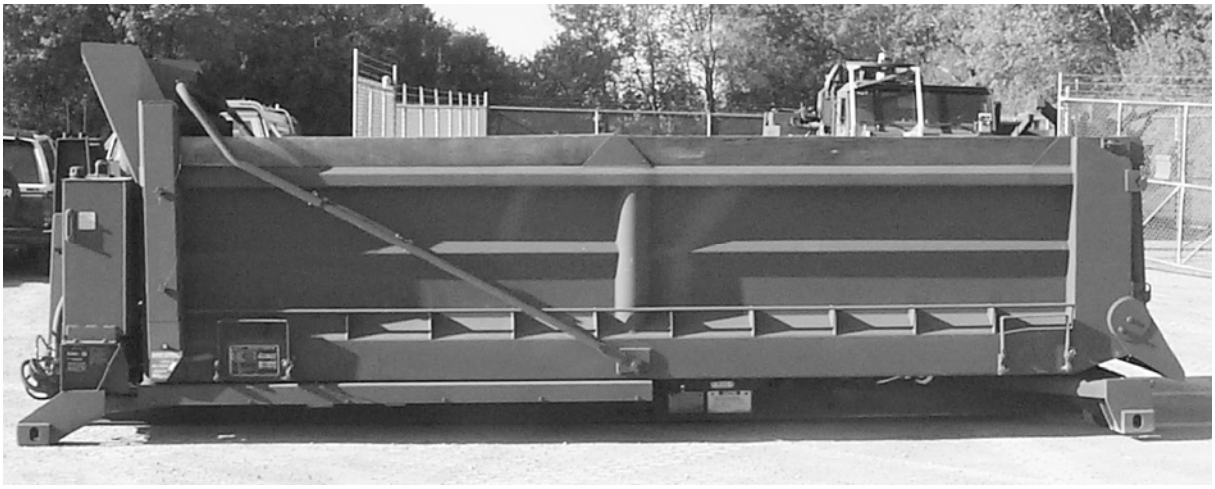
TECHNICAL MANUAL

OPERATOR, UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL AND REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)



DUMP BODY MODULE

MODEL M6

(NSN 3990-01-443-8024) (EIC: BDQ)

***Supersedes TM 9-3990-259-13&P, 01 November 2000**

HEADQUARTERS, DEPARTMENT OF THE ARMY

JUNE 2007

WARNING SUMMARY

The following is a list of warnings that appear in this manual. Dump Body operators and mechanics must become familiar with all warnings. Severe injury or death can be avoided by operators and mechanics who understand the vehicle and are alert to possible dangers.

WARNING

- Chock wheels when working on truck. Failure to comply could result in serious injury to personnel.
- Before deploying tarp over Dump Body, ensure crank handle is removed from shaft. If handle is connected to shaft, serious injury to personnel could result with handle spinning out of control.
- Never open or close tarp within 40 feet (12.2 m) of overhead power lines or trees. Failure to comply may result in death or serious injury to personnel.
- Ensure tarp is fully opened or fully closed before moving truck. Failure to comply may result in serious injury to personnel.
- Never move truck with tarp swing arms partially raised. Failure to comply may result in serious injury to personnel.
- Always remove crank handle before touching or moving tarp brake lever. Failure to comply may result in serious injury to personnel.
- Ensure all personnel are clear of tarp path before lowering tarp. Failure to comply may result in death or serious injury to personnel.
- When brake lever is pulled down, tarp will immediately spring rearward until handle reaches the BRAKE position. Pulling handle quickly down will minimize tarp travel. Ensure personnel are clear of tarp path. Failure to comply may result in serious injury to personnel.
- Never operate tarp system under obstructions, such as power lines or trees. Failure to comply may result in death or serious injury to personnel.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury to death to personnel if body props give way.
- The maximum payload of the dump body is 25,710 lb (11,672 kg). Do not exceed the maximum payload. Failure to comply could result in equipment failure and injury or death to personnel.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.
- Do not walk or stand under raised Dump Body. Failure to comply may result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and kill or injure personnel.
- Ensure all personnel are clear of Dump Body before lowering. Failure to comply could result in death or serious injury to personnel.

WARNING

- Stabilizer bar weighs 386 lb (170 kg). Do not attempt to lift or remove stabilizer bar without the aid of an assistant and suitable lifting device. Failure to comply could result in serious injury to personnel.
- Motor pump assembly weighs 120 lb (54 kg). Do not attempt to lift or remove motor pump assembly without the aid of an assistant. Failure to comply could result in serious injury to personnel.
- An empty Dump Body with tailgate attached weighs 5500 lb (2495 kg). Do not attempt to lift or remove Dump Body without the aid of an assistant and suitable lifting device. Failure to comply could result in serious injury to personnel.
- Cylinder assembly weighs approximately 750 lb (340 kg). Do attempt to lift or remove cylinder assembly without the aid of an assistant and suitable lifting device. Failure to comply could result in serious injury to personnel.
- Cylinder mount assembly weighs 210 lb (95 kg). Do not attempt to lift the lower mount assembly without the aid of an assistant. Failure to comply could result in serious injury to personnel.
- An empty hydraulic reservoir weighs 150 lb (68 kg). Do not attempt to lift reservoir without the aid of an assistant and suitable lifting device. Failure to comply could result in serious injury to personnel.
- Tailgate weighs 375 lb (170 kg). Do not attempt to lift or remove tailgate without the aid of an assistant and suitable lifting device. Failure to comply could result in serious injury to personnel.
- Crank assembly bracket weighs 75 lb (34 Kg). Do not attempt to lift or move crank assembly bracket without the aid of an assistant. Failure to comply could result in serious injury to personnel.
- Dry-cleaning solvent (P-D-680) is TOXIC and flammable. Wear protective goggles, face shield, and gloves; use only in a well-ventilated area; avoid contact with skin, eyes, and clothes, and do not breathe vapors. Keep away from heat or flame. Never smoke when using solvent. The flashpoint for Type II dry-cleaning solvent is 140°F (60°C) and Type III dry-cleaning solvent is 200°F (93°C). Failure to do so may result in serious injury or death to personnel.
- Hydraulic system can reach 3675 psi (25,339 kPa). Never connect/disconnect any hydraulic line or fitting without first dropping pressure to zero. Failure to comply could cause serious injury or death to personnel.
- If loading, transporting, or operating Dump Body on PLS trailer (PLST), ensure tires are facing straight ahead. Dump Body has a very high center of gravity (CG) and PLST is unstable when front tires are not facing straight ahead. Failure to comply may result in vehicle rollover causing injury or death to personnel.
- Dump Body has a very high center of gravity (CG). A higher CG limits cornering and side slope operations. Limit side slope operations and transportation to no more than a 20 percent side slope angle when Dump Body is loaded onto PLS truck or PLS trailer (PLST). Dump operations should be limited to side slopes no greater than 10 percent on the PLS truck and level ground for the PLS trailer (PLST). Use extreme caution when raising Dump Body on any side slope operations as CG becomes even higher. Failure to comply may result in vehicle rollover causing injury or death to personnel.

WARNING

- When performing dumping operations with wet, sticky, frozen, or hard packed materials, PLS truck or PLS Trailer must be on level ground and stationary. Failure to comply could result in serious injury to personnel or damage to equipment.
- Wet, sticky, frozen, or hard packed materials may not discharge completely or discharge suddenly in large chucks. If materials do not start to flow before hoist cylinder reaches the end of the second stage, STOP dump operations and reassess the situation. Failure to comply could result in serious injury to personnel or damage to equipment.
- Do not try to loosen a sticky load by pulling forward or backward and braking abruptly. Injury to personnel or damage to equipment may result.
- Do not attempt to dump in high wind. High winds may disperse aggregate. High winds may also cause dump truck to roll over when dump body is raised. Failure to follow this warning may result in death or injury to personnel or damage to equipment.
- Hose tray cover weighs 100 lb (45.5 kg). Do not attempt to remove hose tray cover without the aid of an assistant and a suitable lifting device. Failure to comply may result in serious injury to personnel.
- The Dump Body hydraulic system operates at oil pressures up to 2700 psi (18,617 kPa). Never disconnect any hydraulic line or fitting without first dropping pressure to zero. Failure to comply may result in serious injury or death to personnel.
- Never disconnect any hydraulic line or fitting without dropping pressure to zero. Failure to comply many result in serious injury or death to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death may occur.
- Keep clear of tailgate opening. Failure to comply could result in serious injury to personnel.
- Air lines may be under extreme pressure. Ensure all personnel wear protective goggles when working around compressed air. Failure to comply may result in serious injury or death to personnel.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury personnel.
- Adhesives, solvents, and sealing compounds can burn easily, can give off harmful vapors, and are harmful to skin and clothing. To avoid injury or death, keep away from open fire and use in well-ventilated area. If adhesives, solvent or sealing compound gets on skin or clothing, wash immediately with soap and water.

LIST OF EFFECTIVE PAGES Insert latest changed pages. Destroy superseded pages.

NOTE

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Dates of issue for chage pages are:

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TOTAL NUMBER OF PAGES IN THIS PUBLICATION IS 412 CONSISTING OF THE FOLLOWING:

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TM 9-3990-259-13&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 30 June 2007

OPERATOR, UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL AND REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

FOR

DUMP BODY MODULE

MODEL M6

(NSN 3990-01-443-8024) (EIC: BDQ)

Current as of 30 June 2007

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Submit your DA Form 2028 (Recommended Changes to Equipment Technical Publications), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is https://aeps.ria.army.mil. The DA Form 2028 is located under the Public Applications section in the AEPS Public Home Page. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax or email your letter or DA Form 2028 directly to: TACOM Life Cycle Management Command, ATTN: AMSTA-LC-LPIT / TECH PUBS, TACOM-RI, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The email address is ROCK-TACOM-TECH-PUBS@conus.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

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

*Supersedes TM 9-3990-259-13&P dated 01 Novembr 2000

HOW TO USE THIS MANUAL

This manual is designed to help operate and maintain the Dump Body Module, Model M6, NSN 3990-01-443-8024, Part Number 87T0038. Listed below are some of the features included in this manual to help locate and use the need information:

- Warning, caution and note headings, subject headings and other essential information are printed in bold type making them easier to see.
- In addition to text, there are digital photos and some line art illustrations showing how to take a component off and put it back on. Cleaning and inspection criteria are also included where necessary.
- Chapter 1 of this manual describes the Dump Body Module and provides equipment data.
- Chapter 2 of this manual covers Operator's Controls and Indicators, General Maintenance Instructions, Preventive Maintenance Checks and Services (PMCS), Operator Instructions and Lubrication Instructions
- Chapter 3 of this manual covers General Maintenance Instructions, Unit and Direct Support Maintenance Instructions.
- Chapter 4 of this manual covers Unit Maintenance Troubleshooting Instructions.
- Appendix A of this manual provides a Repair Parts and Special Tools List (RPSTL) for the Dump Body Module.
- Appendix B of this manual covers Torque Limits.
- Appendix C of this manual provides a Maintenance Allocation Chart (MAC).
- Appendix D of this manual provides an Expendable Supplies and Materials List.
- Appendix E of this manual provides a Tool Identification List.

Follow these guidelines when using this manual:

- Read all WARNINGS, CAUTIONS and NOTES prior to performing any procedure.
- The operator must read through this manual and become familiar with the contents before attempting to operate the Dump Body Module.
- Dump Body Module TM 9-3990-259-13&P is used in conjunction with Palletized Load System (PLS) TM 9-2320-364 manual series and Palletized Load System Trailer (PLST) TM 9-2330-385-14.

CHAPTER 1
INTRODUCTION

1-1. EQUIPMENT DESCRIPTION.

a. Characteristics.

The Palletized Load System (PLS) Dump Body consists of a 12–14 yard capacity by volume and 25,710 lb (11,672 kg) by gross weight unit. The PLS Dump Body is a 5.3-ton demountable unit capable of repeated use with the PLS Load Handling System (LHS) and compatible for transport and operation on the PLS truck and/or the PLS trailer (PLST).

b. Capabilities.

The PLS Dump Body Engineer Mission Module (EMM) is used to load, transport, and dump payloads of sand and gravel aggregates, crushed rock, hot paving mixes, earth clay, rubble, and large boulders at engineering and construction sites under worldwide climatic conditions in a military environment.

When loaded with material, the Dump Body is capable of being loaded and unloaded on any PLS truck and/or trailer. A fully loaded Dump Body can be transferred from one PLS to another. **However, only a PLS (M1075) equipped with a universal power interface kit can raise and lower the Dump Body.** The Dump Body can be elevated to a 52-degree angle.

c. Features.

- 12-14 yard capacity Dump Body by volume and 25,710 lb (11,672 kg) by gross weight
- Spring-deploying tarp system to cover load
- Air-actuated tailgate release.

1-2. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

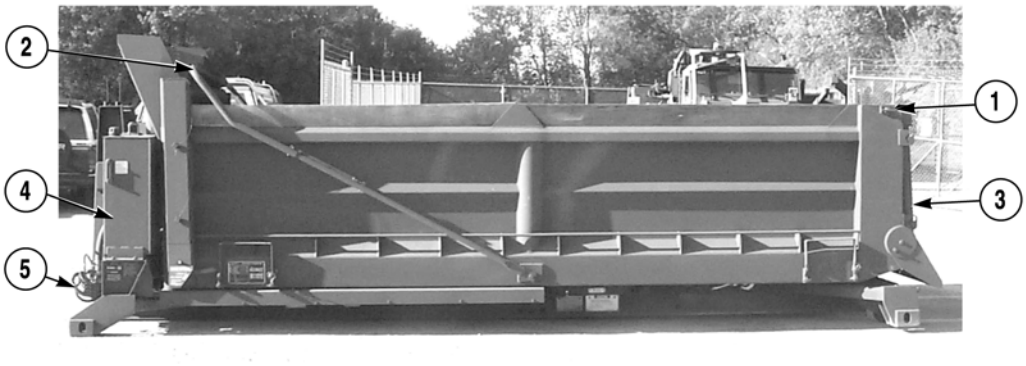


Figure 1-1. Location of Major Components, Left Side View

a. Dump Body (1).

The Dump Body has a capacity of 12–14 yards by volume and 25,710 lb (11,672 kg) by gross weight. It is constructed of high-strength steel. Side board pockets are fabricated into Dump Body corners and sides.

b. Tarp (2).

The tarp material is a nylon-mesh type. It is deployed over the load using a torsion spring and swing arms. The tarp is stored in a rolled-up configuration controlled by a hand crank.

c. Tailgate (3).

The tailgate locks are air released. The tailgate is made of 7-gage steel and has chain slot brackets on rear corner pillars to adjust tailgate opening when dumping or spreading.

d. Hydraulic Reservoir (4).

The 32 gal (121 L) hydraulic reservoir has an approximate capacity of 28 gal (106 L). The hydraulic reservoir stores and cools oil used in the hydraulic system.

e. Universal Power Interface Kit (UPIK) (5).

Provides air, hydraulic, and electrical power necessary to run the Dump Body.

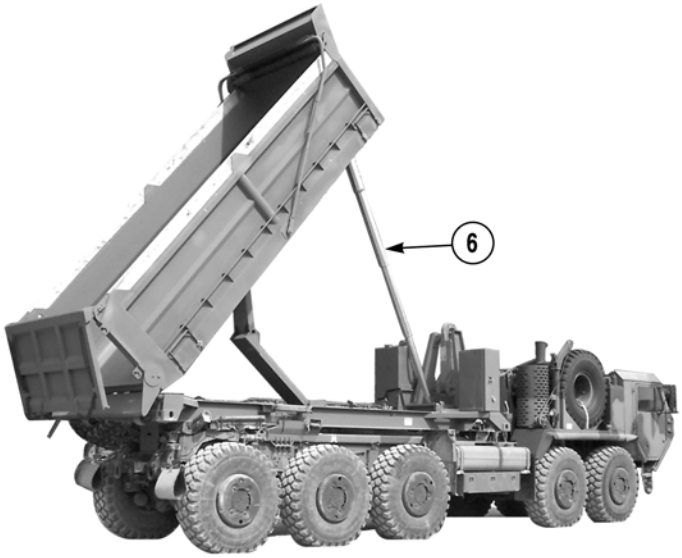


Figure 1-2. Location of Major Components, Right Side View

f. Telescopic Hoist (6).

The hydraulic cylinder is a four-stage, single-acting cylinder. The bore at the base of the cylinder is 7.00 in. (17.78 cm). The stroke is approximately 191 in. (485 cm).

1-3. EQUIPMENT DATA.

Refer to Tables 1-1 and 1-2 for specific equipment data.

Table 1-1. Dimensions

	Feet/Inches	Meters
Length of Dump Body only	20/0	6.10
Width of Dump Body (with or without tarp)	8/0	2.44
Height of Dump Body only	7/0	2.13
Height w/Fully Raised Dump Body on Truck	24/2	7.35
Length of Loaded PLS w/Dump Body	36/0	10.98
Width of Loaded PLS w/Dump Body	8/0	2.44
Height of Loaded PLS w/Dump Body	11/10	3.61
Height of Dump Body Bed Side to ground on Truck	9/10	2.98
Height of Dump Body Side Board top to ground on Truck	10/4	3.14
Height of Dump Body Side to ground on PLS Trailer	9/2	2.78
Height of Dump Body Side Board top to ground on PLS Trailer	9/8	2.93

Table 1-2. Weights

	Pounds	Kilograms
Weight of Empty Dump Body	10,540	4785
Weight of PLS w/Empty Dump Body	54,300	24,652
Weight of PLS w/Full Dump Body	79,950	36,297
Weight of Payload (Permissible Capacity)	25,710	11,672
Maximum weight of Dump Body and Payload	36,250	16,458

WARNING

The maximum payload of the dump body is 25,710 lb (11,672 kg). Do not exceed the maximum payload. Failure to comply could result in equipment failure and injury or death to personnel.

Table 1-3. Payload

Materials	Weight of Materials (lbs)		Capacity		Maximum Functional Load (cu-yd) that does not exceed GW limit
	Per cu-ft.	Per cu-yd	Level Full 12.0 cu yds Loaded Weight lbs	Sideboard Full 14.0 cu yds Loaded Weight lbs	
Ashes	43	1,161	13,932	16,254	22.1
Cinders	46	1,242	14,904	17,388	20.7
Clay, dry loose	77	2,079	24,948	*29,106	12.3
Clay, wet	110	2,970	*35,640	*41,580	8.6
Clay and gravel	110	2,970	*35,640	*41,580	8.7
Coal, anthracite (hard)	54	1,458	17,496	20,412	17.6
Coal, bituminous (soft)	81	2,187	*26,244	*30,618	11.7
Coke	28	756	9,072	10,584	33.9
Concrete	138	3,726	*44,712	*52,164	6.9
Concrete mix, wet	124	3,348	*40,176	*46,872	7.7
Earth, dry loose	75	2,025	24,300	*28,350	12.7
Earth, moist packed	95	2,565	*30,780	*35,910	10.0
Earth/gravel, dry loose	100	2,700	*32,400	*37,800	9.5
Garbage, dry	37	999	11,988	13,986	25.7
Garbage, wet	47	1,269	15,228	17,766	20.2
Gravel	110	2,970	*35,640	*41,580	8.6
Gravel/sand, dry loose	95	2,565	*30,780	*35,910	10.0
Gravel and sand, wet	120	3,240	*38,880	*45,360	7.9
Limestone, crushed	100	2,700	*32,400	*37,800	9.5
Mud, wet	120	3,240	*38,880	*45,360	7.9
Rock and stone, crushed	95	2,565	*30,780	*35,910	10.0
Salt, fine	50	1,350	16,200	18,900	19.0
Sand, dry loose	98	2,646	*31,752	*37,044	9.7
Sand, dry packed	110	2,970	*35,640	*41,580	8.6
Sand, moist loose	120	3,240	*38,880	*45,360	7.9
Slag, crushed	75	2,025	24,300	*28,350	12.7
Snow, moist packed	50	1,350	16,200	18,900	19.0
Stone, crushed	100	2,700	*32,400	*37,800	9.5
Stone, loose	95	2,565	*30,780	*35,910	10.0

* Loaded Weight exceeds rated payload

1-4. PRINCIPLES OF OPERATION.

Hydraulic, pneumatic, and electrical power is provided to the module through the Universal Power Interface Kit (UPIK) of the PLS truck.

a. Hydraulic System.

The PLS truck hydraulic system will supply hydraulic fluid through the interface kit to the motor to drive a pump of the Dump Body which in turn will pump the hydraulic fluid in the reservoir required to operate the hydraulic cylinder on the Dump Body. This flow is orificed down to 30 gpm (113.6 L/m) with maximum pressure being relieved at 3000 psi (20,685 kPa) at the supply valve for the Dump Body circuit. The cab-mounted Dump Body joystick is used to control raising and lowering the Dump Body.

The Dump Body hydraulic kit interfaces with the PLS hydraulics at the interface kit connection. The quick disconnects located above the main fuel tank allow the hydraulic system to be quickly switched between the LHS mode and the Dump Body mode.

The cylinder used to raise and lower the Dump Body is a single-acting, 4-stage-type with a 191 in. (485 cm) stroke and a first stage bore of 7.00 in. (17.78 cm).

b. Air System.

The tailgate lock is controlled by a 3.50 in. (8.89 cm) I.D., 8 in. (20.32 cm) stroke air cylinder. Air is supplied to the cylinder by the truck's air system through the interface kit.

c. Electrical System.

The electrical system consists of a control box magnetically mounted on the center cab console. The control box consists of a joystick to raise and lower the Dump Body, a two-position switch to lock/unlock the tailgate, and two indicator lights—one for Dump Body up and one for trailer connection.

1-5. HANDLING AND TRANSPORTATION PROCEDURES.

The Dump Body is capable of being loaded or unloaded on any PLS truck and/or PLST. A fully loaded Dump Body can be transferred from one PLS to another. However, only a PLS (M1075) equipped with an interface kit can raise and lower the Dump Body. The flatrack portion of the Dump Body contains rail transport pins for securing during rail transport. ISO corner castings are used to interconnect the modules.

1-6. WARRANTY INFORMATION.

Except as provided below, and provided the module has been placed into service within one (1) year after shipment from the factory, as established by the date on DD Form 250, or a period of twelve (12) months after delivery to the first user, Oshkosh Truck Corporation warrants the Engineering Mission Modules (EMMs) are free from defects in material and workmanship. This limited warranty shall apply only if the module is properly maintained and used in service which is normal for the particular module. Normal service means service which does not subject the module to stresses or impacts greater than normally result from the careful use of the module or chassis. Oshkosh makes no warranty whatsoever as to: (1) Any module, chassis, or component, part, attachment, or accessory damaged by misuse, neglect, or accident; (2) Any module, chassis, or component, part, attachment, or accessory which shall have been repaired, module altered or assembled in any way by others than Oshkosh which, in the sole judgement of Oshkosh, affects the performance, stability, or purpose for which it was manufactured; (3) Frames or crossmembers which have been subject to welding, heat treatment, or corrosion caused by the use of acids after delivery to the first user; (4) Products or parts which are not defective, but which may wear out and have to be replaced during the warranty period including, but not limited to, fluids, gaskets, and light bulbs.

If the Unit discovers a defect or nonconformity, it must notify Oshkosh within ten (10) days after the date of discovery. Notification of a defect can be made by telephone or in writing, providing the details of the claim. If you have any questions, call the Oshkosh Defense Service Department at (920) 235-9151, extension 2681.

Warranty replacement parts are shipped directly to the Unit within five (5) days of notification. Oshkosh arranges to correct the claim. Warranty claims are corrected in the field or at an Oshkosh service dealer. If it becomes necessary to return a module to a service dealer or our plant for repair, Oshkosh arranges and pays transportation to the facility.

1-7. MAINTENANCE CONCEPT.

The Unit operating the module should replace the components and replacement parts covered in this manual. Major systems, major components, and items that are not covered in the maintenance tasks or illustrated within the parts list can be repaired by an Oshkosh service representative or designated technician.

1-8. REPAIR AND PARTS SUPPORT.

Oshkosh will provide parts delivery for all PLS Engineering Mission Module (EMM) parts in five (5) business days or less.

Oshkosh shall provide parts support for the EMM-unique items and will ship the part directly to the ordering Unit or activity. Overseas locations will be shipped to a designated containerization point for transshipment on military aircraft/vessel to the originator.

