

TM9-2330-358-14&P

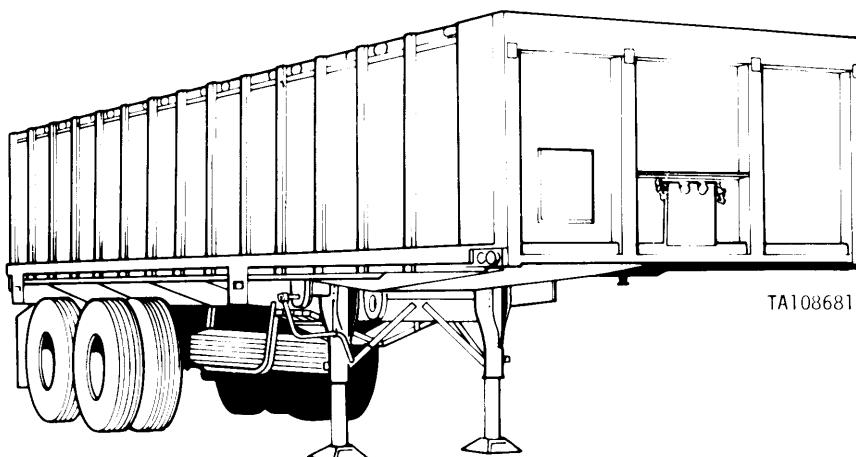
This manual supersedes TM9-2330-358-14&P dated 20 February 1981, including all changes.

TECHNICAL MANUAL

OPERATOR'S, UNIT,
INTERMEDIATE DIRECT SUPPORT
AND
INTERMEDIATE GENERAL SUPPORT
MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LISTS)

FOR

SEMITRAILER, TACTICAL, DUAL PURPOSE
BREAKBULK/CONTAINER TRANSPORTER,
22-1/2 TON,
M871 (NSN 2330-00-122-6779)
M871A1 (NSN 2330-01-226-0701)



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Distribution: "Approved for public release; distribution is unlimited".

HEADQUARTERS, DEPARTMENT OF THE ARMY

DECEMBER 1987

This copy is a reprint which includes current pages from Change 1.

WARNING

Do not tow the M871 or M871A1 with the M52, M52A1, or M52A2 truck tractor. The M52 five ton truck tractor's inherent design capabilities are not compatible with the semitrailer, and if used would result in a serious compromise to the safety of personnel and equipment.

When towing the semitrailer with the M818, the fifth wheel wedges on the M818 are to be in the locked-in (pushed in) mode for highway and secondary road use, and in the locked-out (pulled out) mode for cross country operation.

Be sure all personnel stand clear of the towing vehicle and semitrailer during coupling operations.

WARNING

Under no circumstances shall speeds exceed the following:

Highway	55 mph/88 km/h
Gravel/Dirt	20 mph/32 km/h
Off-Road	10 mph/16 km/h

Failure to observe the above may result in personnel injury and damage to equipment.

WARNING

Wear protective goggles when opening air reservoir drain cock and avoid contact with the air stream.

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138° F (59° C).

WARNING

A hot brake can cause serious burns. Exercise extreme caution before attempting to touch drum after use. Slowly move hand toward drum. If drum is overheated, radiated heat will be felt before actually touching drum.

WARNING

Do not place any part of your body under a container during the loading or unloading of the semitrailer.

WARNING

Do not tow the semitrailer with a unsecured cargo container.

When transporting the 8 ft-6in. commercial container, the towing vehicle fifth wheel height must not exceed 50.4 in. (1.28 meters) in order to comply with the 157.48 in. (4 meter) overall height limit for USAREUR. The M915 fifth wheel meets this requirement.

WARNING

Do not get under the semitrailer while slinging operations are underway. Do not lift a loaded semitrailer. Failure to observe this warning could result in serious injury or damage to personnel and equipment.

Do not lift the semitrailer without a ground-guide, using a 30 ft. guideline attached to either one of rear lifting eyes. Without ground-guide steering assistance serious injury or damage could result to personnel and equipment.

WARNING

Disconnect electrical power from vehicle prior to making any repairs on the electrical system. Failure to do so could result in personal injury.

WARNING

Jack must be positioned directly under axle to prevent slippage. Direct all personnel to stay clear of vehicle when vehicle is supported in the air. Failure to do so could result in serious injury and damage to equipment.

WARNING

Use extreme caution while using steam cleaning equipment to avoid potentially serious burns. To prevent injury, user must wear protective goggles or face shield when using steam cleaning equipment.

WARNING

Compressed air for cleaning purposes will not exceed 30 psi. Particles blown by compressed air are hazardous. Make certain the air stream is directed away from user and other personnel in the area. To prevent injury, user must wear protective goggles or face shield when using compressed air.

WARNING

Do not use a dry brush or compressed air to clean brakeshoes. There may be asbestos dust on brakeshoes which can be dangerous to your health if you breath it. Brakeshoe must be wet, and a soft bristle brush must be used. Rinse and allow to dry.

WARNING

It is essential that torque values be maintained to insure proper operation of the suspension system. The torque values of the suspension bolts and nuts must be checked after the initial break-in period of 1,000 miles (1,500 km) and every three months thereafter. Failure to do so may cause injury to personnel, damage to equipment, and will void the warranty.

CHANGE

NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington D. C., 4 May 1993

**OPERATOR'S, UNIT, INTERMEDIATE DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING
REPAIR PARTS AND SPECIAL TOOLS LISTS)**

FOR

**SEMITRAILER, TACTICAL, DUAL PURPOSE
BREAKBULK/CONTAINER TRANSPORTER, 22-1/2 TON
M871 (NSN 2330-00-122-6779)
M871A1 (NSN 2330-01-226-0701)**

Current as of 18 January 1993

TM 9-2330-358-14&P dated 17 December 1987, is changed as follows:

1. Remove old pages and insert new pages.
2. New or changed material is indicated by an asterisk or by a vertical bar in the margin of the page.

Remove Pages	Insert Pages
<i>iii and iv</i>	<i>iii and iv</i>
<i>F-1 through Figure 4</i>	<i>F-1 through Figure 4</i>
<i>5-1 and 5-2</i>	<i>5-1 and 5-2</i>
<i>6-1 through Figure 8</i>	<i>6-1 through Figure 8</i>
<i>11-1 through 18-2</i>	<i>11-1 through 18-2</i>
<i>19-1 through Figure 22</i>	<i>19-1 through Figure 22</i>
<i>23-1 and 23-2</i>	<i>23-1 and 23-2</i>
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<i>Figure 34 (sheet 1 of 4) through 34-2</i>	<i>Figure 34 (sheet 1 of 4) through 34-2</i>
<i>35-1 through Figure 37</i>	<i>35-1 through Figure 37</i>
<i>38-1 and 38-2</i>	<i>38-1 and 38-2</i>
<i>40-1 and 40-2</i>	<i>40-1 and 40-2</i>
<i>45-1 and Figure 46</i>	<i>45-1 and Figure 46</i>
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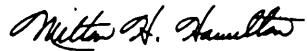
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General, United States Army
Chief of Staff

Official:



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

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HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 17 December 1987

OPERATOR, UNIT, INTERMEDIATE DIRECT SUPPORT AND
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FOR

SEMITRAILER, TACTICAL, DUAL PURPOSE
BREAKBULK/(CONTAINER TRANSPORTER, 22-1/2 TON
M871 (NSN 2330-00-122-6779)
M871A1 (NSN 2330-01-226-0701)

Current as of 15 November 1987.

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, direct to: Commander, US Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-50000 A reply will be furnished to you.

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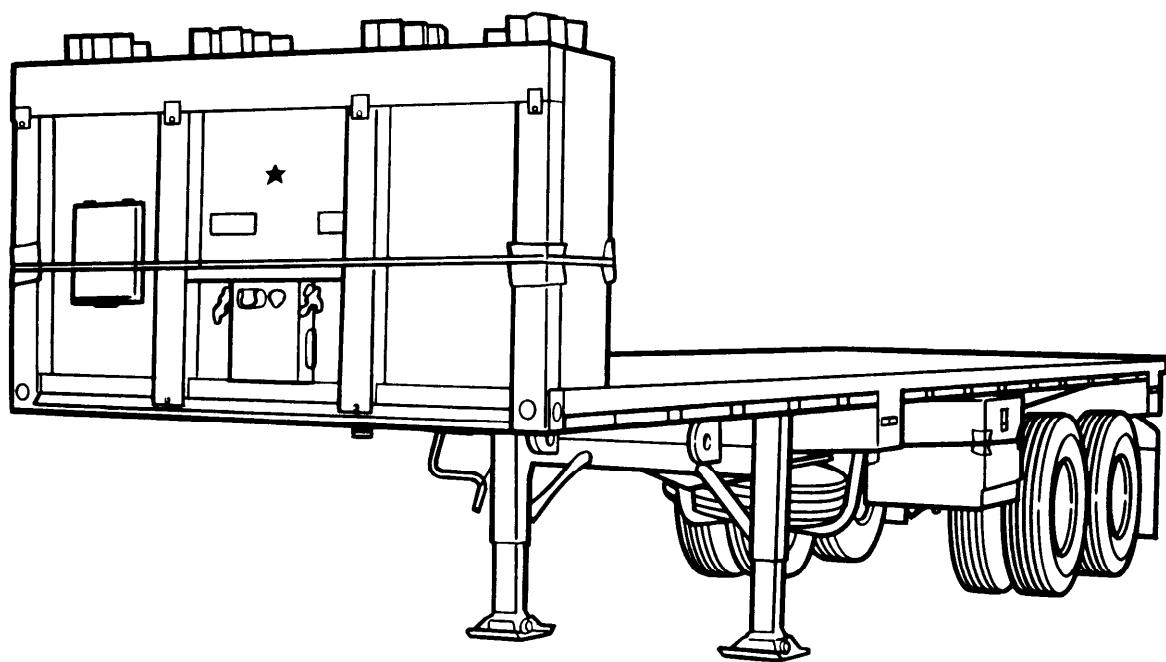


Figure 1-1. Semitrailer, M871, M871A, left front view

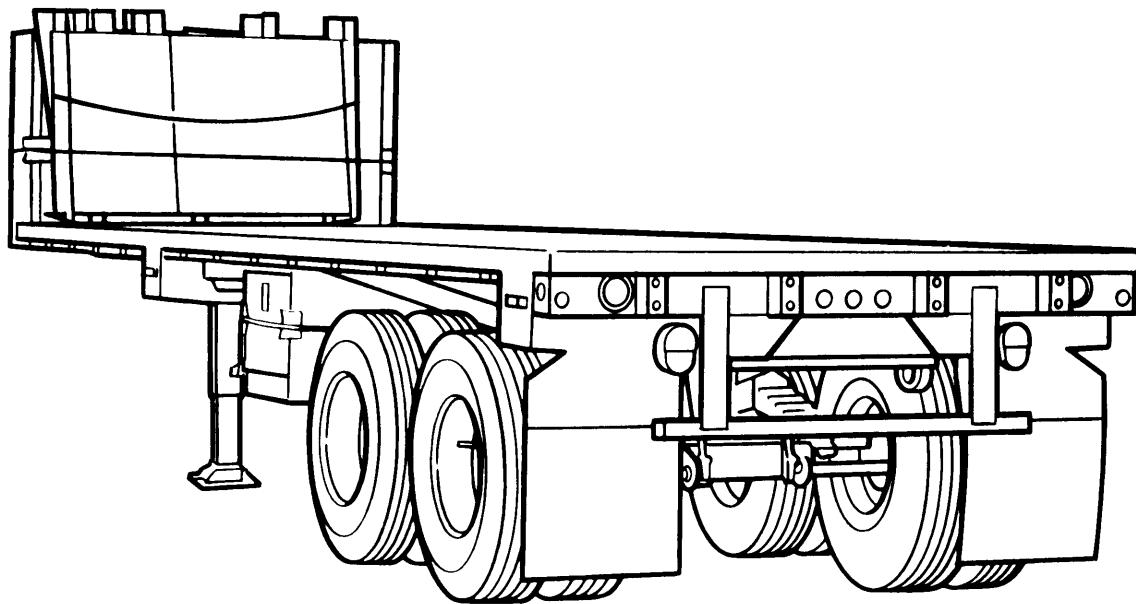


Figure 1-2. Semitrailer, H871, H871A1, left rear view

CHAPTER 1

INTRODUCTION

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1-1. SCOPE

a. Type of Manual. Operator's, Organizational, Direct Support and General Support Maintenance Manual (including Repair Parts and Special Tools Lists).

b. Model Number and Equipment Name.

M871, M871A1, Semicrailer, Tactical: 22 1/2-ton, Dual Purpose, Breakbulk/Container Transporter.

c. Purpose of Equipment. The semitrailers are intended for use in transporting containerized (ANSI/ISO) or breakbulk cargo on highways or off roads.

d. Special Limitations on Equipment. Do not exceed the load and speed limitation of the semitrailer. The semitrailer is designed to be towed over smooth, hard-surfaced roads with loads up to 22 1/2-tons (20,250 kg) at speeds as high as 55 mph (88 km/h). It can also be towed over unimproved roads, trails and open rolling terrain with loads up to 22 1/2-tons (20,250 kg) at a sustained speed of 10 mph (16 km/h). The semitrailer should be operated only after being serviced and equipped for existing climatic conditions.

1-2. MAINTENANCE FORMS AND RECORDS

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

1-3. DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE

Procedures for destruction of Tank-Automotive equipment to prevent enemy use (U.S. Army Tank-Automotive Command) can be found in TM 750-244-6.

1-4. PREPARATION FOR STORAGE OR SHIPMENT

See Chapter 4 for storage and shipment information.

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

If your semitrailer 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 (Quality Deficiency Report). Mail it to Commander, U.S. Army Tank-Automotive Command, Attn: AMSTA-MP, Warren, MI 48397-5000. We'll send you a reply.

1-6. M871A1 WARRANTY

For warranty coverage and the administration of warranty claims, refer to Warranty TB 9-2330-358-14.

Section II. EQUIPMENT DESCRIPTION

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M871A1 Equipment Data	1-6
Special Requirement (USAREUR only)	1-8

1-7. EQUIPMENT CAPABILITIES AND FEATURES

- Easily configured for either breakbulk or containerized cargo.

WARNING

- Do not tow the M871 or M871A1 with the M52, M52A1, or M52A2 truck tractor. The M52 five ton truck tractor's inherent design capabilities are not compatible with the semitrailer, and if used would result in a serious compromise to the safety of personnel and equipment.
- When towing the semitrailer with the M818, the fifth wheel wedges on the M818 are to be in the locked-in (pushed in) mode for highway and secondary road use, and in the locked-out (pulled out) mode for cross country operation.
 - Can be towed by the M915 for improved highway use only, or the M818, M931, and M932 for either highway or off-road.
 - Can carry up to 46,000 pounds of cargo.
 - Side racks are easily installed or removed.

WARNING

Under no circumstances shall speeds exceed the following:

Highway	55 mph/88 km/h
Gravel/Dirt	20 mph/32 km/h
Off-Road	10 mph/16 km/h

Failure to observe the above may result in personnel injury and damage to equipment.

1-8. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

a. Right Front of Semitrailer.

- (1) FRONT PANEL - Constructed of steel. It has the nose box and the manifest box mounted on the front side. When carrying breakbulk cargo with the side racks installed, it will keep the load from shifting forward.
- (2) MANIFEST BOX - Used to store the cargo manifests.
- (3) NOSE BOX - Contains the electrical and air line connections. The nose box also contains the electrical parts required for proper operation of the service lights.
- (4) KINGPIN - Connects the semitrailer to the fifth wheel of the towing vehicle.
- (5) LIFT POINT - Used to lift the semitrailer with a sling hoist.
- (6) LANDING LEGS - Manually extended when the semitrailer is unhooked from the towing vehicle and manually retracted when the towing vehicle is hooked up.
- (7) TIRE CARRIER - Carries the spare tire.
- (8) TANDEM AXLES - Consists of the suspension system, brake system, axles and the tires.
- (9) FRAME - Constructed of steel with a wooden floor. Provides the load bearing surface, mounting for the axles, suspension and the kingpin.
- (10) LANDING GEAR AND CRANK - Two speed gearbox for ease in extending or retracting landing legs.
- (11) DECAL - Towing vehicle restriction.

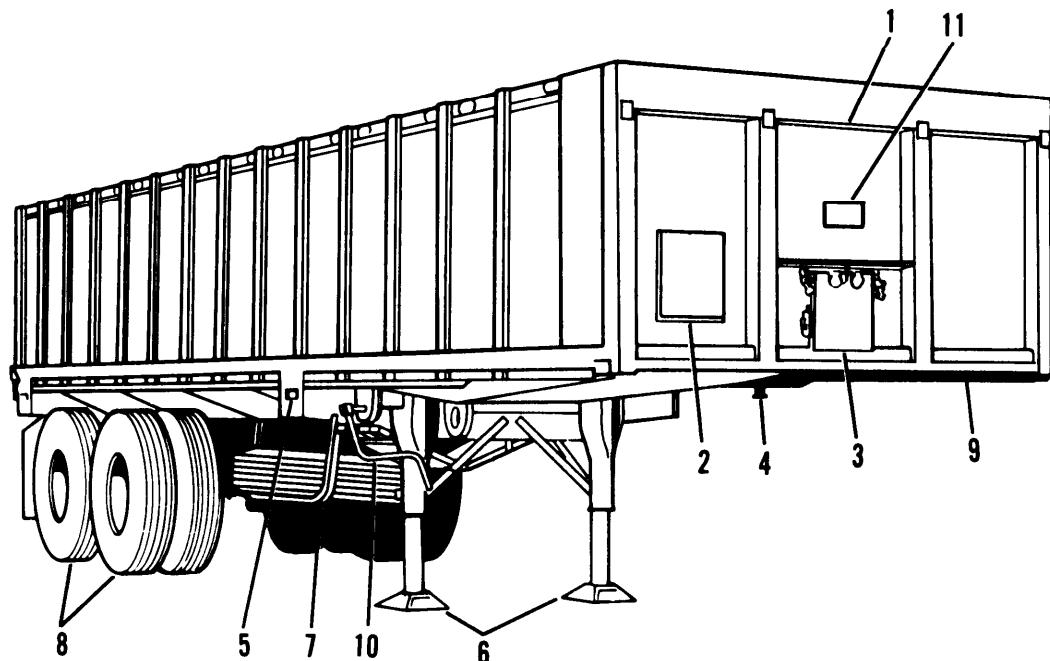


Figure 1-3. M871, M871A1, Right Front View

b. Left Rear of the Semitrailer.

- (1) FLOOR - Constructed of wood. It is bolted to the chassis for easy maintenance.
- (2) LIFT POINT - Used to lift the semitrailer with a sling hoist.
- (3) CHOCK BLOCKS - Stored on both sides of the semitrailer. Used to chock the wheels when the towing vehicle is unhooked, to prevent movement.
- (4) RUBBER BUMPERS - Prevent damage to the semitrailer and the dock when loading or unloading.
- (5) SERVICE LIGHTS - Contain the clearance, composite and stop, turn and taillights.
- (6) BUMPER - Prevents damage to the suspension when backing the semitrailer into the dock.
- (7) MUD FLAPS - Keep mud and water from being splashed off the rear tires during rainy weather. Mud flaps also keep most of the rocks thrown up when traveling unimproved roads from being thrown off to the rear.
- (8) SIDE RACKS - Used when carrying breakbulk cargo. The side racks mount to the frame.

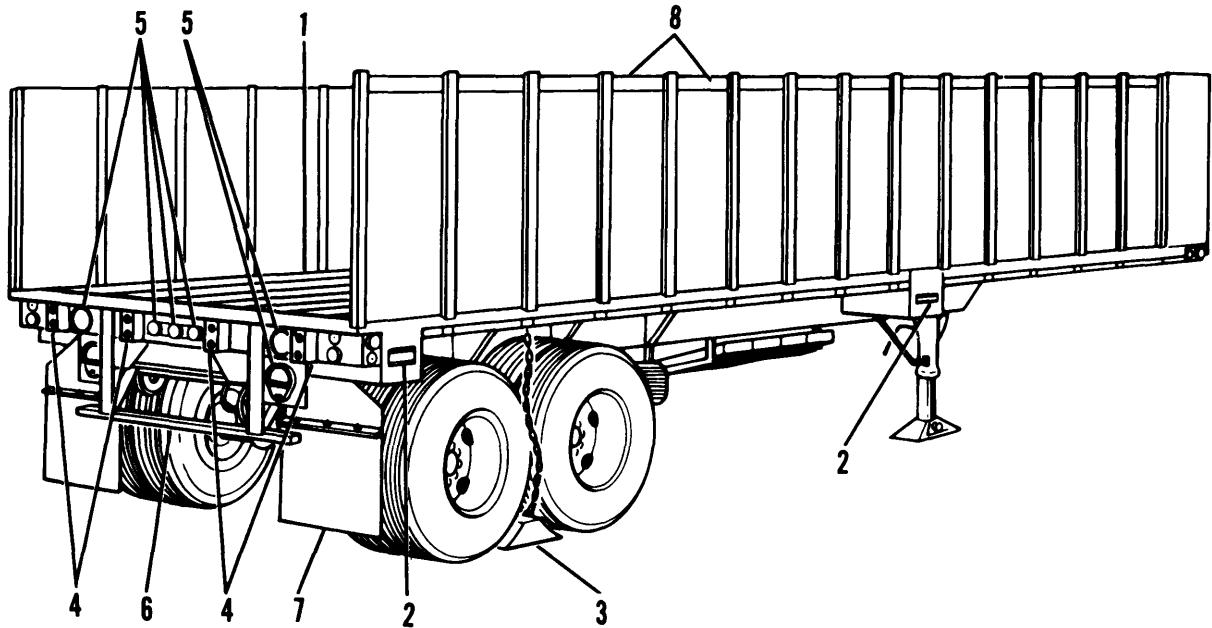


Figure 1-4. M871, M4871A1, Right Rear View

1-9 . DIFFERENCES BETWEEN MODELS

There are no major differences between the M871 and the M871A1 semitrailers. Based on Interchangeability Studies, the only parts that are not interchangeable are the landing legs.

1-10. M871 EQUIPMENT DATA

a. Dimensions.

Height (to top of front panel)	103 in. (262cm)
Length	358 in. (909cm)
Width	96 in. (244 cm)

b. Electrical System.

Voltage	12 and 24 volt
Blackout lights	24 volt
Stop, turn and taillights	12 volt
Clearance lights	12 volt

c. Clearance.

Ground (from bottom of axle)	18 in. (46cm)
Fording Depth	30 in. (76 cm)

d. Kingpin.

Towing facilities	Kingpin(2-1/2 in.)
Location (from front of trailer)	28 in. (71 cm)

e. Tires and Wheels.

Size	11.00 x 20, 12 ply
Inflation pressure (Highway)	75 psi (517 kPa)
Inflation pressure (Cross-country)	35 psi (241 kPa)
Wheel and rim size	20 inch X 7.5 inch

f. Weight.

Empty	15,630 lbs (7,034 kg)
Payload	45,000 lbs (20,250 kg)

g. Axles.

Manufacturer	Standard Forge and Axle Co. Montgomery, Alabama
Model number	A21T-FCT7R-DW10A
Capacity	25,000 lbs (11,250 kg) (per axle)

h. Brakes.

Manufacturer	Standard Forge and Axle Montgomery, Alabama
Type	Drum, 20 in. X 7 in.

i. Landing Gear.

Type	Telescopic, manual, handcrank
Capacity	40,000 lbs fully loaded (18,000 kg)

j. Suspension.

Manufacturer	Hutchenson & Son Metal Products, Springfield, Missouri
Type	Tandem overslung axle
Model number	H900-50

1-11. M871A1 EQUIPMENT DATAa. Semitrailer.

Towing facilities	Kingpin(2-1/2 in.)
Kingpin to front of chassis	28 in. (71 cm)
Kingpin to landing leg	100 in. (254 cm)
Dimensions overall:	
Length	358 in. (909 cm)
Width	96 in. (244 cm)
Height	103 in. (262 cm)

Floor height (empty) 55 in. (140 cm)
 Floor height (loaded) 54 in. (137 cm)
 Upper fifth wheel plate height (loaded) 46 in. (117 cm)
 Track (tread center-to-center of tires) 53 in. (135 cm)
 Empty weight 15,630 lbs (7,034 kg)
 Payload:
 Hard surface roads 45,000 lbs (20,250 kg)
 Crosscountry 45,000 lbs (20,250 kg)
 Center of gravity forward of suspension:
 Loaded 176 in. (447 cm)
 Empty 166 in. (422 cm)
 Angle of departure (loaded) 50°
 Ground Clearance (from bottom of axle) 18 in. (46 cm)
 Fording Depth 30 in. (76 cm)

b. Electrical System

Voltage	12 and 24 volts DC negative ground
Blackout lights	24 volt
Stop, turn and taillights	12 volt
Clearance lights	12 volt

c. Axles.

Type	Tubular K22-AX703-127
Quantity	2
Manufacturer	Dana Corporation, Montgomery, Alabama
Capacity	25,000 lbs (11,250 kg) (per axle)

d. Brakes.

Actuation	Air
Internal brakes	S-cam, two-shoe, double anchor, expanding, self-centering

e. Wheels.

Type	Tube type, Accu-Ride, 2 piece, MS5-Mil-Std
Manufacturer	Firestone
Rim size	20x75
Wheel bearings:	
Type	Tapered roller
Manufacturer	SKF (cone), Timken (cup)

f. Tires.

Quantity	8 plus 1 spare
Size	11.00 x 20
Type	Tube type, nylon, Roadmaster, design 7909
Ply	12
Tire inflation:	
Highway driving	75 psi (517 kPa)
Crosscountry driving	35 psi (241 kPa)

g. Landing Leg.

Type	Telescopic I manual, handcrank
Manufacturer	Binkley Co.
Length to top of floor:	
Retracted	40 in. (102 cm)
Extended	54 in. (137 cm)
Operation	Handcrank, 2-speed
Width at feet (center to center)	56 in. (142 cm)

h. Suspension.

Manufacturer	Hutchenson & Son Metal Products, Springfield, Missouri
Type	Tandem overslung axle
Model number	H900-50

1-12. SPECIAL REQUIREMENT (USAREUR only)

CAUTION

When transporting the commercial 8'6" container, in USAREUR the prime mover must be the M915 to meet the 4 meter (157.48 inches) height requirement.

Maximum allowable overall height with tractor and cargo container is 157.48 inches (4 meters).

Section III. TECHNICAL PRINCIPLES OF OPERATION**1-13. SYSTEMS OF THE M871 AND M871A1 SEMITRAILERS**

- (1) ELECTRICAL SYSTEM. Connects to towing vehicle electrical system to activate the 12 or 24 volt system. Includes 12 and 24 volt wiring for operating taillights, clearance lights, and composite lights.
- (2) BRAKE SYSTEM. Air brake system for service and emergency operation. Includes air reservoirs, drain cocks, gladhands, emergency relay valve, multi-function valve, spring brake chambers, lines and fittings.
- (3) SERVICE BRAKE SYSTEM. Air pressure activates the air chambers, which push the slack adjusters. The slack adjusters turn the camshafts causing the brake shoes to expand against the brake drum.
- (4) SUSPENSION SYSTEM. Includes springs, u-bolts, axles and trunnion tube for ease of travel on improved and unimproved roads.

CHAPTER 2

OPERATING INSTRUCTIONS

Section I. DESCRIPTION AND USE OF OPERATOR'S CONTROLS AND INDICATORS

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2-1. LANDING LEGS

- a. Rotating handcrank (1, fig. 2-1) operates the landing gear. Turning the handcrank (1) clockwise lowers landing legs (2) for parking semitrailer.
- b. Counterclockwise rotation raises legs (2) to towing position.
- c. Pushing operating shaft (3) in engages low speed gear for ease and speed in raising or lowering legs (2).
- d. Pulling operating shaft (3) out engages high speed gear for raising or lowering legs (2).
- e. Crank stow bracket (4) holds the crank when not in use.
- f. Landing gear shoe (5) keeps the legs (2) from sinking into the ground.
- g. Landing leg gear box is located on the right side of semitrailer.
- h. Float pads (6) (Ground Board Assembly). See para. 2-2.

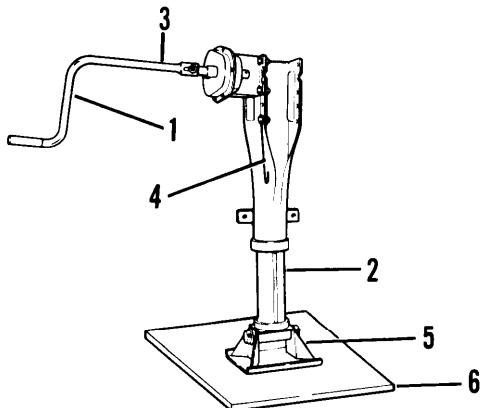


Figure 2-1. Landing Leg

2-2. FLOAT PADS (GROUND BOARD ASSEMBLIES)

a. Two float pads (1, fig. 2-2) are provided for placing under landing leg feet to keep them from sinking into soft ground.

b. Stored in brackets (2) welded to frame.

c. Float pad chain (3) is welded to the frame.

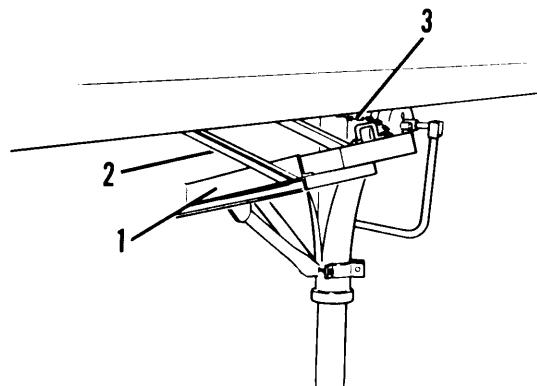


Figure 2-2. Float Pad (Ground Board Assembly)

2-3. CHOCK BLOCKS

a. One chock block (1, fig. 2-3) located on each side of semitrailer.

b. Depending upon the terrain, place chock blocks (1) firmly behind or forward of wheels on each side of the semitrailer.

c. Helps keep semitrailer from moving when towing vehicle is unhooked or when the unit is parked on a hill.

d. Chain (2) holds chock block (1) to semitrailer to keep it from being lost.

e. Stowage bracket (3) stows chock block (1) when not in use.

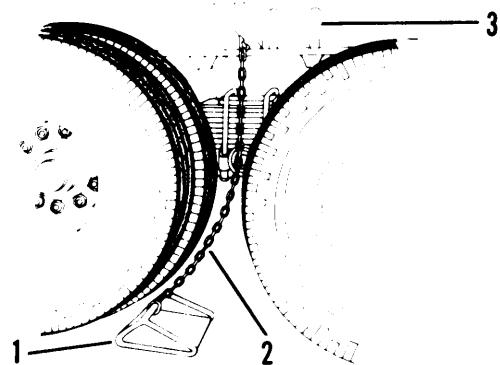


Figure 2-3. Chock Block

2-4. NOSE BOX

a. The nose box has the connections for the air lines and electrical cables from the towing vehicle to the semitrailer.

b. Service gladhand (1, fig. 2-4) and emergency gladhand (2) couplings provide the connection between the semitrailer brake system and the towing vehicle air supply system.

c. Electrical connectors (3) provide the connections between the semitrailer lights and the towing vehicle electrical system. Both connectors use spring loaded covers to keep foreign matter out when the cables are disconnected. The left (roadside) connector is for 12 volt and the right (curbside) is for 24 volt.

d. Two dummy couplings (4) are fitted to the SERVICE and EMERGENCY air hose couplings when brake air hose couplings are not connected to the towing vehicle. Dummy couplings (4) are used to prevent dirt and moisture from entering the brake system.

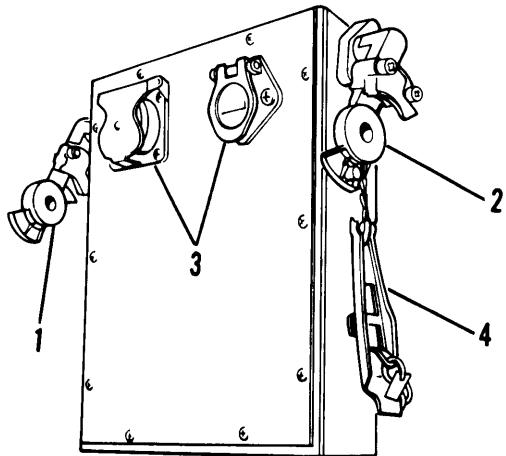


Figure 2-4. Nose Box

2-5. SIDE PANELS

a. The side panels (1, fig. 2-5) are used to contain bulk cargo such as bags of grain or sand.

b. Side panels (1) are installed in sill holes between the side stakes (2).

c. Side stakes (2) are installed into the sill holes. They hold side panels (1) in place.

d. Spreader chains (3) aid in supporting side panels (1) to contain bulk cargo.

e. The side stakes (2) and side panels (1) are stowed against the forward bulkhead (4) when not in use.

f. Side panel stowage retainer straps (M871) (5) or chains (M871A1) are used to retain side panels (1) in stowage.

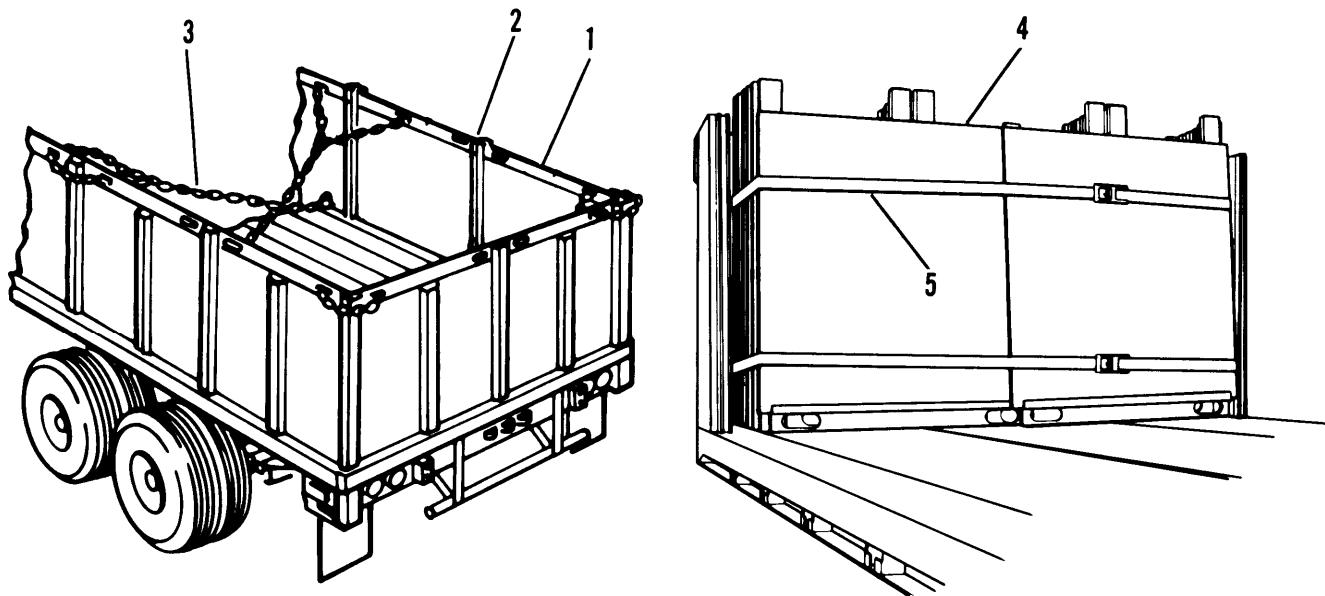


Figure 2-5. Side Panels

2-6. RETRACTABLE TWIST LOCKS

a. Retractable twist locks are used to hold containers on the semitrailer. There are four locks.

b. The twistlock bayonet (1, fig. 2-6) fits into the container receptacle to secure the container.

c. The handle (2) turns the twistlock bayonet (1).

d. The handle securing latch (3) locks the twistlock bayonet into the locked position.

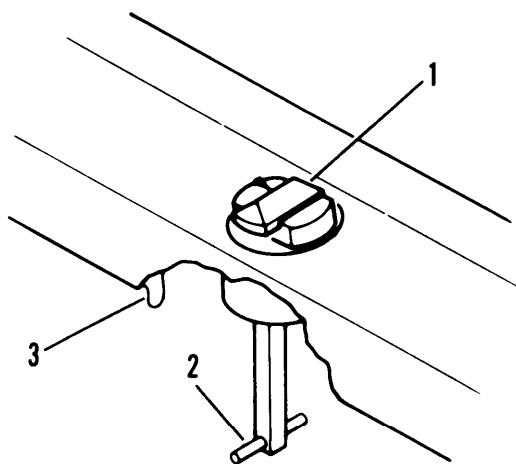


Figure 2-6. Retractable Twist Lock

2-7. KINGPIN

- a. Used to couple semitrailer to towing vehicle.
- b. Protrudes from the center of the fifth wheel upper plate of the semitrailer (1, fig. 2-7).

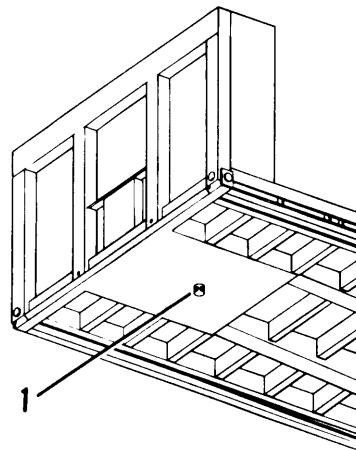


Figure 2-7. Kingpin

2-8. SERVICE LIGHTS

- a. The service lights on the M871 consist of the following lights:
 - Four red clearance lights (1, fig. 2-8) on rear
 - One amber clearance light (2) on each side
 - Two blackout lights (3) on rear
 - Two stop, turn and taillights (4) on rear
 - Three red clearance lights (5) mounted on a bar
 - One amber reflector (6) on each side
 - Four red reflectors (7) on rear

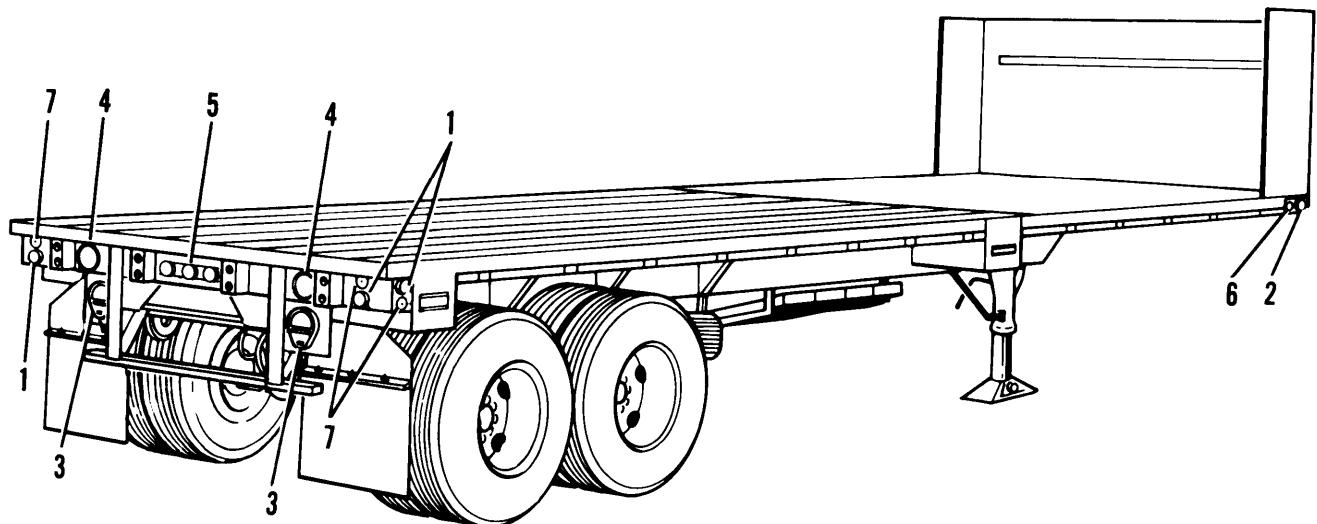


Figure 2-8. Service Lights and Reflectors (M871)

b. The service lights on the M871A1 consist of the following lights:

- Five red clearance lights (1, fig. 2-9) on rear
- Two composite lights (2) on rear
- Two stop, turn and taillights (3) on rear
- Two red reflectors (4) on rear
- Four amber clearance lights (5) on front/side corners

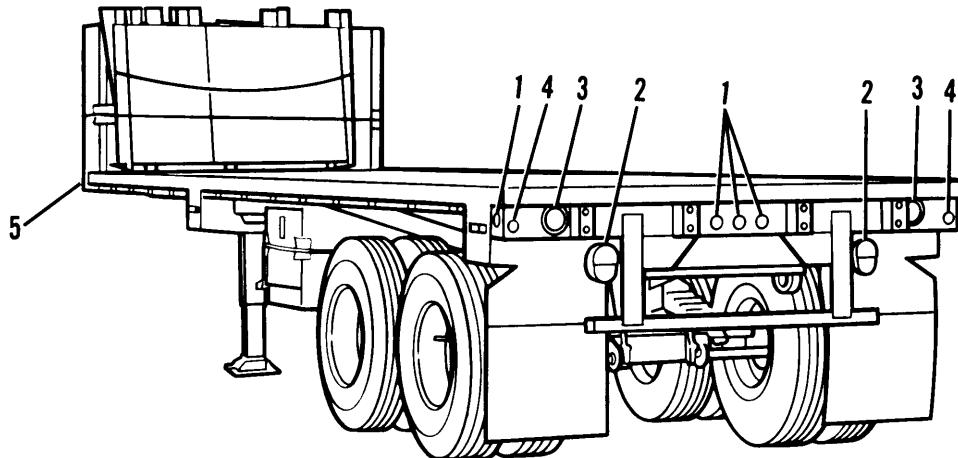


Figure 2-9. Service Lights and Reflectors (M871A1)

2-9. AIR RESERVOIR DRAIN COCK

WARNING

Wear protective goggles when opening air reservoir drain cock and avoid contact with the air stream.

a. The draincock (1, fig. 2-10) is used to relieve air pressure in the semitrailer braking system.

b. It is also used for drainage of moisture collected in air reservoir (2).

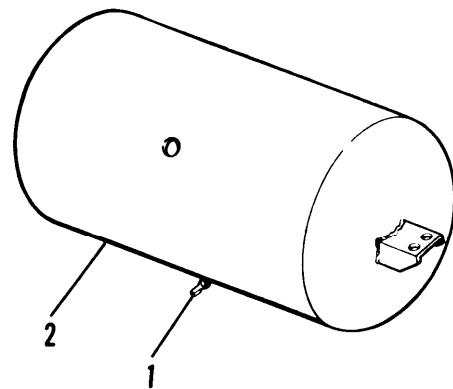


Figure 2-10. Air Reservoir Drain Cock

2-10. FIXED TIEDOWN ANCHORS

NOTE

These anchors may be used in combination with other items listed in the Additional Authorization List (Appendix C) when hauling ammunition items.

a. The fixed tiedown anchors are used in conjunction with web strap tiedown assemblies or chains and binders to restrain cargo placed on the vehicle. There are five anchors installed\permanently affixed along each side rail.

b. The tiedown anchor (1, fig. 2-11) is rotated upwards for attachment of web straps or chain/binder.

c. Hook (2) of web strap, chain or binder.

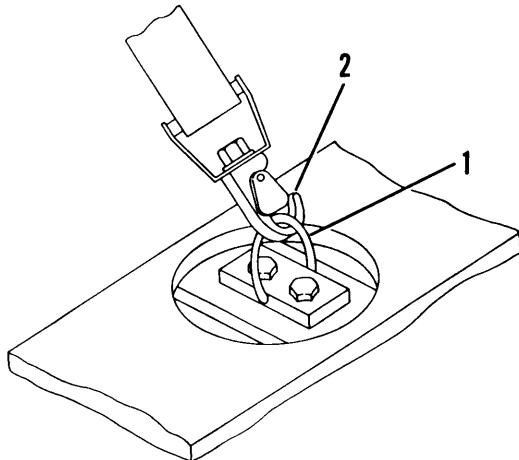


Figure 2-11. Fixed Tiedown Anchor

2-11. REMOVABLE TIEDOWN ANCHORS

a. The removable tiedown anchors or fittings are listed within the Additional Authorization List (Appendix C) and are used in conjunction with listed web strap tiedown assemblies to restrain loads of ammunition. There are 10 locations along each side rail for each vehicular tiedown assembly.

b. The fitting (1, fig. 2-12) is installed in holes located in side rails used for removable container locks. Installed through underside of side rail and rotated until locked into position.

c. Tiedown ring (2) of fitting (1) is rotated upwards for attachment of web strap.

d. Fitting (3) is installed in 1-3/4" diameter holes located in side rails so that spring loaded lock is engaged.

e. Tiedown ring (4) of fitting (3) is rotated upwards for attachment of web straps.

f. Hook (5) of web strap.

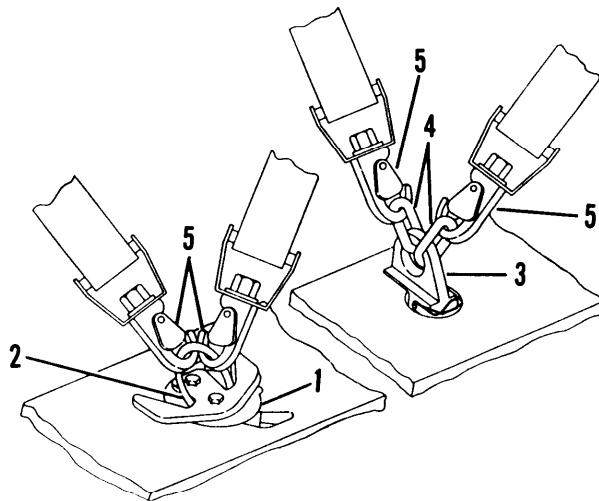


Figure 2-12. Removable Tiedown Anchors

2-12. HOLE COVER PLATES

NOTE

If the semitrailer being used has additional apertures in the side rails or rear sill that are not covered by the cover plates, other material such as 1/4" thick plywood, hardboard, etc., must be positioned over these additional apertures and be temporarily affixed to the semitrailer whenever transporting ammunition items.

a. The removable cover plates (1, fig. 2-13) are listed within the Additional Authorization List (Appendix C) and are used in conjunction with side panels, side stakes and spreader chains when transporting ammunition and using wooden dunnage (blocking and bracing) to restrain the load. The cover plates are used to close the apertures in the vehicle side rails.

b. Cover plates are positioned on side rails prior to installing side panels and side stakes.

c. Cover plate stowage. When not in use, the cover plates will be stowed with the side panels and side stakes against the forward bulkhead.

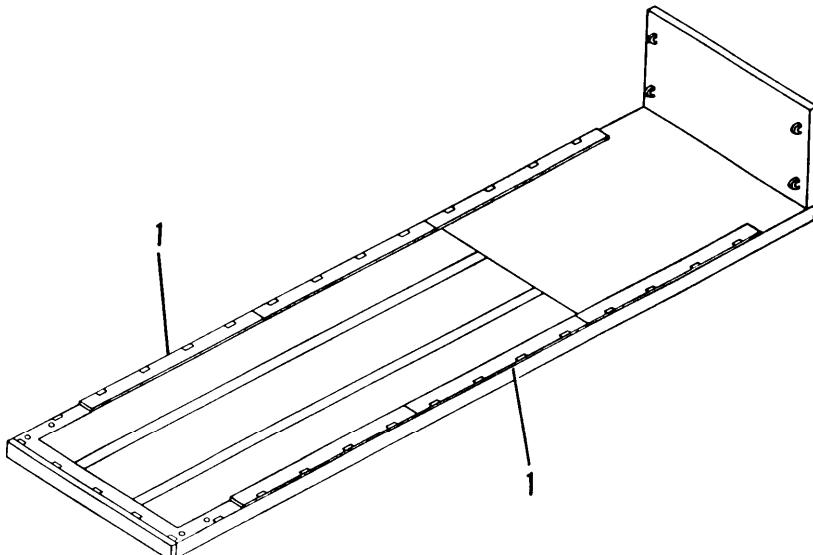


Figure 2-13. Hole Cover Plates

**Section II. OPERATOR/CREW PREVENTIVE MAINTENANCE
CHECKS AND SERVICES (PMCS)**

	Page
Maintenance Forms and Records	2-9
PMCS Column Description	2-10
Special Instructions	2-9

2-13. MAINTENANCE FORMS AND RECORDS

Every mission begins and ends with paperwork. There isn't much of it, but you have to keep it up. The forms and records you fill out have several uses. They are a permanent record of the services, repairs, and modifications made on your vehicle. They are reports to Organizational Maintenance and to your Commander. They are a checklist for you when you want to know what is wrong with the vehicle after its last use, and whether those faults have been fixed. For the information you need on forms and records, see DA Pam 738-750.

2-14. SPECIAL INSTRUCTIONS

a. Do your before (B) PMCS just before you operate the vehicle. Pay attention to **WARNINGS** and **CAUTIONS**.

b. Do your during (D) checks and services of PMCS while the equipment and/or its component systems are in operation. Pay attention to **WARNINGS** and **CAUTIONS**.

c. Do your after (A) PMCS right after operating the vehicle. Pay attention to **WARNINGS** and **CAUTIONS**.

d. If something does not work, troubleshoot it with the instructions in this manual or notify Organizational Maintenance.

e. Always do your PMCS in the same order so it gets to be a habit. Once you've had some practice, you'll spot anything wrong in a hurry.

f. When you do your PMCS, take along a rag or two.

g. While performing PMCS observe WARNING and CAUTION paragraphs preceding those operations which could endanger your safety or result in damage to the equipment.

h. If anything looks wrong and you can't fix it, write it on your DA Form 2404. The number column is the source for the numbers used on the TM Number Column on DA Form 2404. If you find something seriously wrong, report it to Organizational Maintenance RIGHT AWAY.

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138°F (59°C).

- (1) Keep working area clean. Dirt, grease, oil and debris only get in the way and may cover up a serious problem. Clean as you work and as needed. Use dry cleaning solvent (PD-680) to clean metal surfaces. Use soap and water to clean rubber and plastic material.
- (2) Check for loose, missing, bent or broken bolts, nuts, and screws. Check for chipped paint, bare metal or rust around bolt heads. Tighten loose bolts or report it to Organizational Maintenance if you are unable to tighten it.
- (3) Check for loose or chipped paint, rust or gaps where parts are welded together. Report bad welds to Organizational Maintenance.
- (4) Check for cracked or broken insulation, bare wires and loose or broken connectors. Tighten loose connectors. Make sure wires are in good condition.

2-15. PMCS COLUMN DESCRIPTION

a. Item Number - The order that PMCS should be performed, and also used as a source of item numbers for the TM number column on DA Form 2404 Equipment Inspection and Maintenance worksheet when recording results of PMCS.

b. Interval - Tells when each check is to be performed.

c. Item to be Inspected - Lists the checks to be performed.

d. Equipment is Not Ready/Available If - Has an entry only when the semitrailer should not be operated or accepted with that problem.

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

B-BEFORE D-DURING A-AFTER

ITEM NO.	INTERVAL			ITEM TO BE INSPECTED PROCEDURES: CHECK FOR AND HAVE REPAIRED, FILLED, OR ADJUSTED AS NEEDED	EQUIPMENT IS NOT READY/ AVAILABLE IF:
	B	D	A		
1	•			<p>NOTE</p> <p>Perform Before (B) PMCS if:</p> <ul style="list-style-type: none"> a. You are the assigned operator, but have not used the semitrailer since the last inspection. b. You are using the semitrailer for the first time. <p>NOTE</p> <p>Perform the following inspections/checks, prior to connecting the semitrailer to the towing vehicle.</p> <p>TIRES</p> <ul style="list-style-type: none"> a. Check tire pressure (including spare, if applicable) when tires are cool. <p>Hard Road 75 psi Cross-Country 35 psi Mud or Sand 35psi</p> <ul style="list-style-type: none"> b. Check tires for cuts, foreign objects or unusual tread wear. Remove any stones from between tires. <p>WHEELS</p> <p>NOTE</p> <p>Left wheel nuts are turned counterclockwise to tighten and clockwise to loosen. Right wheel nuts are turned clockwise to tighten and counterclockwise to loosen.</p>	(Duals) Two tires on one axle flat, missing or unserviceable. (Single) One tire flat, missing, or unserviceable.
2					

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

ITEM NO.	INTERVAL			B-BEFORE	D-DURING	A-AFTER	
	B	D	A	ITEM TO BE INSPECTED PROCEDURES: CHECK FOR AND HAVE REPAIRED, FILLED, OR ADJUSTED AS NEEDED			EQUIPMENT IS NOT READY/AVAILABLE IF:
	•			Check wheels for damage and wheel nuts for tightness and presence.			Two or more wheel nuts loose or missing from any wheel.
3	•			AIR HOSES AND CABLES	Check intervehicular air hoses and cables for cuts and breaks.		Air hoses or intervehicular cables are broken or missing.
4	•			BRAKE SYSTEM	a. Inspect brake hose couplings (gland hands) for security and/or damage. b. Test brake system by connecting semitrailer to towing vehicle. Check hose connections and make sure the towing vehicle air service line valve is turned on. Actuate the service brakes.		Coupling missing, broken or damaged. Service brakes fail to operate.
	•				NOTE		
	•				Service brakes can be heard to actuate at the semitrailer. Air chamber push rods will compress.		
	•				c. With semitrailer connected to the towing vehicle, have an assistant actuate the service brakes and listen for air leaks at the gladhands, at the relay valve, multi-function valve and at the air reservoirs.		Air leaks are found.
	•				d. Be alert for unusual difficulty in stopping that would indicate that the semitrailer service brakes are malfunctioning.		

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

ITEM NO.	INTERVAL			B-BEFORE	D-DURING	A-AFTER
	B	D	A	ITEM TO BE INSPECTED PROCEDURES: CHECK FOR AND HAVE REPAIRED, FILLED, OR ADJUSTED AS NEEDBD		
					<u>WARNING</u>	
5			●	<p>A hot brake can cause serious burns. Exercise extreme caution before attempting to touch drum after use. Slowly move hand toward drum. If drum is overheated, radiated heat will be felt before actually touching drum.</p> <p>e. Cautiously feel brake drums for being abnormally hot or cold. An abnormally hot drum indicates a possible dragging or grabbing brake, or improperly adjusted, dry, or defective wheel bearings. An abnormally cool drum indicates improper adjustment.</p> <p>AIR RESERVOIRS</p>	<p>Drum is abnormally hot.</p>	
			●	<u>WARNING</u>		
			●	<p>Wear protective goggles when opening air reservoir drain cock and avoid contact with the air stream.</p> <p>a. Check air reservoir drain cock. It should be closed. Close it if open.</p> <p>b. Inspect air reservoirs for damage or evidence of leakage.</p> <p>c. Open drain cock and drain condensation.</p>	<p>Air reservoir(s) leaking or damaged.</p>	
			●			

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

NO.	INTERVAL			ITEM TO BE INSPECTED PROCEDURES: CHECK FOR AND HAVE REPAIRED. FILLED. OR ADJUSTED AS NEEDED	EQUIPMENT IS NOT READY/ AVAILABLE IF:
	B	D	A		
6				LIGHTS AND REFLECTORS NOTE An assistant is required while checking the brake lights. a. Check for damage and presence of reflectors. b. If tactical situation permits, connect intervehicular cable to the towing vehicle. Operate the vehicle light switch through all settings and check the lights.	
7	•	•		KINGPIN a. Inspect kingpin for cracks and bends. b. Inspect upper fifth wheel plate for cracks and dents.	One or more lights inoperative or missing. Damaged, cracked, broken, or missing kingpin. Cracked upper fifth wheel plate.
8	•	•	•	LANDING GEAR a. When cranking landing leg, check that each leg moves smoothly and does not bind. Pull out handcrank and check for high speed operation. Push in for low speed operation. b. Inspect handcrank, gearbox, and landing leg foot for secure mounting. Check that handcrank holder stows handcrank securely. Make sure other leg moves equally with side being cranked.	Landing gear/leg inoperative.

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

ITEM NO.	INTERVAL			ITEM TO BE INSPECTED PROCEDURES: CHECK FOR AND HAVE REPAIRED, FILLED, OR ADJUSTED AS NEEDED	EQUIPMENT IS NOT READY/AVAILABLE IF:
	B	D	A		
9			●	SUSPENSION <ul style="list-style-type: none"> a. Inspect springs for abnormal sag, broken or shifted leaves, loose or missing leaf clips, u-bolt, or other hardware. b. Inspect axles for obvious damage. 	Damaged, loose, broken, or missing components are evident.
10	●		●	ELECTRICAL CONNECTIONS <ul style="list-style-type: none"> a. Visually inspect connector bodies for secure mounting/damage. b. Inspect pins for foreign matter build-up, and/or bent, burnt, or broken pins. c. Inspect insulator for signs of arcing 	Obvious damage.
11	●			ACCESSORIES <ul style="list-style-type: none"> a. Visually inspect assemblies such as chock blocks and float pads for looseness of mountings or connections. b. Check for any tampering or damage that may have occurred since last operation. 	
12	●		●	OPERATION <ul style="list-style-type: none"> a. Be alert for any unusual noises when towing semitrailer. Stop and investigate any unusual noises. b. Ensure that semitrailer is tracking correctly with no side pull. 	Damage that would affect safe operation is evident. Semitrailer is not tracking properly.

Section III. OPERATION UNDER USUAL CONDITIONS

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Operation	2-20
Preparation for Use	2-16
Slinging Procedures	2-30

2-16. PREPARATION FOR USE

Perform the preventive maintenance checks and services (B - Before Operation Column) listed in Table 2-1 before doing the following procedures. These checks and services will determine that the semitrailer is ready for operation.

a. Positioning the Chock Blocks.

- (1) Remove chock blocks from stowage brackets.
- (2) Place chock blocks behind tires on level ground or uphill slope. On downhill slope, place chock blocks in front of tires.

b. Coupling Semitrailer To Towing Vehicle.**WARNING**

- Do not tow M871 or M871A1 with the M52, M52A1, or M52A2 truck tractor. The M52 five ton truck tractor's inherent design capabilities are not compatible with the semitrailer and would result in a serious compromise to the safety of personnel and equipment.
- Be sure all personnel stand clear of the towing vehicle and semitrailer during coupling operations.

NOTE

- Can be towed by the M915 for improved highway use only or the M818, M931 and M932 for either highway or off-road.

- (1) Align towing vehicle with semitrailer.
- (2) Slowly back towing vehicle into position. Be sure kingpin (1, fig. 2-14) is in line with fifth wheel coupler jaws (2).
- (3) Stop the towing vehicle just before the kingpin plate of the semitrailer starts to ride up the approach ramps (3) of the towing vehicle.

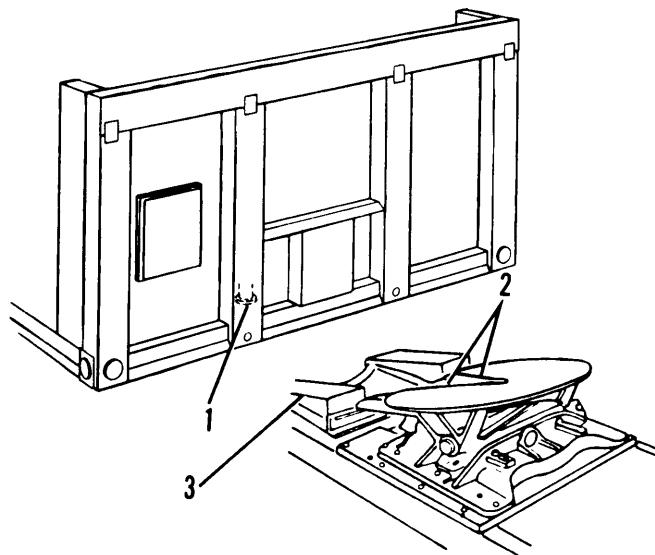


Figure 2-14. Coupling Semitrailer to Towing Vehicle

c. Connect Intervehicular Hoses.

CAUTION

This operation is performed to lock the brakes and prevent movement of the semitrailer. Landing legs may be damaged if the semitrailer moves.

- (1) Connect the two air hoses marked SERVICE (1, fig. 2-15) and EMERGENCY (2) on towing vehicle to corresponding air hose couplings on the semitrailer.
- (2) Open air lines shutoff valves on towing vehicle.
- (3) If no air leakage is detected, apply the brakes on the semitrailer from the towing vehicle.

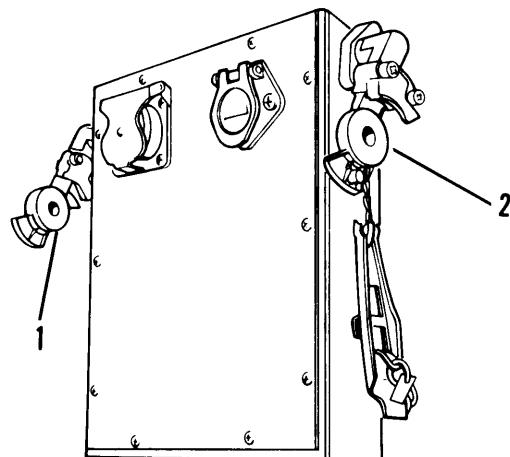


Figure 2-15. Connecting Intervehicular Hoses

d. Completing Coupling Semitrailer to Towing Vehicle.

- (1) Before kingpin plate (1, fig. 2-16) starts to ride approach ramps (2), check that the kingpin plate (1) is above approach ramps (2). Adjust height as needed by using landing gear. Make sure towing vehicle fifth wheel coupler jaws (3) are open.
- (2) Slowly back the towing vehicle until coupler jaws (3) engage the kingpin (4).

CAUTION

- Visually check the coupling. You should not be able to see light between the fifth wheel and the kingpin plate.
- When towing the semitrailer with the M818 (prime mover) the fifth wheel wedges on the M818 are to be in the locked-in (pushed in) mode for highway and secondary road use, and in the locked-out (pulled out) mode for cross country operation.

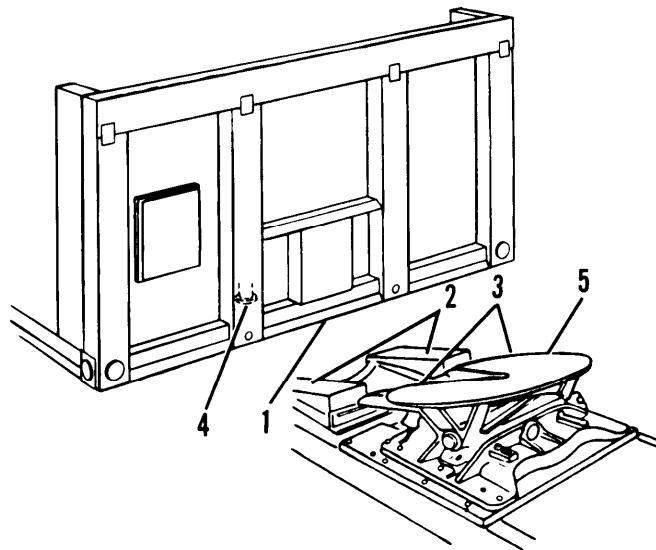


Figure 2-16. Completing Coupling Semitrailer to Towing Vehicle

CAUTION

If coupling operation is not completed and another attempt is to be made, pull towing vehicle forward carefully. Do not exceed the limits of air hoses and electrical cable.

- (3) Make sure coupling is secure by inching towing vehicle forward. If coupling is not locked, rock towing vehicle back and forth slowly until kingpin (1) is locked in fifth wheel (5).

- (4) Connect intervehicular cable by opening the cover on the receptacle. Align slot on plug with aligning key of receptacle. Release cover. Operate lights from towing vehicle to make certain lights are in working order.
- (5) Check the air lines and electrical cable to be sure that they are supported and will not catch or chafe.
- (6) Recheck fifth wheel/kingpin locking by trying to move towing vehicle and semitrailer forward.

e. Raising the Landing Gear.

- (1) Unhook crank (1, fig. 2-17) from crank holder (2).
- (2) Raise crank (1).

NOTE

Pull out on crank for high speed operation.

- (3) Turn crank (1) counterclockwise until legs (3) have been retracted.
- (4) Lower crank (1) and secure in crank holder (2).
- (5) Remove and stow chock block and chains. Remove and stow float pads, if used.

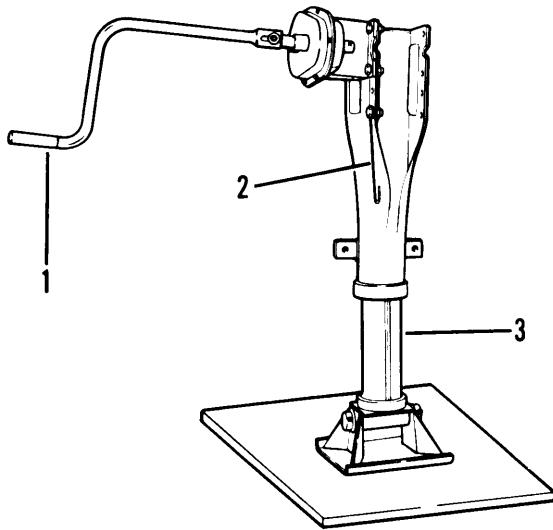


Figure 2-17. Landing Gear

2-17. OPERATION

a. Loading the Semitrailer (Containerized Cargo).

WARNING

Do not place any part of your body under a container during the loading or unloading of the semitrailer.

- (1) Release handle (3, fig. 2-18) from latch (2). Push lock assembly (1) upward.
- (2) Turn handle (3) clockwise 90° to rotate twistlock bayonet (4) into loading position.
- (3) Load cargo container on the semitrailer.
- (4) Check the mating of twistlock (4) into the container fitting.
- (5) Rotate handle (3) clockwise 90° to rotate twistlock (4) into locked position.
- (6) Secure the handle (3) with latch (2).

WARNING

Do not tow the semitrailer with an unsecured cargo container.

When transporting the 8 ft-6 in. commercial container, the towing vehicle fifth wheel height must not exceed 50.4 in. (1.28 meters) in order to comply with the 157.48 in. (4 meter) overall height limit for USAREUR. The M915 fifth wheel height meets this requirement.

- (7) Check again to be sure the container is securely locked.

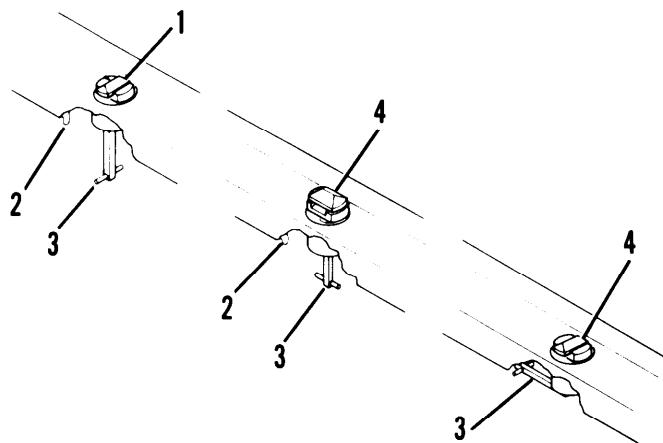


Figure 2-18. Twistlock Operation

b. Loading the Semitrailer (Bulk Cargo).

- (1) Install all fourteen side racks (1, fig. 2-19) and two rear racks (2).
- (2) Install thirteen side stakes (3) between the fourteen side racks and two rear racks.
- (3) Install rear corner stakes (4) and secure corners with corner chains (5).

CAUTION

Be sure the spreader chains are equally spaced the length of the semitrailer or the side stakes and racks could bulge and break causing the cargo to spill.

- (4) Install the four spreader chains (6).

- (5) Load cargo into the semitrailer.

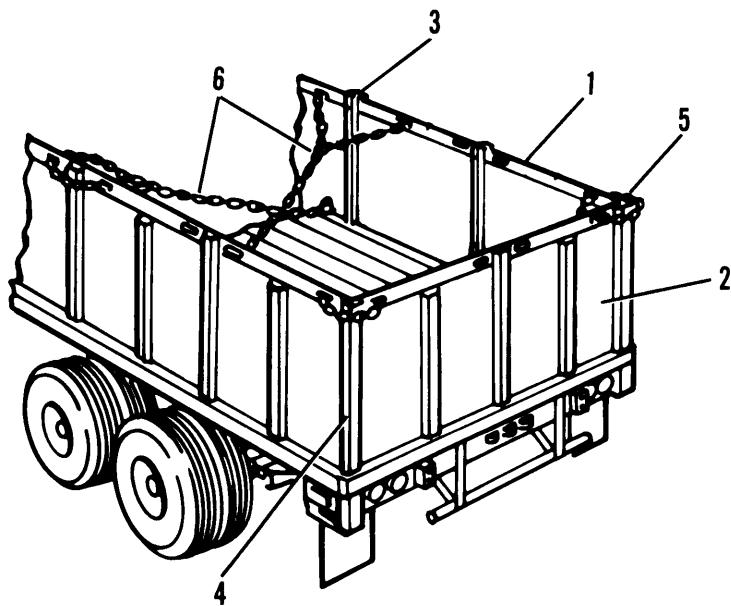


Figure 2-19. Loading Bulk Cargo

c. Loading the Semitrailer (Ammunition Cargo).

NOTE

For specific ammunition loading, tiedown, restraint, and/or transport guidance, refer to U.S. Army Materiel Command 19-48 series tactical vehicle outloading drawings listed within DA Pamphlet 75-5, Index of Storage and Outloading Drawings for Ammunition.

The Loose Projectile Restraint System (LPRS) is a system that provides a fast, simple method of securing "loose" unfuzed 155mm projectiles for transport in field artillery companion vehicles. These "egg crate" module racks may be assembled in 9-round, 15-round and 25-round sets and are restrained in the cargo bed by authorized tie-down straps. Refer to TM 9-2590-210-10 for complete instructions.

(1) Wooden Dunnage Restraint Method.

- (a) Install side rail hole cover plates, side racks and side stakes on one side of semitrailer.
- (b) Install nailed-down or floating dunnage (blocking and bracing), as appropriate, within semitrailer and load ammunition cargo.
- (c) Install remaining blocking and bracing.
- (d) Install remaining side rail hole cover plates, side racks and side stakes.
- (e) Install four spreader chains equally spaced along the length of the semitrailer.

(2) Web Strap Tiedown Assembly Restraint Method.

- (a) Install appropriate vehicular tiedown fittings in holes along each side rail, as required by appropriate tactical vehicle outloading drawing.
- (b) Load ammunition cargo.
- (c) Install appropriate web strap tiedown assemblies from a tiedown fitting on one side of the semitrailer, over/around/through ammunition cargo (as required by outloading drawing), to a tiedown fitting on the other side of the semitrailer.
- (d) Tension web straps as specified within appropriate outloading drawing.
- (e) If required, install side racks, side stakes, rear racks and spreader chains.

d. Towing the Semicrailer.

WARNING

When towing the semicrailer with the M818, the fifth wheel wedges on the M818 are to be in the locked-in (pushed in) mode for highway and secondary road use, and in the locked-out (pulled out) mode for cross country operation.

Extreme caution shall be exercised in all turns, curves, -and highway cloverleafs when towing a high center of gravity containerized payload.

WARNING

Under no circumstances shall speeds exceed the following:

Highway	55 mph/88 km/h
Gravel/Dirt	20 mph/32 km/h
Off-Road	10 mph/16 km/h

Failure to observe the above warnings may result in personnel injury and damage to equipment.

- (1) Driving. When driving the towing vehicle and semicrailer, the overall length of the unit must be kept in mind when passing other vehicles and when turning. Because the unit is hinged in the middle, backing is also affected. The semicrailer's payload will affect stopping and off-road maneuverability.
- (2) Turning. When turning corners, allow for the semicrailer wheels turning inside the radius of the towing vehicle. Make a right turn by driving the towing vehicle about halfway into the intersection and then cutting sharply to the right. This will keep the semicrailer off the curb (fig. 2-20).
- (3) Stopping. The brakes of the towing vehicle and the semicrailer are applied at the same time in normal operation when the driver steps on the brake pedal. Brake pressure should be applied gradually and smoothly. The semicrailer brakes may be applied separately by using the semicrailer handbrake control lever on the steering column. On steep downgrades or slippery surfaces, the semicrailer brakes should be slowly applied before the towing vehicle brakes. This will reduce the possibility of jack-knifing the semicrailer.
- (4) Parking. When the towing vehicle and the semicrailer are to be parked and left unattended, set the parking brake on the towing vehicle and apply the brakes on the semicrailer. Turn off the towing vehicle's engine before leaving the cab. Block the semicrailer wheels with chock blocks.

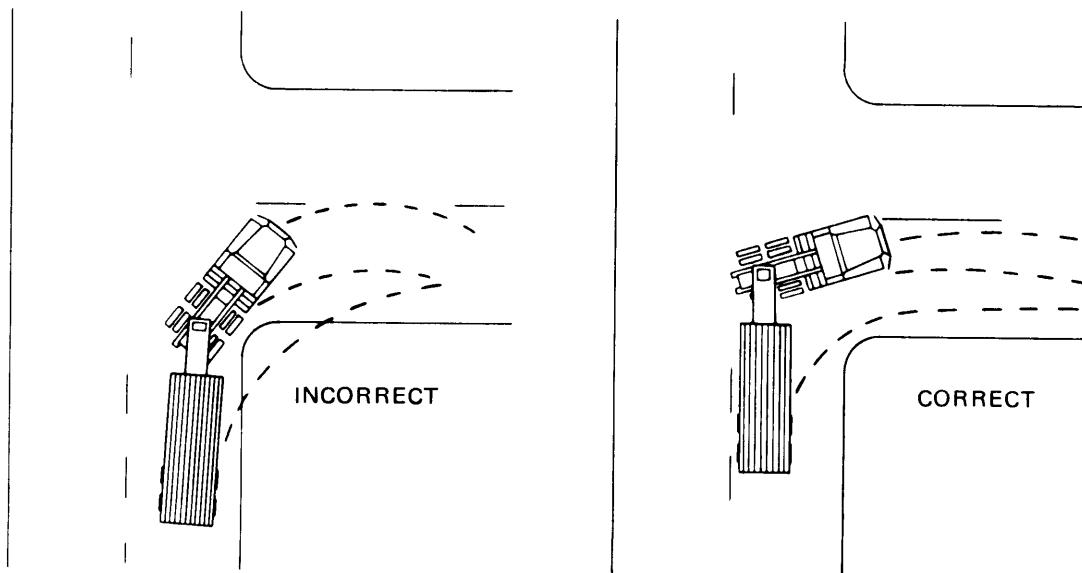


Figure 2-20. Turning

(5) Backing. When backing, use an assistant as a ground guide to direct you. Adjust rear view mirrors before backing. When backing, the rear of the semitrailer will move in the opposite direction from the front towing vehicle wheels. If the wheels are turned to the right, the semitrailer will go left. If the wheels are turned to the left, the semitrailer will go to the right (fig. 2-21).

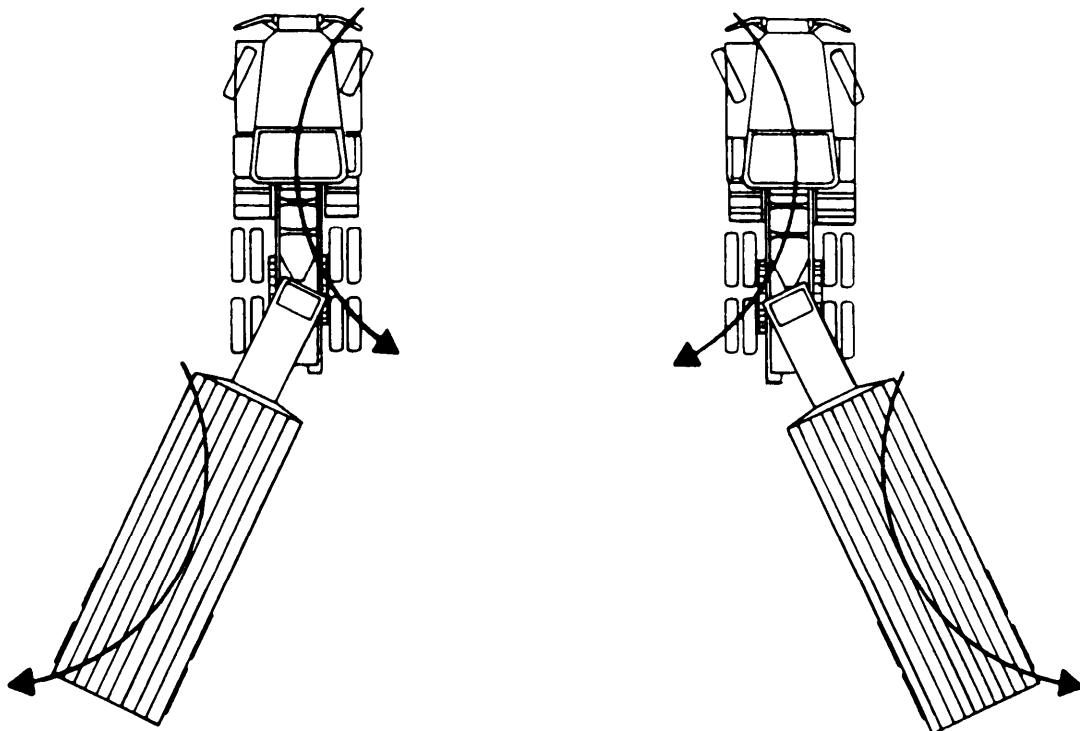


Figure 2-21. Backing

e. Unloading the Semitrailer (Ammunition Cargo).

- (1) Wooden Dunnage Restraint Method.
 - (a) As required, remove spreader chains, side racks, rear racks, side stakes and hole cover plates.
 - (b) Remove restraint dunnage, as appropriate, to allow access to cargo.
 - (c) Unload the ammunition cargo from the semitrailer.
 - (d) Remove the remaining restraint dunnage, side racks, side stakes, hole cover plates, etc.
 - (e) Store the side/rear racks, side stakes, spreader chains and cover plates in the specified stowage area.
- (2) Web Strap Tiedown Assembly Restraint Method.
 - (a) Remove side/rear racks, side stakes and spreader chains, if installed on the semitrailer.
 - (b) Remove web strap tiedown assemblies.
 - (c) Unload the ammunition cargo from the semitrailer.
 - (d) Remove vehicular tiedown fittings from the semitrailer side rails.
 - (e) Store the side/rear racks, side stakes, spreader chains, tiedown fittings and web strap tiedown assemblies in the approved stowage area.

f. Unloading the Semitrailer (Bulk Cargo).

- (1) Unload the cargo from the semitrailer.
- (2) Remove the spreader chains.
- (3) Remove the corner stakes.
- (4) Remove the 13 side stakes.
- (5) Remove the 14 side racks and 2 rear racks.
- (6) Store the side racks, side stakes and spreader chains in the approved stowage area.

g. Unloading the semitrailer Bulk Cargo.

- (1) Release handle (3, fig. 2-22) from latch (2).
- (2) Turn handle (3) counter clockwise 90° to rotate twistlock bayonet (4).

- (3) Unload cargo container from the semitrailer.
- (4) Rotate handle (3) counterclockwise 90° and lower lock assembly (1).
- (5) Secure the handle (3) to latch (2).

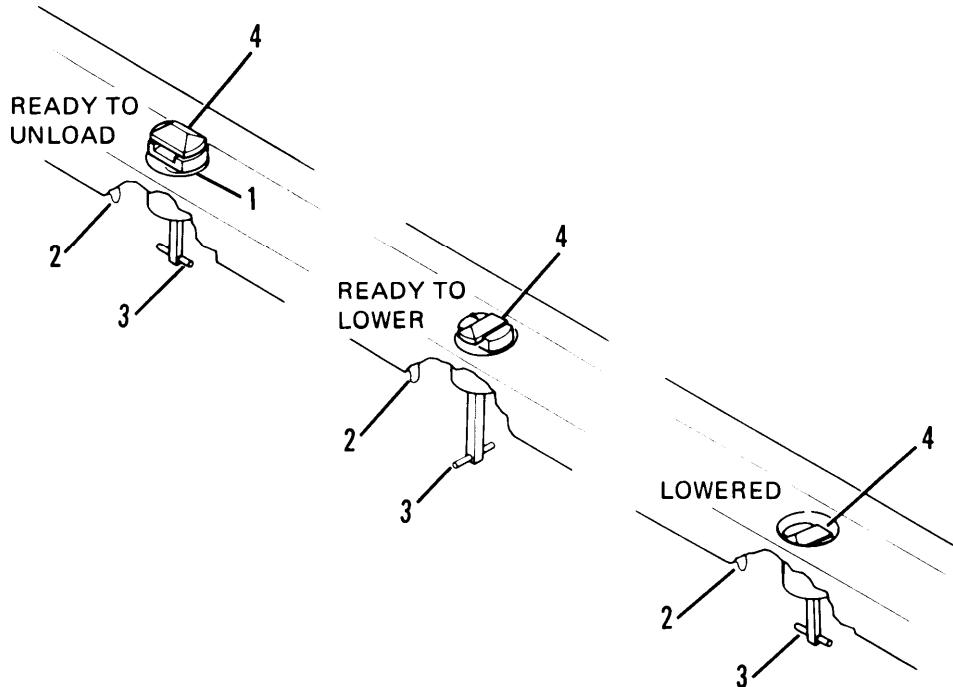


Figure 2-22. Twistlock

h. Stacking Side Panels.

Camouflage patterns may not match if panels and stakes are not numbered.

- (1) Starting at the rear of the semitrailer, number each panel (1, fig. 2-23) and stake (2) per side and position with chalk. (Example: 2R is the second panel from the rear of the semitrailer on the right side.)
- (2) Remove rear panels first. Stack left panel (1, fig. 2-24) with the flat side against the left side of the bulkhead (2). Stack right panel (3) with the flat side against the right side of the bulkhead (2).
- (3) Remove corner stakes (4). Place each stake (4) along the left side of the panel support (5).
- (4) Remove the first left and right side panel (6). Stack left side rack, with flat side facing out, against left rear panel (1). Stack right side panel, with flat side facing out, against right rear panel (3).

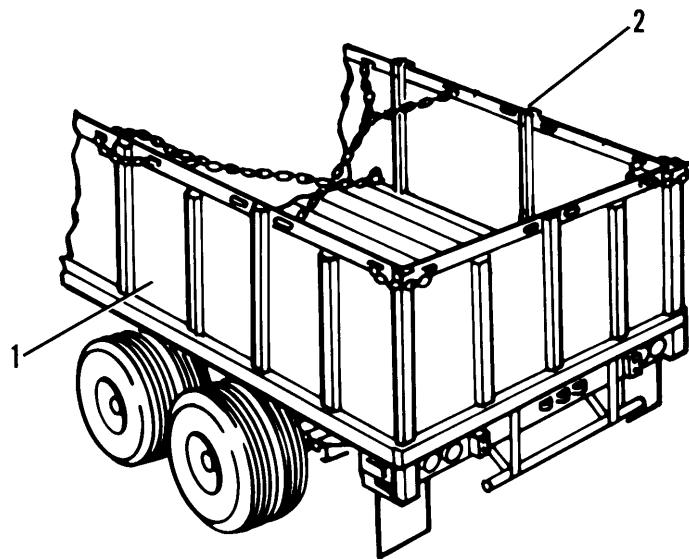


Figure 2-23. Side Panels and Stakes

- (5) Repeat steps 2 through 4 until all panels and stakes are stacked.
- (6) Secure panels and stakes to bulkhead (2) with retainer straps (M871) or spreader chains (M871A1). Use turnbuckle to tighten chains on the M871A1.

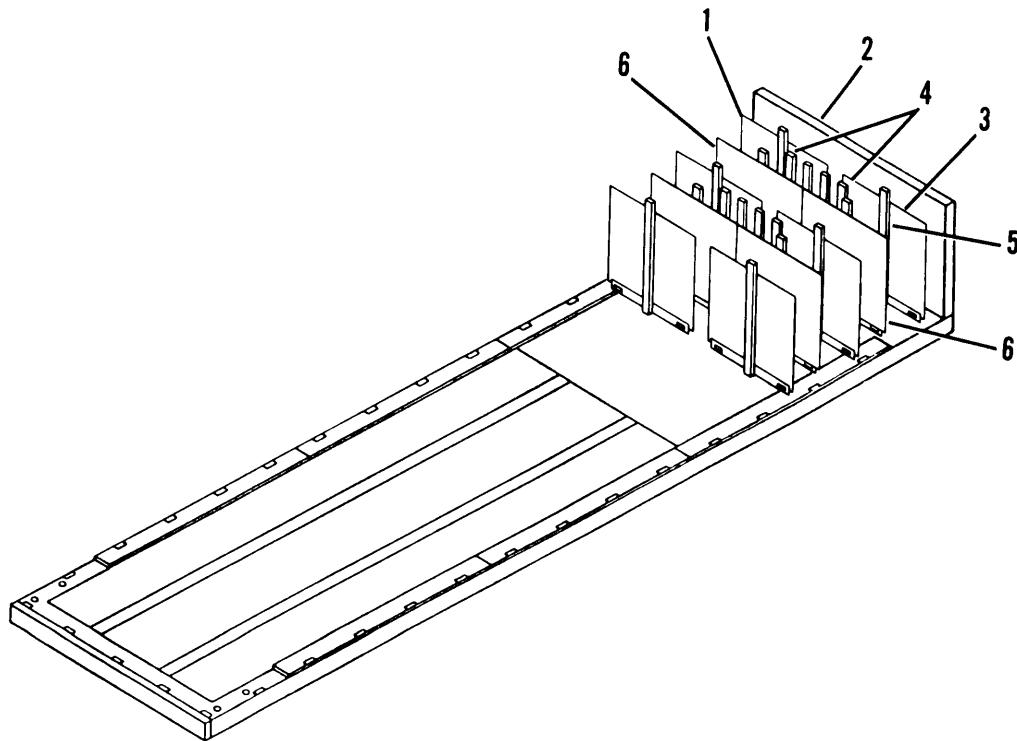


Figure 2-24. Stacking Side Panels and Stakes

2-18. AFTER USE

a. Positioning Chock Blocks.

- (1) Remove chock blocks from stowage brackets.
- (2) Place chock blocks behind tires on level ground or uphill slope. On downhill slope, place chock blocks in front of tires.

b. Lowering Landing Gear.

NOTE

To prevent landing legs from sinking in soft ground, place float pads (ground board assemblies) (4) under landing shoes (5).

- (1) Unhook crank (1, fig. 2-25) from crank holder (2).
- (2) Raise the crank (1).

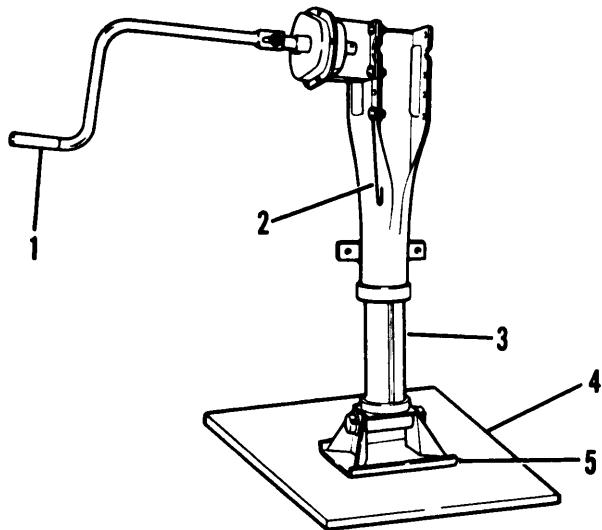


Figure 2-25. Lowering Landing Gear

NOTE

Push crank in for low speed operation.

- (3) Turn crank (1) clockwise until legs (3) are extended.

c. Uncoupling Semic trailer From Towing Vehicle.

- (1) Close shutoff valves for service and emergency air supply located on the towing vehicle.
- (2) Disconnect both the service air hose and emergency air hose from air hose couplings (1 and 2, fig. 2-26).

- (3) Install dummy couplings (4) on service (1) and emergency (2) gladhands.
- (4) Disconnect electrical cable from connector (3).

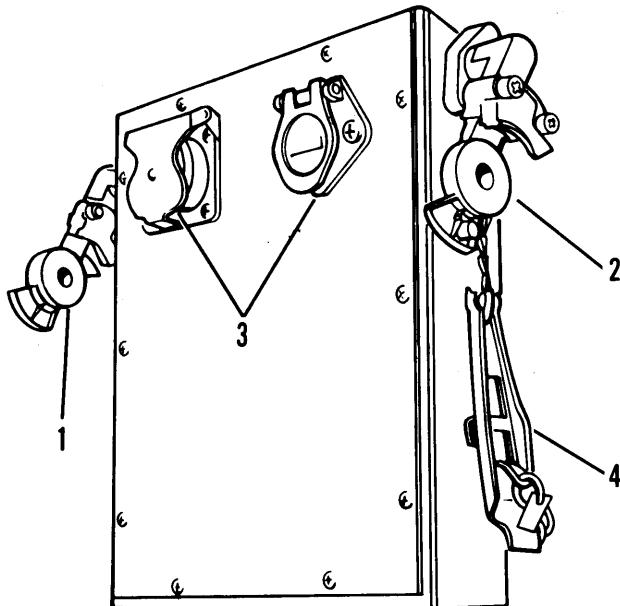


Figure 2-26. Uncoupling Semitrailer From Towing Vehicle

- (5) Release semitrailer kingpin from towing vehicle fifth wheel.
- (6) Slowly drive towing vehicle forward until semitrailer is clear of approach ramps (1, fig. 2-27).

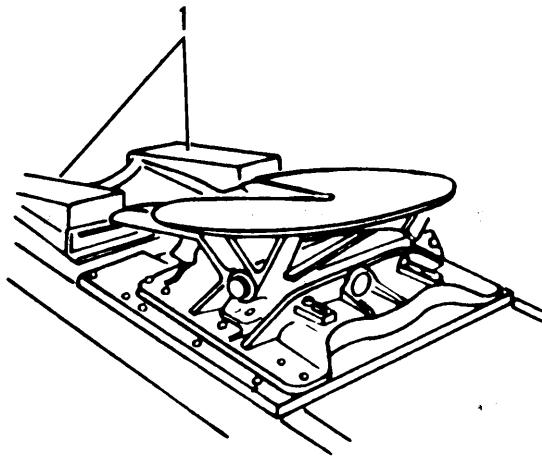


Figure 2-27. Fifth Wheel and Approach Ramps

2-19. SLINGING PROCEDURES

CAUTION

Do not lift the semitrailer with side racks installed.

Do not sling the semitrailer unless all four lifting eyes (1, fig. 2-28) are fully extended.

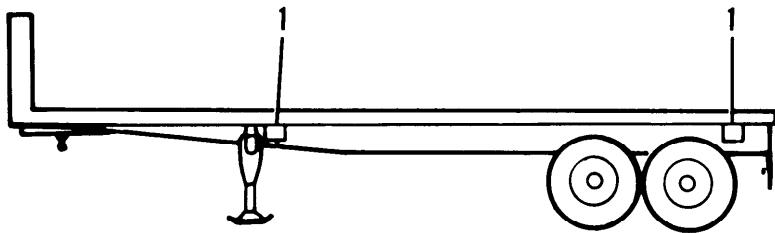


Figure 2-28. Lifting Eye Location

a. Pull the latch (2, fig. 2-29) down and hold; push out on bolt at rear of lifting eye.

b. Pull the lifting eye (3) out from the housing as far as it will go.

CAUTION

Be sure that the hook point is facing toward the outside of the semitrailer.

c. Connect the sling hook (4) to the lifting eye.

WARNING

Do not get under the semitrailer while slinging operation are underway. Do not lift a loaded semitrailer. Failure to observe this warning could result in serious injury or damage to personnel and equipment.

Do not lift the semitrailer without a ground-guide, using a 30 ft. guideline attached to either one of rear lifting eyes. Without ground-guide steering assistance serious injury or damage could result to personnel and equipment.

e. When all four lifting eyes are extended and hoist is attached, lift the semitrailer .

f. After moving the semitrailer, remove the sling hook (4) from the lifting eye (3).

g. Pull down the latch (2) and slide the lifting eye (3) into the housing (1) until the latch (2) retracts.

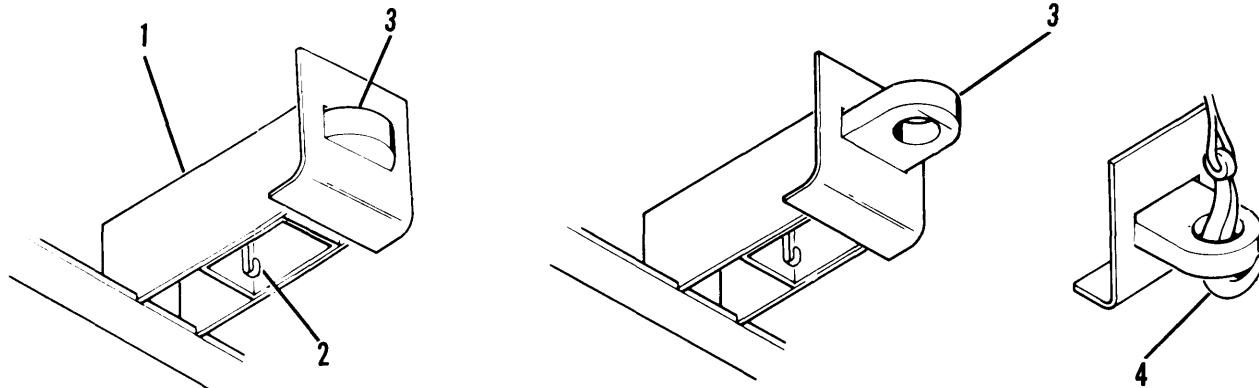


Figure 2-29. Slinging

Section IV. OPERATION UNDER UNUSUAL CONDITIONS

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Operation in Mud.....	2-32
Operation in Rainy or Humid Conditions	2-32
Operation on Rocky Terrain	2-33
Operation in Salt Water Areas	2-32
Operation in Snow	2-32
Operation with Air Brake Failure	2-33

2-20. OPERATION IN EXTREME COLD

a. Operation.

