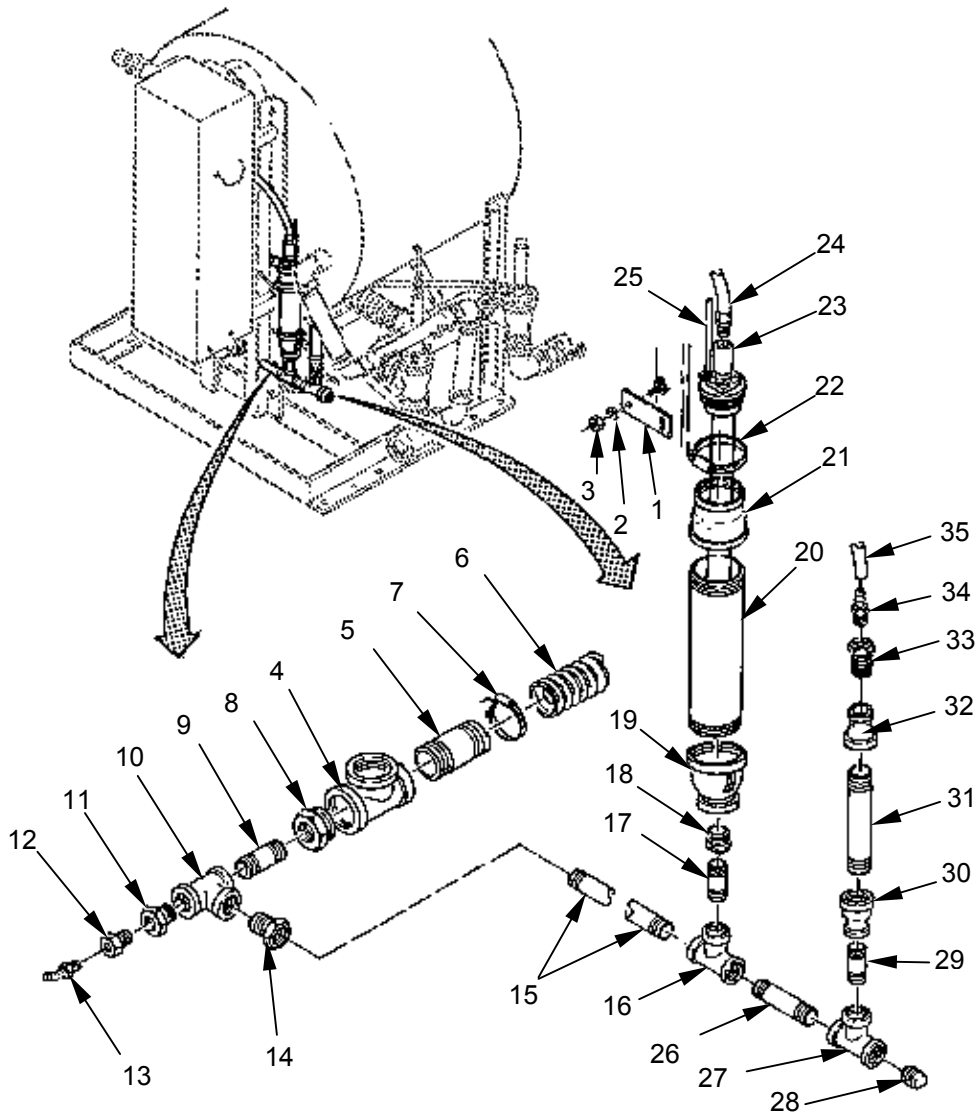
Apply antiseize compound to all male threads before installing hardware.

2. Install the tee **(4)** on the washer.
3. Install the nipple **(5)** on the tee **(4)**.
4. Install the hose **(6)** on the nipple **(5)**.
5. Install the clamp **(7)** on the hose **(6)**.
6. Install the bushing **(8)** on the tee **(4)**.
7. Install the nipple **(9)** on the bushing **(8)**.
8. Install the tee **(10)** on the nipple **(9)**.
9. Install the bushing **(11)** on the tee **(10)**.
10. Install the bushing **(12)** on the bushing **(11)**.
11. Install the sensor **(13)** on the bushing **(12)**.
12. Install the bushing **(14)** on the tee **(10)**.
13. Install the nipple **(15)** on the bushing **(14)**.
14. Install the tee **(16)** on the nipple **(15)**.
15. Install the nipple **(17)** on the tee **(16)**.
16. Install the bushing **(18)** on the nipple **(17)**.
17. Install the reducer **(19)** on the bushing **(18)**.
18. Install the nipple **(20)** on the reducer **(19)**.
19. Install the reducer **(21)** on the nipple **(20)**.
20. Install the clamp **(22)** on the bracket **(1)** and reducer **(21)**.
21. Insert the sensor switch plug **(23)** and riser tube **(24)** in the reducer **(21)**.
22. Screw the sensor switch plug **(23)** into the reducer **(21)**.
23. Screw the riser tube **(24)** on the sensor switch plug **(23)**.
24. Install the nipple **(25)** on the sensor switch plug **(23)**.
25. Install the nipple **(26)** on the tee **(16)**.

26. Install the tee **(27)** on the nipple **(26)**.
27. Install the plug **(28)** on the tee **(27)**.
28. Install the nipple **(29)** on the tee **(27)**.
29. Install the reducer **(30)** on the nipple **(29)**.
30. Install the nipple **(31)** on the reducer **(30)**.
31. Install the reducer **(32)** on the nipple **(31)**.
32. Install the bushing **(33)** on the reducer **(32)**.
33. Install the adapter **(34)** on the bushing **(33)**.
34. Install the hose **(35)** on the adapter **(34)**.

#### **REPLACE**

1. Remove unserviceable tub pipe components as described above.
2. Install new tub pipe components as described above.



END OF WORK PACKAGE

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**MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**LOCK COVER ASSEMBLY AND LOCK ASSEMBLY**  
**INSPECT, REPAIR, REPLACE, ADJUST**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Connector (Item 26, WP 0189 00)  
Sealing Washer (Item 64, WP 0189 00)  
Plumbing Fixture Setting Compound (Item 15, WP  
0190 00)  
Tags (Item 19, WP 0190 00)

**Equipment Conditions**

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

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**INSPECT**

Inspect lock cover and lock assembly as described in WP 0018 00.



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**WARNING**

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

**REPAIR**

Remove lock cover as follows:

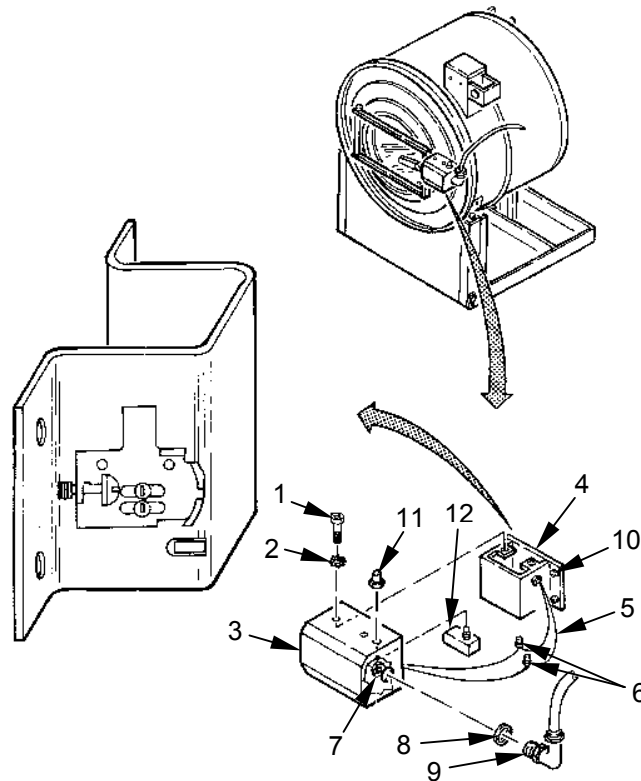
1. Remove four screws **(1)** and washers **(2)** from the lock cover **(3)**.
2. Remove the lock cover **(3)** from the lock **(4)**.
3. Tag electrical wiring **(5)** and remove two connectors **(6)**.
4. Remove the nut **(7)**, washer **(8)** and connector **(9)**. Discard washer **(8)**.

Remove lock as follows:

1. Remove the lock cover **(3)**.
2. Remove four screws **(10)** from the lock **(4)** and remove the lock.

Repair Switch as follows:

1. Remove the boot **(11)** from the switch **(12)**.
2. Remove the switch **(12)** from the lock cover **(3)**.
3. Position a new switch **(12)** in the lock cover **(3)**.
4. Install the boot **(11)** on the switch **(12)**.



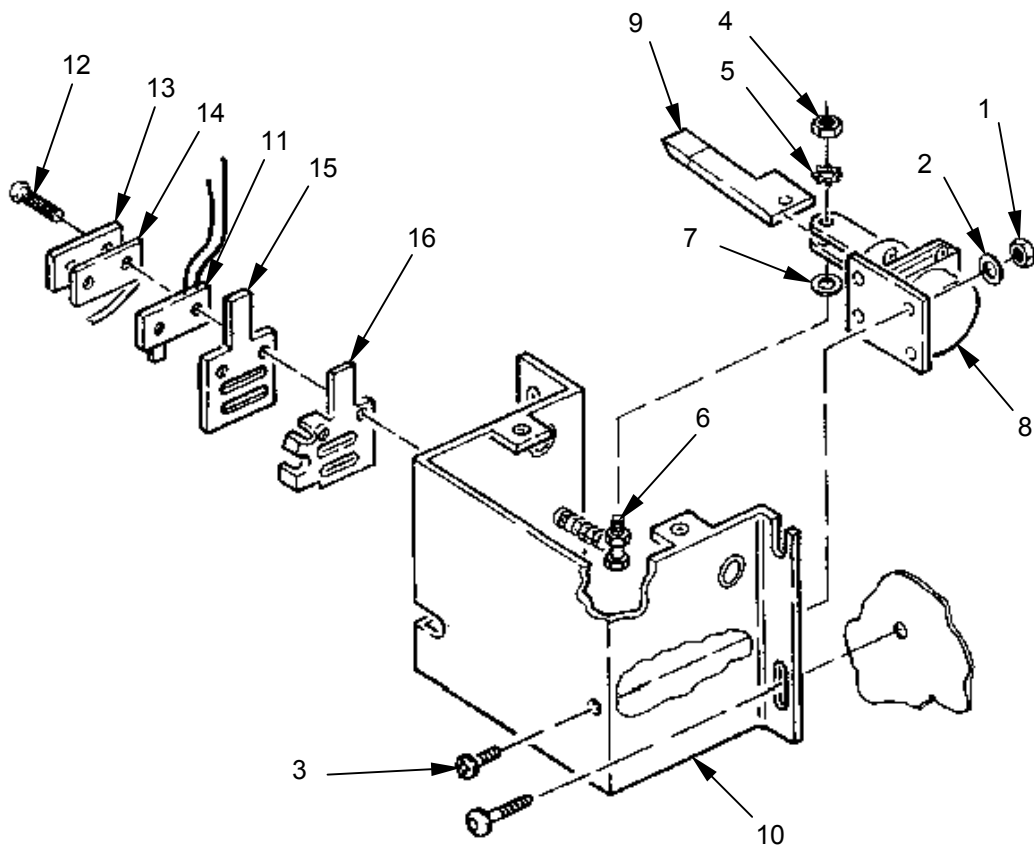


## Repair door solenoid.

1. Remove two nuts (1), washers (2) and screws (3).
2. Remove the nut (4), washer (5), screw (6), and washer (7) from the door solenoid (8) and remove the bar (9).
3. Position the bar (9) on the new door solenoid (8) and install the screw (6), washer (7), washer (5) and nut (4).
4. Position the door solenoid (8) on the bracket (10) and install two screws (3), washers (2) and nuts (1).

## Repair door switch (11).

1. Remove two screws (12), gasket (13) and strike plate (14).
2. Remove the switch (11) and insulator (15) from the latch strike (16).
3. Position the latch strike (16), insulator (15), new switch (11), strike plate (14), gasket (13) and install two screws (12).



Install Lock.

1. Apply plumbing fixture setting compound around the four mounting holes on washer that the screws **(1)** will be installed in.
2. Position the lock **(2)** on the washer door **(3)** and install four screws **(1)**.
3. Install the lock cover **(4)**.

Install lock cover.

1. Position the connector **(5)**, new washer **(6)** on the lock cover **(4)** and install the 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.

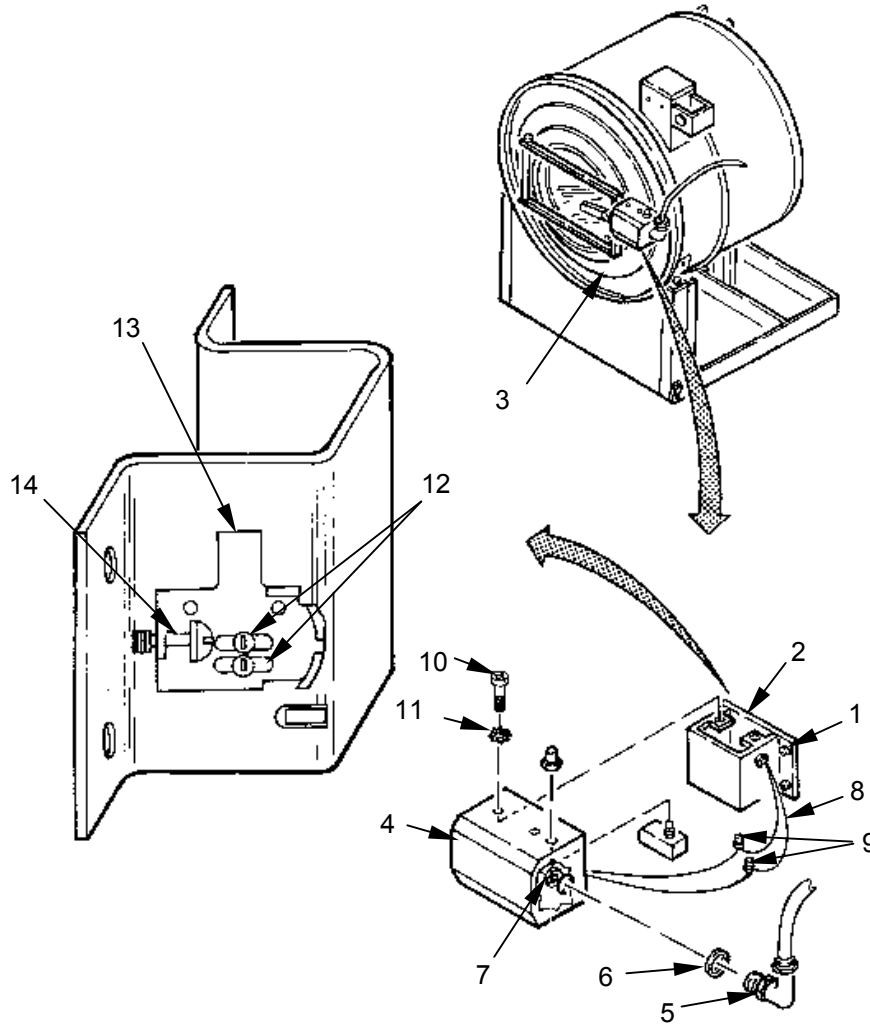
2. Connect electrical wiring **(8)** with two connectors **(9)**.
3. Position the lock cover **(4)** on the lock **(2)**.
4. Install four screws **(10)** and washers **(11)** on the lock cover **(4)**.

### REPLACE

1. Remove unserviceable lock **(2)** or lock cover **(4)** as described above.
2. Install new lock **(2)** or lock cover **(4)** as described above.

### ADJUST

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



END OF WORK PACKAGE



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**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
NSN (3510-01-291-8169 (M85-100))  
NSN (3510-01-365-5687 (M85-200))  
DOOR AND BAR ASSEMBLY  
INSPECT, ADJUST**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Conditions**

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

---

**INSPECT**

Inspect door and bar assembly as described in WP 0018 00.

**ADJUST**

1. Place paper between the door and washer and close the door.
2. Pull on paper material, it should barely move.
3. If paper pulls out easily, adjust door as described in WP 0044 00.

**END OF WORK PACKAGE**



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**DOOR ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Gasket (Item 33, WP 0189 00)

Gasket (Item 37, WP 0189 00)

Adhesive (RTV) (Item 1, WP 0190 00)

Plumbing Fixture Setting Compound (Item 15, WP 0190 00)

**Equipment Conditions**

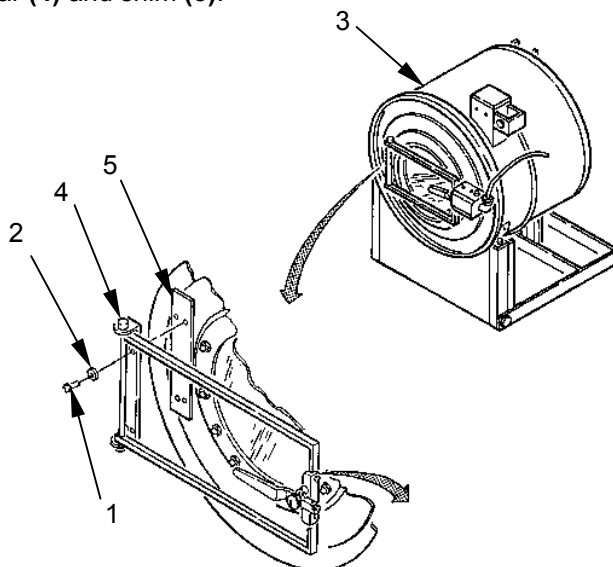
Laundry Unit shut down (TM 10-3510-222-10)

**INSPECT**

Inspect door and bar assembly as described in WP 0018 00.

**REPAIR****Remove door and bar**

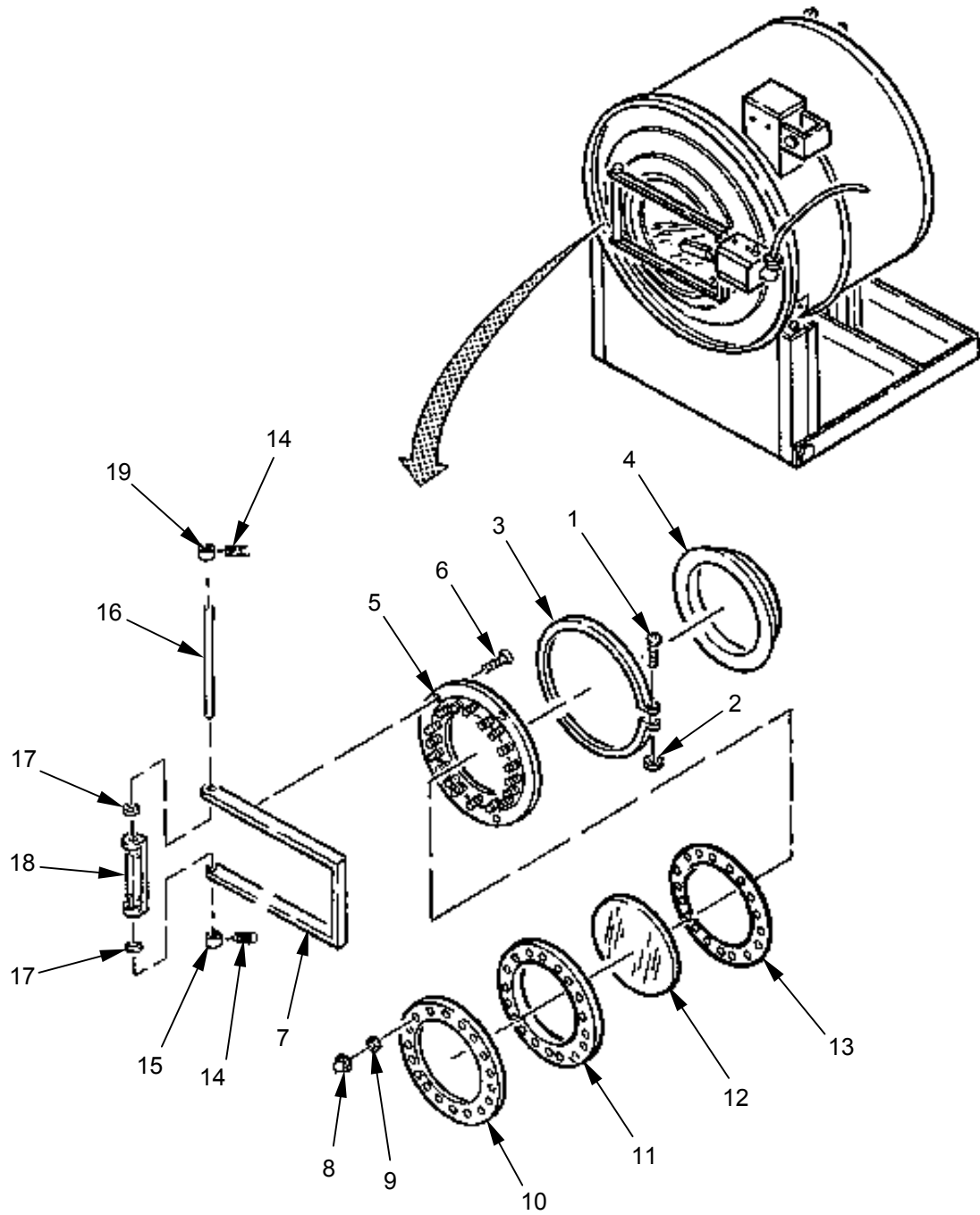
1. Remove four screws (1) and flat washers (2) from washer (3).
2. Remove door and bar (4) and shim (5).



**Repair damaged Door**

1. Remove screw (1) and nut (2) from band (3).
2. Remove band (3) and gasket (4) from rim (5).
3. Remove four screws (6) from rim (5) and bar (7).
4. Remove eighteen nuts (8) and flat washers (9) from rim (5).
5. Remove retainer (10), gasket (11), window (12) and gasket (13) from rim (5). Discard gaskets (4 and 13).
6. Loosen set screw (14) and remove collar (15) from pin (16).
7. Remove pin (16), two bushings (17) and hinge (18).
8. Loosen set screw (14) and remove collar (19) from pin (16).
9. Install collar (19), tighten set screw (14) on pin (16).
10. Install pin (16), two bushings (17) and hinge (18) on bar (20).
11. Install collar (19), tighten set screw (14) on pin (16).
12. Position new gasket (13), window (12), new gasket (11) and retainer (10) on rim (5).
13. Install eighteen flat washers (9) and nuts (8) on rim (5).
14. Position rim (5) on bar (20) and install four screws (6).
15. Position gasket (4) on rim (5) and band (3). Install screw (1) and nut (2).



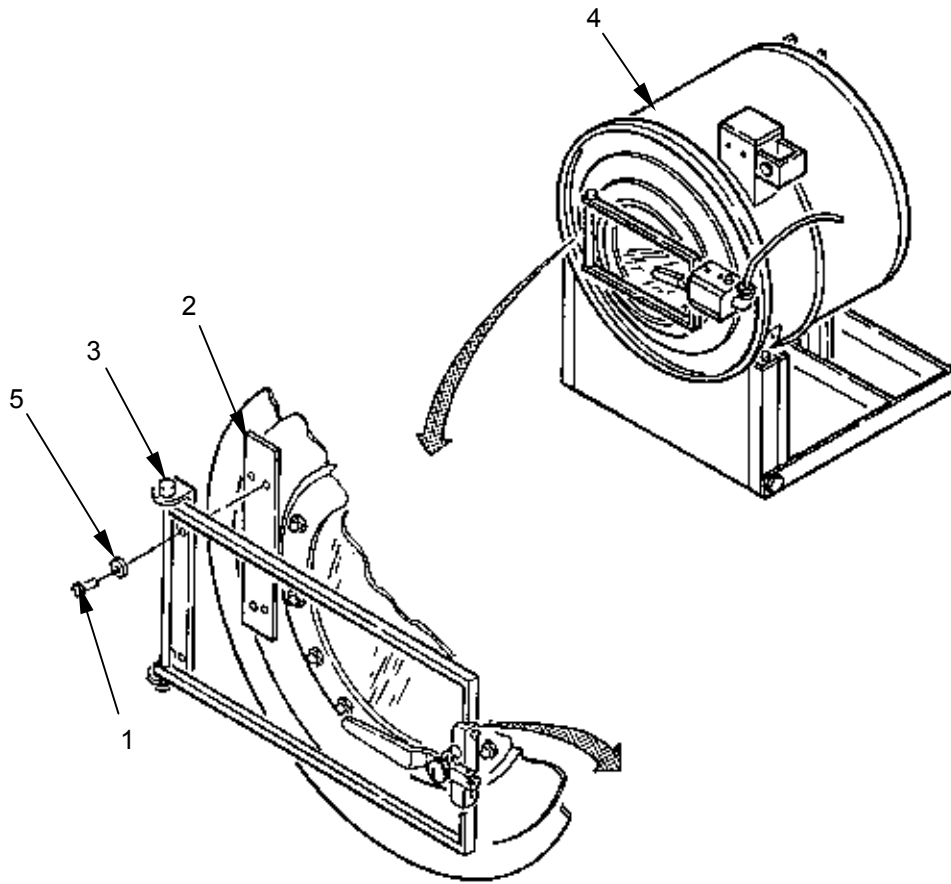


**Install door and bar**

1. Apply plumbing fixture setting compound around the four mounting holes on washer where screws (1) will be installed.
2. Position shim (2) and door and bar (3) on washer (4) and install four washers (5) and screws (1).
3. Close washer door.

**REPLACE**

1. Remove unserviceable door assembly as described above.
2. Install new door assembly as described above.

**END OF WORK PACKAGE**

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**BELT GUARD ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Conditions**

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

**INSPECT**

Inspect belt guard assembly as described in WP 0018 00.

**WARNING**

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

**REPAIR**

1. Remove four studs (1) from the belt guard (2).
2. Remove the belt guard (2) from the washer (3).

**Remove/install stud(s)****NOTE**

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

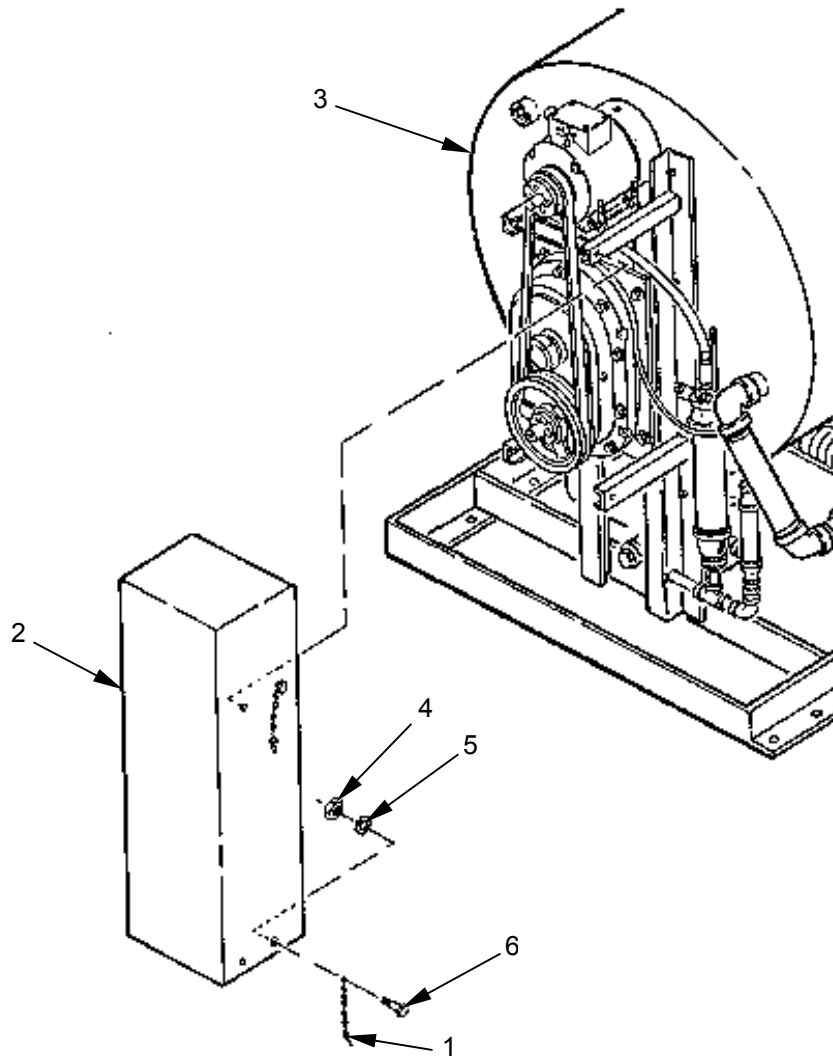
1. Remove the nut (4), star washer (5), chain and stud (1) and screw (6) from the belt guard (2).
2. Install the screw (6), new chain and stud (1), star washer (5) and nut (4) on the belt guard (2).
3. Remove four studs (1) from the belt guard (2).
4. Install four studs (1) on the new belt guard (2).

**Remove/install belt guard**

1. Position the belt guard (2) on the washer (3).
2. Install four studs (1) on the belt guard (2).

**REPLACE**

1. Remove unserviceable belt guard assembly components as described above.
2. Install new belt guard assembly components as described above.

**END OF WORK PACKAGE**

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**MOTOR AND PLATE ASSEMBLY**  
**INSPECT, REPAIR, REPLACE, ADJUST**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

Closed End Connector (Item 4, WP 0189 00)

**Equipment Conditions**

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

Belt guard removed (WP 0045 00)

**INSPECT**

Inspect motor and plate assembly as described in WP 0018 00.

**WARNING**

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

**REPAIR****Remove AC motor**

1. Loosen four nuts **(1)** on screws **(2)**.
2. Back off four nuts **(3)** on screws **(2)** enough to remove the V-belt **(4)**.
3. Remove the V-belt **(4)** from the pulley **(5)**.
4. Remove four screws **(6)**, and cover **(7)** from the ac motor **(8)**.
5. Tag and remove electrical wiring from the ac motor **(8)** and remove the conduit **(9)** with wiring.
6. Remove four nuts **(10)**, lockwashers **(11)** and bolts **(12)** from the ac motor **(8)** and plate **(13)**.
7. Remove the ac motor **(8)** from the plate **(13)**.
8. Measure the distance between the pulley **(5)** and the ac motor **(8)** and record the distance.
9. Remove two bolts **(14)** and bushing **(15)**.
10. Remove the pulley **(5)** and key **(16)** from the ac motor **(8)**.
11. Position the cover **(7)** on the ac motor **(8)** and install four screws **(6)**.

**Remove plate**

Remove four nuts (1) and plate (13) from screws (2).

**Remove V-belt**

1. Loosen four nuts (1) from screws (2).
2. Turn four nuts (3) to lower the plate (13) until the V-belt (4) can be removed.
3. Remove the V-belt (4) from pulleys (5 and 17).

**Install AC motor**

1. Remove four screws (6) and cover (7) on the ac motor (8).
2. Position the ac motor (8) on the plate (13).
3. Install four bolts (12), lockwashers (11) and nuts (10) on ac motor (8) and plate (13).

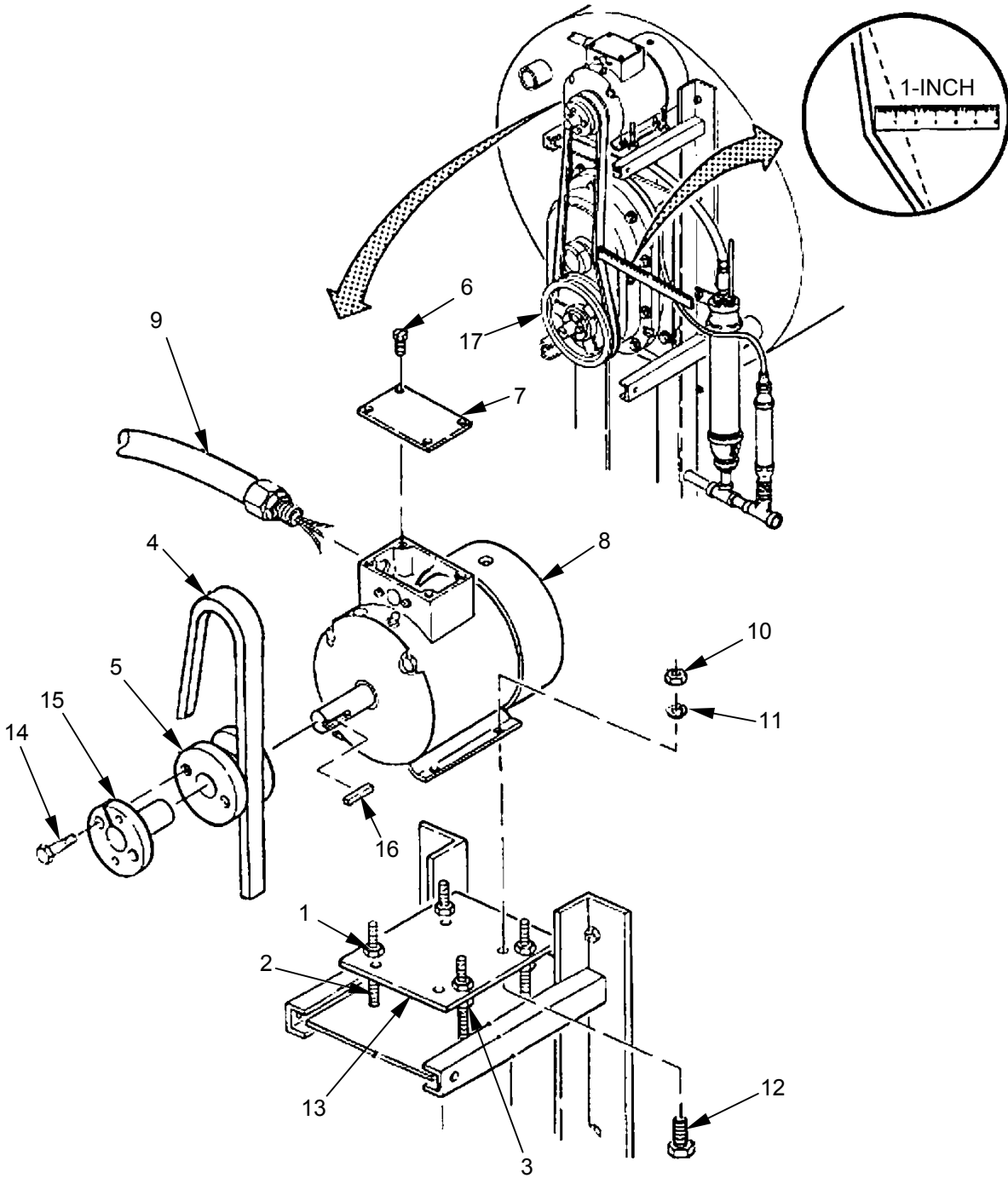
**NOTE**

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

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

**REPLACE**

1. Remove unserviceable motor and plate assembly components as described above.
2. Install new motor and plate assembly components as described above.



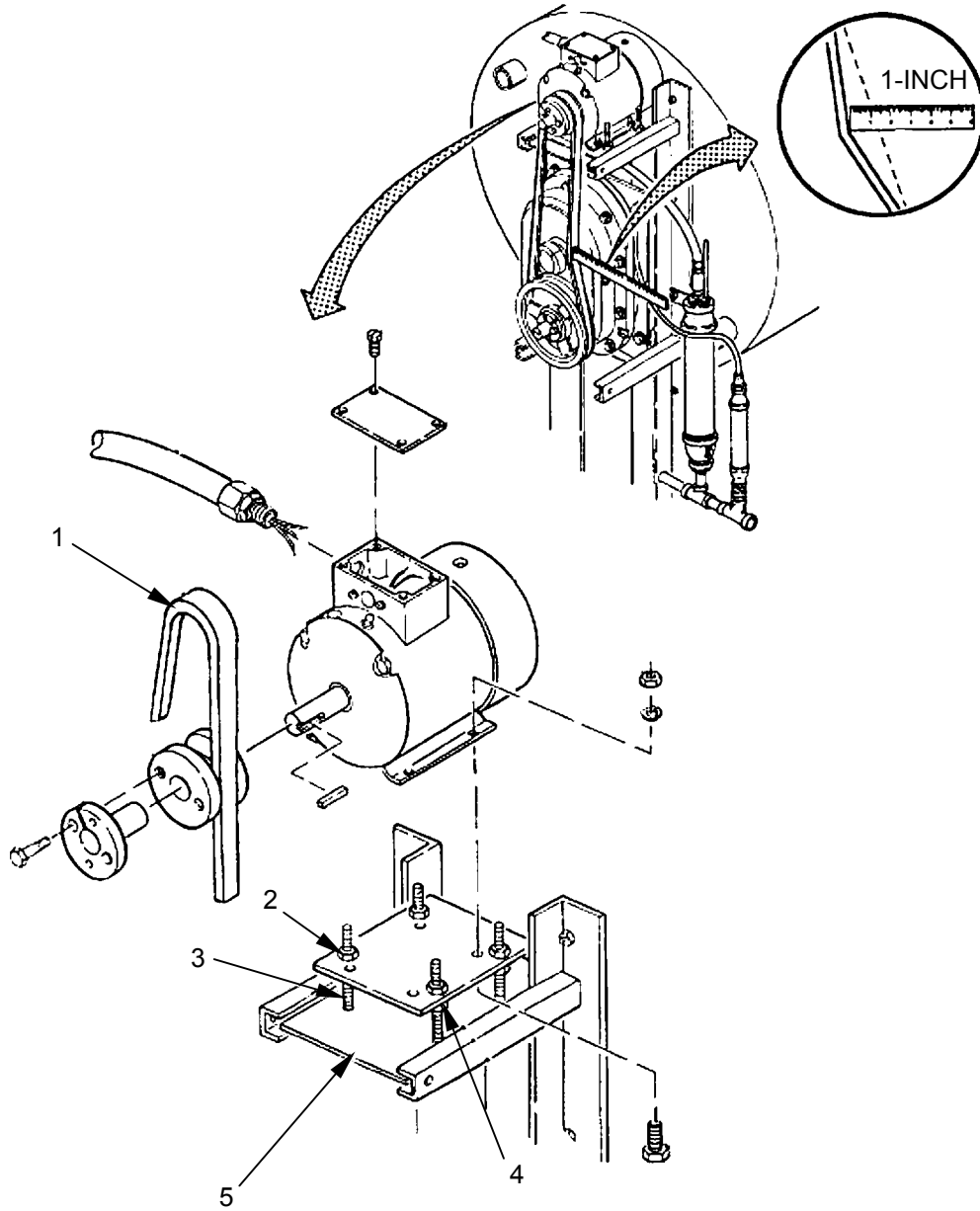
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**ADJUST****NOTE**

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

1. Measure V-belt **(1)** deflection of one inch (2.54 cm) at the center distance between the motor pulley and the gear box pulley.
2. If less than one inch, do substeps below:
  - a. Loosen four nuts **(2)** on screws **(3)** if not already loose.
  - b. Turn the four nuts **(4)** until one inch deflection is achieved on the V-belt **(1)**.
  - c. Tighten the four nuts **(2)** on the screws **(3)** and plate **(5)**.
3. If more than one inch, do substeps below:
  - a. Loosen four nuts **(2)** on screws **(3)** if not already loose.
  - b. Turn the four nuts **(4)** until one inch deflection is achieved on the V-belt **(1)**.
  - c. Tighten the four nuts **(2)** on the screws **(3)** and plate **(5)**.





END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**AIR TANK ASSEMBLY**  
**INSPECT, REPAIR, REPLACE**

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**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)

**Equipment Conditions**

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

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**INSPECT**

Inspect air tank assembly as described in WP 0018 00.



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**WARNING**

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

**REPAIR****Remove air tank and components**

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

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**NOTE**

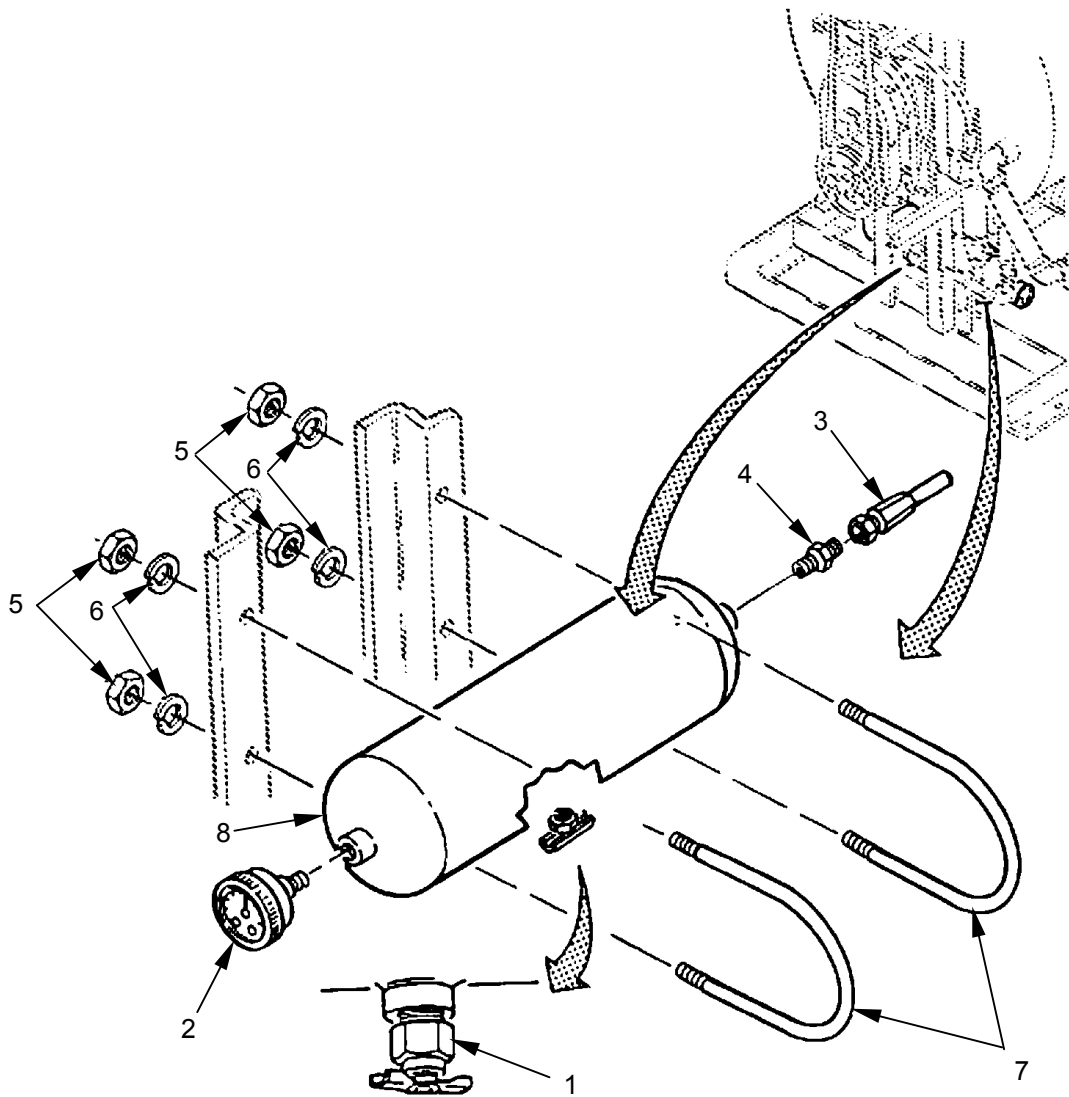
Apply antiseize compound to all male threads (except adapter and U-clamps) before installing hardware.

**Install air tank and components**

1. Install the drain cock **(1)** on the air tank **(8)**.
2. Install the pressure gage **(2)** on the air tank **(8)**.
3. Install the adapter **(4)** on the air tank **(8)**.
4. Position the air tank **(8)** on the washer and install two U-bolts **(7)**, four lockwashers **(6)** and nuts **(5)**.
5. Install the air hose **(3)** on the adapter **(4)**.

**REPLACE**

1. Remove unserviceable air tank and components as described above.
2. Install new air tank and components as described above.



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**PRESSURE GAUGE**  
**REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)

**Equipment Conditions**

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



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**WARNING**

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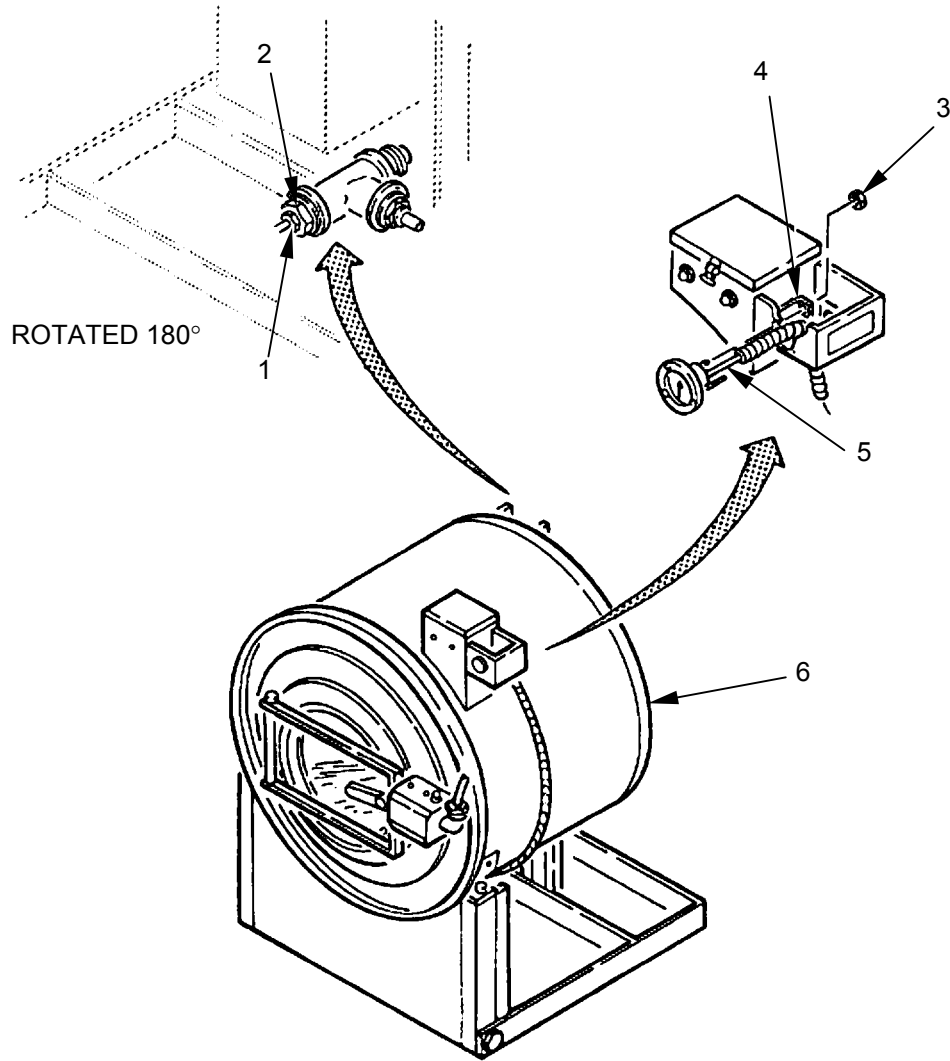
High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

**REPLACE****Remove pressure gauge**

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

**Install pressure gauge**

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



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**AIR MANIFOLD**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)

**Equipment Conditions**

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



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**WARNING**

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

**REPAIR**

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

**Remove air manifold**

1. On the washer air tank, open the drain cock until the pressure gage reads 0 psi.
2. Close the drain cock (WP 0047 00, Air Tank).
3. Remove five hose clamps **(1)** from air hoses **(2, 3, 4, 5 and 6)**.
4. Remove the air hoses **(2, 3, 4, 5 and 6)** from the air manifold **(7)**.
5. Remove hose **(8)** from adapter **(9)**.
6. Remove hose **(10)** from adapter **(11)**.
7. Remove four nuts **(12)**, lockwashers **(13)**, two plates **(14)** and air manifold **(7)**.

**Disassemble air manifold**

1. Remove the adapter **(9)** from the tee **(15)**.
2. Remove the adapter **(11)** from the tee **(15)**.
3. Remove the tee **(15)** from the nipple **(16)**.
4. Remove the adapter **(17)** from the pipe cross **(18)**.
5. Remove the adapter **(19)** from the pipe cross **(18)**.
6. Remove the pipe cross **(18)** from the nipple **(20)**.
7. Remove the nipple **(20)** from the pipe cross **(21)**.
8. Remove the adapter **(22)** from the pipe cross **(21)**.
9. Remove the adapter **(23)** from the pipe cross **(21)**.
10. Remove the adapter **(24)** from the pipe cross **(21)**.

**Assemble air manifold****NOTE**

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

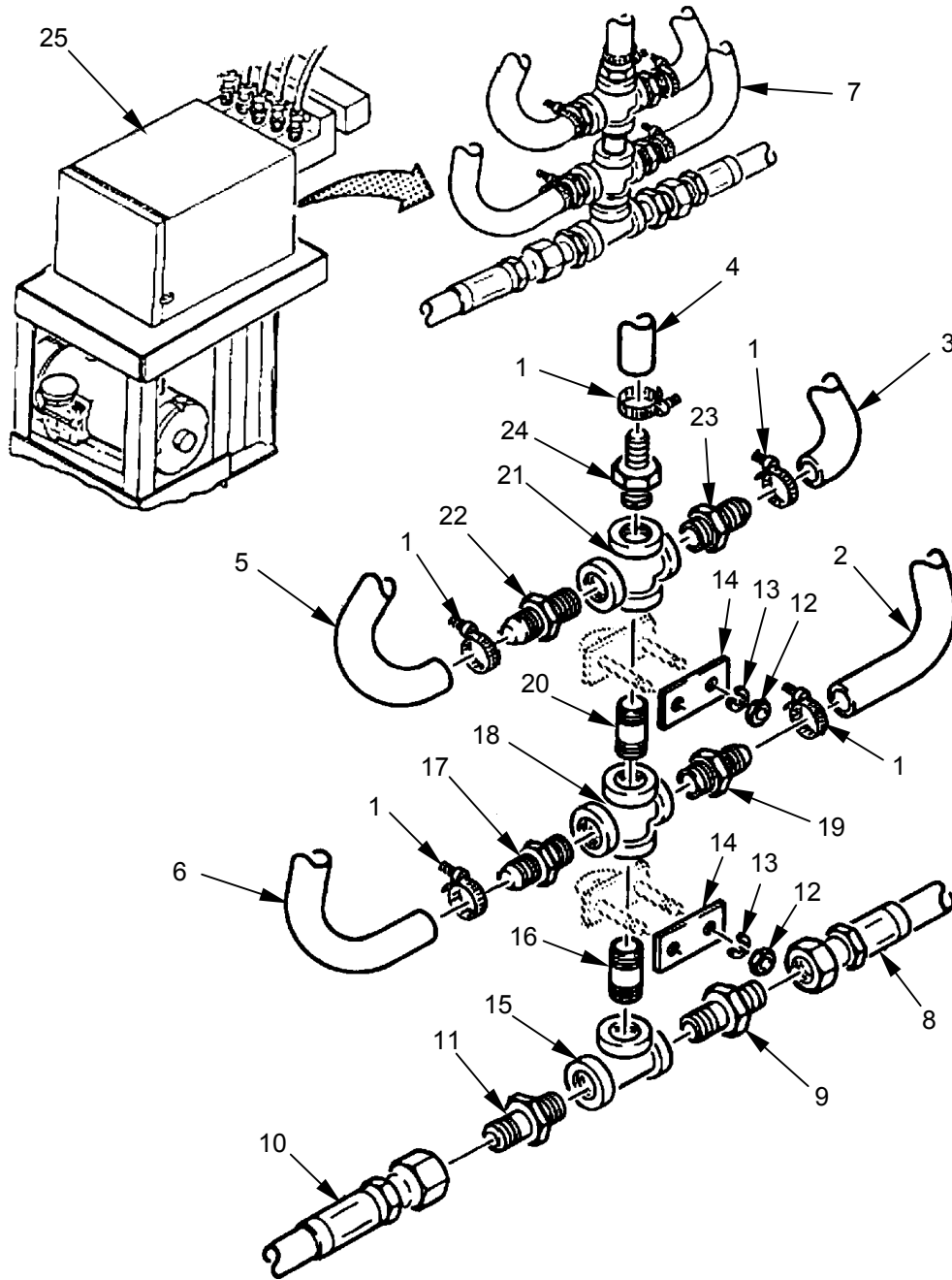
1. Install the adapter **(24)** on the pipe cross **(21)**.
2. Install the adapter **(23)** on the pipe cross **(21)**.
3. Install the adapter **(22)** on the pipe cross **(21)**.
4. Install the nipple **(20)** on the pipe cross **(21)**.
5. Install the pipe cross **(18)** on the nipple **(20)**.
6. Install the adapter **(19)** on the pipe cross **(18)**.
7. Install the adapter **(17)** on the pipe cross **(18)**.
8. Install the nipple **(16)** on the pipe cross **(18)**.
9. Install the tee **(15)** on the nipple **(16)**.
10. Install the adapter **(11)** on the tee **(15)**.
11. Install the adapter **(9)** on the tee **(15)**.

**Install air manifold**

1. Position the air manifold **(7)** on the control panel **(25)**.
2. Install two plates **(14)**, four lockwashers **(13)** and nuts **(12)**.
3. Install the hose **(10)** on the adapter **(11)**.
4. Install the hose **(8)** on the adapter **(9)**.
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 the air manifold **(7)**.
7. Position five hose clamps **(1)** over adapters **(9, 11, 17, 19, 22 and 23)** and tighten.

**REPLACE**

1. Remove unserviceable air manifold and components as described above.
2. Install new air manifold and components as described above.



END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**AIR COMPRESSOR**  
**REPAIR, REPLACE, ADJUST**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

Two (for Adjustment)

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Conditions**

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



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**WARNING**

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

**REPAIR****Remove Air Compressor**

1. On the washer air tank (under rear of washer), open the drain cock until the pressure gage reads 0 psi.
2. Close the drain cock.
3. Remove the hose **(1)** from the elbow **(2)**.
4. Loosen the captive nut **(3)** on the cover **(4)** and remove the cover **(4)** from the switch **(5)**.
5. Tag and disconnect the electrical wiring to the switch **(5)**.
6. Loosen screws **(6)** and rotate the plate **(7)**.
7. Remove the nut **(8)** from the 90° adapter **(9)** and remove the adapter **(9)**.
8. Remove four nuts **(10)**, lockwashers **(11)**, flat washers **(12 and 13)** and bolts **(14)** from the bracket **(15)**.
9. Remove the air compressor **(16)** from the control stand **(17)**.

**Replace handle**

1. Remove two screws **(18)** and handle **(19)**.
2. Install a new handle **(19)** with two screws **(18)**.

**Replace fan**

1. Remove two screws **(20)** and cover **(21)**.
2. Pull the fan **(22)** from the shaft **(23)**.
3. Push a new fan **(22)** on the shaft **(23)** 1/8 inch from the end of the shaft.
4. Install the cover **(21)** with two screws **(20)**.

**Install Air Compressor or switch**

1. Position the air compressor **(16)** on the control stand **(17)** and install four flat washers **(13)**, bolts **(14)**, flat washers **(12)**, lockwashers **(11)** and nuts **(8)**.
2. Position the 90° adapter **(9)** on the switch **(5)** and install the nut **(8)**.

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

**REPLACE**

1. Remove unserviceable air compressor and components as described above.
2. Install new air compressor and components as described above.

**ADJUST**

1. Loosen the captive nut **(3)** on the cover **(4)** and remove the cover **(4)** from the air compressor **(16)**.

**WARNING**

High voltages in 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.

2. Apply electrical power, refer to TM 10-3510-222-10.
3. If the washer air tank gage (under rear of washer) reads 105 or above psi and the air compressor does not turn off, do the substeps below:
  - a. On the washer air tank, open the drain cock. Reading on the gage is approximately 50 psi.
  - b. Close the washer air tank drain cock.
  - c. Adjust nut **(24)** to turn off the air compressor **(16)** at 100 psi on washer air tank gage.
  - d. Repeat substeps until the air compressor shuts off at 100 psi.
4. If the washer air tank gage (under rear of washer) reads below 90 psi and the air compressor is not on, adjust the nut **(24)** to turn on the air compressor **(16)** at 90 psi.
5. Install the cover **(4)** and tighten the captive nut **(3)**.





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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85, M85-100, M85-200**  
**(NSN 3510-01-222-9301 (M85))**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**BRAKE**  
**ADJUST**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

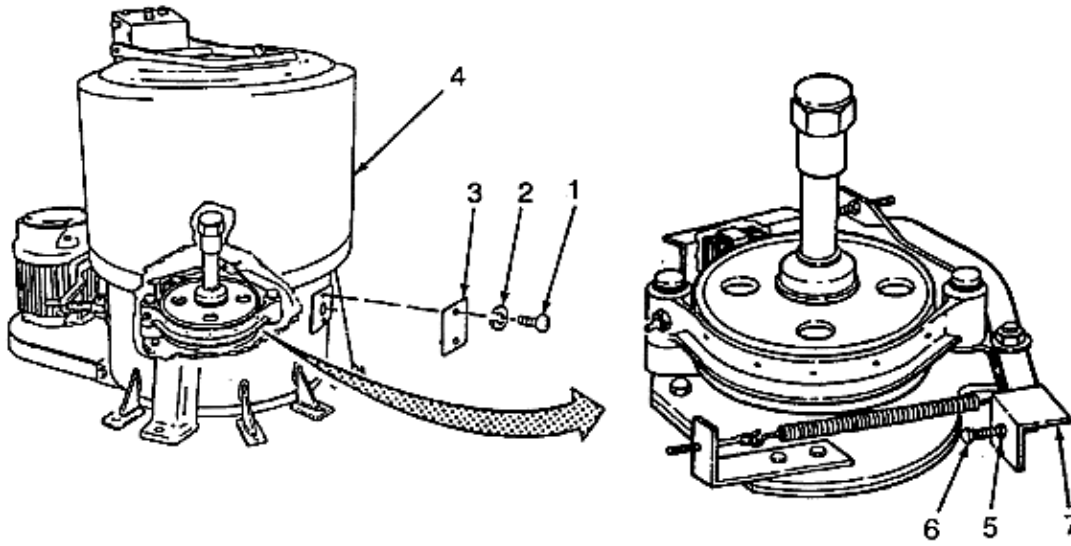
Laundry Unit shut down. (TM 10-3510-222-10)

**WARNING**

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

**ADJUST**

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



END OF WORK PACKAGE

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**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
NSN (3510-01-291-8169 (M85-100))  
NSN (3510-01-365-5687 (M85-200))  
FILTER ASSEMBLY  
REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools****Personnel Required**

One

**Material/Parts****Equipment Conditions**

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

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**NOTE**

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

**REPAIR / REPLACE****Remove filter**

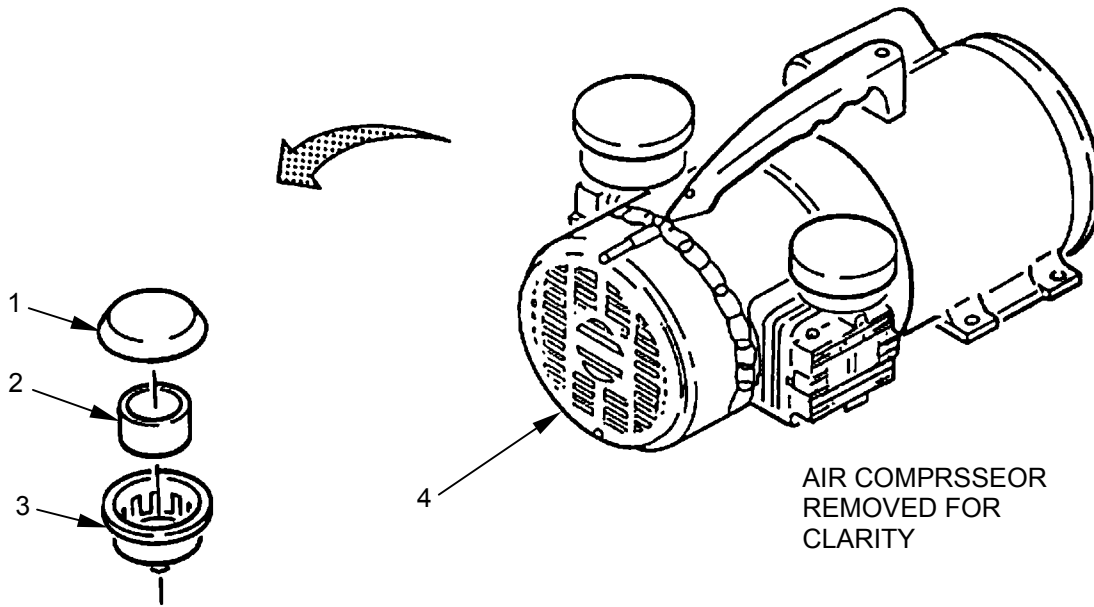
1. Access the filter by pulling up on top cap **(1)**.
2. Remove the filter **(2)**.
3. Unscrew the body **(3)** from the air compressor **(4)**.

**Replace filter**

Repair consists of replacing a damaged or missing filter.

**Install filter**

1. Screw the body **(3)** onto the air compressor **(4)**.
2. Install the filter **(2)**.
3. Install the top **(1)** on the body **(3)**.



END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**WET WASH BIN**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Antiseize Compound (Item 5, 0190 00)

**Equipment Conditions**

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

---

**REPAIR / REPLACE**

Repair consists of replacing damaged or missing components of the wet wash bin.

**Remove wet wash bin**

1. Remove the hose **(1)** from the quick coupling half **(2)**.
2. Remove two nuts **(3)**, lockwashers **(4)**, flat washers **(5)** and bolts **(6)** at location B on the figure.
3. Remove three bolts **(7)**, lockwashers **(8)** and flat washers **(9)** at location A on the figure.
4. Remove the wet wash bin **(10)** from the trailer **(11)**.

**Replace drain bin plate**

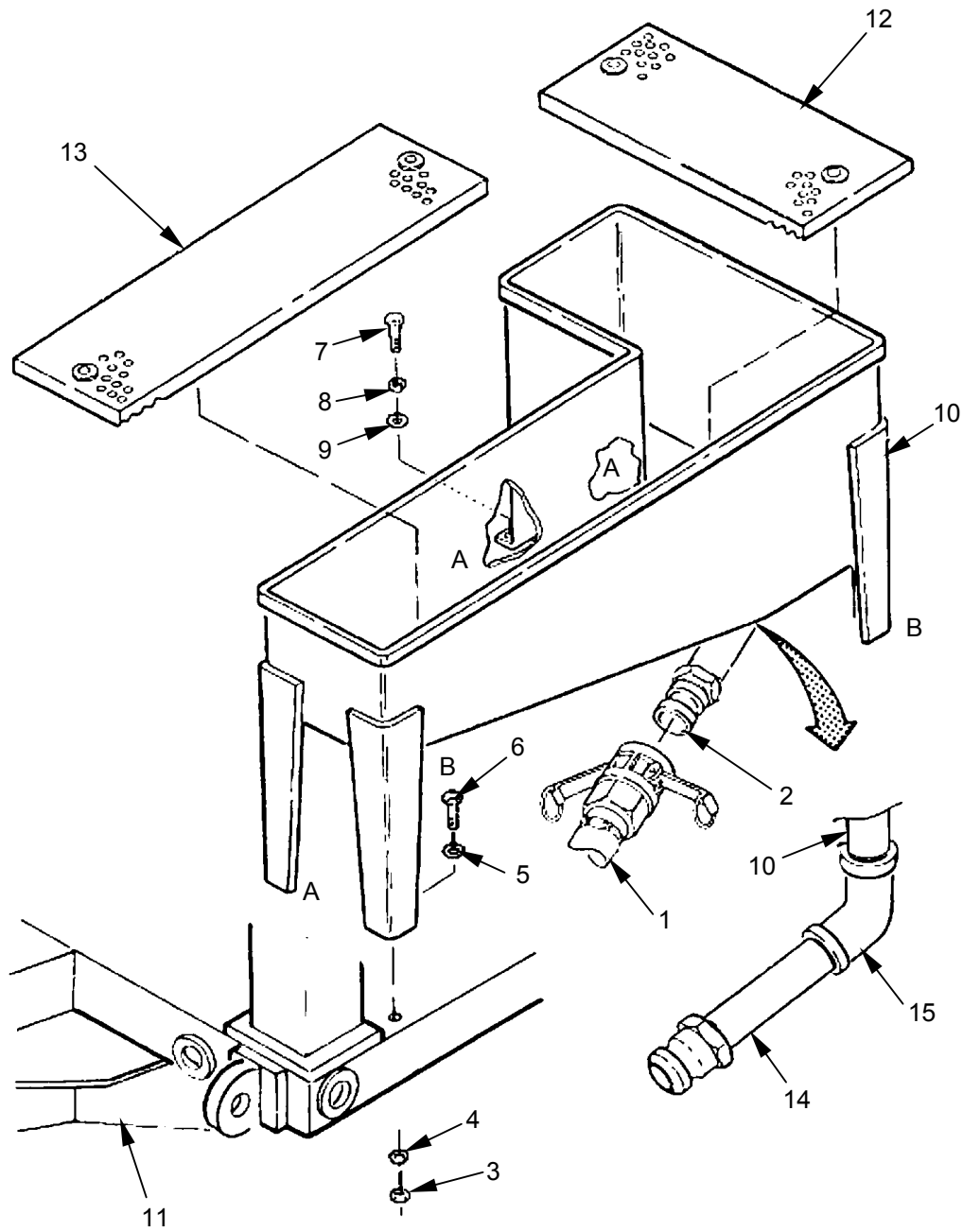
1. Remove the drain bin plate **(12 and/or 13)**.
2. Install the drain bin plate **(12 and/or 13)**.

**Replace drain hookup**

1. Remove the quick coupling half **(2)**.
2. Remove the pipe **(14)**.
3. Remove the elbow **(15)**.
4. Apply antiseize compound to male threads of wet wash bin **(10)** and pipe **(14)**.
5. Install the elbow **(15)**.
6. Install the pipe **(14)**.
7. Install the quick disconnect coupling **(2)**.

**Install wet wash bin**

1. Position the wet wash bin **(10)** on the trailer **(11)**.
2. Install three flat washers **(9)**, lockwashers **(8)** and bolts **(7)** at location A on the figure.
3. Install two bolts **(6)**, flat washers **(5)**, lockwashers **(4)** and nuts **(3)** at location B on the figure.
4. Install the hose **(1)** on the quick coupling half **(2)**.



END OF WORK PACKAGE





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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**EXTRACTOR PIPING**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)

**Equipment Conditions**

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



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**WARNING**

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

**REPAIR / REPLACE**

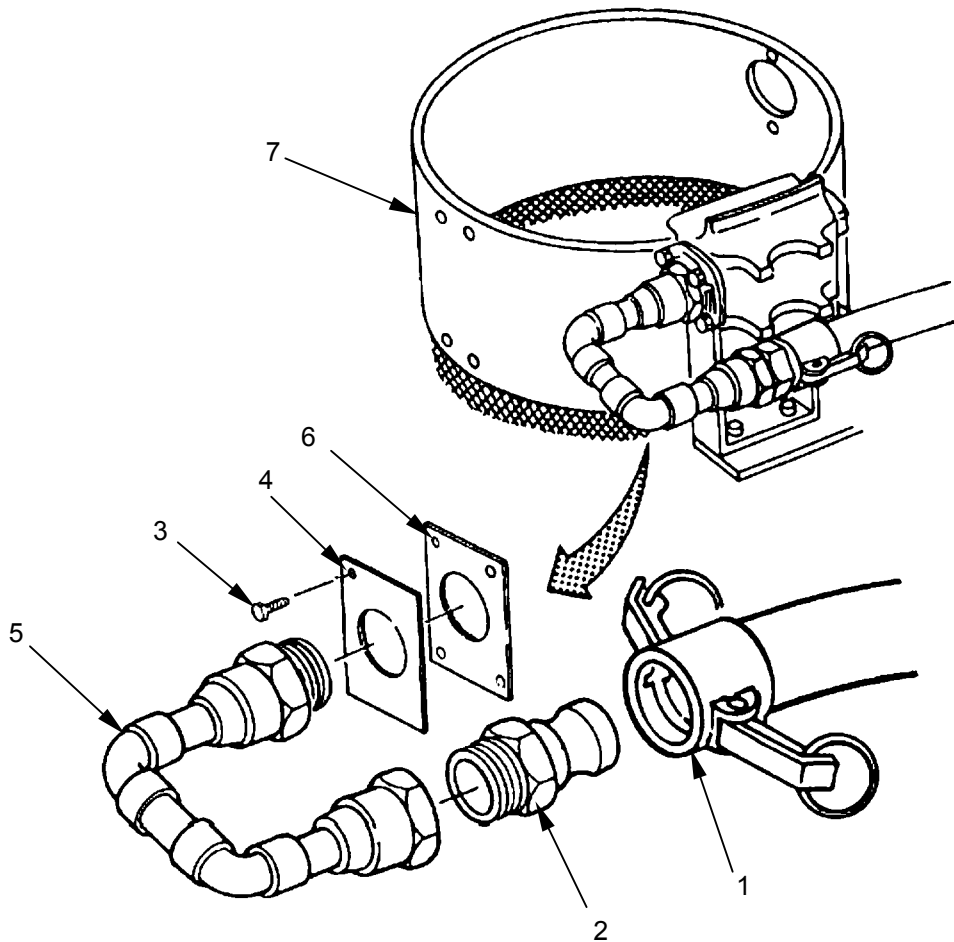
Repair consists of replacing damaged or missing components of the extractor piping.

**Remove extractor piping components**

1. Remove the coupling half **(1)** from the adapter **(2)**.
2. Remove four bolts **(3)**.
3. Remove the flange **(4)** with attached piping **(5)** and gasket **(6)** from the extractor **(7)**.
4. Remove the flange **(4)** from the piping **(5)**.
5. Remove the adapter **(2)** from the piping **(5)**.

**Install extractor piping components**

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

**END OF WORK PACKAGE**

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**EXTRACTOR ASSEMBLY**  
**SERVICE, ADJUST, REPAIR**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts****Equipment Conditions**

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

**SERVICE****NOTE**

Servicing of extractor consists of lubrication only. Refer to LO 10-3510-220-12 for lubrication.

**Disassemble extractor for lubrication****WARNING**

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

1. Turn off power to extractor.

**WARNING**

Extractor basket is heavy and awkward to handle. Use a sufficient number of personnel to lift extractor to avoid injury.

2. Open lid (1).

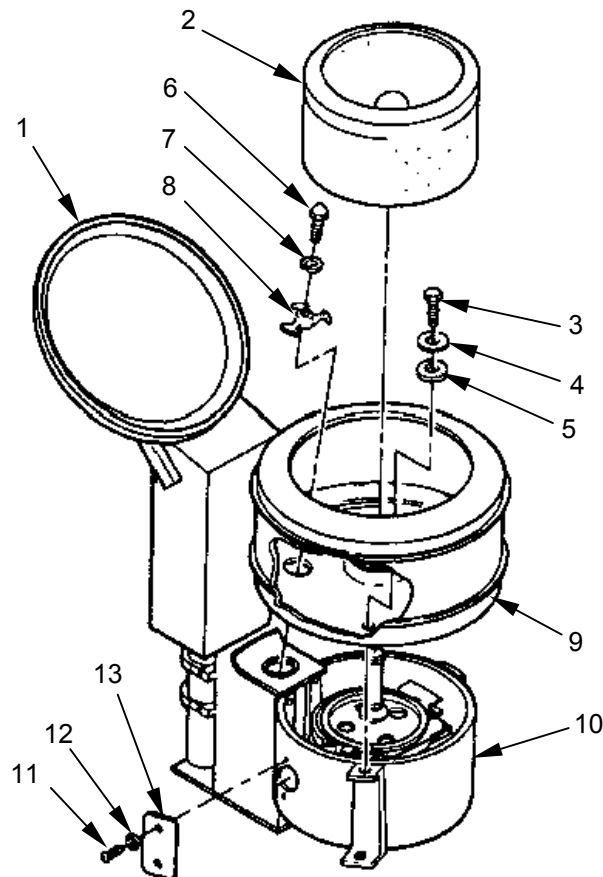
3. Manually lift extractor basket (2) from extractor assembly and set aside.
4. Remove two cap screws (3), flat washers (4), gaskets (5), cap screw (6), lock washer (7), and drain clamp (8).
5. Remove curb (9) from base (10).
6. Remove two screws (11), washers (12) and remove access plate (13).

### Lubricate extractor

Lubricate in accordance with LO 10-3510-220-12.

### Assemble extractor after lubrication

1. Install curb (9) on base (10) and secure with drain clamp (8), lock-washer (7), cap screw (6), two gaskets (5), flat washers (4), and cap screws (3).
2. Install extractor basket (2) and rotate until basket drops.
3. Close lid (1).
4. Install access plate (13) on base (10) and secure with two screws (11) and washers (12).

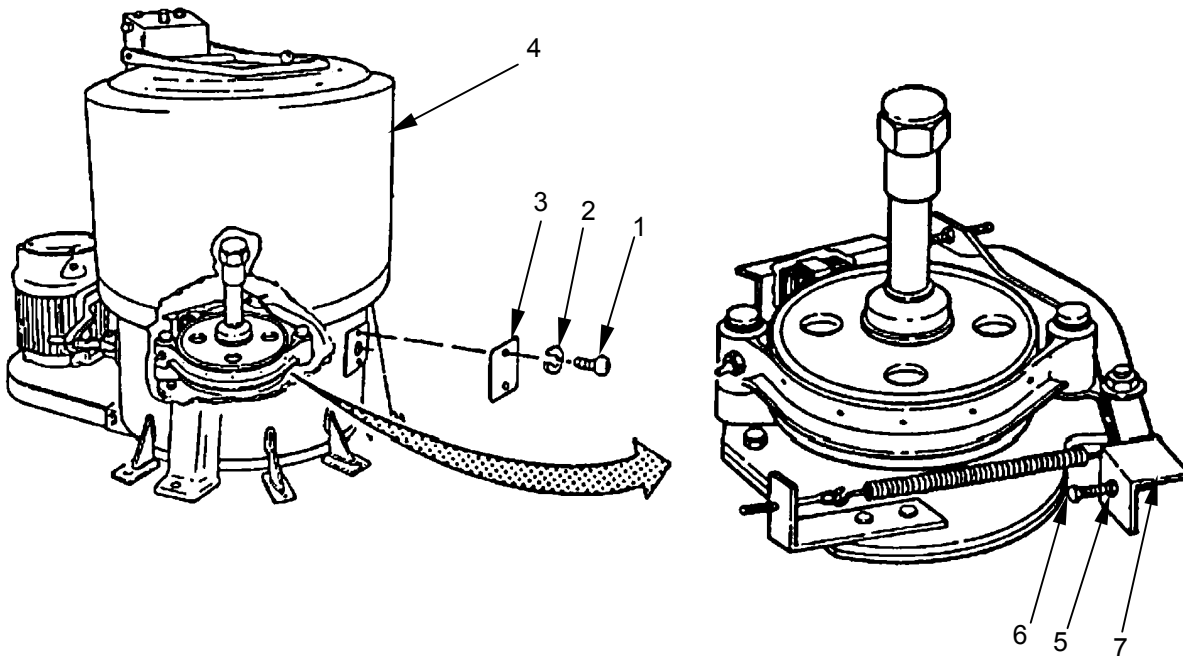


**ADJUST****WARNING**

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

**Adjust brake shoe**

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



**Adjust drive belt**

1. Remove screw (1), lock washer (2), and slide belt guard (3) away from machine.
2. Pull motor hanger (4) away from machine and relieve tension on spring (5). Swing tension bolt (6) and spring away from motor hanger.

**CAUTION**

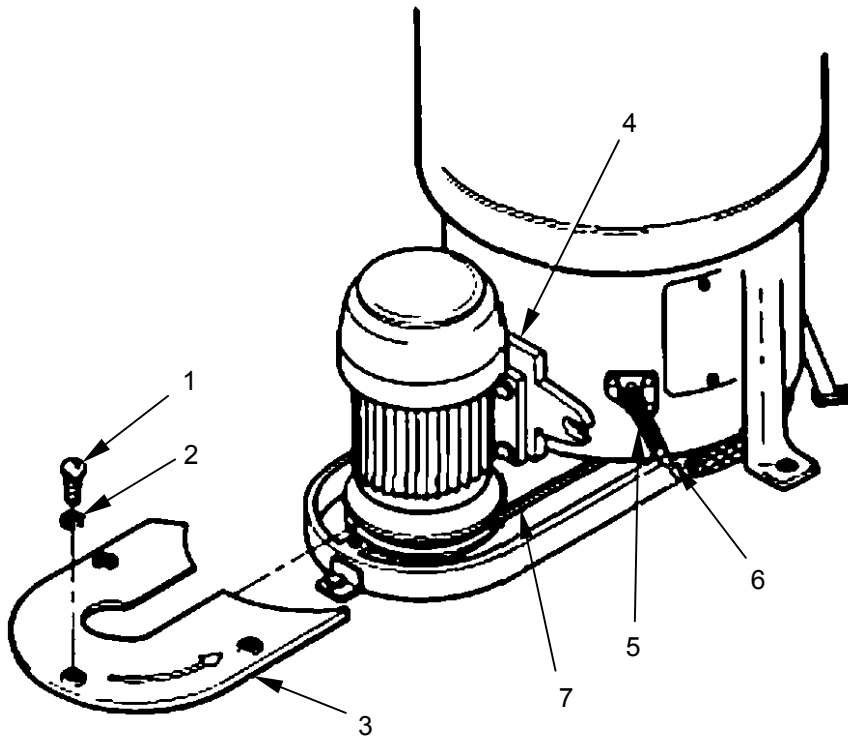
Do not overtighten belt. It should be as loose as possible without slipping during startup.

3. If drive belt (7) is slipping, add two or three flat washers (1/2-inch (12.7 mm) inside diameter) behind spring (5).
4. If drive belt (7) is too tight, remove two or three flat washers from behind spring (7).
5. Position motor hanger (4) and swing tension bolt (6) with spring (7) into slot of hanger. Ensure drive belt (7) stays in correct position.

**NOTE**

A new drive belt will usually eliminate slipping without an adjustment for tension.

6. Slide belt guard (3), back into position and secure with screw (1) and lock washer (2).



**REPAIR****NOTE**

Repair at this level consists only of drive belt replacement and adjustment.

**Remove drive belt**

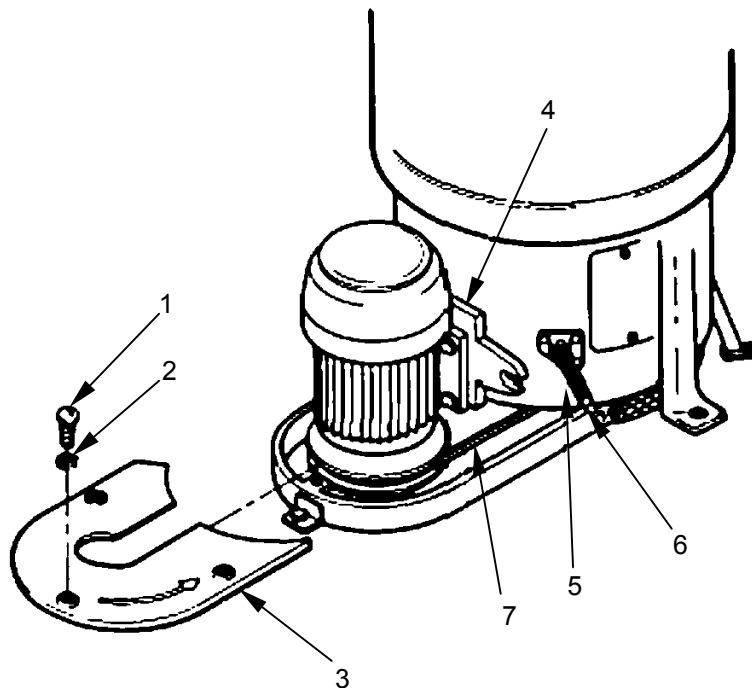
1. Remove screw (1) and lock washer (2) and slide belt guard (3) away from machine.
2. Pull motor hanger (4) away from machine and relieve tension on spring (5). Swing tension bolt (6) and spring away from motor hanger.
3. Remove drive belt (7).

**Install new drive belt**

1. Install drive belt (7) in correct position.
2. Position motor hanger (4) and swing tension bolt (6) with spring (5) into slot of hanger.
3. Check for proper belt tracking and tension.
4. Slide belt guard (3) back into position and secure with lock washer (2) and screw (1).

**NOTE**

Install work platform in transport position (TM 10-3510-209-10).



**END OF WORK PACKAGE**





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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**EXTRACTOR LID AND KNOB ASSEMBLY**  
**REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts****Equipment Conditions**

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



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**WARNING**

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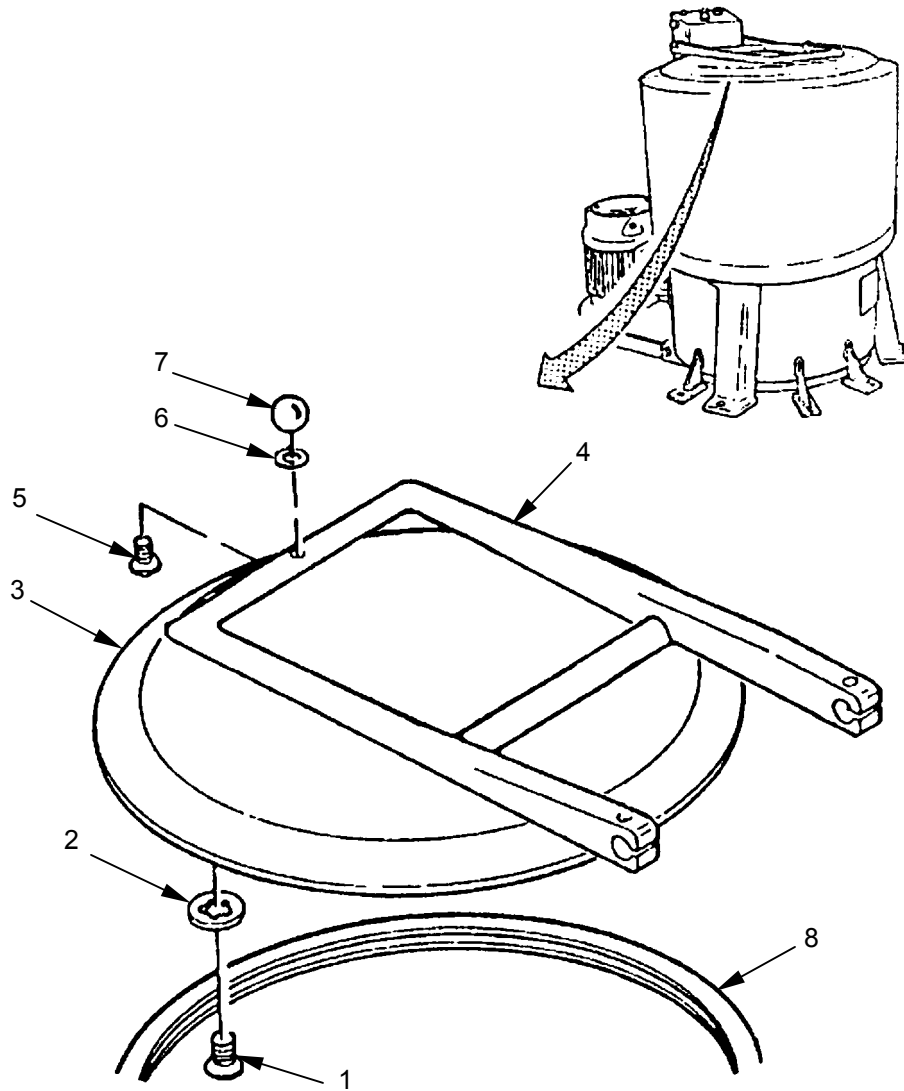
High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

**REPLACE****Remove extractor lid and knob components**

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

**Install extractor lid and knob components**

1. Install a new seal **(8)** on the lid **(3)**.
2. Position the ball **(7)** on the lid frame **(4)** and secure with flat washer **(6)** and screw **(5)**.
3. Position the lid **(3)** on the lid frame **(4)** and secure it with six screws **(1)** and lockwashers **(2)**.



END OF WORK PACKAGE

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**BASKET AND CURB ASSEMBLY**  
**REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)

**Personnel Required**

Four

**Materials/Parts**

Gasket (Item 59, WP 0189 00)  
 Gasket (Item 60, WP 0189 00)

**Equipment Conditions**

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

**WARNING**

The basket is heavy and requires at least four people to lift. Using less than four people may result in injury.

**REPAIR****NOTE**

Repair procedures consist of replacing lost or damaged components.

**Remove basket and curb assembly components**

1. Remove the basket (1) from the curb assembly (2).

**CAUTION**

Put chocks on sides of the basket to keep it from rolling.

2. Tip the basket (1) over on its side and remove eight screws (3), lockwashers (4) and post (5).
3. Remove two bolts (6), flat washers (7) and gaskets (8).
4. Remove the nut (9), lockwasher (10) and drain clamp (11).

**CAUTION**

When the curb is removed, keep the lid open to prevent damage to switches

5. Remove the curb assembly (2) from the drive unit (12).

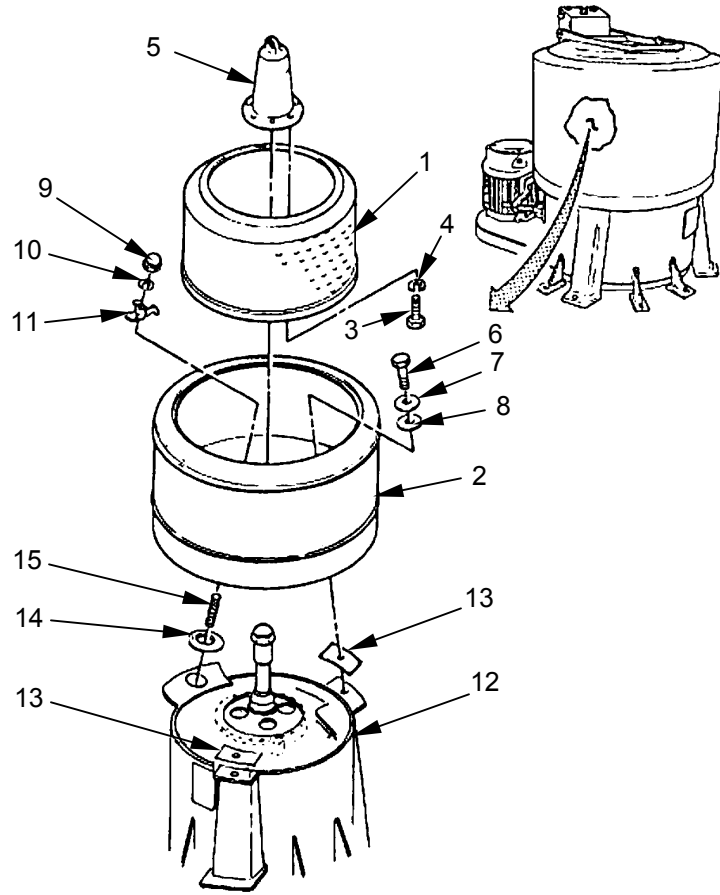
6. Remove two gaskets (13), gasket (14) and stud (15).

**Install basket and curb assembly components**

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

**REPLACE**

1. Remove unserviceable basket (1), curb assembly (2) or components as described above.
2. Install new basket (1), curb assembly (2) or components as described above.



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**INDICATOR LIGHT**  
**REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Lamp Extractor (Item 14, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Gasket (Item 59, WP 0189 00)  
Gasket (Item 60, WP 0189 00)

**Equipment Conditions**

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

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**WARNING**

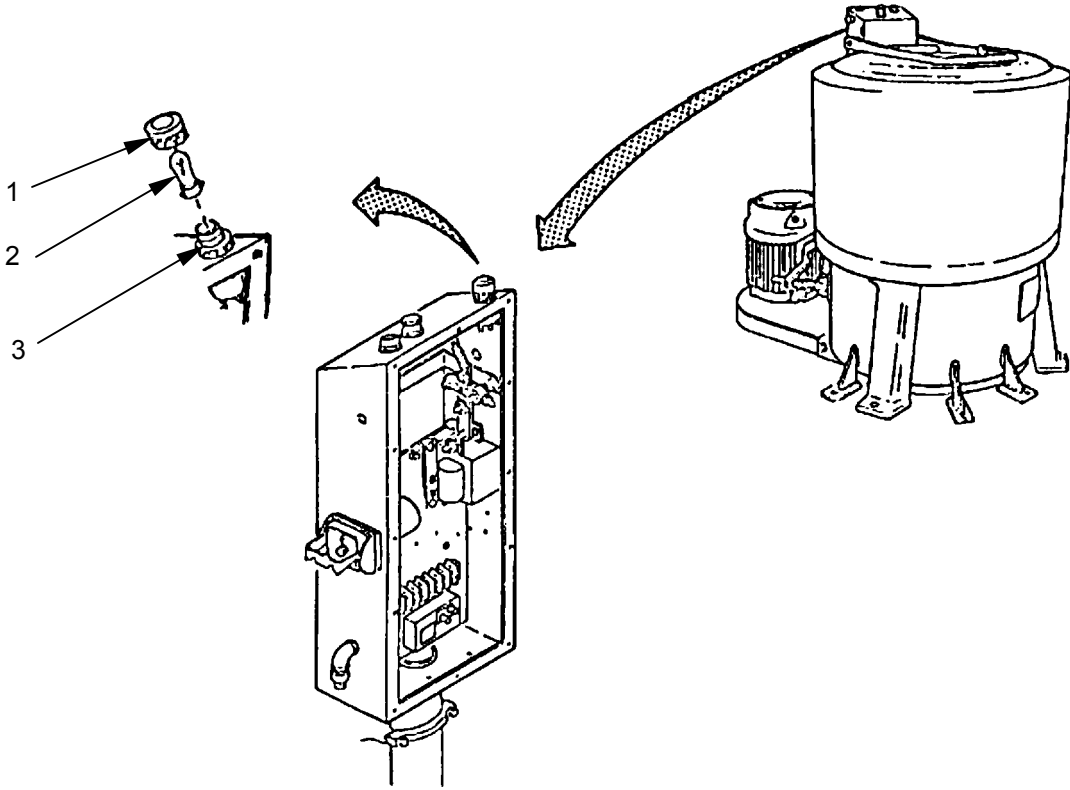
Voltage in this equipment is high enough to cause serious injury or death. Do not replace light bulb with power on.

**REPLACE****Remove indicator light**

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

**Install indicator light**

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



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**MOTOR ASSEMBLY**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Box Gasket (Item 71, WP 0189 00)  
Tags (Item 19, WP 0190 00)

**Equipment Conditions**

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

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**WARNING**

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

**REPAIR****NOTE**

Repair procedures consist of replacing lost or damaged components.

**Remove motor assembly components**

1. Remove bolt (1), lockwasher (2) and belt cover (3).
2. Remove the belt guard (4).
3. Push the motor (5) toward the extractor to compress the spring (6), mounted on belt tension bolt (7), and remove belt (8).
4. Remove four screws (9), lockwashers (10) and motor (5) from the motor mounting plate (11).
5. Remove two caps (12) and cover (13) from the conduit box (14).
6. Disconnect and tag wires.

7. Remove the nut **(15)**, gasket **(16)** and box connector **(17)** from the conduit box **(14)**.

### NOTE

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

8. Remove three screws **(18)**, lockwashers **(19)** and pulley **(20)** from the motor shaft **(5)**.
9. Mark the position of the hub **(21)** on the motor shaft **(5)**, loosen the setscrew **(22)** and remove the hub **(21)**.
10. Remove the key **(23)** from the motor shaft **(5)**.

### Install motor assembly components

1. Position the key **(23)** on the motor shaft **(5)**.
2. Install the hub **(21)** on the motor shaft **(5)** as marked at disassembly and secure with the setscrew **(22)**.
3. Install the pulley **(20)** on the hub **(21)** and secure it with three screws **(18)** and lockwashers **(19)**.
4. Position the motor **(5)** on the motor mounting plate **(11)** and secure it with four lockwashers **(10)** and bolts **(9)**.

### 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 the belt tension bolt **(7)** in the groove of the motor mounting plate **(11)**.
6. Position the belt **(8)** on the pulley **(20)** and on the pulley of the extractor drive **(24)**.
7. Install the gasket **(16)** and box connector **(17)** on the conduit box **(14)** with nut **(15)**.

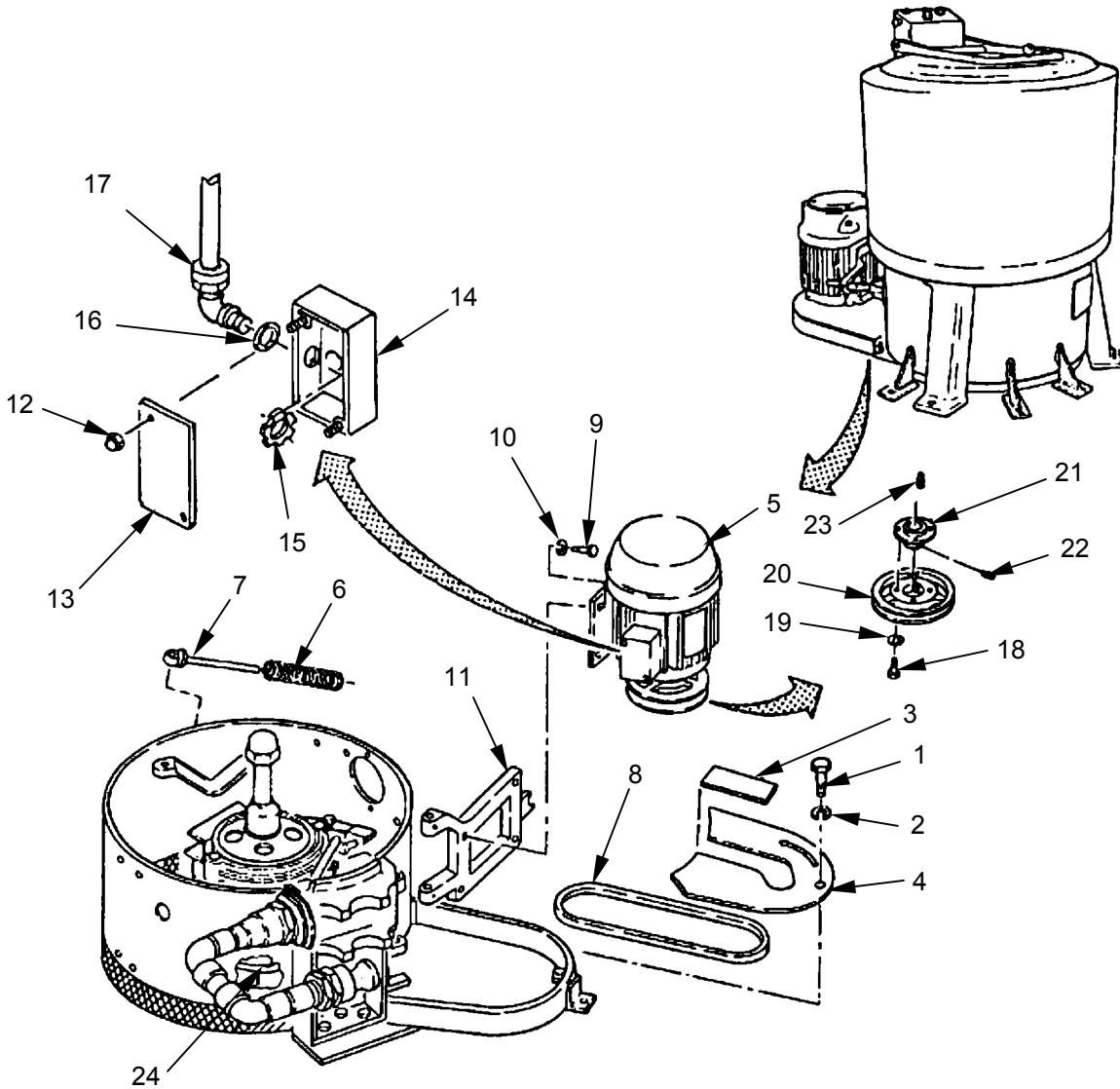
### NOTE

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 the cover **(13)** on the conduit box **(14)** and secure it with two caps **(12)**.
10. Position the belt guard **(4)** and belt cover **(3)** over the belt **(8)** and secure it with lockwashers **(2)** and bolt **(1)**.