Oshkosh will apply bar-coded labels to every shipment made under this contract.

Oshkosh will supply new, quality parts and ensure complete customer satisfaction through a parts warranty. Quality standards will be maintained through the use of the ISO 9002 quality system or equivalent standards, or certified Original Equipment Manufacturer (OEM) replacement parts. Oshkosh will reimburse customers for any parts they returned in unused condition that were found damaged upon receipt. Parts may be returned due to incorrect part number or incorrect order quantity received.

Replacement and repair parts information can be found in the replacement parts Appendix of this manual. Any parts not identified in the replacement parts Appendix will also be supported and supplied through Oshkosh. If a part is unidentifiable, an Oshkosh representative will assist in identifying that part. If you have any questions, or to obtain parts that are under warranty, call the Oshkosh Defense Service Department at (920) 235-9151, extension 2681.

1-9. 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) (Maintenance Management UPDATE).

1-10. CORROSION PREVENTION AND CONTROL (CPC).

The Dump Body has a total service life of 10 years which allows for extended periods of operation in a corrosive environment. A corrosive environment includes exposure to high humidity, salt spray, road-deicing chemicals, gravel, and atmospheric contamination. No action beyond normal washing and repair of damaged areas is necessary to control corrosion. To prevent moisture accumulation, drain holes are provided on structural and sheet metal areas where necessary. Stowage boxes are provided with seals and baffled drains.

1-11. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

Refer to TM 750-244-6, Procedures for Destruction of Tank Automotive Equipment to Prevent Enemy Use.

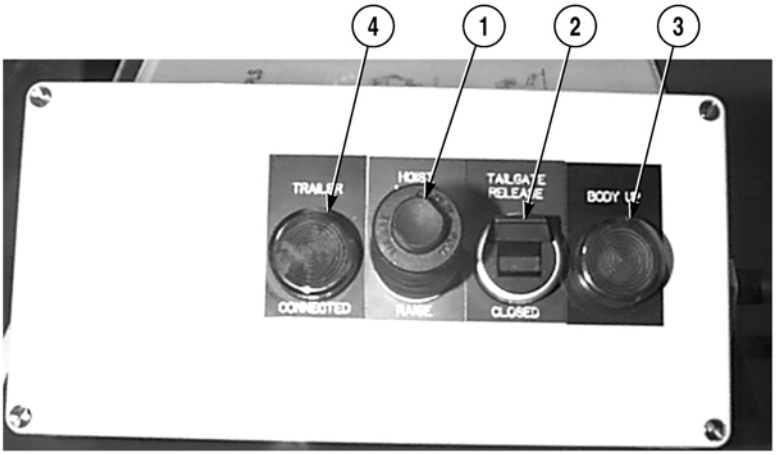
1-12. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs).

If your Dump Body Module 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 a SF 368 (Product Quality Deficiency Report). Mail it to us at: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E-MPA, Warren, MI 48397-5000. We'll send you a reply.

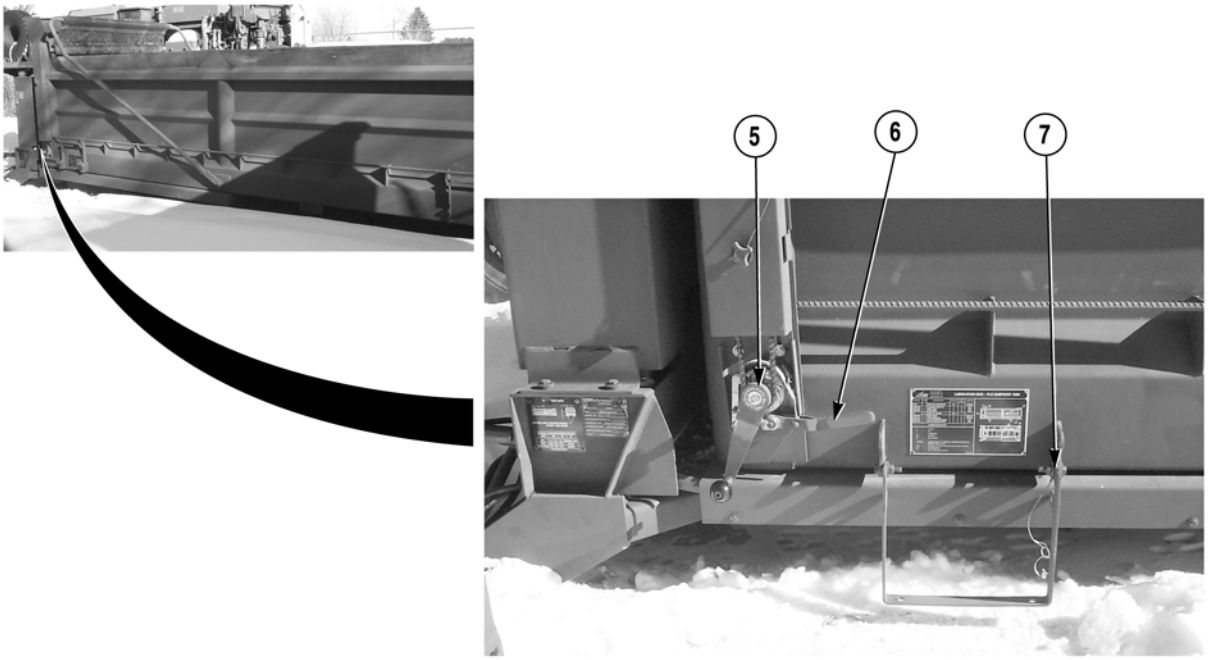
CHAPTER 2
OPERATING AND MAINTENANCE INSTRUCTIONS

2-1. LOCATION AND USE OF CONTROLS AND INDICATORS.

Know the location and proper use of every control and indicator before operation the Dump Body. Use this paragraph to learn how each control and indicator is to be used. Separate illustrations, with keys, are provided in this paragraph.

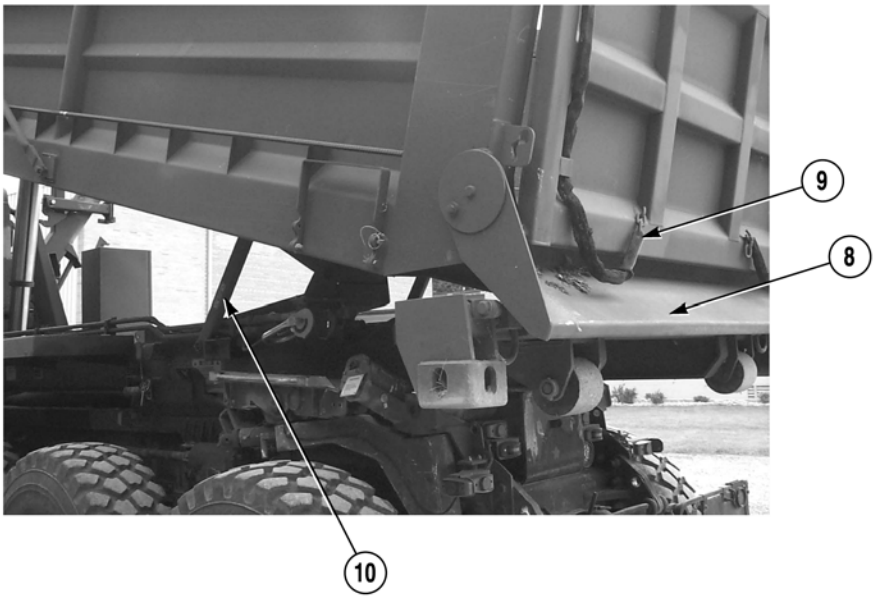


Key	Control or Indicator	Function
1	Dump Body Joystick	Pull up on outer ring, push forward to lower Dump Body, and pull back to raise Dump Body.
2	Tailgate Release Switch	Push switch to RELEASE to unlock bottom of tailgate. Push switch to CLOSE to lock bottom of tailgate. (Dump Body must be down to lock tailgate.)
3	Body Up Light	Illuminates as soon as Dump Body begins to raise and shuts off when Dump Body is completely lowered.
4	Trailer Connected Light	Illuminates when trailer is hooked up to interface kit.

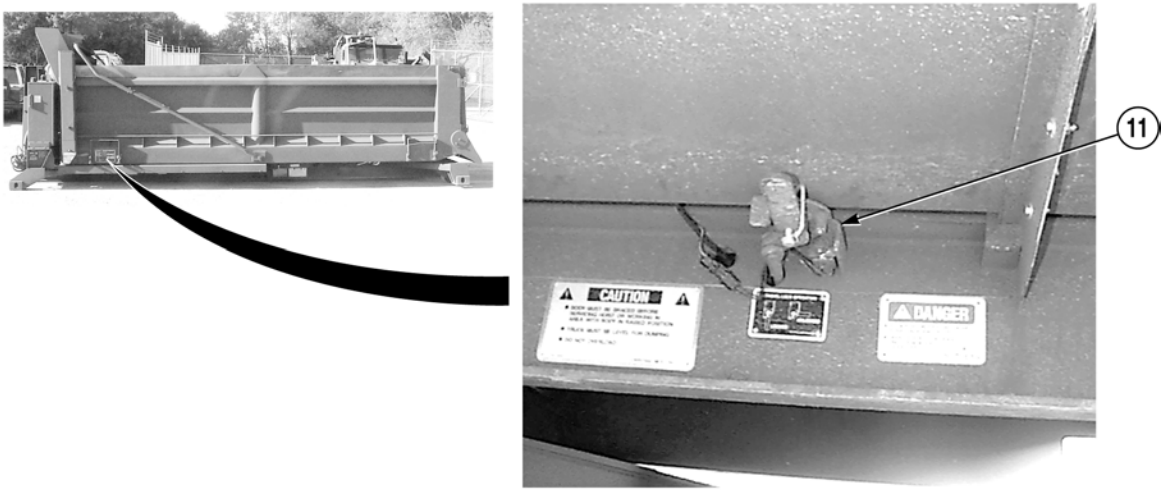


Key	Control or Indicator	Function
5	Tarp Hand Crank	Removable hand crank. Turn handle counterclockwise to roll tarp up. Remove and stow crank in Dump Body RH stowage box when not using.
6	Tarp Brake Handle	Three-position handle: 1. Upper Position (LOCK). Handle should be in this position when tarp is fully extended over load and when tarp is being cranked in. Handle spring returns to this position. 2. Lower Position (BRAKE). This is the braking position. Holding handle in this position holds tarp from deploying over load. 3. Middle Position (RELEASE). Holding handle in this position allows spring force to deploy tarp over load.
7	Ladder Bracket	Located at four corners of Dump Body to provide access to install, retract, and secure tarp and adjust tailgate chains. To unstow ladder bracket, remove pin and lower. To stow, raise ladder bracket and insert pin.

2-1. LOCATION AND USE OF CONTROLS AND INDICATORS (CONT).



Key	Control or Indicator	Function
8	Spill Shield	Prevents material in Dump Body from spilling out and damaging trailer.
9	Tailgate Safety Chains (2)	Used to limit the opening of the tailgate.
10	Body Props (2)	Are designed and intended to support an empty Dump Body in the raised position, for service only.



Key	Control or Indicator	Function
11	Travel Lock Down Mechanism	Secures the Dump Body to the supporting frame to prevent tilting of the Body during transport and sling loading operations. The travel lock is located on the left hand side of the supporting frame, underneath the hose tray.

2-2. HANDLING AND TRANSPORTATION PROCEDURES.

The Dump Body is capable of being loaded or unloaded on any PLS truck and/or PLS trailer (PLST).

The flatrack portion of the module contains rail transport pins for securing during rail transport. Lift pockets are also provided for forklift handling.

2-3. INITIAL GUIDELINES.

Before operating the Dump Body, the operator should.

a. Perform Before (B) Preventive Maintenance Checks and Services. If necessary, notify Organizational Maintenance of problems.

b. Know how to use the Dump Body safely and efficiently.

2-4. PREPARATION FOR OPERATION.

a. Refer to TM 9-2320-364-10 for Preparing for Operation of PLS truck.

b. Inspect Dump Body unit for damage that may have occurred during transport.

c. Check and tighten all fasteners, body tie-down bolts, pipe and circulating line connections, etc., that may have loosened during transit.

2-5. LOADING AND UNLOADING DUMP BODY ON PLS TRUCK.

a. Loading.

WARNING

- If loading, transporting, or operating Dump Body on PLS trailer (PLST), ensure front tires are facing straight ahead. Dump Body has a very high center of gravity (CG) and PLST is unstable when front tires are not facing straight ahead. Failure to comply may result in vehicle rollover causing injury or death to personnel.
- Dump Body has a very high center of gravity (CG). A higher CG limits cornering and side slope operations. Limit side slope transportation to no more than a 20 percent side slope angle when Dump Body is loaded onto PLS truck or PLS trailer (PLST). Dump operations should be limited to side slopes no greater than 10 percent on the PLS truck and level ground for the PLS trailer (PLST). Use extreme caution when raising Dump Body on any side slope operations as CG become even higher. Failure to comply may result in vehicle rollover causing injury or death to personnel.

(1) Ensure air line, hydraulic lines, electrical lines, chains, and straps are stowed and will not contact any moving parts.

(2) Ensure travel lock is in “LOCKED” position, refer to Para 2-13.

(3) Ensure hand crank and control box are in stowage box.

(4) Ensure stowage box door is closed and secured.

2-5. LOADING AND UNLOADING DUMP BODY ON PLS TRUCK (CONT).

(5) Ensure rear rollers are properly installed, refer to Para 2-18.

(6) Ensure tailgate is closed and locked.

NOTE

If Dump Body is full of payload, ensure that Dump Body/payload combination does not exceed the truck weight limits.

(7) Ensure rear quick disconnect handle is in "LOCKED" position.

(8) To load a Dump Body on a PLS truck, refer to PLS Operator's Manual TM 9-2320-364-10, "Picking Up a Flatrack in Auto Mode."

(9) To load a Dump Body on a PLS trailer (PLST), refer to PLS operators manual, TM 9-2320-364-10, "Normal transfer of Flatrack to Trailer."

b. Unloading.

CAUTION

PLS interface kit must be disconnected prior to performing this task or damage to equipment may result.

(1) Ensure air line, hydraulic lines, electrical lines, chains, and straps are stowed and will not contact any moving parts.

(2) Ensure Dump Body is completely lowered.

(3) Ensure travel lock is in "LOCKED" position, refer to, refer to Para 2-13.

(4) Ensure LHS switch is in the "AUTO" mode before attempting to unload a Dump Body.

(5) To unload a Dump Body from a PLS truck, refer to PLS Operator's Manual TM 9-2320-364-10, "Off-Loading Flatrack in Auto Mode."

(6) To unload a Dump Body from a PLS trailer, refer to PLS operators manual, TM 9-2320-364-10, "Normal Removal of Flatrack from Trailer."

2-6. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS).

To ensure that the PLS Dump Body is ready for operation at all times, it must be inspected on a regular basis so that defects may be found before they result in serious damage equipment failure, or injury to personnel. This section contains Preventive Maintenance Checks and Services (PMCS) requirements. Using the PMCS Table (Table 2-1), perform maintenance at the specific intervals.

2-7. GENERAL MAINTENANCE INSTRUCTIONS.

WARNING

- Dry-cleaning solvent (P-D-680) is TOXIC and flammable. Wear protective goggles, face shield, and gloves; use only in a well-ventilated area; avoid contact with skin, eyes, and clothes, and do not breathe vapors. Keep away from heat or flame. Never smoke when using solvent. The flashpoint for Type II dry-cleaning solvent is 140°F (60°C) and Type III dry-cleaning solvent is 200°F (93°C). Failure to do so may result in serious injury or death to personnel.
- If personnel become dizzy while using cleaning solvent, immediately get fresh air and medical help. If solvent contacts skin or clothes, flush with cold water. If solvent contacts eyes, immediately flush eyes with water and get immediate medical attention.

a. Cleanliness.

The Dump Body will operate practically trouble free if the proper emphasis is placed on cleaning and lubricating. Dirt, grease, oil, and debris only get in the way and may cover up a serious problem. Use dry-cleaning solvent on all metal surfaces.

b. Bolts, Nuts, and Screws.

Check them all for obvious looseness, missing, bent, or broken condition. Look for chipped paint, bare metal, or rust around bolt heads. If you find something is loose, tighten it, or notify your supervisor.

c. Welds.

Look for loose or chipped paint, rust, or gaps where parts are welded together. If a cracked weld is found, notify your supervisor.

d. Electric Wires and Connectors.

Look for cracked or broken insulation, bare wires, and loose or broken connectors. Tighten loose connectors and make sure the wires are in good shape.

e. Hydraulic Lines and Fittings.

Look for wear, cuts, kinks, damage, and leaks. Make sure clamps and fittings are tight. Wet spots show leaks, of course, but a stain around a fitting or connection can mean a leak also. If a leak comes from a loose fitting or connector, tighten it. If something is broken or worn out, notify your supervisor. If deep cuts or hose leaks are found, refer to, (Para 2-8) for leakage criteria. Notify your supervisor of all leaks found.

2-8. FLUID LEAKAGE.

It is necessary for the operator to know how fluid leakage affects the status of the hydraulic system. The following are definitions of the types/classes of leakage you need to know to be able to determine the status of the mixer. Learn, then be familiar with them and remember-when in doubt, notify your supervisor.

Leakage definitions for Operator/Crew PMCS:

CAUTION

- Equipment operation is allowable with minor leaks (Class I or II). Consideration must be given to the fluid capacity in the item/system being checked/inspected. When in doubt, notify your supervisor. Failure to comply could result in damage to equipment.
- When operating with Class I or II leaks, continue to check fluid levels as required in your PMCS. Failure to comply could result in damage to equipment.
- Class III should be reported to your supervisor or Unit Maintenance.

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

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

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

2-9. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) TABLE.

a. Do the BEFORE (B) PREVENTIVE MAINTENANCE just before you operate the Dump Body. Pay attention to the CAUTIONS and WARNINGS.

b. Do the DURING (D) PREVENTIVE MAINTENANCE while the Dump Body and/or its component systems are in operation.

c. Do the AFTER (A) PREVENTIVE MAINTENANCE right after operating the Dump Body. Pay attention to the CAUTIONS and WARNINGS.

d. Do the WEEKLY (W) PREVENTIVE MAINTENANCE weekly.

e. Do the MONTHLY (M) PREVENTIVE MAINTENANCE monthly.

f. Do the SEMIANNUAL (SA) PREVENTIVE MAINTENANCE once every six months and/or every 250 hours, whichever comes first.

g. Do the ANNUAL (AN) PREVENTIVE MAINTENANCE once every year and/or every 500 hours, whichever comes first.

h. Always do the PREVENTIVE MAINTENANCE in the same order until it gets to be a habit. Once practiced, it will be easy to spot anything wrong in a hurry. Perform the checks and services listed in Table 2-1 in the order listed.

i. If something does not work, troubleshoot using instructions in Unit Maintenance Troubleshooting, Chapter 4, of this manual.

j. When doing preventive maintenance, take along the tools and supplies needed to make all the checks, including a clean cloth or two.

k. The following is a breakdown of the PMCS table:

(1) **"Item No." column.** Checks and services are numbered in a logical order for moving around the module. The item number column is used as a source of item numbers for the TM Number Column on the DA Form 2404 or 5988E, Equipment Inspection and Maintenance Worksheet, for recording results of PMCS.

(2) **"Interval" column.** The column identifies when the PMCS should be performed. Lubrication services should coincide with the module's Semiannual Preventative Maintenance Service. For this purpose, a 10 percent tolerance (variation) in specified lubrication point hours is permissible. Those modules not accumulating 250 hours in a 6-month period will be lubricated at the time of the Semiannual Preventative Maintenance Service.

(3) **"Item To Be Inspected"** column. This column identifies the item to be inspected.

(4) **"Procedure"** column. This column contains all the information required to do the check/inspection. A digital photo is supplied to aid the user in identifying items. Whenever replacement is recommended, reference is made to the applicable maintenance instructions.

(5) **"Not Mission Capable If"** column. This column contains a brief statement of the condition that would cause the vehicle to be less than fully ready to perform it's assigned mission.

- If the module must be kept in continuous operation, do only the procedures that can be done without disturbing operation. Make complete checks and services when the module is shut down.
- Oil filters must be serviced/cleaned/changed as applicable, when they are known to be contaminated or clogged and at prescribed intervals.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

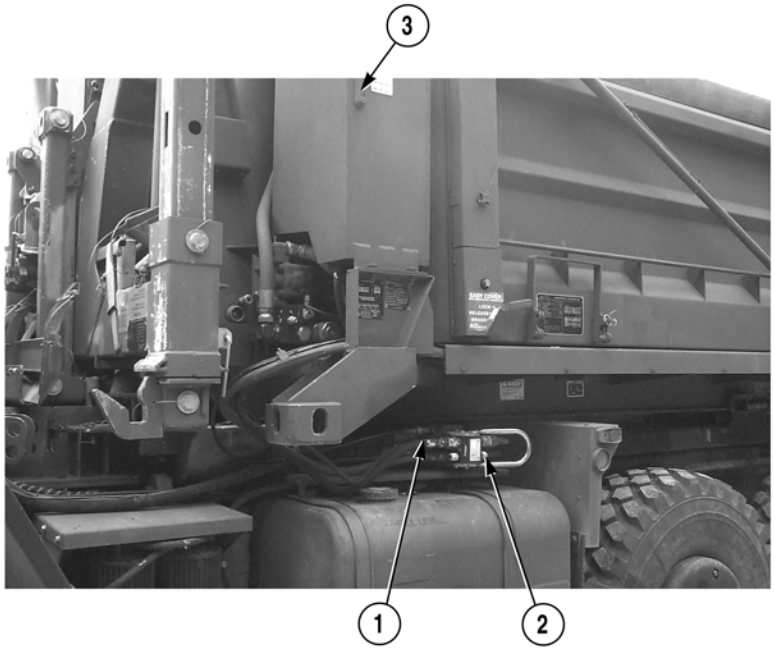
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
1	B	Hoses and Components	Check for evidence of cuts, kinks, damage, and leakage of hydraulic fluid on or under module.	Class III leaks are evident or hose has damage that would impair operation.
				
2	B	Hydraulic Quick Disconnect	Check hydraulic quick disconnect (1) for leaks and obvious damage.	Hydraulic quick disconnect has Class III leaks or has damage that would impair operation.
3	B	Electrical and Air Quick Disconnect	Check electrical and air quick disconnects and lines (2) for kinks, rips and obvious damage.	Quick disconnects have damage that would impair operation.
4	B	Hydraulic Reservoir Oil Level	Check hydraulic reservoir oil level (sight glass) (3).	Hydraulic oil level is below the “LOW” mark.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

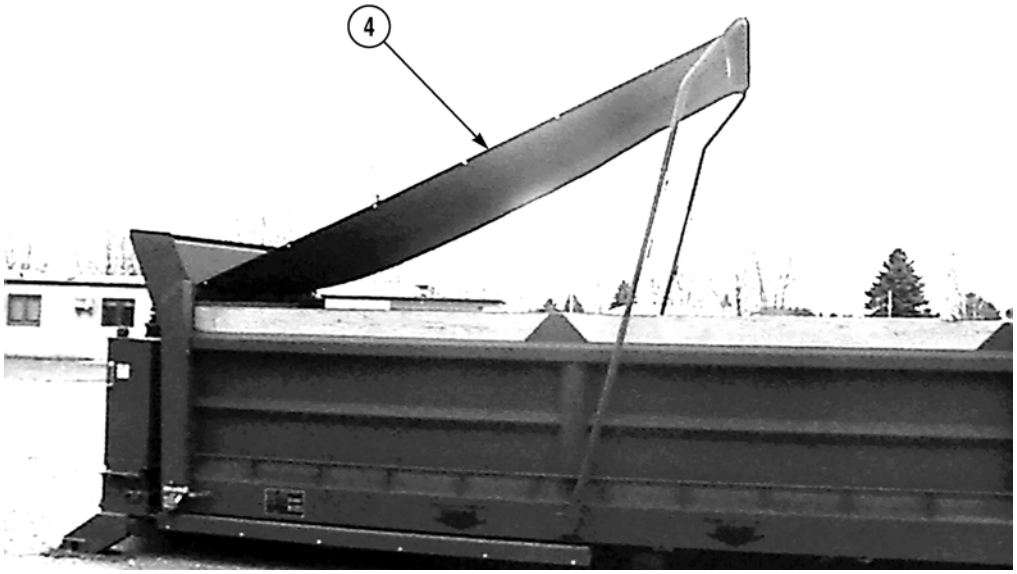
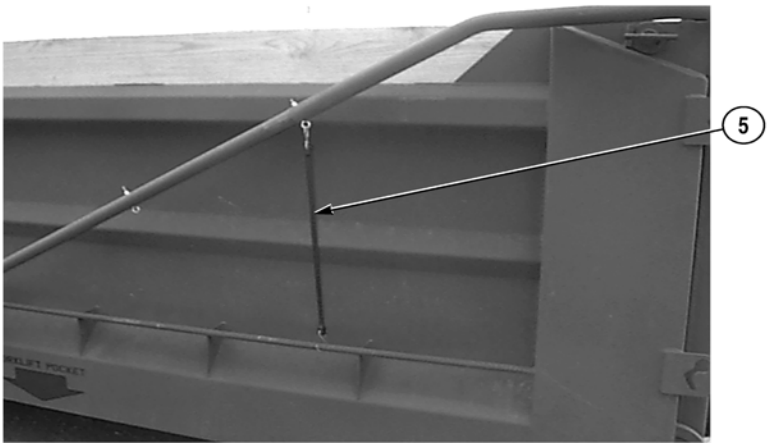
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
			NOTE Operation of truck without tarp covering load may violate AR 385-55.	
5	B	Tarp	Check operation of tarp (4) (Para 2-12).	
6	B	Tarp	Check tarp (4) for rips and obvious damage.	
				