- (1) Be careful when placing the semitrailer in motion after a shutdown. Congealed lubricants can cause part failure.
- (2) Tires may be frozen to the ground or with a flat spot if they were underinflated.
- (3) Brake shoes may be frozen to the brake drums and will require preheating by using a torch to avoid damage.
- (4) Refer to FM 9-207 and FM 21-305 for special instructions on driving hazards in snow and ice that may be encountered during extremely cold weather conditions.

b. At-Halt Parking.

- (1) For short shutdown periods, park in a sheltered spot out of the wind.
- (2) For long shutdown periods, if high dry ground is not available, prepare a footing of planks or brush.
- (3) Remove all buildup of ice and snow as soon as possible after shutdown.
- (4) Cover and shield the semitrailer with canvas covers if available. Keep ends of covers off ground to keep them from freezing to the ground.

2-21. OPERATION IN EXTREME HEAT

a. Refer to TB 43-0239 and FM 90-3 for maintenance and operations, respectively, under desert conditions.

b. Do not park the semitrailer in the sun for long periods of time as heat and sunlight will shorten the life of the tires.

c. Park the semitrailer where it will get maximum protection from heat, sun and dust.

2-22. OPERATION IN RAINY OR HUMID CONDITIONS

Frequently inspect, clean and lubricate inactive equipment to prevent rust and fungus accumulation.

2-23. OPERATION IN SALT WATER AREAS

Salt water will cause metal parts to rust and corrode. Clean, inspect and lubricate frequently.

2-24. OPERATION IN SNOW

Refer to FM 21-305 for special instructions on operations in snow.

2-25. OPERATION IN MUD OR SAND

CAUTION

Do not tow, pull, or push semitrailer by rear bumper.
This may cause damage to equipment.

a. Reduce tire pressure to 35 psi (241 kPa) for operation in beach or desert sand.

b. Be sure to return tire pressure to normal 75 psi (517 kpa) after sand operation.

c. After operation in mud or sand clean, inspect and lubricate the semitrailer.

2-26. OPERATION ON ROCKY TERRAIN

- a. Tires must be fully inflated to 75 psi (517 kPa) when moving on rough or rocky terrain. Underinflated tires will cause internal ruptures of tires and damage tubes.
- b. Before driving over stumps or rocks, make sure the semitrailer can clear them. Such objects can damage components on the underside of the semitrailer. Beware of low hanging limbs that can damage cargo.
- c. Be sure you have a serviceable spare tire because there is a greater chance of tire puncture.

2-27. FORDING

CAUTION

Do not exceed fording depth of 30 in. (76 cm) or damage to the equipment may result.

a. Before Fording.

- (1) Before entering water, check bottom surface conditions. If bottom is too soft, do not ford.
- (2) Cables and terminals must be protected by spraying with ignition insulation compound.

b. After Fording.

- (1) After coming out of water, apply brakes a few times to help dry out brake linings. Make sure semitrailer brakes are working before driving at normal speeds.
- (2) Drain or dry all areas where water has collected.
- (3) Lubricate all unpainted surfaces. See lubrication chart (fig. 3-1).
- (4) Wheel bearings should be cleaned and repacked with lubricant as specified on the lubrication chart (fig. 3-1) after each submersion.
- (5) Dry all lubrication points and lubricate as specified on the lubrication chart (fig. 3-1).

2-28. OPERATION WITH AIR BRAKE FAILURE (CAGING SPRING BRAKE CHAMBERS)

WARNING

This is an emergency procedure that is to be used only to move the semitrailer off the traveled portion of the road when a brake line or other part fails causing loss of air brake system air pressure.

- o Always block wheels with chock blocks before manually releasing actuator (caging spring brakes).
 - o Caged spring in bottom chamber is under 2500 lbs of tension. Use extreme care when performing maintenance. Do not position yourself in front of, or in line with the spring brake assembly. Perform necessary maintenance from the side. Read all manufacturer's warning labels before caging. Inspect clamp bands, castings and fasteners for external damage. If damage to these items is evident, do not attempt caging procedure. Notify organizational maintenance immediately. Failure to observe this warning could result in serious personal injury.
- a. Block semitrailer with chock blocks to prevent movement.
- b. Remove plug (3, fig. 2-30) from spring brake chamber.
- c. Remove nut (5) and washer (6). Remove spring brake tool (1) from mounting hole (2) in spring brake chamber.
- d. Insert spring brake tool (1) through opening (4) in brake chamber. Turn release tool (1) 1/4 turn clockwise to lock in manual release position.
- e. Install washer (6) and nut (5) on spring brake tool (1). Tighten until $2\frac{1}{2}$ to $2\frac{3}{4}$ inches of spring brake tool (1) is exposed.
- f. Repeat steps b. through e. for remaining spring brake chambers.
- g. Remove and stow chock blocks. Move semitrailer.
- h. Re-chock wheels to prevent semitrailer movement.
- i. Notify Organizational Maintenance.

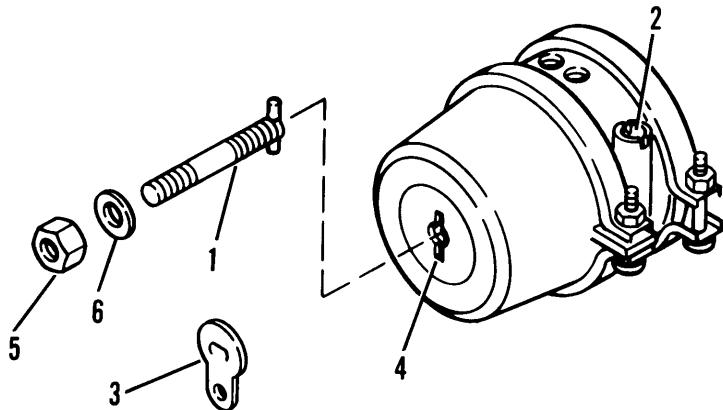


Figure 2-30. Caging Spring Brake Chamber

CHAPTER 3
OPERATOR MAINTENANCE

Section I. LUBRICATION INSTRUCTIONS

	Page
Lubrication Chart	3-1
Lubrication Instructions	3-1

3-1. LUBRICATION INSTRUCTIONS

NOTE

These instructions are mandatory.

a. General. Keep all lubricants in closed containers and store in a clean, dry place away from external heat. Keep container covers clean and allow no dust, dirt, or other foreign material to mix with lubricants. Keep all lubrication equipment clean and ready for use.

b. Cleaning. Keep all external parts, not requiring lubrication, free of lubricants. Before lubricating equipment, wipe all lubrication points free of dirt and grease. Clean all lubrication points after servicing to prevent accumulation of foreign matter.

c. Lubrication Points. Service lubrication points at the proper intervals as specified in the lubrication chart. The intervals specified are based on operation under normal conditions. Modification of recommended intervals may be required under unusual operating conditions.

3-2. LUBRICATION CHART

a. For lubrication under normal conditions, refer to the lubrication chart on the following page.

b. For instructions on lubrication in weather below 0°F (-18°C), refer to FM 9-207.

c. For lubrication before and after fording, refer to TM 9-238.

d. After operating in mud, dust, sand or other unusual conditions, clean and inspect all lubrication points. Lubricate semitrailer in accordance with the lubrication chart.

LUBRICATION CHART

SEMI TRAILER, BREAKBULK/CONTAINER TRANSPORTER, M871 AND M871A1

Intervals are based on normal operation. Reduce to compensate for abnormal operation and severe conditions or contaminated lubricants. During inactive periods, intervals may be extended commensurate with adequate preservation. Relubricate after washing or fording.

Clean fittings before lubricating. Clean parts with PD-680, SD-2 SOLVENT, dry cleaning. Dry before lubricating. Lubricate dotted arrow points on both sides of the equipment.

LUBRICANT ● INTERVAL

INTERVAL ● LUBRICANT

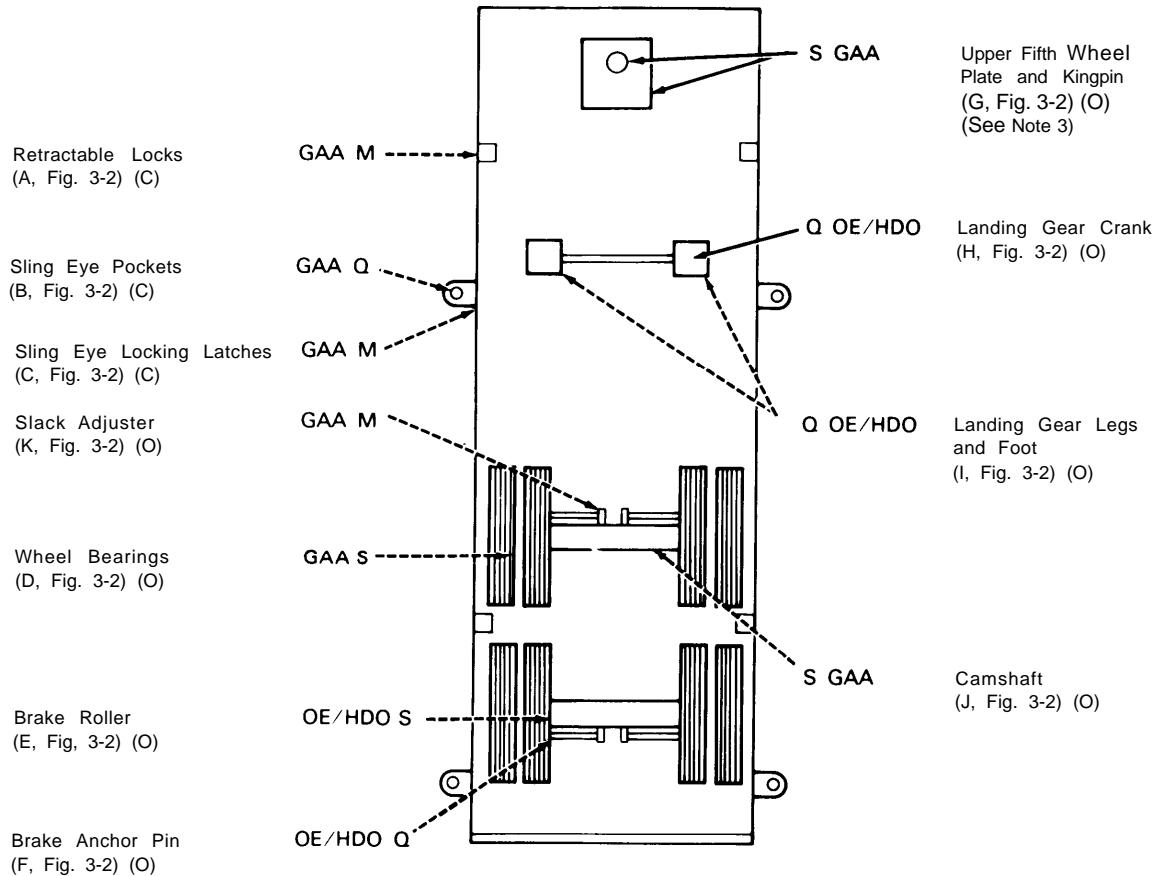


Figure 3-1. Lubrication Chart (sheet 1 of 2)

- KEY -

LUBRICANT	CAPACITIES	EXPECTED TEMPERATURE			INTERVALS
		Above +15F (Above -9C)	+40F to -15F (+4C to -26C)	+40F to -65F (+4C to -54C)	
OE/HDO Lubricating Oil, ICE, Tactical (MIL-L-2104) OEA Lubricating Oil, ICE, Arctic (MIL-L-46167) Brake Roller Brake Anchor Pin Landing Gear Crank Landing Gear Legs and Foot	As Req'd	OE/HDO 15/40 OR OE/HDO-30 (0-238) See Key NOTE	OE/HDO 15/40 OR OE/HDO-10 (0-237) See Key NOTE	OEA (0-183)	S - Semiannually A - Annually (Every 2nd "S" P.M. Service) Q - Quarterly M - Monthly
GAA Grease, Automotive and (MIL-G-10924) Artillery Retractable Twist Locks Sling Eye Pockets Sling Eye Locking Latches Slack Adjuster Upper Fifth Wheel Plate and Kingpin Camshaft Wheel Bearings	As Req'd	GAA (G-403) ALL TEMPERATURES			For arctic operation refer to FM 9-207

Key Note:

Grade 15W-40 (OE/HDO 15/40) is the preferred lubricant when temperatures are above +5°F (-15°C).

NOTES:

1. LUBRICATION INTERVALS
Points requiring lubrication at 6 months will be lubricated at time of the "S" P.M. service.
2. DO NOT LUBRICATE
Springs.
3. Kingpin and Plate. Apply a thin coat of GAA grease to kingpin and upper fifth wheel plate.

Figure 3-1. Lubrication Chart (sheet 2 of 2)

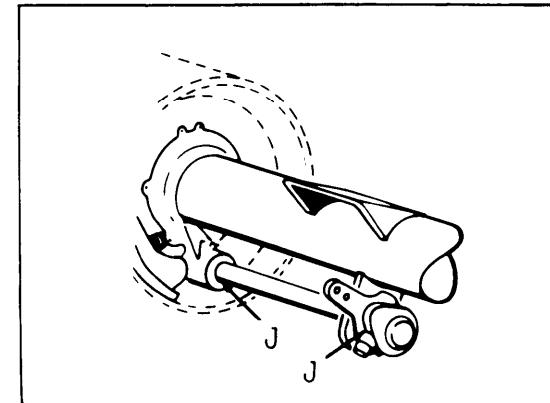
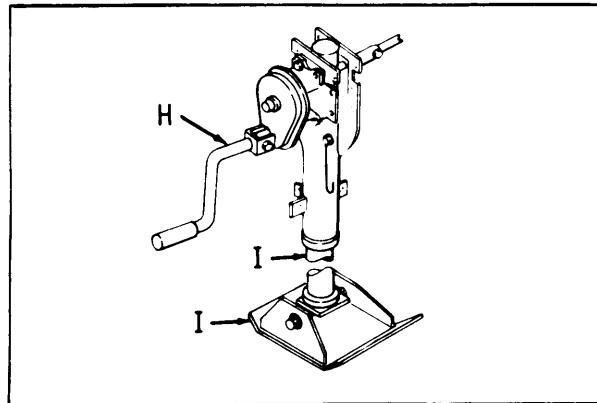
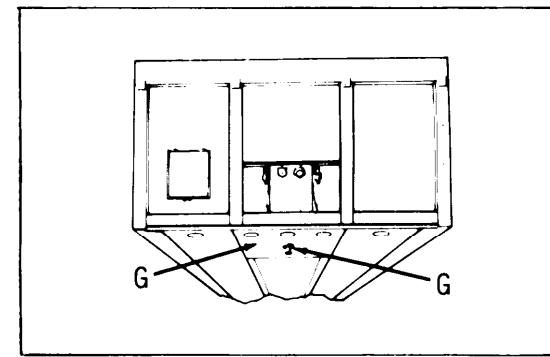
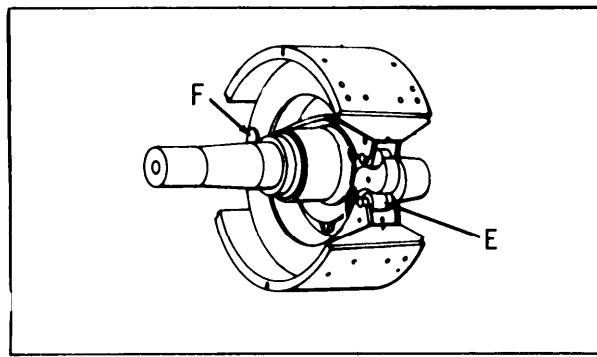
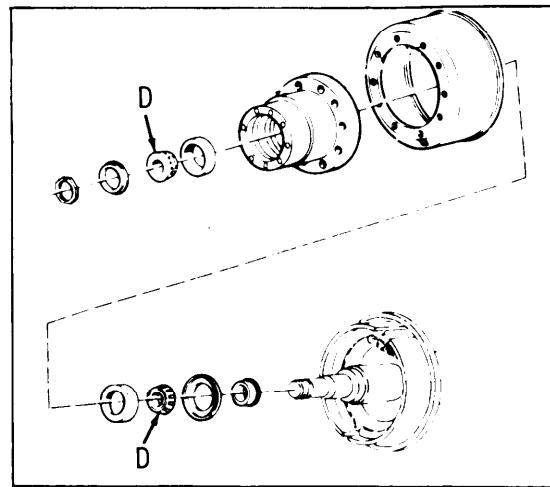
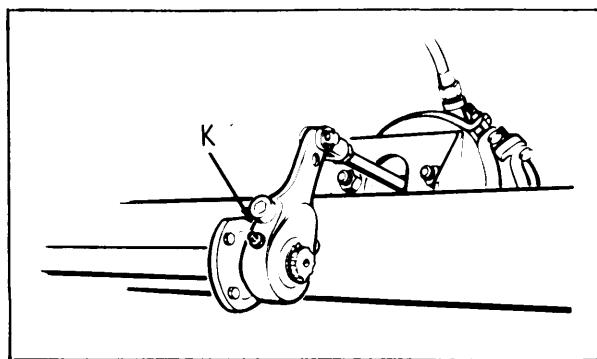
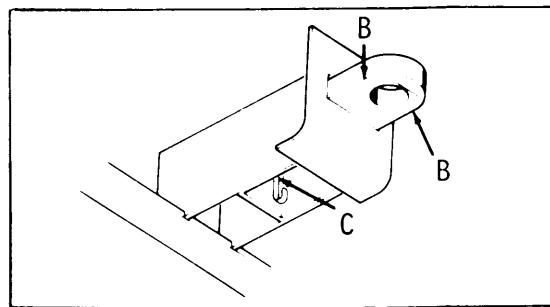
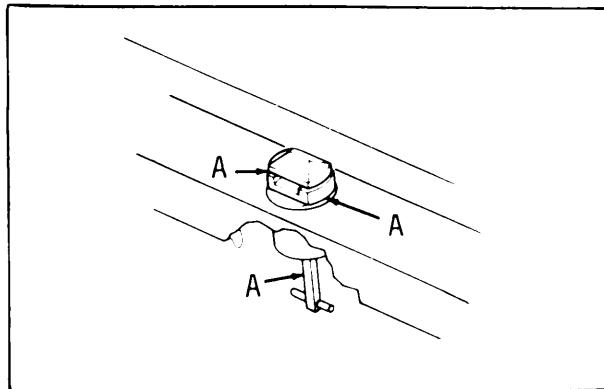


Figure 3-2. Localized Lubrication Points

Section II. OPERATOR TROUBLESHOOTING PROCEDURES

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3-3. GENERAL

a. The table in this section lists the common malfunctions which you may find during the operation or maintenance of the semitrailer or its components. You should perform the tests or inspections and corrective maintenance in the order listed.

b. This manual cannot list all malfunctions that may occur, or all tests, inspections and corrective actions. If a malfunction is not listed or it is not corrected by the listed corrective actions, notify Organizational Maintenance.

3-4. SYMPTOM INDEX

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BRAKES:	
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TIRES:	
Excessively worn, scuffed or cupped tires	3-9

Table 3-1. Operator Troubleshooting Table

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
--------------------	---------------------------	--------------------------

ELECTRICAL SYSTEM

1. ALL LIGHTS DO NOT LIGHT.

WARNING

Disconnect electrical power source before performing any troubleshooting on wiring harness, connectors or lights.

- Step 1. Check lights on towing vehicle including turn signals and stop lights.
- If towing vehicle lights do not light, notify Organizational Maintenance.
 - If towing vehicle lights come on, go to step 2.
- Step 2. Check electrical connection at intervehicular cable receptacle.
- If cable is not properly connected, reconnect electrical cable.
 - If cable is properly connected, go to step 3.
- Step 3. Check intervehicular connectors for dirty or corroded pins. Check for damaged pins.
- If pins are dirty or corroded, clean the pins (para. 3-5).
 - If pins are damaged, notify Organizational Maintenance.
 - If the above steps do not correct the malfunction, notify Organizational Maintenance.

2. ONE OR MORE LIGHTS WILL NOT LIGHT.

- Step 1. Check for burned out or defective bulbs.
- If bulbs are burned out or defective, notify Organizational Maintenance.
 - If bulbs are not burned out or defective, go to step 2.
- Step 2. Check for broken lead wires or loose connections.
- If lead wires are broken, notify Organizational Maintenance.
 - If connections are not loose or broken, go to step 3.
- Step 3. Check light assembly for damage.
- If light assembly is damaged, notify Organizational Maintenance.
 - If light assembly is not damaged, go to step 4.

Table 3-1. Operator Troubleshooting Table

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
ELECTRICAL SYSTEM - continued		
2. ONE OR MORE LIGHTS WILL NOT LIGHT - continued.		
Step 4.	Check for dirty or corroded connectors at back of light.	
a.	If connectors are dirty or corroded, clean (para. 3-5).	
b.	If cleaning does not correct the malfunction, notify Organizational Maintenance.	
3. DIM OR FLICKERING LIGHTS.		
Step 1.	Check electrical connectors at light for loose, dirty or corroded pins.	
a.	If connections are loose, tighten.	
b.	If connector pins are dirty or corroded, clean pins (para. 3-5).	
c.	If connections are tight and clean, go to step 2.	
Step 2.	Check for defective bulb.	
a.	If bulb is defective, notify Organizational Maintenance.	
b.	If bulb is not defective, and malfunction is not corrected, notify Organizational Maintenance.	
BRAKES		
1. BRAKES WILL NOT RELEASE.		
Step 1.	Check that towing vehicle to semitrailer air supply is turned on.	
a.	If air is shut off, turn on air supply.	
b.	If air supply is on, go to step 2.	
Step 2.	Check air pressure of towing vehicle.	
a.	If pressure is low, build up air pressure to normal level.	
b.	If pressure is normal, go to step 3.	
Step 3.	Check air line connections at gladhands.	
a.	If air lines are not properly connected (Emergency to Emergency, Service to Service), reconnect air lines.	
b.	If air lines are connected properly, go to step 4.	

Table 3-1. Operator Troubleshooting Table**MALFUNCTION**

TEST OR INSPECTION	CORRECTIVE ACTION
---------------------------	--------------------------

BRAKES - continued

1. BRAKES WILL NOT RELEASE - continued.

Step 4. Check for dirty or damaged packing in gladhands.

- a. If packing is dirty, clean packing (para. 3-7).
- b. If packing is leaking, notify Organizational Maintenance.
- c. If coupling is clean and not damaged, go to step 5.

Step 5. Inspect air line connections for leaks.

- a. If leaks are evident, notify Organizational Maintenance.
- b. If no leaks are evident, go to step 6.

Step 6. Check for open drain cock on each reservoir.

- a. If either drain cock is open, close it.
- b. If drain cocks are closed, notify Organizational Maintenance.

2. GRABBING BRAKES.

Check for moisture in air reservoir by opening each drain cock (para. 3-8).

- a. If moisture is present, allow to drain.
- b. If reservoirs are dry and malfunction is not corrected, notify Organizational Maintenance.

LANDING GEAR

1. LANDING GEAR IS DIFFICULT TO RAISE OR LOWER.

Step 1. Check for misaligned or broken crank handle.

- a. If handle is misaligned or broken, notify Organizational Maintenance.
- b. If handle is not misaligned or broken, go to step 2.

Step 2. Check for dirt on lower landing gear leg.

- a. If lower landing gear leg is dirty, clean leg (para. 3-6).
- b. If lower landing gear leg is clean, go to step 3.

Step 3. Check for misaligned, damaged or bent landing gear legs.

If legs are misaligned, damaged or bent, notify Organizational Maintenance.

Table 3-1. Operator Troubleshooting Table

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
TIRES		
1. EXCESSIVELY WORN, SCUFFED OR CUPPED TIRES.		
Step 1. Check tire pressure.		
a. If tire pressure is not 75 psi (517 kPa), inflate tires. b. If tire pressure is 75 psi (517 kPa), go to step 2.		
1. EXCESSIVELY WORN, SCUFFED OR CUPPED TIRES - continued.		
Step 2. Check for loose, cracked or broken wheels.		
a. If wheels are loose, tighten nuts. b. If wheel is cracked or broken, notify Organizational Maintenance. c. If wheel is secure and not cracked or broken, go to step 3.		
Step 3. Check suspension system for damaged springs and loose or missing bolts and nuts.		
a. If suspension is damaged or has loose or missing bolts and nuts, notify Organizational Maintenance. b. If suspension system is not damaged and all hardware is complete and secure, go to step 4.		
Step 4. Check tracking for indication of axle misalignment.		
a. If axle appears to be misaligned, notify Organizational Maintenance. b. If the above steps do not correct the malfunction, notify Organizational Maintenance.		

Section III. MAINTENANCE PROCEDURES

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Air Hose Couplings	3-12
Air Reservoir	3-13
Electrical Connectors	3-10
Landing Gear Legs	3-11
Tire Removal and Installation	3-14

3-5. ELECTRICAL CONNECTORS

This task covers:

Cleaning

INITIAL SETUP

Materials/Parts

Brush, acid swabbing (item 2, appendix E)
Detergent, liquid (item 4, appendix E)
Rags, wiping (item 12, appendix E)

WARNING

Disconnect electrical power from vehicle prior to making any repairs on the electrical system. Failure to do so could result in personal injury.

- a. Use a soft cloth to remove any buildup of grease and dirt (fig. 3-3).
- b. Using brush and detergent, clean metal surfaces.
- c. Allow to dry.

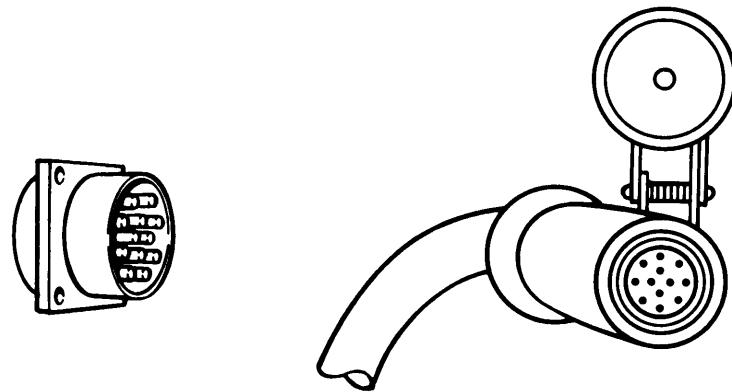


Figure 3-3. Electrical Connectors

TASK ENDS HERE

3-6. LANDING GEAR LEGS

This task covers:

Cleaning

INITIAL SETUP

Materials/Parts

Solvent, dry cleaning (PD-680) (item 14, appendix E)
Rags, wiping (item 12, appendix E)

- a. Use a soft cloth to remove any buildup of grease and dirt (fig. 3-4).

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138°F (59°C).

- b. Use a small brush and dry cleaning solvent (PD-680) to thoroughly clean landing gear leg.

- c. Allow to dry.

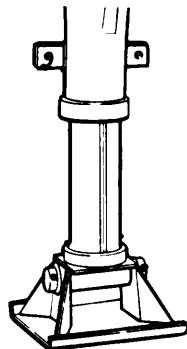


Figure 3-4. Landing Gear

TASK ENDS HERE

3-7. AIR HOSE COUPLINGS (GLADHANDS)

This task covers:

Cleaning

INITIAL SETUP

Materials/Parts

Detergent, liquid (item 4, appendix E)

Rags, wiping (item 12, appendix E)

- a. Use a soft cloth to remove any buildup of grease and dirt (fig. 3-5).
- b. Use a soft cloth and detergent and water to thoroughly clean gladhand packing (1).
- c. Allow to dry.

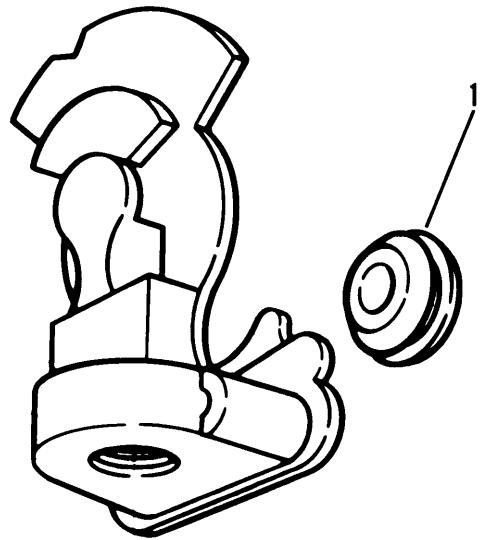


Figure 3-5. Gladhand

TASK ENDS HERE

3-8. AIR RESERVOIRS

This task covers:

Servicing

INITIAL SETUP

Tools

Protective goggles

- a. Turn off air supply to semitrailer.
- b. Unhook gladhands.

WARNING

Wear protective goggles when opening drain cock and avoid the air stream. Failure to do so could result in personal injury.

- c. Open drain cock (1, fig. 3-6) and allow pressure to drain.
- d. Close drain cock (1).
- e. Connect gladhands.

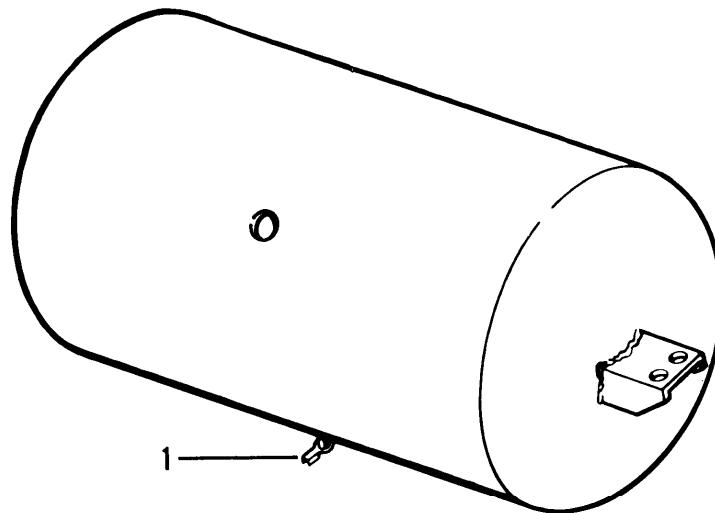


Figure 3-6. Air Reservoir

TASK ENDS HERE

3-9. TIRE REMOVAL AND INSTALLATION

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Personnel Required
-------	--------------------

Jack, hydraulic, hand Wrench, lug/stud nut	Two
---	-----

a. Removal.

- (1) Set chock blocks opposite the tire(s) being removed.
- (2) Remove jack from towing vehicle.

WARNING

Jack must be positioned directly under axle to prevent slippage. Direct all personnel to stay clear of vehicle when vehicle is supported in the air. Failure to do so could result in serious injury and damage to equipment.

- (3) Position jack under axle closest to where tire(s) will be removed (fig. 3-7).

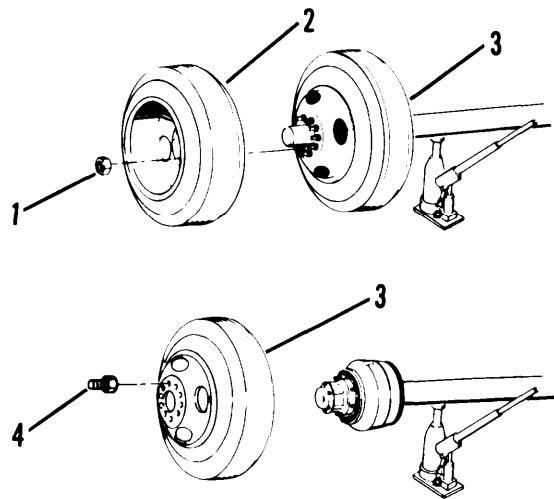


Figure 3-7. Jacking and Tire Removal

- (4) Loosen, but do not remove ten lug nuts (1).
- (5) Jack Up the axle until tires (2 and 3) are clear of the ground.
- (6) Remove ten lug nuts (1) and tire (2).

NOTE

If only the outer tire is being changed, omit step 7.

- (7) Remove ten lugs (4) and tire (3).

b. Installation.

CAUTION

The valve stem must be in the groove of the drum to prevent damage.

NOTE

If only the outer tire is being installed, omit step 1.

- (1) Install new tire (3) and tighten lugs (4).
- (2) Install outer wheel (2) and ten lugs (1). The valve stem must be 180 degrees from the valve stem of the inner wheel.
- (3) Lower and remove jack. Be certain lug nuts are tightened.
- (4) Remove chock blocks and stow in brackets.
- (5) Notify Organizational Maintenance to torque lug nuts.

TASK ENDS HERE

CHAPTER 4

ORGANIZATIONAL MAINTENANCE INSTRUCTIONS

Section I. GENERAL MAINTENANCE INSTRUCTIONS

	Page
Cleaning Instructions	4-2
General Information	4-1
Inspection Instruction	4-3
Repair Instructions	4-4
Scope	4-1
Work Safety	4-1

4-1. SCOPE

These general maintenance instructions contain general shop practices and specific methods you must be familiar with to properly maintain the semitrailer. You should read and understand these practices and methods before starting organizational tasks on the semitrailer.

4-2. WORK SAFETY

a. Before starting a task, think about the risks and hazards to your safety as well as others. Wear protective gear such as safety goggles or lenses, safety shoes, rubber apron, or gloves. Protect yourself against injury.

b. When lifting heavy parts, have someone help you. Make sure that lifting/jacking equipment is working properly, that it is suitable for the task assigned, and is secured against slipping.

c. Always use power tools carefully.

4-3. GENERAL INFORMATION

a. Before beginning a task, find out how much repair, modification, or replacement is needed to fix the equipment as described in this manual. Sometimes the reason for equipment failure can be seen right away and complete teardown is not necessary. Disassemble the equipment only as far as necessary to repair or replace damaged or broken parts.

b. All tags and forms attached to the equipment must be checked to learn the reason for removal from service. Check all Modification Work Orders (MWO) and Technical Bulletins (TB) for equipment changes and updates.

c. In some cases a part may be damaged by removal. If the part appears to be good and other parts behind it are not defective, leave it on and continue the procedure. Here are a few simple rules:

- (1) Do not take out dowel pins or studs unless loose, bent, broken or otherwise damaged.

- (2) Do not pull bearings or bushings unless damaged. If you must get at parts behind them, pull out bearings or bushings carefully.
- (3) Replace all gaskets, seals, and packings.

4-4. CLEANING INSTRUCTIONS

a. General.

- (1) The cleaning instructions will be the same for the majority of parts and components which make up the semitrailer.
- (2) The importance of cleaning must be thoroughly understood by maintenance personnel. Great care and effort are required in cleaning. Dirt and foreign material are a constant threat to satisfactory maintenance. The following should apply to all cleaning, inspection, repair and assembly operations.

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138°F (59°C).

- (a) Clean all parts before inspection, after repair and before assembly.
- (b) Hands should be kept free of any accumulation of grease, which can collect dust, dirt or grit.
- (c) After cleaning, all parts should be covered or wrapped to protect them from dust and dirt. Parts which are subject to rust should be lightly oiled.

b. Steam Cleaning.

WARNING

Use extreme caution while using steam cleaning equipment to avoid potentially serious burns. To prevent injury, user must wear protective goggles or face shield when using steam cleaning equipment.

- (1) Protect all electrical equipment which could be damaged by the steam or moisture before steam cleaning the exterior of the semitrailer.
- (2) Place disassembled parts in a suitable container to steam clean.
- (3) After cleaning, dry and apply light coat of oil to all parts subject to rust.

WARNING

Compressed air for cleaning purposes will not exceed 30 psi. Particles blown by compressed air are hazardous. Make certain the air stream is directed away from user and other personnel in the area. To prevent injury, user must wear protective goggles or face shield when using compressed air.

- (4) Blow out all tapped (threaded) holes with compressed air to remove dirt and cleaning fluids.

c. Electrical Cables, Flexible Hose and Oil Seals.

CAUTION

Do not use dry cleaning solvent to clean rubber, plastic, or synthetic materials. Washing oil seals, electrical cables and flexible hoses with dry cleaning solvents or mineral spirits will cause serious damage or destroy the material.

NOTE

Wash electrical cables and flexible hose with water and mild soap solution and wipe dry. Oil seals are generally damaged during removal, so cleaning will not be necessary since new seals will be used in assembly.

d. Brakeshoes.

WARNING

Do not use a dry brush or compressed air to clean brakeshoes. There may be asbestos dust on brakeshoes which can be dangerous to your health if you breath it. (Brakeshoe must be wet, and a soft bristle brush must be used.) Rinse and allow to dry.

- e. Bearings. Refer to TM 9-214 for instructions and procedures covering care and maintenance of bearings.

4-5. INSPECTION INSTRUCTIONS

- a. General. All components and parts must be carefully checked to determine if they are serviceable for reuse, if they can be repaired, or if they must be scrapped.

b. Drilled and Tapped (Threaded) Holes.

- (1) Inspect for wear, distortion (stretching), cracks or any other damage in or around holes.

- (2) Inspect threaded areas for wear, distortion or evidence of cross-threading.
- (3) Mark all damaged areas for repair or replacement.

c. Metal Lines, Flexible Lines (Hoses) and Metal Fittings.

- (1) Inspect metal lines for sharp kinks, cracks, bends or dents.
- (2) Inspect flexible lines for fraying, evidence of leakage or loose metal fittings or connectors.
- (3) Check all metal fittings and connectors for thread damage. Check for hex heads that are worn or rounded by poorly fitting wrenches.
- (4) Mark all damaged material for repair or replacement.

d. Castings, Forgings and Machined Metal Parts.

- (1) Inspect machined surfaces for nicks, burrs, raised metal, wear or any other damage.
- (2) Check all inner and outer surfaces for breaks and cracks.
- (3) Mark all damaged material for repair or replacement.

e. Bearings. Refer to TM 9-214 for inspection instructions and defect analysis.

f. Air Lines, Fittings and Connections. Check for leaking fittings and connections by coating fittings and connections with soap solution. No leakage is permissible.

4-6. REPAIR INSTRUCTIONS

NOTE

For accuracy, refer to the Source, Maintenance and Recoverability codes (SMR) assigned to support items listed in the maintenance Repair Parts and Special Tools Lists (RPSTL) Appendix F contained in this manual.

a. General. Any repair procedure peculiar to a specific part or component is covered in the section or paragraph relating to that item. After repair, clean all parts thoroughly to prevent dirt, metal chips or other foreign material from entering any working parts.

b. Castings, Forgings and Machined Metal Parts.

- (1) Minor cracked castings or forgings may possibly be repaired. See your supervisor and refer to TM 9-237.

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138°F (59°C).

- (2) Repair minor damage to machined surfaces with a fine mill file or crocus cloth dipped in dry cleaning solvent (PD-680).
- (3) Machined surface deeply nicked which could affect the assembly operation should be replaced. See your supervisor.
- (4) Minor damage to threaded capscrew holes should be repaired with thread tap of same size. See your supervisor.

c. Metal Lines, Flexible Lines (Hoses) and Metal Fittings. Refer to brake system maintenance procedures.

Section II. REPAIR PARTS, SPECIAL TOOLS, TMDE AND SUPPORT EQUIPMENT

	Page
Common Tools and Equipment	4-5
Repair Parts	4-5
Special Tools, TMDE and Support Equipment	4-5

4-7. COMMON TOOLS AND EQUIPMENT

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

4-8. SPECIAL TOOLS, TMDE AND SUPPORT EQUIPMENT

No special tools, TMDE or support equipment is required for maintenance of the semitrailer .

4-9. REPAIR PARTS

See Appendix F for repair parts information.

Section III. SERVICE UPON RECEIPT OF MATERIEL

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Servicing the Equipment	4-6
Unpacking and Checking the Equipment	4-5

4-10. UNPACKING AND CHECKING THE EQUIPMENT

- a. Remove any metal strapping, plywood, tapes, seals, wrapping paper or any other shipping and protective items.

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138°F (59°C).

b. If any exterior parts are coated with rust preventive compound, remove it with cleaning solvent (PD-680).

c. Read and follow all instructions contained in DD Form 1397, which is attached to a conspicuous part of the semitrailer.

d. Inspect equipment for damage incurred during shipping. If equipment has been damaged, report the damage on DD Form 6, Packing Improvement Report.

e. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with DA Pam 738-750.

4-11. SERVICING THE EQUIPMENT

a. Perform the preventive maintenance checks and services contained in tables 2-1 and 4-1.

b. Lubricate all points as shown in the lubrication chart (fig. 3-1), regardless of interval.

c. Schedule the next preventive maintenance checks and services on DD Form 314, Preventive Maintenance Schedule and Record.

Section IV. ORGANIZATIONAL PREVENTIVE MAITENANCE CHECKS AND SERVICES (PMCS)

	Page
General	4-6
Organizational Preventive Maintenance Checks and Services	4-6
PMCS Column Description	4-8

4-12. GENERAL

To ensure that the semitrailer is ready for operation at all times, it must be inspected systematically so that defects may be discovered and corrected before they result in serious damage or failure. Table 4-1 contains a tabulated listing of preventive maintenance checks and services to be performed by Organizational Maintenance personnel. All deficiencies and shortcomings will be recorded as well as the corrective action taken on DA Form 2404 at the earliest possible opportunity.

4-13. ORGANIZATIONAL PREVENTIVE MAINTENANCB CHECKS AND SERVICES

a. The item numbers of table 4-1 indicate the sequence of PMCS. Perform at intervals shown below:

- (1) Do your (Q) PREVENTIVE MAINTENANCE once every 3 months.
- (2) Do your (S) PREVENTIVE MAINTENANCE once every 6 months.

- b. If something doesn't work, troubleshoot it with the instructions in this manual or notify your supervisor.
- c. Always do your preventive maintenance in the same order, so it gets to be a habit. Once you've had some practice, you'll spot anything wrong in a hurry.
- d. If anything looks wrong and you can't fix it, write it down on your DA Form 2404. If you find something seriously wrong, report it to Direct Support Maintenance as soon as possible.

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138°F (59°C).

WARNING

Compressed air for cleaning purposes will not exceed 30 psi. Particles blown by compressed air are hazardous. Make certain the air stream is directed away from user and other personnel in the area. To prevent injury, user must wear protective goggles or face shield when using compressed air.

- (1) Keep it clean: Dirt, grease, oil and debris only get in the way and may cover up a serious problem. Clean as you work and as needed. Use dry cleaning solvent (PD-680) to clean metal surfaces. Use soap and water when you clean rubber or plastic material.
- (2) Bolts, nuts and screws: Check that they are not loose, missing, bent or broken. Look for chipped paint, bare metal or rust around bolt heads. Tighten any that are loose.
- (3) Welds: Look for loose or chipped paint, rust, or gaps where parts are welded together. If you find a bad weld, report it to Direct Support Maintenance.
- (4) Electric wires and connectors: Look for cracked or broken insulation, bare wires and loose or broken connectors. Tighten loose connections and make sure wires are in good condition.
- (5) Hoses and fluid lines: Look for wear, damage and leaks. Make sure clamps and fittings are tight. Wet spots show leaks, of course, but a stain around a fitting or connector can mean a leak. If a leak comes from a loose fitting or connector, tighten it. If something is broken or worn out, either correct it or report it to Direct Support Maintenance (see Maintenance Allocation Chart, appendix B).

4-14. PMCS COLUMN DESCRIPTION

- a. Item Number - The order that PMCS should be performed, and also used as a source of item numbers for the TM number column on DA Form 2404 Equipment Inspection and Maintenance worksheet when recording results of PMCS.
- b. Interval - Tells when each check is to be performed.
- c. Item To Be Inspected - Lists the checks to be performed.

NOTE

Perform Operator/Crew PMCS prior to or in conjunction with Organizational PMCS if:

- a. There is a delay between the daily operation and the Organizational PMCS.
- b. Regular operator is not assisting/participating.

Table 4-1. ORGANIZATIONAL PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**Q - QUARTERLY****S - SEMIANNUALLY**

ITEM NO.	INTERVAL		ITEM TO BE INSPECTED PROCEDURE: CHECK FOR AND HAVE REPAIRED, FILLED OR ADJUSTED AS NEEDED
	Q	S	
1	•		LIGHTS AND REFLECTORS <ul style="list-style-type: none"> a. Check for any broken, cracked lenses, or unserviceable lights and replace if necessary (paras. 4-22 through 4-25). b. Check for cracked or broken reflectors. Replace as necessary (para. 4-63).
2	•		AIR RESERVOIRS AND LINES <ul style="list-style-type: none"> Check air reservoirs and air lines for damage and tight connections.
3	•		WHEELS <ul style="list-style-type: none"> a. Check for missing lug nuts. b. Check lug nuts for tightness. Torque to 400-450 lb ft (542-612 Nm). c. Check wheels for damage. Replace wheels if found to be defective (para. 4-45).

Table 4-1. ORGANIZATIONAL PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

Q - QUARTERLY

S-SEMIANNUALLY

ITEM NO.	INTERVAL		ITEM TO BE INSPECTED PROCEDURE: CHECK FOR AND HAVE REPAIRED, FILLED OR ADJUSTED AS NEEDED
	Q	S	
4	•	•	<p>d. Check wheel bearings. Clean, repack, install and adjust (para. 4-47).</p> <p>e. Check brakes. Replace damaged or worn parts (para. 4-42).</p> <p>SPRINGS</p> <hr/> <p style="text-align: center;"><u>WARNING</u></p> <p>It is essential that torque values be maintained to insure proper operation of the suspension system. The torque values of the suspension bolts and nuts must be checked after the initial break-in period of 1,000 miles (1,600 km) and every three months thereafter. Failure to do so may cause injury to personnel, damage to equipment and will void the warranty.</p> <p>a. Check trunnion cap u-bolts for tightness. Torque to 880 lb ft (1192 Nm).</p> <p>b. Check spring cap u-bolts for tightness. Torque to 300 lb ft (408 Nm).</p> <p>c. Check spring cap bolts for tightness. Torque to 180 lb ft (244 Nm).</p> <p>d. Check springs for any evidence of damage or sagging.</p> <p>e. Check for shifted leaves. If evidence of shifting, sagging, or damage exists, immediately notify Direct Support.</p>
5	•		<p>DATA PLATES</p> <p>Assure legibility and condition of data plate. Replace damaged or disfigured plate (para. 4-64).</p>
6	•		<p>BODY (FLOOR)</p> <p>Check overall body and floor condition for evidence of rotted wood, gouges and other damage. Repair as necessary.</p>

Table 4-1. ORGANIZATIONAL PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

Q - QUARTERLY

S - SEMIANNUALLY

ITEM NO.	INTERVAL		ITEM TO BE INSPECTED PROCEDURE: CHECK FOR AND HAVE REPAIRED, FILLED OR ADJUSTED AS NEEDED
	Q	S	
7	●		<p>ROAD TEST</p> <p>a. Perform road test. Give special attention to items that were repaired or adjusted.</p> <p style="text-align: center;"><u>WARNING</u></p> <p>Overheated brake drums and hubs can cause severe burns if not touched carefully.</p> <p>b. Check brake drums and hubs immediately after road test; cautiously feel brake drums and hubs.</p> <p style="text-align: center;"><u>NOTE</u></p> <p>An overheated wheel hub and brake drum indicates an improperly adjusted or defective brake or dry wheel bearing. An abnormally cool condition indicates an inoperative brake.</p> <p>c. Be alert during road tests for any unusual noises that may indicate damage or looseness in springs.</p>

Section V. ORGANIZATIONAL TROUBLESHOOTING PROCEDURES

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General	4-10
Symptom Index	4-11

4-15. GENERAL

a. The table in this section lists common malfunctions which may be found during operation or maintenance of the semitrailer or components. You should perform test inspections and corrective actions in the order listed.

b. This manual cannot list all malfunctions that may occur, nor all tests or inspections and corrective actions. If a malfunction is not listed, or it is not corrected by listed corrective actions, notify your supervisor.

4-16. SYMPTOM INDEX

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Table 4-2. Organizational Troubleshooting Table**MALFUNCTION****TEST OR INSPECTION****CORRECTIVE ACTION****ELECTRICAL SYSTEM**

See schematics as follows:

- Fig. 4-18 M871 electrical schematic
 Fig. 4-19 M871A1 electrical schematic

1. ALL LIGHTS DO NOT LIGHT.

Step 1. Check intervehicular cable receptacles for proper connections.

- a. Pull plug out and reinsert fully.
- b. If receptacles not defective, go to step 2.

Table 4-2. Organizational Troubleshooting Table**MALFUNCTION****TEST OR INSPECTION****CORRECTIVE ACTION****ELECTRICAL SYSTEM - continued**

1. ALL LIGHTS DO NOT LIGHT - continued.

Step 2. Check setting of light switch on towing vehicle.

- a. Set light switch properly.
- b. If light switch is set properly, go to step 3.

Step 3. Check circuit breaker on towing vehicle.

- a. If circuit breaker is open, reset circuit breaker.
- b. If circuit breaker is not open, go to step 4.

Step 4. Check wiring for bare spots in insulation.

- a. Repair wiring, if defective (para. 4-27, 4-28).
- b. If wiring not defective, go to step 5.

Step 5. Check ground connector for loose or broken connections.

Repair or tighten ground connector.

2. ONE OR MORE LIGHTS DO NOT LIGHT.

Step 1. Check for burned out lamp.

- a. Replace lamp if defective (para. 4-22).
- b. If lamp does not light, go to step 2.

Step 2. Check for broken or shorted wire in cable or loose connection in plug or receptacle.

- a. Tighten, repair or replace as necessary.
- b. If wiring and connections not damaged, go to step 3.

Step 3. Check for damaged light assembly.

- a. Replace light assembly, if damaged (paras. 4-22 through 4-25).
- b. If light assembly is not damaged, go to step 4.

Step 4. Check lamp socket for dirt and corrosion.

- a. Remove lamp and clean sockets, if dirty or corroded.
- b. If lamp socket is clean, go to step 5.

Table 4-2. Organizational Troubleshooting Table**MALFUNCTION****TEST OR INSPECTION****CORRECTIVE ACTION****ELECTRICAL SYSTEM - continued**

2. ONE OR MORE LIGHTS DO NOT LIGHT - continued.

Step 5. Check plug and/or receptacle for dirty or corroded contacts.

- a. Clean contacts, if dirty or corroded.
- b. If contacts are not dirty or corroded, go to step 6.

Step 6. Check for loose or broken ground wire at light assembly.

Repair or tighten ground wire, if defective.

BRAKE SYSTEM

1. BRAKES WILL NOT RELEASE.

Step 1. Check for defective emergency relay valve.

- a. Build up pressure in semitrailer brake system, if semitrailer is coupled. Open drain cocks on semitrailer air reservoirs, if semitrailer is uncoupled.
- b. If emergency relay valve is operating, go to step 2.

Step 2. Check air hose connections to towing vehicle.

- a. Connect air hoses properly.
- b. If air hoses are connected properly, go to step 3.

Step 3. Check position of brake valve on towing vehicle.

- a. Move brake valve to release position.
- b. If brake valve is correctly positioned, go to step 4.

Step 4. Check for restriction in service air and emergency air lines.

- a. If air lines or hoses are restricted, replace or repair as required (para. 4-33).
- b. If air lines or hoses are free of restrictions, go to step 5.

Step 5. Check for closed shutoff valves on towing vehicle.

- a. Open valves, if closed.
- b. If valves are open, go to step 6.

Table 4-2. Organizational Troubleshooting Table**MALFUNCTION****TEST OR INSPECTION****CORRECTIVE ACTION****BRAKE SYSTEM - continued**

1. BRAKES WILL NOT RELEASE - continued.

Step 6. Check for weak or broken brake shoe tension spring.

If brake shoe tension spring is broken, replace (para. 4-42) .

2. NO BRAKES OR WEAK BRAKES.

Step 1. Check for closed shutoff valves on towing vehicle.

- a. Open valves, if closed.
- b. If valves are open, go to step 2.

Step 2. Check air hoses for proper connection to towing vehicle.

- a. Connect hoses properly.
- b. If hoses are properly connected, go to step 3.

Step 3. Check for open drain cocks in semitrailer air reservoirs.

- a. Close drain cocks, if open.
- b. If drain cocks are closed, go to step 4.

Step 4. Check air pressure gage on towing vehicle for low air pressure indication. Check air lines/connectors for restrictions.

- a. Tighten connections; remove any restrictions from hoses. Repair or replace as necessary (para. 4-33).
- b. If air pressure gage indicates normal, go to step 5.

Step 5. Check for defective emergency relay valve.

- a. If emergency relay valve is defective, replace (para. 4-34).
- b. If emergency relay valve is not defective, go to step 6.

Step 6. Check for grease on brake lining.

- a. If brake lining has grease on it, replace brake shoes (para. 4-42).
- b. If brake lining shows no grease, go to step 7.

Table 4-2. Organizational Troubleshooting Table

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
BRAKE SYSTEM - continued		
2. NO BRAKES OR WEAK BRAKES - continued.		
Step 7.	Check for worn/worn out brake lining.	
a.	If brake lining is worn, adjust brakes (para. 4-47).	
b.	If brake lining is worn out, replace brake shoes (para. 4-42).	
c.	If brake lining is not worn, go to step 8.	
Step 8.	Check for air leakage in air chambers.	
a.	If air chambers are leaking, tighten connections.	
b.	If air chambers are not leaking, go to step 9.	
Step 9.	Visually check for broken or frozen camshaft roller.	
	If camshaft roller is broken or frozen, replace (para. 4-43).	
3. SLOW BRAKE APPLICATION OR RELEASE.		
Step 1.	Check for low air pressure indication on air pressure gage in towing vehicle. Check air lines/connectors for restrictions.	
a.	Tighten connections; remove any restrictions from hoses. Repair or replace as necessary (para. 4-33).	
b.	If air pressure gage indicates normal, go to step 2.	
Step 2.	Check operation of emergency relay valve.	
a.	If emergency relay valve is defective, replace (para. 4-34).	
b.	If emergency relay valve is not defective, go to step 3.	
Step 3.	Check for weak or broken brake shoe tension spring.	
a.	If spring is weak or broken, replace (para. 4-42).	
b.	If spring is not defective, go to step 4.	
Step 4.	Check for defective air chambers.	
a.	If air chambers are defective, replace (para. 4-40).	
b.	If air chambers are not defective, go to step 5.	
Step 5.	Visually check for broken or frozen camshaft roller.	
	If camshaft roller is broken or frozen, replace (para. 4-43).	

Table 4-2. Organizational Troubleshooting Table

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
BRAKE SYSTEM - continued		
4. GRABBING BRAKES.		
Step 1.	Check for moisture in air reservoirs.	
a.	Open drain cocks for drainage of moisture from air reservoirs.	
b.	If no moisture is present, go to step 2.	
Step 2.	Check brake adjustment.	
a.	If brakes are out of adjustment, adjust slack adjusters (para. 4-30).	
b.	If brakes are not out of adjustment, go to step 3.	
Step 3.	Check for grease on brake lining.	
a.	If grease is present, replace brake shoes (para. 4-42).	
b.	If grease is not present, go to step 4.	
Step 4.	Check for loose or worn wheel bearings.	
a.	If wheel bearings are loose, adjust (para. 4-47).	
b.	If wheel bearings cannot be adjusted, replace (para. 4-47).	
c.	If wheel bearings are not loose or worn, go to step 5.	
Step 5.	Check for cracked, scored, or deformed brake drum.	
a.	If brake drum is cracked or deformed, replace (para. 4-47).	
b.	If brake drum is scored, notify Direct Support/General Support Maintenance.	
c.	If brake drum is not defective, go to step 6.	
Step 6.	Check for loose or worn brake lining.	
a.	If brake lining is loose or worn, notify Direct Support Maintenance.	
b.	If brake lining is not loose or worn, go to step 7.	
Step 7.	Visually check for broken or frozen camshaft roller.	
	If camshaft roller is broken or frozen, replace (para. 4-43).	

Table 4-2. Organizational Troubleshooting Table

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
BRAKE SYSTEM - continued		
5. BRAKES DRAG AND ONE OR MORE BRAKE DRUMS RUNNING HOT.		
Step 1.	Check brake adjustment.	
	a.	If brakes are out of adjustment or adjusted too tightly, correctly adjust slack adjusters (para. 4-30).
	b.	If brakes are not out of adjustment, go to step 2.
Step 2.	Check for weak or broken brake shoe tension spring.	
	a.	If tension spring is defective, replace (para. 4-42).
	b.	If tension spring is not defective, go to step 3.
Step 3.	Visually check for broken or frozen camshaft roller.	
	a.	If camshaft roller is broken or frozen, replace (para. 4-43).
	b.	If camshaft roller is not defective, go to step 4.
Step 4.	Check for cracked, scored or deformed brake drum.	
	a.	If brake drum is cracked or deformed, replace (para. 4-47).
	b.	If brake drum is scored, notify Direct Support/General Support Maintenance.

LANDING LEG

DIFFICULTY IN TURNING HANDCRANK.

- Step 1. Check for bent lower leg.
- a. If lower leg is bent, replace landing leg (para. 4-55).
 - b. If lower leg is not bent, go to step 2.
- Step 2. Check for grinding gears or bearings in landing leg gear box.
- If gears or bearings grind and legs do not extend or retract properly, replace complete gear box (para. 4-55).

Table 4-2. Organizational Troubleshooting Table**MALFUNCTION****TEST OR INSPECTION****CORRECTIVE ACTION****SPRINGS AND SUSPENSION**

1. HARD PULLING.

- Step 1. Check for dragging brakes (side pull or hot drum).
- If brakes are dragging, adjust slack adjuster (para. 4-30).
 - If brakes are not dragging, go to step 2.

Step 2. Check wheel bearing adjustment.

- If wheel bearings are out of adjustment, adjust wheel bearings (para. 4-47).
- If wheel bearings are not out of adjustment, go to step 3.

Step 3. Check for loose trunnion tube bracket bolts.

- If trunnion tube bracket bolts are loose, torque to 300 lb ft (408 Nm).
- If trunnion tube bracket bolts are secure, go to step 4.

Step 4. Check for loose springs.

If springs are loose, notify Direct Support/General Support Maintenance.

2. IMPROPER SPRING ACTION.

Step 1. Check for loose spring cap u-bolts.

- If u-bolts are loose, torque u-bolt nuts to 300 lb ft (408 Nm).
- If u-bolts are secure, go to step 2.

Step 2. Check springs for broken or weak spring leaves.

If leaves are broken or weak, notify Direct Support/General Support Maintenance.

3. EXCESSIVELY WORN, SCUFFED, OR CUPPED TIRES.

Step 1. Check tire pressure.

- If tire pressure is not 75 psi, inflate tires to 75 psi.
- If tire pressure is 75 psi, go to step 2.

Table 4-2. Organizational Troubleshooting Table

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
SPRINGS AND SUSPENSION - continued		
3. EXCESSIVELY WORN, SCUFFED, OR CUPPED TIRES - continued.		
Step 2.	Check for loose wheels.	
a.	If wheels are loose, tighten wheel lug nuts and torque to 400-450 lb ft (542-612 Nm).	
b.	If wheels are not loose, go to step 3.	
Step 3.	Check for loose wheel bearings.	
a.	If wheel bearings are loose, adjust wheel bearings (para. 4-47).	
b.	If wheel bearings are not loose, go to step 4.	
Step 4.	Check for bent wheel.	
a.	Replace wheel, if bent (para. 4-45).	
b.	If wheel is not bent, go to step 5.	
Step 5.	Check for deformed, cracked or scored brake drum.	
a.	If brake drum is cracked or deformed, replace brake drum (para. 4-47).	
b.	If brake drum is scored, notify Direct Support/General Support Maintenance.	

Section VI. MAINTENANCE OF THE ELECTRICAL SYSTEM

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4-17. 12 VOLT RECEPTACLE (NOSE BOX COVER)

This task covers:

Removal Installation

INITIAL SETUP

Tools

Materials/Parts

General mechanics tool kit and common supplement II Tags (item 15,
Appendix E)

a. Removal.

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

NOTE

Item 2 is on the M871 semitrailer only.

- (1) Remove ten screws (1, fig. 4-1) and ten washers (2).
 - (2) Ease the nose box cover (3) away from the nose box (4).
 - (3) Tag wires to 12 volt receptacle (5).

NOTE

On the M871A1 semitrailer, unscrew, but do not remove six screws.

- (4) Unscrew, but do not remove seven screws on 12 volt receptacle (5).
 - (5) Withdraw wires from receptacle (5).
 - (6) Remove two nuts (6), lockwashers (7) and bolts (8) from receptacle (5).
Remove receptacle (5).

b. Installation.

- (1) Install 12 volt receptacle (5, fig. 4-1) in nose box cover (3). Secure receptacle (5) with two bolts (8), lockwashers (7) and nuts (6).

- (2) Insert wires in receptacle (5). Be certain wires go in proper place (fig. 4-2).

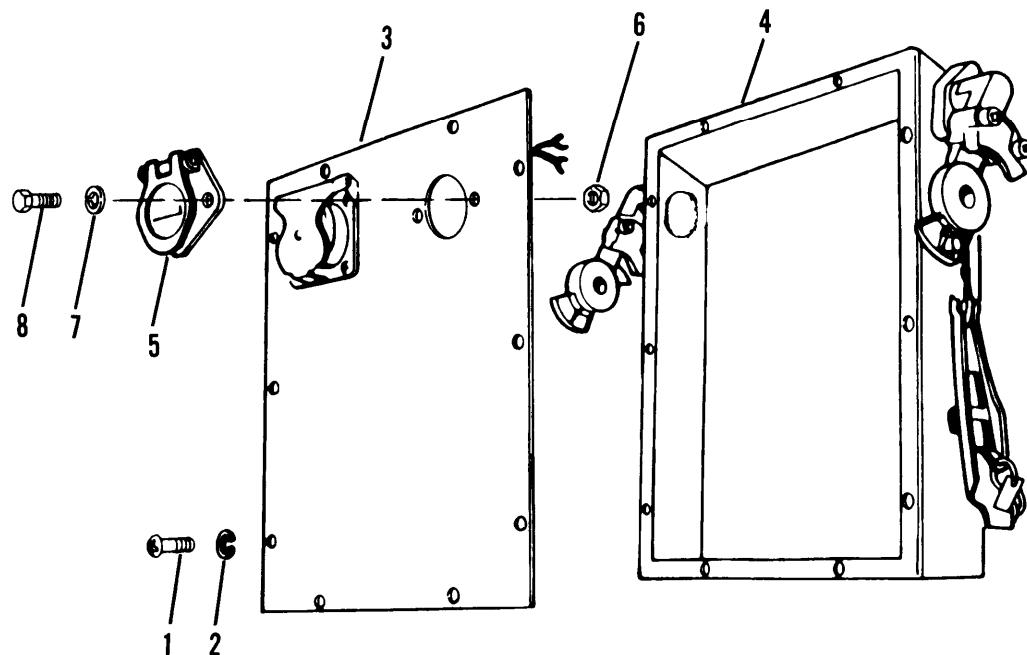


Figure 4-1. 12 Volt Receptacle

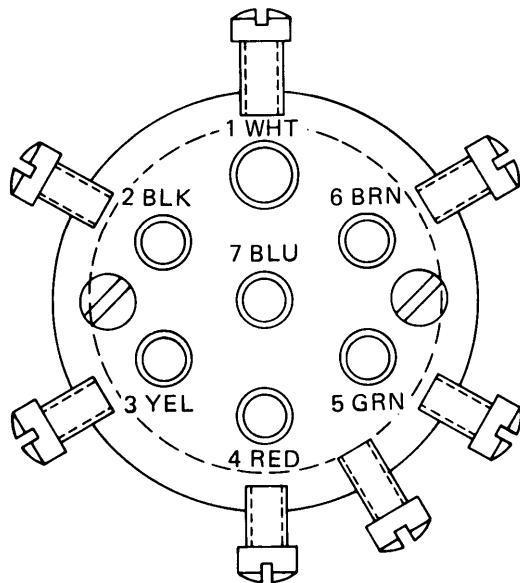


Figure 4-2. 12 Volt Receptacle Wire Placement

- (3) Tighten seven screws on receptacle (5, fig. 4-1).

NOTE

Tighten six screws on the M871A1 semitrailer.

CAUTION

Make sure electrical wires are pulled down when installing nose box cover. Failure to do so will cause damage to the electrical system.

NOTE

Item 2 is on the M871 semitrailer only.

- (4) Pull wires down from center hole in kingpin plate while installing nose box cover (3) on nose box (4). Install ten washers (2) and screws (1) to secure cover (3) to semitrailer.
- (5) Connect electrical power and test for proper operation.

TASK ENDS HERE

4-18. 24 VOLT RECEPTACLE (NOSE BOX COVER)

This task covers:

Removal
Disassembly
Assembly
Installation

INITIAL SETUP

Tools	Materials/Parts
Electrical connector repair kit General mechanics tool kit and common supplement II	Tags (item 15, Appendix E)

a. Removal.

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

NOTE

Item 2 is on the M871 semitrailer only.

- (1) Remove ten screws (1, fig. 4-3) and ten washers (2).
- (2) Ease the nose box cover (3) away from the nose box (4).

- (3) Tag and disconnect six wires from terminal boards and white ground wire from nose box cover (3).
- (4) Remove four bolts (5), washers (6) and nuts (7) that secure 24 volt receptacle (8) to cover (3).
- (5) Withdraw receptacle (8).

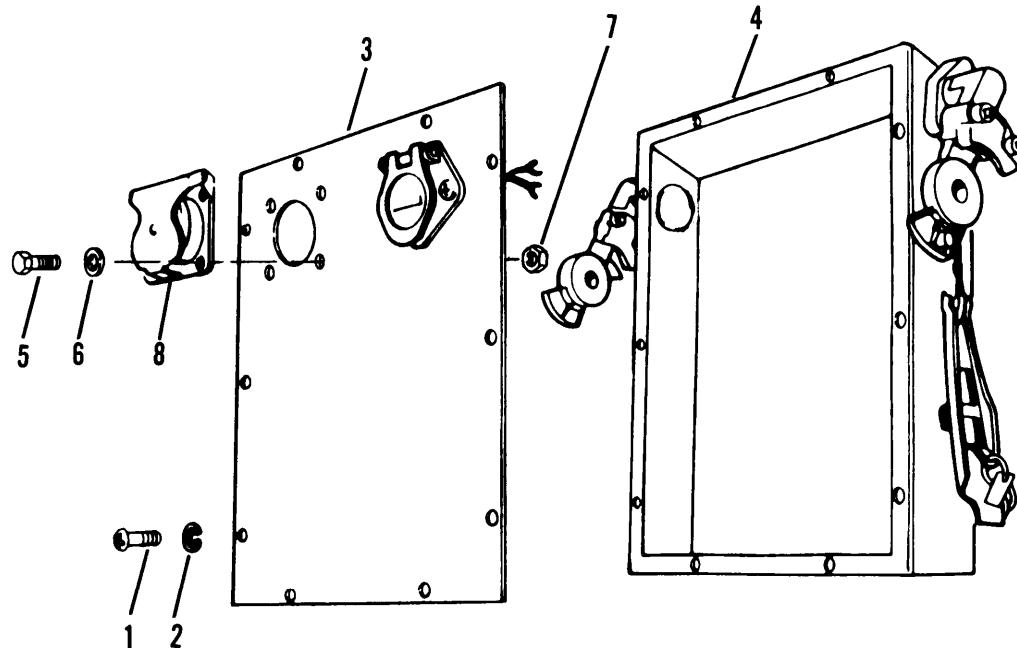


Figure 4-3. 24 Volt Receptacle

b. Disassembly.

- (1) Unscrew grommet retaining nut (1, fig. 4-4) and slide back on cable assembly (2).
- (2) Slide grommet (3) on cable assembly (2).
- (3) Using removal and installation tool from electrical connector repair kit, pull inserts (4) forward out of receptacle assembly grommet (7).
- (4) Using soldering gun, heat solder well and remove pins (4) from wire end (5).
- (5) Tag wires with letters on face of the grommet (3).
- (6) Pull wires (6) out of grommet (3) and nut (1).

c. Assembly.

- (1) Slide retaining nut (1) on wire with threads (6) facing outward.
- (2) Put wire ends (6) into back of grommet (3). Make sure that the wires (6) are matched with the proper pin letters on grommet (3).

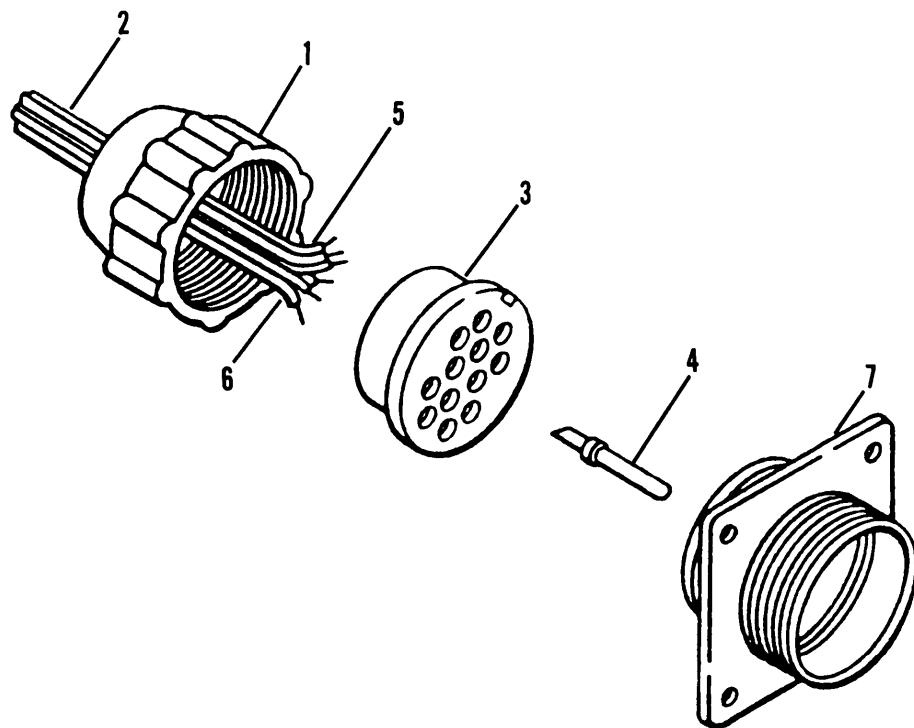


Figure 4-4. 24 Volt Receptacle Assembly

- (3) Strip insulation on wire ends (6) equal to depth of solder well in pins (4). Place solder well on wire ends and solder.
- (4) Coat grommet (7) in receptacle assembly with a light film of petroleum.
- (5) Install each pin (4) in the rear of the receptacle assembly grommet (7). Make sure that the identifying letters are matched with the identical letters on the grommet.
- (6) Push solder wells into grommet (3) until seated. Push grommet (3) in receptacle assembly.
- (7) Screw retaining nut (1) on grommet (3) and tighten hand tight.

d. Installation.

- (1) Install receptacle (8, fig. 4-3).
- (2) Secure receptacle (8) with four bolts (5), washers (6) and nuts (7).
- (3) Connect six wires to terminal boards and white ground wire to nose box cover (3).

CAUTION

Make sure electrical wires are pulled down when installing nose box cover. Failure to do so will cause damage to the electrical system.

NOTE

Item 2 is on the M871 semitrailer only.

(4) Pull wires down from center hole in kingpin plate while installing nose box cover (3) on nose box (4). Install ten washers (2) and screws (1) to secure cover (3) to semitrailer.

(5) Connect electrical power and test for proper operation.

TASK ENDS HERE

4-19. RESISTORS

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

Equipment Condition

Nose box cover removed

a. Removal.

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

(1) Remove two screws (1, fig. 4-5), washers (2) and nuts (3).

NOTE

Item 2 is on the M871 semitrailer only.

(2) Remove resistor (4).

(3) Remove two screws (5) and clips (6) from the terminal boards (7).

(4) Repeat steps 1 through 3 for the remaining two resistors.

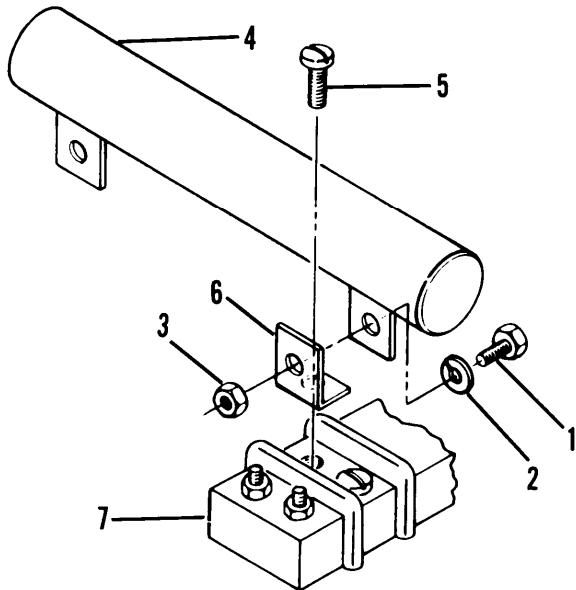


Figure 4-5. Resistor

b. Installation.

(1) Install two clips (6, fig. 4-5) to the terminal boards (7) and secure with two screws (5).

(2) Place resistor (4) into position.

NOTE

Item 2 is on the M871 semitrailer only.

(3) Install two screws (1), washers (2) and nuts (3).

(4) Repeat steps 1 through 3 for other resistors.

(5) Install nose box cover.

(6) Connect electrical power and test for proper operation.

TASK ENDS HERE

4-20. TERMINAL BOARDS

This task covers:

Removal

Installation

INITIAL SETUP

Tools

General mechanics tool kit

Materials/Parts

Equipment Condition

Tags (item 15,
Appendix E)

Resistors removed (para. 4-19)

a. Removal.

- (1) Tag and disconnect wires to terminal board.

NOTE

On the M871A1 semitrailer, remove two nuts (1) and bolts (2).

- (2) Remove four nuts (1, fig. 4-6) and bolts (2).
- (3) Remove terminal board (3) from nose box cover (4).
- (4) Repeat steps 1 through 3 for other terminal board.

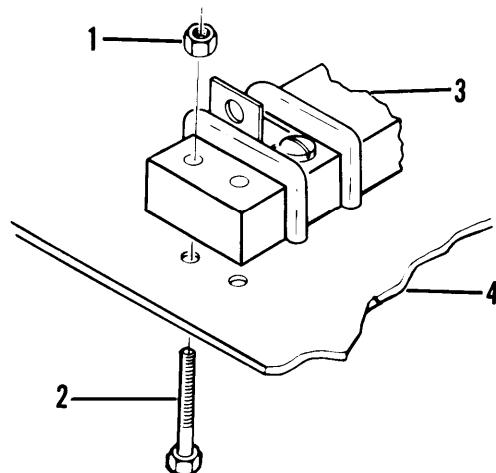


Figure 4-6. Terminal Board

b. Installation.

- (1) Install terminal board (3, fig. 4-6) to nose box cover (4).

NOTE

On the M871A1 semitrailer, install two bolts (2) and nuts (1).

- (2) Install four bolts (2) and nuts (1).
- (3) Connect wires to terminal board.
- (4) Repeat steps 1 through 3 for other terminal board.
- (5) Install resistors (para. 4-19).
- (6) Install nose box cover.
- (7) Connect electrical power and test for proper operation.

TASK ENDS HERE

4-21. JUNCTION BOX COVER (M871 ONLY)

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Materials/Parts
General mechanics tool kit and common supplement II	Tags (item 15, Appendix E)

a. Removal

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

- (1) Remove two screws (1, fig. 4-7) and junction box cover (2).
- (2) Tag and disconnect the interconnecting wiring from terminal strip.
- (3) Repeat steps 1 and 2 for other junction box cover (2).

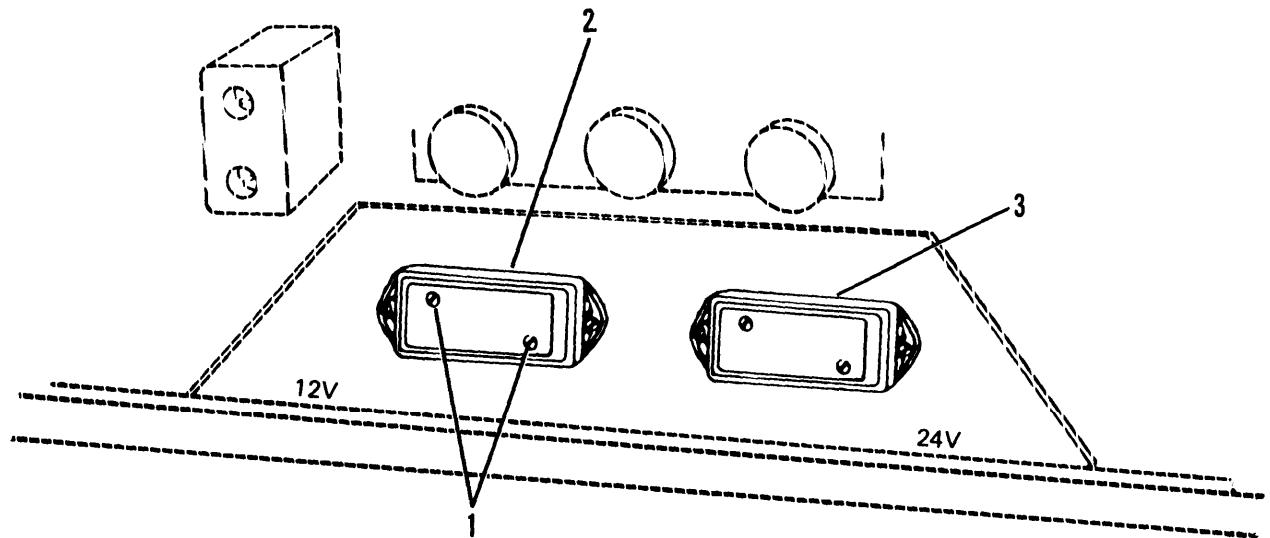


Figure 4-7. Junction Box Cover (M871 only)

b. Installation.

- (1) Connect interconnecting wiring to the terminal board.
- (2) Install junction box cover (2, fig. 4-7) and two screws (1).
- (3) Repeat steps 1 and 2 for other junction box cover (3).
- (4) Connect electrical power and test for proper operation.

TASK ENDS HERE

4-22. COMPOSITE LIGHT

This task covers:

Removal .
Disassembly
Repair
Assembly
Installation

INITIAL SETUP

Tools

General mechanics tool kit

Materials/Parts

Tags (item 15,
Appendix E)

NOTE

Tag wires to aid in installation. If wire connectors are to be repaired or replaced, go to wire connector procedure (para. 4-26).

Removal is not necessary for lamp, lens, or door assembly replacement. If circuit marker bands are missing or not readable, replace (para. 4-26).

a. Removal.

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

CAUTION

Do not pull on wires, only pull connectors apart. Pulling on wires could damage them.

- (1) Pull connectors (1, fig. 4-8) apart.
- (2) Remove two screws (2) and lockwashers (3) that hold composite light assembly (4) to frame (5).
- (3) Remove composite light assembly (4).

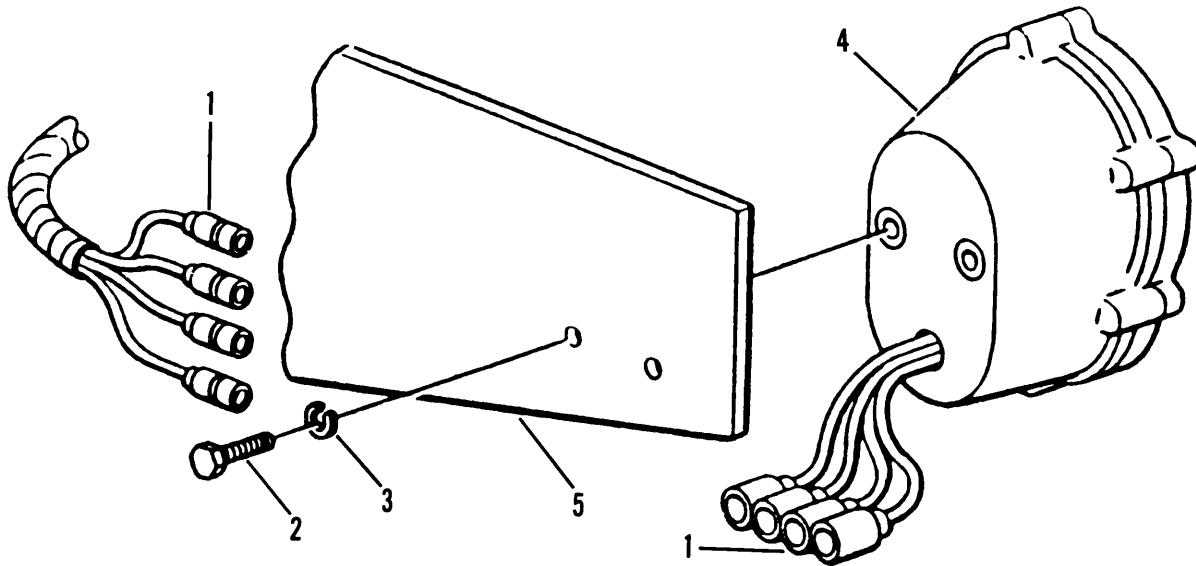


Figure 4-8. Composite Light

b. Disassembly.

- (1) Unscrew six captive screws (1, fig. 4-9) on door (2).
- (2) Remove door (2) and gasket (3). Captive screws (1) are fitted with retaining rings (4) and will remain in door. Discard gasket (3) from door (2).
- (3) Remove lamps (5, 6, and 7) from sockets.
- (4) Remove C-washers (8) and shells (9) from end of cables.

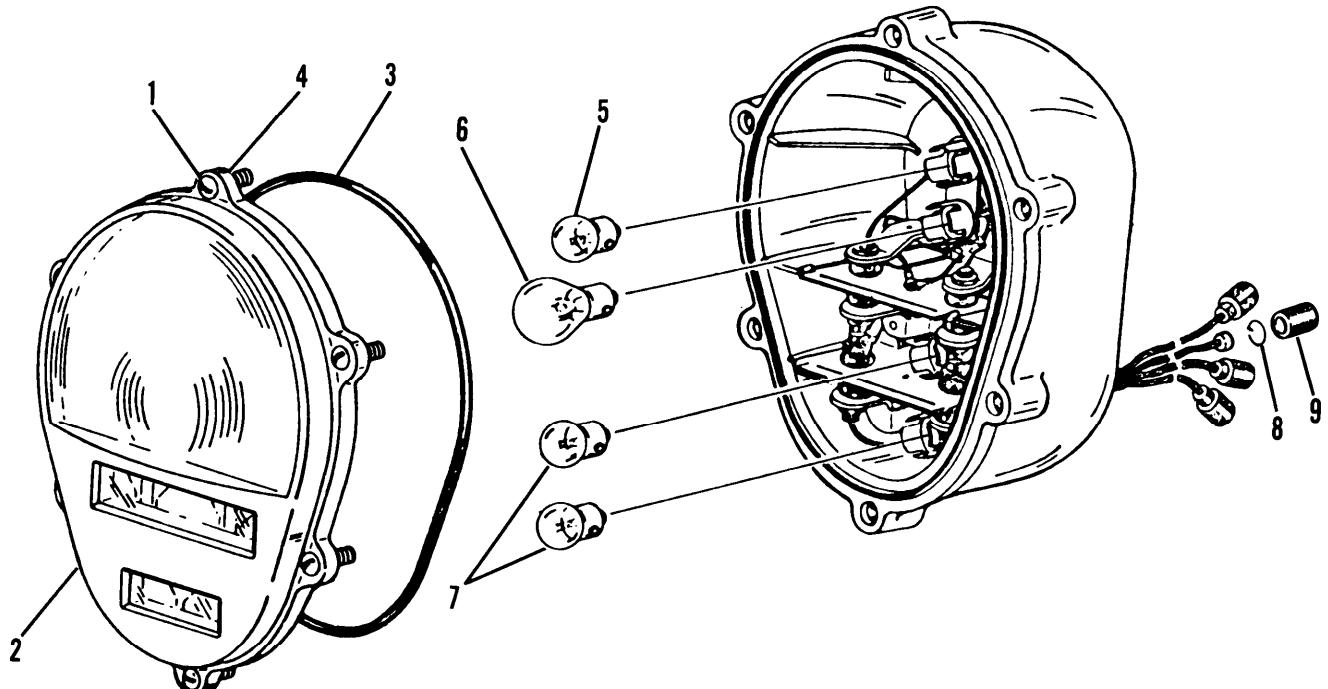


Figure 4-9. Composite Light Assembly

c. Repair. Repair is limited to the replacement of unserviceable parts.

d. Assembly.

- (1) Install shells (9, fig. 4-9) and C-washers (8) on end of cables.
- (2) Install lamps (5, 6, and 7) in sockets.
- (3) Install door (2) and new gasket (3).
- (4) Secure door (2) with six captive screws (1).

e. Installation.

- (1) Install composite light assembly (4, fig. 4-8) on frame (5) and secure with two lockwashers (3) and screws (2).

(2) Connect cable connectors (1).

NOTE

This pertains to the M871A1 semitrailer only.

Connect the following wires to the composite light as follows:

Left composite light

Purple wire - #23 marker band wire
Red wire - #460 461 22 marker band wire
Brown wire - #21 marker band wire
Black wire - #24 marker band wire

Right composite light

Purple wire - #23 marker band wire
Red wire - #460 461 22 marker band wire
Brown wire - #21 marker band wire
Blue wire - #24 marker band wire

(3) Connect electrical power and test for proper operation.

TASK ENDS HERE

4-23. TAILLIGHT

This task covers:

Removal
Disassembly (M871 only)
Repair (M871 only)
Assembly (M871 only)
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal.

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

(1) Remove three screws (1, fig. 4-10).

(2) Remove taillight assembly (2).

NOTE

The M871A1 semitrailer has a 3 wire plug in the taillight unit.

(3) Pull connectors (3) apart.

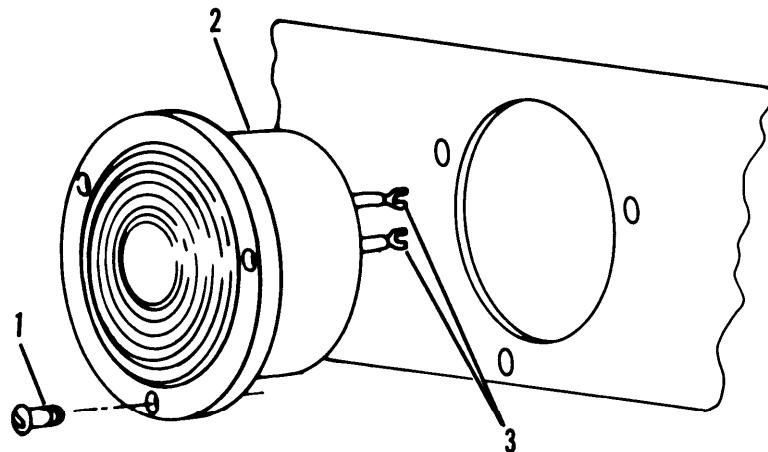


Figure 4-10. Taillight

b. Disassembly (M871).

(1) Remove snap ring (1, fig. 4-11).

(2) Remove lens (2).

(3) Remove light bulb (3).

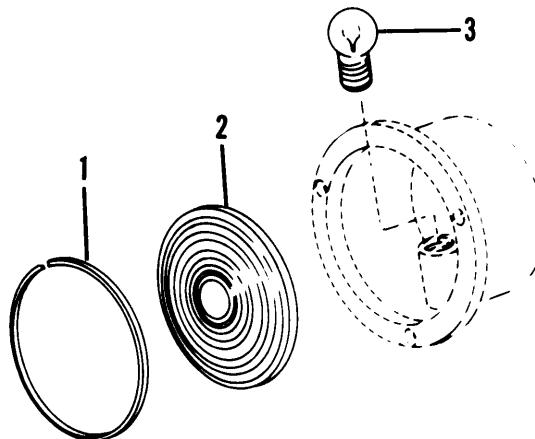


Figure 4-11. Taillight Assembly (M871 only)

c. Repair (M871). Repair is limited to the replacement of unserviceable parts only

d. Assembly (M871).

- (1) Install light bulb (3, fig. 4-11).
- (2) Install lens (2).
- (3) Install snap ring (1).

e. Installation.

- (1) Connect wiring (3, fig. 4-10).
- (2) Install light assembly (2) into position.
- (3) Install three screws (1).
- (4) Connect electrical power and test for proper operation.

TASK ENDS HERE

4-24. CLEARANCE LIGHT

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Materials/Parts
General mechanics tool kit	Tags (item 15, Appendix E)

a. Removal (M871).

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in serious injury or death.

- (1) Rotate light (1, fig. 4-12) one-quarter turn counterclockwise and pull light (1) straight out.
- (2) Remove connector (2) from rear of light (1).

(3) Remove two screws (3) and mounting disk (4).

(4) Tag and disconnect wiring from semitrailer wiring and remove connector (2).

b. Removal (M871A1).

(1) Pry clearance light (1, fig. 4-13) from grommet (2).

(2) Pull connectors (3) apart.

(3) Remove grommet (2) from frame (4).

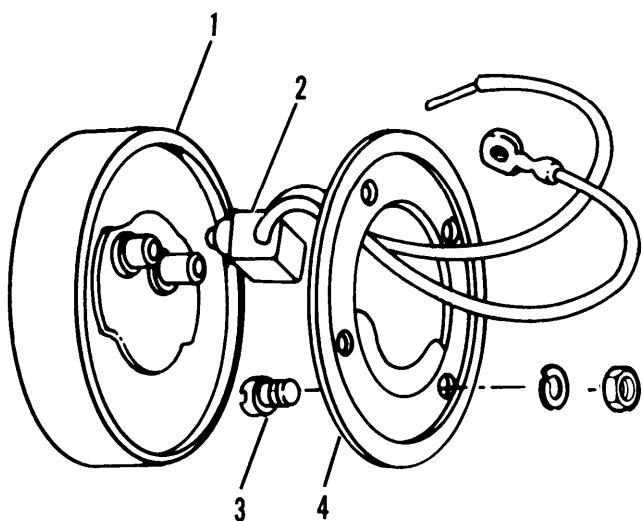


Figure 4-12. Clearance Light (M871)

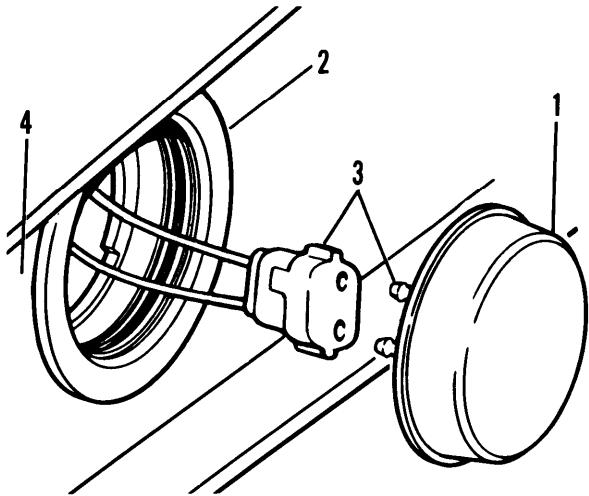


Figure 4-13. Clearance Light (M871A1)

c. Installation (M871).

(1) Connect connector wiring (2, fig. 4-12) to semitrailer wiring.

(2) Install mounting disk (4) and two screws (3).

(3) Install connector (2) to rear of light (1).

(4) Rotate light (1) one-quarter turn clockwise.

(5) Connect electrical power and test for proper operation.

d. Installation (M871A1).

(1) Install grommet (2, fig. 4-13) in frame (4).

(2) Connect cable connectors (3).

CAUTION

Do not twist clearance light to install in frame.
Connectors may become disconnected and light will not operate.

(3) Snap clearance light (1) into position in frame (4).

(4) Connect electrical power and test for proper operation.

TASK END HERE

4-25. BAR LAMP ASSEMBLY (M871 ONLY)

This task covers:

Removal
Disassembly
Assembly
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

NOTE

The M871A1 semitrailer does not have a bar lamp assembly. To remove the three lights on the M871A1 semitrailer, follow the clearance light procedure.

- (1) Remove four screws (1, fig. 4-14) and ease bar lamp assembly (2) from rear of semitrailer (3).
- (2) Remove ground strap (4) from screw (1).
- (3) Disconnect wiring.

b. Disassembly.

- (1) Turn light (5, fig. 4-14) approximately one quarter turn counterclockwise and pull the light (5) straight out from the bar assembly (2). Remove the other two lamps the same way.

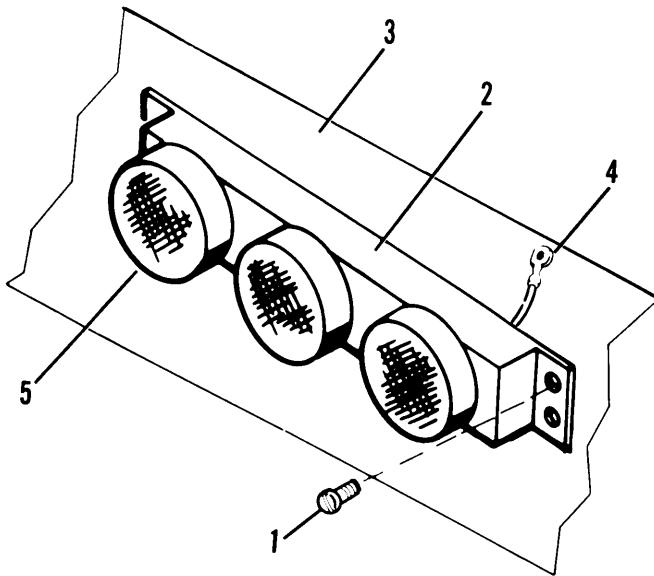


Figure 4-14. Bar Lamp Assembly (M871 only)

c. Assembly

- (1) Install light (5, fig. 4-14) and rotate one-quarter turn clockwise. Install the other two lights to the assembly the same way.

d. Installation.

- (1) Connect wiring.
- (2) Install ground strap (4, fig. 4-14) to one of the screws (1).
- (3) Install bar lamp assembly (2) into position and secure with four screws (1) 1
- (4) Connect electrical power and test for proper operation.

TASK ENDS HERE

4-26. WIRE CONNECTORS

This task covers:

Repair

INITIAL SETUP

Tools

General mechanics tool kit

Materials/Parts

Electrical Repair Kit

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

a. Male Connector Repair.

- (1) Separate halves of connector (2, fig. 4-15).
- (2) Slide shell (3) up wire lead (1) until clear of contact (4) and retaining washer (5).
- (3) Remove and discard retaining washer (5).
- (4) Slide shell (3) off over contact (4).