**REPLACE**

1. Remove unserviceable motor assembly and components as described above.
2. Install new motor assembly and components as described above.



**END OF WORK PACKAGE**



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**NONMETALLIC HOSES (FUEL LINES)**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Hose(s) (Items 1, 2, 3, WP 0192 00)

Gasket (Item 60, WP 0189 00)

**Equipment Conditions**

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

**WARNING**

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

**WARNING**

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

**REPAIR****Remove hose(s)**

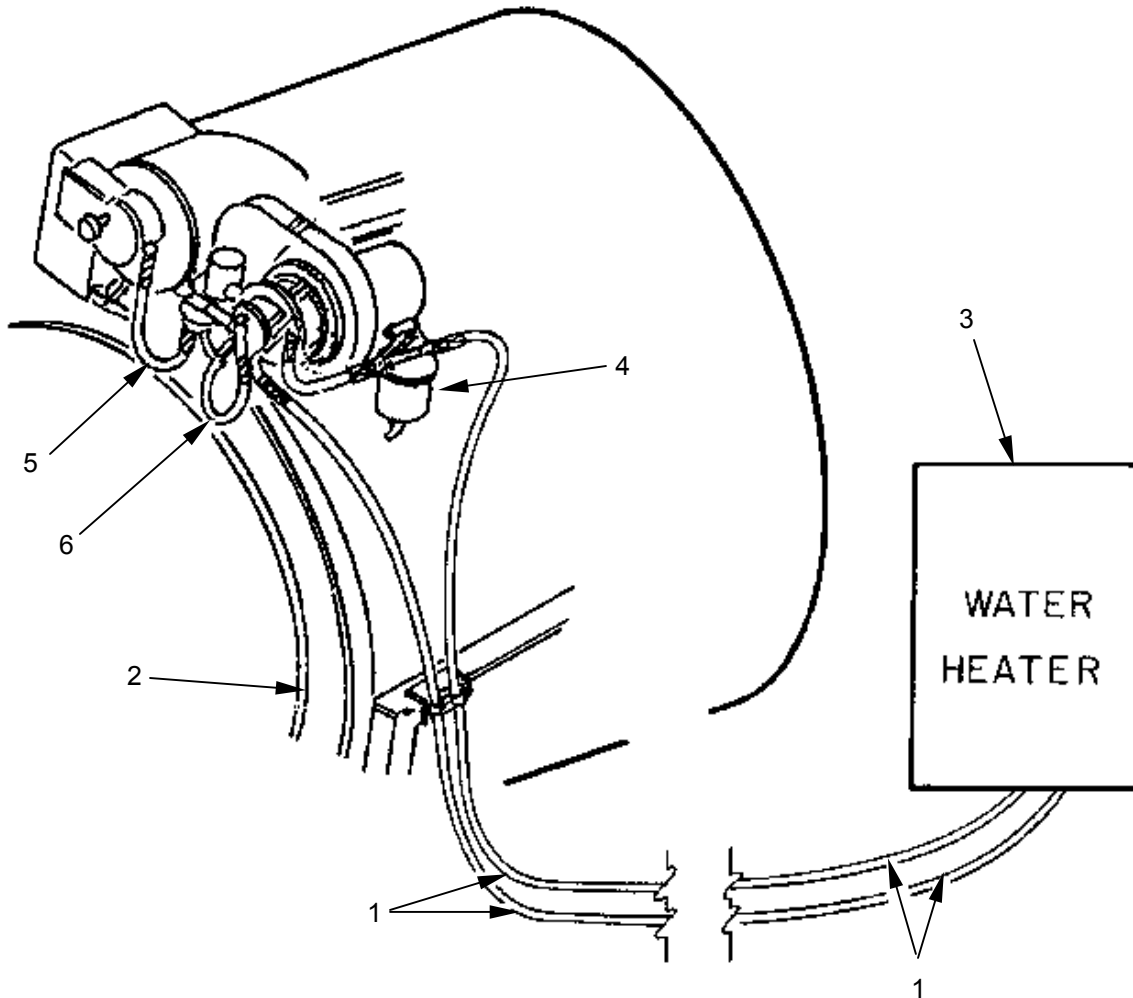
1. Remove the nonmetallic hose **(1)** as required, from the dryer **(2)**, and/or water heater **(3)**, blower to fluid filter **(4)**, burner to solenoid valve **(5)** and rotary pump to solenoid valve **(6)**.
2. Refer to WP 0073 00 for repair of hose(s).

**Install hose(s)**

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

**REPLACE**

1. Remove unserviceable hose(s) (1) as described above.
2. Install new hose(s) (1) as described above.



**END OF WORK PACKAGE**

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**MODIFIED M85 WATER HEATER**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Sealing washer (Item 64, WP 0189 00)

Tags (Item 14, WP 0190 00)

**Equipment Conditions**

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

Exhaust duct removed (TM 10-3510-222-10)

Fuel lines removed (WP 0060 00)

Piping removed (WP 0054 00)



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**WARNING**

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

**REPAIR****Remove water heater and components**

1. Disconnect the hose **(1)** from the water heater **(2)**.
2. Tag and disconnect electrical wiring (power in) from the water heater control box **(3)**.
3. Remove the nut **(4)**, sealing washer **(5)** and connector **(6)**.
4. Remove eight bolts **(7)**, lockwashers **(8)**, flat washers **(9)** and four tiedowns **(10)** from the water heater **(2)**.
5. Remove the water heater **(2)** (using a forklift) from the Laundry Unit.
6. Repair of the water heater is covered in TM 10-4520-259-13&P.

**Remove water heater and components**

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

**NOTE**

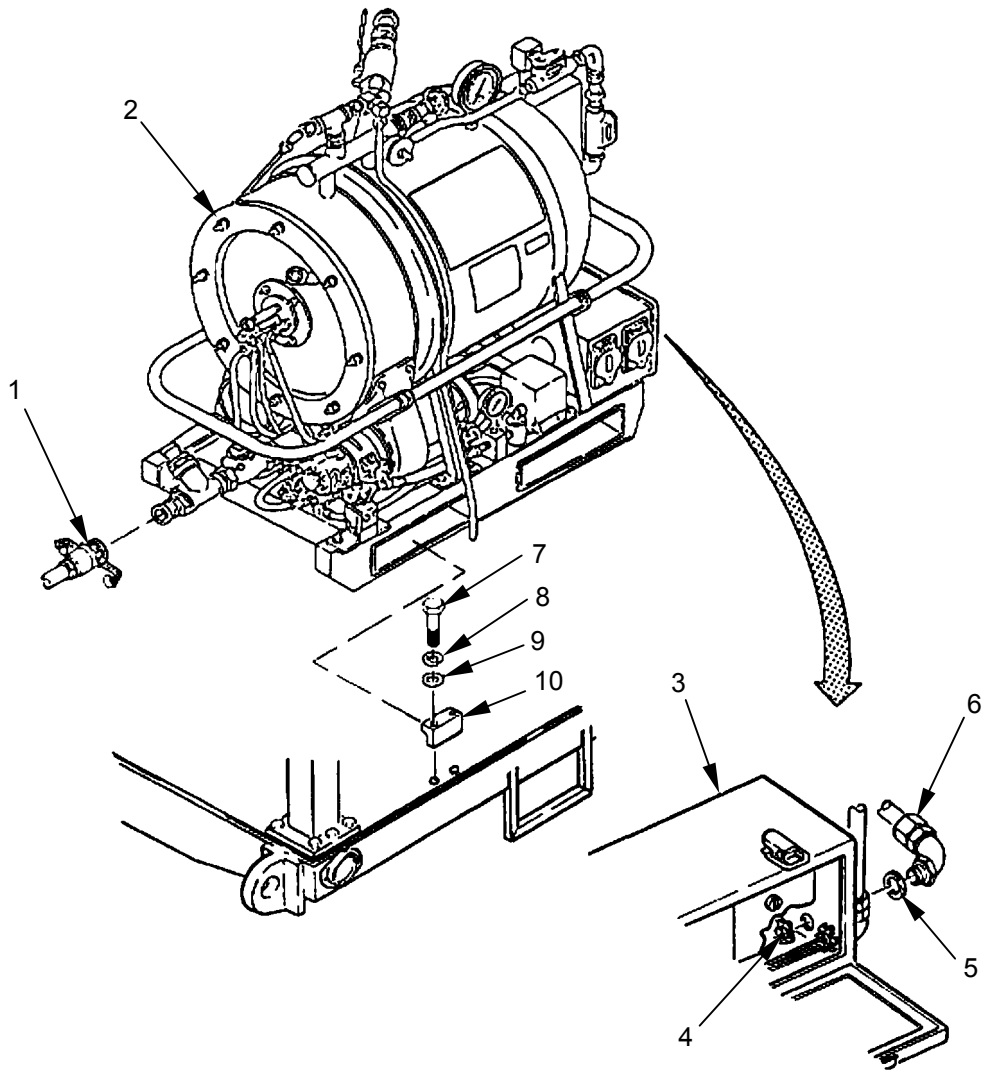
Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-1 Laundry Unit Interconnect Wiring Diagram, may be used to connect wires if tags are lost or illegible.

4. Connect electrical wiring as tagged.
5. Connect the hose **(1)** to the water heater **(2)**.
6. Install piping (WP 0063 00).
7. Connect the fuel lines, refer to TM 10-3510-222-10.
8. Install the exhaust duct, refer to TM 10-3510-222-10.

**REPLACE**

1. Remove unserviceable water heater **(2)** and components as described above.
2. Install new water heater **(2)** and components as described above.





END OF WORK PACKAGE



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**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**CLAMP ASSEMBLY**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Conditions**

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

**NOTE**

Both clamps are identical, only one is shown.

**REPAIR****NOTE**

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

**Remove upper clamp assembly (supporting pipe) and components**

1. Remove two nuts **(1)**, lockwashers **(2)**, and clamp **(3)** from rods **(4)**.
2. Remove the piping **(5)** (IAW WP 0062 00).
3. Remove the clamp **(6)** and two lockwashers **(7)**.

**Remove lower clamp (attaching to guard) and components**

1. Remove four nuts **(8)** and two lockwashers **(9)**.
2. Remove the clamp **(10)**, two rods **(4)**, clamp **(11)**, lockwashers **(12)** and two nuts **(13)**.

**Install upper clamp (supporting piping) and components**

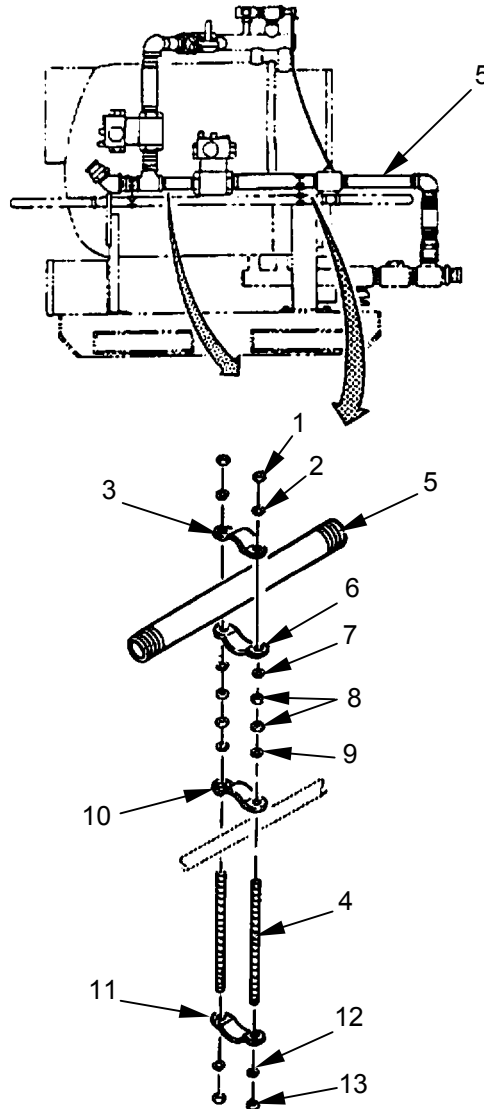
1. Install two lockwashers **(7)** and clamp **(6)** on rods **(4)**.
2. Install the piping **(5)** (IAW WP 0063 00).
3. Install the clamp **(3)**, two lockwashers **(2)** and nuts **(1)**.

**Install lower clamp (attaching to guard) and components**

1. Install two nuts (13), lockwashers (12), clamp (11), two rods (4) and clamp (10) at same position as removed.
2. Install two lockwashers (9) and four nuts (8).

**REPLACE**

1. Remove unserviceable clamp assemblies and components as described above.
2. Install new clamp assemblies and components as described above.



**END OF WORK PACKAGE**

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**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**PIPING ASSEMBLY**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP  
0188 00)  
Band-it Jr. (Item 10, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Antiseize Compound (Item 5, WP 0189 00)  
Clamp (Item 73, WP 0189 00)

**Equipment Conditions**

Laundry Unit shut down (TM 10-3510-222-10)  
Water Heater Exhaust Pipe removed  
(TM 10-3510-222-10)  
Upper clamp removed (IAW WP 0062)  
Modified M85 Water Heater drained  
(TM 10-4520-259-13&P)

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**WARNING**

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

**REPAIR / REPLACE****NOTE**

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

**NOTE**

M85-100 valves look like items (27) and (31). M-85-200 valves look like items (26) and (30).

**Remove piping components**

1. Remove the hose (1) from the quick coupling half (2).
2. Remove the hose (3) from the adapter (4).
3. Remove the hose (5) from the adapter (6).

4. Remove the coupling nut (7) from the adapter (8).
5. Remove the quick coupling half (9) from the coupling half (10).
6. Remove the quick coupling half (11) from the quick coupling half (12).
7. Remove the piping from the water heater.
8. If the water heater is being replaced, remove the coupling nut (13) and tube (14).

#### **Replace piping hardware**

1. Remove the piping.
2. Remove only as needed for replacement or repair (15, 16, 17, 18, 19, 20, 21, 22, 23 and 24).
3. Clean male threads of replaced piping with wire brush.

#### **NOTE**

Apply antiseize compound to all male threads before installing hardware.

4. Apply antiseize compound to male threads of piping.
5. Install the piping.

#### **Replace hot water ball valve, M85-100 or -200, or hot water valve, M80**

1. Remove the piping.
2. Remove the pipe (25) from the valve (26) or (27).
3. Remove the valve (26) or (27), from the pipe nipple (28).
4. Remove the elbow (4) from the valve (26) or (29).
5. Clean male threads of the pipe nipple (28) and pipe (25) with wire brush.
6. Apply antiseize compound to male threads on the pipe nipple (28) and pipe (25).
7. Install the elbow (4) on the new valve (26) or (27).
8. Install the valve (26) or (27) on the pipe nipple (28).

#### **NOTE**

The arrow on the bracket of the ball valve should be pointing down.

9. Install the pipe (25) on the valve (26) or (27).
10. Install the piping.

**Replace cold water ball valve, M85, or cold water valve, M80**

1. Remove the piping.
2. Remove the pipe (29) from the valve (30) or (31).
3. Remove the valve (30) or (31) from the pipe nipple (32).
4. Remove the elbow (6) from the valve (30) or (31).
5. Clean male threads of the pipe nipple (32) and pipe (29) with wire brush.
6. Apply antiseize compound to male threads on the pipe nipple (32) and pipe (29).
7. Install the elbow (6) on the new valve (30) or (31).

**NOTE**

The arrow on bracket of the ball valve should be pointing to the front of the Laundry Unit.

8. Install the valve (30) or (31) on pipe nipple (32).
9. Install pipe (29) on the valve (30) or (31).
10. Install piping.

**Replace quick coupling half**

1. Remove piping.
2. Remove quick coupling half (11).
3. Clean threads of bushing (33).
4. Apply antiseize compound to male threads on bushing (33).
5. Install new quick coupling half (11).
6. Install piping.

**Replace quick coupling half**

1. Remove piping.
2. Remove clamp (34) from hose (35).
3. Remove quick coupling half (9).
4. Install new quick coupling half (9).
5. Using Band-it Jr., install clamp (34) on hose (35).
6. Install piping.

**Replace quick coupling half**

Repair consists of replacing gaskets (36 and 37).

**Replace rubber hose**

1. Remove piping.
2. Remove three clamps (**38** and **34**).
3. Remove quick coupling half (**9**) from rubber hose (**35**).
4. Remove rubber hose (**35**) from adapter (**39**).
5. Cut new rubber hose (**35**) to eight inches.
6. Install rubber hose (**35**) on adapter (**39**).
7. Install quick coupling half (**9**) on hose (**35**).
8. Using Band-it Jr., install three clamps (**38** and **34**).
9. Install piping.

**Install piping components**

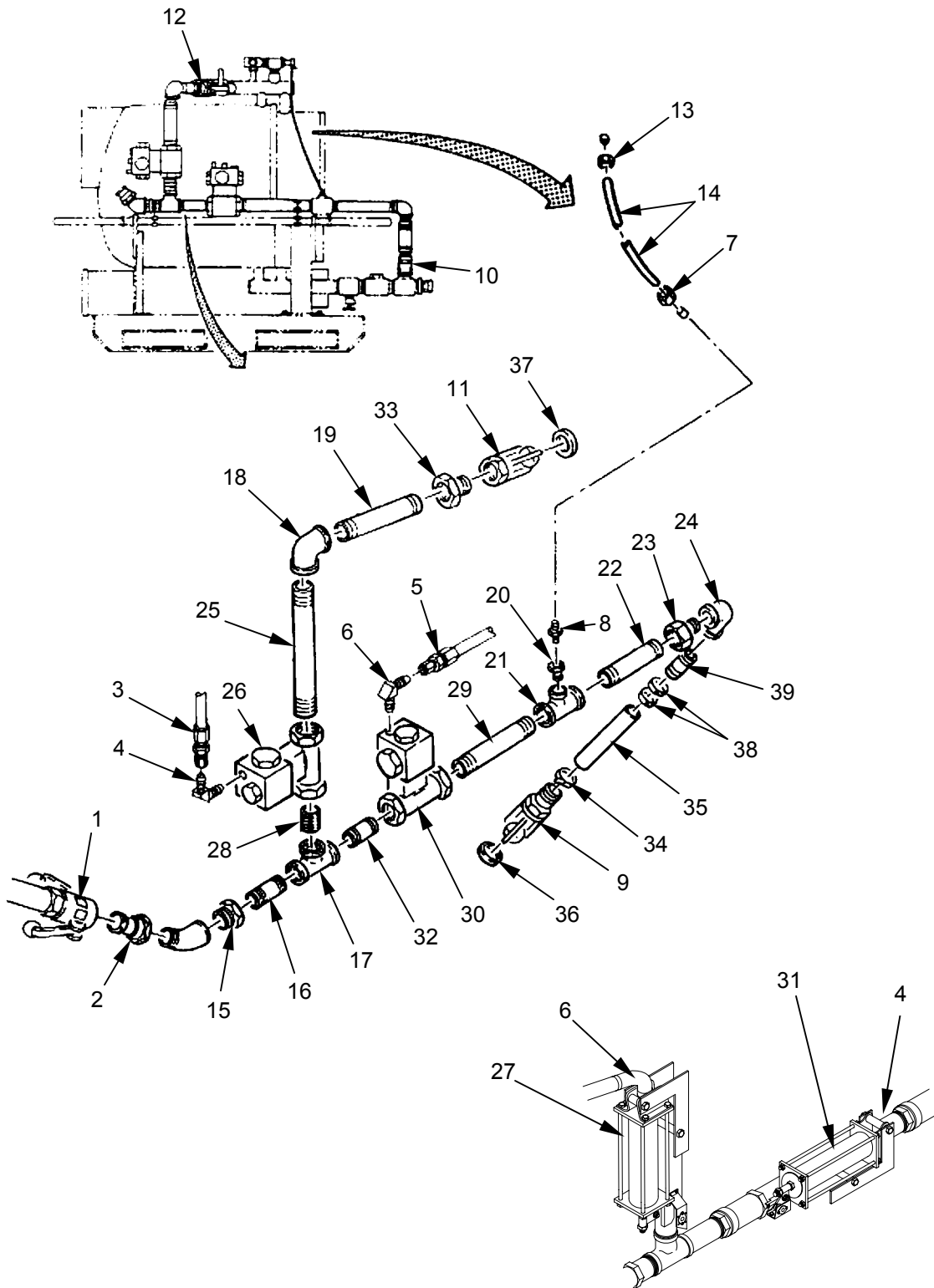
1. Position piping on water heater.
2. If water heater was replaced, install nut (**7**) and tube (**14**).

**NOTE**

Piping should be placed between the threaded rods (WP 0054 00).

3. Lock quick coupling half (**9** and **11**).
4. Install coupling nut (**7**) on adapter (**8**).
5. Install hose (**5**) on elbow (**6**).
6. Install hose (**3**) on elbow (**4**).
7. Install hose (**1**) on quick coupling half (**2**).
8. Install upper clamps (IAW WP 0061 00).
9. Install water heater exhaust pipe (TM 10-3510-222-10).





END OF WORK PACKAGE



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**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**QUICK COUPLING HALF**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Gasket (Items 7 and 8, WP 0189 00)

**Equipment Conditions**Laundry Unit shut down (TM 10-3510-222-10)  
Equipment Condition Water/drain hose removed  
(TM10-3510-222-10)

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**REPAIR / REPLACE****NOTE**

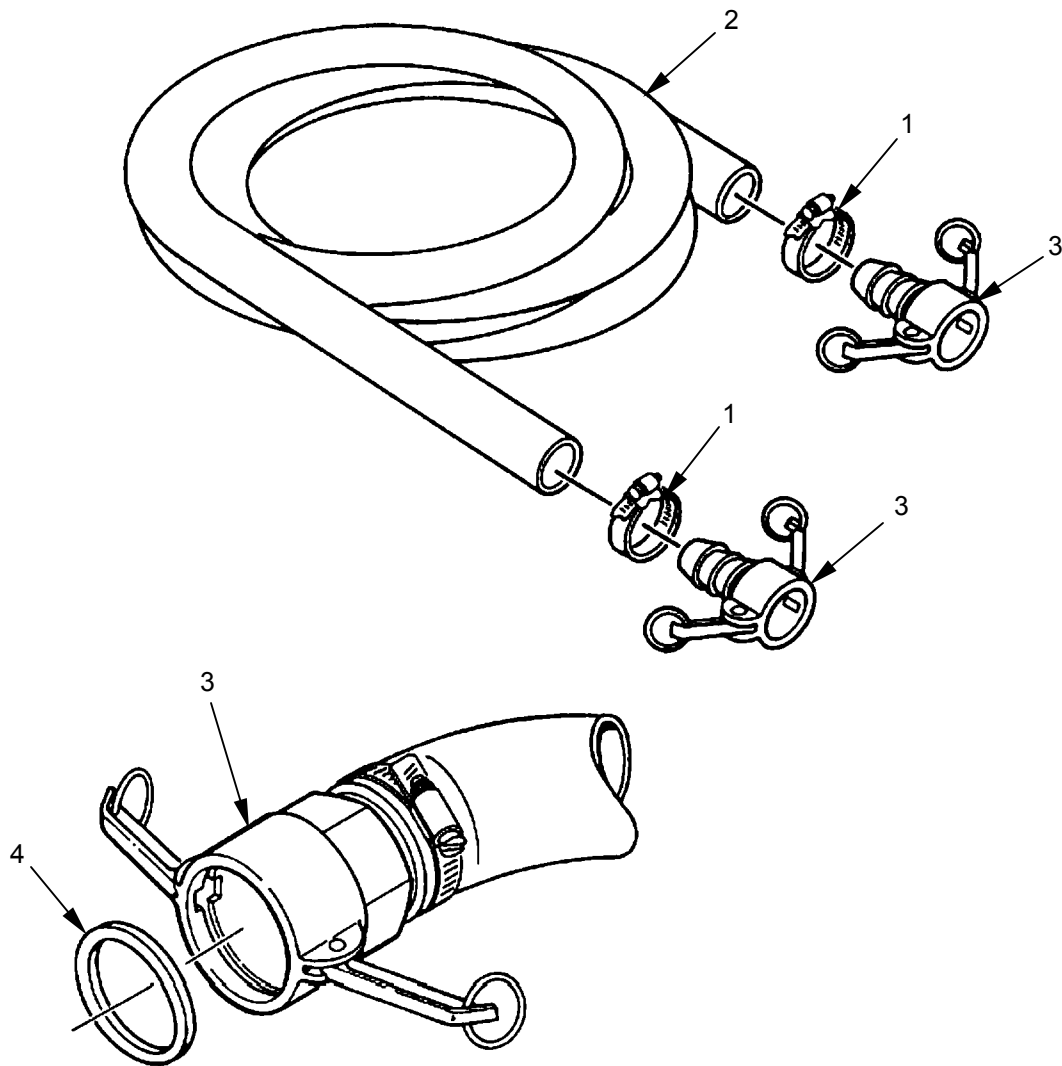
Repair on quick coupling halves is for all quick coupling halves on the Laundry Unit. Repair consists of replacing damaged or missing components of the quick coupling halves.

**Replace quick coupling halves**

1. Loosen clamp **(1)** on hose **(2)**.
2. Remove quick coupling halves **(3)** from hose **(2)**.
3. Install quick coupling halves **(3)** in hose **(2)**.
4. Tighten clamp **(1)** on hose **(2)**.

**Replace gasket**

1. Remove gasket **(4)** from quick coupling halves **(3)**.
2. Install new gasket **(4)** in quick coupling halves **(3)**.



END OF WORK PACKAGE

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**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**BRACKET ASSEMBLY (NONMETALLIC HOSE)**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Conditions**

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

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**REPAIR****Remove bracket assembly and components**

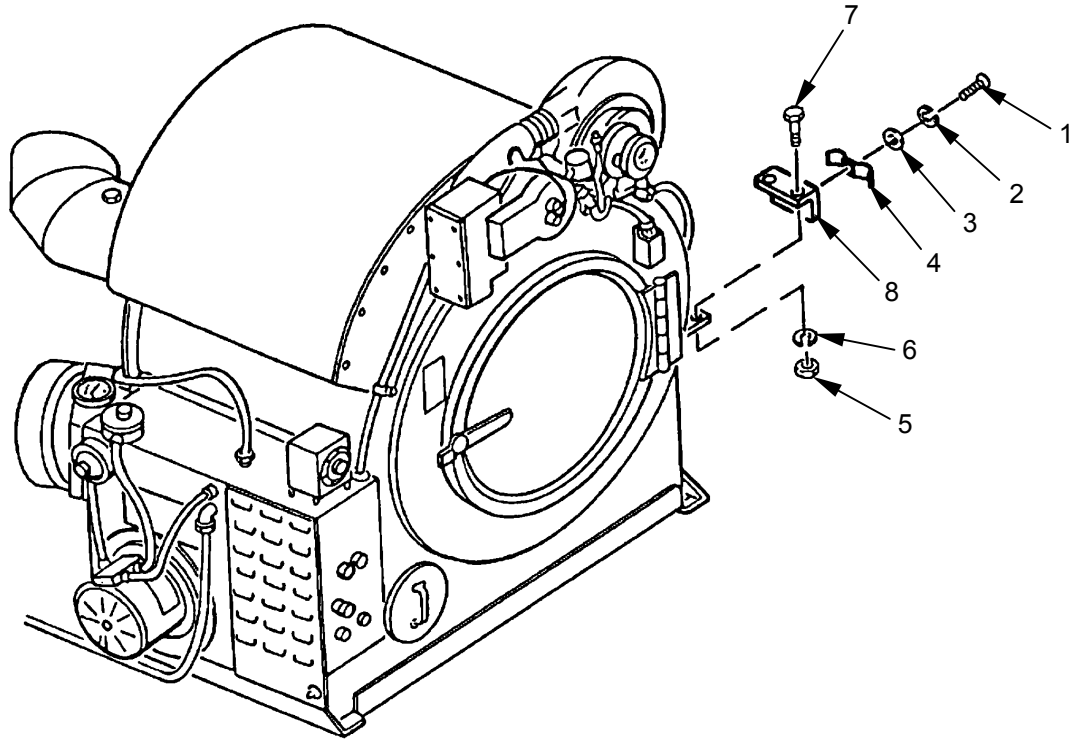
1. Remove the screw (1), lockwashers (2), flat washers (3) and clamp (4).
2. Remove two nuts (5), lockwashers (6), screws (7) and bracket (8).

**NOTE**

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

**Install bracket assembly and components**

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



END OF WORK PACKAGE

**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**FLUID FILTER**  
**REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Gasket (Item 30, WP 0189 00)

Antiseize Tape (Item 20, WP 0190 00)

Parts Kit (Item 31, WP 0189 00)

**Equipment Conditions**

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

Nonmetallic hoses (fuel lines) disconnected from filter (WP 0060 00)

**REPAIR****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.

**Remove fluid filter and components**

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

**Disassemble fluid filter**

1. Remove four screws **(13)**.
2. Remove the retaining ring **(14)**, bowl **(15)** and gasket **(16)** from the filter head **(17)**.

**Assemble fluid filter**

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

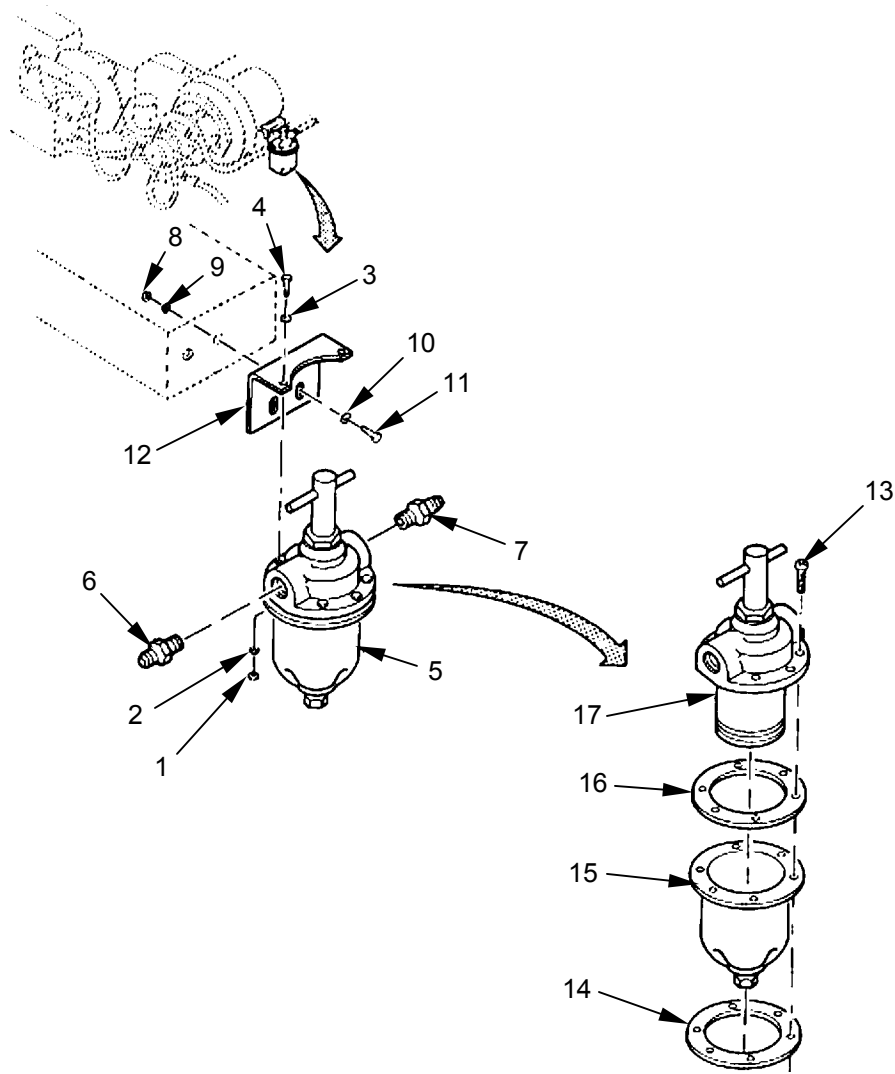
**Install fluid filter and components**

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

**REPLACE**

1. Remove unserviceable fluid filter and components as described above.
2. Install unserviceable fluid filter and components as described above.





END OF WORK PACKAGE



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**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**ADAPTER ASSEMBLY**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Gasket (Item 30, WP 0189 00)

Compound, Antiseize (Item 5, WP 0190 00)

Parts Kit (Item 31, WP 0189 00)

**Equipment Conditions**

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

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**REPAIR**

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**WARNING**

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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.

**Disassemble adapter assembly**

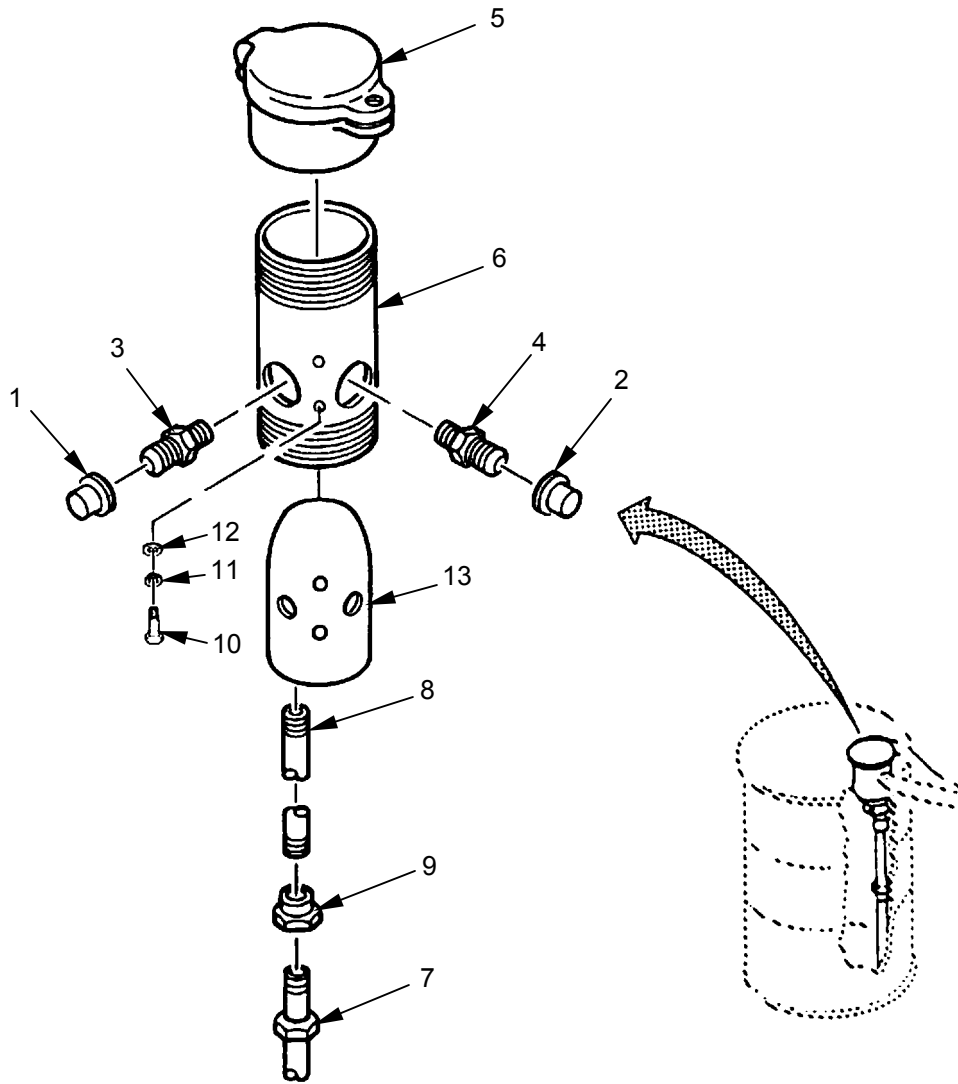
1. If installed, remove caps **(1 and 2)**.
2. Remove connectors **(3 and 4)**.
3. Unscrew the fill box **(5)** from the nipple **(6)**.
4. Remove pipe **(7)**.
5. Remove pipe **(8)**.
6. Remove the coupling **(9)** from the pipe **(8)**.
7. Remove two screws **(10)**, lockwashers **(11)**, flat washers **(12)** and the block **(13)** from the nipple **(6)**.

**Assemble adapter assembly**

1. Position the block **(13)** on the nipple **(6)** and secure it with two flat washers **(12)**, lockwashers **(11)** and screws **(10)**.
2. Apply antiseize compound to the threads of the pipe **(8)** and install it on the block **(13)**.
3. Connect the coupling **(9)** to the pipe **(8)**.
4. Install the pipe **(8)**.
5. Install the extension assembly **(7)**.
6. Apply antiseize compound to the top threads of the nipple **(6)** and install the filler box **(5)** on the nipple.
7. Apply antiseize compound to smaller threads of connectors **(3 and 4)** and install them on the block **(13)**.
8. If available, install caps **(1 and 2)**.

**REPLACE**

1. Disassemble and remove unserviceable adapter assembly as described above.
2. Assemble and install new adapter assembly as described above.



END OF WORK PACKAGE



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**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**BLOWER ASSEMBLY**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP  
0188 00)

**Personnel Required**

Two

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Conditions**

Laundry Unit shut down (TM 10-3510-222-10)  
Remove Nonmetallic Hoses (Fuel Lines)  
(WP 0060 00)

---

**REPAIR****WARNING**

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

**Remove blower assembly and components**

1. Remove two screws **(1)** and plate **(2)** from the motor **(3)**.

**NOTE**

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

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

**NOTE**

Repair consists of replacement of the fan and motor (WP 0088 00), shutter assembly (WP 0069 00) and repair of the rotary pump (WP 0071 00).

**Install blower assembly and components**

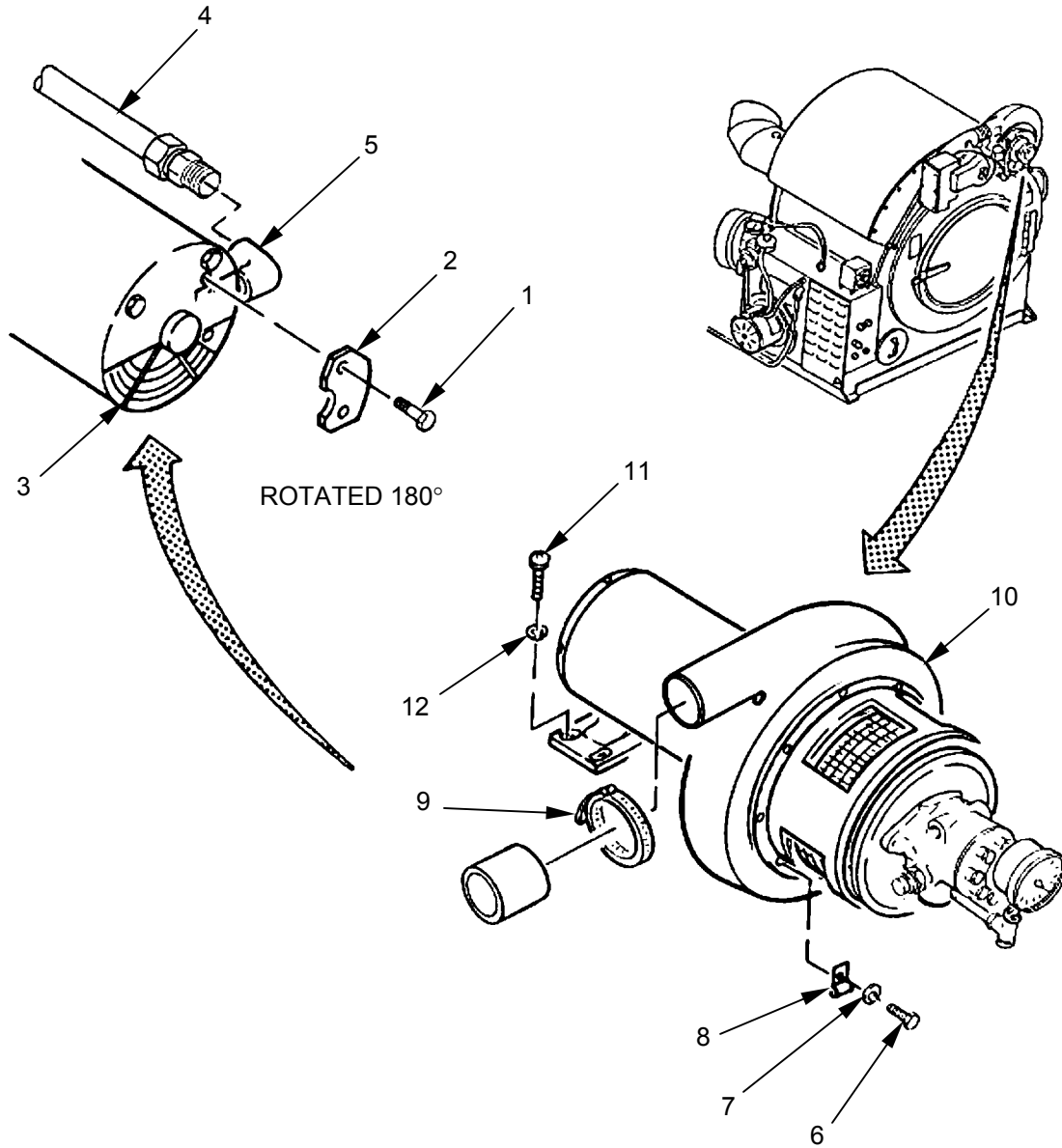
1. Position the blower assembly **(10)** on the mounting bracket of the dryer and secure it with four screws **(11)** and lockwashers **(12)**.
2. Tighten the hose clamp **(9)**.
3. Feed the wires through the elbow **(5)** into the motor **(3)**.
4. Install the elbow **(5)** and nut **(4)** onto the motor **(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.

5. Connect the wires as tagged.
6. Position the conduit on the clamp **(8)** and install the clamp with lockwasher **(7)** and screw **(6)**.





END OF WORK PACKAGE



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**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**SHUTTER ASSEMBLY**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Conditions**Dryer shut down (TM 10-3510-222-10)  
Rotary Pump removed (WP 0071 00)

---

**REPAIR****NOTE**

Repair procedures consist of replacing lost or damaged components.

**Remove shutter assembly and components**

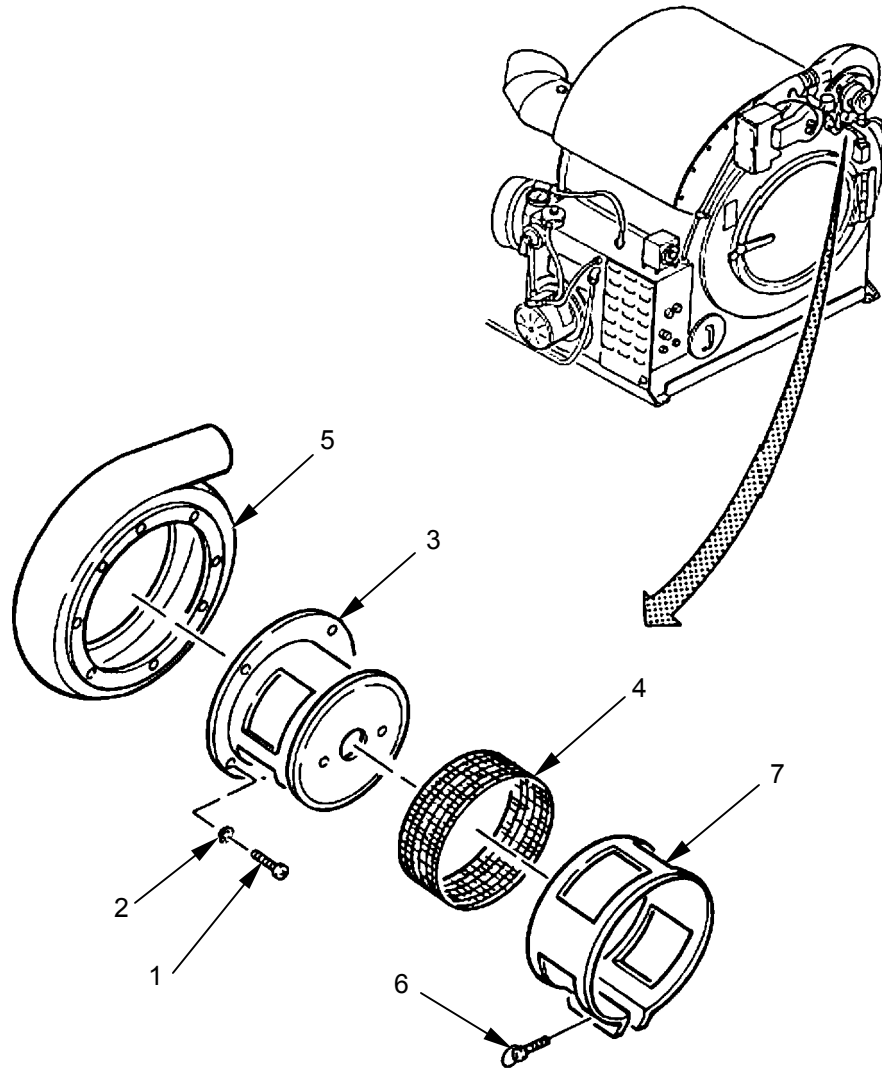
1. Remove four screws **(1)**, lockwashers **(2)** and adapter **(3)** from the blower assembly **(4)**.
2. Loosen screw **(5)** and remove the cover **(6)** from the adapter **(3)**.
3. Remove the screen **(7)**.

**Install shutter assembly and components**

1. Position the screen **(6)** into the adapter **(3)**.
2. Position the adapter **(3)** on the blower assembly **(4)** and secure it with four lockwashers **(2)** and screws **(1)**.
3. Position the cover **(6)** on the adapter **(3)**.
4. Adjust the cover **(6)** for maximum open position on the adapter **(3)** and tighten screw **(5)**.
5. Install the rotary pump (WP 0071 00).

**REPLACE**

1. Remove unserviceable shutter assembly and components as described above.
2. Install new shutter assembly and components as described above.



END OF WORK PACKAGE

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**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**AIR SHUTTER AND PLENUM ASSEMBLY**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Gasket (Item 63, WP 0190 00)  
Sealing Compound (Item 6, WP 0190 00)

**Equipment Conditions**

Dryer shut down (TM 10-3510-222-10)  
Gas-Oil Combustion Burner removed (WP 0072 00)  
Transformer and Box removed (WP 0075 00)  
Solenoid Nonmetallic Hose Valve removed (WP 0073 00)

---

**REPAIR****Remove air shutter and plenum components**

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

**NOTE**

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

**Install air shutter and plenum components**

1. Position the gasket **(15)** and plenum **(14)** on the mounting studs **(16)** and secure with six lockwashers **(13)** and nuts **(12)**.
2. Install the hose **(11)** and two clamps **(9 and 10)**.

3. Position the shutter assembly **(8)** on the air nozzle **(7)**.

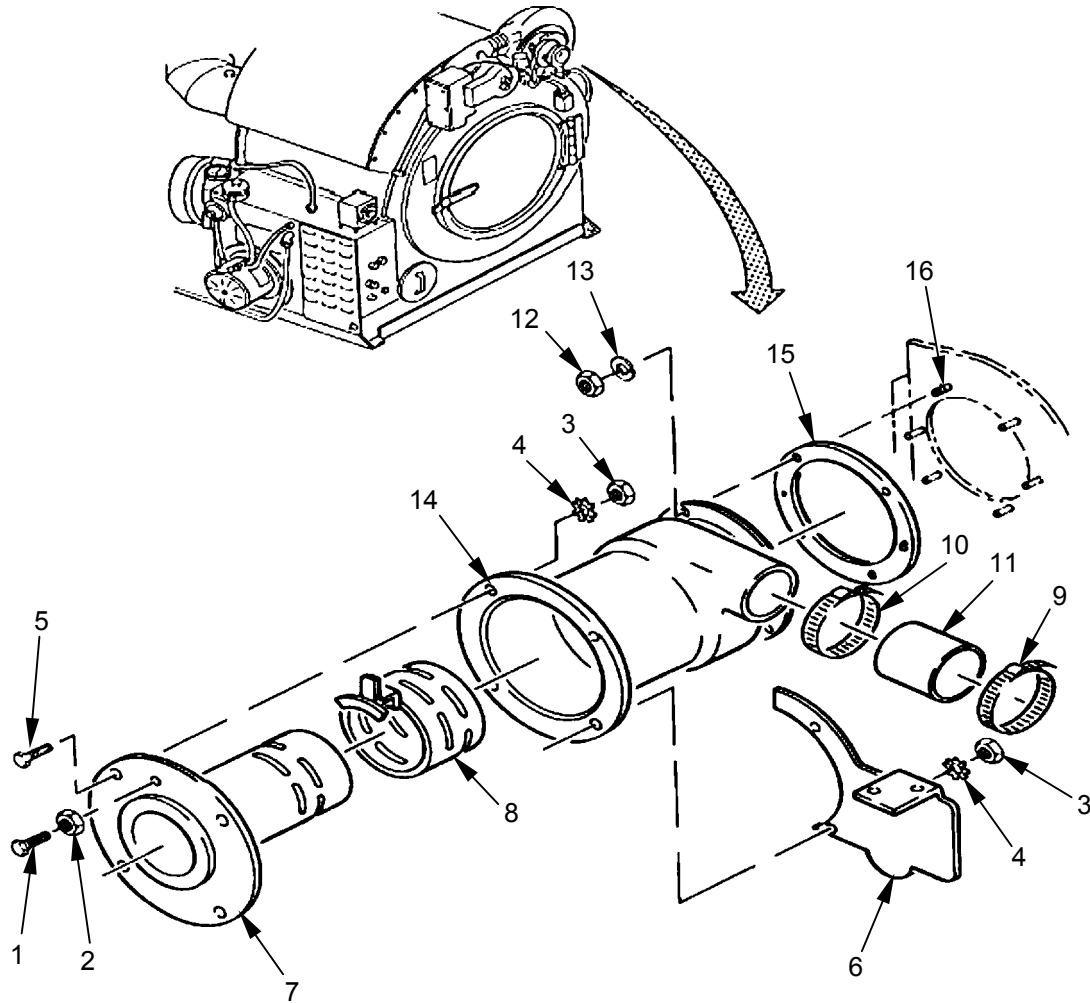
### NOTE

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

4. Position the air nozzle **(7)** in the plenum **(14)**.
5. Position the bracket **(6)** on the plenum **(14)** and install four screws **(5)**, lockwashers **(4)** and nuts **(3)**.
6. Thread the nut **(2)** approximately halfway up the screw **(1)** and install the screw in the shutter assembly **(7)**, tightening it sufficiently to keep the air shutter **(8)** from turning due to vibration.
7. When the screw **(1)** is sufficiently tight, turn the nut **(2)** to lock the screw.
8. Install the solenoid nonmetallic hose valve (WP 0073 00).
9. Install the gas-oil combustion burner (WP 0072 00).
10. Install the transformer and box (WP 0075 00).

### REPLACE

1. Remove unserviceable air shutter and plenum components as described above.
2. Install new air shutter and plenum components as described above.



END OF WORK PACKAGE





**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**ROTARY PUMP**  
**ADJUST, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)

**Equipment Conditions**

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

Gas-Oil Combustion Burner removed  
(WP 0072 00)Nonmetallic Hoses (fuel lines) disconnected from  
Rotary Pump Assembly (WP 0060 00)**REPLACE****WARNING**

Fuel is toxic and flammable. Avoid contact and breathing of fuel vapors. Death or serious injury may result to personnel. If fuel is spilled accidentally, wipe up spills as much as possible to avoid fire hazard.

**Remove unserviceable rotary pump and components**

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

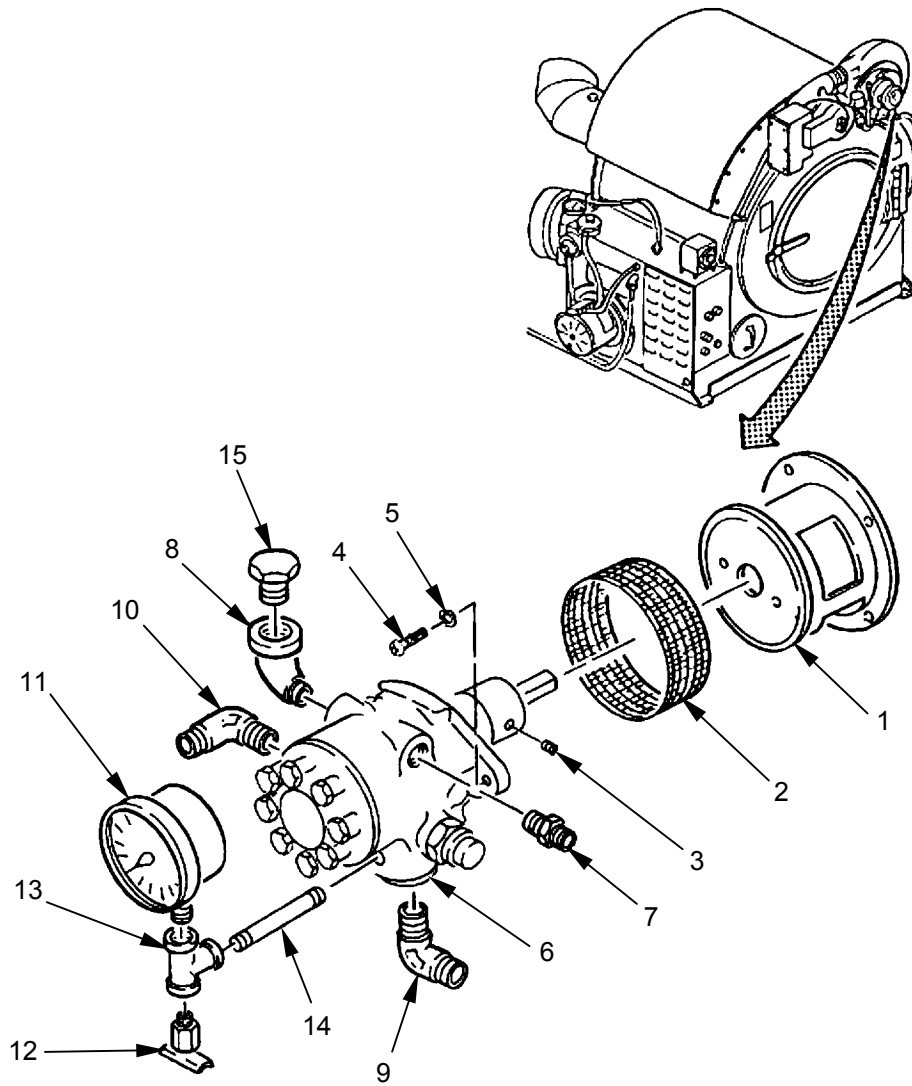
**Install new rotary pump and components**

1. Apply antiseize compound to all male threads of fittings.
2. Install the nipple **(14)** and tee **(13)** on the rotary pump assembly **(6)**.
3. Install the gage **(11)** on the tee **(13)**.
4. Install the drain cock **(12)** on the tee **(13)**.

5. Install elbows (**8**, **9** and **10**) on the rotary pump assembly (**6**).
6. Install the adapter (**7**).
7. Position the rotary pump (**6**) on the blower assembly and secure it with two lockwashers (**5**) and screws (**4**).
8. Tighten the setscrew (**3**) and adjust the screen (**2**).
9. Connect the nonmetallic hoses to the rotary pump (WP 0060 00).

#### **ADJUST**

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



ROTATED FOR CLARITY

END OF WORK PACKAGE



**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**GAS-OIL COMBUSTION BURNER**  
**REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)

**Equipment Conditions**

Dryer shut down (TM 10-3510-222-10)  
 Gas-Oil Combustion Burner removed (WP 0072 00)  
 Nonmetallic Hoses (fuel lines) disconnected from Rotary Pump Assembly (WP 0060 00)  
 Solenoid Nonmetallic Hose Valve removed (WP 0073 00)  
 Transformer and Box removed (WP 0075 00)

**REPAIR****WARNING**

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

**Remove gas-oil combustion burner and components**

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

**NOTE**

Repair of burner assembly consists of replacement of solenoid nonmetallic hose valve (WP 0073 00) ignition cable, sight eye and piping, electrode and nozzle assembly (WP 0072 00).

**Install gas-oil combustion burner and components**

1. Position gasket **(8)** on the studs of the dryer.
2. Position the burner assembly **(4)** on the dryer, making sure hose **(3)** mates with the air duct on the burner assembly. Secure it with six lockwashers **(6)** and nuts **(5)**, using the top nut to secure the ground strap **(7)** to the burner assembly **(4)**.
3. Tighten two clamps **(2)**.
4. Install the transformer and box (WP 0075 00).
5. Install the solenoid nonmetallic hose valve (WP 0073 00).
6. Connect the nonmetallic hoses (fuel lines) (WP 0060 00).

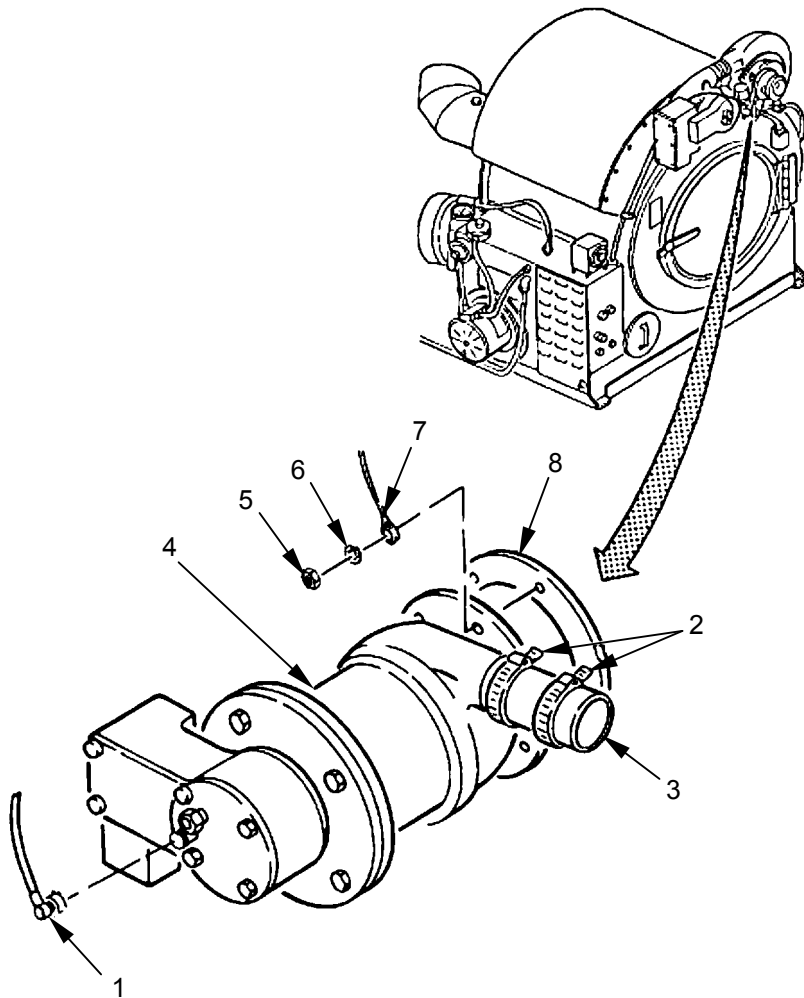
**NOTE**

The flame control is fragile. Do not force it on or overtighten.

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

**REPLACE**

1. Remove unserviceable gas-oil combustion burner and components as described above.
2. Install new gas-oil combustion burner and components as described above.



END OF WORK PACKAGE





**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85, M85-100, M85-200**  
**(NSN 3510-01-222-9301 (M85))**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**SOLENOID VALVE, NONMETALLIC HOSE**  
**REMOVE, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

Antiseize Compound (Item 5, WP 0190 00)

**Equipment Condition**

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

Nonmetallic Hoses (Fuel Lines) disconnected  
(WP 0060 00)

Transformer Cover removed (WP 0075 00)

**WARNING**

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

**WARNING**

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

**REMOVE**

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

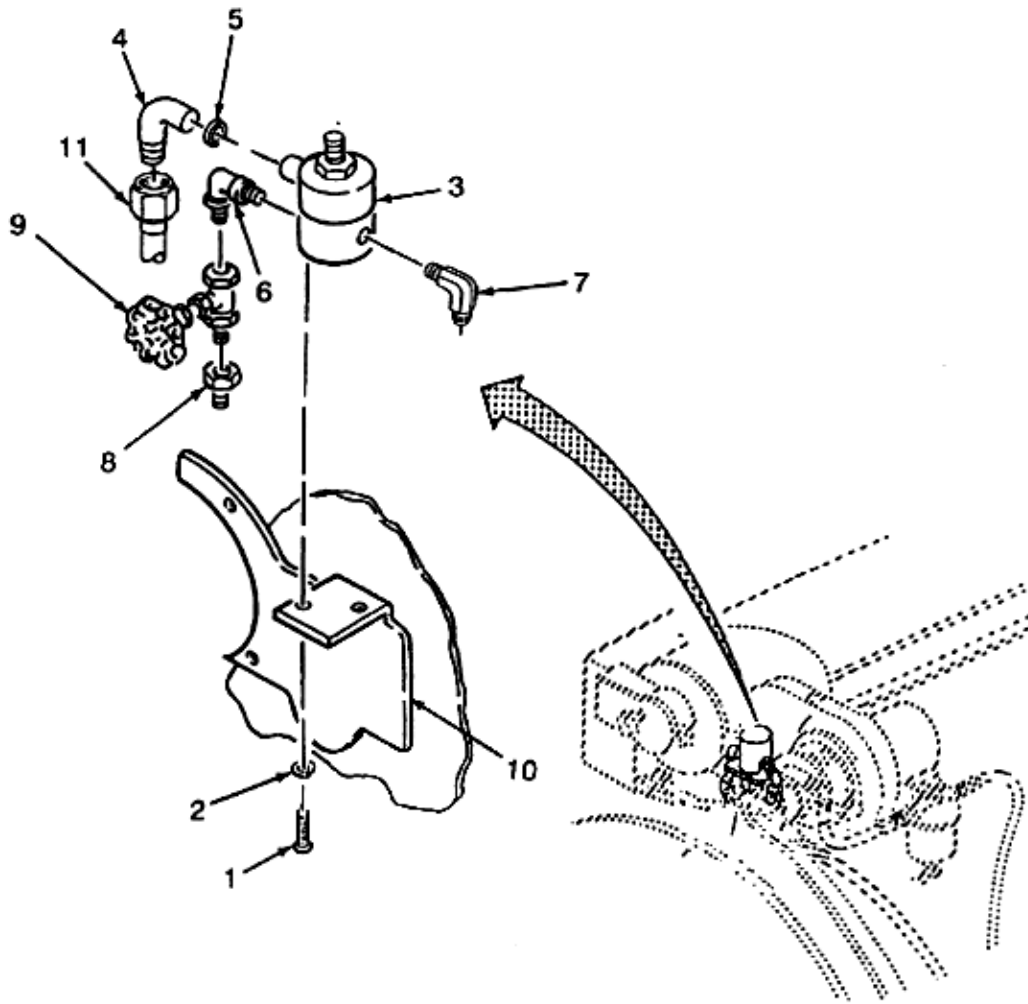
**INSTALL**

1. Apply antiseize compound to the threads of elbows **(6 and 7)** and install them on solenoid valve **(3)**.
2. Apply antiseize compound to all male fittings and install the elbow **(6)** and connector **(8)** on the shutoff valve **(9)**.
3. Connect the elbow **(6)** to the solenoid **(3)**.
4. Position the solenoid **(3)** on the bracket **(10)** and secure it with two lockwashers **(2)** and screws **(1)**.
5. Position the gasket **(5)** and elbow **(4)** on the 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 the wires of the solenoid through the elbow **(4)** and conduit **(11)**. Connect the conduit (WP 0075 00) to the transformer box and connect the wires as tagged.
7. Install the nonmetallic hoses (fuel lines) (WP 0060 00).
8. Install the transformer cover (WP 0075 00).



END OF WORK PACKAGE



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**IGNITION CABLES, SIGHT EYE ASSEMBLY, FUEL PIPING, ELECTRODES AND NOZZLES**  
**REPAIR, REPLACE, ADJUST**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Antiseize Tape (Item 20, WP 0190 00)  
 Antiseize Compound (Item 5, WP 0190 00)

**Equipment Conditions**

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

**REPAIR****WARNING**

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

**Remove ignition cables, sight eye assembly, fuel piping, electrodes and nozzles and components**

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

**NOTE**

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

**Install ignition cables, sight eye assembly, fuel piping, electrodes and nozzles and components**

1. Install elbow **(25)** on base **(10)** using teflon tape on the male pipe threads.
2. Install the adapter **(23)** on the pipe **(24)**.
3. Install nozzle **(22)** on adapter **(23)**.
4. Position the electrodes **(15)** in the base **(10)** and tighten the setscrews **(21)** hand tight.
5. Go to the adjustment procedure to correctly position the electrodes **(15)** in the base **(10)**.
6. Connect the female terminal **(26)** of cable **(13)** to the transformer contact **(16)** and cable **(14)** to contact **(17)**.
7. When the electrodes **(15)** are correctly positioned in the base **(10)**, position the cables **(13 and 14)** on the electrodes **(15)** and install nuts **(11 and 12)** on each electrode.
8. Position the burner base **(10)** on the shutter assembly **(20)** and install three lockwashers **(19)** and screws **(18)**.
9. Position the cover **(9)** on the base **(10)** and install six lockwashers **(8)** and screws **(7)**.
10. Install the gasket **(3)**, window **(2)** and cap **(1)** on the pipe **(5)**.

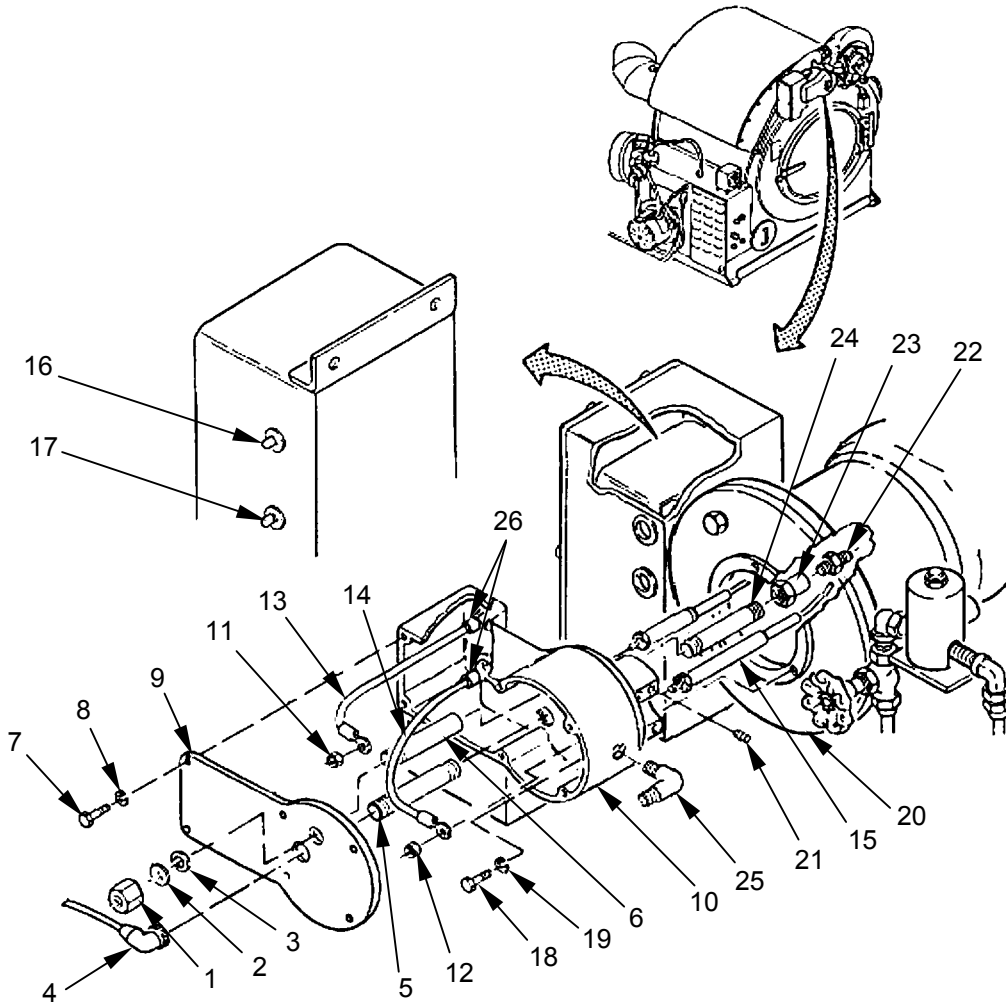
**CAUTION**

The flame scanner is fragile. Do not force on or over tighten.

11. Connect the flame scanner **(4)** on the sight eye **(6)** finger tight.

**REPLACE**

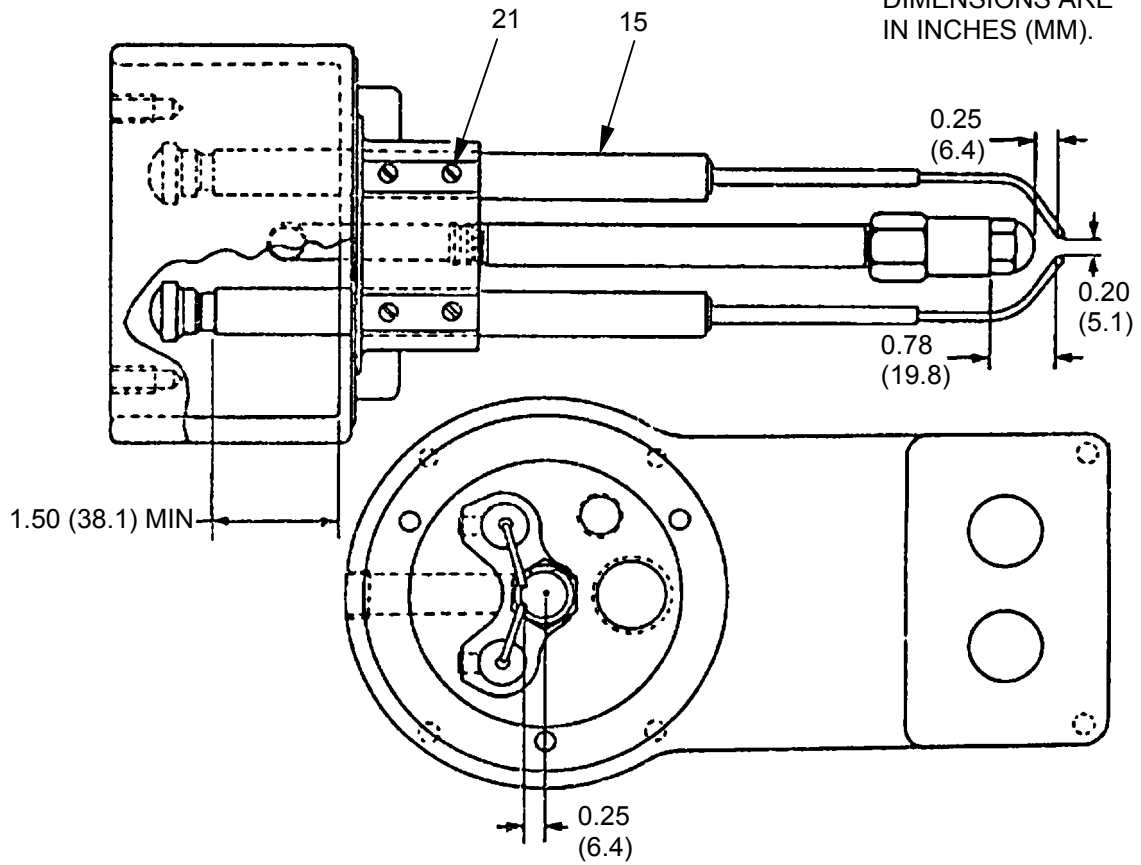
1. Remove unserviceable ignition cables, sight eye assembly, fuel piping, electrodes and nozzles and components as described above.
2. Install new ignition cables, sight eye assembly, fuel piping, electrodes and nozzles and components as described above.



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

NOTE:

DIMENSIONS ARE  
IN INCHES (MM).



Ignition Cables, Sight Eye, Nozzle, Fuel Piping and Electrodes  
(Sheet 2 of 2)

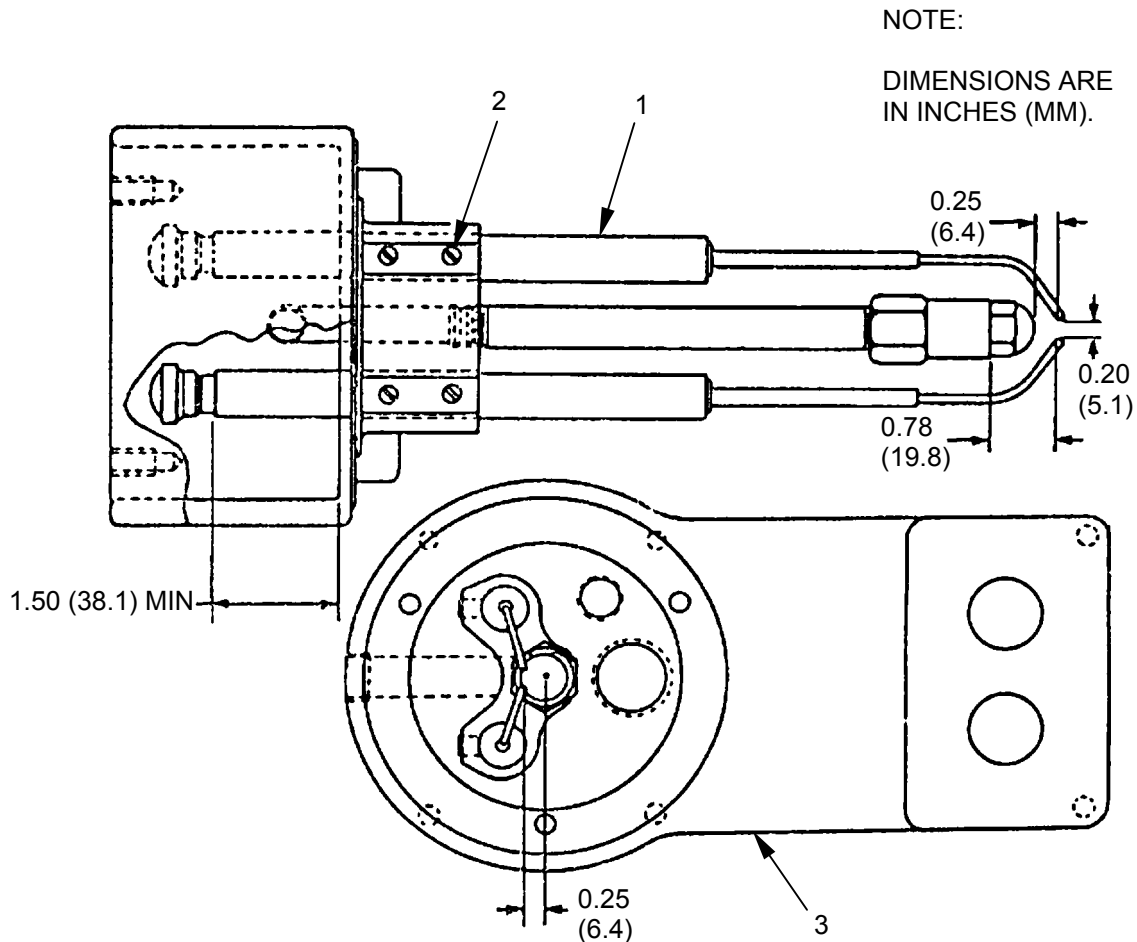


## ADJUST

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



END OF WORK PACKAGE



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**TRANSFORMER ASSEMBLY AND BOX ASSEMBLY**  
**REPAIR, REPLACE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Adhesive (Item 1, WP 0190 00)  
 Grommet (Item 72, WP 0189 00)  
 Blind Nut (Item 75, WP 0189 00)  
 Blind Nut (Item 76, WP 0189 00)  
 Tags (Item 19, WP 0190 00)

**Equipment Conditions**

Ignition Cables removed (WP 0074 00)  
 Solenoid wires removed from box (WP 0073 00)  
 Dryer door switch wires removed from box (WP 0075 00)  
 Motor wires removed from box (WP 0059 00)

**REPAIR****WARNING**

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

**Remove transformer assembly and box assembly components**

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

**NOTE**

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

**Install transformer assembly and box assembly components**

1. If removed, install blind nuts **(24)** and grommets **(23)**.
2. Install the box **(9)** and secure it with two screws **(20)**, lockwashers **(21)** and nut **(22)**.
3. Position the gasket **(19)** and elbow **(18)** on the box **(9)** and secure it with nut **(17)**.
4. Install three gaskets **(16)** and adapters **(15)** on the box **(9)** and secure it with nuts **(14)**.
5. Position the bracket **(13)** on the transformer **(8)** and install two screws **(12)**.
6. Position the bracket **(11)** on the transformer **(8)** and install two screws **(10)**.
7. Position the transformer **(8)** in the box **(9)**, and install screw **(4)**, lockwasher **(5)**, screw **(6)** and lockwasher **(7)**.

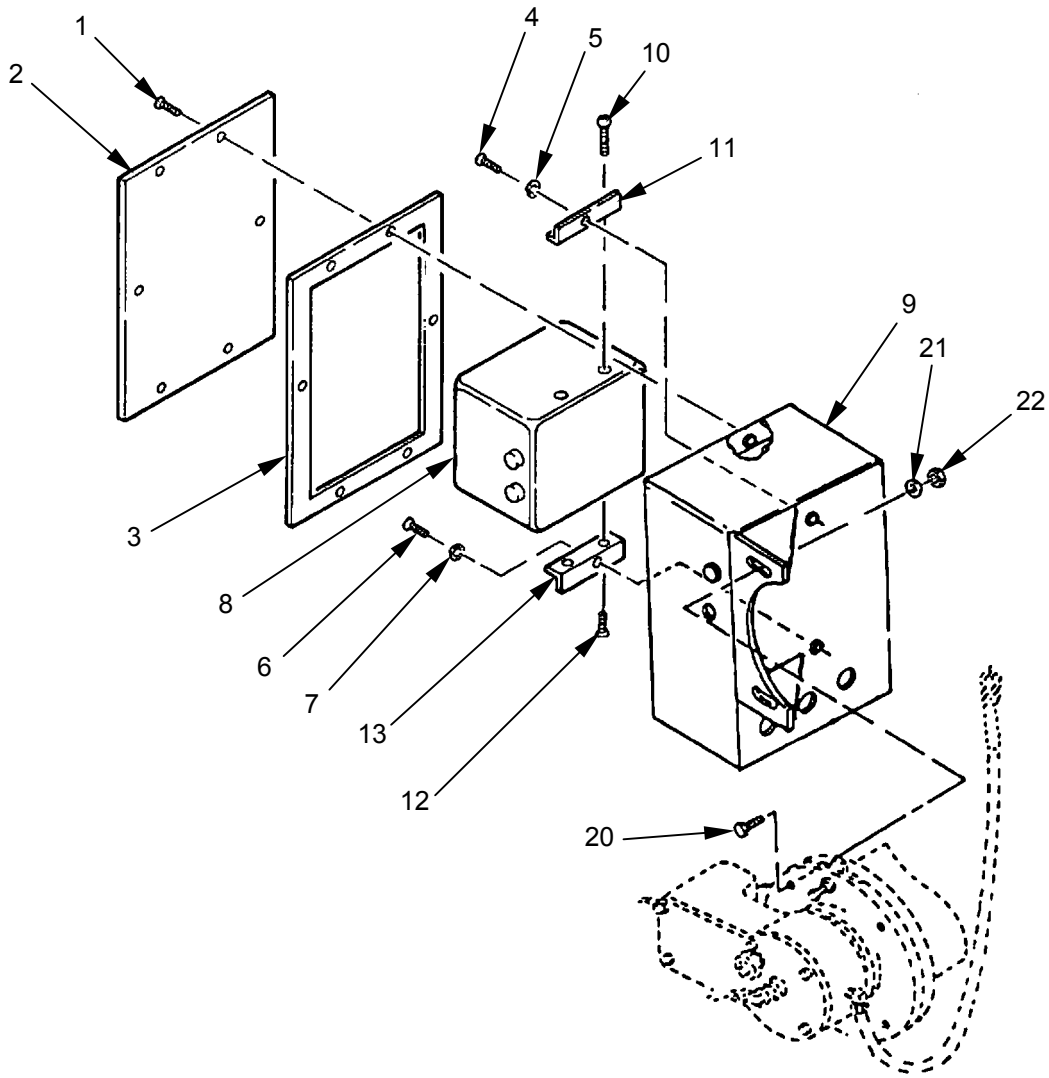
**NOTE**

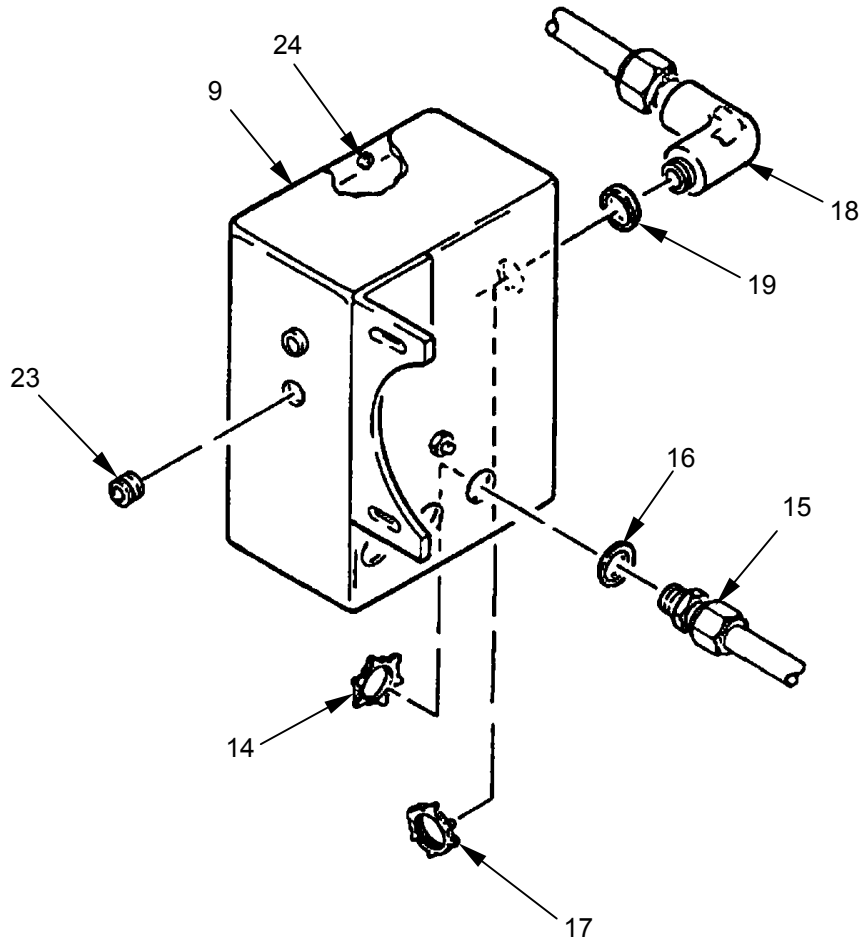
Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram (see WP 00198 00), may be used to connect wires if tags are lost or illegible.

8. Connect the transformer wires as tagged.
9. Install the door switch wires (WP 0075 00).
10. Install the solenoid wires (WP 0073 00).
11. Install the motor wires (WP 0059 00).
12. Install the ignition cables (WP 0074 00).
13. If required, position the gasket **(3)** and secure it with adhesive.
14. Install the cover **(2)** on the front of the box **(9)** and install six screws **(1)**.

**REPLACE**

1. Remove unserviceable transformer assembly and box assembly as described above.
2. Install new transformer assembly and box assembly as described above.





END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**SPEED REDUCER ASSEMBLY**  
**ADJUST**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Conditions**

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

---

**ADJUST**

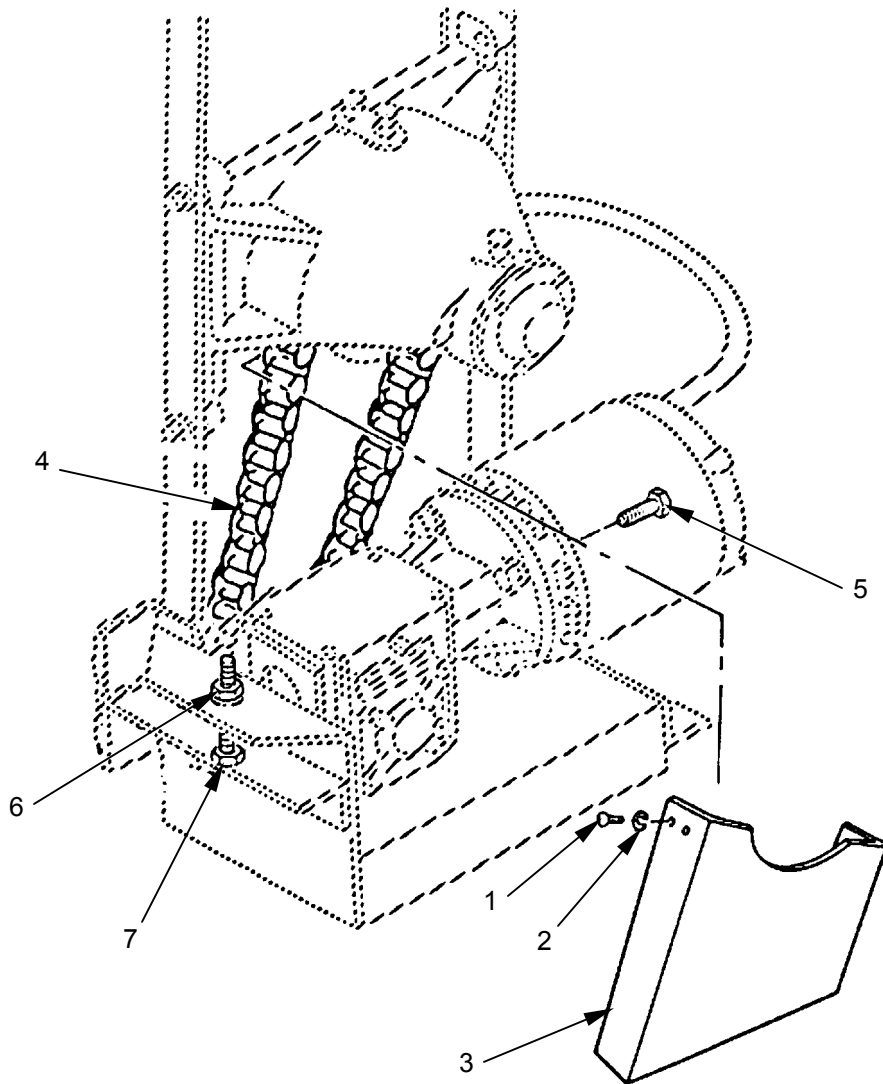
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**WARNING**

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

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



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**LIGHT ASSEMBLY**  
**REPAIR, REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Lamp Extractor (Item 14, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Conditions**

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

---

**REPAIR****WARNING**

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

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

---

**NOTE**

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

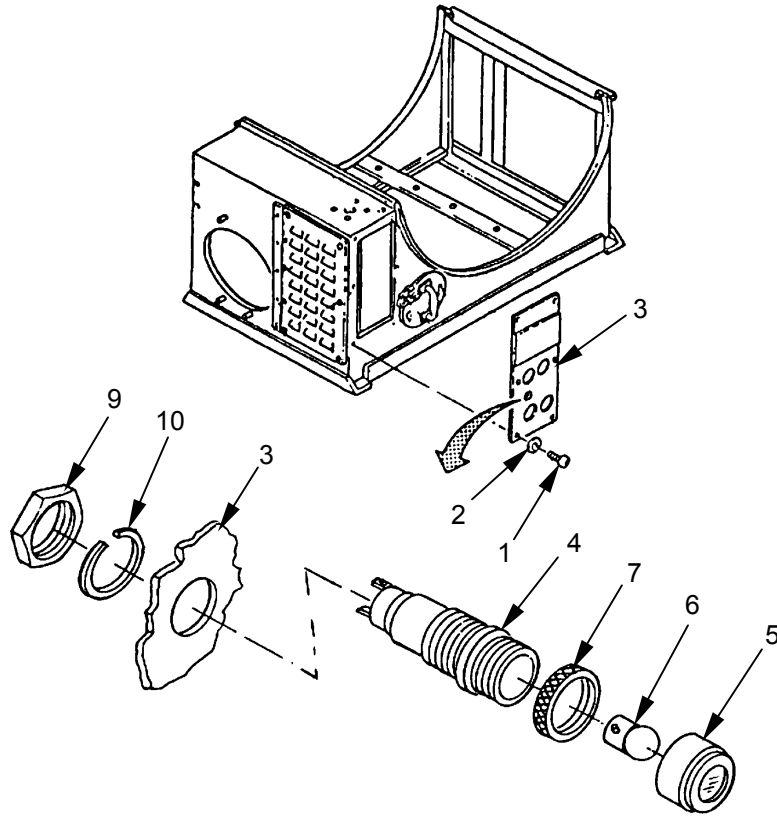
**Install light assembly and components**

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

**NOTE**

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

4. Position wires on the terminals of the switch body **(8)** as tagged.
5. Position the panel **(3)** on the unit and secure it with six screws **(1)** and lockwashers **(2)**.



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**NSN (3510-01-291-8169 (M85-100))**  
**NSN (3510-01-365-5687 (M85-200))**  
**LIGHT BULB**  
**REPLACE**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Lamp Extractor (Item 14, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Conditions**

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

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**REPLACE****WARNING**

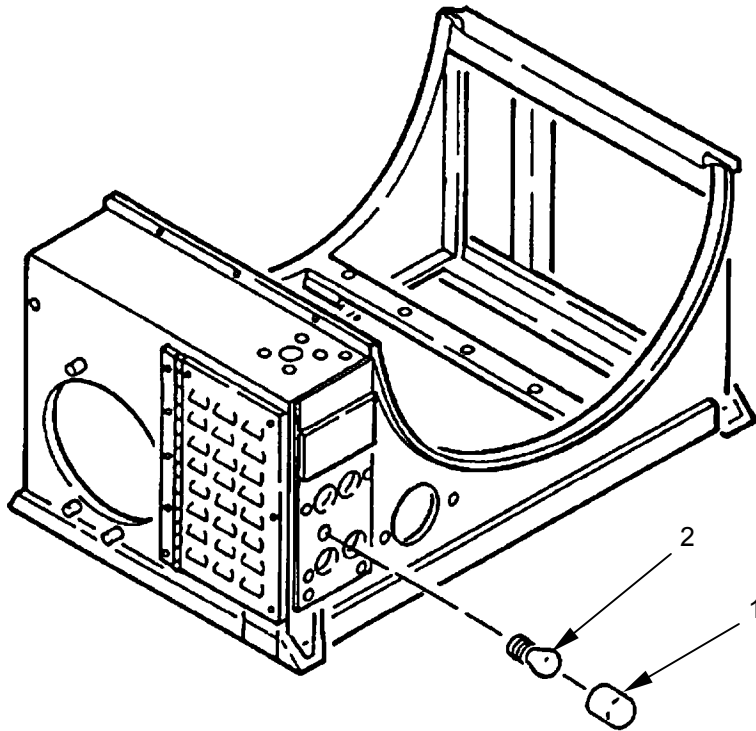
High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

**Remove light bulb and light bulb cover**

1. Unscrew the light bulb cover **(1)**.
2. Using the lamp extractor, push the light bulb **(2)** in, twist it counterclockwise and pull it out.

**Remove light bulb and light bulb cover**

1. Install the lamp **(2)**.
2. Install the lamp shade **(1)**.



END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**BUZZER**  
**REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Material/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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

**WARNING**

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

**REMOVE****CAUTION**

Care must be exercised when the panel is opened to prevent strain on the wiring connected to electrical components on the panel. Complete removal of the panel is possible only after the 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 the panel **(3)**.
2. Tag and disconnect the wires from the body of the buzzer **(5)**.
3. Remove the cap **(4)** and body of the buzzer **(5)** from the panel **(3)**.