7	B	Rubber Straps	Check for missing or damaged rubber straps (5) (both sides).	

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
8	B	Controller and Cable Connector	Check controller (6) and cable connectors for missing parts or obvious damage.	Controller is damaged or inoperable.
9	B	BODY UP Light	Check that BODY UP light (7) illuminates. a. Load dump body on truck (if not already loaded) (Para 2-5). b. Hookup UPIK connections (if not already hooked up) (Para 2-11). c. Raise dump body and deploy body prop (Para 2-14).	

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
10	B	Travel Locks	Check travel locks (8) for proper operation and obvious damage.	Damage prevents travel lock from operating properly.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

11	B	Body Props	Check body props (9) (both sides) for missing parts, proper operation and obvious damage.	

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

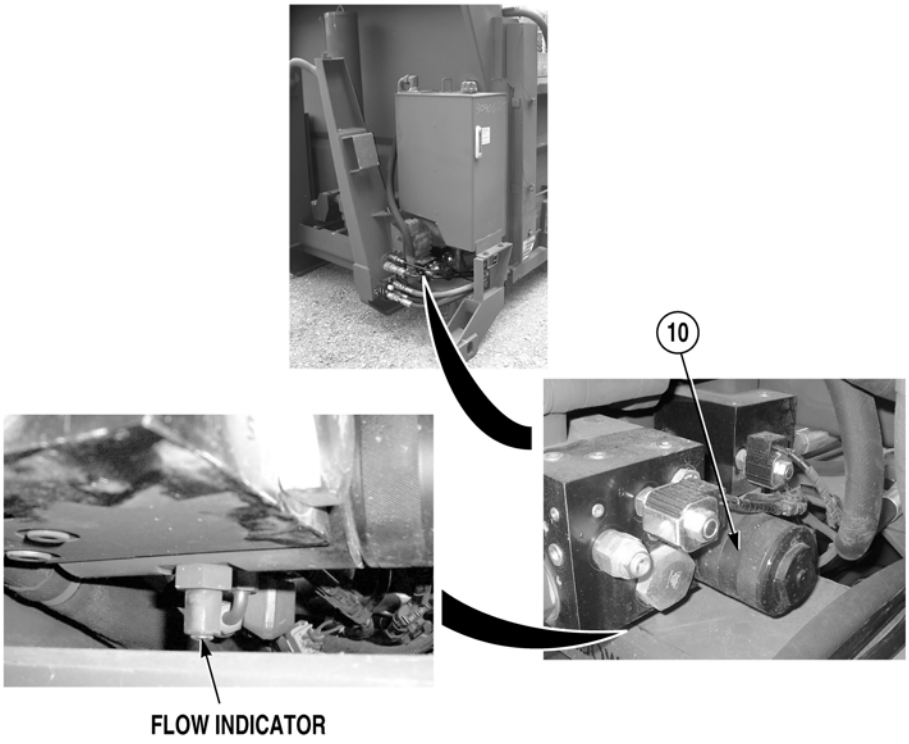
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
			NOTE Flow indicator is located on the underside of the motor pump assembly manifold, near the hydraulic high pressure oil filter.	
12	B	Hydraulic High Pressure Oil Filter	Check hydraulic high pressure oil filter flow indicator band. If band is red, replace hydraulic filter (10), (Para 3-14).	
13	D	Hydraulic High Pressure Oil Filter	Check hydraulic high pressure oil filter (10) for leaks or damage.	Hydraulic high pressure oil filter has Class III leaks or damage that would impair operation.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

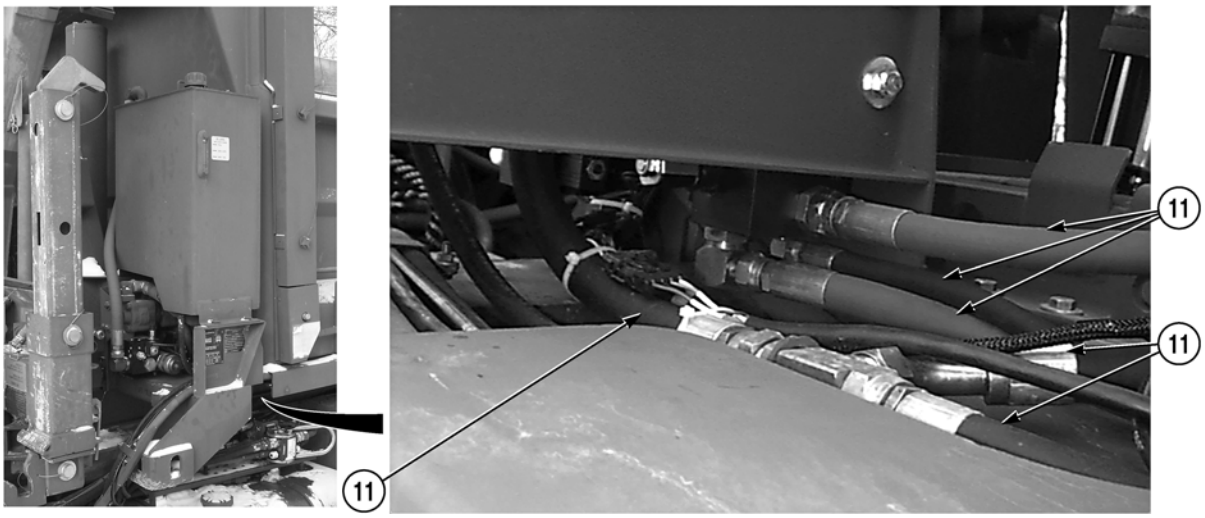
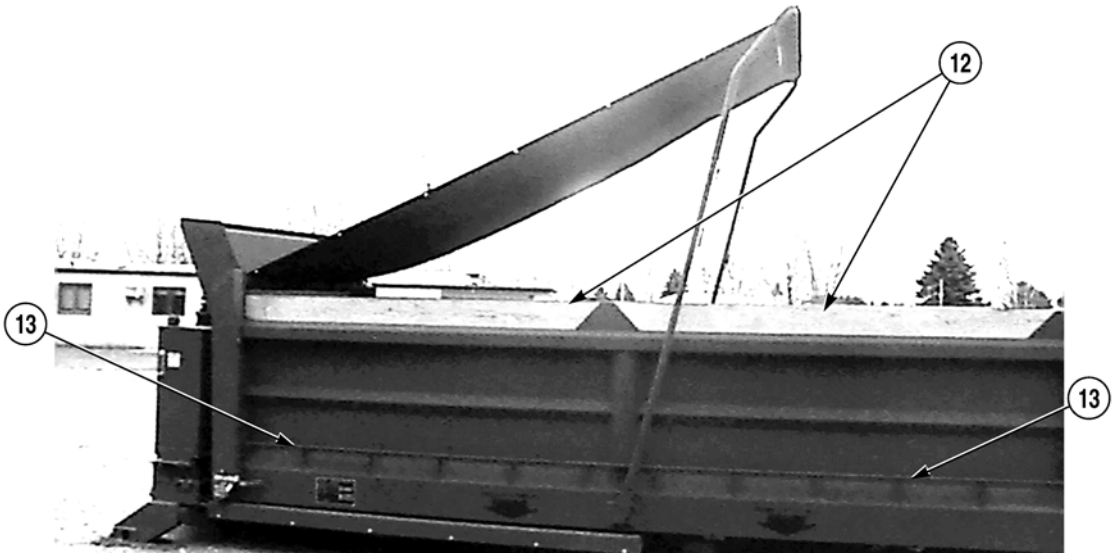
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
14	A	Hydraulic Reservoir Hoses	Check hydraulic reservoir hoses (11) for leaks or obvious damage.	Hydraulic reservoir has Class III leaks or damage that would impair operation.
				
15	A	Sideboards	Check sideboards (12) (both sides) for missing items, rotting or obvious damage.	
16	A	Tiedown Rods	Check tiedown rods (13) (both sides) for obvious damage.	

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

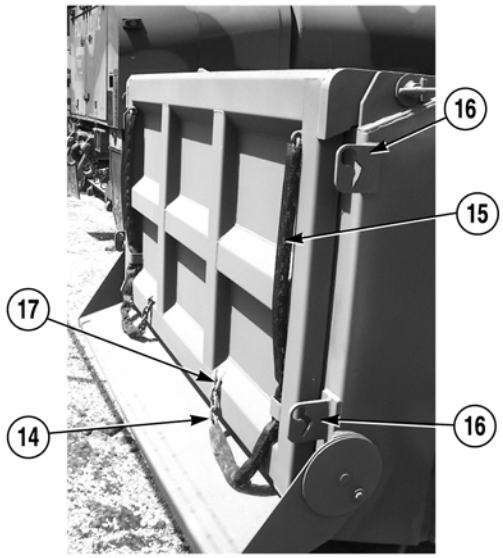
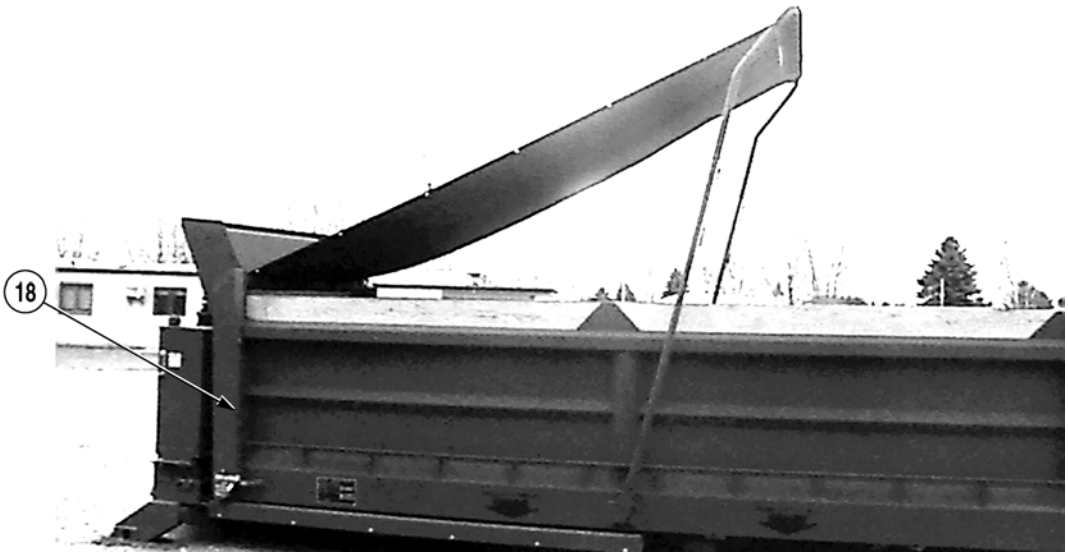
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
17	A	Dump Body	Check tailgate chains (14), silencers (15), brackets (16), and stowage hooks (17) for missing parts or obvious damage (both sides).	Components have damage that would impair operation.
				
18	A	Dump Body Bed	Check interior of dump body bed (18) for dents, rips, and obvious damage.	Components have damage that would impair operation.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

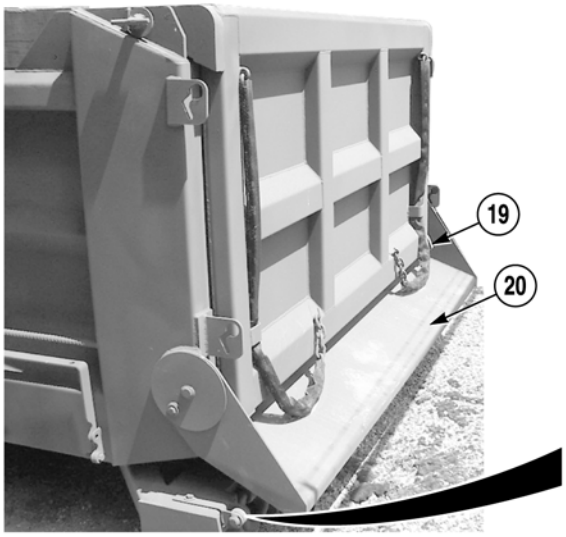
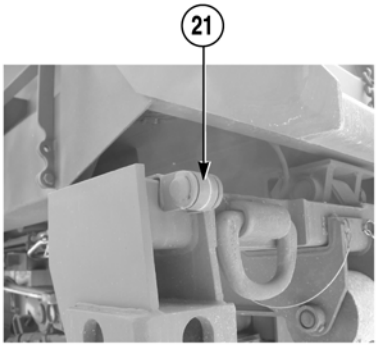
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
			 	
19	A	Tailgate	Check tailgate locks and pegs (19) for missing or damaged parts (both sides).	Tailgate locks are damaged or components have damage that would impair operation.
20	A	Spill Shield	Check spill shield (20) for missing or damaged parts.	
21	A	Spill Shield Rollers	Check spill shield roller (21) for missing pins, cracks, flat spots or obvious damage (both sides).	

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

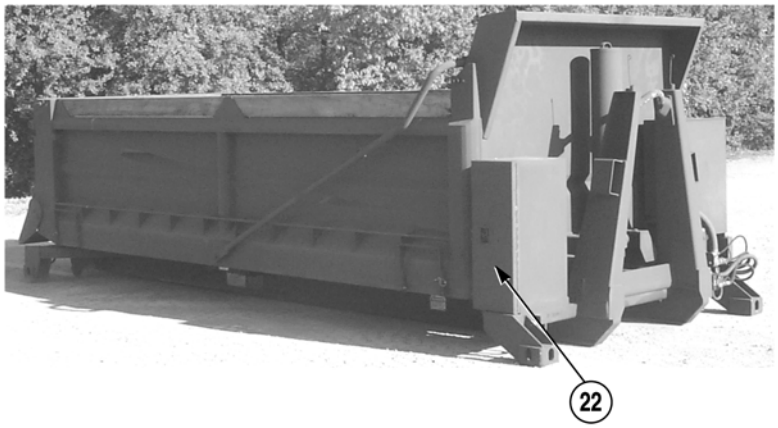
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
22	A	Stowage Box	Check stowage box (22) and door seals for missing parts or obvious damage.	
23	A	Hoses, Lines, and Cables	Check hoses, lines, and cables for leaks, cuts, or obvious damage. Ensure cables are clear of frame rails. Ensure cable ties are not missing. a. Load dump body on truck (if not already loaded), (Para 2-5). b. Hookup UPIK connections (if not already hooked up), (Para 2-11). c. Raise dump body and deploy body props, (Para 2-14).	Class III leaks are evident or components are missing or have damage that would impair operation.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

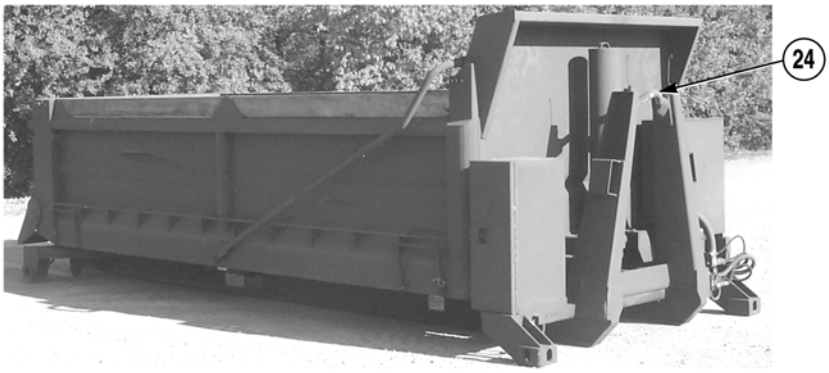
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
24	A	Air Cylinder	Check air cylinder (23) and tubing for missing parts and obvious damage.	Components have damage that would impair operation.
				
25	A	Hook Bar	Check hook bar (24) for cracks or obvious damage.	Hook bar has damage or cracks that would impair operation.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

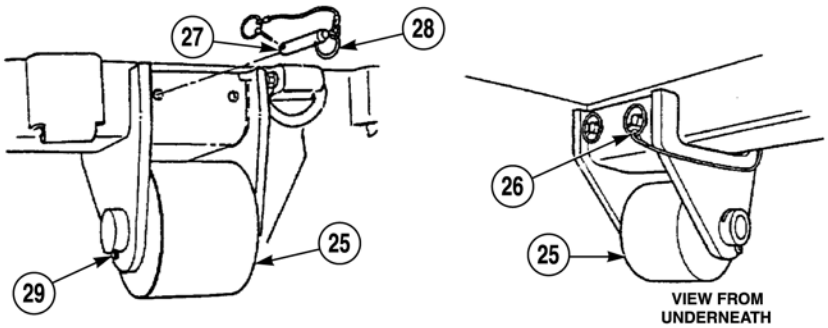
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
			 	
26	A	Rear Rollers	Check rear rollers (25) for missing pins, cracks, flat spots or obvious damage.	Components have damage that would impair operation.
			WARNING Roller must be supported while removing retaining pins or roller may drop causing injury to personnel.	
27	A	Rear Rollers	a. Hold rear roller (25) in place. Remove holding pin (26) from each retaining pin (27). Lift on ring (28), pull retaining pin out far enough to ensure it is removable, then push back in. Perform same with other pin. b. Ensure rear roller (25) will rotate. c. Ensure roll pins (29) are not damaged.	Neither roller functions correctly.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

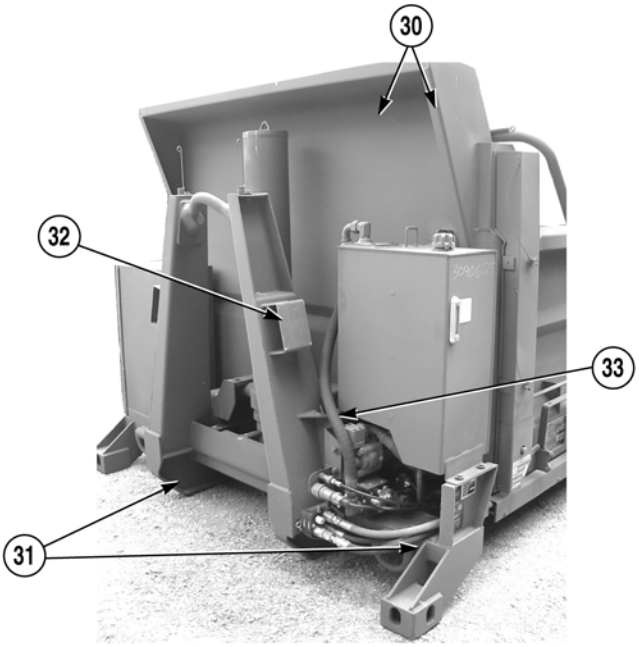
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
28	SA	Sheet Metal and Frame	Inspect sheet metal and frame (30) for evidence of corrosion damage such as surface color change, surface separation, blistered paint, rust through, or other evidence of damage.	Sheet metal is affected to the point of damage to the parts.
29	SA	Frame	Check for broken frame rails (31), crossmembers, or cracked welds on undercarriage.	Damaged rails, crossmembers, or cracked welds are found.
30	SA	Mounting Brackets	Check mounting brackets (32) for cracks, breaks, rust or looseness.	Mounting brackets are damaged or missing.
31	SA	Hydraulic Hoses, Air Lines, and Wire Harnesses	Follow routing of all hydraulic hoses (33). Inspect for loose fittings, excessive chafing, cracks and leaks.	Loose fittings, cracks, leaks, or excessive chafing is found.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

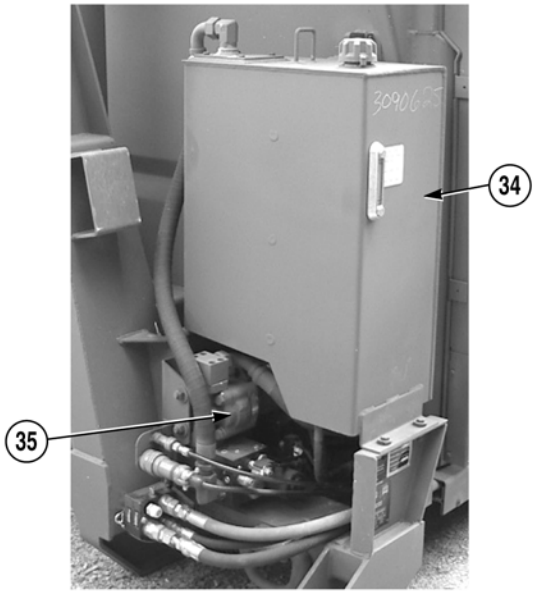
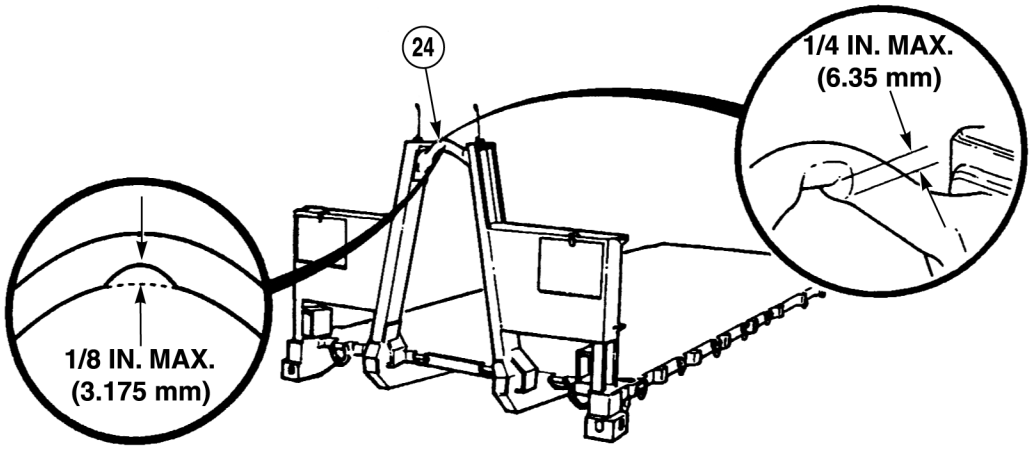
Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
			NOTE • When oil is cold, do not add or fill beyond "FULL". • Refer to DA para 378-750 for sampling requirements.	
32	SA	Hydraulic Reservoir	a. Check hydraulic reservoir (34) for cracks, leaks, or obvious damage. b. Check hydraulic oil level and fill as required, (Para 3-13).	Any Class III leaks.
33	SA	Hydraulic Pump and Motor Assembly	Inspect hydraulic pump and motor assembly (35) for leaks or loose parts.	Any Class III leaks, loose parts or damage.