NOTE

If replacing only connector, skip steps 5, 6, and 8.

- (5) Using cutting pliers, cut contact (4) off lead (1).
- (6) Strip insulation from wire lead (1) equal to depth of new contact (4).

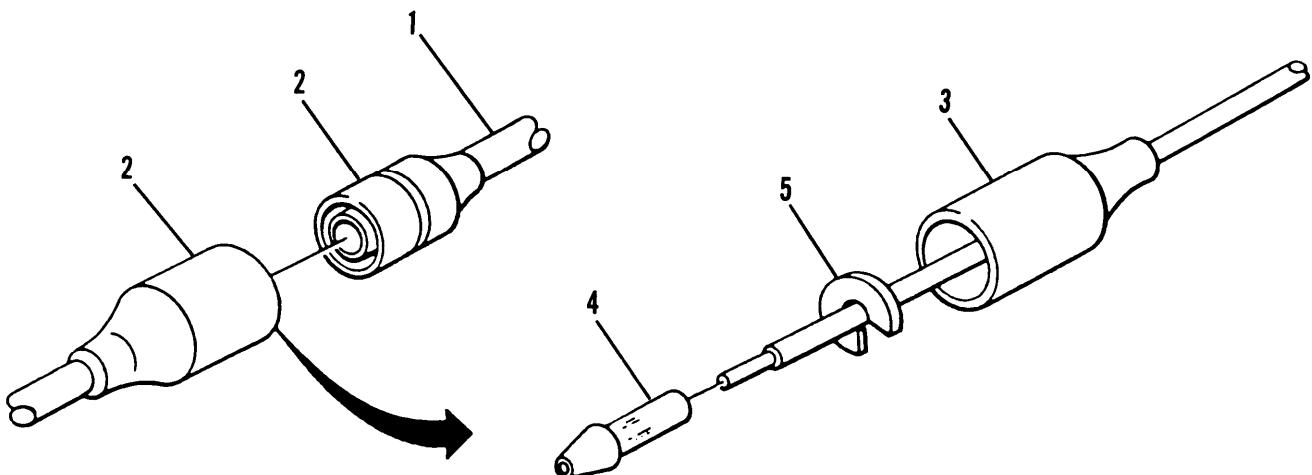


Figure 4-15. Male Connector Repair

- (7) Slide new shell (3) on wire lead (1). Apply insulating compound to wire lead (1).
- (8) Slide wire lead end (1) into new contact (4), and using crimping tool, crimp.
- (9) Place new retaining washer (5) on lead (1) at contact (4).
- (10) Slide shell (3) down wire lead (1) until retaining washer (5) seats.
- (11) Apply insulating compound to outside of connector (2). Push connector (2) halves together until seated.
- (12) Connect power. Turn on semitrailer lights and check for proper operation.

b. Female Connector Repair.

- (1) Separate connector halves (1 and 2, fig. 4-16).
- (2) Slide shell (4) and sleeve (6) up wire lead (3) until clear of terminal (5).
- (3) Using diagonal cutting pliers, cut terminal (5) off wire lead (3). Be sure to leave enough lead for connection after repair.
- (4) Slide shell (4) and sleeve (6) off wire lead (3). Discard shell (4) and sleeve (6).
- (5) Using wire stripper, strip insulation from wire lead (3) 1/8-inch (3.2 mm) from end.
- (6) Slide new shell (4) and sleeve (6) on wire lead (3). Apply insulation compound to end of wire lead (3).

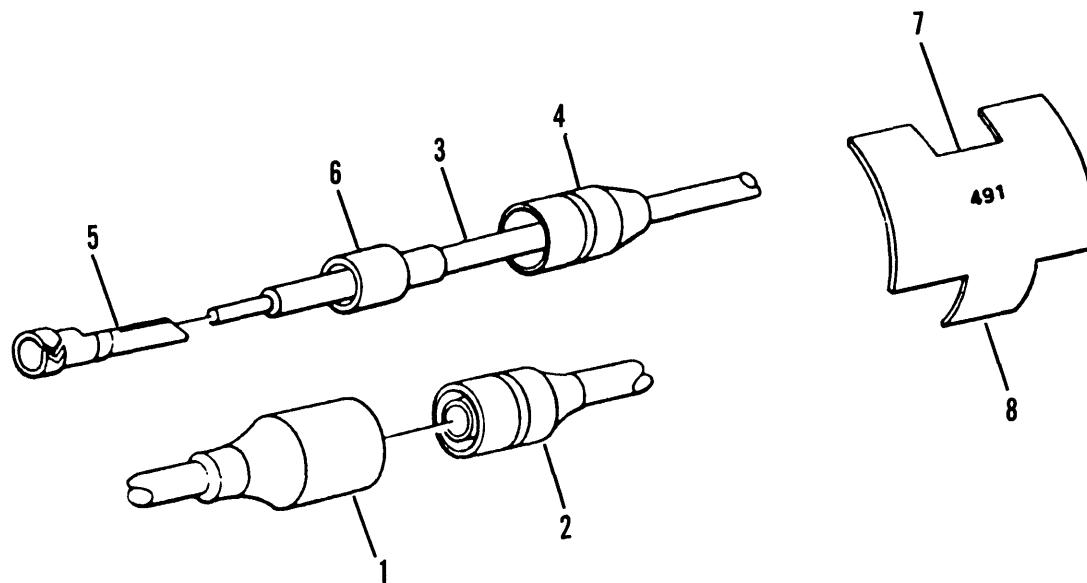


Figure 4-16. Female Connector Repair

- (7) Slide new terminal (5) on wire lead (3), and using crimping tool, crimp end.
- (8) Slide new shell (4) and sleeve (6) down over terminal (5) until seated.
- (9) Apply insulation compound to outside of female connector (1). Push connectors (1 and 2) together until seated.
- (10) Connect power. Turn on semitrailer lights and check for proper operation.

c. Circuit Marker Band Replacement.

- (1) Open tab ends of marker band (7, fig. 4-16) and remove. Discard marker band (7).
- (2) Using etching tool, etch proper number on new marker band (7).
- (3) Place marker band (7) on wire lead (3). Using crimping tool, bend tab end (8) over wire (3).

TASK END HERE

4-27. WIRING HARNESS (M871)

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Materials/Parts
General mechanics tool kit	Lockwire (item 17, (Appendix E))

a. Removal.

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

- (1) Remove nose box cover assembly (para. 4-17).
- (2) Remove the two junction box covers (para. 4-21).
- (3) Disconnect four terminals in 12 volt junction box on left rear of the vehicle.

- (4) Disconnect three terminals in 24 volt junction box on right rear of vehicle.
- (5) Tie a piece of .020 lockwire (1, fig. 4-17) that is at least 400 inches (34 feet) long to the terminals (2) extended out of the rear of the semitrailer.
- (6) Pull the cable out from the front of the semitrailer. Do not pull the lockwire out. It is needed to reinstall the cable.

b. Repair. Repair is limited to replacement of damaged wires (Appendix G) and connectors (para. 4-26).

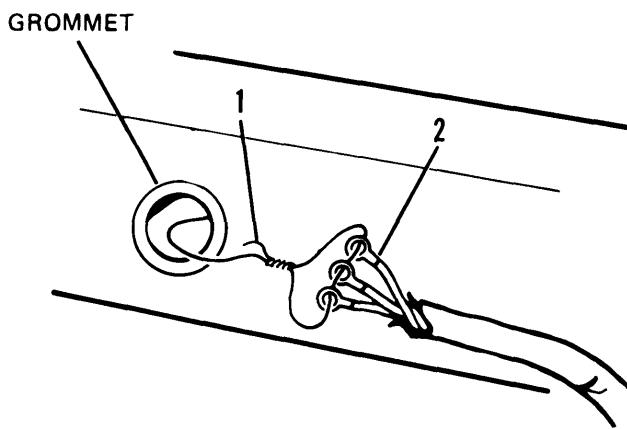


Figure 4-17. Removing Wiring Harness

c. Installation.

- (1) Tie the end of the lockwire (1, fig. 4-17) that was fed through the frame during removal to the terminals (2) of the cable.
- (2) Feed the cable into the frame hole while pulling the lockwire out the other,
- (3) Connect wiring harness to appropriate junction box terminals as shown in schematic diagram (fig. 4-18).
- (4) Install the two junction box covers (para. 4-21).
- (5) Install nose box cover (para. 4-17).
- (6) Connect electrical power and test for proper operation.

TASK ENDS HERE

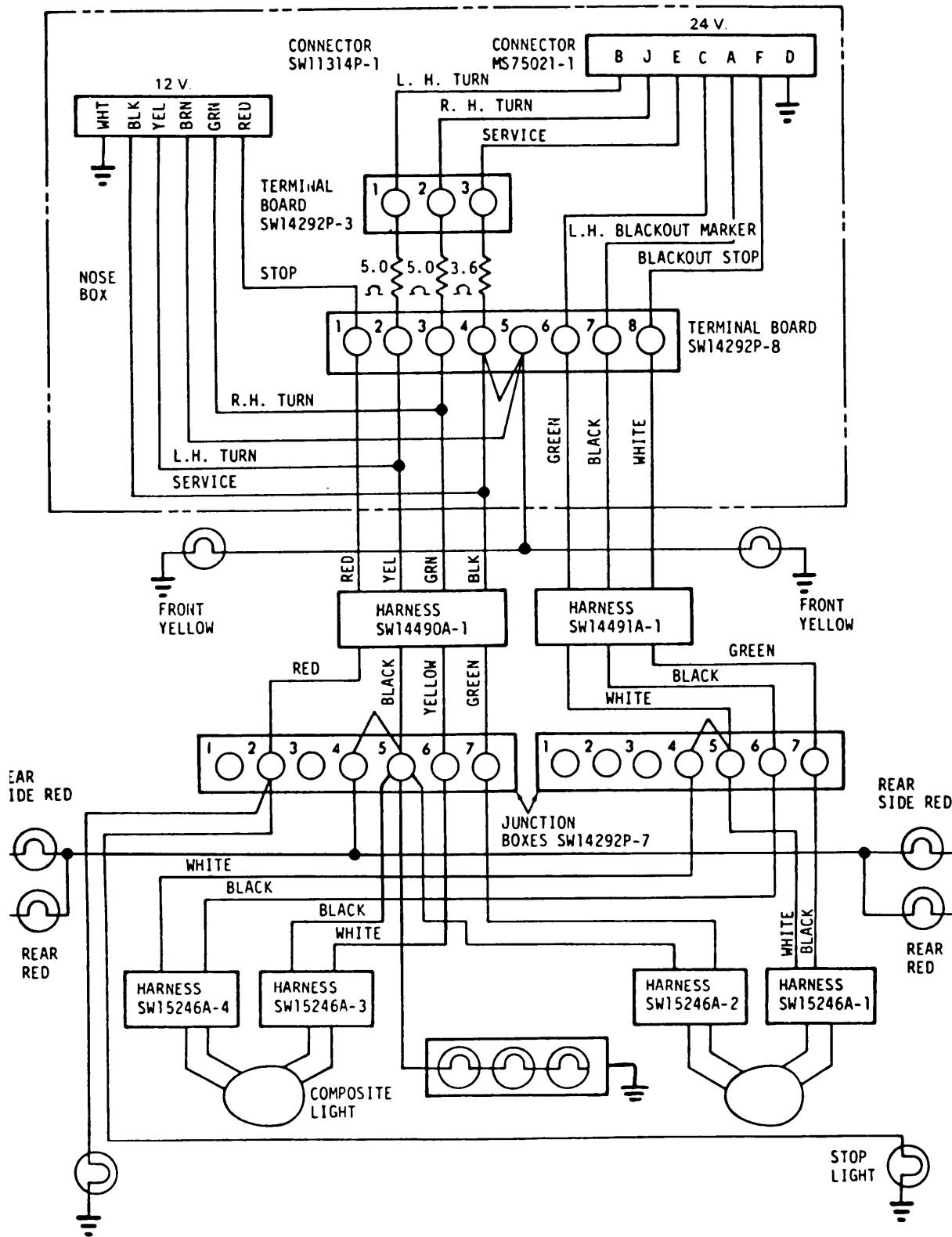


Figure 4-18. M871 Electrical Schematic

4-28. WIRING HARNESSES (M871A1)

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Materials/Parts
General mechanics tool kit	Tags (item 15, Appendix E)

WARNING

Disconnect all outside power before performing any maintenance on the electrical system. Failure to do so could result in injury.

a. Front Wiring Harness Removal.

- (1) Disconnect amber clearance light cable connectors on each side of the semitrailer by reaching underneath the trailer.
- (2) Remove the front amber clearance lights.
- (3) Remove front nose box cover assembly. Tag and disconnect the wires to the front harness from the terminal board.
- (4) Remove front wiring harness through the holes in the front of the kingpin plate.

b. Rear Wiring Harness Removal.

- (1) Disconnect clearance, tail and composite light connectors on rear and side of semitrailer.
- (2) Disconnect coupling between rear wiring harness and main wiring harness.
- (3) Remove rear wiring harness.

c. Main Wiring Harness Removal.

- (1) Remove front nose box cover assembly. Tag and disconnect wires from terminal boards.
- (2) Disconnect coupling between rear harness and main harness.
- (3) Remove main wiring harness.

d. Repair. Repair is limited to replacement of damaged wires (Appendix G) and connectors (para. 4-26) .

e. Front Wiring Harness Installation.

CAUTION

Be sure all grommets are present when installing wiring harness. If grommets are missing, the wiring harness may be damaged when threading through frame.

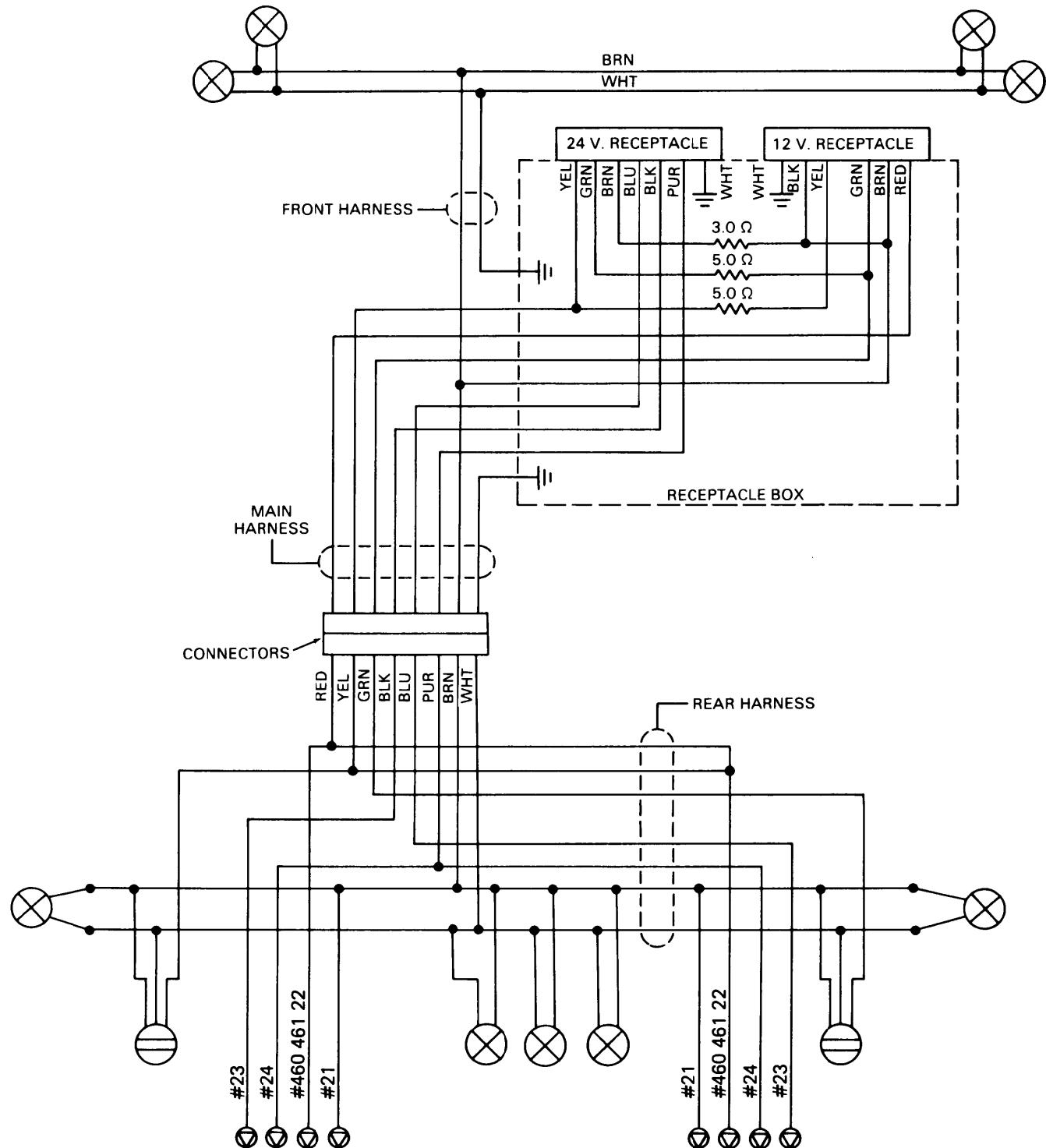
- (1) Install front wiring harness through the holes in the front of the kingpin plate (see wiring schematic, fig. 4-19).
- (2) Connect wires to terminal board. Install nose box cover assembly.
- (3) Install front clearance lights.
- (4) Connect clearance light cable connectors.
- (5) Check wiring harness for continuity.

f. Rear Wiring Harness Installation.

CAUTION

Be sure all grommets are present when installing wiring harness. If grommets are missing, the wiring harness may be damaged when threading through frame.

- (1) Install rear wiring harness (see wiring schematic, fig. 4-19).
- (2) Connect coupling between rear wiring harness and main wiring harness.
- (3) Connect clearance, tail and composite light connectors on rear and side of semitrailer .
- (4) Check wiring harness for continuity.



(X) PLUG FOR CLEARANCE LIGHT

(◎) FEMALE BULLET CONNECTOR FOR COMPOSITE LIGHT

(⊖) PLUG FOR STOP, TURN AND TAILIGHT

Figure 4-19. M871A1 Electrical Schematic

g. Main Wiring Harness Installation.**CAUTION**

Be sure all grommets are present when installing wiring harness. If grommets are missing, the wiring harness may be damaged when threading through frame.

- (1) Install main wiring harness (see electrical schematic, fig. 4-19).
- (2) Connect coupling between rear wiring harness and main wiring harness.
- (3) Connect wires to terminal board. Install nose box cover assembly.
- (4) Check wiring harness for continuity.

TASK ENDS HERE

Section VII. MAINTENANCE OF AIR BRAKE SYSTEM COMPONENTS

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4-29. DESCRIPTION OF BRAKES

a. General. When the brake system of the semitrailer is properly connected to the service brake system of the towing vehicle, the service brake pedal on the towing vehicle controls the brakes on both vehicles. All units needed to produce and maintain a constant supply of compressed air are located on the towing vehicle and must operate effectively to ensure proper performance of the semitrailer brakes.

b. Type of Brakes. The brakes are the air actuated type (figs. 4-20, 4-21). Air pressure is used to operate the mechanical internal brakes at the semitrailer wheels. The brakes are applied in proportion to the foot pressure applied to the brake pedal of the towing vehicle.

c. Brake System Units. The brake system consists of internal brakes, slack adjusters, service air line, emergency air line, emergency relay valve, multi-function valve, air reservoirs, spring brake chambers and connections.

d. Internal Brakes.

- (1) The internal brakes are located within the brake drums. Each internal brake has two brake shoes (1, fig. 4-22). The outer surfaces of the brake shoes are fitted with brake linings. Each shoe is anchored at one end on an anchor pin on which it pivots. The other end of each shoe is free to be pushed out or pulled.
- (2) An S-shaped cam (2) on the end of the camshaft is mounted between the free ends of the two brake shoes (1). Rotation of the cam (2) forces the shoes (1) out causing the brake linings to contact the drum.
- (3) A brake shoe tension spring (3), near the free ends of the brake shoes (1)~ retracts the brake shoes (1) from the drum and holds them in a retracted position until the brakes are applied.

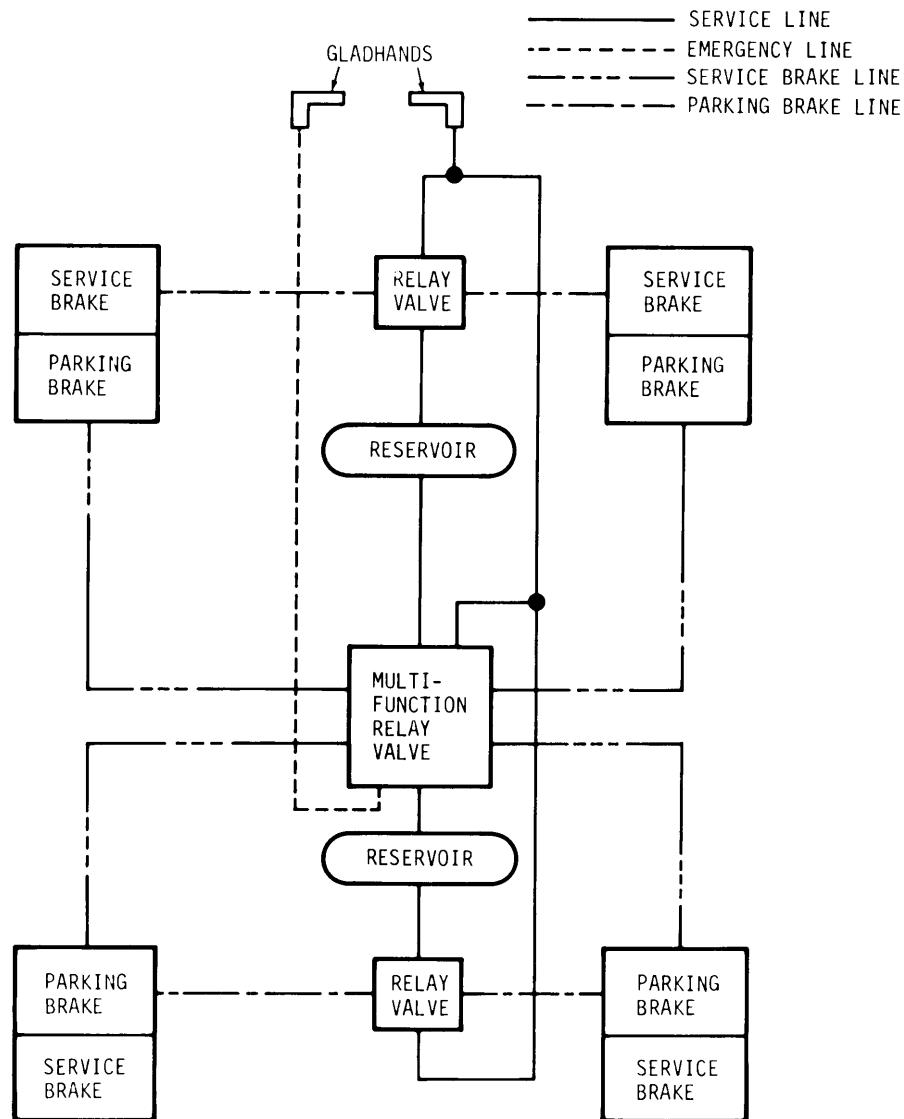


Figure 4-20. H871 Brake System Schematic

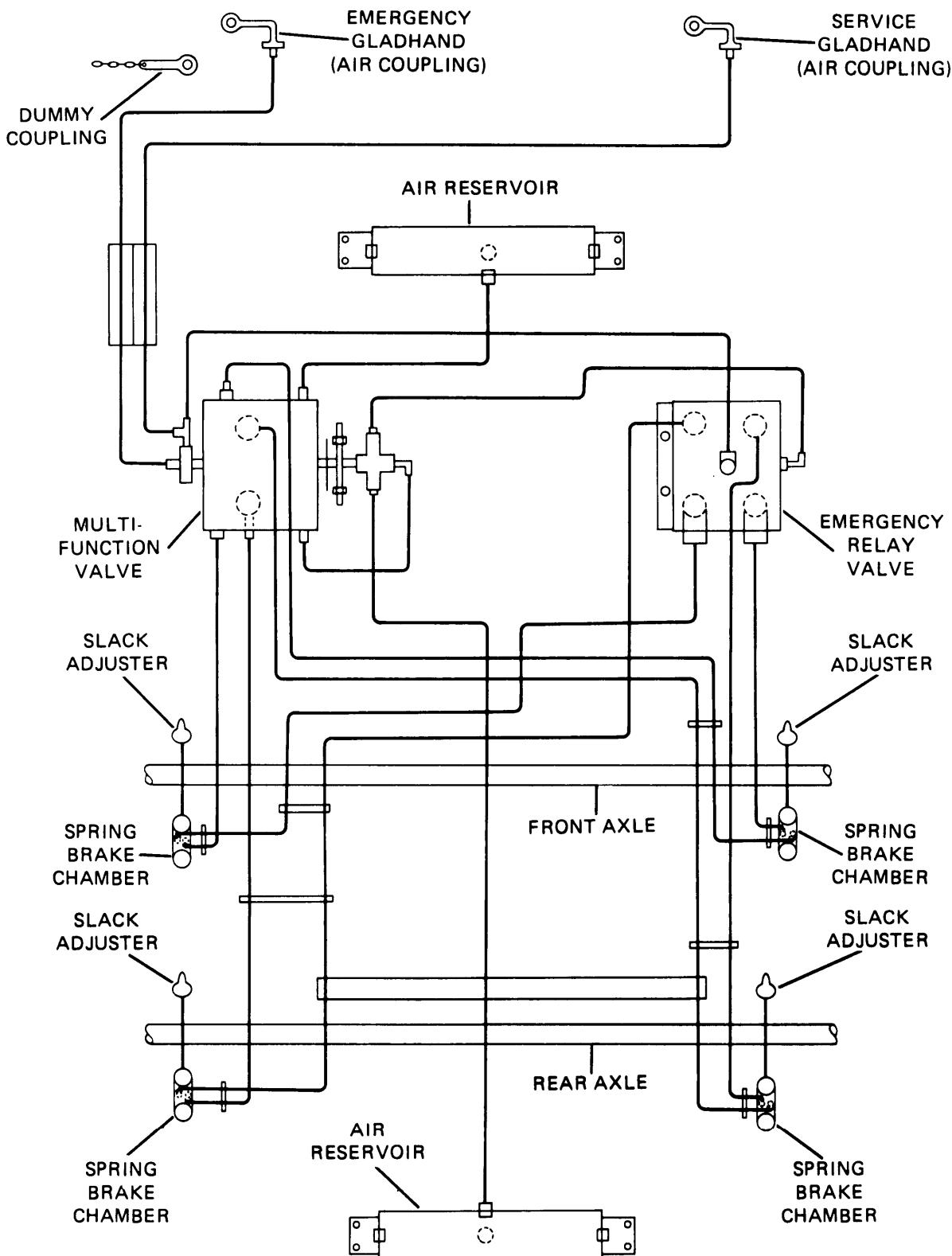


Figure 4-21. M871A1 Brake System Schematic

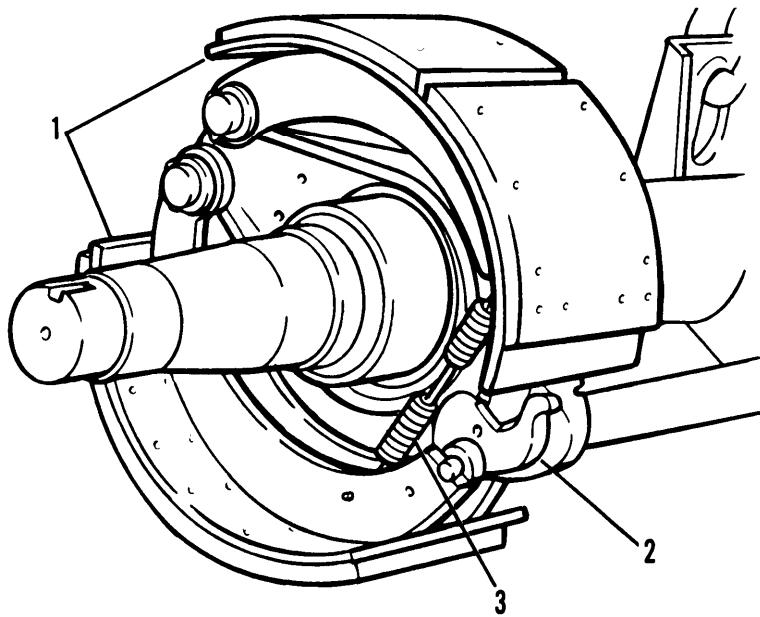


Figure 4-22. Internal Brakes

e. Slack Adjusters. The slack adjusters (1, fig. 4-23) are levers mounted on the brake camshafts (2). Push rods (3) of the air brake chambers (4) operate the slack adjusters (1) which in turn rotate the camshafts (2) causing the cams to press the brake shoes against the brake drums.

f. Spring Brake Chambers. The spring brake chambers (4, fig. 4-23) are mounted adjacent to the internal wheel brakes. The spring brake chambers convert air pressure into mechanical motion to operate the slack adjusters when applying brakes. The spring in the spring brake chamber may be caged in case of air loss or brake failure to move the semitrailer.

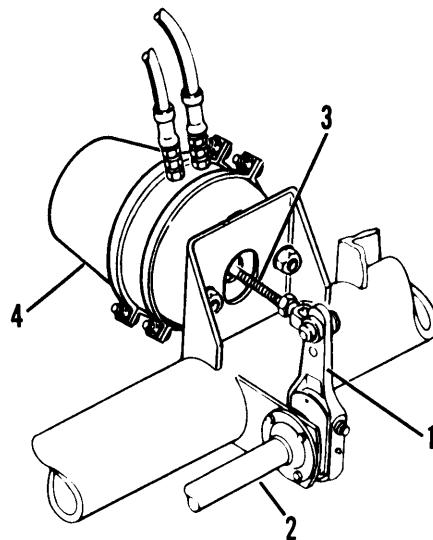


Figure 4-23. Slack Adjuster and Spring Brake Chamber

g. Service Air Line. The service air line on the semitrailer extends from the air hose coupling (tagged SERVICE) on the right side of the semitrailer to the multi-function valve to the emergency relay valve. Its purpose is to transmit changes in air pressure originated in the towing vehicle, which causes the emergency relay valve to function.

h. Emergency Air Line. The emergency air line on the semitrailer extends from the air hose coupling (tagged EMERGENCY), on the left side of the semitrailer to the multi-function valve to the emergency relay valve. This air line transmits compressed air to fill the semitrailer air reservoirs and maintain proper air pressure, under control of the multi-function valve and the emergency relay valve, to apply the brakes on the semitrailer.

i. Emergency Relay Valve. The emergency relay valve (1, fig. 4-24) is mounted on the semitrailer frame. The emergency relay valve directly controls the service brakes on the semitrailer. It speeds brake action by releasing air from the air reservoirs, on the semitrailer, directly to the brake chambers. This valve controls the flow of air to and from the semitrailer air reservoirs and automatically applies the brakes if the semitrailer breaks away from the towing vehicle or if there is a serious leak in the emergency air line.

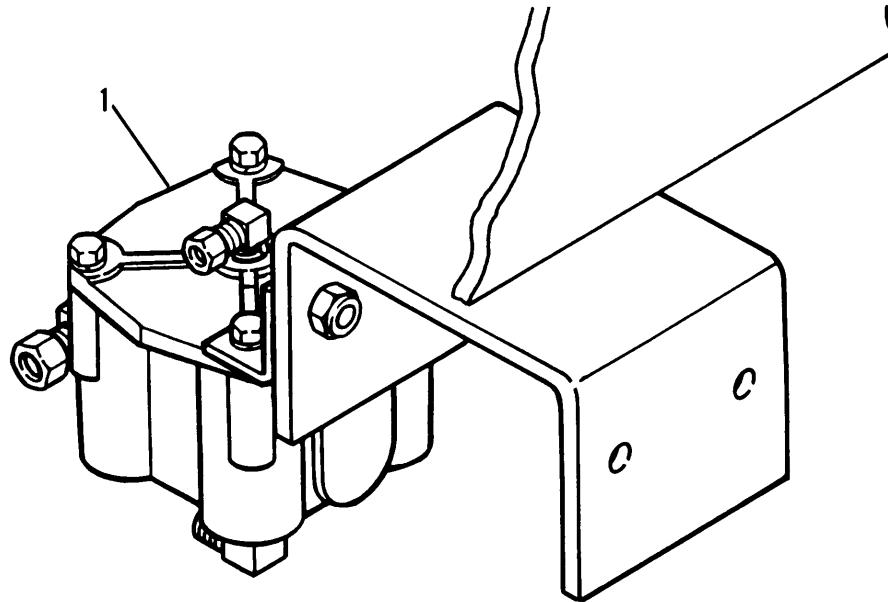


Figure 4-24. Emergency Relay Valve (M871A1)

j. Multi-Function Valve. The multi-function valve (1, fig. 4-25) is mounted on the semitrailer frame and controls the brake chambers by utilizing both air reservoirs for normal service braking, but reserving sufficient air pressure to provide the required spring brake chamber release in the event of a system failure.

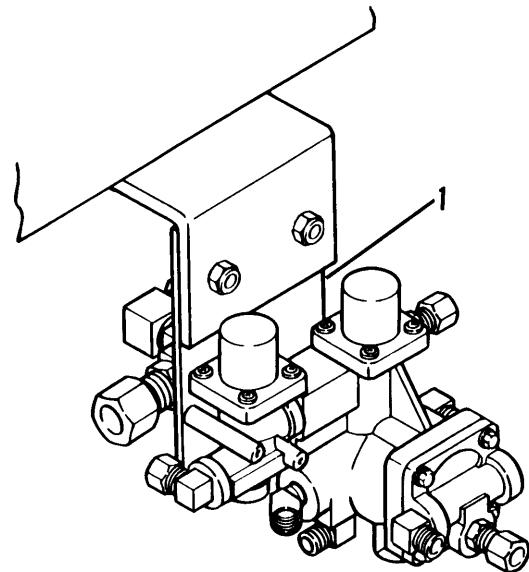


Figure 4-25. Multi-Function Valve (14871A1)

k. Air Reservoirs. The two air reservoirs (1, fig. 4-26) are attached to the frame. The reservoirs provide a supply of air through the emergency relay valve and the multi-function valve for applying the brakes. The air reservoirs are equipped with drain cocks (2) for draining accumulations of moisture and for releasing air pressure in the semitrailer brake system.

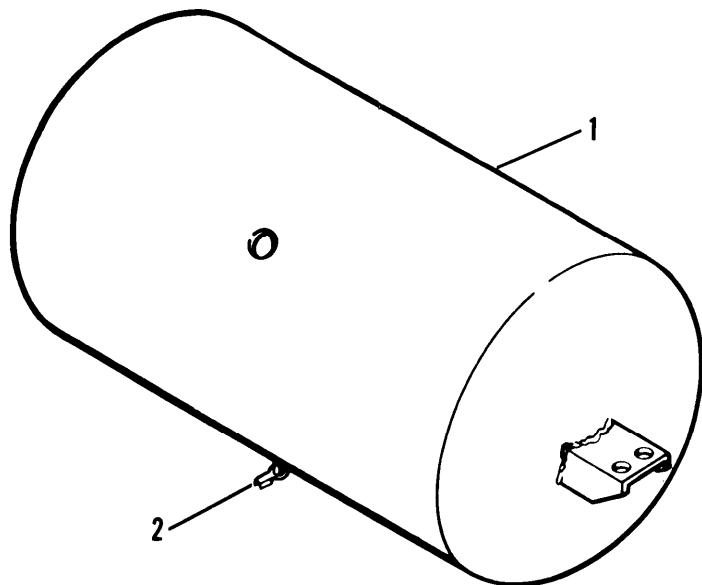


Figure 4-26. Air Reservoir

4-30. MAINTENANCE AND ADJUSTMENTS

This task covers:

Adjustments
Tests

INITIAL SETUP

Tools	Personnel Required
-------	--------------------

Jack, hydraulic, hand, 10-ton General mechanics tool kit	Two
---	-----

Materials/Parts

Soapy water

a. Slack Adjuster Adjustment.

- (1) To release spring forces from slack adjuster and camshaft, apply air to brake chambers. Do not apply the brakes.
- (2) Jack up the axle to be adjusted. Check that wheels rotate freely.
- (3) Check clevis rod (1, fig. 4-27) adjustment. Dimension from outside of nonpressure housing to center of clevis pin should be 5.56 in. (13.34 cm). Slack adjuster (2) may have to be moved or adjusted to center hole in spring brake chamber with clevis rod (1). If dimensions of clevis are not correct, remove cotter pin, clevis pin and loosen locknut. Adjust clevis rod (1) to correct length. Tighten nut. Install clevis pin and new cotter pin.

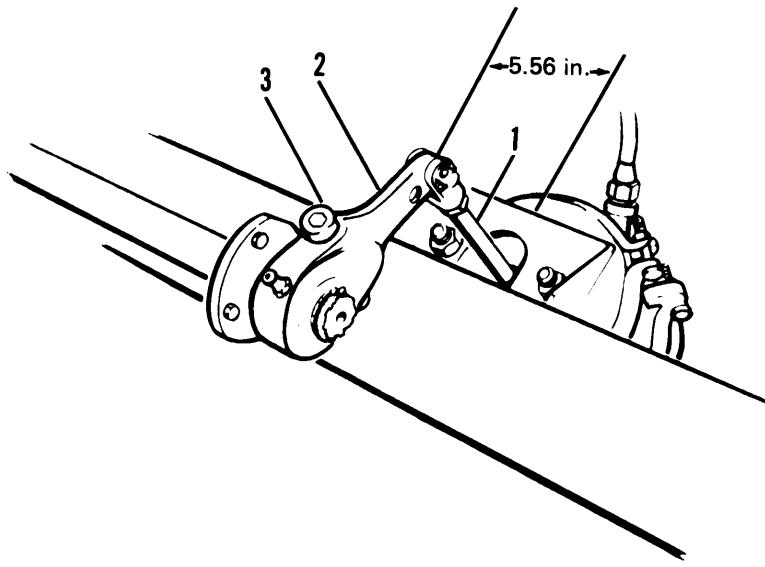


Figure 4-27. Slack Adjuster Adjustment

- (4) Apply a 9/16 wrench to worm shaft hex head (3). Push in against slack adjuster (2) to unlock worm shaft.
- (5) Turn hex head of worm shaft (3) clockwise on slack adjuster (2) until wheel cannot be turned.
- (6) Back off the worm shaft until wheel turns freely.
- (7) Repeat steps 1 through 6 for other slack adjusters, as necessary.
- (8) Lower jack and remove from axle.

b. Emergency Relay Valve, Drainage of Moisture and Tests.

- (1) Operating tests.
 - (a) With air hose couplings connected to towing vehicle, apply brakes. Check that brakes of all semitrailer wheels apply properly.
 - (b) Release brakes. Check that each brake releases promptly.
 - (c) With brake system fully charged, close shutoff cock in emergency line on towing vehicle. Disconnect air hose coupling tagged EMERGENCY. Make sure semitrailer brakes apply automatically.
 - (d) Connect air hose coupling tagged EMERGENCY. Open shutoff cock on towing vehicle. Check that brakes release automatically.
- (2) Leakage tests.
 - (a) With air brake system connected, apply soapy water to spring brake chamber flanges that hold diaphragm and to service air line coupling. No leakage is permitted. Tighten nuts on flanges and tighten coupling as required.
 - (b) With emergency relay valve in emergency position (see 1c above), coat exhaust port with soapsuds.
 - (c) Leakage tests must not exceed a one inch bubble in three seconds. If excess leakage is found, replace emergency relay valve.

c. Multi-Function Valve Tests.

WARNING

Wear protective goggles when opening the air reservoir drain cock. Avoid contact with the air stream. Failure to observe this warning could result in serious personal injury.

- (1) Charge semitrailer air system. The spring brake chambers should release. Shut off the engine, leaving the ignition on and open the drain cock on the front or rear air reservoir. Coat drain cock with soapy water.

- (2) After the air system is bled down, the spring brake chambers on the semitrailer should actuate promptly.
- (3) Leakage at the open drain cock should not exceed a one inch bubble in five seconds. If excess leakage is found, replace multi-function valve.
- (4) Close drain cock.
- (5) Repeat steps 1 through 4 using other air reservoir.

d. Air Reservoirs, Drainage of Moisture and Tests.

WARNING

Wear protective goggles when opening the air reservoir drain cock. Avoid contact with the air stream. Failure to observe this warning could result in serious personal injury.

- (1) Drainage of moisture. Open drain cock on each air reservoir. Close drain cocks after drainage.
- (2) Test and check for serviceability. With air brake system connected to towing vehicle, coat drain cocks, pipe plugs and connections with soapsuds. No leakage is permissible. Tighten any leaking connections. Inspect for damage or corrosion. Replace reservoir if it leaks or if any damage or corrosion is found that would weaken reservoir.

TASK ENDS HERE

4-31. GLADHANDS

This task covers:

Removal
Repair
Installation

INITIAL SETUP

Tools

General mechanics tool kit

Equipment Condition

Drain cocks open (para. 3-8)
Nose box cover removed (para. 4-17)

a. Removal.**NOTE**

On the M871A1 semitrailer, the service side has an elbow (2) and the emergency side has a straight fitting (2).

- (1) Disconnect air line (1, fig. 4-28) from elbow (2).

NOTE

On the M871A1 semitrailer, the two screws (3) and lockwashers (4) are on the inside of the nose box.

- (2) Remove two screws (3) and two washers (4).
- (3) Remove gladhand (5) and elbow (2).
- (4) Separate gladhand (5) from gladhand elbow (6).
- (5) Remove gladhand packing (7) from gladhand (5).
- (6) Repeat steps 1 through 4 for other gladhand, if required.

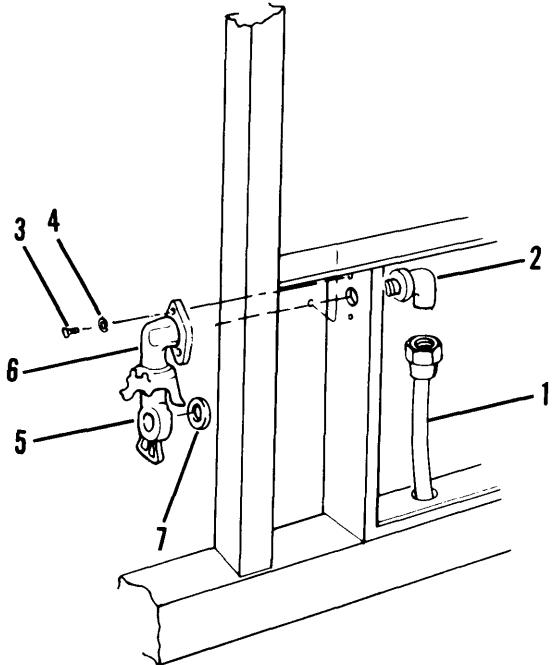
b. Repair. Repair of gladhand is limited to replacement of packing (7).

Figure 4-28. Gladhands

c. Installation.

- (1) Install gladhand packing (7, fig. 4-28) in gladhand (5).
- (2) Connect gladhand (5) and gladhand elbow (6).

NOTE

On the M871A1 semitrailer, the service side has an elbow (2) and the emergency side has a straight fitting (2).

- (3) Install gladhand (5) and elbow (2) into position.
- (4) Install two washers (4) and two screws (3).

NOTE

On the M871A1 semitrailer, the two washers (4) and screws (3) are on the inside of the nose box.

- (5) Connect air line (1) to elbow (2).
- (6) Repeat steps 1 through 4 for other gladhand, if removed.
- (7) Install nose box cover (para. 4-17).
- (8) Close drain cocks (para. 3-8).
- (9) Pressurize air brake system.
- (10) Check for leaks (para. 4-30).

TASK ENDS HERE

4-32. DUMMY COUPLINGS

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Personnel Required
Grinder, portable Torch, acetylene Welder, arc General mechanics tool kit and common supplement II	Two

a. Removal.

WARNING

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

NOTE

Before starting procedure, measure and record the following:

Distance between top of s-hook and bottom of dummy coupling connector elbow.

Distance between bottom of s-hook and bottom edge of nose box.

- (1) Using cutting torch, cut weldment (fig. 4-29).
- (2) Grind weld off nose box (1) surface.
- (3) Repeat steps 1 and 2 for other dummy coupling as needed.

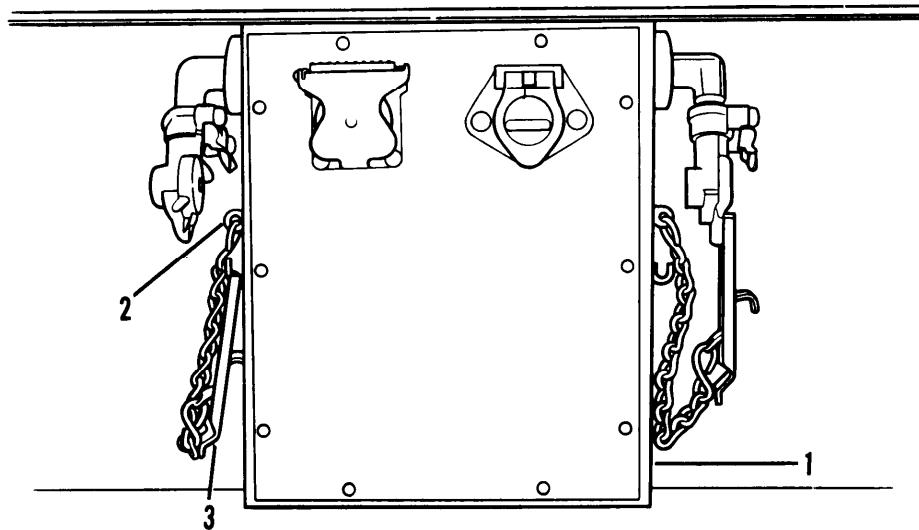


Figure 4-29. Dummy Coupling

b. Installation.

- (1) Position s-hook (2, fig. 4-29) and dummy coupling (3) according to recorded measurements.

WARNING

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

(2) Weld s-hook (2) to nose box (1) using arc welder. Refer to TM 9-237.

(3) Repeat steps 1 and 2 for other dummy coupling as needed.

TASK ENDS HERE

4-33. AIR LINES

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Materials/Parts
General mechanics tool kit	Lockwire (item 17, Appendix E)
Equipment Condition	
Drain cocks open (para. 3-8)	

a. Removal.

- (1) Short air lines.
 - (a) Disconnect both ends of air line and remove.
- (2) Long air lines.
 - (a) Disconnect both ends of air line.
 - (b) Tie a length of lockwire (1, fig. 4-30) to one end.
 - (c) Pull the air line (2) and lockwire (1) out of frame. Do not remove lockwire as it is needed to install air lines.

b. Installation.

- (1) Short air lines.
 - (a) Connect both ends.

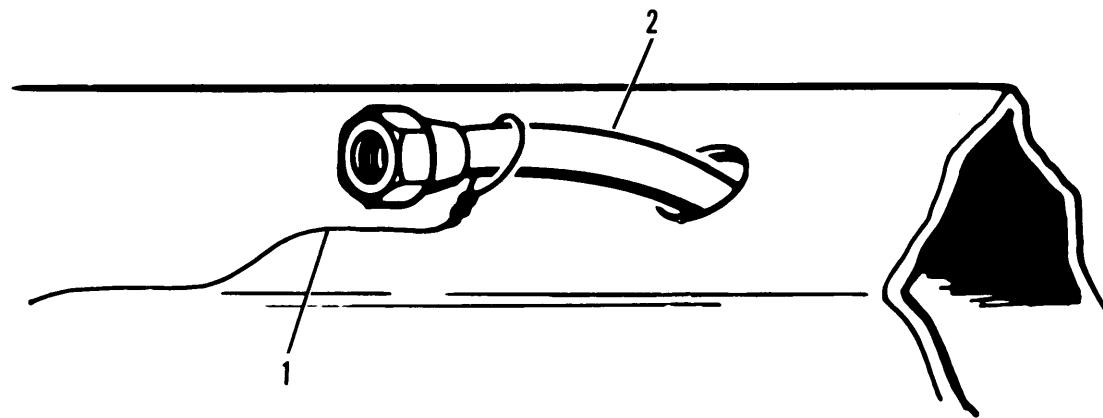


Figure 4-30. Air Lines

(2) Long air lines.

(a) Tie the length of lockwire (1, fig. 4-30) that was used during removal to one end of the air line (2).

(b) Feed the air line (2) through the frame while carefully pulling the Lockwire (1).

(c) Connect the air line (2) end.

(3) Close drain cocks.

(4) Pressurize air brake system.

(5) Check for leaks (para. 4-30).

TASK ENDS HERE

4-34. EMERGENCY RELAY VALVE (M871 ONLY)

This task covers:

Removal

Installation

INITIAL SETUP

Tools

General mechanics tool kit

Equipment Condition

Drain cocks open (para. 3-8)

a. Removal.

- (1) Disconnect input (1, fig. 4-31) and output (2) lines from elbows (3) and tee (8).
- (2) Remove two elbows (3), adapter (7) and tee (8).
- (3) Remove relay valve assembly (4) by rotating entire valve assembly counterclockwise.

NOTE

If removing forward valve, be sure to remove tee to rear reservoir.

- (4) Remove nipple (5) from rear of valve assembly (4).
- (5) Repeat steps 1 through 4 for other valve assembly, if required.

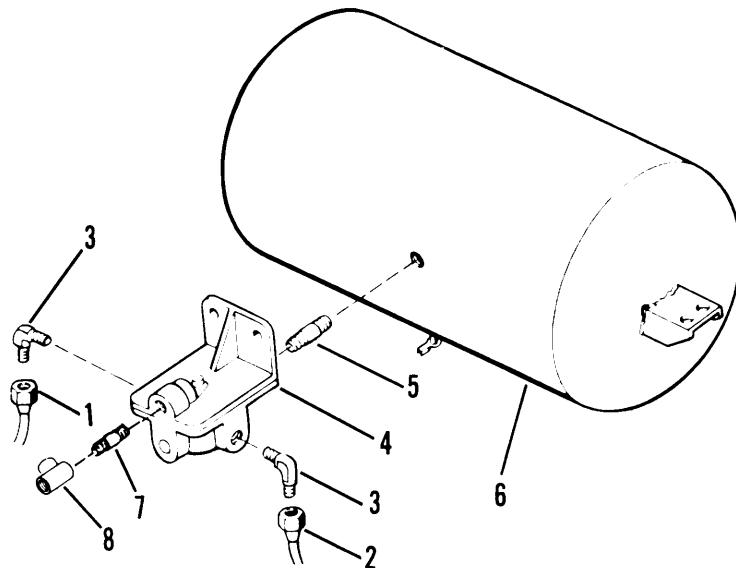


Figure 4-31. Emergency Relay Valve (B1871)

b. Installation.

- (1) Install nipple (5, fig. 4-31) to rear of valve assembly (4).
- (2) Install valve assembly (4) to reservoir (6) by rotating entire valve assembly clockwise.
- (3) Install two elbows (3), adapter (7) and tee (8).
- (4) Connect input (1) and output (2) lines to elbows (3) and tee (8).

- (5) Repeat steps 1 through 4 for other valve, if removed.
- (6) Close drain cocks.
- (7) Check for leaks (para. 4-30).

TASK ENDS HERE

4-35. EMERGENCY RELAY VALVE (M871A1 ONLY)

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Materials/Parts
General mechanics tool kit	Tags (item 15, Appendix E)
Equipment Condition	
Drain cocks open (para. 3-8)	

a. Removal.

- (1) Tag and disconnect air lines from emergency relay valve (1, fig. 4-32).
- (2) Remove two screws (2), washers (3) and locknuts (4) used to mount emergency relay valve (1). Remove emergency relay valve (1).
- (3) Remove fittings (5, 6, and 7) from emergency relay valve (1)

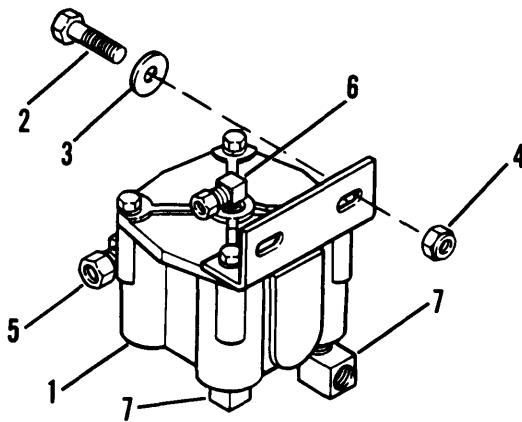


Figure 4-32. Emergency Relay Valve (M871A1)

b. Installation.

- (1) Install fittings (5, 6, and 7, fig. 4-32) on emergency relay valve (1).
- (2) Install emergency relay valve (1, fig. 4-32) on frame bracket.
- (3) Secure emergency relay valve (1) to frame bracket with two screws (2), washers (3) and locknuts (4).
- (4) Connect air lines to emergency relay valve (1).
- (5) Close drain cocks (para. 3-8).
- (6) Charge air brake system.
- (7) Check for leaks (para. 4-30).

TASK ENDS HERE**4-36. MULTI-FUNCTION VALVE (M871)**

This task covers:

Removal
Installation**INITIAL SETUP**

Tools	Materials/Parts
General mechanics tool kit	Tags (item 15, Appendix E)
Equipment Condition	

Drain cocks open (para. 3-8)

a. Removal.

- (1) Disconnect eight air lines (1, fig. 4-33). Tag lines with port identification.
- (2) Remove two elbows (2) and tee (3).
- (3) Remove multi-function valve assembly (4) by rotating entire valve assembly counterclockwise.
- (4) Remove nipple (5) from rear of valve assembly (4).

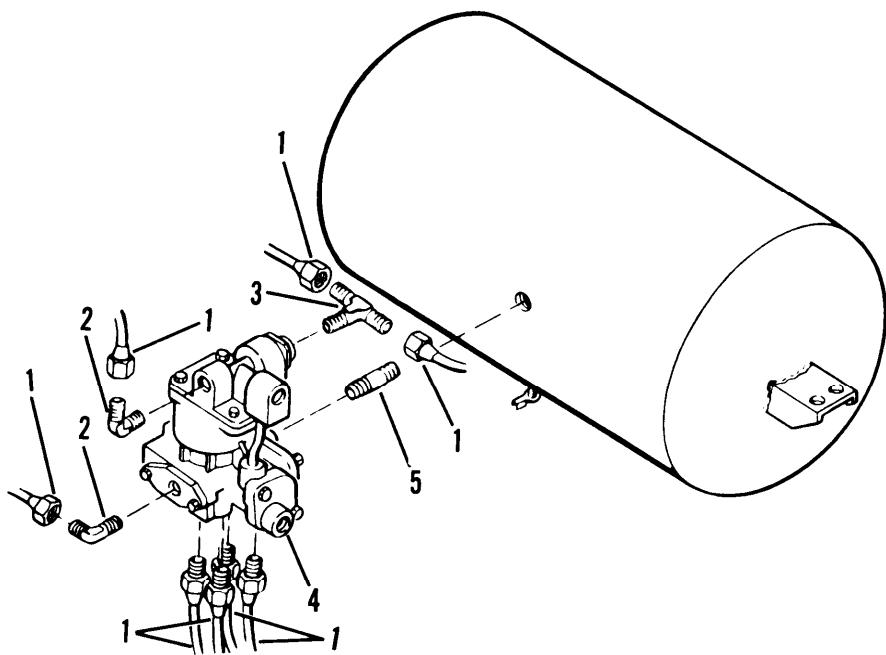


Figure 4-33. Multi-Function Valve (M871)

b. Installation.

- (1) Install nipple (5, fig. 4-33) to rear of the valve assembly (4). Install tee (3) to top port of valve.
- (2) Install multi-function valve assembly (4) by rotating entire assembly clockwise.
- (3) Install two elbows (2) and tee (3).
- (4) Connect eight air lines (1) per tagged identification.
- (5) Close drain cock.
- (6) Pressurize air brake system.
- (7) Check for leaks (para. 4-30).

TASK ENDS HERE

4-37. MULTI-FUNCTION VALVE (M871Al ONLY)

This task covers:

Removal
Installation

INITIAL SETUP

tools	Materials/Parts
General mechanics tool kit	Tags (item 15, Appendix E)
Equipment Condition	Teflon Tape (item 16, Appendix E)
Drain cocks open (para. 3-8)	

a. Removal.

- (1) Tag and disconnect air lines from multi-function valve (1, fig. 4-34).
- (2) Remove two screws (2) and locknuts (3) from mounting plate (4).
- (3) Remove multi-function valve (1) from female pipe cross (5) and mounting plate (4).
- (4) Remove washer (6) and male adapter (7) from multi-function valve (1).
- (5) Remove male connectors (8, 9 and 10) from multi-function valve (1).
- (6) Remove adapters (11) and tee (12) from multi-function valve (1).
- (7) Remove male connectors (13 and 14) from pipe cross (5).
- (8) Remove 90° elbow (15) from pipe cross (5).

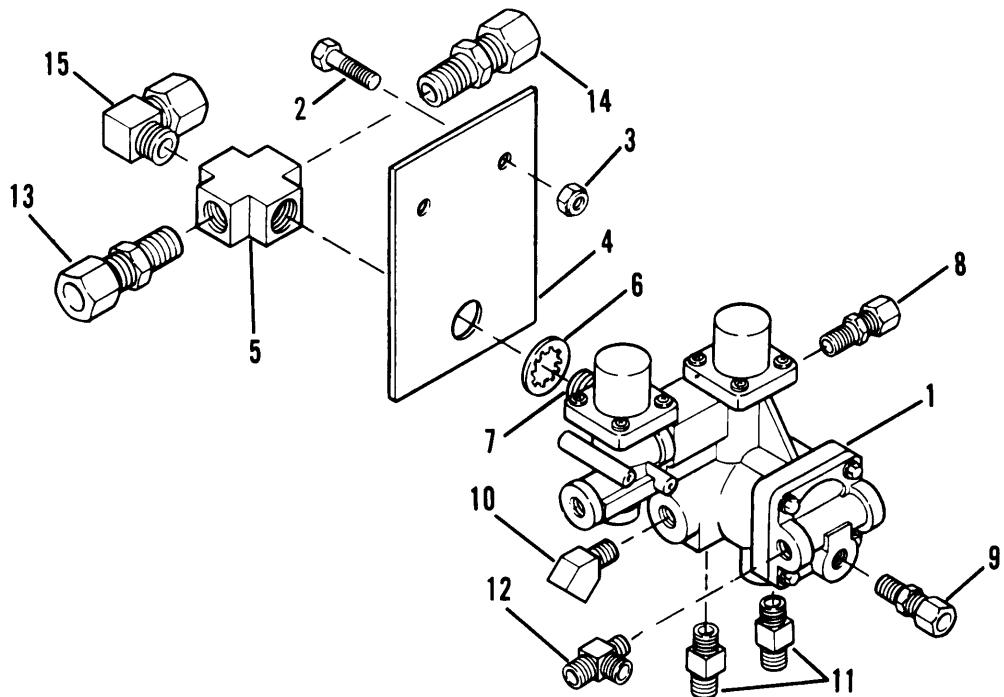


Figure 4-34. Multi-Function Valve W7W

b. Installation.

NOTE

Wrap the threads of each fitting with teflon tape before installation to assure a tight and secure fit.

- (1) Install 900 elbow (15, fig. 4-34) in pipe cross (5).
- (2) Install male connectors (13 and 14) in pipe cross (5).
- (3) Install adapters (11) and tee (12) in multi-function valve (1).
- (4) Install male connectors (8, 9 and 10) in multi-function valve (1).
- (5) Install male adapter (7) and washer (6) on multi-function valve (1).
- (6) Install multi-function valve (1) on mounting plate (4) and female pipe cross (5).
- (7) Secure multi-function valve (1) and mounting plate (4) to frame with two screws (2) and locknuts (3).
- (8) Connect air lines to multi-function valve (1).
- (9) Close drain cocks.
- (10) Charge air brake system.
- (11) Check for leaks.

TASK ENDS HERE

4-38. AIR RESERVOIRS

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Materials/Parts
General mechanics tool kit	Tags (item 15, Appendix E)
Equipment Condition	
Drain cocks open (para. 3-8) Emergency relay valve removed (M871 if applicable) (para. 4-34) Multi-function valve removed (M871 if applicable) (para. 4-36)	

a. Removal.

- (1) Tag and disconnect air line connected between air reservoirs (M871A1) being removed.
- (2) Remove four nuts (2, fig. 4-35), eight washers (3), and four bolts (4) from bracket (5) (welded to air reservoir).
- (3) Remove air reservoir (1).
- (4) Remove drain cock (6) and fittings from air reservoir (1).

b. Installation.

- (1) Install drain cock (6, fig. 4-35) and fittings on air reservoir (1).
- (2) Line up holes in air reservoir brackets (5) with holes in frame (6).
- (3) Secure air reservoir (1) with four bolts (4), eight washers (3) and four nuts (2).
- (4) Install air line between air reservoirs (M871A1).

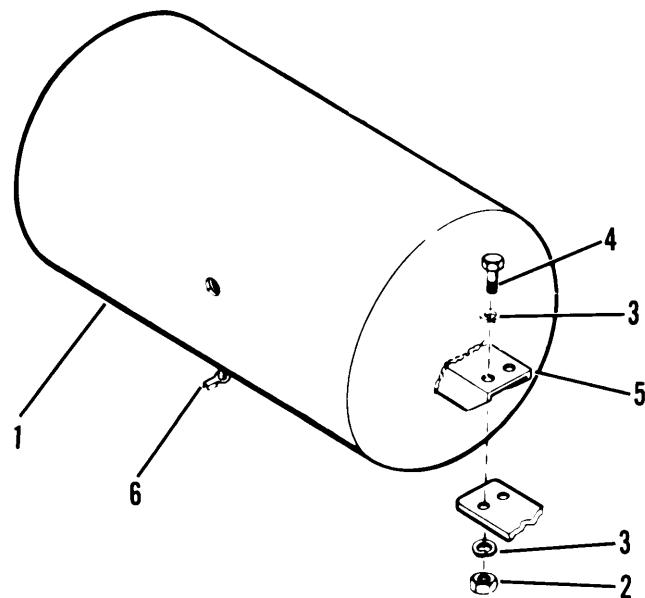


Figure 4-35. Air Reservoir

- (5) Install emergency relay valve (M871 if applicable) (para. 4-34) or multi-function valve (M871 if applicable) (para. 4-36).
- (6) Close drain cocks.
- (7) Pressurize air brake system when both air reservoirs are installed.
- (8) Check for leaks.

TASK ENDS HERE

This task covers:

Service

INITIAL SETUP

Tools

General mechanics tool kit
Spring Brake Tool

Equipment Condition

Spring brake chambers caged (para. 2-28)

WARNING

- Caged spring in bottom chamber is under 2,500 lbs of tension. Use extreme care when performing maintenance.
- Do not position yourself in front of, or in line with the spring brake assembly. Perform necessary maintenance from the side.
- Read all manufacturer's warning labels before uncaging.
- Inspect clamp bands, castings, and fasteners for external damage. If damage to these items is evident, do not attempt uncaging procedure. Refer to para. 4-40 for removal instructions.

Failure to observe this warning could result in serious personal injury and damage to equipment.

- a. Block semitrailer with chock blocks to prevent movement.
- b. Slowly loosen nut (1, fig. 4-36) and washer (2) on spring brake tool (3). Remove nut (1) and washer (2).
- c. Turn spring brake tool (3) 1/4 turn counterclockwise to unlock from manual release position. Remove spring brake tool (3).
- d. Install plug (4) on spring brake chamber (5).
- e. Insert spring brake tool (3) in mounting hole (6) in spring brake chamber (5). Secure spring brake tool (3) with washer (2) and nut (1).

- f. Repeat steps b. through e. for remaining spring brake chambers.
- g. Remove and stow chock blocks.

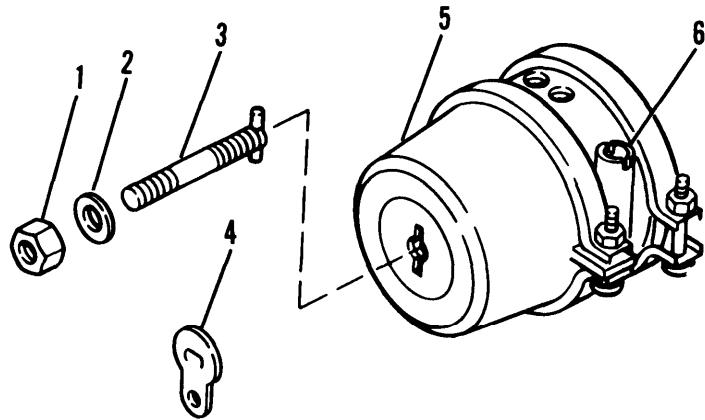


Figure 4-36. Uncaging Spring Brake Chambers

TASK END HERE

4-40. SPRING BRAKE CHAMBER

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit	Materials/Parts
Equipment Condition	Tags (item 15, Appendix E)
Drain cocks open (para. 3-8)	

a. Removal.

WARNING

- Caged spring in bottom chamber is under 2,500 lbs of tension. Use extreme care when performing maintenance.
- Do not position yourself in front of, or in line with the spring brake assembly. Perform necessary maintenance from the side.
- Read all manufacturer's warning labels before uncaging.
- Inspect clamp bands, castings, and fasteners for external damage. If damage to these items is evident, do not attempt uncaging procedure. Refer to para. 4-40 for removal instructions.

Failure to observe this warning could result in serious personal injury and damage to equipment.

- (1) Turn adjusting nut (1, fig. 4-37) on slack adjuster (2) counterclockwise to release spring forces.
- (2) Tag and disconnect air lines from multi-function and emergency relay valves.
- (3) Tag and disconnect two air lines (3) from spring brake chamber (8).
- (4) Remove cotter pin (4) and clevis pin (5). Remove clevis from slack adjuster (2).
- (5) Remove two nuts (6) and two washers (7).
- (6) Remove spring brake chamber (8).

b. Installation.

- (1) Install spring brake chamber (8, fig. 4-37) in position.
- (2) Install two washers (7) and two nuts (6).
- (3) Position clevis on slack adjuster (2) and install clevis pin (5) and cotter pin (4).
- (4) Connect air lines (3) to spring brake chamber (8).
- (5) Connect air lines to the multi-function and emergency relay valves.
- (6) Close drain cocks on air reservoirs and pressurize air brake system.
- (7) Adjust slack adjuster (para. 4-30).

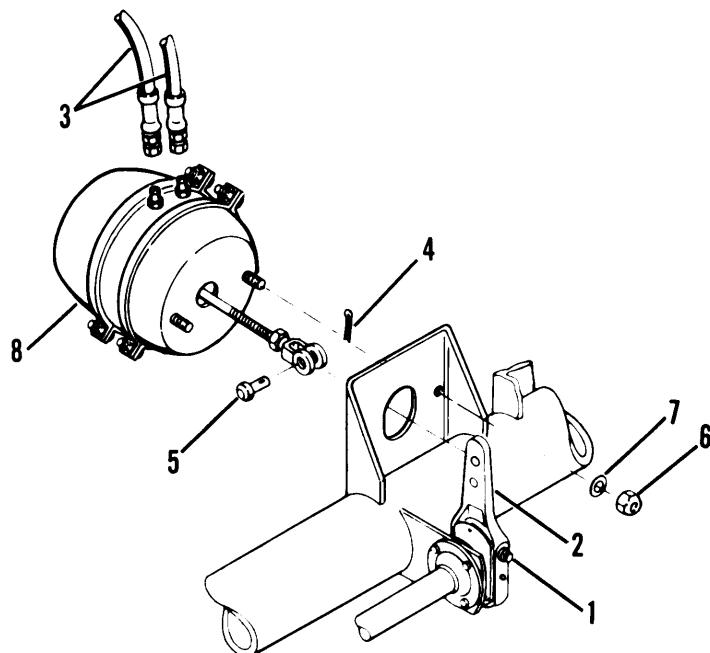


Figure 4-37. Spring Brake Chamber

TASK ENDS HERB

4-41. SLACK ADJUSTER

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

Equipment Condition

Drain cocks open (para. 3-8)

a. Removal.

- (1) Turn adjusting nut (3, fig. 4-38)) on slack adjuster (4) counterclockwise to release spring forces.
- (2) Remove cotter pin (1) and clevis pin (2).

- (3) Rotate the slack adjuster (4) out of the clevis (5) on the spring brake chamber.
- (4) Remove retaining ring (6) from end of camshaft (7).
- (5) Using hammer and suitable drift, tap slack adjuster (4) lightly until it comes off camshaft (7).

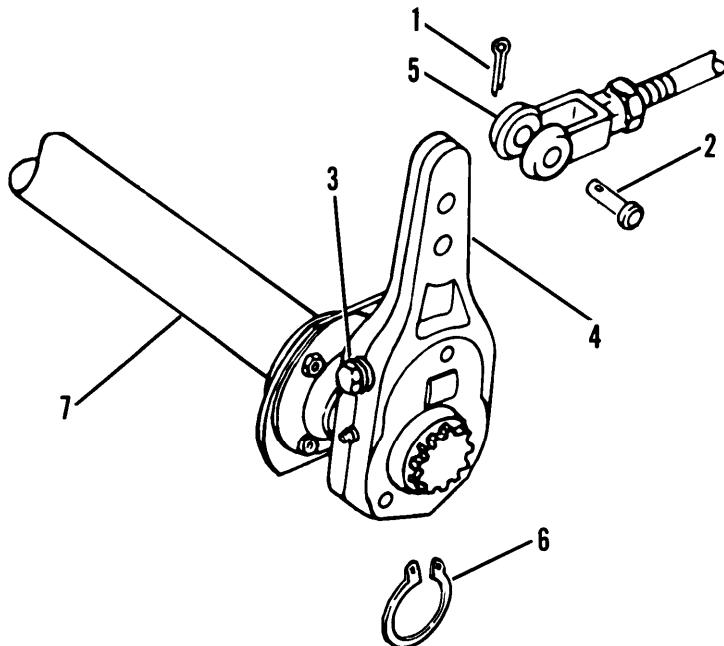


Figure 4-38. Slack Adjuster

b. Installation.

- (1) Clean splines of camshaft (7, fig. 4-38).
- (2) Place slack adjuster (4) in position on camshaft (7) and tap in place using a hammer.
- (3) Install retaining ring (6).
- (4) Rotate slack adjuster (4) into clevis (5).
- (5) Install clevis pin (2) and cotter pin (1).
- (6) Close drain cocks.
- (7) Adjust slack adjuster (para. 4-30).

TASK ENDS HERE

4-42. BRAKE SHOES

This task covers:

Removal
Installation

INITIAL SETUP

Tools

Jack stands
General mechanics tool kit

Equipment Condition

Drain cocks open (para. 3-8)
Tires and wheels removed (para. 4-45)
Brake drum and hub removed (para. 4-47)

a. Removal.

WARNING

The frame and axle must be firmly supported to prevent shifting of the semitrailer. Shifting may cause serious injury to personnel and damage to equipment.

- (1) Support axle and frame on each side.

NOTE

Omit step 2 when working with the M871A1 semitrailer.
The M871A1 semitrailer does not have a spider bolt.

- (2) Loosen spider bolt (1, fig. 4-39) when working on M871 semitrailer.
- (3) Remove anchor pin retaining rings (2) and anchor pin washers (3).
- (4) Drive out anchor pins (4 and 5).
- (5) Remove spring (6) from upper shoe (7) and lower shoe (8).
- (6) Remove spring pin (9) from both shoes (7 and 8).
- (7) Remove rollers (10) and roller retainers (11).

NOTE

Omit step 8 when removing the M871A1 brake shoes.

- (8) Remove spider nut (12), washer (13) and bolt (1).

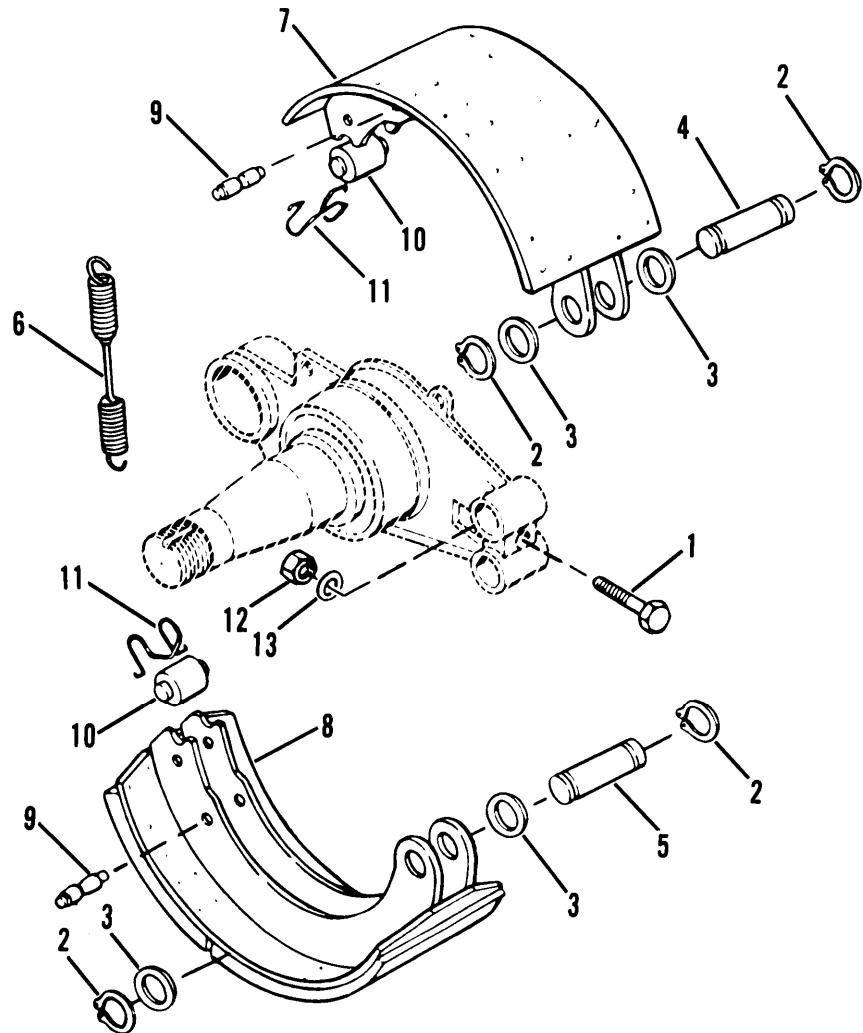


Figure 4-39. Brake Shoes

b. Installation.

NOTE

Omit step 1 when installing the M871A1 brake shoes.

- (1) Install spider bolt (1, fig. 4-39), washer (13) and spider nut (12). Do not tighten.
- (2) Install rollers (10) and roller retainers (11).
- (3) Place shoes (7 and 8) in position. Install anchor pins (4 and 5).
- (4) Install anchor pin washers (3) and anchor pin retaining rings (2).

- (5) Install spring pins (9) to both shoes (7 and 8).
- (6) Install spring (6).

NOTE

Omit step 7 when installing the M871A1 brake shoes.

- (7) Torque spider nut (12) and bolt (1) to 100-120 lb ft (136-163 Nm).
- (8) Install brake drum and hub (para. 4-47).
- (9) Install wheels on axle (para. 4-45).
- (10) Close drain cocks.
- (11) Adjust slack adjusters (para. 4-30).
- (12) Remove frame and axle supports.

TASK ENDS HERE

4-43. BRAKE CAMSHAFT

This task covers:

Removal
Installation

INITIAL SETUP

Tools

Jack stands
General mechanics tool kit

Equipment Condition

Drain cocks open (para. 3-8)
Tires and wheels removed (para. 4-45)
Slack adjusters removed (para. 4-41)
Brake drum and hub removed (para. 4-47)
Brake shoes removed (para. 4-42)

a. Removal.

WARNING

The frame and axle must be firmly supported to prevent shifting of the semitrailer. Shifting may cause serious injury to personnel and damage to equipment.

- (1) Support axle and frame on each side.
- (2) Remove snap ring (2, fig. 4-40) and washer (3) from camshaft (1).
- (3) Remove camshaft (1).
- (4) Remove seal (5), bushing (6) and seal (7).
- (5) Remove four nuts (8), washers (9) and screws (10) when removing the M871 camshaft. Remove three nuts (8), washers (9) and screws (10) when removing the M871A1 camshaft.

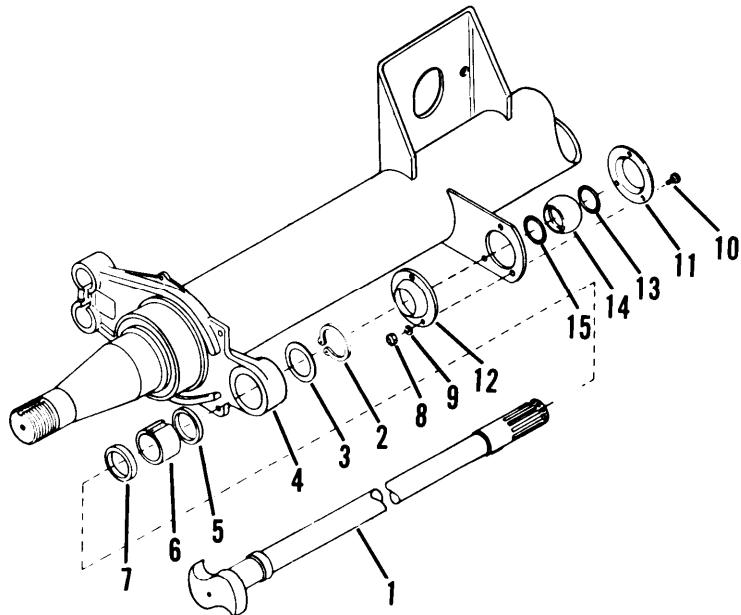


Figure 4-40. Brake Camshaft

- (6) Remove retainer (11), retainer (12), preformed packing (13), bushing (14) and preformed packing (15).

b. Installation.

- (1) Install preformed packing (15, fig. 4-40), bushing (14), preformed packing (13), retainer (12) and retainer (11).
- (2) Install four screws (10), washers (9) and nuts (8) when installing the M871 camshaft. Install three screws (10), washers (9) and nuts (8) when installing the M871A1 camshaft.

- (3) Install seal (7), bushing (6) and seal (5).
- (4) Slide camshaft (1) halfway through spider (4). Install washer (3) and snap ring (2), then slide camshaft (1) the rest of the way through spider (4).
- (5) Install snap ring (2) into proper position.
- (6) Install slack adjuster (para. 4-41).
- (7) Install brake shoes (para. 4-42).
- (8) Install brake drum and hub (para. 4-47).
- (9) Install tires and wheels (para. 4-45).
- (10) Close drain cocks.
- (11) Adjust slack adjusters (para. 4-30).
- (12) Remove axle and frame supports.

TASK ENDS HERE

Section VIII. MAINTENANCE OF THE WHEELS, HUBS AND DRUMS

	Page
Brake Drum and Hub	4-79
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Tires and Tubes.	4-79
Wheels	4-77

4-44. DESCRIPTION

a. General. The brake drums and wheels are mounted on the hubs. Each hub is mounted on the spindle of its axle on two tapered roller bearings. The wheels are mounted on the hub with ten wheel studs and lug nuts. Lug nuts must be turned in the opposite direction to the normal rotation of the wheel to be loosened or removed. The wheel bearings are removable for cleaning, inspection and lubrication. A grease seal (and seal ring on the M871A1) is fitted behind the inner bearing to protect brake linings from lubricant.

b. Brake Drums. The brake drum (1, fig. 4-41) is attached to the hub (2) with ten nuts and studs. A hub cap (3) and gasket, fastened by six screws and washers of the center of the hub, excludes moisture and dirt.

c. Tires. Tires are military pneumatic type, cross country non-directional tread design, size 11.00 X 20, 12-ply rating with controlled bead. The tires are equipped with tubes and continuous flaps.

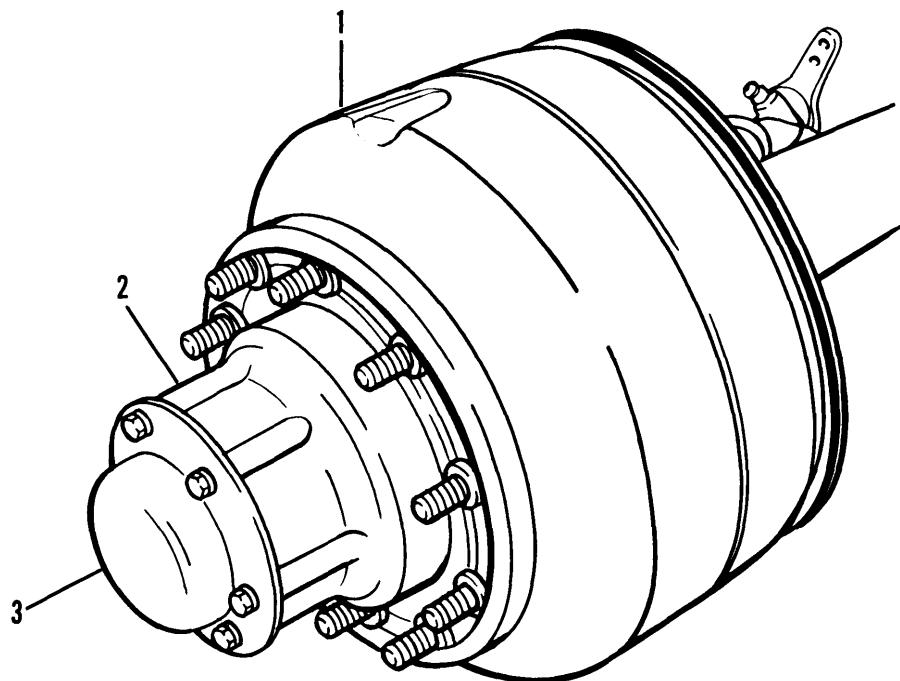


Figure 4-41. Hub and Brake Drum

4-45. WHEELS

This task covers:

Removal
Installation

INITIAL SETUP

Tools

Jack stands
General mechanics tool kit and common supplement II

a. Removal.

- (1) Set chock blocks opposite the set of wheels being removed.
- (2) Loosen, but do not remove ten lug nuts (1, fig. 4-42).
- (3) Jack up axle until wheels (2 and 3) are clear of the ground.

WARNING

The frame and axle must be firmly supported to prevent shifting of the semitrailer. Shifting may cause serious injury to personnel and damage to equipment.

(4) Support the semitrailer axle and frame with jack stands.

(5) Remove ten lug nuts (1) and outer wheel (2).

NOTE

If only the outer tire and wheel is being removed, omit step 6.

(6) Remove ten lugs (4) and inner wheel (3).

b. Installation.**CAUTION**

The valve stem must be in the groove of the drum to prevent damage.

(1) Install inner wheel (3, fig. 4-42) and ten lugs (4).

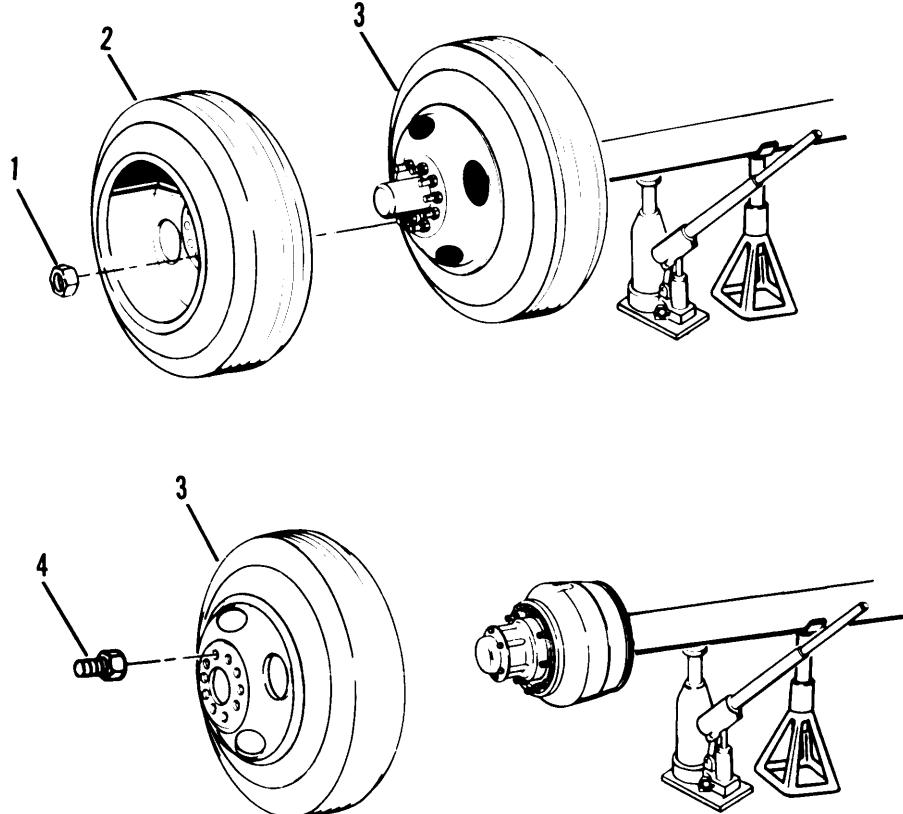


Figure 4-42. Tire and Wheel Removal

- (2) Install wheel (2) and ten lug nuts (1). The valve stem must be 180 degrees from the valve stem of the inner wheel. Torque lug nuts to 400-450 lb ft (542-612 Nm).
- (3) Remove jack stands and lower semitrailer.
- (4) Remove chock blocks and stow in brackets.

TASK ENDS HERE

4-46. TIRES AND TUBES

Refer to TM 9-2610-200-24 for tire and tube removal, repair and installation.

TASK ENDS HERE

4-47. BRAKE DRUM AND HUB

This task covers:

Removal
Installation
Adjustment

INITIAL SETUP

Tools

General mechanics tool kit and common supplement 11

Equipment Condition

Tires and wheels removed (para. 4-45)

Materials/Parts

Gasket, Hub Cap
Grease (Item 6, appendix E)

a. Removal.

CAUTION

Be certain which model semitrailer you are working on.
Callout 6, on figure 4-43 is on the M871 semitrailer
only. Callout 16 is on the M871A1 semitrailer only.

- (1) Remove six screws (1, fig. 4-43), six washers (2), hub cap (3) and gasket (4). Discard gasket (4).

NOTE

The tongue washer (6) is on the M871 semitrailer only.

- (2) Straighten tabs on tongue washer (6). Remove axle nut (5), tongue washer (6), lockwasher (7) and inner nut (8).
- (3) Remove outer bearing cone (9).
- (4) Remove hub (11) and brake drum (12).
- (5) Remove grease seal (13) and inner bearing cone (14). Discard grease seal (13) if damaged.

N O T E

The seal ring (16) and lockwashers (17) are on the M871A1 semitrailer only.

- (6) Remove seal ring (16) from spindle, and discard if damaged.
- (7) Remove inner bearing cup (15) and outer bearing cup (10) from hub (11).
- (8) Remove ten nuts (18) and lockwashers (17).
- (9) Separate hub (11) and brake drum (12).
- (10) Remove ten studs (19) from hub (11), if damaged.

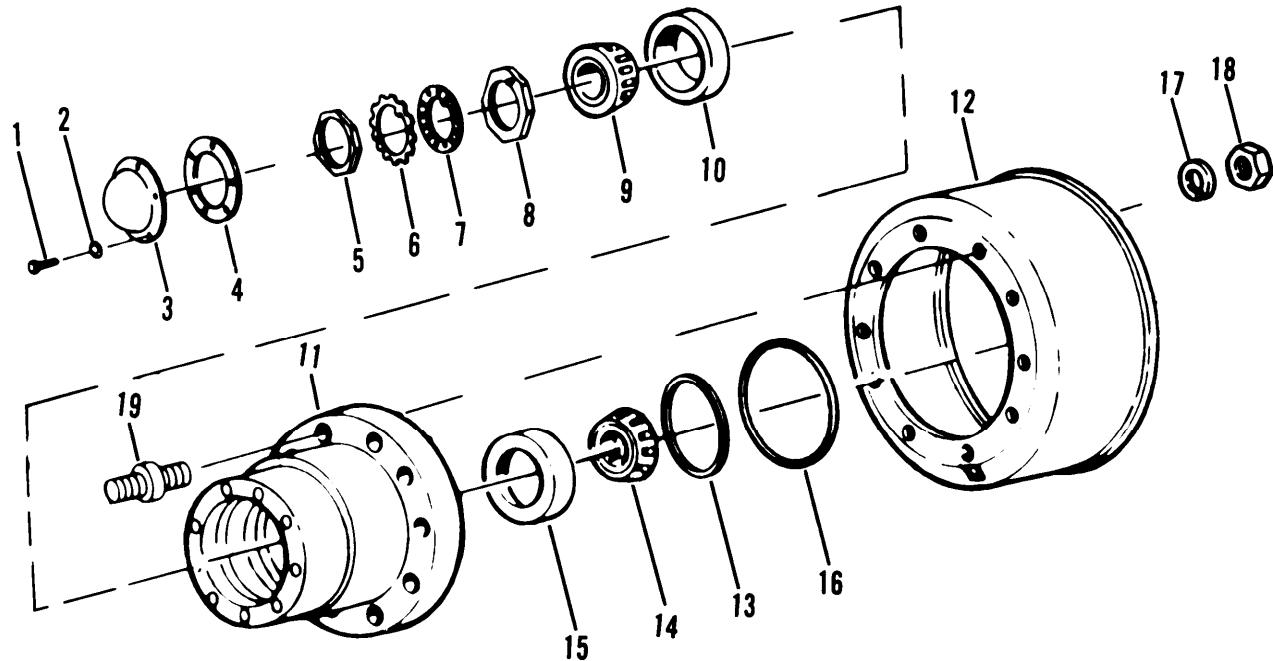


Figure 4-43. Brake Drum and Hub

b. Installation.

- (1) Install ten studs (19, fig. 4-43) with short side from shoulder facing in the hub (11).
- (2) Install hub (11) on brake drum (12).

NOTE

The seal ring (16) and lockwashers (17) are on the M871A1 semitrailer only.

- (3) Secure hub (11) and brake drum (12) with ten lockwashers (17) and nuts (18) 1
- (4) Using soft durable item, install inner bearing cup (15) and outer bearing cup (10) in hub (11).
- (5) Install new seal ring (16) on spindle, if removed.
- (6) Pack inner bearing cone (14) with grease per lubrication chart (fig. 3-1). Install inner bearing cone (14) and new grease seal (13) in hub (11) if removed.
- (7) Install assembled hub (11) and brake drum (12) on axle spindle.
- (8) Pack outer bearing cone (9) with grease per lubrication chart (fig. 3-1). Install outer bearing cone (9).

c. Adjustment.

- (1) Install inner nut (8, fig. 4-43) with locking guide pin out and torque to 75 lb ft (103 Nm) while rotating hub and drum assembly. Back off one turn and repeat 75 lb ft (103 Nm) torque. Back off 1/4 turn.

NOTE

The tongue washer (6) is on the M871 semitrailer only. Be sure lockwasher hole (7) and the locking guide pin on the inner nut (8) mate. The lockwasher may have to be turned over or the inner nut moved slightly to fit properly. Be sure to bend tabs down on tongue washer.

- (2) Install lockwasher (7), tongue washer (6) and axle nut (5). Tighten outer nut to 150-200 lb ft (204-272 Nm).
- (3) Install new gasket (4).
- (4) Install hub cap (3). Secure with six washers (2) and six screws (1).
- (5) Install wheels on axle (para. 4-45).
- (6) Remove axle supports.

TASK ENDS HERE

Section IX. MAINTENANCE OF THE FRAME

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4-48. DOCK BUMPERS

This task covers:

Removal
Installation

INITIAL SETUP**Tools**

General mechanics tool kit

a. Removal.**NOTE**

On the M871A1 semitrailer, the washer (2) is positioned from the front of the dock bumper .

- (1) Remove two nuts (1, fig. 4-44), washers (2), and screws (3).
- (2) Remove dock bumper (4).
- (3) Repeat steps (1) and (2) for other bumpers as needed.

b. Installation.

- (1) Place dock bumper (4, fig. 4-44) into position.

NOTE

On the M871A1 semitrailer, the washer (2) is positioned from the front of the dock bumper.

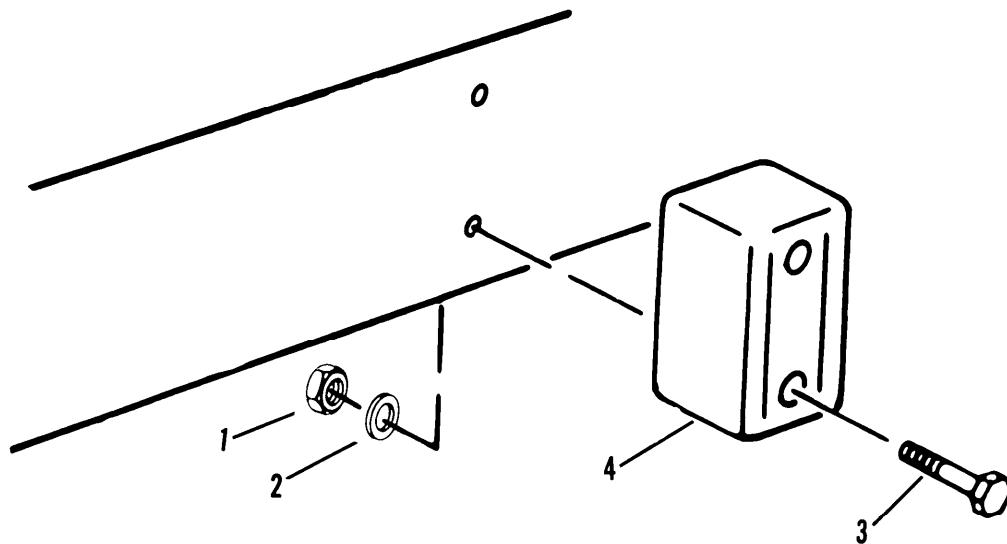


Figure 4-44. Dock Bumper

- (2) Install two screws (3), washers (2) and nuts (1).
- (3) Repeat steps (1) and (2) for other bumpers as needed.