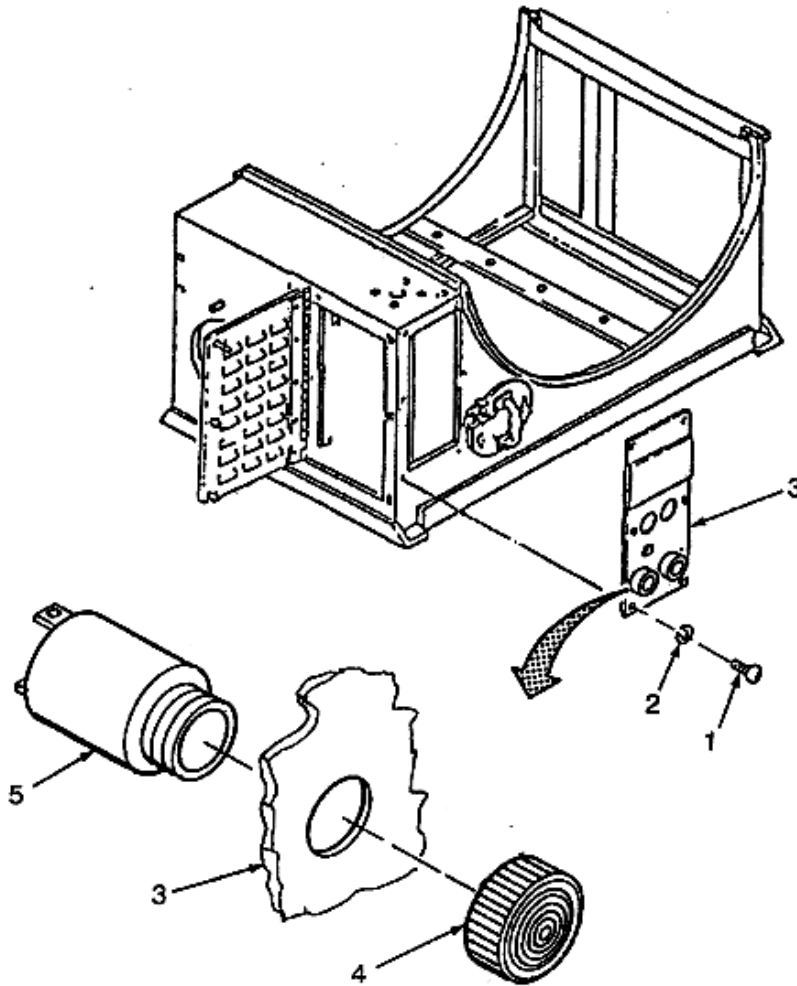
**INSTALL**

1. Position the buzzer body (5) in the cutout of the panel (3) and secure it 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 the wires on the terminals of the body (5) as tagged and secure with screws.
3. Position the panel (3) on the unit and secure it with six screws (1) and lockwashers (2).

**END OF WORK PACKAGE**



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**THERMOSTATIC SWITCH**  
**REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Material/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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



---

**WARNING**

---

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

**REMOVE**

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

**NOTE**

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

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

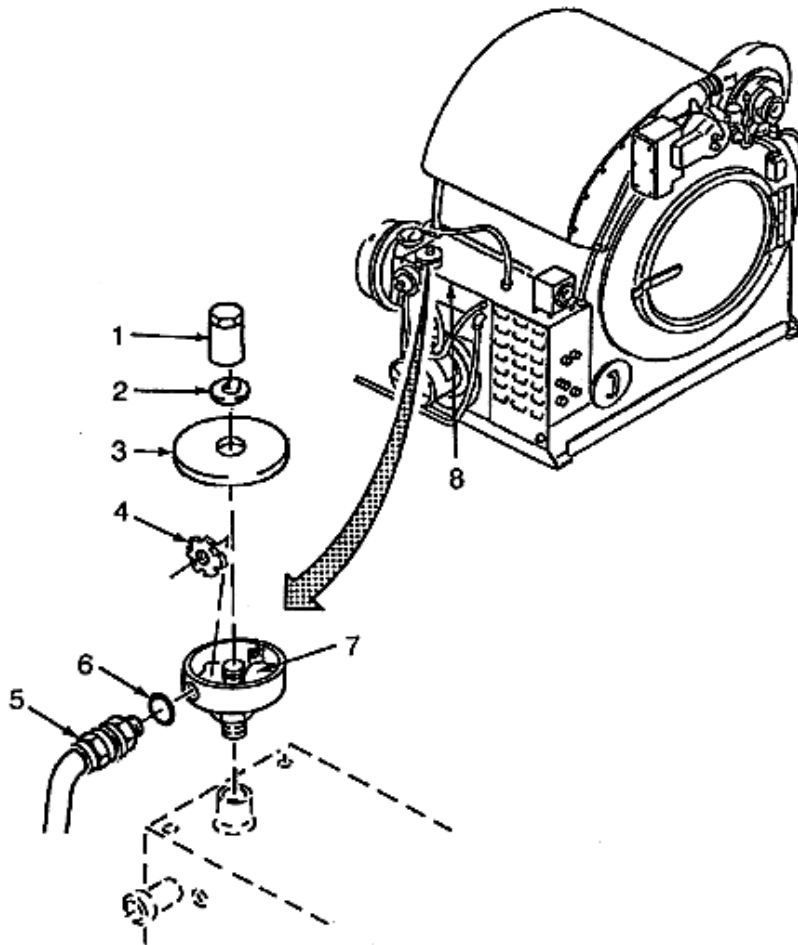
**INSTALL**

1. Install the switch **(7)** on the base **(8)**.
2. As required, install fins on the switch probe **(7)**, if fins were previously removed.
3. Install the adapter **(5)** and gasket **(6)** on the switch housing **(7)** 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 the wires as tagged.
5. Position the cover (3) on the switch housing (7) and secure it with washer (2) and nut (1).



**END OF WORK PACKAGE**

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**TEMPERATURE CONTROL**  
**REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Material/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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



---

**WARNING**

---

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

**REMOVE**

1. Loosen the setscrew on the knob **(1)** and remove the knob from the shaft **(2)** of the temperature control **(3)**.
2. Remove the nut **(4)** and cover **(5)**.
3. Tag and disconnect wires.
4. Remove the nut **(6)**.
5. Remove the adapter **(7)** from the temperature control **(3)**.
6. Remove the gasket **(8)**.

**NOTE**

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

7. Unscrew the temperature control **(3)** from the dryer base **(9)**.

**INSTALL**

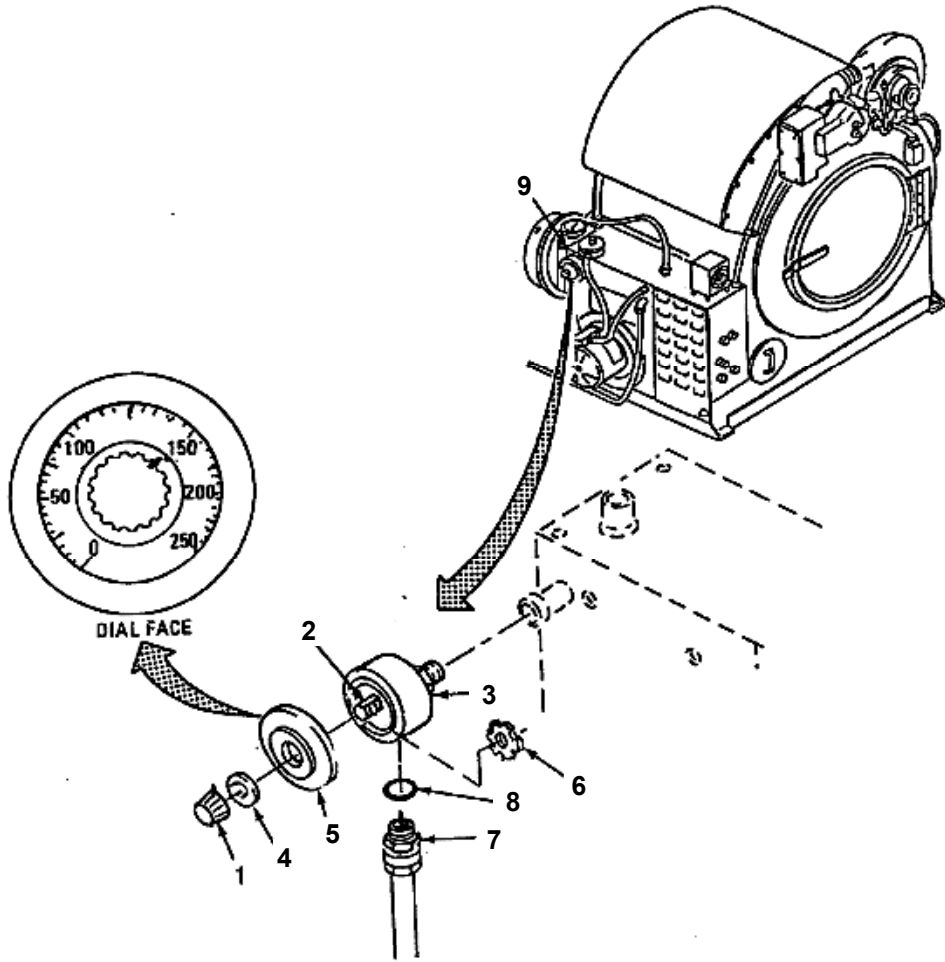
1. Install the temperature control **(3)** on the dryer base **(9)**.
2. As required, install the fins on the temperature control probe **(3)** if the fins were previously removed.

3. Install the adapter **(7)**, gasket **(8)** and nut **(6)** on the temperature control **(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.

4. Connect the wires as tagged.
5. Position the cover **(5)** on the shaft **(2)** and install nut **(4)**.
6. Rotate the shaft **(2)** so that the flat side is 180° away from zero.
7. Position the knob **(1)** on the shaft **(2)** with the arrow pointing to zero and tighten the setscrew on the knob.
8. When turning the knob **(1)** up from zero, a clicking sound should be heard when it gets to correct temperature. If no clicking sound is heard, proceed to the next step.
9. Remove the knob **(1)** and rotate the shaft **(2)** completely around one revolution clockwise. Repeat steps **(7)** through **(9)**.



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**THERMOMETER**  
**REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

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

**WARNING**

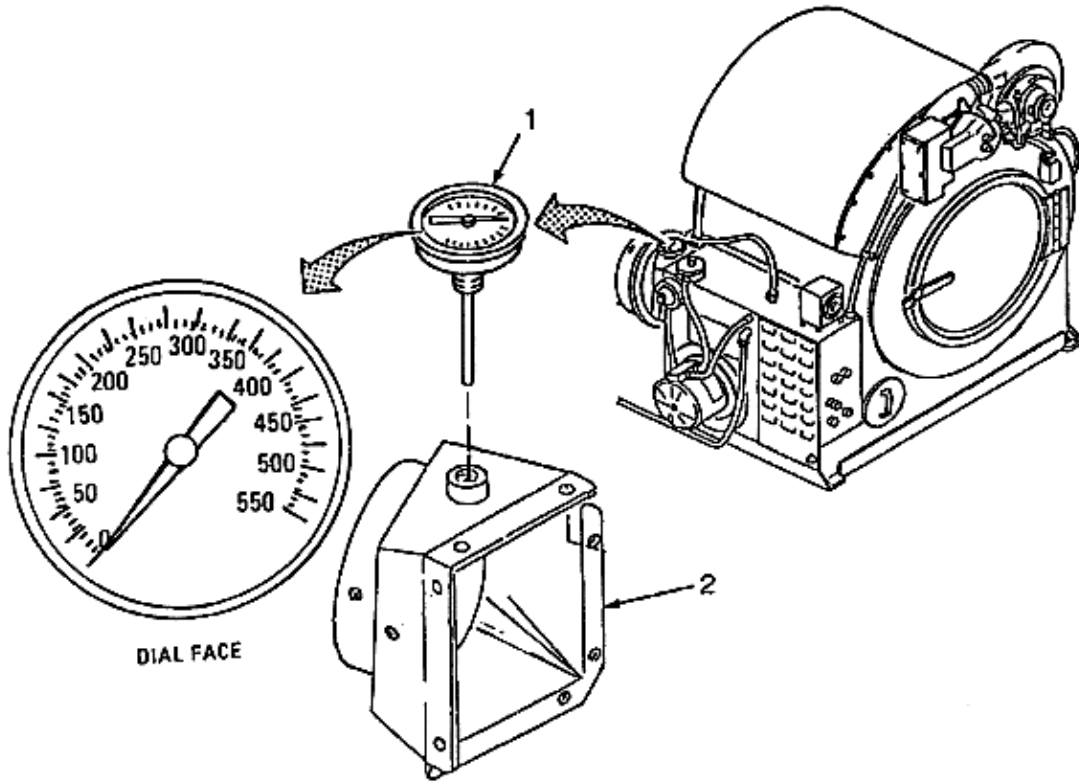
High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

**REMOVE**

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

**INSTALL**

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



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**DOOR**  
**REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Sealing Compound (Item 7, WP 0190 00)

Gasket Material (Item 61, WP 0189 00)

**Equipment Condition**

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



---

**WARNING**

---

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

**REMOVE**

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

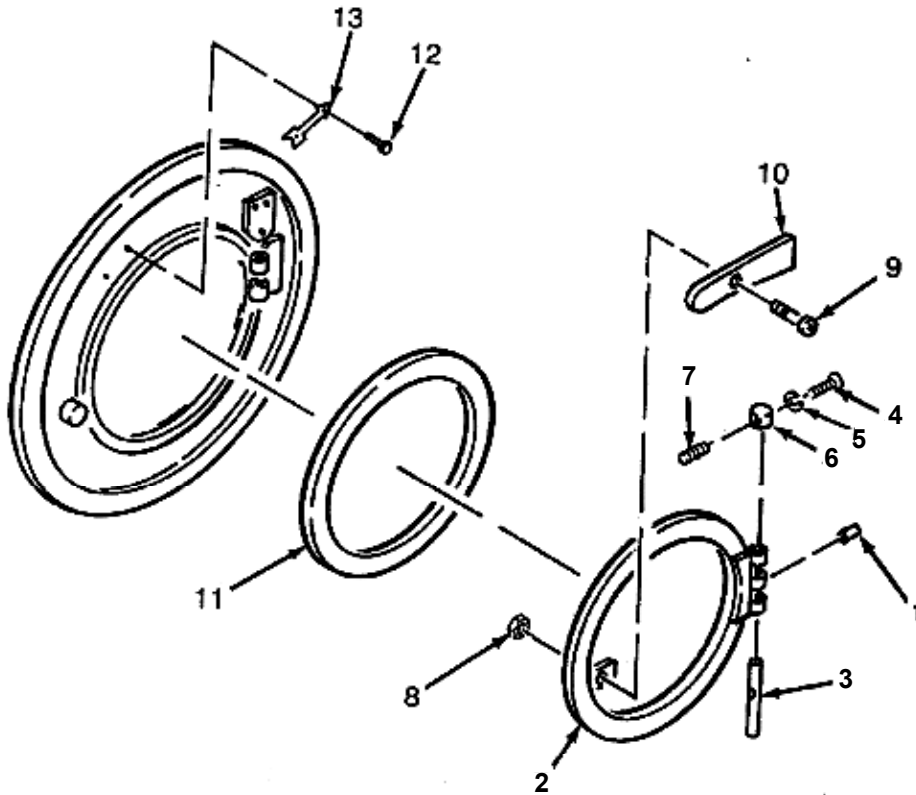
**REPAIR**

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

**INSTALL**

1. If required, position the arrow **(13)** on the door and secure it with two screws **(12)**.
2. Cut gasket material **(11)** to size.
3. Apply adhesive to the door **(2)**.
4. Install the gasket **(11)** on the door **(2)**.

5. Install the handle (10), screw (9) and nut (8).
6. Position the door (2) on the dryer and insert the hinge pin (3). Secure it with a roll pin (1).
7. Install the lockwasher (5) and screw (4) on the collar (6) and position the collar (6) on top of the pin (3).
8. Secure the collar (6) to the top of the pin (3) with the setscrew (7).
9. Adjust the door switch (WP 0084 00).



END OF WORK PACKAGE

---

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**DOOR SWITCH**  
**REMOVE, INSTALL, ADJUST**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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



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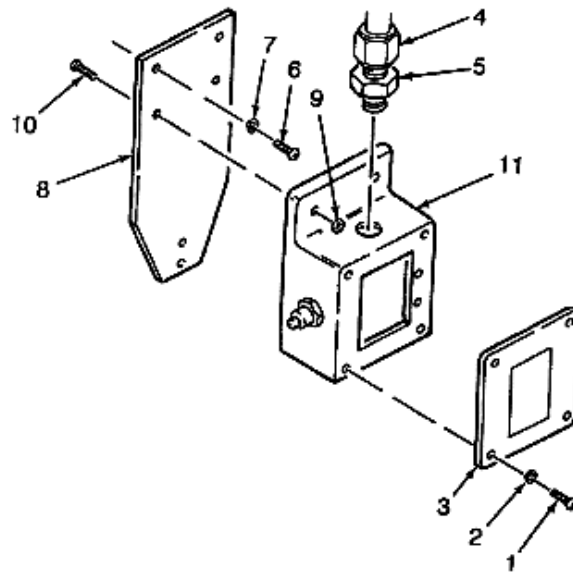
**WARNING**

---

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

**REMOVE**

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



## INSTALL

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

## NOTE

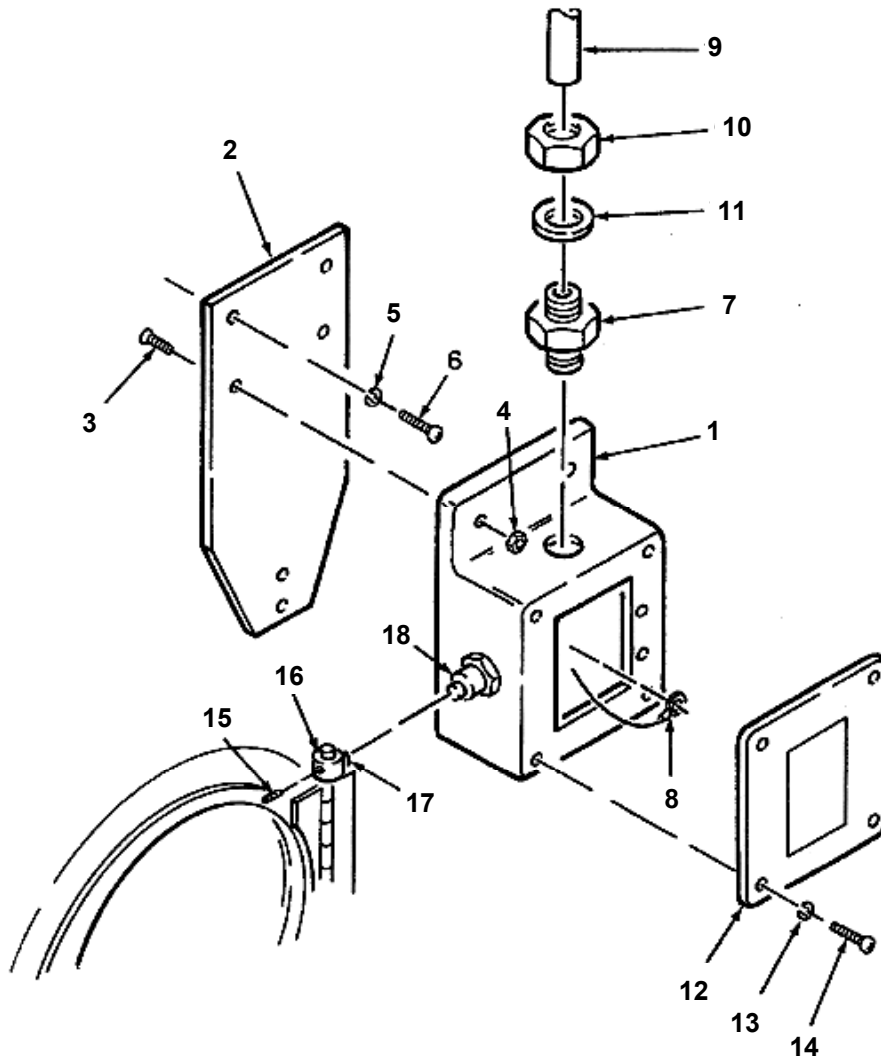
Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

5. Connect the wires, as tagged.
6. Install the cover (12) with four lockwashers (13) and screws (14).
7. Adjust the switch for proper operation in accordance with the adjustment procedure below.

## ADJUST

1. Open the dryer door and check for proper operation of the switch. The switch and cam operate properly when a click is heard when the door is opened and closed.
2. The door is adjusted correctly when the drum stops turning as the door is starting to open.
3. If the door switch operates correctly, no adjustment is required. If not, proceed with step (12).

4. Loosen the setscrew (15) and turn the cam (16), or raise and lower it, so that the screw (17) is centered on the plunger (18) when the door is fully open.
5. Tighten the setscrew (15).
6. If the screw (17) is fully centered on the plunger (18), but the plunger is not fully depressed or the door cannot be fully opened because the plunger (18) is too close to the screw (17), turn the screw (17) in or out for correct plunger (18) travel.



END OF WORK PACKAGE



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**DISCHARGE SPOUT**  
**REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Exhaust Adapter removed (WP 0087 00)

**WARNING**

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

**REMOVE**

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

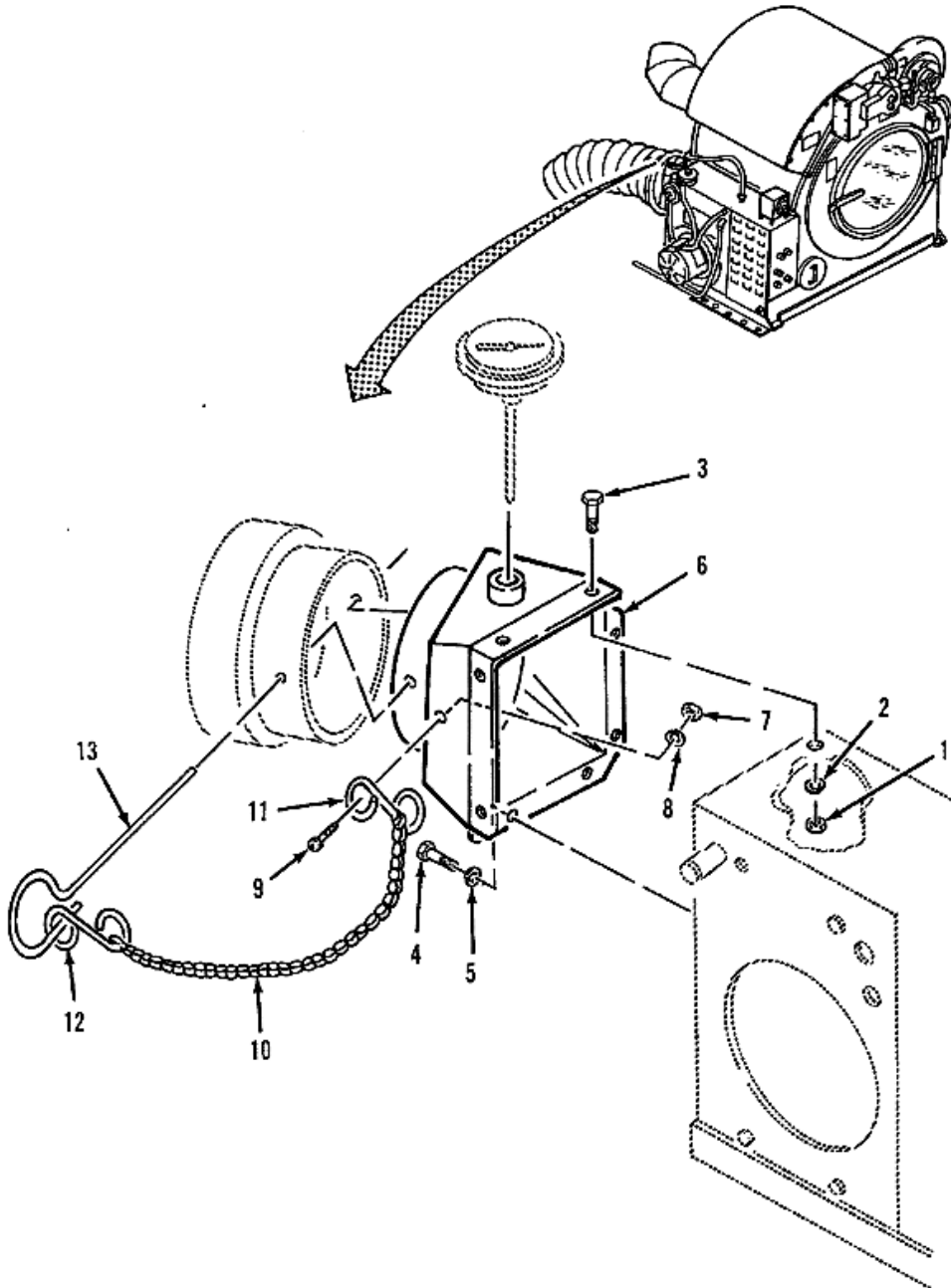
**REPAIR**

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

**INSTALL**

1. Connect the S-hook **(12)** to the pin **(13)** and chain **(10)**.
2. Connect the S-hook **(11)** to other end of chain **(10)**.
3. Attach the S-hook **(11)** to the spout and duct **(6)**, using a screw **(9)**, lockwasher **(8)** and nut **(7)**.

4. Position the spout and duct (6) on the dryer base and secure it with four screws (4) and lockwashers (5) and four screws (3), lockwashers (2) and nuts (1).
5. Install the exhaust adapter (WP 0087 00).



END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**EXHAUST ELBOW**  
**REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**Exhaust Hoses disconnected (WP 0086 00) and  
Dryer shut down (TM 10-3510-222-10)**WARNING**

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

**WARNING**

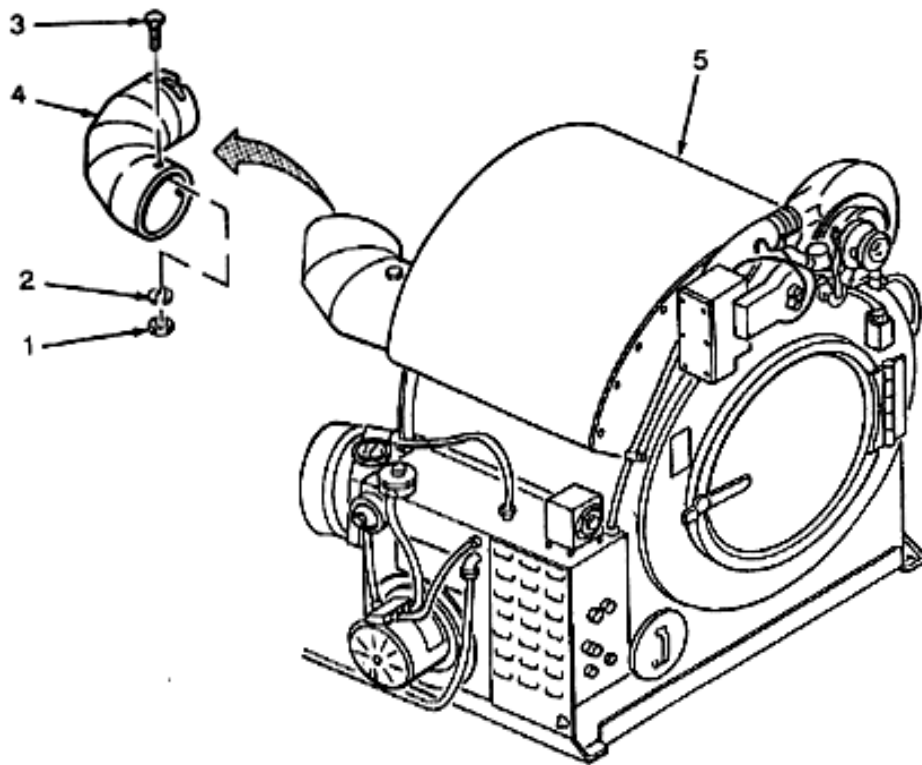
The elbow may be hot if dryer was running. To prevent burns, allow sufficient time for the elbow to cool before replacement.

**REMOVE**

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

**INSTALL**

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



END OF WORK PACKAGE

---

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**EXHAUST ADAPTER**  
**REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**Exhaust Hoses disconnected (WP 0090 00) and  
Dryer shut down (TM 10-3510-222-10)**WARNING**

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

**WARNING**

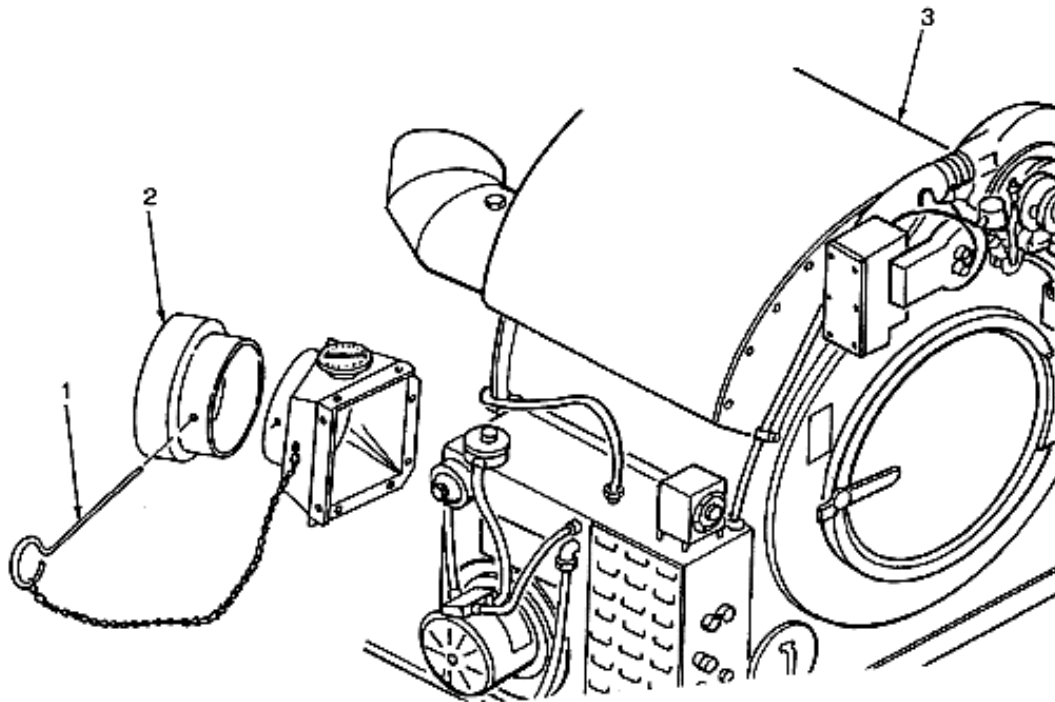
The adapter may be hot if dryer was running. To prevent burns, allow sufficient time for the adapter to cool before replacement.

**REMOVE**

1. Remove pin **(1)**.
2. Remove the adapter **(2)**.

**INSTALL**

1. Position replacement adapter **(2)** on the dryer **(3)**.
2. Align the holes on the adapter **(2)** with the slots in the dryer **(3)**.
3. Install the pin **(1)**.



END OF WORK PACKAGE

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**FAN AND MOTOR**  
**REMOVE, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

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

Blower removed (WP 0068 00)

Rotary Pump removed (WP 0071 00)

**WARNING**

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

**REMOVE**

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

**INSTALL**

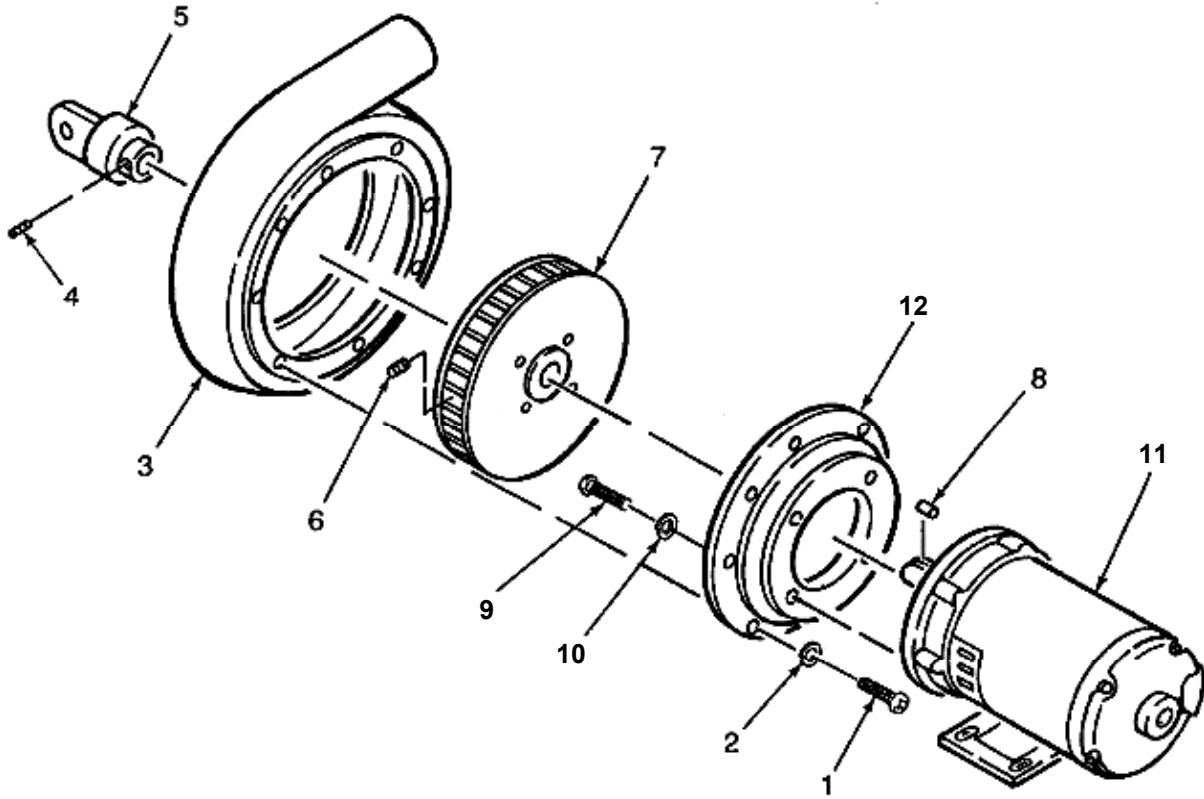
1. Position the adapter plate **(12)** on the motor **(11)** and install four lockwashers **(10)** and screws **(9)**.

**NOTE**

A gap of ¼ inch between the adapter and the fan is required.

2. Position the key **(8)** on shaft of the motor **(11)** and install the fan **(7)**. Tighten the setscrew **(6)**.
3. Install the collar **(5)** and secure it with a setscrew **(4)**.

4. Position the fan housing (3) on the adapter plate (12) and install eight screws (1) and lockwashers (2).
5. Install the blower (WP 0068 00).
6. Install the rotary pump (WP 0071 00).



**END OF WORK PACKAGE**

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**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
CABLE (WATER PUMP)  
REPAIR**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

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

**WARNING**

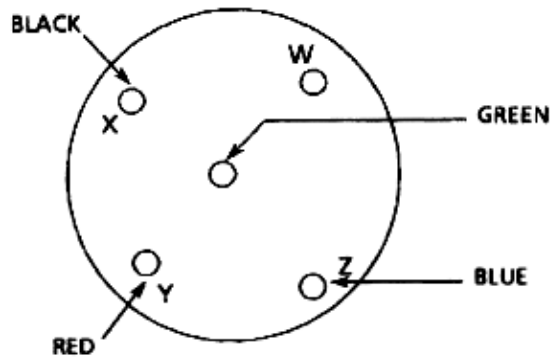
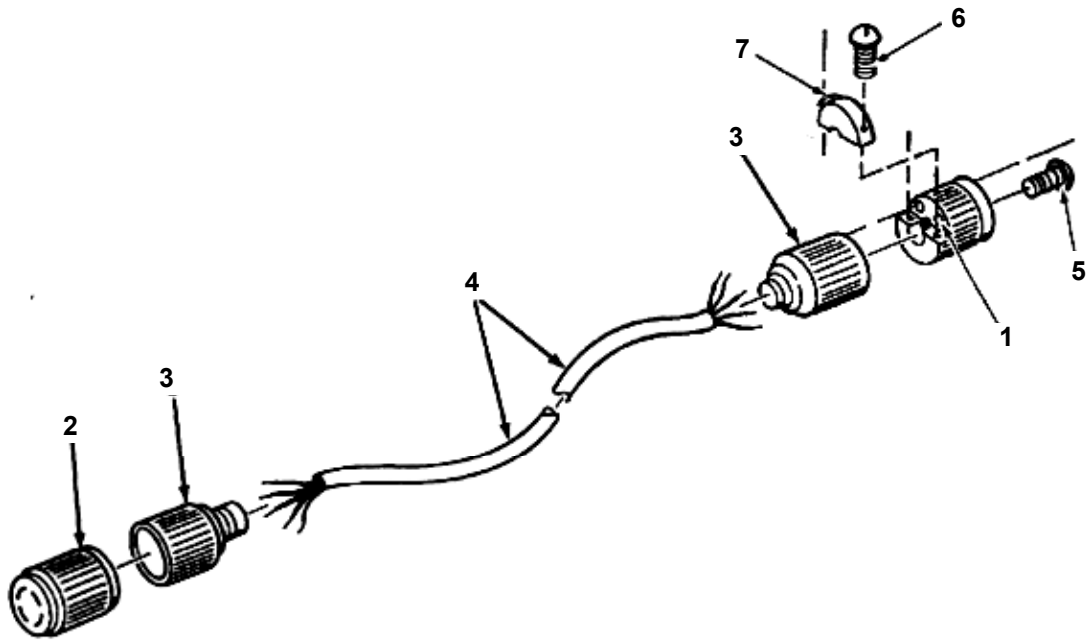
High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

**REPAIR**

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

3. Cable **(4)**.
  - a. Position cover **(3)** on cable **(4)**.
  - b. Remove electrical plug **(1)** and electrical connector **(2)** from cable **(4)**.
  - c. Remove covers **(3)** from cable **(4)**.
  - d. Install covers **(3)** on new cable **(4)**.
  - e. Install electrical plug **(1)** and electrical connector **(2)**.
  - f. Position covers **(3)** on electrical plug **(1)** and electrical connector **(2)**.





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.

END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**SHIELD**  
**REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Dryer Shutdown (TM 10-3510-222-10))

**WARNING**

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

**REMOVE**

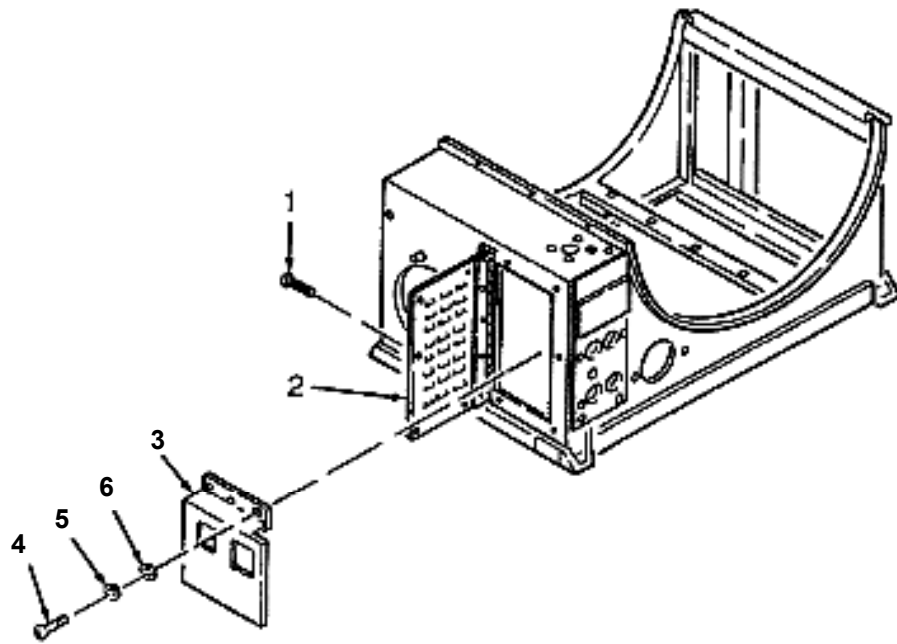
1. Loosen the three captive screws **(1)** and open the door **(2)**.
2. Support the shield **(3)** and remove four screws **(4)**, lockwashers **(5)** and flat washers **(6)**.
3. Remove the shield **(3)**.

**REPAIR**

Repair consists of replacing the damaged or missing shield.

**INSTALL**

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



END OF WORK PACKAGE

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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**TIEDOWN**  
**REPAIR**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Wire Rope (Item 58, WP 0189 00)

Sleeve (Item 57, WP 0189 00)

**Equipment Condition**

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

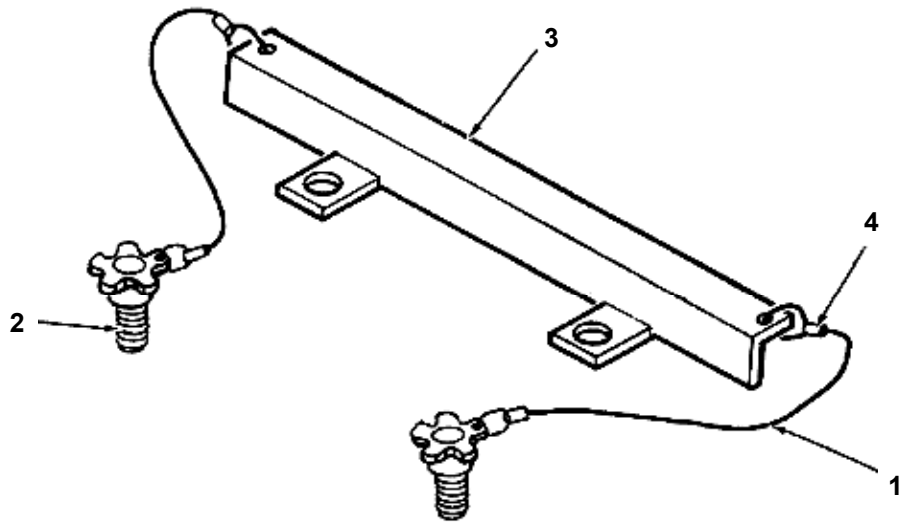
**WARNING**

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

**REPAIR****NOTE**

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

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



END OF WORK PACKAGE

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**CENTRIFUGAL PUMP UNIT (WATER PUMP)**  
**REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Angle Connector (Item 3, WP 0189 00)  
 Self-locking nut (Item 18, WP 0189 00)  
 Shaft Seal (Item 5, WP 0189 00)  
 Preformed Packing (Item 6, WP 0189 00)  
 Tags (Item 19, WP 0190 00)

**Equipment Condition**

Sediment Strainer and Outlet Piping removed  
 (WP 0093 00)

**REMOVE**

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 **(8)**. Discard nuts **(7)**.
5. Remove centrifugal pump unit **(3)** from frame **(9)**.
6. Remove drain cock **(10)** from centrifugal pump unit **(3)**.

**REPAIR**

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

**NOTE**

When installing a new pump, verify the wiring against the data plate to ensure that the motor is wired for 208VAC.

**INSTALL**

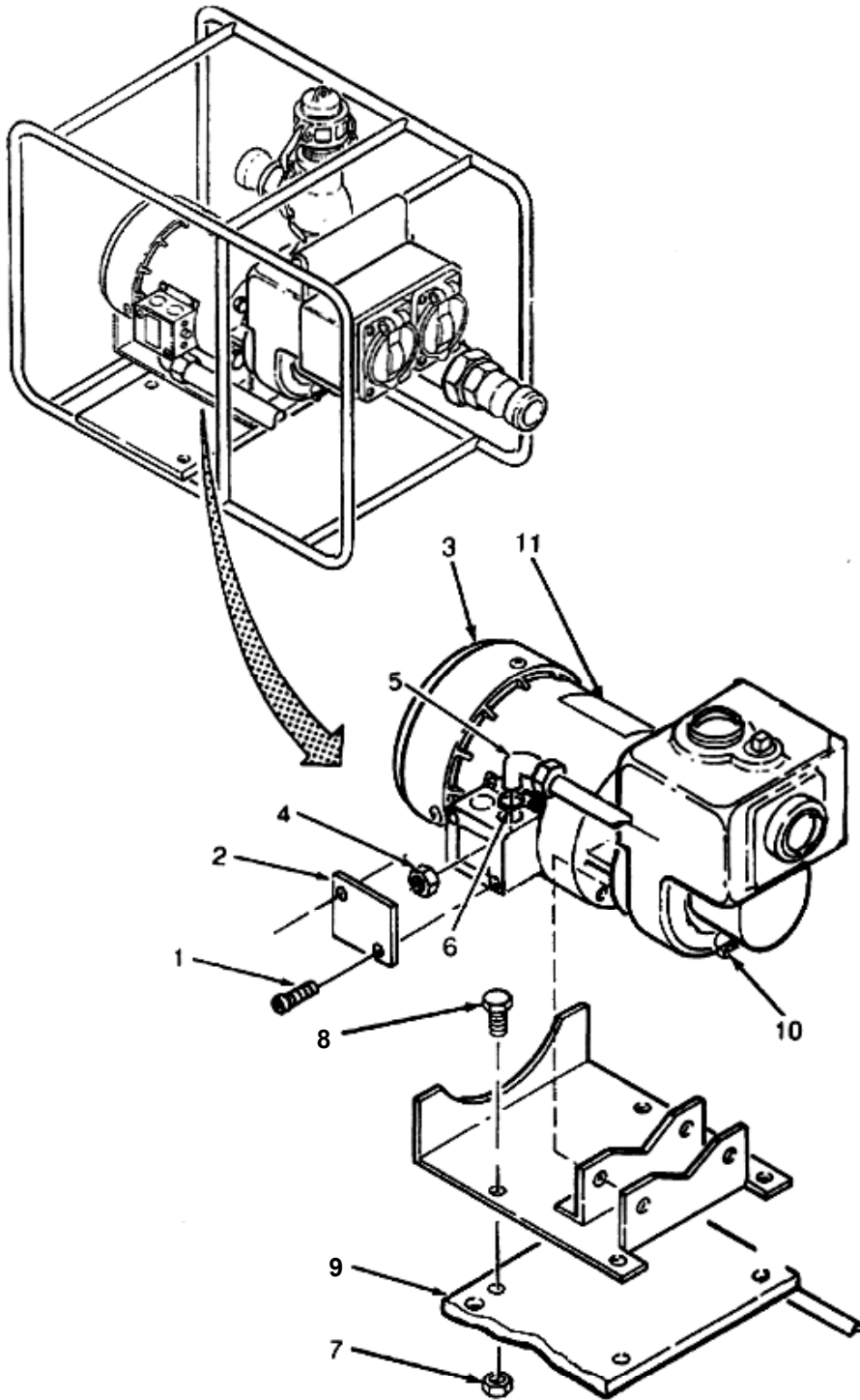
1. Install drain cock **(10)** on centrifugal pump unit **(3)**.
2. Position centrifugal pump unit **(3)** on frame **(9)**.
3. Install four bolts **(8)**, self-locking nuts **(7)** on centrifugal pump unit **(3)** and frame **(9)**.
4. Install angle connector **(5)**, washer **(6)** and nut **(4)**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

**NOTE**

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on the Centrifugal Pump Unit Wiring Diagram (see Foldout Pages), 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 (WP 0093 00).





END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**SEDIMENT STRAINER AND OUTLET PIPING**  
**SERVICE, REMOVE, DISASSEMBLE, REPAIR, ASSEMBLE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Preformed Packing (Item 6, WP 0189 00)  
Antiseize Tape (Item 20, WP 0190 00)

**Equipment Condition**

Centrifugal Pump Unit removed (WP 0092 00)

---

**SERVICE**

1. Remove strainer cap **(1)** from body **(2)**, or remove clamp **(3)** by loosening bolt **(4)** from body **(2)**. Discard preformed packing **(5)**.
2. Remove strainer **(6)** from body **(2)**.
3. Clean strainer thoroughly with water.
4. Install strainer **(6)** in body **(2)**.
5. Install new preformed packing **(5)** on cap **(1)**.
6. Install strainer cap **(1)** on body **(2)**, or install clamp **(3)** on body **(2)**. Tighten bolt **(4)** on clamp **(3)**.

**REMOVE**

1. Sediment Strainer Assembly **(7)**. Remove sediment strainer assembly **(7)** from centrifugal pump unit **(8)**.
2. Pipe Nipple **(9)**. Remove pipe nipple **(9)** from centrifugal pump unit **(8)**.

**DISASSEMBLE**

1. Sediment Strainer Assembly **(7)**.
  - a. Disassemble sediment strainer assembly **(7)** per servicing.
  - b. Remove coupling half **(10)** from body **(2)**.
  - c. Remove pipe nipple **(9)** from body **(2)**.

2. Coupling Half (11).
  - a. Remove cap (12).
  - b. Remove coupling half (11) and gasket (13).
  - c. Remove coupling half (14).
  - d. Remove tee (15) from nipple (16).

## REPAIR

Repair consists of replacing damaged or missing components of the sediment strainer assembly (7) and/or outlet piping (17).

## ASSEMBLE

### NOTE

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

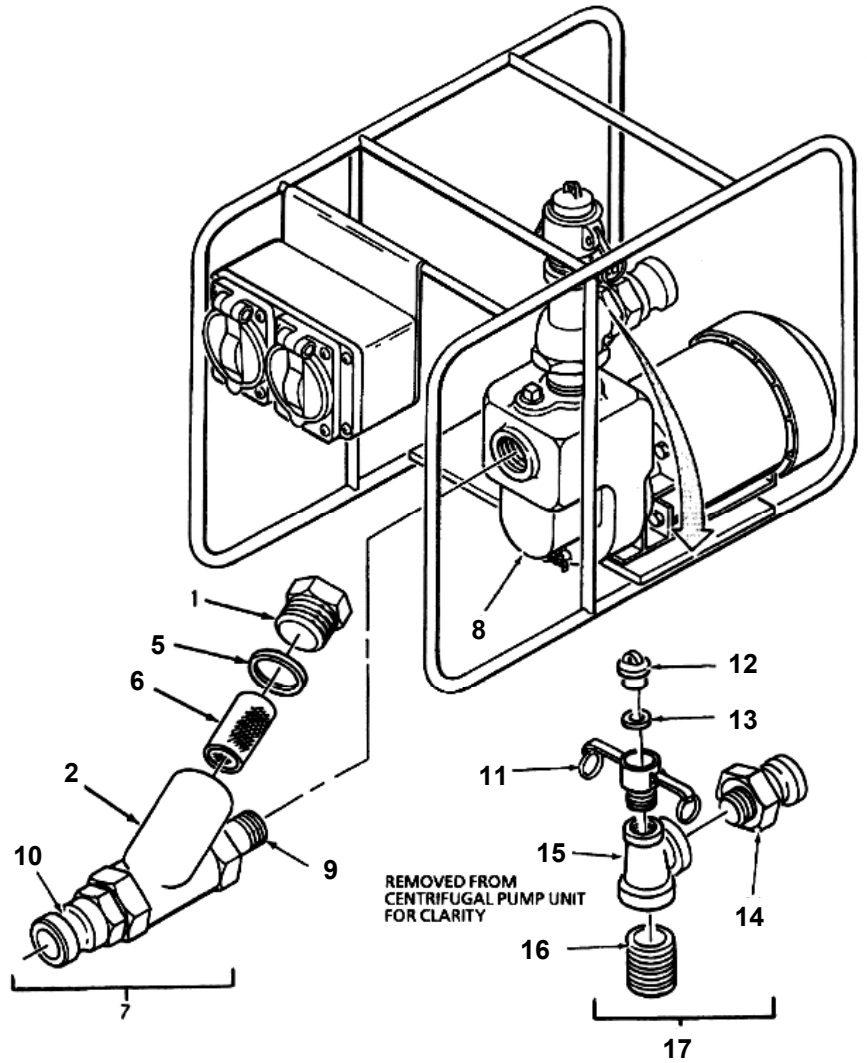
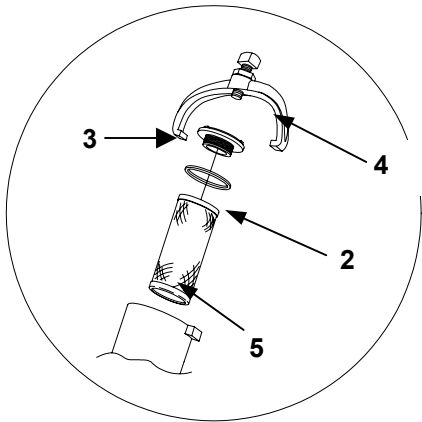
1. Sediment Strainer Assembly (7).
  - a. Install coupling half (10) in body (2).
  - b. Install pipe nipple (9) in body (2).
2. Outlet Piping (17).
  - a. Install nipple (16) on tee (15).
  - b. Install coupling half (14) on tee (15).
  - c. Install coupling half (11) and gasket (13).
  - d. Install cap (12).

**INSTALL**

**NOTE**

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

1. Sediment Strainer Assembly (7). Install sediment strainer assembly (7) on centrifugal pump unit (8).
2. Outlet Piping (17). Install outlet piping assembly (17) on centrifugal pump unit (8).



**END OF WORK PACKAGE**



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**CONNECTOR-SWITCH**  
**REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Straight Connector (Item 2, WP 0189 00)  
 Gasket (Item 62, WP 0189 00)  
 Tags (Item 19, WP 0190 00)

**Equipment Condition**

Centrifugal Pump Unit removed (WP 0092 00)

**REMOVE**

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)** washers **(11)** and screws **(12)** from switch box **(4)** and remove switch box **(4)** from frame **(13)**.

**REPAIR**

1. Repair consists of replacing damaged or missing components of the connector-switch.
2. Receptacle **(6)**.
  - a. Remove screws **(14)** from receptacle cover **(15)**. Remove cover **(15)** and gasket **(16)**.
  - b. Tag and disconnect electrical wiring **(17)** 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. Connect wiring to new receptacle **(6)** as tagged.
- d. Install receptacle **(6)** in cover **(2)** with screws **(14)**.
3. Switch **(5)**.
  - a. Remove four screws **(18)**, cover **(19)** and gasket **(20)**.
  - b. Remove two screws **(21)**.

- c. Tag and disconnect wiring **(23)** 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 **(21)** securing switch **(5)**.
- f. Install gasket **(20)**, cover **(19)** and four screws **(18)**.

### INSTALL

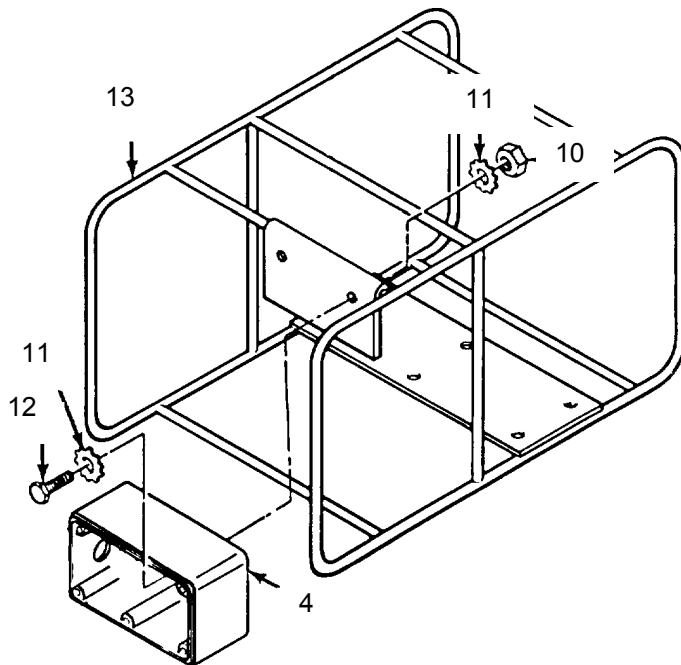
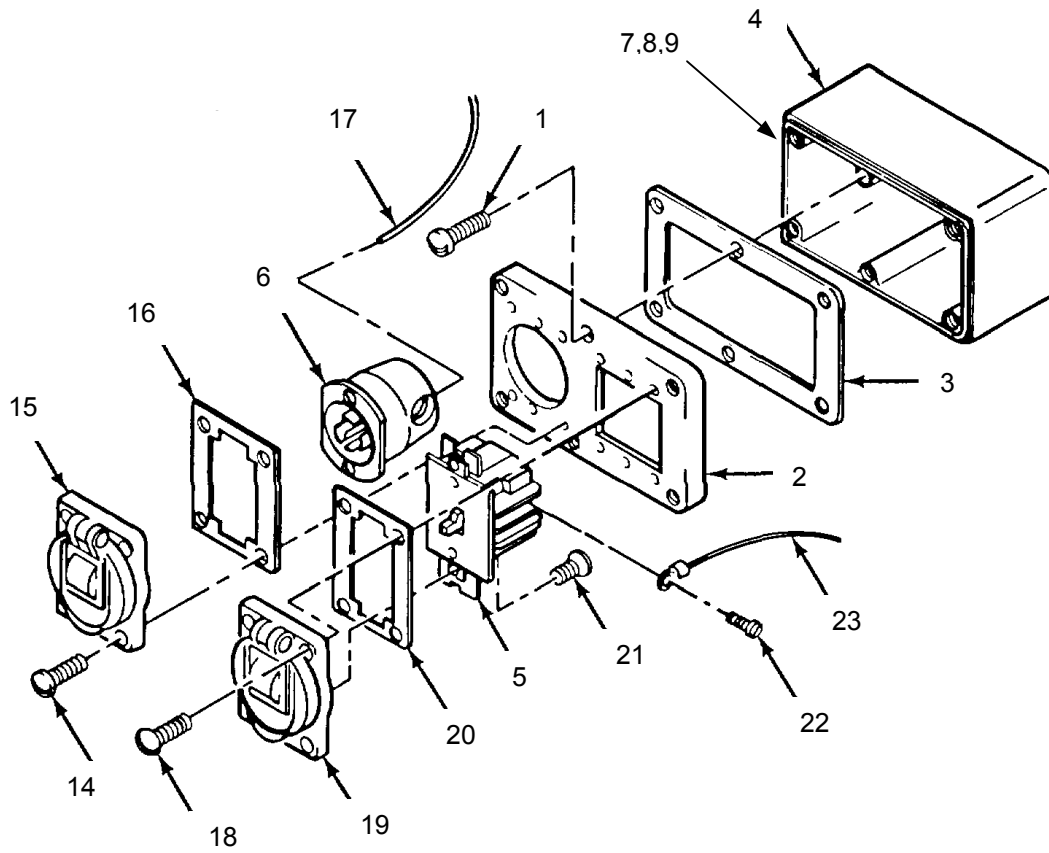
1. Position switch box **(4)** on water pump frame **(13)** and install two screws **(12)**, washers **(11)** and nuts **(10)**.
2. Install connector **(8)**, washer **(9)** and nut **(7)** on switch box **(4)**.

### 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. Install gasket **(3)** and cover **(2)** on switch box **(4)** with six screws **(1)**.





END OF WORK PACKAGE



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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**SUCTION STRAINER**  
**REPAIR**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

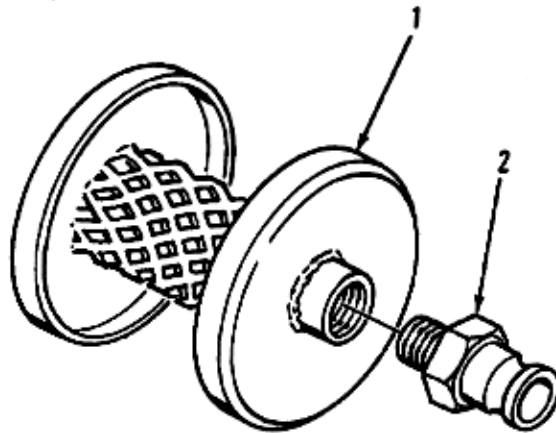
**Materials/Parts****Equipment Condition**

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

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**REPAIR**

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

**END OF WORK PACKAGE**



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**FIRE EXTINGUISHER/BRACKET**  
**REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:**

<b>Tools</b> General Mechanic's Tool Kit (Item 1, WP 0188 00)	<b>Personnel Required</b> One
<b>Materials/Parts</b>	<b>Equipment Condition</b>

**REMOVE**

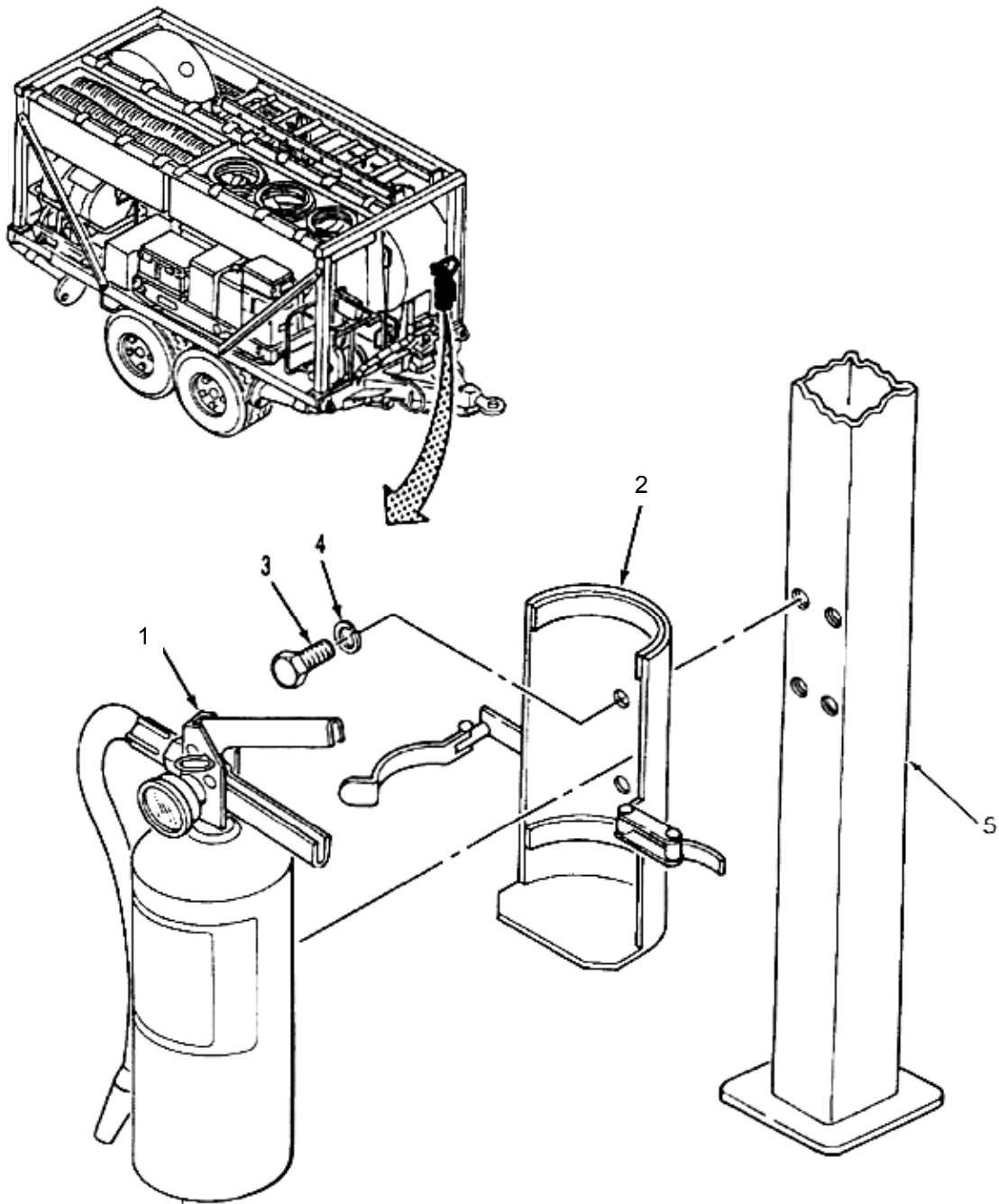
1. Fire Extinguisher **(1)**.
  - a. Unlatch fire extinguisher bracket **(2)**.
  - b. Remove fire extinguisher **(1)**.
2. Bracket **(2)**. With fire extinguisher **(1)** removed, remove four bolts **(3)** and lock washers **(4)** from bracket **(2)** and remove bracket.

**REPAIR**

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

**INSTALL**

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



END OF WORK PACKAGE

---

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**BRACKET**  
**REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

---

**REMOVE**

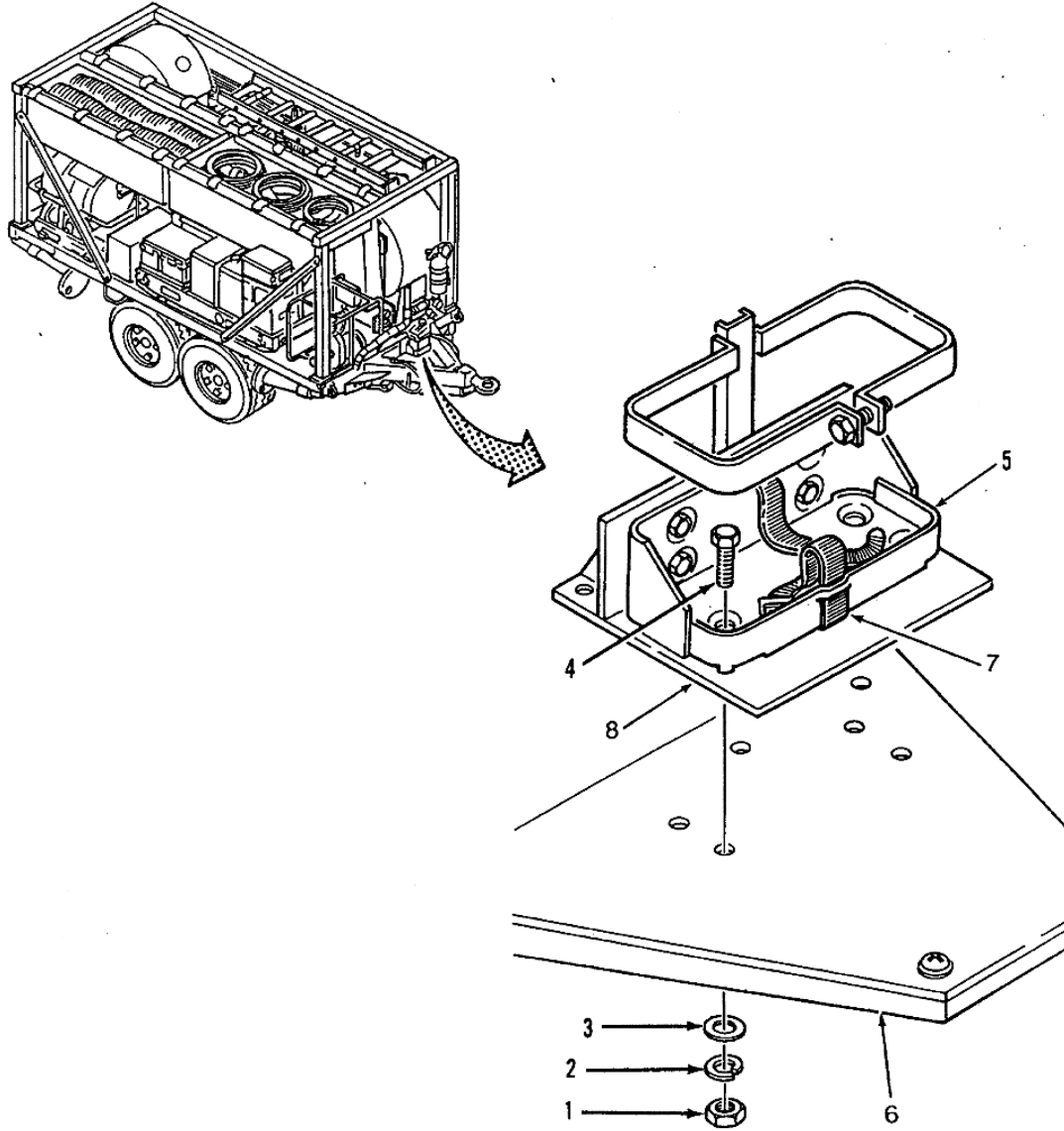
1. Remove seven nuts **(1)**, lock washers **(2)**, washers **(3)** and bolts **(4)** from bracket **(5)**.
2. Remove mounting bracket **(5)** from trailer **(6)**.

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

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

**INSTALL**

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



END OF WORK PACKAGE



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**TOOL BOX**  
**REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP  
 0188 00)  
 Hand Blind Riveter (Item 7, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Rivet (Item 10, WP 0189 00)

**Equipment Condition****REMOVE**

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

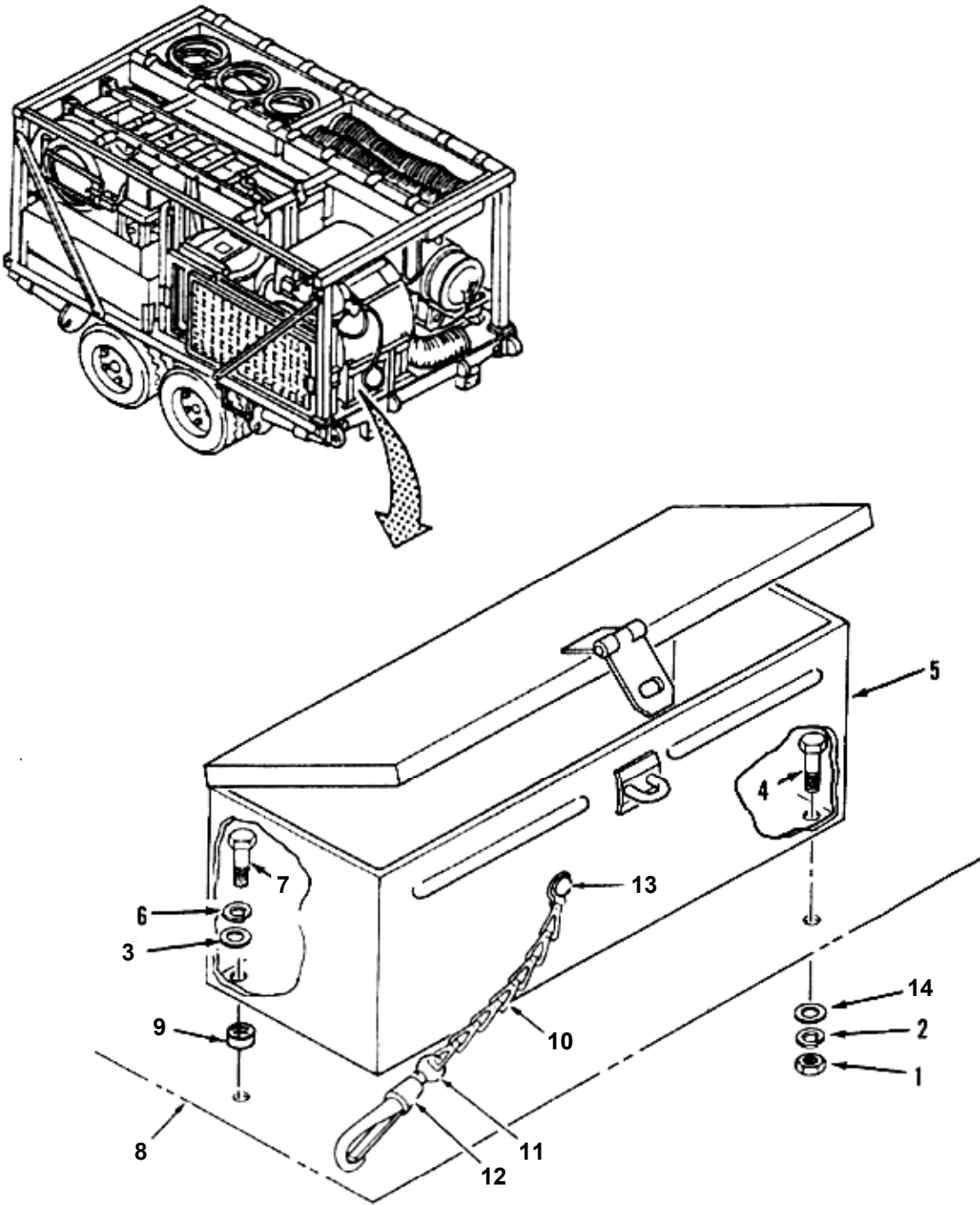
**REPAIR**

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

1. Steel chain **(10)**, 6 inches long.
2. Ring **(11)**.
3. Snaphook **(12)**.
4. Rivet **(13)**.

**INSTALL**

1. Position four spacers **(9)** on trailer **(8)** to align for installation of bolts **(4 and 7)**.
2. Position tool box **(5)** on trailer **(8)**.
3. Install two bolts **(4)** on right side of the tool box **(5)** with washers **(14)**, lock washers **(2)** and nuts **(1)**.
4. Install two bolts **(7)**, washers **(3)** and lock washers **(6)** in tool box **(5)**.



END OF WORK PACKAGE

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**MODIFIED GENERATOR**  
**REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 2, WP  
 0188 00)

**Personnel Required**

One

**Materials/Parts**

Self-locking nut (Item 13, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
 Cover removed (WP 0092 00)  
 Detach bottom of tarpaulin support frame  
 (TM 10-3510-222-10)

---



**WARNING**

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

**REMOVE**

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



**WARNING**

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

2. Remove generator exhaust hoses **(2)** from generator **(3)**.
3. Disconnect pigtail of main power cable **(4)** from generator **(3)**.
4. Remove eight nuts **(5)**, lock washers **(6)**, washers **(7)**, blocks **(8)** and bolts **(9)** from generator **(3)** and Laundry Unit.
5. Remove generator **(3)** (using forklift) from Laundry Unit.

6. Remove union **(10)** and pipe **(11)** as one piece from generator **(3)**.
7. Remove three battery hooks **(12)**.
8. Remove hose **(13)** from gauge **(14)**.
9. Remove two nuts **(15)** and bolts **(16)** from oil gauge bracket **(17)** and generator **(3)** and remove oil gauge bracket.
10. Remove hose **(13)** from generator **(3)**.
11. Remove two nuts **(18)** from gauge **(14)** and remove gauge **(14)** from oil gauge bracket **(17)**.
12. Mount gauge **(14)** on generator bracket. Refer to TM 5-6115-585-12.
13. Remove oil gauge hose **(13)** from replacement generator.
14. Remove three battery hooks **(12)** from replacement generator.
15. Install three battery hooks **(12)** on generator **(3)** with washers and wing nuts.

## REPAIR

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

1. Exhaust hoses **(2)**.
2. Union **(10)**.
3. Pipe **(11)**.
4. Hose **(13)**.
5. Hooks **(12)**.
6. Oil gauge bracket **(17)**.

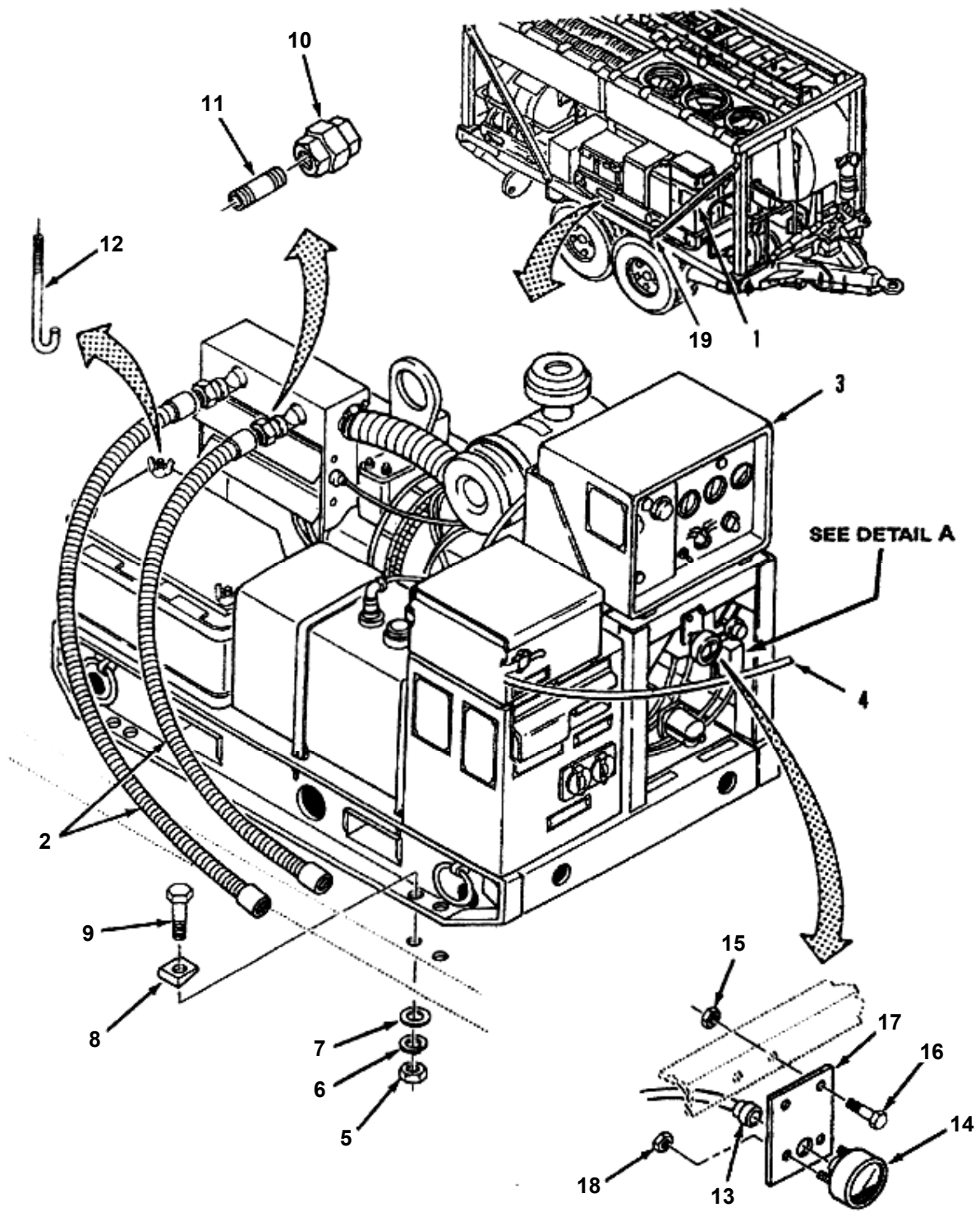
## INSTALL

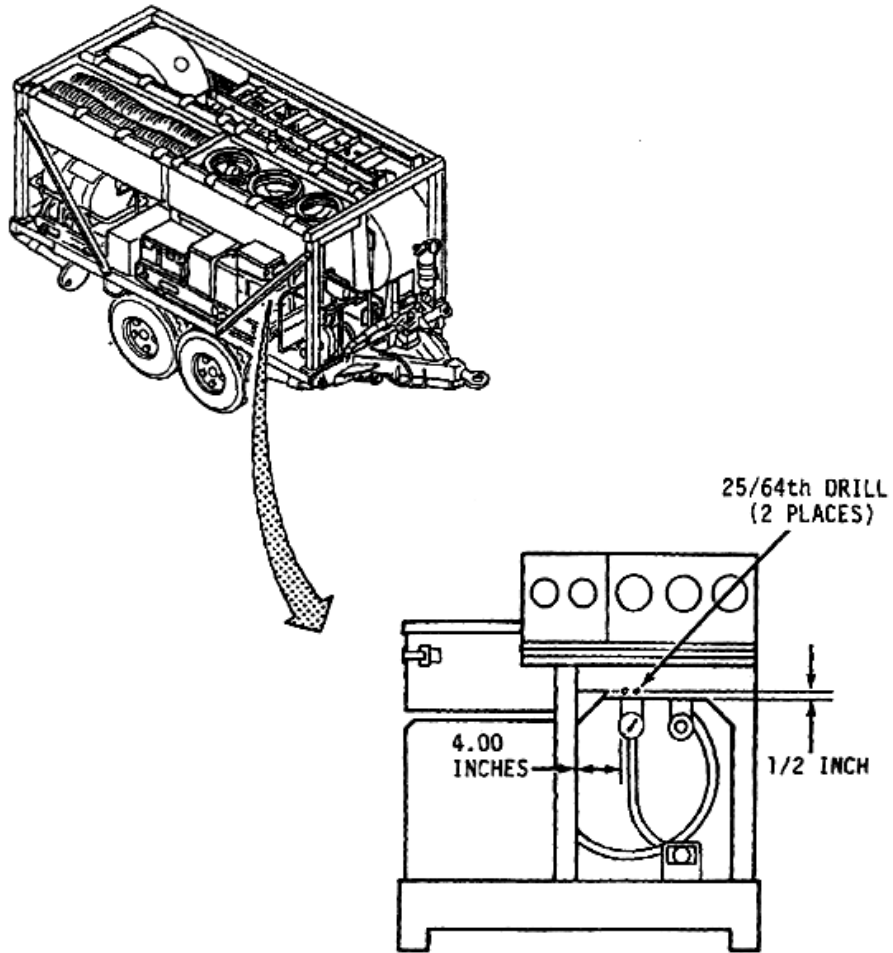
1. Remove gauge **(14)** from replacement generator mounting bracket. Refer to TM 5-6115-585-12.
2. Using oil gauge bracket **(17)** as a template, drill two 25/64th inch holes in generator per view A of the accompanying figure.
3. Install gauge **(14)** on oil gauge bracket **(17)** with two nuts **(18)**.
4. Position oil gauge bracket **(17)** on generator **(3)** and install two bolts **(16)** and nuts **(15)**.
5. Connect hose **(13)** to gauge **(14)** and generator **(3)**.
6. Install union **(10)** and pipe **(11)** as one piece on generator **(3)**.
7. Position generator **(3)** (using forklift) on Laundry Unit.
8. Install eight bolts **(9)**, blocks **(8)**, washers **(7)**, lock washers **(6)** and nuts **(5)** on generator **(3)** and Laundry Unit.

9. Install two generator exhaust hoses **(2)** on generator **(3)**.
10. Install three battery hooks **(12)** on generator **(3)**.
11. Install battery cover (WP 0100 00).
12. Connect pigtail end of main power cable to generator, refer to FO-1 Laundry Unit Wiring Diagram.

<b>Generator</b>	<b>Main Power Cable</b>
L1	BLACK
L2	BLUE
L3	RED
L0	WHITE
GROUND	GREEN

13. Rotate tarpaulin support frame **(1)** for installation of hardware **(19)**.
14. Install tarpaulin support frame **(1)** (TM 10-3510-222-10).





**DETAIL A**  
END VIEW  
(CONTROLS)

END OF WORK PACKAGE





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**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**COVER**  
**REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

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

**WARNING**

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

**REMOVE**

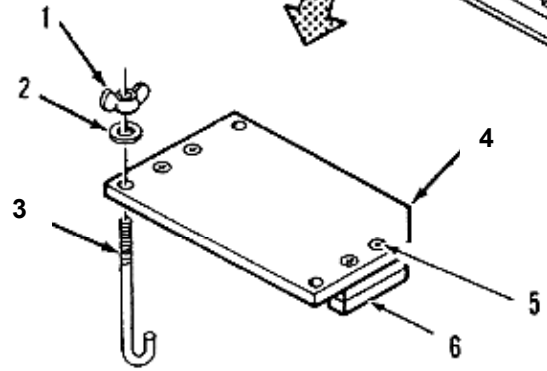
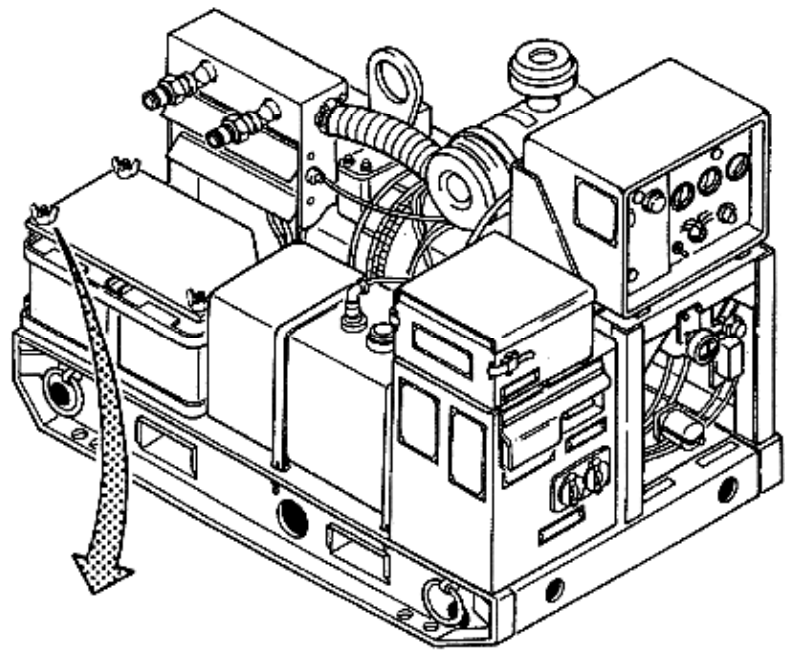
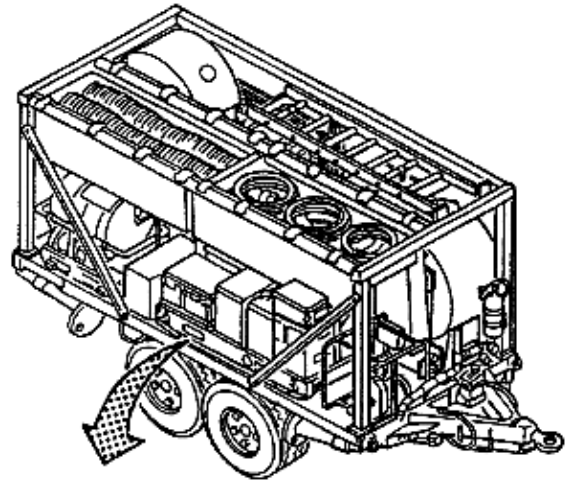
1. Remove three wing nuts **(1)** and washers **(2)** from battery hooks **(3)**.
2. Remove cover **(4)** from battery hooks **(3)**.

**REPAIR**

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

**INSTALL**

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



END OF WORK PACKAGE

**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**GROUND ROD**  
**REPAIR**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

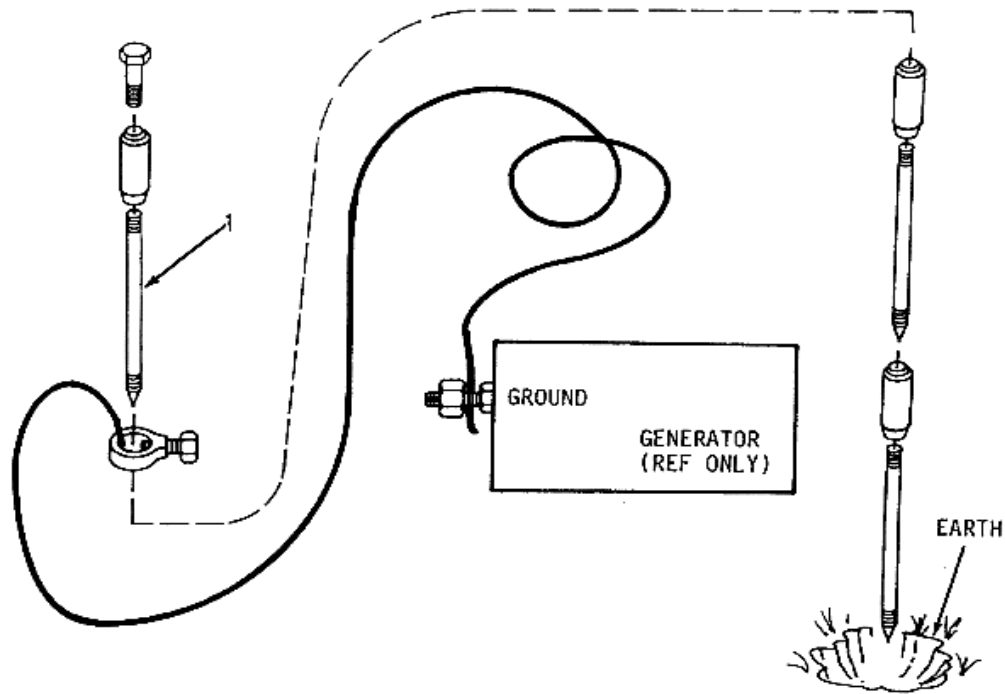
**Materials/Parts****Equipment Condition**

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

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

**REPAIR**

Repair consists of replacing damaged or missing components of the ground rod (1). Repair damaged threads using a tap and die.

**END OF WORK PACKAGE**



**UNIT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**HOSE(S) AND QUICK COUPLING HALF**  
**REPAIR**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

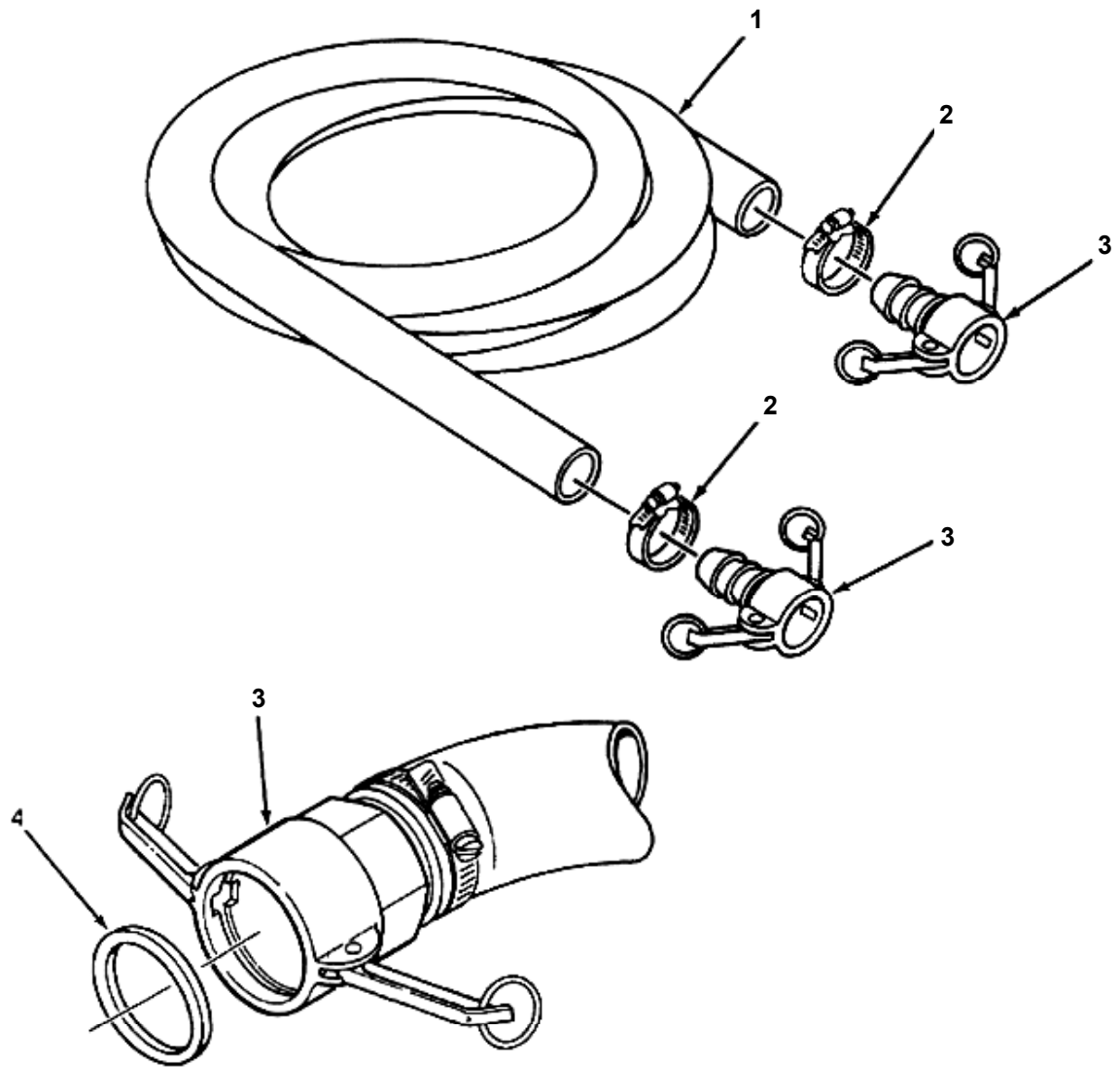
**Materials/Parts**

Gasket (Items 7 and 8, WP 0189 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
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 **(1)**.
  - a. Loosen hose clamps **(2)** and remove quick coupling halves **(3)** from hose **(1)**.
  - b. Remove hose clamps **(2)** from hose **(1)**.
  - c. Position hose clamps **(2)** on hose **(1)**.
  - d. Install quick coupling halves **(3)** in hose **(1)**.
  - e. Tighten hose clamps **(2)** on hose **(1)** and quick coupling halves **(3)**.
2. Clamp **(2)**.
  - a. Remove clamp **(2)** on hose **(1)**.
  - b. Install clamp **(2)** on hose **(1)**.
3. Quick Coupling Halves **(3)**.
  - a. Loosen clamp **(2)** on hose **(1)**.
  - b. Remove quick coupling halves **(3)** from hose **(1)**.
  - c. Install quick coupling halves **(3)** in hose **(1)**.
  - d. Tighten clamp **(2)** on hose **(1)**.
4. Gasket **(4)**.
  - a. Remove gasket **(4)** from quick coupling halves **(3)**.
  - b. Install new gasket **(4)** in quick coupling halves **(3)**.



END OF WORK PACKAGE

**UNIT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
MODIFIED TRAILER  
REPAIR**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
Hand Blind Riveter (Item 7, WP 0188 00)  
Hand Blind Riveter (Item 11, WP 0188 00)  
Installation Tool (Item 12, WP 0188 00)  
Installation Tool (Item 13, WP 0188 00)

**Personnel Required**

One

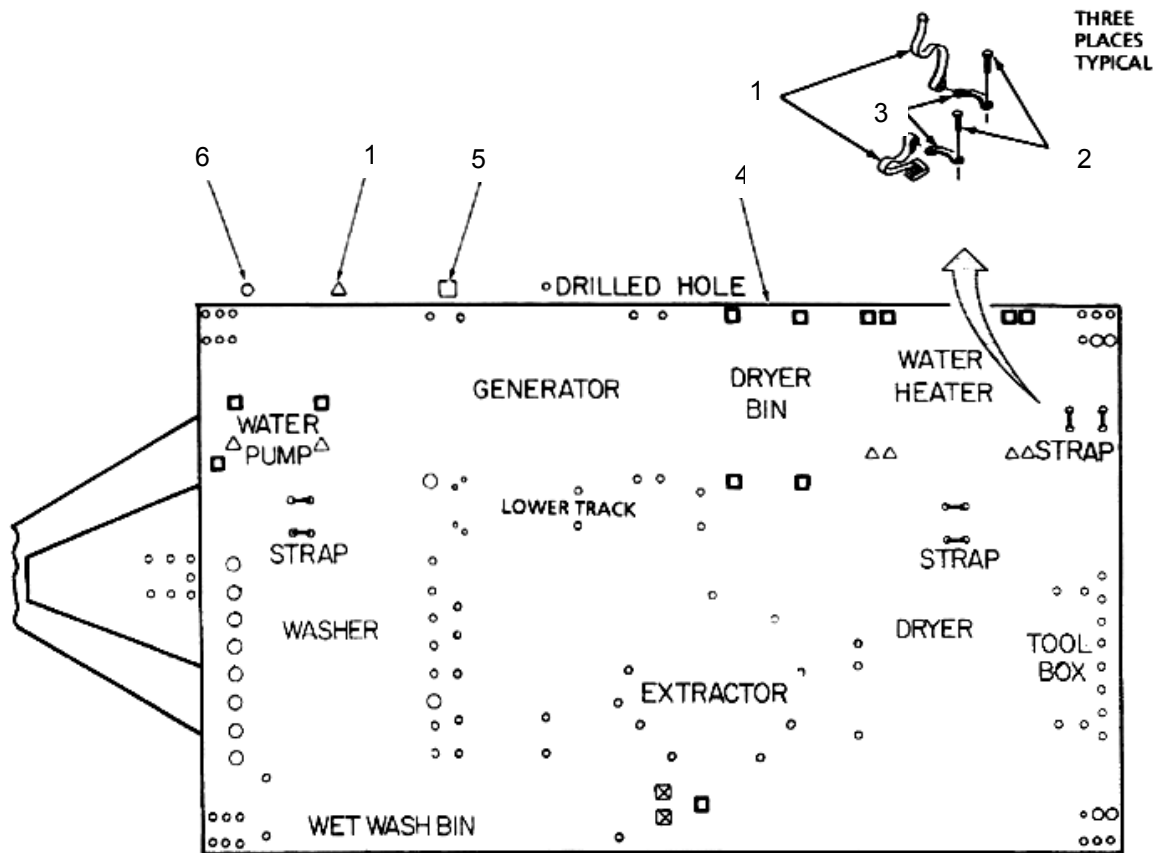
**Materials/Parts**

Blind Rivet (Item 69, WP 0189 00)  
Blind Rivet (Item 70, WP 0189 00)  
Screw Thread Insert (Item 66, WP 0189 00)  
Screw Thread Insert (Item 67, WP 0189 00)  
Screw Thread Insert (Item 68, WP 0189 00)

**Equipment Condition****REPAIR**

1. Strap **(1)**.
  - a. Remove four screws **(2)** from strap loops **(3)**.
  - b. Remove strap **(1)** from strap loops **(3)**.
  - c. Install new strap **(1)** on strap loops **(3)**.
  - d. Position strap loops **(3)** on trailer **(4)** and install four screws **(2)**.
2. Blind nut **(5)**.
  - a. Remove components as required to repair trailer **(4)**.
  - b. Remove blind nut **(5)**, using .500 drill bit.
  - c. Insert new blind nut **(5)** in hole on trailer **(4)**.
  - d. Using blind hand riveter, set blind nut **(5)** in place.
  - e. Install components as required if removed.
3. Screw thread insert **(6)**.
  - a. Remove components as required to repair trailer **(4)**.
  - b. Remove screw thread insert **(6)**, using 23/32 for 1/2 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 **(6)**.