Table 2-1. Unit Preventive Maintenance Checks and Services (PMCS) (Cont)

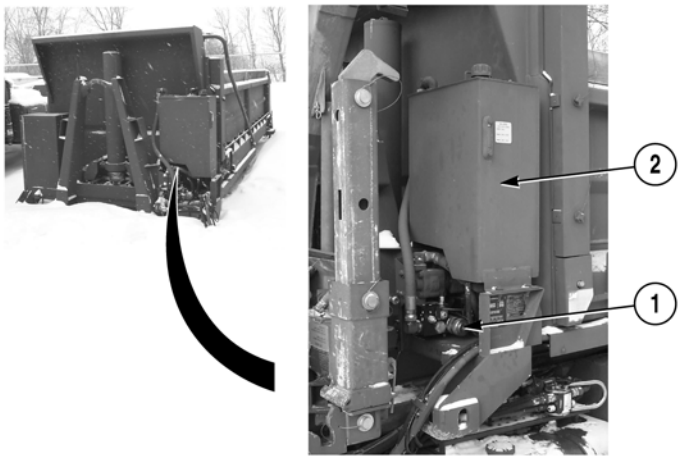
B - Before D - During A - After W - Weekly M - Monthly SA - Semiannual AN - Annual

Item No.	Interval	Item to Be Inspected	Procedure	NOT Mission Capable If:
				
34	SA	Hook Bar	Check hook bar (24) for wear. If wear at lower back side of hook bar is greater than 1/4 in. (6.35 mm) or greater than 1/8 in. (3.175 mm) at bottom of hook bar, notify supervisor.	Wear at lower back side of hook bar is greater than 1/4 in. (6.35 mm) or greater than 1/8 in. (3.18 mm) at bottom of hook bar.
				
35	AN	Hydraulic Reservoir	When oil is cold, do not add or fill beyond "FULL". a. Drain and refill hydraulic reservoir (34) every 500 hours or annually, whichever comes first, (Para 3-13).	

2-10. LUBRICATING INSTRUCTIONS.

WARNING

Never work under Dump Body in raised position without body props installed. Failure to comply could result in death or serious injury to personnel.



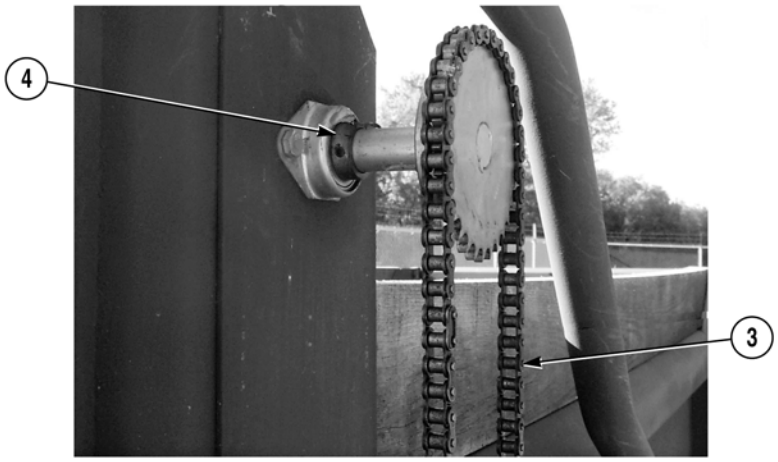


Table 2-2. Lubrication Points

Interval	Item	Description	Service	Lube Points	Lubricant
Daily	1	Hoist High Pressure Oil Filter (Off Truck)	C		
Daily	2	Hoist Oil Reservoir (Off Truck)	C/F		OE/HDO
Monthly	3	Tarp Chain (Off Truck)	L	1	OE/HDO
Monthly	4	Tarp Bearing (Off Truck)	L	2	OE/HDO

2-10. LUBRICATING INSTRUCTIONS (CONT).

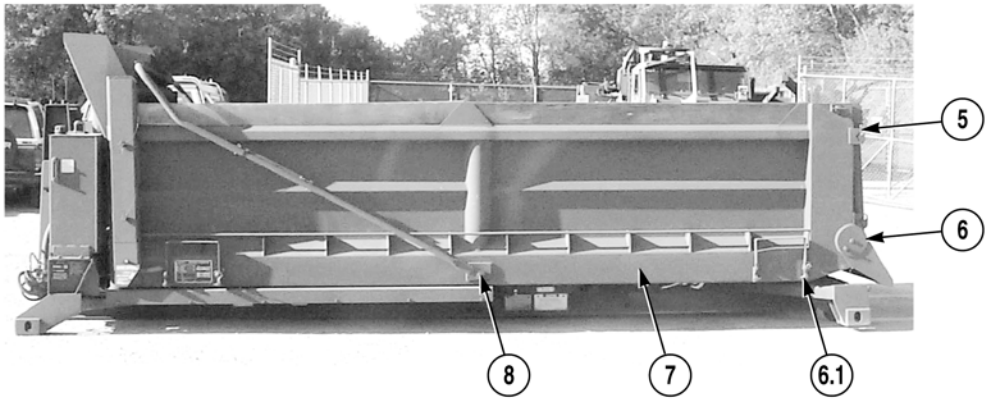


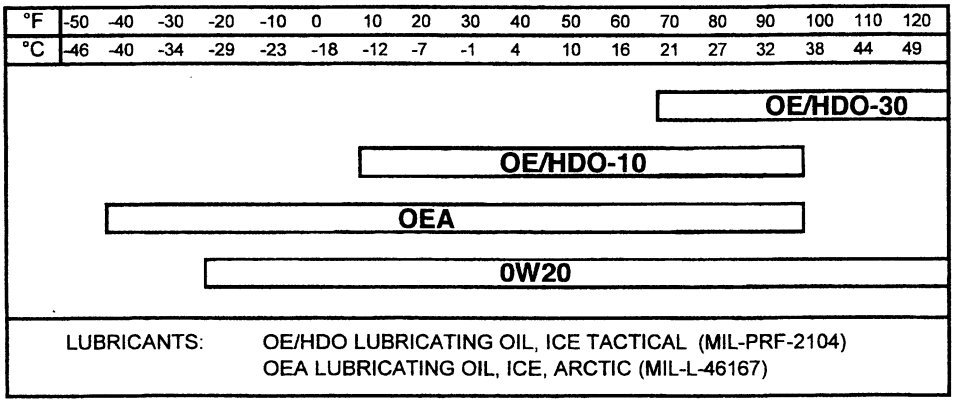
Table 2-2. Lubrication Points (Cont)

Interval	Item	Description	Service	Lube Points	Lubricant
Monthly/AR	5	Tailgate Hinge Pin (On Truck)	L	2	GAA
Monthly/AR	6	Latch Finger Bushing	L	2	GAA
Monthly/AR	6.1	Air Tailgate Release Pivot	L	1	GAA
Monthly/AR	7	Stabilizer (On Truck)	L	5	GAA
Monthly/AR	8	Body Prop (On Truck)	L/B	2	GAA

—KEY—

C = Check
OC = On condition
F = Fill
B = Both sides
L = Lubricate
CH = Change
OE/HDO = Lubricating oil, internal combustion tactical service (MIL-PRF-2104)
GAA = Grease, automotive and artillery (MIL-G-10924)
AR = Apply grease to fittings daily if Dump Body is in use daily

HYDRAULIC RESERVOIR



2-11. CONNECTING HYDRAULIC, AIR AND ELECTRICAL SYSTEMS.

a. Connection.

(1) Apply parking brakes and shut off engine switch (TM 9-2320-364-10).

WARNING

Hydraulic system can reach 3675 psi (25,339 kPa). Never connect/disconnect any hydraulic line or fitting without first dropping pressure to zero. Failure to comply could cause serious injury or death to personnel.

CAUTION

To prevent hydraulic contamination, keep hydraulic quick disconnects clean and install protective caps when couplers are not connected.

NOTE

A small amount of oil will leak out of quick disconnect couplings when disconnected. Wipe off any oil that spills on fender and dispose of in accordance with local regulations.

(2) Connect hydraulic, air, and electrical systems (TM 9-2320-364-10).

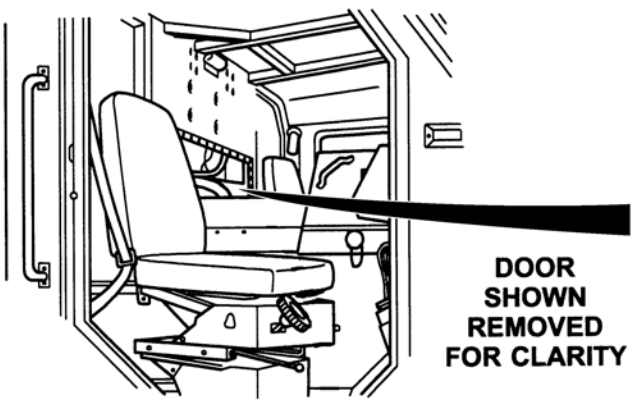
(3) Remove ladder from stow hooks on truck.

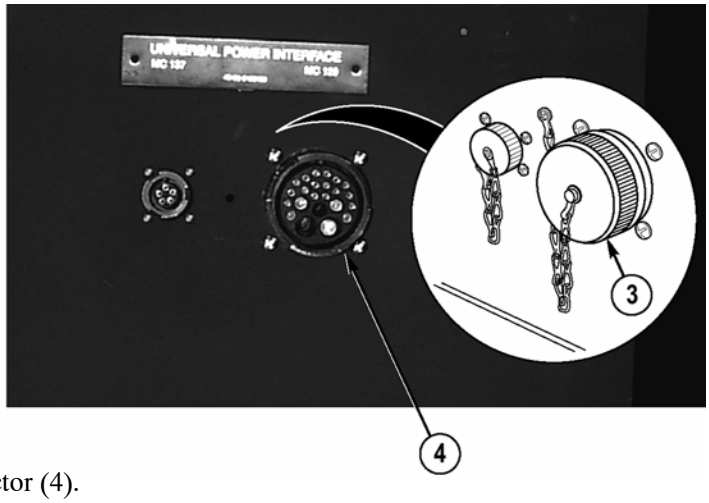
(4) Swing down ladder bracket and position two hooks on ladder in two holes.

2-11. CONNECTING HYDRAULIC, AIR AND ELECTRICAL SYSTEMS (CONT).

(5) Remove control box (1) from stowage box (2).

(6) Stow ladder in stow hooks on truck and position ladder bracket in stowed position.





(7) Remove connector cap (3) from MC129 connector (4).

(8) Remove cover from control box cable end.

(9) Connect control box cable end to MC129 connector (4).

2-12. TARP OPERATION.

a. Deploy Tarp.

WARNING

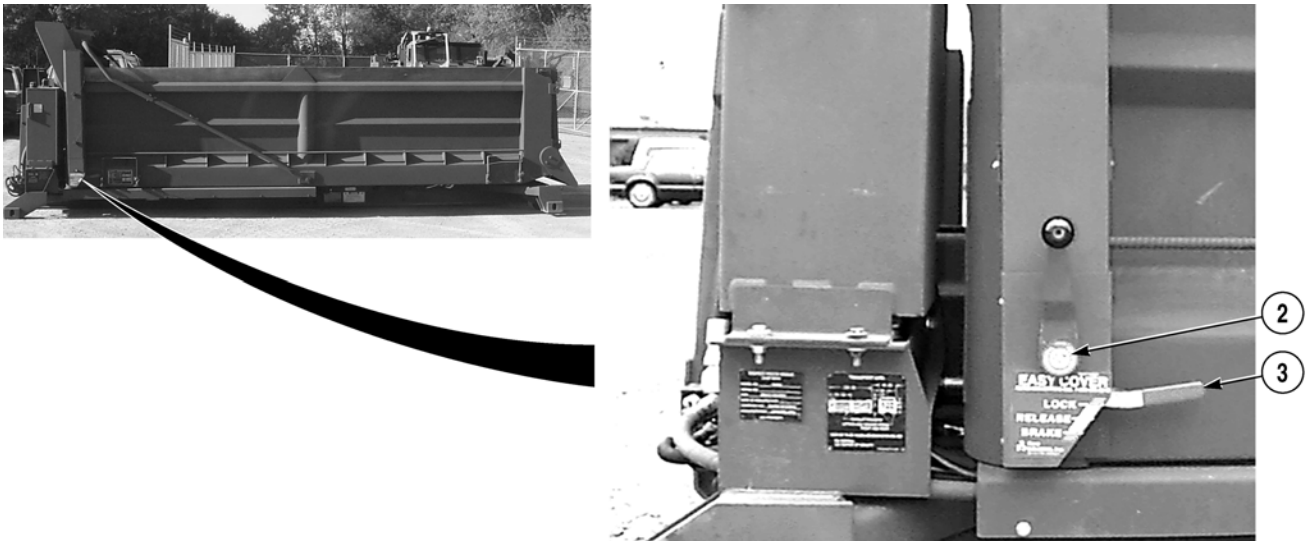
- When brake lever is pulled down, tarp will immediately spring to the rear until handle reaches the “BRAKE” position. Pulling handle quickly down will minimize tarp travel. Make sure personnel are clear of tarp path. Failure to comply may result in serious injury to personnel.
- Never operate tarp system under obstructions, such as power lines or trees. Failure to comply may result in death or serious injury to personnel.
- Ensure crank handle is removed from shaft. If handle is connected to shaft, serious injury to personnel could result with handle spinning out of control.

NOTE

If Dump Body is on truck, PLS ladder can be used to ease operations.

(1) Ensure hand crank (1) is not installed on shaft (2).

2-12. TARP OPERATION (CONT).



(2) Quickly pull lever (3) down to “BRAKE” position and hold.

CAUTION

Do not let go of brake lever until tarp is fully over load. If lever is released to “LOCK” position while tarp is moving, damage to crank mechanism will result.

NOTE

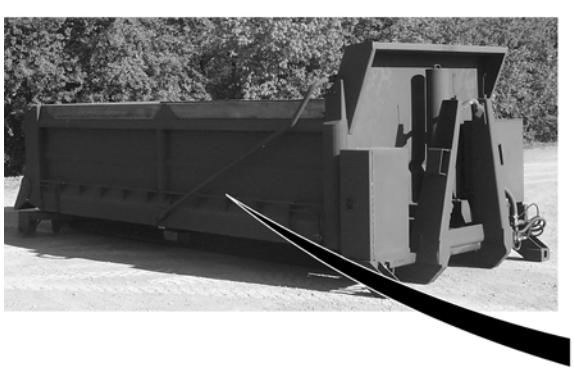
If tarp is moving too fast, pull lever down slightly to apply more braking force.

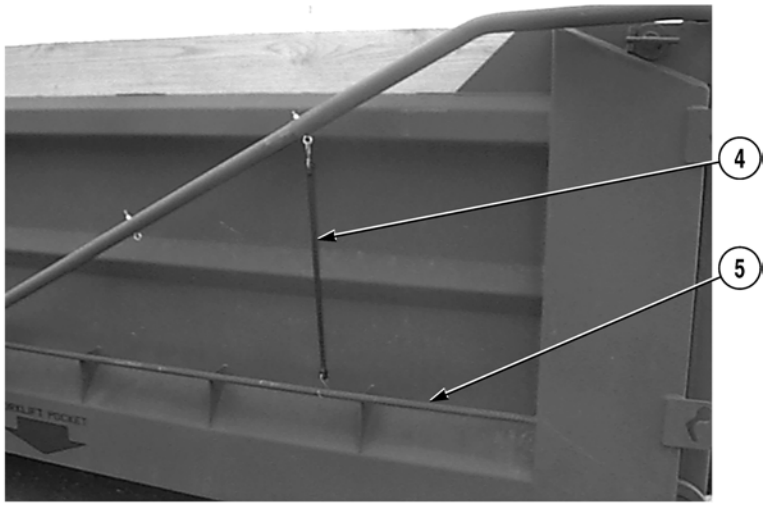
(3) Slowly move lever (3) upward to “RELEASE” position until tarp is fully over the load.

(4) Once tarp is fully covering load, release lever (3) to “LOCK” position.

NOTE

Once tarp is fully covering load, tarp should be secured by attaching tie down straps to tie bar.





(5) Remove tie down straps (4) from stowed position.

(6) Attach tie down straps (4) to tie down bar (5) (both sides).

b. Stow Tarp.

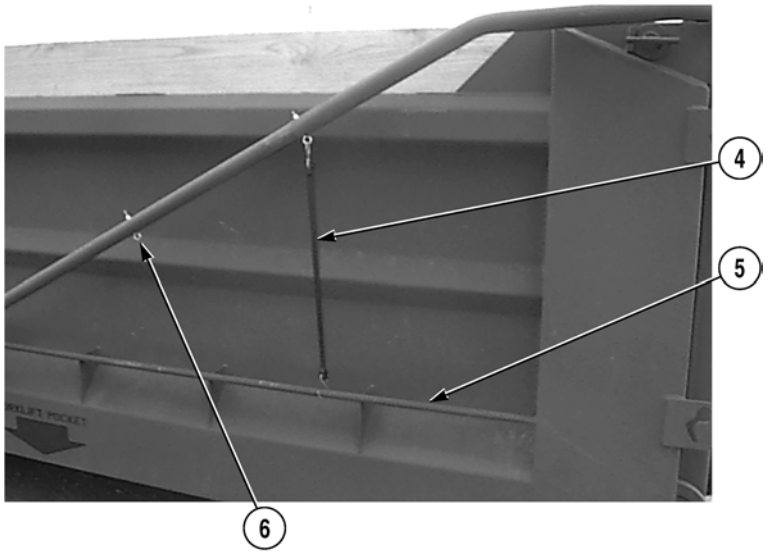
WARNING

- Never open or close tarp within 40 feet (12.2 m) of overhead power lines or trees. Failure to comply may result in death or serious injury to personnel.
- Ensure tarp is fully opened or fully closed before moving truck. Failure to comply may result in serious injury to personnel.
- Never move truck with tarp swing arms partially raised. Failure to comply may result in serious injury to personnel.
- Always remove crank handle before touching or moving tarp brake lever. Failure to comply may result in serious injury to personnel.
- Ensure all personnel are clear of tarp path before lowering tarp. Failure to comply may result in death or serious injury to personnel.

NOTE

Tarp immediately springs back when tarp brake lever is pulled. Pull tarp brake lever down to slow tarp travel.

2-12. TARP OPERATION (CONT).



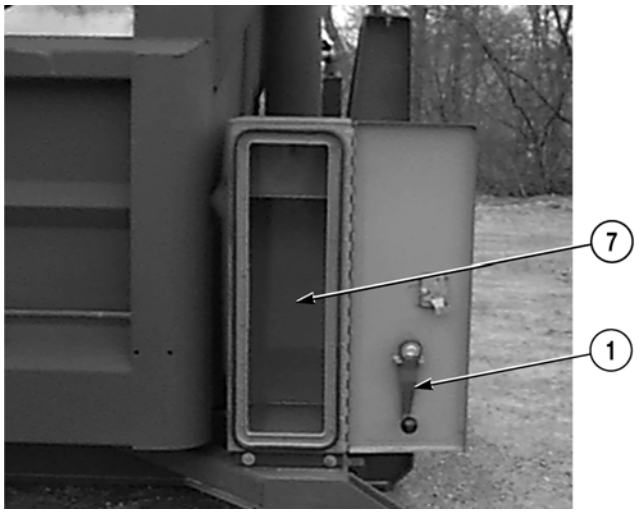
(1) Unhook two tie down straps (4) from tie down bar (5) and hook in stow hooks (6) (both sides of Dump Body).

NOTE

Perform Steps (2) and (3) if Dump Body is on truck.

(2) Remove ladder from stow hooks on truck.

(3) Swing down ladder bracket and position two hooks on ladder in two holes.

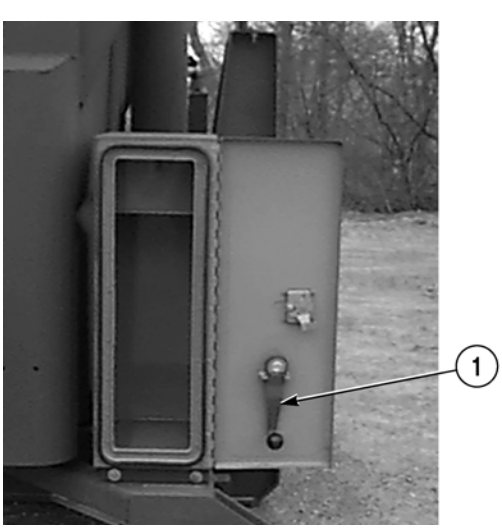


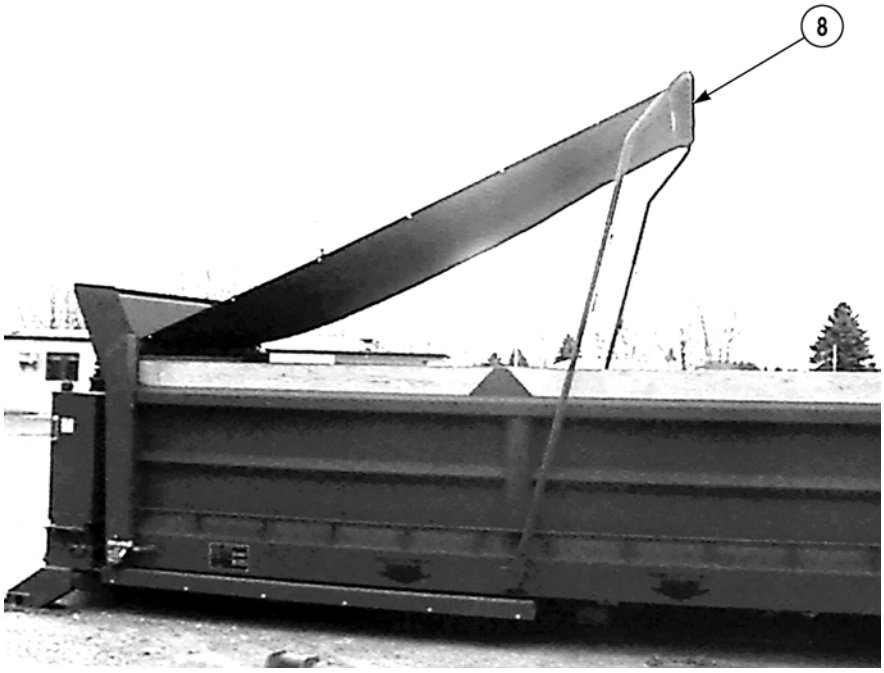
(4) Remove hand crank (1) from stowage box (7).

(5) Install hand crank (1) on shaft (2).

CAUTION

Ensure tarp is free of debris prior to rolling up or damage to equipment may result.





(6) Turn hand crank (1) counterclockwise until tarp (8) is completely rolled up.

(7) Remove hand crank (1) from shaft (2).

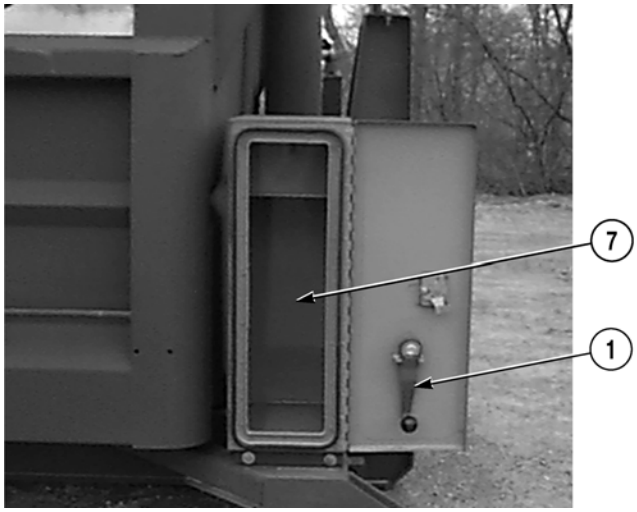
2-12. TARP OPERATION (CONT).

(8) Place hand crank (1) in stowage compartment (7).

NOTE

Perform Step (9) if ladder was used.

(9) Stow ladder in stow hooks on truck and position ladder bracket in stowed position.



2-13. TRAVEL LOCK OPERATION.