TASK ENDS HERE

4-49. CHOCK BLOCKS

This task covers:

Removal
Installation

Personnel Required

Two

-
- a. Removal.

WARNING

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

NOTE

Mark location of chock block chain on frame before beginning procedure. Measure and record length of new chain required to properly emplace chock block.

- (1) Using cutting torch, cut weldment (fig. 4-45).

- (2) Grind weld off frame surface.
- (3) Remove chain (1) from chock block (2).
- (4) Repeat steps 1 through 3 for other chock block as needed.

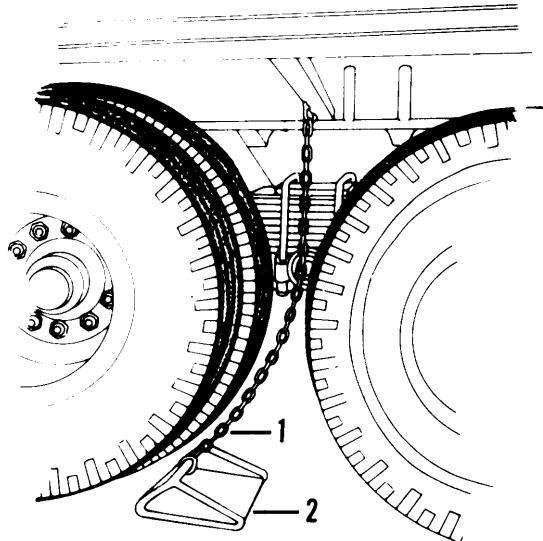


Figure 4-45. Chock BLOCK

b. Installation.

- (1) Position chock block chain (1, fig. 4-45) on frame according to markings.

W A R N I N G

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

- (2) Weld chock block chain (1) to frame using arc welder. Refer to TM 9-237.
- (3) Install chain (1) on block (2).
- (4) Stow chock block (2).
- (5) Repeat steps 1 through 3 for other chock block as needed.

TASK ENDS HERE

4-50. RETRACTABLE TWIST LOCKS

This task covers:

Removal
Disassembly
Repair
Assembly
Installation

INITIAL SETUP**Tools**

General mechanics tool kit

a. Removal.

- (1) Lower lock.
- (2) Drive out pin (1, fig. 4-46) and remove lower assembly (2) by turning clockwise.
- (3) Remove upper assembly (3), taking care not to separate locator block and bayonet.

b. Disassembly.

- (1) Upper assembly.

CAUTION

Take care in separating locator block and bayonet to prevent loss of balls and springs.

- (a) Remove setscrew (1, fig. 4-47), spring (2) and ball (3).
 - (b) Separate locator block (4) and bayonet (5).
 - (c) Remove ball (6) and spring (7).
- (2) Lower assembly.
 - (a) Remove pin (1, fig. 4-48).
 - (b) Remove handle (2) and two spacers (3) from base cap (4).
- c. Repair. Repair is by replacement of assembly only.

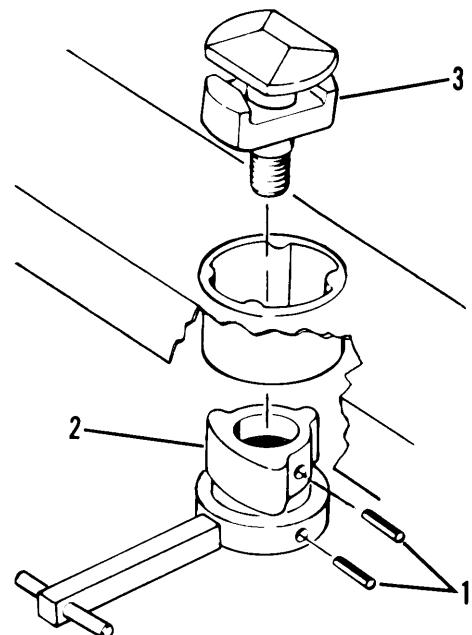


Figure 4-46. Retractable Twist Lock

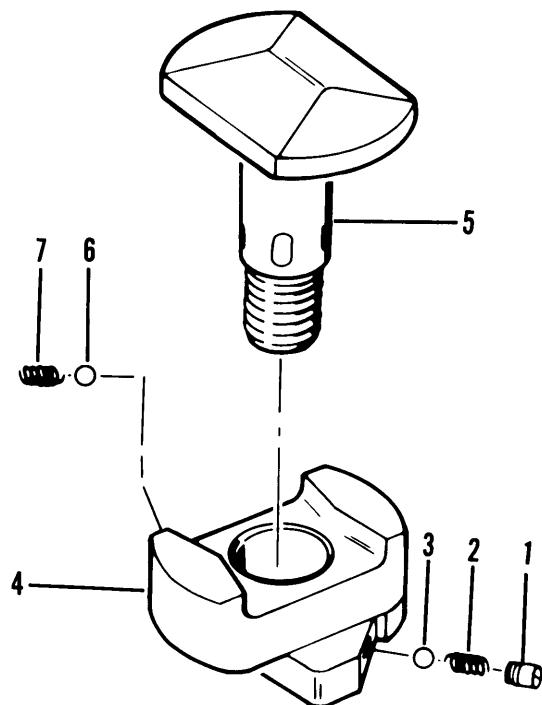


Figure 4-47. Retractable Twist Lock Upper Assembly

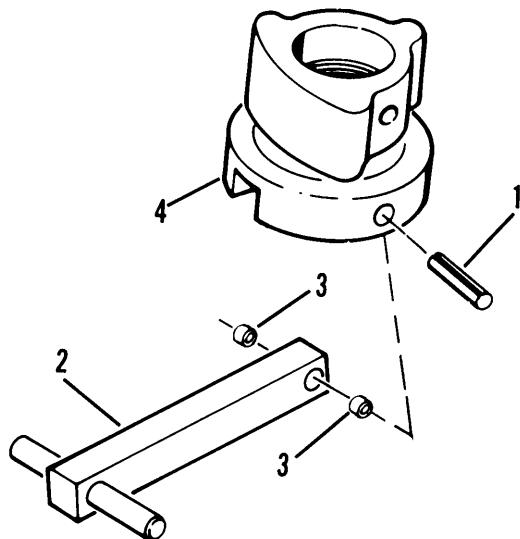


Figure 4-48. Retractable Twist Lock Lower Assembly

d. Assembly.

(1) Lower assembly.

- (a) Install handle (2, fig. 4-48) and two spacers (3) to base cap (4).
- (b) Install pin (1).

(2) Upper assembly.

- (a) Place spring (7, fig. 4-47) and ball (6) into position.
- (b) Install locator block (4) to bayonet (5).
- (c) Install ball (3), spring (2) and setscrew (1).

e. Installation.

(1) Install upper assembly (3, fig. 4-46).

(2) Install lower assembly (2). Turn clockwise and align holes for pin (1).

(3) Install pin (1).

TASK ENDS HERE

4-51. STAKE RETAINERS

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Personnel Required
-------	--------------------

Grinder, portable	Two
Torch, acetylene	
Welder, arc	
General mechanics tool kit and common supplement II	

Equipment Condition

Stakes and panels removed (para. 2-26)

a. Removal.**WARNING**

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

NOTE

Before starting procedure, measure and record the following:

Distance between s-hook and top of frame rail.

Distance between s-hook and bottom of frame rail.

Distance between s-hook and right side frame extension.

Distance between s-hook and left side frame extension.

(1) Using cutting torch, cut weldment (fig. 4-49).

(2) Grind weld off frame surface.

(3) Repeat steps 1 and 2 for other stake retainers as needed.

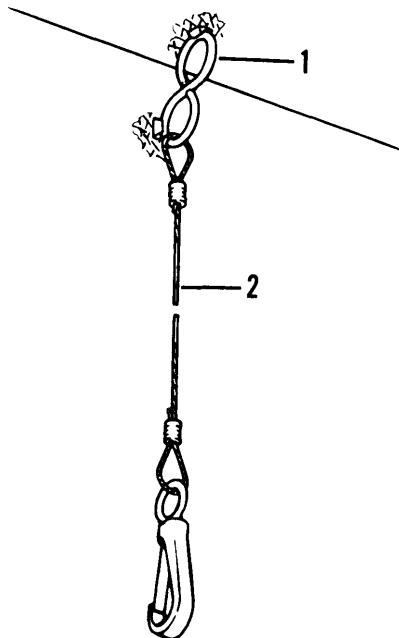


Figure 4-49. Stake Retainer

b Installation.

- (1) Position s-hook (1, fig. 4-49) and stake retainer (2) according to recorded measurements.
- (2) Weld s-hook (1) and stake retainer (2) to frame using arc welder. Refer to TM 9-237.
- (3) Repeat steps 1 and 2 for other stake retainers as needed.

TASK ENDS HERE

4-52. TIEDOWN RINGS

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal.

(1) Remove two bolts (1, fig. 4-50) and locknuts (2) from tiedown ring bracket (3).

(2) Remove bracket (3) and tiedown ring (4).

(3) Repeat steps 1 and 2 for other tiedown rings as needed.

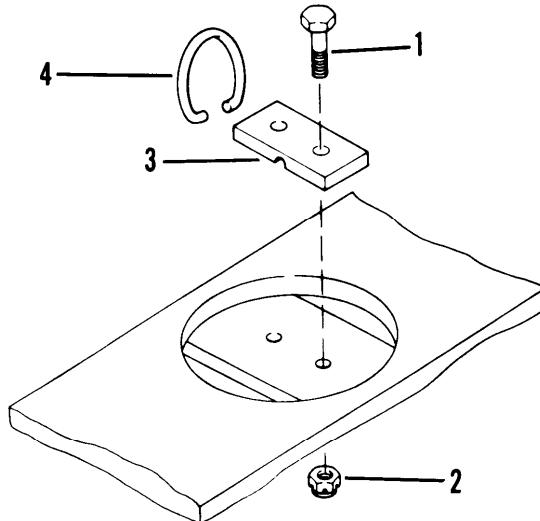


Figure 4-50. Tiedown Ring

b. Installation.

(1) Install tiedown ring (4, fig. 4-50) and bracket (3).

(2) Secure bracket (3) with two bolts (1) and locknuts (2).

(3) Repeat steps 1 and 2 for other tiedown rings as needed.

TASK ENDS HERE

4-53. LIFTING EYES

This task covers:

Removal

Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal.

- (1) Move lifting eye (1, fig. 4-51) to extended position.
- (2) Remove bolt (2) and washer (3).
- (3) Remove lifting eye (1).
- (4) Repeat steps 1 through 3 for other lifting eyes as needed.

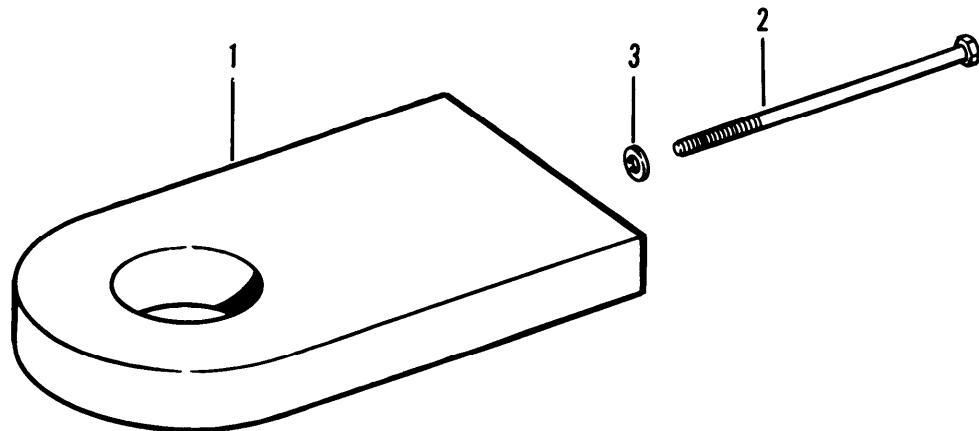


Figure 4-51. Lifting Eye

b. Installation.

- (1) Install lifting eye (1, fig. 4-51) into position.
- (2) Install washer (3) and bolt (2).
- (3) Move lifting eye (1) to stowed position.
- (4) Repeat steps 1 through 3 for other lifting eyes as necessary.

TASK ENDS HERE

4-54. SPARE TIRE CARRIER CHAIN ASSEMBLY

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal.

- (1) Unhook clasp (1, fig. 4-52) from chain (2) on spare tire carrier (3) .
- (2) Remove spare tire.
- (3) Remove chain (2) from spare tire carrier (3) .

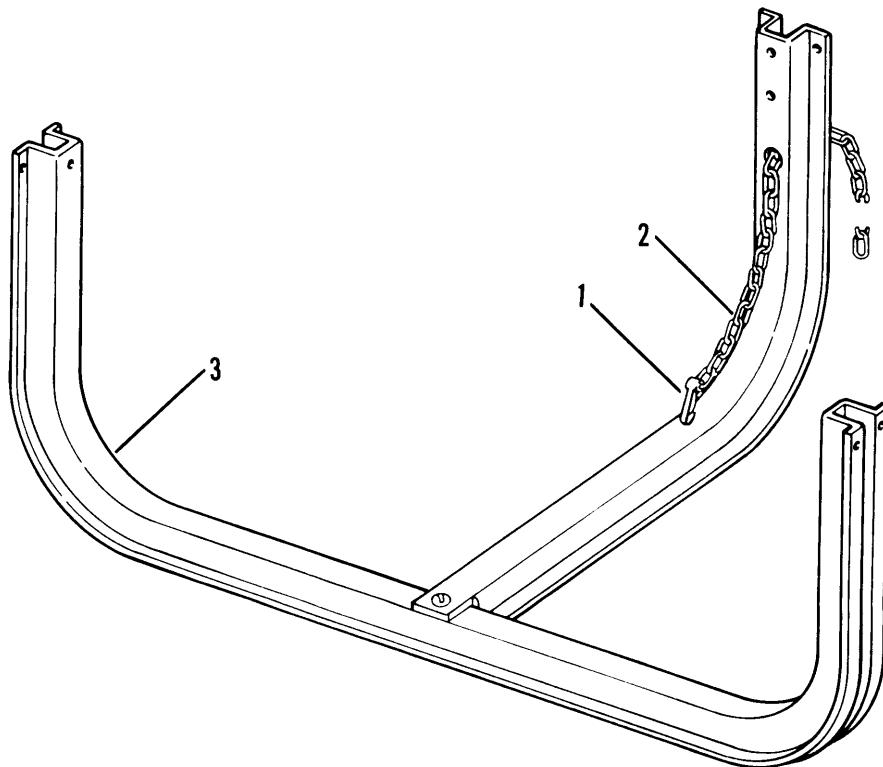


Figure 4-52. Spare Tire Carrier Chain Assembly.

b. Installation.

- (1) Thread chain (2) through spare tire carrier (3).
- (2) Install spare tire.
- (3) Bring ends of chain (2) through spare tire and fasten clasp (1).

TASK ENDS HERE

4-55. LANDING LEGS

This task covers:

Removal
Disassembly
Assembly
Installation

INITIAL SETUP

Tools

Jack stands
General mechanics tool kit

a. Crank Removal.

WARNING

The frame must be firmly supported to prevent shifting of the semitrailer. Shifting may cause serious injury to personnel and damage to equipment.

NOTE

The landing legs on the M871 semitrailer are cylindrical. The landing legs on the M871A1 semitrailer are square.

- (1) Block semitrailer on jack stands.
- (2) Block wheels with chock blocks to prevent movement of semitrailer.
- (3) Remove float pads from brackets for easier access to landing legs.
- (4) Remove nut (1, fig. 4-53), washer (2), bolt (3) and washer (4).

NOTE

The seal (6) is on the M871 semitrailer only.

- (5) Remove crank (5) and seal (6).

b. Gear Box Removal (M871).

NOTE

The gear box on the M871A1 semitrailer is welded to the landing leg and cannot be removed.

- (1) Remove nut (6, fig. 4-54), washer (7) and bolt (8) from coupling (9).
- (2) Remove four nuts (1), washers (2) and bolts (3).
- (3) Remove gear box (4) from landing leg (5).

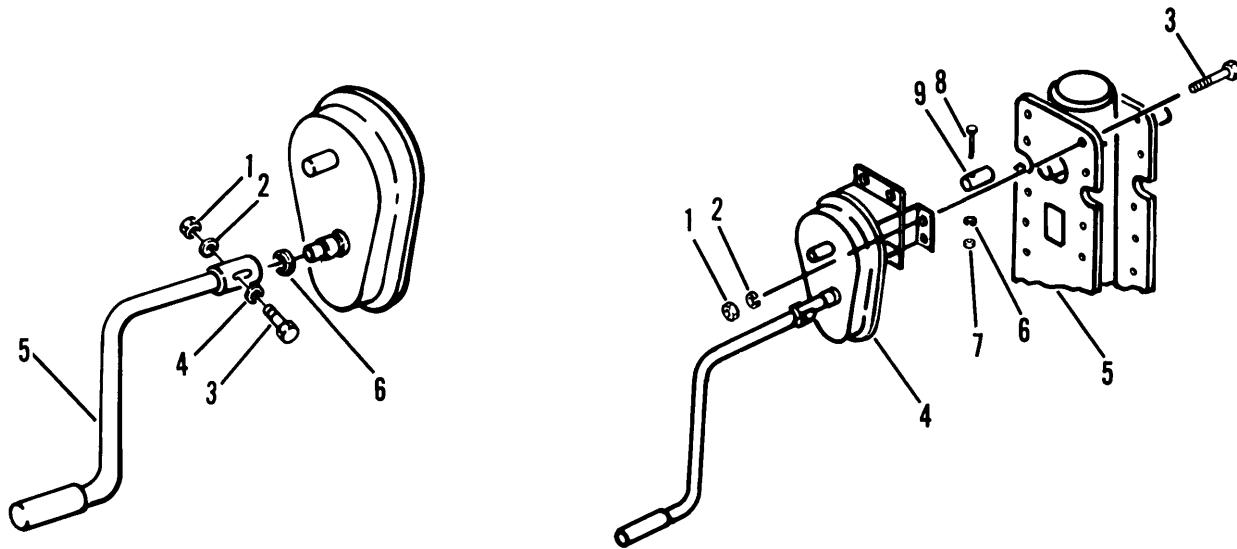


Figure 4-53. Crank

Figure 4-54. Gear Box (111871 only)

c. Left Landing Leg Removal.

NOTE

The left landing leg is the side without the gear box.

NOTE

The washer (2) is on the M871 semitrailer only.

- (1) Remove nut (1, fig. 4-55), washer (2) and bolt (3) from coupling (4).

NOTE

The washers (2) are on the **M871** semitrailer only.

- (2) Remove four nuts (1, fig. 4-56), washers (2) and bolts (3) holding braces (4 and 5). Remove braces (4 and 5).

NOTE

On the M871A1 semitrailer, remove ten nuts (6) and bolts (8).

- (3) Remove eight nuts (6), washers (7) and bolts (8). Remove left landing leg (9).

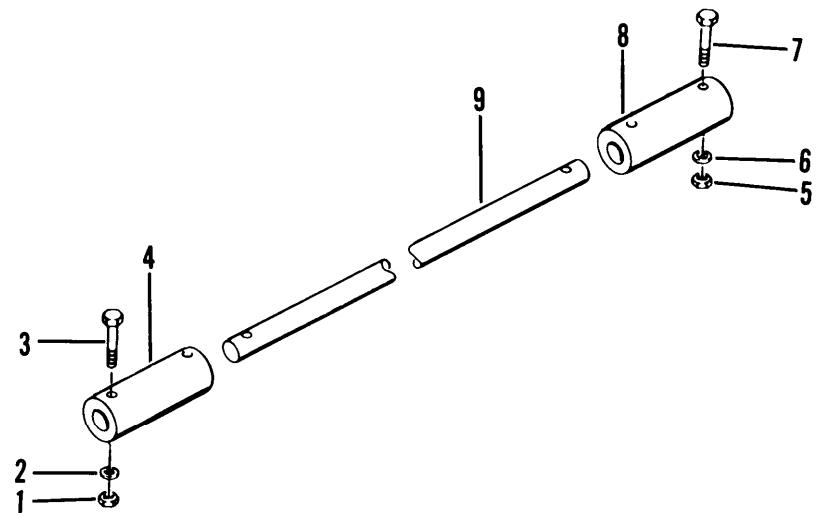


Figure 4-55. Couplings and Drive Shaft

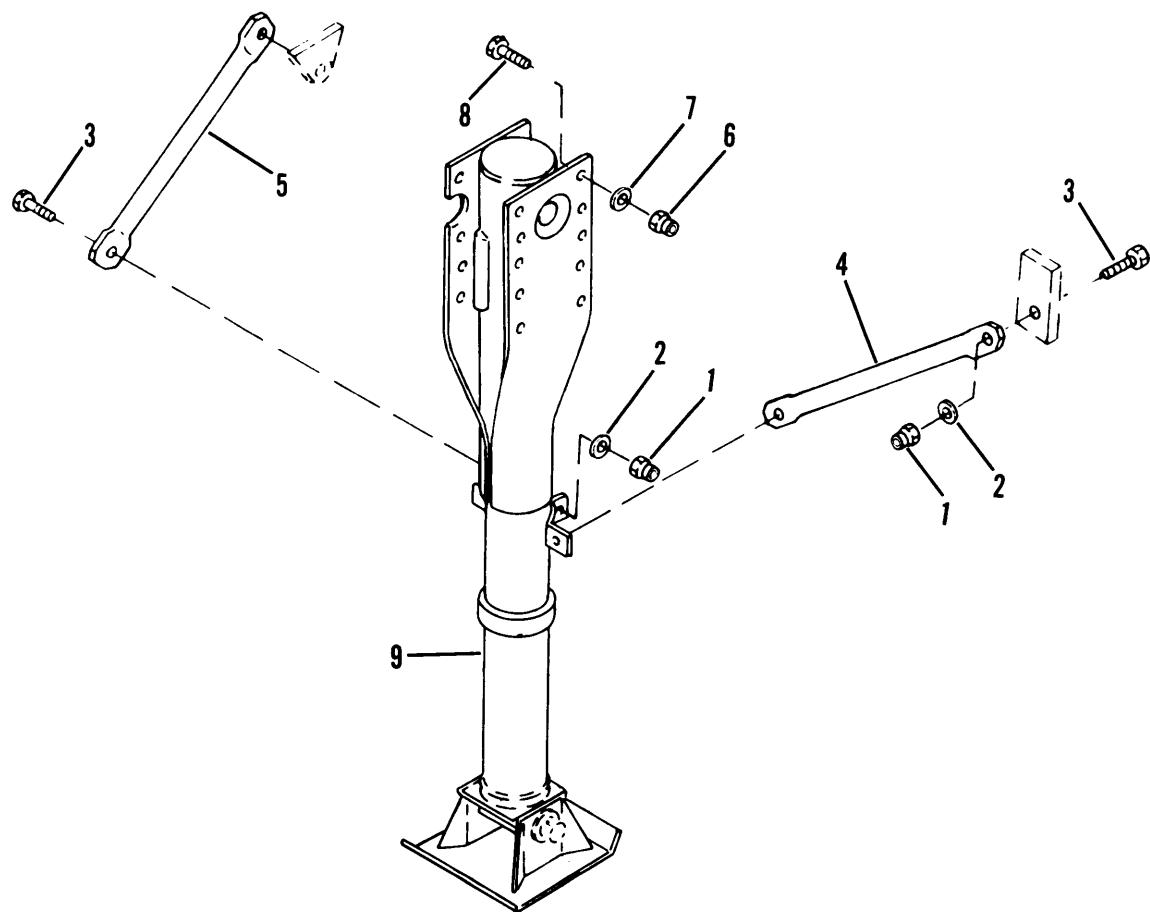


Figure 4-56. Landing Leg

d. Drive Shaft Removal.

N O T E

The washer (6) is on the M871 semitrailer only.

(1) Remove nut (5, fig. 4-55), washer (6) and bolt (7) from coupling (8).

(2) Remove drive shaft (9).

e. Right Landing Leg Removal.

N O T E

The right landing leg is the side with the gear box.

N O T E

The washers (2) are on the M871 semitrailer only.

(1) Remove four nuts (1, fig. 4-56), washers (2) and bolts (3) holding braces (4 and 5). Remove braces (4 and 5).

N O T E

On the M871A1 semitrailer, remove ten nuts (6) and bolts (8).

(2) Remove eight nuts (6), washers (7) and bolts (8). Remove right landing leg (9).

f. Right Landing Leg Installation.

N O T E

The right landing leg is the side with the gear box.

N O T E

On the M871A1 semitrailer, install ten bolts (8) and nuts (6).

(1) Install landing (9, fig. 4-56) and secure with eight bolts (8), washers (7) and nuts (6). Torque nuts to 150-160 lb ft (204-218 Nm).

N O T E

On the M871A1 semitrailer, secure braces with four bolts (3) and nuts (1).

(2) Install braces (4 and 5) and secure with four bolts (3), washers (2) and nuts (1). Torque nuts to 150-160 lb ft (204-218 Nm).

g. Drive Shaft Installation.

- (1) Install drive shaft (9, fig. 4-55).

NOTE

The washer (6) is on the M871 semitrailer only.

- (2) Install bolt (7), washer (6) and nut (5) to secure coupling (8) to right landing leg.

h. Left Landing Leg Installation.**NOTE**

The left landing leg is the side without the gear box.

NOTE

On the M871A1 semitrailer, install ten bolts (8) and nuts (6).

- (1) Install left landing leg (9, fig. 4-56) and secure with eight bolts (8), washers (7) and nuts (6). Torque nuts to 150-160 lb ft (204-218 Nm).

NOTE

On the M871A1 semitrailer, secure braces with four bolts (3) and nuts (1).

- (2) Install braces (4 and 5) and secure with four bolts (3), washers (2) and nuts (1). Torque nuts to 150-160 lb ft (204-218 Nm).

NOTE

The washer (2) is on the M871 semitrailer only.

- (3) Install bolt (3, fig. 4-55), washer (2) and nut (1) on coupling (4).

i. Gear Installation (M871).**NOTE**

The gear box on the M871A1 semitrailer is welded to the landing leg.

- (1) Install gear box (4, fig. 4-54) on landing leg (5).
- (2) Install four bolts (3), washers (2) and nuts (1).
- (3) Install bolt (8), washer (7) and nut (6) on coupling (9).

j. Crank Installation.**N O T E**

The seal (6) is on the M871 semitrailer only.

- (1) Install seal (6, fig. 4-53) and crank (5).
- (2) Install washer (4), bolt (3), washer (2) and nut (1).
- (3) Install float pad in bracket.
- (4) Check operation of landing legs.
- (5) Make sure landing legs are fully lowered and remove jack stands.

TASK ENDS HERE

4-56. FLOAT PADS (GROUND BOARD ASSEMBLY)

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Personnel Required
Grinder, portable	TWO
Torch, acetylene	
Welder, arc	
General mechanics tool kit	

a. Handle Removal.

- (1) Remove two nuts (1, fig. 4-57), washers (2) and bolts (3) from float pad handle (4).
- (2) Remove handle (4).

b. Chain Removal.**WARNING**

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

NOTE

Mark location of float pad chain on frame before beginning procedure.

(1) Using cutting torch, cut weldment.

(2) Grind weld off frame surface.

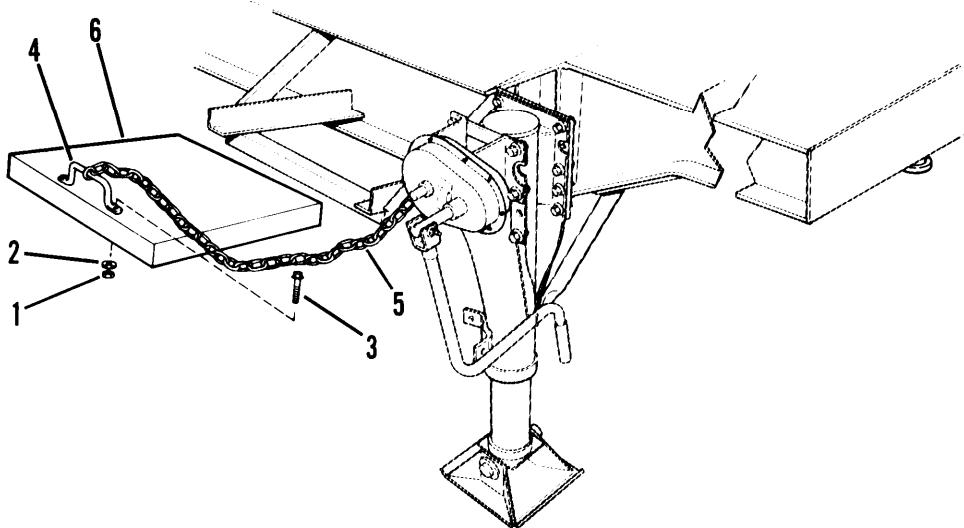


Figure 4-57. Float Pad

c. Chain Installation.

(1) Position float pad chain (5, fig. 4-57) on frame according to markings.

W A R N I N G

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

(2) Weld float pad chain (5) to frame using arc welder. Refer to TM 9-237.

(3) stow float pad (6).

d. Handle Installation.

(1) Position handle (4, fig. 4-57) on float pad (6).

(2) Secure handle (4) with two bolts (3), washers (2) and nuts (1).

(3) Stow float pad (6).

TASK ENDS HERE

Section X. MAINTENANCE OF THE SUSPENSION

4-57. SUSPENSION BUMPERS

This task covers:

Removal

Installation

INITIAL SETUP

Tools

General mechanics tool kit

NOTE

This procedure is for the M871A1 semitrailer only.

a. Removal.

- (1) Remove two nuts (1, fig. 4-58), bolts (2) and washers (3).
- (2) Remove suspension bumper (4) 1
- (3) Repeat steps 1 and 2 for other suspension bumpers as needed.

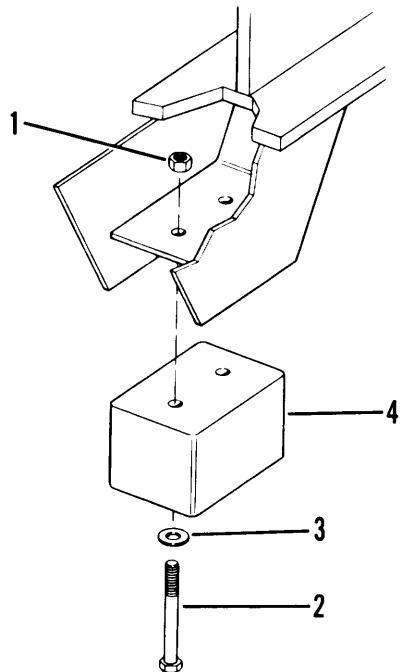


Figure 4-58. Suspension Bumper

b. Installation.

- (1) Place suspension bumper (4, fig. 4-58) into position.
- (2) Install two washers (3), bolts (2) and nuts (1).
- (3) Repeat steps 1 and 2 for other suspension bumpers as needed.

TASK ENDS HERE

Section XI. MAINTENANCE OF THE BODY

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Chassis Bulkhead Assembly	4-101
Document Box	4-106
Floor	4-105
Mud Flaps	4-104
Side Panels	4-103

4-58. CHASSIS BULKHEAD ASSEMBLY

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Bulkhead Removal.

N O T E

On the M871A1 semitrailer, remove 11 nuts (1), washers (2) and bolts (3) from bulkhead (4).

- (1) Remove nine nuts (1, fig. 4-59), washers (2) and bolts (3) from bulkhead (4) .

NOTE

Due to tight fit it may be necessary to pry bulkhead (4) from frame.

- (2) Remove bulkhead (4).

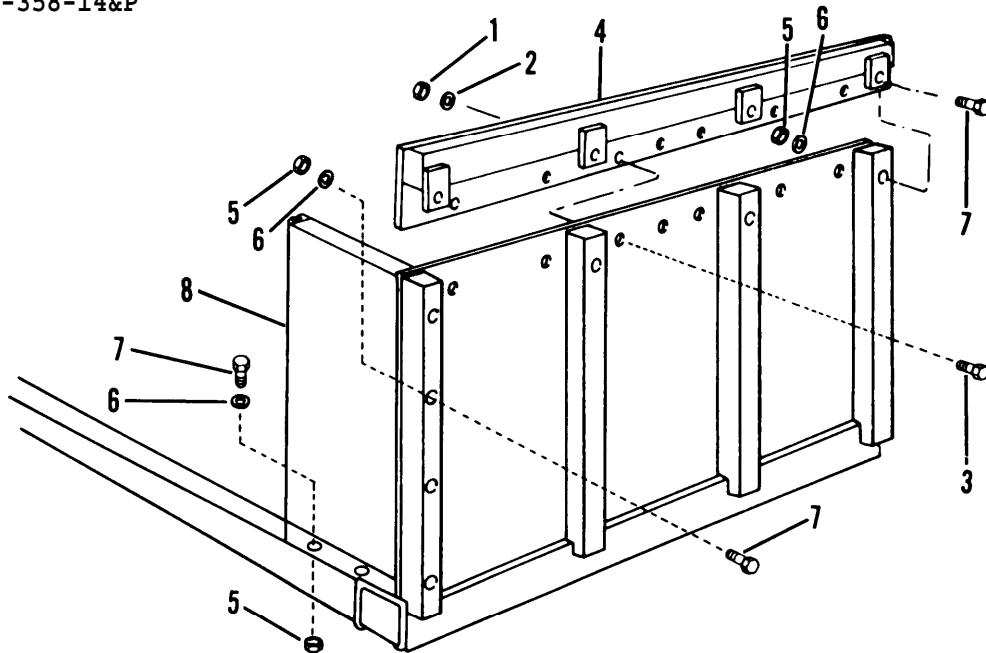


Figure 4-59. Chassis Bulkhead Assembly

b. Wing Panel Removal.

- (1) Remove seven nuts (5, fig. 4-59), washers (6) and bolts (7) from wing panel (8)0
- (2) Remove wing panel (8).
- (3) Repeat steps 1 and 2 for other wing panel as needed.

c. Wing Panel Installation.

- (1) Install wing panel (8, fig. 4-59).
- (2) Secure wing panel (8) with seven bolts (7), washers (6) and nuts (5).
- (3) Repeat steps 1 and 2 for other wing panel as needed.

d. Bulkhead Installation.

- (1) Install bulkhead (4, fig. 4-59).

NOTE

On the M871A1 semitrailer, secure bulkhead (4) with 11 bolts (3), washers (2) and nuts (1).

There are two sizes of bolts that secure the bulkhead. The longer bolts are used to secure the areas with the frame extension on the front of the semitrailer.

- (2) Secure bulkhead (4) with nine bolts (3), washers (2) and nuts (1).

TASK ENDS HERE

4-59. SIDE PANELS

This task covers:

Disassembly
Repair
Assembly

INITIAL SETUP

Tools

General mechanics tool kit

Equipment Condition

Side panels removed

a. Disassembly.

- (1) Remove twelve nuts (1, fig. 4-60) , screws (2) , washers (3) and stake (4) .
- (2) Pull off top rail (5) from board (6) .

b. Repair. Repair is by replacement of components only.

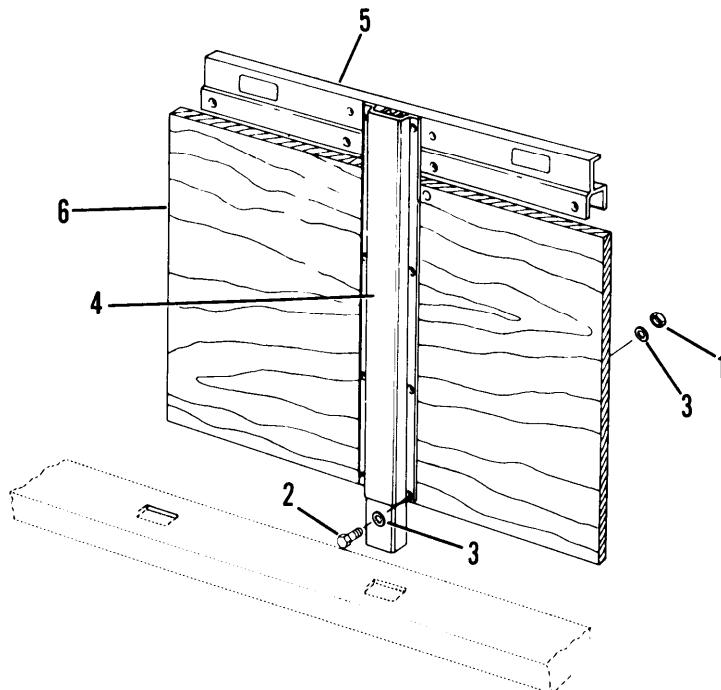


Figure 4-60. Side Panels

c. Assembly.

- (1) Install top rail (5, fig. 4-60) on board (6).
- (2) Install stake (4), and secure using twelve screws (2), washers (3) and nuts (1).
- (3) Install side panels on semitrailer .

TASK ENDS HERE

4-60. MUD FLAPS

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal.

- (1) Remove four nuts (1, fig. 4-61), washers (2) and screws (3) from mud flap (4).
- (2) Remove backing strip (5) and mud flap (4).

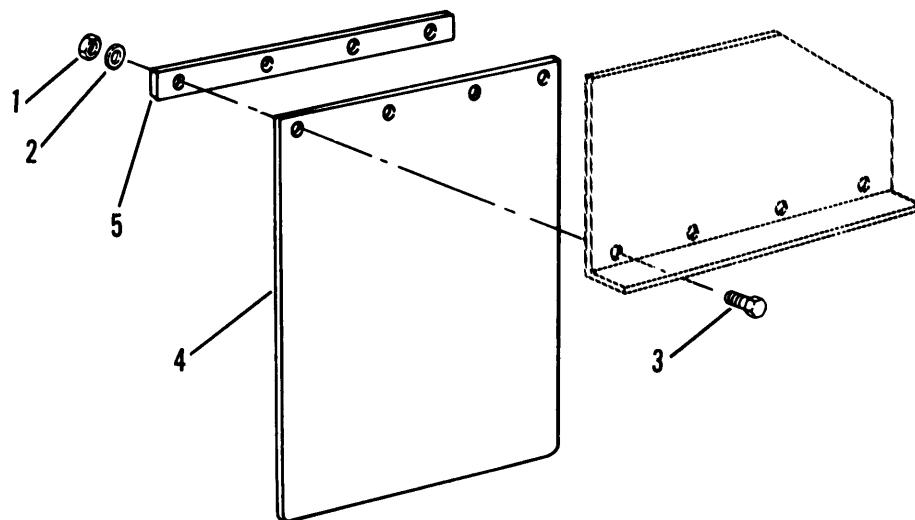


Figure 4-61. Mud Flap

b. Installation.

- (1) Position mud flap (4, fig. 4-61) and backing strip (5).
- (2) Secure mud flap (4) with four screws (3), washers (2) and nuts (1).

TASK ENDS HERE

4-61. FLOOR

This task covers:

Removal
Installation

INITIAL SETUP

Tools

1/2" torque-x driver bit (Appendix D)
General mechanics tool kit

a. Removal.

NOTE

See Appendix G for information on board size and configuration of floor for M871A1 semitrailer.

- (1) Measure plank (1, fig. 4-62) to be replaced.
- (2) Remove screws (2) as needed to free plank (1).
- (3) Lift planks (1) away from frame.
- (4) Repeat as needed for any other planks needing replacement.

b. Installation.

- (1) Place planks (1, fig. 4-62) into position.
- (2) Install screws (2).
- (3) Repeat for other planks that were removed.

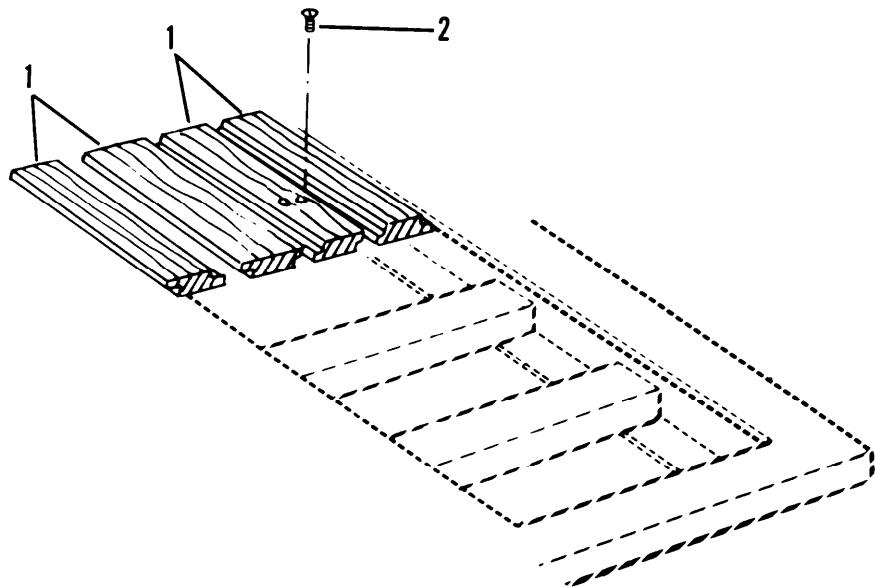


Figure 4-62. Floor

TASK ENDS HERE

4-62. DOCUMENT BOX

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal.

- (1) Remove four screws (1, fig. 4-63) and washers (2).

NOTE

The washers (2) are on the M871 semitrailer only.

- (2) Remove document box (3).

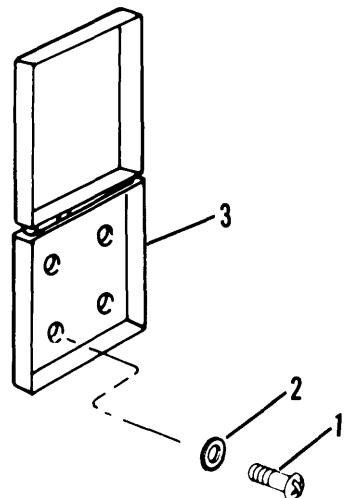


Figure 4-63. Document Box

b. Installation.

- (1) Place document box (3, fig. 4-63) into position.

NOTE

The washers (2) are on the M871 semitrailer only.

- (2) Install four washers (2) and screws (1).

TASK ENDS HERE

Section XII. MAINTENANCE OF MISCELLANEOUS ACCESSORY ITEMS

	Page
Data Plates	4-108
Reflectors	4-107

4-63. REFLECTORS

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal.

NOTE

The reflectors on the M871A1 semitrailer are secured by a self-tapping screw only.

- (1) Remove screw (1, fig. 4-64) nut (4) and washer (3).
- (2) Remove reflector (2).
- (3) Repeat steps 1 and 2 for other reflectors as required.

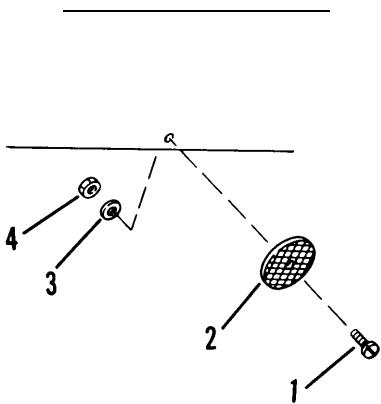


Figure 4-64. Reflector

b. Installation.

- (1) Place reflector (2, fig. 4-64) into position.

NOTE

The reflectors on the M871A1 semitrailer are secured by a self-tapping screw only.

- (2) Install screw (1), washer (3) and nut (4).
- (3) Repeat for other reflectors as required.

TASK ENDS HERE

4-64. DATA PLATES

This task covers:

Removal
Installation

INITIAL SETUP

Tools

General mechanics tool kit

a. Removal.

- (1) Remove four rivets (1, fig. 4-65) from data plate (2) .
- (2) Remove data plate (2) .
- (3) Repeat steps 1 and 2 for other data plate as needed.

b. Installation.

- (1) Install data plate (2, fig. 4-65) into position.
- (2) Secure data plate (2) with four rivets (1).
- (3) Repeat steps 1 and 2 for other data plate as needed.

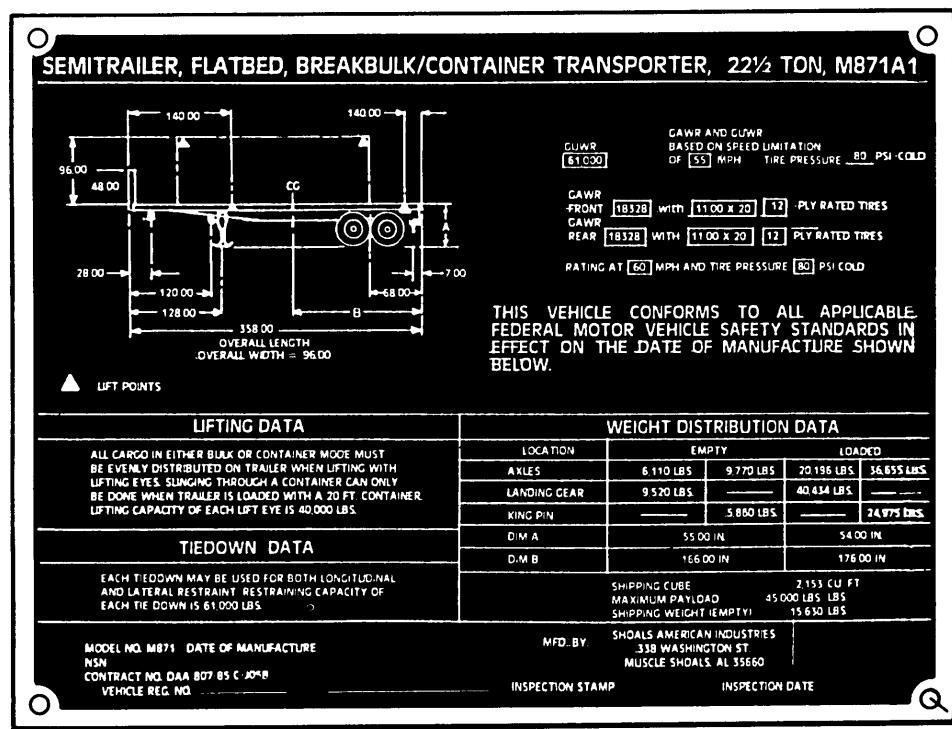


Figure 4-65. Data Plate

TASK ENDS HERE

Section XIII. PREPARATION FOR STORAGE AND SHIPMENT

	Page
Administrative Storage Instructions	4-110
General	4-110
Shipping Instructions	4-110

4-65. GENERAL

Commanders are responsible for insuring that all materiel issued or assigned to their command is maintained in a serviceable condition, properly cared for and that personnel under their command comply with technical instructions. Lack of time, lack of trained personnel or lack of proper tools may result in a unit being incapable of performing maintenance for which it is responsible. In such cases, unit commanders, with approval of major commanders, may place materiel that is beyond the maintenance capability of the unit, in administrative storage or return it to supply agencies. When preparing the semitrailer for administrative storage, the unit commander will be responsible for processing the materiel, including all tools and equipment, in such a manner as to protect it against corrosion, deterioration and physical damage during shipment or periods of administrative storage.

4-66. ADMINISTRATIVE STORAGE INSTRUCTIONS

Refer to TM 740-90-1.

4-67. SHIPPING INSTRUCTIONS

Preparation for Shipment. Preservation and other protective measures taken in the preparation of materiel and accompanying tools and equipment for shipment must be sufficient to protect the materiel against deterioration and physical damage during shipment.

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138°F (590°C).

- a. Cleaning. Use dry cleaning solvent (PD-680) to clean or wash grease or oil from all metal parts. All exposed machined surfaces must be cleaned to insure removal of corrosion, soil, grease, residues, perspiration or other acid or alkali residues.
- b. Drying. After cleaning, use cold water to rinse all parts. Use a clean cloth to dry all parts thoroughly.
- c. Lubrication. Lubricate items specified on lubrication chart (fig. 3-1).

d. Preservation.

- (1) All critical unpainted metal surfaces must be protected during shipment. Oil or grease covered in the lubrication section may be used for this purpose but it is effective for only a few days. Equipment protected in this manner must be watched for signs of corrosion. Preservatives selection will be such that their application, use or removal will not damage the surface to which they are applied.
- (2) Coat lower landing leg, chassis, frame, exterior hardware and suspension system with corrosion preventive compound.
- (3) Spray data plates with a thin coating of ignition insulation compound. Control overspray to avoid coating adjacent surfaces.
- (4) Cover all exterior reflectors and lights with tape.

e. Marking. Refer to AR 746-1 for Packaging of Army Materiel for Storage and Shipment.

Section XIV. MAINTENANCE UNDER UNUSUAL CONDITIONS

	Page
Extreme Cold Weather Maintenance	4-111
Extreme Hot Weather Maintenance	4-112
Maintenance After Fording	4-112
Maintenance After Operation on Unusual Terrain	4-112

4-68. EXTREME COLD WEATHER MAINTENANCE**CAUTION**

It is very important that approved maintenance procedures be followed. FM 9-207 contains general information which is specifically applicable to this materiel as well as all other materiel. It must be considered an essential part of this technical manual, not merely an explanatory supplement to it.

a. The importance of maintenance must be impressed on all concerned. Maintenance of mechanical equipment in extreme cold is exceptionally difficult in the field. Even shop maintenance cannot be completed with normal speed because equipment must be allowed to thaw out and warm up before the mechanic can make satisfactory repairs. In the field, maintenance must be undertaken under the most difficult of conditions. Bare hands stick to cold metal. Fuel in contact with the hands results in supercooling due to evaporation, and hands can be painfully frozen in a matter of minutes. Engine oils, except subzero grade, are unpourable at temperatures below -40°F. Ordinary greases become as solid as cold butter.

b. These difficulties increase time required to perform maintenance. At temperatures below -40°F., maintenance requires up to five times the normal amount of time. Complete winterization, diligent maintenance, and well trained crews are the key to efficient Arctic winter operation.

c. Refer to FM 9-207 for general information on extreme cold weather maintenance procedures.

4-69. EXTREME HOT WEATHER MAINTENANCE

- a. Refer to TB 43-0239 for specific desert maintenance instructions.
- b. Corrosion. In hot, damp climates, corrosive action will occur on all parts of the materiel ;and will be accelerated during rainy seasons. Evidence will appear in the form of rust, paint blisters, mildew, mold and fungus growth.
- c. Protective Action. Remove the corrosion from exterior metal surfaces with abrasive paper or cloth and apply a protective coating of paint, or touch up existing paint. Keep a film of preservative oil on unfinished exposed metal surfaces. Cables and terminals should be protected by spraying with ignition insulation compound.

4-70. MAINTENANCE AFTER FORDING

a. General. Although materiel unit housings are sealed to prevent the free flow of water into the housings, it must be realized that due to the necessary design of these assemblies, some water may enter, especially during submersion. The following services should be accomplished on all materiel which has been exposed to some depth of water or completely submerged, especially in salt water. Precautions should be taken as soon as practicable to halt deterioration and avoid damage before the materiel is driven extensively in regular service.

b. Lubricate. Clean and lubricate all parts as specified on the lubrication chart. Remove wheels; clean and repack bearings. Make sure that lubricant is generously forced into each lubrication fitting to force out any water present.

c. Electrical Connections. Check all electrical connections for corrosion.

d. Paint. clean all exposed painted surfaces and touch up paint where necessary. Coat unpainted metal parts with preservative oil.

e. Aluminum or Magnesium Parts. If vehicle remains in salt water for any appreciable length of time, aluminum or magnesium parts which were exposed to water will probably be unfit for further use and must be replaced.

4-71. MAINTENANCE AFTER OPERATION UNUSUAL TERRAIN

a. Mud. Thorough cleaning and lubrication of all parts affected must be accomplished as soon as pssible after operation in mud, particularly when a sea of liquid mud has been traversed. Clean all suspension components and lubricate as specified on the lubrication chart. Repack wheel bearings, if necessary.

b. Sand or Dust. completely to force out lubricants contaminated by sand or dust.

CHAPTER 5

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS

Section I. REPAIR PARTS, SPECIAL TOOLS, TMDE AND SUPPORT EQUIPMENT

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Common Tools and Equipment	5-1
Repair Parts	51
Special Tools, TMDE, and Support Equipment	5-1

5-1. COMMON TOOLS AND EQUIPMENT

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

5-2. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

No special tools, TMDE or equipment are required to maintain the semitrailer.

5-3 1 REPAIR PARTS

Repair parts are listed and illustrated in Appendix F of this manual.

Section II. MAINTENANCE OF THE AXLES

5-4. AXLES

This task covers:

Removal
Repair
Installation
Adjustment

INITIAL SETUP

Tools	Personnel Required
Jack stands General mechanics tool kit and common supplement II	Two
Equipment Condition	Materials/Parts Tags (item 15, Appendix E)
Landing legs down (para. 2-1) Drain cocks open (para. 3-8) Tires and wheels removed (para. 4-45)	

a. Rear Axle Removal.

WARNING

The semitrailer must be supported adequately to prevent shifting. Shifting may cause serious injury to personnel and damage to equipment.

- (1) Support main frame of semitrailer and front axle.
- (2) Turn the slack adjuster nut (1, fig. 5-1) on the slack adjuster (2) counterclockwise to release spring forces. Repeat for other side of axle.

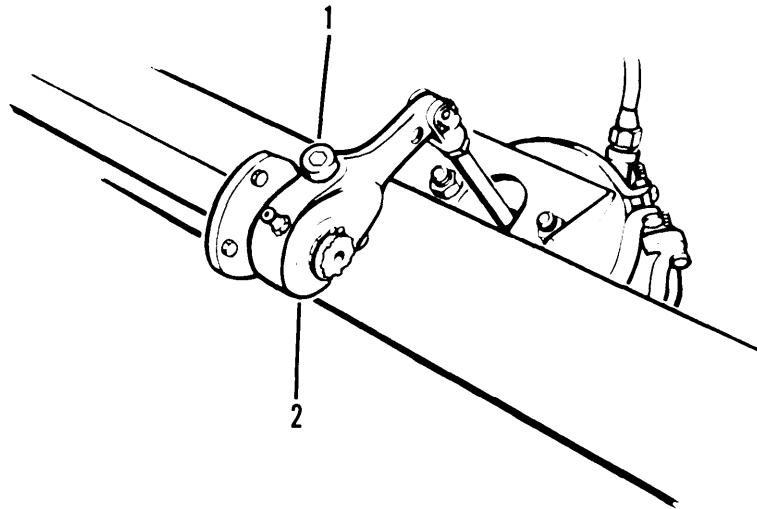


Figure 5-1. Slack Adjuster

- (3) Tag and disconnect air hoses from the emergency relay and multi-function valves.
- (4) Remove screw (1, fig. 5-2) from hose clamp (2) on suspension support bracket (3). Repeat for other three hose clamps.
- (5) Remove hose separators (4) from air hoses (5).
- (6) Tag and disconnect air hoses from rear spring brake chambers.
- (7) Remove four nuts (1, fig. 5-3), washers (2) and bolts (3). Repeat for other side of axle.
- (8) Remove four nuts (4), washers (5) and two u-bolts (6). Repeat for other side of axle.

- (9) Remove spring cap (7) from each side of axle. Slowly lower and remove axle.
- (10) Remove spring brake chambers (para. 4-40), slack adjusters (para. 4-41), hubs and drums (para. 4-47), brake shoes (para. 4-42) and camshafts (para. 4-43) as needed.

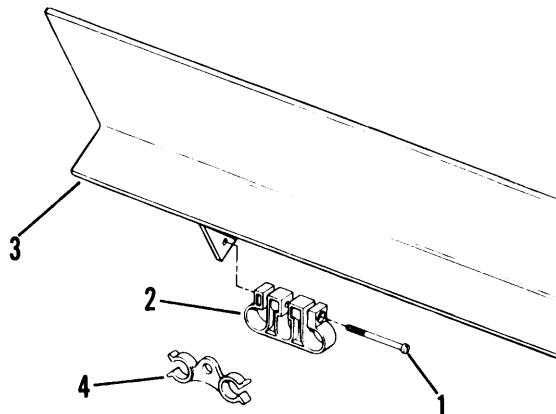


Figure 5-2. Hose Clamp

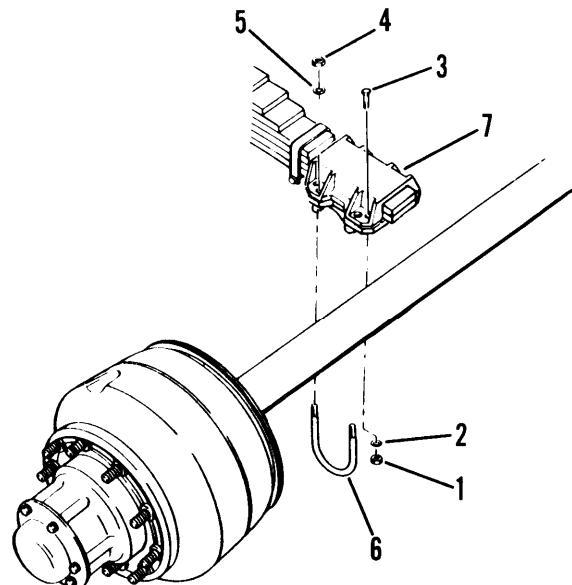


Figure 5-3. Axle Replacement

b. Front Axle Removal.

WARNING

The semitrailer must be supported adequately to prevent shifting. Shifting may cause serious injury to personnel and damage to equipment.

- (1) Support main frame of semitrailer and rear axle.

- (2) Turn the slack adjuster nut (1, fig. 5-1) on the slack adjuster (2) counterclockwise to release spring forces. Repeat for other side of axle.
- (3) Tag and disconnect air hoses from the emergency relay and multi-function valves.
- (4) Tag and disconnect air hoses from front spring brake chambers.
- (5) Remove four nuts (1, fig. 5-3), washers (2) and bolts (3). Repeat for other side of axle.
- (6) Remove four nuts (4), washers (5) and two u-bolts (6). Repeat for other side of axle.
- (7) Remove spring cap (7) from each side of axle. Slowly lower and remove axle.
- (8) Remove spring brake chambers (para. 4-40), slack adjusters (para. 4-41), hubs and drums (para. 4-47) (para. 4-42), brake shoes and camshafts (para. 4-43) as needed.

c. Repair. Repair of the axles is limited to chasing spindle threads.

d. Axle Seat Installation. (For new axles only)

NOTE

This procedure is to be used only when a new axle is being installed. If old axle is being installed, follow procedures for front or rear axle installation.

When ordering new axle, you must also order the lower adjustment plates and spring seats. Two sets (adjustment plate and lower spring seat) are required per axle; one of which is prewelded (Appendix F, fig. 35, item 2) at the factory, and the other set ordered separately (Appendix F, fig. 35, items 19 and 20). If installing two new axles, the prewelded adjustment plates and spring seats must be installed on opposite corners (example: Left-Rear and Right-Front).

- (1) With axle camber up, locate the center of both axles by measuring between the brake flanges and marking the center.
- (2) Place axles in position under suspension. Be certain axle seats are an equal distance from the center of the axle. All axle seats should measure the same distance from the brake flanges.
- (3) Align the camber marks on the top of the axle with the centerline of the axle seats.

WARNING

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

CAUTION

Do not attach welding ground clamps to u-bolts, springs or axles except at designated weld points. These parts should be protected from weld spatter.

NOTE

Be certain all axle seats fit the axle properly. If necessary, grind the axle seats to insure that both seats fit properly and are horizontal and parallel.

- (4) Tack weld seats in place (fig. 5-4). Be certain axle seats are still level, parallel, properly located and aligned.
- (5) Weld axle seats to axle using 3/8 inch fillet welds on front and rear of axle seats. Welds are per Class 2, MIL-STD 1261.

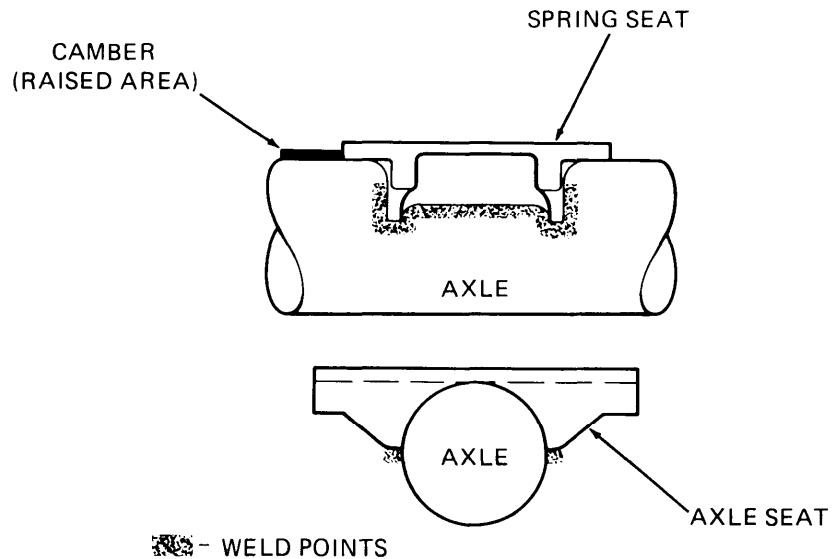


Figure 5-4. Axle Seat

e. Front Axle Installation.

- (1) Install camshafts (para. 4-43), brake shoes (para. 4-2), hubs and drums (para. 4-47) slack adjusters (para. 4-41) and spring brake chambers (para. 4-40) if removed.
- (2) Raise front axle into position.

- (3) On both sides of the axle, align raised surface of adjustment plate (1, fig. 5-5) with recessed area on the underside of spring assembly (2).
- (4) Install spring cap (7, fig. 5-3) on each side of axle.

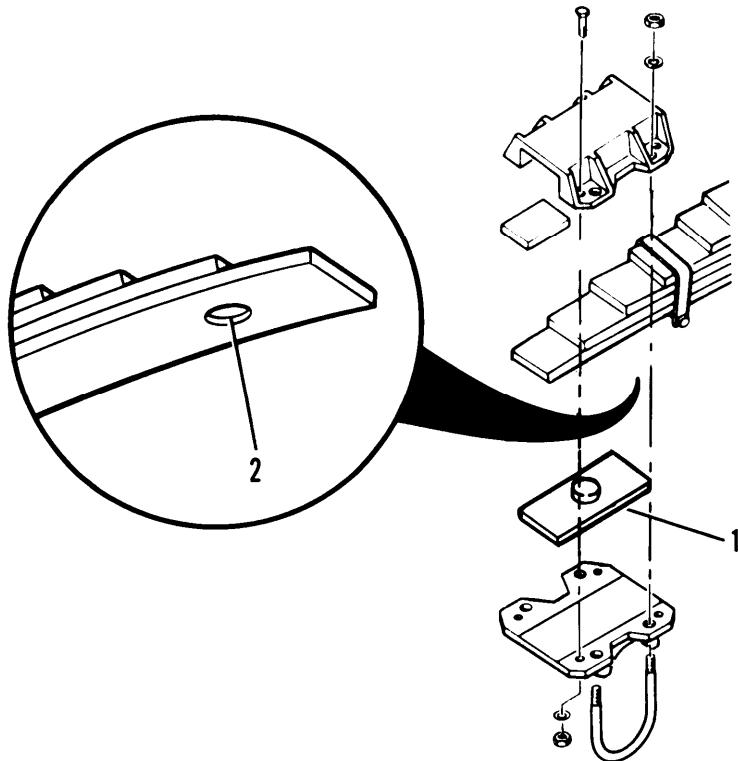


Figure 5-5. Adjustment Plate

WARNING

It is essential that torque values be maintained to insure proper operation of the suspension system. The torque values of the suspension bolts and nuts must be checked after the initial break-in period of 1,000 miles (1,600 km) and every three months thereafter. Failure to do so may cause injury to personnel, damage to equipment and will void the warranty.

NOTE

If installing new axle, go to alignment procedure. Do not torque nuts.

NOTE

Inspect flange on spring seat cap to determine if socket will fit on bolt. It may be necessary to grind only enough flange so socket will fit over the head of the bolt properly.

- (5) Install two u-bolts (6), four washers (5) and nuts (4). Torque to 300 lb ft (408 Nm). Repeat for other side of axle.
- (6) Install four bolts (3), washers (2) and nuts (1). Torque to 180 lb ft (244 Nm). Repeat for other side of axle.
- (7) Connect air hoses to front spring brake chambers.
- (8) Connect air hoses to the emergency relay and multi-function valves.
- (9) Adjust slack adjuster (Para. 4-30).
- (10) Install tires and wheels (para. 4-45).
- (11) Close drain cocks (para. 3-8).
- (12) Remove axle and frame supports.

f. Rear Axle Installation.

- (1) Install camshafts (para. 4-43), brake shoes (para. 4-42), hubs and drums (para. 4-47), slack adjusters (para. 4-41) and spring brake chambers (para. 4-40), if removed.
- (2) Raise rear axle into position.
- (3) On both sides of the axle, align raised surface of adjustment plate (1, fig. 5-5) with recessed area on the underside of spring assembly.
- (4) Install spring cap (7, fig. 5-3) on each side of the axle.

WARNING

It is essential that torque values be maintained to insure proper operation of the suspension system. The torque values of the suspension bolts and nuts must be checked after the initial break-in period of 1,000 miles (1,600 km) and every three months thereafter. Failure to do so may cause injury to personnel, damage to equipment and will void the warranty.

NOTE

If installing new axle, go to alignment procedure. Do not torque nuts.

NOTE

Inspect flange on spring seat cap to determine if socket will fit on bolt. It may be necessary to grind only enough flange so socket will fit over the head of the bolt properly.

- (5) Install two u-bolts (6), four washers (5) and nuts (4). Torque to 300 lb ft (408 Nm). Repeat for other side of axle.
- (6) Install four bolts (3), washers (2) and nuts (1). Torque to 180 lb ft (244 Nm). Repeat for other side of axle.
- (7) Connect air hoses to rear spring brake chambers.
- (8) Install hose separators (4, fig. 5-2) on air hoses (5).
- (9) Install air hose (5) in hose clamp (2). Secure hose clamp (2) to suspension support bracket (3) with screw (1). Repeat for other three hose clamps.
- (10) Connect air hoses to the emergency relay and multi-function valves.
- (11) Adjust slack adjusters (para. 4-30).
- (12) Install tires and wheels (para. 4-45).
- (13) Close drain cocks (para. 3-8).
- (14) Remove axle and frame supports.

g. Axle Alignment.

NOTE

This procedure is to be used only when a new axle is being installed.

- (1) Measure the distance from the kingpin to the centerline of the spindles on the front axle (fig. 5-6). The measurement should be 240 - 7/8" ± 1/8 inch.
- (2) Tighten u-bolts and spring cap bolts on front axle.
- (3) Align rear axle with the front axle by measuring between the spindles. The measurement should be 50 - 1/2" ± 1/8 inch.
- (4) Tighten rear axle u-bolts and spring cap bolts.
- (5) Recheck the alignment of the front axle with the kingpin and the rear axle with the front axle.

WARNING

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

CAUTION

DO NOT ATTACH WELDING GROUND CLAMPS TO U-BOLTS, SPRINGS OR AXLES EXCEPT AT DESIGNATED WELD POINTS. THESE PARTS SHOULD BE PROTECTED FROM WELD SPATTER.

- (6) Weld the unwelded alignment plate to the axle seat to match the pre-welded plate. Welds are per Class 2, MIL-STD 1261.

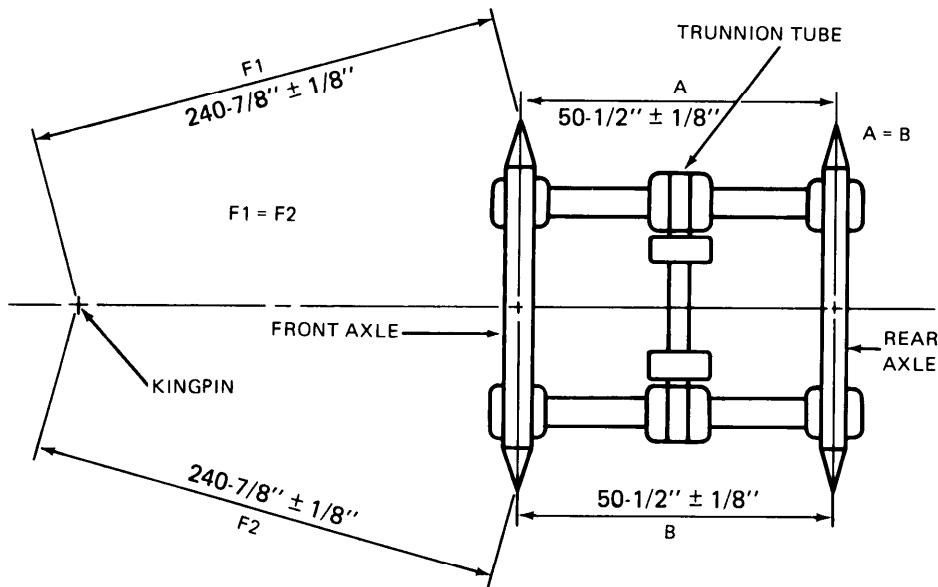


Figure 5-6. Axle Alignment

WARNING

It is essential that torque values be maintained to insure proper operation of the suspension system. The torque values of the suspension bolts and nuts must be checked after the initial break-in period of 1,000 miles (1,600 km) and every three months thereafter. Failure to do so may cause injury to personnel, damage to equipment and will void the warranty.

- (7) Torque u-bolt nuts to 300 lb ft (408 Nm).
- (8) Torque spring cap nuts to 180 lb ft (244 Nm).
- (9) If installing front axle, go to step 7 of front axle installation procedure. If installing rear axle, go to step 7 of rear axle installation procedure.

TASK ENDS HERE

Section III. MAINTENANCE OF THE BRAKES**5-5. BRAKE LINING**

This task covers:

Removal
Installation

INITIAL SETUP**Tools**

0.010 inch feeler gage
General mechanics tool kit and common supplement II

Equipment Condition

Brake shoes removed (para. 4-42)

a. Removal.**WARNING**

DO not grind rivet heads off due to asbestos hazard.

- (1) Remove 12 rivets (1, fig. 5-7) from each lining (2 and 3).
- (2) Strip linings (2 and 3) from brake shoes (4).

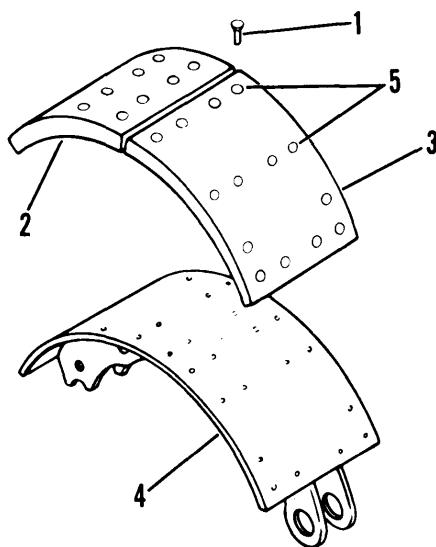


Figure 5-7. Brake Lining Replacement

b. Installation.

- (1) Install new lining (2, fig. 5-7) on brake shoes (4).
- (2) Align rivet holes (5) in brake shoe (4) and lining (2 and 3). Clamp linings in place.
- (3) Install end rivets (1) in lining (2 and 3). Remove clamp and install remaining rivets (1).
- (4) Check contact of linings (2 and 3) with brake shoe (4) after riveting. A 0.010 inch feeler gage should not enter between brake shoe (4) and lining (2 and 3) at any point.
- (5) Install brake shoes (para. 4-42).
- (6) Install brake drum and hub (para. 4-47).
- (7) Install tires and wheels (para. 4-45).

TASK ENDS HERE

Section IV. MAINTENANCE OF THE WHEELS, HUBS AND DRUMS

5-6 . BRAKE DRUM

This task covers:

Repair

INITIAL SETUP

Tools

Lathe, brake drum
Micrometer, inside, brake drum I.D.
General mechanics tool kit and common supplement II

Equipment Condition

Hub and drum removed and separated (para. 4-47)

Materials/Parts

Crocus cloth (item 3, appendix E)
Rags, wiping (item 12, appendix E)
Solvent, dry cleaning, (PD-680) (item 14, appendix E)

WARNING

Dry cleaning solvent (PD-680) is both toxic and flammable. Avoid prolonged breathing of vapors. Avoid skin contact. Use only in a well ventilated area. Keep away from open flame. Flash point of solvent is 138°F (59°C).

- a. Clean brake drum (1, fig. 5-8) with dry cleaning solvent (PD-680).
- b. Check brake drum (1) for wear, cracks or damage. Replace, if necessary.

NOTE

Slight scoring conditions can be corrected by polishing with crocus cloth. Heavy scoring and out-of-round conditions require turning brake drum on a refinishing lathe.

Whenever the drum on one side of the axle is refinished, the other drum on that axle should be turned to the same specifications.

- c. Check inner braking surface (2) for heat checking, scoring or warpage.
- d. Using micrometer, check inside of brake drum for out-of-round or tapered wear.

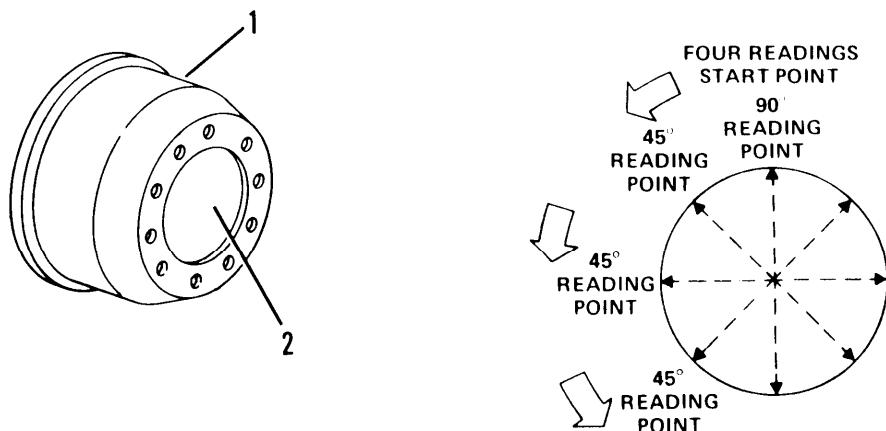


Figure 5-8. Checking Brake DRUM for Out-of-Roundness

- e. Record each reading. The maximum difference between the four readings cannot exceed 0.0006 inch (0.01524 mm). Drums with out-of-round exceeding limits must be turned.

WARNING

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

NOTE

If turning causes drum to exceed original diameter by more than 0.080 inch (2.032 mm), replace drum. The other drum on that axle should be replaced also.

NOTE

Check drum diameter after each cut to make sure you have not cut too much metal out.

- f. To refinish inner braking surface (2), mount brake drum on refinishing lathe. Make several thin cuts until scoring has been removed.
- g. Refinish other drum on that axle to the same specifications.
- h. Assemble hub and drum and install on axle (para. 4-47).
- i. Install tire and wheel assemblies (para. 4-45).

TASK ENDS HERE

SECTION V. MAINTENANCE OF THE FRAME

	Page
Frame	5-13
Kingpin..... •	5-13

5-7. FRAME

Refer to TB 9-2300-247-40 for repair of the frame.

TASK ENDS HERE

5-8 . KINGPIN

This task covers:

Removal
Installation

INITIAL SETUP

Tools

300 amp arc welder
General mechanics tool kit and common supplement II

Personnel Required

TWO

a. Removal.

- (1) Remove middle metal plate to gain access to the top surface of the kingpin (fig. 5-9).

W A R N I N G

Compressed air for cleaning purposes will not exceed 30 psi. Particles blown by compressed air are hazardous. Make certain the air stream is directed away from user and other personnel in the area. To prevent injury, user must wear protective goggles or face shield when using compressed air.

- (2) Using the air-arc process, remove the welds securing the kingpin upper surface and plug welds from the kingpin "mushroom". A 300 amp welder is required along with a "shop air" supply of 90 psi. Care must be taken to minimize damage to the bolster plate. Damage to the kingpin being removed is of no consequence.
- (3) Remove the kingpin.

b. Installation.

W A R N I N G

Wear welding mask, gloves, and apron when welding or using cutting torch. Failure to wear adequate protective clothing may result in serious injury.

- (1) Grind the area of the bolster plate under the kingpin "mushroom" flush so that the new kingpin will lie flat on the bolster plate.
- (2) Install the new kingpin. Locate the holes in the kingpin top in the same manner as the one removed.

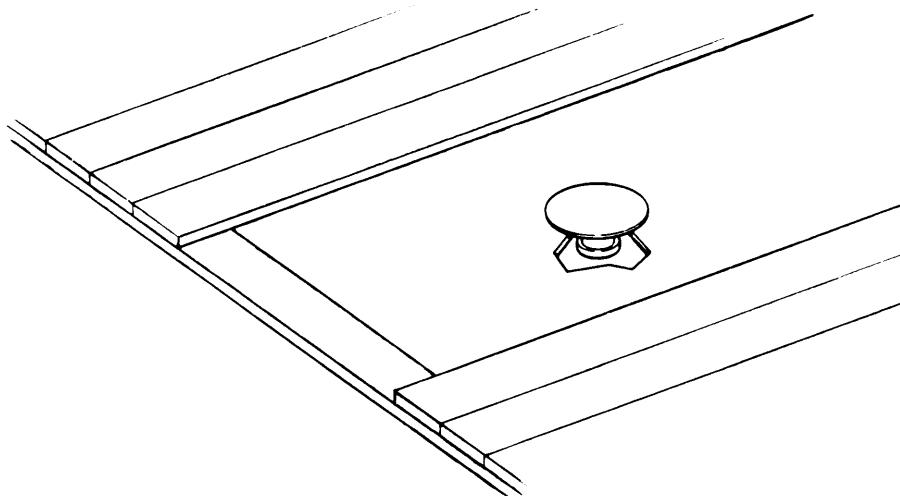


Figure 5-9. Kingpin

- (3) Preheat kingpin and bolster plate to 150°F (66°C), and maintain temperature throughout the welding process.
- (4) Weld the kingpin "mushroom" to the bolster plate with 1/4 inch fillet weld two inches long at four equally spaced points on the edge of the flange and plug weld the holes in the "mushroom". Welds are to be in accordance with MIL-STD-1261, class 3. Use 100,000 psi electrode or wire of the following specification: electrodes, mineral coated, low hydrogen, MIL-E-2200/6 type MIL-10015 or MIL-10016. Wire, use bare solid wire, low alloy steel, MIL-E-23765/2 type 100S-1, 100S-2 or 110S-1.
- (5) Inspect weld with dye penetrant or magnetic particle inspection. No cracks are allowable and any cracks found must be repaired.
- (6) Prime and paint the top of the kingpin and bolster plate as follows: Prime, per TT-P-636 or TT-P-634. Paint with enamel per MIL-E-52798.
- (7) Replace middle metal plate that was removed to gain access to the top of the kingpin.

TASK ENDS HERE

Section VI. MAINTENANCE OF THE SUSPENSION

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Trunnion Tube	5-17

5-9. SPRINGS

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Personnel Required
-------	--------------------

Jack stands	Two
General mechanics tool kit and common supplement II	

Equipment Condition

Tires and wheels removed (para. 4-45)

a. Removal.**WARNING**

The frame must be firmly supported to prevent shifting of the semitrailer. Shifting may cause serious injury to personnel and damage to equipment.

- (1) Support both axles and frame.
- (2) Remove four nuts (1, fig. 5-10), washers (2) and bolts (3) from each side of spring assembly (4).
- (3) Remove four nuts (5), washers (6) and two u-bolts (7) from each side of spring (4).
- (4) Remove spring cap (8) from each side of spring (4).
- (5) Remove four nuts (9), washers (10) and two large u-bolts (11) that secure spring (4) to trunnion tube.
- (6) Remove spring (4).

b. Installation.

- (1) Position spring (4, fig. 5-10).

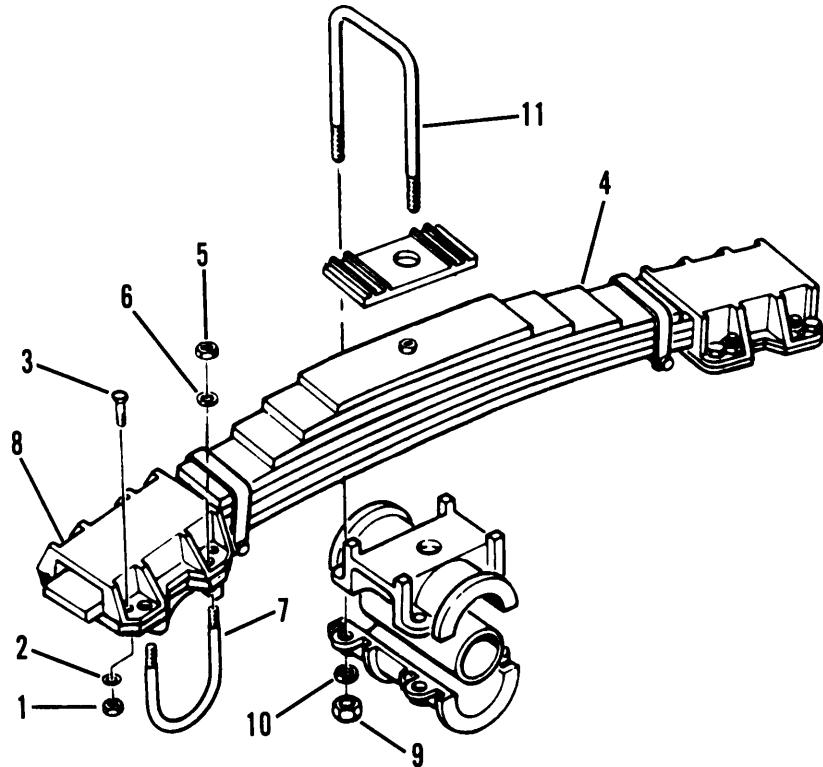


Figure 5-10. Spring Assembly

WARNING

It is essential that torque values be maintained to insure proper operation of the suspension system. The torque values of the suspension bolts and nuts must be checked after the initial break-in period of 1,000 miles (1,600 km) and every three months thereafter. Failure to do so may cause injury to personnel, damage to equipment and will void the warranty.

- (2) Install two large trunnion cap u-bolts (11), four washers (10) and nuts (9) to secure spring (4) to trunnion tube. Torque to 880 lb ft (1192 Nm).
- (3) Install spring cap (8) on each side of spring (4).
- (4) Install two spring cap u-bolts (7), four washers (6) and nuts (5) on each side of spring cap (8). Torque to 300 lb ft (408 Nm).

NOTE

Inspect flange on spring seat cap to determine if socket will fit on bolt. It may be necessary to grind only enough flange so socket will fit over the head of the bolt properly.

- (5) Install four spring cap bolts (3), washers (2) and nuts (1) to each side of spring (4). Torque to 180 lb ft (244 Nm).
- (6) Install tires and wheels (para. 4-45).
- (7) Remove axle and frame supports.

TASK ENDS HERE

5-10. TRUNNION TUBE

This task covers:

Removal
Installation

INITIAL SETUP

Tools	Personnel Required
Lifting device	Two
Jack stands	
General mechanics tool kit and common supplement II	

Equipment Condition

Tires and wheels removed (para. 4-45)

a. Removal.

WARNING

The frame must be firmly supported to prevent shifting of the semitrailer. Shifting may cause serious injury to personnel and damage to equipment.

- (1) Support both sides of frame.
- (2) Using a suitable lifting device, raise semitrailer slightly.
- (3) Remove four nuts (1, fig. 5-11), washers (2) and two large u-bolts (3) from each set of springs (4).
- (4) Lower semitrailer slightly.

NOTE

Axles will support spring assemblies.

- (5) Remove upper trunnion caps (5) and lower trunnion caps (6).
- (6) Remove two nuts (7), washers (8) and bolts (9) from each trunnion hanger (10) (welded to frame).
- (7) Remove teflon bushing (11) and washer (12) from each side of trunnion tube (13). Clean teflon bushing (11) and washer (12).
- (8) Clean trunnion tube (13). It may be necessary to use sandpaper to remove rust. Thoroughly lubricate trunnion tube after cleaning.
- (9) Remove trunnion tube (13).

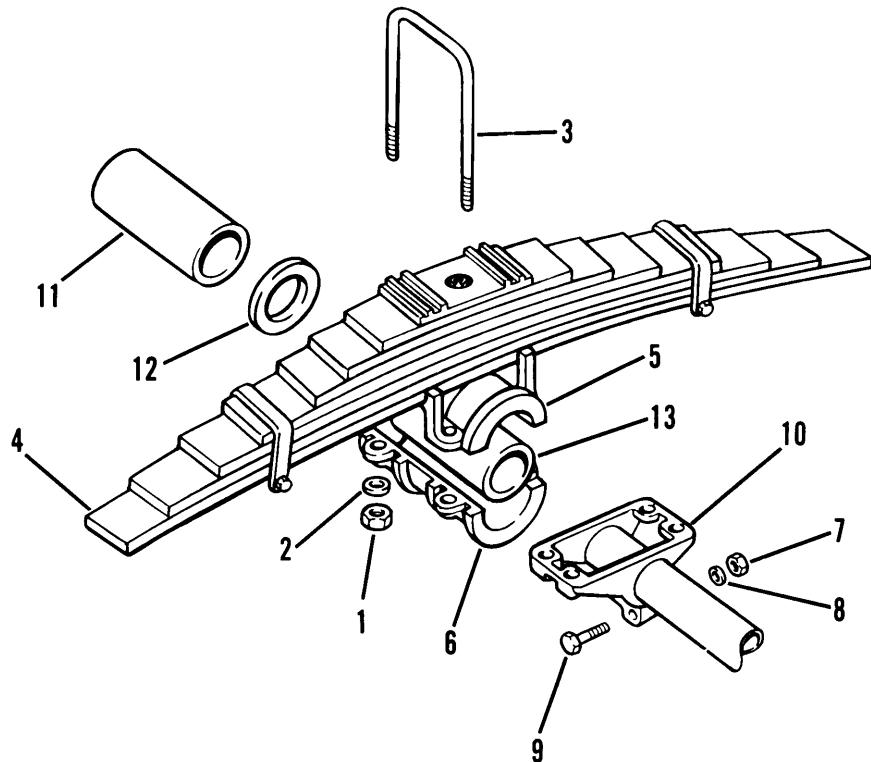


Figure 5-11. Trunnion Tube

b. Installation.

- (1) Clean and lubricate new trunnion tube (13, fig. 5-11).

NOTE

Measure from the end of the trunnion tube to the support housing to determine if the trunnion tube is centered.

- (2) Install trunnion tube (13). Be certain trunnion tube is centered evenly.
- (3) Install washer (12) and teflon bushing (11) on each side of trunnion tube (13). Be certain teflon bushings (11) are evenly centered on trunnion tube (13).

WARNING

It is essential that torque values be maintained to insure proper operation of the suspension system. The torque values of the suspension bolts and nuts must be checked after the initial break-in period of 1,000 miles (1,600 km) and every three months thereafter. Failure to do so may cause injury to personnel, damage to equipment and will void the warranty.

NOTE

Before tightening bolts, make sure trunnion tube is centered.

- (4) Install two bolts (9), washers (8) and nuts (7) on each trunnion hanger (10) (welded to frame). Torque to 300 lb ft (408 Nm).
- (5) Install upper trunnion caps (5) and lower trunnion caps (6) on each side.

NOTE

Before tightening bolts, make sure teflon bushings are properly centered in trunnion caps.

- (6) Install two large u-bolts (3), four washers (2) and nuts (1) on each set of springs (4). Torque to 880 lb ft (1192 Nm).
- (7) Install tires and wheels (para. 4-45).
- (8) Remove axle and frame supports.

TASK ENDS HERE

APPENDIX A**REFERENCES****A-1. PUBLICATION INDEXES AND GENERAL REFERENCES.**

Indexes should be consulted frequently for latest changes or revisions of references given in this appendix and for new publications relating to material covered in this publication.

Military Publication Indexes.

Consolidated Index of Army Publications and Forms DA PAM 310-1

A-2. FORMS.

Refer to DA PAM 738-750, the Army Maintenance Management System (TAMMS), for instructions on the use of maintenance forms pertaining to the material.

A-3. FIELD MANUALS.

The following field manuals contain information pertinent to the major item material and associated equipment.

Nuclear, Biological, and Chemical (NBC) Reconnaissance and Decontamination Operations (How To Fight)	FM 3-87 (HTF)
Camouflage	FM 5-20
Operation and Maintenance of Ordnance Materiel in Cold Weather (0 Deg to Minus 65 Deg F.)	FM 9-207
Nuclear, Biological, and Chemical Defense	FM 21-40
Manual for Wheeled Vehicle Driver	FM 21-305
Basic Cold Weather Manual	FM 31-70
Army Motor Transport Units and Operations	FM 55-30
Desert Operations	FM 90-3

A-4. TECHNICAL MANUALS.

Chemical, Biological, and Radiological (CBR) De-contamination	TM 3-220
Inspection, Care, and Maintenance of Antifriction Bearings	TM 9-214
Materials Used for Cleaning, Preserving, Abrading, and Cementing Ordnance Material and Related Materials Including Chemicals	TM 9-247
Operatort's Manual for Welding Theory and Application	TM 9-237
Deep Water Fording of Ordnance Materiel	TM 9-238
Care, Maintenance and Repair of Pneumatic Tires and Inner Tubes	TM 9-2610-200-24
Procedures for Destruction of Tank-Automotive Equipment to Prevent Enemy Use (US Army Tank-Automotive Command)	TM 750-244-6

A-5 . REPAIR PARTS AND SPECIAL TOOLS LISTS.

The Repair Parts and Special Tools List (RPSTL) that applies to the major item materiel and associated equipment appear as Appendix F of this manual.

A-6 . TECHNICAL BULLETINS.

The following Technical Bulletins contain information pertinent to the major item materiel and associated equipment.

Tactical Wheeled Vehicles: Repair of Frames	TB 9-2300-247-40
Warranty Technical Bulletin for M871A1, 22-1/2 Ton	
Semitrailer	TB 9-2330-358-14
Maintenance in the Desert.	TB 43-0239
Description, Use, Bonding Techniques, and Proper- ties of Adhesives	TB ORD 1032

A-7 . GENERAL TYPE EQUIPMENT PUBLICATIONS (INCLUDING DA PAMS)

Index for Storing and Outloading Drawings for Am- munition bin.	DA PAM 75-5
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APPENDIX B

MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

B-1. GENERAL

- a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance categories.
- b. The Maintenance Allocation Chart (MAC) in section II 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 will be consistent with the capacities and capabilities of the designated maintenance categories.
- c. Section III lists the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from section II.
- d. Section IV contains supplemental instructions and explanatory notes for a particular maintenance function.

B-2. MAINTENANCE FUNCTIONS

Maintenance functions will be limited to and defined as follows:

- a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and\or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel).
- b. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards.
- c. Service. Operations required periodically to keep an item in proper operating condition, i.e., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases.
- d. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.
- e. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.
- f. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or 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.

g. 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.

h. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and is shown as the 3d position code of the SMR code.

i. Repair. The application of maintenance services including fault location/troubleshooting, removal/installation, and disassembly/assembly procedures, and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly) end item, or system.

j. 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 (i.e., DMWR). Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

k. Rebuild. Consists of those services\actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours/miles, etc.) considered in classifying Army equipment/components.

B-3. EXPLANATION OF COLUMNS IN THE MAC, SECTION II.

a. Column 1, Group Number. Column 1 lists functional group code numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the next higher assembly. End item group number shall bee "00".

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

c. Column 3, Maintenance Function. Column 3 lists the functions to be performed on the item listed in Column 2. (For detailed explanation of these functions, see paragraph B-2.)

d. Column 4, Maintenance Level. Column 4 specifies by the listing of a work time figure in the appropriate subcolumn(s), the category of maintenance authorized to perform the function listed in Column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance categories, appropriate work time figures will be shown for each category. 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/quality control time in addition to the time required to perform the specific tasks identified to the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance categories are as follows:

C	Operator or crew
O	Organizational maintenance
F	Direct Support maintenance
H	General Support maintenance
D	Depot maintenance

e. Column 5, Tools and Equipment. Column 5 specifies by code, those common tool sets (not individual tools) and special tools, TMDE, and support equipment required to perform the designated function.

f. Column 6, Remarks. This column shall, when applicable, contain a letter code, in alphabetic order, which shall be keyed to the remarks contained in Section IV.

B-4. EXPLANATION OF COLUMNS IN TOOL AND TEST EQUIPMENT REQUIREMENTS, SECTION III

a. Column 1, Reference Code. The tool and test equipment reference code correlates with a code used in the MAC, Section II, Column 5.

b. Column 2, Level Maintenance. The lowest category of maintenance authorized to use the tool or test equipment.

c. Column 3, Nomenclature. Name or identification of the tool or test equipment.

d. Column 4, National Stock Number. The National Stock Number of the tool or test equipment.

e. Column 5, Tool Number. The manufacturer's part number.

B-5. EXPLANATION OF COLUMNS IN REMARKS, SECTION IV

a. Column 1, Reference Code. The code recorded in column 6, Section II.

b. Column 2, Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC, Section II.