- d. Remove insert (6).
  - e. Screw in insert (6) until slightly below surface (keeps position insert (6) at correct depth).
  - f. Drive kees down with several light taps on installation tool.
4. Screw thread insert (7) (helical coil).
- a. Remove components as required to repair trailer (4).
  - b. Remove screw thread insert (7).
  - c. Install screw thread insert (7).
  - d. Install components as required if removed.



END OF WORK PACKAGE



**CHAPTER 4**

**DIRECT SUPPORT TROUBLESHOOTING INSTRUCTIONS**  
**FOR**  
**M85 TRAILER MOUNTED LAUNDRY UNIT**



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**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**DIRECT SUPPORT MAINTENANCE GENERAL INFORMATION**

---

**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.

**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.

**COMMON TOOLS AND EQUIPMENT**

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

**SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT**

Refer to WP 0189 00 (Maintenance Allocation Chart) for a list of special tools, TMDE, and support equipment.

**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. WP 0190 00 lists the Mandatory Replacement Parts which need to be replaced during maintenance.



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**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**DIRECT SUPPORT TROUBLESHOOTING**

---

**INTRODUCTION**

The Malfunction Index lists the common malfunctions in 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.

**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.

1. Malfunction Index. For quick access to troubleshooting procedures.
2. Generator. Refer to TM 5-6115-585-12 for troubleshooting.
3. Trailer. Refer to TM 9-2330-376-14&P for troubleshooting.
4. Water Heater. Refer to TM 10-4520-259-13&P for troubleshooting.



**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200  
DIRECT SUPPORT MALFUNCTION SYMPTOM INDEX**

**DIRECT SUPPORT LAUNDRY UNIT MAIN POWER TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
No power to component circuit breaker	WP 0100 00	1

**DIRECT SUPPORT WASHER TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
Washer will not operate	WP 0110 00	1
Washer will not fill with cold/hot water in automatic/manual mode	WP 0110 00	2
Washer cylinder will not rotate in automatic/manual mode	WP 0110 00	3
Washer cylinder rotates only in one direction	WP 0110 00	4
Washer cylinder rotates, automatic function does not operate	WP 0110 00	5
Washer rotates in one direction only without stopping	WP 0110 00	6
Washer fill level too low	WP 0110 00	7
Washer fill level too high	WP 0110 00	8
Washer door will not open	WP 0110 00	9
Washer will not drain	WP 0110 00	10

**DIRECT SUPPORT DRYER TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
Dryer cylinder does not operate	WP 00107 00	1
Dryer hot air blower does not operate	WP 00107 00	2
Drying takes too long	WP 00107 00	3
Dryer's heated air is not drawn through tumbler	WP 00107 00	4
Dryer fails to operate for selected time	WP 00107 00	5
Dryer fails to dry laundry	WP 00107 00	6
Dryer fails to start	WP 00107 00	7
Dryer burner flame fails	WP 00107 00	8
Dryer tumbler does not rotate	WP 00107 00	9
Excessive smoke from dryer	WP 00107 00	10
Air leaks from dryer door	WP 00107 00	11

**DIRECT SUPPORT EXTRACTOR TROUBLESHOOTING PROCEDURES**

<b>MALFUNCTION</b>	<b>Work Package</b>	<b>Item</b>
Extractor fails to start	WP 00108 00	1
Extractor starts but basket fails to turn	WP 00108 00	2
Extractor runs too long	WP 00108 00	3





**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DRYER UNIT TROUBLESHOOTING**

**INITIAL SETUP:**

**Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

**Equipment Condition**

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

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
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 foldout pages, Dryer Wiring Diagram.
	Step 2. Check for damaged roller chain.	If roller chain is damaged, replace roller chain. Refer to WP 0174 00, 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 WP 0137 00, 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 WP 0173 00, 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 (see Foldout Section).
	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 WP 0172 00, 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 WP 0172 00, 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 WP 0172 00, Hot Air Blower.

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
4. DRYER'S HEATED AIR IS NOT DRAWN THROUGH TUMBLER – Continued.	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 WP 0172 00, Hot Air Blower.
5. DRYER FAILS TO OPERATE FOR SELECTED TIME.	Check for needle slippage by rotating needle around clockwise until it clicks.	If needle does not click at zero, loosen setscrews and tighten with the needle at the zero position.
		If problem persists, replace timer. Refer to WP 0158 00, 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 (WP 0189 00, Table 2, Item 6).
7. DRYER FAILS TO START.	Check for damaged On/Off switch.	Replace On/Off switch. Refer to WP 0167 00, 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:	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 WP 0012 00, UV and IR Flame Control Assembly.
		Check UV scanner with UV scanner control box tester (WP 0189 00, Table 2, Item 6).
	Step 2. Check flame control and UV scanner for damage.	Replace flame control and UV scanner. Refer to WP 0169 00 and WP 0170 00.
9. DRYER TUMBLER DOES NOT ROTATE.	Check speed reducer for damage.	Replace speed reducer. Refer to WP 0164 00, Speed Reducer.
10. EXCESSIVE SMOKE FROM DRYER EXHAUST.	Check for blocked or clogged pipe assemblies.	Remove clogs. Refer to WP 0175 00, Heater.
11. AIR LEAKS FROM DRYER DOOR.	Check for cracks or broken welds.	Repair cracks and welds. Refer to WP 0178 00, Tumbler Barrel.

**END OF WORK PACKAGE**

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
EXTRACTOR TROUBLESHOOTING**

**INITIAL SETUP:**

**Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)


**Personnel Required**

One

**Materials/Parts**

**Equipment Condition**

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

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
1. EXTRACTOR FAILS TO START.	 <p align="center"><b>WARNING</b></p> <p>High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.</p>	
	Step 1. Check for tripped drive motor breaker.	Remove box cover on side of extractor.
		If breaker is tripped, set to OFF, then back to ON position.
		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 WP 0153 00, 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 WP 0159 00, 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 WP 0147 00, Pushbutton Switch.

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
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 WP 0151 00 Extractor Brake.
	Step 2. Check drive unit for damage and oil leaks.	If drive unit is damaged or leaking, repair drive unit. Refer to WP 0150 00, 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 WP 0157 00, Timer.

**END OF WORK PACKAGE**

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
LAUNDRY UNIT TROUBLESHOOTING**

**INITIAL SETUP:**

**Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

**Equipment Condition**

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

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
NO POWER TO COMPONENT CIRCUIT BREAKERS.	Measure power at input side of breaker.	Repair power cable. Refer to WP 0140 00, Power Cable, direct support.

**END OF WORK PACKAGE**



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
WASHER TROUBLESHOOTING**

**INITIAL SETUP:**

**Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

**Equipment Condition**

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

<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
1. WASHER WILL NOT OPERATE.	Step 1. Check for blown fuse inside control box.	If fuse is blown, replace fuse. Refer to WP 0136 00, Chassis Control, direct support.
	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 11, K12, K13 if defective. Refer to WP 0136 00, Chassis Control.
3. WASHER CYLINDER WILL NOT ROTATE IN AUTOMATIC MODE.	Step 1. Check K9 relay.	Replace relay if defective. Refer to WP 0136 00, Chassis Control.
	Step 2. Check for defective gear reducer. Check for rough or high-friction turning of shafts.	Repair or replace reducer. Refer to WP 0134 00, Reducer and Output Quill.
4. WASHER CYLINDER ROTATES ONLY IN ONE DIRECTION.	Check reversing contactors in control panel.	Replace reversing contactor. Refer to WP 0136 00, 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 WP 0136 00, Chassis Control.
	Step 3. Check functioning of AUTO/MANUAL switch.	Replace AUTO/MANUAL switch. Refer to WP 0133 00, Control Panel.

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
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 WP 0136 00, Chassis Control.
	Step 2. Check operation of movement timing switches.	Replace switches. Refer to WP 0136 00, Chassis Control.
	Step 3. Check functioning of reversing contactor.	Replace reversing contactor. Refer to WP 0136 00, Chassis Control.
7. WASHER FILL LEVEL TOO LOW (well below lowest setting).	<p style="text-align: center;"><b><u>WARNING</u></b></p> 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. After testing for normally closed contacts, gently blow on the pressure switch using a small hose. The contacts should open.	If switch is defective, replace water level switch. Refer to WP 0133 00, Control Panel.  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 WP 0131 00, Control Console.
8. WASHER FILL LEVEL TOO HIGH (well above setting or water overflowing into the overflow line).	<p style="text-align: center;"><b><u>WARNING</u></b></p> 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.	If switch is defective, replace water level switch. Refer to WP 0133 00, Control Panel.  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 WP 0131 00, Control Console.



<b>MALFUNCTION</b>	<b>TEST OR INSPECTION</b>	<b>CORRECTIVE ACTION</b>
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 WP 0131 00, Control Console.
10. WASHER WILL NOT DRAIN	Check for clog in washer drain.	Remove clog.

**END OF WORK PACKAGE**



## **CHAPTER 5**

# **DIRECT SUPPORT MAINTENANCE INSTRUCTIONS FOR M85 TRAILER MOUNTED LAUNDRY UNIT**



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**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**DIRECT SUPPORT MAINTENANCE PROCEDURES**

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**GENERAL MAINTENANCE PROCEDURES****Electrical Motor and Generator Repair.**

Repair electric motors and generators in accordance with TM 5-764.

**Wiring.**

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

**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 WP 0193. Cable Diagrams, Wire Run List, and Control Circuits.

**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. If the break in the wire is in a harness, conduit, or inaccessible area, replace the wire.

**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 accordingly.

**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.

**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. Be sure to leave no bare wire exposed. If a terminal lug breaks off a wire, replace it with an exact duplicate.

**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.

**Bearings.** For cleaning and inspection of antifriction bearings, refer to TM 9-2 14.

### Cleaning and Inspection of Mechanical Parts.



### WARNING

P-D-680 Dry cleaning 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 dry cleaning 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.

### 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 bare metal areas with sandpaper and refinish with primer and olive drab paint. Refer to TM 43-0139 for proper painting instructions. Allow paint to dry between coats.

### END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
TARPAULIN  
REPAIR**

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**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Grommet Press (Item 15, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

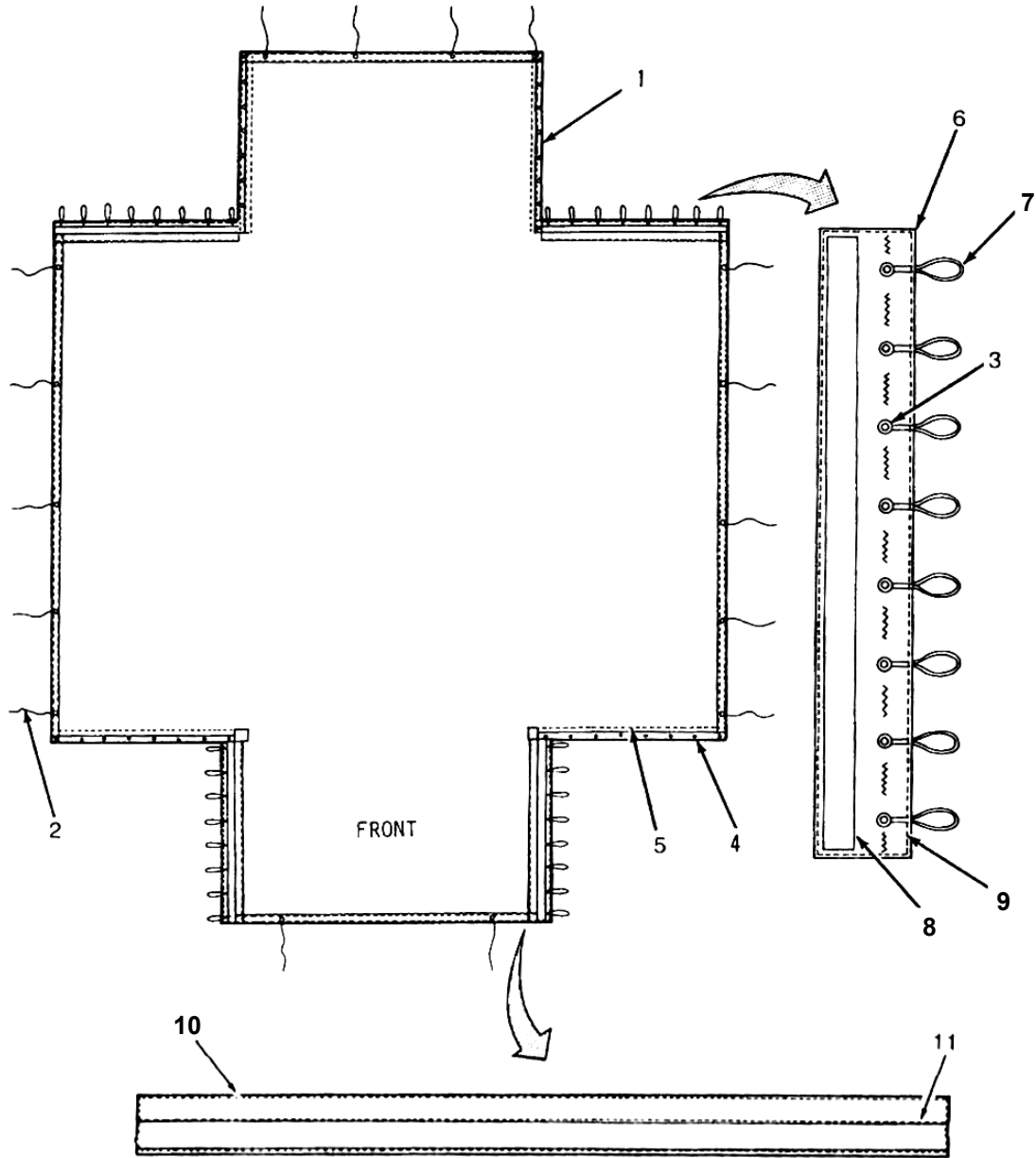
Thread (Item 23, WP 0190 00)  
Metallic grommet(s) (Item 32, WP 0189 00)  
Tape, Textile (Item 22, WP 0190 00)  
Cord, Braided (Item 8, WP 0190 00)

**Equipment Condition**

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**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 **(7)**.
  - b. Grommet **(3)**.
  - c. Textile Tape **(8)** (60 inches).
  - d. Body **(9)**.
3. Flap **(10)**. Repair consists of replacing damaged or missing components of the flap **(10)**. Refer to FM 10-16, Repair of Tents, Canvas and Webbing. Pile tape **(11)** (60 inches).



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
LADDER  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

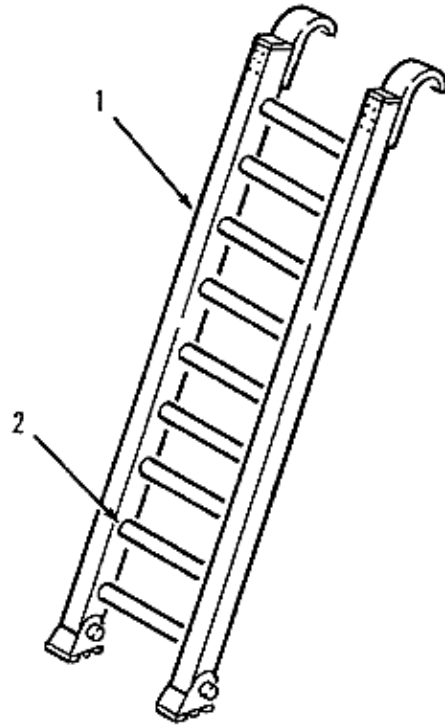
Thread (Item 23, WP 0190 00)  
Metallic grommet(s) (Item 32, WP 0189 00)  
Tape, Textile (Item 22, WP 0190 00)  
Cord, Braided (Item 8, WP 0190 00)

**Equipment Condition****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 TM 9-237 Welding Theory and Application.



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
BASKET(S)  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Basket(s) removed, if required (WP 0021 00)

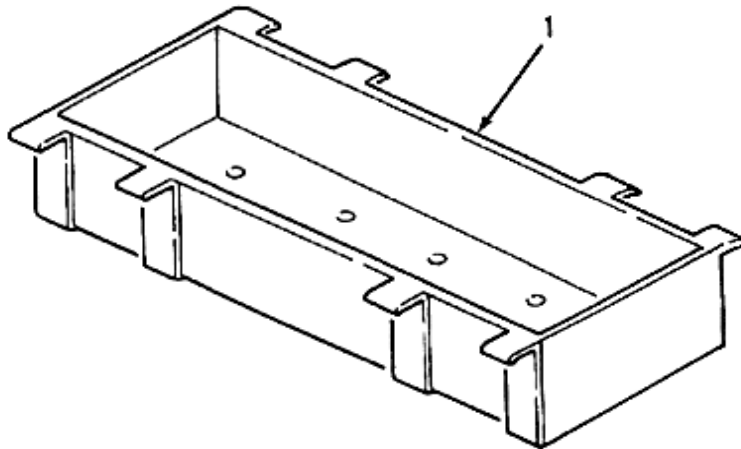
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**WARNING**

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 basket(s) (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
2. Install basket(s) (1) if removed (WP 0021 00).

**END OF WORK PACKAGE**



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
FRONT AND REAR FRAMES  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Front and/or rear frames removed if required (WP 0026 00 and WP 0027 00)

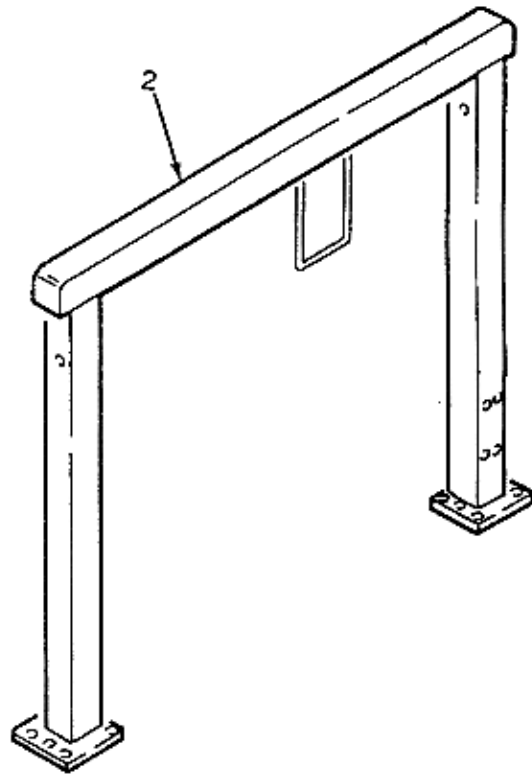
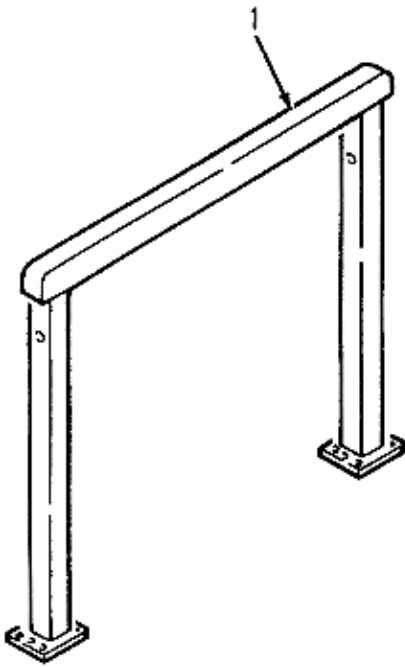
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**WARNING**

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 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)** in accordance with WP 0026 00 and/or WP 0027 00.



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
STRUT  
REPAIR**

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Ladder removed (WP 0113 00)

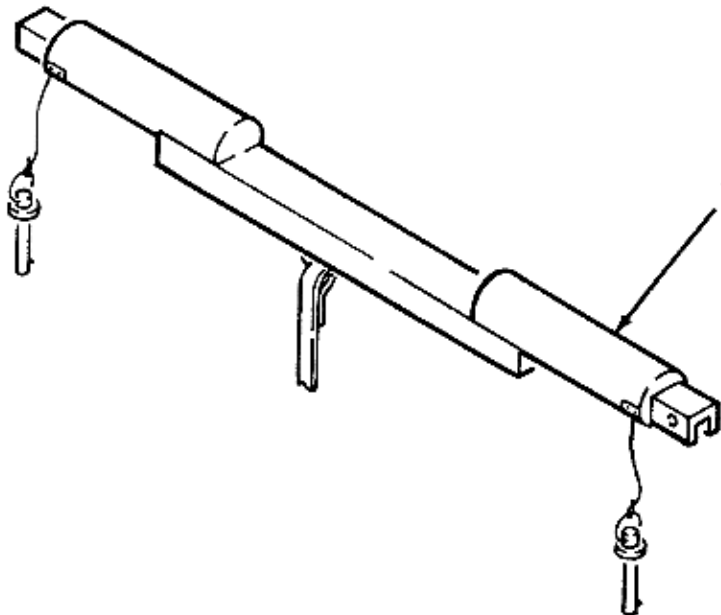


**WARNING**

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.



**END OF WORK PACKAGE**





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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
RIGHT, CENTER, AND LEFT BEAMS  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Right and Center Beams removed (WP 0023 00 and WP 0024 00)

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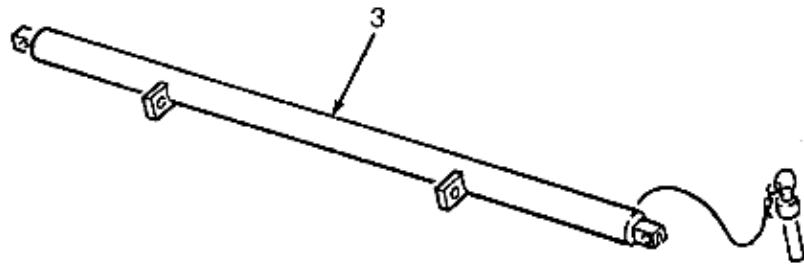
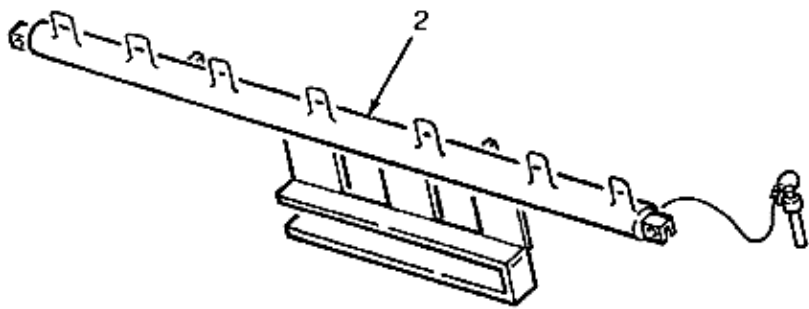
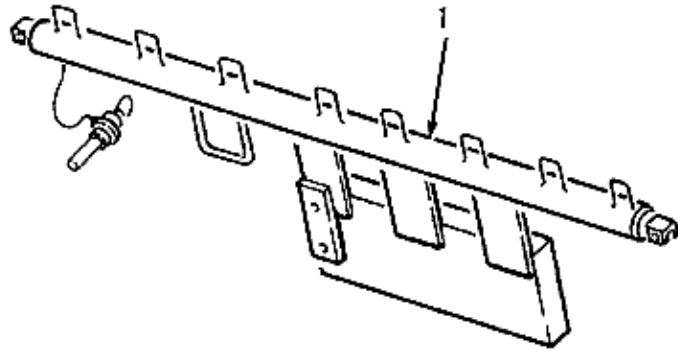
**WARNING**

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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 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)** in accordance with WP 0023 00 and/or WP 0024 00.
3. If required, install left beam **(3)** in accordance with WP 0025 00.



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
UPRIGHT RAIL  
REPAIR**

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

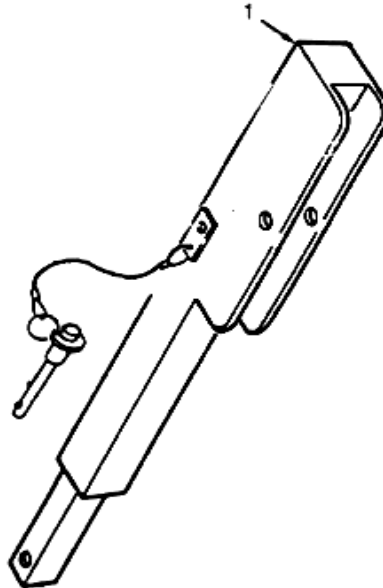
**Materials/Parts****Equipment Condition**

**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.



**END OF WORK PACKAGE**



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
LOWER TRACK  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Lower track removed (WP 0031 00)

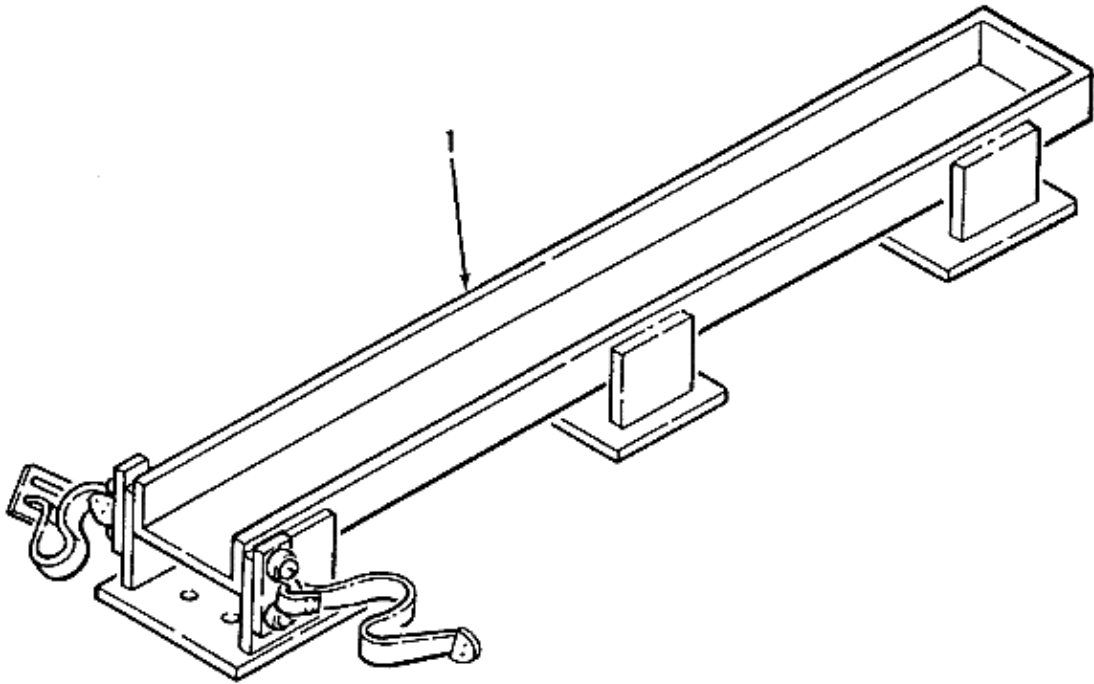
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**WARNING**

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 lower track **(1)** being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
2. Install lower track **(1)** (WP 0031 00).



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
MAINTENANCE PLATFORM  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Maintenance platform removed (TM 10-3510-222-10)

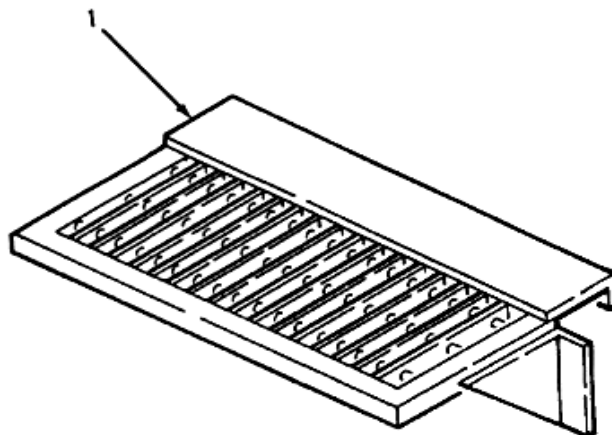
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**WARNING**

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 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).



**END OF WORK PACKAGE**





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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
SHORT PLATFORM  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Short platform removed (TM 10-3510-222-10)

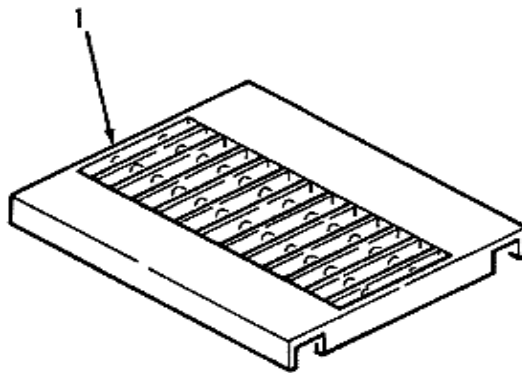
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**WARNING**

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 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).



**END OF WORK PACKAGE**



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
LOWER/DRYER PLATFORM  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Lower/dryer platform removed (TM 10-3510-222-10)

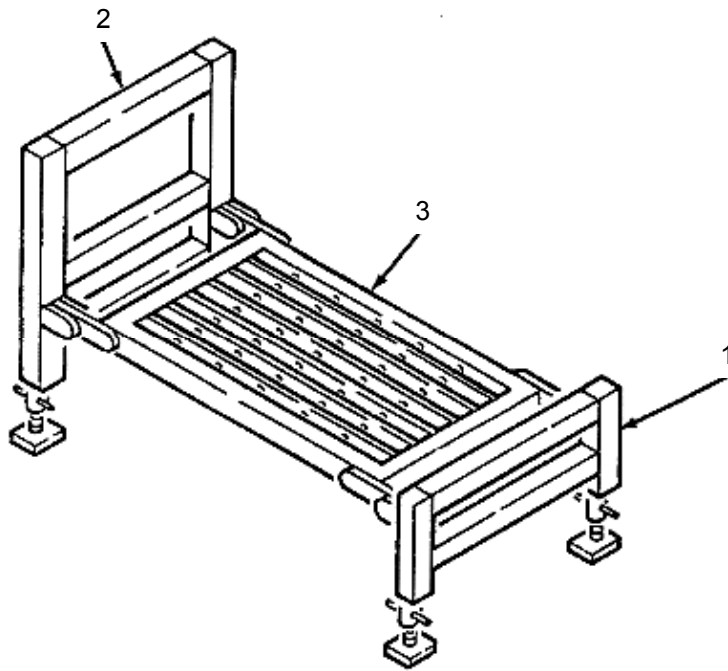
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**WARNING**

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 lower frame **(1)** or high frame **(2)** and/or lower/dryer platform **(3)** being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
2. Install lower/dryer platform (TM 10-3510-222-10).



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
NSN (3510-01-291-8169 (M85-100))  
NSN (3510-01-365-5687 (M85-200))  
DRYER PLATFORM ASSEMBLY  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Dryer platform assembly removed (TM 10-3510-222-10)

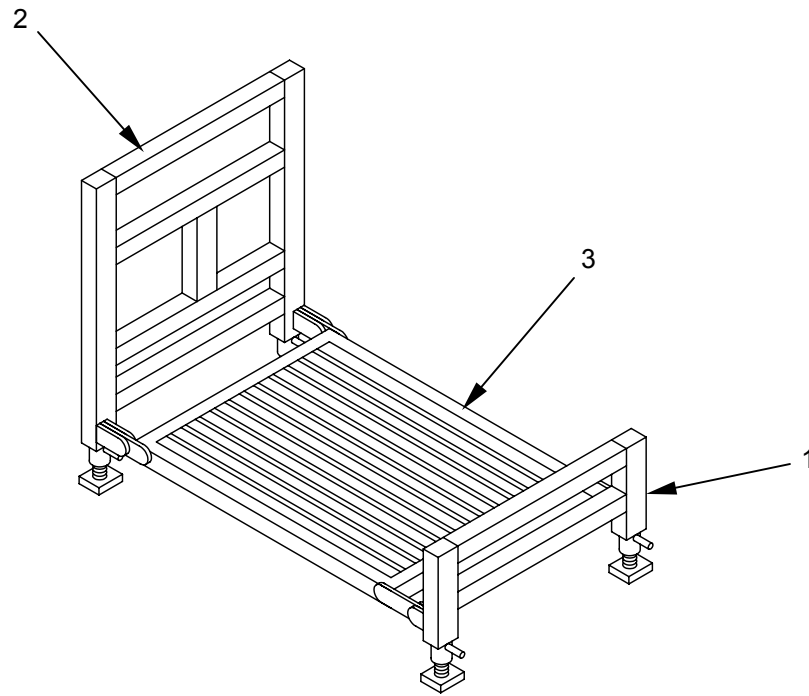
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**WARNING**

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 lower frame **(1)** or high frame **(2)** and dryer platform **(3)** being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.
2. Install dryer platform (TM 10-3510-222-10).



**END OF WORK PACKAGE**

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
SEAL AND CARRIAGE  
REMOVE, SERVICE, INSPECT, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Gasket (Item 9, WP 0189 00)

Adhesive (RTV) (Item 1, WP 0190 00)

**Equipment Condition**

Reducer removed (WP 0134 00)

**REMOVE**

1. Remove two set screws **(1)** from collar **(2)**.
2. Remove collar **(2)** from shaft of basket **(3)**.
3. Remove six nuts **(4)**, lockwashers **(5)** and flat washers **(6)** from studs **(7)**.
4. Remove carriage **(8)** from washer **(9)**.
5. Remove three seals **(10)** from carriage **(8)**.

**SERVICE**

Clean adhesive from back of washer **(9)** and from carriage **(8)**.

**INSPECT**

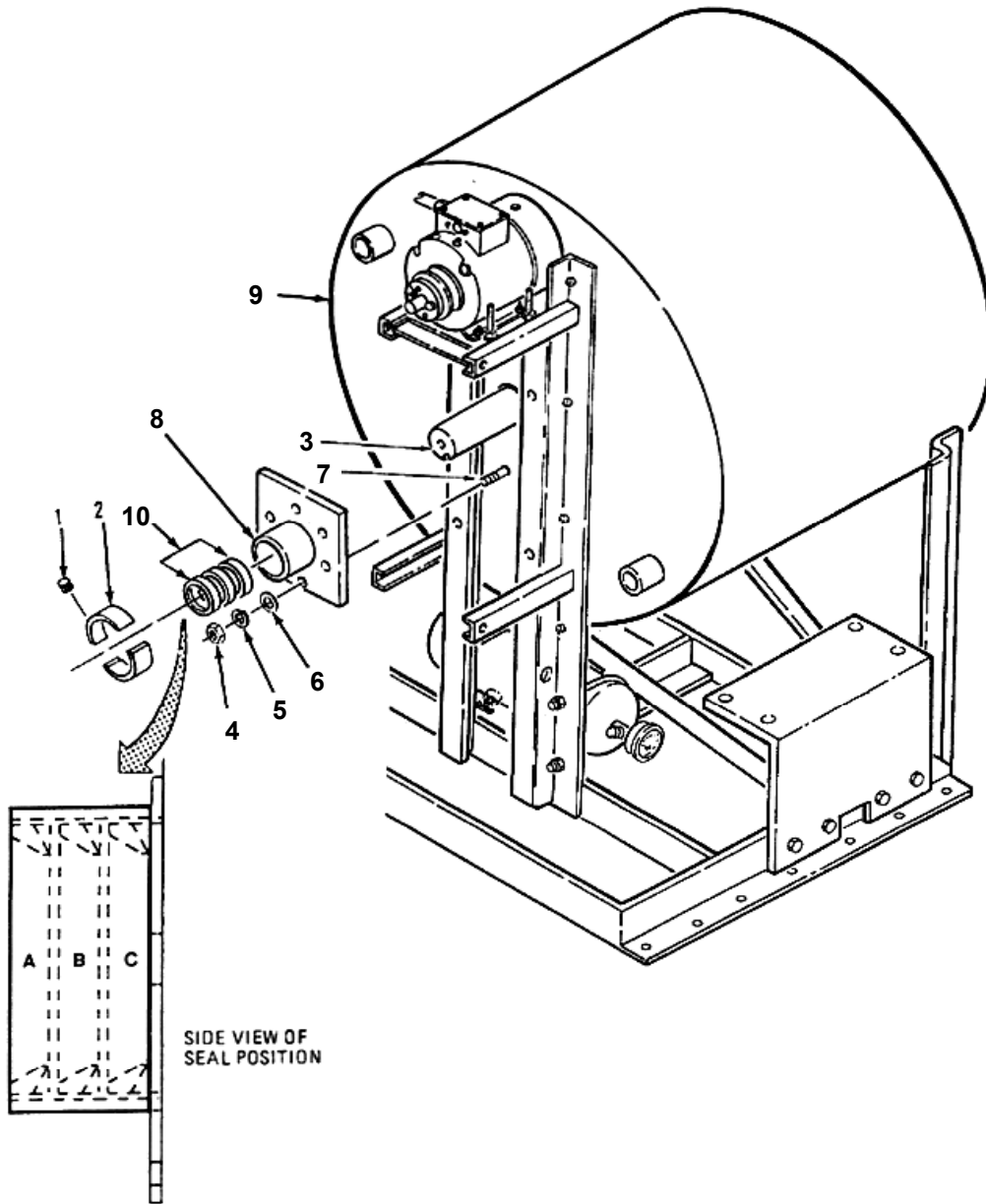
Inspect carriage **(8)** for damage or wear.

**REPAIR**

Repair consists of replacing damaged or missing components of the seal **(10)** and carriage **(8)**.

**INSTALL**

1. Install three seals **(10)** on carriage **(8)**.
2. Lubricate seals **(10)**.
3. Apply adhesive to back of carriage **(8)**.
4. Position carriage **(8)** on studs **(7)** and install six flat washers **(6)**, lockwashers **(5)** and nuts **(4)**.
5. On collar **(2)** index pin position on index hole shaft of basket **(3)** and install two set screws **(1)**.
6. Install reducer (WP 0134 00).



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
BASKET  
REMOVE, INSPECT, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Tool Kit (Item 3, WP 0188 00)  
Welding Shop (Item 8, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Gasket (Item 50, WP 0189 00)  
Gasket (Item 51, WP 0189 00)  
Gasket (Item 9, WP 0189 00)  
Adhesive (RTV) (Item 1, WP 0190 00)

**Equipment Condition**

Wet wash bin removed (WP 0053 00)  
Seal and carriage removed (WP 0124 00)  
Lock cover removed (WP 0042 00)

**REMOVE****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 **(4)**.
2. Remove gasket **(5)** and discard.
3. Remove front drum **(6)**.

**WARNING**

Be careful when removing basket from drum; basket has sharp edges and may injure personnel.

4. If replacing basket **(7)** do substeps below:
  - a. Remove two nuts **(8)** and one bolt **(9)** from ring **(10)**.
  - b. Remove ring **(10)** and gasket **(11)** from basket **(7)**.

**WARNING**

Tumbler barrel is heavy/difficult to handle. To prevent injury, use two people to lift.

- c. Remove basket (7) from drum (4).

**INSPECT**

Inspect parts for damage or wear.

**REPAIR**

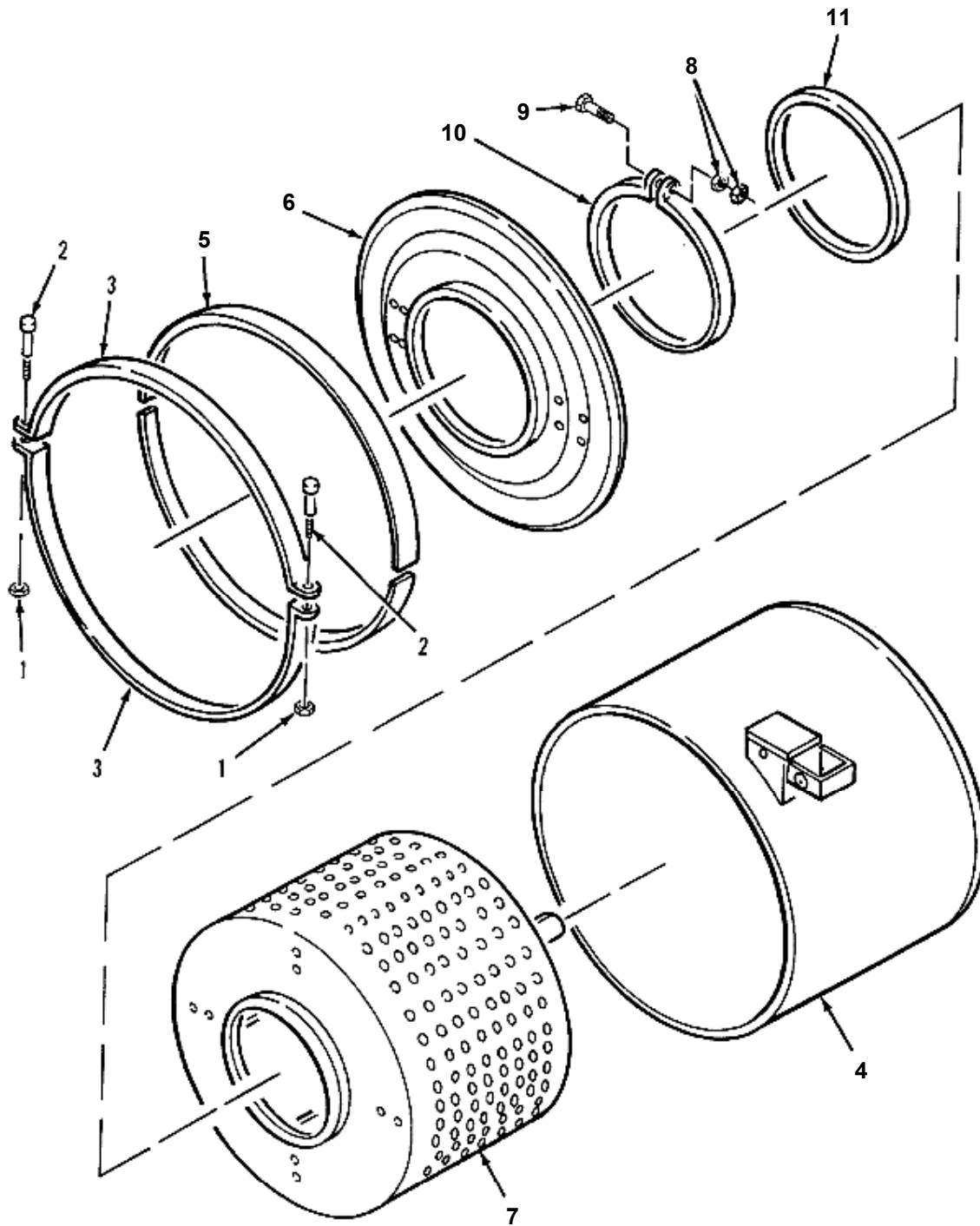
Repair consists of basket (7) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.

**INSTALL****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 (10) and ring (11) on basket (7).
  - b. Install bolt (9) and two nuts (8) on ring (10).
  - c. Position basket (7) on drum (4).
2. Install gasket (5) in draw band (3).
3. Position draw band (3) on drum (4).
4. Position two screws (2) and nuts (1) on draw bands (3).
5. Position front drum (6) on drum (4) on draw band (3).
6. Tighten draw band (3) and cut excess gasket (5).
7. Apply adhesive to gap in gasket (5) on both sides.

8. Install lock cover (WP 0042 00).
9. Install seal and carriage (WP 0124 00).
10. Install wet wash bin (WP 0053 00).



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
TWO STEP STAIR  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Two step stair removed (TM 10-3510-222-10)

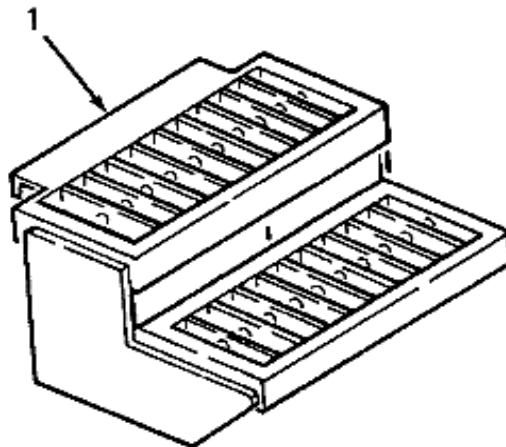
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**WARNING**

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 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).



**END OF WORK PACKAGE**



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DRUM  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0189 00)  
Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
Automotive Vehicle Tool Kit (Item 3, WP 0188 00)  
Welding Shop (Item 8, WP 0188 00)

**Personnel Required**

Three

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)  
Adhesive (RTV) (Item 1, WP 0190 00)

**Equipment Condition**

Basket removed (WP 0021 00)  
Pressure gauge removed (WP 0048 00)  
Tub pipe removed (WP 0041 00)

**REMOVE**

1. Remove three screws **(1)** from panel **(2)**.
2. Remove two screws **(3)** from drum **(4)** and remove panel **(2)**.
3. Remove two nuts **(5)**, lockwashers **(6)** and bolts **(7)** from strap **(8)**.
4. Remove strap **(8)** from drum **(4)**.
5. Remove nut **(9)**, lockwasher **(10)**, flat washer **(11)** and bolt **(12)** from drum **(4)**.
6. Remove hose clamp **(13)** from hose **(14)**.
7. Remove hose **(14)** from nipple **(15)**.
8. Remove nipple **(15)** from elbow **(16)**.
9. Remove elbow **(16)** from nipple **(17)**.
10. Remove nipple **(17)** from elbow **(18)**.
11. Remove elbow **(18)** from drum **(4)**.
12. Remove hose **(19)**.
13. Remove elbow **(20)** from drum **(4)**.
14. Support drum **(4)**, remove eight nuts **(21)**, lockwashers **(22)**, bolts **(23)** and spacers **(24 and 25)**.
15. Remove drum **(4)**.
16. Remove disconnect coupling **(26)** from elbow **(20)**.
17. Remove four nuts **(27)** from guard **(28)** and remove guard **(28)**.

18. Remove two screws (27) from catch (29) and remove catch (29).
19. Remove two screws (29) from latch (30) and remove latch (30).

## REPAIR

Repair consists of drum (4) being straightened and/or welded.

## INSTALL

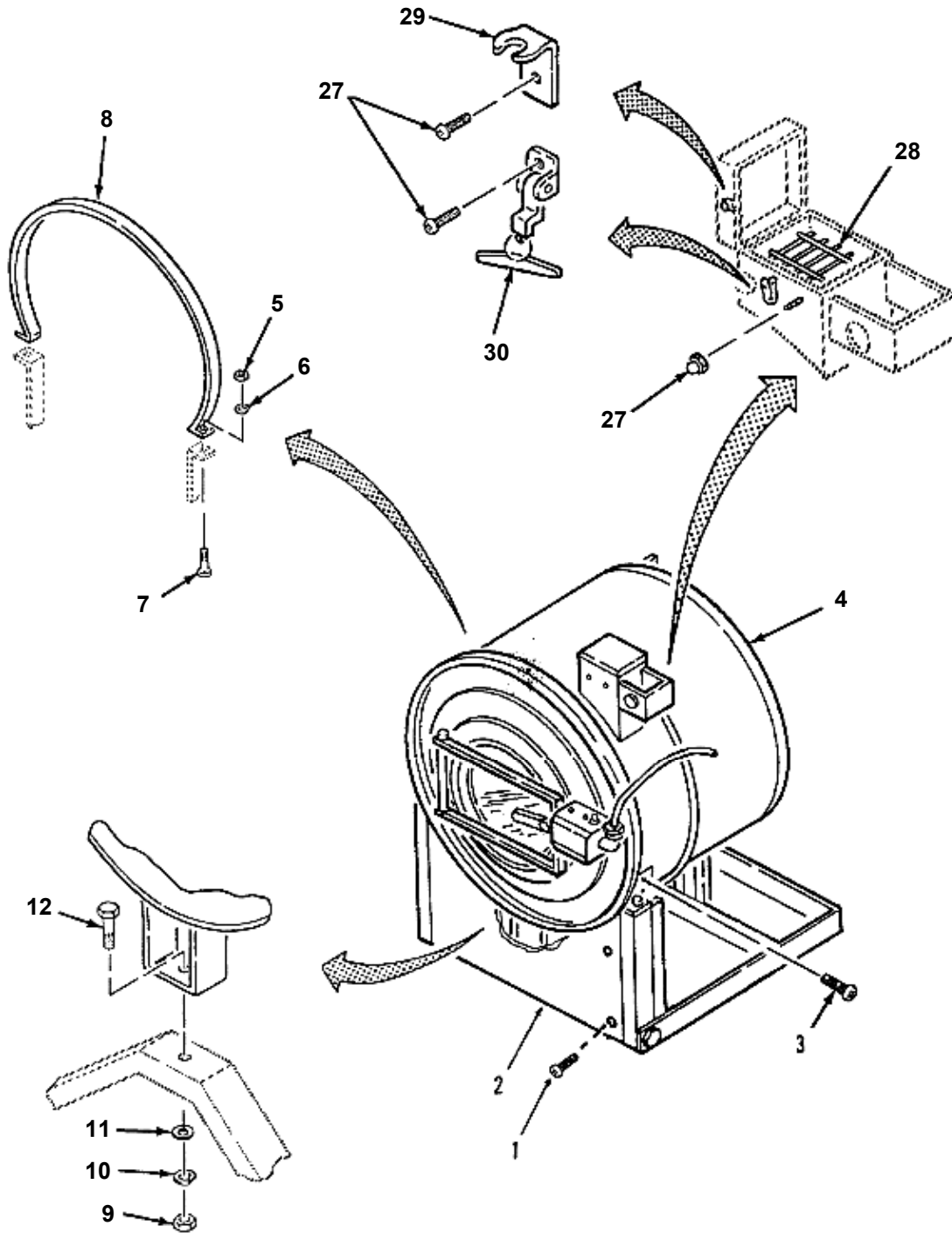
### NOTE

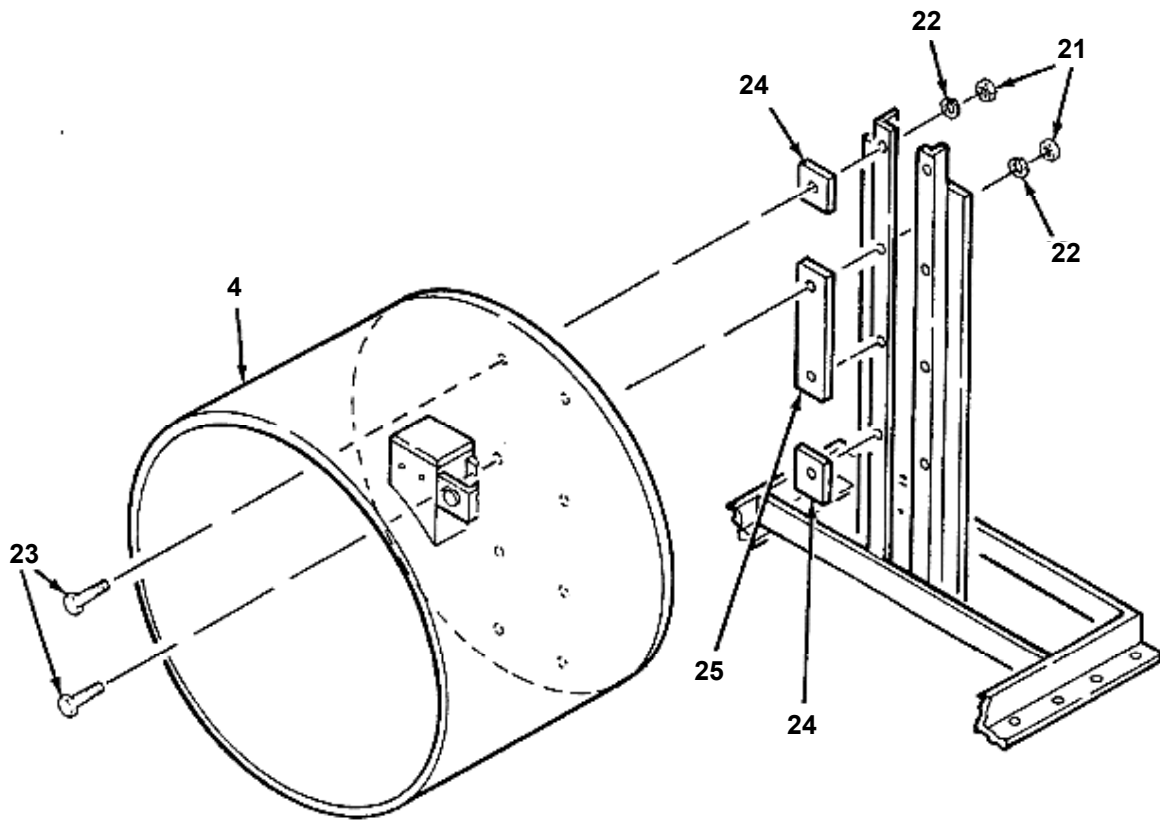
Apply antiseize compound to all male threads of piping before installing hardware.

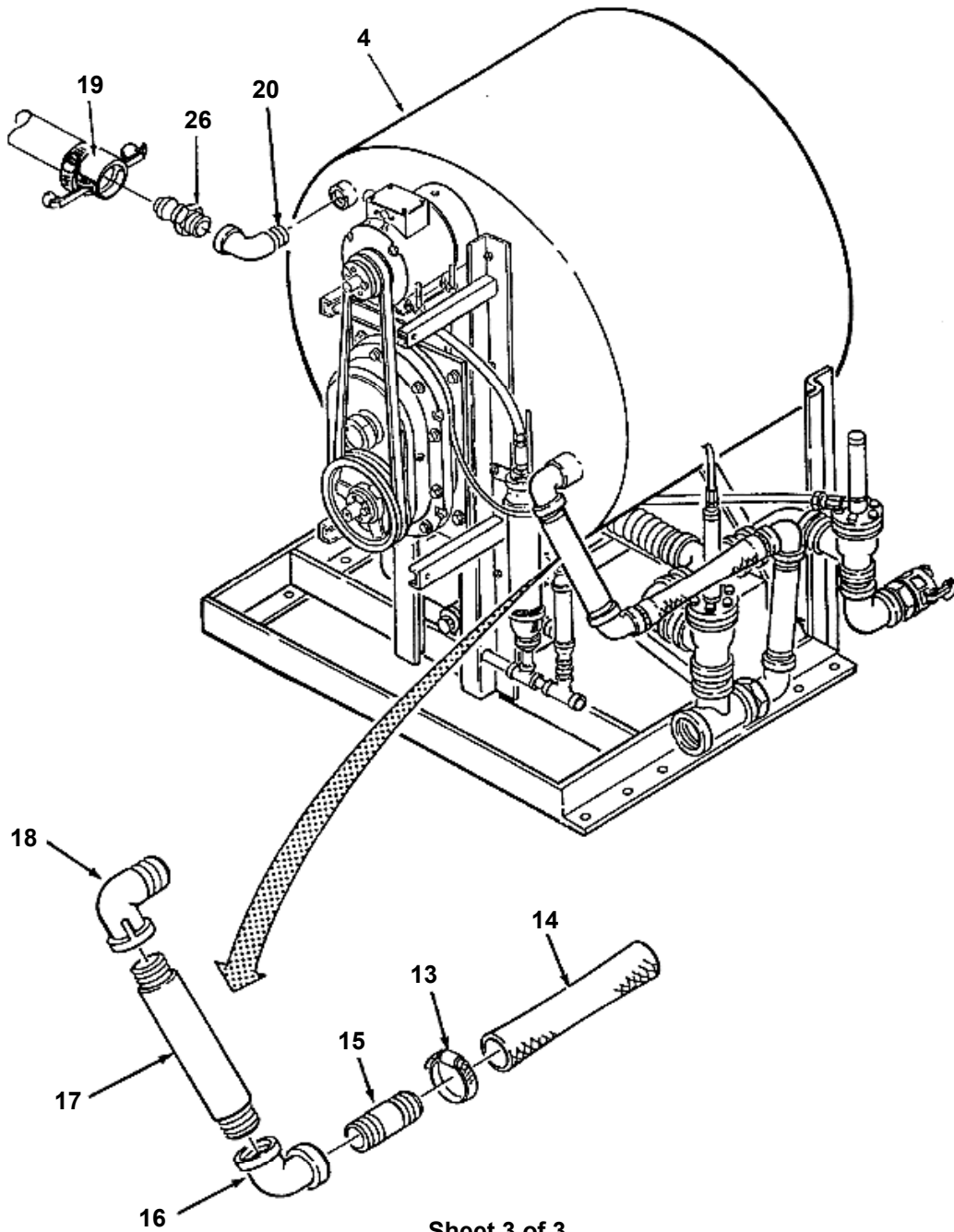
1. Position drum (4) on washer.
2. Position spacers (24 and 25) between drum (4) and washer frame and install eight bolts (23), lockwashers (22) and nuts (21).
3. Apply adhesive around bolts (23).
4. Install bolt (12), flat washer (11), lockwasher (10) and nut (9).
5. Position strap (8) on drum (4) and install two bolts (7), lockwashers (6) and nuts (5).
6. Install panel (2) with three screws (1).
7. Install two screws (3) on drum (4).
8. Install elbow (18) on drum (4).
9. Install nipple (17) on elbow (18).
10. Install elbow (16) on nipple (17).
11. Install nipple (15) on elbow (16).
12. Install hose (14) on nipple (15).
13. Install hose clamp (13) on hose (14).
14. Install elbow (20) on drum (4).
15. Install disconnect coupling (26) on elbow (20).
16. Install hose (19) on disconnect coupling (26).
17. Position catch (29) on dispenser of drum (4) and install two screws (27).
18. Position latch (30) on dispenser of drum (4) and install two screws (27).
19. Position guard (28) in dispenser of drum (4) and install four nuts (27).
20. Install basket (WP 0021 00).
21. Install pressure gauge (WP 0048 00).



22. Install tub pipe (WP 0041 00).







Sheet 3 of 3

END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
WASHER DRAIN  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Solder (Item 18, WP 0190 00)  
Flux (Item 10, WP 0190 00)  
Antiseize Compound (Item 5, WP 0190 00)

**Equipment Condition**

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



**WARNING**

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

**REMOVE**

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)**.
  - b. Remove coupling half **(3)** from swing check valve **(20)**.
  - c. Remove swing check valve **(20)** from adapter **(21)**.

## 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).

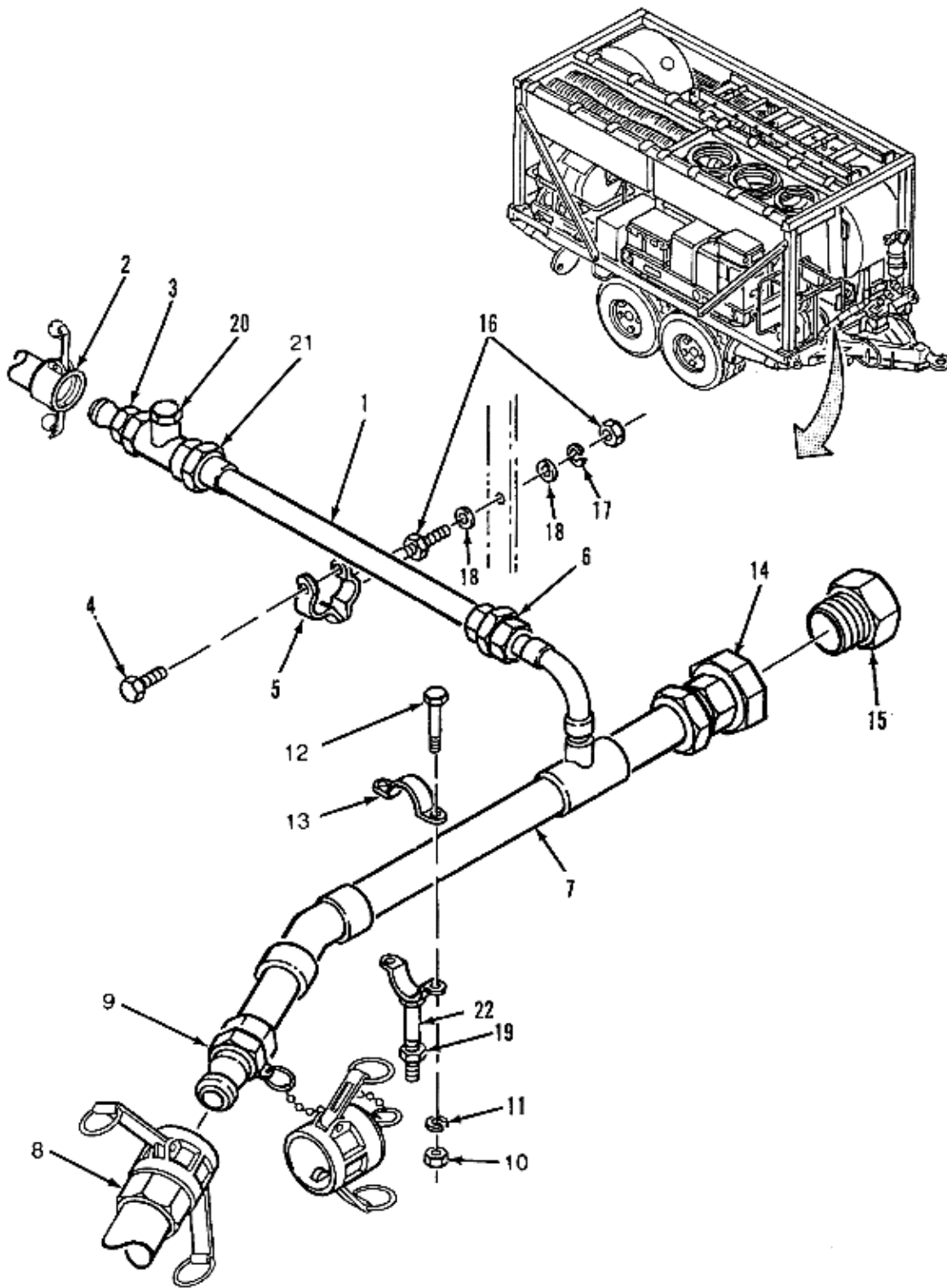
Remove damaged fitting(s). Before installing fitting(s), apply antiseize compound to male threads.
3. Pipe holder **(5)**.

Repair consists of replacing components on the pipe holder **(5)**.

## INSTALL

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)**.



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
FRAME  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Trailer mounted welding shop (Item 8, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Antiseize Compound (Item 5, WP 0190 00)  
Adhesive (RTV) (Item 1, WP 0190 00)

**Equipment Condition**

Drum removed (WP 0127 00)  
Air Tank removed (WP 0047 00)



**WARNING**

Frame of the Laundry Unit is heavy and awkward to handle. Serious injury could occur if moved without sufficient personnel.

**REMOVE**

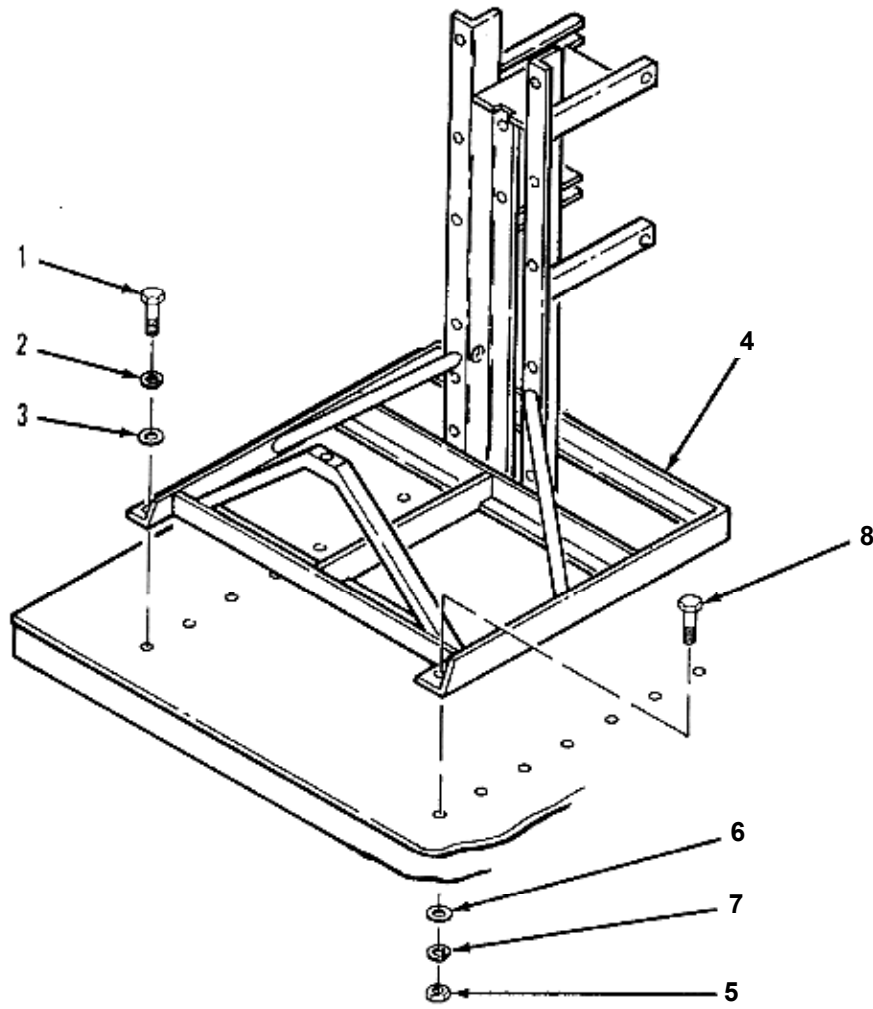
1. Remove 15 bolts (1), lockwashers (2), flat washers (3) from frame (4) and modified trailer.
2. Remove nut (5), flat washer (6), lockwasher (7) and bolt (8) from frame (4) and modified trailer.
3. Remove frame (4) from modified trailer.

**REPAIR**

Repair consists of frame (4) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.

**INSTALL**

1. Position frame (4) on modified trailer.
2. Install bolt (8), flat washer (6), lockwasher (7) and nut (5) on frame (4).
3. Install 15 flat washers (3), lockwashers (2) and bolts (1) on frame (4) and modified trailer.
4. Install drum (WP 0127 00).
5. Install air tank (WP 0047 00).



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
WASHER  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Tie Down Straps (Item 3, WP 0190 00)  
Electrical Connector (Item 24, WP 0189 00)  
Tags (Item 19, WP 0190 00)  
Sealing Washer (Item 64, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Front frame removed (WP 0026 00)  
Wet wash bin removed (WP 0053 00)  
Washer drain (upper and lower), and  
Lower washer hookup removed (WP 0128 00)

**WARNING**

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

**REMOVE**

1. Open drain cock **(1)** on washer air tank **(2)**.
2. When gauge on washer air tank **(2)** reads 0 psi, close drain cock **(1)**.
3. Disconnect air hoses **(3 and 4)** from normal open valve **(5)** and normal closed valve **(6)**.
4. Remove quick disconnect cap **(7)** from quick coupling half **(8)**.
5. Remove quick coupling half **(8)** from elbow **(9)**.
6. Remove four mounting studs **(10)** from belt guard **(11)**.
7. Remove belt guard **(11)** from washer **(12)**.
8. Remove quick disconnect coupling **(13)** from coupling half **(14)**.
9. Remove coupling half **(14)** from elbow **(15)**.
10. Remove elbow **(15)** from washer **(12)**.

11. Remove fifteen bolts (16), lockwashers (17) and flat washers (18) from washer (12) and Laundry Unit.
12. Remove one nut (19), lockwasher (20), flat washer (21) and bolt (22) from washer (12) and Laundry Unit.
13. Remove air hoses (3 and 4) from washer control panel (23).
14. Disconnect three air hoses (24) from washer control panel (23).
15. Remove twelve screws (25) and washers (26), top cover (27) and washer control panel (23).
16. Tag and disconnect electrical wiring to conduit (28) and control panel (23) from Laundry Unit.
17. Remove connector nut (29), gasket (30) and flexible conduit (28) from washer control panel (23).
18. Disconnect air hoses (31 and 32) from washer control panel (23).

**WARNING**

Washer is heavy and awkward to handle. Serious injury could occur if moved without sufficient personnel.

19. Remove four nuts (33), lockwashers (34), eight flat washers (35) and bolts (36) from washer control panel (23) and washer control stand (37).
20. Support washer control panel (23) and remove washer (12) from Laundry Unit using suitable lifting device.
21. Position belt guard (11) on washer (12) and install four mounting studs (10).

**REPAIR****NOTE**

Washer repairs are covered in (WP 0127 00) through (WP 0130 00).

**INSTALL**

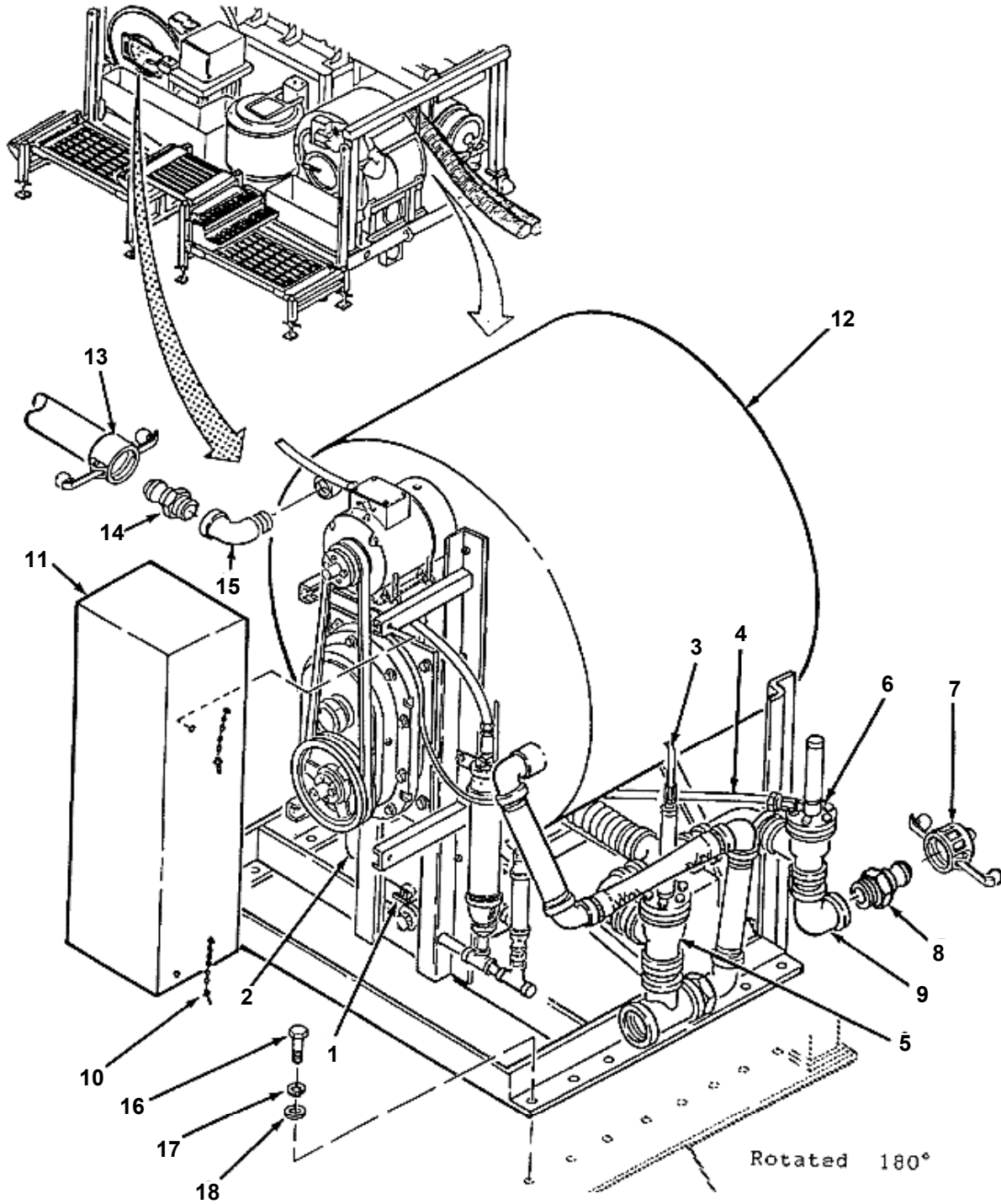
1. Remove four mounting studs **(10)** from belt guard **(11)**.
2. Remove belt guard **(11)** from washer **(12)**.
3. Position washer **(12)** on Laundry Unit using suitable lifting device.
4. Install eight flat washers **(35)**, four lockwashers **(34)** and nuts **(33)** on bolts **(36)** of washer control panel **(23)**.
5. Install flat washer **(21)**, lockwasher **(20)** and nut **(19)** on bolt **(22)** on washer **(12)** and Laundry Unit.
6. Install fifteen flat washers **(18)**, lockwashers **(17)** and bolts **(16)** on washer **(12)** and Laundry Unit.
7. Connect air hoses **(31 and 32)** to washer control panel **(23)**.
8. Install gasket **(30)**, electrical connector and flexible conduit **(28)** and wiring in washer control panel **(23)**. Secure with nut **(29)**.

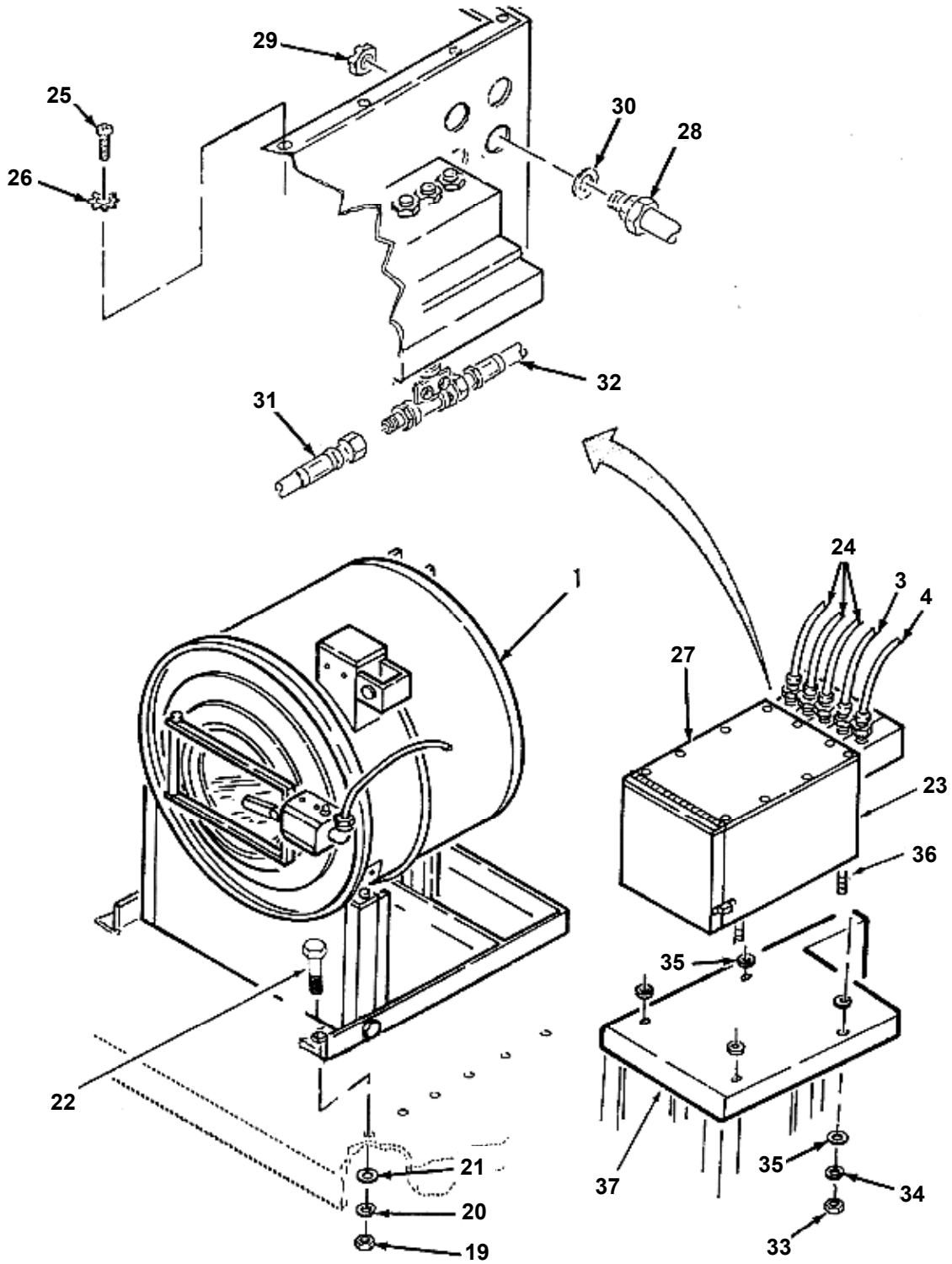
**NOTE**

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 **(23)**.
10. Position top cover **(27)** on washer control panel **(23)** and install twelve washers **(26)** and screws **(25)**.
11. Connect three air hoses **(24)** on washer control panel **(23)**.
12. Install air hoses **(3 and 4)** on washer control panel **(23)**.
13. Apply antiseize compound to male threads of elbow **(15)** and install on washer **(12)**.
14. Apply antiseize compound to male threads of coupling half **(14)** and install in elbow **(15)**.
15. Connect quick disconnect coupling **(13)** to coupling half **(14)**.
16. Position belt guard **(11)** on washer **(12)** and install four mounting studs **(10)**.
17. Apply antiseize compound to male threads of quick coupling half **(8)** and install in elbow **(9)**.
18. Install quick disconnect cap **(7)** on quick coupling half **(8)**.
19. Route-air hoses **(3 and 4)** behind washer **(12)** and use tie down straps as required to support hoses **(3 and 4)**.
20. Connect air hose **(3)** to normal open valve **(5)**.
21. Connect air hose **(4)** to normal close valve **(6)**.
22. Install front frame (WP 0027 00).
23. Install wet wash bin (WP 0053 00).

24. Install washer drain (upper and lower) and lower washer hookup (WP 0128 00).





END OF WORK PACKAGE





**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
CONTROL CONSOLE  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Adhesive (RTV) (Item 1, WP 0190 00)  
Sealing Washer (5) (Item 64, WP 0189 00)  
Tag (Item 19, WP 0190 00)  
Gasket (Item 78, WP 0189 00)

**Equipment Condition**

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



**WARNING**

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

**REMOVE**

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)**.

## 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)**.
  - 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)**.
- l. 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)**.
5. Latch **(39)** and strike **(36)**.
6. Remove two screws **(34)** and lockwashers **(35)**.
7. Remove strike **(36)**.
8. Position new strike **(36)** on washer control console **(3)** and install two lockwashers **(35)** and screws **(34)**.
9. Remove two screws **(37)** and lockwashers **(38)**.
10. Remove latch **(39)**.
11. Position new latch **(39)** on control console **(3)** and install two lockwashers **(38)** and screws **(37)**.

## INSTALL

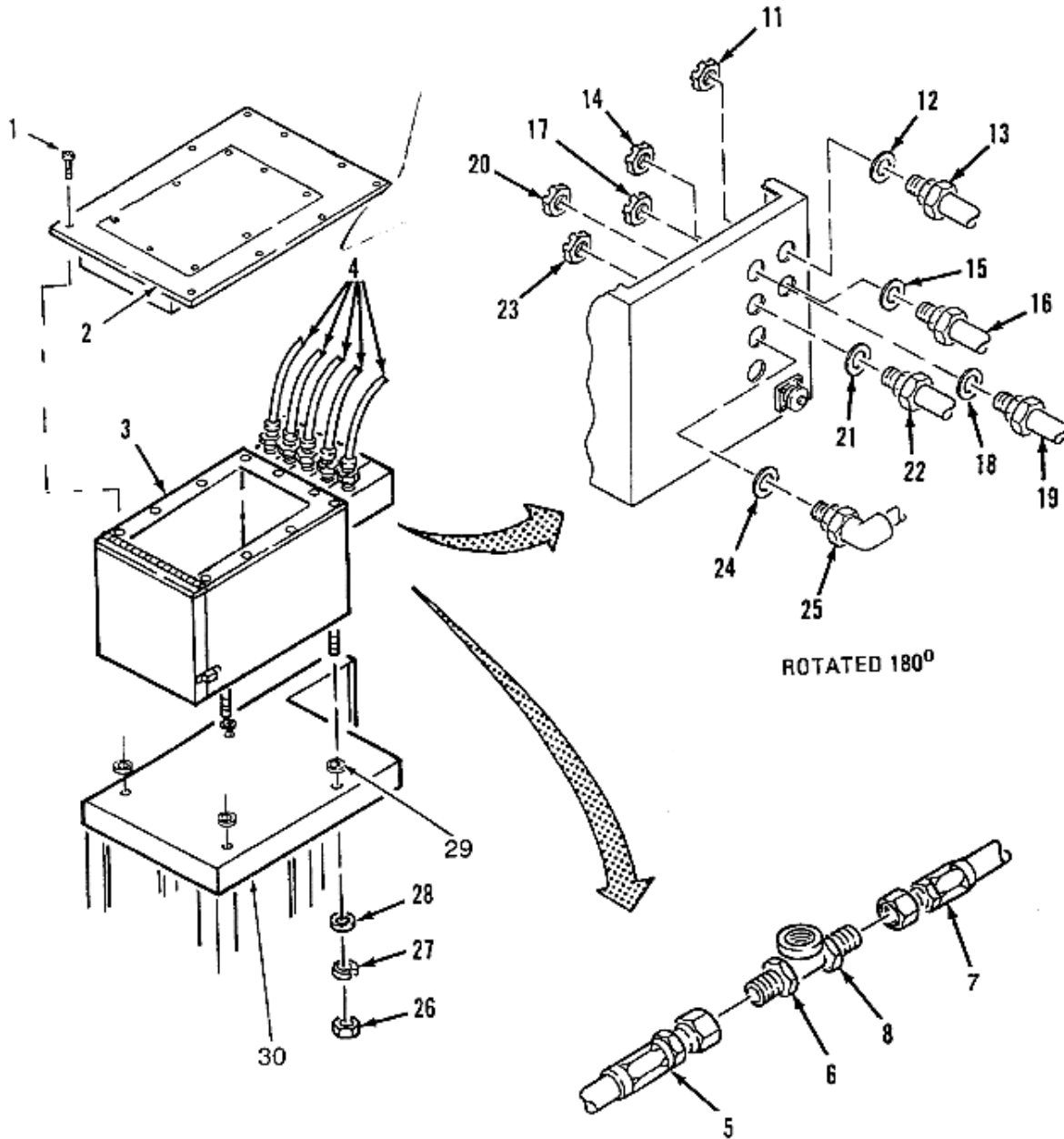
1. Position four washers **(29)** on control stand **(30)**.
2. Position washer control console **(3)** on control stand **(30)**.
3. Install four flat washers **(28)**, lockwashers **(27)** and nuts **(26)**.

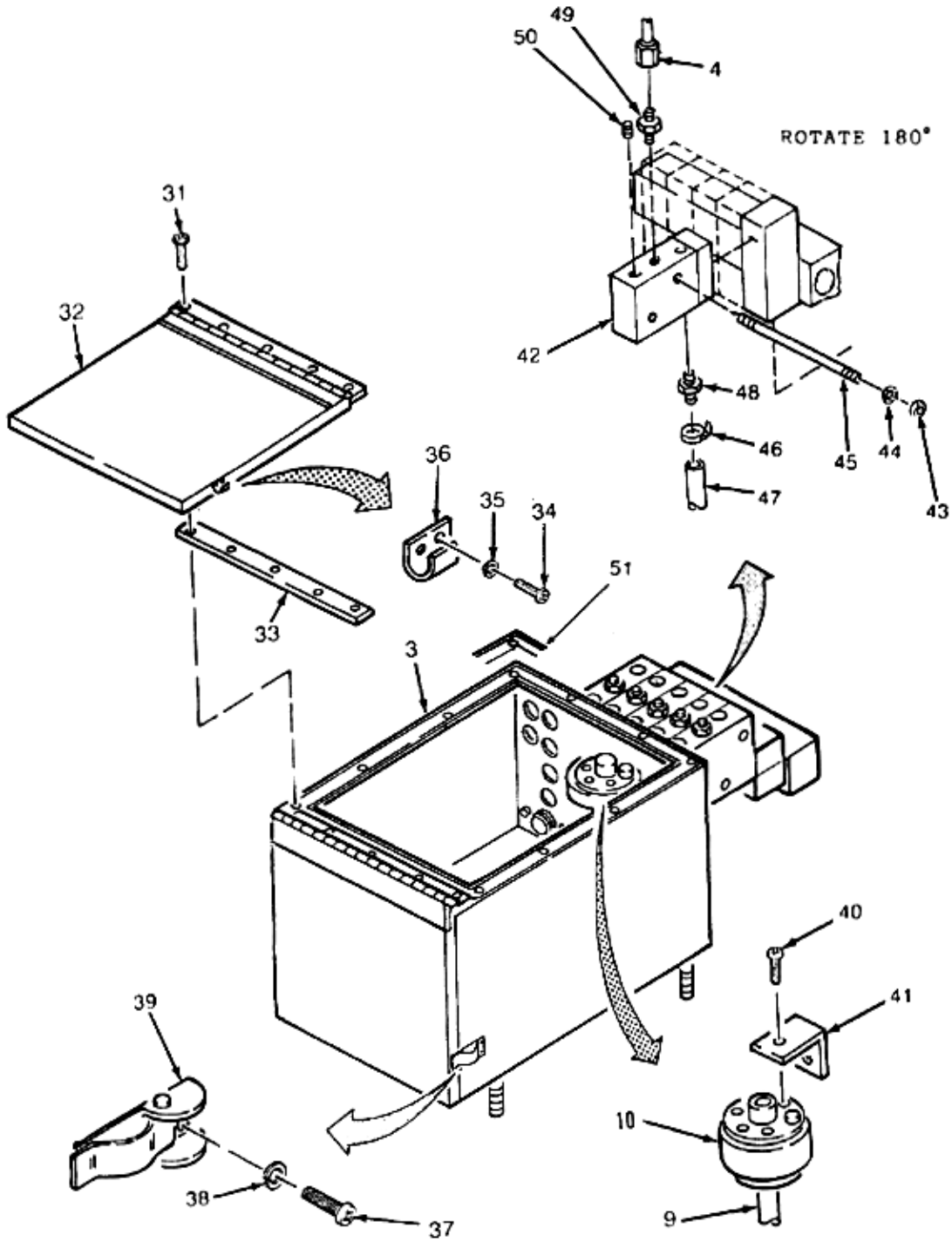
## NOTE

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).





Sheet 2 of 2

END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DOOR AND BAR  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Plumbing Fixture Setting Compound (Item 15, WP 190 00)

Gasket (Item 33, WP 0189 00)

Gasket (Item 37, WP 0189 00)

Adhesive (RTV) (Item 1, WP 0190 00)

**Equipment Condition**

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

---

**REMOVAL**

1. Remove four screws **(1)** and flat washers **(2)** from washer **(3)**.
2. Remove door and bar **(4)** and shim **(5)**.

**REPAIR**

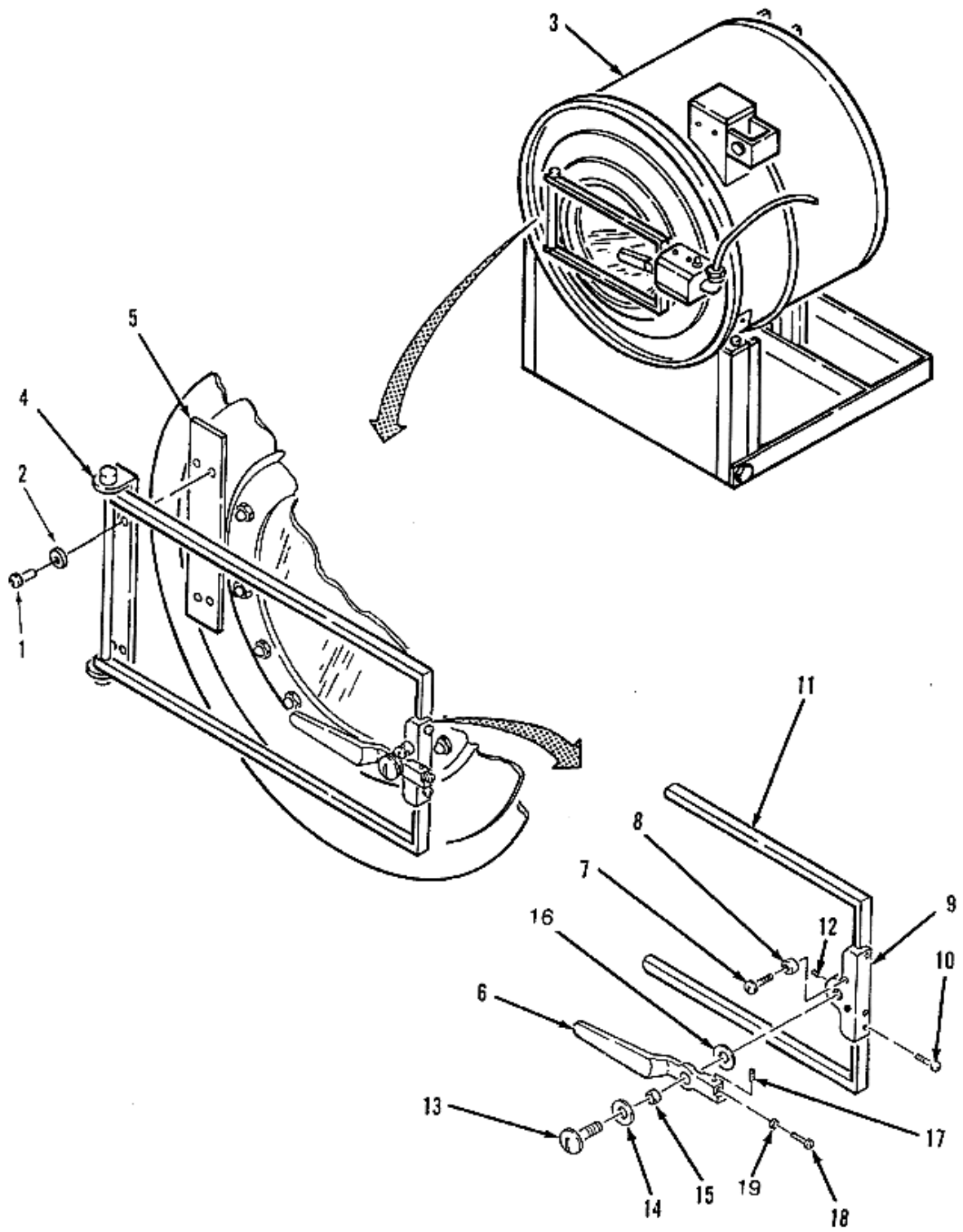
1. Latch handle **(6)**.
  - a. Remove screw **(7)** and handle stop **(8)** from block **(9)**.
  - b. Remove four screws **(10)** from block **(9)** and bar **(11)**.
  - c. Remove latch handle **(6)** from bar **(11)**.
  - d. Remove set screw **(12)** from block **(9)**.
  - e. Remove screw **(13)**, 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)**.
  - j. 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)**.
  - l. Install handle stop **(8)** and screw **(7)** on block **(9)**.