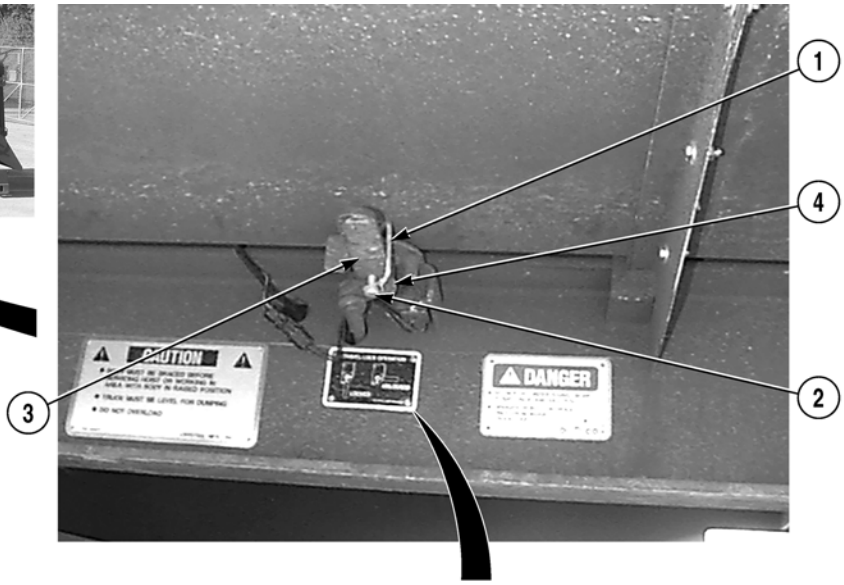
a. Locking Travel Lock.

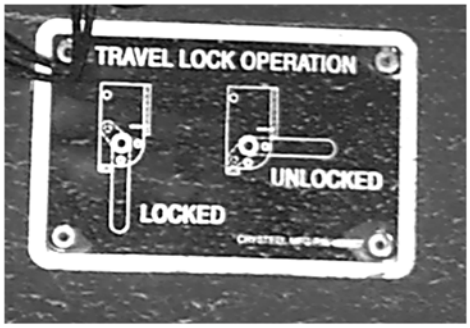
CAUTION

To prevent damage to travel lock, the hoist must not be raised when travel lock is in "LOCKED" position.

NOTE

- The travel lock secures Dump Body to Dump Body frame to prevent tilting of the body during load handling operations, rail transport, and sling loading operations.
- Travel locks should not be used during normal filling and dumping operations.





(1) Pull wire retainer (1) from locking pin (2).

(2) Remove locking pin (2) by pulling it downward.

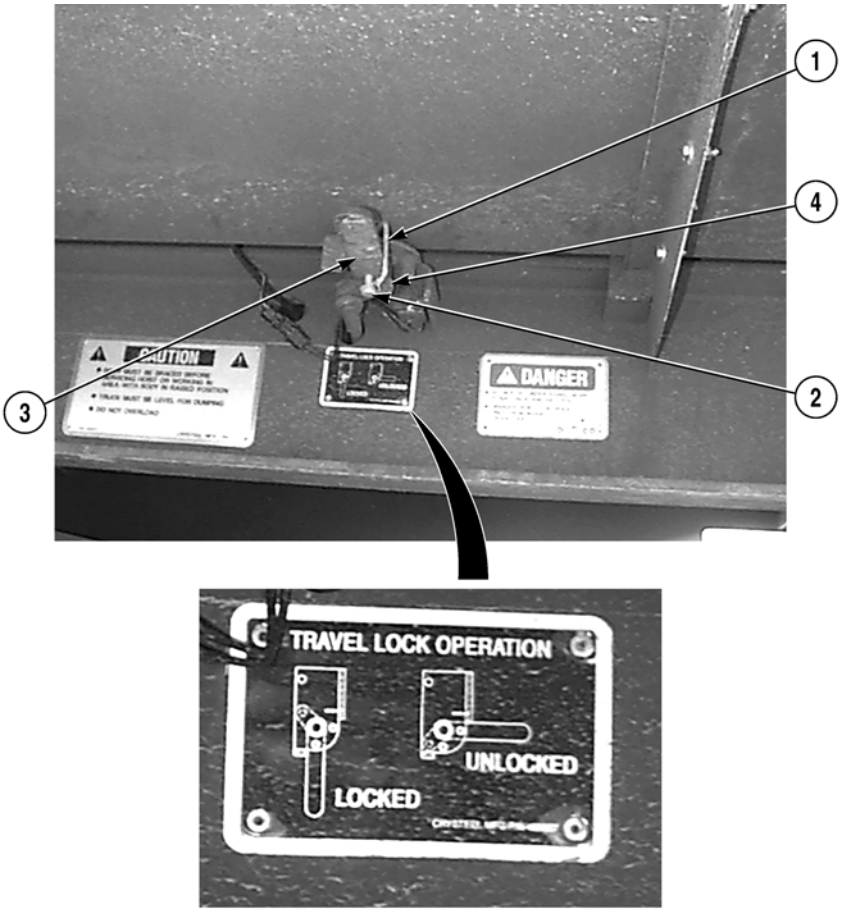
(3) Rotate travel lock handle (3) to left (outward) so handle points straight out from frame at a 90-degree angle.

(4) Insert locking pin (2) through hole in travel lock handle (3) and retaining collar (4).

(5) Position wire retainer (1) back over end of the locking pin (2).

2-13. TRAVEL LOCK OPERATION (CONT).

b. Unlocking Travel Lock.



(1) Pull wire retainer (1) from locking pin (2).

(2) Remove locking pin (2) by pulling it downward.

(3) Rotate travel lock handle (3) to right (inward) so travel lock handle (3) is parallel with frame.

(4) Insert locking pin (2) through hole in travel lock handle (3) and retaining collar (4).

(5) Position wire retainer (1) back over end of locking pin (2).

2-14. BODY PROP OPERATION.

a. Deploy Body Props.

WARNING

- Dump Body reaches height of 24 ft. 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in the raised position without Dump Body resting on body props. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on truck, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Operate Dump Body control only from inside truck cab. Failure to comply could result in death or serious injury to personnel.

NOTE

- Use of the body props permits service to be performed safely beneath a raised body.
- Always use both body props (one on each side) to support EMPTY Dump Body for inspection, maintenance, or repair operations only.

(1) Prepare Dump Body for operation, refer to Para 2-4.

(2) Start engine and apply parking brakes (TM 9-2320-364-10).

CAUTION

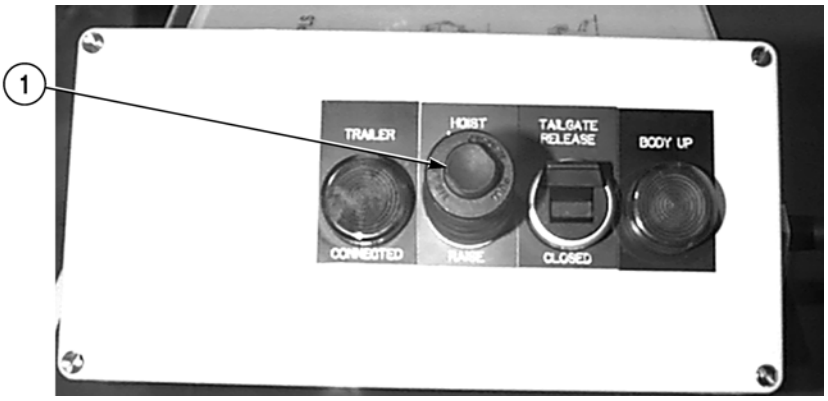
Ensure engine is at idle before using hydraulic selector switch, or damage to equipment may result.

NOTE

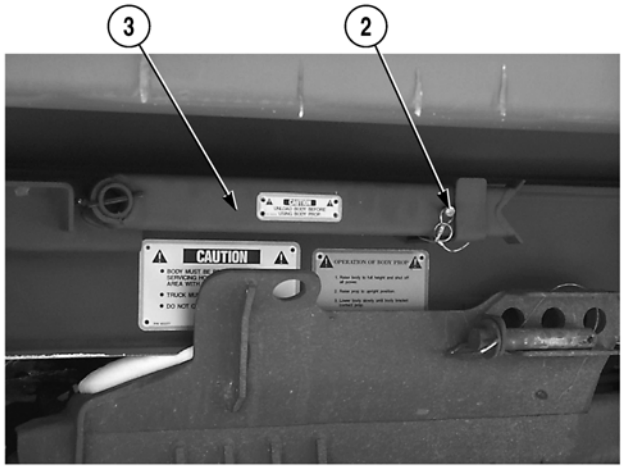
- The amount of time to raise and lower is controlled by engine speed. Engine speed can be increased to approximately 1500 rpm to reduce loading and unloading times.
- BODY UP light will illuminate as soon as Dump Body begins to raise.

(3) Turn hydraulic selector switch to CRANE/SRW position (TM 9-2320-364-10).

2-14. BODY PROP OPERATION (CONT).



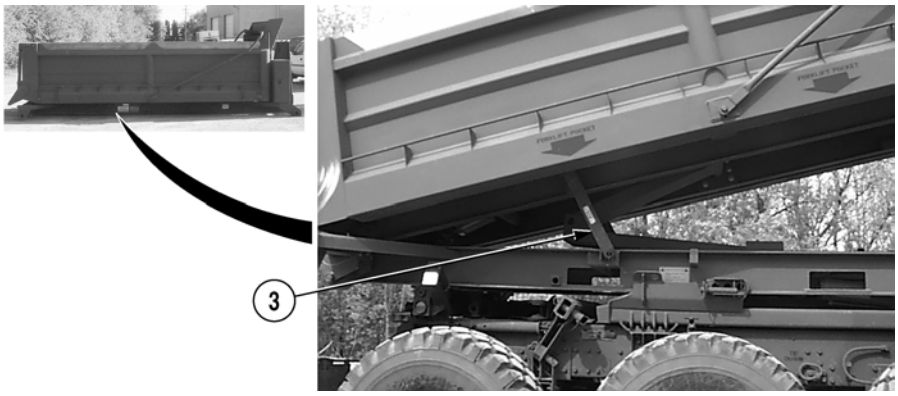
(4) Pull up on outer ring of joystick (1) to release joystick. Move joystick (1) to “RAISE” position. When Dump Body is fully raised, release joystick.



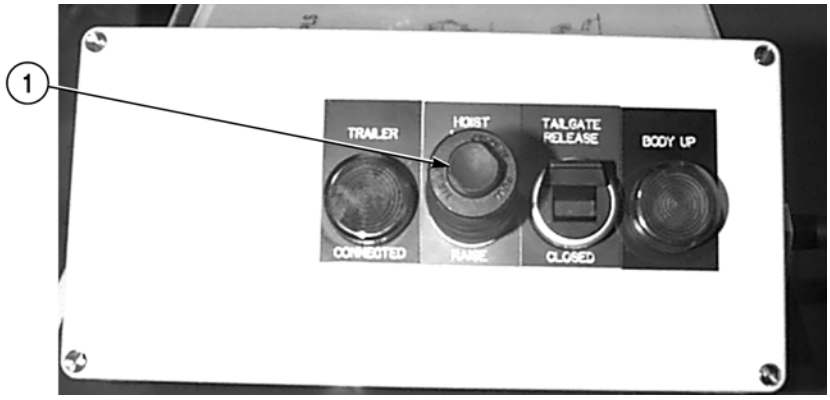
(5) Remove retainer pin (2) from both body props (3).

WARNING

Ensure personnel are clear of Dump Body when lowering Dump Body. Failure to comply could result in serious injury or death to personnel.



(6) With the aid of an assistant, raise both body props (3) to upright position.



(7) Pull up on outer ring of joystick (1) to release joystick. Move joystick (1) to “LOWER” position. Lower the Dump Body slowly until brackets contact both body props.

(8) Shut OFF engine (TM 9-2320-364-10).

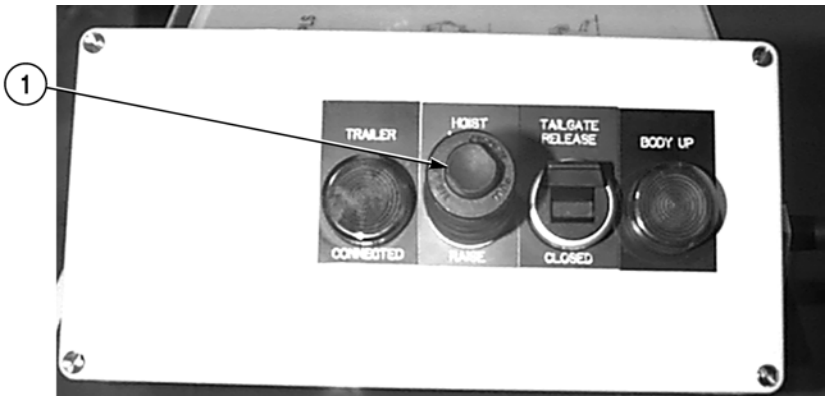
2-14. BODY PROP OPERATION (CONT).

b. Stow Body Props.

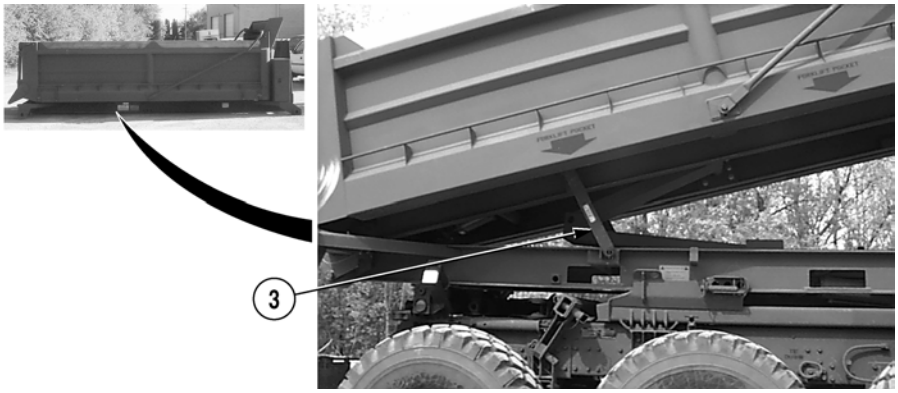
(1) Start engine and apply parking brakes (TM 9-2320-364-10).

WARNING

- Operate Dump Body control only from inside truck cab. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body reaches height of 24 ft. 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.



(2) Pull up on outer ring of joystick (1) to release joystick. Move joystick (1) to “RAISE” Dump Body position. When Dump Body raises approximately 1 ft. (30.5 cm.), release joystick.

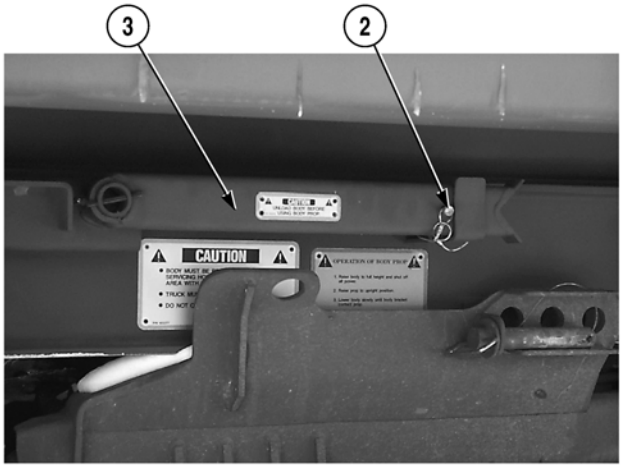


WARNING

Ensure personnel are clear of Dump Body when lowering Dump Body. Failure to comply could result in serious injury or death to personnel.

(3) With the aid of an assistant, lower both body props (3) onto support brackets.

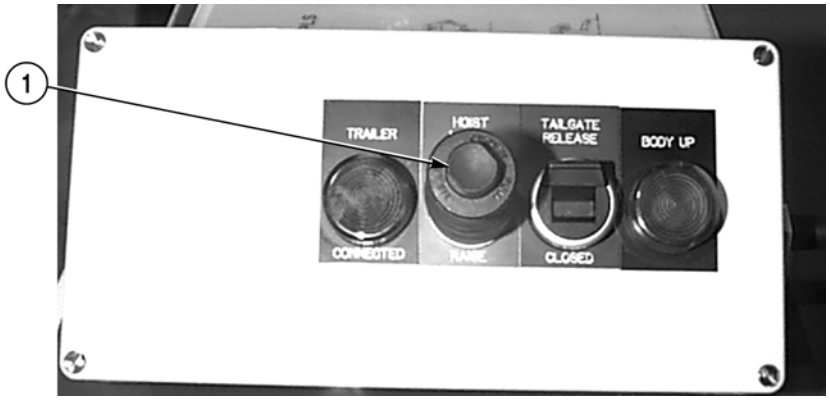
(4) Install retainer pins (2) in both body props (3).



2-14. BODY PROP OPERATION (CONT).

NOTE

When Dump Body is completely lowered, BODY UP light will shut off.



(5) Pull up on outer ring of joystick (1) to release joystick. Move joystick to “LOWER” position. Release joystick when Dump Body is fully lowered.

(6) Turn hydraulic selector switch to “OFF” position (TM 9-2320-364-10).

(7) Shut OFF engine (TM 9-2320-364-10).

2-15. DUMP BODY OPERATION.

a. Preparation for Dumping or Spreading.

CAUTION

Travel lock must be in "UNLOCKED" position before operator attempts to raise body with hoist. Failure to comply could result in damage to equipment.

(1) Uncover load, refer to Para 2-5.

NOTE

Wet, sticky, frozen, or hard packed material conditions may cause materials not to flow or to discharge in large chunks.

(2) Prior to dumping payload, determine condition of materials.

(3) Connect hydraulic, air, electric connections, and control box, refer to Para 2-11.

(4) Start Engine and apply parking brake (TM 9-2320-364-10).

CAUTION

Engine speed must be at idle before using hydraulic selector switch, or damage to equipment may result.

NOTE

- Hydraulic selector switch should remain in the "OFF" position until ready to raise or lower Dump Body.
- When hydraulic selector switch is turned to CRANE/SRW, auxiliary hydraulic light on dash will illuminate green.

(5) Turn hydraulic selector switch to CRANE/SRW (TM 9-2320-364-10).

b. Dumping Payload.

WARNING

Keep clear of tailgate opening. Failure to comply could result in serious injury to personnel.

(1) Ensure transmission is in "NEUTRAL" and apply parking brake (TM 9-2320-364-10).

2-15. DUMP BODY OPERATION (CONT).

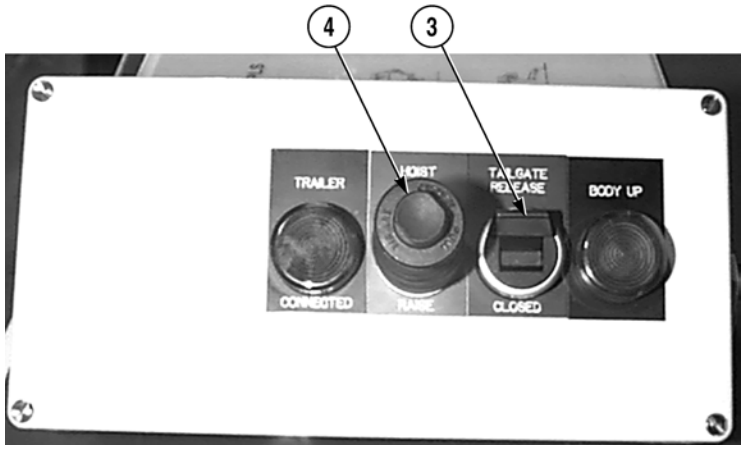
(2) Ensure two tailgate chains (1) are stowed on hooks (2).

WARNING

- Do not walk or stand under raised Dump Body. Failure to comply could result in death or serious injury to personnel.
- Do not stand behind truck with loaded Dump Body once tailgate switch has been released. Failure to comply could result in death or serious injury to personnel.
- Operate Dump Body controls only from inside truck cab. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body reaches height of 24 ft. 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Stay clear of fill embankments, side slopes, up slopes, and soft ground. Failure to comply could result in serious injury to personnel.
- Raise Dump Body only enough to allow payload to slide out of bed. Maximum dump angle is 52 degrees. Failure to comply could result in serious injury to personnel.
- Dumping operations should be done with assistance of a ground guide. Failure to comply could result in serious injury to personnel.
- Dump operations should be limited to side slopes no greater than 10 percent while on the PLS Truck and on level ground on the PLS Trailer. Failure to comply could result in serious injury to personnel or damage to equipment.
- When performing dumping operations with wet, sticky, frozen, or hard packed materials, PLS truck or PLS Trailer must be on level ground and stationary. Failure to comply could result in serious injury to personnel or damage to equipment.
- Wet, sticky, frozen, or hard packed materials may not discharge completely or discharge suddenly in large chucks. If materials do not start to flow before hoist cylinder reaches the end of the second stage, STOP dump operations and reassess the situation. Failure to comply could result in serious injury to personnel or damage to equipment.
- Do not try to loosen a sticky load by pulling forward or backward and braking abruptly. Injury to personnel or damage to equipment may result.
- Do not attempt to dump in high wind. High winds may disperse aggregate. High winds may also cause dump truck to roll over when dump body is raised. Failure to follow this warning may result in death or injury to personnel or damage to equipment.

NOTE

Dumping of payload can only be done from inside of cab.



(3) Move tailgate switch (3) to “RELEASE” position.

NOTE

- Pull up on outer ring of joystick to release joystick. Pulling back on joystick will raise Dump Body. Pushing joystick forward will lower Dump Body.
- BODY UP light will illuminate as soon as Dump Body begins to raise.
- The amount of time to raise Dump Body is controlled by engine speed. Engine speed can be increased to 1500 rpm to reduce dumping time.
- If material will not discharge, refer to Troubleshooting (Para 4-4).

(4) Pull up on outer ring of joystick (4) to release the joystick. Move joystick to “RAISE” position. When payload is fully dumped, release joystick.

WARNING

Ensure all personnel are clear of Dump Body before lowering. Failure to comply could result in death or serious injury to personnel.

NOTE

When Dump Body is completely lowered, BODY UP light will shut off.

(5) Pull up on outer ring of joystick (4) to release joystick. Move joystick to “LOWER” position. Release joystick when Dump Body is fully lowered.

(6) Move tailgate switch (3) to “CLOSED” position.

(7) Turn hydraulic selector switch to “OFF” position (TM 9-2320-364-10).

2-15. DUMP BODY OPERATION (CONT).

c. Spreading Payload While Dumping.

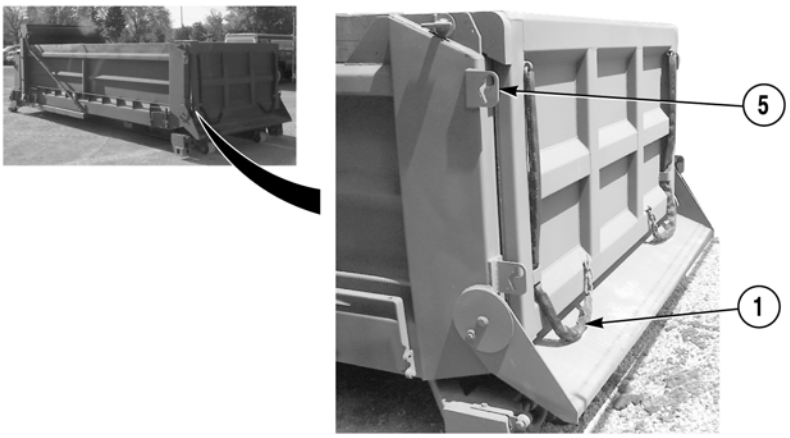
(1) Ensure transmission is in NEUTRAL and apply parking brake (TM 9-2320-364-10).

WARNING

- Keep clear of tailgate opening. Failure to comply could result in serious injury to personnel.
- Do not walk or stand under raised Dump Body. Failure to comply could result in death or serious injury to personnel.
- Do not stand behind truck with loaded Dump Body once tailgate switch has been released. Failure to comply could result in death or serious injury to personnel.
- Operate Dump Body controls only from inside truck cab. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body reaches height of 24 ft. 2 in (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Dump operations should be limited to side slopes no greater than 10 percent while on the PLS Truck and on level ground on the PLS Trailer. Failure to comply could result in serious injury to personnel or damage to equipment.
- Stay clear of fill embankments, side slopes, up slopes, and soft ground. Failure to comply could result in serious injury to personnel.
- Raise Dump Body only enough to allow payload to slide out of bed. Maximum dump angle is 52 degrees. Failure to comply could result in serious injury to personnel.
- Dumping operations should be done with assistance of a ground guide. Failure to comply could result in serious injury to personnel.
- When performing dumping operations with wet, sticky, frozen, or hard packed materials, PLS truck or PLS Trailer must be on level ground and stationary. Failure to comply could result in serious injury to personnel or damage to equipment.
- Wet, sticky, frozen, or hard packed materials may not discharge completely or discharge suddenly in large chucks. If materials do not start to flow before hoist cylinder reaches the end of the second stage, STOP dump operations and reassess the situation. Failure to comply could result in serious injury to personnel or damage to equipment.