**SECTION II. MAINTENANCE ALLOCATION CHART
FOR
SEMITRAILER, BREAKBULK/CONTAINER TRANSPORTER: M871 AND M871A1**

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQPT.	(6) REMARKS
			UNIT		INTERMEDIATE	DEPOT	D		
C	0	F	H						
06	ELECTRICAL SYSTEM							1,2,3	A
0609	Lights	Repair Replace		0.2 0.3					
0613	Chassis Wiring Harness	Repair Replace		1.0 1.5					
	Receptacle Assemblies, 12 and 24 volt	Service Repair Replace	0.5	3.5 3.0					
	Resistors	Replace		0.2					
	Junction Box Cover	Replace		0.2					M871 only
11	REAR AXLE							1,2,3,4	A
1100	Rear Axle	Repair Replace			3.0 5.0				
12	BRAKES							1,2,3	A
1202	Service Brakes	Replace		2.0					
	Brake Shoe Assembly	Replace		2.0					
	Brake Lining	Replace			1.0				
1206	Slack Adjuster	Adjust Replace		0.2 1.0					
1208	Air Brake System	Test		0.2					
	Air Lines and Fittings	Replace		0.2					
	Air Couplings (Gladhands)	Service Repair Replace	0.5	0.2 0.2					
	Air Reservoir	Service Replace	0.1	2.0					
	Drain Cock	Replace		0.2					
	Spring Brake Chambers	Replace		1.0					

**SECTION II. MAINTENANCE ALLOCATION CHART
FOR
SEMITRAILER, BREAKBULK/CONTAINER TRANSPORTER: M871 AND M871A1**

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQPT.	(6) REMARKS
			UNIT		INTERMEDIATE	DEPOT			
			C	O	F	H	D		
1208 (Cont)	Emergency Relay Valve	Replace		1.0				1,2,3	A
	Multi-function Valve	Replace		1.0					
13	WHEELS,HUBS AND DRUMS								
1311	Wheel Assembly	Inspect Replace	0.5	0.5					
	Bearing, Wheel	Adjust Replace		0.2 1.5					
	Drum, Brake	Repair Replace		0.5	1.5				
	Hub	Replace		0.5					
	Gasket, Hub Cap	Replace		0.2					
	Seal, Grease	Replace		1.0					
	Tires, Tubes	Inspect Service	0.5 0.1						
1313	Tires	Inspect Replace	0.5	0.5					
	Tubes	Repair Replace		0.7 0.5					
15	FRAME							1,2,3	A,B
1501	Frame Assembly	Repair					8.0		
	Rear Bumpers	Replace		2.0					
	Cargo Bed Tiedown Rings	Replace		0.2					
	Lifting Eyes	Replace		0.5					
	Chock Blocks	Replace		0.5					
	Stake Retainers	Replace		0.5					
	Twist Locks	Repair Replace		0.1 1.0					

**SECTION II. MAINTENANCE ALLOCATION CHART
FOR
SEMITRAILER, BREAKBULK/CONTAINER TRANSPORTER: M871 AND M871A1**

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQPT.	(6) REMARKS		
			UNIT		INTERMEDIATE	DEPOT					
			C	O	F	H	D				
1503	Kingpin	Service Replace	0.2			4.0					
1504	Spare Tire Carrier Chain Assembly	Replace		0.5							
1507	Landing Leg	Service Repair Replace	0.2	6.0 4.0							
	Gear Box Landing Leg	Replace		0.5					M871 only		
	Float Pads (Ground Board Assemblies)	Repair Replace		0.5 1.0							
16	SPRINGS AND SHOCK ABSORBERS							1,2,3	A		
1601	Springs	Replace			4.0						
	U-bolts	Replace			2.0						
	Tube, Trunnion	Replace			4.0						
	Suspension Bumpers	Replace		1.0							
18	BODY							1,2,3			
1801	Side Panels	Repair		1.0							
	Chassis Bulkhead	Replace		2.0							
	Mud Flaps	Replace		0.5							
1805	Floors	Replace		1.5							
1808	Document Box	Replace		0.5							
22	BODY ACCESSORIES							1,2,3			
2202	Reflectors	Replace		0.2							
2210	Data Plates	Replace		0.2							

SECTION III. TOOL AND TEST EQUIPMENT REQUIREMENTS
FOR
SEMITRAILER, BREAKBULK/CONTAINER TRANSPORTER:M871 AND M871A1

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE NOMENCLATURE LEVEL	NATIONAL/ NATO STOCK NUMBER	TOOL NUMBER
COMMON TOOLS:			
1	O, F, H	TOOL KIT, MECHANICS GENERAL	5180-00-177-7033
2	O, F, H	SHOP EQUIPMENT, COMMON SET NO. 1	4910-00-754-0654
3	O, F, H	SHOP EQUIPMENT, SUPPLEMENTAL SET NO. 1	4910-00-754-0653
4	F, H	SHOP EQUIPMENT, FIELD MAINTENANCE, BASIC SET	4910-00-754-0705
SPECIAL TOOLS:			
(NONE REQUIRED)			

SECTION IV. REMARKS

REFERENCE CODE	REMARKS
A	Direct Support (F) maintenance includes replacement of repairable assemblies, repair of components of assemblies considered uneconomical to evacuate further. Performs adjustments of systems for which Organizational maintenance does not possess skills or test equipment.
B	General Support (H) maintenance includes repair of most replaceable assemblies. Overhaul of assemblies which require extensive work in terms of man hours, skills and testing of overhauled assemblies will be accomplished at depots.

APPENDIX C**COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LISTS****Section I. INTRODUCTION****C-1. SCOPE**

This appendix lists components of end item and basic issue items for the semitrailer to help you inventory items required for safe and efficient operation.

C-2. GENERAL

The Components of End Item and Basic Issue Items Lists are divided into the following sections:

a. Section II. Components of End Item. This listing is for information purposes only, and is not authority to requisition replacements. These items are part of the end item, but are removed and separately packaged for transportation or shipment. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Illustrations are furnished to assist you in identifying the items.

b. Section III. Basic Issue Items. These are the minimum essential items required to place the semitrailers in operation, to operate it, and to perform emergency repairs. Although shipped separately packaged, BII must be with the semitrailers during operation and whenever it is transferred between property accounts. The illustrations will assist you with hard to identify items. This manual is your authority to request/requisition replacement BII, based on TOE/MTOE authorization of the end item.

C-3. EXPLANATION OF COLUMNS

The following provides an explanation of columns found in the tabular listings.

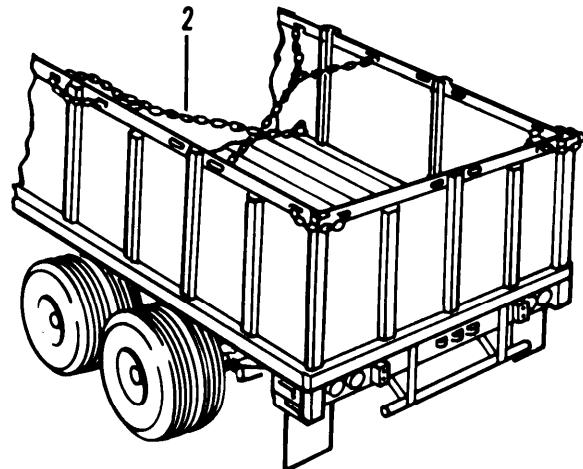
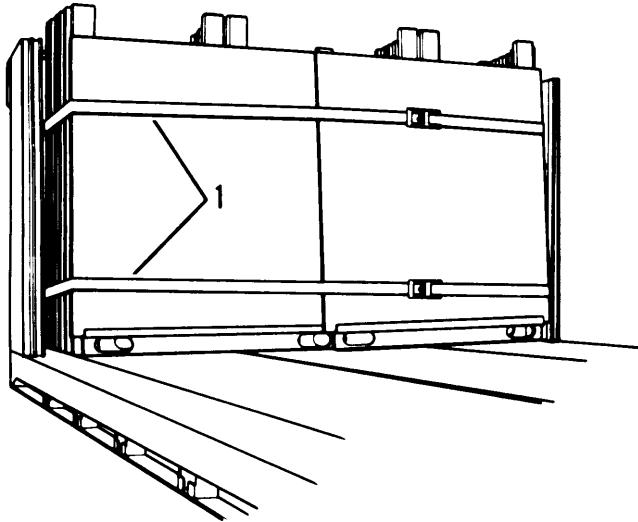
- a. Column (1) Illustration Number (Illus Number). This column indicates the number of the illustration on which the item is shown.
- b. Column (2) National Stock Number. Indicates the National Stock Number assigned to the item and will be used for requisitioning purposes.
- c. Column (3) Description. Indicates the Federal item name and, if required, a minimum description to identify and locate the item. The last line for each item indicates the FSCM (in parentheses) followed by the part number.
- d. Column (4) Unit of Measure (U/M). Indicates the measure used in performing the actual operational\maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr).
- e. Column (5) Quantity required (qty rqr). Indicates the quantity of the item authorized to be used with/on the equipment.

Section II. COMPONENTS OF END ITEM LIST

NONE

Section III. BASIC ISSUE ITEM LIST

(1) ILLUS NO	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION REF NO.& MFR CODE	(4) UNIT MEAS	(5) QTY FURN WITH EQUIP
1	3990-01-217-1085	Strap Assy. (Tiedown) SW15481P (98255)	V79	EA 2
2		Cross Chain Assy SAT871-0003 (66788)	WAA	EA 4
2	4010-01-109-9435	Cross Chain Assy. SW15205A (98255)	V79	EA 4
NI	2530-01-095-5361	Spring Brake Tool (Stud Assy) 11M011 (50153)		EA 4
NI	5120-01-170-4972	Wrench, Socket (Lug) 32501 (75204)	WAA	EA 1
NI	5120-01-170-4980	Bar, Socket (Lug) 3800-941 (75204)	WAA	EA 1
NI	2590-01-062-3520	Container Lock (Twist Lock w/"F" Pin) FC7537 (25575)	WAA	EA 4



Basic Issue Items

APPENDIX D

ADDITIONAL AUTHORIZATION LIST

Section I. INTRODUCTION

D-1. SCOPE

This appendix lists additional items you are authorized for the support of the semitrailer.

D-2. GENERAL

This list identifies items that do not have to accompany the semitrailer and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

D-3. EXPLANATION OF LISTING

National stock numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment. The items are listed in alphabetical sequence by item name under the type document (i.e., CTA, MTOE, TDA, or JTA) which authorizes the item(s) to you. If item required differs for different models of this equipment, the model is shown under the "Usable On" heading in the description column.

Section II. ADDITIONAL AUTHORIZATION LIST

(1) National Stock Number	Part No. and FSCM	(2) Description	(3) U/M	(4) Qty
2540-00-9195	7979195 (19207)	Tarpaulin	EA	1
2540-01-138-3995	12255591 (19207)	Bow	EA	9
5120-01-160-9635	440-tx40 (03705)	Bit, Hex, Insert	EA	1
NOTE The following are items to be used when hauling conventional ammunition on staked sidewall trailer using wooden dunnage for ammunition restraint.				
2590-01-060-7116	FB 7556 (25575)	Plate, Cover, Intermediate	EA	6

(1) National Stock Number	(2) Description	(3) U/M	(4) Qty
Part No. and FSCM			
NOTE			
The following are items to be used when hauling all ammunition types and using web strap tiedown assemblies for ammunition restraint.			
2540-01-117-3943	SP 3715-1 (96603)	Tiedown Assembly, Vehicular	EA 20
2540-01-112-1732	ISW 15906A (998255)	Tiedown Assembly, Vehicular	EA 20
5340-00-980-9277	10900880 (19207)	Tiedown Assembly, Web Strap (Non-nuclear)	EA 25*
1670-00-725-1437	SP4067 (96603)	Tiedown Assembly, Web Strap (Non-nuclear)	EA 25*
5340-01-089-4997	11669588 (19207)	Tiedown Assembly, Web Strap (Nuclear)	EA 25*
5340-01-204-3009	9392419 (59678)	Tiedown Assembly, Web Strap (Nuclear)	EA 25*
NOTE			
The six previous items may be used for ammunition transport. When Transporting nuclear ammunition, however, only the nuclear web strap tiedown assemblies, NSN 5340-01-089-4997 and NSN 5340-01-204-3009, will be used in conjunction with the vehicular tiedown assemblies to restrain nuclear ammunition items.			

NOTICE : Only a total of 25 straps is authorized per trailer. This quantity of 25 may be all of one of the straps listed above or may be a combination of all the four listed for all ammunition types except nuclear. For nuclear munitions, the quantity of 25 may be all of one of the last two straps listed or any combination thereof.

APPENDIX E

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

E-1. SCOPE

This listing is for informational purposes only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

E-2. EXPLANATION OF COLUMNS

a. Column (1) - Item number. This number is assigned to the entry in the listing and is referenced in the initial setup narrative instructions to identify the material.

b. Column (2) - Level. This column identifies the lowest level of maintenance that requires the listed item.

C - Operator/Crew
 O - organizational
 F - Direct Support
 H - General Support

c. Column (3) - National Stock Number. This is the National stock number assigned to the item; use it to request or requisition the item.

d. Column (4) - Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Federal Supply Code for Manufacturer (FSCM) in parentheses followed by the part number.

e. Column (5) - Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two character alphabetical abbreviation (e.g., ea, in., pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II. EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST

(1) ITEM No.	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION	(5) U/M
1			Alcohol, Denatured	
2	C	7920-00-514-2417	Brush, Acid Swabbing HB-643 (81348) Box of 144	ea

TM9-2330-358-14&P

(1) ITEM NO.	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION	(5) U/M
3	O	5350-00-221-0872	CLOTH, ABRASIVE (CROCUS) P-C-458 (81348) 50 SHEET PACKAGE	SH
4	O	7930-00-282-9699	DETERGENT, GP LIQ, WS, A	GAL
5			FLUX	PT
6	C	9150-00-190-0904	GREASE, AUTOMOTIVE AND ARTILLERY, GAA, MIL-G-10924 (81349), 1 POUND (0.454 KG) CAN	LB
7	C	9150-00-189-6727	OIL, LUBRICATING, OE/HDO 10 MIL-L-2104C (81349) 1 QUART (0.946 LITER) CAN	QT
8	C	9150-00-186-6681	OIL, LUBRICATING OE/HDO 10 MIL-L-2104C (81349) 1 QUART (0.946 LITER) CAN	QT
9	C	9150-00-402-4478	OIL, LUBRICATING, OEA, MIL-L-46167 (81349) 1 QUART (0.946 LITER) CAN	QT
10	C	9150-00-231-2361	OIL, LUBRICATING, PRESERVATIVE PL-M, MIL-L-3150 (81349) 1 QUART (0.946 LITER) CAN	QT
11	C	9150-00-230-6689	OIL, LUBRICATING, PRESERVATIVE PL-S, VV-L-800 (81348) 1 QUART (0.946 LITER) CAN	QT
12	C	7920-00-205-1711	RAGS, WIPING, A-A-531 (58536) 50 POUND (22.7 KG) BALE	LB
13			SOLDER, ROSIN CORE	
14	C	6850-00-664-5685 6850-00-281-1985 6850-00-285-8011	SOLVENT, DRY CLEANING, TYPE II, PD-680 (81348) 1 QUART (0.946 LITER) CAN 1 GALLON (3.785 LITER) CAN 55 GALLON (208 LITER) CAN	QT GAL GAL
15	O	9905-00-537-8954	TAG, MARKER, MIL-T-12755 (81349) BOX OF 50	EA
16	O	8030-00-889-3534	TAPE, ANTISEIZING (TEFLON) MIL-T-27730 (81349) 1/4 INCH WIDE X 260 INCHES LONG	FT
17	O	9505-00-248-9850	WIRE, STEEL P/N MS20995F47-12 (FSCM 96906)	FT

APPENDIX F
REPAIR PARTS AND SPECIAL TOOLS LISTS
Section I. INTRODUCTION

F-1. SCOPE.

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of Operator's, Unit, Intermediate Direct Support and General Support Maintenance of the Semitrailer. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

F-2. GENERAL.

In addition to Section I, Introduction, this Repair Parts and Special Tools List is divided into the following sections:

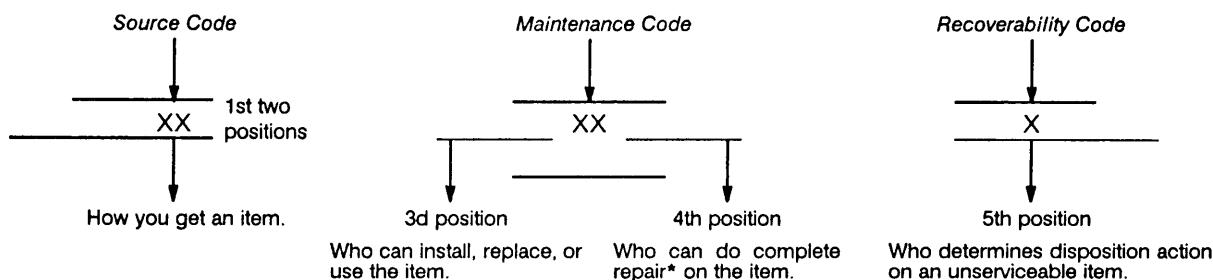
a. **Section II. Repair Parts List.** A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materiel are listed in item name sequence. Repair parts kits are listed separately in their own functional group within Section II. Repair parts for reparable special tools are also listed in this section. Items listed are shown on the associated illustration(s) /figure(s).

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

c. **Section IV Cross-reference Indexes.** A list, in National Item Identification Number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration/figure and item number appearance. The figure and item number index lists figure and item numbers in alphanumeric sequence and cross-references NSN, CAGE, and part numbers.

F-3. EXPLANATION OF COLUMNS (SECTIONS II AND III).

- a. **ITEM NO. [Column (1)].** Indicates the number used to identify items called out in the illustration.
- b. **SMR CODE [Column (2)].** The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



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

F-3. EXPLANATION OF COLUMNS (SECTIONS II AND III) (Con't).

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

<u>Code</u>	<u>Application/Explanation</u>
PA PB PC** PD PE PF PG	Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3d position of the SMR code. <small>..Items coded PC are subject to deterioration.</small>
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3d position of the SMR code. The complete kit must be requisitioned and applied.
MO - <i>Made at UM/AVUM Level</i> MF - <i>Made at DS/AVUM Level</i> MH - <i>Made at GS Level</i> ML - <i>Made at Specialized Repair Activity (SRA)</i> MD - <i>Made at Depot</i>	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk materiel which is identified by the part number in the <i>DESCRIPTION AND USABLE ON CODE (UOC)</i> column and listed in the bulk materiel group of the repair parts list in this RPSTL. If the item is authorized to you by the 3d position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.
AO - <i>Assembled by UMI/AVUM Level</i> AF - <i>Assembled by DS/AVUM Level</i> AH - <i>Assembled by GS Level</i> AL - <i>Assembled by SRA</i> AD - <i>Assembled at Depot</i>	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3d position code of the SMR code authorizes you to replace the item, but the source code indicates that the item is assembled at a higher level, order the item from the higher level of maintenance.

NOTE

Cannibalization or controlled exchange, when authorized, maybe used as a source of supply for items with the above source codes, except for those source coded "XA."

XA - DO NOT requisition an "XA"-coded item. Order its next higher assembly.

XB - If an "XB" item is not available from salvage, order it using the CAGE and part number given.

F-3. EXPLANATION OF COLUMNS (SECTIONS II AND III) (Con't).

XC - Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.

XD - Item is not stocked. Order an "XD"-coded item through normal supply channels using the CAGE and part number given, if no NSN is available.

(2) Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to use and repair support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

- (a) The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance.

<u>Code</u>	<u>Application/Explanation</u>
C	Crew or operator maintenance done within unit maintenance or aviation unit maintenance.
O	Unit maintenance or aviation unit can remove, replace, and use the item.
F	Direct support or aviation intermediate level can remove, replace, and use the item.
H	General support level can remove, replace, and use the item.
L	Specialized repair activity can remove, replace, and use the item.
D	Depot level can remove, replace, and use the item.

NOTE

Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

- (b) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized "Repair" functions). This position will contain one of the following maintenance codes:

<u>Code</u>	<u>Application/Explanation</u>
O	- Unit maintenance or aviation unit is the lowest level that can do complete repair of the item.
F	- Direct support or aviation intermediate is the lowest level than can do complete repair of the item.
H	- General support is the lowest level that can do complete repair of the item.
L	- Specialized repair activity is the lowest level that can do complete repair of the item.
D	Depot is the lowest level that can do complete repair of the item.
Z	- Nonreparable. No repair is authorized.
B	- No repair is authorized. (No parts or special tools are authorized for the maintenance of a "B"-coded item.) However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

F-3. EXPLANATION OF COLUMNS (SECTIONS II AND III) (Con't).

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

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

c. **CAGEC [Column (3)].** The Commercial and Government Entity (CAGE) Code (C) is a 5-digit alphanumeric code which is used-to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

NOTE

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

d. **PART NUMBER [Column (4)].** Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

e. **DESCRIPTION AND USABLE ON CODE (UOC) [Column (5)].** This column includes the following information:

(1) The Federal item name and, when required, a minimum description to identify the item.

(2) Physical security classification. Not Applicable.

(3) Items that are included in kits and sets are listed below the name of the kit or set on Figure KIT. Not Applicable.

(4) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.

(5) Part numbers for bulk materiels are referenced in this column in the line item entry for the item to be manufactured/fabricated.

F-3. EXPLANATION OF COLUMNS (SECTIONS II AND III) (Con't).

(6) When the item is not used with all serial numbers of the same model, the effective serial numbers are shown on the last line(s) of the description (before UOC).

(7) The usable on code, when applicable (see paragraph F-5, Special Information).

(8) In the Special Tools List section, the Basis of Issue (BOI) appears as the last line(s) in the entry for each special tool, special TMDE, and other special support equipment. When density of equipments supported exceeds density spread indicated in the Basis of Issue, the total authorization is increased proportionately.

(9) The statement "**END OF FIGURE**" appears just below the last item description in Column 5 for a given figure in both Section II and Section III.

f. QTY [Column (6)]. The *QTY* (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column in lieu of a quantity indicates that the quantity is variable and the quantity may vary from application to application.

F-4. EXPLANATION OF COLUMNS (SECTION IV).

a. National Stock Number (NSN) Index.

(1) **STOCK NUMBER column.** This column lists the NSN by National Item Identification Number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN (i.e.,

NSN
~~5305-01-674-1467~~). When using this column to locate an item, ignore the first 4 digits of the NSN. However,

the complete NSN should be used when ordering items by stock number.

(2) **FIG. column.** This column lists the number of the figure where the item is identified/located. The figures are in numerical order in Section II and Section III.

(3) **ITEM column.** The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

b. Part Number Index. Part numbers in this index are listed by part number in ascending alphanumeric sequence (i.e., vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).

(1) **CAGEC column.** The Commercial and Government Entity (CAGE) Code (C) is a 5-digit alphanumeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

(2) **PART NUMBER column.** Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards and inspection requirements to identify an item or range of items.

(3) **STOCK NUMBER column.** This column lists the NSN for the associated part number and manufacturer identified in the PART NUMBER and CAGE columns to the left.

(4) **FIG. column.** This column lists the number of the figure where the item is identified/located in Section II and Section III.

(5) **ITEM column.** The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

F-4. EXPLANATION OF COLUMNS (SECTION IV) (Con't).

c. Figure and Item Number Index.

(1) ***FIG. column.*** This column lists the number of the figure where the item is identified/located in Sections II and III.

(2) ***ITEM column.*** The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

(3) ***STOCK NUMBER column.*** This column lists the NSN for the item.

(4) ***CAGEC column.*** The Commercial and Government Entity (CAGE) Code (C) is a 5-digit alphanumeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

(5) ***PART NUMBER column.*** Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards and inspection requirements to identify an item or range of items.

F-5. SPECIAL INFORMATION.

a. **Usable On Code.** The usable on code appears in the lower left corner of the Description column heading. Usable on codes are shown as "UOC: " in the Description column (justified left) on the first line applicable item description/nomenclature. Uncoded items are applicable to all models. Identification of the usable on codes used in this RPSTL are:

<u>Code</u>	<u>Used On</u>
M871	V79
M871A1	WAA

b. **Fabrication Instructions.** Bulk materiel required to manufacture items are listed in the Bulk Materiel Functional Group of this RPSTL. Part numbers for bulk materiel are also referenced in the DESCRIPTION column of the line item entry for the item to be manufactured/fabricated. Detailed fabrication instructions for items source coded to be manufactured or fabricated are found in *Appendix G* of this manual.

c. **Assembly Instructions.** Detailed assembly instructions for items source coded to be assembled from component spare/repair parts are found in *Chapters 4 and 5*. Items that make up the assembly are listed immediately following the assembly item entry or reference is made to an applicable figure.

d. **Kits.** Line item entries for repair parts kits appear in group 9401 in Section II. Not Applicable.

e. **Index Numbers.** Items which have the word BULK in the FIG. column will have an index number shown in the item column. This index number is a cross-reference between the National Stock Number/Part Number Index and the bulk materiel list in Section H.

F-6. HOW TO LOCATE REPAIR PARTS.

a. When National Stock Number or Part Number is Not Known:

(1) **First.** Using the Table of Contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

(2) **Second.** Find the figure covering the assembly group or subassembly group to which the item belongs.

F-6. HOW TO LOCATE REPAIR PARTS (Con't).

(3) **Third.** Identify the item on the figure and use the Figure and Item Number Index to find the NSN.

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

(1) **First.** Using the National Stock Number or Part Number Index, find the pertinent National Stock Number or Part Number. The NSN Index is in National Item Identification Number (NIIN) sequence [see paragraph F-4.a(l)]. The part numbers in the Part Number Index are listed in ascending alphanumeric sequence (see paragraph F-4.b). Both indexes cross-reference you to the illustration/figure and item number of the item you are looking for.

(2) **Second.** Turn to the figure and item number, verify that the item is the one you're looking for, then locate the item number in the repair parts list for the figure.

F-7. ABBREVIATIONS.

For standard abbreviations see MIL-STD-12D, *Military Standard Abbreviations for Use on Drawings, Specifications, Standards, and in Technical Documents*.

<u>Abbreviations</u>	<u>Explanation</u>
BOA	Basic of Issue Figure
FIG	Figure
NSN	National Stock Number
NIIN	National Item Identification Number (consists of the last 9 digits of the NSN)
P/N	Part Number
RPSTL	Repair Parts and Special Tools Lists
SMR	Source, Maintenance, and Recoverability Code
U/M	Unit of Measure
UOC	Usable on Code

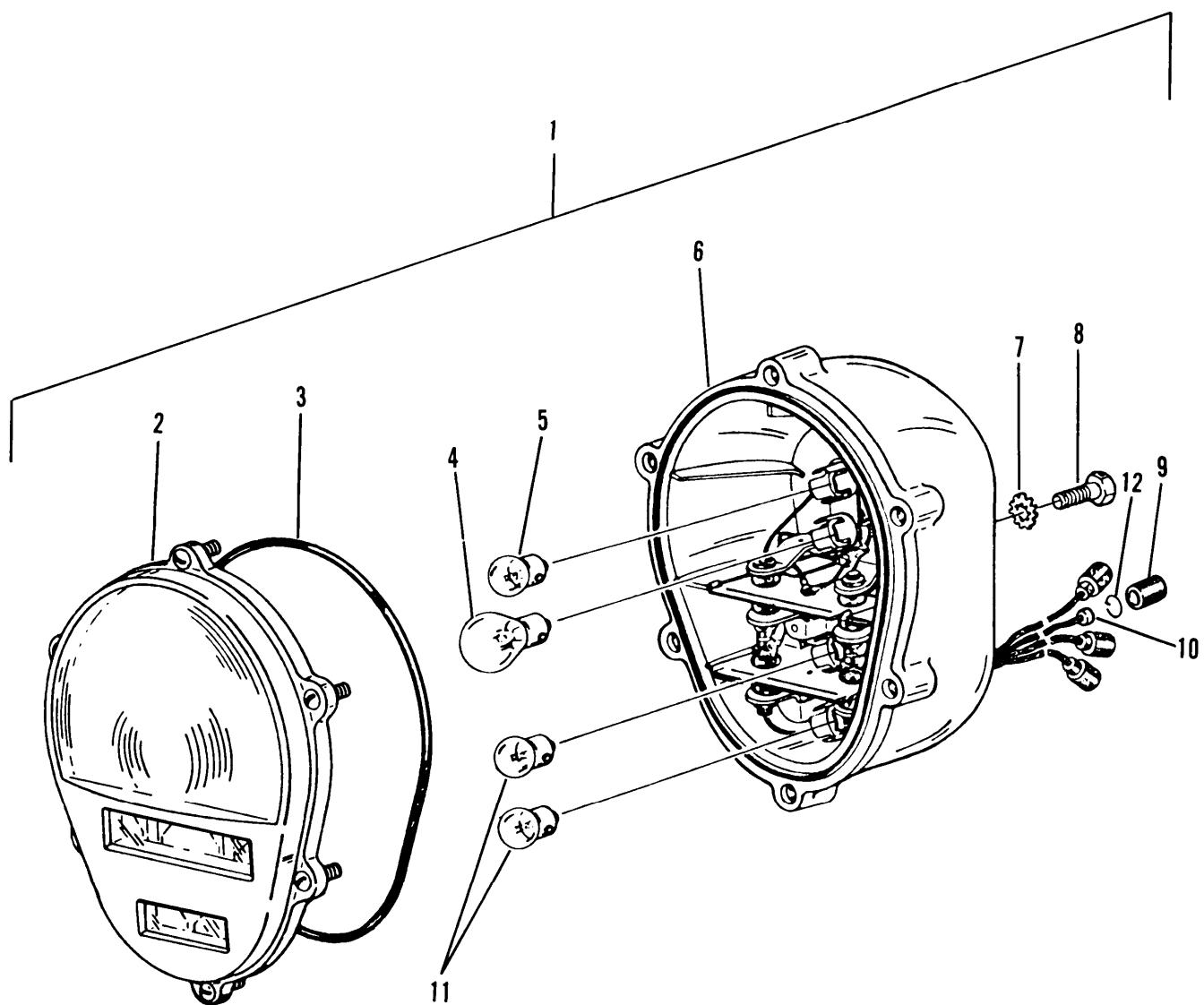
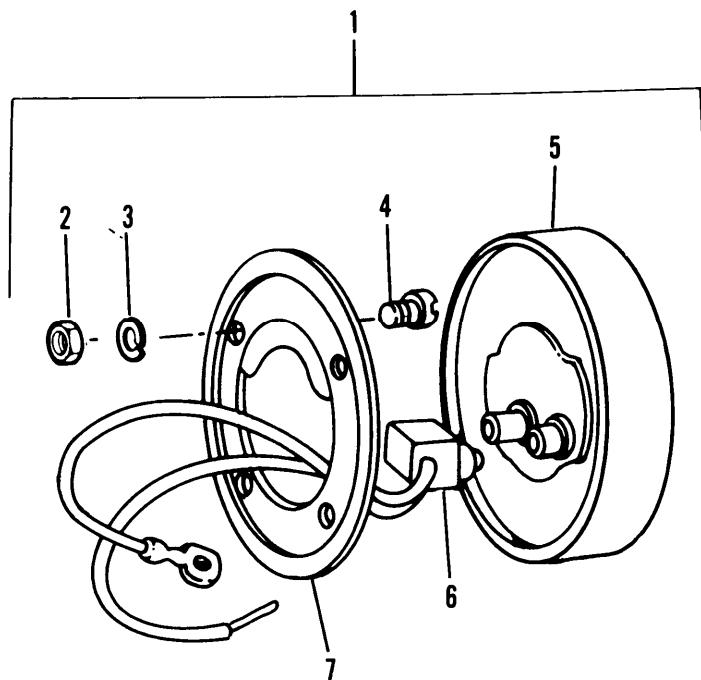


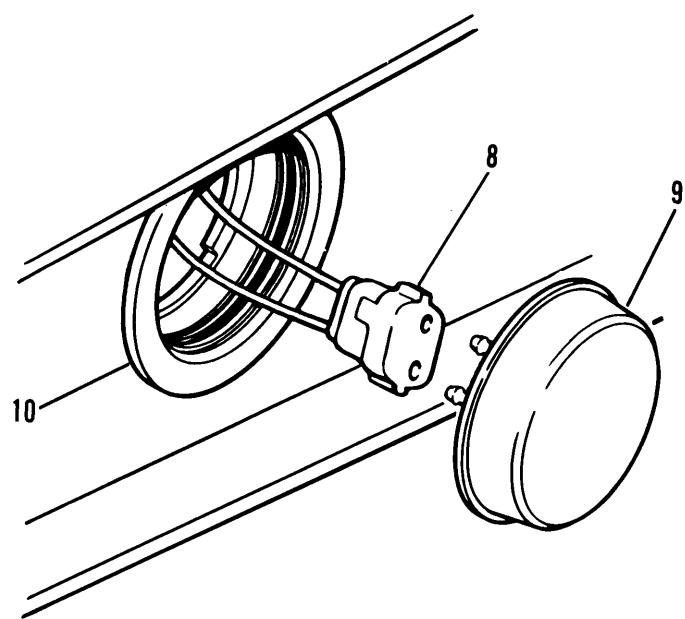
Figure 1. Composite Light

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 06 ELECTRICAL SYSTEM						
GROUP 0609 LIGHTS						
FIG. 1 - COMPOSITE LIGHT						
*	1	PAOOO	19207	12375837	TAILLIGHT, VEHICULAR 24V COMPOSITE TAILLIGHT UOC:V79	2
1		PAOOO	96906	MS52125-1	STOP LIGHT-TAILLIGHT 12V COMPOSITE TAILLIGHT UOC:WAA	2
* 2	PAOZZ	19207	12375841		.LENS, LIGHT COMPOSITE LIGHT	1
3	PAOZZ	19207	11639519-2		.PACKING, PREFORMED COMPOSITE LIGHT	1
3	PAOZZ	96906	MS35490-34		UOC:V79 .GROMMET, NONMETALLIC	1
4	PAOZZ	96906	MS35478-1073		UOC:WAA .LAMP, INCANDESCENT 12V LIGHT	1
4	PAOZZ	96906	MS35478-1683		UOC:V79 .LAMP, INCANDESCENT	1
5	PAOZZ	96906	MS15570-89		UOC:WAA .LAMP, INCANDESCENT 12V LIGHT	1
5	PAOZZ	96906	MS15570-623		UOC:V79 .LAMP, INCANDESCENT	1
*	6	XAOZZ	19207	12375838	UOC:WAA .BODY ASSEMBLY COMPOSITE LIGHT	1
7	PAOZZ	96906	MS35333-42		UOC:V79 .WASHER, LOCK COMPOSITE TAILLIGHT	2
7	PAOZZ	96906	MS35338-46		MTG UOC:V79 .WASHER, LOCK	2
8	PAOZZ	96906	MS35311-59		UOC:WAA .SCREW, CAP, HEXAGON H COMPOSITE	4
*	8	PAOZZ	96906	MS90725-58	TAILLIGHT MTG UOC:V79 .SCREW, CAP, HEXAGON H	2
9	PFOZZ	19207	8338566		UOC:WAA .SHELL, ELECTRICAL CO	4
10	PAOZZ	19207	8338567		UOC:WAA .WASHER, SLOTTED	4
11	PAOZZ	96906	MS15570-1251		UOC:WAA .LAMP, INCANDESCENT 24V LIGHT	2
12	PAOZZ	96906	MS27148-2		UOC:WAA .CONTACT, ELECTRICAL	4

END OF FIGURE



M871 Semitrailer



H871A1 Semitrailer

Figure 2. Clearance Light

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 0609 LIGHTS						
FIG. 2 - CLEARANCE LIGHT						
1	PAOOO	13548	10202Y	LIGHT, MARKER, CLEARA AMBER (COMPONENT PARTS, SAME AS LIGHT ASSY, P/N 10004R, EXCEPT WHERE ANNOTATED) UOC:V79	CLEARANCE, RED	2
1	PAOOO	13548	10004R	LIGHT, MARKER, CLEARA UOC:V79	CLEARANCE, RED	4
2	PAOZZ	96906	MS35649-262	.NUT, PLAIN, HEXAGON MTG UOC:V79	CLEARANCE LIGHT MTG	6
3	PAOZZ	96906	MS45904-54	.WASHER, LOCK UOC:V79	CLEARANCE LIGHT MTG	6
4	PAOZZ	96906	MS24629-26	.SCREW, TAPPING UOC:V79		12
5	PAOZZ	13548	10202Y	.LIGHT, MARKER, CLEARA SEALED (USED ON LIGHT ASSY, P/N 10004Y ONLY) AMBER UOC:V79	CLEARANCE, RED	1
* 5	PAOZZ	13548	10004R	.LIGHT, MARKER, CLEARA (USED ON LIGHT ASSY, P/N 10004R ONLY) UOC:V79	CLEARANCE, RED	1
6	PAOZZ	13548	94902	.PLUG ASSEMBLY UOC:V79	CLEARANCE LIGHT	1
7	PAOZZ	13548	10720	.DISC, LAMP MOUNT UOC:V79	CLEARANCE LIGHT	1
8	XDOZZ	13548	03424A	LEAD ASSEMBLY, ELECT UOC:WAA		9
9	PAOZZ	13548	10205-Y	LAMP UNIT, VEHICULAR UOC:WAA	CLEARANCE	4
9	PAOZZ	13548	10205-R	LAMP UNIT, VEHICULAR UOC:WAA	RED, CLEARANCE	5
10	PAOZZ	13548	10700	GROMMET, NONMETALLIC UOC:WAA		9

END OF FIGURE

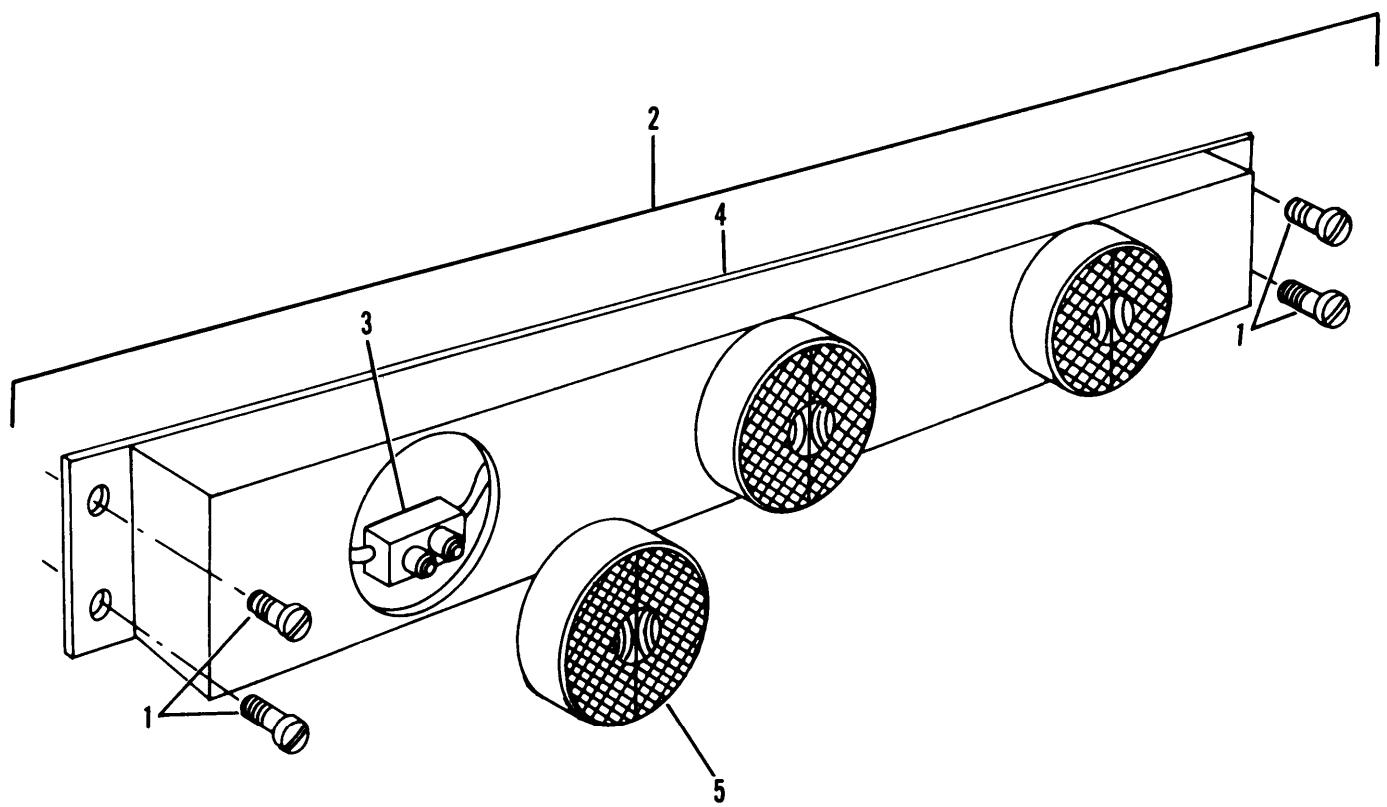
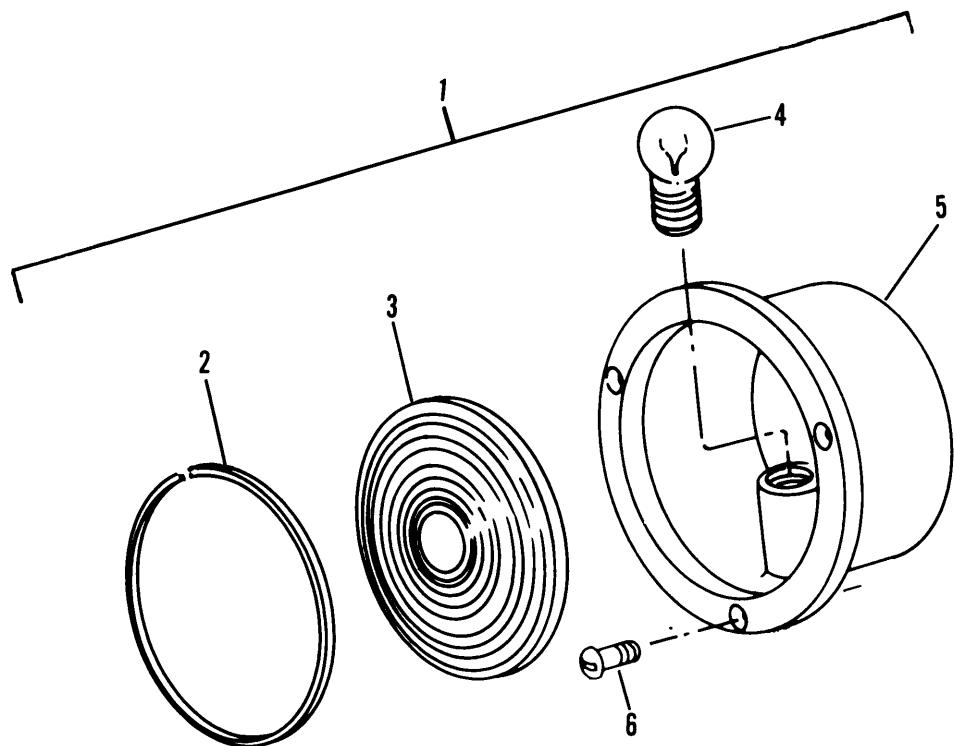


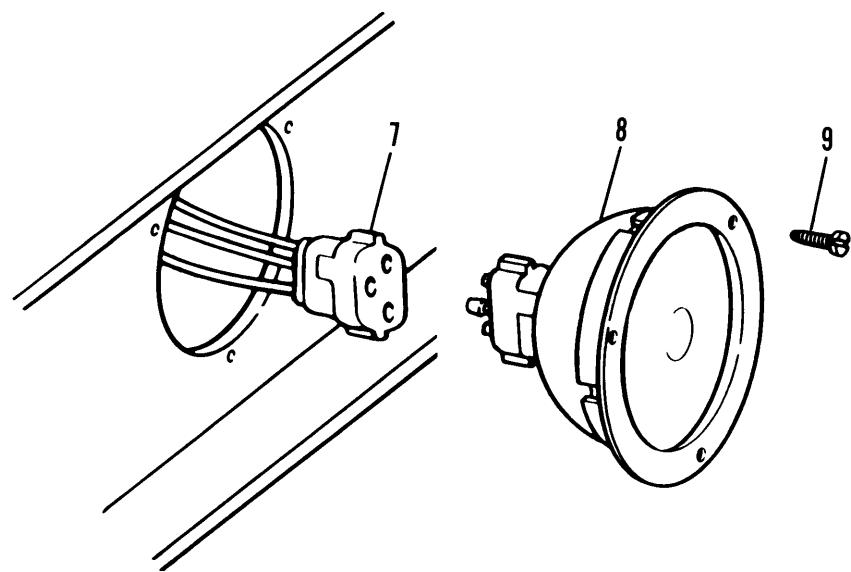
Figure 3. Bar Lamp Assembly (H871)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 0609 LIGHTS						
FIG. 3 - BAR LAMP ASSEMBLY (M871)						
1	PAOZZ	96906	MS24629-26	SCREW,TAPPING LIGHT ASSEMBLY MTG UOC:V79		4
2	PAOZZ	13548	10744R	LAMP UNIT,VEHICULAR THREE LIGHT BAR TYPE UOC:V79		1
3	PAOZZ	13548	93906	.LEAD ASSEMBLY,ELECT CLEARANCE LIGHT UOC:V79		3
* 4	PFOZZ	75175	503-2601	.LIGHT ASSEMBLY,CLEA MOUNTING BRACKET 18 INCHES WIDE UOC:V79		1
* 5	PAOZZ	13548	10004R	.LIGHT,MARKER,CLEARA CLEARANCE RED UOC:V79		3

END OF FIGURE



M871 Semitrailer



M871A1 Semitrailer

Figure 4. Taillight

SECTION II (1) ITEM NO.	(2) SMR CODE	(3) FSCM	TM9-2330-358-14&P (4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 0609 LIGHTS					
FIG.4 - TAILLIGHT					
1	PAOZZ	13548	80301R	STOP LIGHT-TAILIGH SINGLE CONTACT, 12 VOLT UOC:V79	2
2	PAOZZ	13548	97904	.RING,RETAINING STOP LIGHT LENS MTG UOC:V79	1
3	PAOZZ	13548	99007R	.LENS,LIGHT STOP,RED UOC:V79	1
4	PAOZZ	08108	1156	.LAMP,INCADESCENT STOP LIGHT UOC:V79	1
5	XADZZ	98255	SW14346P1	.HOUSING ASSEMBLY STOP LIGHT UOC:V79	1
6	PAOZZ	96906	MS24629-48	SCREW,TAPPING,THREA STOP LIGHT MTG UOC:V79	6
7	PAOZZ	13548	94926	CONNECTOR ASSEMBLY UOC:WAA	2
8	PAOZZ	13548	40022R	LAMP,INCANDESCENT UOC:WAA	2
9	PAOZZ	96906	MS24629-50	SCREW,TAPPING,THREA UOC:WAA	6

END OF FIGURE

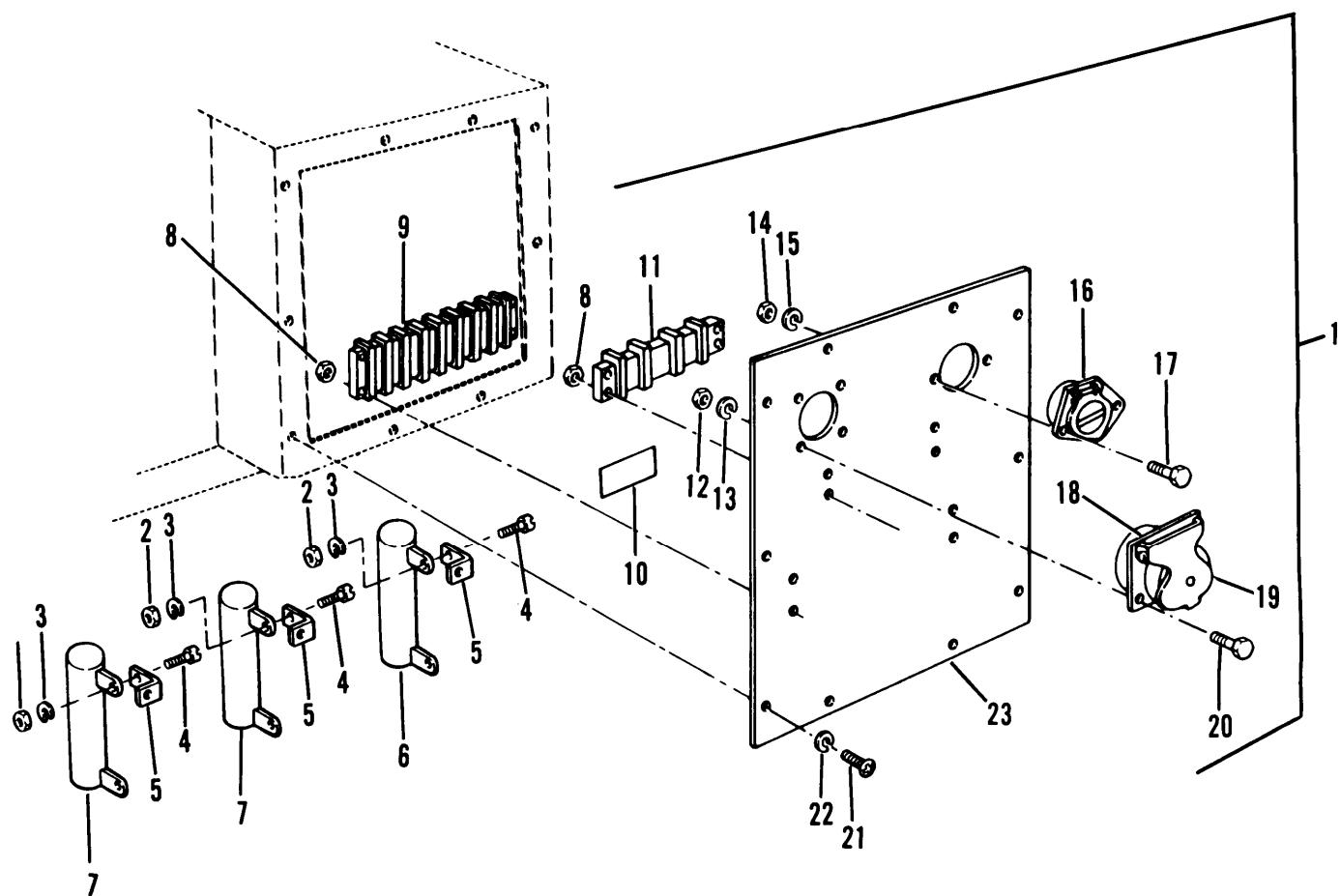


Figure 5. Nose Box (M871)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 0613 HULL OR CHASIS WIRING HARNESS						
FIG. 5 - NOSE BOX (M871)						
1	XBOOO	98255	SW15209A	COVER ASSEMBLY,ELEC UOC:V79		1
2	PAOZZ	96906	MS35649-282	.NUT,PLAIN,HEXAGON RESISTOR CLIP MTG UOC:V79		6
3	PAOZZ	96906	MS35333-36	.WASHER,LOCK UOC:V79		6
4	PAOZZ	96906	MS35206-215	.SCREW,MACHINE UOC:V79		6
5	PAOZZ	98255	SW14867P	.CLIP,ELECTRICAL MOUNTING UOC:V79		6
6	PAOZZ	91637	HL50-02Z-3R6J	.RESISTOR,FIXED,WIRE UOC:V79		1
*	7	PAOZZ	44655	L50J5R0 .RESISTOR,FIXED,WIRE UOC:V79		2
8	PAOZZ	96906	MS21044N06	.NUT,SELF-LOCKING,HE TERMINAL BOARD MTG UOC:V79		8
9	PAOZZ	71785	356-11-08-071	.TERMINAL BOARD COVER ASSEMBLY UOC:V79		1
*	10	PBOZZ	98255	.DECAL COVER ASSEMBLY UOC:V79		1
11	PAOZZ	71785	356-11-03-071	.TERMINAL BOARD COVER ASSEMBLY UOC:V79		1
12	PAOZZ	96906	MS35649-2252	.NUT,PLAIN,HEXAGON CONNECTOR MTG UOC:V79		4
13	PAOZZ	96906	MS35338-44	.WASHER,LOCK CONNECTOR MTG UOC:V79		4
14	PAOZZ	96906	MS35649-2312	.NUT,PLAIN,HEXAGON CONNECTOR MTG UOC:V79		2
15	PAOZZ	96906	MS35338-45	.WASHER,LOCK CONNECTOR MTG UOC:V79		2
*	16	PAOZZ	12339	.CONNECTOR,RECAPTACL 12V UOC:V79		1
17	PAOZZ	96906	MS35206-295	.SCREW,MACHINE CONNECTOR MTG UOC:V79		2
18	PAOZZ	96906	MS75021-1	.CONNECTOR,RECAPTACL ELECTRICAL, COVER ASSY 24V UOC:V79		1
19	PAOZZ	19207	7731428	.COVER,ELECTRICAL CO CONNECTOR UOC:V79		1
20	PAOZZ	96906	MS35206-280	.SCREW,MACHINE CONNECTOR MTG UOC:V79		4
21	PAOZZ	96906	MS24629-48	SCREW,TAPPING COVER ASSEMBLY MTG UOC:V79		10
22	PAOZZ	96906	MS35338-43	WASHER,LOCK COVER ASSEMBLY MTG		10

SECTION II

TM9-2330-358-14&P C01

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
23	XDOZZ	98255	SW15210A	UOC:V79 PLATE, PLAIN COVER ASSEMBLY UOC:V79	1

END OF FIGURE

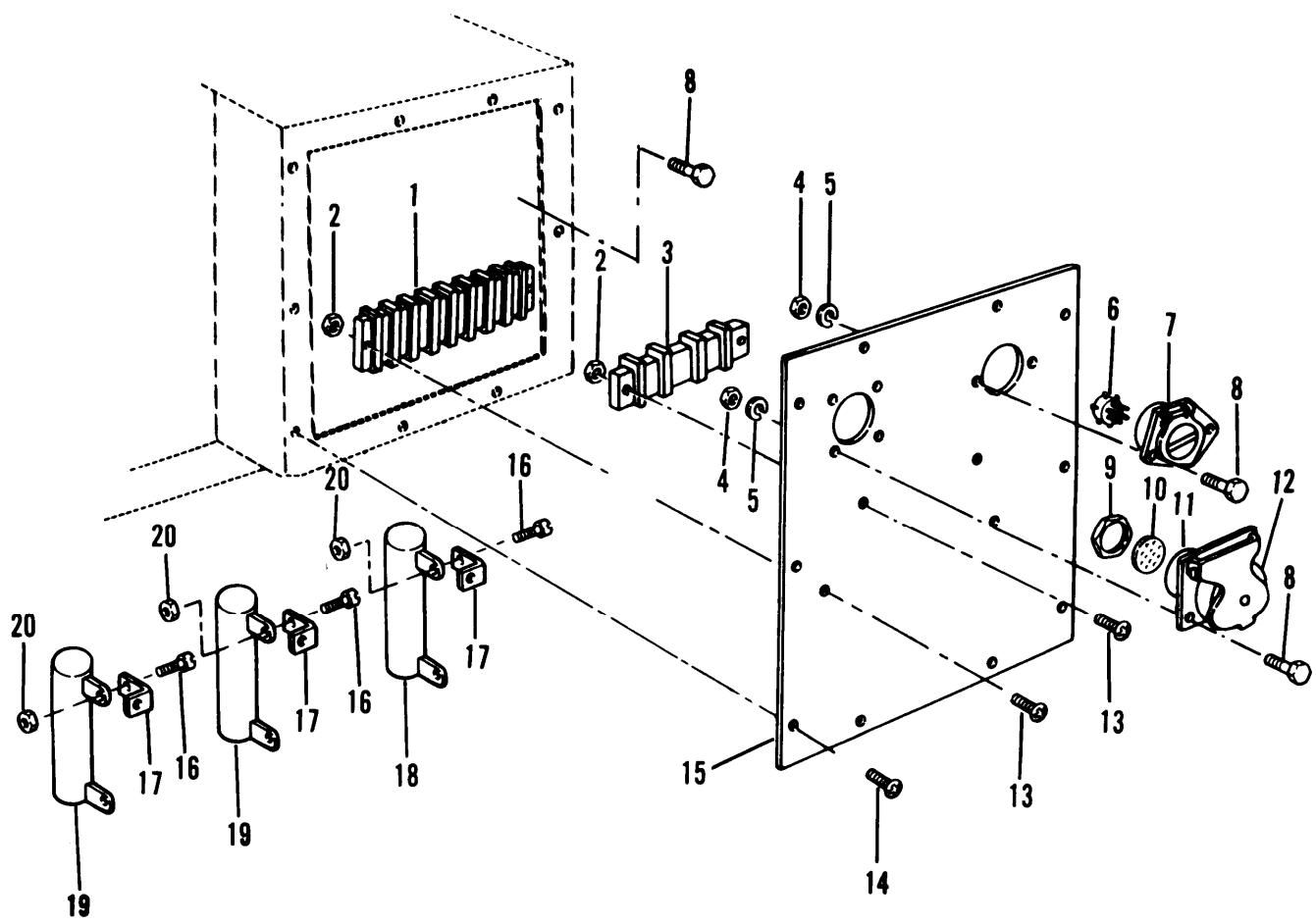


Figure 6. Nose Box (M871A1)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
DESCRIPTION AND USABLE ON CODES(UOC)					QTY
GROUP 0613 HULL OR CHASSIS WIRING HARNESS					
				FIG. 6 - NOSE BOX (M871A1)	
1	PAOZZ	83330	603JJ8	TERMINAL BOARD UOC:WAA	1
2	PAOZZ	96906	MS51922-14	NUT, SELF-LOCKING, HE UOC:WAA	4
* 3	PAOZZ	83330	603-JJ-03	TERMINAL BOARD UOC:WAA	1
4	PAOZZ	96906	MS51967-2	NUT, PLAIN, HEXAGON UOC:WAA	6
* 5	PAOZZ	99539	CBM21389	WASHER, LOCK UOC:WAA	6
6	PFOZZ	06721	782HD	CONNECTOR, RECEPTACL UOC:WAA	1
7	PFOZZ	06721	782HD	CONNECTOR, RECEPTACL 12V UOC:WAA	1
8	PAOZZ	96906	MS35206-281	SCREW, MACHINE UOC:WAA	7
9	PAOZZ	19207	7723309	NUT, PLAIN, KNURLED UOC:WAA	1
10	PAOZZ	19207	7722333	BUSHING, NONMETALLIC UOC:WAA	1
11	PAOZZ	96906	MS75021-1	CONNECTOR, RECEPTACL 24V UOC:WAA	1
12	PFOZZ	19207	7731428	COVER, ELECTRICAL CO UOC:WAA	1
13	PAOZZ	96906	MS35206-265	SCREW, MACHINE UOC:WAA	4
14	PAOZZ	96906	MS24629-48	SCREW, TAPPING UOC:WAA	9
15	PFOZZ	66788	SAT-E18950	PANEL, BLANK UOC:WAA	1
16	PAOZZ	96906	MS35206-215	SCREW, MACHINE UOC:WAA	6
17	PAOZZ	06641	4326	BRACKET, ANGLE UOC:WAA	6
18	PAOZZ	12697	VP50K/30HM	RESISTOR, FIXED, WIRE UOC:WAA	1
19	PAOZZ	51831	VP50K/5	RESISTOR, FIXED, WIRE UOC:WAA	2
20	PAOZZ	96906	MS51922-14	NUT, SELF-LOCKING, HE UOC:WAA	6

END OF FIGURE

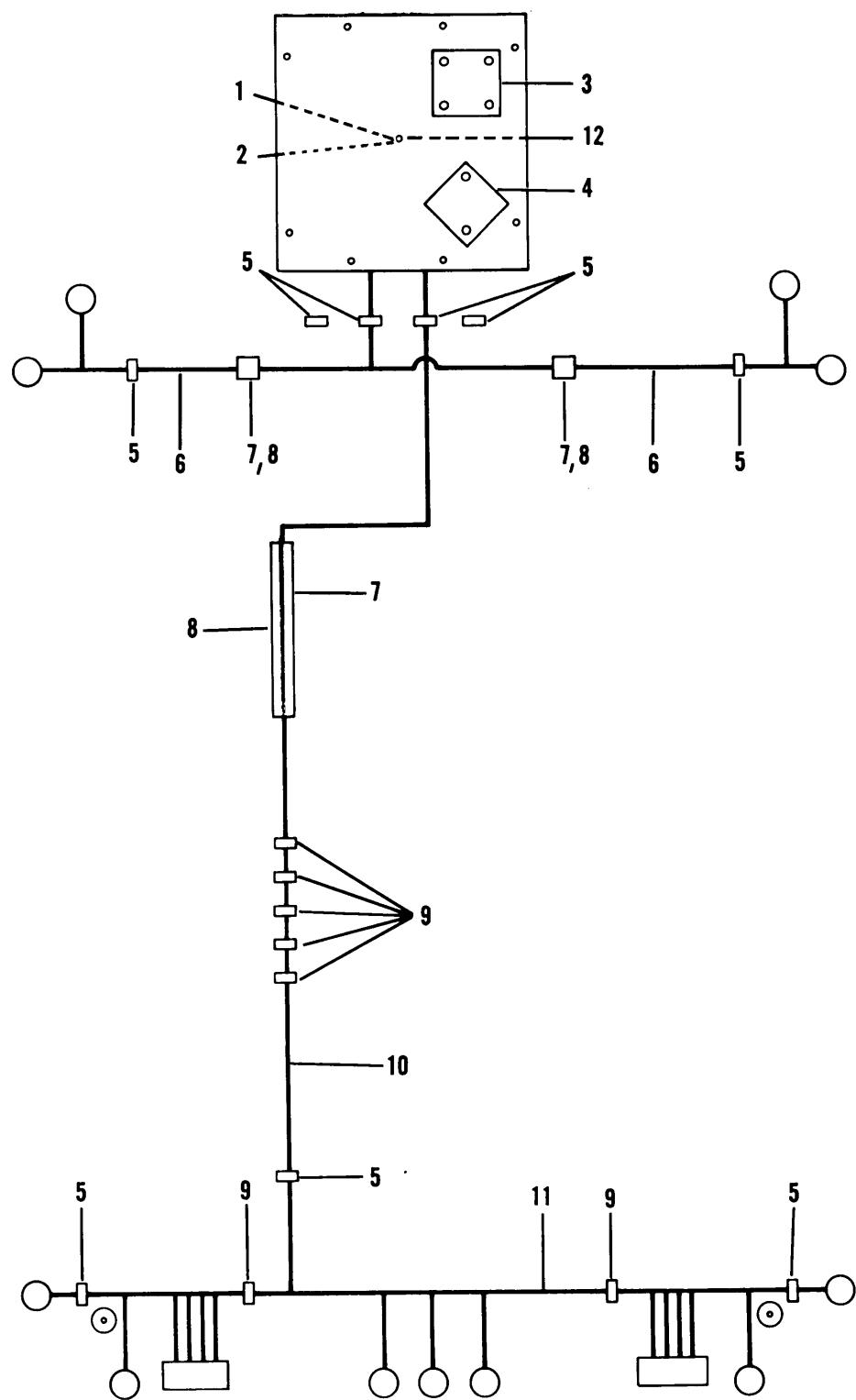


Figure 7. Chassis Electrical Wiring Harness (H871A1)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC) GROUP 0613 HULL OR CHASSIS WIRING HARNESS	(6) QTY
FIG. 7 - CHASSIS ELECTRICAL WIRING HARNESS (M871A1)						
1	PAOZZ	96906	MS25036-108	TERMINAL,LUG UOC:WAA		18
2	PAOZZ	96906	MS27183-9	WASHER,FLAT (GROUND) UOC:WAA		1
3	PAOZZ	66788	SAT-1010	CABLE ASSEMBLY,SPEC 24 VOLT WITH RECEPTACLE UOC:WAA		1
4	PAOOO	66788	SAT-1090	WIRING HARNESS WITH RECEPTACLE UOC:WAA		1
5	PAOZZ	96906	MS35489-108	GROMMET,NONMETALLIC UOC:WAA		11
* 6	PAOOO	66788	SAT-1070	WIRING HARNESS,BRAN UOC:WAA		1
7	PFFZZ	96906	MS25064-12	CONDUIT,METAL,FLEXI UOC:WAA		1
8	PFFZZ	62727	C09140	COUPLING,PIPE UOC:WAA		2
9	PAOZZ	96906	MS35489-114	GROMMET,NONMETALLIC UOC:WAA		7
* 10	PAOOO	66788	SAT-1060	WIRING HARNESS,BRAN UOC:WAA		1
* 11	PAOOO	66788	SAT-1080	WIRING HARNESS,BRAN UOC:WAA		1
12	PAOZZ	96906	MS25036-154	TERMINAL,LUG UOC:WAA		2

END OF FIGURE

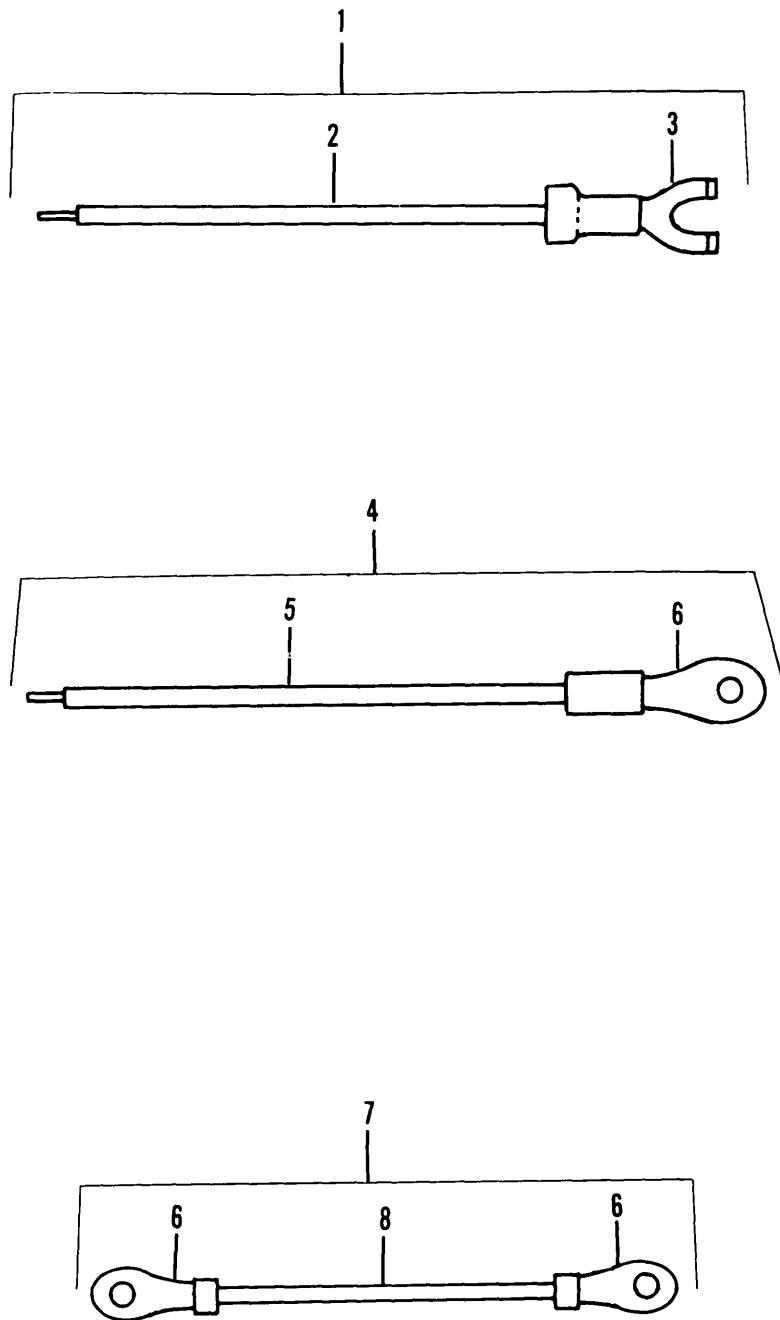


Figure 8. Electrical Wires (M871)

SECTION II (1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	TM9-2330-358-14&P (5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 0613 HULL OR CHASSIS WIRING HARNESS					
FIG. 8 - ELECTRICAL WIRES (M871)					
1	MO000	98255	SW14497A2	WIRE,ELECTRICAL NOSE BOX HOOK UP MFR FROM PN 324015 AND PN MWC12-19U0 ONENT PARTS SAME AS WIRE,P/N SW14497A11,EXCEPT WHERE ANNOTATE UOC:V79	3
1	MO000	98255	SW14498A7	WIRE,ELECTRICAL NOSE BOX HOOK UP, MFR FROM PN 324015 AND PN MWC12-19U0 UOC:V79	3
1	MO000	98255	SW14498A1	WIRE,ELECTRICAL CONNECTOR,MFR FROM P/N 324015 AND P/N MWC12-19U0 ARTS SAME AS WIRE,P/N SW14498A7,EXCEPT WHERE ANNOTATED) UOC:V79	1
1	MO000	98255	SW14497A5	WIRE,ELECTRICAL CONNECTOR TO TERMINAL BLOCK,MFR FROM P/N 324015 AND P/N MWC12-19U0	1
1	MO000	98255	SW14497A1	RE ANNOTATED) UOC:V79 WIRE,ELECTRICAL CONNECTOR TO TERMINAL BLOCK,MFR FROM P/N 324015 AND P/N MWC12-19U0	4
1	MO000	98255	SW14497A11	RE ANNOTATED) UOC:V79 WIRE,ELECTRICAL NOSE BOX HOOK UP, MFR FROM P/N SF20270F AND P/N SW1369P UOC:V79	1
2	PAOZZ	81349	MWC12-19U0	.WIRE,ELECTRICAL NOSE BOX HOOK UP, 22.50 IN.LG. (USED ON WIRE,P/N SW14497A2 ONLY) UOC:V79	1
2	PAOZZ	81349	MWC12-19U0	.WIRE,ELECTRICAL NOSE BOX HOOK UP, 6.00 IN.LG. (USED ON WIRE,P/N SW14498A7 ONLY) UOC:V79	1
2	PAOZZ	81349	MWC12-19U0	.WIRE,ELECTRICAL CONNECTOR,15.50 IN.LG. (USED ON WIRE,P/N SW14498A1 ONLY) UOC:V79	1
2	PAOZZ	81349	MWC12-19U0	.WIRE,ELECTRICAL CONNECTOR TO TERMINAL BLOCK,8.00 IN.LG.(USED ON WIRE,P/N SW14497A5 ONLY) UOC:V79	1

SECTION II (1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	TM9-2330-358-14&P (5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
2	PAOZZ	81349	MWC12-19U0	.WIRE,ELECTRICAL CONNECTOR TO TERMINAL BLOCK,14.00 IN.LG.(USED ON WIRE,P/N SW14497A1 ONLY) UOC:V79	
2	PAOZZ	81349	MWC12-19U0	.WIRE,ELECTRICAL NOSE BOX HOOK UP, 14.50 IN.G. (USED ON WIRE,P/N SW14497A11 ONLY) UOC:V79	
3	PAOZZ	96906	MS25036-112	.TERMINAL,LUG CONNECTOR WIRE (USED ON WIRE,P/N SW14498A1 AND P/N SW14498A7 ONLY) UOC:V79	1
3	PAOZZ	00779	324015	.TERMINAL,LUG NOSE BOX HOOK UP UOC:V79	1
4	MOOOO	98255	SW15248A1	WIRE,ELECTRICAL MFR FROM P/N MS25036-112 AND P/N SW14160P (COMPONENT PARTS SAME AS WIRE,P/N SW15248A6, EXCEPT WHERE ANNOTATED) UOC:V79	2
4	MOOOO	98255	SW15248A2	WIRE,ELECTRICAL MFR FORM P/N MS25036-112 AND P/N SW14160P (COMPONENT PARTS SAME AS WIRE,P/N SW15248A6 EXCEPT WHERE ANNOTATED) UOC:V79	1
4	MOOOO	98255	SW15248A6	WIRE,ELECTRICAL MFR FORM P/N MS25036-112 AND P/N SW14160P UOC:V79	1
4	MOOOO	98255	SW15248A3	WIRE,ELECTRICAL MFR FROM P/N MS25036-112 AND P/N SW14160P (COMPONENT PARTS SAME AS WIRE,P/N SW15248A6 EXCEPT WHERE ANNOTATED) UOC:V79	1
4	MOOOO	98255	SW15248A4	WIRE,ELECTRICAL MFR FROM P/N MS25036-112 AND P/N SW14160P COMPONENT PARTS SAME AS WIRE,P/N SW15248A6 EXCEPT WHERE ANNOTATED) UOC:V79	1
4	MOOOO	98255	SW15248A5	WIRE,ELECTRICAL MFR FROM P/N MS25036-112 AND P/N SW14160P (COMPONENT PARTS SAME AS WIRE,P/N SW15248A6 EXCEPT WHERE ANNOTATED) UOC:V79	1
5	PAOZZ	98255	SW14160P-1	.WIRE,ELECTRICAL 50.00 IN.LG.(USED ON WIRE,P/N SW15248A1 UOC:V79	1
6	PAOZZ	96906	MS25036-112	.TERMINAL,LUG UOC:V79	1
7	MOOOO	98255	SW15247A	WIRE,ELECTRICAL JUMPER,TERMINAL BLOCK,MFR FROM MS25036-112 AND P/N MWC12-19U09P UOC:V79	
8	PAOZZ	81349	MWC12-19U0	.WIRE,ELECTRICAL JUMPER,TERMINAL	

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				BLOCK, 3.00 IN.LG. UOC:V79	

END OF FIGURE

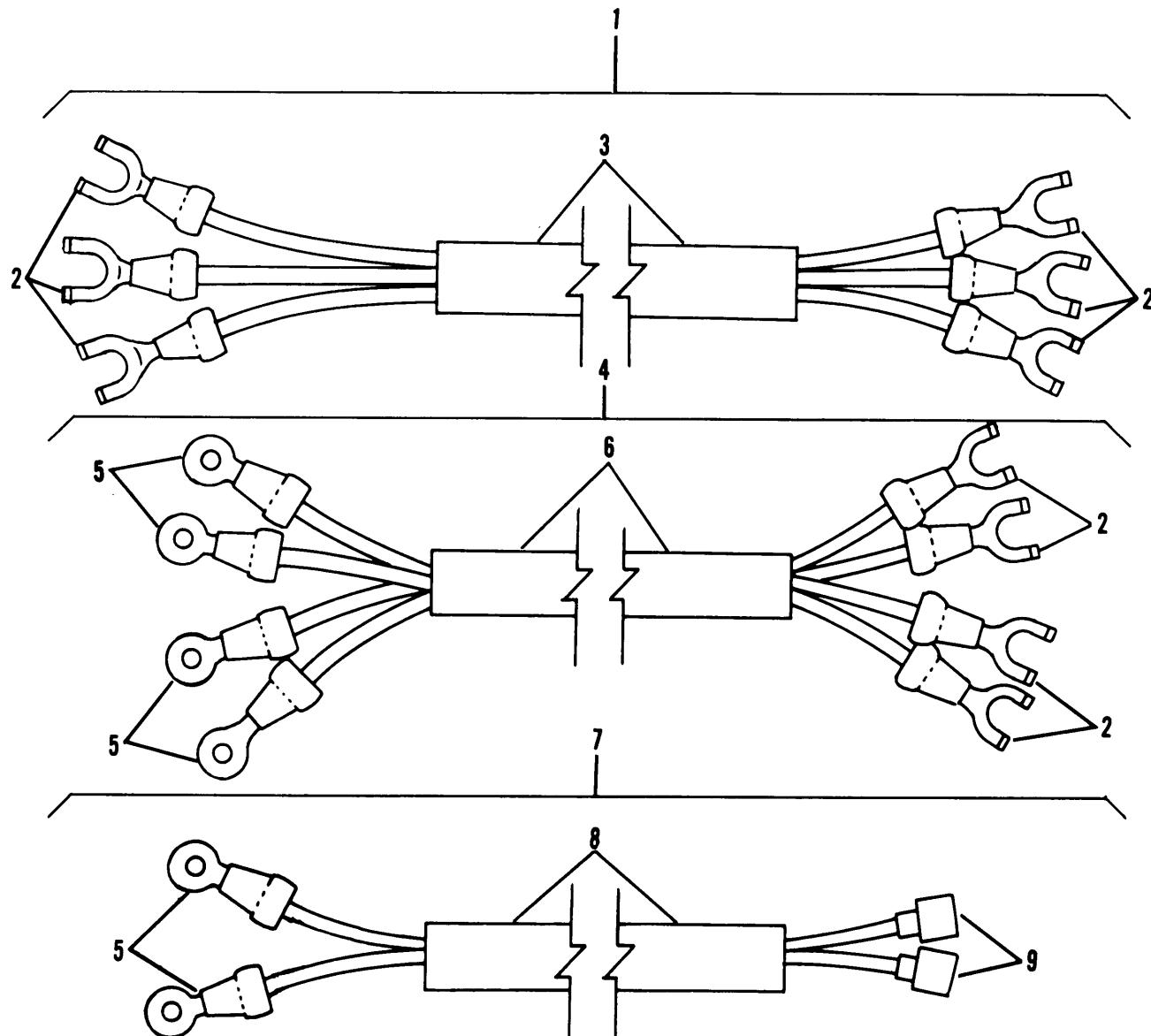


Figure 9. Harness Assemblies (M871)

SECTION II (1) ITEM NO.	(2) SMR CODE	(3) FSCM	TM9-2330-358-14&P (4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 0613 HULL OR CHASSIS WIRING HARNESS					
FIG. 9 - HARNESS ASSEMBLIES (M871)					
1	PAOOO	98255	SW14491A-1	CABLE ASSEMBLY, SPEC 24 VOLT, MAIN UOC:V79	1
2	PAOZZ	00779	324015	.TERMINAL,LUG UOC:V79	10
3	XAOZZ	98255	SW14499P8	.CABLE,FLEXIBLE 419.00 IN.LG. UOC:V79	1
4	PAOOO	98255	SW14490A-1	CABLE ASSEMBLY,SPEC 12 VOLT,MAIN UOC:V79	1
5	PAOZZ	96906	MS25036-112	.TERMINAL,LUG 12 VOLT MAIN HARNESS ASSEMBLY UOC:V79	6
6	PFOZZ	98255	SW14875P	.CABLE ASSEMBLY,SPEC 12 VOLT MAIN HARNESS ASSY,419-99 IN LONG UOC:V79	1
7	PAOOO	98255	SW15246A-4	WIRING HARNESS UOC:V79	1
7	PAOOO	98255	SW15246A-3	CABLE ASSEMBLY,SPEC WIRING, ELECTRICAL (COMPONENT PARTS SAME AS HARNESS ASSY,P/N SW15246A4,EXCEPT WHERE ANNOTATED) UOC:V79	1
7	PAOOO	98255	SW15246A-1	CABLE ASSEMBLY,SPEC WIRING, ELECTRICAL (COMPONENT PARTS SAME AS HARNESS ASSY,P/N SW15246A4,EXCEPT WHERE ANNOTATED) UOC:V79	1
7	PAOOO	98255	SW15246A-2	CABLE ASSEMBLY,SPEC WIRING, ELECTRICAL (COMPONENT PARTS SAME AS HARNESS ASSY,P/N SW15246A4,EXCEPT WHERE ANNOTATED) UOC:V79	1
8	XAOZZ	98255	SW14499P7	.CABLE,ELECTRICAL WIRING HARNESS, 33.00 IN.LG.(USED ON HARNESS ASSY,P/N SW15246A4 ONLY) UOC:V79	1
8	XAOZZ	98255	SW14499P7	.CABLE,ELECTRICAL WIRING HARNESS, 28.00 IN.LG (USED ON HARNESS ASSY,P/N SW15246A4 ONLY) UOC:V79	1
8	XAOZZ	98255	SW14499P7	.CABLE,ELECTRICAL WIRING HARNESS, 35.00 IN.LG.(USED ON HARNESS ASSY,P/N SW15246A1 ONLY) UOC:V79	1
8	XAOZZ	98255	SW14499P7	.CABLE,ELECTRICAL WIRING HARNESS, 42.00 IN.G.(USED ON HARNESS ASSY,P/N SW15246A2 ONLY)	1

SECTION II			TM9-2330-358-14&P	(5)	(6)
(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
9	PAOZZ	96906	MS27144-1	UOC:V79 .CONNECTOR, PLUG, ELEC WIRING HARNESS UOC:V79	2

END OF FIGURE

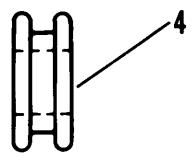
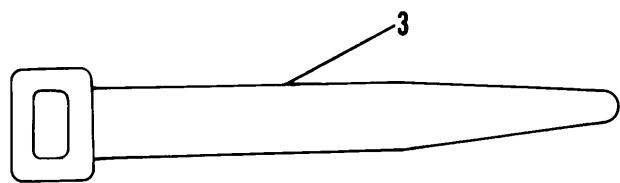
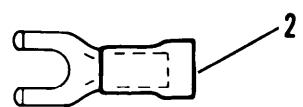
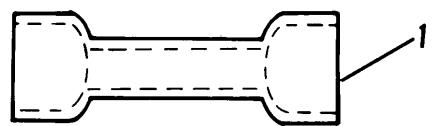


Figure 10. Electrical Connectors

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
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GROUP 0613 HULL OR CHASSIS WIRING
HARNESS

FIG. 10 - ELECTRICAL CONNECTORS

1	PAOZZ	81349	M792815-5	SPLICE UOC:V79	5
2	PAOZZ	00779	324015	TERMINAL,LUG UOC:V79	7
3	PAOZZ	96906	MS3367-5-9	STRAP,TIEDOWN,ELECT WIRING UOC:V79	7
3	PAOZZ	96906	MS3367-5-9	STRAP,TIEDOWN,ELECT UOC:WAA	6
4	PAOZZ	96906	MS35489-107	GROMMET,NONMETALLIC CHASSIS ELECTRICAL WIRING UOC:V79	7

END OF FIGURE

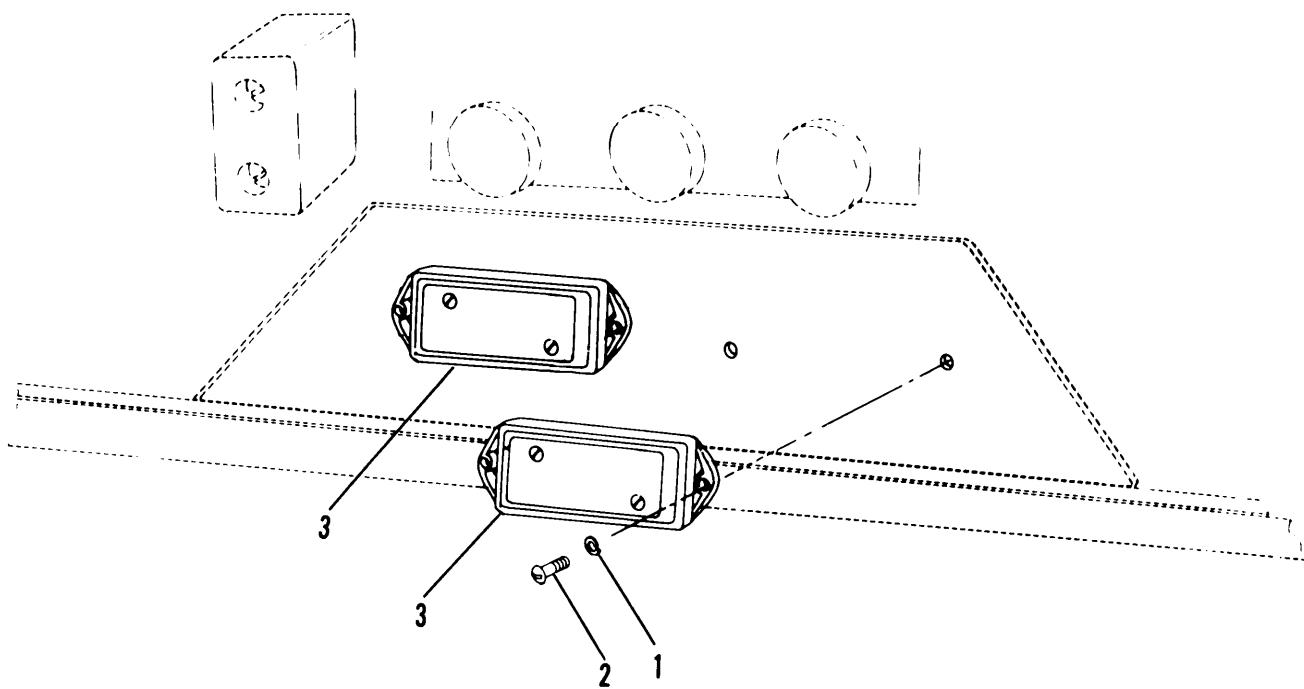


Figure 11. Junction Box (M871)

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 0613 HULL OR CHASSIS WIRING HARNESS					
FIG. 11 - JUNCTION BOX (M871)					
1	PAOZZ	96906	MS35338-44	WASHER,LOCK JUNCTION BOX MTG UOC:V79	4
2	PAOZZ	96906	MS24629-59	SCREW,TAPPING,THREA JUNCTION BOX MTG UOC:V79	4
3	XBOZZ	98343	21220	BOX,JUNCTION ELECTRICAL CONNECTION UOC:V79	2

END OF FIGURE

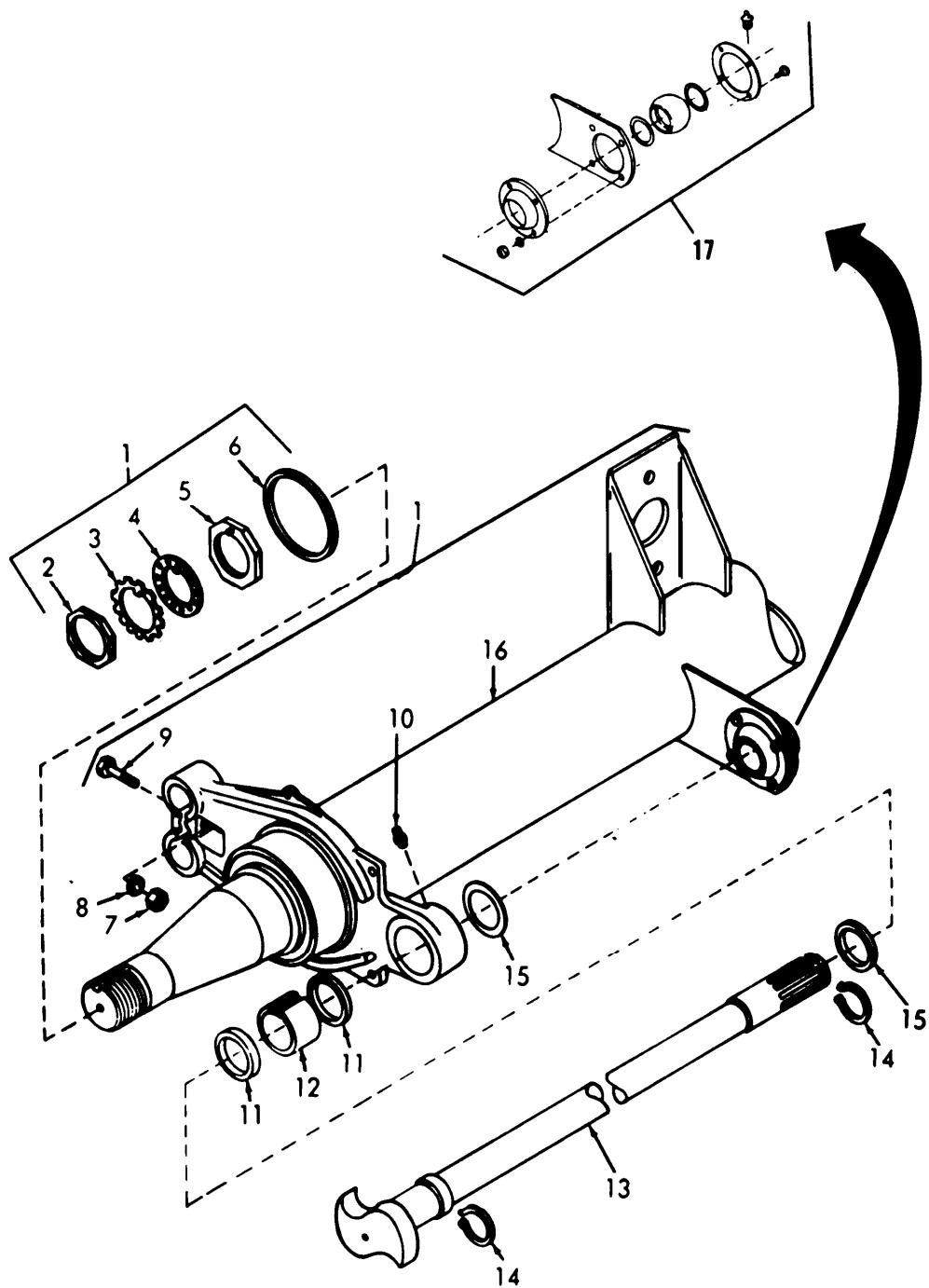


Figure 12. Rear Axle Assembly (M871)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC) (6)	QTY
GROUP 11 REAR AXLE						
GROUP 1100 REAR AXLE ASSEMBLY						
FIG. 12 - REAR AXLE ASSEMBLY (M871)						
*	1	PFFFF	62707 K25AX701-1	AXLE ASSEMBLY, VEHIC UOC:V79		2
2	PFOZZ	62707 M10HN102	.NUT, PLAIN, SLOTTED, O UOC:V79			2
3	PAOZZ	62707 M10HN151	.WASHER WHEEL BEARING			2
*	4	PFOZZ	56697 A150034	.WASHER, KEY UOC:V79		2
5	PFOZZ	62707 M10HN101	.NUT, PLAIN, OCTAGON UOC:V79			2
6	PAOZZ	47346 K25HH100	.SEAL, PLAIN AXLE ASSEMBLY UOC:V79			2
*	7	PAOZZ	11083 S1577	.BOLT, MACHINE BRAKE SPIDER UOC:V79		2
8	PAOZZ	62707 500360-13	.WASHER BRAKE SPIDER UOC:V79			2
9	PAOZZ	62707 501146-5	.NUT BRAKE SPIDER UOC:V79			2
10	PAOZZ	62707 500169-6	.FITTING, LUBRICATION AXLE ASSEMBLY UOC:V79			2
11	PAOZZ	62707 M16HH100	.PACKING, PREFORMED AXLE ASSEMBLY UOC:V79			4
*	12	PFOZZ	26697 MP0-0045	.BUSHING, SPIDER AXLE ASSEMBLY UOC:V79		2
13	PAOZZ	62707 M16WK102-17	.CAMSHAFT, ACTUATING, LH UOC:V79			1
13	PAOZZ	62707 M16WK103-17	.CAMSHAFT RIGHT CAM UOC:V79			1
14	PAOZZ	96906 MS16626-1150	.RING, RETAINING UOC:V79			4
15	PAOZZ	62707 M10HS117	.WASHER, FLAT AXLE ASSEMBLY UOC:V79			4
16	PBFZZ	56697 100103	.AXLE, WHEEL SEMITRAILER UOC:V79			2
17	PAOZZ	62707 M16WH113X	.BRACKET, BRAKE CAM UOC:V79			1

END OF FIGURE

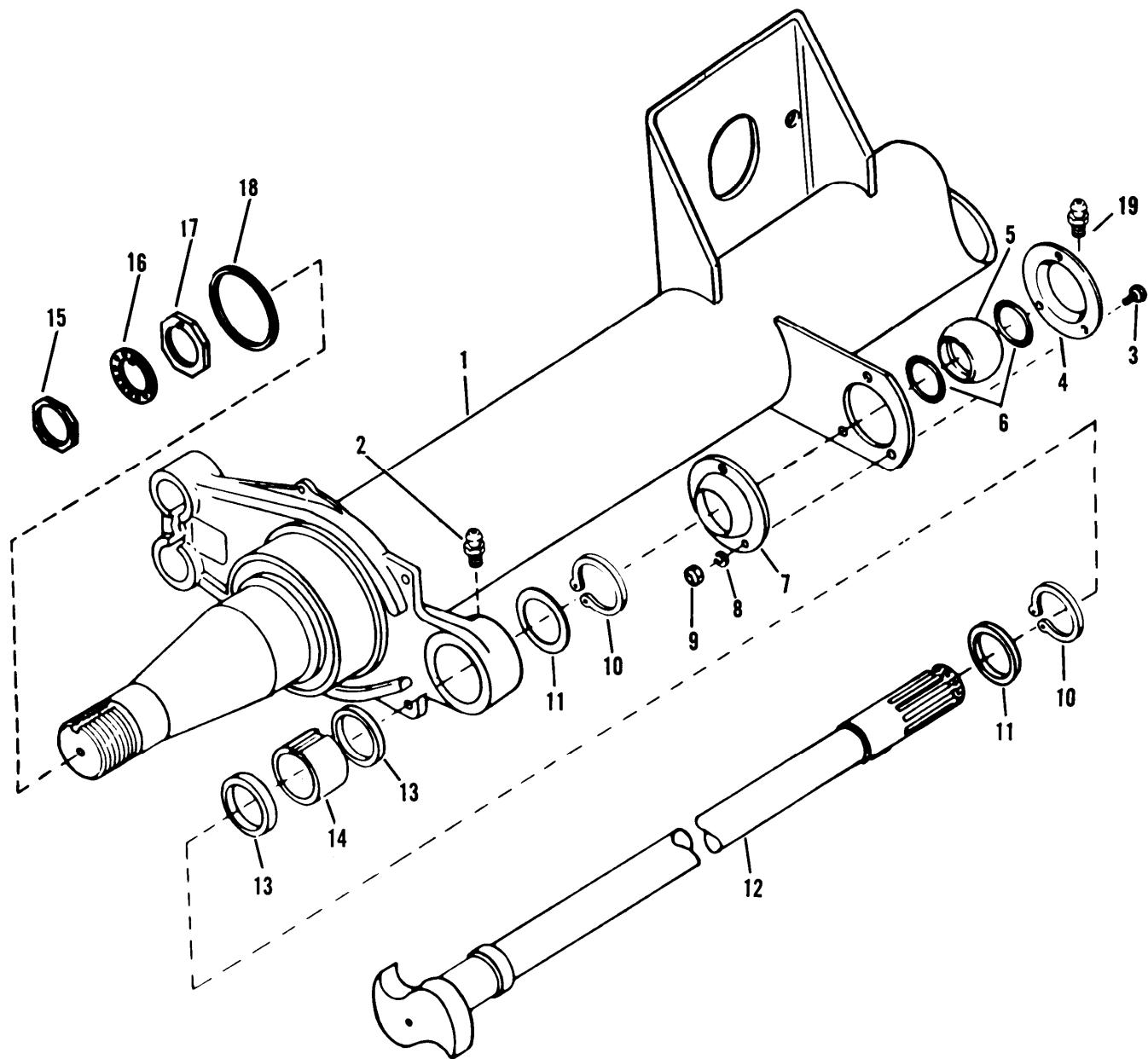


Figure 13. Rear Axle Assembly (M871A1)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
DESCRIPTION AND USABLE ON CODES(UOC)					QTY
GROUP 11 REAR AXLE					
GROUP 1100 REAR AXLE ASSEMBLY					
FIG.13 REAR AXLE ASSEMBLY (M871A1)					
1	PBFZZ	62707	K22TA112-35X	AXLE, VEHICULAR, NOND UOC:WAA	2
2	PAOZZ	24617	9411031	FITTING, LUBRICATION UOC:WAA	2
3	PAOZZ	62707	500397-9	BOLT, MACHINE UOC:WAA	6
4	PFOZZ	62707	M10WH100-2	PLATE, RETAINING, SHA UOC:WAA	2
5	PAOZZ	62707	M10WJ100	BEARING, PLAIN, SPHER UOC:WAA	2
6	PAOZZ	62707	M10HH100	PACKING, PREFORMED UOC:WAA	4
7	PFOZZ	62707	M10WH100-1	PLATE, RETAINING, SHA UOC:WAA	2
8	PAOZZ	96906	MS35338-8	WASHER, LOCK UOC:WAA	6
9	PAOZZ	62707	500370-2	NUT, PLAIN, HEXAGON UOC:WAA	6
10	PAOZZ	96906	MS16626-1150	RING, RETAINING UOC:WAA	4
11	PFOZZ	62707	M10HS117	WASHER, FLAT UOC:WAA	2
* 12	PBOZZ	62707	M16WK102-16	CAMSHAFT, ACTUATING, LH UOC:WAA	1
* 12	PBOZZ	62707	M16WK103-16	CAMSHAFT, ACTUATING, RH UOC:WAA	1
13	PAOZZ	62707	M16HH100	PACKING, PREFORMED UOC:WAA	4
14	PFOZZ	62707	M16HD100	BUSHING, SPIDER UOC:WAA	4
15	PFOZZ	62707	M10HN102	NUT, PLAIN, SLOTTED, O UOC:WAA	2
16	PFOZZ	56697	A150034	WASHER, KEY UOC:WAA	2
17	PFOZZ	62707	M10HN101	NUT, PLAIN, OCTAGON UOC:WAA	2
18	PAOZZ	96968	320-2110	SEAL, OIL UOC:WAA	2
19	PAOZZ	62707	500174-2	FITTING, LUBRICATION UOC:WAA	2