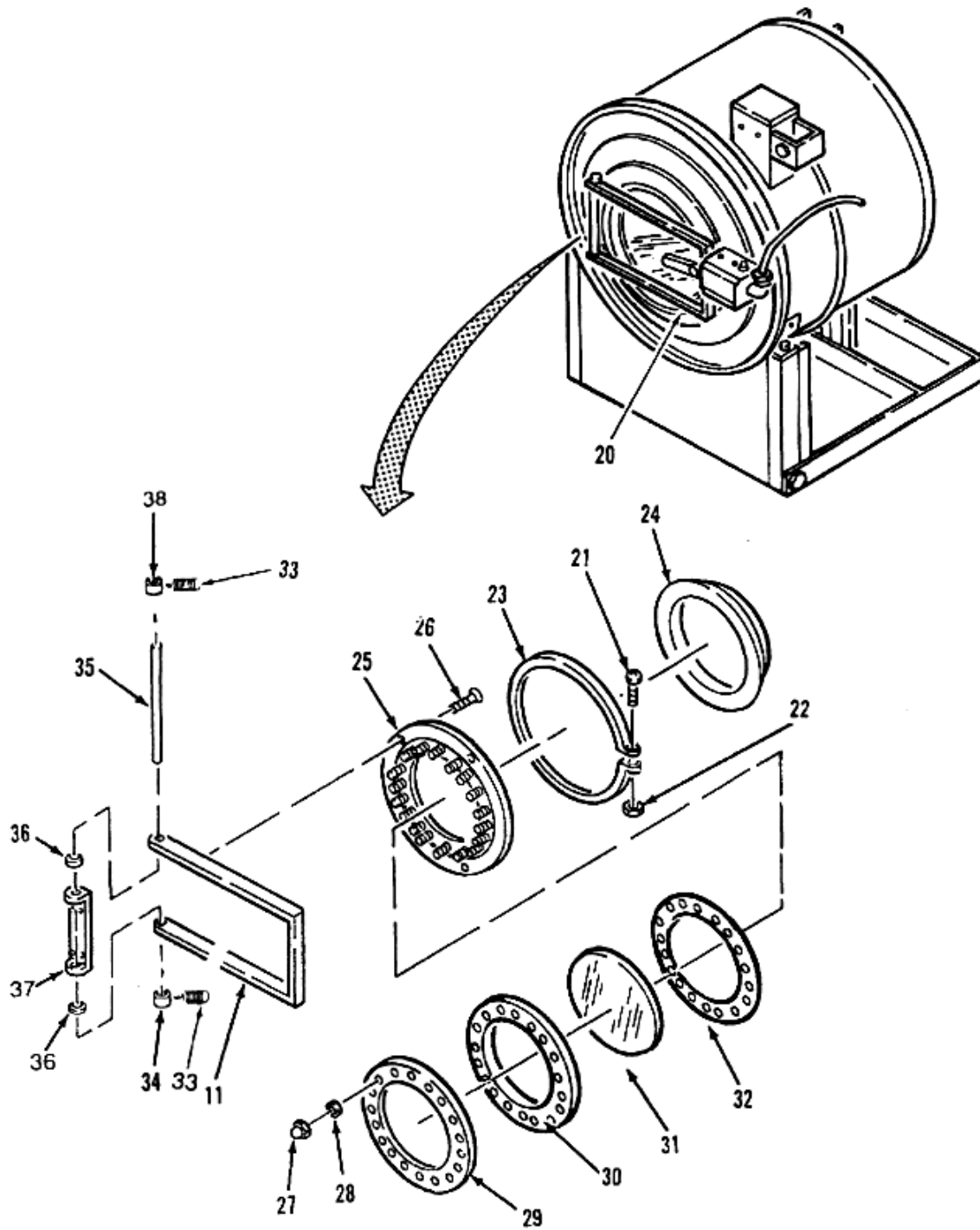
2. Door (20).
  - a. Remove screw (21) and nut (22) from band (23).
  - b. Remove band (23) and gasket (24) from rim (25).
  - c. Remove four screws (26) from rim (25) and bar (11).
  - d. Remove eighteen nuts (27) and flat washers (28) from rim (25).
  - e. Remove retainer (29), gasket (30), window (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).
  - l. 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).

#### INSTALL

1. 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).







END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
CONTROL PANEL  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Trailer Mounted Welding Shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Adhesive (RTV) (Item 1, WP 0190 00)  
Tags (Item 19, WP 0190 00)

**Equipment Condition**

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

**WARNING**

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

**REMOVE**

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)**.

**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)**.
  - 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

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)**.
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)**.

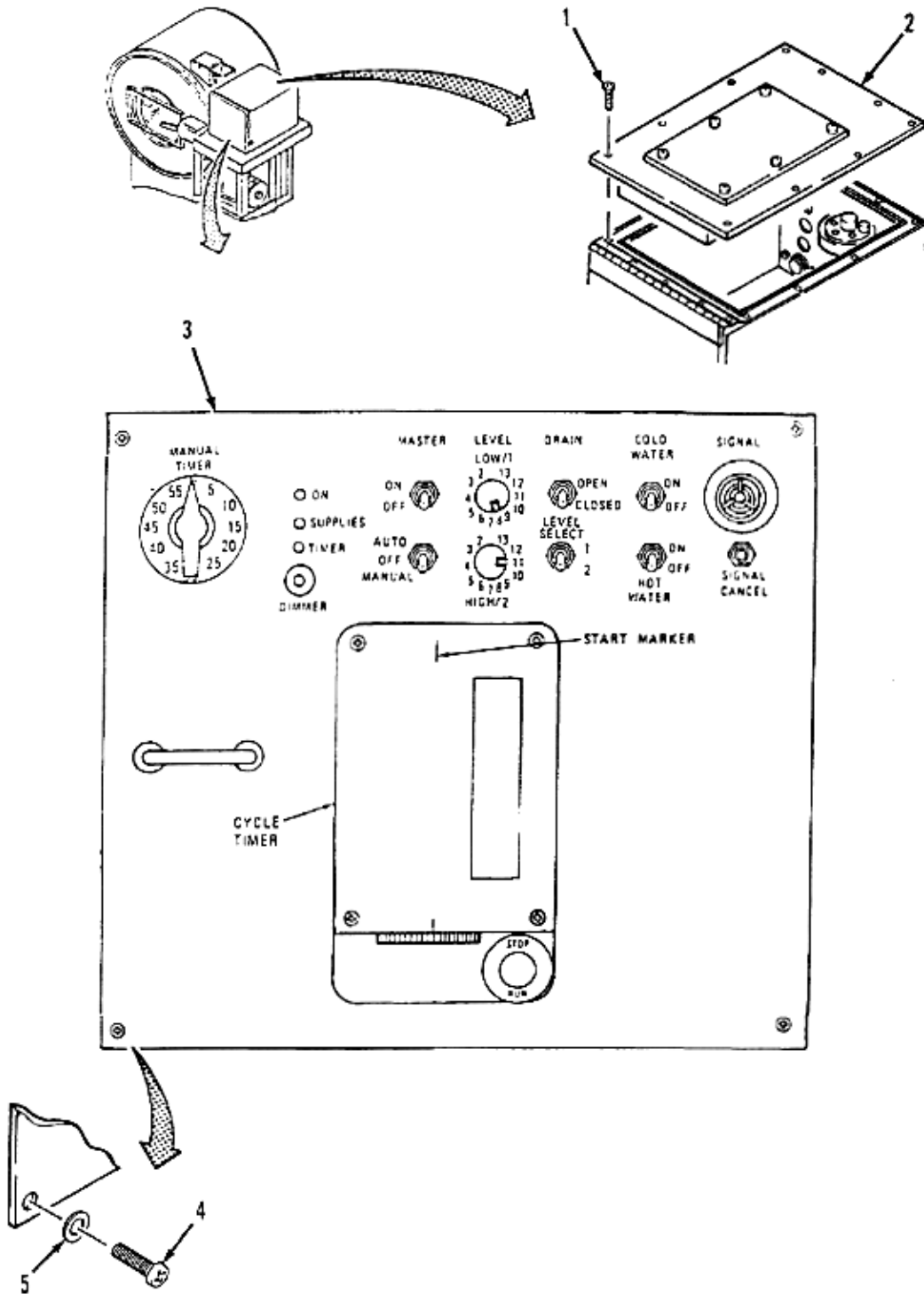
**INSTALL**

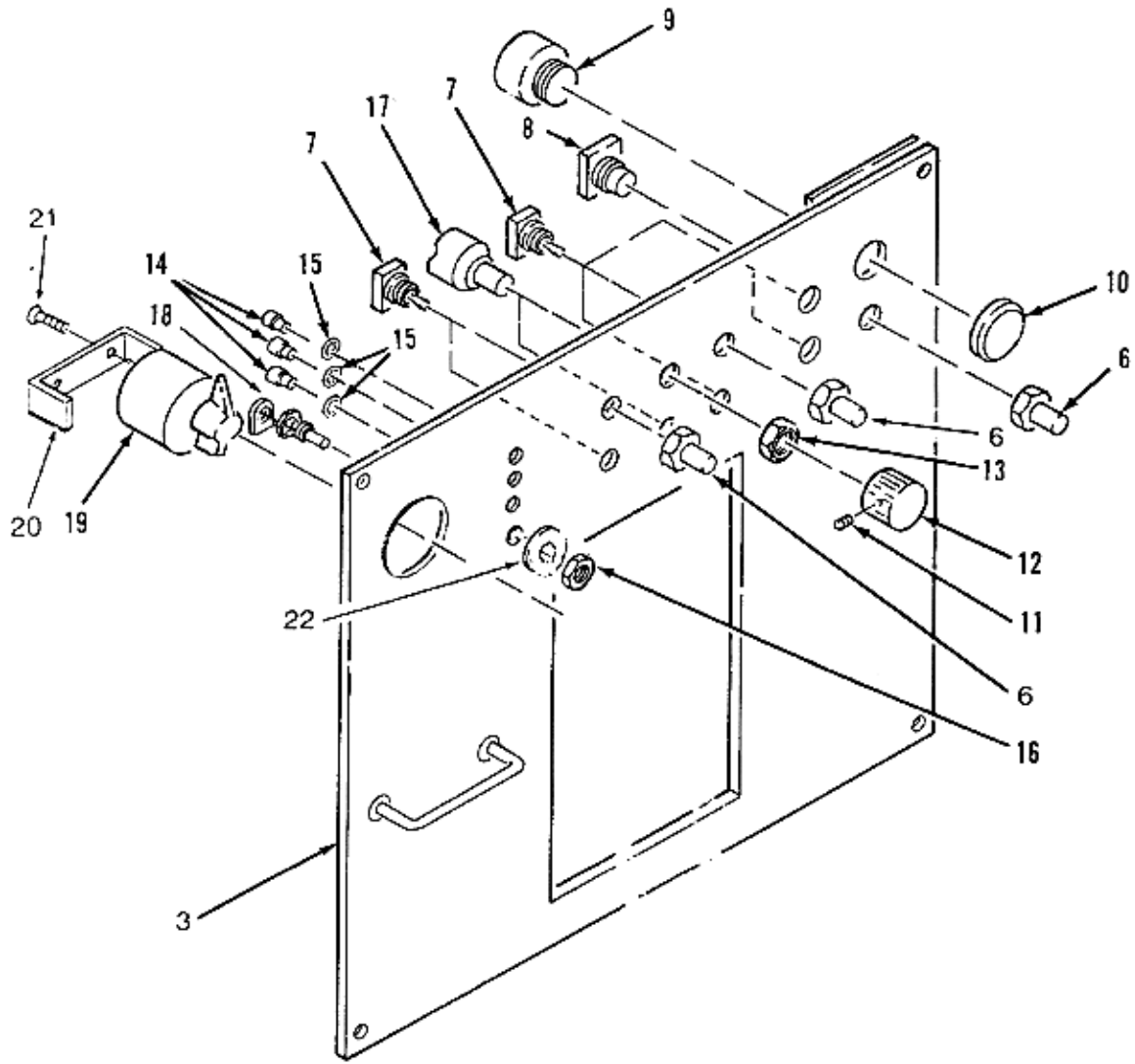
1. Install control panel **(3)**.
2. Install four screws **(4)** and washers **(5)**.
3. Install adhesive (RTV) around control panel **(3)**.

**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. Connect wiring as tagged.
5. Install twelve screws **(1)** on cover **(2)**.





INTERVAL TIMER  
REMOVED FOR CLARITY

Sheet 2 of 2

END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
REDUCER AND OUTPUT QUILL  
REMOVE, DISASSEMBLE, SERVICE,  
INSPECT, REPAIR, ASSEMBLE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Seal (Item 41, WP 0189 00)  
Seal (Item 42, WP 0189 00)  
Cleaning Cloth (Item 4, WP 0190 00)  
Dry Cleaning Solvent (Item 9, WP 0190 00)  
Adhesive (RTV) (Item 1, WP 0190 00)  
Lubricant (See LO 10-3510-222-12 for reducer)  
Shims (Items 11, 12, 19, 23, 25, 27, 28 and 29, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
V-belt removed (WP 0046 00)

---

**NOTE**

For seal replacement only, see REMOVE and INSTALL.

**REMOVE**

1. Remove two Allen screws **(1)** from collar **(2)** and remove collar **(2)**.
2. With a scribe, mark front position of bushing **(3)** on reducer input shaft **(4)**.
3. Measure distance between bushing **(3)** and reducer **(5)** and record distance.
4. Remove two bolts **(6)** and lockwasher **(7)** from bushing **(3)**.
5. Remove bushing **(3)** from pulley **(8)**.
6. Remove pulley **(8)** from reducer input shaft **(4)**.
7. Remove key **(9)** from reducer input shaft **(4)**.
8. Loosen three allen screws **(10)** from front of reducer **(5)** and three allen screws **(10)** on back side of reducer **(5)**.

**NOTE**

Flat washers are between plate and frame for alignment of reducer.

9. Record the number, position and thickness of flat washers **(11)** at each position under plate **(12)**.
10. With a scribe, mark position of plate **(12)** on frame **(13)**.

11. Remove four bolts (14), lockwashers (15) and flat washers (16) from plate (12) and frame (13).
12. Remove reducer (5) from basket shaft (17).
13. Remove key (18) if basket shaft (17) is being replaced.
14. To remove seals, perform the following:
  - a. Remove V-belt (WP 0046 00).
  - b. Remove seals (19) and/or (20) if leaking from cover (21). Discard seals (19 and/or 20).
  - c. Remove reducer (5) if rear seal (22) is leaking.
  - d. Remove seal (22) if leaking from cover (23). Discard seal (22).

### DISASSEMBLE

1. With a scribe, mark position of plate (12) on reducer (5).
2. Remove four bolts (24), lockwashers (25) and flat washers (26) from reducer (5).
3. Remove reducer (5) from plate (12).

### 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 sub-steps below:
  - a. Place container under drain plug (27).
  - b. Remove drain plug (27).
  - c. Remove breather (28).
  - d. When all lubricant has drained from reducer (5), install breather (28) and plug (27).
5. Remove ten nuts (29), flat washers (30), flat washers (31) and bolts (32) from reducer (5).
6. Position reducer (5) with input shaft (4) on top and remove cover (21) from cover (23).
7. Remove gears as assembly (33, 34 and 35).
8. Remove key (36) from gear (37).
9. Remove gears as assembly (38, 39, 37 and 40).
10. Remove key (41) from output quill (42).
11. Remove gears as assembly (43, 44 and 45).
12. Remove seal (22) from cover (23).
13. Remove seals (19 and 20) from cover (21).

**SERVICE****WARNING**

P-D-680 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.

**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.

**INSPECT**

Inspect all parts for damage or wear.

**REPAIR**

Repair consists of replacing damaged components of the gear reducer and output quill.

**1. Disassembly**

- a. Remove four bolts **(46)** from cover **(47)** and remove cover.
- b. Remove shims **(48)** as required.
- c. Remove four bolts **(49)** from cover **(50)** and remove cover.
- d. Remove shims **(51)** as required.
- e. Remove four bolts **(52)** from cover **(53)** and remove cover.
- f. Remove shim **(54)** as required.
- g. Remove gears as assembly A.
  - (1) Remove cone **(33)**.
  - (2) Remove pinion **(34)**.
  - (3) Remove cone **(35)**.
- h. Remove gears as assembly B.

- (1) Remove cone **(38)**.
  - (2) Remove gear **(39)**.
  - (3) Remove cone **(40)**.
  - (4) Remove key **(36)** from gear **(37)**.
- i. Remove gears as assembly C.
    - (1) Remove cone **(43)**.
    - (2) Remove gear **(44)**.
    - (3) Remove cone **(45)**.
    - (4) Remove key **(41)** from output quill **(42)**.
  - j. Remove cups **(55, 56 and 57)** from cover **(21)**.
  - k. Remove cups **(58, 59 and 60)** from cover **(23)**.
2. Assembly

### NOTE

If replacing bearing cups, cones and/or gears, replace as an assembly.

- a. Install cups **(58, 59 and 60)** on cover **(23)**.
- b. Install cups **(55, 56 and 57)** on cover **(21)**.
- c. Install gears as assembly C.
  - (1) Install key **(41)** on output quill **(42)**.
  - (2) Install gear **(44)**.
  - (3) Install cone **(43)**.
  - (4) Install cone **(45)**.
- d. Install gears as assembly B. Install key **(36)** on gear **(37)**.
  - (1) Install gear **(39)**.
  - (2) Install cone **(38)**.
  - (3) Install cone **(40)**.
- e. Install gears as assembly A.
  - (1) Install cone **(33)** on pinion **(34)**.
  - (2) Install cone **(35)**.
- f. Install shim **(54)** as required.

- g. Install four bolts **(52)** on cover **(53)**.
- h. Install shims **(51)** as required.
- i. Install four bolts **(49)** on cover **(50)**.
- j. Install shims **(48)** as required.
- k. Install four bolts **(46)** on cover **(47)**.

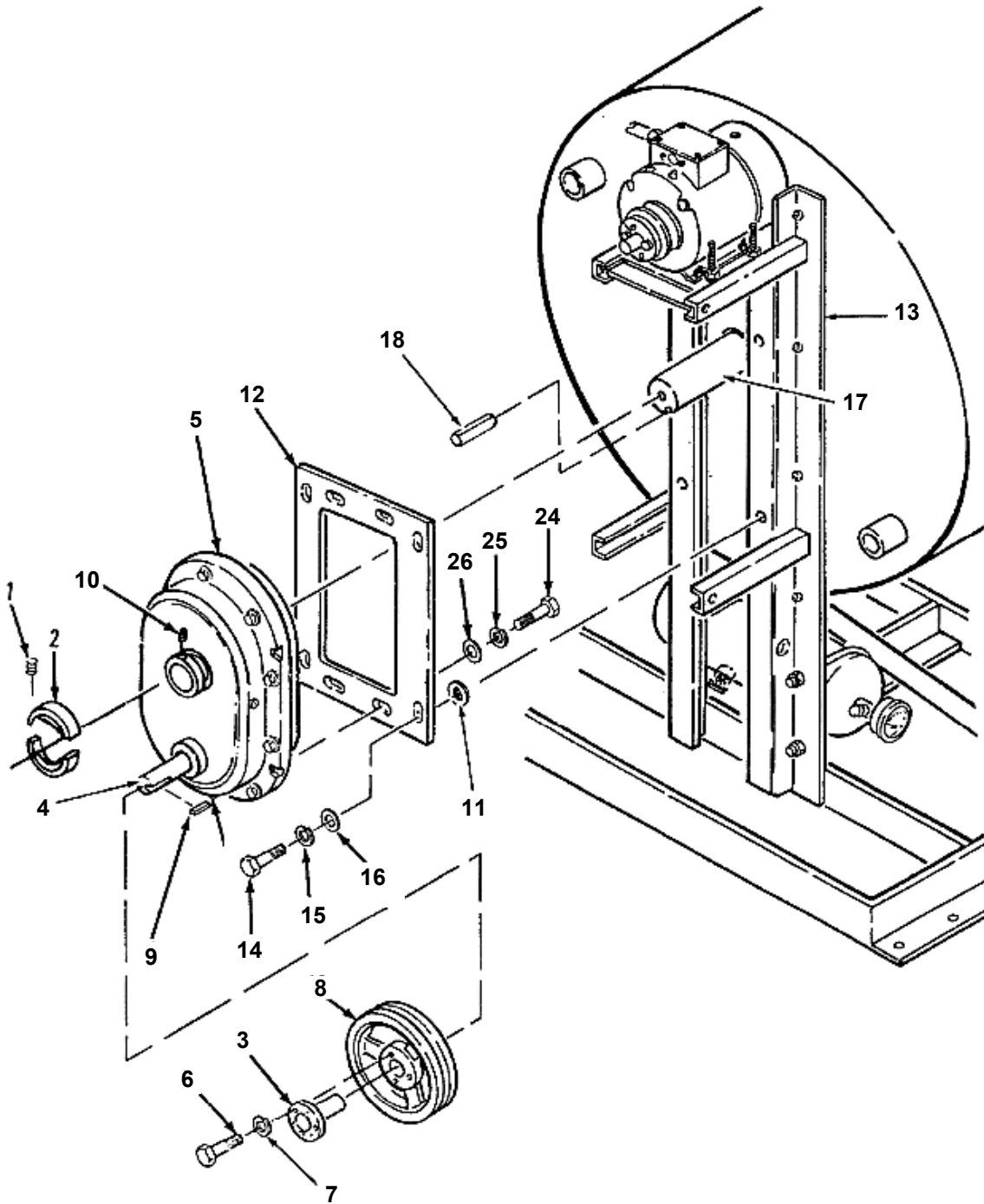
### ASSEMBLE

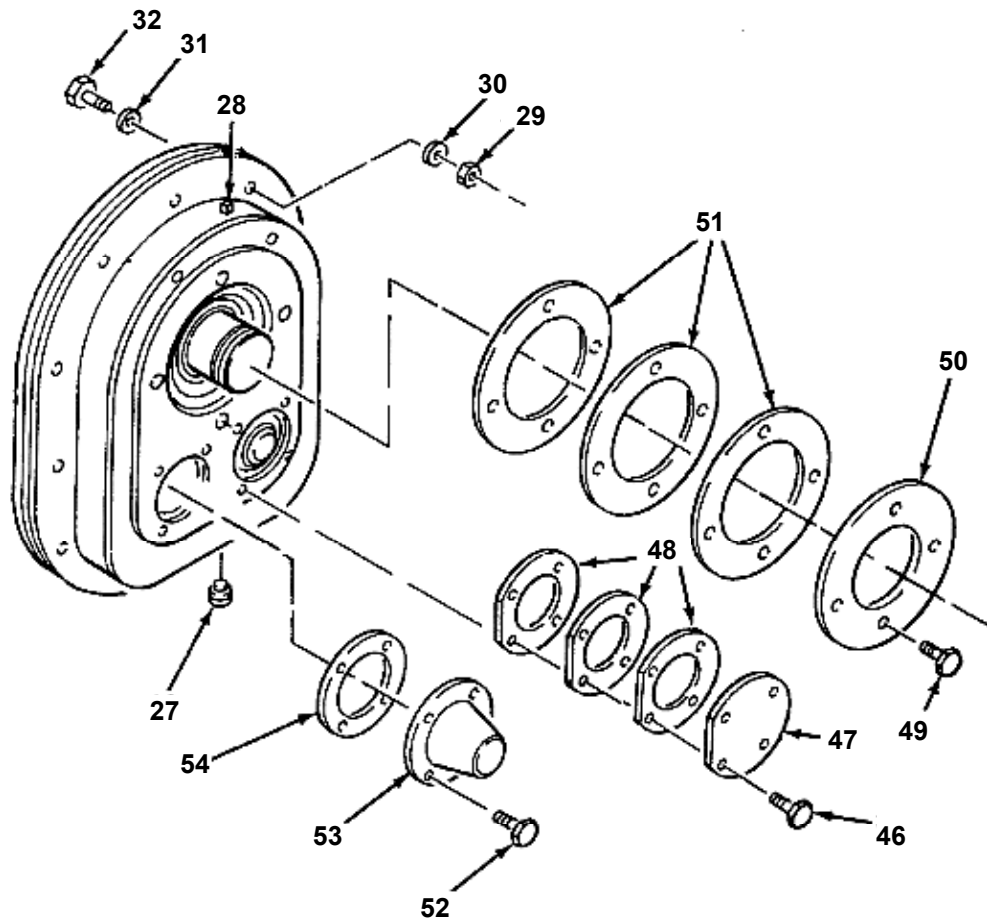
1. Install gears as assembly **(43, 44, 41 and 45)**.
2. Install gears as assembly **(38, 39, 37, 36 and 40)**.
3. Install gears as assembly **(33, 34 and 35)**.
4. Apply adhesive to mating surface of cover **(23)**.
5. Install cover **(21)** on cover **(23)**.
6. Install ten flat washers **(31)**, bolts **(32)**, flat washers **(30)** and nuts **(29)** on reducer **(5)**.
7. Install seal **(20)** on cover **(21)**.
8. Cut two pieces of manila folder two inches by ten inches. Apply lubricant on paper and wrap paper around output quill **(42)**.
9. Install seals **(19 and 22)** on cover **(23 and 21)** and remove paper.
10. Position plate **(12)** on marked position of reducer **(5)** and install four flat washers **(26)**, lockwashers **(25)** and bolts **(24)**.
11. Install key **(9)** on reducer input shaft **(4)**.
12. Install pulley **(8)** on reducer input shaft **(4)**.
13. Install bushing **(3)** on reducer input shaft **(4)** at marked position.
14. Install two bolts **(6)** and lockwasher **(7)** on bushing **(3)**.

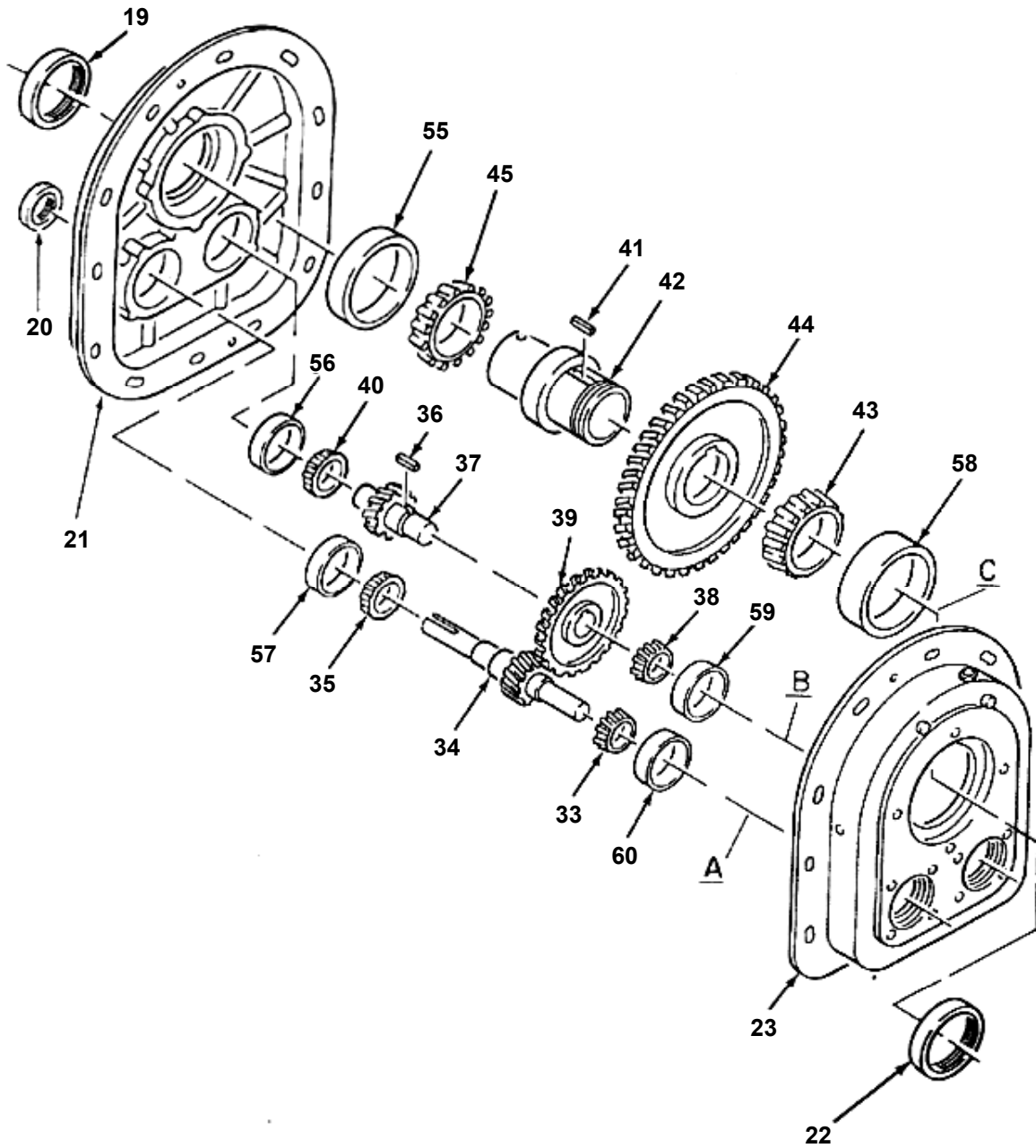
### INSTALL

1. Install key **(18)** on basket shaft **(17)** if removed.
2. Position reducer **(5)** on basket shaft **(17)**.
3. Position flat washers **(11)** for alignment between plate **(12)** and frame **(13)**.
4. Install four flat washers **(16)**, lockwashers **(15)** and bolts **(14)** on plate **(12)** and frame **(13)**.
5. Tighten three Allen screws **(10)** on front of reducer **(5)** and three Allen screws **(10)** on back side of reducer **(5)**.
6. Position collar **(2)** index pin in index hole of basket shaft **(17)** and install two Allen screws **(1)**.

7. Service reducer (5), refer to LO 10-3510-222-12 Lubrication Order.
8. Install V-belt (WP 0046 00).







Sheet 3 of 3

END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
INTERVAL TIMER  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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



---

**WARNING**

---

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

**REMOVE**

1. Remove twelve screws **(1)** from cover **(2)**.
2. Tag and remove electrical wiring from interval timer **(3)**.
3. Remove two nuts **(4)**, clamps **(5)**, four screws **(6)** and washers **(7)**.
4. Remove interval timer **(3)** from front of control panel **(8)**.

**REPAIR**

1. Motor **(12)**.
  - a. Remove twelve screws **(1)** from cover **(2)** and remove cover **(2)**.
  - b. Tag and remove electrical wiring to motor **(9)**.
  - c. Remove two nuts **(10)**, washers **(11)** and screws **(12)** from motor **(9)**.
  - d. Remove motor **(9)**.
  - e. Position new motor **(9)** on interval timer **(3)** and install two screws **(12)**, washers **(11)** and nuts **(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.

- f. Connect electrical wiring as tagged.
- g. Position cover **(2)** on control panel box and install twelve screws **(1)**.
2. Knob **(13)**.
  - a. Loosen setscrew **(14)** and remove knob **(13)**.
  - b. Position new knob **(13)** on interval timer **(3)** and tighten setscrew **(14)**.
3. Window **(15)**.
  - a. Remove twelve screws **(1)** from cover **(2)** and remove cover **(2)**.
  - b. Remove four screws **(16)**, washers **(17)** and remove window **(15)**.
  - c. Position new window **(15)** on interval timer **(3)** and install four washers **(17)** and screws **(16)**.

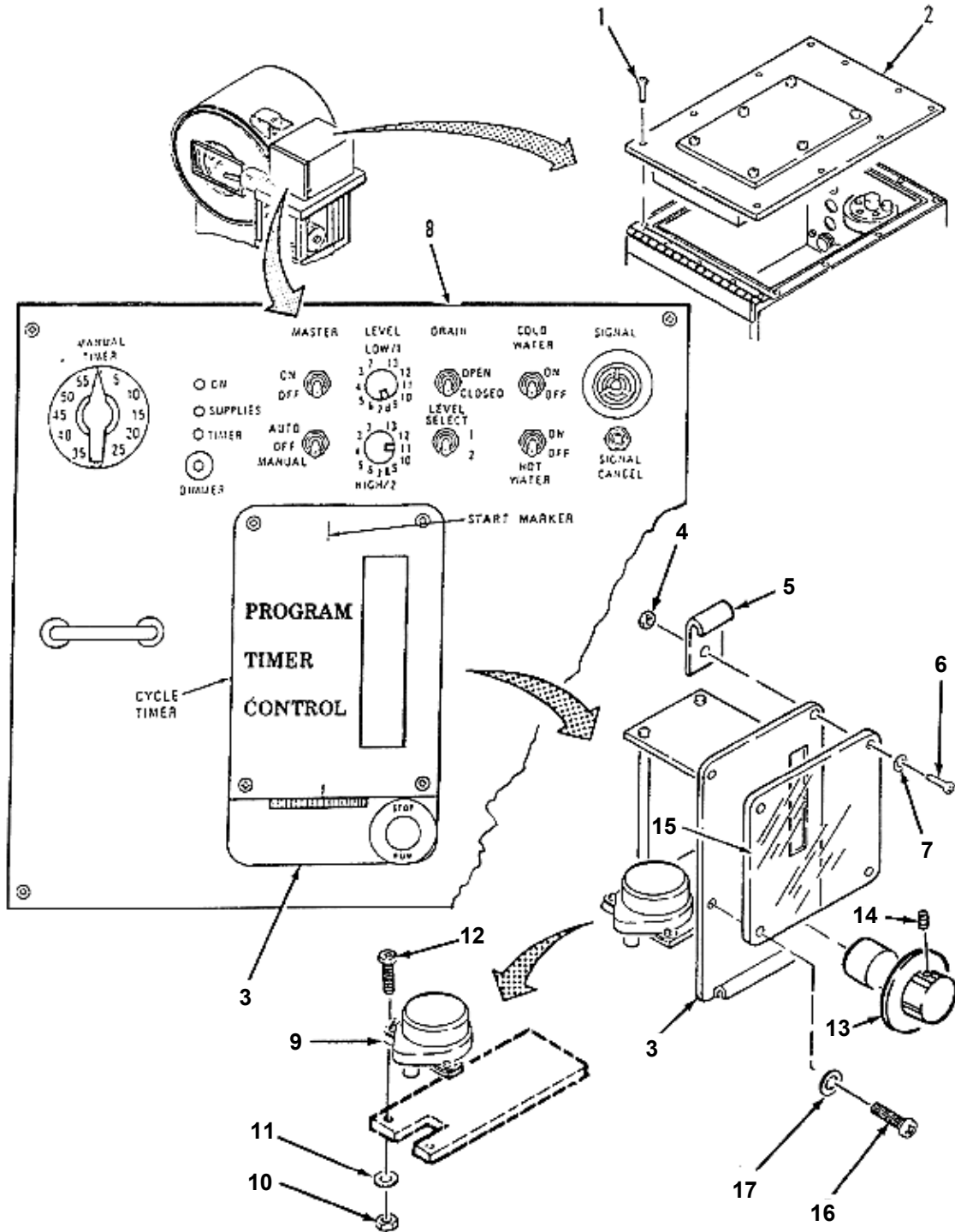
**INSTALL**

1. Position interval timer **(3)** on front of control panel **(8)**.
2. Install four washers **(7)**, screws **(6)**, clamps **(5)** and two nuts **(4)**.

**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.

3. Connect electrical wiring as tagged.
4. Position cover **(2)** and install twelve screws **(1)**.



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
CHASSIS CONTROL  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Adhesive (RTV) (Item 1, WP 0190 00)  
Tags (Item 19, WP 0190 00)  
Tie Down Straps (Item 3, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Control Console and Pressure Switch removed  
(WP 0131 00)



**WARNING**

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

**REMOVE**

1. Remove four nuts **(1)** and flat washers **(2)** from bolts **(3)** which protrude through the control stand **(4)**.
2. Tag and remove electrical wiring to chassis control **(5)**.
3. Remove chassis control **(5)** and washers **(6)** from control console **(7)**.
4. Remove four nuts **(8)** and bolts **(3)** from chassis control **(5)**.

**REPAIR**

1. Relay(s) **(9)**.
  - a. Remove twelve screws **(10)** from cover **(11)** and remove cover **(11)**.
  - b. Release two clips **(12)** from relay(s) **(9)** and remove relay(s) **(9)**.
  - c. Install new relay(s) **(9)** in socket(s) **(13)**.
  - d. Connect two clips **(12)** on relay(s) **(9)**.
  - e. Position cover **(11)** on control console **(7)** and install twelve screws **(10)**.
2. Fuse **(14)**.
  - a. Remove twelve screws **(10)** from cover **(11)** and remove cover **(11)**.

- b. Remove fuse(s) **(14)** from fuse block **(15)**.
  - c. Install new fuse(s) **(14)** on fuse block **(15)**.
  - d. Position cover **(11)** on control console **(7)** and install twelve screws **(10)**.
3. Transformer **(16)**.
- a. Remove twelve screws **(10)** from cover **(11)** and remove cover **(11)**.
  - 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 **(11)** on control console **(7)** and install twelve screws **(10)**.
4. Junction Box **(17)**.
- a. Remove twelve screws **(10)** from cover **(11)** and remove cover **(11)**.
  - b. Remove screw **(18)** and plate **(19)**.
  - c. Remove two screws **(20)**.
  - d. Tag and remove electrical wiring to connector **(21)**.
  - e. Remove two screws **(22)** and junction box **(17)**.
  - f. Remove bushing **(23)** from junction box **(17)**.
  - g. Install bushing **(23)** on new junction box **(17)**.
  - h. Position junction box **(17)** on chassis control **(5)** and install two screws **(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.

- i. Connect electrical wiring to connector **(21)**.
- j. Install two screws **(20)**.
- k. Position plate **(19)** on junction box **(17)** and install screw **(18)**.

- I. Position cover **(11)** on control console **(7)** and install twelve screws **(10)**.
5. Interval Timer **(24)**.
    - a. Remove twelve screws **(10)** from cover **(11)** and remove cover **(11)**.
    - b. Tag and remove electrical wiring to interval timer **(24)**.
    - c. Remove screw **(25)** from interval timer **(24)**.
    - d. Remove interval timer **(24)**.
    - e. Position new interval timer **(24)** on chassis control **(5)** and install screw **(25)**.

#### 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 **(24)**.
  - g. Position cover **(11)** on control console **(7)** and install twelve screws **(10)**.
6. Relay **(26)**.
    - a. Remove twelve screws **(10)** from cover **(11)** and remove cover **(11)**.
    - b. Tag and remove electrical wiring to relay **(26)**.
    - c. Remove two screws **(27)** from relay **(26)** and remove relay **(26)**.
    - d. Position new relay **(26)** on chassis control **(5)** and install two screws **(27)**.

#### 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 **(26)**.
  - f. Position cover **(11)** on control console **(7)** and install twelve screws **(10)**.
7. Movement Timing **(28)**.
    - a. Remove twelve screws **(10)** from cover **(11)** and remove cover **(11)**.
    - b. Tag and remove electrical wiring to movement timing **(28)**.
    - c. Remove two screws **(29)** and remove movement timing **(28)**.
    - d. Position new movement timing **(28)** on chassis control **(5)** and install two screws **(29)**.

**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 **(28)**.
  - f. Position cover **(11)** on control console **(7)** and install twelve screws **(10)**.
8. Reversing Contactor **(30)**.
- a. Remove twelve screws **(10)** from cover **(11)** and remove cover **(11)**.
  - 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 **(11)** on control console **(7)** and install twelve screws **(10)**.



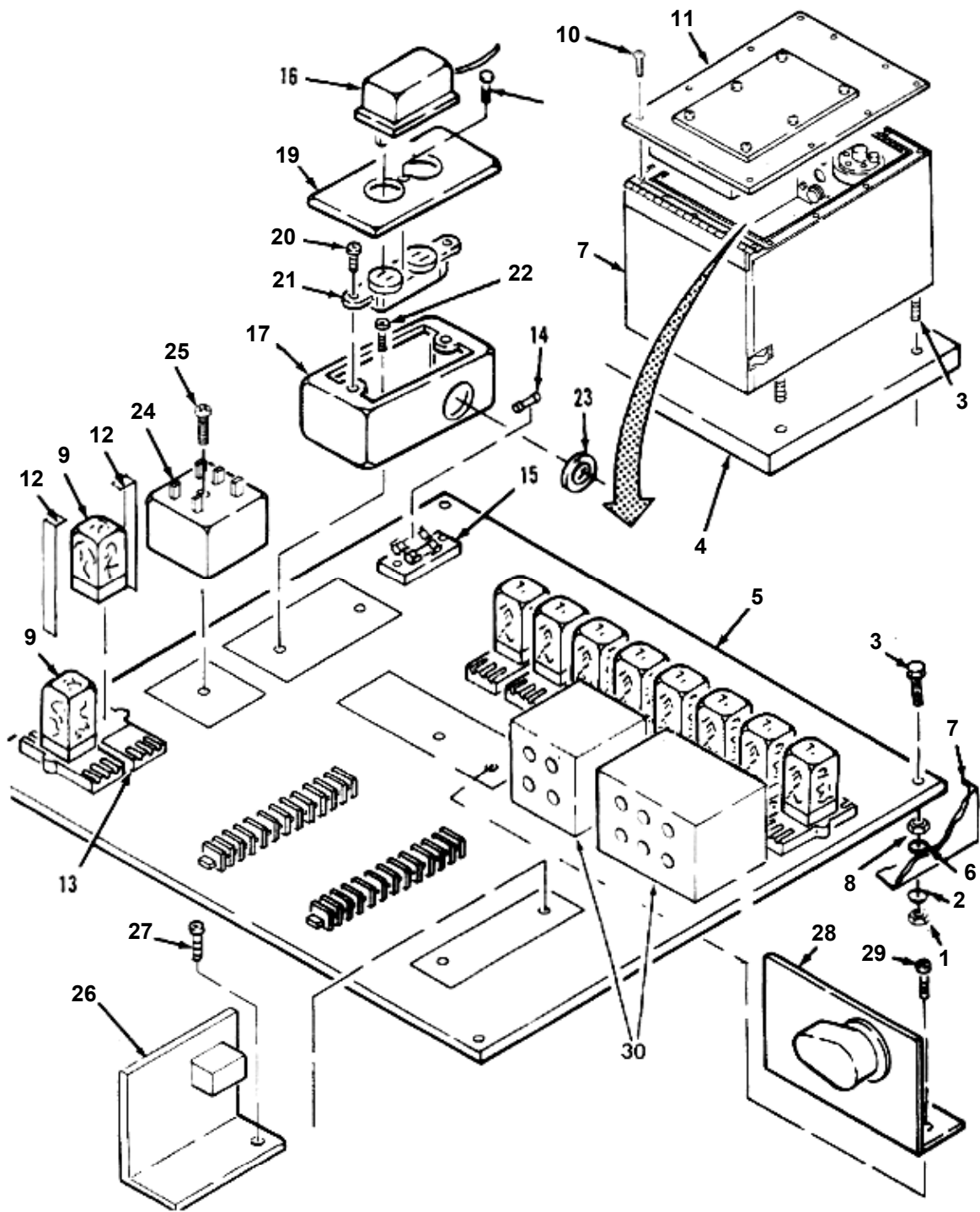
**INSTALL**

1. Install four bolts **(3)** and nuts **(8)** on chassis control **(5)**
2. Apply RTV around bolts **(3)** on the control console **(7)**.
3. Position chassis control **(5)**, flat washers **(6)** on control console **(7)** and install flat washers **(2)** and nuts **(1)**.

**NOTE**

Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, WP 0196 00, may be used to connect wires if tags are lost or illegible.

4. Connect electrical wiring to chassis control **(5)**.
5. Install pressure switch and control console (WP 0131 00).



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
COMPRESSOR AND MOTOR  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

Antiseize Tape (Item 20, WP 0190 00)

**Equipment Condition**

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

Air compressor removed (WP 0050 00)

**WARNING**

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

**REMOVE**

1. Loosen captive nut **(1)** and remove cover **(2)**.
2. Loosen nuts **(3 and 4)** on tube and remove tube **(5)**.
3. Remove elbow **(6)**.
4. Remove adapter **(7)** from tee **(8)**.
5. Remove check valve **(9)**.
6. Remove check valve **(9)** from tee **(8)**.
7. Remove nut **(10)** and pressure switch **(11)** from compressor and motor **(12)**.

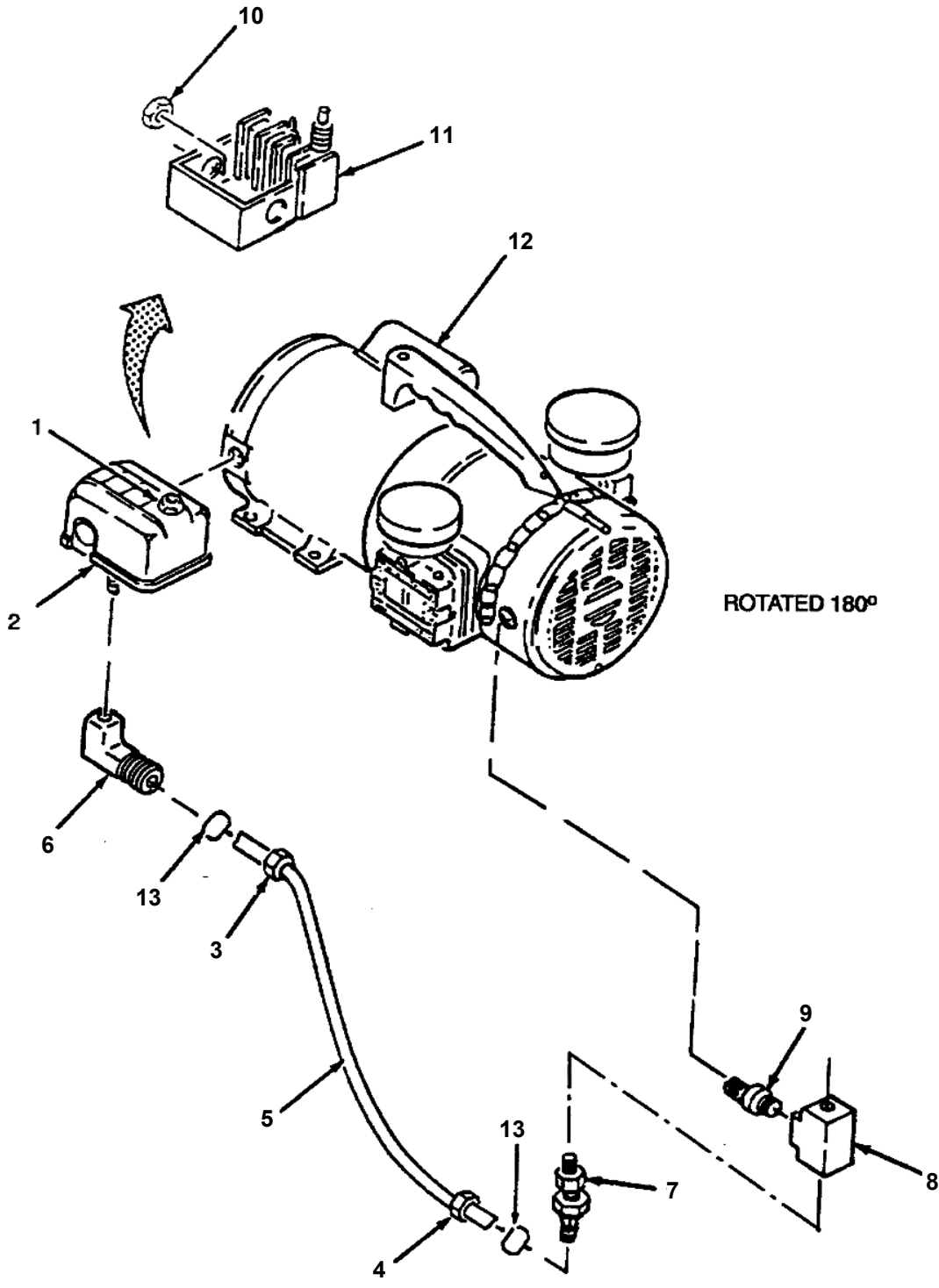
**REPAIR**

Repair consists of replacing damaged or missing components of the compressor and motor.

**INSTALL****NOTE**

Apply antiseize compound to all male threads before installing hardware.

1. Position pressure switch **(11)** on compressor and motor **(12)** and install nut **(10)**.
2. Position cover **(2)** on pressure switch **(11)** and tighten captive nut **(1)**.
3. Install elbow **(6)**.
4. Install check valve **(9)** on tee **(8)**.
5. Install check valve **(9)** on compressor and motor **(12)**.
6. Install adapter **(7)**.
7. Install two inserts **(13)** on tubing **(5)** if tubing was replaced.
8. Install tubing **(5)** and tighten nuts **(3 and 4)**.
9. Install air compressor and do adjustment (WP 0050 00).



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
CONTROLLER STAND  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Trailer Mounted Welding Shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Air compressor removed (WP 0050 00)  
Washer control console removed (WP 0131 00)  
Enclosure box removed (WP 0141 0)  
Power Panel removed (WP 0142 00)

**WARNING**

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

**REMOVE**

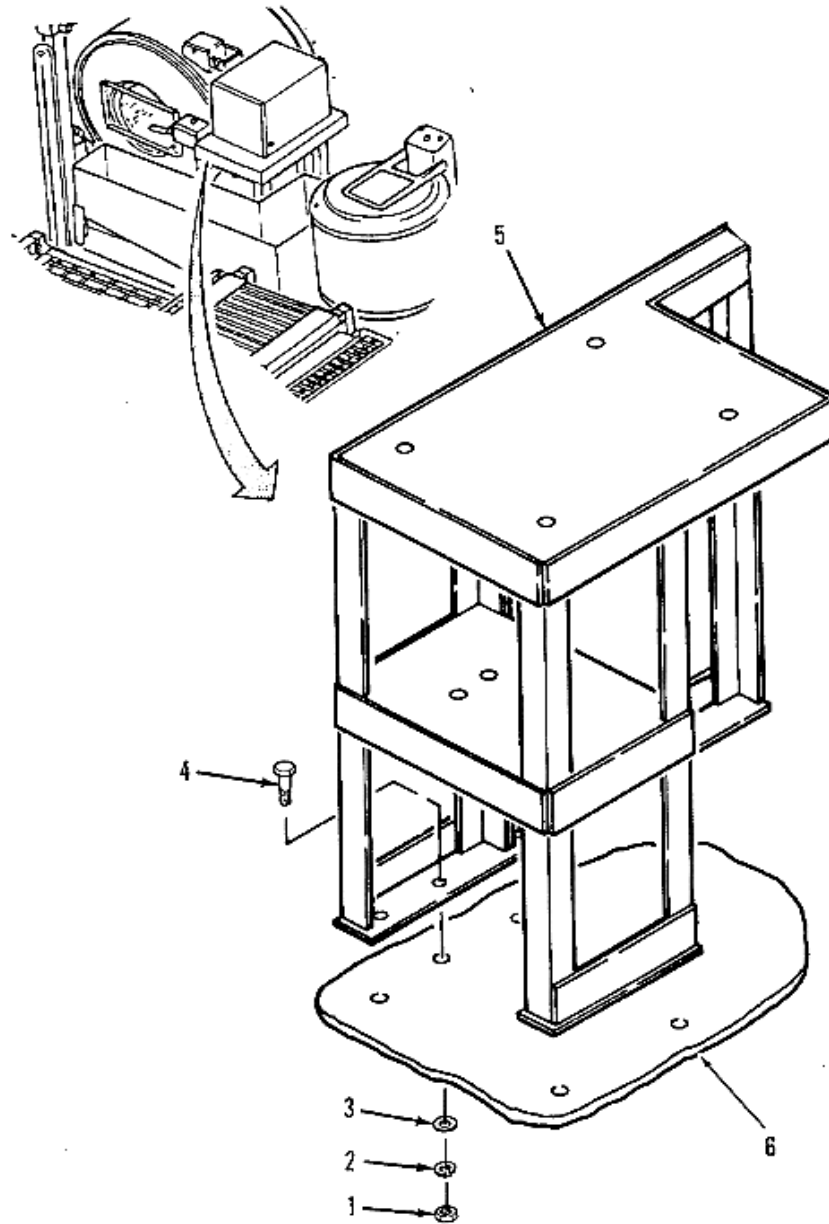
1. Remove seven nuts **(1)**, lockwashers **(2)**, flat washers **(3)** and bolts **(4)**.
2. Remove washer controller stand **(5)** from trailer **(6)**.

**REPAIR**

Repair consists of controller stand **(5)** being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.

**INSTALL**

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 (WP 0142 00).
4. Install enclosure box (WP 0141 00).
5. Install washer control console (WP 0131 00).
6. Install air compressor (WP 0050 00).



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
CONDUIT  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Sealing Washers (Item 64, WP 0189 00)  
Tags (Item 19, WP 0190 00)

**Equipment Condition**

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



**WARNING**

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

**REMOVE**

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 **(4)**, straps **(5)** and remove conduit **(6)**.

**REPAIR**

1. Replace conduit **(6)** or components **(7, 8, 9, 10 and 11)** 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 (WP 0195 00).

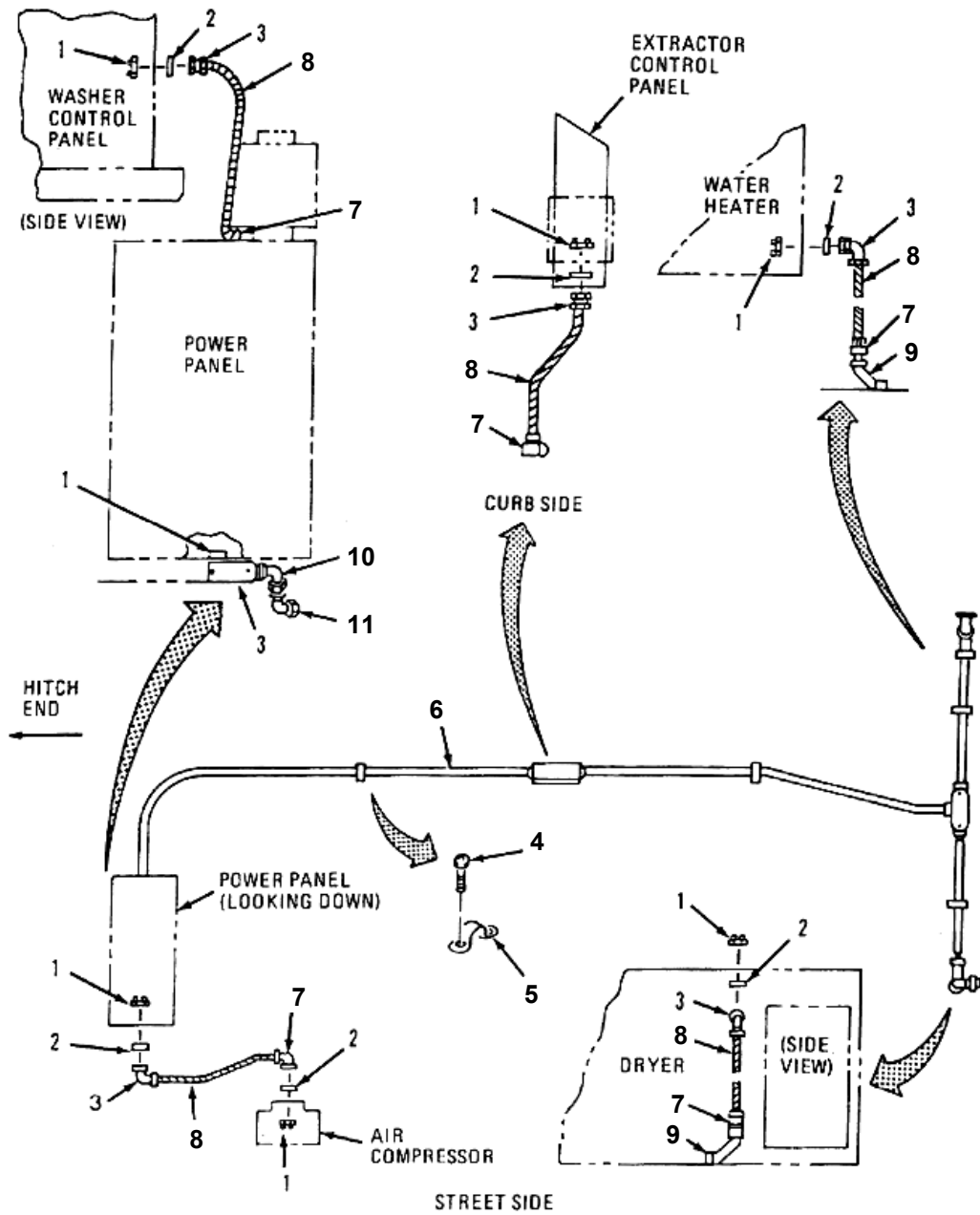
**INSTALL**

1. Position conduit **(6)** on Laundry Unit and install four straps **(5)** and screws **(4)**.
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.



**END OF WORK PACKAGE**

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
POWER CABLE  
REPAIR**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Power cable removed (TM 10-3510-222-10)

**Reference**

General Shop Practice Requirement for the Repair  
and Test of Electronic Equipment (TM 43-0158)

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**WARNING**

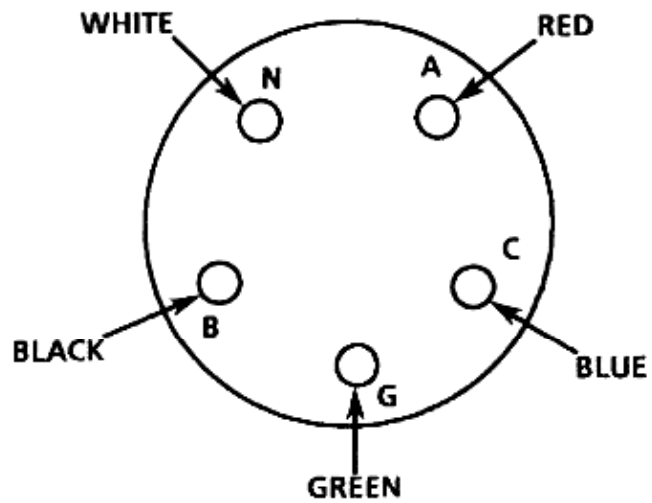
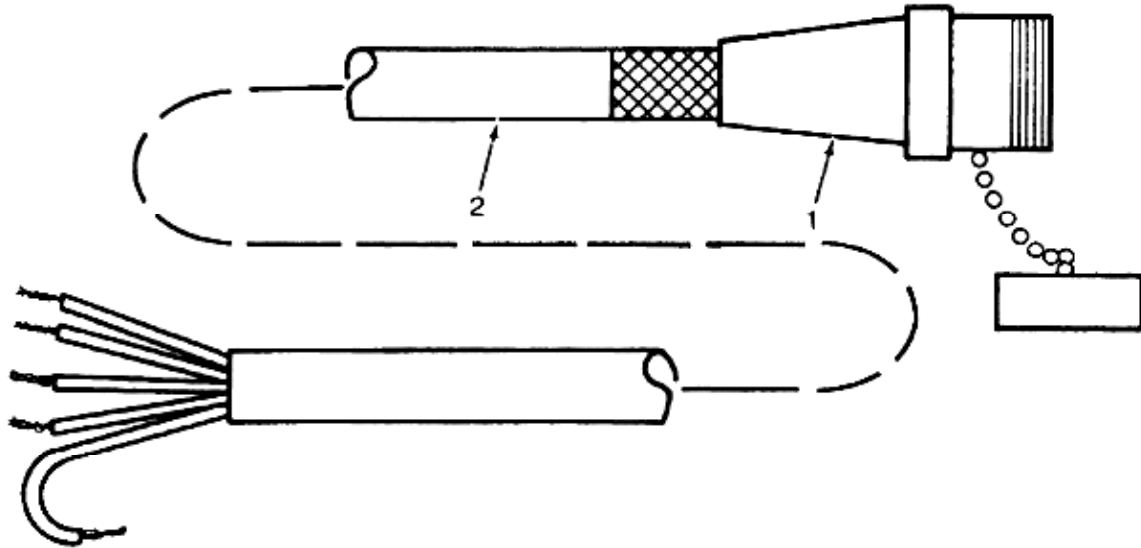
High voltage is present on this equipment. Do not perform maintenance with power on. Death or serious injury may result.

**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 ± 4 INCHES.
2. CABLE P/N CO-05HOF (5/6) 1090.



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
ENCLOSURE BOX  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Circuit Breaker bracket removed (WP 0142 00)

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**WARNING**

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

**REMOVE**

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 **(7)**.
5. Remove chase nipple **(8)** from power panel **(7)**.
6. Remove four screws **(9)**, lockwashers **(10)** and panel **(11)**.
7. Remove three screws **(12)**, lockwashers **(13)** and nuts **(14)**.
8. Remove enclosure box **(1)**.

**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 **(15)**, starwashers **(16)** and voltage starter **(6)**.
  - d. Remove jumper wire from Li and A2, refer to FO-6 Air Compressor Wiring Diagram.
  - e. Remove three heaters **(17)** and six screws **(18)** from voltage starter **(10)**.
  - f. Install three heaters **(17)** on new voltage starter **(6)**. Secure with six screws **(18)**.

**NOTE**

Hold reset button down while installing heaters.

- g. Install jumper wire on Li and A2. Refer to FO-6, Air Compressor Wiring Diagram.
- h. Position voltage starter **(6)** in enclosure box **(1)** and install three star washers **(16)** and screws **(15)**.

**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 **(14)**.

**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 **(18)** and remove heater **(17)**.
  - c. Press reset button **(19)** and position heater **(17)** on voltage starter **(6)** and install two screws **(18)**.
  - 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 **(20)** and coupling **(21)**.
    - b. Position coupling **(21)** on new enclosure box **(1)** and install case nipple **(20)**.

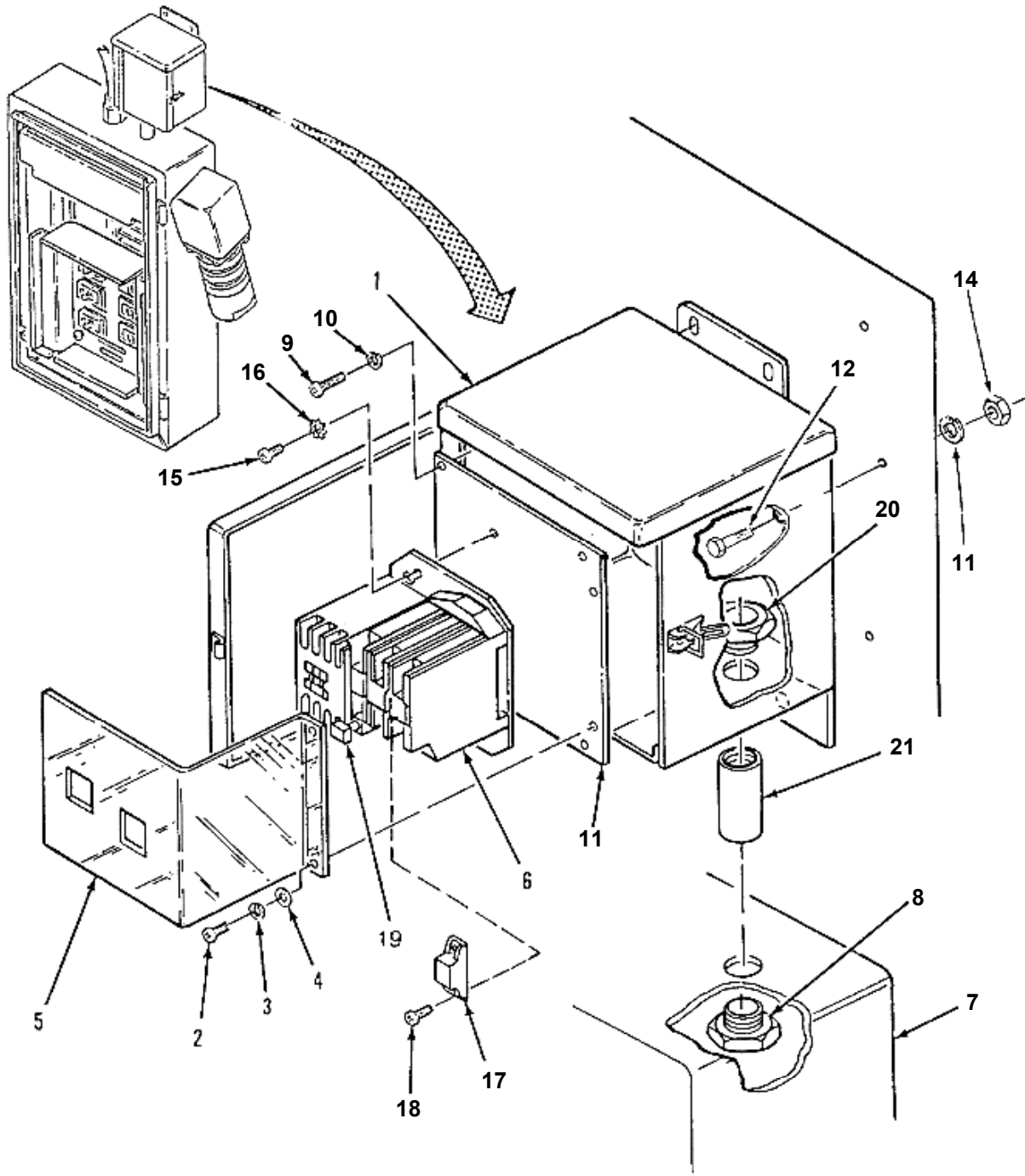
**INSTALL**

1. Position enclosure box **(1)** on power panel **(7)** and install chase nipple **(8)**.
2. Install three screws **(12)**, lockwashers **(13)** and nuts **(14)**.
3. Install panel **(11)**, four lockwashers **(10)** and screws **(9)**.
4. Pull electrical wiring into enclosure box **(1)**.

**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.

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 (WP 0142 00).



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
POWER PANEL  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)  
Sealing Washer (Item 64, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Enclosure Box removed (WP 0141 00)

---

**WARNING**

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

**REMOVE**

1. Open power panel door **(1)**.
2. Remove four screws **(2)**, top and bottom brackets **(3)** and right and left brackets **(4)**.
3. Remove four screws **(5)** and circuit breaker bracket **(6)**.
4. Tag and disconnect electrical wiring from flexible conduit **(7)**.
5. Tag and disconnect wiring from flexible conduit **(8)**.
6. Tag and disconnect wiring from conduit **(9)**.
7. Remove nut **(10)**, sealing washer **(11)** and flexible conduit **(7)**.
8. Remove nut **(12)**, sealing washer **(13)** and flexible conduit **(8)**.
9. Remove nut **(14)**, sealing washer **(15)** and conduit **(9)**.
10. Remove two nuts **(16)**, lockwashers **(17)** and flat washers **(18)**.
11. Remove power panel **(19)**.
12. Remove two nuts **(20)**, bolts **(21)** and flat washers **(22)**.

**REPAIR**

1. Circuit breakers, one 60 amp **(23)**, five 20 amp **(24)**.
  - a. Open power panel door **(1)**.
  - b. Remove four screws **(2)**, top and bottom brackets **(3)** and right and left brackets **(4)**.
  - c. Remove four screws **(5)** and circuit breaker bracket **(6)**.
  - d. Tag and disconnect electrical wiring to circuit breaker **(23 and/or 24)**.
  - e. Remove three screws each **(25)**.
  - f. Remove circuit breaker **(23 and/or 24)**.
  - g. Install new circuit breaker **(23 and/or 24)**.

**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.

- h. Connect electrical wiring to circuit breaker **(23 and/or 24)**.
    - i. Position circuit breaker bracket **(6)** on power panel **(19)** and install four screws **(5)**.
    - j. Position right and left brackets **(4)**, top and bottom brackets **(3)** and install four screws **(2)**.
    - k. Close power panel door **(1)**.
2. Connector **(26)**.
  - a. Open power panel door **(1)**.
  - b. Remove four screws **(2)**, top and bottom brackets **(3)** and right and left brackets **(4)**.
  - c. Remove four screws **(5)** and circuit breaker bracket **(6)**.
  - d. Tag and disconnect electrical wiring to connector **(26)**.
  - e. Remove four screws **(27)**, connector **(26)** and cap **(28)**.
  - f. Remove electrical wiring from connector **(26)**.
  - g. Remove four screws **(29)**, gasket **(30)**, cover **(31)** and grommet **(32)**.
  - h. Install electrical wiring on new connector **(26)**.
  - i. Install grommet **(32)**, gasket **(30)**, cover **(31)** and four screws **(29)**.
  - j. Position connector **(26)** on power panel **(19)** and install four screws **(27)** and cap **(28)**.

**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 **(26)**.
- l. Position circuit breaker bracket **(6)** on power panel **(19)** and install four screws **(5)**.
- m. Position right and left brackets **(4)**, top and bottom brackets **(3)** and install four screws **(2)**.
- n. Close power panel door **(19)**.

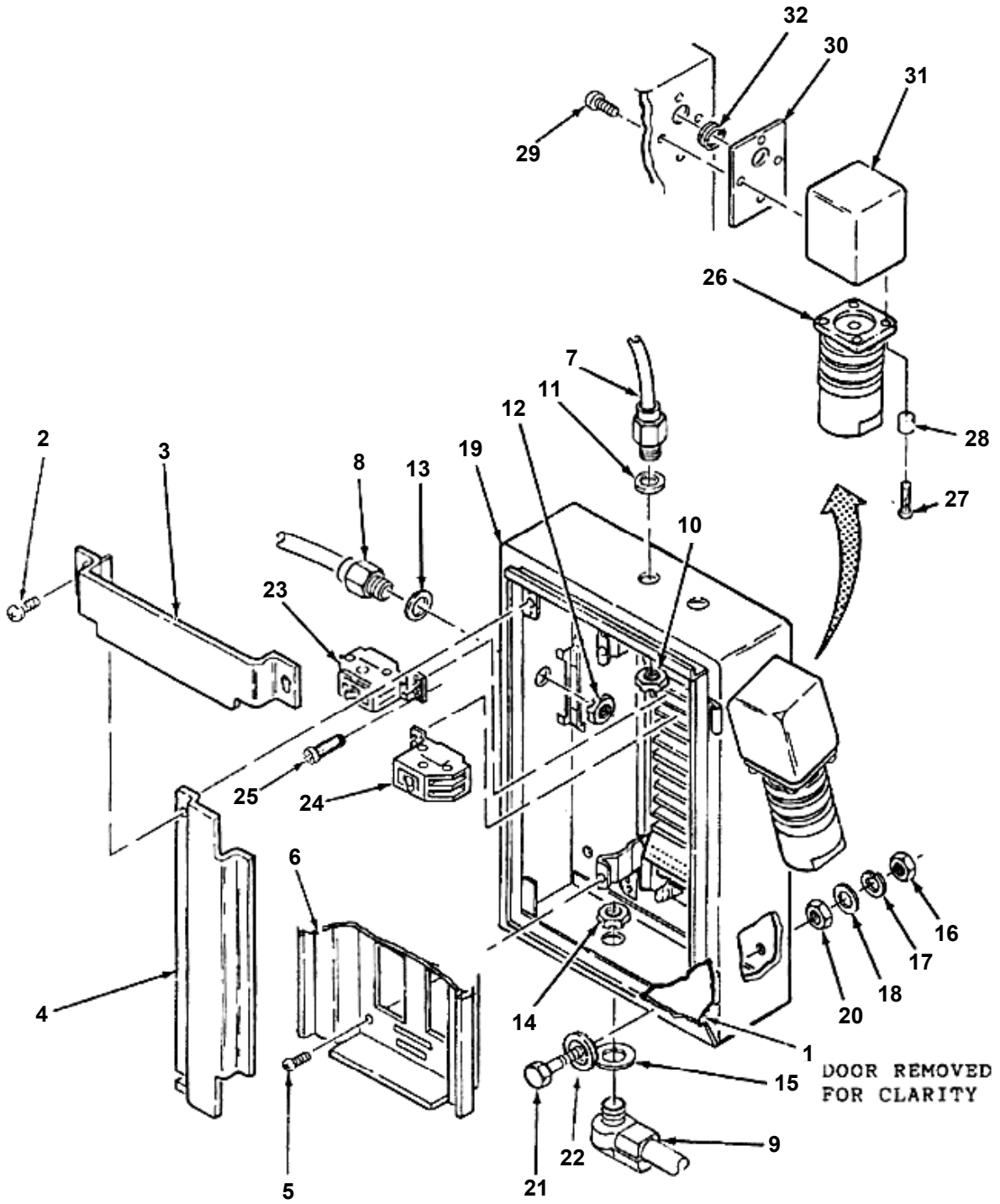
**INSTALL**

- 1. Install two bolts **(21)**, flat washers **(22)** and nuts **(20)**.
- 2. Position power panel **(19)** on washer control stand and install two flat washers **(18)**, lockwashers **(17)** and nuts **(16)**.
- 3. Install sealing washer **(15)**, conduit **(9)** and nut **(14)**.
- 4. Install sealing washer **(13)**, flexible conduit **(8)** and nut **(12)**.
- 5. Install sealing washer **(11)**, flexible conduit **(7)** and nut **(10)**.

**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.

- 6. Connect electrical wiring to circuit breakers **(23 and 24)** as tagged.
- 7. Position circuit breaker bracket **(6)** on power panel **(19)** and install four screws **(5)**.
- 8. Position right and left brackets **(4)**, top and bottom brackets **(3)** on power panel **(19)** and install four screws **(2)**.
- 9. Close power panel door **(1)**.
- 10. Install enclosure box (WP 0141 00).



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
PRE-EXTRACTOR BIN (WET WASH BIN)  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer Mounted Welding Shop (Item 8, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)  
Sealing Washer (Item 64, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Wet wash bin removed (WP 0053 00)

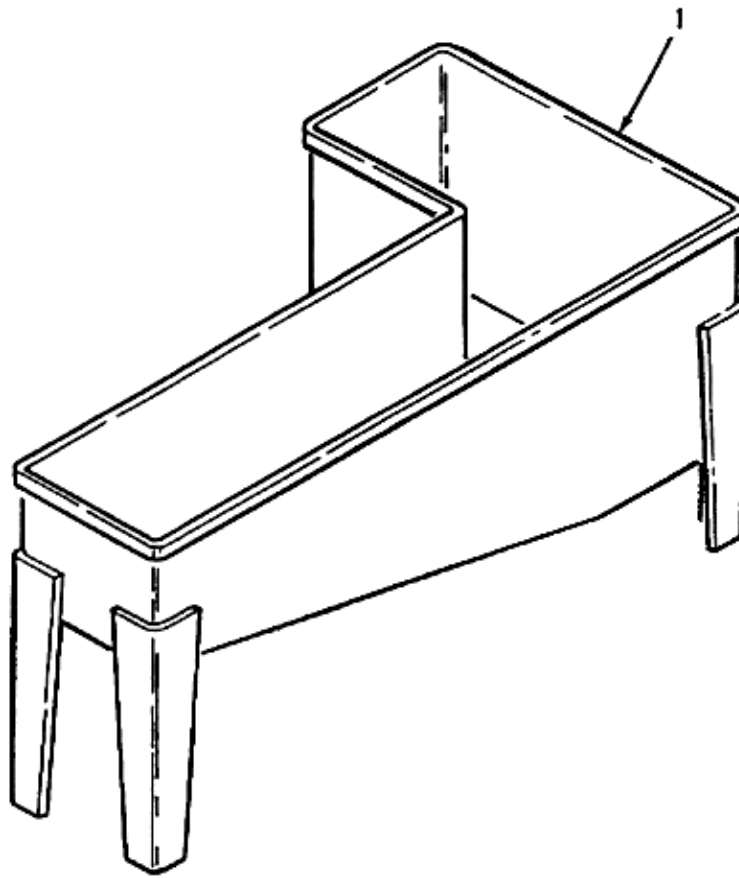
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**WARNING**

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) (WP 0053 00).



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
EXTRACTOR PIPING  
REPAIR**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Solder (Item 18, WP 0190 00)  
Flux (Item 10, WP 0190 00)  
Antiseize Compound (Item 5, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Extractor piping removed (WP 0054 00)

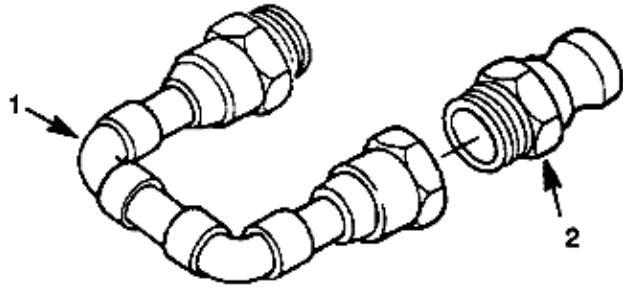


**WARNING**

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. 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. Remove damaged coupling **(2)**. Before installing coupling, apply antiseize compound to male threads.
3. Install extractor piping **(1)** (WP 0054 00).



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
LAUNDRY EXTRACTOR  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Solder (Item 18, WP 0190 00)  
Flux (Item 10, WP 0190 00)  
Antiseize Compound (Item 5, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Water hose disconnected from extractor (WP 0054 00)  
Power input wires/conduit disconnected from extractor (WP 0132 00)

**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.

**REMOVE**

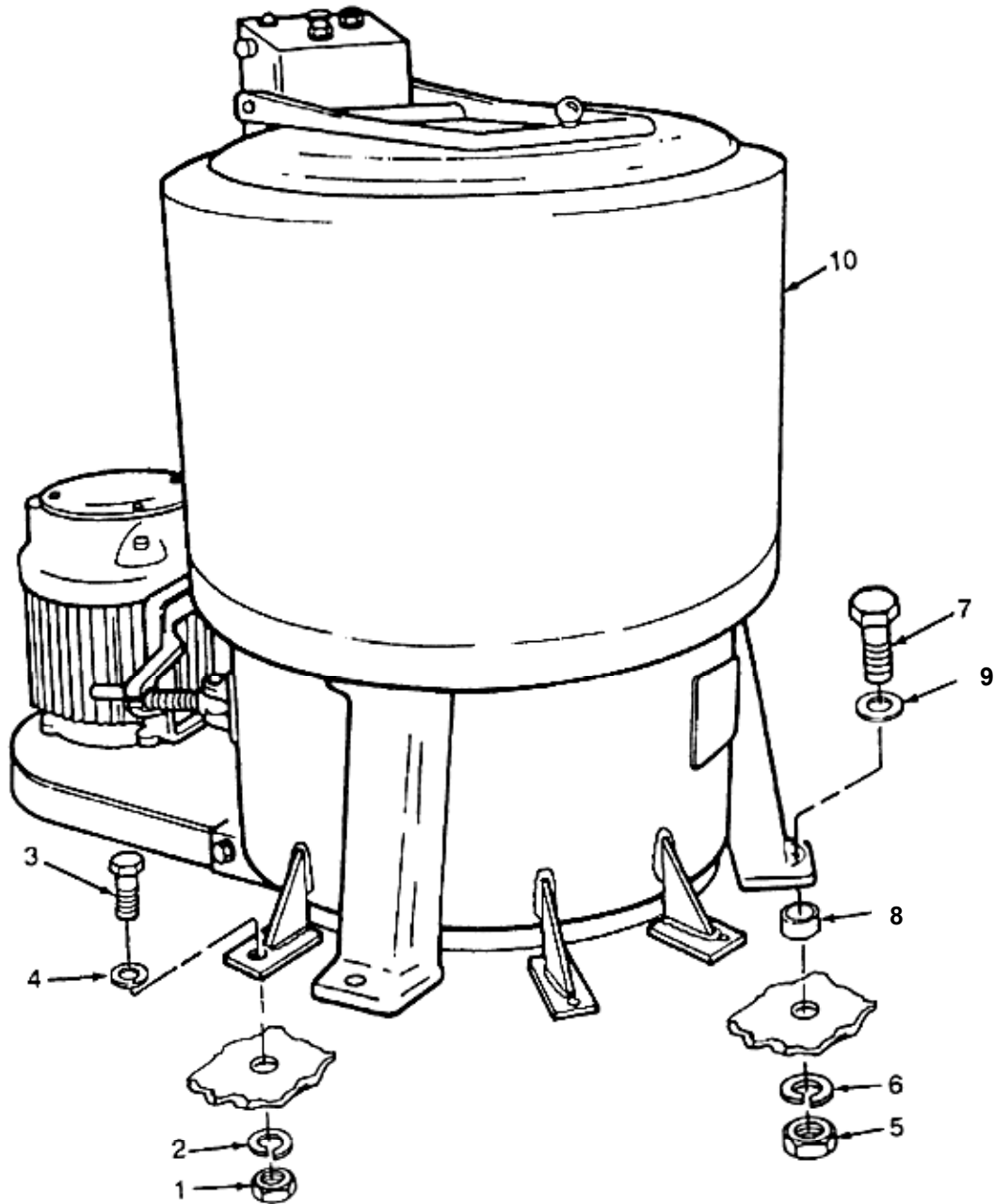
1. Remove five nuts **(1)**, lockwashers **(2)**, screws **(3)** and flat washers **(4)**.
2. Remove three nuts **(5)**, lockwashers **(6)**, bolts **(7)**, sleeves **(8)** and flat washers **(9)**.
3. Using a suitable lifting device, remove extractor **(10)** from Laundry Unit.

**REPAIR****NOTE**

Extractor repairs are covered in WP 0139 00 through WP 0154 00.

**INSTALL**

1. Using a suitable lifting device, position extractor **(10)** on Laundry Unit.
2. Install three sleeves **(8)**, flat washers **(9)**, 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 (WP 0132 00).



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
HINGE SHAFT ASSEMBLY  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Adhesive (Item 2, WP 0190 00)  
Grease (Item 11, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Lid Closed Switch removed (WP 0153 00)  
Lid Locked Switch removed (WP 0154 00)



**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.

**REMOVE**

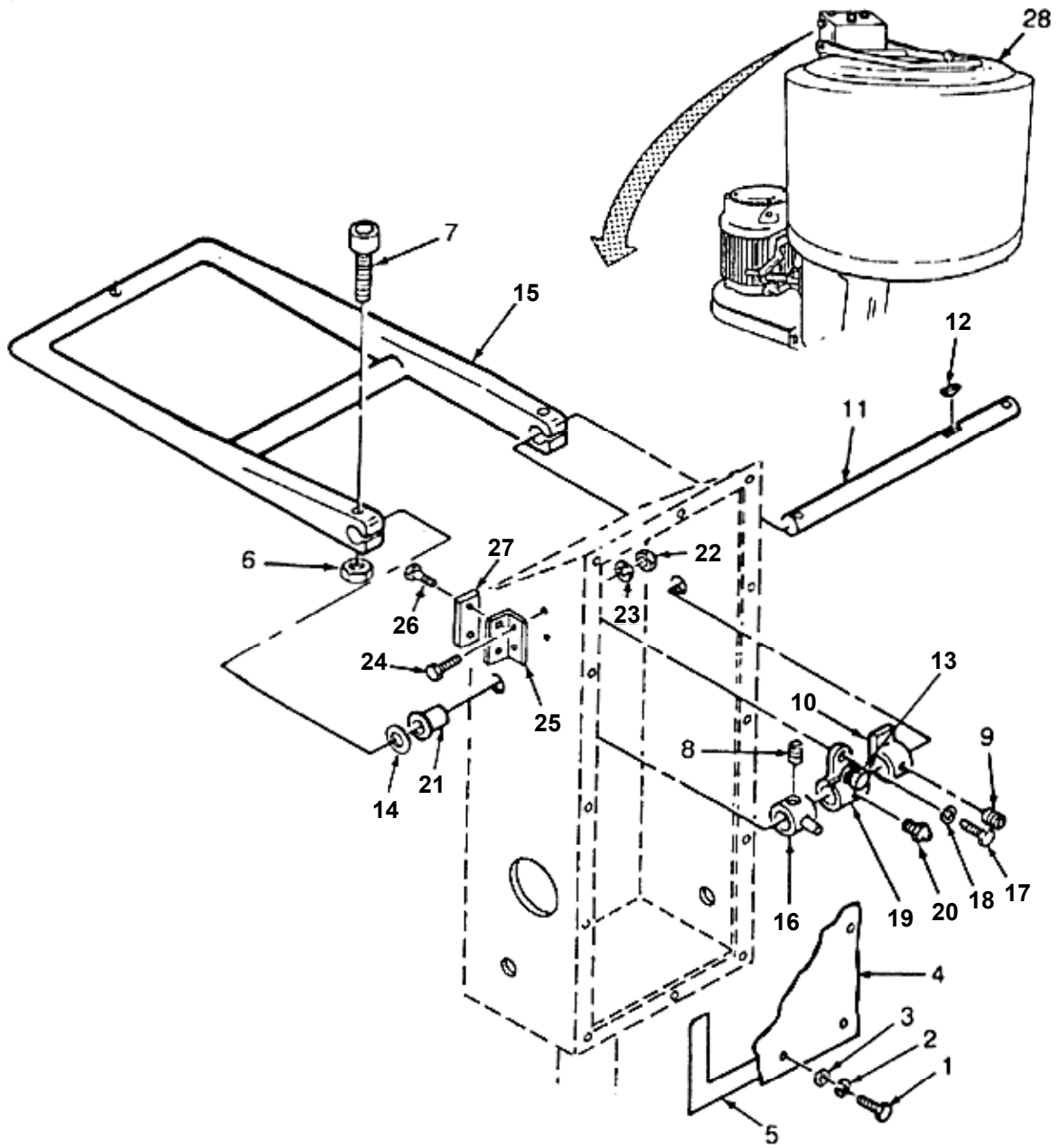
1. Remove twelve bolts (1), lockwashers (2), seal washers (3) and cover (4). As required, remove gasket (5).
2. Remove two nuts (6) and bolts (7).
3. Loosen setscrews (8 and 9).
4. Move cam (10) on shaft (11) and remove key (12).
5. Loosen brake adjustment screw (13).
6. Remove shaft (11), two washers (14), frame (15) and cams (16 and 10).
7. Remove screw (17), lockwasher (18) and brake (19). As required, remove grease fitting (20) and adjustment screw (13) from brake (19).
8. Remove two bushings (21).
9. If required, remove two nuts (22), lockwashers (23), screws (24), bracket (25), screws (26) and bumper (27).

**REPAIR**

Repair consists of replacing damaged and/or missing components of the hinge shaft assembly.

**INSTALL**

1. If removed, install bumper **(27)** on bracket **(25)** with two screws **(26)** and install bracket with two screws **(24)**, lockwashers **(23)** and nuts **(22)**.
2. Install two bushings **(21)**.
3. Install shaft **(11)**, two washers **(14)**, frame **(15)**, key **(12)**, cam **(10)**, brake **(19)**, screw **(17)**, lockwasher **(18)** and cam **(16)**.
4. Close lid **(28)**.
5. With lid closed, turn cam **(16)** 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 **(15)** to shaft **(11)**.
8. If removed, install grease fitting **(20)** and adjustment screw **(13)** and lubricate brake **(19)** (LO 10-3510-222-12).
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 **(13)** on brake **(19)** 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 (WP 0153 00) and lid locked switch (WP 0154 00).



END OF WORK PACKAGE





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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
PUSH BUTTON SWITCH  
REMOVE, INSTALL**

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**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Cover removed (WP 0100 00)

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**WARNING**

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

**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.

**REMOVE**

1. Remove nut **(1)** from control panel **(2)**.
2. Remove switch body **(3)** and teflon washer **(4)**.
3. Tag and disconnect wires from switch body **(3)**.

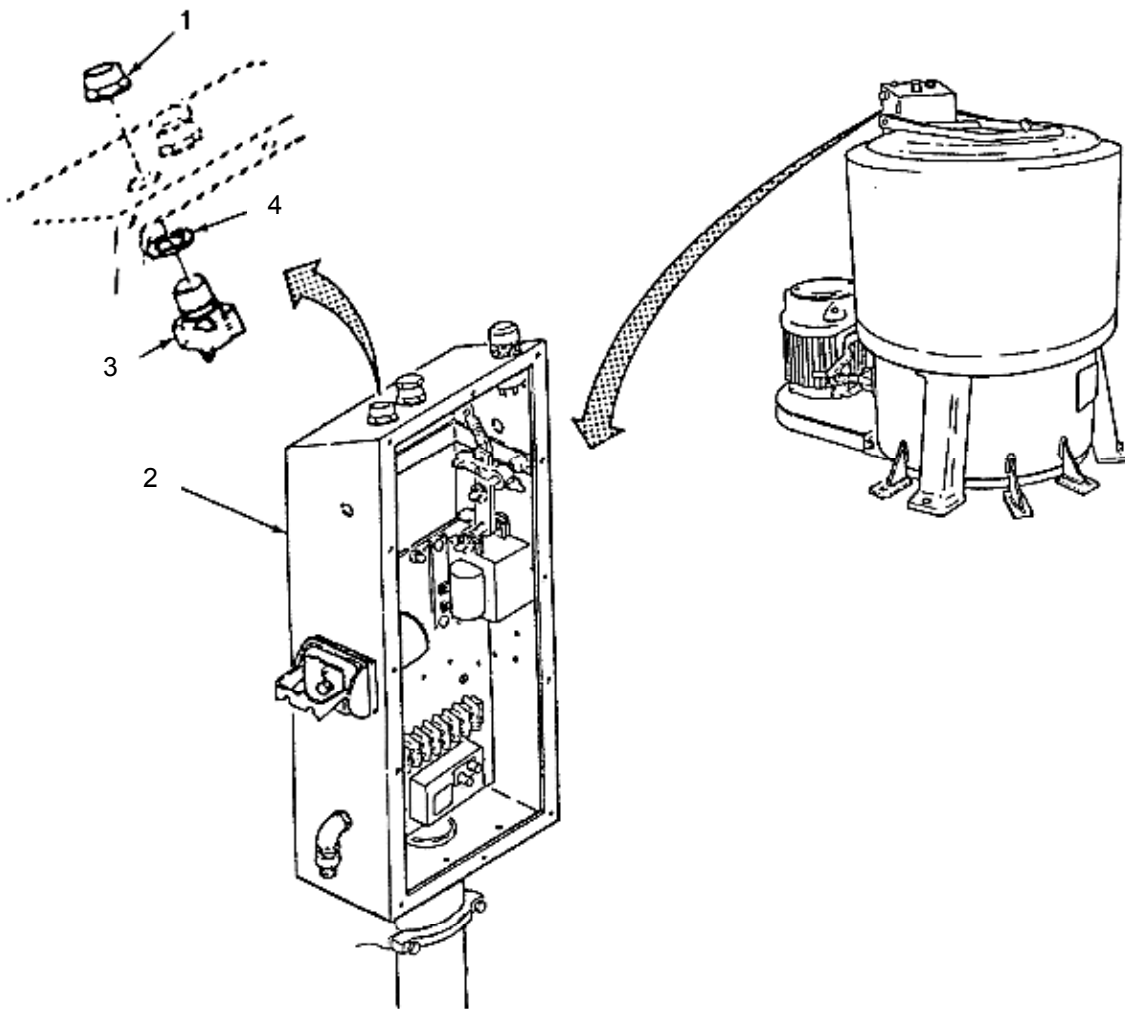
**INSTALL**

1. Position teflon washer **(4)** on switch body **(3)**.
2. Position switch body **(3)** on control panel **(2)**.
3. Install nut **(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 as tagged.
5. Install cover (WP 0100 00).



**END OF WORK PACKAGE**

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
INDICATOR LIGHT  
REMOVE, INSTALL**

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**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)  
Lamp Extractor (Item 14, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Cover removed (WP 0100 00)

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**WARNING**

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

**REMOVE**

1. Unscrew lens **(1)**.
2. Using a lamp extractor, remove lamp **(2)**.
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)**.

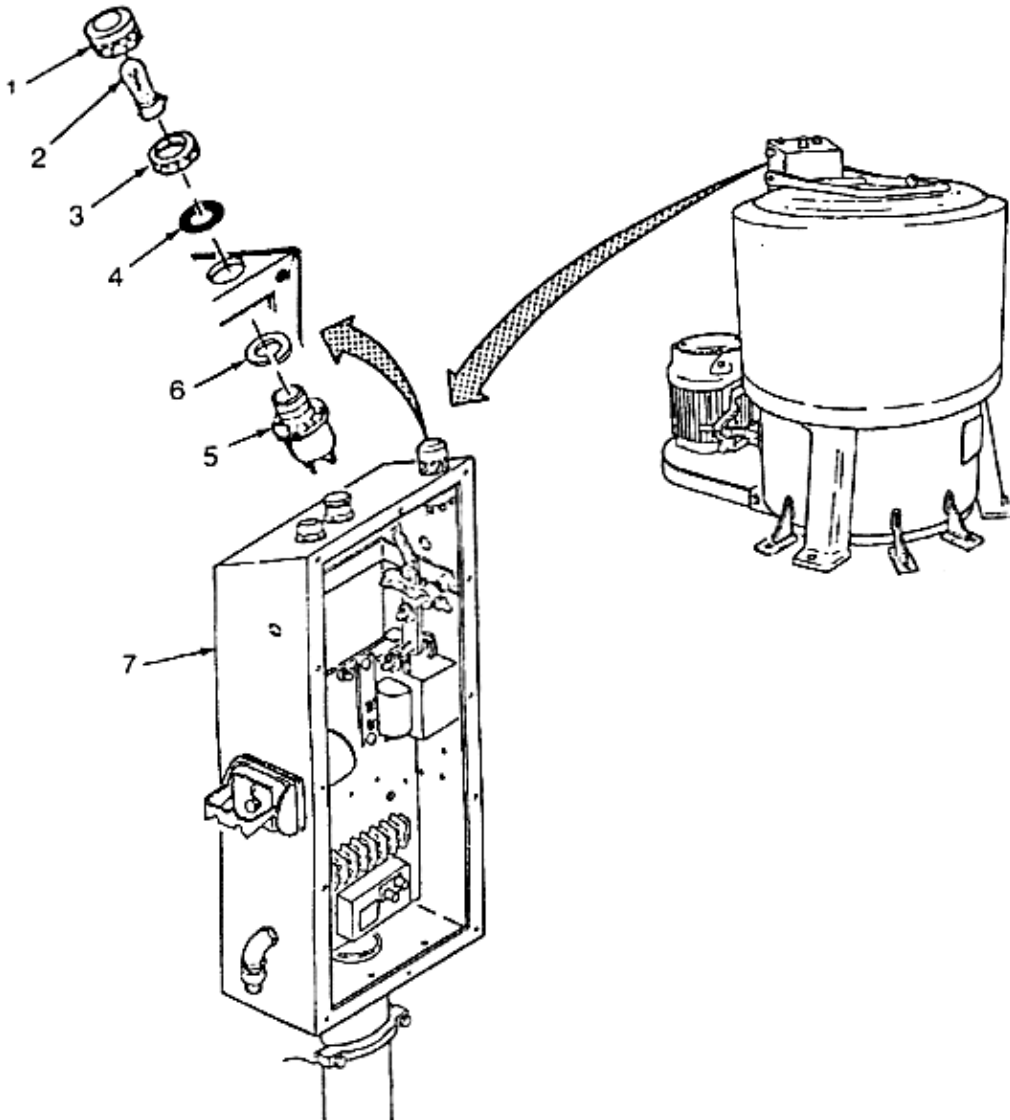
**INSTALL**

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).
4. Install lens (1).
5. Install cover (WP 0100 00).



**END OF WORK PACKAGE**

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
STARTER ENCLOSURE  
REMOVE, REPAIR, INSTALL**

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**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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

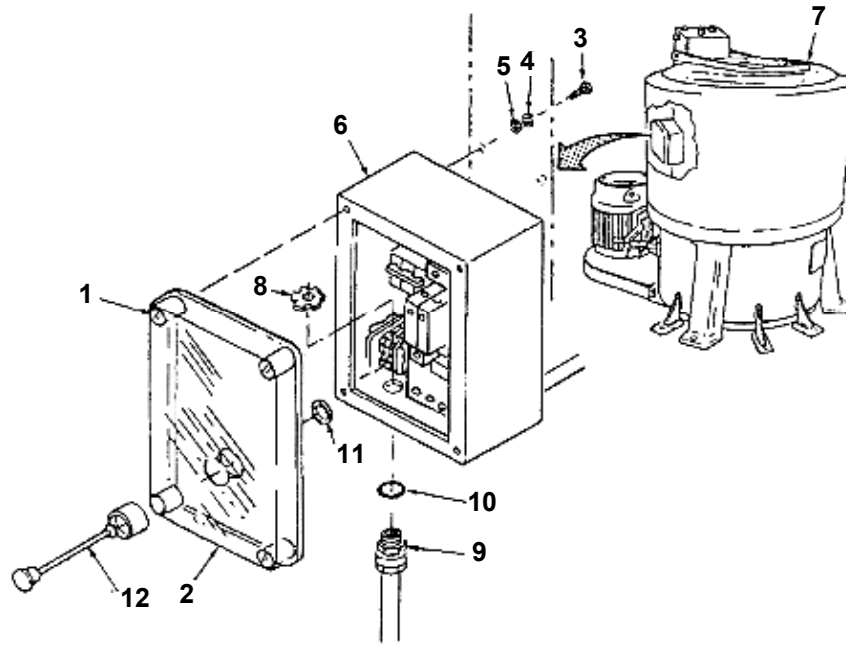
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**WARNING**

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

**REMOVE**

1. Turn four captive screws **(1)** 1/4 turn to unlock. Then remove cover assembly **(2)**.
2. Remove four screws **(3)**, lockwashers **(4)**, flat washers **(5)** and enclosure **(6)** from extractor **(7)**.
3. Tag and disconnect all wires.
4. Remove three nuts **(8)** and box connectors **(9)** with attached wires. Remove three gaskets **(10)**.
5. Remove nut **(11)** and plunger **(12)** from cover assembly **(2)**.