NOTE

- Dumping of payload can only be done from inside cab.
- Pull up on outer ring of joystick to release joystick. Pulling backward will raise Dump Body. Pushing joystick forward will lower Dump Body.
- BODY UP light will illuminate as soon as Dump Body begins to raise.
- The amount of time to raise Dump Body is controlled by engine speed. Engine speed can be increased to 1500 rpm to reduce dumping time.



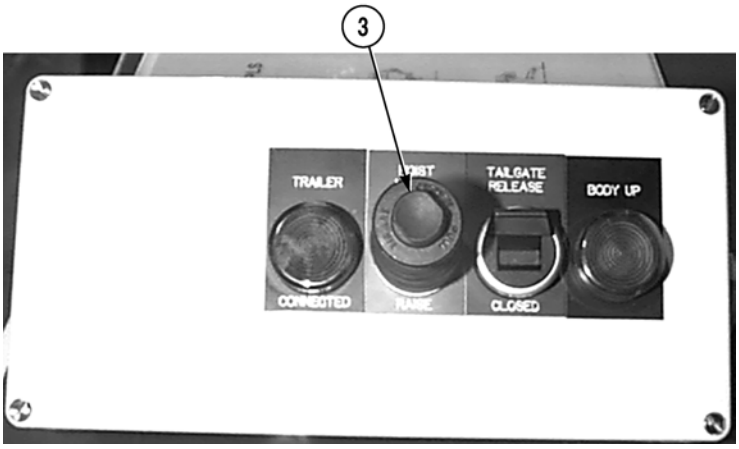
NOTE

Ladder may be used in Step (2).

(2) Position the two tailgate chains (1) in lower brackets (5) and adjust to obtain desired length.

NOTE

Stow ladder if used to adjust chains.



(3) Pull up on outer ring of joystick (3) to release joystick. Move joystick to “RAISE” position. Release joystick when Dump Body is raised enough to allow payload to slide out of bed when gate is opened. Do not raise body so that material spills over top of gate.

2-15. DUMP BODY OPERATION (CONT).

(4) Apply service brake pedal (TM 9-2320-364-10).

NOTE

Payload can be spread in forward or reverse direction, depending on terrain. Procedure is written for forward direction.

(5) Place transmission selector in D for DRIVE (TM 9-2320-364-10).

(6) Release parking brakes (TM 9-2320-364-10).

(7) Move tailgate switch (4) to “RELEASE” position when area needing material is reached.

NOTE

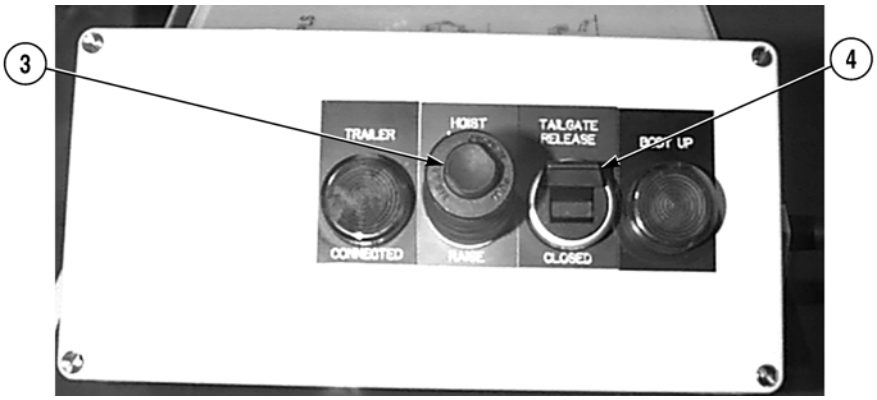
- It may be necessary to raise Dump Body during operation to fully dump load.
- Chain spreading typically performed at a speed of 20-30 mph.

(8) Release service brake pedal and gently depress accelerator pedal and drive forward until payload is fully dumped (TM 9-2320-364-10).

(9) Bring truck to complete stop, place transmission selector in N, for NEUTRAL, and apply parking brakes (TM 9-2320-364-10).

WARNING

Ensure all personnel are clear of Dump Body before lowering. Failure to comply could result in serious injury or death to personnel.



NOTE

When Dump Body is fully lowered, BODY UP light will shut off.

(10) Pull up on outer ring of joystick (3) to release joystick. Move joystick to "LOWER" position. Release joystick when Dump Body is fully lowered.

(11) Move tailgate switch (4) to "CLOSED" position.

(12) Turn hydraulic selector switch to "OFF" position (TM 9-2320-364-10).

(13) Ensure tailgate is closed and tailgate locks are engaged.

2-16. DUMP BODY OPERATION FROM PLS TRAILER (PLST).

WARNING

- Do not walk or stand under raised Dump Body. Failure to comply could result in death or serious injury to personnel.
- Do not stand behind trailer with loaded Dump Body once tailgate switch has been released. Failure to comply could result in death or serious injury to personnel.
- Operate Dump Body controls only from inside truck cab. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body reaches height of 24 ft. 2 in (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Keep clear of tailgate opening. Failure to comply could result in serious injury to personnel.
- Stay clear of fill embankments, side slopes, up slopes, and soft ground. Failure to comply could result in serious injury to personnel.
- Raise Dump Body only enough to allow payload to slide out of bed. Maximum dump angle is 52 degrees. Failure to comply could result in serious injury to personnel.
- Dumping operations should be done with assistance of a ground guide. Failure to comply could result in serious injury to personnel.
- If operating Dump Body on PLS trailer (PLST), ensure tires are facing straight ahead. Dump Body has a very high center of gravity (CG) and PLST is unstable when front tires are not facing straight ahead. Failure to comply could result in vehicle rollover causing injury or death to personnel.
- Dump operations should be limited to side slopes no greater than 10 percent while on the PLS Truck and on level ground on the PLS Trailer. Failure to comply could result in serious injury to personnel or damage to equipment.
- When performing dumping operations with wet, sticky, frozen, or hard packed materials, PLS truck or PLS Trailer must be on level ground and stationary. Failure to comply could result in serious injury to personnel or damage to equipment.
- Wet, sticky, frozen, or hard packed materials may not discharge completely or discharge suddenly in large chucks. If materials do not start to flow before hoist cylinder reaches the end of the second stage, STOP dump operations and reassess the situation. Failure to comply could result in serious injury to personnel or damage to equipment.

CAUTION

- Travel lock must be in “UNLOCKED” position before operator attempts to raise body with hoist. Failure to comply could result in damage to equipment.
- The load on PLS trailer (PLST) must be dumped before attempting to dump the load on PLS truck. PLST must be unhooked from truck. Failure to comply could result in damage to equipment.

NOTE

When interface kit at rear of PLS Dump Body is connected to trailer, TRAILER CONNECTED light on control box will illuminate. This will automatically trigger controls to work Dump Body on PLST.

(1) Prepare Dump Body for loading on truck, refer to Para 2-4.

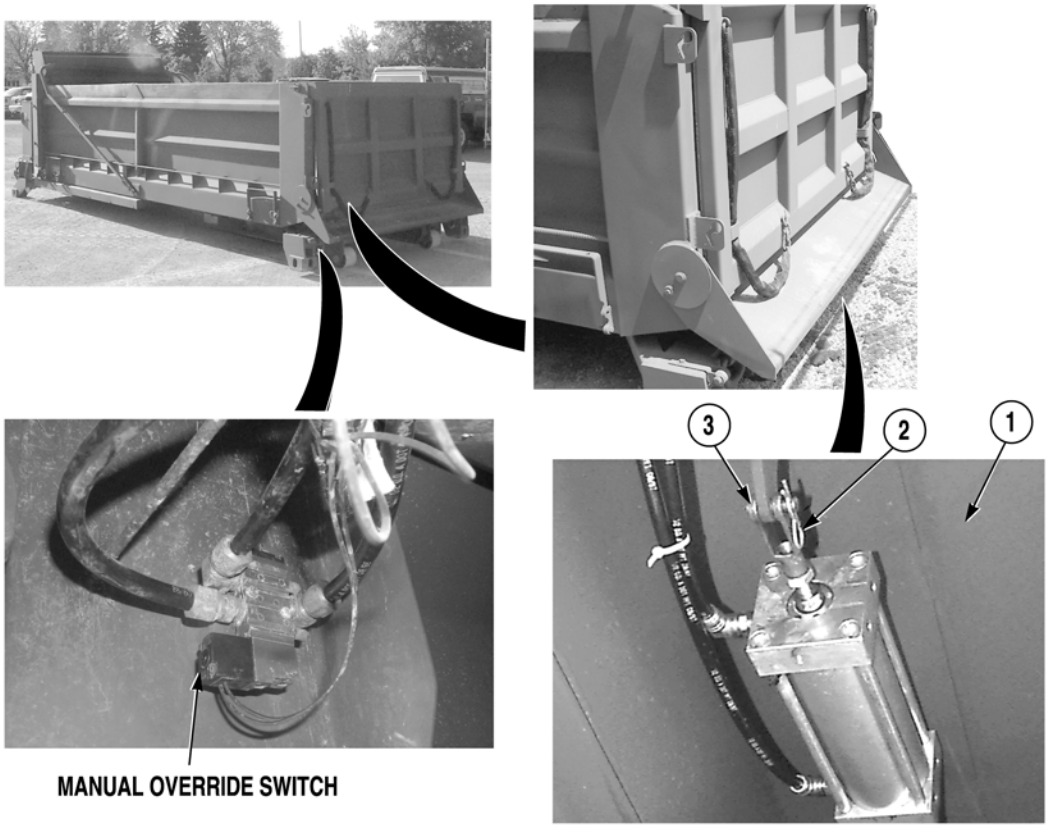
(2) Refer to TM 9-2320-364-10 and load Dump Body on truck and transfer to trailer.

(3) Load second Dump Body on Truck.

(4) Refer to TM 9-2320-385-14 for connecting and disconnecting trailer to truck.

(5) Connect UPIK connectors from Dump Body on trailer to rear UPIK connector on Dump Body on truck.

2-17. EMERGENCY PROCEDURE-RELEASE TAILGATE.



WARNING

- Do not walk or stand under raised Dump Body. Failure to comply could result in death or serious injury to personnel.
- Do not stand behind truck with loaded Dump Body once tailgate switch has been released. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and kill or injure personnel.
- Keep clear of tailgate opening. Failure to comply could result in serious injury to personnel.

NOTE

If air pressure is available, use manual override located in drivers side rear pillar of dump body. This switch can be actuated while standing to the side of the dump body and reaching up into the pillar to depress the button, refer to Para 3-5.

(1) Lower Dump Body (1), refer to Para 2-15.

(2) If air pressure is not present, remove retaining pin (2) from pin (3).

WARNING

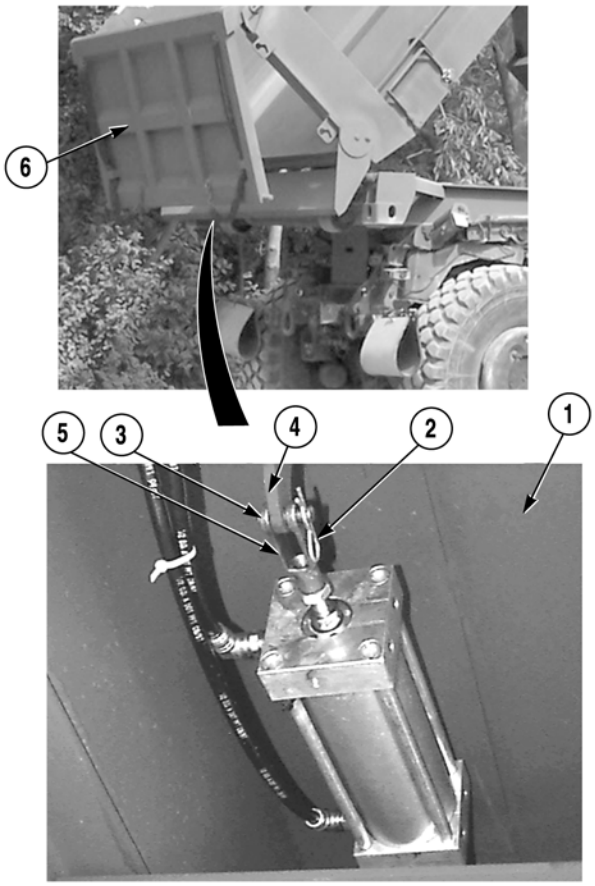
Rope or strap used in Step (3) must be at least 20 ft. (6.10 m) long to ensure operator can stand clear of dump body and load upon tailgate release. Failure to comply could result in severe injury or death to personnel.

(3) Attach rope or strap to lever (4).

(4) Remove pin (3) from yoke (5).

WARNING

Ensure personnel are out from under Dump Body prior to performing Steps (5) and (6). Failure to comply could result in severe injury or death to personnel.



(5) Raise Dump Body (1), refer to Para 2-15.

(6) Ensure personnel move at least 20 ft. (6.10 m) behind Dump Body (1) with end rope or strap.

(7) Pull rope or strap until tailgate (6) is released and empty contents of Dump Body (1).

(8) Lower Dump Body (1), refer to Para 2-15.

(9) Remove rope or strap from lever (4).

(10) Push up on lever (4) until tailgate (6) locks to Dump Body (1).

(11) Install pin (3) in yoke (5).

(12) Install retaining pin (2) in clevis pin (3).

2-18. REAR ROLLER STOW/UNSTOW.

a. Stow

WARNING

Support roller while removing retaining pins or roller may drop causing injury to personnel.

NOTE

This procedure shows replacement of one roller. Replacement is the same for both rollers.

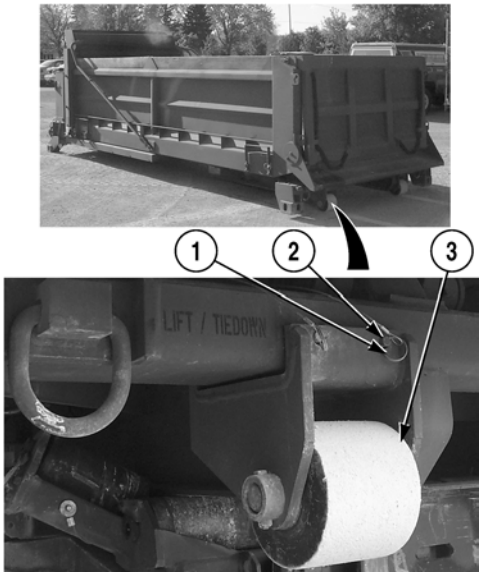
(1) Load Dump Body truck, refer to Para 2-5.

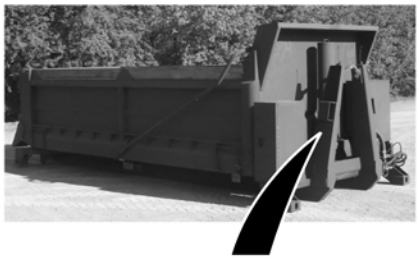
(2) Remove two holding pins (1) from retaining pin (2).

(3) Support roller (3) and remove two retaining pins (2). Remove roller from Dump Body Module.

(4) Position roller (3) on roller stowage bracket (4) and install two retaining pins (2).

(5) Install two holding pins (1) in retaining pins (2).





b. Unstow

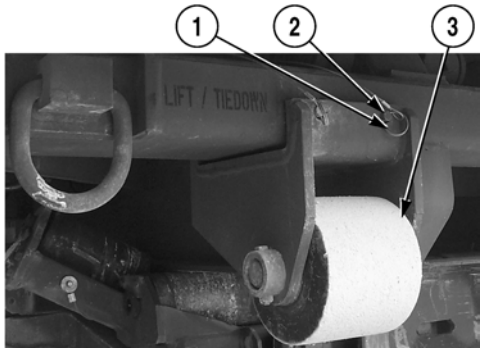
(1) Remove two holding pins (1) from retaining pins (2).

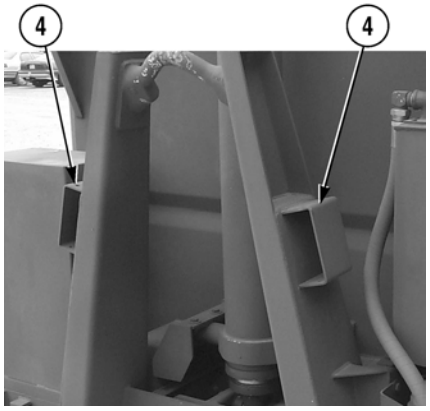
(2) Support roller (3) and remove two retaining pins (2) and roller (3) from roller stowage bracket (4).

(3) Install roller (3) on Dump Body Module using two retaining pins (2).

(4) Install two holding pins (1) in retaining pins (2).

(5) Unload Dump Body truck, refer to Para 2-5.





CHAPTER 3
UNIT AND DIRECT SUPPORT MAINTENANCE INSTRUCTIONS

3-1. INTRODUCTION.

This section contains Unit and Direct Support Maintenance Instructions for the Dump Body. To ensure the Dump Body is ready for operation at all times, it must be inspected on a regular basis so defects may be found before they result in serious damage, equipment failure, or injury to personnel.

3-2. GENERAL MAINTENANCE INSTRUCTIONS.

WARNING

- Dry-cleaning solvent (P-D-680) is TOXIC and flammable. Wear protective goggles, face shield, and gloves; use only in a well-ventilated area; avoid contact with skin, eyes, and clothes, and do not breathe vapors. Keep away from heat or flame. Never smoke when using solvent. The flashpoint for Type II dry-cleaning solvent is 140°F (60°C) and Type III dry-cleaning solvent is 200°F (93°C). Failure to do so may result in serious injury or death to personnel.
- If personnel become dizzy while using cleaning solvent, immediately get fresh air and medical help. If solvent contacts skin or clothes, flush with cold water. If solvent contacts eyes, immediately flush eyes with water and get immediate medical attention.

a. Cleanliness. Dirt, grease, oil and debris only get in the way and may cover up a serious problem. Use Dry-cleaning solvent on metal surfaces and soapy water on rubber.

b. Bolts, Nuts, and Screws. Check bolts, nuts, and screws, for obvious looseness, missing, bent, or broken condition and tighten or replace as necessary. If they cannot be checked with a tool, look for chipped paint, bare metal or rust around bolt head.

c. Welds. Look for loose or chipped paint, rust, or gaps where parts are welded together. If a cracked weld is found, notify your supervisor.

d. Electric Wires and Connectors. Look for cracked or broken insulation, bare wires and loose or broken connectors. Tighten loose connectors and make sure the wires are in good shape.

e. Fluid Hoses, Tubes and Fittings. Look for wear, cuts, kinks, damage, leaks, and make sure clamps and fittings are tight. Wet spots show leaks, but a stain around a fitting or connector may indicate a leak. If connector or fitting is loose, tighten it. If something is broken or worn out, repair or replace per applicable procedure.

f. Fluid Leakage. It is necessary to know how fluid leakage affects the status of fuel, oil, coolant and the hydraulic system. The following are definitions of the type/classes of leakage necessary to know in order to determine the status of the module. Learn, then be familiar with them and REMEMBER—WHEN IN DOUBT, NOTIFY THE SUPERVISOR.

CAUTION

Equipment operation is allowable with minor leakage (Class I or II). Consideration must be given to the fluid capacity in the item/system being checked/inspected. When in doubt, notify the supervisor. When operating with Class I or II leaks, continue to check the fluid levels as required in the PMCS. Class III leaks should be repaired per applicable procedure.

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

(2) Class II. Leakage of fluid great enough to form drops, but not enough to cause drops that fall from item being checked/inspected.

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

3-3. TARP ASSEMBLY REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Personnel Required
Two

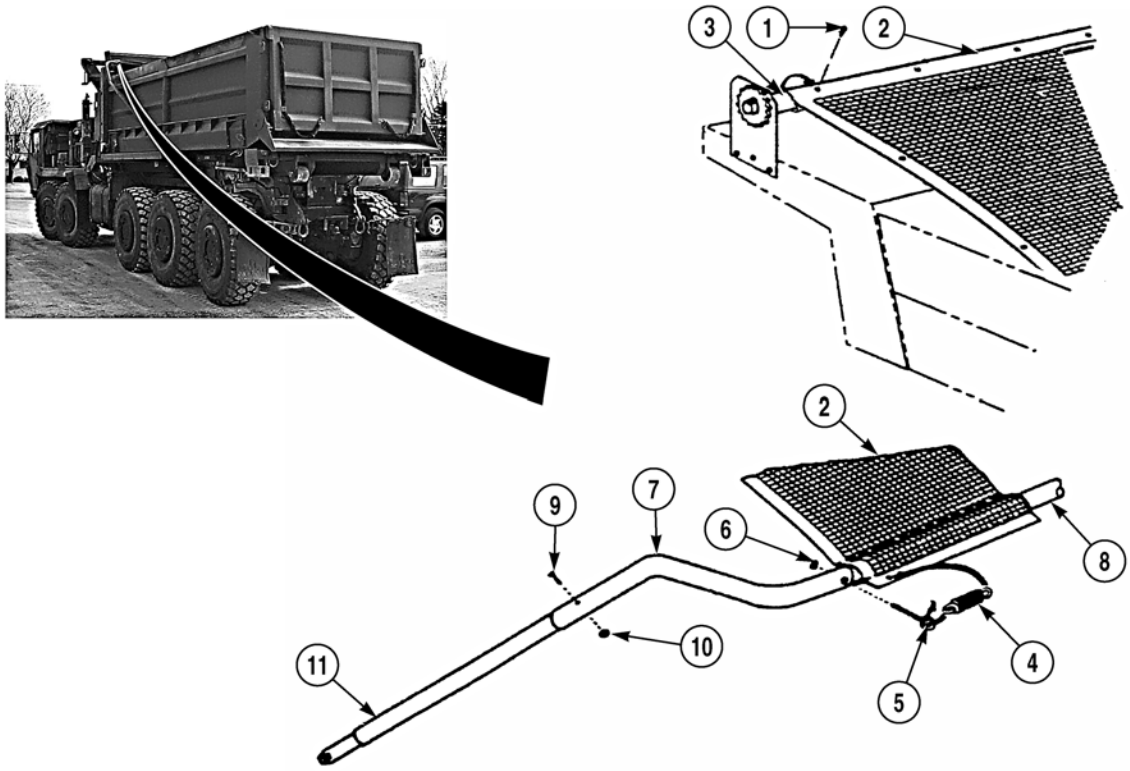
Materials/Parts
Locknut (4) (M45913/1-5C65C)
1/4 in. Roll Pin (6) (MS16562-66)
1/4 x 20-3/4 Screw (6) (MS35206-291)
1/4 in. Lockwasher (4) (MS35333-40)

Equipment Condition
Dump Body unloaded, (Para 2-5)
Tarp deployed, (Para 2-12)

a. Removal.

WARNING

- Never open or close tarp within 40 feet (12.2 m) of overhead power lines or trees. Failure to comply may result in death or serious injury to personnel.
- Before deploying tarp over Dump Body, ensure crank handle is removed from shaft. If handle is connected to shaft, serious injury to personnel could result with handle spinning out of control.
- Ensure tarp is fully opened or fully closed before moving truck. Failure to comply may result in serious injury to personnel.
- Never move truck with tarp swing arms partially raised. Failure to comply may result in serious injury to personnel.
- Always remove crank handle before touching or moving tarp brake lever. Failure to comply may result in serious injury to personnel.
- Ensure all personnel are clear of tarp path before lowering tarp. Failure to comply may result in death or serious injury to personnel.
- When brake lever is pulled down, tarp will immediately spring rearward until handle reaches BRAKE position. Pulling handle quickly down will minimize tarp travel. Ensure personnel are clear of tarp path. Failure to comply may result in serious injury to personnel.
- Never operate tarp system under obstructions, such as power lines or trees. Failure to comply may result in death or serious injury to personnel.