END OF FIGURE

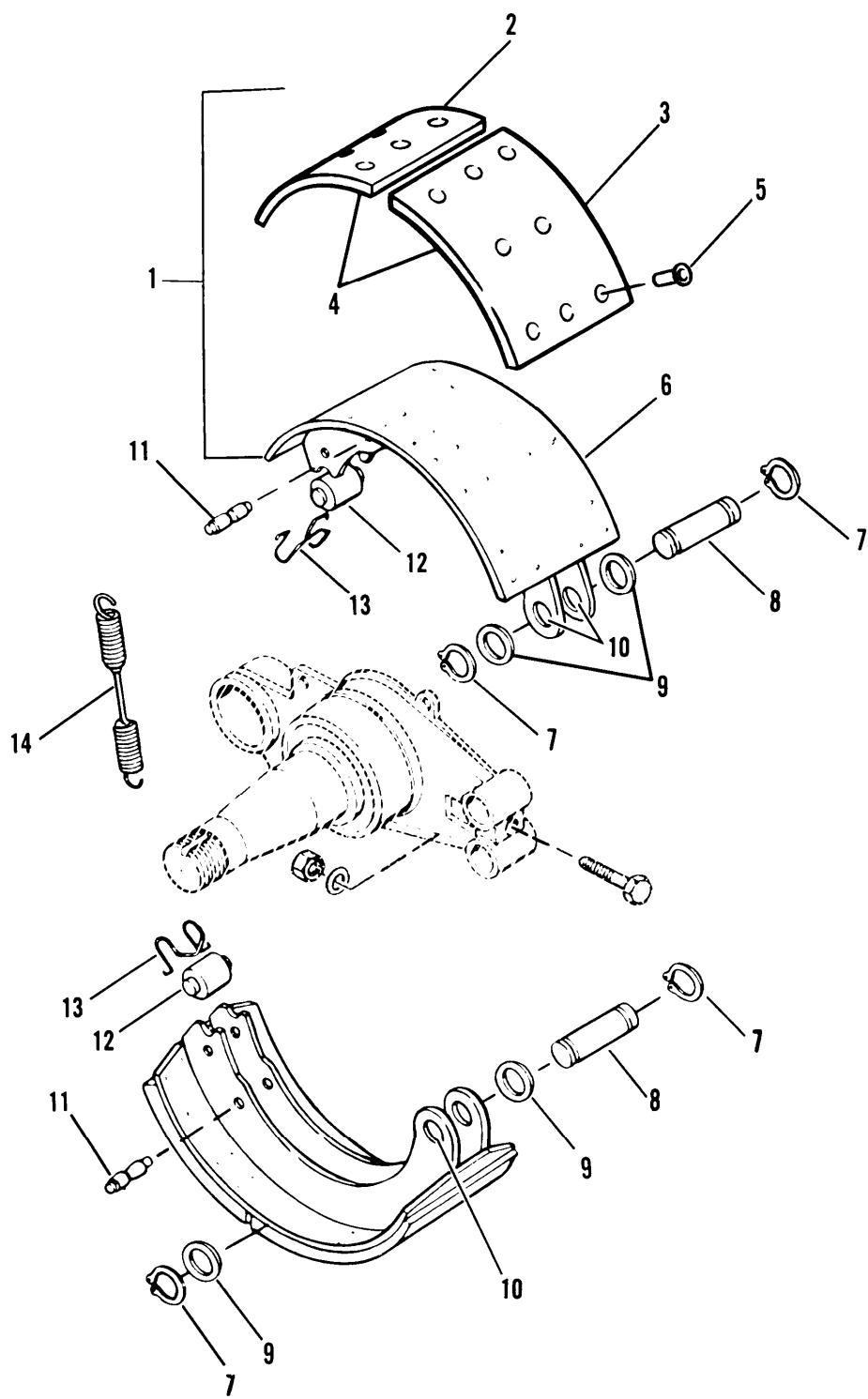


Figure 14. Brake Shoes

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
DESCRIPTION AND USABLE ON CODES(UOC)					QTY
GROUP 1202 SERVICE BRAKES					
FIG. 14 - BRAKE SHOES					
*	1	PAOFF	62707 M16WN101X	BRAKE SHOE AND LINING ASSEMBLY UOC:V79	4
*	1	PAFFF	62707 M16WN121-1X	BRAKE SHOE UOC:WAA	4
2	PAFZZ	62707 M16WL112-2	.LINING,FRICTION UOC:WAA	2	
3	PAFZZ	62707 M16WL112-1	.LINING,FRICTION UOC:WAA	2	
4	PAFZZ	89346 93931R96	.BRAKE LINING KIT UOC:V79	1	
5	PAFZZ	62707 M10HM100	.RIVET,TUBULAR UOC:WAA	48	
5	PAFZZ	62707 M10HM160	.RIVET UOC:V79	16	
6	PAFZZ	62707 M16WS104X	.BRAKE SHOE UOC:WAA	4	
6	PAOZZ	62707 M16SW132-X	.BRAKE SHOE UOC:V79	2	
7	PAOZZ	62707 31624	RING,RETAINING	8	
*	8	XDOZZ	62707 M10HP104	PIN,GROOVED,HEADLES ANCHOR UOC:V79	4
8	PAOZZ	62707 M10HP102	PIN,GROOVED,HEADLES UOC:WAA	4	
9	PAOZZ	62707 M10HN135	WASHER,FLAT ANCHOR PIN UOC:V79	8	
9	PAOZZ	62707 M10HN103	WASHER,FLAT UOC:WAA	8	
10	PFFZZ	62707 M16HD101	BUSHING,SLEEVE UOC:WAA	4	
*	11	PAOZZ	56697 207100	PIN,BRAKE SPRING RETRACT SPRING UOC:V79	4
11	PAOZZ	62707 M16WJ102	CLIP,RETAINING UOC:WAA	4	
12	PAOZZ	62707 M16WJ104	PIN,SHOULDER,HEADLE	4	
13	PAOZZ	62707 M16WJ103	SPRING,HELICAL,TORS	4	
14	PAOZZ	62707 M16WJ100	SPRING,HELICAL,EXTE SLACK ADJUSTER RETRACTER	2	

END OF FIGURE

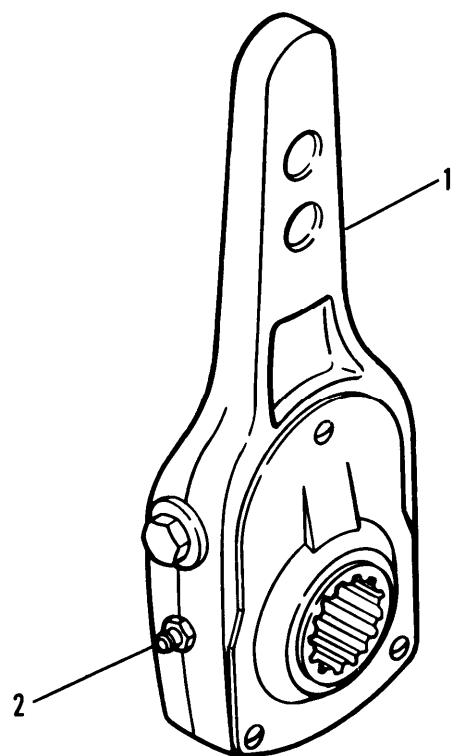


Figure 15. Slack Adjuster

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1206 MECHANICAL BRAKE SYSTEM						
FIG. 15 - SLACK ADJUSTER						
* 1	PAOZZ	08862	A-7022	ADJUSTER,SLACK,BRAK TYPE 25 UOC:V79		2
1	PFOZZ	06721	N-21163-A	ADJUSTER,SLACK,BRAK UOC:WAA		2
2	PAOZZ	06721	185004	FITTING,LUBRICATION UOC:WAA		1
END OF FIGURE						

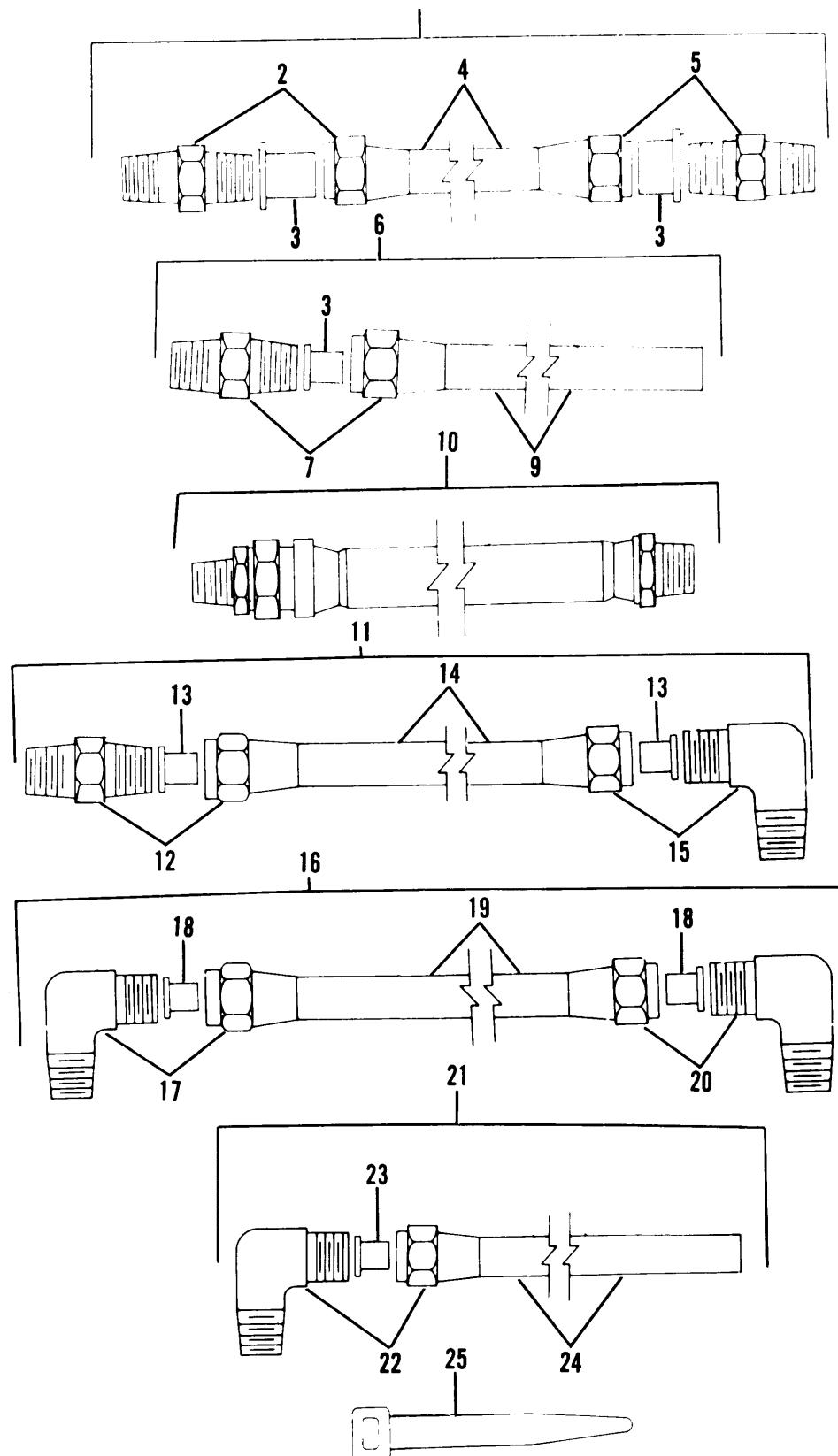


Figure 16. Brake Hose Assemblies and Tube Assembly (M871)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	TM9-2330-358-14&P C01 (5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1208 AIR BRAKE SYSTEM					
FIG. 16 - BRAKE HOSE ASSEMBLIES AND TUBE ASSEMBLY (M871)					
1	MO000	98255	SW15226A	TUBE ASSEMBLY BRAKE LINE MFR FROM P/N 1014M5, P/N CPR102321-4 AND P/N CPR104420-3 (COMPONENT PARTS SAME AS TUBE ASSEMBLY, P/N SW15226A3 EXCEPT WHERE ANNOTATED) (USED ON SERIAL NO. M871-001 THRU M871-0970) UOC:V79	1
1	MO000	98255	SW15226A1	TUBE ASSEMBLY BRAKE LINE, MFR FROM P/N 1014M, P/N CPR102321-4 AND P/N CPR104420-3 (COMPONENT PARTS SAME AS TUBE ASSEMBLY P/N SW15226A3 EXCEPT WHERE ANNOTATED) USED ON SERIAL NO. M871-0001 THRU M871-0125 UOC:V79	1
1	MO000	98255	SW15226A3	TUBE ASSEMBLY BRAKE, MFR FROM P/N 1014M, P/N CPR102321-4, AND P/N CPR104420-3 (USED ON SERIAL NO. M871- 0001 THRU M871-0125 ONLY) UOC:V79	1
1	MO000	98255	SW15226A2	TUBE ASSEMBLY BRAKE LINE, MFR FROM P/N MS39179-9, P/N MS39179-10, P/N CPR102321-4, AND P/N CPR104420- 3 (COMPONENT PARTS SAME AS TUBE ASSEMBLY P/N SW15226A3, EXCEPT WHERE ANNOTATED) (USED ON SERIAL NO. M871- 0001 THRU M871-0125 ONLY) UOC:V79	1
2	PAOZZ	56442	1014M5	.ADAPTER, STRAIGHT, PI BRAKE LINE UOC:V79	2
3	PAOZZ	19207	CPR102321-4	.INSERT, TUBE FITTING BRAKE LINE UOC:V79	2
* 4	PAOZZ	30327	C608	.HOSE, NONMETALLIC BRAKE 25.00 IN. LG. (USED ON TUBE ASSY, P/N SW15226A1 ONLY) UOC:V79	1
* 4	PAOZZ	30327	C608	.HOSE, NONMETALLIC BRAKE, 110.00 IN. LG. (USED ON TUBE ASSY, P/N SW15226A3 AND TUBEASSY, P/N SW15226A ONLY) UOC:V79	1
* 4	PAOZZ	30327	C608	.HOSE, NONMETALLIC BRAKE 80.00 IN. LG. (USED ON TUBE ASSY, P/N SW15226A2 ONLY) UOC:V79	1
* 5	PAOZZ	81343	8-6 120102BA	.ADAPTER, STRAIGHT, PI BRAKE LINE (USED ON TUBE ASSY, P/N SW15226A2	1

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	C01 (5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				AND TUBE ASSY,P/NSW15226A ONLY) UOC:V79	
* 5	PAOZZ	81343	8-8 120102BA	.ADAPTER,STRAIGHT,PI BRAKE LINE (USED ON TUBE ASSY,P/N SW15226A2 ONLY) UOC:V79	1
6	MOOOO	98255	SW15230A	TUBE ASSEMBLY BRAKE,MFR FROM P/N 1014M5 ,P/N CPR102321,AND P/N CPR104420(COMPONENT PARTS SAME AS TUBE ASSEMBLY, P/N SW15230A2 EXCEPT WHERE ANNOTATED) (USED ON SERIAL NO.M871- 0126 THRU M871-0970 ONLY) UOC:V79	1
6	MOOOO	98255	SW15230A1	TUBE ASSEMBLY BRAKE,MFR FROM P/N 1014M5 ,P/N CPR102321-4,AND P/N CPR104420-3 (COMPONENT PARTS SAME AS TUBE ASSEMBLY,P/N SW15230A2, EXCEPTWHERE ANNOTATED) (USED ON SERIAL NO.M871-0001 THRU M871-0125 ONLY) UOC:V79	1
6	MOOOO	98255	SW15230A1	TUBE ASSEMBLY BRAKE,MFR FROM P/N MS39179-9,P/N CPR102321-4,AND P/N CPR104420(USED ON SERIAL NO.M871- 0001 THRU M871-0125 ONLY) UOC:V79	1
7	PAOZZ	56442	1014M5	.ADAPTER,STRAIGHT,PI BRAKE LINE (USED ON TUBE ASSY,P/N SW15230A1 ONLY) UOC:V79	1
7	PAOZZ	81343	8-6 120102BA	.ADAPTER,STRAIGHT,PI BRAKE LINE (USED ON TUBE ASSY,P/N SW15230A2 ONLY) UOC:V79	1
8	PAOZZ	19207	CPR102321-4	.INSERT,TUBE FITTING BRAKE LINE UOC:V79	1
* 9	PAOZZ	30327	C608	.HOSE,NONMETALLIC BRAKE,370.00 IN.LG.(USED ON TUBE ASSY,P/N SW15230A2 ONLY) UOC:V79	1
10	PAOZZ	06721	16630	HOSE ASSEMBLY,NONME BRAKE LINE UOC:V79	6
10	PAOZZ	98255	SW15227P-4	HOSE ASSEMBLY,NONME BRAKE SYSTEM UOC:V79	2
11	MOOOO	98255	SW16056A	HOSE ASSEMBLY BRAKE LINE MFR FROM P/N MS39179-9,P/N MS39182-4,P/N CPR102321 ,P/N CPR104420(USED ON SERIAL NO.M871-0126 THRU M871-0970 UOC:V79	1
* 12	PAOZZ	81343	8-6 120102BA	.ADAPTER,STRAIGHT,PI UOC:V79	1
13	PAOZZ	19207	CPR102321-4	.INSERT,TUBE FITTING	2

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
				DESCRIPTION AND USABLE ON CODES(UOC)	QTY
* 14	PAOZZ	30327	C608	UOC:V79 .HOSE, NONMETALLIC	1
* 15	PAOZZ	81343	8-4 120202BA	UOC:V79 .ELBOW, PIPE TO TUBE	1
16	MOOOO	98255	SW16057A	UOC:V79 HOSE ASSEMBLY BRAKE,MFR FROM P/N MS39182-16, P/N CPR102321-4, PN 169X8X8, AND CPR104420 (USED ON SERIAL NO.M871-0126. THRU M871-0970) UOC:V79	1
* 17	PAOZZ	81343	8-6 120202BA	.ELBOW, PIPE TO TUBE UOC:V79	1
18	PAOZZ	19207	CPR102321-4	.INSERT, TUBE FITTING UOC:V79	2
* 19	PAOZZ	30327	C608	.HOSE, NONMETALLIC UOC:V79	1
20	PAOZZ	79470	169X8X8	.ELBOW, PIPE TO TUBE UOC:V79	1
21	MOOOO	98255	SW16058A	HOSE ASSEMBLY BRAKE,MFR FROM P/N MS39182-6, P/N CPR102321-4, AND CPR104420 (USED ON SERIAL NO.M871- 0126 THRU M871-0970) UOC:V79	1
* 22	PAOZZ	81343	8-6 120102BA	.ADAPTER, STRAIGHT, PI UOC:V79	1
23	PAOZZ	19207	CPR102321-4	.INSERT, TUBE FITTING UOC:V79	1
* 24	PAOZZ	30327	C608	.HOSE, NONMETALLIC UOC:V79	1
25	PAOZZ	96906	MS3367-1-9	STRAP, TIEDOWN, ELECT UOC:V79	8

END OF FIGURE

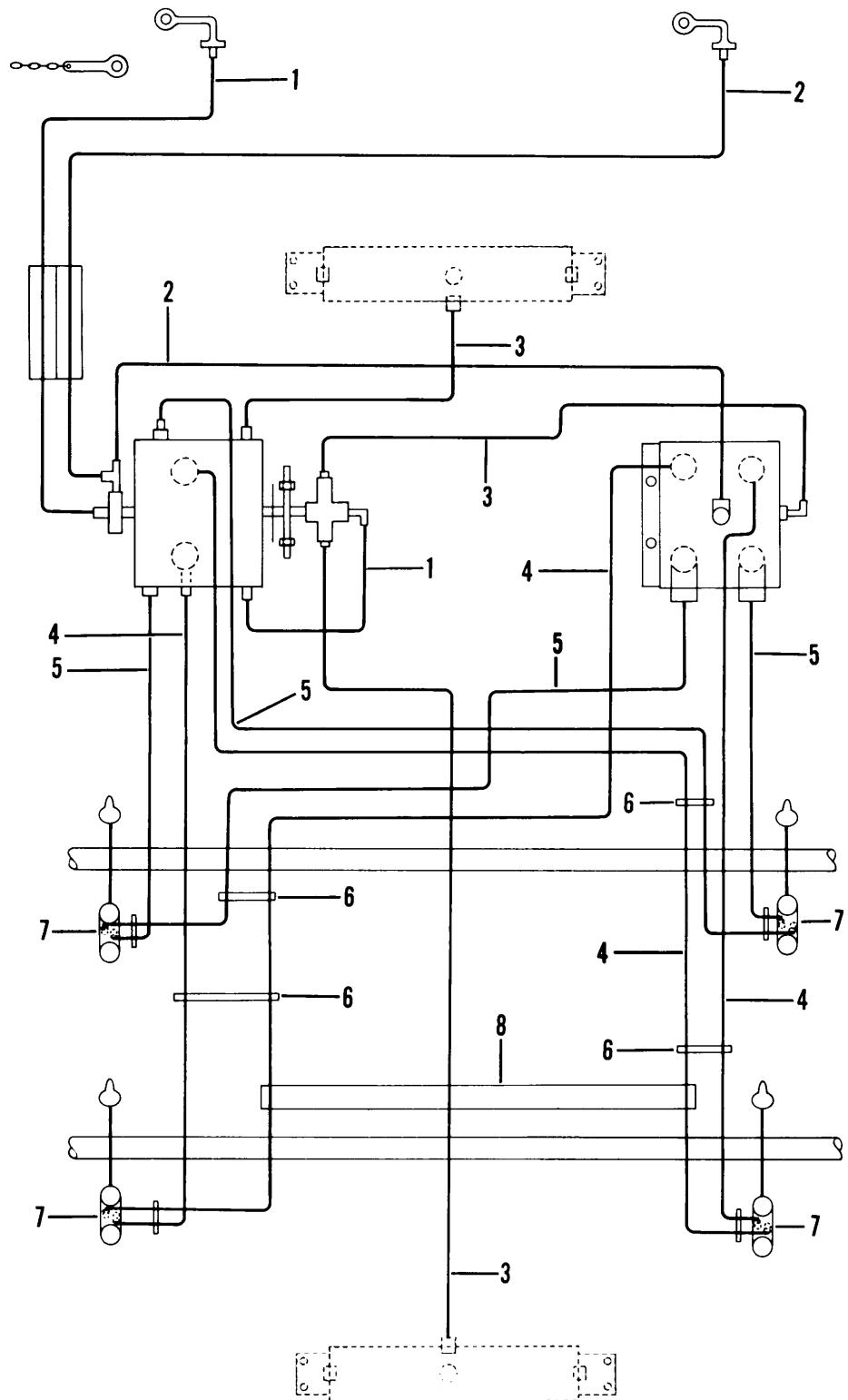
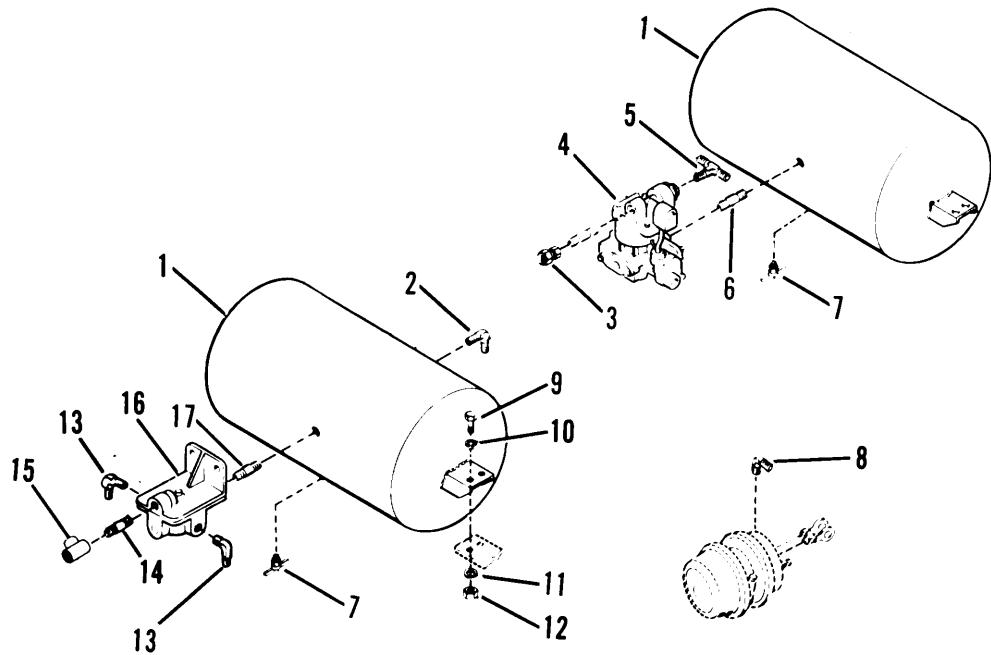


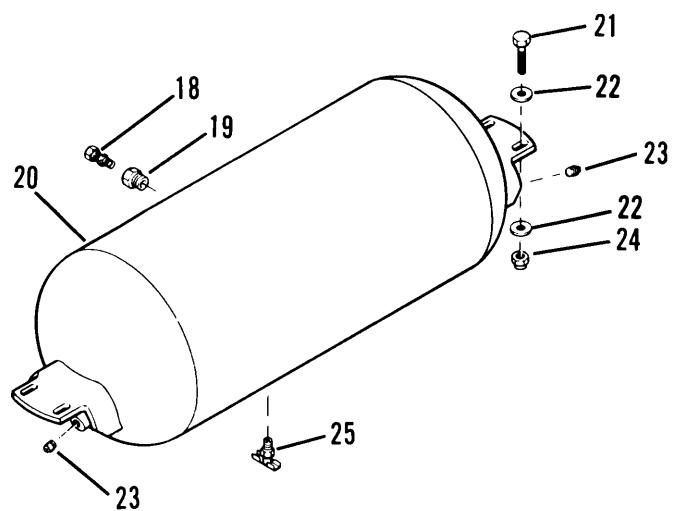
Figure 17. Brake Hose Assemblies (M871A1)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1208 AIR BRAKE SYSTEM						
FIG. 17 - BRAKE HOSE ASSEMBLIES (M871A1)						
1	MOOZZ	85757	3250-06-12	TUBING, 3/8 RED MAKE FROM P/N 3250-06-124-6 FSCM 85757 UOC:WAA		295
2	MOOZZ	85757	3250-06-16	TUBING, 3/8 BLUE MAKE FROM P/N 3250-06-164-6 FSCM 85757 UOC:WAA		295
3	MOOZZ	85757	3250-08-12	TUBING, 1/2 RED MAKE FROM P/N 3250-08-124-2 FSCM 85757 UOC:WAA		20
4	PAOZZ	79470	503-38105-09000	HOSE ASSEMBLY, NONME UOC:WAA		4
5	PAOZZ	79470	503-38105-04200	HOSE ASSEMBLY, NONME UOC:WAA		4
* 6	PAOZZ	06721	100469	SEPARATOR, HOSE UOC:WAA		4
7	PAOZZ	79470	3350X6	ELBOW, PIPE UOC:WAA		8
* 8	PFOZZ	06721	1521	CLAMP, LOOP UOC:WAA		4

END OF FIGURE



M871 Semitrailer



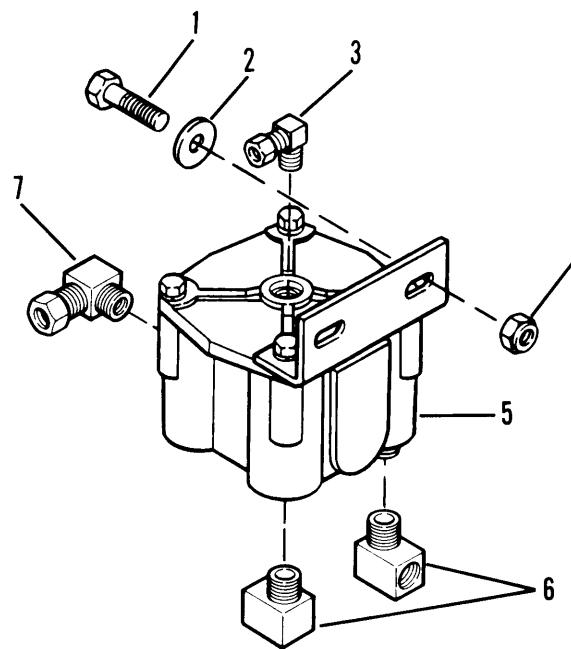
M871A1 Semitrailer

Figure 18. Air Reservoir and Valves

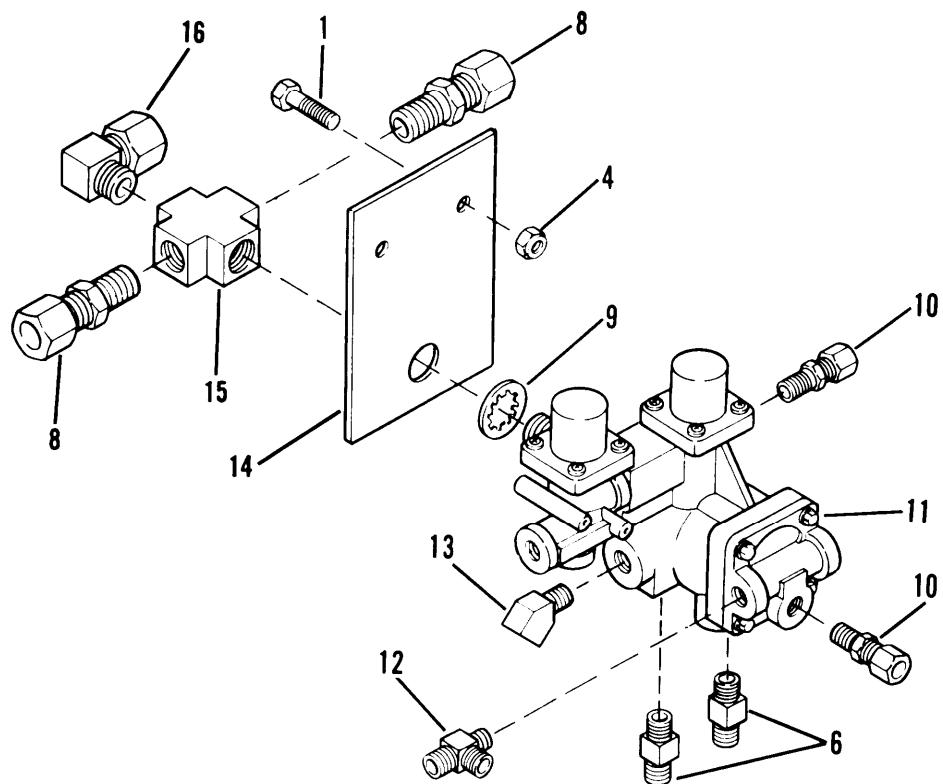
SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
				DESCRIPTION AND USABLE ON CODES(UOC)	QTY
GROUP 1208 AIR BRAKE SYSTEM					
FIG. 18 - AIR RESERVOIR AND VALVES					
1	PAOZZ	98255	9506	TANK, PRESSURE BRAKES UOC:V79	2
2	PAOZZ	96906	MS51952-2	ELBOW, PIPE BRAKE SYSTEM (USED ON SERIAL NO.M871-0001 THRU M871-0125 ONLY) UOC:V79	1
2	PAOZZ	79470	3400X12	ELBOW, PIPE BRAKE LINE (USED ON SERIAL NO.M871-0001 THRU M871-0125 ONLY) UOC:V79	1
3	PAOZZ	19422	BM11352-77	BUSHING, PIPE BRAKE SYSTEM (USED ON SERIAL NO.M871-0001 THRU M871-0125 ONLY) UOC:V79	1
4	PAOZZ	06721	AF104001	VALVE, LINEAR, DIRECT UOC:V79	1
4	PAOZZ	16662	A88802	VALVE RELAY, MULTI F RELAY, MULTI- FUNCTION (WHEN REPLACING THIS VALVE ASSY, USE KIT, P/N SW16026A) UOC:V79	1
* 5	PAOZZ	81343	8-8-6 120425BA	TEE, PIPE TO TUBE UOC:V79	1
6	PAOZZ	96906	MS51953-78	NIPPLE, PIPE UOC:V79	1
7	PAOZZ	79470	190	COCK, DRAIN RESERVOIR UOC:V79	2
8	PAOZZ	79470	3350X6	ELBOW, PIPE BRAKE LINES UOC:V79	4
9	PAOZZ	96906	MS90728-62	SCREW, CAP, HEXAGON H AIR RESERVOIR MTG UOC:V79	8
10	PAOZZ	96906	MS27183-14	WASHER, FLAT AIR RESERVOIR MTG UOC:V79	8
11	PAOZZ	96906	MS35338-46	WASHER, LOCK AIR RESERVOIR MTG UOC:V79	8
12	PAOZZ	96906	MS51967-8	NUT, PLAIN, HEXAGON AIR RESERVOIR MTG UOC:V79	8
13	PAOZZ	79470	3400X6	ELBOW, PIPE BRAKE LINE UOC:V79	4
14	PAOZZ	96906	MS51873-25	NIPPLE, PIPE BRAKE LINE UOC:V79	1
15	PAOZZ	30379	105417	TEE, PIPE BRAKE LINE UOC:V79	1
16	PAOZZ	16662	A78889	VALVE, AIR BRAKE RELAY, BRAKE UOC:V79	2
17	PAOZZ	72582	121208	NIPPLE, PIPE BRAKE (USE ON SERIAL NO.M871-0001 THRU M871-0125 ONLY)	2

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) C01 DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
18	PAOZZ	79470	1468X8	UOC:V79 ADAPTER, STRAIGHT, PI UOC:WAA	2
19	PAOZZ	79470	3220X12X6	BUSHING, PIPE UOC:WAA	2
* 20	PBOZZ	62173	9500	TANK, PRESSURE UOC:WAA	2
21	PAOZZ	96906	MS90728-64	SCREW, CAP, HEXAGON H UOC:WAA	8
22	PAOZZ	96906	MS27183-13	WASHER, FLAT UOC:WAA	16
23	PAOZZ	96906	MS20913-3S	PLUG, PIPE UOC:WAA	4
24	PAOZZ	96906	MS51922-17	NUT, SELF-LOCKING, HE UOC:WAA	8
25	PAOZZ	96906	MS35782-5	COCK, DRAIN UOC:WAA	2

END OF FIGURE



Emergency Relay Valve



Multi-function Valve

Figure 19. Emergency Relay and Multi-function Valves (M871A1)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) C01 DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1208 AIR BRAKE SYSTEM					
FIG. 19 - EMERGENCY RELAY AND MULTI-FUNCTION VALVES (M871A1)					
1	PAOZZ	81337	5-4-1304-98	SCREW,CAP,HEXAGON H UOC:WAA	4
2	PAOZZ	96906	MS27183-11	WASHER,FLAT UOC:WAA	2
*	3	PAOZZ	81793	205102 ELBOW,PIPE TO TUBE UOC:WAA	1
4	PAOZZ	96906	MS51922-9	NUT,SELF-LOCKING,HE UOC:WAA	4
5	PAOZZ	06853	102276	VALVE,RELAY,AIR PRE UOC:WAA	1
6	PAOZZ	79470	3400X6	ELBOW,PIPE UOC:WAA	4
7	PAOZZ	79470	1469X8X8	ELBOW,PIPE TO TUBE UOC:WAA	1
8	PAOZZ	79470	1468X8X8	ADAPTER,STRAIGHT,PI UOC:WAA	2
9	PAOZZ	96906	MS35333-49	WASHER,LOCK UOC:WAA	1
10	PAOZZ	79470	1468X6	ADAPTER,STRAIGHT,PI UOC:WAA	2
11	PAOZZ	06848	101622	VALVE,RELAY,AIR PRE UOC:WAA	1
12	PAOZZ	79470	1471X6	TEE,PIPE TO TUBE UOC:WAA	1
13	PAOZZ	79470	1468X8X4	ADAPTER,STRAIGHT,PI UOC:WAA	1
14	PFOZZ	06848	294649	BRACKET,ANGLE UOC:WAA	1
15	PFOZZ	79470	3950X8	CROSS,PIPE UOC:WAA	1
16	PAOZZ	79470	1469X6X8	ELBOW,PIPE TO TUBE UOC:WAA	1

END OF FIGURE

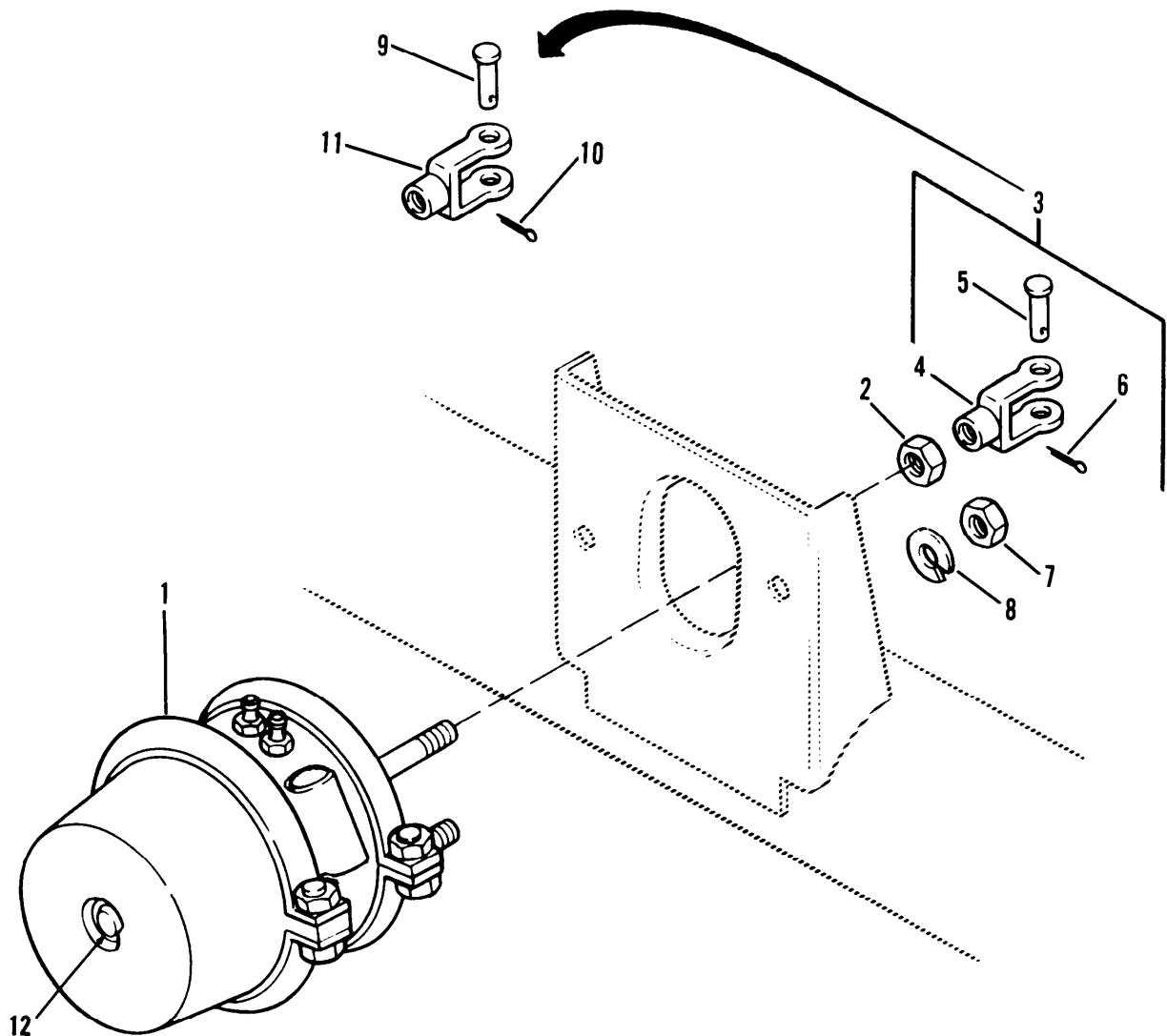


Figure 20. Spring Brake Chambers

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1208 AIR BRAKE SYSTEM						
FIG. 20 - SPRING BRAKE CHAMBERS						
1	PAOZZ	50153	162429	CHAMBER,AIR BRAKE AIR UOC:V79		4
* 1	PAOZZ	06721	N04730N	CHAMBER,AIR BRAKE UOC:WAA		4
2	PAOZZ	96906	MS35691-53	NUT,PLAIN,HEXAGON		4
3	PAOZZ	50153	11M018-1	CLEVIS ASSEMBLY BRAKE CHAMBER UOC:V79		1
4	XAOZZ	50153	11M059	.CLEVIS,ROD END BRAKE CHAMBER UOC:V79		1
5	PAOZZ	50153	11M061	.PIN,STRAIGHT,HEADED CLEVIS ASSEMBLY UOC:V79		1
6	PAOZZ	96906	MS24665-353	.PIN,COTTER CLEVIS ASSEMBLY UOC:V79		1
7	PAOZZ	96906	MS51967-20	NUT,PLAIN,HEXAGON BRAKE CHAMBER MTG UOC:V79		8
7	PAOZZ	96906	MS35691-49	NUT,PLAIN,HEXAGON		8
8	PAOZZ	96906	MS35338-50	WASHER,LOCK UOC:WAA		8
* 9	PAOZZ	06721	19100	PIN,STRAIGHT,HEADLE UOC:WAA		4
10	PAOZZ	06721	6-X-102	PIN,COTTER UOC:WAA		4
11	PAOZZ	06721	194054	CLEVIS,ROD END UOC:WAA		4
12	PAOZZ	50153	11M012	PLUG,CHAMBER TOP BRAKE CHAMBER UOC:V79		1
* 12	PAOZZ	98343	N-14398A	PLUG,DUST BRAKE CHA UOC:WAA		1

END OF FIGURE

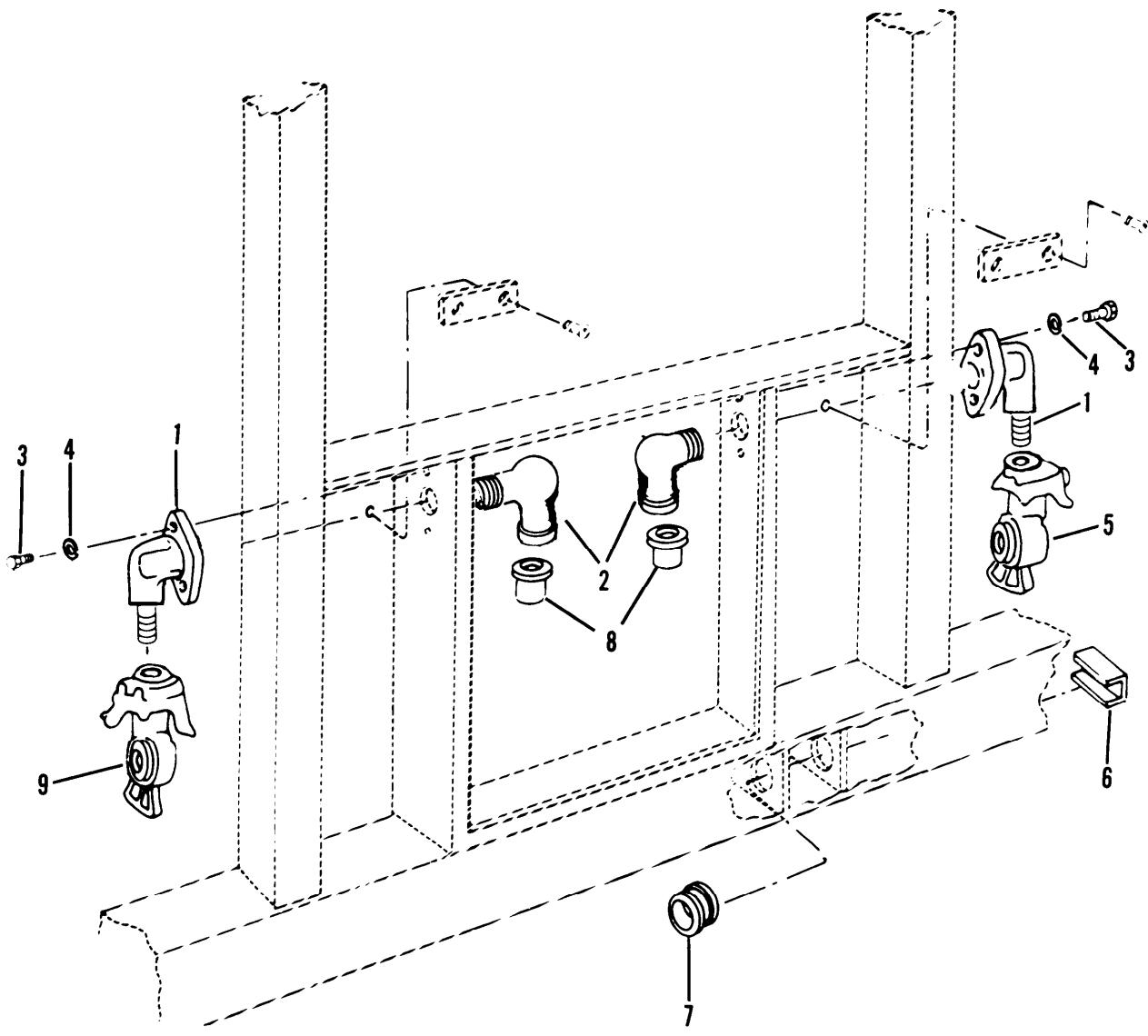


Figure 21. Air Couplings (Gladhands) (M871)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC) GROUP 1208 AIR BRAKE SYSTEM FIG. 21 - AIR COUPLINGS (GLADHANDS) (M871)	(6) QTY
1	PAOZZ	98343	51410107	ELBOW,PIPE BRAKE HOSE GLADHAND UOC:V79		2
* 2	PAOZZ	81343	8-6 120202BA	ELBOW,PIPE TO TUBE BRAKE HOSE UOC:V79		2
3	PAOZZ	96906	MS35206-309	SCREW,MACHINE GLADHAND ELBOW MTG UOC:V79		4
4	PAOZZ	96906	MS35338-46	WASHER,LOCK GLADHAND ELBOW MTG UOC:V79		4
5	PAOZZ	98343	10451E	COUPLING HALF,QUICK AIR BRAKES UOC:V79		1
6	PAOZZ	98255	SW15460P-1	NONMETALLIC CHANNEL UOC:V79		2
7	PAOZZ	96906	MS35489-107	GROMMET,NONMETALLIC UOC:V79		4
8	PAOZZ	19207	CPR102321-4	INSERT,TUBE FITTING GLADHAND HOSES UOC:V79		2
* 9	PAOZZ	96906	MS35746-1	COUPLING HALF,QUICK AIR BRAKE SYSTEM UOC:V79		1

END OF FIGURE

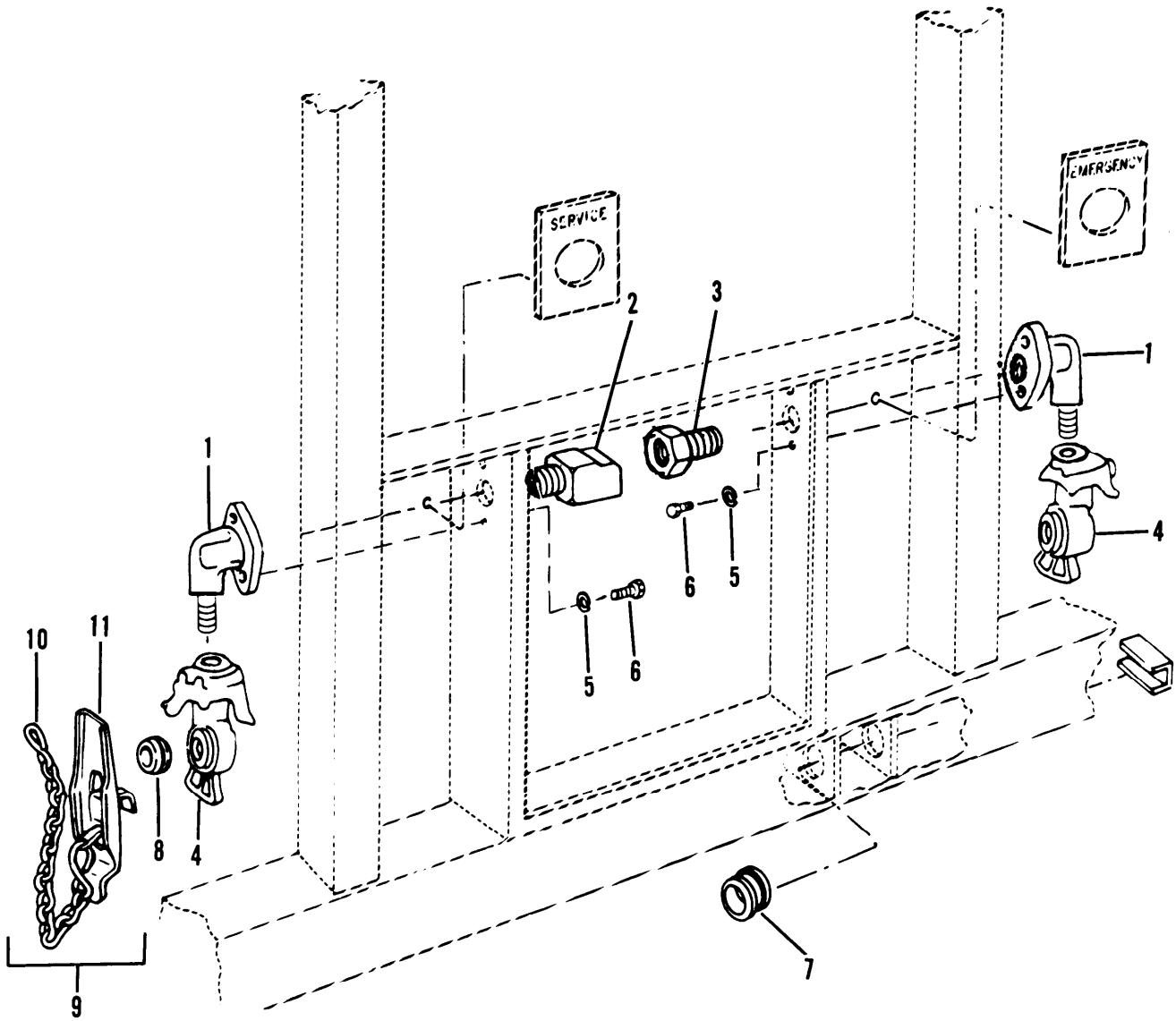


Figure 22. Air Couplings (Gladhands) (M871A1)

SECTION II (1) ITEM NO.	(2) SMR CODE	(3) FSCM	TM9-2330-358-14&P (4) PART NUMBER	(5)	(6) QTY
DESCRIPTION AND USABLE ON CODE (UOC)					
GROUP 1208 AIR BRAKE SYSTEM					
FIG. 22 - AIR COUPLINGS (GLADHANDS) (M871A1)					
1	PFOZZ	98343	51410107	ELBOW,PIPE UOC:WAA	2
2	PAOZZ	79470	1469X6X6	ELBOW,PIPE TO TUBE UOC:WAA	1
3	PAOZZ	79470	1468X6X6	ADAPTER,STRAIGHT,PI UOC:WAA	1
4	PFOZZ	96906	MS35746-1	COUPLING HALF,QUICK UOC:WAA	2
5	PAOZZ	96906	MS35333-42	WASHER,LOCK UOC:WAA	4
6	PAOZZ	96906	MS18154-60	SCREW,CAP,HEXAGON H UOC:WAA	4
7	PAOZZ	96906	MS35489-107	GROMMET,NONMETALLIC UOC:WAA	20
8	PAOZZ	98343	1509	PACKING,PREFORMED UOC:WAA	2
9	PAOZZ	06721	N-13048	DUMMY COUPLING,AUTO UOC:WAA	2
10	PFOZZ	06721	N-13047	.CHAIN,WELDLESS UOC:WAA	1
11	PFOZZ	06721	N-20071	.HOOK UOC:WAA	1

END OF FIGURE

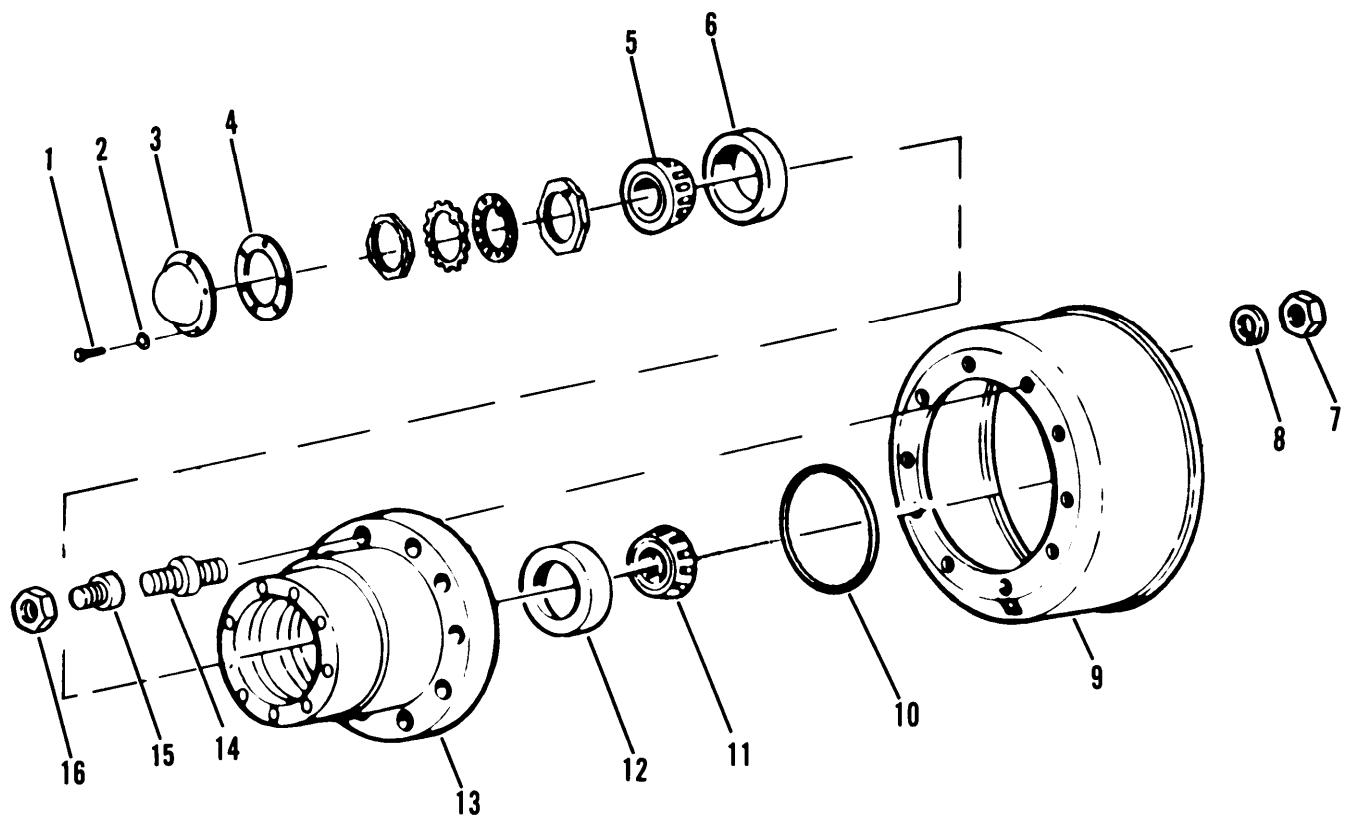
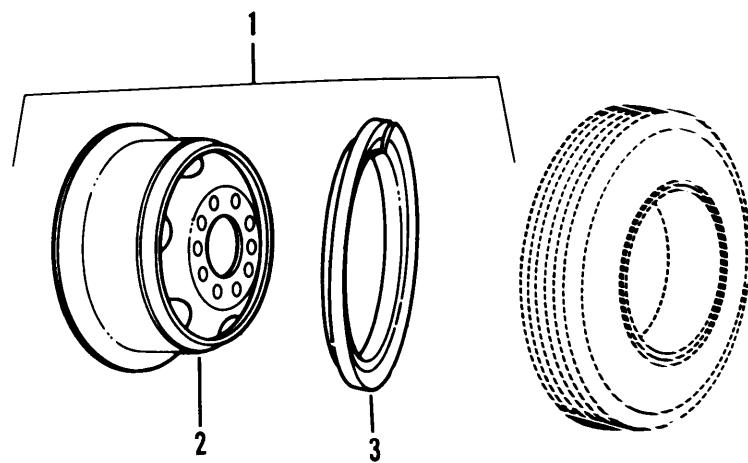


Figure 23. Hub and Drum

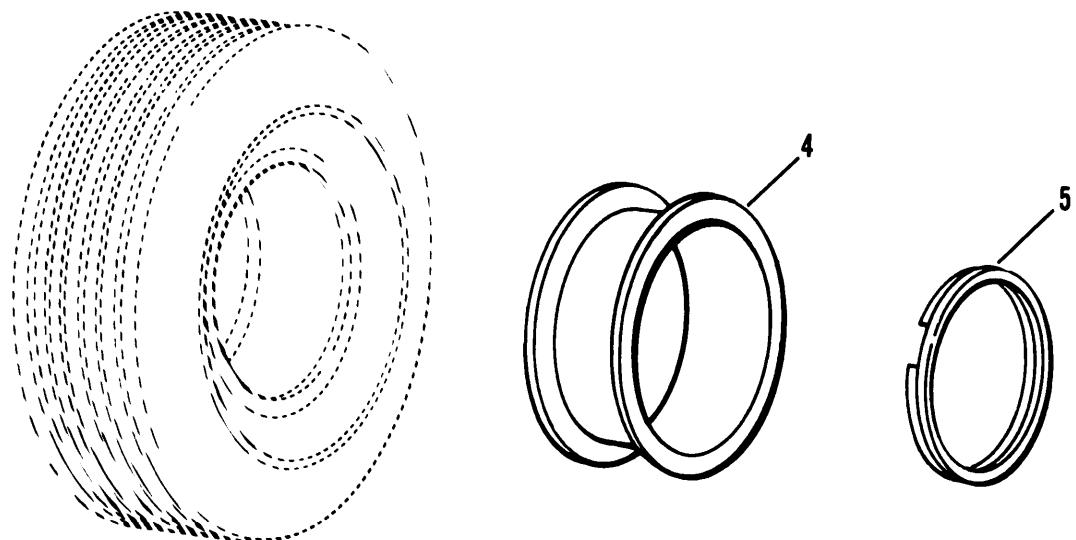
SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	TM9-2330-358-14&P C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 13 WHEELS AND TRACKS						
GROUP 11311 WHEEL ASSEMBLY						
FIG. 23 - HUB AND DRUM						
1	PAOZZ	96906	MS90728-30	BOLT,MACHINE HUB CAP MTG UOC:V79		12
1	PAOZZ	96906	MS90728-3	SCREW,CAP,HEXAGON H UOC:WAA		6
2	PAOZZ	62707	500356-10	WASHER,LOCK HUB CAP MTG UOC:V79		12
2	PAOZZ	96906	MS35338-45	WASHER,LOCK UOC:WAA		6
3	PAOZZ	62707	M10HK131	COVER,ACCESS AXLE ASSEMBLY UOC:V79		2
3	PAOZZ	26151	343-4009	COVER,ACCESS UOC:WAA		1
4	PAOZZ	62707	M10HG108	GASKET UOC:WAA		1
4	PAOZZ	62707	M10HG115	GASKET UOC:V79		1
5	PAOZZ	60038	643	CONE AND ROLLERS,TA AXLE ASSEMBLY UOC:V79		2
5	PAOZZ	56697	HM212049	CONE AND ROLLERS,TA UOC:WAA		2
6	PAOZZ	60038	632	CUP,TAPERED ROLLER AXLE ASSEMBLY UOC:V79		2
6	PAOZZ	60038	HM212011	CUP,TAPERED ROLLER UOC:WAA		2
7	PAOZZ	96906	MS51922-61	NUT,SELF-LOCKING,HE UOC:WAA		10
7	PAOZZ	62707	500371-8	ANCHOR PIN HUT UOC:V79		20
8	PAOZZ	18889	257	WASHER,FLAT UOC:WAA		10
9	PAOZZ	62707	M16WA100	BRAKE DRUM UOC:V79		4
* 9	PAOZZ	18889	62200	BRAKE DRUM UOC:WAA		1
10	PAOZZ	78257	315-1504	SEAL UOC:WAA		2
11	PAOZZ	60038	749	CONE AND ROLLERS,TA AXLE ASSEMBLY UOC:V79		2
11	PAOZZ	60038	HM218248	CONE AND ROLLERS,TA UOC:WAA		2
* 12	PAOZZ	78500	742	CUP,TAPERED ROLLER AXLE ASSEMBLY UOC:V79		2
12	PAOZZ	60038	HM218210	CUP,TAPERED ROLLER UOC:WAA		2
* 13	XBOZZ	62707	K25HU105	HUB,WHEEL AXLE ASSEMBLY		2

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
				DESCRIPTION AND USABLE ON CODES(UOC)	QTY
13	PFOZZ	18889	1001	UOC:V79 HUB,WHEEL,VEHICULAR	1
14	PAOZZ	18889	139902	UOC:WAA STUD,SHOULDERED RH	10
14	PAOZZ	18889	139913	UOC:WAA STUD,SHOULDERED LH	10
14	PAOZZ	09386	13096	UOC:V79 STUD,SHOULDERED RH	10
14	PAOZZ	09386	13097	UOC:V79 STUD,SHOULDERED LH	10
* 15	PAOZZ	09386	10708	NUT,WHEEL INNER,RH UOC:V79	10
* 15	PAOZZ	09386	10709	NUT,CAP INNER,LH UOC:V79	10
15	PAOZZ	18889	107080	BOLT,LAG RH UOC:WAA	10
15	PAOZZ	18889	107091	BOLT,LAG LH UOC:WAA	10
* 16	PAOZZ	96906	MS51983-4	NUT,PLAIN,SINGLE BA RH UOC:V79	10
16	PAOZZ	96906	MS51983-3	NUT,PLAIN,SINGLE BA LH UOC:V79	10
16	PAOZZ	18889	178910	NUT,PLAIN,CAP RH UOC:WAA	10
16	PAOZZ	18889	178921	BOLT,LAG LH UOC:WAA	10

END OF FIGURE



M871 Semitrailer



M871A1 Semitrailer

Figure 24. Tire and Rim Assemblies

SECTION II (1) ITEM NO.	(2) SMR CODE	(3) FSCM	TM9-2330-358-14&P (4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 1311 WHEEL ASSEMBLY					
FIG. 24 - TIRE AND RIM ASSEMBLIES					
1	PAOZZ	19207	7388820	WHEEL, PNEUMATIC TIR DISC TYPE UOC:V79	9
2	PBOZZ	19207	7389493	.BRAKE DRUM VEHICLE WHEEL UOC:V79	9
3	PBOZZ	19207	7389061	.RING,SIDE,AUTOMOTIV WHEEL ASSEMBLY UOC:V79	9
4	PBOZZ	22337	RA26039-13	WHEEL,PNEUMATIC TIR UOC:WAA	18
5	PBOZZ	19207	7389061	RING,SIDE,AUTOMOTIV UOC:WAA	18

END OF FIGURE

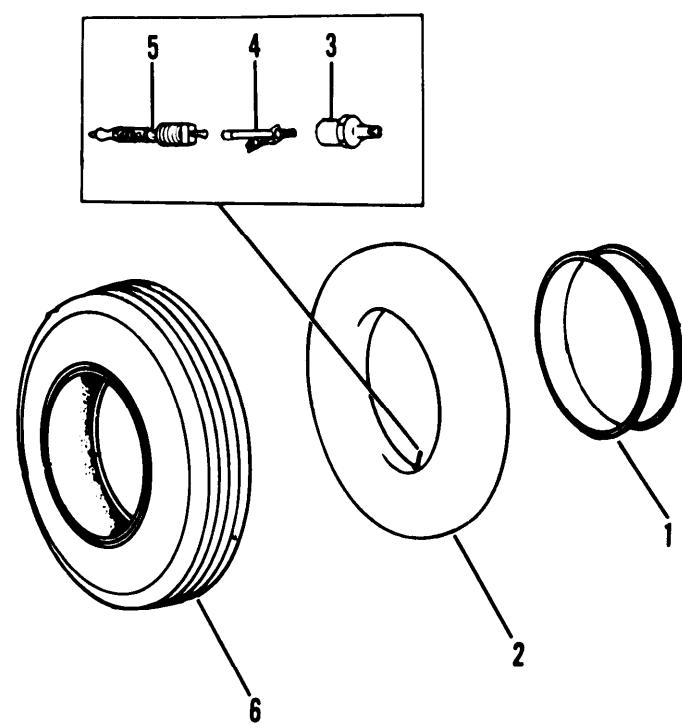


Figure 25. Tire Set

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
DESCRIPTION AND USABLE ON CODES(UOC)					QTY
GROUP 1313 TIRES,TUBES, TIRE CHAINES					
				FIG. 25 - TIRE SET	
* 1	PCOZZ	73808	20R	FLAP,INNER TUBE,PNE SIZE 20-8 UOC:V79	9
1	PCOZZ	73808	20R	FLAP,INNER TUBE,PNE UOC:WAA	9
* 2	PCOZZ	81348	11.00-20/TR78A/O N CENTER	INNER TUBE,PNEUMATI TIRE UOC:V79	9
2	PAOZZ	81348	11.00R20/GP2/TR7 8A/ON CENTER	INNER TUBE,PNEUMATI UOC:WAA	9
* 3	PAOZZ	81348	TYIV/CL1/TRVC8	CAP,PNEUMATIC VALVE INNER TUBE UOC:V79	9
3	PAOZZ	81348	ZZ-V-25/TYPEIV/C LASS1/TR-VC-2	CAP,PNEUMATIC VALVE UOC:WAA	9
* 4	PAOZZ	27783	7383	VALVE EXTENSION,TIR WHEEL VALVE CORE UOC:V79	9
5	PAOZZ	17875	100HA	VALVE CORE INNER TUBE UOC:V79	9
5	PAOZZ	27783	5405V	VALVE CORE UOC:WAA	2
* 6	PAOFH	81348	GP3STYLXTYBBCLR/ T/11.00-20/F/TBH	TIRE,PNEUMATIC 12 PLY RATED	1

END OF FIGURE

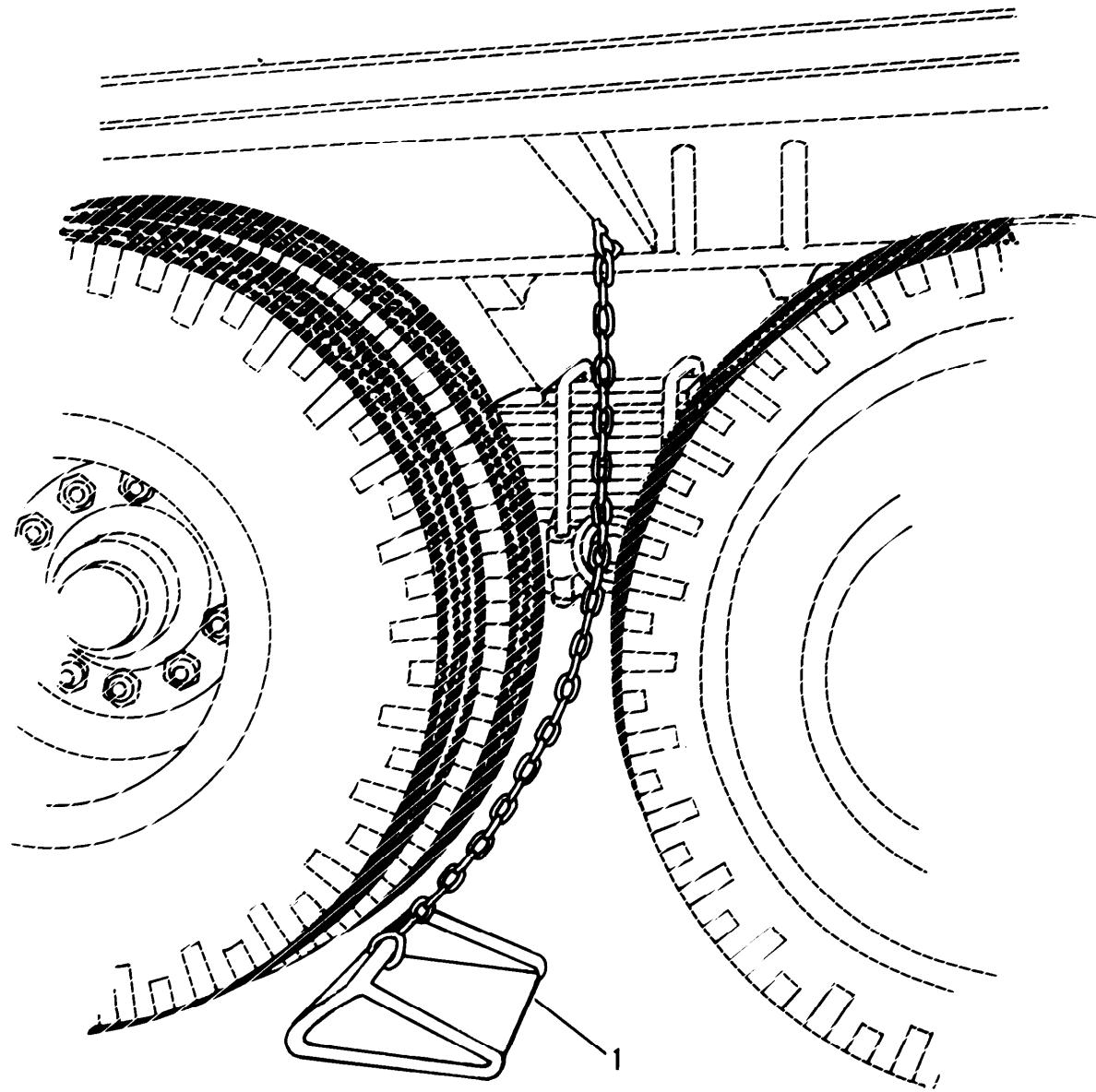


Figure 26. Chock Block

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC) GROUP 15 FRAME, TOWING ATTACHMENTS, AND DRAWBARS SYSTEMS GROUP 1501 FRAME ASSEMBLY	(6) QTY
* 1 1	PAOZZ	96906 98255	MS52127-3 SW11979A		CHOCK,WHEEL TRACK CHOCK,WHEEL TRACK UOC:V79	2 2

END OF FIGURE

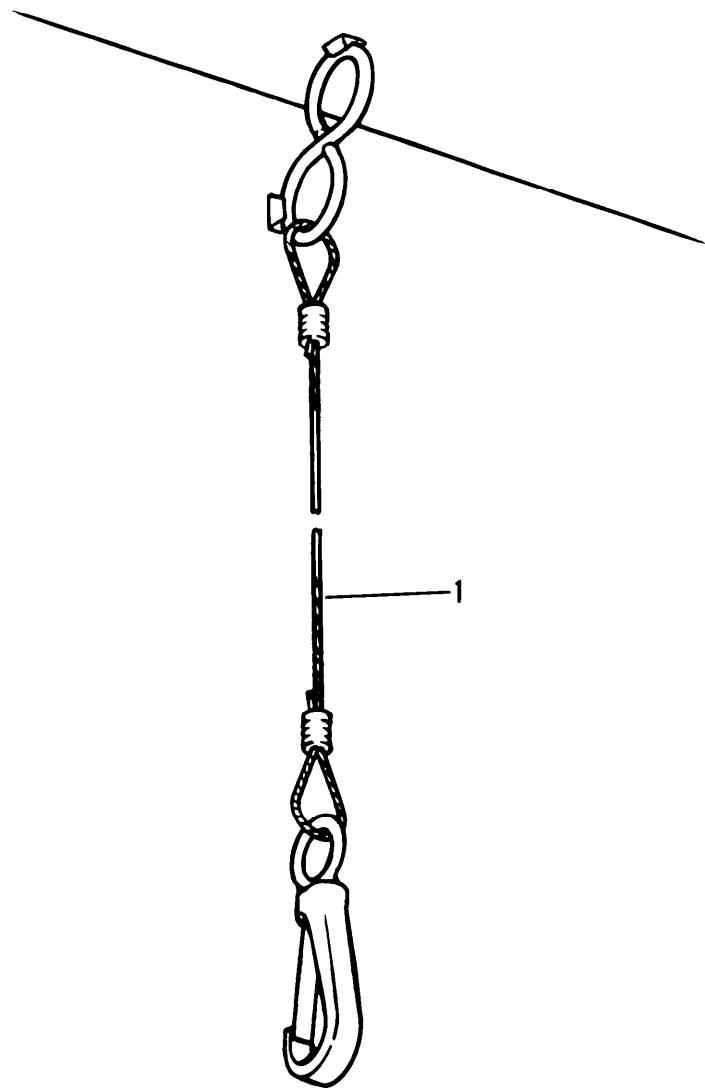


Figure 27. Stake Retainer

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) PART FSCM	(4) NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
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GROUP 1501 FRAME ASSEMBLY

FIG. 27 - STAKE RETAINER

1	PFFZZ	66788	SAI871-0005	ROPE, WIRE UOC:WAA	16
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END OF FIGURE

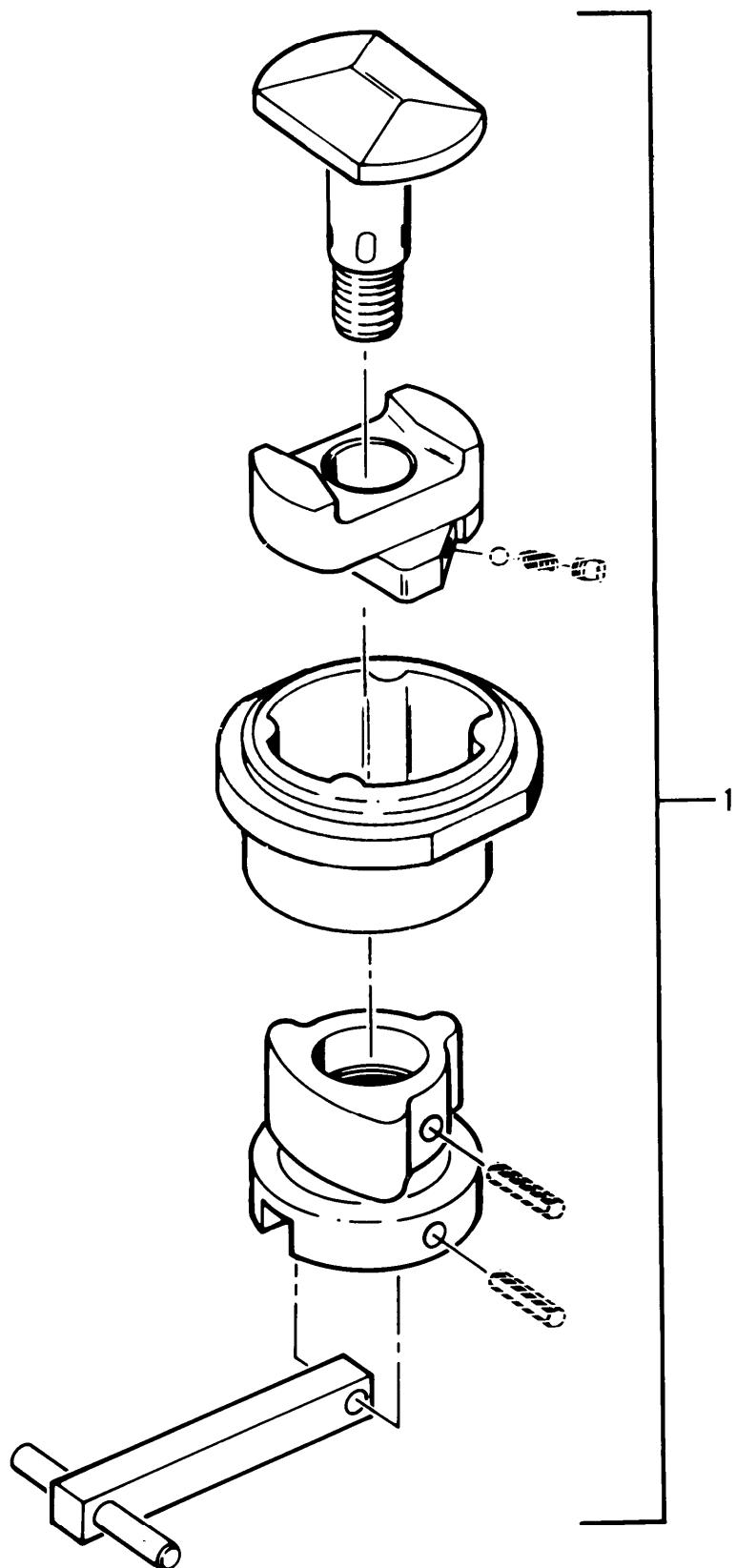
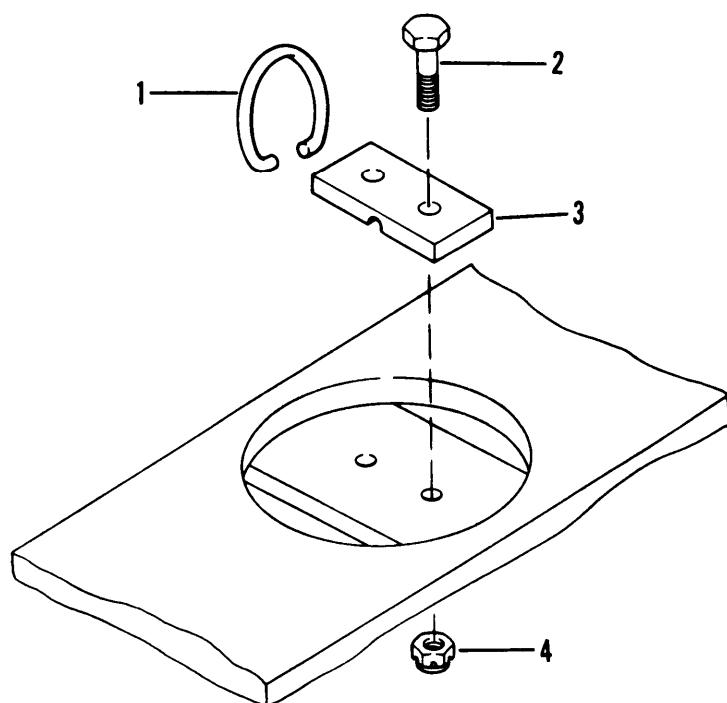


Figure 28. Retractable Twist Lock

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1501 FRAME ASSEMBLY						
* 1	PAOZZ	65059	78038-1	FIG. 28 - RETRACTABLE TWIST LOCK LOCK SET,MORTISE		4
END OF FIGURE						



Tiedown Ring

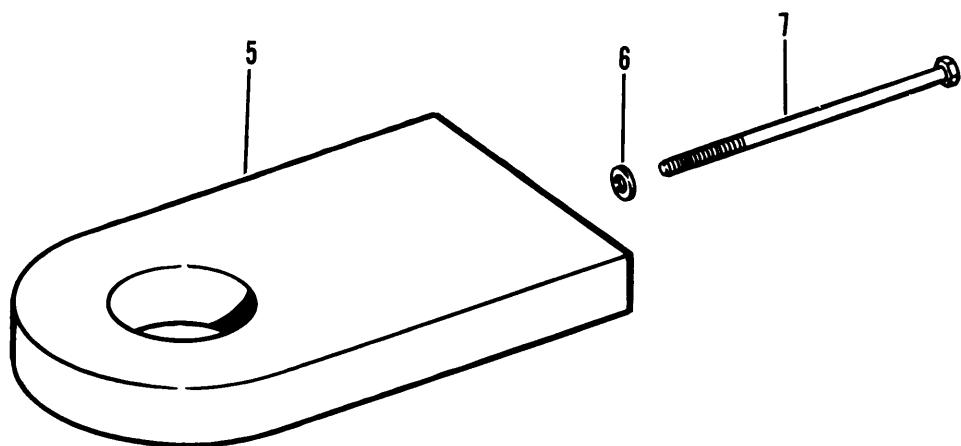


Figure 29. Lifting Bye and Tiedown Ring

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 1501 FRAME ASSEMBLY					
FIG. 29 - LIFTING EYE AND TIEDOWN RING					
1	PAOZZ	66788	TC-4	RING, DEE UOC:WAA	10
2	PAOZZ	96906	MS90728-64	SCREW, CAP, HEXAGON H UOC:WAA	20
3	PFOZZ	66788	1071	TIEDOWN, D-RING UOC:WAA	10
4	PAOZZ	96906	MS51922-17	NUT, SELF-LOCKING, HE UOC:WAA	20
5	PFOZZ	66788	SAT-18315	PAD EYE UOC:WAA	4
6	PAOZZ	96906	MS27183-13	WASHER, FLAT UOC:WAA	4
7	PAOZZ	96906	MS90728-107	SCREW, CAP, HEXAGON H UOC:WAA	4

END OF FIGURE

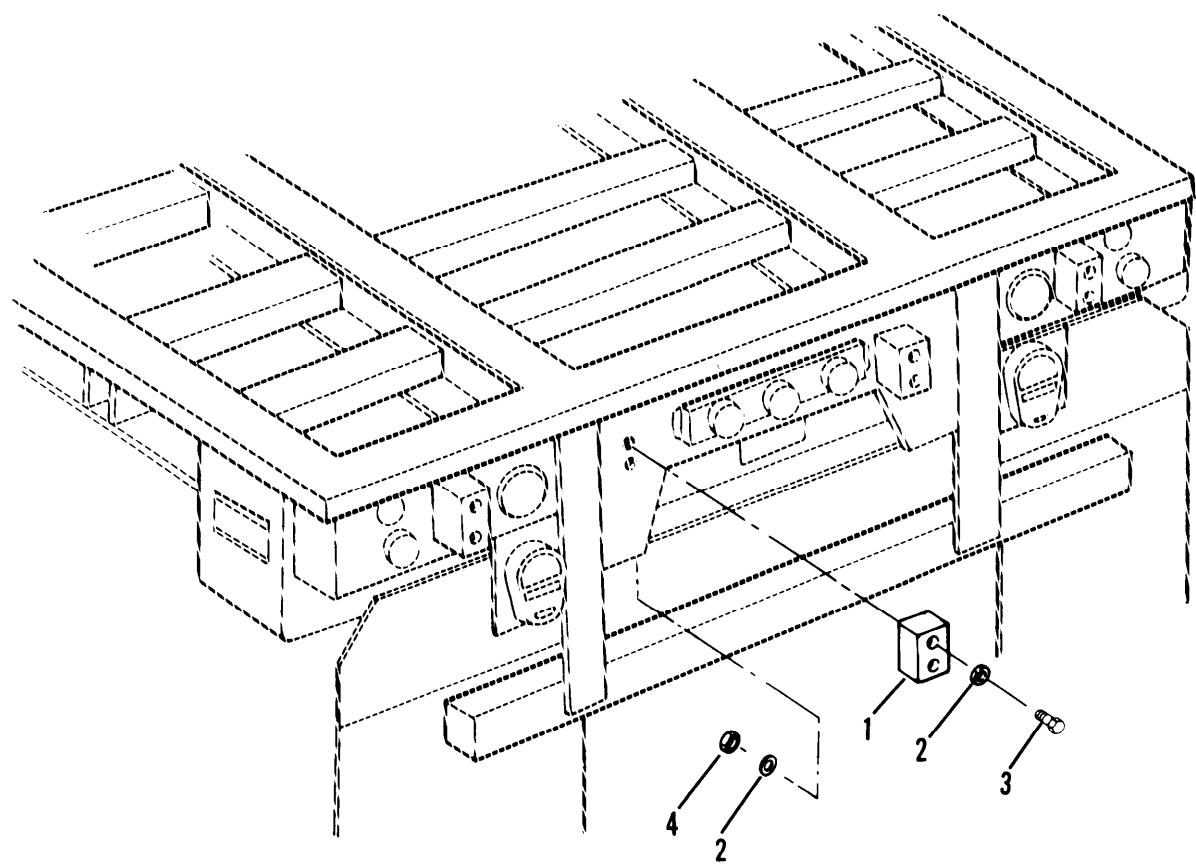


Figure 30. Dock Bumper

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 1501 FRAME ASSEMBLY					
FIG. 30 - DOCK BUMPER					
1	PAOZZ	98255	SW14337P	BUMPER,RUBBER SEMITRAILER UOC:V79	4
1	PAOZZ	66788	SL1000	BUMPER,RUBBER UOC:WAA	4
2	PAOZZ	96906	MS27183-21	WASHER,FLAT	16
3	PAOZZ	96906	MS90725-167	SCREW,CAP,HEXAGON H BUMPER MOUNTING	8
4	PAOZZ	96906	MS51967-20	NUT,PLAIN,HEXAGON BUMPER MOUNTING UOC:V79	8
4	PAOZZ	96906	MS51922-49	NUT,SELF-LOCKING,HE UOC:WAA	8

END OF FIGURE

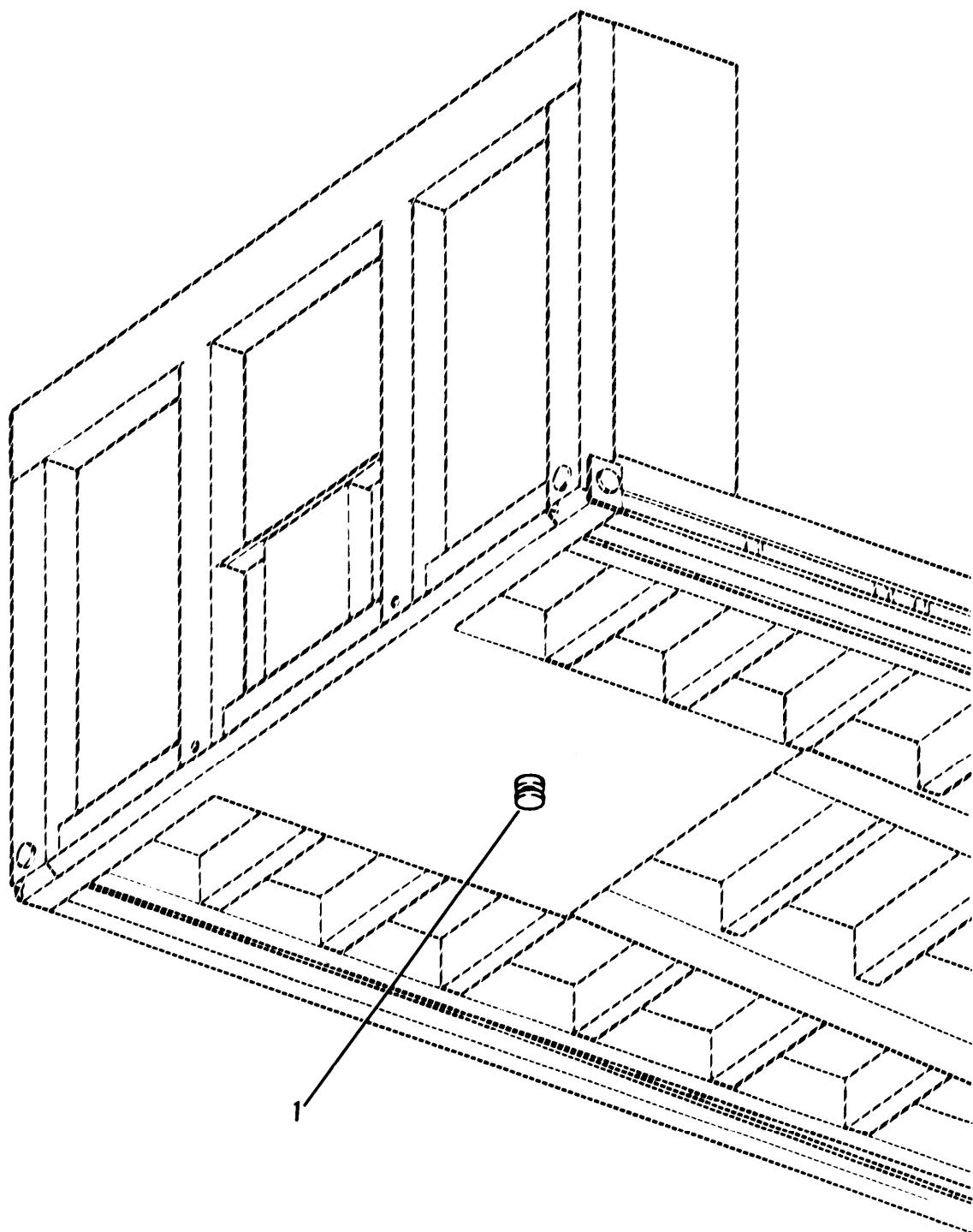
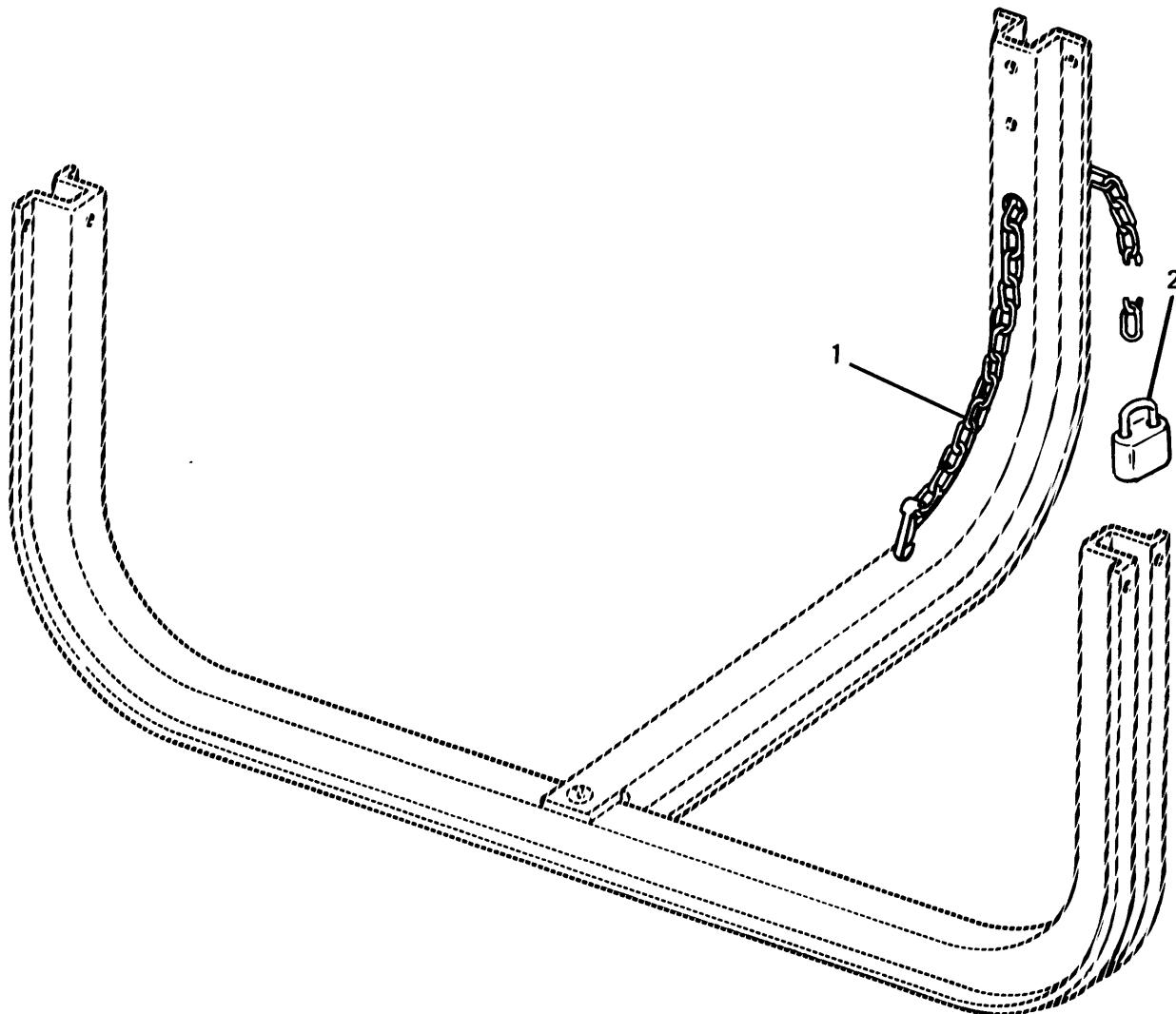