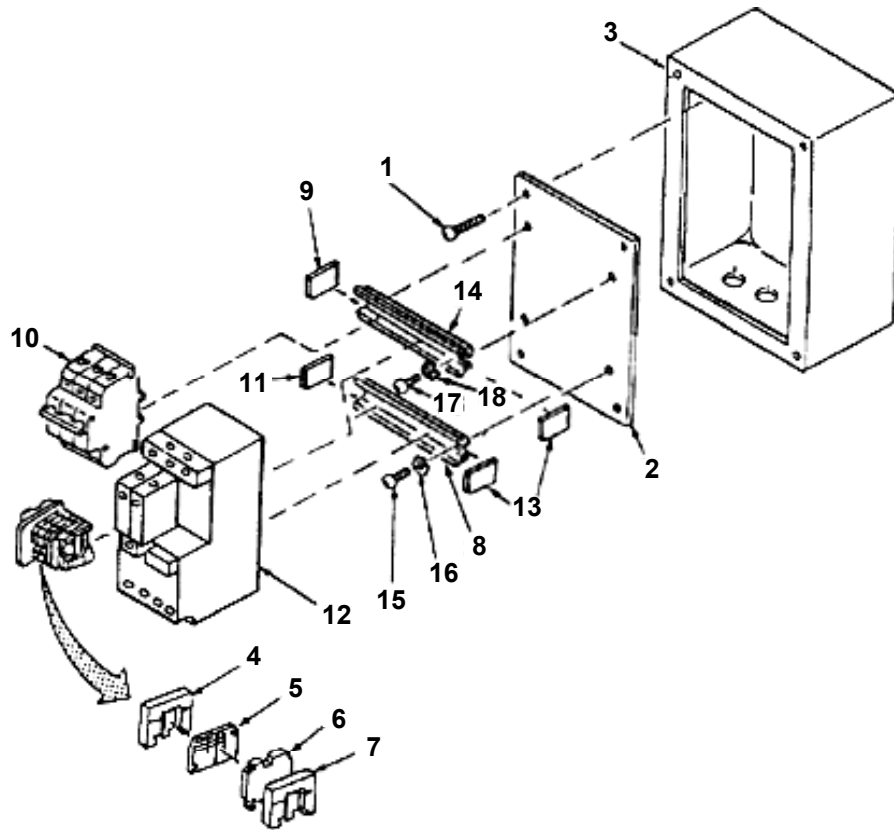
## REPAIR

### 1. Disassembly

- a. Remove four screws **(1)** and remove panel **(2)** from enclosure **(3)**.
- b. Remove end bracket **(4)**, divider **(5)**, seven terminal blocks **(6)** and end bracket **(7)** from rail **(8)**.
- c. Remove end bracket **(9)**, circuit breaker **(10)**, two end brackets **(11)**, motor starter **(12)** and stop **(13)** from rail **(14)**.
- d. Remove two screws **(15)**, lockwashers **(16)** and rail **(8)**.
- e. Remove two screws **(17)**, lockwashers **(18)** and rail **(14)**.

### 2. Assembly

- a. Position rail **(14)** on panel **(2)** and secure with two lockwashers **(18)** and screws **(17)**.
- b. Position rail **(8)** on panel **(2)** and secure with lockwashers **(16)** and screws **(15)**.
- c. Position circuit breaker **(10)** on rail **(14)** and install bracket **(9)** on end of rail **(14)** and two end brackets **(11)** to the right of circuit breaker **(10)**.
- d. Install motor starter **(12)** on rail **(8)** and secure with end bracket **(13)**.
- e. Position end bracket **(7)**, seven terminal blocks **(6)**, divider **(5)** and end bracket **(4)** on rail **(8)**.
- f. Position panel **(2)** in enclosure **(3)** and secure with four screws **(1)**.



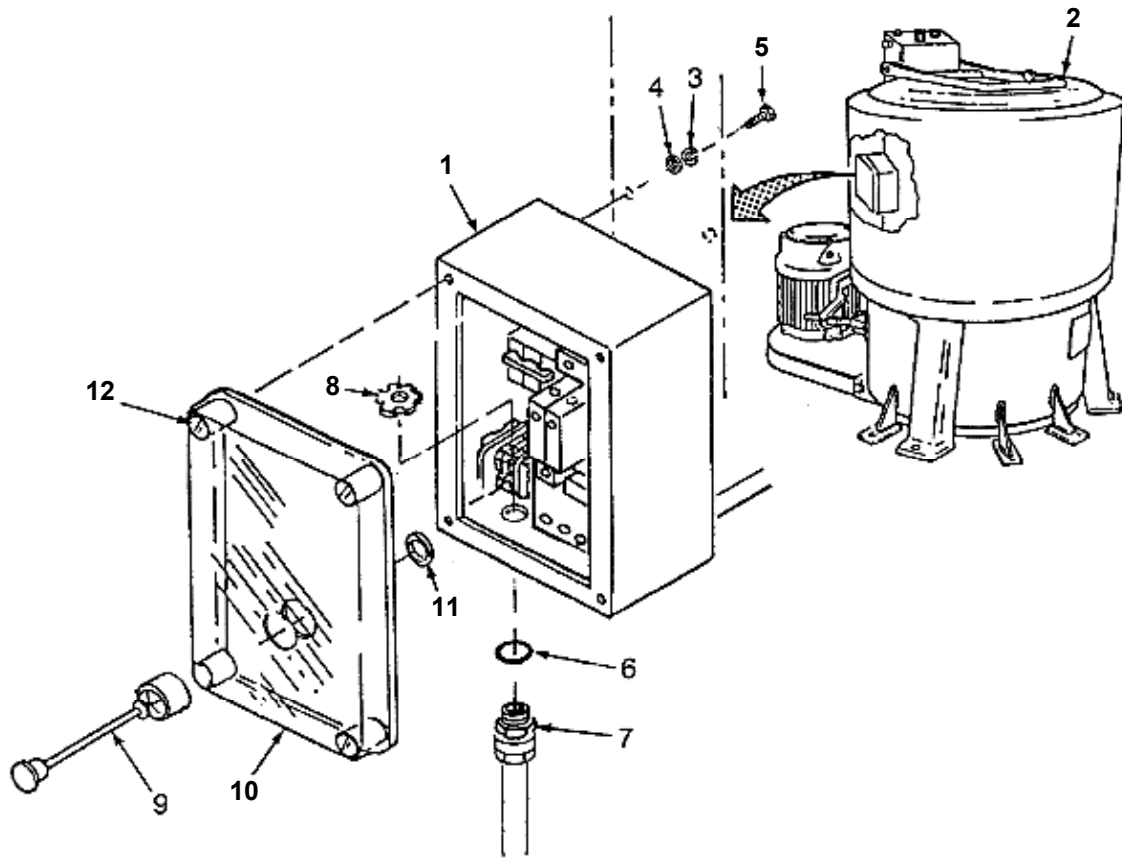
## INSTALL

1. Position enclosure (1) on extractor (2) and secure with four lockwashers (3), flat washers (4) and screws (5).
2. Install three gaskets (6) and box connector (7) on enclosure (1), secure with nuts (8).

## 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 (10) and secure with nut (11).
4. Position cover (10) on enclosure (1) and turn captive screws (12) 1/4 turn clockwise to lock cover in place.



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DRIVE UNIT ASSEMBLY  
REMOVE, REPAIR, INSTALL**

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**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP  
0188 00)

**Personnel Required**

Two

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Basket and Curb removed (WP 0057 00)

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**WARNING**

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

**REMOVE**

1. Tag and disconnect wires from solenoid **(1)**.
2. Remove six screws **(2)**, lockwashers **(3)** and three caps **(4)**.
3. Remove four screws **(5)**, lockwashers **(6)** and two caps **(7)**.
4. Mark position of drive unit assembly in relation to frame **(8)**.
5. Lift drive unit assembly **(9)** out of frame **(8)**.
6. Remove three bumper caps **(10)** from drive unit assembly **(9)**.
7. Mark frame **(8)** in relation to skirt **(11)**.
8. Remove frame **(8)** from skirt **(11)**.
9. Remove two rubber trunnions **(12)** from frame **(8)**.

**REPAIR**

Repair of drive unit consists of repair of brake (WP 0151 00) and oil housing (WP 0152 00).

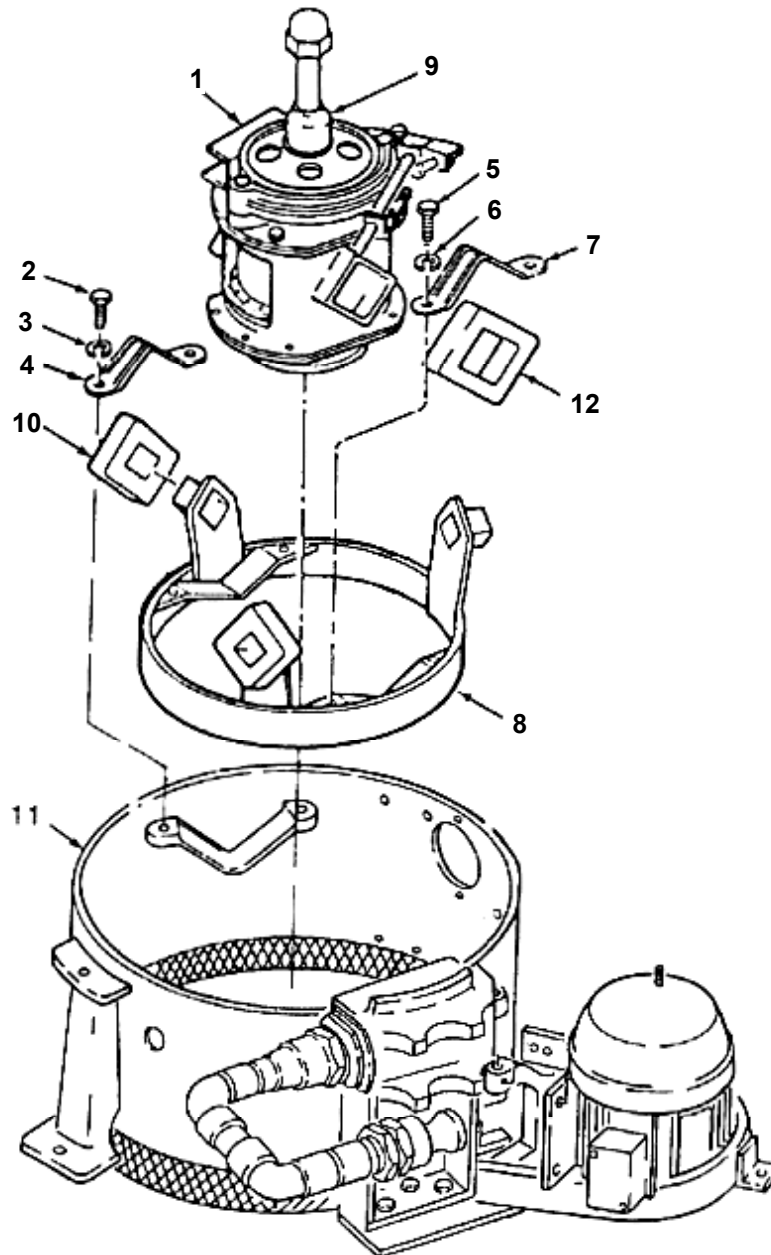
**INSTALL**

1. Position two rubber trunnions **(12)** on frame **(8)**.
2. Position frame **(8)** in skirt **(11)** as marked.
3. Position three bumper caps **(10)** on drive unit assembly **(9)**.
4. Position drive unit assembly **(9)** on frame **(8)**.
5. Install two caps **(7)**, four lockwashers **(6)** and screws **(5)**.
6. Install three caps **(4)**, six lockwashers **(3)** and screws **(2)**.

**NOTE**

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

7. Connect wires to solenoid **(1)** as tagged.
8. Install basket and curb assembly (WP 0057 00).



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
EXTRACTOR BRAKE  
DISASSEMBLE, REPAIR, ASSEMBLE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Cotter Pin (Item 74, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Basket and Curb removed (WP 0057 00)

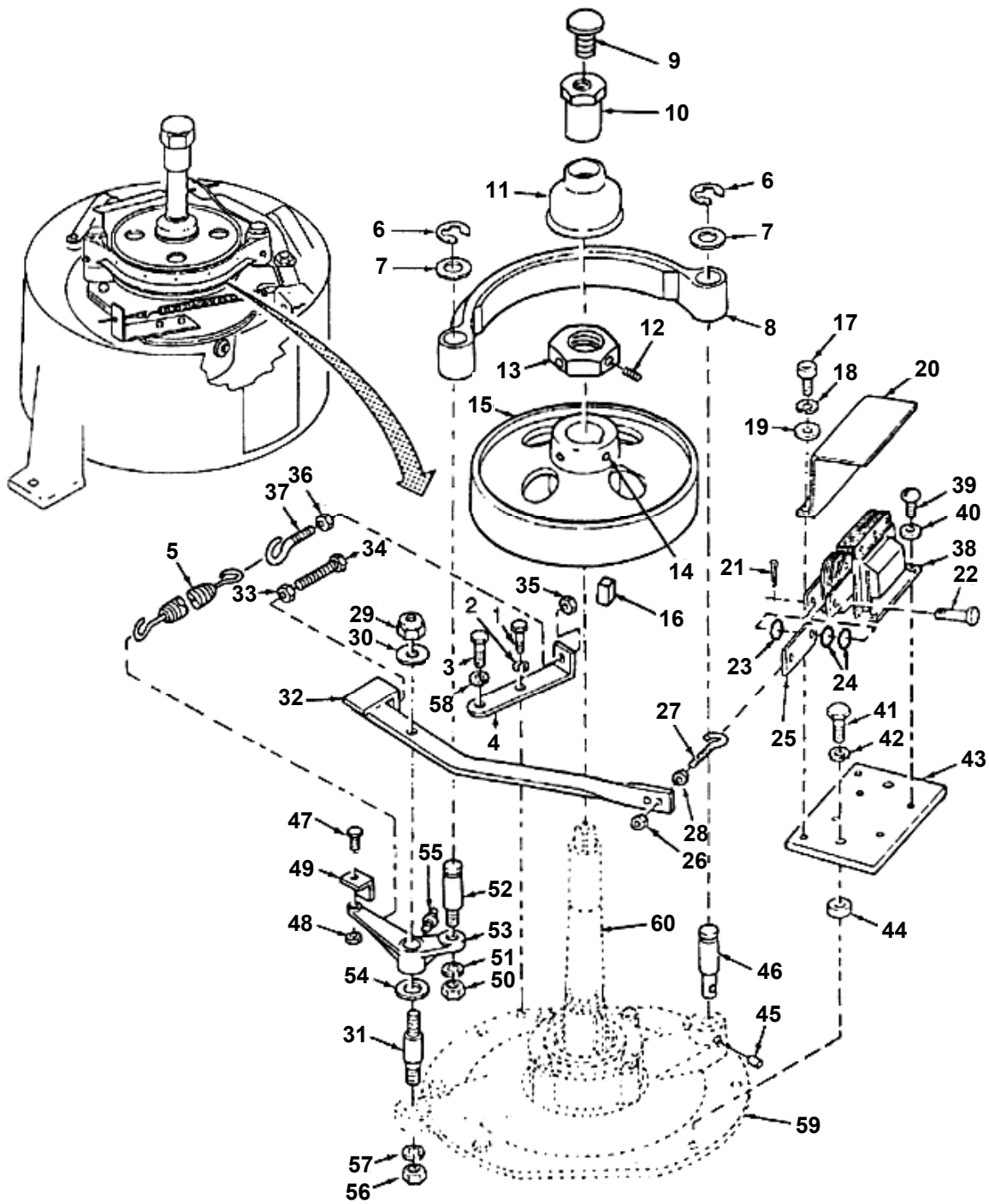
**WARNING**

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

**DISASSEMBLE**

1. Remove screw **(1)** and lockwasher **(2)**. Loosen screw **(3)** and pivot bracket **(4)** to loosen spring **(5)**.
2. Remove spring **(5)**.
3. Remove two retaining rings **(6)** and flat washers **(7)**.
4. Remove brake shoe **(8)**.
5. Remove insert **(9)** and basket ball **(10)**.
6. Remove seal **(11)**.
7. Loosen three set-screws **(12)** on collar **(13)** and remove collar.
8. Loosen two set-screws **(14)** on drum **(15)** and remove drum and key **(16)**.
9. Remove two screws **(17)** and lockwashers **(18)**, flat washers **(19)** and bracket **(20)**.
10. Remove cotter pin **(21)**, shoulder pin **(22)** and three spacers **(23 and 24)** and link **(25)**.
11. Remove nut **(26)**, unscrew hook **(27)** and remove nut **(28)** from hook **(27)**.
12. Remove nuts **(29)** and flat washer **(30)** from stud **(31)**.
13. Remove arm **(32)** and remove nut **(33)** and bolt **(34)** from arm **(32)**. Disconnect hook **(27)** from link **(25)**.

14. Remove nuts **(35 and 36)** and hook **(37)**.
15. Tag and disconnect wires from solenoid **(38)** and remove four screws **(39)**, lockwashers **(40)** and solenoid **(38)**.
16. Remove two screws **(41)** and lockwashers **(42)**, plate **(43)** and two spacers **(44)**.
17. Remove pin **(45)** and stud **(46)**.
18. Remove screw **(47)**, nut **(48)** and bracket **(49)**.
19. Remove nut **(50)**, lockwasher **(51)** and stud **(52)**.
20. Remove bell crank **(53)** and flat washer **(54)**. Remove grease fitting **(55)** from bell crank **(53)**.
21. Remove nut **(56)**, lockwasher **(57)** and stud **(31)**.
22. Remove screw **(3)**, lockwashers **(58)** and pivot bracket **(4)**.



**REPAIR**

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

**ASSEMBLE**

1. Position bracket **(4)** on oil drive housing **(59)** and loosely install lockwashers **(58)** and screws **(3)**.
2. Position stud **(31)** on oil drive housing **(59)** and secure with lockwasher **(57)** and nut **(56)**.
3. Position flat washer **(54)** and bell crank **(53)** on stud **(31)**. Install grease fitting **(55)** on bell crank **(53)**.
4. Position stud **(52)** on bell crank **(53)** and secure with lockwasher **(51)** and nut **(50)**.
5. Position bracket **(49)** on bell crank **(53)** and install screw **(47)** and nut **(48)**.
6. Position stud **(46)** on drive housing **(59)** and install pin **(45)**.
7. Position plate **(43)** on oil drive housing **(59)** and secure with two spacers **(44)**, lockwashers **(42)** and screws **(41)**.
8. Position solenoid **(38)** on plate **(43)** and secure with four lockwashers **(40)** and screws **(39)**.

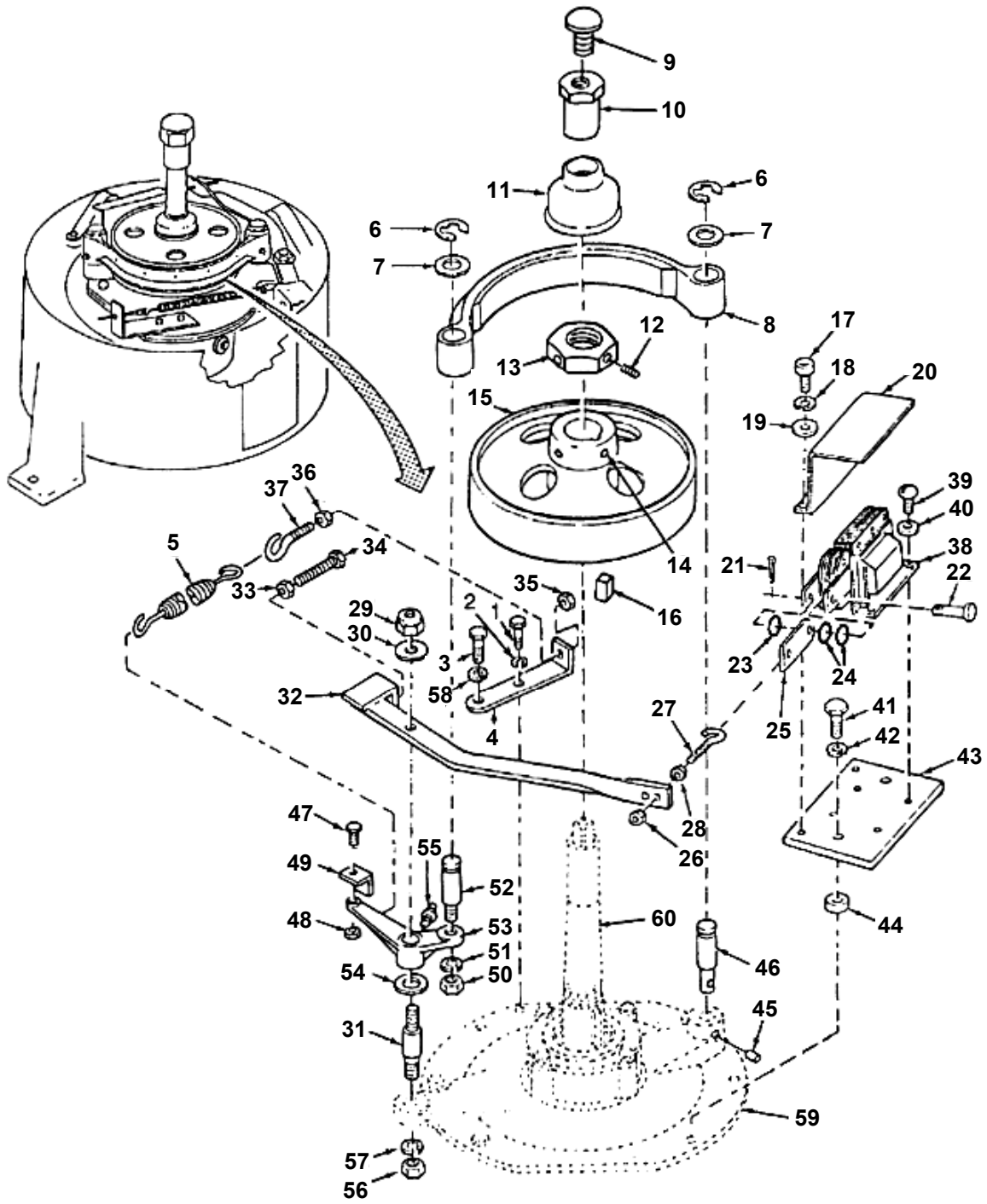
**NOTE**

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 **(38)** as tagged.
10. Position three grommets **(23 and 24)** and link **(25)** on solenoid **(38)** and install shoulder pin **(22)** with cotter pin **(21)**.
11. Thread nut **(33)** about halfway up on screw **(34)** and install screw in arm **(32)**.
12. Install nuts **(26 and 28)** and hook **(27)** on arm **(32)**.
13. Connect hook **(27)** to link **(25)**.
14. Position arm **(32)** on stud **(31)**. Secure with flat washer **(30)** and nut **(29)**.
15. Install hook **(37)** and nuts **(36 and 35)** on bracket **(4)**.
16. Install spring **(5)**, connecting it to bell crank **(53)** and hook **(37)**. Tighten screw **(3)** and install screw **(1)** and lockwasher **(2)**.



17. Install bracket **(20)** on plate **(43)** with two flat washers **(19)**, lockwashers **(18)** and screws **(17)**.
18. Position key **(16)**, drum **(15)** and setscrews **(12)** on drive shaft **(60)** and tighten two setscrews **(14)**.
19. Install seal **(11)**, basket ball **(10)** and insert **(9)**.
20. Position brake shoe **(8)** on studs **(46 and 52)** and install flat washers **(7)** and clips **(6)**.
21. Install curb and basket (WP 0057 00).
22. Adjust brake (WP 0051 00).



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
OIL HOUSING  
DISASSEMBLE, REPAIR, ASSEMBLE, ADJUST**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)  
Drain Pan (Item 16, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Cotter Pin (Item 74, WP 0189 00)  
Lubricant (Item 13, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Drive Assembly removed (WP 0150 00)  
Brake removed (WP 0151 00)

**WARNING**

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

**DISASSEMBLE**

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).

## REPAIR

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

## ASSEMBLE

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 (WP 0150 00 and WP 0151 00).
16. Go to adjustment procedure below.

**ADJUST****CAUTION**

Incorrect gap will damage drive unit.

**NOTE**

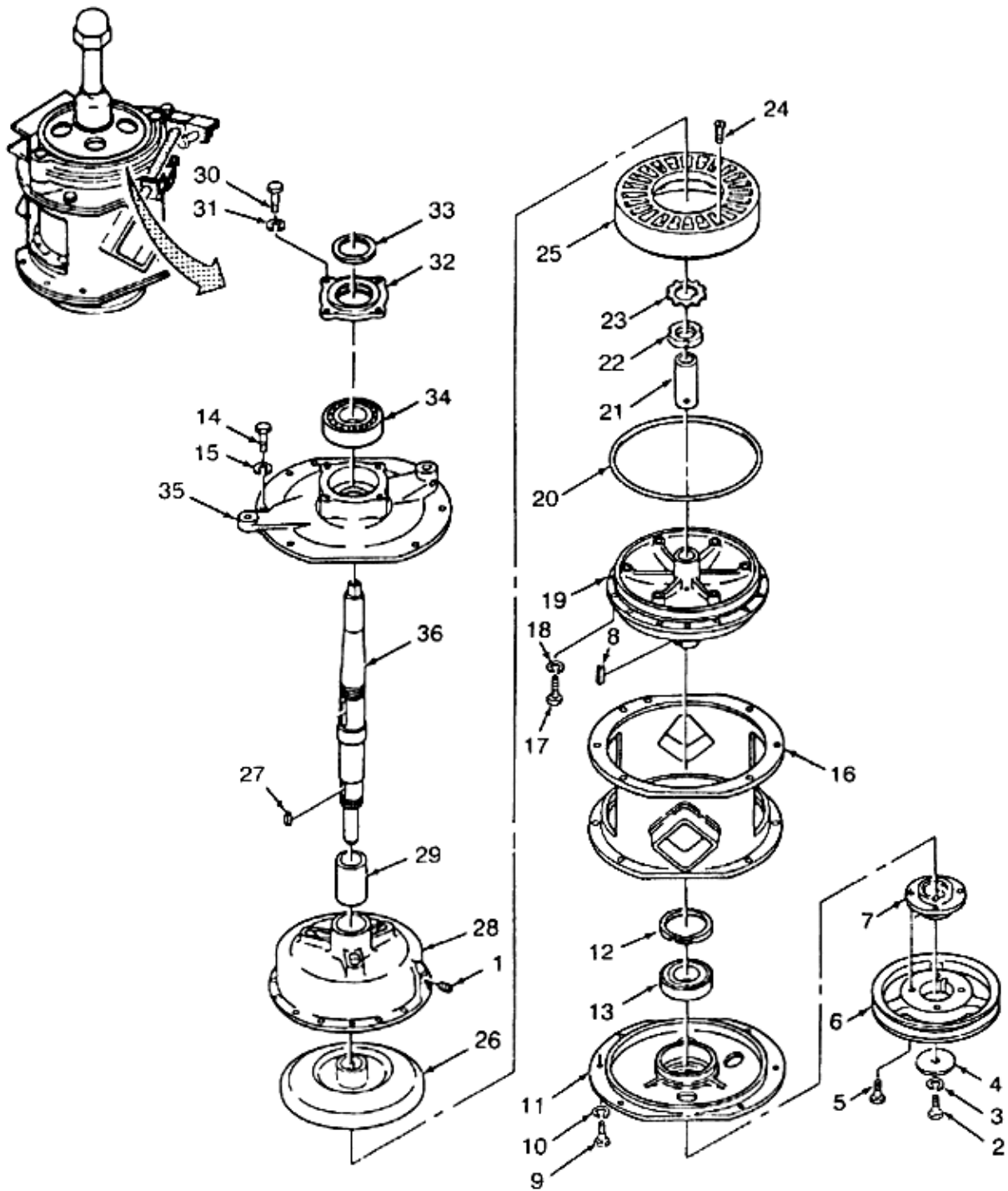
Adjustment consists of checking/obtaining correct gap between runner and clutch driver and requires that brake assembly is installed on unit.

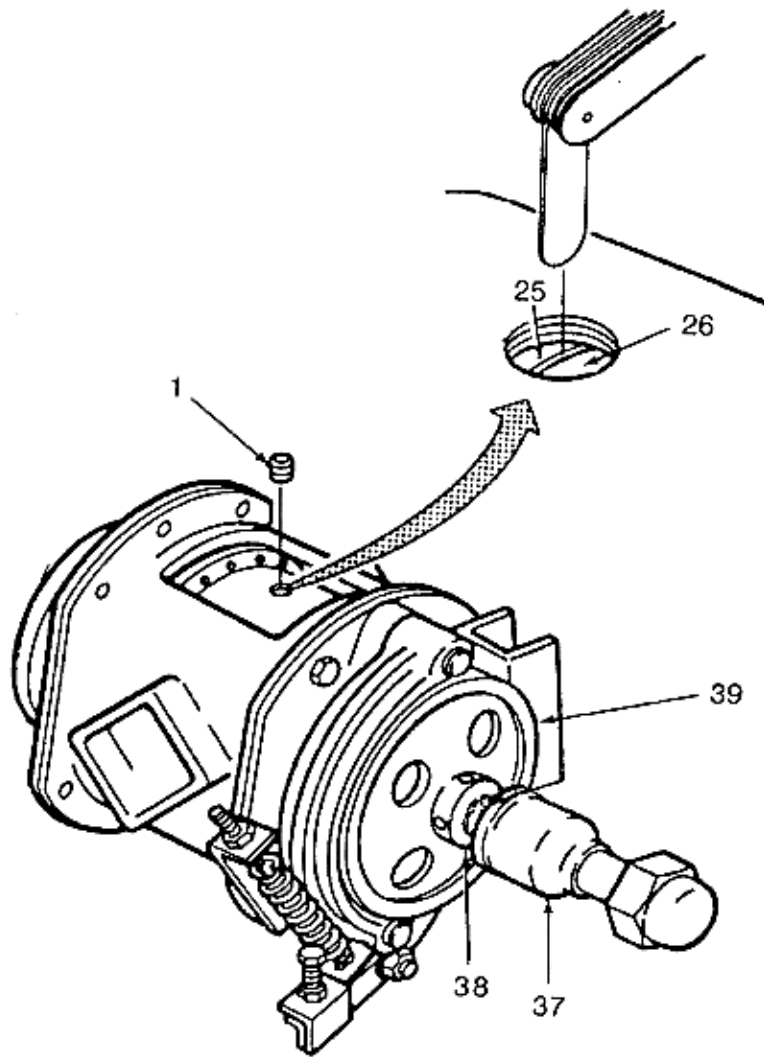
1. Remove fill plug **(1)**.

**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.
  - d. Measure gap to see if it changed. Adjust again, if necessary.
  - e. 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.
  - f. Install additional setscrews in any of the five additional holes to prevent loss of screws.
  - g. Tighten two setscrews on hub **(39)**.
  - h. Install rubber shaft seal **(37)**.
4. Install fill plug **(1)**.





END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: MM85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
LID CLOSED SWITCH  
REMOVE, INSTALL, ADJUST**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Cover removed (WP 0135 00)**WARNING**

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

**REMOVE**

1. Loosen two screws **(1)** and remove the mounting plate **(2)** with the attached switch **(3)** from the control panel **(4)**.
2. Tag and disconnect electrical wires from the switch **(3)**.
3. Remove two nuts **(5)**, lockwashers **(6)** and screws **(7)** and separate the switch **(3)** from the mounting plate **(2)**.

**INSTALL**

1. Position the switch **(3)** on the plate **(2)** and secure it with two screws **(7)**, lockwashers **(6)** and 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.

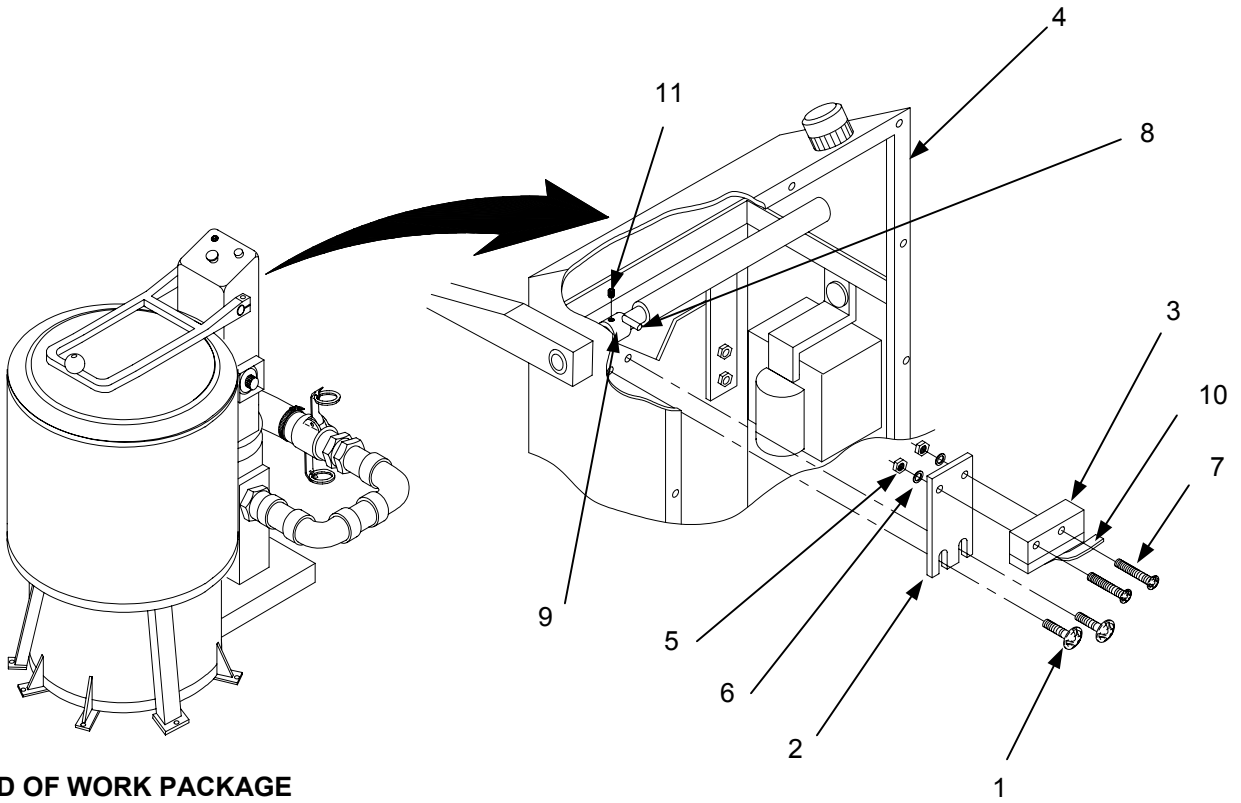
2. Connect the electrical wires to the switch **(3)** as tagged.
3. Install the plate **(2)** on the control panel **(4)**. Tighten the screws **(1)** finger tight.
4. Go to the switch adjustment procedure below.

---

**ADJUST****NOTE**

Switch adjustment is necessary when the cam or switch is replaced and when switch is out of adjustment due to vibration.

1. Slowly close the extractor lid and check if stud **(8)** on the cam **(9)** is depressing the switch actuator **(10)** enough to close the switch when the lid is fully closed. If the stud **(8)** comes down level and depresses the switch actuator **(10)**, the switch is properly adjusted. If the switch **(3)** or cam **(9)** need adjustment, go to step 2 or 3 as appropriate.
2. If the stud **(8)** is level, but the switch **(3)** is positioned too high to sufficiently depress the switch actuator **(10)**, or the switch is depressed too much, loosen the screws **(1)** and move the switch plate **(2)** up or down for correct adjustment.
3. If the stud **(8)** is not level, loosen the setscrew **(11)** on the cam **(9)** and rotate the cam until the stud **(8)** is level when the lid is closed. Tighten the setscrew **(11)** and restart the adjustment procedure at step 1.
4. Install the control panel cover (WP 0135 00).



**END OF WORK PACKAGE**



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: MM85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
LID LOCKED SWITCH  
REMOVE, INSTALL, ADJUST**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Cover removed (WP 0100 00)**WARNING**

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

**REMOVE**

1. Loosen two screws **(1)**, lockwashers **(2)**, flat washers **(3)** and remove plate **(4)** with attached switch **(5)** from control panel **(6)**.
2. Tag and disconnect electrical wires from switch **(5)**.
3. Remove two nuts **(6)**, lockwashers **(7)** and screws **(8)** and separate switch **(5)** from plate **(4)**.

**INSTALL**

1. Position switch **(5)** on plate **(4)** and secure with two screws **(8)**, lockwashers **(7)** and nuts **(6)**.

**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.

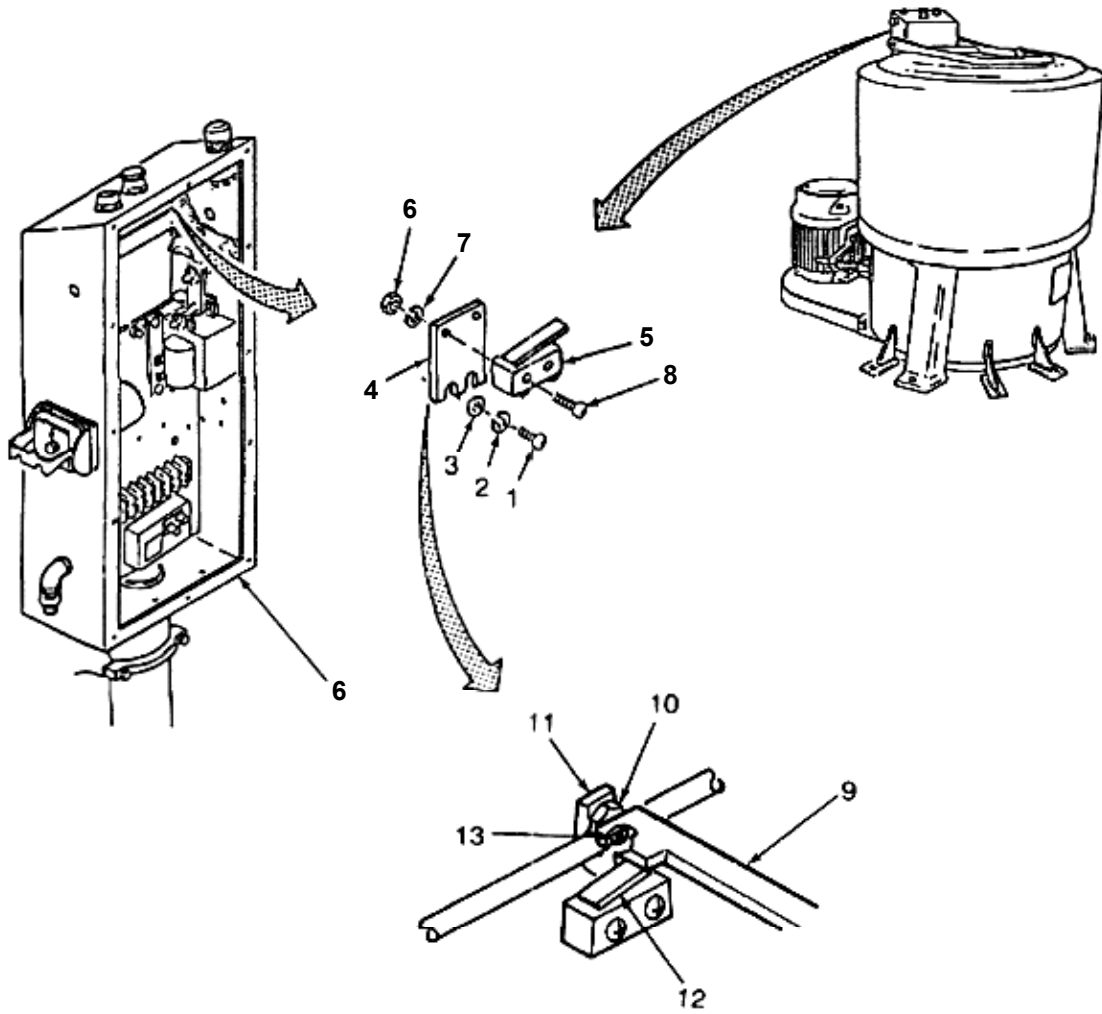
2. Connect electrical wires to switch **(5)** as tagged.
3. Install plate **(4)** on control panel **(6)**. Secure with screws **(1)**, lockwashers **(2)** and flat washers **(3)**. Tighten screws **(1)** finger tight.
4. Do adjustment procedure below.

---

**ADJUST****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.
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 screw **(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 **(4)** up or down for correct adjustment. Tighten screws **(1)**.
5. Install cover (WP 0135 00).



END OF WORK PACKAGE





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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
OVERVOLTAGE ABSORBER  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Cover removed (WP 0135 00)**WARNING**

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

**REMOVE**

1. Remove rear cover on extractor panel.
2. Disconnect wires from old overvoltage absorber.
3. Remove two mounting screws from old overvoltage absorber at terminal board and isolation contactor, and then discard overvoltage absorber.
4. Disconnect all wires coming from isolation contactor and remove contactor. Wires should be on old contactor.

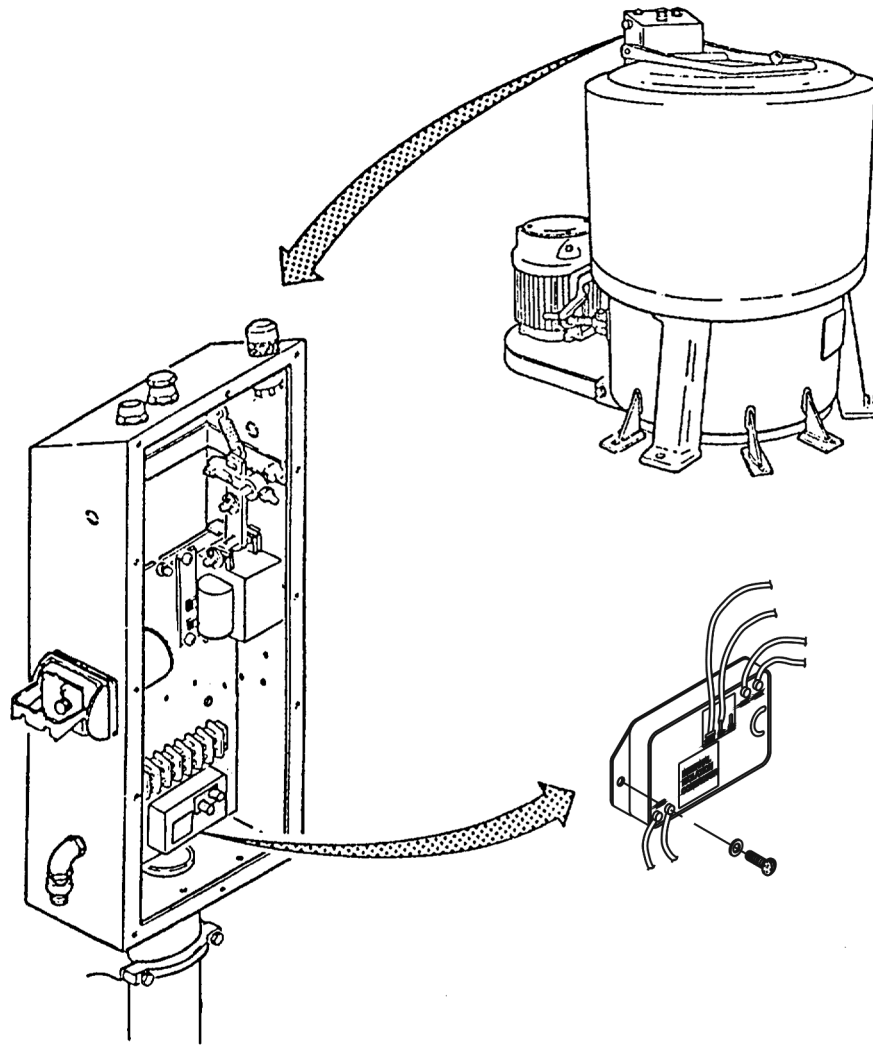
**INSTALL**

1. Use mounting screws for new overvoltage absorber and install new overvoltage absorber.
2. Connect one black wire from overvoltage absorber to T1 on terminal board.
3. Connect one black wire from overvoltage absorber to T2 on terminal board.
4. Connect one red wire from overvoltage absorber to 1L1 on terminal board.
5. Connect one red wire from overvoltage absorber to 1L2 on terminal board.

**NOTE**

Use two brown wires removed from old isolation contactor for the following steps. Crimp-on wire terminals will need to be installed on one end of each brown wire.

6. Connect one brown wire from overvoltage absorber *COM* to 1L1 on terminal board.
7. Connect one brown wire from overvoltage absorber *NO* to 5 on terminal board.



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: MM85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
SOLID STATE RELAY  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Cover removed (WP 0135 00)**WARNING**

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

**REMOVE**

1. Tag and disconnect wires from solid state relay **(3)**.
2. Remove screw **(1)**, lockwasher **(2)** and solid state relay **(3)**.

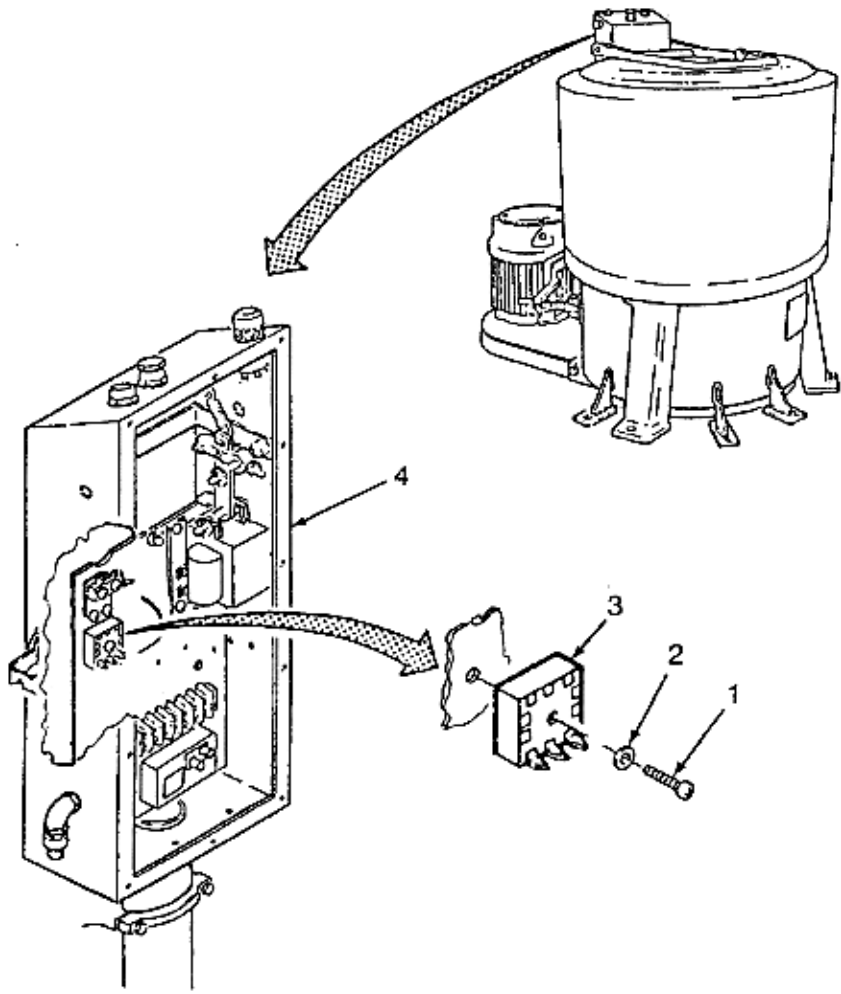
**INSTALL**

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 (WP 0135 00).



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
TIMER  
REMOVE, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Cover removed (WP 0100 00)**WARNING**

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

**REMOVE**

1. Tag and disconnect wires from timer case (1).
2. Loosen screw (2) and pull up on handle (3).
3. Pull timer (4) out of control panel (5).
4. Remove four nuts (6), lockwashers (7) and screws (8).
5. Remove timer case (1) from control panel (5).

**INSTALL**

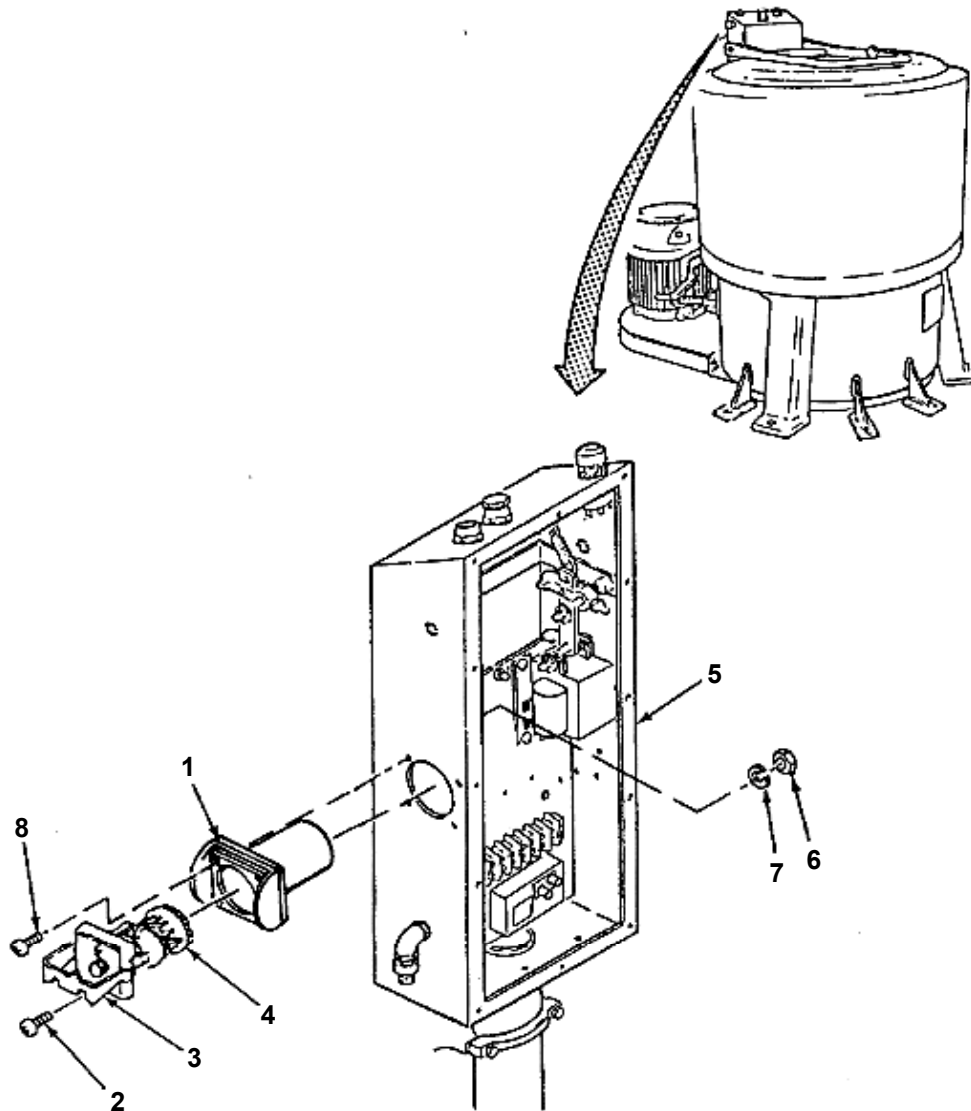
1. Position timer case (1) in control panel (5) and secure with four screws (8), lockwashers (7) and nuts (6).
2. Insert timer (4) in timer case (1) and pull down handle (3).
3. Tighten screw (2).

**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.

4. Connect wires to timer case (1) as tagged.

5. Install cover (WP 0100 00).



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
TERMINAL BOARD  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Cover removed (WP 0135 00)**WARNING**

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

**REMOVE**

1. Tag and disconnect wires from terminal board **(3)**.
2. Remove two screws **(1)**, lockwashers **(2)** and terminal board **(3)**.

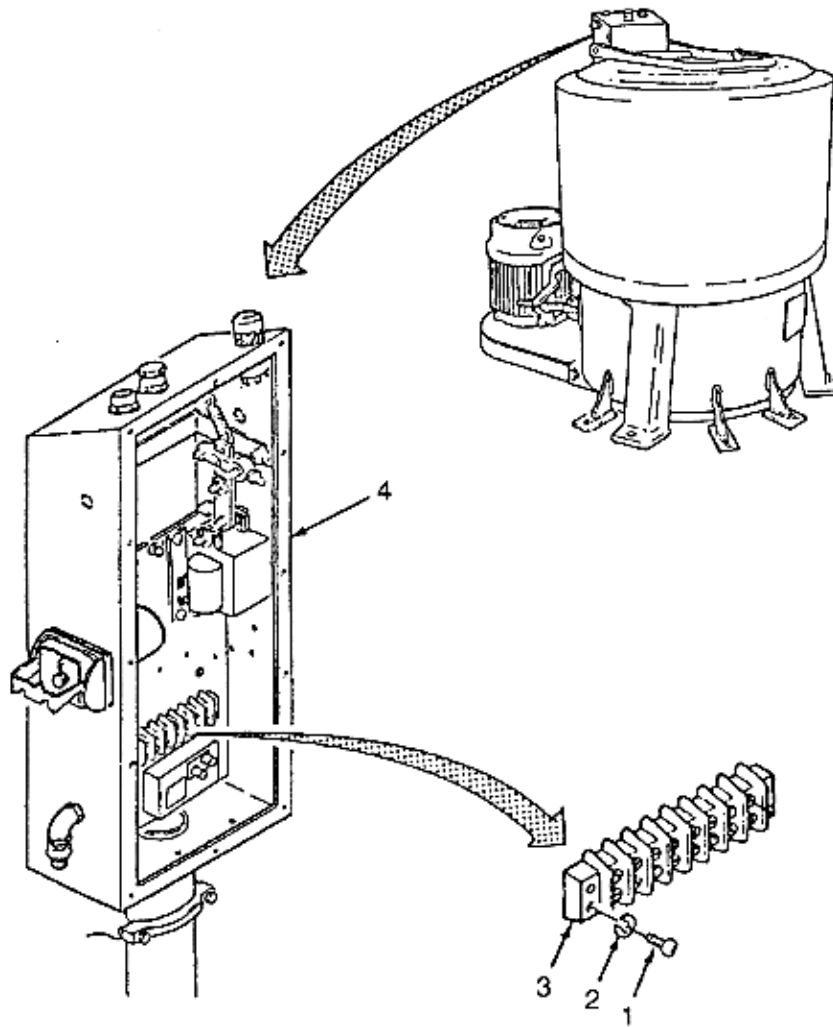
**INSTALL**

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 (WP 0135 00).



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
LID LOCKED SOLENOID  
REMOVE, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Cotter Pin (Item 56, WP 0189 00)

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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

Cover removed (WP 0135 00)

**WARNING**

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

**REMOVE**

1. Tag and disconnect wires from solenoid (1).
2. Remove cotter pin (2), grommets (3 and 4) and shoulder pin (5).
3. Remove four screws (6), lockwashers (7), flat washers (8) and solenoid (1) from enclosure (9).
4. Remove retaining ring (10), spring (11) and arm (12).
5. Remove cotter pin (13), pin (14), link (15), screw (16) and grease fitting (17) from arm (12).

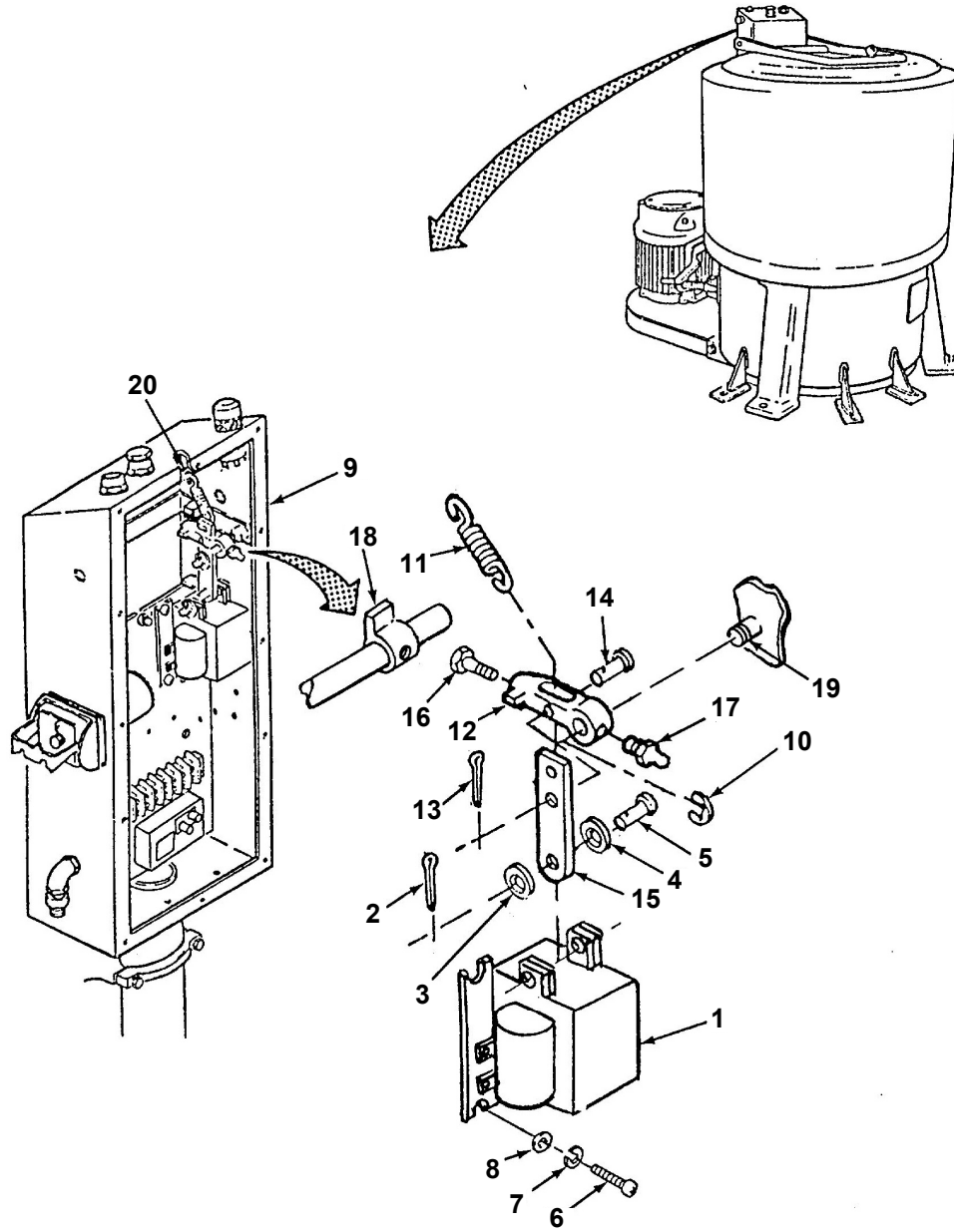
**INSTALL**

1. Install screw (16), grease fitting (17), pin (14), link (15) and cotter pin (13) on arm (12). Screw (16) will almost touch cam (18).
2. Position arm (12) on stud (19) in control panel (9) and secure with retaining ring (10).
3. Position solenoid (1) in enclosure (9) and secure with four screws (6), lockwashers (7) and flat washers (8).
4. Line up link (15) with holes on top of solenoid (1) and install shoulder pin (5), two grommets (3 and 4) and cotter pin (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.

5. Connect wires to solenoid **(1)** as tagged.
6. Install spring **(11)** onto link **(15)** and bracket **(20)** in top of enclosure **(9)**.
7. Perform adjustment procedure (WP 0154 00).
8. Install cover (WP 0135 00).



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
CONTROL PANEL  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Cotter Pin (Item 56, WP 0189 00)  
Tags (Item 19, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Electrical components removed (WP 0165 00 thru  
0172 00)  
Starter Box removed (WP 0149 00)

---

**WARNING**

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

**REMOVE**

1. Remove locknut **(1)**.
2. Remove elbow **(2)** from control panel **(3)** and remove gasket **(4)**.
3. Support control panel **(3)** and remove four screws **(5)**, lockwashers **(6)** and two clamps **(7)**.
4. Remove control panel **(3)**.
5. Remove three nuts **(8)**, lockwashers **(9)** and flat washers **(10)**.
6. Remove components board **(11)** and flat washers **(12)**.

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**REPAIR****WARNING**

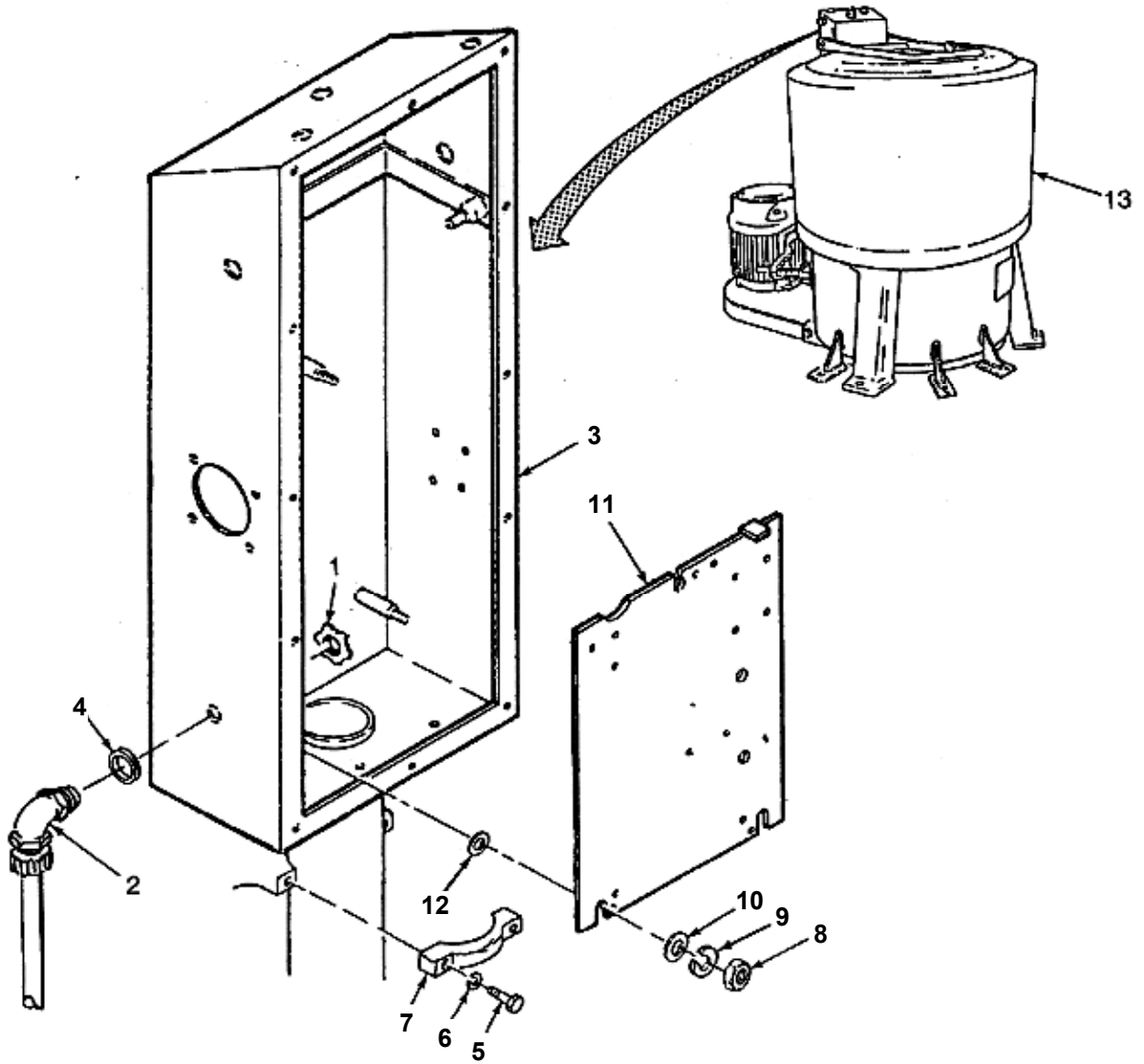
Chemical Agent Resistance Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied.

Repair consists of welding of control panel **(3)**. Refer to TM 9-257, Welding Theory Application.

**INSTALL**

1. Position flat washers **(12)** and components board **(11)** on studs inside control panel **(3)** and secure with three flat washers **(10)**, lockwashers **(9)** and nuts **(8)**.
2. Position control panel **(3)** on extractor **(13)** and install two clamps **(7)** with two lockwashers **(6)** and screws **(5)**.
3. Install gasket **(4)** on elbow **(2)** and secure into control panel **(3)** with locknut **(1)**.
4. Install electrical components (WP 0165 00) through (WP 0172 00).
5. Install starter box (WP 0149 00).





END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
SKIRT AND LEVELING ARM  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

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

Drive Unit removed (WP 0051 00)

Motor removed (WP 0046 00)

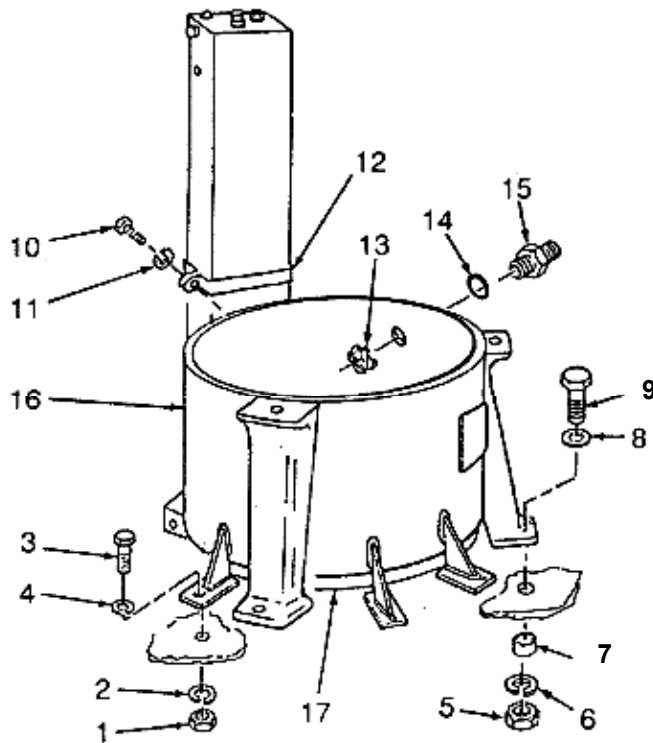
Extractor Piping removed (WP 0054 00)

**WARNING**

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

**REMOVE**

1. Remove six nuts **(1)**, lockwashers **(2)**, screws **(3)** and flat washers **(4)**.
2. Remove three nuts **(5)**, lockwashers **(6)**, sleeves **(7)**, flat washers **(8)** and screws **(9)**.
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)**.



## REPAIR

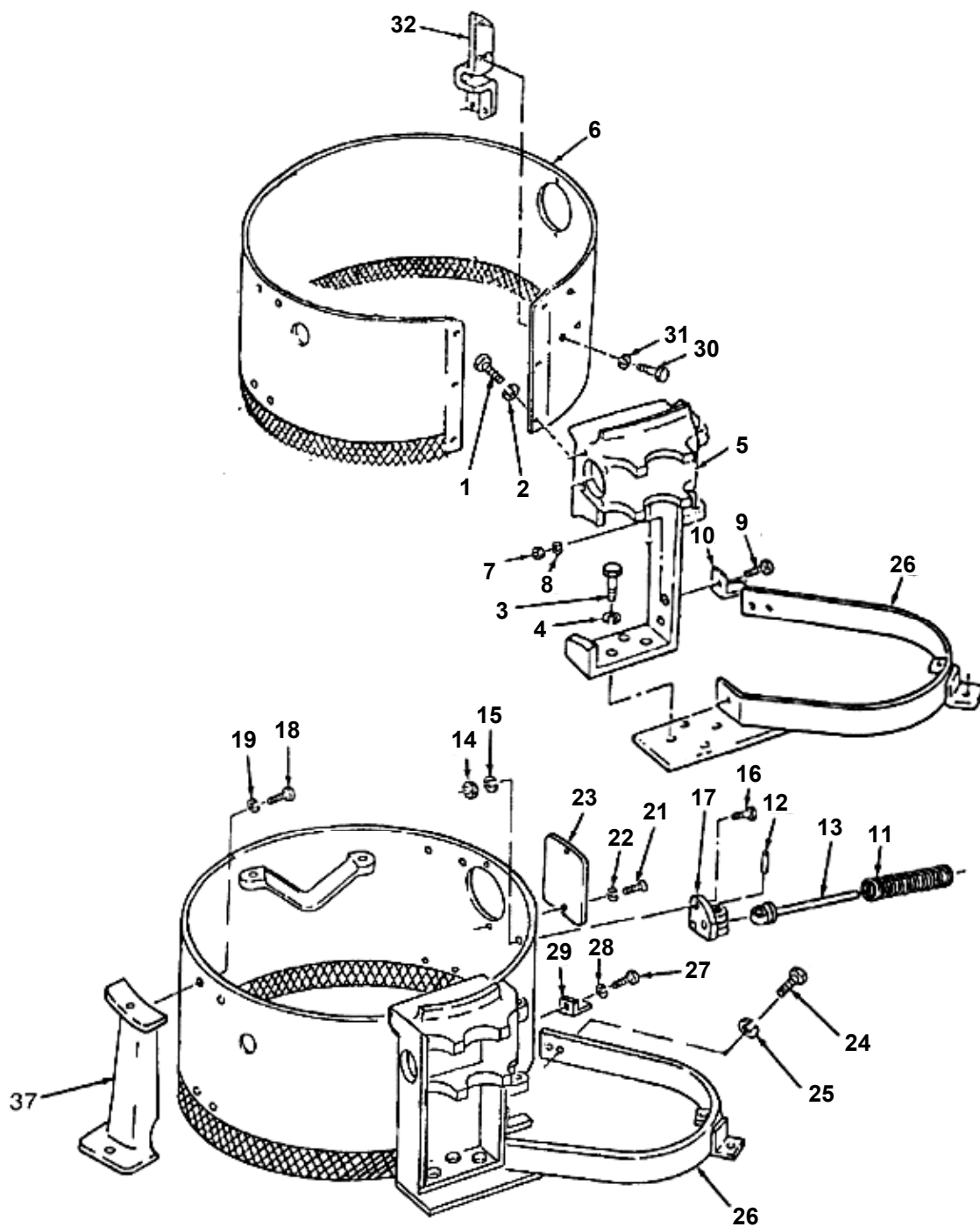
### 1. Disassembly

- a. Remove six screws (1), lockwashers (2), three bolts (3), lockwashers (4) and leg (5) from skirt (6).
- b. Remove nut (7), lockwasher (8), screw (9) and bracket (10) from leg (5).
- c. Remove spring (11), pin (12), rod (13), three nuts (14), lockwashers (15), screws (16) and base (17).
- d. Remove eight bolts (18), lockwashers (19) and two legs (20).
- e. Remove two screws (21), lockwashers (22) and plate (23).
- f. Remove two bolts (24) and lockwashers (25) and separate bracket (26) from skirt (6).
- g. Remove screw (27), lockwasher (28) and bracket (29).
- h. Remove three screws (30), lockwashers (31) and bracket (32) from skirt (6).

### 2. Assembly

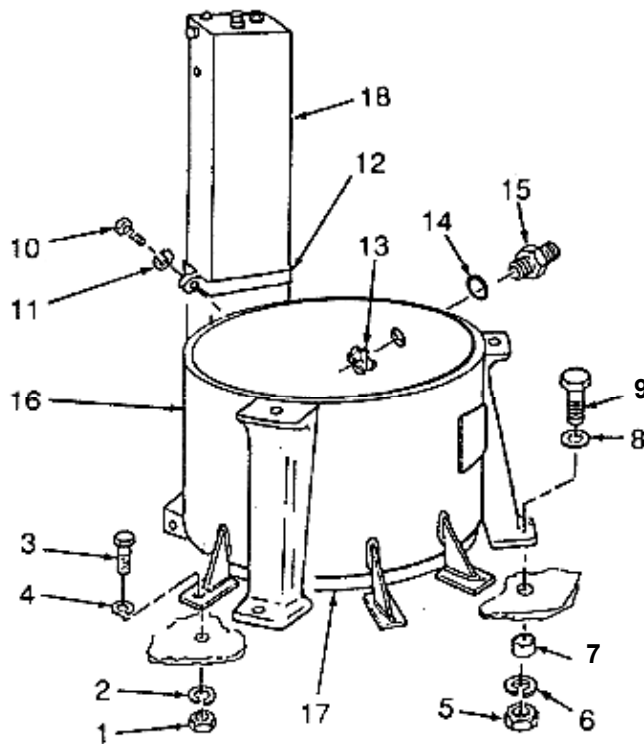
- a. Install bracket (32) with three screws (30) and lockwashers (31).
- b. Install bracket (29) with screws (27) and lockwashers (28).
- c. Position plate (23) on skirt (6) and secure with two lockwashers (22) and screws (21).
- d. Position two legs (20) on skirt (6) and secure with eight bolts (18) and lockwashers (19).

- e. Position bracket **(26)** on leg **(5)** and install three bolts **(3)**, lockwashers **(4)**, two bolts **(24)** and lockwashers **(25)**.
- f. Position base **(17)** on skirt **(6)** and install with three screws **(16)**, lockwashers **(15)** and nuts **(14)**.
- g. Position rod **(13)** on base **(17)** and install pin **(12)**.
- h. Position spring **(11)** on rod **(13)**.
- i. Install bracket **(10)** on leg **(5)** with screw **(9)**, lockwasher **(8)** and nut **(7)**.
- j. Position leg **(5)** on skirt **(6)** and secure with six lockwashers **(2)** and screws **(1)**.



**INSTALL**

1. Position skirt (16) and leveling arm (17) on trailer.
2. Install three screws (9), flat washers (8), sleeve (7), 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 (WP 0051 00).
7. Install motor (WP 0046 00).
8. Install extractor piping (WP 0054 00).

**END OF WORK PACKAGE**





**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DRYER  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 2, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP 0188 00)  
Trailer Mounted Welding Shop (Item 8, WP 0188 00)

**Personnel Required**

Four

**Material/Parts**

Tie Down Straps (Item 3, WP 0190 00)  
Tags (Item 19, WP 0190 00)

**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 (WP 0167 00)  
Rear Frame removed (WP 0027 00)

**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.

**REMOVE**

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 **(11)**.
4. Pull elbow **(11)** and wires **(7)** away from dryer base **(12)** and remove gasket **(13)**.
5. Remove dryer using a suitable lifting device from Laundry Unit.

**REPAIR****NOTE**

Dryer repairs are covered in Work Packages 0172 00 through 0182 00.

**INSTALL**

1. Position dryer using a suitable lifting device on Laundry Unit.

**NOTE**

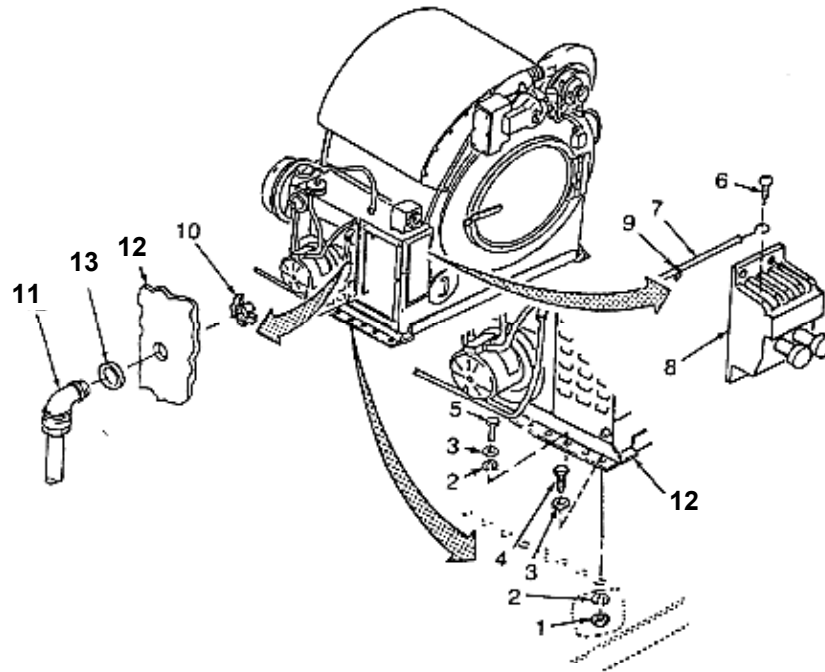
If screw goes into threaded hole, install lockwashers and flat washers on top.

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 **(13)** on elbow **(11)** and feed wires **(7)** into dryer base **(12)**.
5. Secure elbow **(11)** 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 (WP 0100 00).
10. Install rear frame (WP 0027 00).
11. Connect fuel input hoses (TM 10-3510-222-10).



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
ROTARY PUMP  
REPAIR**

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**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Shop Equipment, Automotive Vehicle (Item 3, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Dryer shut down (TM 10-3510-222-10)  
Rotary Pump Removed (WP 0071 00)  
Nonmetallic Hoses (Fuel Lines) disconnected from  
Pump Assembly (WP 0060 00)

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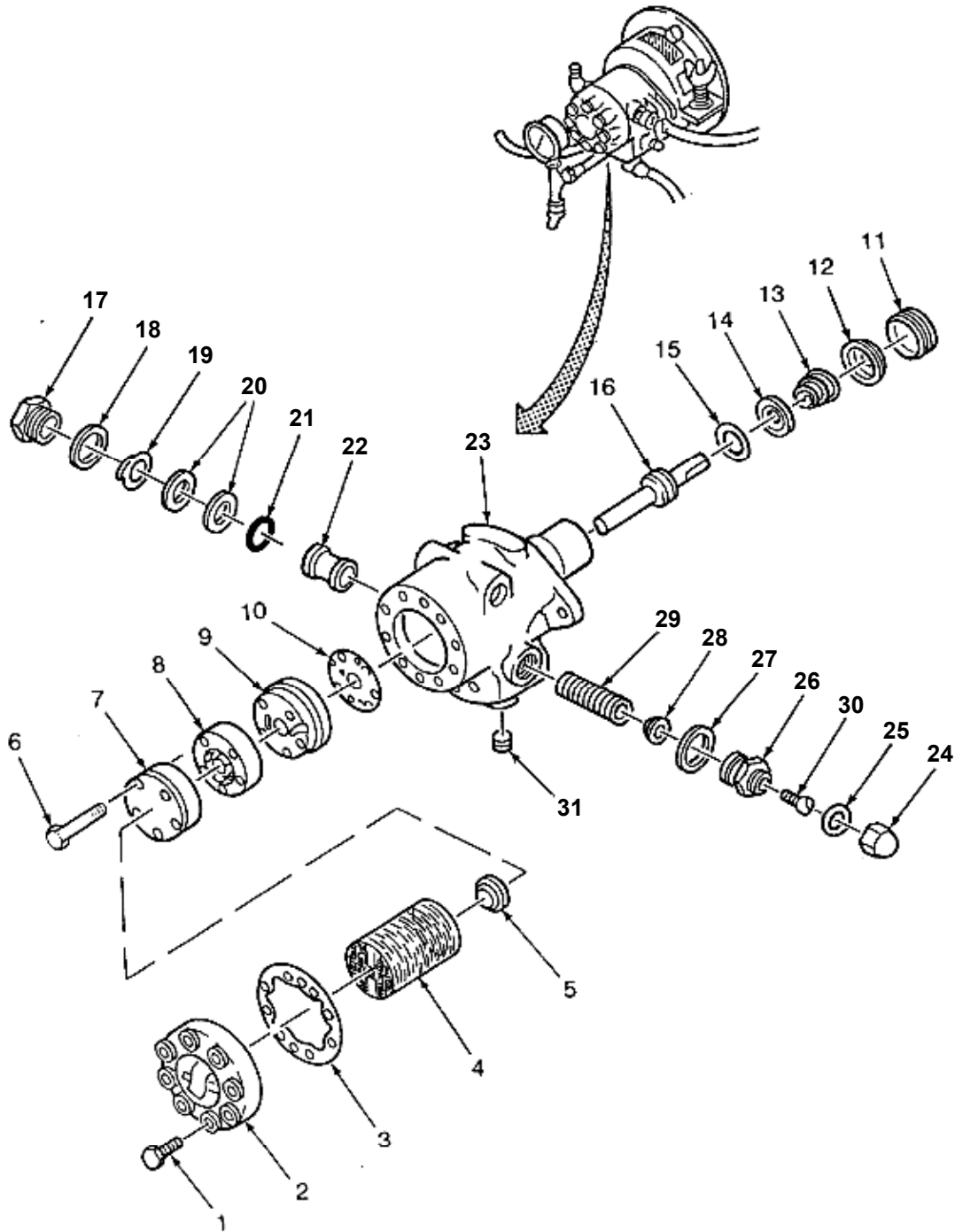
**WARNING**

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

**REPAIR**

1. Disassemble.
  - a. Remove eight cap-screws **(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 **(17)**, gasket **(18)**, sleeve retainer **(19)**, washer **(20)**, O-ring **(21)** and sleeve **(22)** from fuel pump body **(23)**.
  - g. Remove acorn nut **(24)**, gasket **(25)**, end plug **(26)**, gasket **(27)**, spring seat **(28)** and spring **(29)** from fuel pump body **(23)**.
  - h. Remove pressure adjusting screw **(30)** from end plug assembly **(26)**.
  - i. Remove plug **(31)** from fuel pump body **(23)**.

- 
2. Assemble.
    - a. Install plug **(31)** into fuel pump body **(23)**.
    - b. Install pressure adjusting screw **(30)** in end plug assembly **(26)**.
    - c. Install spring **(29)**, spring seat **(28)**, gasket **(27)**, end plug **(26)**, gasket **(25)** and acorn nut **(24)** on fuel pump body **(23)**.
    - d. Install sleeve **(22)**, O-ring **(21)**, washer **(20)**, sleeve retainer **(19)**, gasket **(18)** and end plug **(17)** on fuel pump body **(23)**.
    - 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)**.



END OF WORK PACKAGE





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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
SPEED REDUCER  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Shop Equipment, Automotive Vehicle (Item 3, WP  
0190 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

Chain removed (WP 0174 00)

---

**WARNING**

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

**REMOVE**

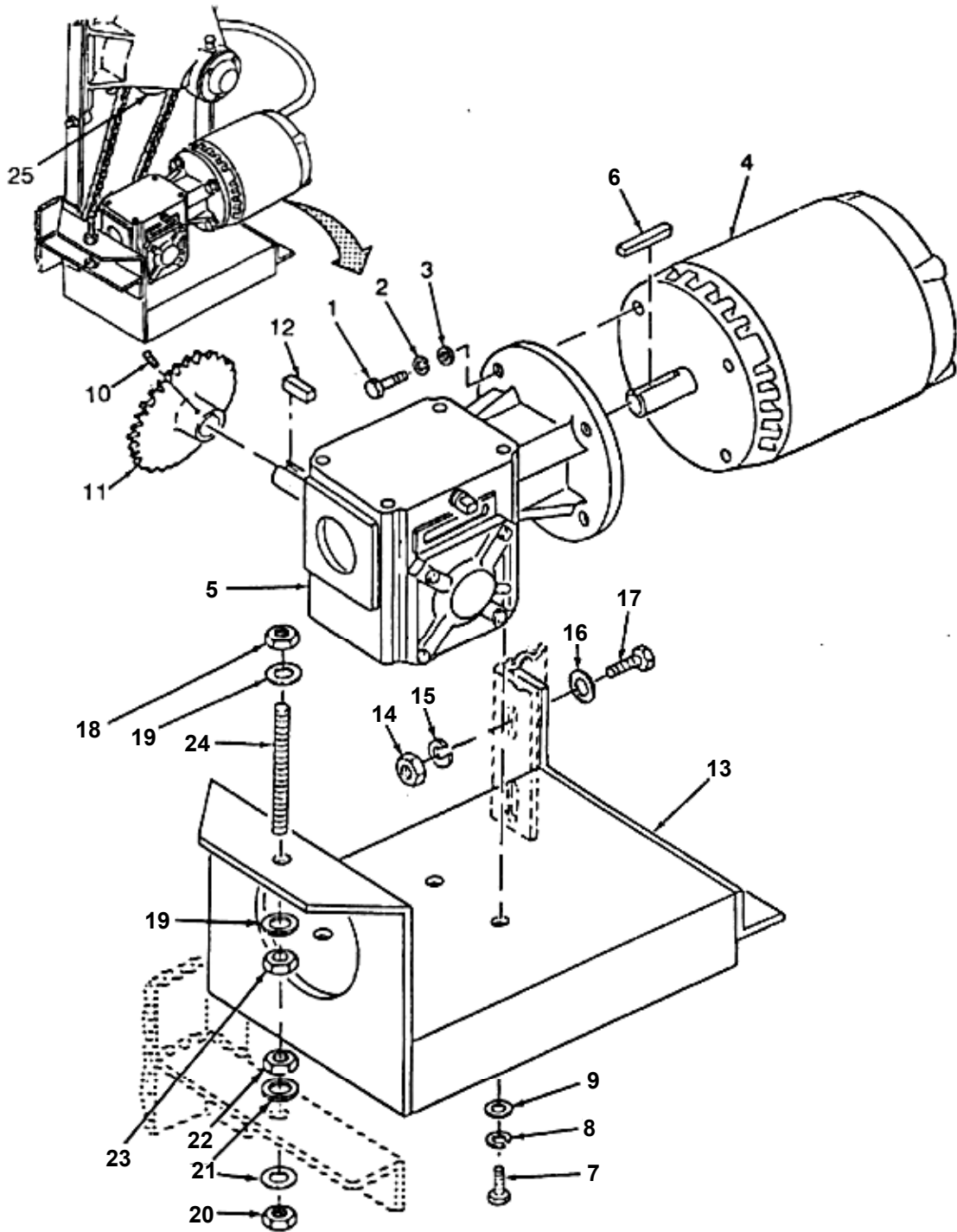
1. Remove four screws **(1)**, lockwashers **(2)**, flat washers **(3)** and motor **(4)** from speed reducer **(5)**.
2. Remove key **(6)**.
3. Remove four screws **(7)**, lockwashers **(8)** and flat washers **(9)**.
4. Remove speed reducer **(5)**.
5. Loosen setscrew **(10)** and remove sprocket **(11)** and key **(12)** from speed reducer **(5)**.
6. If replacement of bracket **(13)** is required, remove two nuts **(14)**, lockwashers **(15)**, flat washer **(16)** and screws **(17)**.
7. Support bracket **(13)** and remove nut **(18)**, flat washers **(19)**, nut **(20)**, flat washers **(21)** and return nuts **(22 and 23)** from stud **(24)**.
8. Remove bracket **(13)**.

**REPAIR**

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

**INSTALL**

1. If removed, position bracket **(13)** on dryer and install two screws **(17)**, flat washers **(16)**, lockwashers **(15)** and nuts **(14)**.
2. Position stud **(24)** in bracket **(13)** and install nuts **(22 and 23)**, flat washers **(21)**, nut **(20)**, flat washers **(19)** and nut **(18)**.
3. Install key **(12)** and sprocket **(11)** on speed reducer **(5)**.
4. Position speed reducer **(5)** on bracket **(13)** and secure with four flat washers **(9)**, lockwashers **(8)** and screws **(7)**.
5. Align sprocket **(11)** on speed reducer **(5)** with drive sprocket **(25)** on trunnion, tapping it in or out on shaft of speed reducer **(5)**, as required.
6. When sprockets are aligned, tighten setscrew **(10)**.
7. Position key **(6)** on shaft of motor **(4)** and install motor on speed reducer **(5)**, securing it with four lockwashers **(2)**, flat washers **(3)** and screws **(1)**.
8. Install roller chain (WP 0174 00).



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
STARTER MOTOR  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10  
Shield removed (WP 0090 00))

---

**WARNING**

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

**REMOVE**

1. Tag and disconnect wires from starter motor **(1)**.
2. Remove screws **(2)**, washers **(3)** and starter motor **(1)**.
3. As required, remove screws **(4)** and heaters **(5)**.

**INSTALL**

1. Position starter motor **(1)** on dryer base and secure with four screws **(2)** and lockwashers **(3)**.

**NOTE**

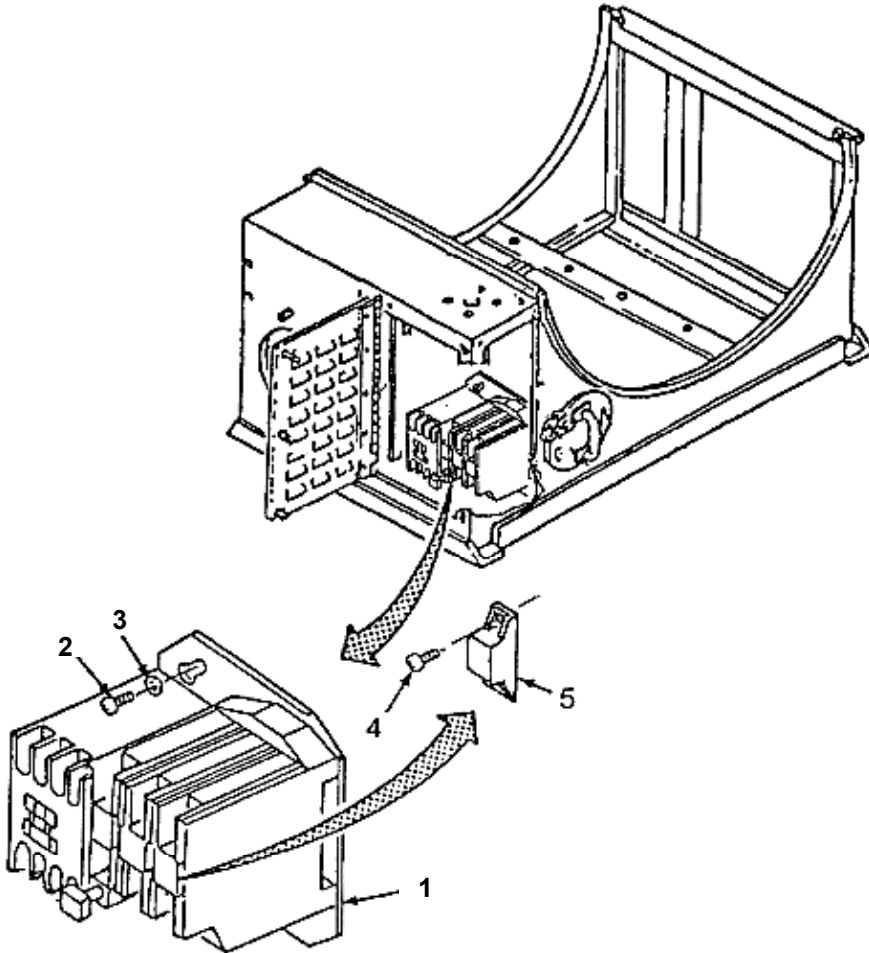
Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

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 (WP 0090 00).



**END OF WORK PACKAGE**

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DRYER PANEL  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Grommets (Item 34, WP 0189 00)  
Nut, Blind (Item 35, WP 0189 00)  
Nut, Blind (Item 36, WP 0189 00)  
Nut, Blind (Item 38, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Shield removed (WP 0090 00)  
Electrical Components removed from panel  
(WP's 0165 00 thru 0171 00)



**WARNING**

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

**REMOVE**

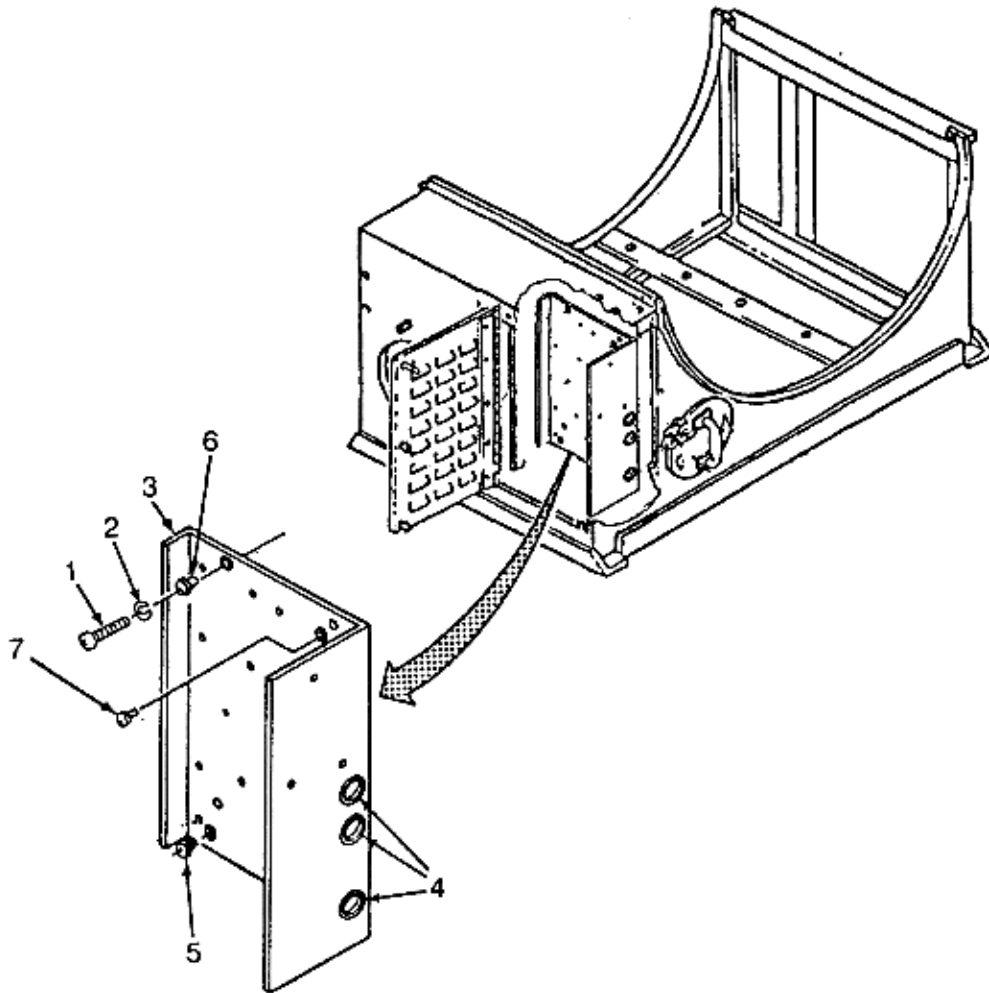
1. Remove four screws **(1)** and lockwashers **(2)**.
2. Remove panel **(3)**.
3. Remove grommets **(4)**.
4. As required, remove blind nuts **(5, 6 and 7)** from panel.