NOTE

Matchmark roll-up bar halves prior to removal.

(1) Remove six self-tapping screws (1) and tarp (2) from roll-up bar (3). Discard screws.

(2) Remove two springs (4) from eye bolts (5) and tarp (2).

NOTE

Both sides of connecting arm are removed the same way. Left side is shown.

(3) Remove two eye bolts (5) and nuts (6) from connecting arms (7) and cross arm (8).

(4) Remove two eye bolts (9) and nuts (10) from swing arms (11) and connecting arms (7).

WARNING

Swing arm is under spring tension. Ensure swing arm is supported during disassembly or injury to personnel may result.

(5) With the aid of an assistant, remove connecting arms (7) from swing arm (11).

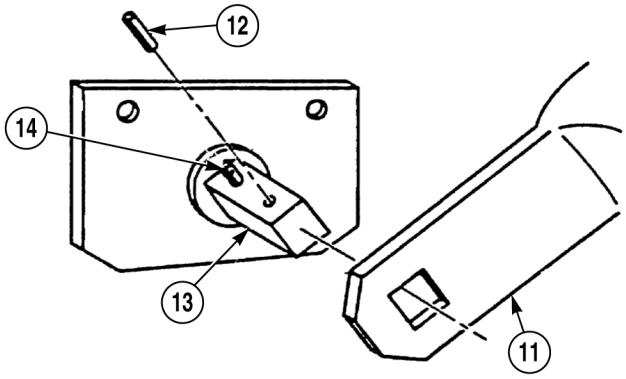
(6) Remove cross arm (8) from pocket in end of tarp (2).

3-3. TARP ASSEMBLY REPLACEMENT (CONT).

NOTE

Both swing arms are removed the same way. Left side shown.

(7) Remove and discard roll pin (12) from tension spring assembly shaft (13).



WARNING

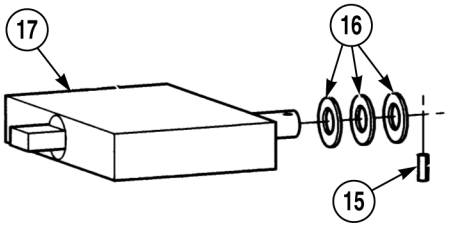
Swing arm is under spring tension. Ensure swing arm is supported during disassembly or injury to personnel may result.

NOTE

Hold back of tension spring assembly shaft with a 1 in. wrench when removing swing arm.

(8) Remove swing arm (11) from tension spring assembly shaft (13).

(9) Remove and discard roll pin (14) from tension spring assembly shaft (13).



NOTE

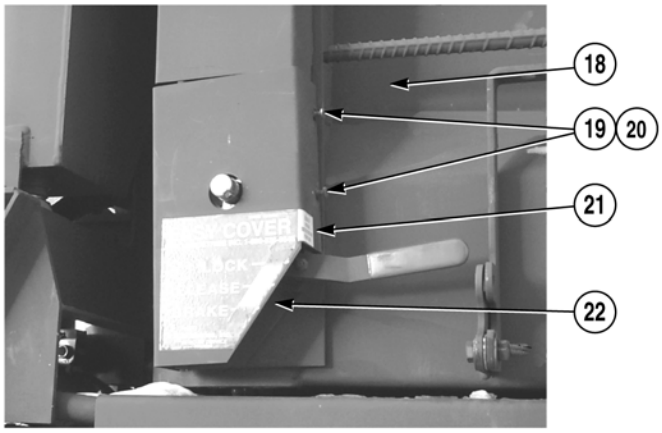
Note quantity of washers prior to removal to ensure proper installation.

(10) Remove roll pin (15) and washers (16) from back of tension spring assembly (17). Discard roll pin.

(11) Remove tension spring assembly (17) from Dump Body (18).

(12) Repeat Steps (7) through (11) for right side.

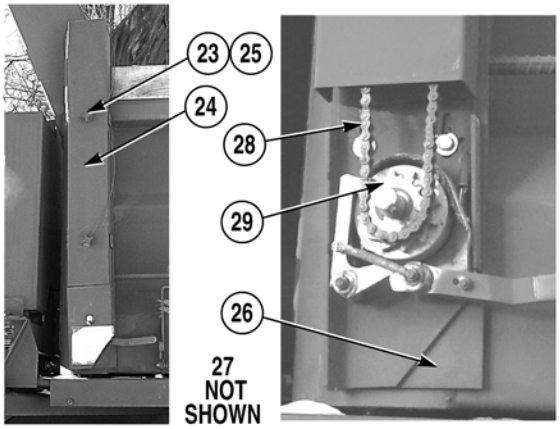
(13) Remove four screws (19), lockwashers (20) and lower crank assembly cover (21) from crank assembly (22). Discard lockwashers.



(14) Remove two tethered plastic knobs (23), upper crank assembly cover (24) and two washers (25) from mounting plate (26).

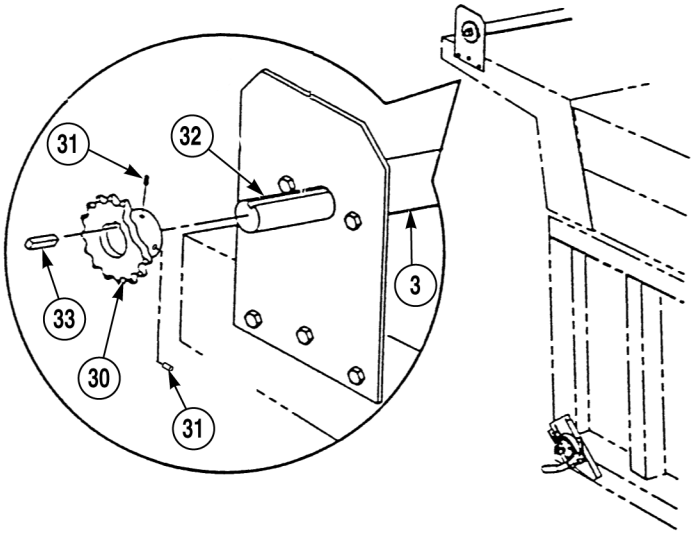
(15) Remove master link (27) from chain (28).

(16) Remove chain (28) from sprockets (29) and (30).



(17) Loosen two set screws (31) and remove sprocket (30) from shaft (32) of roll up bar (3).

(18) Remove key (33) from shaft (32).



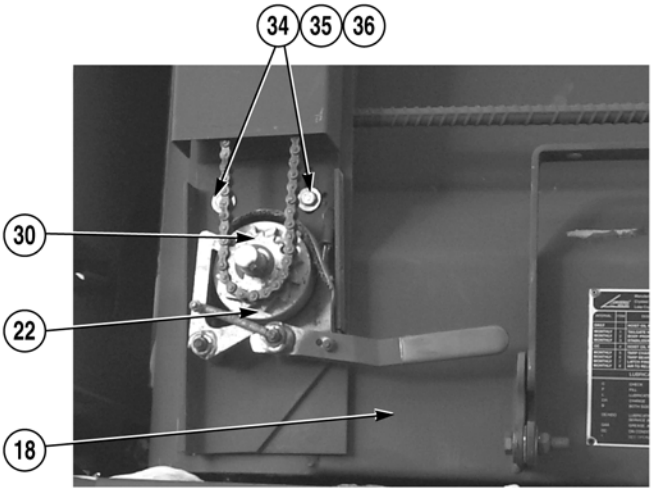
WARNING

Crank assembly bracket weighs 75 lb (34 kg). Do not attempt to lift or move crank assembly bracket without the aid of an assistant. Failure to comply could result in serious injury to personnel.

NOTE

Note quantity of washers prior to removal.

(19) Remove two nuts (34), four washers (35), two screws (36) and crank assembly (22) from Dump Body (18).



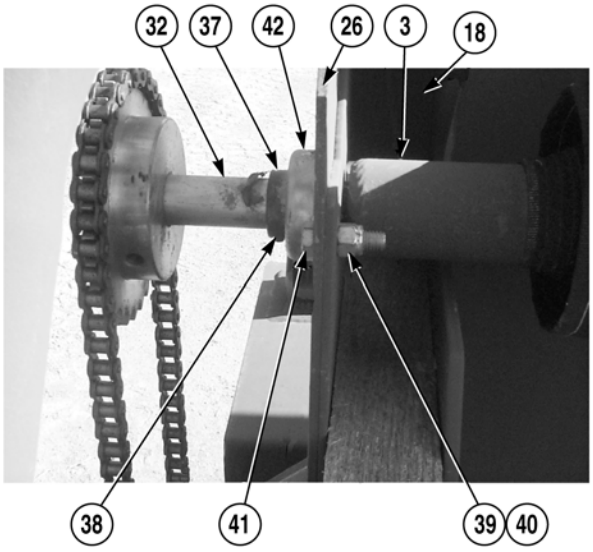
3-3. TARP ASSEMBLY REPLACEMENT (CONT).

(20) Loosen two set screws (37) on bearing (38).

NOTE

Washers may or may not be present.

(21) With the aid of an assistant, remove two locknuts (39), washers (40), screws (41), bearing cover (42), bearing (38) and mounting plate (26) from shaft (32) of roll up bar (3) and Dump Body (18). Discard locknuts.



NOTE

Washers may or may not be present.

(22) Remove two locknuts (43), washers (44) and screws (45) from bearing cover (46) and Dump Body (18). Discard locknuts.

NOTE

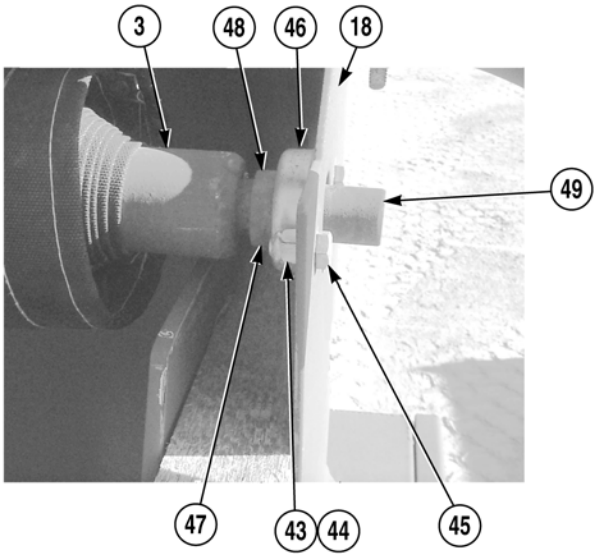
Roll-up bars are removed by pushing together.

(23) Separate right side roll-up bar (3) from left side roll-up bar (3).

NOTE

Note position of bearing prior to removal to ensure proper installation.

(24) Loosen two set screws (47) and remove bearing (48) and bearing cover (46) from shaft (49) of roll-up bar (3).



b. Installation.

(1) Position right side roll-up bar (3) in left side roll-up bar (3).

(2) Position bearing (48) and bearing cover (46) on shaft (49) of right side roll-up bar (3).

(3) Position roll-up bar (3) in Dump Body (19) and align matchmarks.

(4) Install bearing (48) and bearing cover (46) on Dump Body (18) with two screws (45), washers (44) and locknuts (43).

(5) Adjust roll-up bar (3) so shoulder on right side is 1 in. (2.54 cm) from edge of bearing (48).

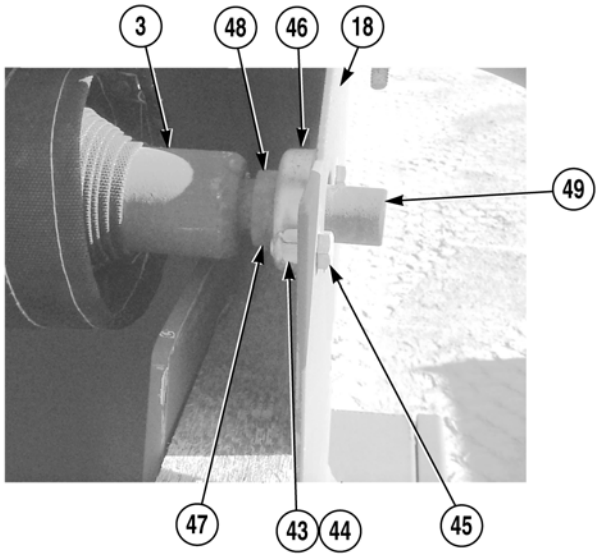
(6) Tighten two set screws (47) on bearing (48).

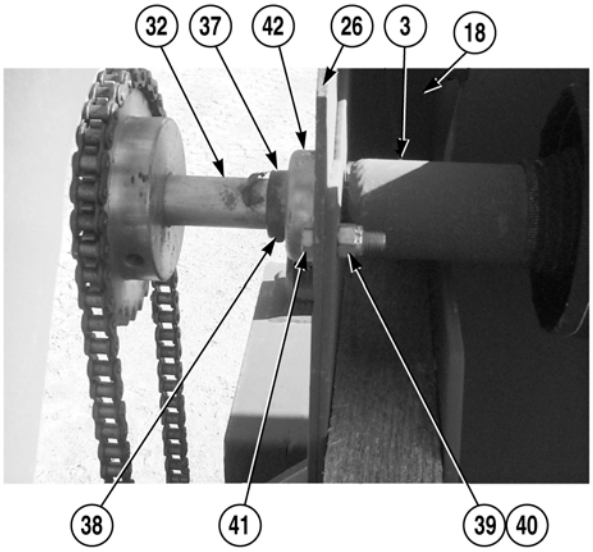
(7) Install mounting plate (26), bearing (38), and bearing cover (42) on shaft (32) of left side roll-up bar shaft (3) and Dump Body (18) with two screws (41), washers (40) and locknuts (39).

NOTE

Ensure matchmarks are lined up on left side and right side roll-up bars prior to tightening set screws in Step (8).

(8) Tighten two set screws (37) on bearing (38).





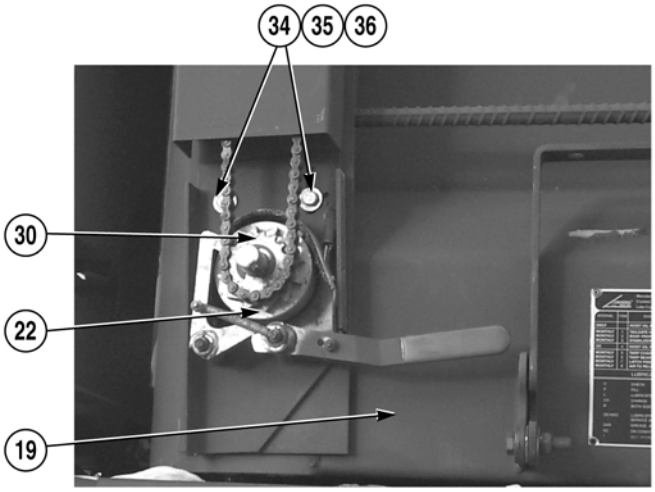
3-3. TARP ASSEMBLY REPLACEMENT (CONT).

(9) Position crank assembly (22) on Dump Body (18) with two screws (36), washers (35) and nuts (34). Do not tighten.

(10) Lightly tap key (33) into keyway of shaft (32).

(11) Position sprocket (30) on shaft (32) of left side roll-up bar (3) until flush with end.

(12) Tighten two set screws (31) on sprocket (30).



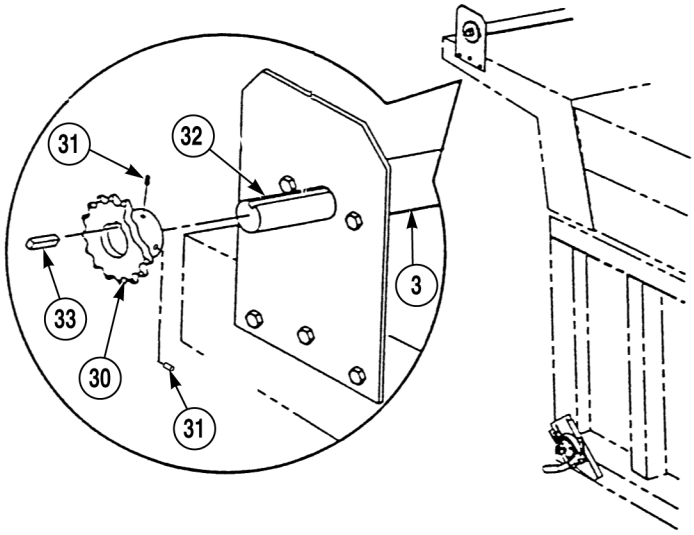
NOTE

It may be necessary to lift up on crank to install master link in chain.

(13) Position chain (28) around both sprockets (29) and (30), and install master link (27).

(14) With the aid of an assistant, push crank assembly (22) down to tighten chain (28), and tighten two nuts (34) on screws (36).

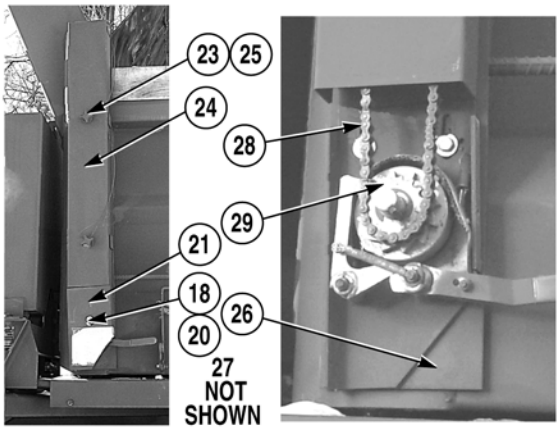
(15) Install two washers (25) and upper crank assembly cover (24) on mounting plate (26) with two tethered plastic knobs (23).



NOTE

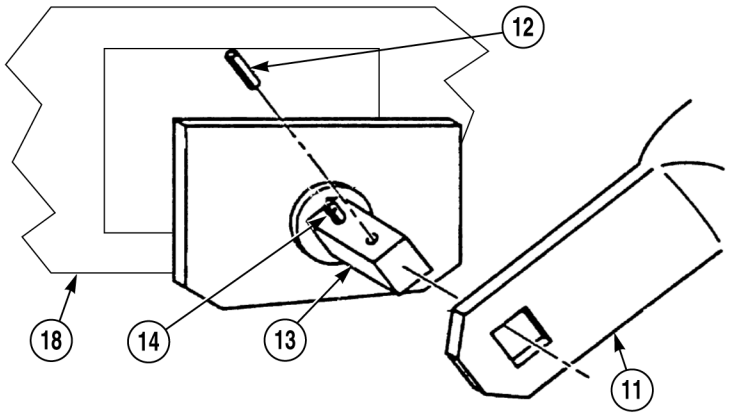
Ensure crank handle is centered through hole in lower crank assembly cover before tightening screws.

(16) Install lower crank assembly cover (21) on crank assembly (22) with four lockwashers (20) and screws (18).



NOTE

- Both tension spring assemblies are installed the same way. Left side is shown.
- Outer edge of tension spring assembly should be flush with outer edge of Dump Body when installed.

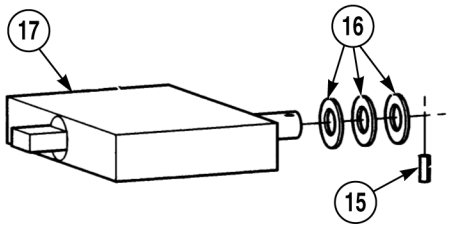


(17) Position tension spring assembly (17) in Dump Body (18).

NOTE

Install same quantity of washers as noted prior to removal.

(18) Install washers (16) and roll pin (15) on tension spring assembly (17).



WARNING

Swing arm is under spring tension. Ensure swing arm is supported during disassembly or injury to personnel may result.

NOTE

- On occasion, tension spring assembly may not have enough tension to pull tarp to rear of Dump Body. Test completed tarp system. If tension is not sufficient, take arms apart and preload tension spring assemblies by turning shafts 1/4 turn towards front and reattach swing arm.
- Hold tension arm assembly behind roll pin with 1 in. wrench and rotate towards front of truck to install swing arm.
- Swing arm is properly installed when swing arm weld overlap is towards outside of Dump Body.

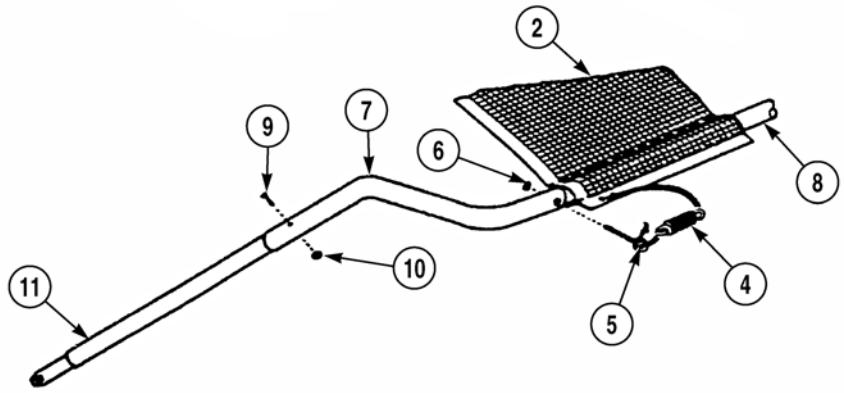
(19) Install roll pin (14) on tension spring assembly shaft (13).

(20) With the aid of an assistant, position swing arm (11) on left side tension spring assembly shaft (13).

(21) Install roll pin (12) in tension spring assembly shaft (13).

(22) Repeat Steps (17) through (21) for right side.

3-3. TARP ASSEMBLY REPLACEMENT (CONT).



(23) Position cross arm (8) through pocket in end of tarp (2).

(24) Position two connecting arms (7) on cross arm (8).

(25) With the aid of an assistant, raise two swing arms (11) to top of tailgate and position ends of two connecting arms (7) over two swing arms (11).

(26) Install two swing arms (11) on connecting arms (7) with eye bolts (9) and nuts (10).

(27) Install two connecting arms (7) on cross arm (8) with two eye bolts (5) and nuts (6).

(28) Attach two springs (4) on tarp (2) and two eye bolts (5). Crimp ends of springs.

NOTE

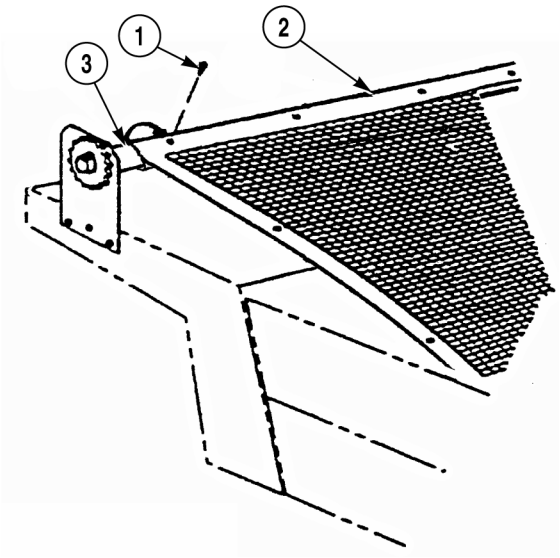
Ensure tarp is centered from side to side.

(29) Position end of tarp (2) towards roll-up bar (3).

NOTE

Ensure at least one hole goes through area that holds two sections of roll-up bar together.

(30) Secure tarp (2) on roll-up bar (3) with six self-tapping screws (1).



c. Follow-On Maintenance:

- Check tarp operation, (Para 2-12).

END OF TASK

3-4. TRAVEL LOCK REPLACEMENT/ADJUSTMENT.