Figure 31. Kingpin

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1503 PINTLES AND TOWING ATTACHMENTS						
FIG. 31 - KINGPIN						
* 1	PBHZZ	19207	7067973	KINGPIN,FIFTH WHEEL 2-1/2 INCH		1
END OF FIGURE						



TA706590

Figure 32. Spare Tire Carrier

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC) GROUP 1504 SPARE WHEEL CARRIER AND TIRE LOCK	(6) QTY
* 1	PAOZZ	16003	C43974	CHAIN,WELDLESS UOC:WAA		1
1	PAOZZ	01976	SIZE2-0	CHAIN,WELDED		1
* 2	PAOZZ	96906	MS35647-10	PADLOCK		1

FIG. 32 - SPARE TIRE CARRIER

END OF FIGURE

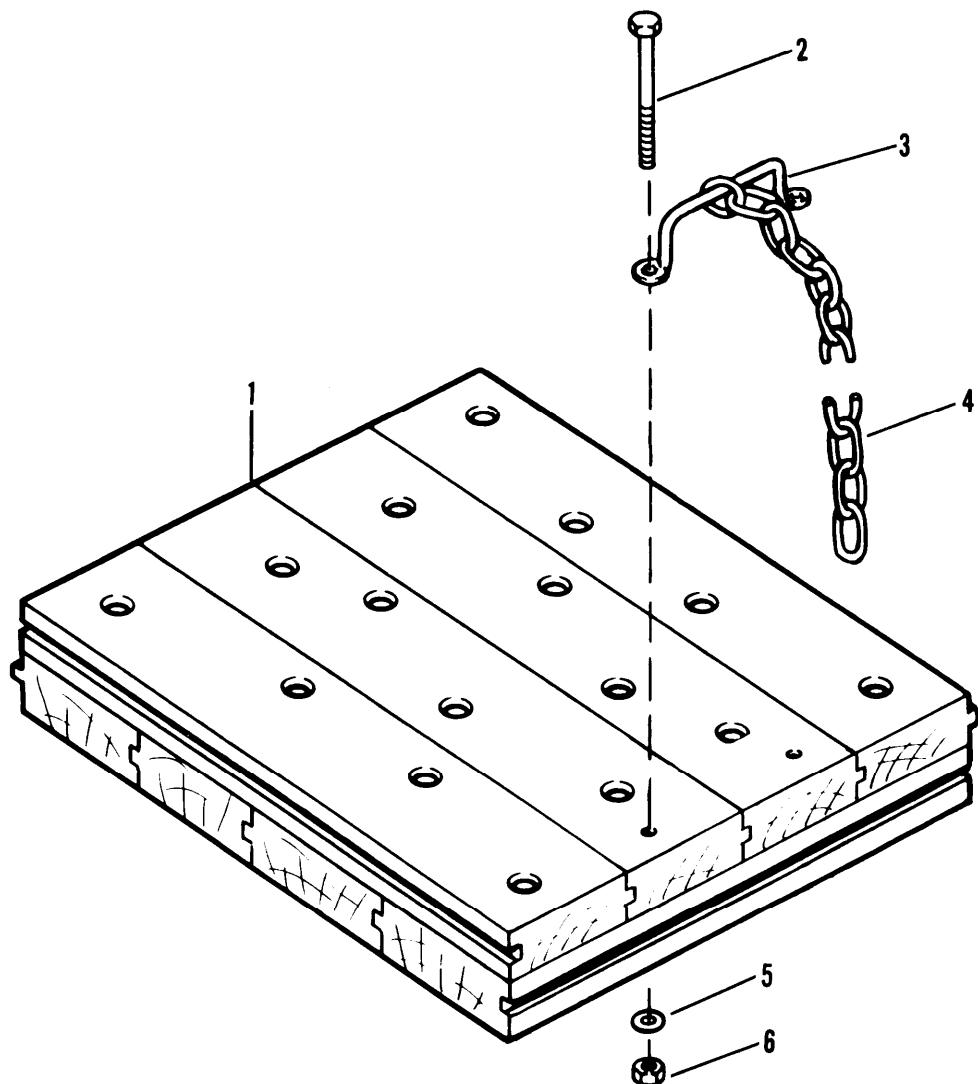


Figure 33. Ground Board Assembly

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 1507 LANDING GEAR, LEVELING JACKS					
FIG. 33 - GROUND BOARD ASSEMBLY					
1	PAOZZ	19207	7417585	BOARD GROUND JACK	2
2	PAOZZ	96906	MS35291-44	BOLT, MACHINE	2
3	PAOZZ	19207	7531424	HANDLE, BOW	2
4	PAOZZ	19207	H008-02-22080	CHAIN, WELDED	2
5	PAOZZ	96906	MS27183-13	WASHER, FLAT	2
6	PAOZZ	96906	MS51967-5	NUT, PLAIN, HEXAGON	2

END OF FIGURE

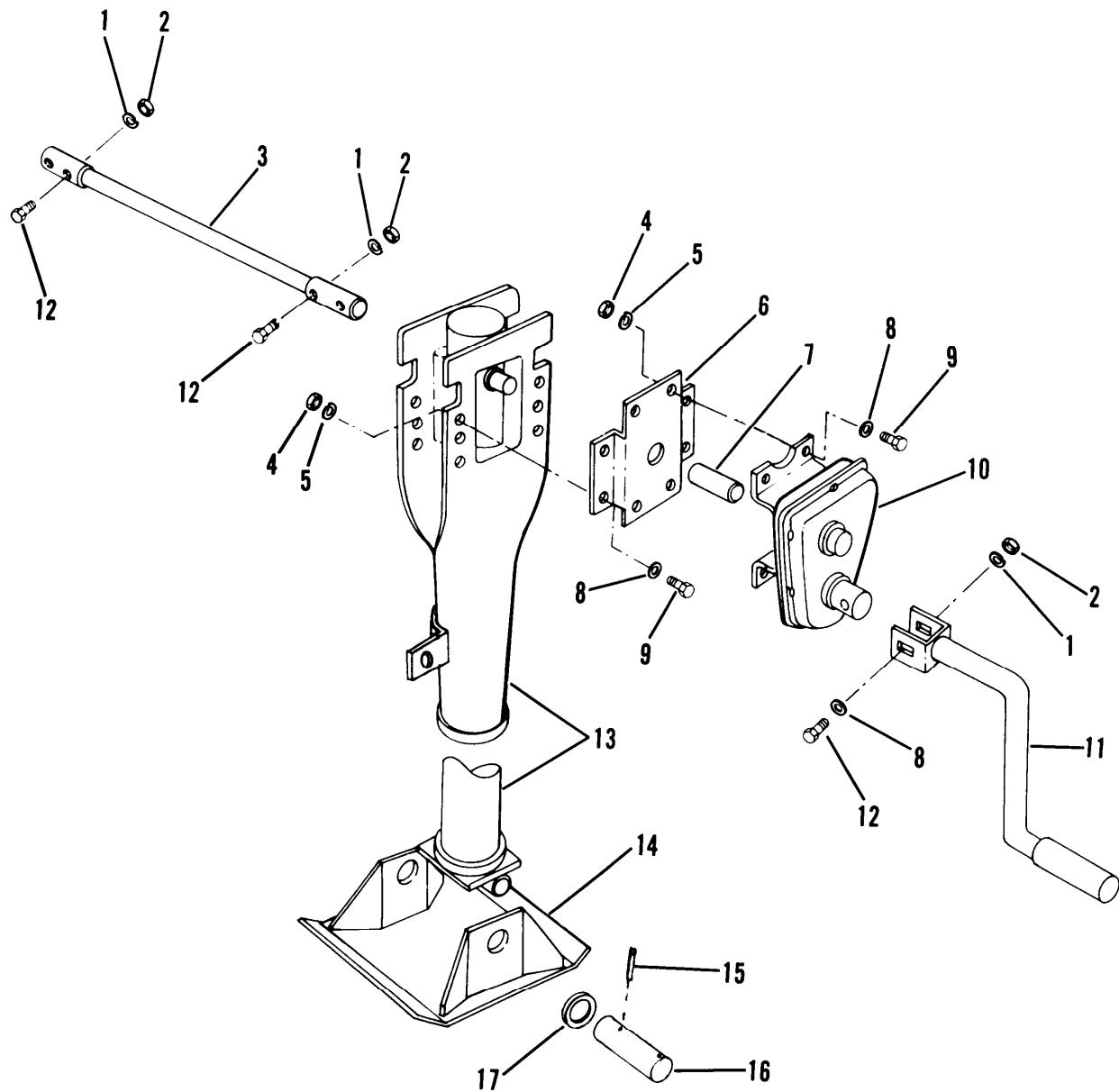


Figure 34. Landing Legs (M871) (sheet 1 of 4)

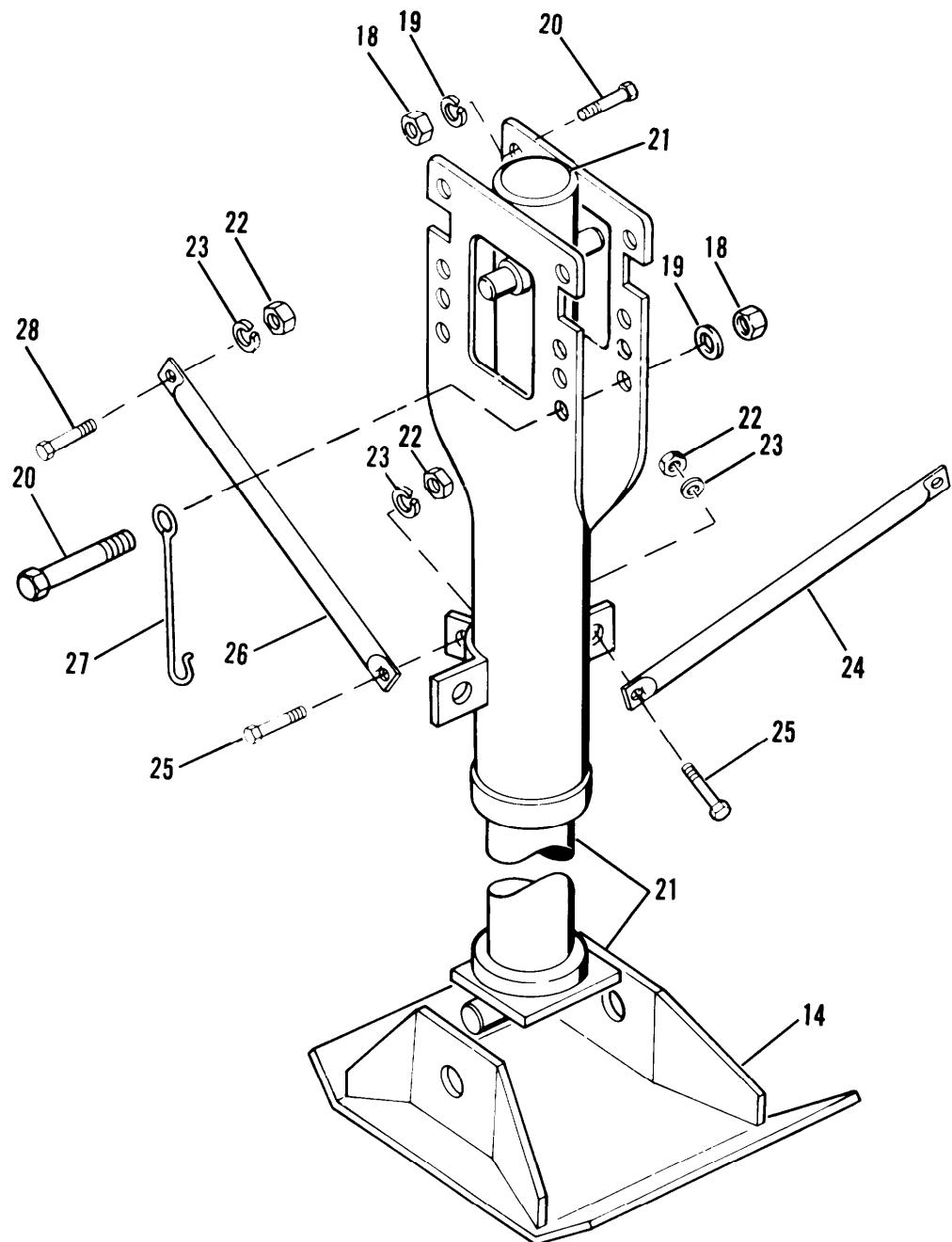


Figure 34. Landing Legs (M871) (sheet 2 of 4)

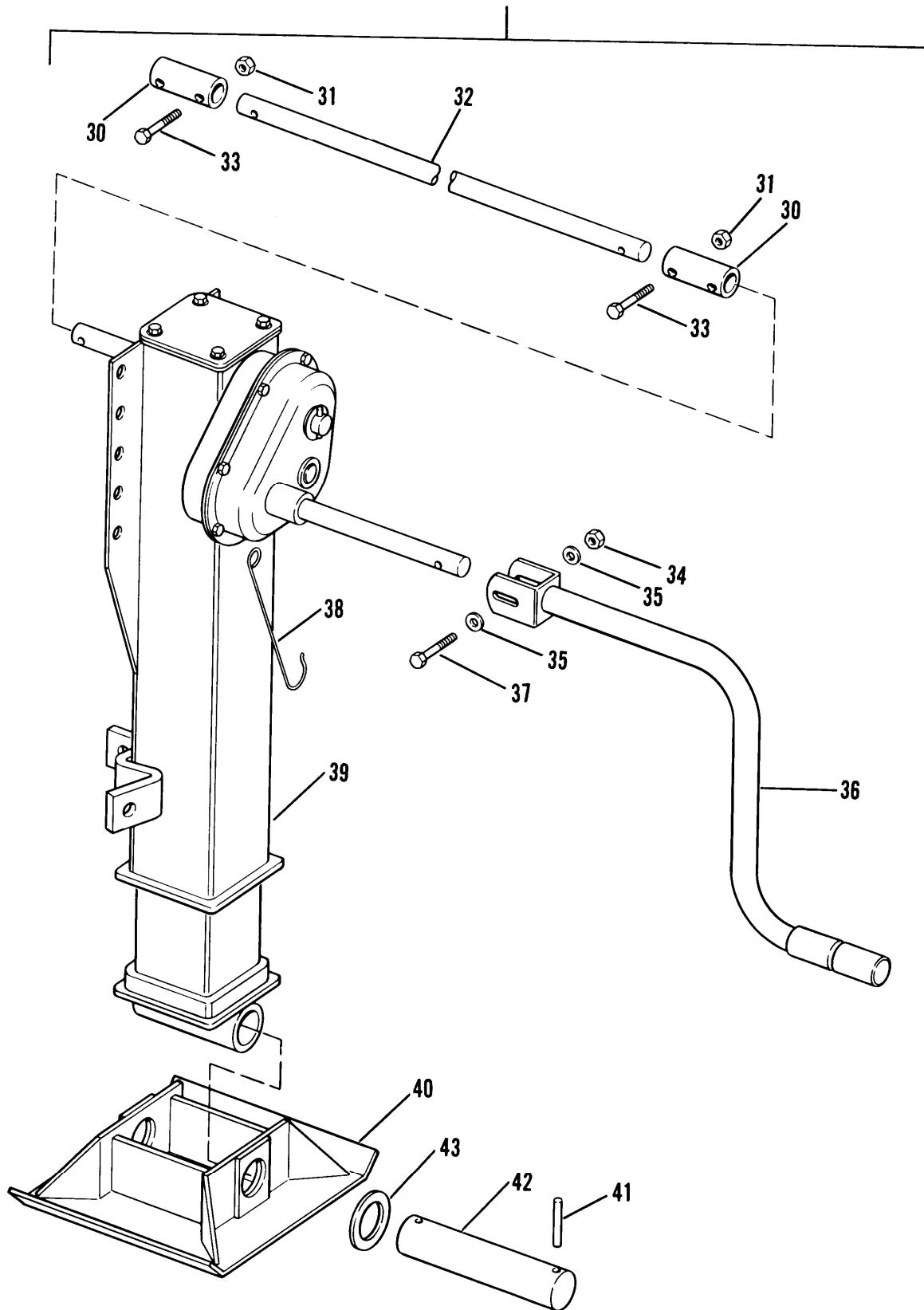


Figure 34. Landing Legs (M871A1) (sheet 3 of 4)

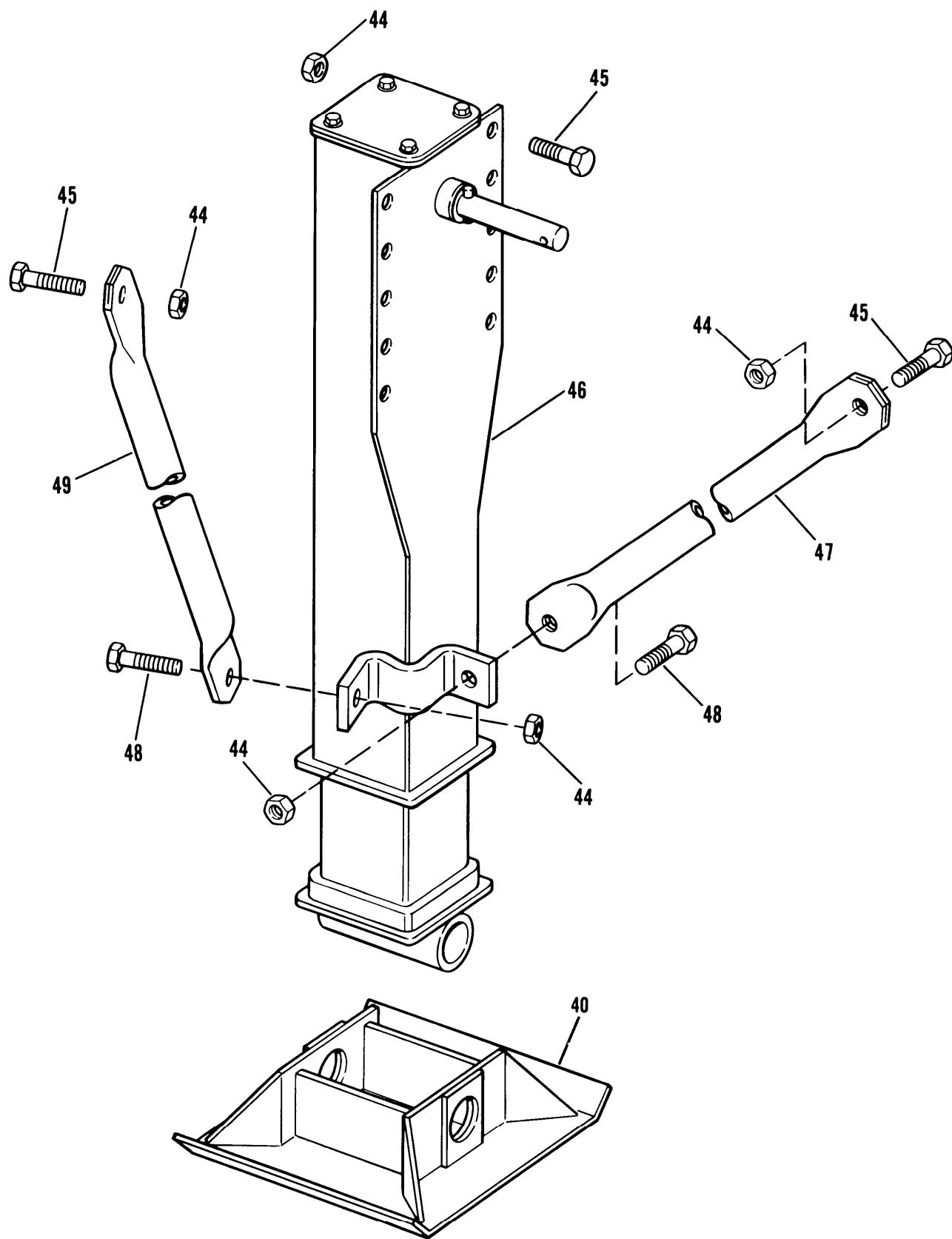


Figure 34. Landing Legs (M871A1) (sheet 4 of 4)

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1507 LANDING GEAR, LEVELING JACKS						
FIG. 34 - LANDING LEGS						
1	PAOZZ	96906	MS27183-15	WASHER,FLAT SHAFT MTG UOC:V79		4
2	PAOZZ	96906	MS51922-17	NUT,SELF-LOCKING,HE SHAFT MTG UOC:V79		4
3	PAOZZ	80837	6880-141	SHAFT,STRAIGHT LANDING GEAR LEG UOC:V79		1
4	PAOZZ	96906	MS51967-20	NUT,PLAIN,HEXAGON GEARBOX MTG UOC:V79		8
5	PAOZZ	80045	23MS35338-50	WASHER,LOCK GEARBOX MTG UOC:V79		8
6	XDOZZ	98255	SW15464A	BRACKET,MOUNTING GEARBOX UOC:V79		1
7	PAOZZ	98255	SW15220M	COUPLING,SHAFT,RIGI LANDING GEAR UOC:V79		1
8	PAOZZ	96906	MS27183-21	WASHER,FLAT GEARBOX MTG UOC:V79		12
9	PAOZZ	96906	MS90725-162	SCREW,CAP,HEXAGON H GEARBOX MTG UOC:V79		8
10	PAOZZ	19207	11625431	DRIVE UNIT,ANGLE LANDING GEAR UOC:V79		1
* 11	PAOZZ	99411	LG0082-02	CRANK,HAND LANDING GEAR LEG UOC:V79		1
12	PAOZZ	96906	MS90725-67	SCREW,CAP,HEXAGON H SHAFT MTG UOC:V79		4
13	PAOZZ	19207	11625119	LEG,SEMITRAILER RET LANDING GEAR UOC:V79		2
14	PAOZZ	23705	11670871	SHOE,JACK SUPPORT LANDING GEAR UOC:V79		2
15	PAOZZ	96906	MS16562-82	PIN,SPRING LANDING GEAR LEG UOC:V79		4
16	PAOZZ	19207	11625085	SHAFT,STRAIGHT LANDING GEAR LEG UOC:V79		2
17	PAOZZ	19207	11625086	WASHER,FLAT LANDING GEAR LEG UOC:V79		4
18	PAOZZ	96906	MS51967-20	NUT,PLAIN,HEXAGON LANDING GEAR MTG UOC:V79		16
* 19	PAOZZ	96906	MS35338-50	WASHER,LOCK LANDING GEAR MTG UOC:V79		16
20	PAOZZ	96906	MS90725-162	SCREW,CAP,HEXAGON H LANDING GEAR MTG UOC:V79		16
* 21	PFOZZ	98255	15124P	SUPPORT,RETRACTABLE VEHICLE UOC:V79		1
22	PAOZZ	96906	MS51967-20	NUT,PLAIN,HEXAGON BRACE MTG UOC:V79		4
* 23	PAOZZ	96906	MS35338-50	WASHER,LOCK BRACE MTG		4

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
				DESCRIPTION AND USABLE ON CODES(UOC)	QTY
24	PAOZZ	19207	11625075	UOC:V79 BRACE, LANDING GEAR LANDING GEAR LEG	2
25	PAOZZ	96906	MS90725-164	UOC:V79 SCREW,CAP,HEXAGON H BRACE MTG	4
26	PAOZZ	19207	11625075-1	UOC:V79 BRACE,TUBE LANDING GEAR LEG	2
27	PAOZZ	98255	SW14276P	UOC:V79 HOLDER,CRANK,LANDIN LANDING GEAR LEG	1
28	PAOZZ	96906	MS90725-163	UOC:V79 SCREW,CAP,HEXAGON H BRACE MTG	3
* 29	PBOOO	99411	417774	SUPPORT,RETRACTABLE UOC:WAA	1
30	PFOZZ	99411	LG0523	.COUPLING,SHAFT,RIGI UOC:WAA	2
31	PAOZZ	96906	MS51922-17	.NUT,SELF-LOCKING,HE UOC:WAA	4
* 32	PFOZZ	99411	LG0094-33	.SHAFT,STRAIGHT UOC:WAA	1
33	PAOZZ	96906	MS90725-67	.SCREW,CAP,HEXAGON H UOC:WAA	4
34	PAOZZ	96906	MS51922-17	.NUT,SELF-LOCKING,HE UOC:WAA	1
35	PAOZZ	96906	MS27183-21	.WASHER,FLAT UOC:WAA	2
36	PFOZZ	99411	LG0083-03	.CRANK,HAND UOC:WAA	1
37	PAOZZ	96906	MS90725-67	.SCREW,CAP,HEXAGON H UOC:WAA	1
38	PAOZZ	99411	417410	.HANDLE,HOOK UOC:WAA	1
* 39	PAOZZ	99411	LG5M29-92	.LEG,SEMITRAILER RET UOC:WAA	1
40	PAOZZ	99411	417741	.SHOE,JACK SUPPORT UOC:WAA	2
41	PAOZZ	96906	MS16562-82	.PIN,SPRING UOC:WAA	4
42	PAOZZ	99411	413245	.AXLE,VEHICULAR,NOND UOC:WAA	2
43	PAOZZ	96906	MS27183-35	.WASHER,FLAT UOC:WAA	4
44	PFOZZ	96906	MS51922-49	.NUT,SELF-LOCKING,HE UOC:WAA	28
45	PFOZZ	96906	MS90728-163	.SCREW,CAP,HEXAGON H UOC:WAA	24
* 46	PAOZZ	99411	LG5M29-91	.LEG,SEMITRAILER RET UOC:WAA	1
47	PFOZZ	19207	11625075-1	.BRACE,TUBE UOC:WAA	2
48	PAOZZ	96906	MS90728-165	.SCREW,CAP,HEXAGON H UOC:WAA	4

SECTION II			TM9-2330-358-14&P		
(1)	(2)	(3)	(4)	(5)	(6)
ITEM	SMR	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
49	PFOZZ	99411	LG0525	.BRACE, LANDING GEAR UOC:WAA	2

END OF FIGURE

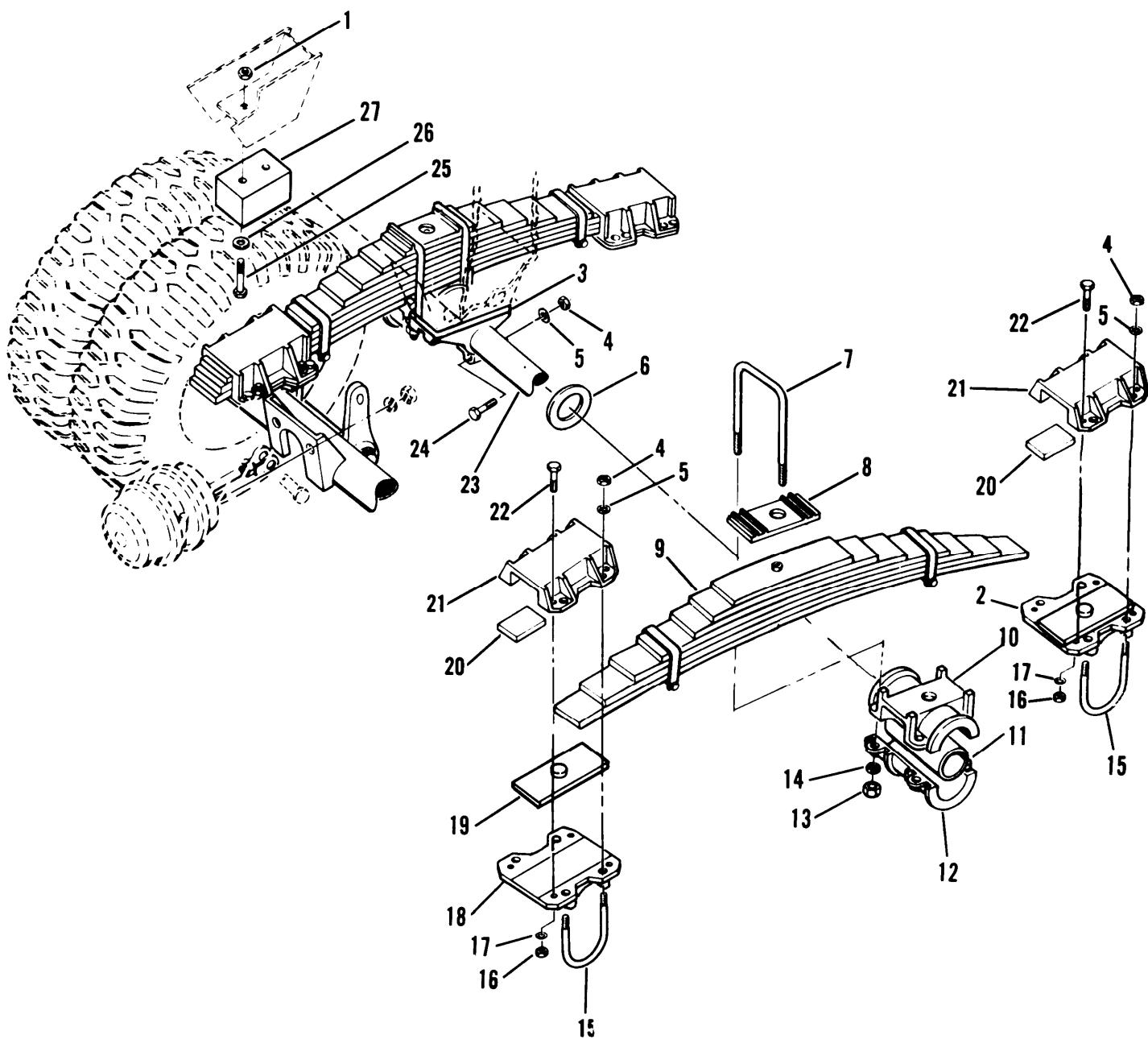


Figure 35. Suspension

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
DESCRIPTION AND USABLE ON CODES(UOC)					QTY
GROUP 16 SPRINGS AND SHOCK ABSORBERS					
GROUP 1601 SPRINGS					
FIG. 35 - SUSPENSION					
1	PAOZZ	96906	MS51922-49	NUT,SELF-LOCKING,HE UOC:WAA	8
2	PFFZZ	92967	10712-00	SEAT,LEAF SPRING FOR NON- ADJUSTABLE SPRING SEAT	4
* 3	PBFZZ	92967	849-01	HANGER,TRUNNION	2
4	PAFZZ	92967	841-00	NUT,SELF-LOCKING,HE	20
5	PAFZZ	92967	817-00	WASHER,FLAT	4
6	PAFZZ	92967	895-00	WASHER,FLAT	2
7	PAFZZ	92967	9639-03	BOLT,U	4
8	PFFZZ	92967	9640-00	PLATE,WEAR,LEAF SPR	2
* 9	PBFZZ	92967	9999-00	SPRING ASSEMBLY,LEA	2
10	PFFZZ	92967	891-00	HUB TRUNNION,UPPER	2
11	PAFZZ	92967	896-00	BUSHING,RUBBER TRUNNION HUB	2
				UOC:V79	
11	PFFZZ	92967	890-00	BUSHING,NONMETALLIC	2
				UOC:WAA	
* 12	PFFZZ	19207	12315351	TRUNNION,HUB,LOWER	2
13	PAFZZ	92967	836-00	NUT,PLAIN,HEXAGON	8
14	PAFZZ	92967	837-00	WASHER,FLAT	8
15	PAFZZ	92967	10060-01	BOLT,U	8
16	PAFZZ	92967	37-03	NUT,SELF-LOCKING,HE	16
17	PAFZZ	92967	10273-00	WASHER,FLAT	16
18	PFFZZ	92967	9934-02	SEAT,LEAF SPRING ADJUSTABLE	4
19	PFFZZ	92967	10608-00	PLATE,ALIGNMENT,LEA	4
20	PFFZZ	92967	814-00	PAD,CUSHIONING	8
21	PFFZZ	92967	9937-00	END CAP,SPRING FOR ADJUSTABLE SPRING SEAT	4
22	PAFZZ	96906	MS90727-164	SCREW,CAP,HEXAGON H	16
23	PFFZZ	92967	B893-02	TUBE,METALLIC	2
24	PAFZZ	92967	10376-00	SCREW,CAP,HEXAGON H	4
25	PAOZZ	96906	MS90725-167	SCREW,CAP,HEXAGON H	8
				UOC:WAA	
26	PAOZZ	96906	MS27183-21	WASHER,FLAT	8
				UOC:WAA	
27	PAOZZ	66788	SL1000	BUMPER,NONMETALLIC	4
				UOC:WAA	

END OF FIGURE

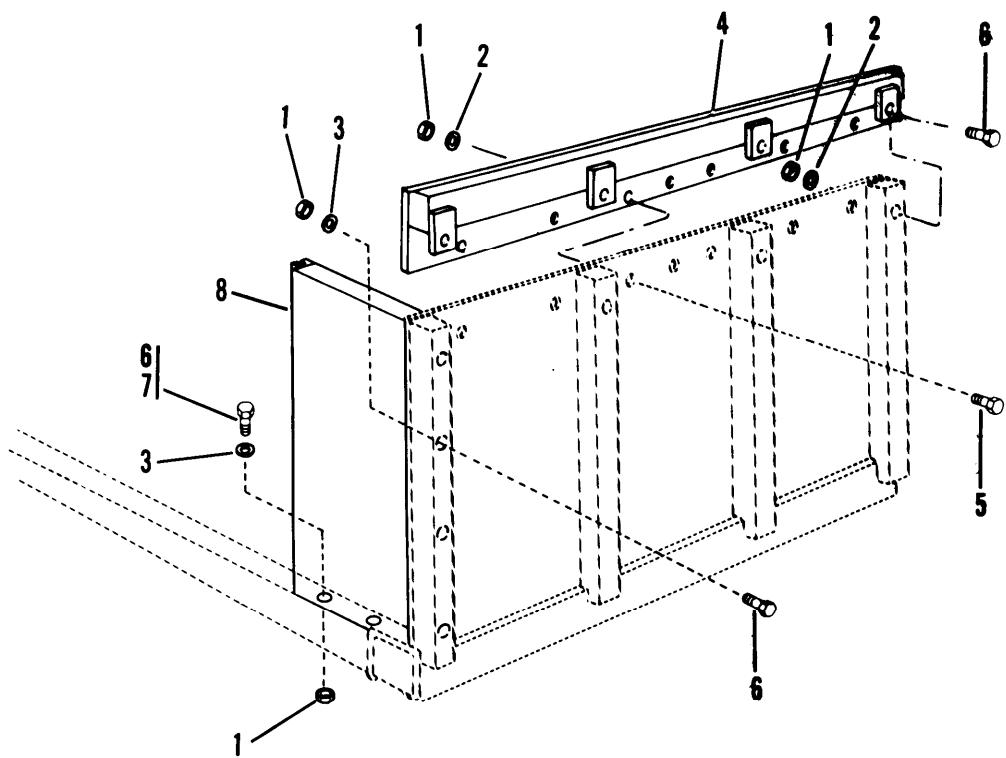


Figure 36. Chassis Bulkhead

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 18 BODY, CAB, HOOD, AND HULL						
GROUP 1801 BODY, CAB, HOOD, AND HULL ASSEMBLIES						
FIG. 36 - CHASSIS BULKHEAD						
1	PAOZZ	96906	MS35649-2382	NUT,PLAIN,HEXAGON UOC:V79		21
1	PAOZZ	96906	MS51922-17	NUT,SELF-LOCKING,HE UOC:WAA		25
2	PAOZZ	96906	MS35338-46	WASHER,LOCK UOC:V79		9
3	PAOZZ	96906	MS35338-65	WASHER,LOCK WING PANEL MTG UOC:V79		6
4	XDOZZ	98255	SW15111A	TUBE ASSEMBLY UPPER BULKHEAD UOC:V79		1
4	PFOZZ	66788	871-0006	BULKHEAD UOC:WAA		1
5	PAOZZ	96906	MS18154-60	SCREW,CAP,HEXAGON H WING PANEL MTG UOC:V79		7
5	PAOZZ	96906	MS90728-78	SCREW,CAP,HEXAGON H UOC:WAA		12
* 6	PAOZZ	96906	MS90728-78	SCREW,CAP,HEXAGON H UOC:V79		8
6	PAOZZ	96906	MS90728-64	SCREW,CAP,HEXAGON H (ALSO USED FOR MATING WING PANEL TO FRAME RAIL) UOC:WAA		12
* 7	PAOZZ	96906	MS90725-58	SCREW,CAP,HEXAGON H UOC:V79		7
8	XDOZZ	98255	SW15201A1	WING PANEL FRONT,LEFT SIDE UOC:V79		1
8	XDOZZ	98255	SW15201A2	WING PANEL FRONT,RIGHT SIDE UOC:V79		1
8	PFOZZ	66788	SAT-17548	PANEL,BUILDING,PREF LEFT-SIDE UOC:WAA		1
8	PFOZZ	66788	871-0007	PANEL,BODY,VEHICULA RIGHT SIDE UOC:WAA		1

END OF FIGURE

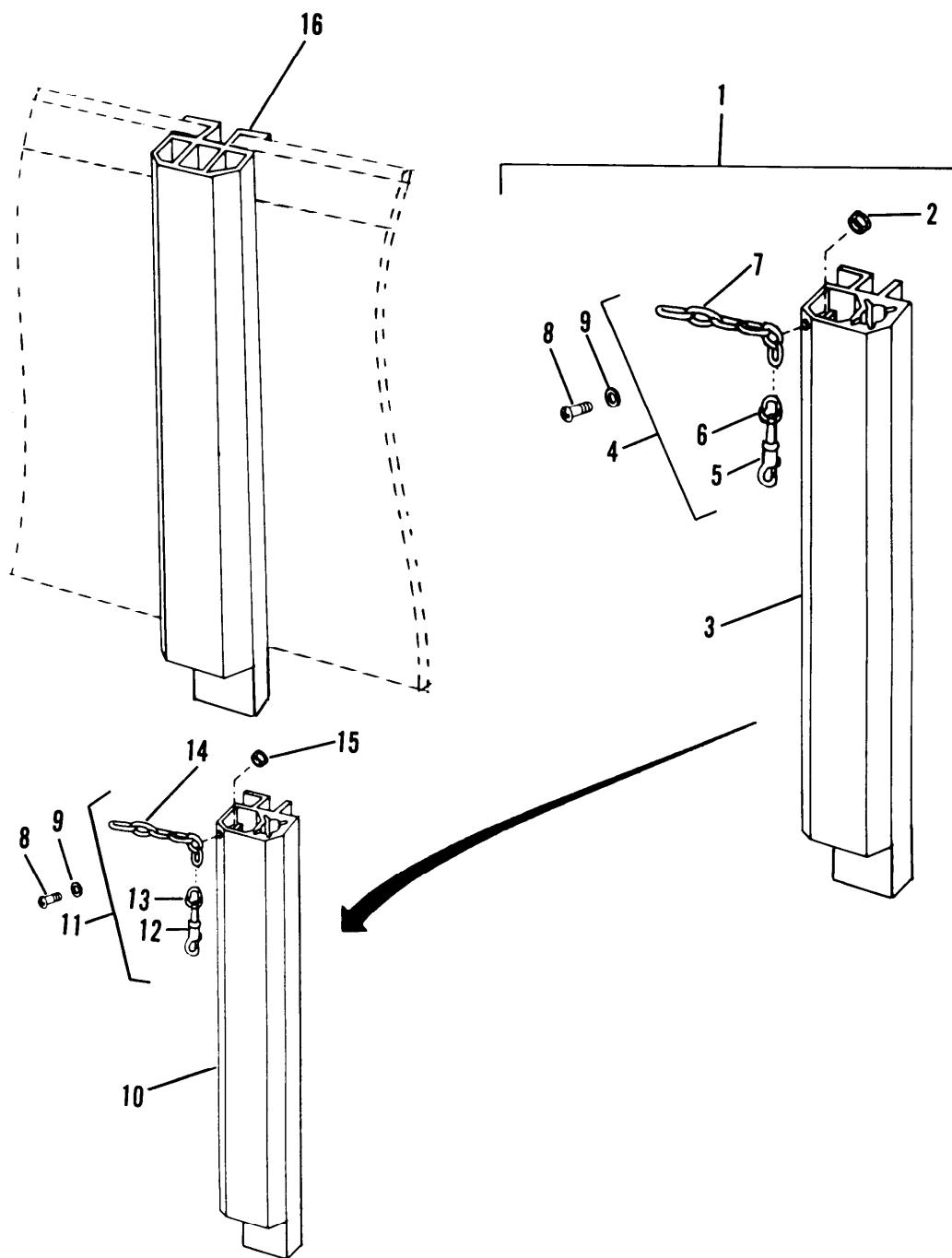


Figure 37. Corner Stake and Panel Splice

SECTION II (1) ITEM NO.	(2) SMR CODE	(3) FSCM	TM9-2330-358-14&P (4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 1801 BODY, CAB, HOOD, AND HULL ASSEMBLIES					
FIG. 37 - CORNER STAKE AND PANEL SPLICE					
1	PAOOO	98255	SW15254A1	STAKE, VEHICLE BODY LEFT REAR CORNER ASSEMBLY UOC:V79	1
1	PAOOO	98255	SW15254A2	STAKE, VEHICLE BODY RIGHT REAR CORNER ASSEMBLY UOC:V79	1
2	PAOZZ	96906	MS51922-1	.NUT, SELF-LOCKING, HE STAKE CHAIN MOUNTING UOC:V79	1
3	PAOZZ	98255	SW14659M1	.STAKE, VEHICLE BODY LEFT REAR CORNER UOC:V79	1
3	PAOZZ	98255	SW14659M2	.STAKE, VEHICLE BODY RIGHT REAR CORNER UOC:V79	1
4	PAOZZ	98255	SW15266A	.CHAIN ASSEMBLY, SING CORNER STAKE ASSEMBLY UOC:V79	1
5	PAOZZ	80874	225-750	..SNAP HOOK CHAIN ASSEMBLY UOC:V79	1
6	PAOZZ	98255	SW11935P-1	..LINK, CHAIN LAP CHAIN ASSEMBLY UOC:V79	1
7	PAOZZ	98255	SW10998P1-18	..CHAIN, WELDED CHAIN ASSEMBLY UOC:V79	1
8	PAOZZ	96906	MS35206-283	.SCREW, MACHINE STAKE CHAINJ MTG 1	
9	PAOZZ	96906	MS27183-10	.WASHER, FLAT STAKE CHAIN MTG 1	
10	PFOZZ	66788	SAT-18915	POST, LEFT CORNER UOC:WAA	1
10	PFOZZ	66788	SAT-18920	MOLDING, METAL RIGHT REAR CORNER UOC:WAA	1
11	MOOZZ	66788	SAT17523-1	CHAIN ASSY CHAIN, ASSEMBLY, MADE FROM P/N/MS51922-1, MS35206-283, 012- 0322, 580-0724, & 760-0311, MS27183-10 UOC:WAA	2
12	PAOZZ	80535	760-0311	.SNAP HOOK UOC:WAA	2
13	PAOZZ	80535	580-0724	.LINK, CHAIN, LAP UOC:WAA	2
14	PFOZZ	66788	SAI871-0005	.ROPE, WIRE UOC:WAA	2
15	PAOZZ	96906	MS51967-2	NUT, PLAIN, HEXAGON UOC:WAA	2
16	PAOZZ	98255	SW14658M	STAKE, VEHICLE BODY SEMITRAILER UOC:V79	13
16	PFOZZ	66788	SAT-18910	MOLDING, METAL	13

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
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UOC:WAA

END OF FIGURE

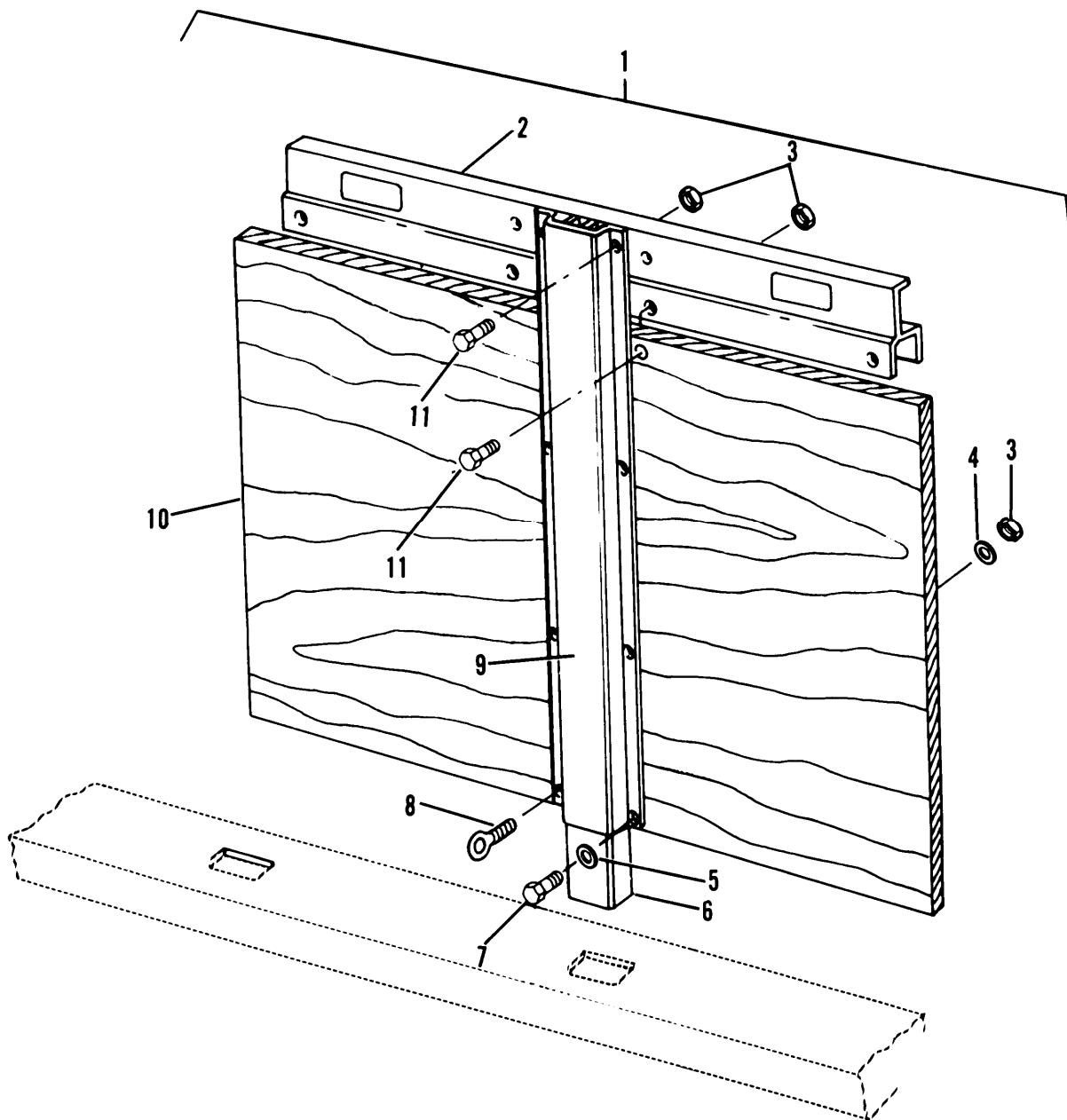


Figure 38. Side Panel Assemblies

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
GROUP 1801 BODY, CAB, HOOD, AND HULL ASSEMBLIES						
FIG. 38 - SIDE PANEL ASSEMBLIES						
1	PAOOO	98255	SW14661A	SIDE RACK, VEHICLE B SEMITRAILER SIDE UOC:V79		14
* 1	PAOOO	25575	AB36-033	SIDE RACK, VEHICLE B SEMITRAILER REAR UOC:V79		2
* 1	PFOZZ	66788	SAT-17544	SIDE RACK, VEHICLE B UOC:WAA		14
1	PFOZZ	66788	SAT-17545	STAKE, VEHICLE BODY REAR UOC:WAA		2
2	PAOZZ	98255	SW14880M2	.CAP, PROTECTIVE SIDE UOC:V79		1
2	PAOZZ	98255	SW14880M3	.CAP, PROTECTIVE, SIDE REAR UOC:V79		1
2	PFOZZ	66788	SAT-17562	.MOLDING, METAL USED ON P/N SAT- 17545 UOC:WAA		1
2	PFOZZ	66788	SAT-17565	.MOLDING, METAL USED ON P/N SAT- UOC:WAA		1
3	PAOZZ	96906	MS51922-1	.NUT, SELF-LOCKING, HE UOC:V79		24
3	PAOZZ	96906	MS51967-2	.NUT, PLAIN, HEXAGON UOC:WAA		13
4	PAOZZ	98255	SW15056P	.WASHER UOC:V79		12
4	PAOZZ	96906	MS35338-44	.WASHER, LOCK UOC:WAA		13
5	PAOZZ	96906	MS27183-10	.WASHER, FLAT UOC:WAA		13
6	PAOZZ	98255	SW14657M	.STAKE, VEHICLE BODY SIDE UOC:V79		14
* 7	PAOZZ	11815	15055P	.BOLT, ASSEMBLED WASH UOC:V79		12
7	PAOZZ	96906	MS90728-12	.SCREW, CAP, HEXAGON H UOC:WAA		13
8	PAOZZ	96906	MS27950-2	.BOLT, EYE UOC:WAA		2
9	PAOZZ	66788	SAT-18905	.SIDE RACK, VEHICLE B UOC:WAA		16
* 10	PAOZZ	55683	1920-AB36-032-2	.PANEL, LYWOOD, SIDE SEMITRAILER, SIDE UOC:V79		1
10	PAOZZ	98255	SW14671P-3	.SIDE RACK, VEHICLE B SEMITRAILER, REAR UOC:V79		1

SECTION II		TM9-2330-358-14&P		(5)	(6)
(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER		
10	PAOZZ	66788	SAT-17548	. PANEL, BUILDING, PREF SIDE RACK, TYPE 1 UOC:WAA	14
10	PAOZZ	66788	SAT-17549	. PANEL, BUILDING, PREF REAR RACK, TYPE II UOC:WAA	2
11	PAOZZ	96906	MS90725-5	. SCREW, CAP, HEXAGON H PANEL CAP MTG UOC:V79	24

END OF FIGURE

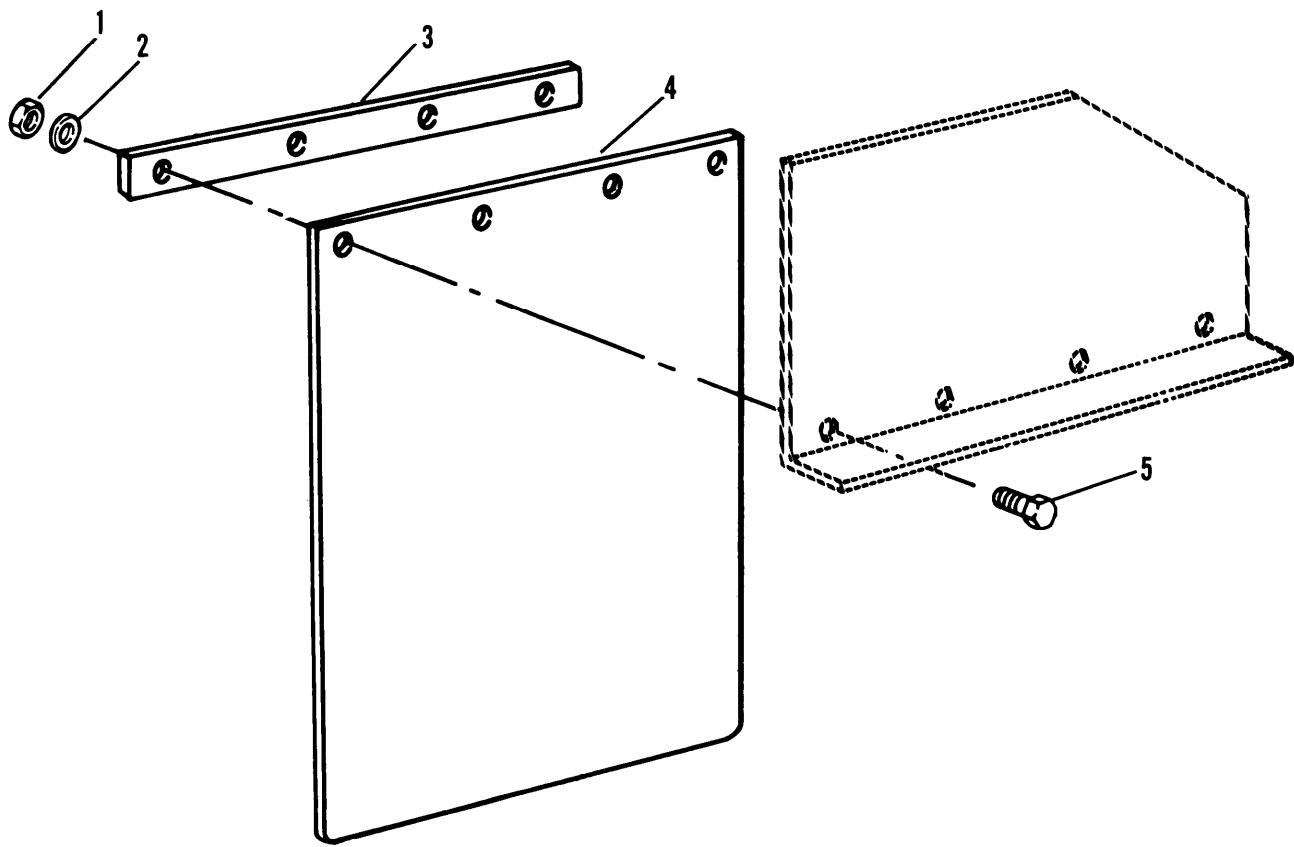


Figure 39. Mud Flap

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 1801 BODY, CAB, HOOD, AND HULL ASSEMBLIES					
FIG. 39 - MUD FLAP					
1	PAOZZ	96906	MS35649-2382	NUT, PLAIN, HEXAGON SPLASH GUARD AND STRIP MOUNTING	8
2	PAOZZ	96906	MS35338-46	WASHER, LOCK SPLASH GUARD AND STRIP MOUNTING UOC:V79	8
2	PAOZZ	96906	MS35338-44	WASHER, LOCK UOC:WAA	8
3	PAOZZ	98255	SW14417M	RETAINER, SPLASH GUA SEMITRAILER UOC:V79	2
3	PAOZZ	66788	871-F-4-MF3	RETAINER, MUD FLAD UOC:WAA	2
4	PAOZZ	19207	10882200	GUARD, SPLASH, VEHICU SEMITRAILER UOC:V79	2
4	PAOZZ	05333	302424	GUARD, SPLASH, VEHICU UOC:WAA	2
5	PAOZZ	96906	MS90728-62	SCREW,CAP,HEXAGON H UOC:V79	8
5	PAOZZ	96906	MS90727-8	SCREW,CAP,HEXAGON H UOC:WAA	8

END OF FIGURE

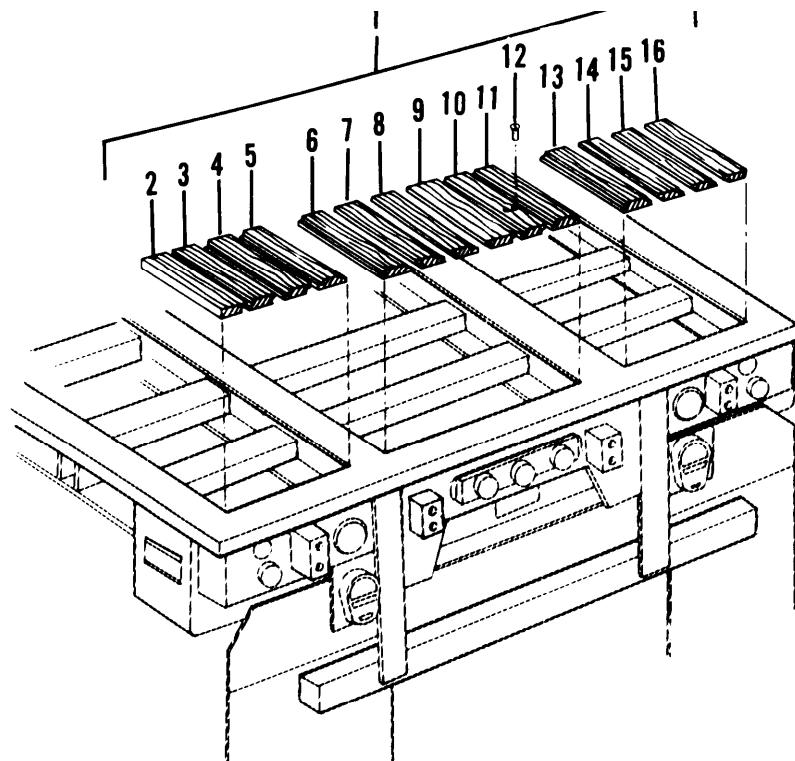
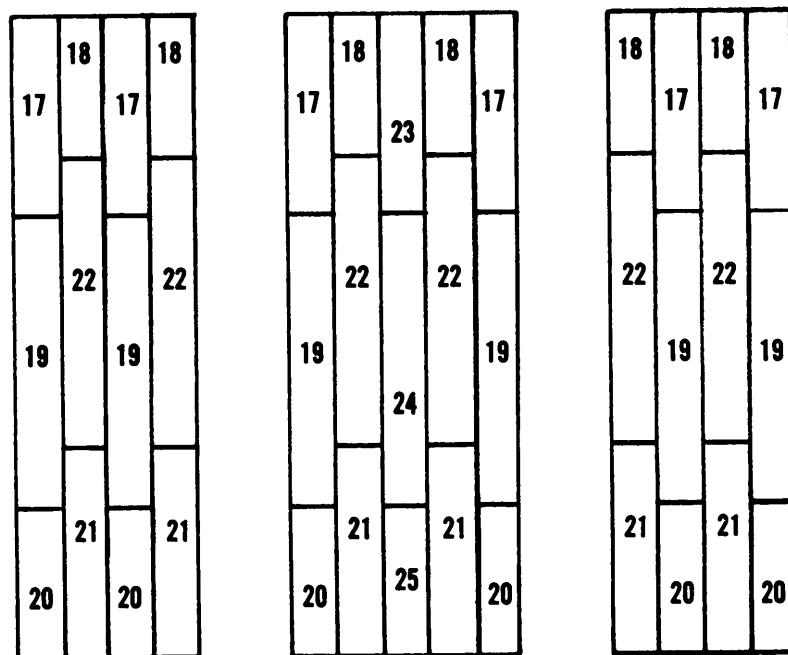
**M871 Semitrailer****M871A1 Semitrailer**

Figure 40. Floor

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
DESCRIPTION AND USABLE ON CODES(UOC)					QTY
GROUP 1805 FLOORS, SUBFLOORS, AND RELATED COMPONENTS					
FIG. 40 - FLOOR					
* 1	PBOZZ	98255	15200P	LUMBER,HARDWOOD SEMITRAILER UOC:V79	1
* 2	PBOZZ	98255	15200P-1	.LUMBER,HARDWOOD SEMITRAILER UOC:V79	1
* 3	PBOZZ	98255	15200P-2	.LUMBER,HARDWOOD SEMITRAILER UOC:V79	1
* 4	PBOZZ	98255	15200P-3	.LUMBER,HARDWOOD SEMITRAILER UOC:V79	1
* 5	PBOZZ	98255	15200P-4	.LUMBER,HARDWOOD SEMITRAILER UOC:V79	1
* 6	PBOZZ	98255	15200P-5	.LUMBER,HARDWOOD SEMITRAILER UOC:V79	1
7	XDOZZ	98255	SW15200P6	.BOARD,FLOOR,CENTER SEMITRAILER UOC:V79	1
8	XDOZZ	98255	SW15200P7	.BOARD,FLOOR,CENTER SEMITRAILER UOC:V79	1
9	XDOZZ	98255	SW15200P8	.BOARD,FLOOR,CENTER SEMITRAILER UOC:V79	1
10	XDOZZ	98255	SW15200P9	.BOARD,FLOOR,CENTER SEMITRAILER UOC:V79	1
11	XDOZZ	98255	SW15200P10	.BOARD,FLOOR,CENTER SEMITRAILER UOC:V79	1
12	PAOZZ	98255	SW14342P1	.SCREW,TAPPING FLOOR BOARD MTG UOC:V79	440
13	XDOZZ	98255	SW15200P11	.BOARD,FLOOR,O.B. SEMITRAILER UOC:V79	1
14	XDOZZ	98255	SW15200P12	.BOARD,FLOOR,O.B. SEMITRAILER UOC:V79	1
15	XDOZZ	98255	SW15200P13	.BOARD,FLOOR,O.B. SEMITRAILER UOC:V79	1
16	XDOZZ	98255	SW15200P14	.BOARD,FLOOR,EDGE SEMITRAILER UOC:V79	1
17	MOOZZ	81348	A1	BOARD,FLOOR MAKE FROM P/N MML736 (81348) UOC:WAA	6
18	MOOZZ	66788	B1	BOARD MAKE FROM P/N MML736 (81348) UOC:WAA	6
19	MOOZZ	81348	A2	BOARD MAKE FROM P/N MML736 (81348) UOC:WAA	6
20	MOOZZ	81348	A3	BOARD FLOOR MAKE FROM P/N MML736 (81348) UOC:WAA	6
21	MOOZZ	81348	B3	BOARD FLOOR MAKE FROM P/N MML736 (81348) UOC:WAA	6
22	MOOZZ	66788	B2	BOARD MAKE FROM P/N MML736 (81348)	6

SECTION II

TM9-2330-358-14&P C01

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
23	MOOZZ	66788	G1	UOC:WAA BOARD MAKE FROM P/N MML736 (81348)	1
24	MOOZZ	81348	G2	UOC:WAA BOARD FLOOR MAKE FROM P/N MML736 (81348)	1
25	MOOZZ	66788	G3	UOC:WAA BOARD MAKE FROM P/N MML736 (81348)	1
26	MOOZZ	96906	MS24627-62	UOC:WAA SCREW,TAPPING	128

END OF FIGURE

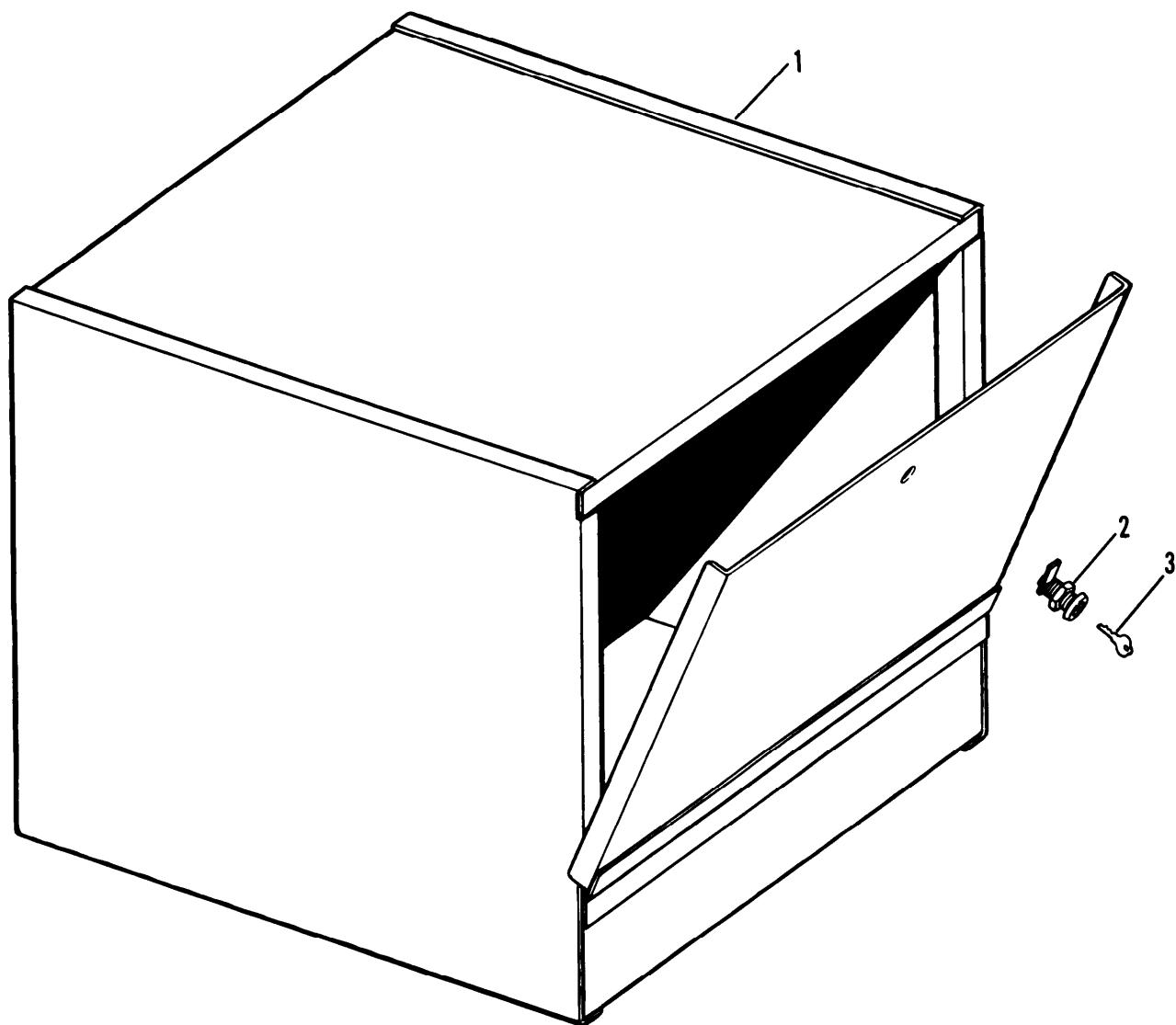


Figure 41. Storage Box

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 1808 STOWAGE RACKS, BOCES, STRAPS, CARRYING CASES CABLE REELS, HOSE REELS, ETC.					

FIG. 41 - STORAGE BOX

1	PFFZZ	66788	6000	BOX, ACCESSORIES STO UOC:WAA	1
2	PFOZZ	66788	L3980	CYLINDER, LOCK, VEHIC UOC:WAA	1
3	PFOZZ	66788	LL71	KEY BLANK UOC:WAA	1

END OF FIGURE

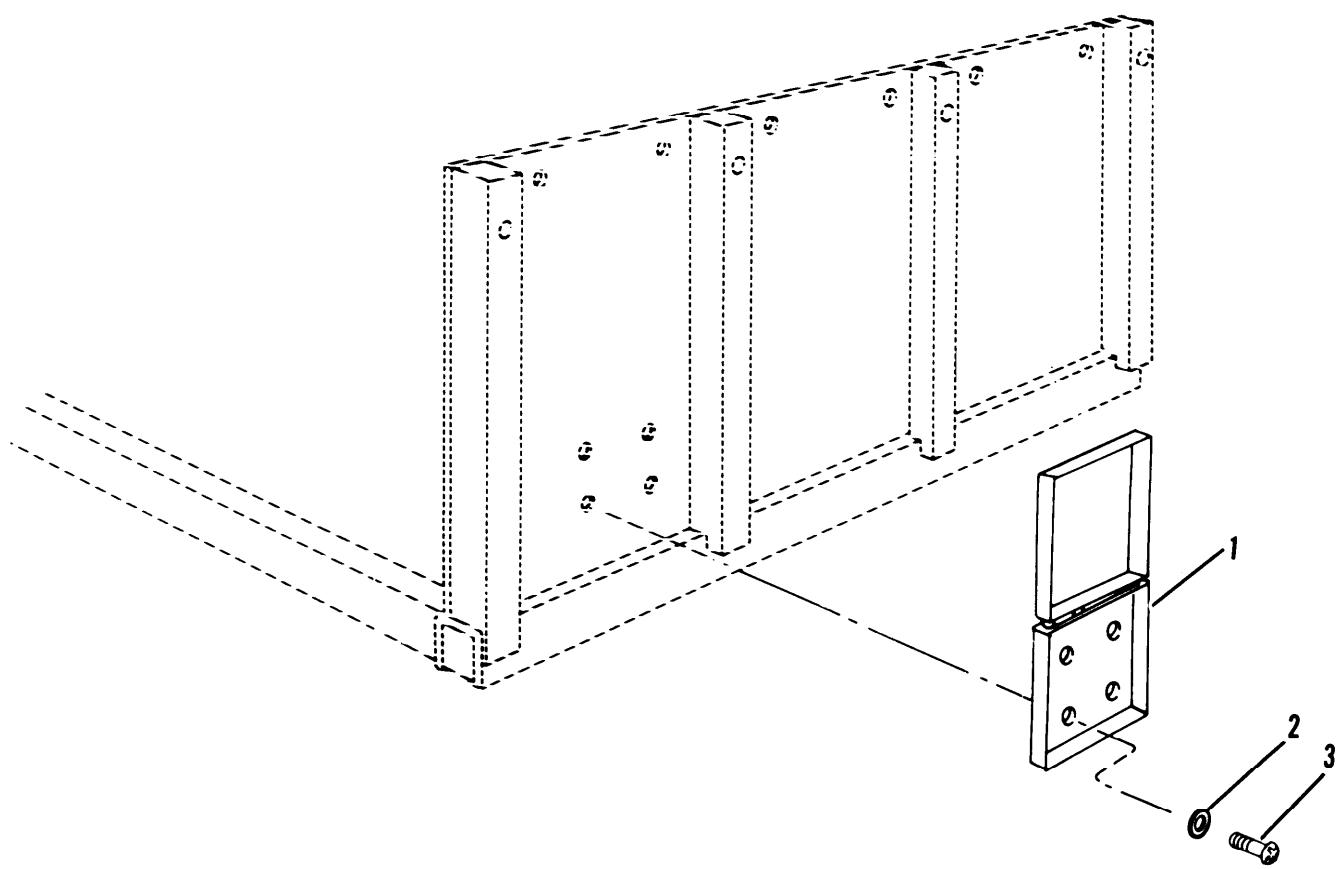


Figure 42. Document Box

SECTION II

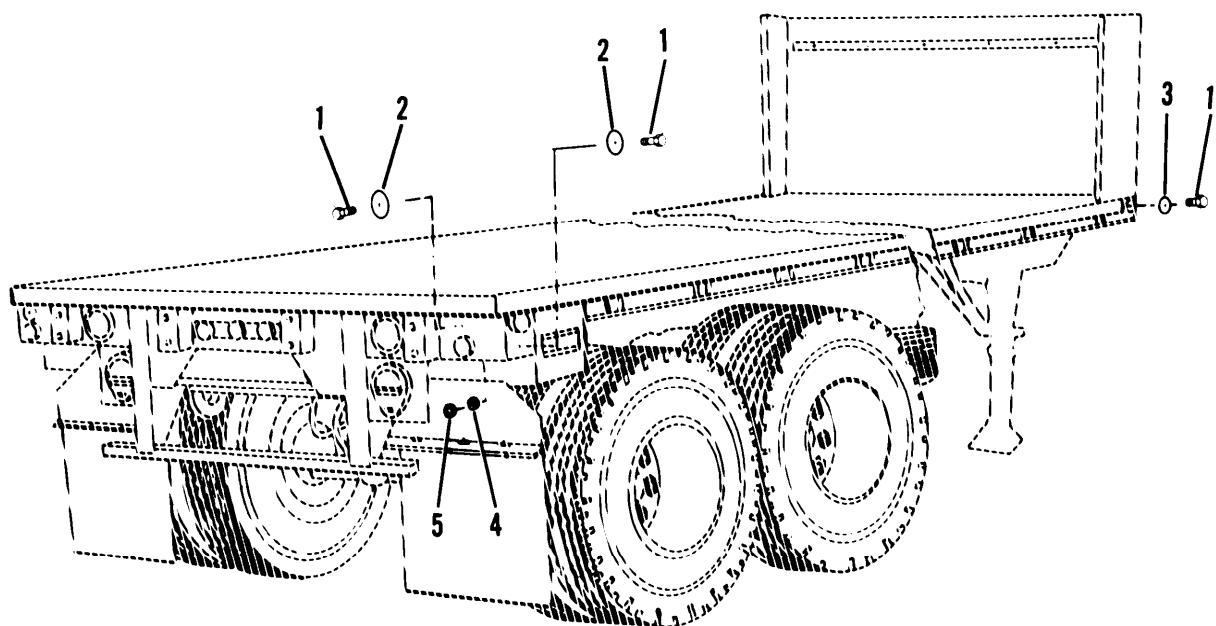
TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
				GROUP 1808 STOWAGE RACKS, BOXES, STRAPS, CARRYING CASES, CABLE REELS, HOSE REELS, ETC.	

FIG. 42 - DOCUMENT BOX

1	PAOZZ	98255	3713	BOX, VEHICULAR ACCES SEMITRAILER UOC:V79	1
1	PFOZZ	66788	SAT-17518	BOX, DOCUMENT UOC:WAA	1
2	PAOZZ	96906	MS27183-11	WASHER, FLAT MANIFEST BOX MOUNTING UOC:V79	4
3	PAOZZ	96906	MS24629-48	SCREW, TAPPING, THREA MANIFEST BOX MOUNTING UOC:V79	4
3	PAOZZ	96906	MS51861-49	SCREW, TAPPING, THREA UOC:WAA	4

END OF FIGURE



M871 Semitrailer

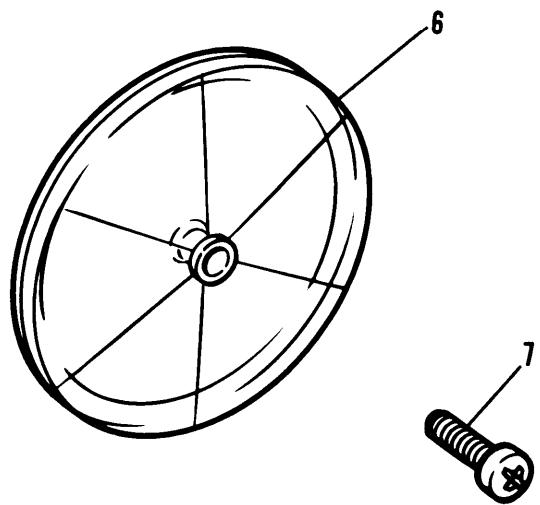


Figure 43. Reflectors

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 22 BODY, CHASSIS, AND HULL ACCESSORY ITEMS					
GROUP 2202 ACCESSORY ITEMS FIG. 43 - REFLECTORS					
1	PAOZZ	96906	MS35206-264	SCREW, MACHINE RED REFLECTOR MTG UOC:V79	4
2	PAOZZ	81834	40092-3	REFLECTOR, INDICATIN RED UOC:V79	4
3	PAOZZ	81834	40093-3	REFLECTOR, INDICATIN AMBER UOC:V79	2
3	PAOZZ	13548	98007Y	REFLECTOR, INDICATIN UOC:WAA	2
4	PAOZZ	96906	MS35338-43	WASHER, LOCK REFLECTOR MTG UOC:V79	6
5	PAOZZ	96906	MS35649-202	NUT, PLAIN, HEXAGON REFLECTOR MTG UOC:V79	6
6	PAOZZ	13548	98007R	REFLECTOR, INDICATIN RED UOC:WAA	2
7	PAOZZ	96906	MS24629-48	SCREW, TAPPING, THREA UOC:WAA	4

END OF FIGURE

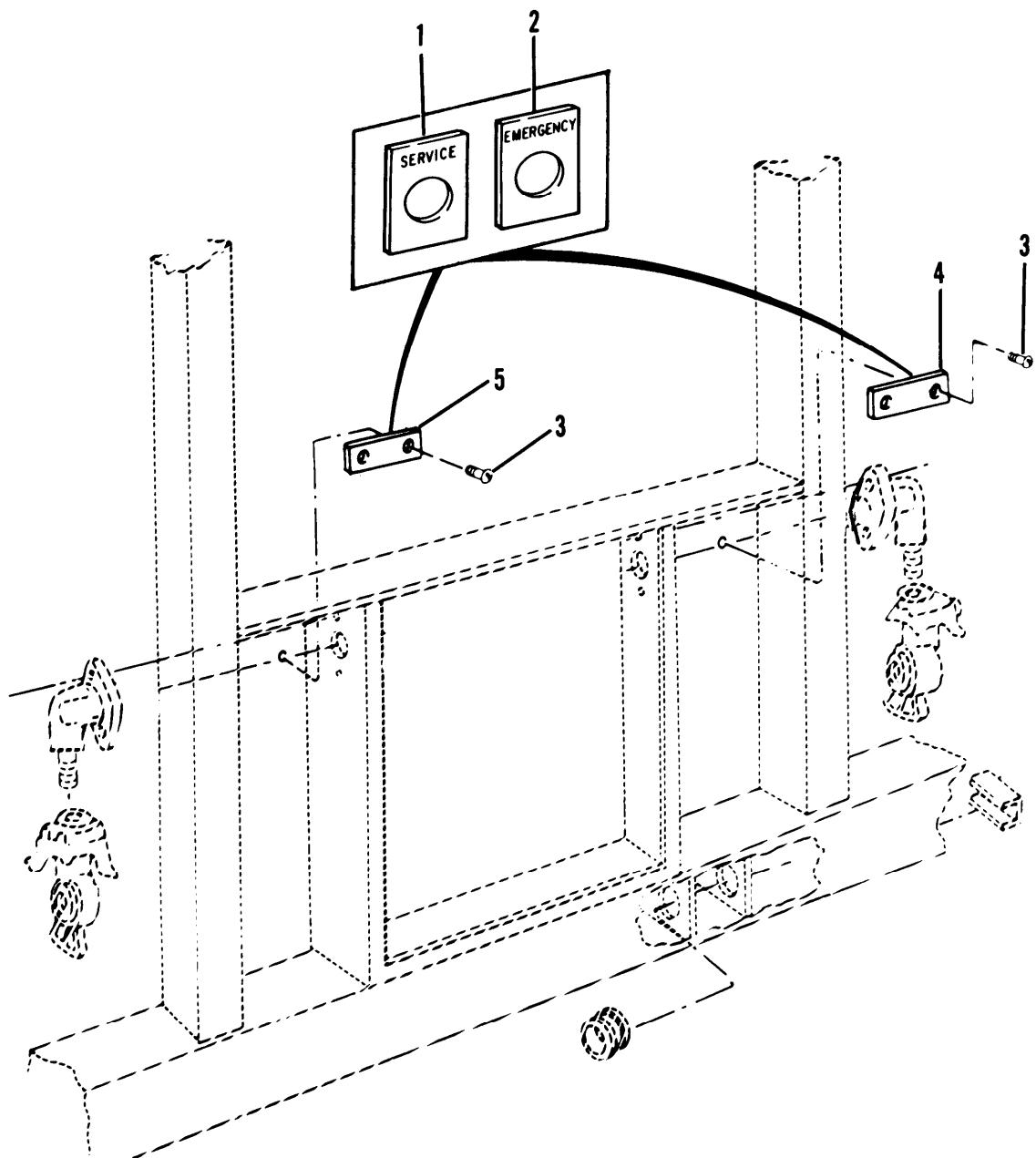


Figure 44. Brake System Data Plates

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
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GROUP 2210 DATA PLATES AND
INSTRUCTION HOLDERS

FIG. 44 - BRAKE SYSTEM DATA PLATES

1	PAOZZ	40342	N10790C	PLATE, IDENTIFICATIO UOC:WAA	1
2	PAOZZ	96906	MS53007-2	PLATE, IDENTIFICATIO UOC:WAA	1
3	PAOZZ	96906	MS51863-43C	SCREW, TAPPING, THREA TAG MTG	4
4	XDOZZ	98255	SW15228P-1	PLATE, IDENTIFICATIO UOC:V79	1
5	XDOZZ	98255	SW15228P2	PLATE, INSTRUCTION GLADHAND UOC:V79	1

END OF FIGURE

SEMITRAILER, FLATBED, BREAKBULK/CONTAINER TRANSPORTER, 22½ TON, M871A1

GAWR AND CWVR
BASED ON SPEED LIMITATION
OF 65 MPH TIRE PRESSURE 80 PSI COLD

GAWR
FRONT 185/80 WITH 11.00 X 20 12 PLY RATED TIRES
REAR 185/80 WITH 11.00 X 20 12 PLY RATED TIRES

RATING AT 65 MPH AND TIRE PRESSURE 80 PSI COLD

THIS VEHICLE CONFORMS TO ALL APPLICABLE FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN EFFECT ON THE DATE OF MANUFACTURE SHOWN BELOW.

▲ LIFT POINTS

LIFTING DATA		WEIGHT DISTRIBUTION DATA		
ALL CARGO IN EITHER BULK OR CONTAINER MODE MUST BE EVENLY DISTRIBUTED ON TRAILER WHEN LIFTING WITH LIFTING EYES. SURCHARGE THROUGH A CONTAINER CAN ONLY BE DONE WHEN TRAILER IS LOADED WITH A 20 FT CONTAINER. LIFTING CAPACITY OF EACH LIFT EYE IS 40,000 LBS.		LOCATION	EMPTY	LOADED
		AXLES	6,110 LBS	9,770 LBS 20,196 LBS 34,655 LBS
		LANDING GEAR	9,520 LBS	— 40,454 LBS —
		KNOCK N	—	5,850 LBS 74,975 LBS
		DMA	55.00 IN	54.00 IN
		CMB	166.00 IN	176.00 IN
		SHIPPING CUBE 2153 CU FT MAXIMUM PAYLOAD 45,000 LBS LBS SHIPPING WEIGHT (EMPTY) 15,630 LBS		

MODEL NO. M871 DATE OF MANUFACTURE
NSN
CONTRACT NO. DAQ-BD7-85-E-J04R
VEHICLE REG NO. _____

MFD BY SHOALS AMERICAN INDUSTRIES
338 WASHINGTON ST
MUSCLE SHOALS, AL 35660

INSPECTION STAMP _____ INSPECTION DATE _____

LUBRICATION CHART

SEMITRAILER, FLATBED, BREAKBULK/CONTAINER TRANSPORTER, 22½ TON, M871A1

INTERVALS ARE BASED ON NORMAL OPERATION.
REFLUBRICATE AFTER WASHING OR FORGING.
LUBRICATE BOTH SIDES OF EQUIPMENT.

INTERVAL	INT.	DESCRIPTION	SERVICE	SP. INT.	INT.
MONTHLY	1	DRIVELINE & TRANSFER CASE	LUBE	1000	1000
	2	LANDING GEAR HORN PADS	LUBE	1000	1000
	3	LANDING GEAR LOWERING	LUBE	1000	1000
	4	STEERING	LUBE	1000	1000
	5	CAMSHAFT BEARING	LUBE	1000	1000
	6	GEARBOX	LUBE	1000	1000
	7	LANDING GEAR FRAME	LUBE	1000	1000
	8	LANDING GEAR AXLE	LUBE	1000	1000
QUARTERLY	9	SLIDE DOOR HINGES	LUBE	1000	1000
	10	FRONT AXLE PIVOT PLATE	LUBE	1000	1000
	11	FRONT AXLE PIN	LUBE	1000	1000
ANNUALLY	12	PERIODIC OUTSIDE WHEEL FLAMES	REMOVE CLEAR OIL PERIOD	1000	1000

WARNING
SOLVENT-FED P-D-680 IS TOXIC. KEEP OFF SKIN, EYES, AND CLOTHES.
DO NOT BREATHE THE VAPORS. USE CHEMICAL COGGLES AND GOOD VENTILATION.