**REPAIR**

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

**INSTALL**

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 (WP 0165 00 to 0171 00).
5. Install shield (WP 0090 00).

**END OF WORK PACKAGE**



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
ON / OFF SWITCH  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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

**WARNING**

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

**REMOVE****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 **(4)**.
3. Remove three screws **(5)**, lockwashers **(6)** and switch assembly **(4)**.

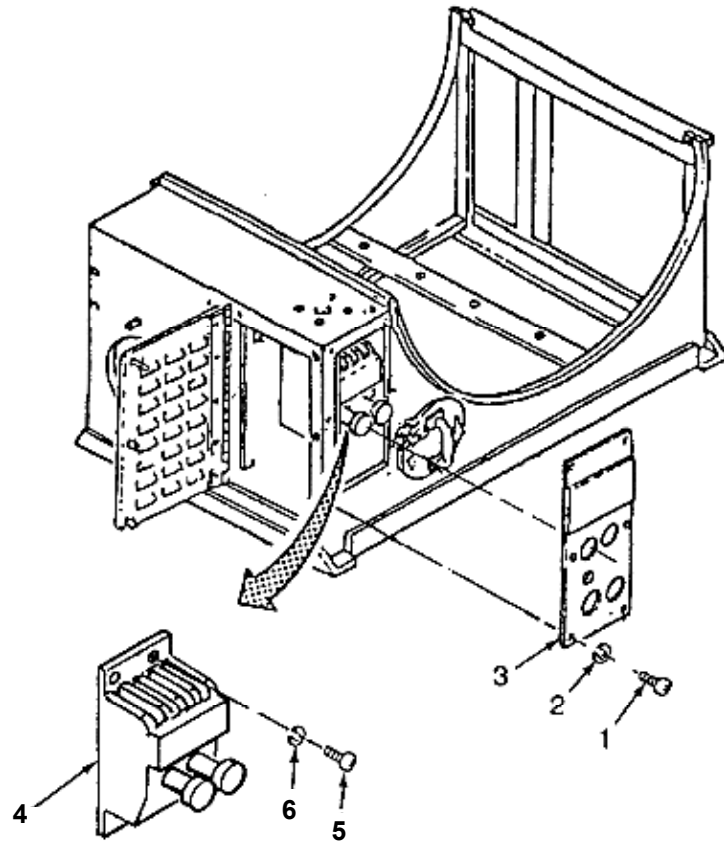
**INSTALL**

1. Position switch assembly **(4)** on dryer and secure with three lockwashers **(6)** and screws **(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.

2. Connect wires as tagged.
3. Position panel **(3)** on unit and secure with six screws **(1)** and lockwashers **(2)**.



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
TIMER  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

Shield Removed (WP 0090 00)

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



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**WARNING**

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

**REMOVE**

1. Remove three screws **(1)** and remove timer **(2)** from box **(3)**.
2. Tag and disconnect wires.
3. Remove conduit nuts **(4 and 5)**.
4. Remove four nuts **(6)**, lockwashers **(7)** and screws **(8)**.
5. Remove nipple **(9)**, four spacers **(10)** and box **(3)**.

**INSTALL**

1. If removed, install box **(3)** as follows:
  - a. Position nipple **(9)**, four spacers **(10)** and box **(3)** on unit and secure with four nuts **(6)**, lockwashers **(7)** and screws **(8)**.
  - b. Install two conduit nuts **(4 and 5)**.

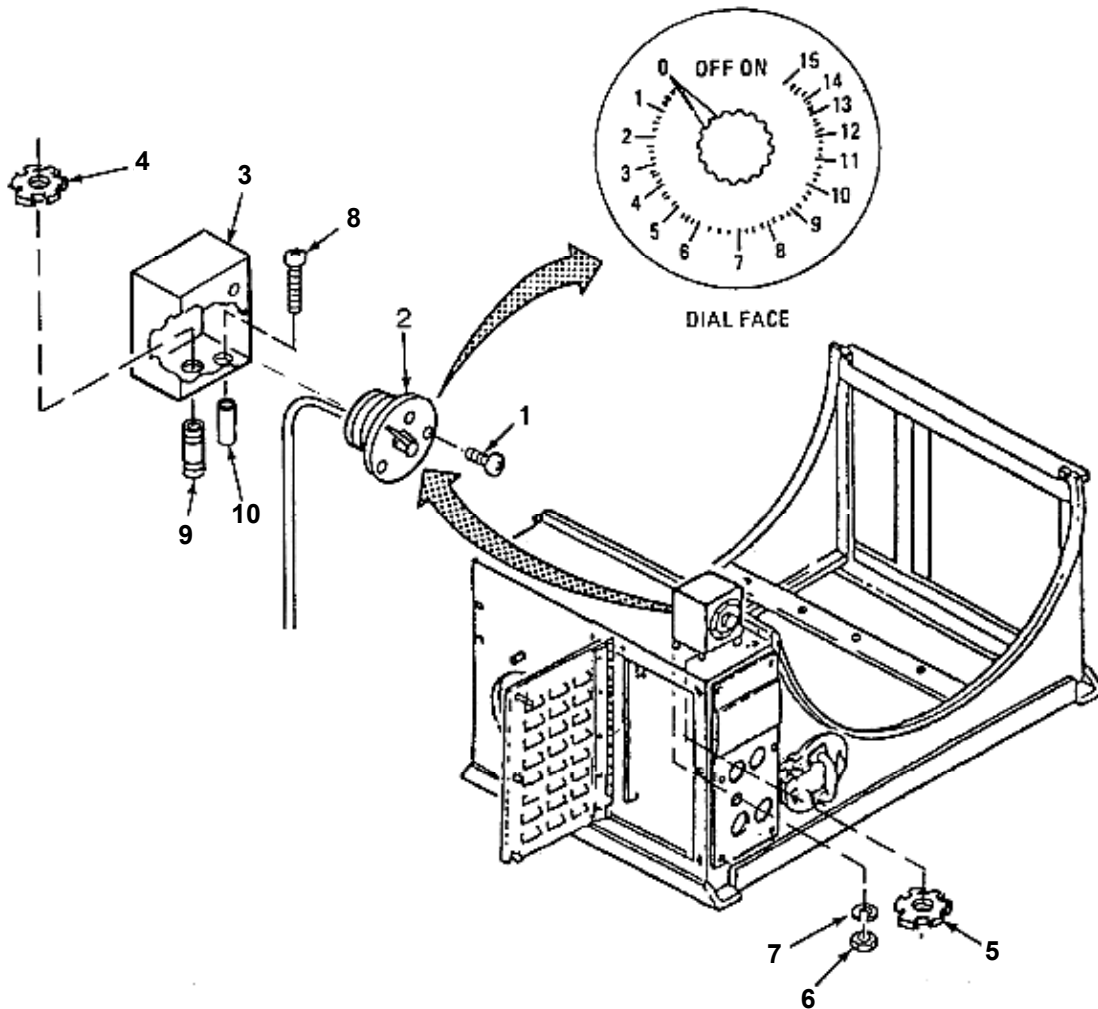
**NOTE**

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.

2. Connect wires as follows:

Numbered wires	Timer wires
32	Red
35	Green
38	Yellow
31	Brown

3. Secure timer (2) to box (3) with three screws (1).
4. Install shield (WP 0090 00).



**END OF WORK PACKAGE**

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
PLUG-IN RELAY  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Door open (WP 0083 00)

---

**WARNING**

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

**REMOVE****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 **(2)** is required, proceed as follows:
  - a. Tag and remove wires from relay socket **(2)**.
  - b. Remove screws **(3)**, lockwashers **(4)** and relay socket **(2)**.

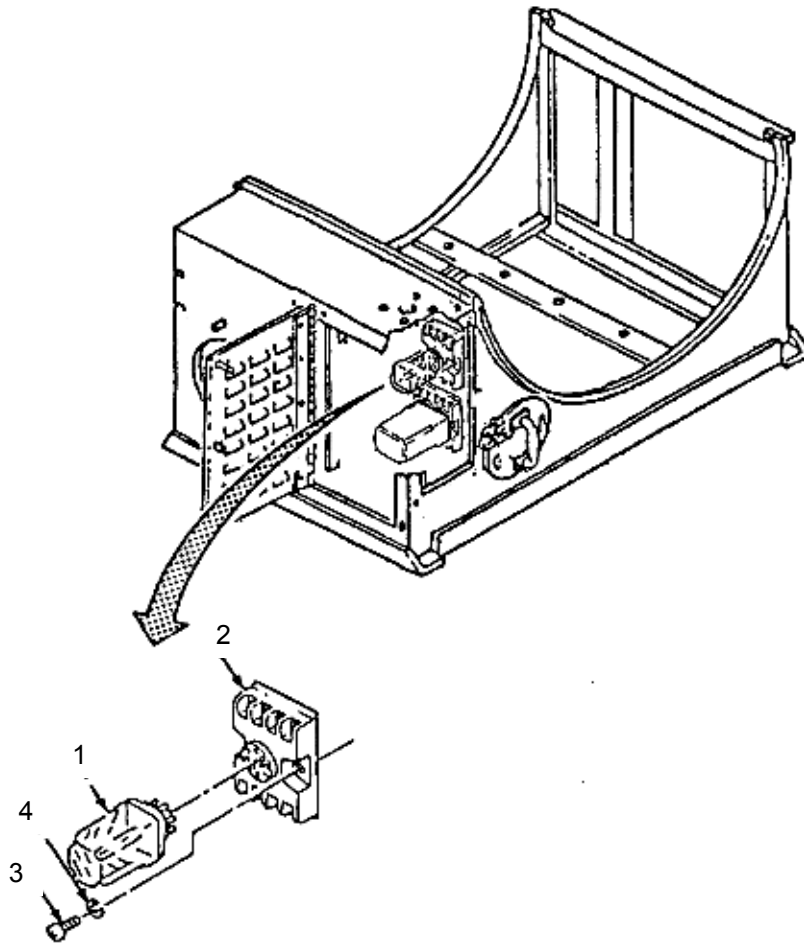
**INSTALL**

1. If removed, position relay socket **(2)** on dryer and secure with screws **(3)** and lockwashers **(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 tagged.
3. Line up pins of relay (1) with holes in relay socket (2) and push in on relay (1) until it is firmly seated.
4. Close door (WP 0083 00).



**END OF WORK PACKAGE**

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
TUMBLER MOTOR CONTROL RELAY (K2)  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Shield removed (WP 0090 00)

---

**WARNING**

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

**REMOVE**

1. Tag and disconnect wires from relay **(3)**.
2. Remove two screws **(1)**, lockwashers **(2)** and relay **(3)**.

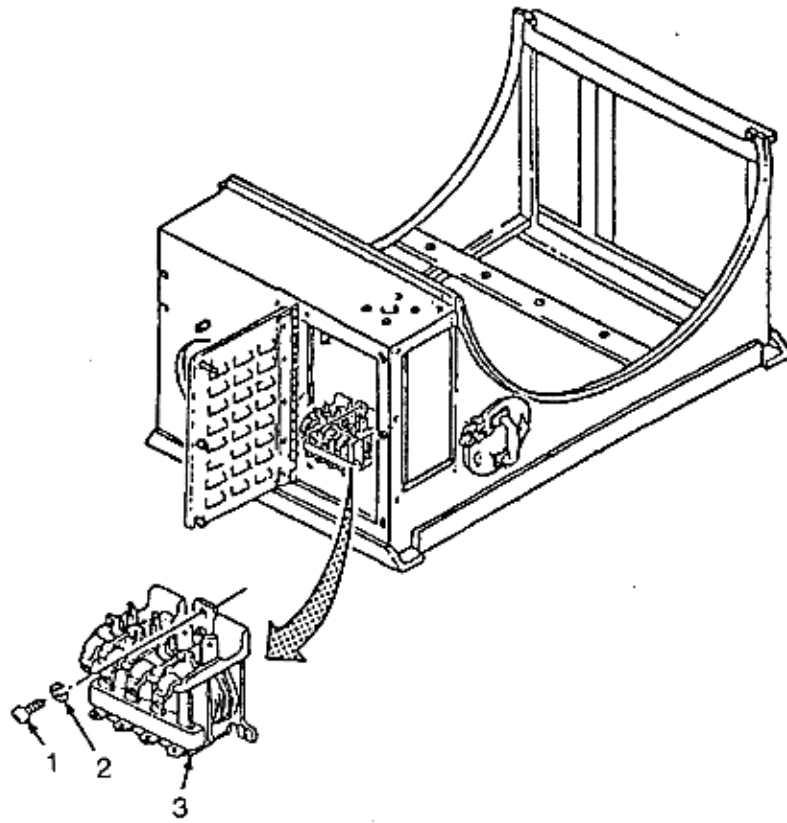
**INSTALL**

1. Position relay **(3)** on dryer 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-4 Dryer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

2. Connect wires as tagged.
3. Install shield (WP 0090 00).



END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
TERMINAL BOARD  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Shield removed (WP 0090 00)**WARNING**

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

**REMOVE**

1. Tag and disconnect wires from terminal board **(3)**.
2. Remove four screws **(1)**, lockwashers **(2)** and terminal board **(3)**.

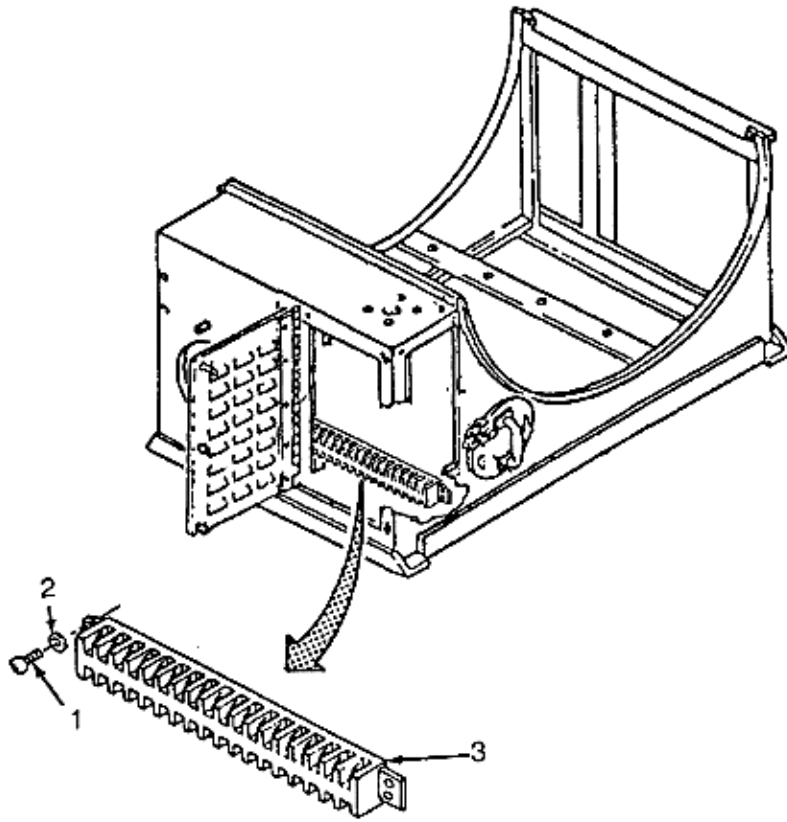
**INSTALL**

1. Position terminal board **(3)** on dryer 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.
3. Install shield (WP 0090 00).



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
HOT AIR BLOWER  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)  
Sealing Washer (Item 64, WP 0189 00)

**Equipment Condition**

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

---

**WARNING**

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

**REMOVE**

1. Remove two screws **(1)** and cover **(2)**.
2. Remove wire nut **(3)** from wires **(4)**.
3. Tag and disconnect wires from motor **(5)**.
4. Remove locknut **(6)** and remove elbow **(7)** and sealing washer **(8)** from motor **(5)**.
5. Remove two locknuts **(9)** and remove sealing washers **(10)** and adapters **(11)** from motor **(5)**.
6. Remove four screws **(12)**, lockwashers **(13)** and cover **(14)** with attached parts from dryer base.
7. Remove cotter pin **(15)**, nut **(16)**, lockwasher **(17)**, spacer **(18)** and exhaust blower **(19)** from shaft of motor **(5)**.
8. Remove key **(20)** from shaft of motor **(5)**.
9. Remove four nuts **(21)**, lockwashers **(22)**, screws **(23)** and cover **(14)** from motor **(5)**.

**REPAIR**

Repair consists of replacing damaged and/or missing components of the hot air blower.

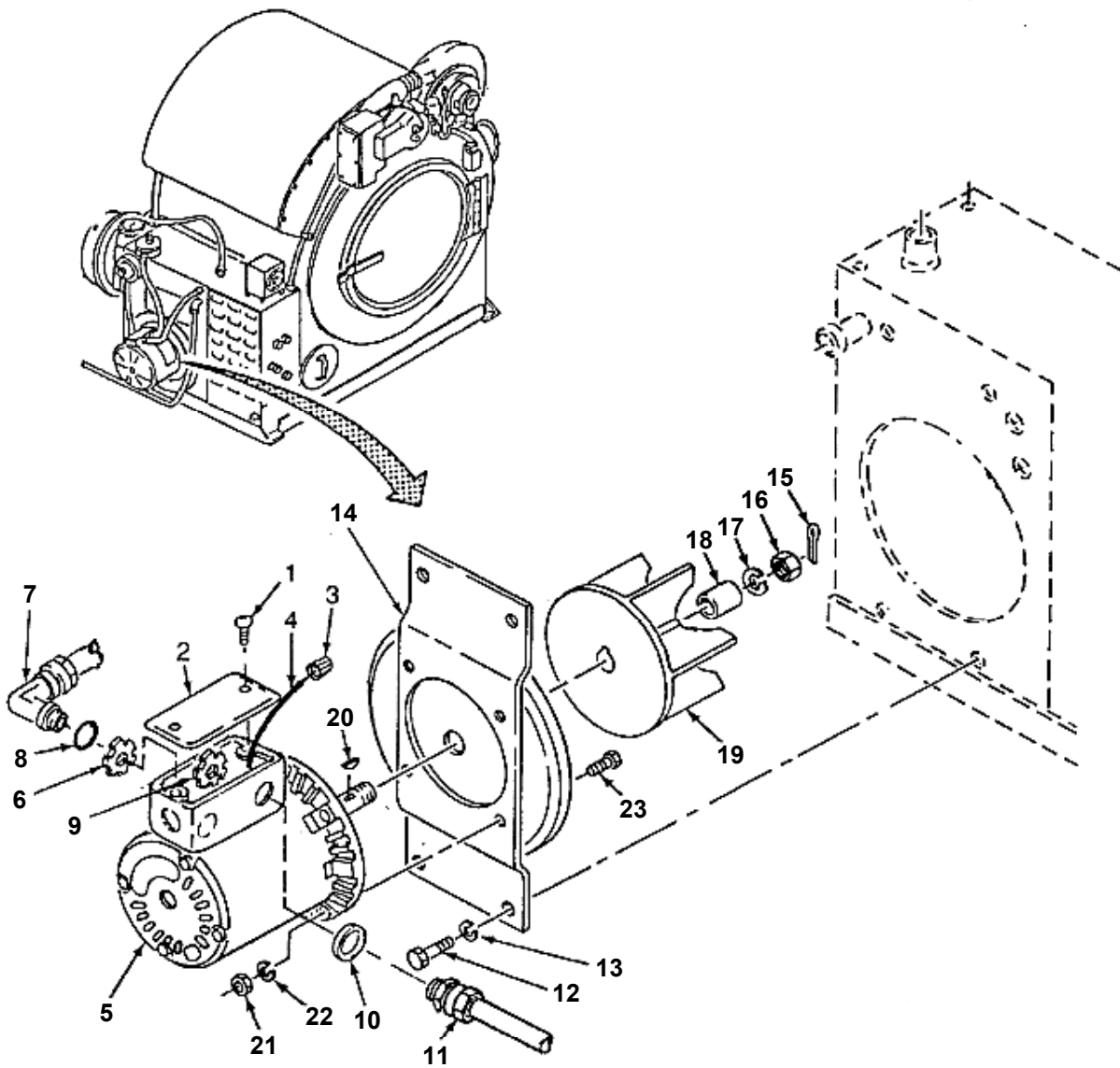
**INSTALL**

1. Position motor **(5)** on cover **(14)** and secure with four screws **(23)**, lockwashers **(22)** and nuts **(21)**.
2. Position key **(20)** on shaft of motor **(5)** and install exhaust blower **(19)**, spacer **(18)**, lockwasher **(17)**, nut **(16)** and cotter pin **(15)**.
3. Position cover **(14)** on base of dryer and install four screws **(12)** and lockwashers **(13)**.
4. Install two adapters **(11)** and sealing washers **(10)** on motor and secure with locknuts **(9)**.
5. Install elbow **(7)** and sealing washer **(8)** on motor **(5)** with locknut **(6)**.

**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. Connect wires as tagged.
7. Install wire nut **(3)**.
8. Install cover **(2)** with two screws **(1)**.



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE**  
**LAUNDRY UNIT, TRAILER MOUNTED, M85**  
**MODELS: M85-100, M85-200**  
**(NSN 3510-01-291-8169 (M85-100))**  
**(NSN 3510-01-365-5687 (M85-200))**  
**TRUNNION**  
**REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
 Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)

**Personnel Required**

Two

**Materials/Parts**

Safety Wire, .0625 dia. (Item 24, WP 0190 00)

**Equipment Condition**

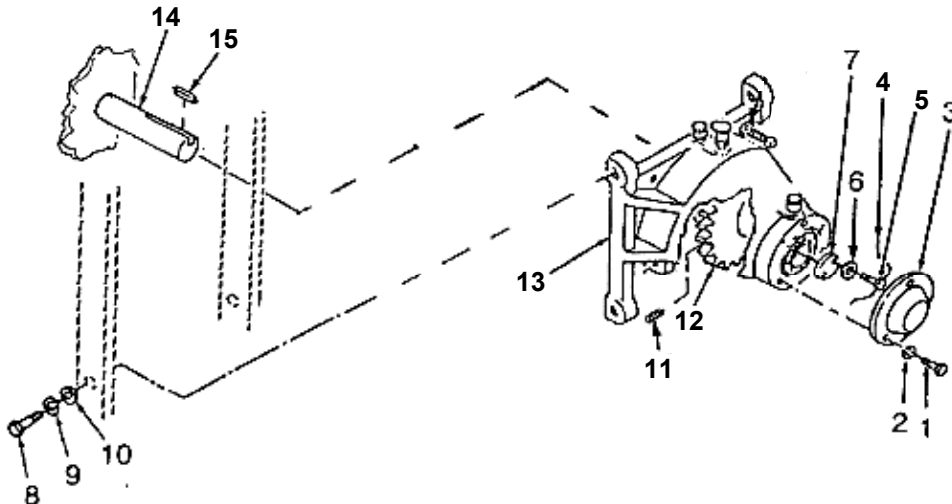
Laundry Unit shut down (TM 10-3510-222-10)  
 Roller Chain removed (WP 0174 00)

**WARNING**

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

**REMOVE**

1. Remove three screws (1), lockwashers (2) and cover (3).
2. Cut safety wire (4) and remove two screws (5), flat washers (6) and retaining plate (7).
3. Remove four screws (8), lockwashers (9) and flat washers (10).
4. Loosen setscrew (11) on sprocket (12) and remove trunnion assembly (13) from tumbler shaft (14).
5. Remove key (15) from tumbler shaft (14).



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**REPAIR**

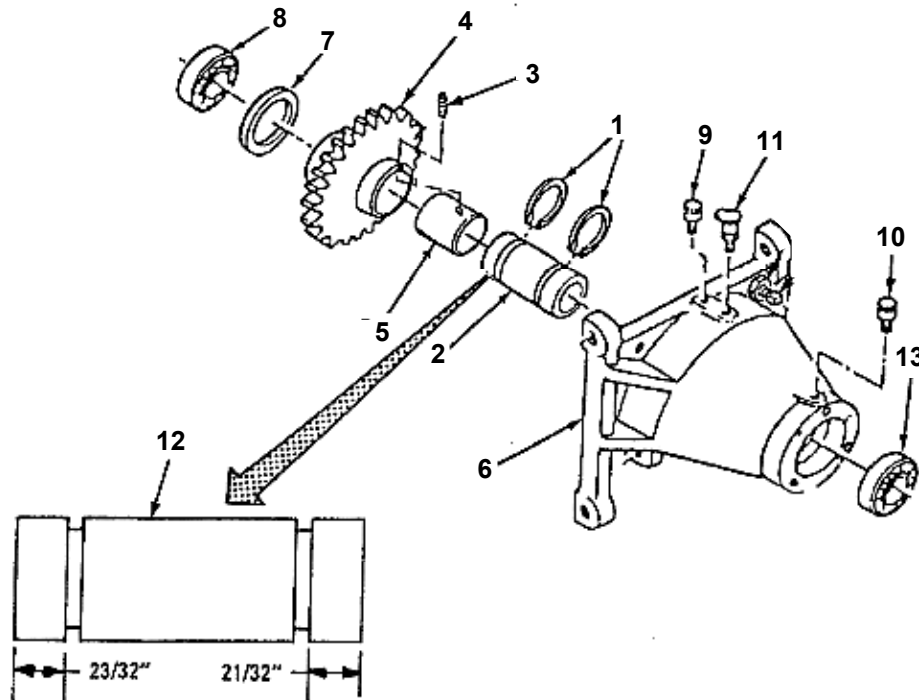
1. Disassembly
  - a. Open retaining rings **(1)** and slide onto spacer **(2)**.
  - b. Loosen two setscrews **(3)**.
  - c. Apply pressure between sprocket **(4)** and spacer **(2)** to remove bearing **(5)**.
  - d. Remove sprocket **(4)**, collar **(5)**, spacer **(2)** and two retaining rings **(1)** from housing **(6)**.
  - e. Remove seal **(7)** and bearing **(8)**.
  - f. Remove grease caps **(9 and 10)** and oil cap **(11)**.
2. Assembly
  - a. Press bearing **(8)** in housing **(6)**.
  - b. Install seal **(7)**.
  - c. Measure distance between retaining ring grooves **(12)** and ends of spacer **(2)** on both sides as illustrated.

**NOTE**

Position spacer in housing with smallest distance away from the sprocket.

- d. Position retaining rings on spacer **(2)** but not in grooves **(12)**.
- e. Position sprocket **(4)**, spacer **(2)** and collar **(5)** in housing **(6)**.
- f. Install bearing **(13)**.
- g. Position retaining rings **(1)** in grooves **(12)**.
- h. Tighten two setscrews **(3)**.
- i. Install oil cap **(11)** and two grease caps **(9 and 10)**.





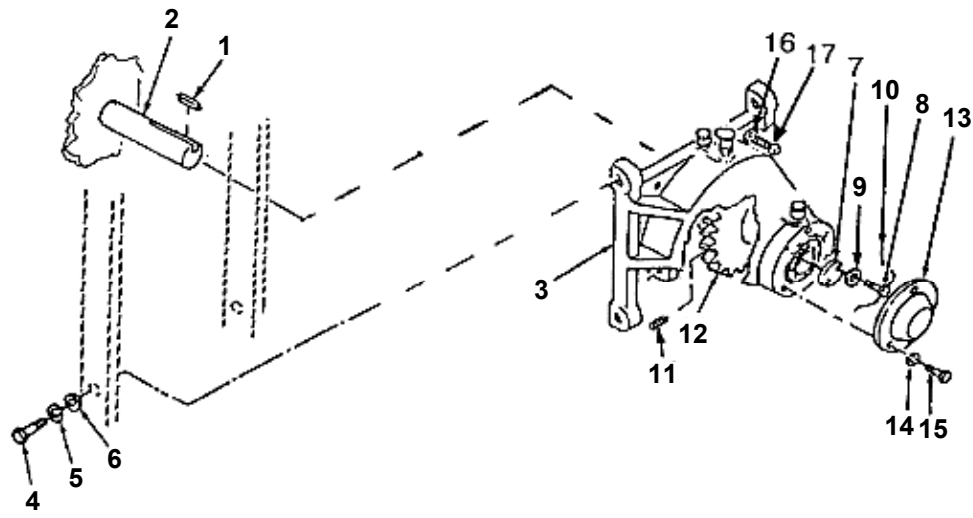
## INSTALL

1. Position key (1) on tumbler shaft (2).
2. With one person holding the dryer drum from inside of dryer and aligning shaft (2) with trunnion assembly (3), slide trunnion assembly (3) over shaft (2).
3. Install four screws (4), lockwashers (5) and flat washers (6).
4. Position plate (7) on end of shaft (2) and install two screws (8) and flat washers (9).

## NOTE

Use 4 inches of safety wire.

5. Install safety wire (10) on screws (8).
6. Tighten setscrew (11) on sprocket (12).
7. Position cover (13) on trunnion assembly (3) and install three lockwashers (14) and screws (15).
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 (6).
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 (WP 0174 00).



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
ROLLER CHAIN  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Safety Wire, .0625 dia. (Item 24, WP 0190 00)

**Equipment Condition**

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



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**WARNING**

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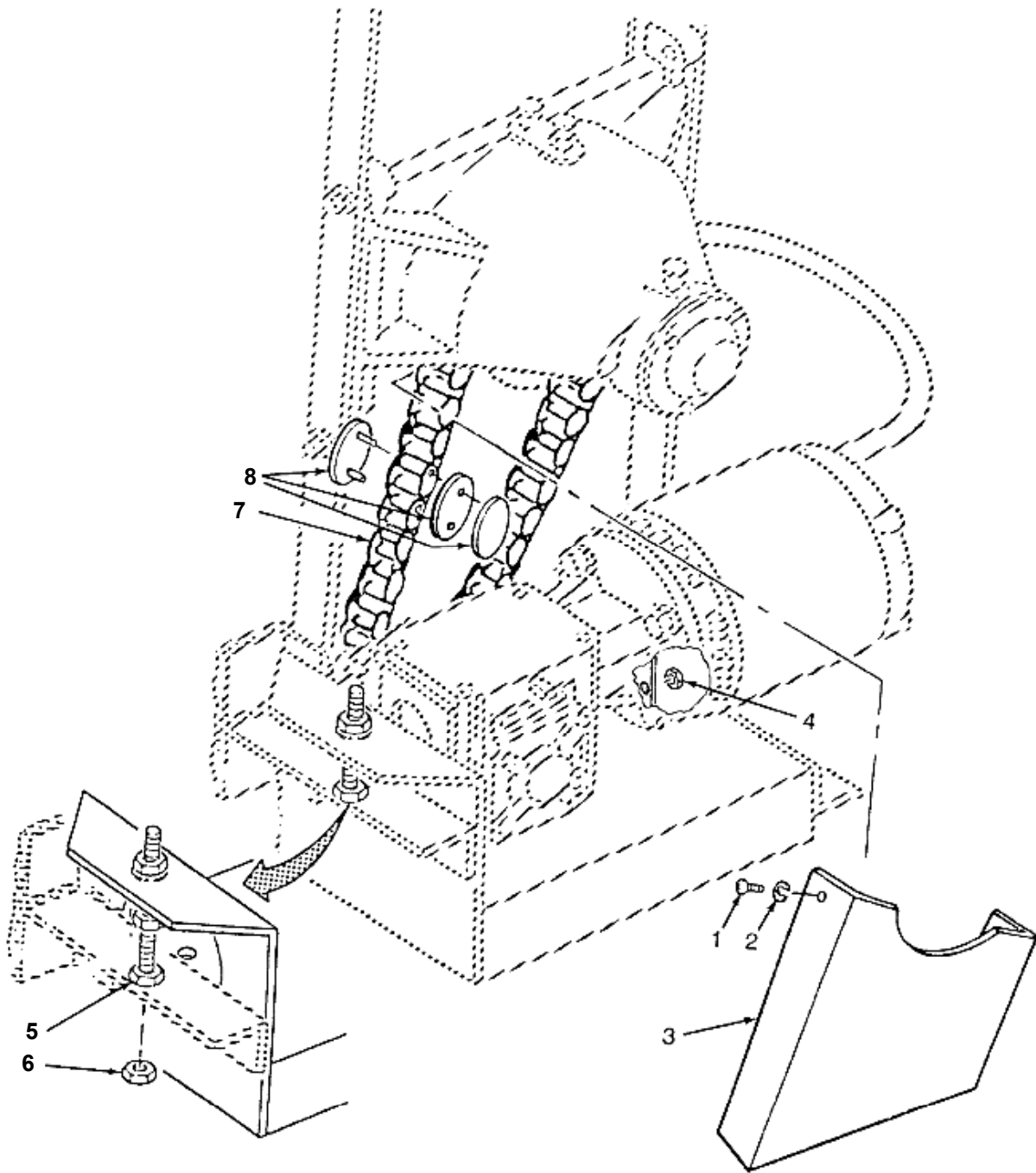
Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.

**REMOVE**

1. Remove three screws **(1)**, lockwashers **(2)** and chain guard **(3)**.
2. Loosen two nuts **(4)**.
3. Loosen nut **(5)** and tighten nut **(6)** until chain **(7)** is loose on sprockets.
4. Turn hub to expose master link **(8)**. Remove master link **(8)**.
5. Remove chain **(7)**.

**INSTALL**

1. Position chain **(7)** on sprockets and install master link **(8)** as illustrated.
2. Loosen nut **(6)** and tighten nut **(5)** until chain is tight.
3. Do roller chain adjustment procedure (WP 0174 00).
4. Tighten two nuts **(4)**.
5. Install three screws **(1)**, lockwashers **(2)** and chain guard **(3)**.



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
HEATER  
REMOVE, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Heat Exchanger Installation Kit (Item 5, WP 0188 00)

**Personnel Required**

Four

**Materials/Parts**

Rope Gasket (Item 48, WP 0189 00)  
Rope Gasket (Item 49, WP 0189 00)  
Rope Gasket (Item 52, WP 0189 00)  
Rope Gasket (Item 53, WP 0189 00)  
Rope Gasket (Item 54, WP 0189 00)  
Rope Gasket (Item 55, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Beams and baskets removed (WP 0021 00 to WP 0025 00)  
Screen removed (WP 0177 00)  
Blower and burner assembly removed (WP 0172 00)



**WARNING**

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.



**WARNING**

Heater assembly may be hot if dryer was running. To prevent burns allow sufficient time for heater to cool before replacement.

**REMOVE**

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 **(9)**.
4. Remove four screws **(10)**, lockwashers **(11)**, flat washers **(12)** and plate **(13)**.

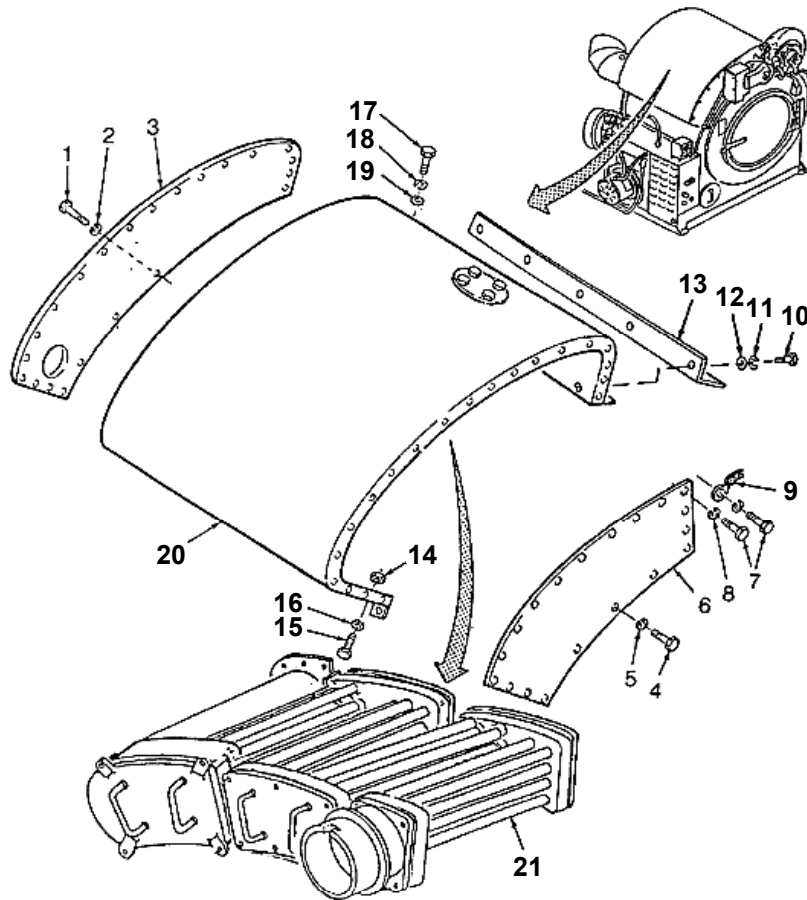
5. Remove two nuts (14), screws (15) and lockwashers (16).
6. Remove two screws (17), lockwashers (18) and flat washers (19).



**WARNING**

Heater assembly is heavy and requires four people to remove. Attempts to lift alone may cause serious injury.

7. Remove cover (20) from rear of dryer.
8. Remove heater assembly (21) from top of dryer.



**REPAIR**

1. Disassembly.
  - a. Remove four screws **(1)**, lockwashers **(2)** and cover **(3)**.
  - b. Remove 3/8 inch gasket **(4)** and adapter **(5)** from pipe assembly **(6)**.
  - c. Remove six screws **(7)**, lockwashers **(8)**, cover **(9)** and 3/8 inch 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 inch 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 inch rope gasket **(20)**.
  - g. Separate pipe assembly **(16)** from pipe assembly **(21)**.
  - h. Remove four nuts **(22)** and lockwashers **(23)**, cover **(24)** and ¼ inch rope gasket **(25)** from pipe assembly **(21)**.
  - i. Remove mounting assembly **(26)** from pipe assembly **(21)** and remove ¼ inch rope gasket **(27)** from mounting assembly **(26)**.
2. Assembly.

**NOTE**

Ensure rope gasket makes a complete seal.

- a. Install ¼ inch rope gasket **(27)** into mounting assembly **(26)** and install mounting assembly **(26)** onto pipe assembly **(21)**.

**NOTE**

Ensure rope gasket makes a complete seal.

- b. Install cover **(24)** and ¼ inch rope gasket **(25)** on pipe assembly **(21)** with four lockwashers **(23)** and nuts **(22)**.
- c. Position the pipes on pipe assembly **(21)** 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 inch 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 inch 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.

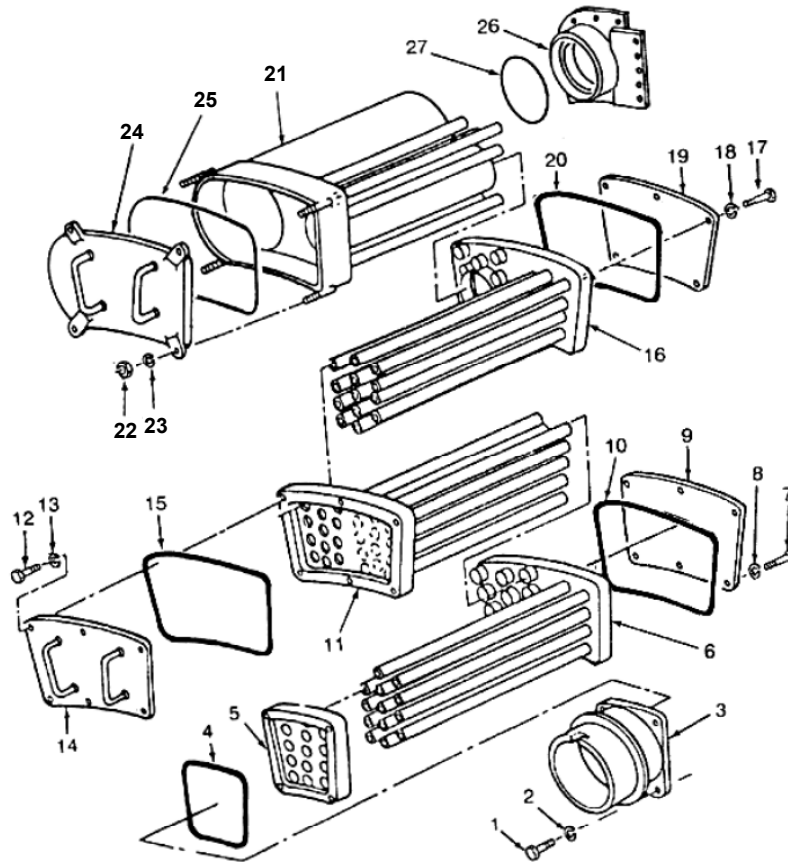
- h. Install 3/8 inch rope gasket **(10)** and cover **(9)** with six lockwashers **(8)** and screws **(7)**.
- i. Position the pipes on pipe assembly **(6)** on box **(5)** using the heat exchanger installation kit.

**NOTE**

Ensure rope gasket makes a complete seal around the outside edge of the pipe assembly.

- j. Install 3/8 inch rope gasket **(4)** and cover **(3)** on pipe assembly **(6)** with four screws **(1)** and lockwashers **(2)**.





## INSTALL

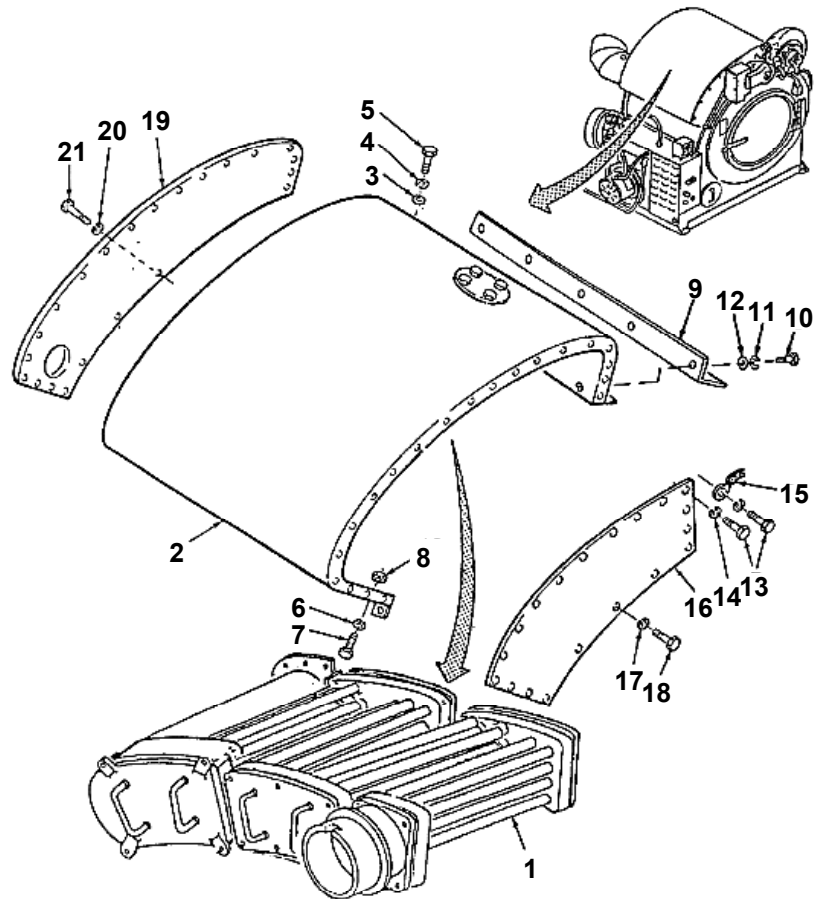


### **WARNING**

Heater assembly is heavy and requires four people to remove. Attempts to lift alone may cause serious injury.

1. Position heater assembly **(1)** on top of dryer.
2. Position cover **(2)** on top of heater **(1)**.
3. Secure cover **(2)** to dryer with two flat washers **(3)**, lockwashers **(4)** and screws **(5)** and two lockwashers **(6)**, screws **(7)** and nuts **(8)**.
4. Install plate **(9)** and secure with four screws **(10)**, lockwashers **(11)** and flat washers **(12)**.

5. Install six screws (13) and lockwashers (14) making sure ground strap (15) is also secured on front cover (16).
6. Position front cover (16) on cover (2) and secure with nineteen lockwashers (17) and screws (18).
7. Position rear cover (19) on cover (2) and secure with twenty lockwashers (20) and screws (21).
8. Install blower and burner assembly (WP 0172 00).
9. Install screen (WP 0177 00).
10. Install beams and baskets (WP 0021 00 to WP 0025 00).



**END OF WORK PACKAGE**

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
HEATER BASE  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**Laundry Unit shut down (TM 10-3510-222-10)  
Heater Assembly removed (WP 0175 00)**WARNING**

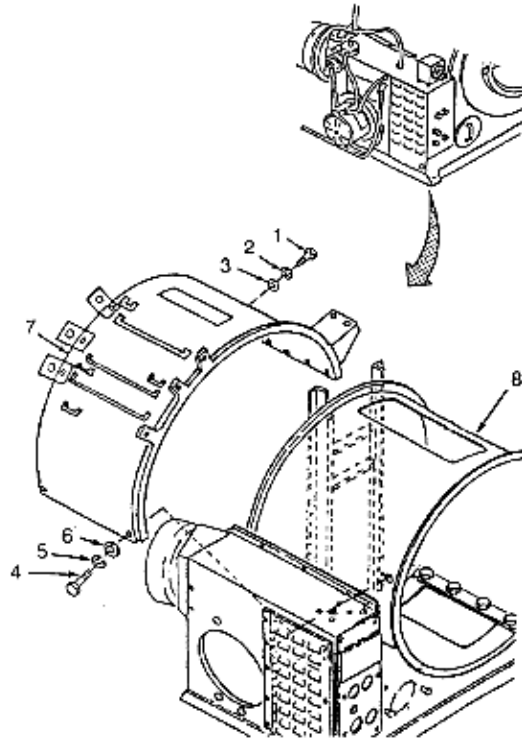
Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.

**REMOVE**

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)**.

**INSTALL**

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 (WP 0175 00).



END OF WORK PACKAGE

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
HEATER SCREEN  
REMOVE, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

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

**WARNING**

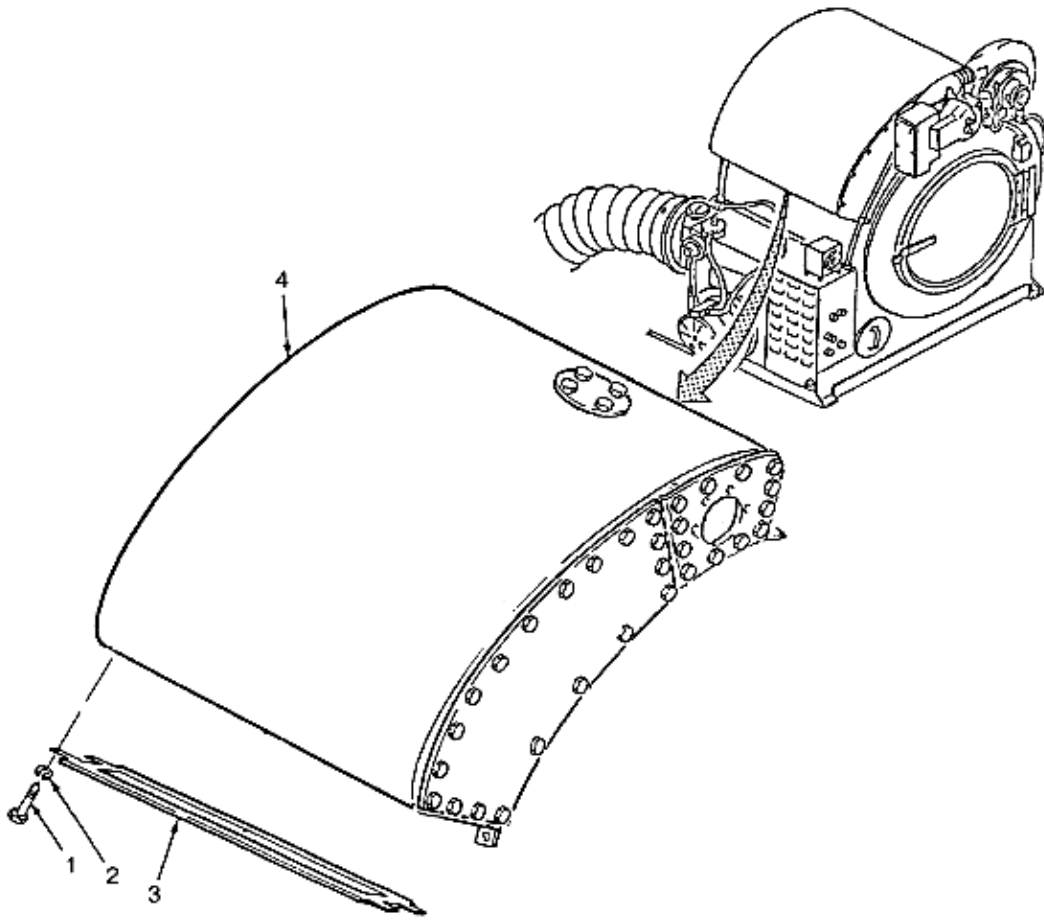
Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.

**REMOVE**

1. Remove four screws **(1)** and lockwashers **(2)**.
2. Remove screen **(3)** from heater assembly **(4)**.

**INSTALL**

1. Position screen **(3)** on heater assembly **(4)**.
2. Install four screws **(1)** and lockwashers **(2)**.



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
TUMBLER BARREL  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Trailer Mounted Welding Shop (Item 8, WP 0188 00)

**Personnel Required**

Four

**Materials/Parts**

Safety Wire, .0625 dia (Item 24, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Platform Anchor removed (WP 0028 00)

**WARNING**

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.

**WARNING**

Tumbler barrel is heavy/difficult to handle. To prevent injury, use two people to lift.

**REMOVE****NOTE**

Clamp may be one or two pieces.

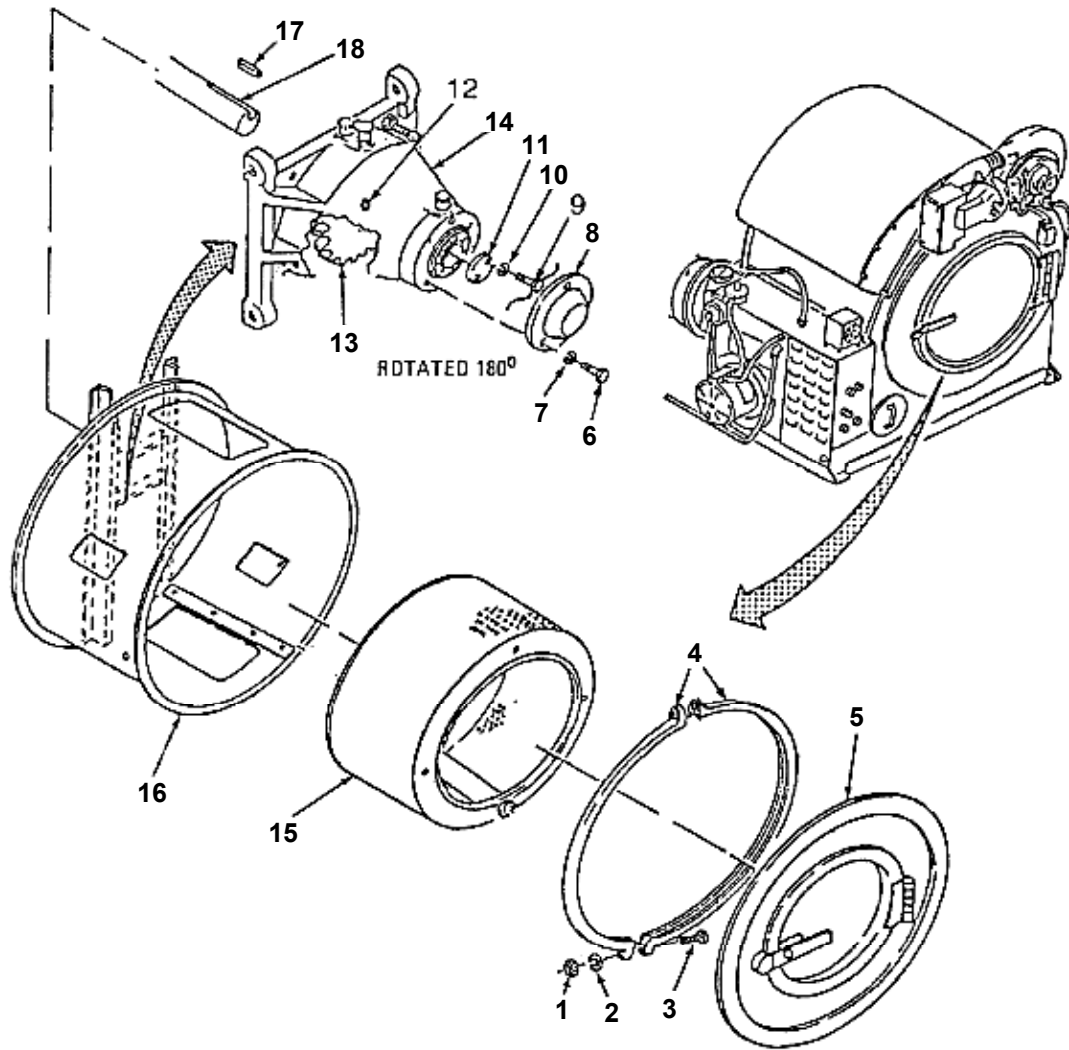
1. Remove two nuts **(1)**, lockwashers **(2)**, screws **(3)**, clamp(s) **(4)** and front cover plate **(5)**.
2. Remove three screws **(6)**, lockwashers **(7)** and cover plate **(8)**.
3. Cut safety wire on screws **(9)** and remove two screws **(9)**, flat washers **(10)** and retaining plate **(11)**.
4. Loosen setscrew **(12)** on sprocket **(13)** of trunnion assembly **(14)**.

**WARNING**

Tumbler barrel is heavy/difficult to handle. To prevent injury, use two people to lift.

5. Remove tumbler barrel **(15)** from dryer cylinder **(16)**.
6. Remove key **(17)** from shaft **(18)**.





**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)**.

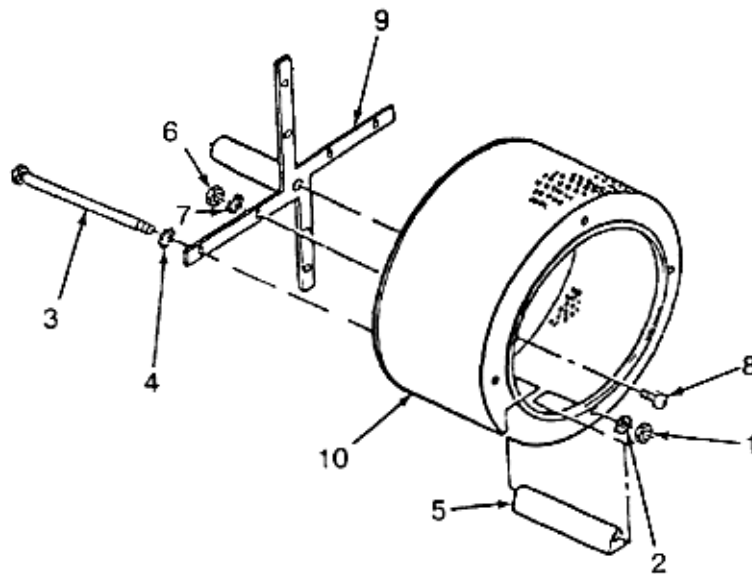


Chemical Agent Resistant Coating (CARC) produces toxic fumes when flame is applied. It is necessary to remove CARC in area where flame is to be applied. Death can result.

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)**.



**INSTALL**

1. Position key (1) in trunnion assembly (2).

**WARNING**

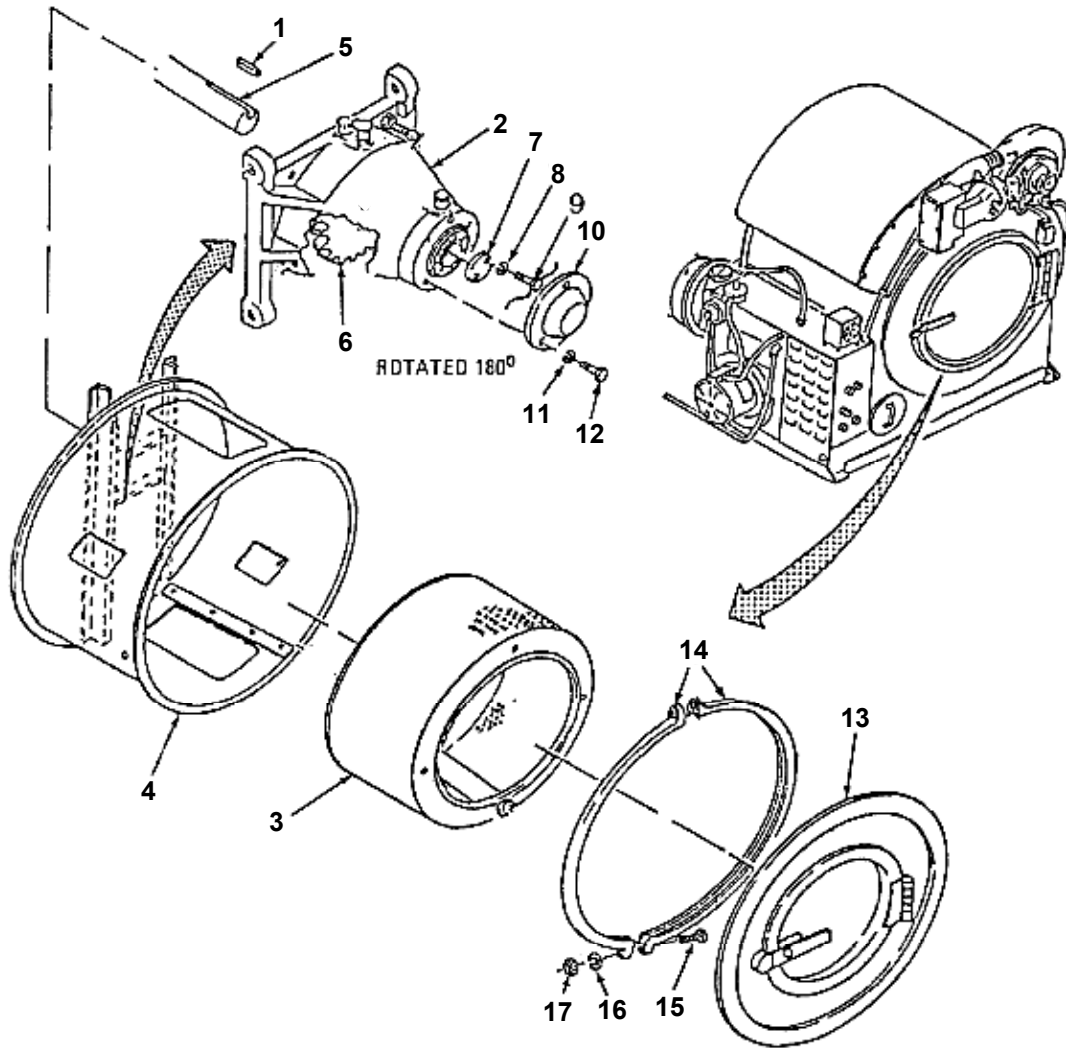
Tumbler barrel is heavy/difficult to handle. To prevent injury, use two people to lift.

2. Position tumbler barrel (3) in cylinder (4), making sure that shaft (5) of tumbler spider slides into the sprocket (6) of trunnion assembly (2).
3. Install retaining plate (7) with two flat washers (8) and screws (9) on shaft (5) of spider.
4. Secure screws (9) with safety wire.
5. Position cover plate (10) on trunnion assembly (2) and secure with three lockwashers (11) and screws (12).

**NOTE**

Clamp ring may be one or two pieces.

6. Position front cover plate (13) on cylinder (4) and install clamp(s) (14), screw (15), lockwasher (16) and nut (17) to secure cover to cylinder.
7. Install platform anchor (WP 0028 00).



END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
CYLINDER  
REMOVE, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Trailer Mounted Welding Shop (Item 8, WP 0188 00)

**Personnel Required**

Two

**Materials /Parts**

Safety Wire, .0625 dia (Item 24, WP 0190 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Tumbler Barrel removed (WP 0178 00)  
Heater Assembly removed (WP 0175 00)  
Heater Base removed (WP 0176 00)

**WARNING**

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.

**WARNING**

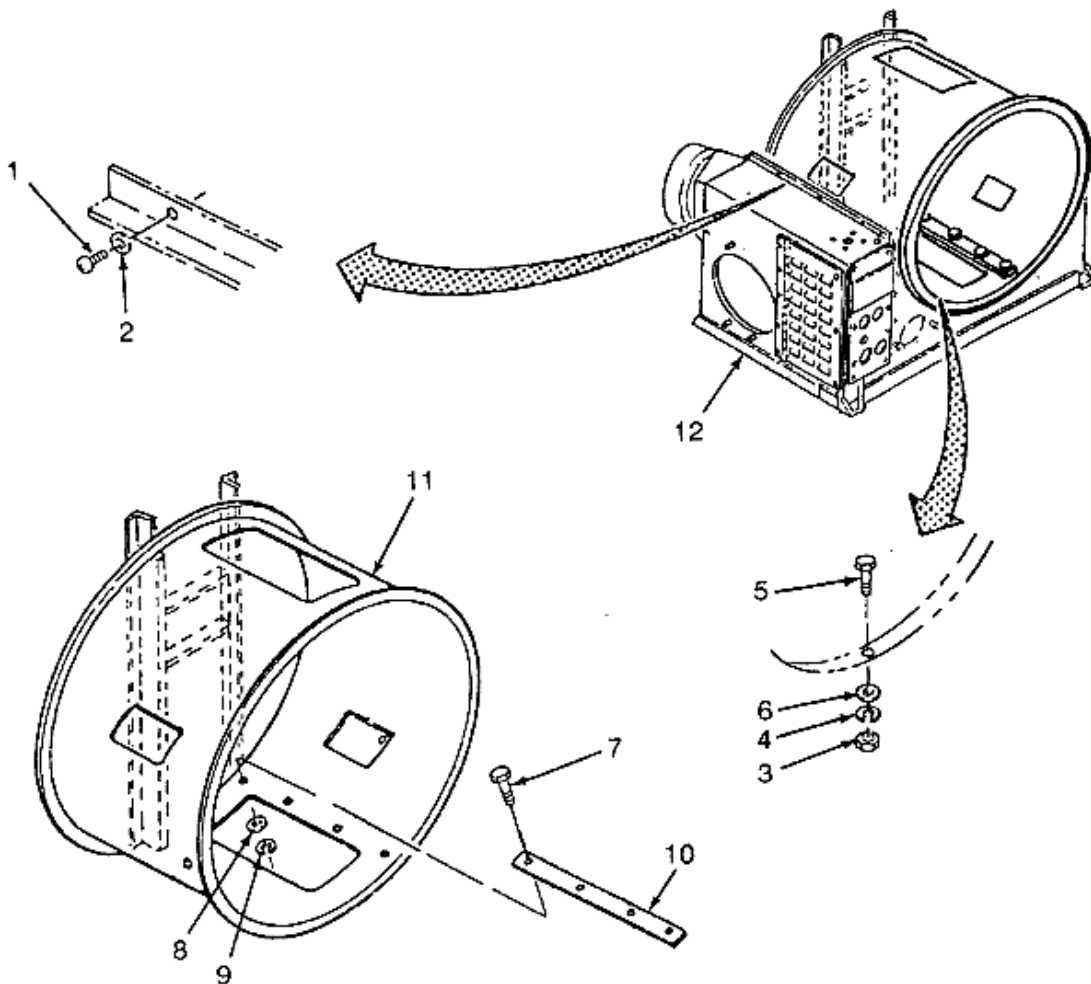
Tumbler barrel is heavy/difficult to handle. To prevent injury, use two people to lift.

**REMOVE**

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)**.

**INSTALL**

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 (WP 0178 00).
6. Install heater base (WP 0176 00).
7. Install heater assembly (WP 0175 00).

**END OF WORK PACKAGE**

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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DRYER CONDUITS  
REMOVE, REPAIR, INSTALL**

---

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP  
0188 00)

**Personnel Required**

Two

**Materials /Parts**

Tags (Item 19, WP 0190 00)

**Equipment Condition**

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

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**WARNING**

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

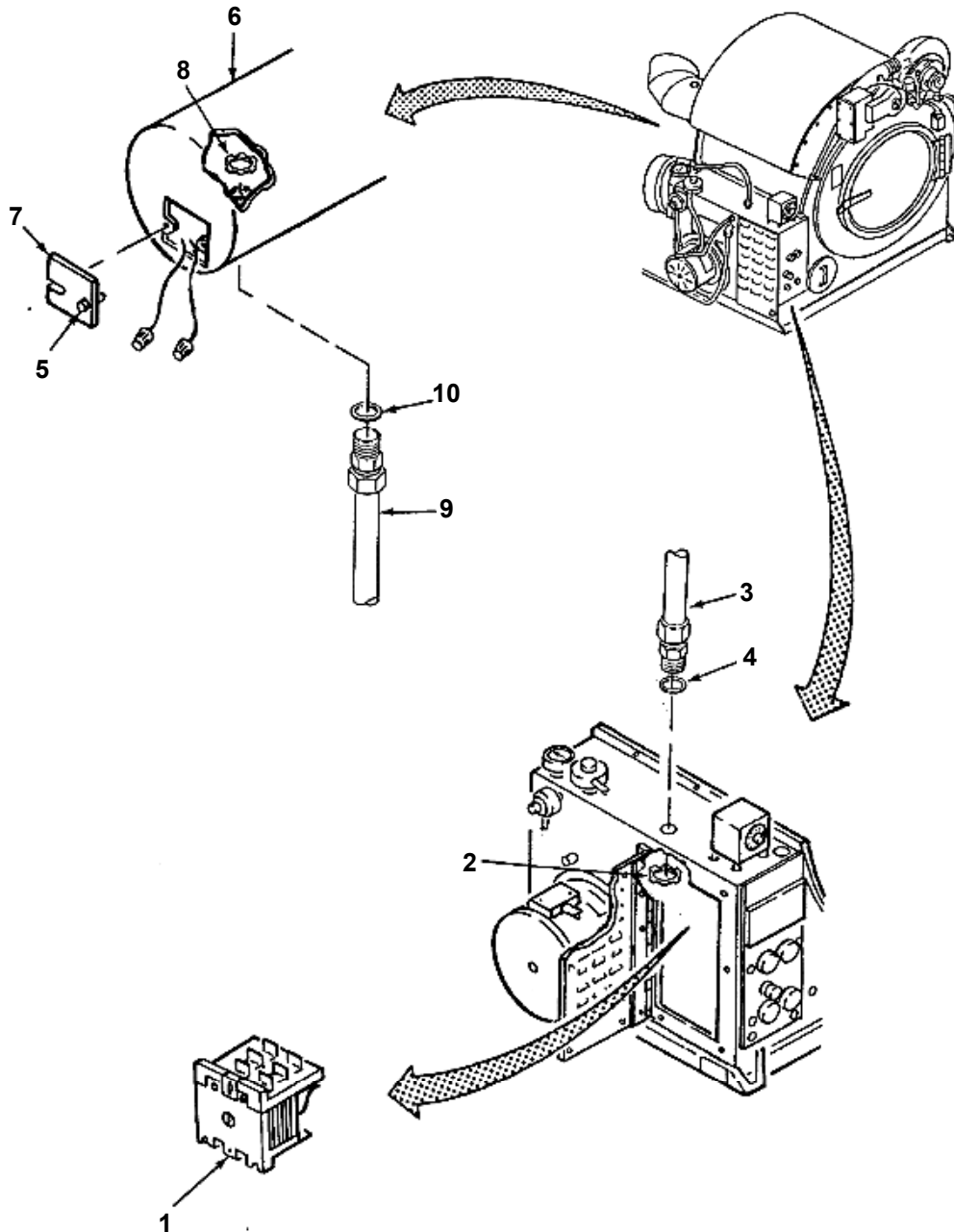
**REMOVE**

1. Tumbler Motor - Base Control Box Conduit.
  - a. Tag and disconnect wires (wire #19, #20 and #21) at relay **(1)**.
  - b. Remove nut **(2)**.
  - c. Pull adapter **(3)** with attached parts from electrical enclosure.
  - d. Remove gasket **(4)** from adapter **(3)**.
  - e. Loosen two screws **(5)** from tumbler motor **(6)** and remove cover **(7)**.
  - f. Tag and disconnect wires from tumbler motor **(6)**.

**NOTE**

Disconnecting wires, combining only motor wires (T4, T5 and T6) is not necessary to replace conduit.

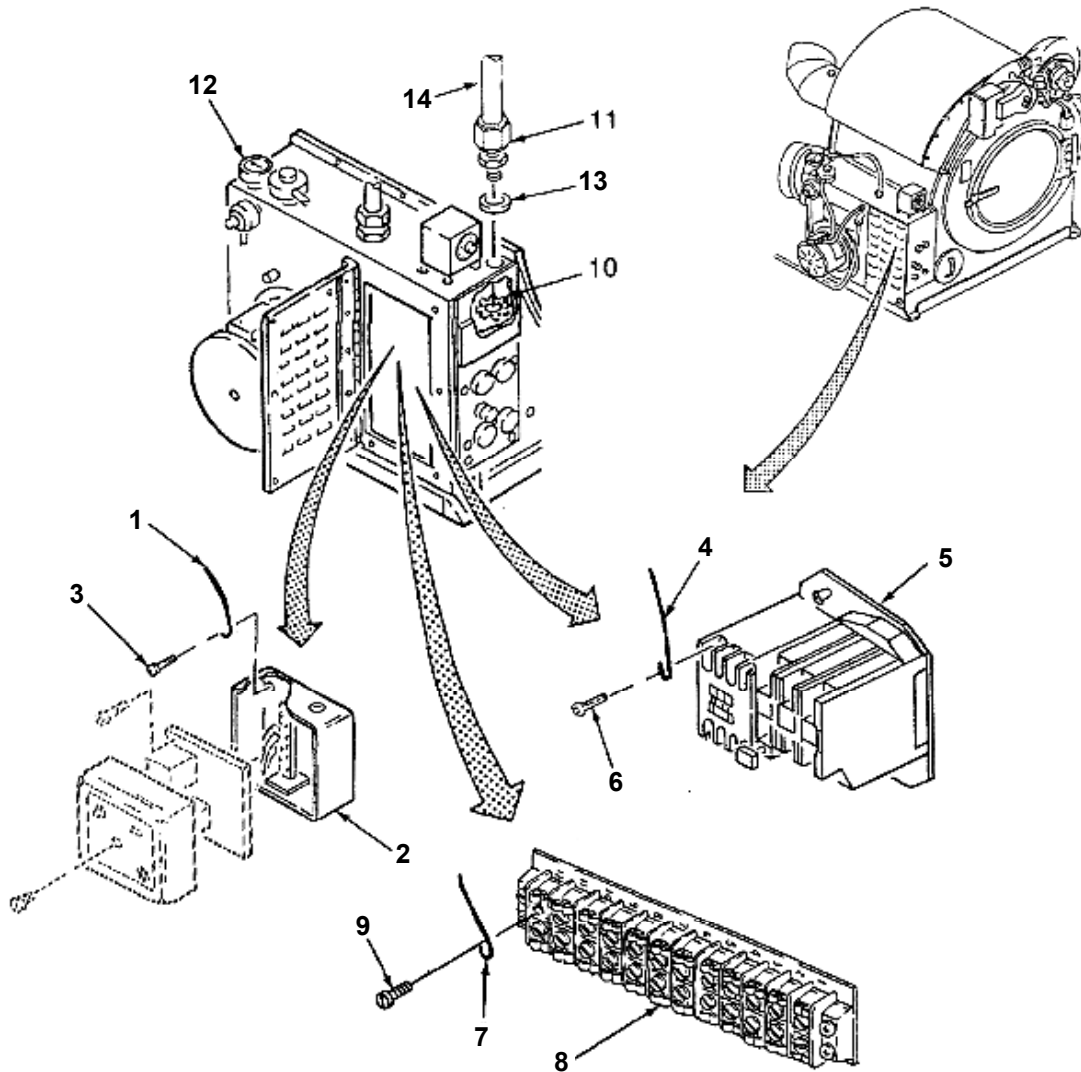
- g. Remove locknut (8) and pull adapter (9) with attached parts away from tumbler motor (6).
- h. Remove gasket (10).





2. Transformer Box - Control Box Conduit.

- a. Tag wires (1) connected to terminals 3 and 4 at scanner terminal box (2), loosen screws (3) and remove wires (1).
- b. Tag wires (4) connected to terminals T1, T2 and T3 at motor starter (5). Remove screws (6) and remove wires (4).
- c. Tag wires (7) connected to terminals NR (wire #40), CG (wire #30) and TR3 (wire #29) at terminal board (8). Remove screws (9) and disconnect wires (7).
- d. Remove nut (10) and pull adapter (11) with attached parts out of control box (12).
- e. As required, remove gasket (13) from adapter (11).
- f. Remove conduit (14) from transformer box (WP 0075 00).



**REPAIR**

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

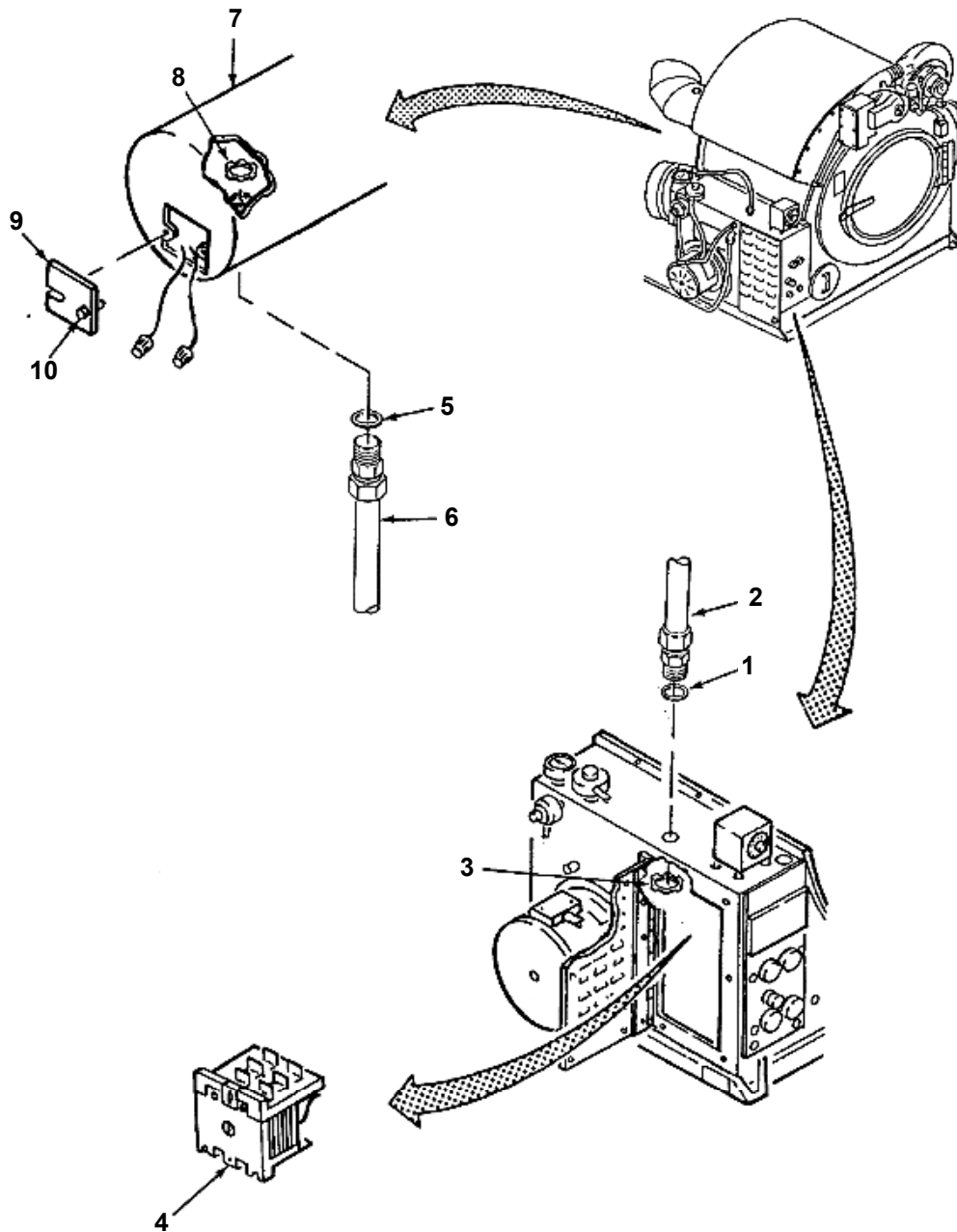
**INSTALL**

1. Tumbler Motor Base Control Box Conduit.
  - a. Position gasket **(1)** on adapter **(2)**.
  - b. Feed wires into control panel and install nut **(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.

- c. Connect wires to relay **(4)** as tagged.
- d. Position gasket **(5)** on adapter **(6)**, feed wires into tumbler motor **(7)** and install locknut **(8)**.
- e. Connect wires to tumbler motor **(7)** as tagged.
- f. Install cover **(9)** and secure with two screws **(10)**.



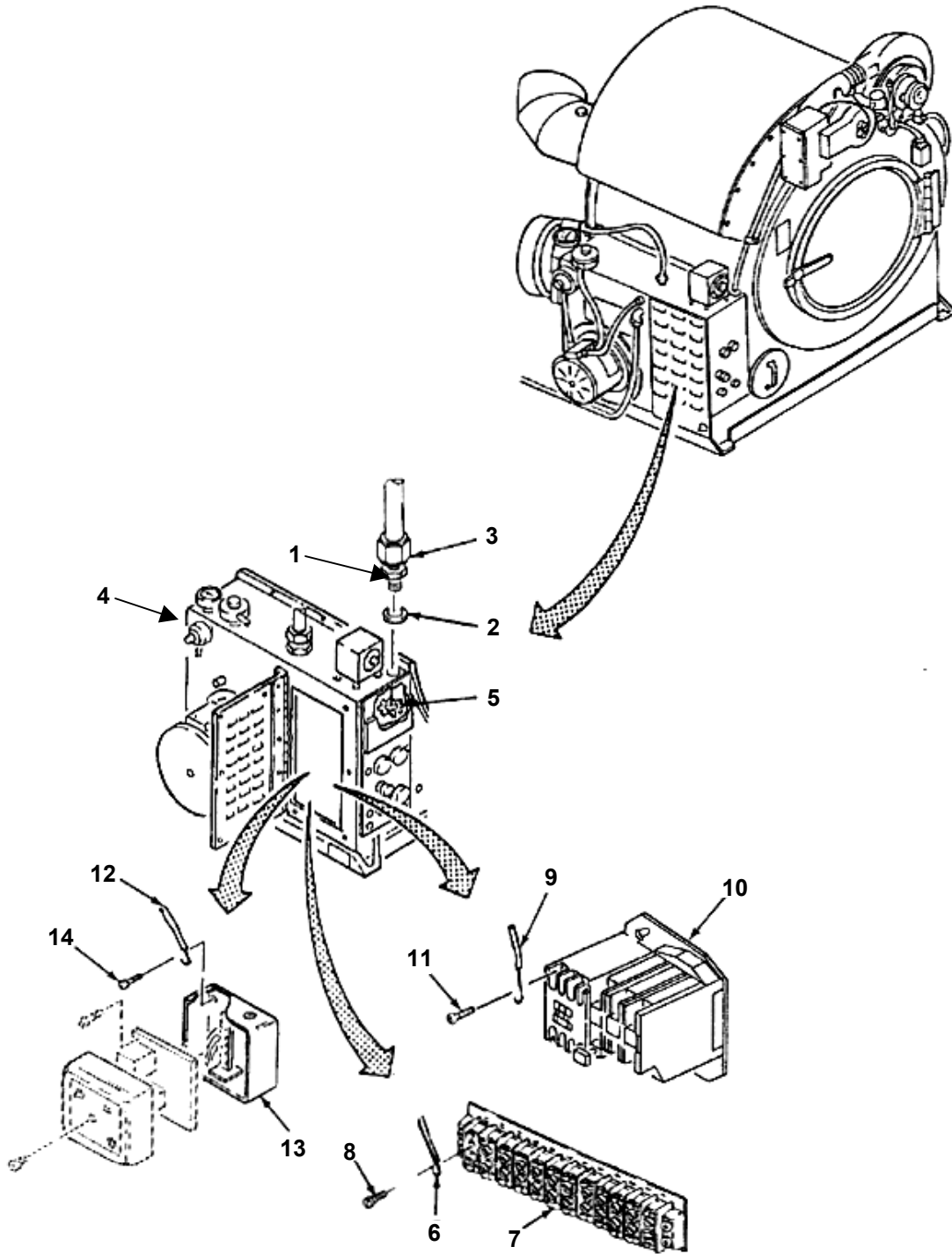
2. Transformer Box - Control Box Conduit.

- a. Install conduit (1) to the transformer box (WP 0075 00).
- b. Position gasket (2) on adapter (3), feed wires through conduit (1) into control box (4).
- c. Install nut (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.

- d. Connect wires **(6)** to terminal board **(7)** as tagged and secure with screws **(8)**.
- e. Connect wires **(9)** to motor starter **(10)** as tagged and secure with screws **(11)**.
- f. Connect wires **(12)** to terminal box **(13)** as tagged and secure with screws **(14)**.



END OF WORK PACKAGE



**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DRYER BASE  
REMOVE, REPAIR, INSTALL**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment (Item 3, WP 0188 00)  
Installation Fastener Tool (Item 9, WP 0188 00)

**Personnel Required**

Two

**Materials /Parts**

Adhesive (Item 1, WP 0190 00)  
Rivet, Blind (Item 39, WP 0189 00)  
Rivet, Blind (Item 14, WP 0189 00)  
Screw, Captive (Item 40, WP 0189 00)  
Rivet, Solid (Item 43, WP 0189 00)  
Nut, Blind (Item 44, WP 0189 00)  
Nut, Blind (Item 45, WP 0189 00)  
Nut, Blind (Item 46, WP 0189 00)  
Nut Blind (Item 47, WP 0189 00)

**Equipment Condition**

Dryer shut down (TM 10-3510-222-10)  
Dryer Cylinder removed (WP 0181 00)  
Cover (ON/OFF Switch) removed (WP 0167 00)  
Electrical components removed (WP 0165 00 - WP 0170 00)

**WARNING**

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

**REMOVE**

1. Remove five rivets **(1)**.
2. Support control box cover **(2)** and loosen three captive screws **(3)** from base **(4)**.
3. As required, remove five rivets **(5)** and separate hinge **(6)** from base **(4)**.
4. Remove rivet **(7)**.
5. Remove door **(8)** and gasket **(9)**. As required, remove rivet **(10)** and chain **(11)** from door **(8)**.
6. Remove two solid rivets **(12)**.
7. As required, remove insulation sheet **(13)**.
8. As required, remove three captive screws **(3)** from control box cover **(2)**. Discard captive screws **(3)**.

9. As required, remove blind nuts **(14, 15, 16 and 17)**.
10. Remove eleven nuts **(18)**, sixteen lockwashers **(19)**, flat washers **(20)** and screws **(21)**.
11. Remove base **(4)**.

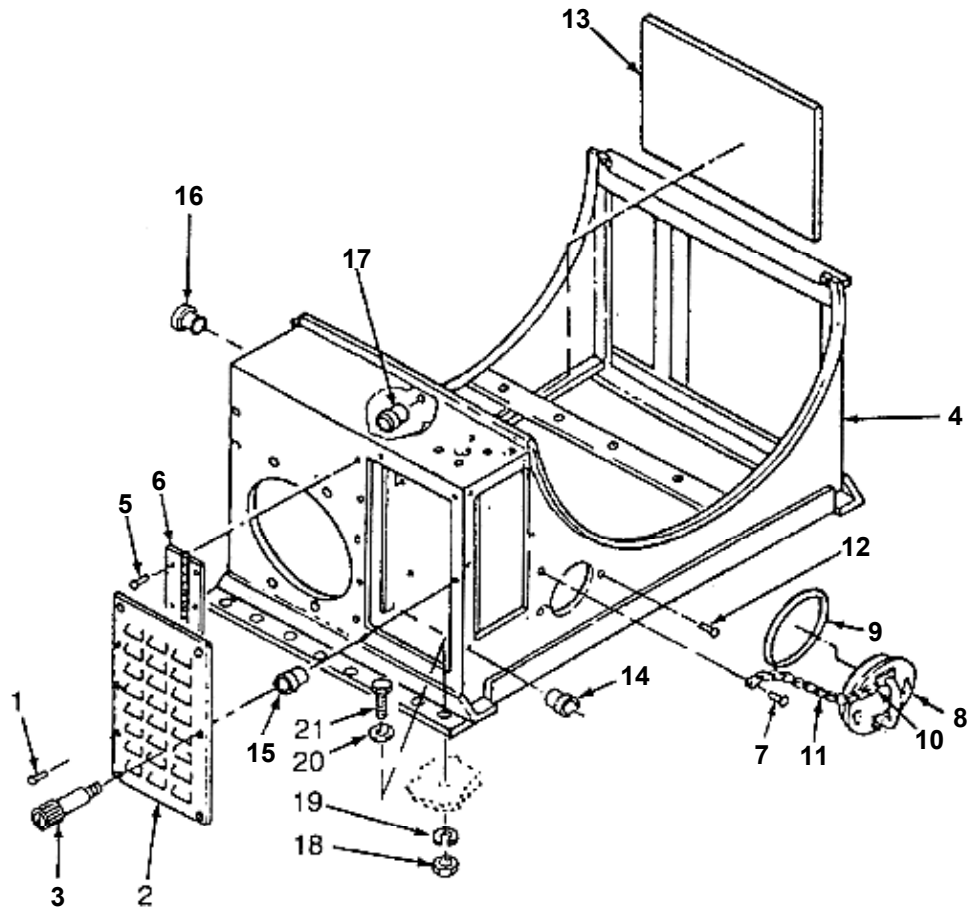
## REPAIR

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

## INSTALL

1. Install base **(4)**, secure with eleven nuts **(18)**, sixteen lockwashers **(19)**, flat washers **(20)** and screws **(21)**.
2. If removed, install blind nuts **(14, 15, 16 and 17)** on base **(4)**.
3. Apply adhesive to insulation sheet **(13)** and install on the side of base **(4)** behind the dryer control panel.
4. Install two solid rivets **(12)**.
5. Install chain **(11)** on door **(8)** with rivet **(10)**.
6. Install gasket **(9)** and cover **(2)** on base **(4)**.
7. Position chain **(11)** on base **(4)** and install rivet **(7)**.
8. Install hinge **(6)** on cover **(2)** with five rivets **(1)**.
9. If required, install captive screws **(3)** onto control box cover **(2)** using Installation Fastener Tool.
10. Place control box cover **(2)** on base **(4)** and secure with three captive screws **(3)**.
11. Install hinge **(6)** on base **(4)** using five rivets **(5)**.
12. Install electrical components (WP 0165 00 thru WP 0172 00).
13. Install panel (WP 0166 00).
14. Install dryer cylinder (WP 0179 00).





END OF WORK PACKAGE



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**DIRECT SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
DRYER BIN  
REPAIR**

---

**INITIAL SETUP:****Tools**

Trailer Mounted Welding Shop (Item 8, WP 0188  
00)

**Personnel Required**

One

**Materials/Parts****Equipment Condition**

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

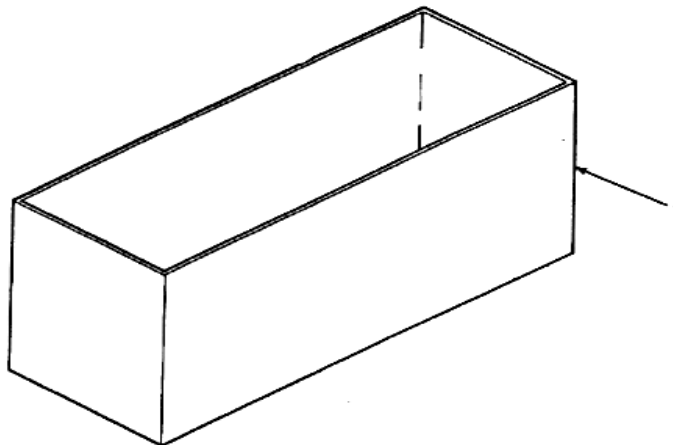
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**WARNING**

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**

Repair consists of dryer bin (1) being straightened and/or welded. Refer to TM 9-237 Welding Theory and Application.



**END OF WORK PACKAGE**



**CHAPTER 6**

**GENERAL SUPPORT MAINTENANCE INSTRUCTIONS  
FOR  
M85 TRAILER MOUNTED LAUNDRY UNIT**



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**GENERAL SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
GENERAL INFORMATION**

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## **LUBRICATION ORDERS**

**Laundry Unit.** Refer to LO 10-3510-222-12 for lubrication order.

**Generator.** Refer to LO 5-6115-585-12 for lubrication order.

**Trailer.** Refer to TM 9-2330-376-14&P for lubrication order.

**Water Heater.** Refer to TM 10-4520-259-13&P for lubrication order.

## **REPAIR PARTS, TOOLS, SPECIAL TOOLS; TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE); AND SUPPORT EQUIPMENT**

### **COMMON TOOLS AND EQUIPMENT**

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

### **SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT**

Refer to WP 0188 00, Maintenance Allocation Chart, TMDE, and Support Equipment and TM 10-3510-222-24P, Repair Parts and Special Tools List.

### **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. WP 0190 00 lists the Mandatory Replacement Parts which need to be replaced during maintenance.

## **GENERAL MAINTENANCE PROCEDURES**

### **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 WP 0188 00. Step by step procedures have been provided for all actions authorized to be performed by Unit, Direct Support Maintenance in Chapters 3 and 5, and General Support in Chapter 6.



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

### **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 Cable Diagrams, Wire Run List, and Control Circuits (see Foldout Pages).
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.

**Cleaning and Inspection of Antifriction Bearings.** Refer to TM 9-214, Inspection, Care, and Maintenance of Antifriction Bearings.



## 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.

### 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 (WP 0190 00, Item 6) and olive drab paint (WP 0190 00, Item 7). Refer to TM 43-0139 for proper painting instructions. Allow paint to dry between coats.

### END OF WORK PACKAGE



**GENERAL SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
AC MOTOR  
REPAIR**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Automotive Vehicle Shop Equipment  
(Item 3, WP 0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)  
Gasket (Item 79, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Motor and Plate removed (WP 0046 00)

**Reference**

Repair of Electric Motors and Generators  
(TM 5-764)

**WARNING**

Be sure power to dryer is off at circuit breaker panel. Accidental start of dryer while performing this task could cause injury.

**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)**.
- l. Remove four screws **(16)** from cover **(17)** and remove cover **(17)** and gasket **(18)**.
- m. Tag and remove electrical wiring from protector **(19)**.
- n. Remove two screws **(20)** from electrical box **(21)**.
- o. Remove protector **(19)** and boot **(22)**.

## 2. ASSEMBLY

- a. Install boot **(22)** and protector **(19)** in electrical box **(21)**, with two screws **(20)**.

### **NOTE**

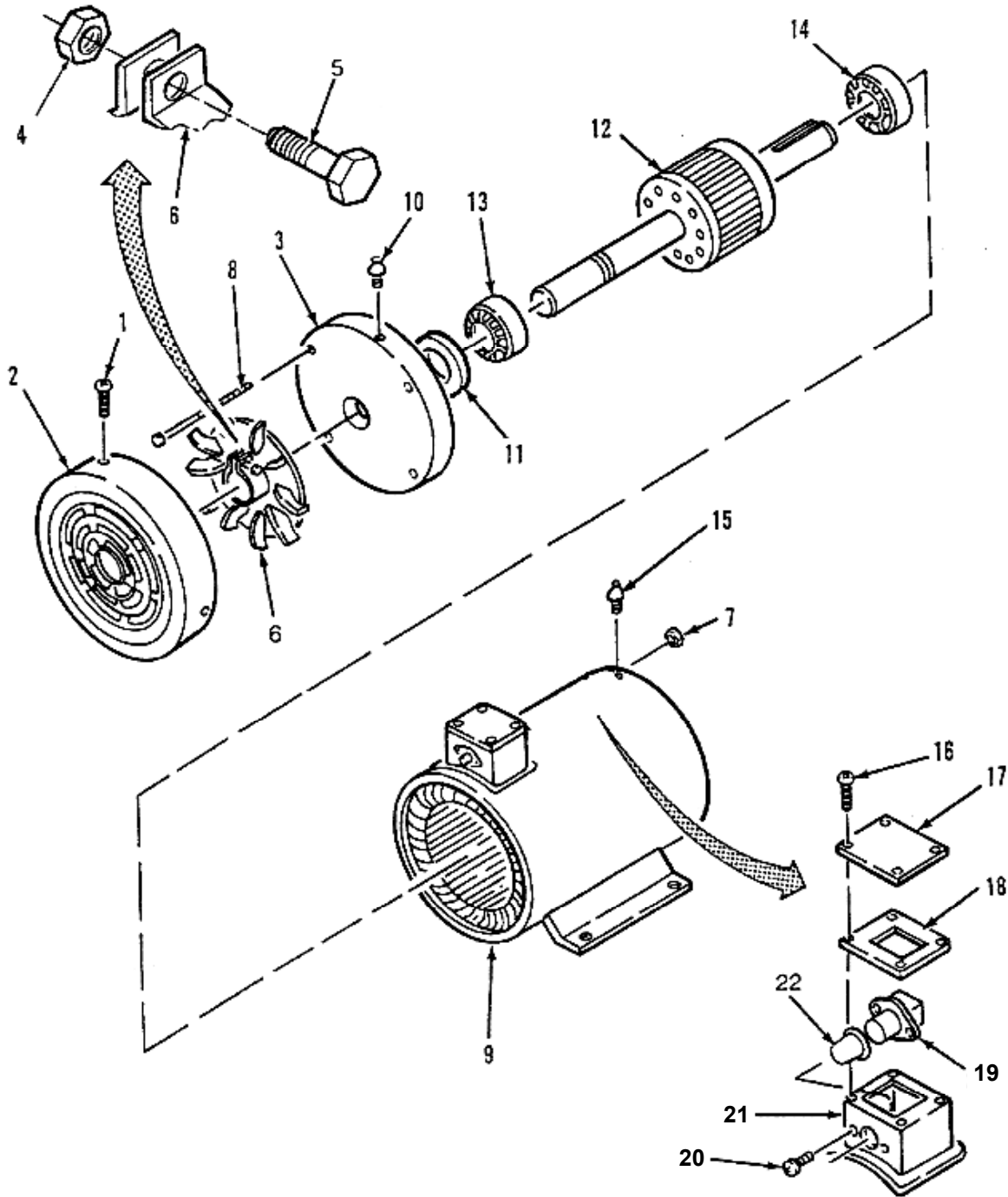
Wire numbers are stamped on each electrical wire. This information, in conjunction with data on FO-2 Washer Wiring Diagram, may be used to connect wires if tags are lost or illegible.

- b. Connect wiring to protector **(19)** as tagged.
- c. Position gasket **(18)** and cover **(17)** on electrical box **(21)** 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.

- l. 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 (WP 0046 00).



END OF WORK PACKAGE



**GENERAL SUPPORT MAINTENANCE  
LAUNDRY UNIT, TRAILER MOUNTED, M85  
MODELS: M85-100, M85-200  
(NSN 3510-01-291-8169 (M85-100))  
(NSN 3510-01-365-5687 (M85-200))  
AC MOTOR AND CONDUIT BOX  
DISASSEMBLE, REPAIR, ASSEMBLE**

**INITIAL SETUP:****Tools**

General Mechanic's Tool Kit (Item 1, WP 0188 00)  
Electrical Repair Shop Equipment (Item 4, WP  
0188 00)

**Personnel Required**

One

**Materials/Parts**

Tags (Item 19, WP 0190 00)  
Gasket (Item 65, WP 0189 00)

**Equipment Condition**

Laundry Unit shut down (TM 10-3510-222-10)  
Motor Assembly removed (WP 0059 00)



**WARNING**

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

**DISASSEMBLE**

1. Remove two caps **(1)** and cover **(2)**.
2. Remove gasket **(3)** from conduit box **(4)**. Discard gasket **(3)**.
3. Remove two studs **(5)**.
4. Remove conduit box **(4)** 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 **(18)** from stator **(19)**.
11. Remove bearings **(20 and 21)** from rotor **(18)**.

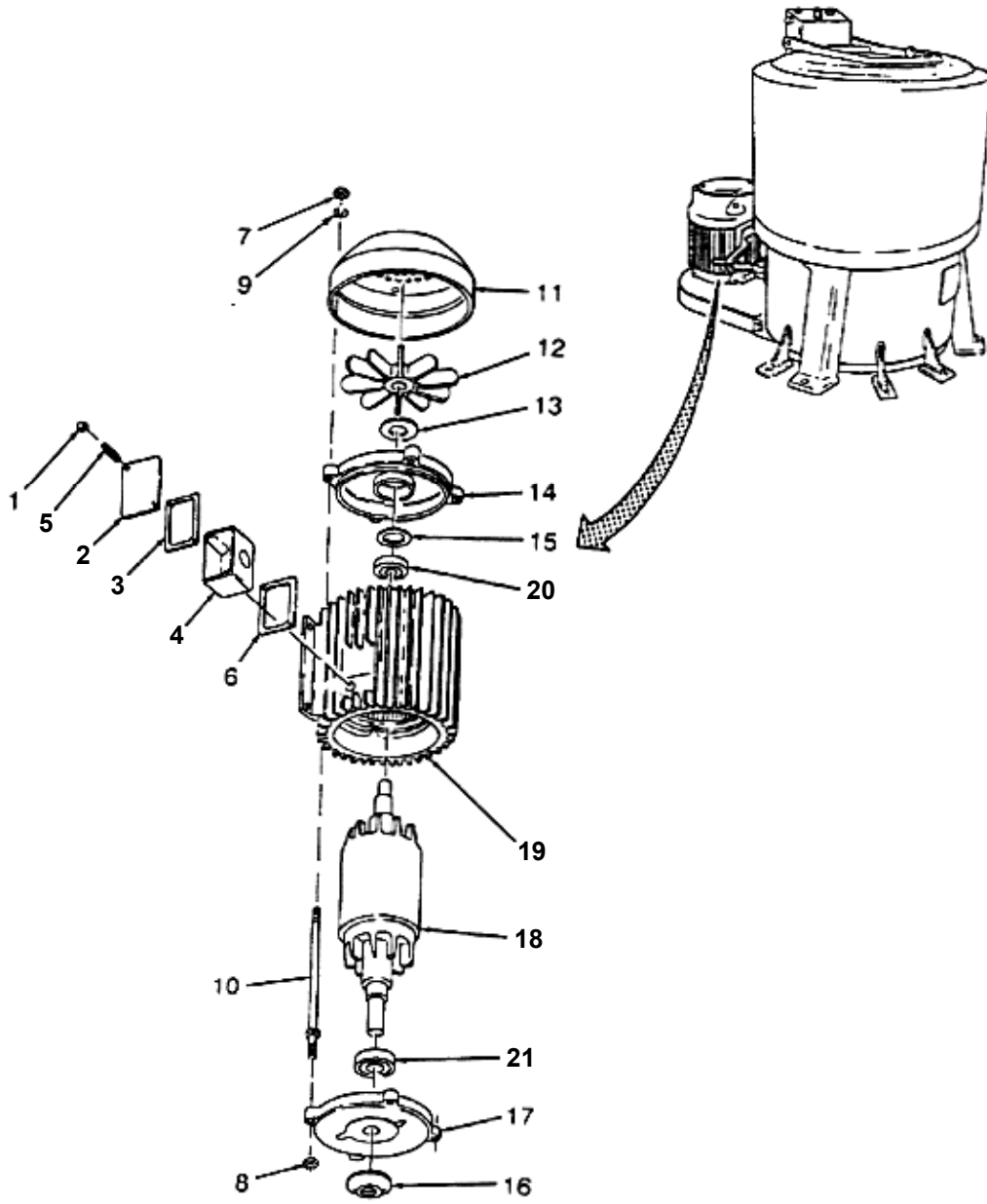
**REPAIR**

Repair is limited to replacement of parts on the ac motor and conduit box.

**ASSEMBLE**

1. Press bearings **(20 and 21)** onto shaft of rotor **(18)**.
2. Position rotor **(18)** in stator **(19)**.
3. Position end bracket **(17)** over shaft of rotor **(18)** and on end of stator **(19)**.
4. Install slinger **(16)** on end bracket **(17)**.
5. Position two spring washers **(15)** and end bracket **(14)** over shaft of rotor **(18)** and on stator **(19)**.
6. Install slinger **(13)**.
7. Install fan **(12)**.
8. Position cover **(11)** on fan end of stator **(19)** and install four rods **(10)**, nuts **(7 and 8)** and lockwashers **(9)**.
9. Install gasket **(6)**, conduit box **(4)**, gasket **(3)**, cover **(2)**, two studs **(5)** and caps **(1)**.
10. Install motor assembly (WP 0059 00).





END OF WORK PACKAGE



**CHAPTER 7**

**SUPPORTING INFORMATION**  
**FOR**  
**M85 TRAILER MOUNTED LAUNDRY UNIT**



**M85-100, AND M85-200 LAUNDRY UNIT, TRAILER MOUNTED  
REFERENCES**

**SCOPE**

This work package 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.

**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

**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

**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 10-351 0-222-24P

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, XMIO6I EI ..... 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 Materiel 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 43-01 58

**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

**TECHNICAL BULLETINS**

Preservation for USAMECOM Mechanical Equipment For  
Shipment and Storage (US Army) ..... TB 740-97-2

**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





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**M85-100, AND M85-200 LAUNDRY UNIT, TRAILER MOUNTED  
MAINTENANCE ALLOCATION CHART (MAC) INTRODUCTION**

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**INTRODUCTION****The Army Maintenance System MAC**

This introduction provides a general explanation of all maintenance and repair functions authorized at the two maintenance levels under the Two-Level Maintenance System concept.

The MAC (immediately following the introduction) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field - includes two columns, Unit maintenance and Direct Support maintenance. The Unit maintenance column is divided again into two more subcolumns, C for Operator or Crew and O for Unit maintenance.

Sustainment – includes two subcolumns, General Support (H) and Depot (D).

The tools and test equipment requirements (immediately following the MAC) list the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks (immediately following the tools and test equipment requirements) contain supplemental instructions and explanatory notes for a particular maintenance function.

**Maintenance Functions**

Maintenance functions are limited to and defined as follows:

1. Inspect. 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.) This includes scheduled inspection and gagings and evaluation of cannon tubes.
2. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.
3. Service. Operations required periodically to keep an item in proper operating condition, e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:
  - a. Unpack. To remove from packing box for service or when required for the performance of maintenance operations.
  - b. Repack. To return item to packing box after service and other maintenance operations.
  - c. Clean. To rid the item of contamination.
  - d. Touch up. To spot paint scratched or blistered surfaces.
  - e. Mark. To restore obliterated identification.

4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper or position, or by setting the operating characteristics to specified parameters.
5. Align. To adjust specified variable elements of an item to bring about optimum or desired performance
6. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment 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.
7. Remove/Install. 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.
8. Paint. To prepare and spray color coats of paint so that the ammunition can be identified and protected. The color indicating primary use is applied, preferably, to the entire exterior surface as the background color of the item. Other markings are to be repainted as original so as to retain proper ammunition identification.
9. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and assigned maintenance level is shown as the third position code of the Source, Maintenance and Recoverability (SMR) code.
10. Repair. The application of maintenance services, including fault location/troubleshooting, removal/installation, 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.

### NOTE

The following definitions are applicable to the "repair" maintenance function:

Services. Inspect, test, service, adjust, align, calibrate, and/or replace.

Fault location/troubleshooting. The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (UUT).

Disassembly/assembly. The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

Actions. Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

11. Overhaul. 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. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

12. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/components.

### Explanation of Columns in the MAC

Column (1) Group Number. Column (1) lists Functional Group Code (FGC) numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

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

Column (3) Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to "Maintenance Functions" outlined above).

Column (4) Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as manhours in whole hours or decimals) in the appropriate subcolumn. This work time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to 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 time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

#### Field:

- C Operator or Crew maintenance
- O Unit maintenance
- F Direct Support maintenance

#### Sustainment:

- L Specialized Repair Activity
- H General Support  
maintenance
- D Depot maintenance

### NOTE

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE, and support special equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) Remarks Code. When applicable, this column contains a letter code, in alphabetic order, which is keyed to the remarks table entries.

### **Explanation of Columns in the Tools and Test Equipment Requirements**

Column (1) – Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) – Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) – Nomenclature. Name or identification of the tool or test equipment.

Column (4) – National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) – Tool Number. The manufacturer's part number.

### **Explanation of Columns in Remarks**

Column (1) – Remarks Code. The code recorded in column (6) of the MAC.

Column (2) – Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

M85-100, AND M85-200 LAUNDRY UNIT, TRAILER MOUNTED  
 MAINTENANCE ALLOCATION CHART (MAC)

Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD			SUSTAINMENT			
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	D		
00	LAUNDRY UNIT, TRAILER MOUNTED MODEL 85-200								
01	TARPAULIN	INSPECT REPLACE REPAIR	0.5 0.5		2.0		1,15	C	
0102	FLAP, BECKET	INSPECT REPLACE REPAIR	0.5		1.0 1.0		1,3 1,3	C	
02	LADDER ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5	1.0	1.0		1,2,8	A,B	
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	A,B	
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	B	
09	REAR FRAME ASSEMBLY	INSPECT REPLACE REPAIR		0.5 1.0 1.0	1.0		1 1,2,7,8	B	
	PLATFORM ANCHOR	INSPECT REPAIR REPLACE	0.5	1.0 1.0			1	B	
10	UPRIGHT RAIL ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0	1.0		1,8	A,B	
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	A,B	
1201	TIE DOWN, CARGO	INSPECT REPLACE REPAIR	0.2	0.5 0.5			1 1	A	

Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted - continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	D		
13	MAINTENANCE PLATFORM	INSPECT REPLACE REPAIR	0.5 0.5		1.0			8	B
14	SHORT PLATFORM ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5		1.0			8	B
15	LOWER DRYER PLATFORM ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5	1.0	1.0			1,8	A,B
16	TWO STEP STAIR ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5		1.0			8	B
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	B
1702	LOW FRAME ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0	1.0			1 8	B
1703	DRYER PLATFORM	INSPECT REPLACE REPAIR	0.5	1.0	1.0			1 8	B
18	QUICK DISCONNECT CAP	INSPECT REPLACE REPAIR		0.2 0.5 0.5				1	A
19	WASHER DRAIN ASSEMBLY	INSPECT REPLACE REPAIR		0.5	1.0 2.0			1 1,3	C
20	WASHING MACHINE	INSPECT REPLACE REPAIR	0.5		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	A
2003	LOCK COVER ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0				1,2	A
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	C
200501	LATCH HANDLE ASSEMBLY	INSPECT REPLACE REPAIR	0.5		1.0 2.0			1 1	C

Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted – continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	D		
200502	DOOR ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 2.0				1 1	C
2006	BELT GUARD ASSEMBLY	INSPECT REPLACE REPAIR		0.5 1.0 1.5				1	A
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 ADJUST	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
	PRESSURE GAGE	REPLACE		0.5				1	
2009	REDUCER ASSEMBLY	INSPECT SERVICE REPLACE REPAIR		0.5 0.5	2.0 4.0			1 1,3 1,3	C
200901	GEAR REDUCER	INSPECT REPLACE REPAIR			0.5 2.0 4.0			1,3	C
2010	SEAL AND CARRIAGE	INSPECT REPLACE REPAIR SERVICE			0.2 0.5 0.5 0.5			1 1	C
2011	BASKET ASSEMBLY	INSPECT REPLACE REPAIR			0.5 2.0 1.0			1 1,3,8	B
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	B
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	C
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	C

Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted – continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD			SUSTAINMENT			
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	D		
2015010101	INTERVAL TIMER	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1 1	C
201502	CHASSIS CONTROL ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,4 1	C
21	AIR COMPRESSOR ASSEMBLY	INSPECT ADJUST REPLACE REPAIR	0.5 1.0	1.0 1.0 0.5				1 1 1,3	A A, C
2101	COMPRESSOR AND MOTOR	INSPECT REPLACE REPAIR	0.5		1.0 2.0			1 1	C
210101	FILTER ASSEMBLY	INSPECT REPLACE REPAIR	0.2	0.5 0.5					C
210102	COMMON CYLINDER HEAD (LEFT SIDE)	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	C
210103	COMMON CYLINDER HEAD (RIGHT SIDE)	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1,3 1,3	C
210104	AIR COMPRESSOR HOUSING	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1 1,3	C
22	CONTROLLER STAND	INSPECT REPLACE REPAIR		0.5	1.0 1.5			1 8	B,C
23	CONDUIT ASSEMBLY	INSPECT REPLACE REPAIR	0.5		3.0 4.0			1,4 1,4	C
24	POWER CABLE ASSEMBLY	INSPECT REPLACE REPAIR	0.5 1.0		2.0			1,4	C
2401	ELECTRICAL PLUG CONNECTOR	INSPECT REPLACE REPAIR	0.5		1.0 1.0			1,4 1,4	C
25	ELECTRICAL WIRING	INSPECT REPLACE REPAIR	0.5		2.0 4.0			1,4	C
26	ENCLOSURE BOX ASSEMBLY	INSPECT REPLACE REPAIR		0.5	2.0 3.0			1 1,4	C
27	POWER PANEL ASSEMBLY	INSPECT REPLACE REPAIR	0.5		1.5 3.0			1 1,4	C
28	WET WASH BIN ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0	2.0			1 1,8	A,B



Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted - continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	C		
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	8.0			1 1,2 1,2 1,2,3,4	A, C
3001	HINGE SHAFT ASSEMBLY	INSPECT REPLACE REPAIR			0.2 0.5 0.5			1 1,3	C
3002	PUSH BUTTON SWITCH	INSPECT REPLACE REPAIR	0.2		0.5 0.5			1 1,4	C
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	C
3006	DRIVE UNIT ASSEMBLY	INSPECT ADJUST REPLACE REPAIR		0.5	0.5 1.0 4.0			1 1,3 1,3	C
300601	UPPER SHAFT NUT	INSPECT REPLACE REPAIR			0.2 0.5 0.5			1 1,3	C
300602	BRAKE EXTRACTOR	INSPECT REPLACE REPAIR			0.2 0.5 0.1			1,3 1	C
300603	OIL HOUSING ASSEMBLY	INSPECT ADJUST REPLACE REPAIR			0.5 1.0 1.0 2.0			1,3 1,3 1,3,16	C
	LID CLOSED SWITCH	REMOVE INSTALL ADJUST			1.0 1.0 0.5			1	C
	LID LOCKED SWITCH	REMOVE INSTALL ADJUST			1.0 1.0 0.5			1	C
	OVERVOLTAGE ABSORBER (ROTATION MONITOR)	REMOVE INSTALL			1.0 1.0			1	C
	SOLID STATE RELAY	REMOVE INSTALL			0.5 0.5			1	C
	TIMER	REMOVE INSTALL			0.5 0.5			1	C
	TERMINAL BOARD	REMOVE INSTALL			1.0 1.0			1	C
	LID LOCKED SOLENOID	REMOVE INSTALL			1.0 1.0			1	C

Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted – continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	C		
3007	MOTOR ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1,3	C
300701	AC MOTOR	INSPECT REPLACE REPAIR	0.5	1.0		2.0		1 1,4	G
31	NONMETALLIC HOSE ASSEMBLY	INSPECT REPLACE REPAIR	0.2	0.5 1.0				1 1,2	A
32	MODIFIED M85 WATER HEATER	INSPECT REPLACE REPAIR	0.5	3.0 2.0				1 1,2	A
3201	CLAMP ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.5 1.0				1 1	A
3202	PIPING ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1,2 1,2,10	A
3203	OUICK COUPLING HALF	INSPECT REPLACE REPAIR	0.2	0.5 0.5				1	A
33	DRYER ASSEMBLY	INSPECT ADJUST REPLACE REPAIR	0.5	1.0 3.0	3.0 8.0			1 1,4 1,2,3,4,8	A, B, C
3301	DRYER	INSPECT REPLACE REPAIR	0.5	2.0	4.0 8.0			1 1,2,3,5,6,8	A B, C
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	A
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	A
330105	BLOWER ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 2.0				1 1,2	A
33010501	SHUTTER ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 2.0				1 1,2	A
	AIR SHUTTER AND PLENUM ASSEMBLY	REPAIR REPLACE		0.5 1.0				1,2	A

Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted – continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	D		
33010502	ROTARY PUMP	INSPECT ADJUST REPLACE REPAIR	0.5	0.5 1.5	3.0			1 1 1,3	C
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	A
33010602	IGNITION CABLE	INSPECT REPLACE REPAIR		0.5 1.0 1.0				1,2 1,2	A
33010603	SIGHT EYE ASSEMBLY	INSPECT REPLACE REPAIR		0.5 1.0 1.0				1,2 1,2	A
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	A
33010701	BOX ASSEMBLY	REPLACE REPAIR		1.0 1.0				1 1,2	A
330108	SPEED REDUCER ASSEMBLY	INSPECT SERVICE ADJUST REPLACE REPAIR		0.5 0.5 1.0	2.0 4.0			1 1 1,3	C
330109	LIGHT ASSEMBLY	INSPECT REPLACE REPAIR	0.2	1.0 1.5				1 1,14	A
	LIGHT BULB	REPLACE		0.5 0.5				1	A
330111	STARTER MOTOR	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1 1	C
330112	UV AND IR FLAME CONTROL ASSEMBLY	TEST REMOVE REPAIR INSTALL		0.5 0.5 1.0 0.5				1	A
330112	CONTROL PANEL ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 1.0			1 1,3	C
	BUZZER	REMOVE INSTALL		0.5 0.5				1	A
330113	HOT AIR BLOWER ASSEMBLY	INSPECT REPLACE REPAIR			0.5 1.0 2.0			1 1,3	C

Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted - continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	C		
330114	TUMBLER ASSEMBLY	INSPECT REPLACE REPAIR			0.5 2.0 4.0			1 1	B,C
33011401	TRUNNION ASSEMBLY	INSPECT SERVICE REPLACE REPAIR		0.5	0.5 2.0 4.0			1 1,3	C
	ROLLER CHAIN ASSEMBLY	REMOVE INSTALL			1.0 1.0			1	C
33011402	AIR HEAT TUMBLER	INSPECT REPLACE REPAIR			0.5 2.0 4.0			1,3 1,3	C
3301140201	MOUNTING ASSEMBLY	INSPECT REPLACE REPAIR			0.5 0.5 0.5			1 1,3	C
330114020	HOOD ASSEMBLY	INSPECT REPLACE REPAIR	0.5		2.0 3.0			1 1,3,8	C
33011403	BARREL ASSEMBLY	INSPECT REPLACE REPAIR			0.5 2.0 3.0			1 1,8	B, C
33011404	CYLINDER ASSEMBLY	INSPECT REPLACE REPAIR			0.5 2.0 3.0			1 1	C
3301140401	SHELL ASSEMBLY	INSPECT REPLACE REPAIR		0.5 2.0 3.0	2.0			1 1,8	A,B
330114040101	HINGE ASSEMBLY	INSPECT REPLACE REPAIR		0.5 2.0 3.0				1 1	A
3301140402	DOOR ASSEMBLY	INSPECT REPLACE REPAIR		0.5 2.0 3.0	2.0			1 1,8	A, B
	DOOR SWITCH	REMOVE INSTALL ADJUST		0.5 0.5 0.5				1	A
33011405	DRYER BASE ASSEMBLY	INSPECT REPLACE REPAIR			0.5 3.0 2.0			1 1,3,9	C
3301140501	DISCHARGE SPOUT	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1 1	A
	EXHAUST ELBOW	REMOVE INSTALL		1.0 1.0				1	A
	EXHAUST ADAPTER	REMOVE INSTALL		1.0 1.0				1	A
	FAN & MOTOR	REMOVE INSTALL		1.0 1.0				1	A
3301140502	BASE ASSEMBLY	INSPECT REPLACE REPAIR	0.5		1.0 2.0			1 1,3,9	C

Table 1. MAC for M85-100 AND M85-200 Laundry Unit, Trailer Mounted - continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	C		
3302	ELECTRICAL WIRING	INSPECT REPLACE REPAIR			0.5 2.0 3.0			1,4 1,4	C
34	DRYER BIN ASSEMBLY	INSPECT REPLACE REPAIR	0.5 1.0		1.0			8	B
35	CABLE ASSEMBLY	INSPECT REPLACE REPAIR	0.5 0.5		1.0			1	A
36	TIEDOWN ASSEMBLY	INSPECT REPLACE REPAIR	0.5	0.2 1.0				1,2	A
3601	BOLT AND LANYARD	INSPECT REPLACE REPAIR		0.2 0.5 0.5				1 1,2	A
37	CENTRIFUGAL PUMP UNIT	INSPECT REPLACE REPAIR	0.5 0.5	1.0				1,2	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
30	SUCTION STRAINER ASSEMBLY	INSPECT REPLACE REPAIR		0.2 0.5 0.5				1	A
39	FIRE EXTINGUISHER	INSPECT REPLACE	0.2	0.5					A
40	BRACKET ASSEMBLY	INSPECT REPLACE	0.2	0.5				1	A
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
4201	COVER ASSEMBLY	INSPECT REPLACE REPAIR	0.5	1.0 1.0				1	A
4202	GENERATOR SET	REMOVE REPAIR INSTALL			2.0 2.0 2.0			1,2	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 REPAIR		0.5 5.0	8.0			1 12,7,11,12,13	A, C

**Table 2. Tools and Test Equipment for M85-100 AND M85-200 Laundry Unit, Trailer Mounted**

(1) TOOL OR TEST EQUIPMENT REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL STOCK NUMBER	(5) TOOL NUMBER
1	O	Tool Kit, General Mechanics	5180-00-177-7033	SC5180-90-CL-N26
2	O	Shop Equipment, Automotive Vehicle	4910-00-754-0654	SC-4910-95-CL-A74
3	F	Shop Equipment, Automotive Vehicle	4190-00-754-0705	SC-4910-95-CL-A31
4	F	Shop Equipment, Electrical Repair	4940-00-294-9517	SC-4940-95-CL-B05
5	F	Heat Exchanger Installation Kit (Dryer)		MFG0676-100 (CAGE 90596)
6	F	UV Scanner Control, Box Tester	4940-01-025-5289	57AV7-1 000 (CAGE 98317)
7	O	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	O	Band-it Jr.		C002 (CAGE 70847)
11	O	Riveter, Blind, Hand	5120-01-020-7814	C-722 (5/16 x 24) (CAGE 03481)
12	O	Installation Tool (Keensert)		THXHD 813L (1 x 13) (CAGE 29372)
13	O	Installation Tool (Keensert)		THXHD 616L (3/8 x 16) (CAGE 29372)
14	O	Extractor, Lamp	5120-00-288-7679	MIL-R-6655CL4 (81349)
15	F	Grommet Press Assembly		6-1-9557-30 (CAGE 90598)
16	O	Drain Pan	4910-01-077-7845	4191T3 (39428)

**Table 3. Remarks for M85, M85-100, and M85-200 Laundry Unit, Trailer Mounted**

(1) REMARKS CODE	(2) REMARKS
A	Unit level for replacement of components.
B	Weld and straighten at direct support.
C	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.

**M85-100, AND M85-200 LAUNDRY UNIT, TRAILER MOUNTED  
MANDATORY PARTS LIST**

**SCOPE**

The mandatory replacement parts referenced in the task setups and procedures are listed here.

<b>ITEM NO.</b>	<b>NOMENCLATURE</b>	<b>PART NUMBER</b>
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	63X1 399
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
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	MILGI649ITY3CL3
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-CRI9K
39	Blind Rivet	SD64BS
40	Captive Screw	FTI600-10-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

ITEM NO.	NOMENCLATURE	PART NUMBER
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
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, DIA 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	Cotter 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



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**M85-100, AND M85-200 LAUNDRY UNIT, TRAILER MOUNTED  
EXPENDABLE AND DURABLES ITEMS LIST**

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**INTRODUCTION****Scope**

This section lists expendable and durable items that you will need to operate and maintain the M85. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

**Explanations of Columns in the Expendable / Durable Items List**

Column (1) Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., Use adhesive (WP0190 00, Table 1, Item 1).

Column (2) Level. This column includes the lowest level of maintenance that requires the listed item.

- C** Operator or Crew
- O** Unit Maintenance
- F** Direct Support Maintenance
- H** General Support Maintenance
- D** Depot Maintenance

Column (3) National Stock Number. This is the NSN assigned to the item which you can use to requisition it.

Column (4) Item Name, Description, CAGEC, and Part Number. This column provides the other information you need to identify the item.

Column (5), U/M (unit of measure) indicates how the item is issued for the National Stock Number shown in column (1).

EXPENDABLE AND DURABLE ITEMS LIST

Table 1. Expendable and Durable Items 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	8040-00-165-8614	Adhesive, one qt (81348) MMM-A-121	qt
3	0	9905-00-027-4577	Band Marker (Tiedown Straps) (96906) MS3367-2	ea
4	0	7920-00-292-9204	Cloth, Cleaning (81348) CCC-C-46	mx
5	0	8030-01-009-2590	Compound, Antiseize (08854) SLIC-TITE (thread compound)	pt
6	0	8030-00-247-2525	Compound, Sealing (81349) MIL-S-451 80	tu
7	0	8040-00-865-8991	Compound, Sealing, Type I (81349) MIL-A- 46106	kt
8	F	4020-00-515-0064	Cord, Braided (81349) MIL-C-43307, 5/16 dia, olive drab No. 7	ft
9	F	6850-00-281-1985	Drycleaning Solvent, one gal (81348) P-D-680	ga
10	0		Flux, Paste, ASTM B-486, Grade 77, Allow comp SN 50, Type OA	lb
11	F	9150-00-065-0029	Grease, Automotive and Artillery (81349) MIL-6-1 0924	tu
12	0		Hose, Rubber (81348) ZZ-H-561 AAI 015008	
13	0		Hydraulic & Lubrication Oil Mix (07819) HLP-HD46	ga
14	0	9150-00-250-0926	Petrolatum, Technical, 1.75 lb (81348) VV-P-236	cn
15	0	8030-00-221-3823	Plumbing Fixture Setting Compound, 1 lb (81348) HHC 536 Type I	lb
16	0	8010-01 -229-9561	Polyurethane Coating (CARC) (81349) MIL-C- 53039	ga
17	0	8010-01-193-0518	Primer Coating (81349) MIL-P-53022	kt
18	F	3439-00-198-3406	Solder, Tin Alloy, SN5OWS, 5 lb (81348) QQ-S- 571	lb
19	0	9905-00-537-8954	Tag, Marker (81349) MIL-T-12755 (wire tags)	bd
20	0	8030-00-889-3535	Tape, Antiseize, 21 ft (81349) MI L-T-27730	ea
21	0	5970-00-644-3167	Tape, Insulation, Electrical, 85 ft (81348) HH-I- 510	ro
22	F	8315-00-253-6293	Tape, Textile (81349) MIL-T-43566, TYI, CL4, 2W, OD7	yd
23	F	8310-00-227-1244	Thread, 1,362.5 yds (81348) V-T-285	tu
24	0	9525-00-529-9196	Wire, Nonelectrical (96906) MS20995NC51 (safety wire).	rl

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**M85-100, AND M85-200 LAUNDRY UNIT, TRAILER MOUNTED  
TORQUE LIMITS**











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**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.

**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.

FASTENER	TYPE	MINIMUM TENSILE STRENGTH	MATERIAL	BODY SIZE OR OUTSIDE DIAMETER OF FASTENER													
				#2	#3	#4	#5	#6	#8	#10	1/4	1/10	1/8	1/16	1/2	5/16	
	SAE 0-1-2	74,000 PSI	LOW CARBON STEEL									6 (8)	12 (16)	20 (27)	32 (44)	47 (64)	69 (94)
	SAE 3	100,000 PSI	MEDIUM CARBON STEEL									9 (12)	17 (23)	30 (41)	47 (64)	69 (94)	103 (140)
	SAE 5	120,000 PSI	MEDIUM CARBON HEAT TREAT STEEL									10 (14)	19 (26)	33 (45)	54 (73)	78 (106)	114 (155)
	SAE 6	133,000 PSI	MEDIUM CARBON STEEL QUENCHED TEMPERED									12 (16)	24 (33)	43 (58)	69 (94)	106 (144)	150 (203)
	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						9 (1.0)	16 (1.8)	30 (3.4)	70 (7.9)	140 (15.8)	18 (2.0)	29 (3.3)	43 (4.9)	63 (7.1)
	MACHINE SCREW YELLOW BRASS	60,000 PSI	COPPER (CU) 63% ZINC (ZN) 37%	2 (.2)	3.3 (.3)	4.4 (.5)	6.4 (.7)	8 (.9)	16 (1.8)	20 (2.3)	65 (7.3)	110 (12.4)	17 (23)	27 (37)	37 (50)	49 (66)	
	SILICONE 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)	19 (2.1)	22 (2.5)	70 (7.9)	125 (14.1)	20 (27)	30 (41)	41 (56)	53 (72)	

TYPE	BODY SIZE OR OUTSIDE DIAMETER OF FASTENER															
	3/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	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)								
SILICONE BRONZE TYPE "B"	88 (119)	117 (159)	180 (244)	250 (339)	365 (495)	450 (610)		655 (888)								

LEGEND

1. TORQUE VALUES: All numbers are in foot-pounds except those that are underlined, which are inch-pounds.
2. Numbers in parentheses are Newton-Meters.

TYPE	BODY SIZE OR OUTSIDE DIAMETER OF FASTENER															
	3/8	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8	1 3/4	1 7/8	2	2 1/4	2 1/2	2 3/4	3
SAE 0-1-2	96 (130)	155 (210)	206 (279)	310 (420)	480 (651)	675 (915)	900 (1220)	1100 (1492)	1470 (1993)	1900 (2576)	2360 (3200)	2750 (3729)	3450 (4678)	4400 (5966)	7350 (9967)	9500 (12882)
SAE 3	145 (197)	234 (317)	372 (504)	551 (747)	872 (1182)	1211 (1642)	1624 (2202)	1943 (2635)	2660 (3607)	3463 (4696)	4695 (6366)	5427 (7359)	7226 (9798)	8049 (10914)	13450 (18238)	17548 (23795)
SAE 5	154 (209)	257 (349)	382 (518)	587 (796)	794 (1017)	1105 (1498)	1500 (2034)	1775 (2407)	2425 (3288)	3150 (4211)	4200 (5695)	4550 (6110)	6550 (8882)	7175 (9729)	13000 (17628)	16000 (21696)
SAE 6	209 (283)	350 (475)	550 (746)	825 (1119)	1304 (1768)	1815 (2461)	2434 (3301)	2913 (3950)	3985 (5404)	5189 (7036)	6980 (9465)	7491 (10158)	10825 (14619)	14983 (20317)	20151 (27325)	26286 (35644)
SAE 7	21~ (292)	360 (488)	570 (773)	840 (1139)	1325 (1797)	1825 (2475)	2500 (3390)	3000 (4068)	4000 (5424)	5300 (7187)	7000 (9492)	7500 (10170)	11000 (14916)	15500 (21018)	21000 (28476)	27000 (36612)
SAE 8	230 (312)	380 (515)	600 (914)	900 (1220)	1430 (1940)	1975 (2678)	2650 (3593)	3200 (4339)	4400 (5966)	5650 (7661)	7600 (10306)	8200 (11119)	12000 (16272)	17000 (23052)	23000 (31188)	29000 (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	100 (136)	146 (198)														



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**LAUNDRY UNIT, TRAILER MOUNTED, MODEL M85-100, M85-200**  
**ILLUSTRATED LIST OF MANUFACTURED ITEMS**

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**INTRODUCTION**

1. This appendix includes complete instructions for making items authorized to be manufactured or fabricated at Unit, Direct Support, and General Support maintenance.
2. 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.
3. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list of the illustrations.

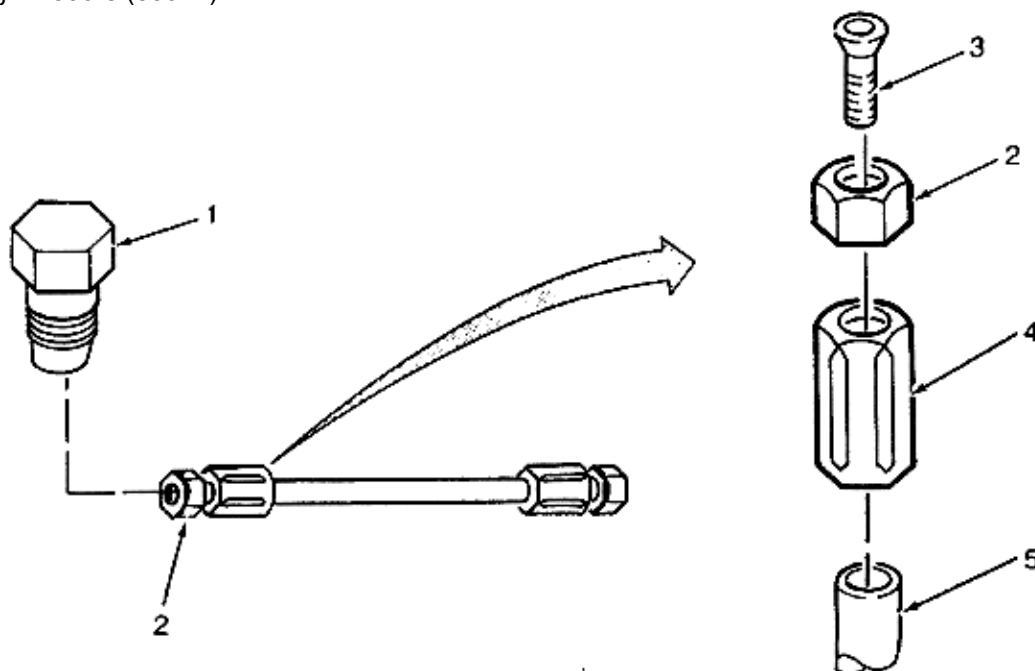
**MANUFACTURED ITEMS PART NUMBER INDEX**

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) Adapter Hose	MS 28741-5-0120 (2 each) 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.

1. Install steel plug (1) in nut (2) and tighten.
2. Remove nut (2) and nipple (3) by turning counterclockwise from adapter (4).
3. Remove adapter (4) by turning clockwise from hose (5).
4. Install adapter (4) by turning counterclockwise on hose (5).
5. Install nut (2) and nipple (3) by turning clockwise on nut (2).
6. Remove steel plug (1) from nut (2).



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**M85-100, AND M85-200 LAUNDRY UNIT, TRAILER MOUNTED  
CABLE DIAGRAMS**


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**SCOPE**

The wiring lists and diagrams show the electrical interconnect wiring components and diagrams used on the Laundry Unit. Fold outs are located in the work packages at the end of this technical manual.

**WIRING LISTS**

	<b>WORK PACKAGE</b>
Laundry Unit Interconnect Wiring List	Foldout Pages
Washer Wiring List	Foldout Pages
Dryer Wiring List	Foldout Pages

**WIRING DIAGRAM FOLDOUTS**

	<b>WORK PACKAGE</b>
Laundry Unit Interconnect Wiring Diagram	Foldout Pages
Washer Wiring Diagram	Foldout Pages
Extractor Unit Wiring Diagram	Foldout Pages
Dryer Wiring Diagram	Foldout Pages
Centrifugal Pump Unit Wiring Diagram	Foldout Pages
Air Compressor Wiring Diagram	Foldout Pages

**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

**Table 1. Laundry Interconnect Wiring List**

WIRE NO.	WIRE COLOR	FROM	TO	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	RED	WASH CON UNIT CB, 20-L3	WASH CON UNIT TB1-4	62"	M16878/2BLE0	12
17	BLUE	WASH CON UNIT CB, 20-L2	WASH CON UNIT TB1-3	62"	M16878/2BLE2	12
18	BLACK	WASH CON UNIT CB, 20-L1	WASH CON UNIT TB1-2	62"	M16878/2BLE6	12
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 L1	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	21"	M16878/2BLE5	12
29	BLACK	DRYER CB, 20 L3	DRYER KIR L3	180"	M16878/2BLE0	12
30	RED	DRYER CB, 20 L2	DRYER KIR L2	180"	M16878/2BLE2	12
31	BLUE	DRYER CB, 20 L1	DRYER KIR 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

Table 2. Washer Wiring List

WIRE NO.	WIRE COLOR	FROM	TO	WIRE LENGTH	MIL SPEC	WIRE GAUGE
1	GREEN	K2 (L1)	GND LUG	32"		14
2	WHITE	K2 (L2)	TBI-1	26"		14
3	BLACK	K2 (L3)	TBI-2	25"		14
4	GREEN	K2LT1)	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	K8CW(Li)	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)	FI	19"		18
21	BLACK	FI	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
26	BLACK	Kil (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)	ii"		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	KI 1 (2)	P3-15	30"		18
50	BLACK	P1-6	K11 (8)	35"		18
51	BLACK	P1-ii	K11 (5)	24"		18
52	BLACK	P1-10	K4 (13)	17"		18
53	BLACK	K9(ii)	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	Ki 1(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

Table 2. Washer Wiring List- continued

WIRE NO.	WIRE COLOR	FROM	TO	WIRE LENGTH	MIL SPEC	WIRE GAUGE
68	BLACK	TIMER ii (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
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-II	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	KI (1)	K3 (5)	4"		18
93	BLACK	KI (1)	P2-1	25"		18
94	BLACK	K10(6)	KI (9)	15"		18
95	BLACK	CCW SW (COM)	PSI (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	PSI (BRASS)	K14 (COM)	16"		18
100	BLACK	K14 (NC)	K12 (13)	28"		18
101	BLUE	K4 (9)	K14 (COIL -)	25"		22
102	RED	Ki (10)	K3 (10)	4"		22
103	WHITE	HOTWTRSOL	COLD WTR SOL	7"		18
104	WHITE	COLD WTR SQL	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 SQL	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
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	-	-	-	-	-	-

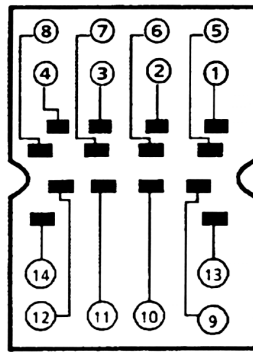
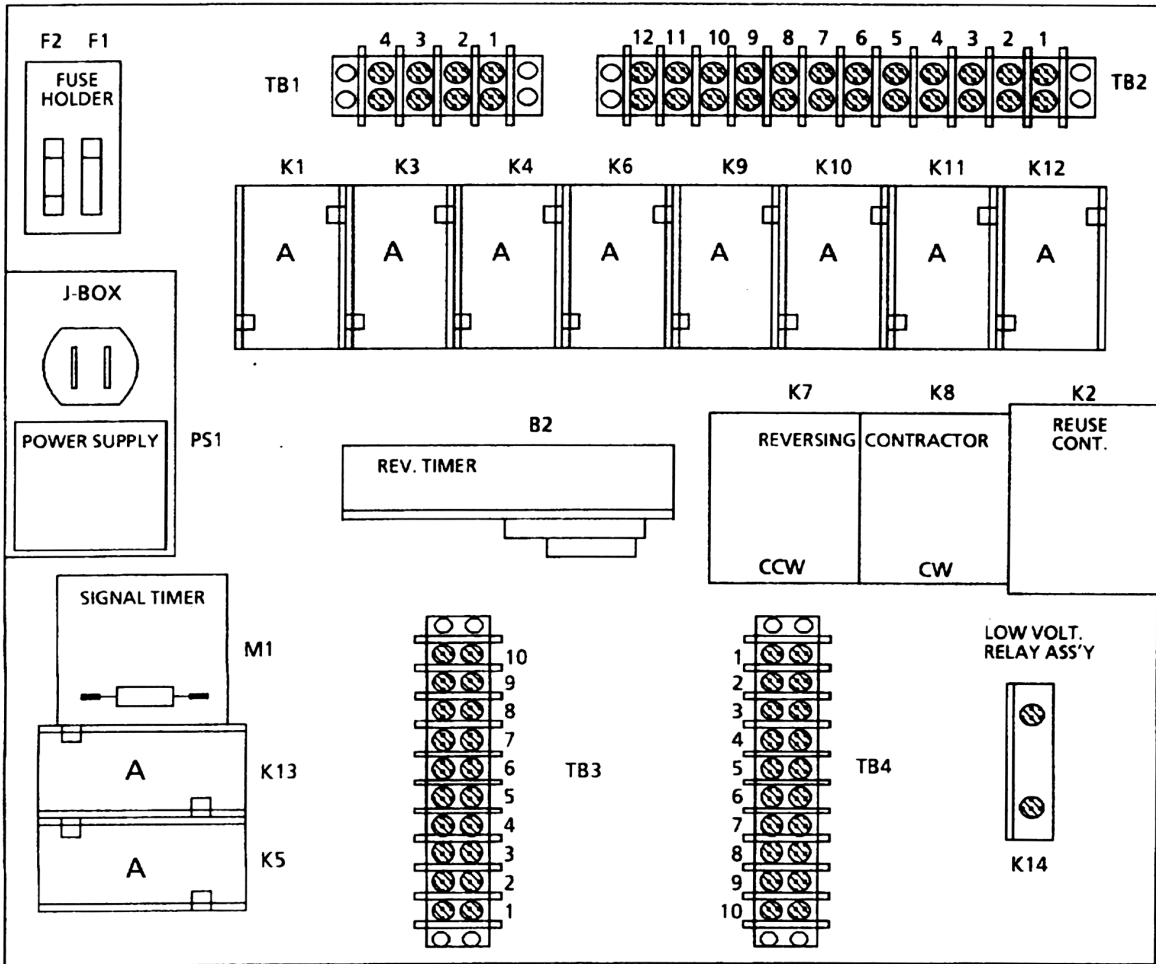
Table 2. Washer Wiring List- continued

WIRE NO.	WIRE COLOR	FROM	TO	WIRE LENGTH	MIL SPEC	WIRE GAUGE
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
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	P4-11	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
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
180	BLACK	AUTO/MAN #6	P1-4	7"		18
181	BLACK	SIG. CANCEL (NO)	P2-2	9"		18
182	RED	P2-6	RI (CCW)	19"		22
183	RED LEAD (LED)	Ri (CENTER)	ON" LED	-		-
184	RED	RI (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

Table 2. Washer Wiring List- continued

WIRE NO.	WIRE COLOR	FROM	TO	WIRE LENGTH	MIL SPEC	WIRE GAUGE
198	BLUE	TB3-10	P4-6	14"		22
199	BLUE	TB3-3	P4-7	14"		22
200	BLUE	TB4-1	P4-8	14"		22
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	PS1 (-)	TB3-6	17"		
207	BLUE	P2-10	TB3-6	14"		22
208	SOLID, DC	PS1(+)	TB3-5	17"		
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 SQL	42"	/	18
220	BLACK	TB2-4	WASTE DRN SQL	42"	(	18
221	BLACK	TB2-7	REUSE WTR WOL	38"	)	18
222	BLACK	TB2-5	HOT WTR SQL	36"		18
223	BLACK	TB2-6	COLD WTR SQL	36"		18
224	WHITE	TB2-8	REUSE DRN SQL	36"		18
225	-	-	-	-	-	-
226	-	-	-	-	-	-
227	-	-	-	-	-	-
228	-	-	-	-	-	-
229	-	TB4-1	LEVEL SENSOR 8	-	-	-
230	-	TB4-2	LEVEL SENSOR 9	-	-	-
231	-	TB3-2	LEVEL SENSOR 10	-	-	-
232	-	TB4-3	LEVEL SENSOR 11	-	-	-
233	-	TB4-4	LEVEL SENSOR 12	-	-	-
234	-	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	-	-	-	-	-	-
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

### Washer Wiring List Reference Diagram



A

Table. 3 Dryer Wiring List

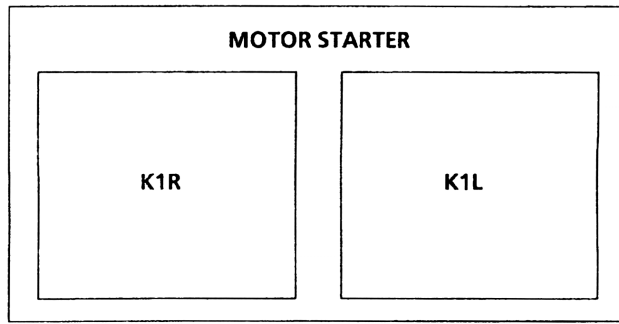
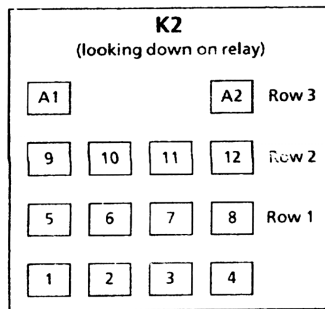
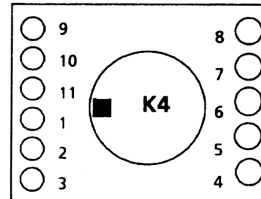
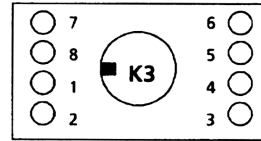
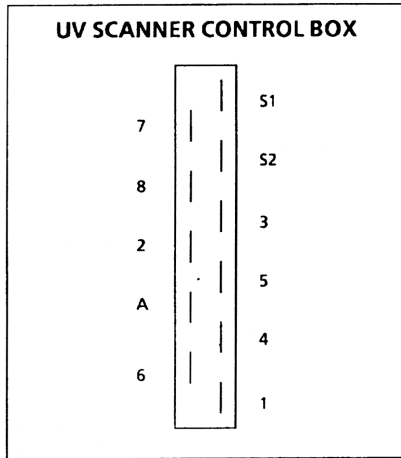
WIRE NO.	WIRE COLOR	FROM	TO	WIRE LENGTH	MIL SPEC	WIRE GAUGE
1	BLACK	S1-L1	TB-1	26"	MIL -W-16878/2-BLE-0	12
2	RED	S1- L2	TB-2	26"	MIL -W-16878/2-BLE-2	12
3	BLUE	S1-L3	TB-3	26	MIL -W-16878/2-BLE-6	12
4	BLACK	TB-1	KIR-L1	13"	MIL -W-16878/2-BLE-0	12
5	RED	TB-2	KIR-L2	12"	MIL -W-16878/2-BLE-2	12
6	BLUE	TB-3	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
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
47	WHITE	K4-1	K4-2	1.5"	MIL-W-16878/1-BJE-9	16
48	-	K1R-A1	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/ BLACK	B2-L2	TH1-1	26"	-	B2 WHITE/ 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



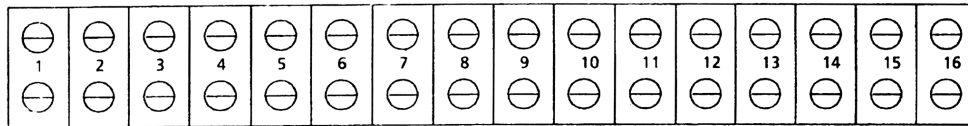
Table. 3 Dryer Wiring List

WIRE NO.	WIRE COLOR	FROM	TO	WIRE LENGTH	MIL SPEC	WIRE GAUGE
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

**Dryer Wiring List Reference Diagram**



**TERMINAL BOARD (TB)**



**M85,M85-100 AND M85-200 LAUNDRY UNIT, TRAILER MOUNTED  
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By Order of the Secretary of the Army:

PETER J. SCHOOMAKER  
General, United States Army  
*Chief of Staff*

Official:

  
SANDRA R. RILEY  
*Administrative Assistant to the  
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To: amssbriml@natick.army.mil

Subject: DA Form 2028

1. From: Joe Smith
2. Unit: home
3. Address: 4300 Park
4. City: Hometown
5. St: MO
6. Zip: 77777
7. Date Sent: 19-OCT-93
8. Pub no: 55-2840-229-23
9. Pub Title: TM
10. Publication Date: 04-JUL-85
11. Change Number: 7
12. Submitter Rank: MSG
13. Submitter FName: Joe
14. Submitter MName: T
15. Submitter LName: Smith
16. Submitter Phone: 123-123-1234
17. Problem: 1
18. Page: 2
19. Paragraph: 3
20. Line: 4
21. NSN: 5
22. Reference: 6
23. Figure: 7
24. Table: 8
25. Item: 9
26. Total: 123
27. Text:

This is the text for the problem below line 27.





<b>RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS</b> For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	<b>DATE</b> 21 October 2003
<b>TO:</b> (Forward to proponent of publication or form) (Include ZIP Code) COMMANDER U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND ATTN: AMSSB-RIM-L KANSAS STREET NATICK, MA 01760-5052						<b>FROM:</b> (Activity and location) (Include ZIP Code)  <i>PFC Jane Doe</i> <i>CO A 3<sup>rd</sup> Engineer BR</i> <i>Ft. Leonardwood, MO 63108</i>	
<b>PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS</b>							
<b>PUBLICATION/FORM NUMBER</b> TM 10-1670-296-23&P				<b>DATE</b> 30 October 2002	<b>TITLE</b> Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems		
<b>ITEM NO.</b>	<b>PAGE NO.</b>	<b>PARA-GRAPH</b>	<b>LINE NO. *</b>	<b>FIGURE NO.</b>	<b>TABLE NO.</b>	<b>RECOMMENDED CHANGES AND REASON</b> <i>(Provide exact wording of recommended changes, if possible).</i>	
	0036 00-2				1	<i>In table 1, Sewing Machine Code Symbols, the second sewing machine code symbol should be MD ZZ not MD 22.</i>  <i>Change the manual to show Sewing Machine, Industrial: Zig-Zag; 308 stitch; medium-duty; NSN 3530-01-181-1421 as a MD ZZ code symbol.</i>	
<small>*Reference to line numbers within the paragraph or subparagraph.</small>							
<b>TYPED NAME, GRADE OR TITLE</b>  Jane Doe, PFC				<b>TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION</b>  508-233-4141		<b>SIGNATURE</b>  Jane Doe <i>Jane Doe</i>	

<b>TO:</b> <i>(Forward direct to addressee listed in publication)</i> COMMANDER U.S. ARMY SOLDIER AND BIOLOGICAL CHEMICAL COMMAND ATTN: AMSSB-RIM-L KANSAS STREET NATICK, MA 01760-5052	<b>FROM:</b> <i>(Activity and location) (Include ZIP Code)</i> <i>PFC Jane Doe</i> <i>CO A 3<sup>rd</sup> Engineer BR</i> <i>Ft. Leonardwood, MO 63108</i>	<b>DATE</b> 21 October 2003
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**PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS**

<b>PUBLICATION NUMBER</b> TM 10-1670-296-23&P	<b>DATE</b> 30 October 2002	<b>TITLE</b> Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems
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PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
0066 00-1					4			<i>Callout 16 in figure 4 is pointed to a <u>D-Ring</u>. In the Repair Parts List key for figure 4, item 16 is called a <u>Snap Hook</u>. Please correct one or the other.</i>

SAMPLE

**PART III – REMARKS** *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

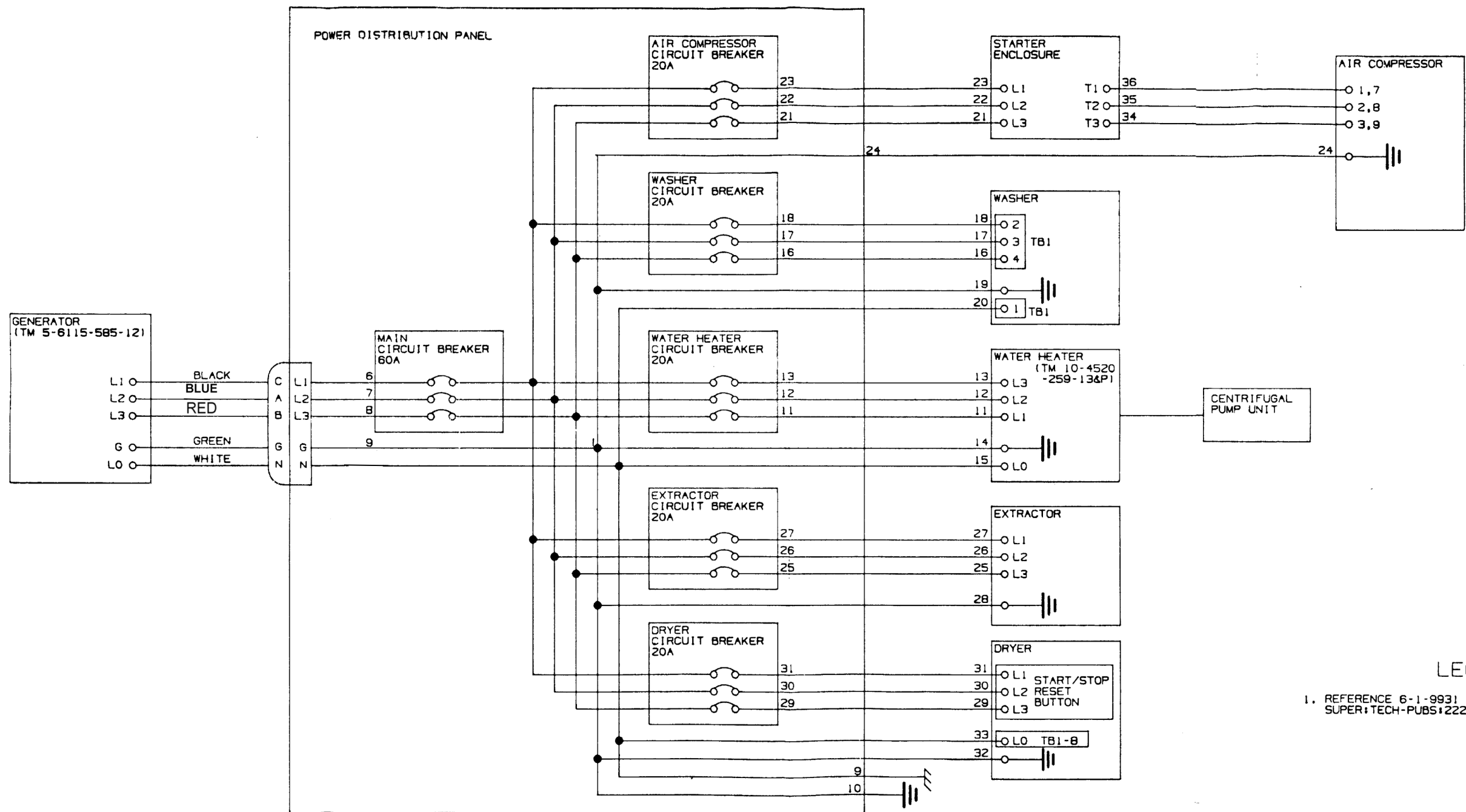
TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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<b>RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS</b>						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
For use of this form, see AR 25-30; the proponent agency is ODISC4.							
<b>TO:</b> (Forward to proponent of publication or form) (Include ZIP Code) Commander, U.S. Army Tank-automotive & Armament Command ATTN: AMSTA LC-CECT, Kansas Street Natick, MA 01760-5052						<b>FROM:</b> (Activity and location) (Include ZIP Code)	
<b>PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS</b>							
PUBLICATION/FORM NUMBER TM 10-3510-222-24				DATE 30 May 2005		TITLE Unit, Direct Support, And General Support Maintenance Manual for Laundry Unit, Trailer Mounted, M85 Models: M85-100, M85-200	
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Provide exact wording of recommended changes, if possible).</i>	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOOVON, PLUS EXTENSION		SIGNATURE	

<b>TO:</b> (Forward direct to addressee listed in publication)				<b>FROM:</b> (Activity and location) (Include ZIP Code)				<b>DATE</b>	
<b>PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS</b>									
PUBLICATION NUMBER TM 10-3510-222-24				DATE 30 May 2005			TITLE Unit, Direct Support, And General Support Maintenance Manual for Laundry Unit, Trailer Mounted, M85 Models: M85-100, M85-200		
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<b>PART III – REMARKS</b> (Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)									
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION				SIGNATURE	

<b>RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS</b>						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
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<b>TO:</b> (Forward to proponent of publication or form) (Include ZIP Code) Commander, U.S. Army Tank-automotive & Armament Command ATTN: AMSTA LC-CECT, Kansas Street Natick, MA 01760-5052						<b>FROM:</b> (Activity and location) (Include ZIP Code)	
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<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE	

<b>TO:</b> (Forward direct to addressee listed in publication)				<b>FROM:</b> (Activity and location) (Include ZIP Code)				<b>DATE</b>	
<b>PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS</b>									
PUBLICATION NUMBER TM 10-3510-222-24				DATE 30 May 2005			TITLE Unit, Direct Support, And General Support Maintenance Manual for Laundry Unit, Trailer Mounted, M85 Models: M85-100, M85-200		
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<b>PART III – REMARKS</b> (Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)									
TYPED NAME, GRADE OR TITLE				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION				SIGNATURE	

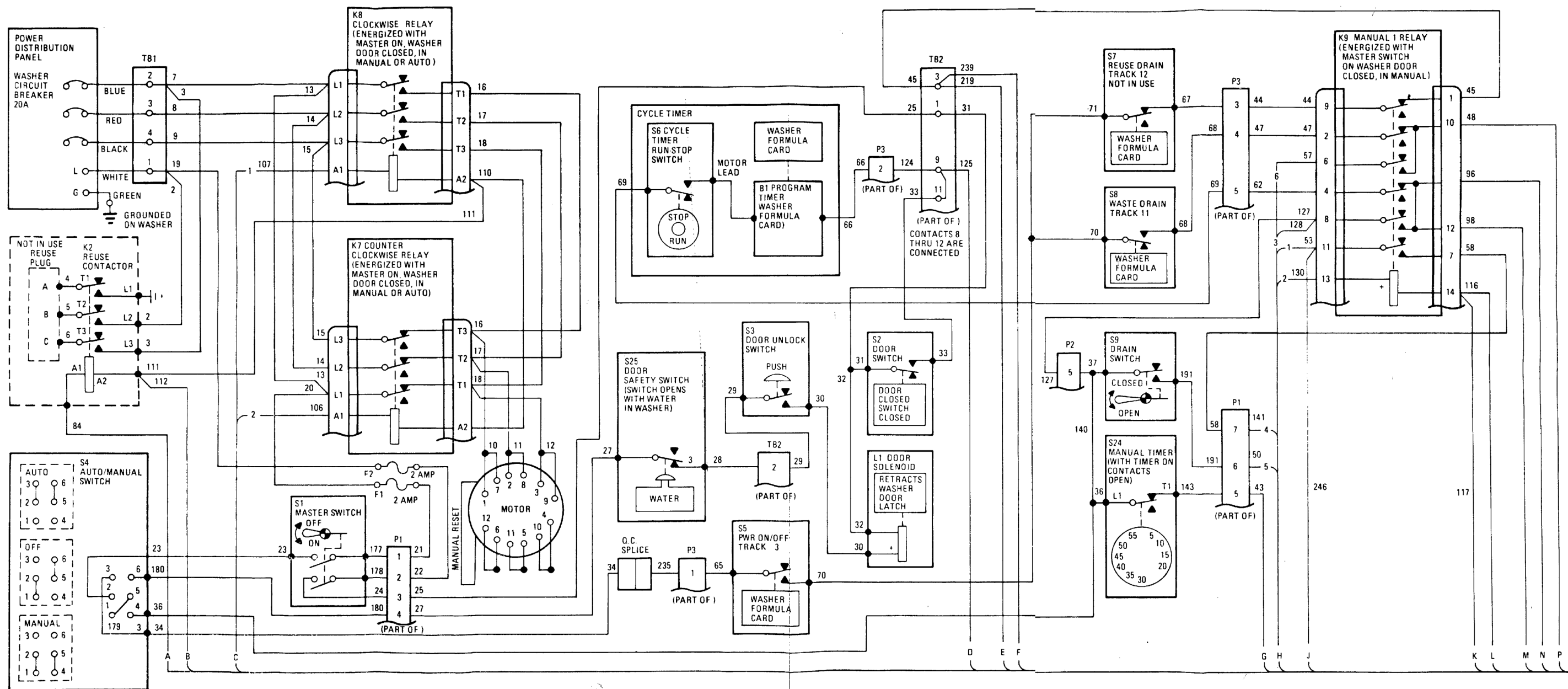


**LEGEND**  
 1. REFERENCE 6-1-9931 (DIRECTORY:EAS11:000031  
 SUPER:TECH-PUBS:222-24-FO-1-LAUNDRY)

Figure FO-1 Laundry Unit Interconnect Wiring Diagram

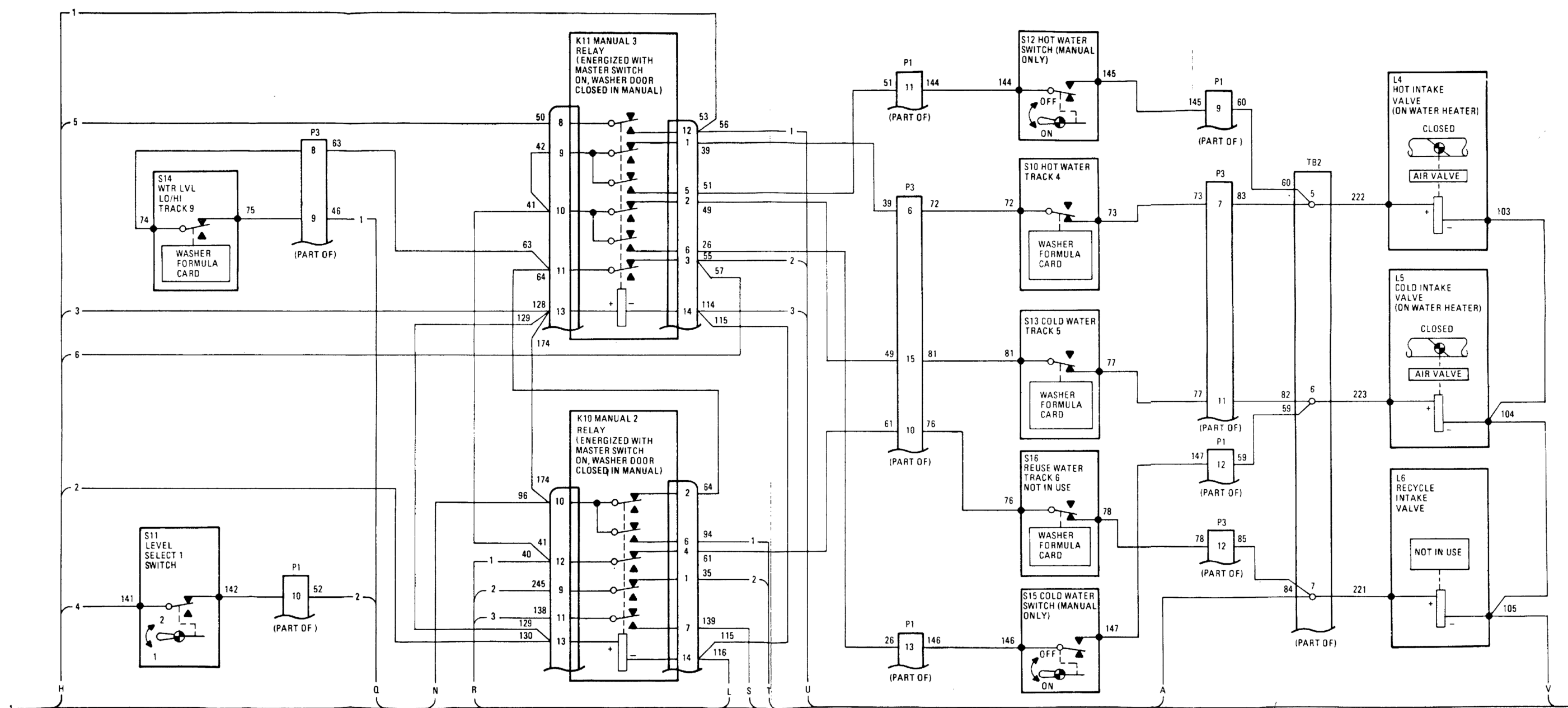






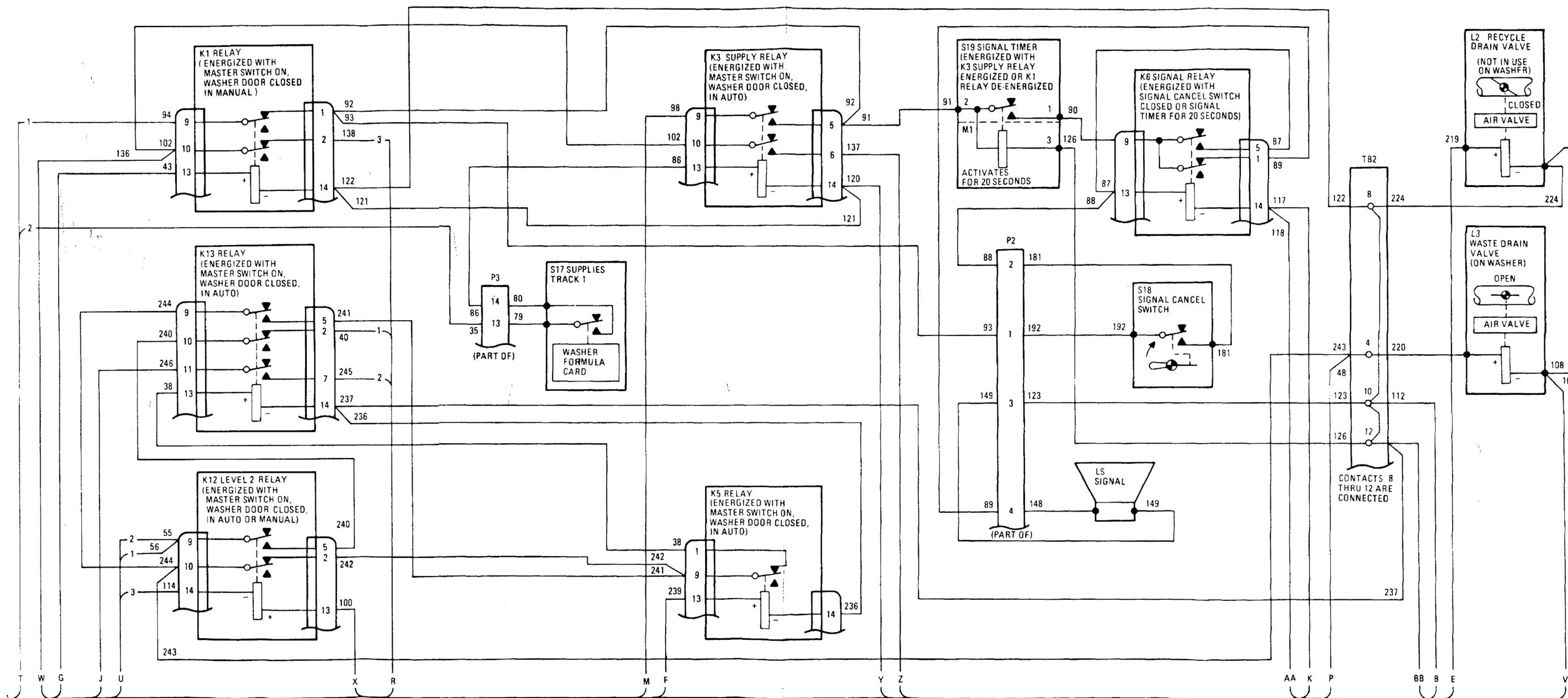
FO-2 Washer Wiring Diagram (Sheet 1 of 5)





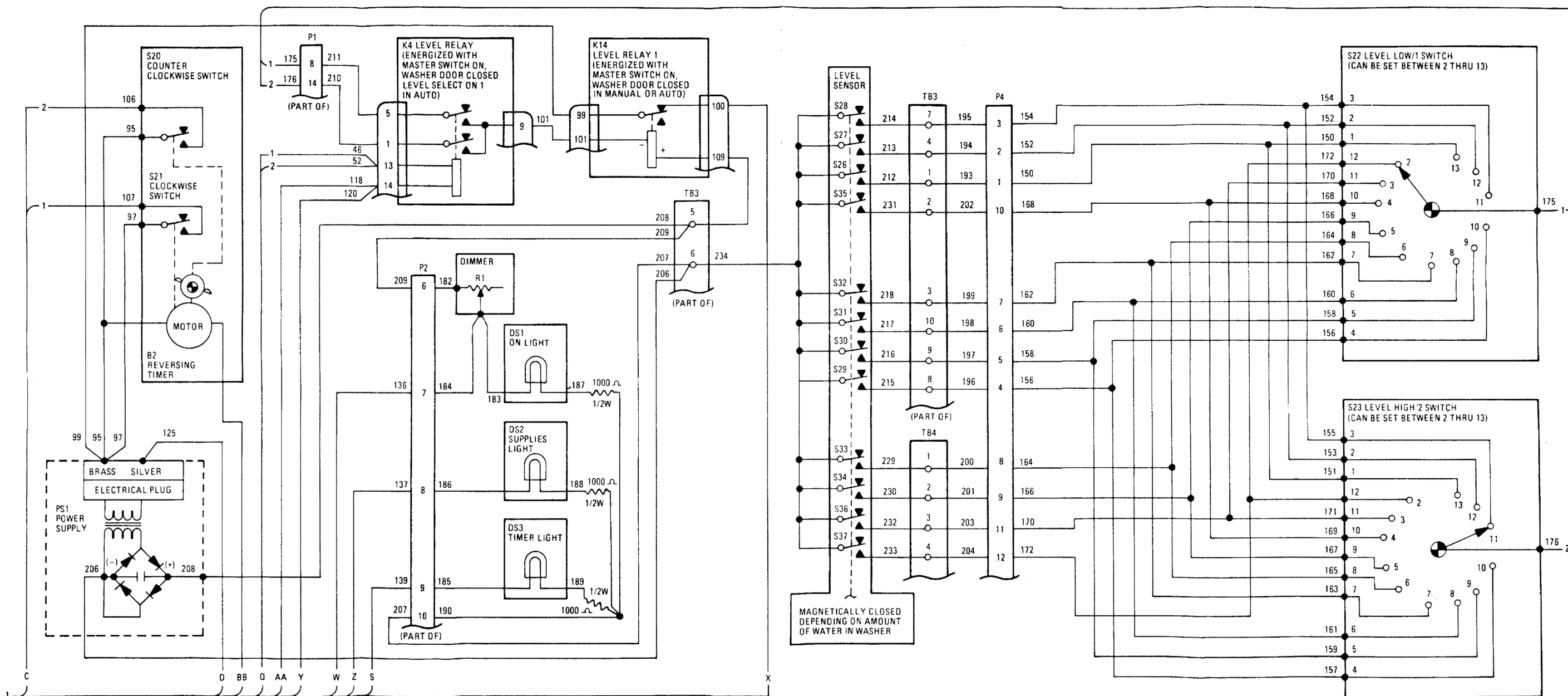
FO-2 Washer Wiring Diagram (Sheet 2 of 5)





FO-2 Washer Wiring Diagram (Sheet 3 of 5)

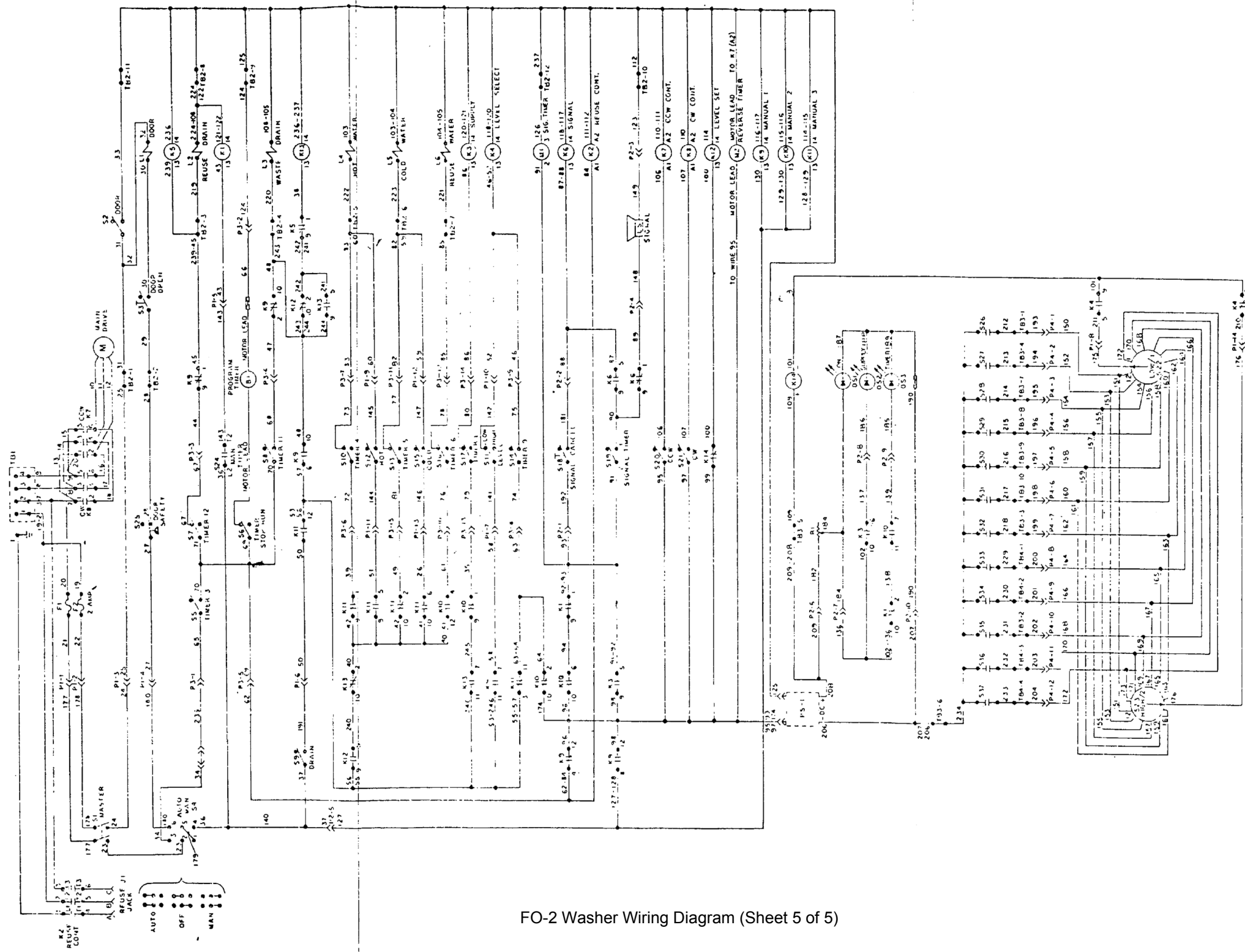




FO-2 Washer Wiring Diagram (Sheet 4 of 5)

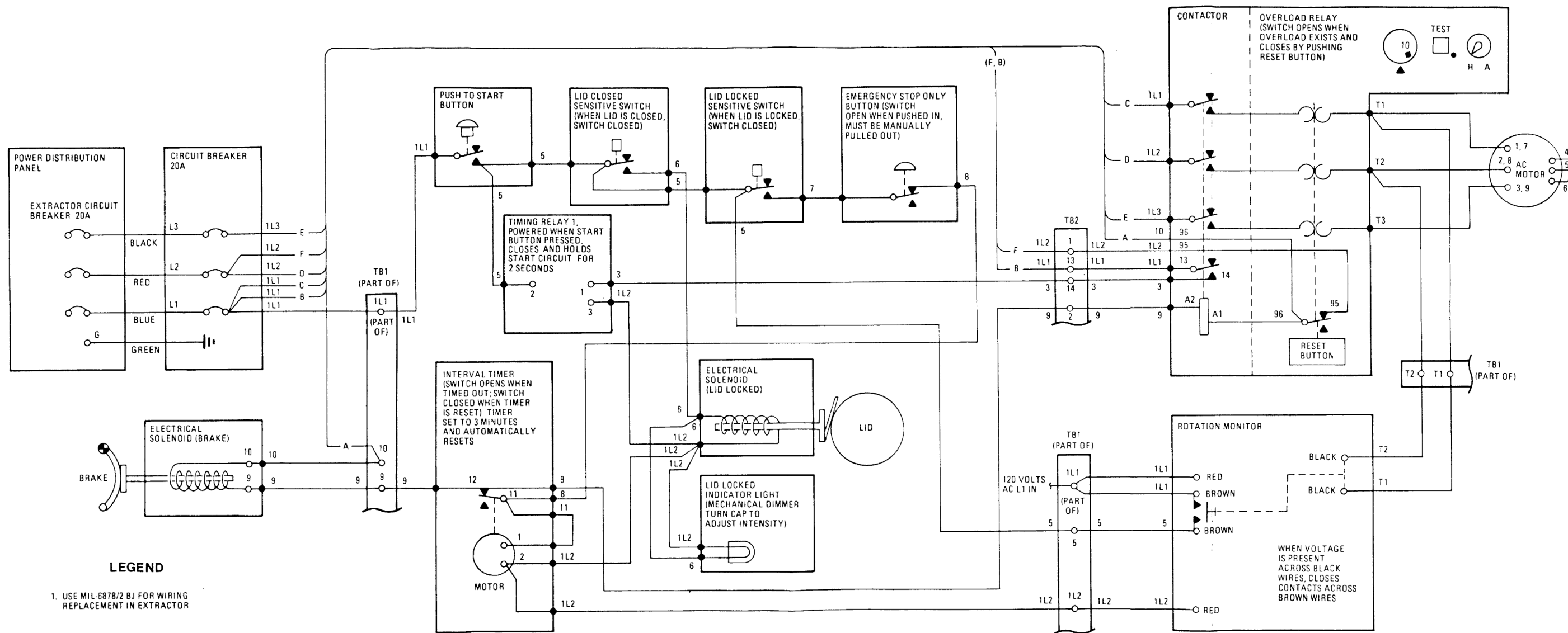






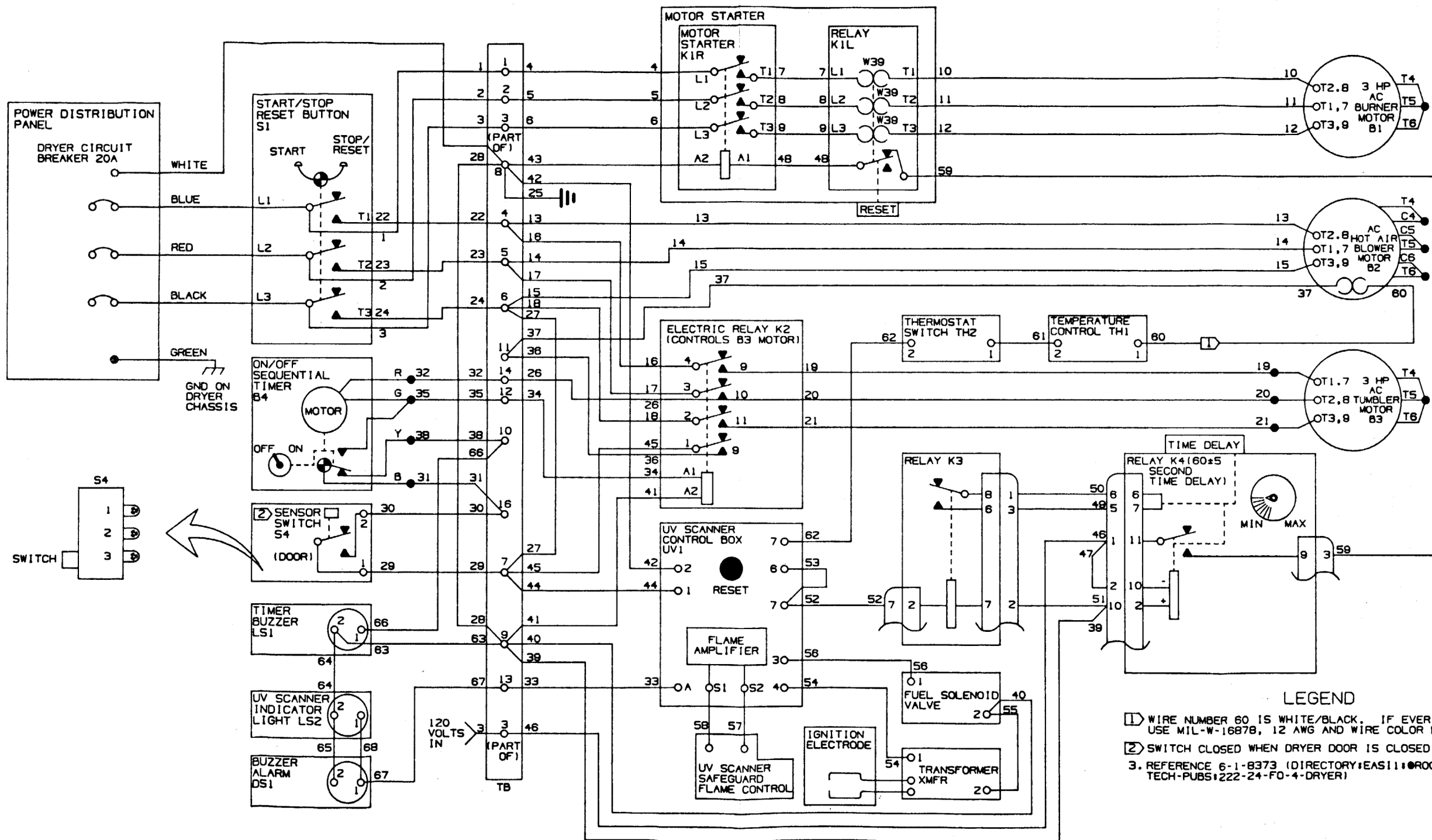
FO-2 Washer Wiring Diagram (Sheet 5 of 5)





Extractor Wiring Diagram

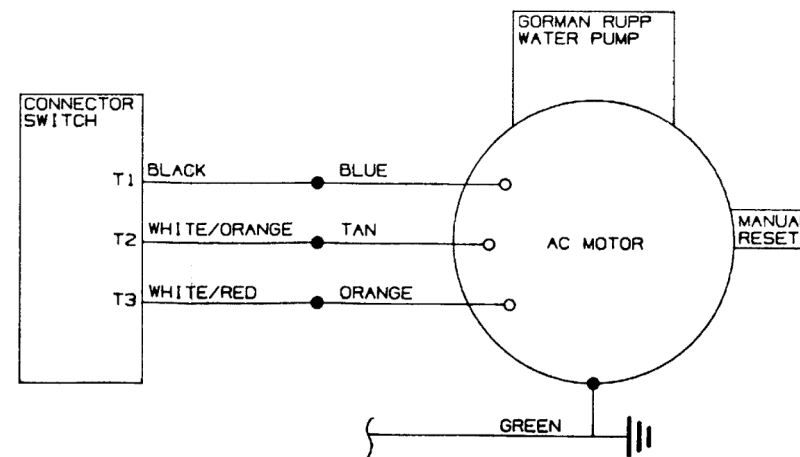
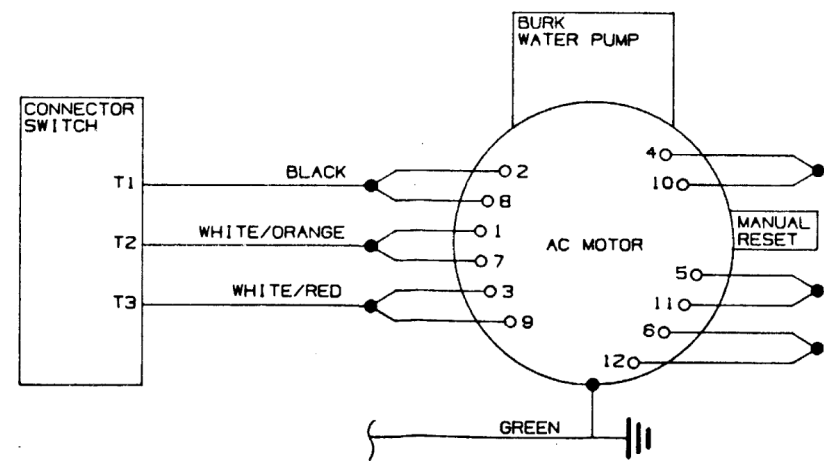
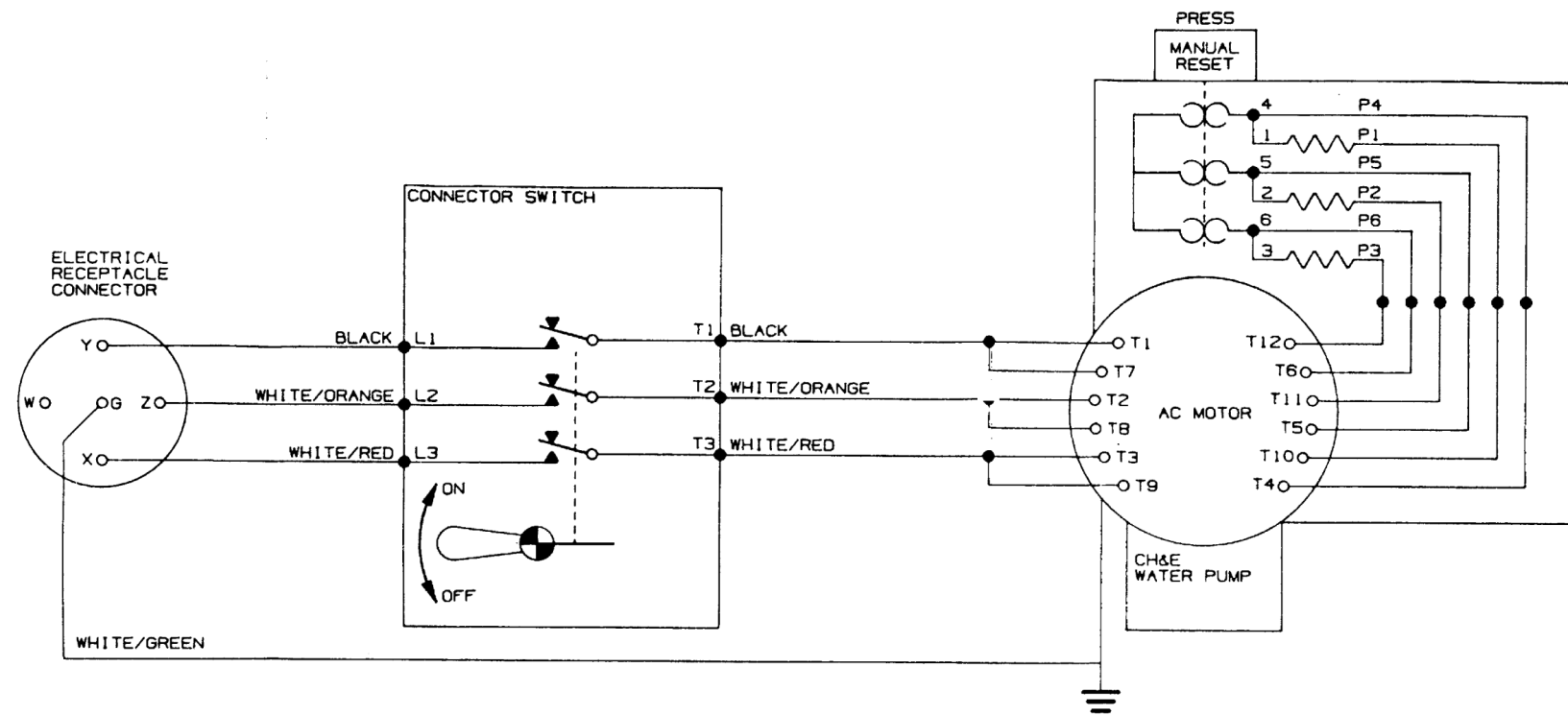




Dryer Wiring Diagram

- LEGEND**
- ① WIRE NUMBER 60 IS WHITE/BLACK. IF EVER REPLACED, USE MIL-W-16878, 12 AWG AND WIRE COLOR BROWN.
  - ② SWITCH CLOSED WHEN DRYER DOOR IS CLOSED.
  - 3. REFERENCE 6-1-8373 (DIRECTORY:EAS111@ROOT3:SUPER:TECH-PUBS:222-24-FO-4-DRYER)





Centrifugal Water Pump Wiring Diagram

LEGEND

1. REPLACEMENT WIRING FOR CENTRIFUGAL PUMP UNIT IS AS FOLLOWS:

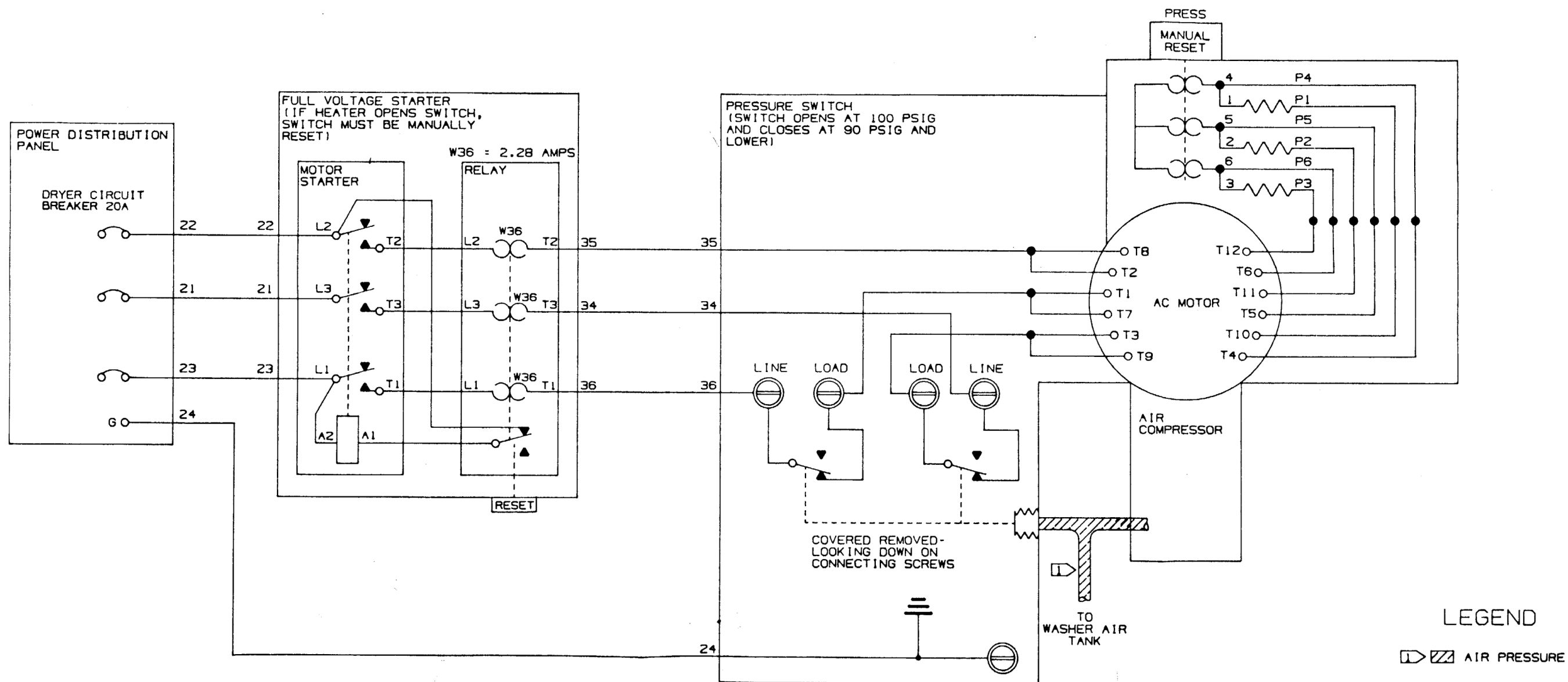
MIL-SPEC	COLOR
MIL-W-5086/2-14-92	WHITE/RED
MIL-W-5086/2-14-93	WHITE/ORANGE
MIL-W-5086/2-14-0	BLACK
MIL-W-5086/2-14-95	WHITE/GREEN

WIRE LENGTH: AS REQUIRED

2. REFERENCE 6-1-9932 (DIRECTORY: EAS111@ROOT3; SUPER: TECH-PUBS: 222-24-F0-5-PUMP)







FO-2 Washer Wiring Diagram (Sheet 5 of 5)



# The Metric System and Equivalents

## Linear Measure

1 centimeter = 10 millimeters = .39 inch  
 1 decimeter = 10 centimeters = 3.94 inches  
 1 meter = 10 decimeters = 39.37 inches  
 1 dekameter = 10 meters = 32.8 feet  
 1 hectometer = 10 dekameters = 328.08 feet  
 1 kilometer = 10 hectometers = 3,280.8 feet

## Weights

1 centigram = 10 milligrams = .15 grain  
 1 decigram = 10 centigrams = 1.54 grains  
 1 gram = 10 decigrams = .035 ounce  
 1 dekagram = 10 grams = .35 ounce  
 1 hectogram = 10 dekagrams = 3.52 ounces  
 1 kilogram = 10 hectograms = 2.2 pounds  
 1 quintal = 100 kilograms = 220.46 pounds  
 1 metric ton = 10 quintals = 1.1 short tons

## Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce  
 1 deciliter = 10 centiliters = 3.38 fl. ounces  
 1 liter = 10 deciliters = 33.81 fl. ounces  
 1 dekaliter = 10 liters = 2.64 gallons  
 1 hectoliter = 10 dekaliters = 26.42 gallons  
 1 kiloliter = 10 hectoliters = 264.18 gallons

## Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch  
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches  
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet  
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet  
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres  
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

## Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch  
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches  
 1 cu. meter = 1000 cu. decimeters = 35.31 feet

## Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

## Temperature (Exact)

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