LUBRICANT SPECIFICATIONS

OIL MIL-L-2104
Greas MIL-C-27000
See Part 2 Appendix I

LUBRICANT DATA

LUBRICANT	TYPE	GRADE	GRADE
DEF OIL LUBRICANT PIGRO	DEF	DEF	DEF
DEF OIL LUBE PIGMENTATIVE	DEF	DEF	DEF
DEF - MOLY OIL DRY SPRAY	DEF	DEF	DEF
GAS-CRETE AUTO & AIRPLANE	GAS	GAS	GAS

Figure 45. Data Plates

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6) DESCRIPTION AND USABLE ON CODES(UOC)	QTY
GROUP 2210 DATA PLATES AND INSTRUCTION HOLDERS						
FIG. 45 - DATA PLATES						
* 1	PFOZZ	66788	SAI-871-0008	PLATE, IDENTIFICATIO UOC:WAA		1
1	PFOZZ	98255	15237P	PLATE, IDENTIFICATIO UOC:V79		1
2	PAOZZ	96906	MS24662-225	RIVET, BLIND UOC:WAA		4
3	PFOZZ	66788	871-0009	PLATE, INSTRUCTION UOC:WAA		8

END OF FIGURE

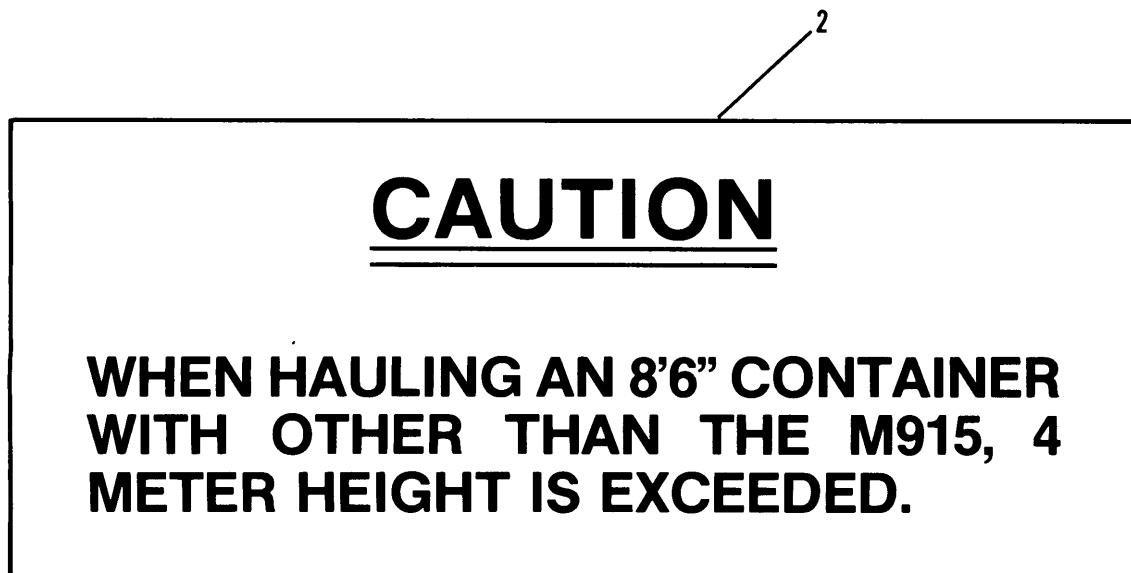


Figure 46. Decals

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 2210 DATA PLATES AND INSTRUCT-					
ION HOLDERS					
FIG. 46 DECALS					
1	PFOZZ	66788	SAT17553	MARKER, IDENTIFICATI UOC:WAA	1
2	PFOZZ	66788	SAT17554	MARKER, IDENTIFICATI UOC:WAA	1

END OF FIGURE

SECTION II

TM9-2330-358-14&P

(1) ITEM NO.	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY
GROUP 9401 KITS					
FIG.KITS					
1	PAOZZ	98255	SW16026A	MODIFICATION KIT BRAKE SYSTEM (USED ON SERIAL NO. M871-0001 THRU M871-0125 ONLY, WHEN REPLACING VALVE P/N A88802) UOC:V79	1

END OF FIGURE

SECTION II (1) ITEM NO	(2) SMR CODE	(3) CAGEC	TM9-2330-358-14&P (4) PART NUMBER	C01 (5)	(6)
				DESCRIPTION AND USABLE ON CODES(UOC)	QTY
GROUP 95 GENERAL USE STANDARDIZED PARTS					
GROUP 9501 HARDWARE SUPPLIES AND BULK MATERIAL, COMMON					
FIG. BULK					
* 1	PAOZZ	30327	C608	HOSE, NONMETALLIC UOC:V79	V
2	PAOZZ	85757	3250-0612	HOSE, NONMETALLIC UOC:WAA	V
3	PAOZZ	85757	3250-0812	HOSE, NONMETALLIC RED UOC:WAA	V
4	PAOZZ	85757	3250-0616	HOSE, NONMETALLIC BLUE UOC:WAA	V
5	PAOZZ	81348	MML736TY3 OAK/GR 22X8	LUMBER, HARDWOOD UOC:WAA	V
6	PAOZZ	81349	MWC12-9U0	WIRE, ELECTRICAL 12 GA UOC:V79	V
7	PAOZZ	19207	7720853	WIRE, ELECTRICAL UOC:WAA	V
8	PAOZZ	98255	SW14160P1	WIRE, ELECTRICAL UOC:V79	V

END OF FIGURE

CROSS-REFERENCE INDEXES

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5310-00-011-5093	36	3	6240-00-143-3159	1	5
6240-00-019-0877	1	11	5940-00-143-4780	7	1
6240-00-019-3093	1	5	5940-00-143-4794	8	3
2610-00-029-0563	25	2		8	6
6240-00-044-6914	1	4		9	5
5310-00-045-3296	5	22	6145-00-152-6499	BULK	7
	43	4	5340-00-158-3805	32	2
5305-00-051-0827	34	25	2640-00-158-5617	25	1
2610-00-051-9450	25	2		25	1
5305-00-052-6917	4	9	5305-00-159-9594	44	3
5305-00-052-6923	11	2	4010-00-165-6061	33	4
5310-00-056-3395	36	1	5935-00-167-7775	9	9
	39	1	5330-00-172-1919	22	8
5999-00-057-2929	1	12	5325-00-174-9325	10	4
2640-00-060-3550	25	3		21	7
5305-00-068-0501	38	11		22	7
5305-00-068-0511	18	9	5325-00-174-9328	7	9
	39	5	5340-00-177-9931	34	11
5305-00-068-0515	39	5	2590-00-177-9992	34	13
4730-00-069-1187	19	3	5340-00-182-5359	33	3
5305-00-071-2506	23	1	5325-00-185-0004	1	3
5305-00-071-2509	38	7	4730-00-193-0869	18	3
5975-00-074-2072	16	25	5310-00-193-7577	5	3
5310-00-080-6004	18	10	4730-00-194-0219	18	19
5310-00-081-8087	5	8	4730-00-196-1465	18	14
5310-00-087-4652	18	24	4730-00-196-1467	18	17
	29	4	4730-00-196-1493	18	6
	34	2	4730-00-202-9036	16	5
	34	31	4730-00-203-0028	16	2
	34	34		16	7
	36	1	2610-00-204-4091	25	6
5310-00-087-7493	18	22	5305-00-225-9081	19	1
	29	6	5306-00-226-4823	23	1
	33	5	5940-00-230-0515	7	12
5310-00-088-1251	37	2	4730-00-249-2029	18	15
	38	3	2640-00-250-2474	25	4
5365-00-090-5426	6	10	5306-00-260-4502	12	7
3110-00-100-0332	23	6	5310-00-261-7340	13	8
3110-00-100-0337	23	12	5305-00-269-3209	1	8
3110-00-100-0663	23	5		36	7
3110-00-100-0683	23	11	5305-00-269-3217	34	12
5905-00-101-2769	5	7		34	33
5975-00-111-3208	10	3		34	37
	10	3	5310-00-269-4040	30	4
3010-00-117-3413	34	10		34	44
6220-00-134-9098	1	1		35	1
4730-00-142-3076	16	5	2530-00-270-3878	22	9
	16	7	4010-00-273-2986	32	1
	16	12	5510-00-274-4994	BULK	5
	16	22	4730-00-277-5553	18	2

CROSS-REFERENCE INDEXES

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
4730-00-277-8257	17	7	2530-00-603-5768	24	1
	18	8	6240-00-617-0991	1	4
4730-00-278-4822	18	13	3110-00-618-0248	23	11
	19	6	3110-00-618-0249	23	12
4730-00-289-0051	16	17	5310-00-620-2486	12	4
	21	2		13	16
4730-00-289-0155	22	5	5310-00-637-9541	1	7
3110-00-293-8997	23	6		18	11
3110-00-293-8998	23	5		21	4
6145-00-310-2598	8	5		36	2
	BULK	8		39	2
5340-00-330-8254	23	15	2540-00-678-3469	26	1
5310-00-393-6685	6	9	9905-00-685-6540	44	1
5306-00-402-2674	38	8	2530-00-703-2715	12	13
5310-00-407-9566	5	15	2530-00-706-6614	14	4
	23	2	2510-00-706-7973	31	1
4730-00-409-7854	16	15	5305-00-724-5910	34	9
2530-00-426-8342	15	1		34	20
5305-00-432-4205	42	3	5305-00-724-5911	34	28
9390-00-442-6321	21	6	5305-00-724-6761	30	3
5330-00-462-0907	1	3		35	25
6940-00-467-1012	12	13	5305-00-724-7221	34	45
4730-00-472-5058	7	8	5305-00-724-7223	34	48
4820-00-476-6412	25	5	5305-00-725-2317	18	21
4820-00-495-9680	18	7		29	2
5307-00-514-6834	23	14		36	6
5307-00-514-6835	23	14	5305-00-726-2551	35	22
5305-00-527-5611	1	8	5305-00-732-0512	29	7
6145-00-553-0729	8	2	5310-00-732-0558	18	12
	8	2	2530-00-738-9061	24	3
	8	2		24	5
	8	2	2530-00-738-9493	24	2
	8	2	2510-00-741-7585	33	1
	8	2	5310-00-761-6882	6	4
	8	8		37	15
	BULK	6		38	3
5310-00-572-0218	23	15	5310-00-763-8920	20	7
5935-00-572-9180	1	9		30	4
5310-00-582-5965	5	13		34	4
	6	5		34	18
	11	1		34	22
	38	4	5935-00-773-1428	5	19
	39	2		6	12
5310-00-582-6714	19	9	6220-00-774-5347	3	4
4010-00-585-2108	32	1	5365-00-787-2192	12	14
2640-00-591-6488	25	5		13	10
4730-00-595-0083	21	9	5310-00-809-3078	19	2
	22	4		42	2
5310-00-595-7237	1	7	5310-00-809-4058	37	9
	22	5		38	5

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STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5310-00-809-4061	34	1	5940-00-949-3161	6	1
5310-00-820-6653	20	8	5940-00-949-5536	5	11
	34	5	5305-00-964-0503	36	5
	34	19		36	6
	34	23	5310-00-982-6569	34	43
5310-00-823-8803	30	2	5310-00-984-3806	19	4
	34	8	5305-00-984-5675	5	17
	34	35	5305-00-984-5689	21	3
	35	26	5305-00-984-6211	43	1
5310-00-823-8804	7	2	5305-00-984-6212	6	13
5310-00-829-9981	5	14	5305-00-988-1724	5	20
5310-00-832-9719	23	7	5305-00-988-1725	6	8
5310-00-833-8567	1	10	5305-00-988-1727	37	8
5310-00-835-2037	20	2	5310-00-997-1888	5	12
5315-00-839-5822	20	6	9905-00-999-7369	44	2
5935-00-846-3883	5	18	4720-01-003-6706	16	4
	6	11		16	4
5940-00-846-8104	8	3		16	4
	9	2		16	9
	10	2		16	14
4820-00-849-1220	18	25		16	19
5310-00-851-2677	20	7		16	24
5325-00-854-9378	7	5		BULK	1
5305-00-855-0963	2	4	2530-01-016-2029	14	11
	3	1	5320-01-020-0703	14	5
5305-00-855-0964	4	6	4730-01-032-6038	16	3
	5	21		16	8
	6	14		16	13
	42	3		16	18
	43	7		16	23
5310-00-880-2004	23	16		21	8
5310-00-880-2005	23	16	5935-01-038-9629	5	16
5310-00-880-7744	33	6	5340-01-042-0573	23	3
5310-00-889-2708	2	3	5310-01-042-1006	23	7
5305-00-889-2997	5	4	3120-01-042-2579	12	12
	6	16		13	14
2540-00-897-5917	39	4	5310-01-043-0596	12	5
5315-00-903-4322	34	15		13	17
	34	41	5310-01-049-4072	34	17
5340-00-904-0008	37	5	5310-01-049-9051	12	3
6240-00-924-7526	4	4	2590-01-060-7119	38	2
5310-00-927-3877	6	2	5310-01-060-7184	12	9
	6	20	5340-01-060-8993	20	3
5310-00-934-9747	2	2	2510-01-060-9683	34	26
5310-00-934-9757	5	2		34	47
5310-00-934-9758	43	5	5310-01-062-0358	12	8
5305-00-940-8069	35	24	5365-01-062-1009	14	7
5305-00-942-2196	22	6	5310-01-062-1531	14	9
	36	5	5310-01-062-1532	12	15
5940-00-949-3161	5	9		13	11

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NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
4730-01-062-2570	19	10	5310-01-098-7236	35	13
2510-01-063-0262	38	1	5310-01-098-7244	35	17
2510-01-063-3702	38	10	5310-01-098-7245	35	5
2590-01-065-6627	34	14	5310-01-098-7246	35	14
2590-01-065-7220	34	24	5310-01-098-7247	35	6
	34	49	5310-01-098-7827	35	4
6220-01-067-5264	2	6	5305-01-099-4959	40	12
2510-01-067-5397	38	1	5310-01-099-6539	35	16
2540-01-068-4746	4	7	2540-01-100-3894	42	1
9905-01-069-7282	43	6	2510-01-100-7167	35	21
9905-01-070-0471	43	3	3010-01-100-7358	34	7
2590-01-070-5968	34	16	2530-01-100-8070	12	1
2530-01-084-6975	20	12	2590-01-100-9001	35	20
4730-01-090-3237	19	13	2510-01-100-9270	35	18
4730-01-091-8032	18	18	2510-01-100-9271	35	2
5330-01-093-1149	13	18	2520-01-101-0935	35	10
7690-01-094-7873	5	10	2520-01-101-1802	35	3
2510-01-094-7910	38	10	2520-01-101-2551	35	12
6220-01-095-0009	4	1	2510-01-101-2559	35	8
6220-01-095-0010	2	1	2510-01-101-2890	35	19
	2	5	5330-01-101-4854	12	6
6220-01-095-0011	2	1	5330-01-101-4860	23	4
	2	5	2530-01-101-5429	20	1
	3	5	5310-01-101-8158	23	2
6220-01-095-0019	4	3	5365-01-102-1982	4	2
6220-01-095-0117	2	7	5905-01-102-4021	5	6
4820-01-095-8688	18	4	5999-01-102-7818	5	5
4720-01-095-8745	16	10	4730-01-104-8953	17	6
4820-01-095-8755	18	16	2510-01-104-8954	38	2
5995-01-096-0733	3	3	9905-01-105-8610	43	3
4720-01-096-2005	16	10	2590-01-107-5672	9	7
2530-01-096-2230	18	1	2530-01-110-1332	23	9
4730-01-096-3204	21	5	9905-01-110-2079	43	2
3040-01-096-3219	34	3	4810-01-110-2607	18	4
4730-01-096-9128	22	3	5365-01-110-4247	35	11
2590-01-096-9265	34	21	2910-01-112-6262	KITS	1
2510-01-096-9346	37	16	5340-01-112-6396	30	1
2510-01-096-9347	37	1	4010-01-114-1333	37	4
2510-01-096-9348	37	3	5995-01-114-2994	9	7
2810-01-096-9349	37	1	2510-01-114-3209	35	9
2510-01-096-9350	37	3	5995-01-115-0576	9	4
4730-01-097-4330	21	1	2590-01-115-0577	9	7
	22	1	4730-01-115-6643	19	7
2590-01-098-1781	34	27	2590-01-116-0274	9	1
2540-01-098-1782	39	3	5306-01-116-3535	38	7
2640-01-098-2029	25	3	5310-01-119-8200	38	4
2510-01-098-3995	38	6	5315-01-121-1859	20	5
4730-01-098-5229	13	2	6150-01-124-5139	9	7
5306-01-098-7197	35	15	2540-01-124-5227	26	1
5306-01-098-7198	35	7	4730-01-126-7356	16	20

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STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
4730-01-126-9753	18	2	5365-01-239-0887	29	1
4730-01-131-5951	18	5	3120-01-239-0888	13	5
4730-01-134-3563	19	16	3120-01-239-0889	14	10
4730-01-134-7759	19	8	5340-01-239-0890	29	5
4730-01-134-7760	19	12	5307-01-239-0891	23	14
4010-01-142-0450	37	7	5340-01-239-0892	19	14
4010-01-144-1734	37	6	5310-01-239-0893	12	2
2530-01-148-2795	14	6		13	15
5306-01-148-6700	23	16	6150-01-239-3636	7	3
5306-01-148-9697	23	15	4010-01-239-5719	22	10
5365-01-150-6277	35	11	5340-01-239-5720	20	11
5306-01-151-4918	23	15	5310-01-239-8195	23	8
2530-01-155-5731	19	5	5340-01-239-8196	34	38
4730-01-159-6427	19	15	4720-01-240-3055	17	5
3010-01-175-0551	34	30	2530-01-240-3107	23	13
5340-01-175-0564	34	36	2590-01-240-3172	34	40
3040-01-175-0585	34	32	2530-01-240-3173	24	4
5340-01-178-7362	23	3	2590-01-240-6248	38	2
4720-01-179-2939	BULK	4	5995-01-240-8558	7	6
4720-01-179-2940	BULK	3	5995-01-240-8559	7	11
4720-01-180-5152	BULK	2	5995-01-240-8560	7	10
6220-01-182-3380	2	9	2530-01-240-8608	18	20
6220-01-183-4557	2	9	2530-01-240-8620	13	12
5330-01-190-4634	13	6	2530-01-240-8621	20	1
2590-01-192-3445	34	39	2590-01-240-8632	37	10
2530-01-192-6075	23	9	5410-01-240-8649	36	8
2590-01-193-4089	34	46		38	10
5330-01-201-3529	23	10	5410-01-240-8650	38	10
5340-01-209-6524	28	1	4710-01-240-9431	35	23
5935-01-211-4434	6	6	2530-01-240-9657	14	2
	6	7	2510-01-241-2530	38	9
5320-01-217-2227	45	2	2540-01-241-2889	41	1
2530-01-218-3454	14	6	2530-01-241-2979	14	3
5340-01-218-3491	12	17	2530-01-241-3216	14	1
5315-01-220-6238	14	8	2530-01-241-3217	13	12
5315-01-220-6245	14	12	2530-01-241-3218	15	1
5310-01-220-7966	14	9	2590-01-241-3242	38	2
5360-01-220-9373	14	13	2510-01-241-3243	37	16
5975-01-238-4606	7	7	2510-01-241-3277	38	1
5975-01-238-4687	6	15	3040-01-241-4818	13	7
3990-01-238-4784	29	3	5360-01-241-6961	14	14
5905-01-238-8177	6	19	4010-01-241-6963	27	1
5340-01-239-0879	39	3		37	14
5320-01-239-0880	14	5	3040-01-241-7404	13	4
5310-01-239-0881	13	9	2540-01-241-9076	39	4
5315-01-239-0882	20	10	5310-01-242-0662	23	16
5340-01-239-0883	14	11	9905-01-243-0621	45	1
5315-01-239-0884	20	4	5307-01-243-9952	23	14
5330-01-239-0885	12	11	2530-01-248-2532	22	11
	13	13	6150-01-248-2549	7	4

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STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
4720-01-248-2556	17	4			
2540-01-248-4922	41	2			
7690-01-248-7722	46	1			
7690-01-248-7723	46	2			
9905-01-249-1613	45	3			
5306-01-249-4146	13	3			
4730-01-251-9368	15	2			
2590-01-252-2827	36	4			
9905-01-252-2858	45	1			
2590-01-252-2983	34	29			
2530-01-252-6121	19	11			
2530-01-252-6325	34	42			
2530-01-253-7280	13	1			
5340-01-255-1788	41	3			
2510-01-256-0110	36	8			
7520-01-256-4913	42	1			
2510-01-256-8408	38	1			
4730-01-256-9056	13	19			
4730-01-256-9057	12	10			
2510-01-257-3862	37	10			
2530-01-257-6443	14	1			
4010-01-259-6445	37	13			
6220-01-259-9017	4	8			
5340-01-264-1579	30	1			
	35	27			
5325-01-265-3678	2	10			
5340-01-265-6273	37	12			
5340-01-273-0034	6	17			
5340-01-277-5066	17	8			
5330-01-280-5827	23	4			
6220-01-301-5411	3	2			
2510-01-327-5999	40	1			
2510-01-328-8884	40	2			
2510-01-328-8885	40	3			
2510-01-329-2200	40	4			
2510-01-329-2201	40	5			
2510-01-329-2202	40	6			
6220-01-359-2870	1	2			

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CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
08862	A-7022	2530-00-426-8342	15	1
25575	AB36-033	2510-01-063-0262	38	1
06721	AF104001	4810-01-110-2607	18	4
81348	A1		40	17
56697	A150034	5310-00-620-2486	12	4
			13	16
81348	A2		40	19
81348	A3		40	20
16662	A78889	4820-01-095-8755	18	16
16662	A88802	4820-01-095-8688	18	4
19422	BM11352-77	4730-00-193-0869	18	3
66788	B1		40	18
66788	B2		40	22
81348	B3		40	21
92967	B893-02	4710-01-240-9431	35	23
99539	CBM21389	5310-00-582-5965	6	5
19207	CPR102321-4	4730-01-032-6038	16	3
			16	8
			16	13
			16	18
			16	23
			21	8
62727	C09140	4730-00-472-5058	7	8
16003	C43974	4010-00-585-2108	32	1
30327	C608	4720-01-003-6706	16	4
			16	4
			16	9
			16	14
			16	19
			16	24
			BULK	1
81348	GP3STYLXTYBBCLR/ T/11.00-20/F/TBH	2610-00-204-4091	25	6
66788	G1		40	23
81348	G2		40	24
66788	G3		40	25
91637	HL50-02Z-3R6J	5905-01-102-4021	5	6
60038	HM212011	3110-00-293-8997	23	6
56697	HM212049	3110-00-293-8998	23	5
60038	HM218210	3110-00-618-0249	23	12
60038	HM218248	3110-00-618-0248	23	11
19207	H008-02-22080	4010-00-165-6061	33	4
62707	K22TA112-35X	2530-01-253-7280	13	1
62707	K25AX701-1	2530-01-100-8070	12	1
47346	K25HH100	5330-01-101-4854	12	6
62707	K25HU105		23	13
99411	LG0082-02	5340-00-177-9931	34	11
99411	LG0083-03	5340-01-175-0564	34	36
99411	LG0094-33	3040-01-175-0585	34	32
99411	LG0523	3010-01-175-0551	34	30

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CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
99411	LG0525	2590-01-065-7220	34	49
99411	LG5M29-91	2590-01-193-4089	34	46
99411	LG5M29-92	2590-01-192-3445	34	39
66788	LL71	5340-01-255-1788	41	3
66788	L3980	2540-01-248-4922	41	2
44655	L50J5R0	5905-00-101-2769	5	7
81348	MML736TY3 OAK/GR 22X8	5510-00-274-4994	BULK	5
26697	MP0-0045	3120-01-042-2579	12	12
96906	MS15570-1251	6240-00-019-0877	1	11
96906	MS15570-623	6240-00-019-3093	1	5
96906	MS15570-89	6240-00-143-3159	1	5
96906	MS16562-82	5315-00-903-4322	34	15
			34	41
96906	MS16626-1150	5365-00-787-2192	12	14
			13	10
96906	MS18154-60	5305-00-942-2196	22	6
			36	5
96906	MS20913-3S	5310-00-081-8087	18	23
96906	MS21044N06	5310-00-081-8087	5	8
96906	MS24627-62	5305-00-855-0963	40	26
96906	MS24629-26	5305-00-855-0963	2	4
			3	1
96906	MS24629-48	5305-00-855-0964	4	6
			5	21
			6	14
			42	3
			43	7
96906	MS24629-50	5305-00-052-6917	4	9
96906	MS24629-59	5305-00-052-6923	11	2
96906	MS24662-225	5320-01-217-2227	45	2
96906	MS24665-353	5315-00-839-5822	20	6
96906	MS25036-108	5940-00-143-4780	7	1
96906	MS25036-112	5940-00-143-4794	8	3
			8	6
			9	5
96906	MS25036-154	5940-00-230-0515	7	12
96906	MS25064-12	5975-01-238-4606	7	7
96906	MS27144-1	5935-00-167-7775	9	9
96906	MS27148-2	5999-00-057-2929	1	12
96906	MS27183-10	5310-00-809-4058	37	9
			38	5
96906	MS27183-11	5310-00-809-3078	19	2
			42	2
96906	MS27183-13	5310-00-087-7493	18	22
			29	6
			33	5
96906	MS27183-14	5310-00-080-6004	18	10
96906	MS27183-15	5310-00-809-4061	34	1
96906	MS27183-21	5310-00-823-8803	30	2
			34	8

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CAGEC	PART NUMBER	STOCK NUMBER	PART NUMBER INDEX	
			FIG.	ITEM
96906	MS27183-21	5310-00-823-8803	34	35
			35	26
96906	MS27183-35	5310-00-982-6569	34	43
96906	MS27183-9	5310-00-823-8804	7	2
96906	MS27950-2	5306-00-402-2674	38	8
96906	MS3367-1-9	5975-00-074-2072	16	25
96906	MS3367-5-9	5975-00-111-3208	10	3
			10	3
96906	MS35206-215	5305-00-889-2997	5	4
			6	16
96906	MS35206-264	5305-00-984-6211	43	1
96906	MS35206-265	5305-00-984-6212	6	13
96906	MS35206-280	5305-00-988-1724	5	20
96906	MS35206-281	5305-00-988-1725	6	8
96906	MS35206-283	5305-00-988-1727	37	8
96906	MS35206-295	5305-00-984-5675	5	17
96906	MS35206-309	5305-00-984-5689	21	3
96906	MS35291-44		33	2
96906	MS35311-59	5305-00-527-5611	1	8
96906	MS35333-36	5310-00-193-7577	5	3
96906	MS35333-42	5310-00-595-7237	1	7
			22	5
96906	MS35333-49	5310-00-582-6714	19	9
96906	MS35338-43	5310-00-045-3296	5	22
			43	4
96906	MS35338-44	5310-00-582-5965	5	13
			11	1
			38	4
			39	2
96906	MS35338-45	5310-00-407-9566	5	15
			23	2
96906	MS35338-46	5310-00-637-9541	1	7
			18	11
			21	4
			36	2
			39	2
96906	MS35338-50	5310-00-820-6653	20	8
			34	19
			34	23
96906	MS35338-65	5310-00-011-5093	36	3
96906	MS35338-8	5310-00-261-7340	13	8
96906	MS35478-1073	6240-00-617-0991	1	4
96906	MS35478-1683	6240-00-044-6914	1	4
96906	MS35489-107	5325-00-174-9325	10	4
			21	7
			22	7
96906	MS35489-108	5325-00-854-9378	7	5
96906	MS35489-114	5325-00-174-9328	7	9
96906	MS35490-34	5325-00-185-0004	1	3
96906	MS35647-10	5340-00-158-3805	32	2
96906	MS35649-202	5310-00-934-9758	43	5

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CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
96906	MS35649-2252	5310-00-997-1888	5	12
96906	MS35649-2312	5310-00-829-9981	5	14
96906	MS35649-2382	5310-00-056-3395	36	1
			39	1
96906	MS35649-262	5310-00-934-9747	2	2
96906	MS35649-282	5310-00-934-9757	5	2
96906	MS35691-49	5310-00-851-2677	20	7
96906	MS35746-1	4730-00-595-0083	21	9
			22	4
96906	MS35782-5	4820-00-849-1220	18	25
96906	MS45904-54	5310-00-889-2708	2	3
96906	MS51861-49	5305-00-432-4205	42	3
96906	MS51863-43C	5305-00-159-9594	44	3
96906	MS51873-25	4730-00-196-1465	18	14
96906	MS51922-1	5310-00-088-1251	37	2
			38	3
96906	MS51922-14	5310-00-927-3877	6	2
			6	20
96906	MS51922-17	5310-00-087-4652	18	24
			29	4
			34	2
			34	31
			34	34
			36	1
96906	MS51922-49	5310-00-269-4040	30	4
			34	44
			35	1
96906	MS51922-61	5310-00-832-9719	23	7
96906	MS51922-9	5310-00-984-3806	19	4
96906	MS51952-2	4730-00-277-5553	18	2
96906	MS51953-78	4730-00-196-1493	18	6
96906	MS51967-2	5310-00-761-6882	6	4
			37	15
			38	3
96906	MS51967-20	5310-00-763-8920	20	7
			30	4
			34	4
			34	18
			34	22
96906	MS51967-5	5310-00-880-7744	33	6
96906	MS51967-8	5310-00-732-0558	18	12
96906	MS51983-3	5310-00-880-2004	23	16
96906	MS51983-4	5310-00-880-2005	23	16
96906	MS52125-1	6220-00-134-9098	1	1
96906	MS52127-3	2540-00-678-3469	26	1
96906	MS53007-2	9905-00-999-7369	44	2
96906	MS75021-1	5935-00-846-3883	5	18
			6	11
96906	MS90725-162	5305-00-724-5910	34	9
			34	20

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CAGEC	PART NUMBER	PART NUMBER INDEX		ITEM
		STOCK NUMBER	FIG.	
96906	MS90725-163	5305-00-724-5911	34	28
96906	MS90725-164	5305-00-051-0827	34	24
96906	MS90725-167	5305-00-724-6761	30	3
			35	25
96906	MS90725-5	5305-00-068-0501	38	11
96906	MS90725-58	5305-00-269-3209	1	8
			36	7
96906	MS90725-67	5305-00-269-3217	34	12
			34	33
			34	37
96906	MS90727-164	5305-00-726-2551	35	22
96906	MS90727-8	5305-00-068-0515	39	5
96906	MS90728-107	5305-00-732-0512	29	7
96906	MS90728-12	5305-00-071-2509	38	7
96906	MS90728-163	5305-00-724-7221	34	45
96906	MS90728-165	5305-00-724-7223	34	48
96906	MS90728-3	5305-00-071-2506	23	1
96906	MS90728-30	5306-00-226-4823	23	1
96906	MS90728-62	5305-00-068-0511	18	9
			39	5
96906	MS90728-64	5305-00-725-2317	18	21
			29	2
			36	6
96906	MS90728-78	5305-00-964-0503	36	5
			36	6
81349	MWC12-19U0	6145-00-553-0729	8	2
			8	2
			8	2
			8	2
			8	2
			8	8
		BULK	6	
62707	M10HG108	5330-01-101-4860	23	4
62707	M10HG115	5330-01-280-5827	23	4
62707	M10HH100	5330-01-190-4634	13	6
62707	M10HK131	5340-01-178-7362	23	3
62707	M10HM100	5320-01-239-0880	14	5
62707	M10HM160	5320-01-020-0703	14	5
62707	M10HN101	5310-01-043-0596	12	5
			13	17
62707	M10HN102	5310-01-239-0893	12	2
			13	15
62707	M10HN103	5310-01-220-7966	14	9
62707	M10HN135	5310-01-062-1531	14	9
62707	M10HN151	5310-01-049-9051	12	3
62707	M10HP102	5315-01-220-6238	14	8
62707	M10HP104		14	8
62707	M10HS117	5310-01-062-1532	12	15
			13	11
62707	M10WH100-1	3040-01-241-4818	13	7

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CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
62707	M10WH100-2	3040-01-241-7404	13	4
62707	M10WJ100	3120-01-239-0888	13	5
62707	M16HD100	3120-01-042-2579	13	14
62707	M16HD101	3120-01-239-0889	14	10
62707	M16HH100	5330-01-239-0885	12	11
			13	13
62707	M16SW132-X	2530-01-148-2795	14	6
62707	M16WA100	2530-01-110-1332	23	9
62707	M16WH113X	5340-01-218-3491	12	17
62707	M16WJ100	5360-01-241-6961	14	14
62707	M16WJ102	5340-01-239-0883	14	11
62707	M16WJ103	5360-01-220-9373	14	13
62707	M16WJ104	5315-01-220-6245	14	12
62707	M16WK102-16	2530-01-240-8620	13	12
62707	M16WK102-17	2530-00-703-2715	12	13
62707	M16WK103-16	2530-01-241-3217	13	12
62707	M16WK103-17	6940-00-467-1012	12	13
62707	M16WL112-1	2530-01-241-2979	14	3
62707	M16WL112-2	2530-01-240-9657	14	2
62707	M16WN101X	2530-01-257-6443	14	1
62707	M16WN121-1X	2530-01-241-3216	14	1
62707	M16WS104X	2530-01-218-3454	14	6
81349	M792815-5		10	1
06721	N-13047	4010-01-239-5719	22	10
06721	N-13048	2530-00-270-3878	22	9
98343	N-14398A		20	12
06721	N-20071	2530-01-248-2532	22	11
06721	N-21163-A	2530-01-241-3218	15	1
06721	N04730N	2530-01-240-8621	20	1
40342	N10790C	9905-00-685-6540	44	1
22337	RA26039-13	2530-01-240-3173	24	4
66788	SAI-871-0008	9905-01-252-2858	45	1
66788	SAI871-0005	4010-01-241-6963	27	1
			37	14
66788	SAT-E18950	5975-01-238-4687	6	15
66788	SAT-1010	6150-01-239-3636	7	3
66788	SAT-1060	5995-01-240-8560	7	10
66788	SAT-1070	5995-01-240-8558	7	6
66788	SAT-1080	5995-01-240-8559	7	11
66788	SAT-1090	6150-01-248-2549	7	4
66788	SAT-17518	7520-01-256-4913	42	1
66788	SAT-17544	2510-01-256-8408	38	1
66788	SAT-17545	2510-01-241-3277	38	1
66788	SAT-17548	5410-01-240-8649	36	8
			38	10
66788	SAT-17549	5410-01-240-8650	38	10
66788	SAT-17562	2590-01-241-3242	38	2
66788	SAT-17565	2590-01-240-6248	38	2
66788	SAT-18315	5340-01-239-0890	29	5
66788	SAT-18905	2510-01-241-2530	38	9
66788	SAT-18910	2510-01-241-3243	37	16

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CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
66788	SAT-18915	2510-01-257-3862	37	10
66788	SAT-18920	2590-01-240-8632	37	10
66788	SAT17523-1		37	11
66788	SAT17553	7690-01-248-7722	46	1
66788	SAT17554	7690-01-248-7723	46	2
01976	SIZE2-0	4010-00-273-2986	32	1
66788	SL1000	5340-01-264-1579	30	1
			35	27
98255	SW10998P1-18	4010-01-142-0450	37	7
98255	SW11935P-1	4010-01-144-1734	37	6
98255	SW11979A	2540-01-124-5227	26	1
98255	SW14160P-1	6145-00-310-2598	8	5
98255	SW14160P1	6145-00-310-2598	BULK	8
98255	SW14276P	2590-01-098-1781	34	27
98255	SW14337P	5340-01-112-6396	30	1
98255	SW14342P1	5305-01-099-4959	40	12
98255	SW14346P1		4	5
98255	SW14417M	2540-01-098-1782	39	3
98255	SW14490A-1	5995-01-115-0576	9	4
98255	SW14491A-1	2590-01-116-0274	9	1
98255	SW14497A1		8	1
98255	SW14497A11		8	1
98255	SW14497A2		8	1
98255	SW14497A5		8	1
98255	SW14498A1		8	1
98255	SW14498A7		8	1
98255	SW14499P7		9	8
			9	8
			9	8
98255	SW14499P8		9	3
98255	SW14657M	2510-01-098-3995	38	6
98255	SW14658M	2510-01-096-9346	37	16
98255	SW14659M1	2510-01-096-9348	37	3
98255	SW14659M2	2510-01-096-9350	37	3
98255	SW14661A	2510-01-067-5397	38	1
98255	SW14671P-3	2510-01-094-7910	38	10
98255	SW14867P	5999-01-102-7818	5	5
98255	SW14875P		9	6
98255	SW14880M2	2510-01-104-8954	38	2
98255	SW14880M3	2590-01-060-7119	38	2
98255	SW15056P	5310-01-119-8200	38	4
98255	SW15111A		36	4
98255	SW15192P	7690-01-094-7873	5	10
98255	SW15200P10		40	11
98255	SW15200P11		40	13
98255	SW15200P12		40	14
98255	SW15200P13		40	15
98255	SW15200P14		40	16
98255	SW15200P6		40	7
98255	SW15200P7		40	8

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CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
98255	SW15200P8		40	9
98255	SW15200P9		40	10
98255	SW15201A1		36	8
98255	SW15201A2		36	8
98255	SW15209A		5	1
98255	SW15210A		5	23
98255	SW15220M	3010-01-100-7358	34	7
98255	SW15226A		16	1
98255	SW15226A1		16	1
98255	SW15226A2		16	1
98255	SW15226A3		16	1
98255	SW15227P-4	4720-01-096-2005	16	10
98255	SW15228P-1		44	4
98255	SW15228P2		44	5
98255	SW15230A		16	6
98255	SW15230A1		16	6
			16	6
98255	SW15246A-1	2590-01-107-5672	9	7
98255	SW15246A-2	2590-01-115-0577	9	7
98255	SW15246A-3	5995-01-114-2994	9	7
98255	SW15246A-4	6150-01-124-5139	9	7
98255	SW15247A		8	7
98255	SW15248A1		8	4
98255	SW15248A2		8	4
98255	SW15248A3		8	4
98255	SW15248A4		8	4
98255	SW15248A5		8	4
98255	SW15248A6		8	4
98255	SW15254A1	2510-01-096-9347	37	1
98255	SW15254A2	2510-01-096-9349	37	1
98255	SW15266A	4010-01-114-1333	37	4
98255	SW15460P-1	9390-00-442-6321	21	6
98255	SW15464A		34	6
98255	SW16026A	2910-01-112-6262	KITS	1
98255	SW16056A		16	11
98255	SW16057A		16	16
98255	SW16058A		16	21
11083	S1577	5306-00-260-4502	12	7
66788	TC-4	5365-01-239-0887	29	1
81348	TYIV/CL1/TRVC8	2640-01-098-2029	25	3
12697	VP50K/30HM		6	18
51831	VP50K/5	5905-01-238-8177	6	19
81348	ZZ-V-25/TYPEIV/C	2640-00-060-3550	25	3
	LASS1/TR-VC-2			
13548	03424A		2	8
17875	100HA	4820-00-476-6412	25	5
13548	10004R	6220-01-095-0011	2	1
			2	5
			3	5
18889	1001	2530-01-240-3107	23	13
56697	100103		12	16

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CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
06721	100469	4730-01-104-8953	17	6
92967	10060-01	5306-01-098-7197	35	15
56442	1014M5	4730-00-203-0028	16	2
			16	7
06848	101622	2530-01-252-6121	19	11
13548	10202Y	6220-01-095-0010	2	1
			2	5
13548	10205-R	6220-01-183-4557	2	9
13548	10205-Y	6220-01-182-3380	2	9
06853	102276	2530-01-155-5731	19	5
92967	10273-00	5310-01-098-7244	35	17
92967	10376-00	5305-00-940-8069	35	24
98343	10451E	4730-01-096-3204	21	5
30379	105417	4730-00-249-2029	18	15
92967	10608-00	2510-01-101-2890	35	19
13548	10700	5325-01-265-3678	2	10
09386	10708	5340-00-330-8254	23	15
18889	107080	5306-01-151-4918	23	15
09386	10709	5310-00-572-0218	23	15
18889	107091	5306-01-148-9697	23	15
66788	1071	3990-01-238-4784	29	3
92967	10712-00	2510-01-100-9271	35	2
13548	10720	6220-01-095-0117	2	7
13548	10744R	6220-01-301-5411	3	2
19207	10882200	2540-00-897-5917	39	4
81348	11.00-20/TR78A/O N CENTER	2610-00-051-9450	25	2
81348	11.00R20/GP2/TR7 8A/ON CENTER	2610-00-029-0563	25	2
50153	11M012	2530-01-084-6975	20	12
50153	11M018-1	5340-01-060-8993	20	3
50153	11M059		20	4
50153	11M061	5315-01-121-1859	20	5
08108	1156	6240-00-924-7526	4	4
19207	11625075	2590-01-065-7220	34	24
19207	11625075-1	2510-01-060-9683	34	26
			34	47
19207	11625085	2590-01-070-5968	34	16
19207	11625086	5310-01-049-4072	34	17
19207	11625119	2590-00-177-9992	34	13
19207	11625431	3010-00-117-3413	34	10
19207	11639519-2	5330-00-462-0907	1	3
23705	11670871	2590-01-065-6627	34	14
72582	121208	4730-00-196-1467	18	17
19207	12315351	2520-01-101-2551	35	12
19207	12375837		1	1
19207	12375838		1	6
19207	12375841	6220-01-359-2870	1	2
09386	13096	5307-00-514-6835	23	14
09386	13097	5307-00-514-6834	23	14
18889	139902	5307-01-239-0891	23	14

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CAGEC	PART NUMBER	PART NUMBER INDEX		ITEM
		STOCK NUMBER	FIG.	
18889	139913	5307-01-243-9952	23	14
79470	1468X6	4730-01-062-2570	19	10
79470	1468X6X6	4730-01-096-9128	22	3
79470	1468X8	4730-01-091-8032	18	18
79470	1468X8X4	4730-01-090-3237	19	13
79470	1468X8X8	4730-01-134-7759	19	8
79470	1469X6X6	4730-00-289-0155	22	2
79470	1469X6X8	4730-01-134-3563	19	16
79470	1469X8X8	4730-01-115-6643	19	7
79470	1471X6	4730-01-134-7760	19	12
11815	15055P	5306-01-116-3535	38	7
98343	1509	5330-00-172-1919	22	8
98255	15124P	2590-01-096-9265	34	21
98255	15200P	2510-01-327-5999	40	1
98255	15200P-1	2510-01-328-8884	40	2
98255	15200P-2	2510-01-328-8885	40	3
98255	15200P-3	2510-01-329-2200	40	4
98255	15200P-4	2510-01-329-2201	40	5
98255	15200P-5	2510-01-329-2202	40	6
06721	1521	5340-01-277-5066	17	8
98255	15237P	9905-01-243-0621	45	1
50153	162429	2530-01-101-5429	20	1
06721	16630	4720-01-095-8745	16	10
79470	169X8X8	4730-01-126-7356	16	20
18889	178910	5310-01-242-0662	23	16
18889	178921	5306-01-148-6700	23	16
06721	185004	4730-01-251-9368	15	2
79470	190	4820-00-495-9680	18	7
06721	19100	5315-01-239-0884	20	9
55683	1920-AB36-032-2	2510-01-063-3702	38	10
06721	194054	5340-01-239-5720	20	11
73808	20R	2640-00-158-5617	25	1
			25	1
81793	205102	4730-00-069-1187	19	3
56697	207100	2530-01-016-2029	14	11
98343	21220		11	3
80874	225-750	5340-00-904-0008	37	5
80045	23MS35338-50	5310-00-820-6653	34	5
18889	257	5310-01-239-8195	23	8
06848	294649	5340-01-239-0892	19	14
05333	302424	2540-01-241-9076	39	4
78257	315-1504	5330-01-201-3529	23	10
62707	31624	5365-01-062-1009	14	7
96968	320-2110	5330-01-093-1149	13	18
79470	3220X12X6	4730-00-194-0219	18	19
00779	324015	5940-00-846-8104	8	3
			9	2
			10	2
85757	3250-06-12		17	1
85757	3250-06-16		17	2
85757	3250-0612	4720-01-180-5152	BULK	2

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CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
85757	3250-0616	4720-01-179-2939	BULK	4
85757	3250-08-12		17	3
85757	3250-0812	4720-01-179-2940	BULK	3
79470	3350X6	4730-00-277-8257	17	7
			18	8
79470	3400X12	4730-01-126-9753	18	2
79470	3400X6	4730-00-278-4822	18	13
			19	6
26151	343-4009	5340-01-042-0573	23	3
71785	356-11-03-071	5940-00-949-5536	5	11
71785	356-11-08-071	5940-00-949-3161	5	9
92967	37-03	5310-01-099-6539	35	16
98255	3713	2540-01-100-3894	42	1
79470	3950X8	4730-01-159-6427	19	15
13548	40022R	6220-01-259-9017	4	8
81834	40092-3	9905-01-110-2079	43	2
81834	40093-3	9905-01-105-8610	43	3
99411	413245	2530-01-252-6325	34	42
99411	417410	5340-01-239-8196	34	38
99411	417741	2590-01-240-3172	34	40
99411	417774	2590-01-252-2983	34	29
06641	4326	5340-01-273-0034	6	17
81337	5-4-1304-98	5305-00-225-9081	19	1
62707	500169-6	4730-01-256-9057	12	10
62707	500174-2	4730-01-256-9056	13	19
62707	500356-10	5310-01-101-8158	23	2
62707	500360-13	5310-01-062-0358	12	8
62707	500370-2	5310-01-239-0881	13	9
62707	500371-8	5310-01-042-1006	23	7
62707	500397-9	5306-01-249-4146	13	3
62707	501146-5	5310-01-060-7184	12	9
75175	503-2601	6220-00-774-5347	3	4
79470	503-38105-04200	4720-01-240-3055	17	5
79470	503-38105-09000	4720-01-248-2556	17	4
98343	51410107	4730-01-097-4330	21	1
			22	1
27783	5405V	2640-00-591-6488	25	5
80535	580-0724	4010-01-259-6445	37	13
06721	6-X-102	5315-01-239-0882	20	10
66788	6000	2540-01-241-2889	41	1
83330	603-JJ-03		6	3
83330	603JJ8	5940-00-949-3161	6	1
18889	62200	2530-01-192-6075	23	9
60038	632	3110-00-100-0332	23	6
60038	643	3110-00-100-0663	23	5
80837	6880-141	3040-01-096-3219	34	3
19207	7067973	2510-00-706-7973	31	1
27783	7383	2640-00-250-2474	25	4
19207	7388820	2530-00-603-5768	24	1
19207	7389061	2530-00-738-9061	24	3
			24	5

CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
19207	7389493	2530-00-738-9493	24	2
19207	7417585	2510-00-741-7585	33	1
78500	742	3110-00-100-0337	23	12
60038	749	3110-00-100-0683	23	11
19207	7531424	5340-00-182-5359	33	3
12339	76D05086	5935-01-038-9629	5	16
80535	760-0311	5340-01-265-6273	37	12
19207	7720853	6145-00-152-6499	BULK	7
19207	7722333	5365-00-090-5426	6	10
19207	7723309	5310-00-393-6685	6	9
19207	7731428	5935-00-773-1428	5	19
			6	12
65059	78038-1	5340-01-209-6524	28	1
06721	782HD	5935-01-211-4434	6	6
			6	7
81343	8-4 120202BA	4730-00-409-7854	16	15
81343	8-6 120102BA	4730-00-142-3076	16	5
			16	7
			16	12
81343	8-6 120202BA	4730-00-289-0051	16	22
			21	17
81343	8-8 120102BA	4730-00-202-9036	16	2
81343	8-8-6 120425BA	4730-01-131-5951	18	5
13548	80301R	6220-01-095-0009	4	1
92967	814-00	2590-01-100-9001	35	20
92967	817-00	5310-01-098-7245	35	5
19207	8338566	5935-00-572-9180	1	9
19207	8338567	5310-00-833-8567	1	10
92967	836-00	5310-01-098-7236	35	13
92967	837-00	5310-01-098-7246	35	14
92967	841-00	5310-01-098-7827	7827	35
92967	849-01	2520-01-101-1802	35	3
66788	871-F-4-MF3	5340-01-239-0879	39	3
66788	871-0006	2590-01-252-2827	36	4
66788	871-0007	2510-01-256-0110	36	8
66788	871-0009	9905-01-249-1613	45	3
92967	890-00	5365-01-150-6277	35	11
92967	891-00	2520-01-101-0935	35	10
92967	895-00	5310-01-098-7247	35	6
92967	896-00	5365-01-110-4247	35	11
13548	93906	5995-01-096-0733	3	3
89346	93931R96	2530-00-706-6614	14	4
24617	9411031	4730-01-098-5229	13	2
13548	94902	6220-01-067-5264	2	6
13548	94926	2540-01-068-4746	4	7
62173	9500	2530-01-240-8608	18	20
98255	9506	2530-01-096-2230	18	1
92967	9639-03	5306-01-098-7198	35	7
92967	9640-00	2510-01-101-2559	35	8
13548	97904	5365-01-102-1982	4	2

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CAGEC	PART NUMBER	PART NUMBER INDEX		ITEM
		STOCK NUMBER	FIG.	
13548	98007R	9905-01-069-7282	43	6
13548	98007Y	9905-01-070-0471	43	3
13548	99007R	6220-01-095-0019	4	3
92967	9934-02	2510-01-100-9270	35	18
92967	9937-00	2510-01-100-7167	35	21
92967	9999-00	2510-01-114-3209	35	9

CROSS-REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
BULK	1	4720-01-003-6706	30327	C608
BULK	2	4720-01-180-5152	85757	3250-0612
BULK	3	4720-01-179-2940	85757	3250-0812
BULK	4	4720-01-179-2939	85757	3250-0616
BULK	5	5510-00-274-4994	81348	MML736TY3 OAK/GR 22X8
BULK	6	6145-00-553-0729	81349	MWC12-19UU
BULK	7	6145-00-152-6499	19207	7720853
BULK	8	6145-00-310-2598	98255	SWL14160P1
KITS	1	2910-01-112-6262	98255	SW16026A
1	1		19207	12375837
1	1	6220-00-134-9098	96906	MS52125-1
1	2	6220-01-359-2870	19207	12375841
1	3	5325-00-185-0004	96906	MS35490-34
1	3	5330-00-462-0907	19207	11639519-2
1	4	6240-00-044-6914	96906	MS35478-1683
1	4	6240-00-617-0991	96906	MS35478-1073
1	5	6240-00-019-3093	96906	MS15570-623
1	5	6240-00-143-3159	96906	MS15570-89
1	6		19207	12375838
1	7	5310-00-595-7237	96906	MS35333-42
1	7	5310-00-637-9541	96906	MS35338-46
1	8	5305-00-269-3209	96906	MS90725-58
1	8	5305-00-527-5611	96906	MS35311-59
1	9	5935-00-572-9180	19207	8338566
1	10	5310-00-833-8567	19207	8338567
1	11	6240-00-019-0877	96906	MS15570-1251
1	12	5999-00-057-2929	96906	MS27148-2
2	1	6220-01-095-0010	13548	10202Y
2	1	6220-01-095-0011	13548	10004R
2	2	5310-00-934-9747	96906	MS35649-262
2	3	5310-00-889-2708	96906	MS45904-54
2	4	5305-00-855-0963	96906	MS24629-26
2	5	6220-01-095-0010	13548	10202Y
2	5	6220-01-095-0011	13548	10004R
2	6	6220-01-067-5264	13548	94902
2	7	6220-01-095-0117	13548	10720
2	8		13548	03424A
2	9	6220-01-182-3380	13548	10205-Y
2	9	6220-01-183-4557	13548	10205-R
2	10	5325-01-265-3678	13548	10700
3	1	5305-00-855-0963	96906	MS24629-26
3	2	6220-01-301-5411	13548	10744R
3	3	5995-01-096-0733	13548	93906
3	4	6220-00-774-5347	75175	503-2601
3	5	6220-01-095-0011	13548	10004R
4	1	6220-01-095-0009	13548	80301R
4	2	5365-01-102-1982	13548	97904
4	3	6220-01-095-0019	13548	99007R
4	4	6240-00-924-7526	08108	1156
4	5		98255	SW14346P1

CROSS-REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
4	6	5305-00-855-0964	96906	MS24629-48
4	7	2540-01-068-4746	13548	94926
4	8	6220-01-259-9017	13548	40022R
4	9	5305-00-052-6917	96906	MS24629-50
5	1		98255	SW15209A
5	2	5310-00-934-9757	96906	MS35649-282
5	3	5310-00-193-7577	96906	MS35333-36
5	4	5305-00-889-2997	96906	MS35206-215
5	5	5999-01-102-7818	98255	SW14867P
5	6	5905-01-102-4021	91637	HL50-02Z-3R6J
5	7	5905-00-101-2769	44655	L50J5R0
5	8	5310-00-081-8087	96906	MS21044N06
5	9	5940-00-949-3161	71785	356-11-08-071
5	10	7690-01-094-7873	98255	SW15192P
5	11	5940-00-949-5536	71785	356-11-03-071
5	12	5310-00-997-1888	96906	MS35649-2252
5	13	5310-00-582-5965	96906	MS35338-44
5	14	5310-00-829-9981	96906	MS35649-2312
5	15	5310-00-407-9566	96906	MS35338-45
5	16	5935-01-038-9629	12339	76D05086
5	17	5305-00-984-5675	96906	MS35206-295
5	18	5935-00-846-3883	96906	MS75021-1
5	19	5935-00-773-1428	19207	7731428
5	20	5305-00-988-1724	96906	MS35206-280
5	21	5305-00-855-0964	96906	MS24629-48
5	22	5310-00-045-3296	96906	MS35338-43
5	23		98255	SW15210A
6	1	5940-00-949-3161	83330	603JJ8
6	2	5310-00-927-3877	96906	MS51922-14
6	3		83330	603-JJ-03
6	4	5310-00-761-6882	96906	MS51967-2
6	5	5310-00-582-5965	99539	CBM21389
6	6	5935-01-211-4434	06721	782HD
6	7	5935-01-211-4434	06721	782HD
6	8	5305-00-988-1725	96906	MS35206-281
6	9	5310-00-393-6685	19207	7723309
6	10	5365-00-090-5426	19207	7722333
6	11	5935-00-846-3883	96906	MS75021-1
6	12	5935-00-773-1428	19207	7731428
6	13	5305-00-984-6212	96906	MS35206-265
6	14	5305-00-855-0964	96906	MS24629-48
6	15	5975-01-238-4687	66788	SAT-E18950
6	16	5305-00-889-2997	96906	MS35206-215
6	17	5340-01-273-0034	06641	4326
6	18		12697	VP50K/30HM
6	19	5905-01-238-8177	51831	VP50K/5
6	20	5310-00-927-3877	96906	MS51922-14
7	1	5940-00-143-4780	96906	MS25036-108
7	2	5310-00-823-8804	96906	MS27183-9
7	3	6150-01-239-3636	66788	SAT-1010
7	4	6150-01-248-2549	66788	SAT-1090

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
7	5	5325-00-854-9378	96906	MS35489-108
7	6	5995-01-240-8558	66788	SAT-1070
7	7	5975-01-238-4606	96906	MS25064-12
7	8	4730-00-472-5058	62727	C09140
7	9	5325-00-174-9328	96906	MS35489-114
7	10	5995-01-240-8560	66788	SAT-1060
7	11	5995-01-240-8559	66788	SAT-1080
7	12	5940-00-230-0515	96906	MS25036-154
8	1		98255	SW14497A1
8	1		98255	SW14497A11
8	1		98255	SW14497A2
8	1		98255	SW14497A5
8	1		98255	SW14498A1
8	1		98255	SW14498A7
8	2	6145-00-553-0729	81349	MWC12-19U0
8	2	6145-00-553-0729	81349	MWC12-19U0
8	2	6145-00-553-0729	81349	MWC12-19U0
8	2	6145-00-553-0729	81349	MWC12-19U0
8	2	6145-00-553-0729	81349	MWC12-19U0
8	2	6145-00-553-0729	81349	MWC12-19U0
8	3	5940-00-143-4794	96906	MS25036-112
8	3	5940-00-846-8104	00779	324015
8	4		98255	SW15248A1
8	4		98255	SW15248A2
8	4		98255	SW15248A3
8	4		98255	SW15248A4
8	4		98255	SW15248A5
8	4		98255	SW15248A6
8	5	6145-00-310-2598	98255	SW14160P-1
8	6	5940-00-143-4794	96906	MS25036-112
8	7		98255	SW15247A
8	8	6145-00-553-0729	81349	MWC12-19U0
9	1	2590-01-116-0274	98255	SW14491A-1
9	2	5940-00-846-8104	00779	324015
9	3		98255	SW14499P8
9	4	5995-01-115-0576	98255	SW14490A-1
9	5	5940-00-143-4794	96906	MS25036-112
9	6		98255	SW14875P
9	7	2590-01-107-5672	98255	SW15246A-1
9	7	2590-01-115-0577	98255	SW15246A-2
9	7	5995-01-114-2994	98255	SW15246A-3
9	7	6150-01-124-5139	98255	SW15246A-4
9	8		98255	SW14499P7
9	8		98255	SW14499P7
9	8		98255	SW14499P7
9	9	5935-00-167-7775	96906	MS27144-1
10	1		81349	M792815-5
10	2	5940-00-846-8104	00779	324015
10	3	5975-00-111-3208	96906	MS3367-5-9
10	3	5975-00-111-3208	96906	MS3367-5-9

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
10	4	5325-00-174-9325	96906	MS35489-107
11	1	5310-00-582-5965	96906	MS35338-44
11	2	5305-00-052-6923	96906	MS24629-59
11	3		98343	21220
12	1	2530-01-100-8070	62707	K25AX701-1
12	2	5310-01-239-0893	62707	M10HN102
12	3	5310-01-049-9051	62707	M10HN151
12	4	5310-00-620-2486	56697	A150034
12	5	5310-01-043-0596	62707	M10HN101
12	6	5330-01-101-4854	47346	K25HH100
12	7	5306-00-260-4502	11083	S1577
12	8	5310-01-062-0358	62707	500360-13
12	9	5310-01-060-7184	62707	501146-5
12	10	4730-01-256-9057	62707	500169-6
12	11	5330-01-239-0885	62707	M16HH100
12	12	3120-01-042-2579	26697	MPO-0045
12	13	2530-00-703-2715	62707	M16WK102-17
12	13	6940-00-467-1012	62707	M16WK103-17
12	14	5365-00-787-2192	96906	MS16626-1150
12	15	5310-01-062-1532	62707	M10HS117
12	16		56697	100103
12	17	5340-01-218-3491	62707	M16WH113X
13	1	2530-01-253-7280	62707	K22TA112-35X
13	2	4730-01-098-5229	24617	9411031
13	3	5306-01-249-4146	62707	500397-9
13	4	3040-01-241-7404	62707	M10WH100-2
13	5	3120-01-239-0888	62707	M10WJ100
13	6	5330-01-190-4634	62707	M10HH100
13	7	3040-01-241-4818	62707	M10WH100-1
13	8	5310-00-261-7340	96906	MS35338-8
13	9	5310-01-239-0881	62707	500370-2
13	10	5365-00-787-2192	96906	MS16626-1150
13	11	5310-01-062-1532	62707	M10HS117
13	12	2530-01-240-8620	62707	M16WK102-16
13	12	2530-01-241-3217	62707	M16WK103-16
13	13	5330-01-239-0885	62707	M16HH100
13	14	3120-01-042-2579	62707	M16HD100
13	15	5310-01-239-0893	62707	M10HN102
13	16	5310-00-620-2486	56697	A150034
13	17	5310-01-043-0596	62707	M10HN101
13	18	5330-01-093-1149	96968	320-2110
13	19	4730-01-256-9056	62707	500174-2
14	1	2530-01-241-3216	62707	M16WN121-1X
14	1	2530-01-257-6443	62707	M16WN101X
14	2	2530-01-240-9657	62707	M16WL112-2
14	3	2530-01-241-2979	62707	M16WL112-1
14	4	2530-00-706-6614	89346	93931R96
14	5	5320-01-020-0703	62707	M10HM160
14	5	5320-01-239-0880	62707	M10HM100
14	6	2530-01-148-2795	62707	M16SW132-X
14	6	2530-01-218-3454	62707	M16WS104X

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
14	7	5365-01-062-1009	62707	31624
14	8		62707	M10HP104
14	8	5315-01-220-6238	62707	M10HP102
14	9	5310-01-062-1531	62707	M10HN135
14	9	5310-01-220-7966	62707	M10HN103
14	10	3120-01-239-0889	62707	M16HD101
14	11	2530-01-016-2029	56697	207100
14	11	5340-01-239-0883	62707	M16WJ102
14	12	5315-01-220-6245	62707	M16WJ104
14	13	5360-01-220-9373	62707	M16WJ103
14	14	5360-01-241-6961	62707	M16WJ100
15	1	2530-00-426-8342	08862	A-7022
15	1	2530-01-241-3218	06721	N-21163-A
15	2	4730-01-251-9368	06721	185004
16	1		98255	SW15226A
16	1		98255	SW15226A1
16	1		98255	SW15226A2
16	1		98255	SW15226A3
16	2	4730-00-203-0028	56442	1014M5
16	3	4730-01-032-6038	19207	CPR102321-4
16	4	4720-01-003-6706	30327	C608
16	4	4720-01-003-6706	30327	C608
16	5	4730-00-142-3076	81343	8-6 120102BA
16	5	4730-00-202-9036	81343	8-8 120102BA
16	6		98255	SW15230A
16	6		98255	SW15230A1
16	6		98255	SW15230A1
16	7	4730-00-142-3076	81343	8-6 120102BA
16	7	4730-00-203-0028	56442	1014M5
16	8	4730-01-032-6038	19207	CPR102321-4
16	9	4720-01-003-6706	30327	C608
16	10	4720-01-095-8745	06721	16630
16	10	4720-01-096-2005	98255	SW15227P-4
16	11		98255	SW16056A
16	12	4730-00-142-3076	81343	8-6 120102BA
16	13	4730-01-032-6038	19207	CPR102321-4
16	14	4720-01-003-6706	30327	C608
16	15	4730-00-409-7854	81343	8-4 120202BA
16	16		98255	SW16057A
16	17	4730-00-289-0051	81343	8-6 120202BA
16	18	4730-01-032-6038	19207	CPR102321-4
16	19	4720-01-003-6706	30327	C608
16	20	4730-01-126-7356	79470	169X8X8
16	21		98255	SW16058A
16	22	4730-00-142-3076	81343	8-6 120102BA
16	23	4730-01-032-6038	19207	CPR102321-4
16	24	4720-01-003-6706	30327	C608
16	25	5975-00-074-2072	96906	MS3367-1-9
17	1		85757	3250-06-12
17	2		85757	3250-06-16

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
17	3		85757	3250-08-12
17	4	4720-01-248-2556	79470	503-38105-09000
17	5	4720-01-240-3055	79470	503-38105-04200
17	6	4730-01-104-8953	06721	100469
17	7	4730-00-277-8257	79470	3350X6
17	8	5340-01-277-5066	06721	1521
18	1	2530-01-096-2230	98255	9506
18	2	4730-00-277-5553	96906	MS51952-2
18	2	4730-01-126-9753	79470	3400X12
18	3	4730-00-193-0869	19422	BM11352-77
18	4	4810-01-110-2607	06721	AF104001
18	4	4820-01-095-8688	16662	A88802
18	5	4730-01-131-5951	81343	8-8-6 120425BA
18	6	4730-00-196-1493	96906	MS51953-78
18	7	4820-00-495-9680	79470	190
18	8	4730-00-277-8257	79470	3350X6
18	9	5305-00-068-0511	96906	MS90728-62
18	10	5310-00-080-6004	96906	MS27183-14
18	11	5310-00-637-9541	96906	MS35338-46
18	12	5310-00-732-0558	96906	MS51967-8
18	13	4730-00-278-4822	79470	3400X6
18	14	4730-00-196-1465	96906	MS51873-25
18	15	4730-00-249-2029	30379	105417
18	16	4820-01-095-8755	16662	A78889
18	17	4730-00-196-1467	72582	121208
18	18	4730-01-091-8032	79470	1468X8
18	19	4730-00-194-0219	79470	3220X12X6
18	20	2530-01-240-8608	62173	9500
18	21	5305-00-725-2317	96906	MS90728-64
18	22	5310-00-087-7493	96906	MS27183-13
18	23		96906	MS20913-3S
18	24	5310-00-087-4652	96906	MS51922-17
18	25	4820-00-849-1220	96906	MS35782-5
19	1	5305-00-225-9081	81337	5-4-1304-98
19	2	5310-00-809-3078	96906	MS27183-11
19	3	4730-00-069-1187	81793	205102
19	4	5310-00-984-3806	96906	MS51922-9
19	5	2530-01-155-5731	06853	102276
19	6	4730-00-278-4822	79470	3400X6
19	7	4730-01-115-6643	79470	1469X8X8
19	8	4730-01-134-7759	79470	1468X8X8
19	9	5310-00-582-6714	96906	MS35333-49
19	10	4730-01-062-2570	79470	1468X6
19	11	2530-01-252-6121	06848	101622
19	12	4730-01-134-7760	79470	1471X6
19	13	4730-01-090-3237	79470	1468X8X4
19	14	5340-01-239-0892	06848	294649
19	15	4730-01-159-6427	79470	3950X8
19	16	4730-01-134-3563	79470	1469X6X8
20	1	2530-01-101-5429	50153	162429
20	1	2530-01-240-8621	06721	N04730N

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
20	2	5310-00-835-2037	96906	MS35691-53
20	3	5340-01-060-8993	50153	11M018-1
20	4		50153	11M059
20	5	5315-01-121-1859	50153	11M061
20	6	5315-00-839-5822	96906	MS24665-353
20	7	5310-00-763-8920	96906	MS51967-20
20	7	5310-00-851-2677	96906	MS35691-49
20	8	5310-00-820-6653	96906	MS35338-50
20	9	5315-01-239-0884	06721	19100
20	10	5315-01-239-0882	06721	6-X-102
20	11	5340-01-239-5720	06721	194054
20	12		98343	N-14398A
20	12	2530-01-084-6975	50153	11M012
21	1	4730-01-097-4330	98343	51410107
21	2	4730-00-289-0051	81343	8-6 120202BA
21	3	5305-00-984-5689	96906	MS35206-309
21	4	5310-00-637-9541	96906	MS35338-46
21	5	4730-01-096-3204	98343	10451E
21	6	9390-00-442-6321	98255	SW15460P-1
21	7	5325-00-174-9325	96906	MS35489-107
21	8	4730-01-032-6038	19207	CPR102321-4
21	9	4730-00-595-0083	96906	MS35746-1
22	1	4730-01-097-4330	98343	51410107
22	2	4730-00-289-0155	79470	1469X6X6
22	3	4730-01-096-9128	79470	1468X6X6
22	4	4730-00-595-0083	96906	MS35746-1
22	5	5310-00-595-7237	96906	MS35333-42
22	6	5305-00-942-2196	96906	MS18154-60
22	7	5325-00-174-9325	96906	MS35489-107
22	8	5330-00-172-1919	98343	1509
22	9	2530-00-270-3878	06721	N-13048
22	10	4010-01-239-5719	06721	N-13047
22	11	2530-01-248-2532	06721	N-20071
23	1	5305-00-071-2506	96906	MS90728-3
23	1	5306-00-226-4823	96906	MS90728-30
23	2	5310-00-407-9566	96906	MS35338-45
23	2	5310-01-101-8158	62707	500356-10
23	3	5340-01-042-0573	26151	343-4009
23	3	5340-01-178-7362	62707	M10HK131
23	4	5330-01-101-4860	62707	M10HG108
23	4	5330-01-280-5827	62707	M10HG115
23	5	3110-00-100-0663	60038	643
23	5	3110-00-293-8998	56697	HM212049
23	6	3110-00-100-0332	60038	632
23	6	3110-00-293-8997	60038	HM212011
23	7	5310-00-832-9719	96906	MS51922-61
23	7	5310-01-042-1006	62707	500371-8
23	8	5310-01-239-8195	18889	257
23	9	2530-01-110-1332	62707	M16WA100
23	9	2530-01-192-6075	18889	62200
23	10	5330-01-201-3529	78257	315-1504

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
23	11	3110-00-100-0683	60038	749
23	11	3110-00-618-0248	60038	HM218248
23	12	3110-00-100-0337	78500	742
23	12	3110-00-618-0249	60038	HM218210
23	13		62707	K25HU105
23	13	2530-01-240-3107	18889	1001
23	14	5307-00-514-6834	09386	13097
23	14	5307-00-514-6835	09386	13096
23	14	5307-01-239-0891	18889	139902
23	14	5307-01-243-9952	18889	139913
23	15	5306-01-148-9697	18889	107091
23	15	5306-01-151-4918	18889	107080
23	15	5310-00-572-0218	09386	10709
23	15	5340-00-330-8254	09386	10708
23	16	5306-01-148-6700	18889	178921
23	16	5310-00-880-2004	96906	MS51983-3
23	16	5310-00-880-2005	96906	MS51983-4
23	16	5310-01-242-0662	18889	178910
24	1	2530-00-603-5768	19207	7388820
24	2	2530-00-738-9493	19207	7389493
24	3	2530-00-738-9061	19207	7389061
24	4	2530-01-240-3173	22337	RA26039-13
24	5	2530-00-738-9061	19207	7389061
25	1	2640-00-158-5617	73808	20R
25	1	2640-00-158-5617	73808	20R
25	2	2610-00-029-0563	81348	11.00R20/GP2/TR7 8A/ON CENTER
25	2	2610-00-051-9450	81348	11.00-20/TR78A/O N CENTER
25	3	2640-00-060-3550	81348	ZZ-V-25/TYPEIV/C LASS1/TR-VC-2
25	3	2640-01-098-2029	81348	TYIV/CL1/TRVC8
25	4	2640-00-250-2474	27783	7383
25	5	2640-00-591-6488	27783	5405V
25	5	4820-00-476-6412	17875	100HA
25	6	2610-00-204-4091	81348	GP3STYLXTYBBCLR/ T/11.00-20/F/TBH
26	1	2540-00-678-3469	96906	MS52127-3
26	1	2540-01-124-5227	98255	SW11979A
27	1	4010-01-241-6963	66788	SAI871-0005
28	1	5340-01-209-6524	65059	78038-1
29	1	5365-01-239-0887	66788	TC-4
29	2	5305-00-725-2317	96906	MS90728-64
29	3	3990-01-238-4784	66788	1071
29	4	5310-00-087-4652	96906	MS51922-17
29	5	5340-01-239-0890	66788	SAT-18315
29	6	5310-00-087-7493	96906	MS27183-13
29	7	5305-00-732-0512	96906	MS90728-107
30	1	5340-01-112-6396	98255	SW14337P
30	1	5340-01-264-1579	66788	SL1000
30	2	5310-00-823-8803	96906	MS27183-21

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
30	3	5305-00-724-6761	96906	MS90725-167
30	4	5310-00-269-4040	96906	MS51922-49
30	4	5310-00-763-8920	96906	MS51967-20
31	1	2510-00-706-7973	19207	7067973
32	1	4010-00-273-2986	01976	SIZE2-0
32	1	4010-00-585-2108	16003	C43974
32	2	5340-00-158-3805	96906	MS35647-10
33	1	2510-00-741-7585	19207	7417585
33	2		96906	MS35291-44
33	3	5340-00-182-5359	19207	7531424
33	4	4010-00-165-6061	19207	H008-02-22080
33	5	5310-00-087-7493	96906	MS27183-13
33	6	5310-00-880-7744	96906	MS51967-5
34	1	5310-00-809-4061	96906	MS27183-15
34	2	5310-00-087-4652	96906	MS51922-17
34	3	3040-01-096-3219	80837	6880-141
34	4	5310-00-763-8920	96906	MS51967-20
34	5	5310-00-820-6653	80045	23MS35338-50
34	6		98255	SW15464A
34	7	3010-01-100-7358	98255	SW15220M
34	8	5310-00-823-8803	96906	MS27183-21
34	9	5305-00-724-5910	96906	MS90725-162
34	10	3010-00-117-3413	19207	11625431
34	11	5340-00-177-9931	99411	LG0082-02
34	12	5305-00-269-3217	96906	MS90725-67
34	13	2590-00-177-9992	19207	11625119
34	14	2590-01-065-6627	23705	11670871
34	15	5315-00-903-4322	96906	MS16562-82
34	16	2590-01-070-5968	19207	11625085
34	17	5310-01-049-4072	19207	11625086
34	18	5310-00-763-8920	96906	MS51967-20
34	19	5310-00-820-6653	96906	MS35338-50
34	20	5305-00-724-5910	96906	MS90725-162
34	21	2590-01-096-9265	98255	15124P
34	22	5310-00-763-8920	96906	MS51967-20
34	23	5310-00-820-6653	96906	MS35338-50
34	24	2590-01-065-7220	19207	11625075
34	25	5305-00-051-0827	96906	MS90725-164
34	26	2510-01-060-9683	19207	11625075-1
34	27	2590-01-098-1781	98255	SW14276P
34	28	5305-00-724-5911	96906	MS90725-163
34	29	2590-01-252-2983	99411	417774
34	30	3010-01-175-0551	99411	LG0523
34	31	5310-00-087-4652	96906	MS51922-17
34	32	3040-01-175-0585	99411	LG0094-33
34	33	5305-00-269-3217	96906	MS90725-67
34	34	5310-00-087-4652	96906	MS51922-17
34	35	5310-00-823-8803	96906	MS27183-21
34	36	5340-01-175-0564	99411	LG0083-03
34	37	5305-00-269-3217	96906	MS90725-67
34	38	5340-01-239-8196	99411	417410

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
34	39	2590-01-192-3445	99411	LG5M29-92
34	40	2590-01-240-3172	99411	417741
34	41	5315-00-903-4322	96906	MS16562-82
34	42	2530-01-252-6325	99411	413245
34	43	5310-00-982-6569	96906	MS27183-35
34	44	5310-00-269-4040	96906	MS51922-49
34	45	5305-00-724-7221	96906	MS90728-163
34	46	2590-01-193-4089	99411	LG5M29-91
34	47	2510-01-060-9683	19207	11625075-1
34	48	5305-00-724-7223	96906	MS90728-165
34	49	2590-01-065-7220	99411	LG0525
35	1	5310-00-269-4040	96906	MS51922-49
35	2	2510-01-100-9271	92967	10712-00
35	3	2520-01-101-1802	92967	849-01
35	4	5310-01-098-7827	92967	841-00
35	5	5310-01-098-7245	92967	817-00
35	6	5310-01-098-7247	92967	895-00
35	7	5306-01-098-7198	92967	9639-03
35	8	2510-01-101-2559	92967	9640-00
35	9	2510-01-114-3209	92967	9999-00
35	10	2520-01-101-0935	92967	891-00
35	11	5365-01-110-4247	92967	896-00
35	11	5365-01-150-6277	92967	890-00
35	12	2520-01-101-2551	19207	12315351
35	13	5310-01-098-7236	92967	836-00
35	14	5310-01-098-7246	92967	837-00
35	15	5306-01-098-7197	92967	10060-01
35	16	5310-01-099-6539	92967	37-03
35	17	5310-01-098-7244	92967	10273-00
35	18	2510-01-100-9270	92967	9934-02
35	19	2510-01-101-2890	92967	10608-00
35	20	2590-01-100-9001	92967	814-00
35	21	2510-01-100-7167	92967	9937-00
35	22	5305-00-726-2551	96906	MS90727-164
35	23	4710-01-240-9431	92967	B893-02
35	24	5305-00-940-8069	92967	10376-00
35	25	5305-00-724-6761	96906	MS90725-167
35	26	5310-00-823-8803	96906	MS27183-21
35	27	5340-01-264-1579	66788	SL1000
36	1	5310-00-056-3395	96906	MS35649-2382
36	1	5310-00-087-4652	96906	MS51922-17
36	2	5310-00-637-9541	96906	MS35338-46
36	3	5310-00-011-5093	96906	MS35338-65
36	4		98255	SW15111A
36	4	2590-01-252-2827	66788	871-0006
36	5	5305-00-942-2196	96906	MS18154-60
36	5	5305-00-964-0503	96906	MS90728-78
36	6	5305-00-725-2317	96906	MS90728-64
36	6	5305-00-964-0503	96906	MS90728-78
36	7	5305-00-269-3209	96906	MS90725-58
36	8		98255	SW15201A1

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
36	8	2510-01-256-0110	98255	SW15201A2
36	8	5410-01-240-8649	66788	871-0007
36	8	2510-01-096-9347	66788	SAT-17548
37	1	2510-01-096-9347	98255	SW15254A1
37	1	2510-01-096-9349	98255	SW15254A2
37	2	5310-00-088-1251	96906	MS51922-1
37	3	2510-01-096-9348	98255	SW14659M1
37	3	2510-01-096-9350	98255	SW14659M2
37	4	4010-01-114-1333	98255	SW15266A
37	5	5340-00-904-0008	80874	225-750
37	6	4010-01-144-1734	98255	SAT11935P-1
37	7	4010-01-142-0450	98255	SW10998P1-18
37	8	5305-00-988-1727	96906	MS35206-283
37	9	5310-00-809-4058	96906	MS27183-10
37	10	2510-01-257-3862	66788	SAT-18915
37	10	2590-01-240-8632	66788	SAT-18920
37	11		66788	SAT17523-1
37	12	5340-01-265-6273	80535	760-0311
37	13	4010-01-259-6445	80535	580-0724
37	14	4010-01-241-6963	66788	SAI871-0005
37	15	5310-00-761-6882	96906	MS51967-2
37	16	2510-01-096-9346	98255	SW14658M
37	16	2510-01-241-3243	66788	SAT-18910
38	1	2510-01-063-0262	25575	AB36-033
38	1	2510-01-067-5397	98255	SW14661A
38	1	2510-01-241-3277	66788	SAT-17545
38	1	2510-01-256-8408	66788	SAT-17544
38	2	2510-01-104-8954	98255	SW14880M2
38	2	2590-01-060-7119	98255	SW14880M3
38	2	2590-01-240-6248	66788	SAT-17565
38	2	2590-01-241-3242	66788	SAT-17562
38	3	5310-00-088-1251	96906	MS51922-1
38	3	5310-00-761-6882	96906	MS51967-2
38	4	5310-00-582-5965	96906	MS35338-44
38	4	5310-01-119-8200	98255	SW15056P
38	5	5310-00-809-4058	96906	MS27183-10
38	6	2510-01-098-3995	98255	SW14657M
38	7	5305-00-071-2509	96906	MS90728-12
38	7	5306-01-116-3535	11815	15055P
38	8	5306-00-402-2674	96906	MS27950-2
38	9	2510-01-241-2530	66788	SAT-18905
38	10	2510-01-063-3702	55683	1920-AB36-032-2
38	10	2510-01-094-7910	98255	SW14671P-3
38	10	5410-01-240-8649	66788	SAT-17548
38	10	5410-01-240-8650	66788	SAT-17549
38	11	5305-00-068-0501	96906	MS90725-5
39	1	5310-00-056-3395	96906	MS35649-2382
39	2	5310-00-582-5965	96906	MS35338-44
39	2	5310-00-637-9541	96906	MS35338-46
39	3	2540-01-098-1782	98255	SW14417M
39	3	5340-01-239-0879	66788	871-F-4-MF3

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
39	4	2540-00-897-5917	19207	10882200
39	4	2540-01-241-9076	05333	302424
39	5	5305-00-068-0511	96906	MS90728-62
39	5	5305-00-068-0515	96906	MS90727-8
40	1	2510-01-327-5999	98255	15200P
40	2	2510-01-328-8884	98255	15200P-1
40	3	2510-01-328-8885	98255	15200P-2
40	4	2510-01-329-2200	98255	15200P-3
40	5	2510-01-329-2201	98255	15200P-4
40	6	2510-01-329-2202	98255	15200P-5
40	7		98255	SW15200P6
40	8		98255	SW15200P7
40	9		98255	SW15200P8
40	10		98255	SW15200P9
40	11		98255	SW15200P10
40	12	5305-01-099-4959	98255	SW14342P1
40	13		98255	SW15200P11
40	14		98255	SW15200P12
40	15		98255	SW15200P13
40	16		98255	SW15200P14
40	17		81348	A1
40	18		66788	B1
40	19		81348	A2
40	20		81348	A3
40	21		81348	B3
40	22		66788	B2
40	23		66788	G1
40	24		81348	G2
40	25		66788	G3
40	26		96906	MS24627-62
41	1	2540-01-241-2889	66788	6000
41	2	2540-01-248-4922	66788	L3980
41	3	5340-01-255-1788	66788	LL71
42	1	2540-01-100-3894	98255	3713
42	1	7520-01-256-4913	66788	SAT-17518
42	2	5310-00-809-3078	96906	MS27183-11
42	3	5305-00-432-4205	96906	MS51861-49
42	3	5305-00-855-0964	96906	MS24629-48
43	1	5305-00-984-6211	96906	MS35206-264
43	2	9905-01-110-2079	81834	40092-3
43	3	9905-01-070-0471	13548	98007Y
43	3	9905-01-105-8610	81834	40093-3
43	4	5310-00-045-3296	96906	MS35338-43
43	5	5310-00-934-9758	96906	MS35649-202
43	6	9905-01-069-7282	13548	98007R
43	7	5305-00-855-0964	96906	MS24629-48
44	1	9905-00-685-6540	40342	N10790C
44	2	9905-00-999-7369	96906	MS53007-2
44	3	5305-00-159-9594	96906	MS51863-43C
44	4		98255	SW15228P-1
44	5		98255	SW15228P2

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FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		
		STOCK NUMBER	CAGEC	PART NUMBER
45	1	9905-01-243-0621	98255	15237P
45	1	9905-01-252-2858	66788	SAI-871-0008
45	2	5320-01-217-2227	96906	MS24662-225
45	3	9905-01-249-1613	66788	871-0009
46	1	7690-01-248-7722	66788	SAT17553
46	2	7690-01-248-7723	66788	SAT17554

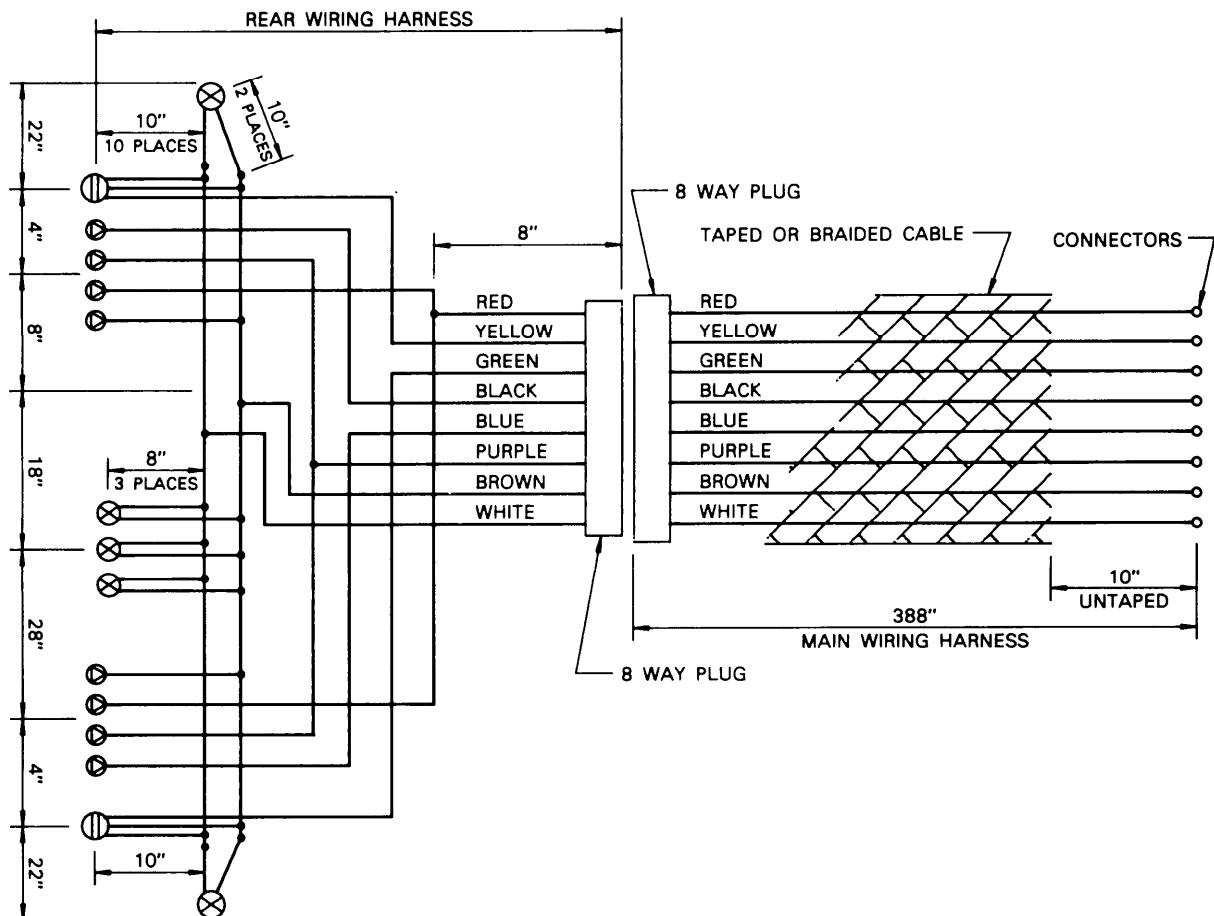
APPENDIX G
ILLUSTRATED LIST OF MANUFACTURED ITEMS

Section I. INTRODUCTION

This appendix includes complete instructions for making items authorized to be manufactured or fabricated at Direct Support/General Support maintenance.

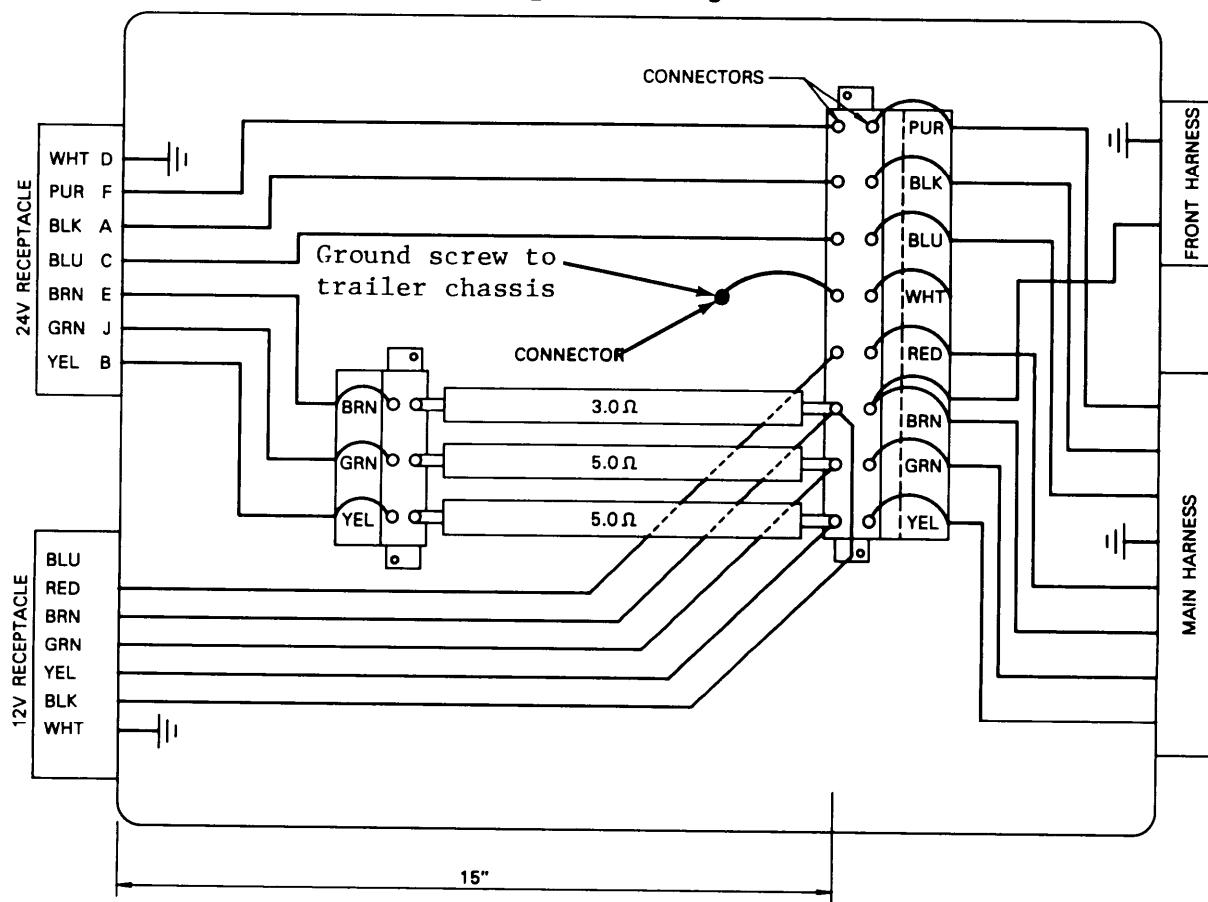
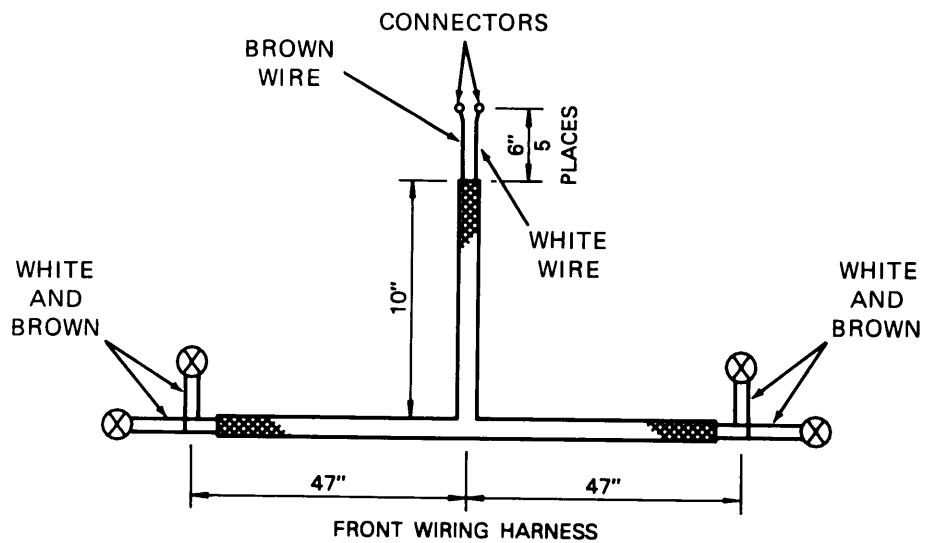
Section II. MANUFACTURED ITEMS ILLUSTRATIONS

Electrical System Wiring M871A1

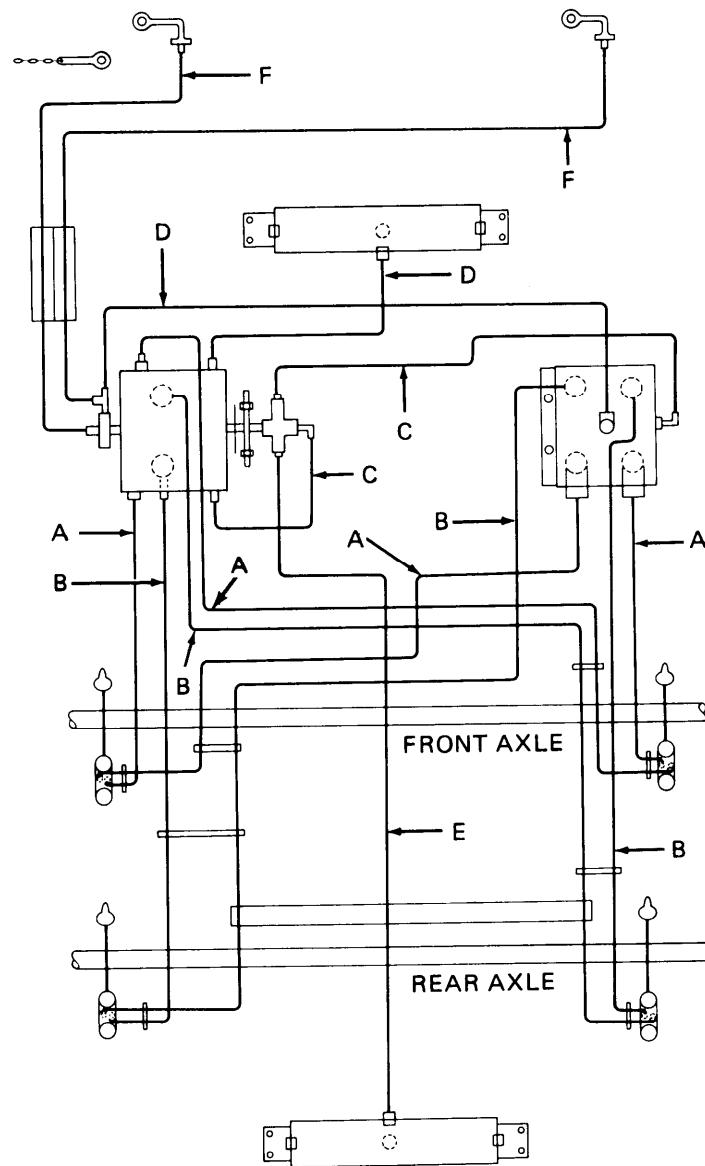


NOTE

Fabricate from : (19207) 7720853 - Bulk wire, black
#14; lengths as indicated.

Electrical System Wiring - M871A1**Nose Box Cover (Inside)****NOTE**

Fabricate from: (19207) 7720853 - Bulk wire, black, #14; lengths as indicated.

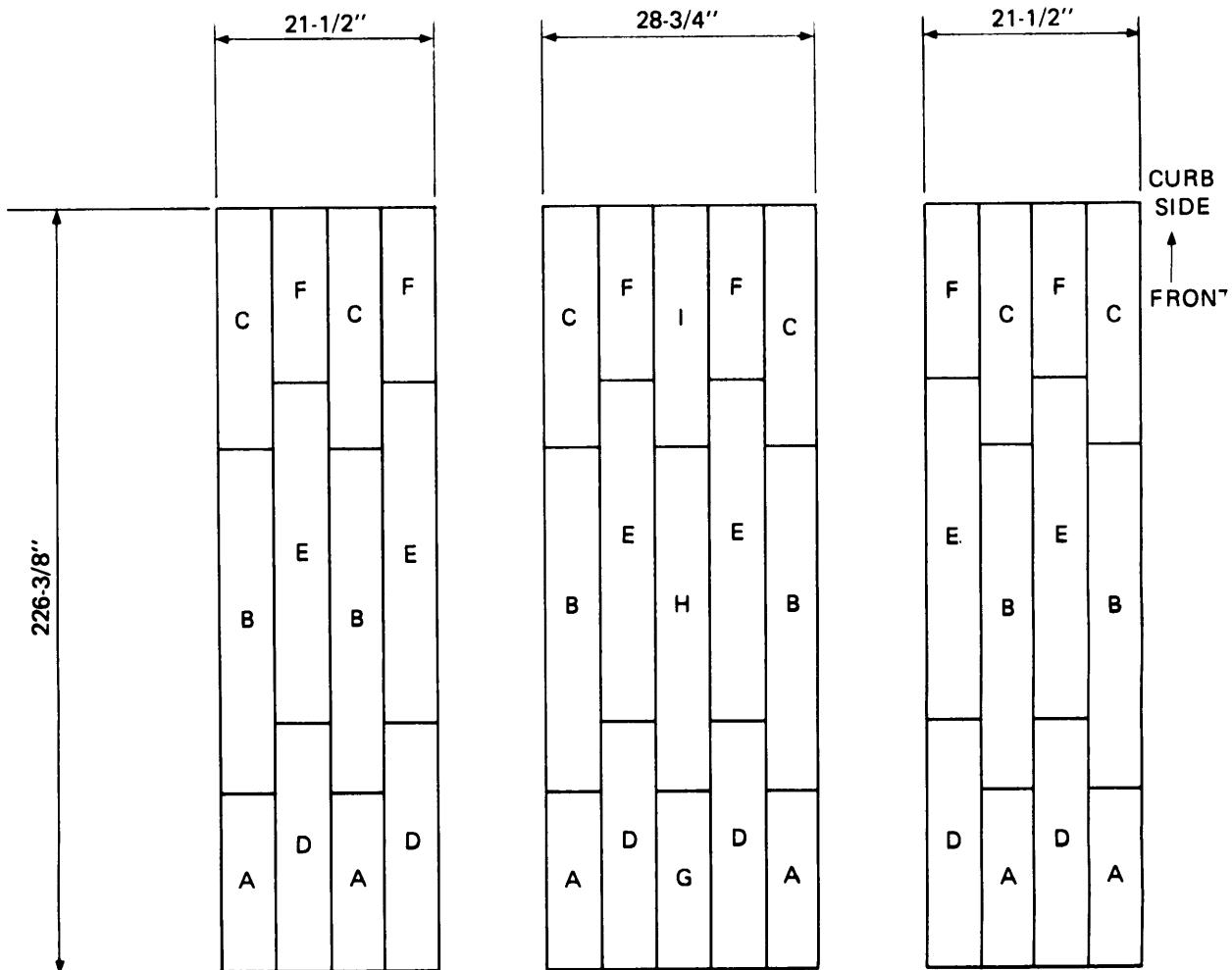
Air Hoses and Tubing

Item	Description	Length	Item	Description	Length
A	1/2" tubing	42"	D	3/8" tubing	20"
B	1/2" tubing	90"	E	3/8" tubing	70"
C	3/8" tubing	17"	F	3/8" air hose	295"

NOTE

Fabricate from : (85757) 3250-06-124 3/8" tubing
 (85757) 3250-06-164 3/8" air hose or
 (85757) 3250-08-124 1/2" tubing

Floor Boards
(M871A1)



Item	Length	Item	Length
A	1 3/4" X 5 5/16" X 60 5/8"	F	1 3/4" X 5 5/16" X 63 3/4"
B	1 3/4" X 5 5/16" X 86"	G	1 3/4" X 7 3/16" X 60 5/8"
C	1 3/4" X 5 5/16" X 79 3/4"	H	1 3/4" X 7 3/16" X 86"
D	1 3/4" X 5 5/16" X 75 5/8"	I	1 3/4" X 7 3/16" X 79 3/4"
E	1 3/4" X 5 5/16" X 88"		

NOTE

Fabricate from: MML736 (81348) - Bulk wood.
To comply with Military Specification MIL-W-003912D

APPENDIX H
TORQUE LIMITS

Action	Part	Lb Ft	Nm
Brake Shoe Installation	Spider Bolt (M871)	100-120	136-163
Brake Drum Installation	Axle Nut	150-200	272-306
Axle Installation	U-bolt Nut	300	408
Caging Air Brake Chamber Spring	Release Tool Assembly	50	68
Tire Installation	Lug Nuts	400-450	542-612
Landing Leg Installation	Brace Nut	150-160	204-218
Landing Leg Installation	Gear Box Nut (M871)	150-160	204-218

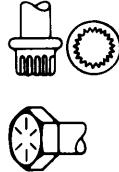
CAPSCREW MARKING

Current Usage	Much Used	Much Used	Used at Times	Used at Times
---------------	-----------	-----------	---------------	---------------

Quality of Material	Indeterminate	Minimum Commercial	Medium Commercial	Best Commercial
---------------------	---------------	--------------------	-------------------	-----------------

SAE Grade Number	1 or 2	5	6 or 7	8
------------------	--------	---	--------	---

Capscrew Head Markings
Manufacturer's marks may vary



These are all SAE Grade 5 (3 line)



STANDARD TORQUE**CAUTION**

If replacement capscrews are of a higher grade than originally supplied, use torque specifications for that placement. This will prevent equipment damage due to overtorquing.

Capscrew (Inches)	Body Size - (Thread)	Torque Lb Ft (Nm)	Torque Lb Ft (Nm)	Torque Lb Ft (Nm)	Torque Lb Ft (Nm)
1/4	20	5 (7)	8 (11)	10 (14)	12 (16)
	28	6 (8)	10 (14)		14 (19)
5/16	18	11 (15)	17 (23)	19 (26)	24 (33)
	24	13 (18)	19 (26)		27 (37)
3/8	16	18 (24)	31 (42)	34 (46)	44 (60)
	24	20 (27)	35 (47)		49 (66)
7/16	14	28 (38)	49 (66)	55 (75)	70 (95)
	20	30 (41)	55 (75)		78 (106)
1/2	13	39 (53)	75 (102)	85 (115)	105 (142)
	20	41 (56)	85 (115)		120 (163)
9/16	12	51 (69)	110 (149)	120 (163)	155 (210)
	18	55 (75)	120 (163)		170 (231)
5/8	11	83 (113)	150 (203)	167 (226)	210 (285)
	18	95 (129)	170 (231)		240 (325)
3/4	10	105 (142)	270 (366)	280 (380)	375 (508)
	16	115 (156)	295 (400)		420 (569)
7/8	9	160 (217)	395 (536)	440 (597)	605 (820)
	14	175 (237)	435 (590)		675 (915)
1	8	235 (319)	590 (800)	660 (895)	910 (1234)
	14	250 (339)	660 (895)		990 (1342)

NOTE

Always use the torque values listed above when specific torque values are not available.

Do not use above values in place of those specified in other sections of this manual; special attention should be observed when using SAE Grade 6, 7 and 8 capscrews.

The above is based on use of clean, dry threads.

Reduce torque by 10 percent when engine oil is used as a lubricant.

Reduce torque by 20 percent if new plated capscrews are used.

Capscrews threaded into aluminum may require reductions in torque of 30 percent or more of Grade 5 capscrews torque and must attain two capscrew diameters of thread engagement.

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To be distributed in accordance with DA Form 12-39, Operator, Unit and Direct and General Support Maintenance for Semitrailer, Tactical 22 1/2-Ton, M871.

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PUBLICATION DATE

17 Dec 87

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Semitrailer, M871, M871A1

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AND WHAT SHOULD BE DONE ABOUT IT:

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AV 777-2222*

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John Doe, PFC

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UNIT'S ADDRESS



FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

Commander
US Army Tank-Automotive Command
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Warren, Michigan 48397-5000

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PUBLICATION DATE

17 Dec 87

PUBLICATION TITLE

22½ Ton Flatbed Transporter
Semitrailer, M871, M871A1

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PARA-
GRAPH

FIGURE
NO

TABLE
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AND WHAT SHOULD BE DONE ABOUT IT:

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PUBLICATION TITLE

22½ Ton Flatbed Transporter
Semitrailer, M871, M871A1

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THE METRIC SYSTEM AND EQUIVALENTS

LINEAR MEASURE

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

WEIGHTS

1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
 1 Kilogram = 1000 Grams = 2.2 Lb.
 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

LIQUID MEASURE

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

SQUARE MEASURE

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

CUBIC MEASURE

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

TEMPERATURE

$\frac{5}{9}(F - 32) = ^\circ C$
 212° Fahrenheit is equivalent to 100° Celsius
 90° Fahrenheit is equivalent to 32.2° Celsius
 32° Fahrenheit is equivalent to 0° Celsius
 $\frac{9}{5}(C + 32) = ^\circ F$

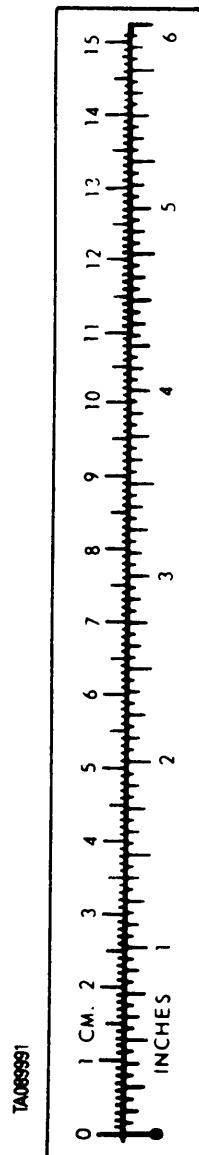
APPROXIMATE CONVERSION FACTORS

TO CHANGE

TO	MULTIPLY BY
Inches	2.540
Feet	0.305
Yards	0.914
Miles	1.609
Square Inches	6.451
Square Feet	0.093
Square Yards	0.836
Square Miles	2.590
Acres	0.405
Cubic Feet	0.028
Cubic Yards	0.765
Fluid Ounces	29.573
Pints	0.473
Quarts	0.946
Gallons	3.785
Ounces	28.349
Pounds	0.454
Short Tons	0.907
Pound-Feet	1.356
Pounds per Square Inch	6.895
Miles per Gallon	0.425
Miles per Hour	1.609

TO CHANGE

TO	MULTIPLY BY
Centimeters	0.394
Meters	3.280
Meters	1.04
Kilometers	0.621
Square Centimeters	0.155
Square Meters	10.764
Square Meters	1.196
Square Kilometers	0.386
Square Hectometers	2.471
Cubic Meters	35.315
Cubic Meters	1.308
Milliliters	0.034
Liters	2.113
Liters	1.057
Liters	0.264
Grams	0.035
Kilograms	2.205
Metric Tons	1.102
Newton-Meters	0.738
Kilopascals	0.145
Kilometers per Liter	2.354
Kilometers per Hour	0.621



PIN: 048124-000