This task covers:

a. Removal b. Installation c. Adjustment d. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Materials/Parts
Cotter Pin (4) (MS24665-368)
Cable Ties (Item 1, Appendix D)

Equipment Condition
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
UPIK electrical connector disconnected, (Para 2-11)

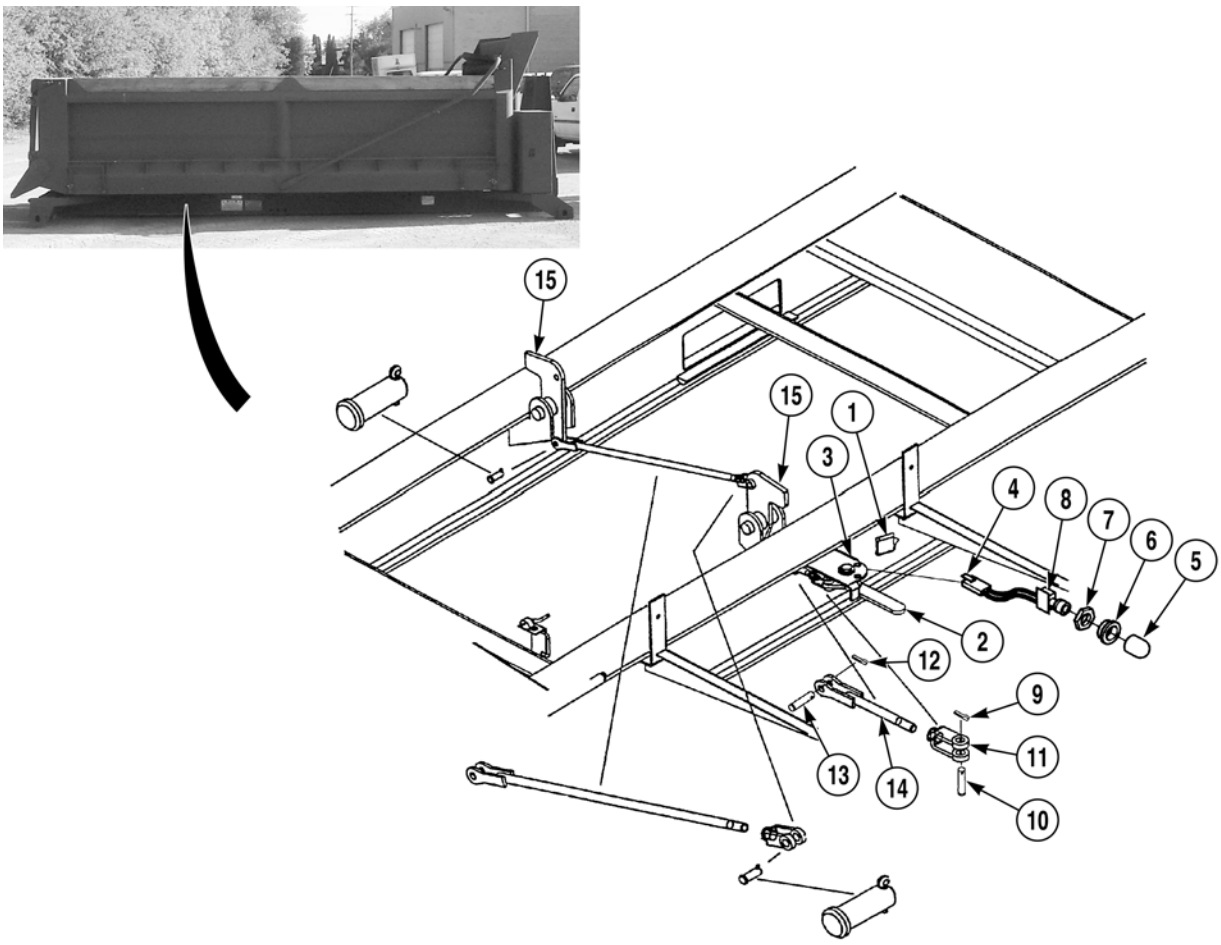
a. Removal.

WARNING

- Chock wheels when working on truck. Failure to comply could result in serious injury to personnel.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.

NOTE

- Use of body props permits service to be performed safely beneath a raised body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.
- Remove cable ties as required.



(1) Remove snap-lock pin (1) from handle (2) and lever (3).

(2) Disconnect 2-pin connector (4).

(3) Remove rubber boot (5), collar (6), jam nut (7), and travel lock switch assembly (8) from lever (3).

(4) Remove cotter pin (9) and clevis pin (10) from yoke (11) and handle (2). Discard cotter pin.

NOTE

Matchmark yoke and handle prior to removal.

(5) Remove yoke (11) from handle (2).

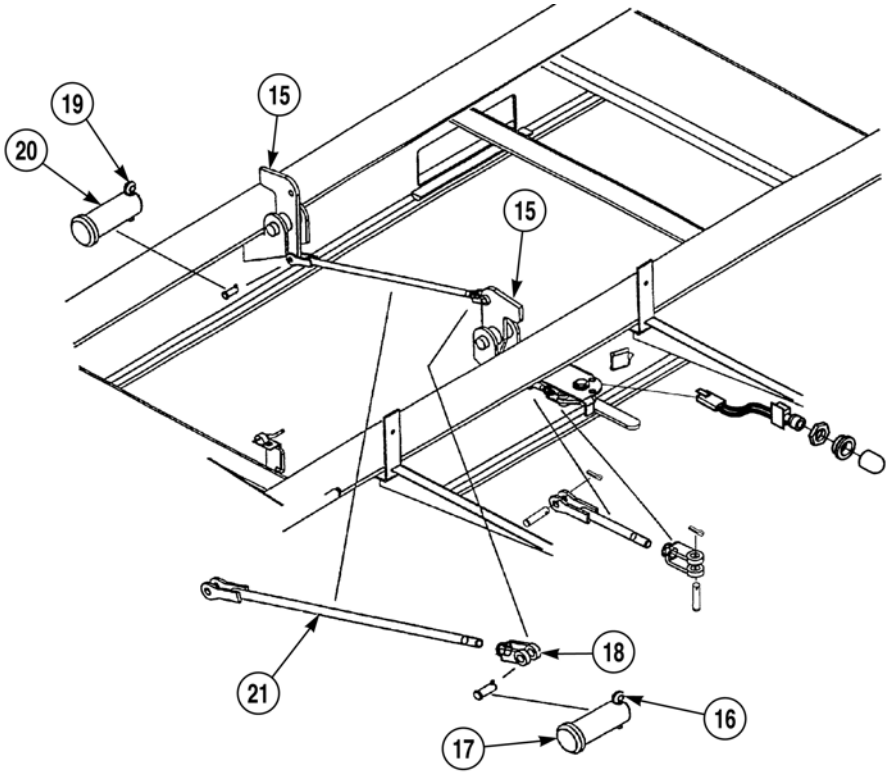
(6) Remove cotter pin (12), clevis pin (13), and stud lever assembly (14) from travel lock (15). Discard cotter pin.

NOTE

Matchmark yoke and stud lever assembly prior to removal.

(7) Remove yoke (11) from stud lever assembly (14).

3-4. TRAVEL LOCK REPLACEMENT/ADJUSTMENT (CONT).



(8) Remove cotter pin (16), clevis pin (17), and yoke (18) from travel lock (15). Discard cotter pin.

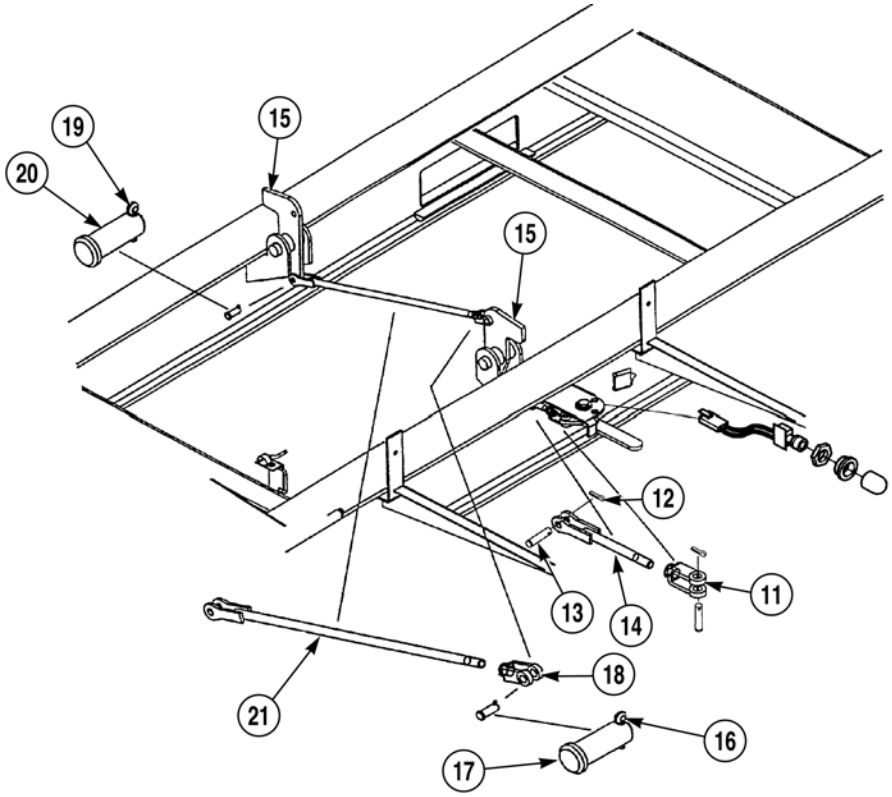
(9) Remove cotter pin (19), clevis pin (20), and stud cross assembly (21) from travel lock (15). Discard cotter pin.

NOTE

Matchmark yoke and stud cross assembly prior to removal.

(10) Remove yoke (18) from stud cross assembly (21).

b. Installation.



NOTE

- Install cable ties as required.
- Align matchmarks on yoke and stud cross assembly.

(1) Install yoke (18) on stud cross assembly (21).

(2) Install stud cross assembly (21), clevis pin (20), and cotter pin (19) on travel lock (15).

(3) Install clevis pin (17) and new cotter pin (16) in yoke (18) and travel lock (15).

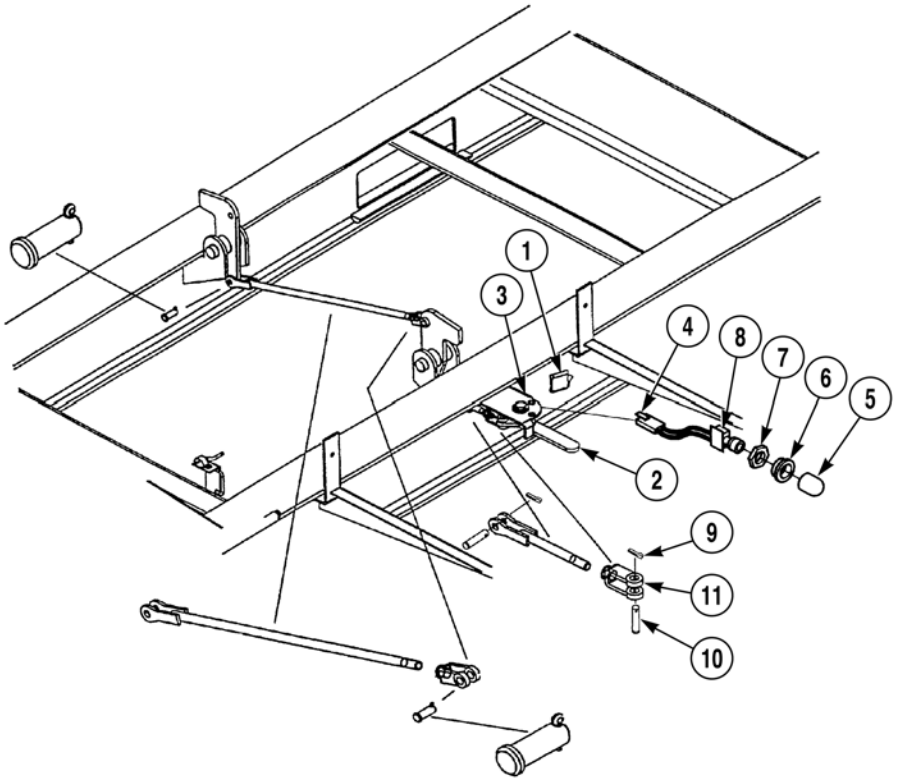
NOTE

Align matchmarks on yoke and stud lever assembly.

(4) Install yoke (11) on stud lever assembly (14).

(5) Install stud lever assembly (14), clevis pin (13), and new cotter pin (12) on travel lock (15).

3-4. TRAVEL LOCK REPLACEMENT/ADJUSTMENT (CONT).



(6) Install clevis pin (10) and cotter pin (9) in yoke (11) and handle (2).

(7) Install travel lock switch assembly (8) to lever (3) with jam nut (7), collar (6), and rubber boot (5).

(8) Connect 2-pin connectors (4).

(9) Install snap-lock pin (1) in handle (2) and lever (3).

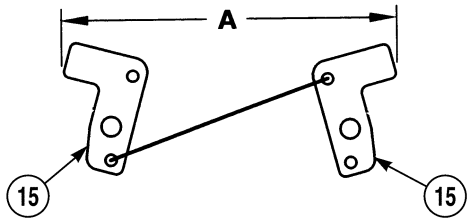
c. Adjustment.

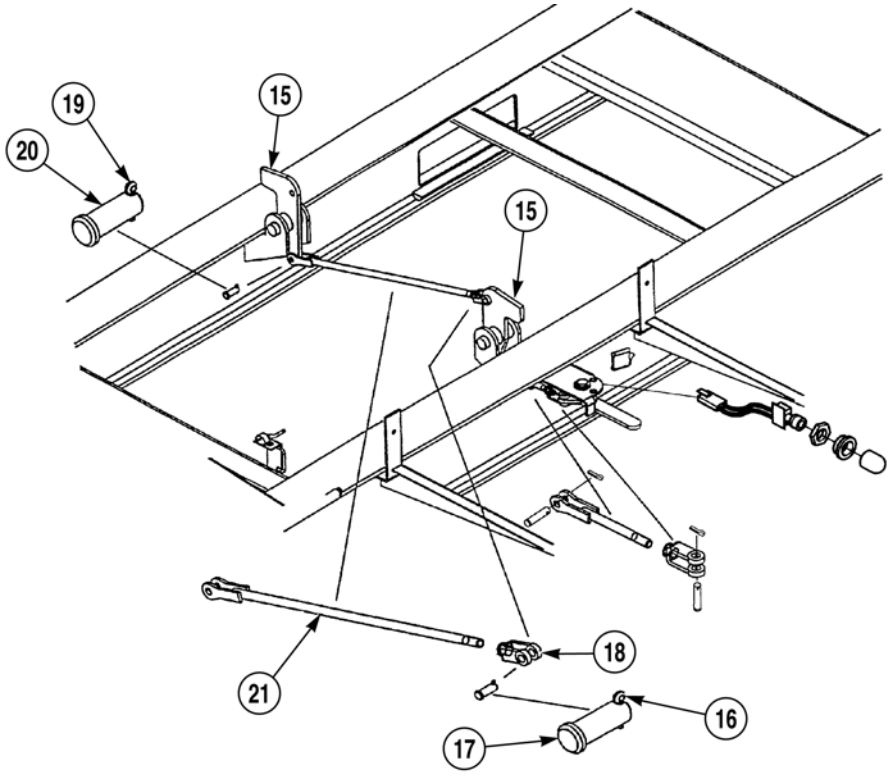
(1) Ensure travel lock handle is in “UNLOCKED” position, refer to Para 2-13.

NOTE

- If measurement “A” is between 30-3/4 in. (78 cm.) and 31-1/4 in. (80 cm.), go to Step (6).
- If measurement “A” is not between 30-3/4 in. (78 cm.) and 31-1/4 in. (80 cm.), perform Steps (3) through (5).

(2) Measure distance between outer edge of travel locks (15). Record as measurement "A."





(3) Remove cotter pin (16), clevis pin (17), and yoke (18) from travel lock (15). Discard cotter pin.

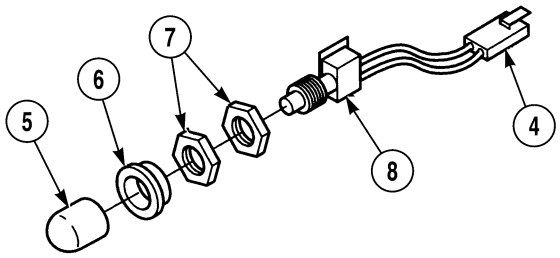
NOTE

- Turn yoke out to increase measurement.
- Turn yoke in to decrease measurement.

(4) Adjust yoke (18) on stud cross assembly (21) to required length and install yoke (18), clevis pin (17), and cotter pin (16) on travel lock (15).

(5) Repeat Step (2).

3-4. TRAVEL LOCK REPLACEMENT/ADJUSTMENT (CONT).



(6) Disconnect 2-pin connector (4).

NOTE

- If there is continuity in Step (8), go to Step (14).
- If there is no continuity in Step (8), perform Steps (9) through (13).

(7) Position multimeter leads in travel lock switch connector (4).

(8) Set multimeter to ohms.

(9) Remove rubber boot (5) and collar (6) from travel lock switch (8).

NOTE

Moving travel lock switch assembly out will engage switch quicker.

(10) Loosen two jam nuts (7) and adjust travel lock switch assembly (8) until continuity is present with travel lock handle in “UNLOCKED” position.

(11) Tighten two jam nuts (7) on travel lock switch assembly (8).

(12) Install collar (6) and rubber boot (5) on travel lock switch assembly (8).

(13) Repeat Steps (7) and (8).

(14) Connect 2-pin connector (4).

d. Follow-On Maintenance:

- Connect UPIK electrical connector, (Para 2-11).
- Stow body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Check travel lock operation, (Para 2-13).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-5. AIR VALVE REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

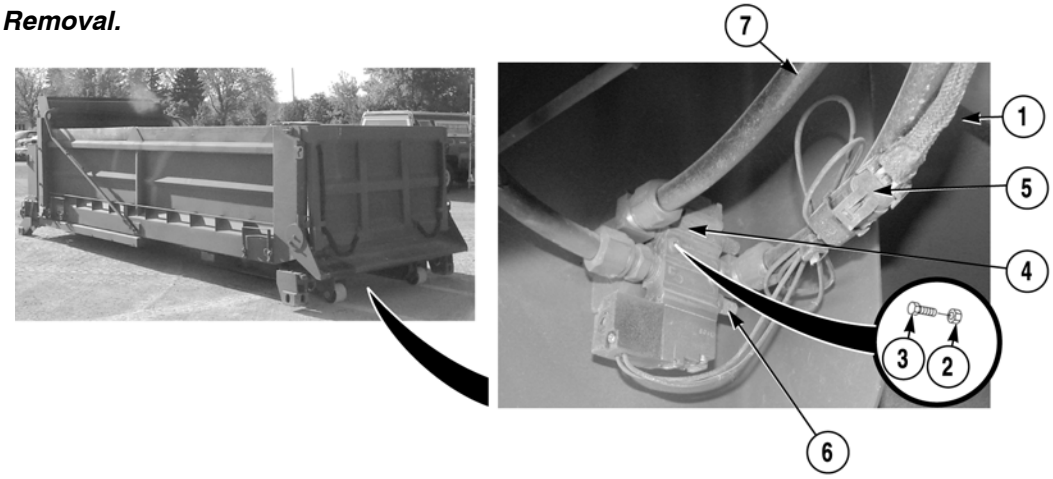
INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Lifting Device, Minimum Capacity 10,600 lb (4812 kg)
Jackstand (2) (Item 8, Appendix E)

Materials/Parts
Cable Ties (Item 1, Appendix D)
Tags, Identification (Item 4, Appendix D)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
UPIK air and electrical connectors disconnected, (Para 2-11)

a. Removal.



NOTE

- Perform Step (1) if Dump Body is on ground.
- Tag and mark hoses prior to removal.
- Remove cable ties as required.

(1) Using lifting device, lift rear of Dump Body (1) and position on two jackstands under subframe.

(2) Remove two nuts (2) and screws (3) from air valve (4) and Dump Body (1).

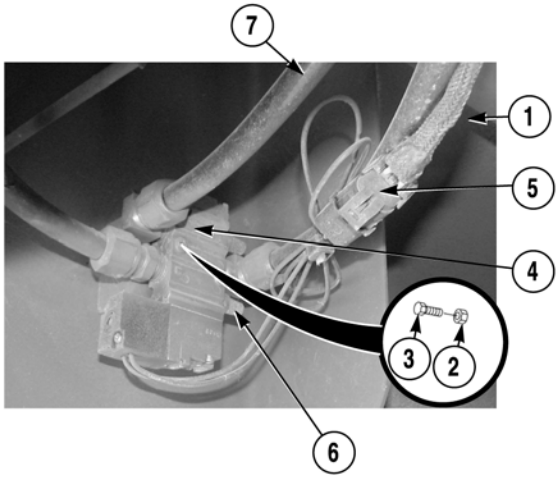
(3) Disconnect electrical connector (5).

(4) Remove two breathers (6) from air valve (4).

(5) Remove three hoses (7) from air valve (4).

3-5. AIR VALVE REPLACEMENT (CONT).

b. Installation.



NOTE

Install hoses in position as noted prior to removal.

(1) Install three hoses (7) on air valve (4).

(2) Install two breathers (6) in air valve (4).

(3) Connect electrical connector (5).

NOTE

Install cable ties as required.

(4) Install air valve (4) on Dump Body (1) with two screws (3) and nuts (2).

NOTE

Perform Steps (5) and (6) if Dump Body is on ground.

(5) Using lifting device, raise Dump Body (1) and remove two jackstands.

(6) Lower Dump Body (1) and remove lifting device.

c. Follow-On Maintenance:

- Connect UPIK air and electrical connectors, (Para 2-11).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-6. AIR CYLINDER REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Lifting device, Minimum Capacity 10,600 lb (4808 kg)
Jackstand (2) (off truck) (Item 8, Appendix E)

Materials/Parts
Sealing Compound (Item 3, Appendix D)
Tags, Identification (Item 4, Appendix D)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
UPIK air connector disconnected, (Para 2-11)
Tailgate closed, upper pins installed, (Para 2-17)

a. Removal.

WARNING

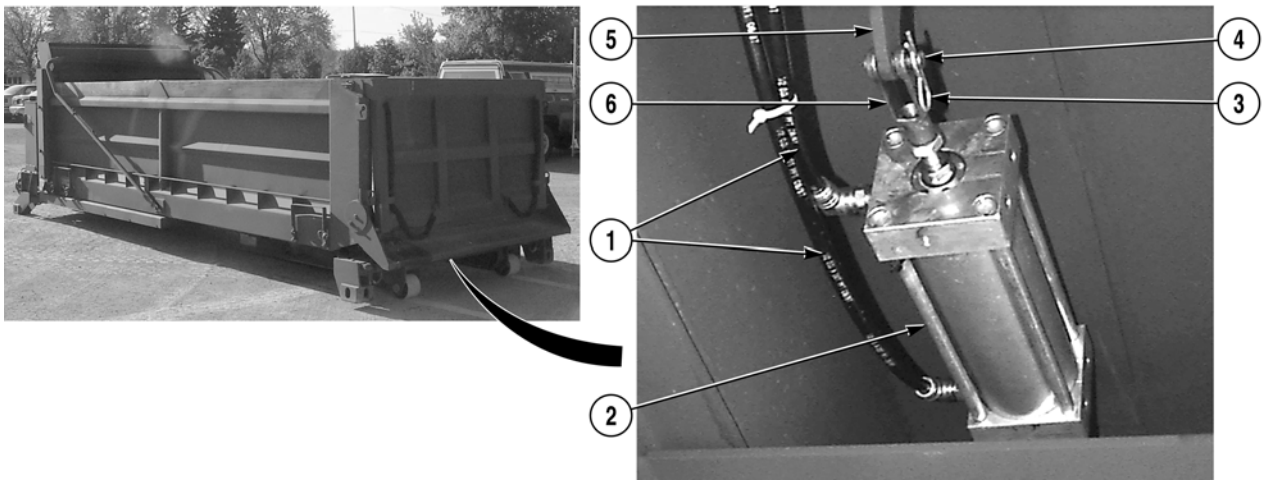
- Dump Body weighs 10,600 lb (4808 kg). Do not attempt to move or lift Dump Body without the aid of an assistant and a lifting device. Failure to comply could result in serious injury or death to personnel.
- Chock wheels when working on truck. Failure to comply could result in serious injury to personnel.

NOTE

Perform Step (1) if Dump Body is on ground.

(1) Using lifting device, lift rear of Dump Body and position on two jackstands under subframe.

3-6. AIR CYLINDER REPLACEMENT (CONT).



NOTE

Tag and mark hoses prior to removal.

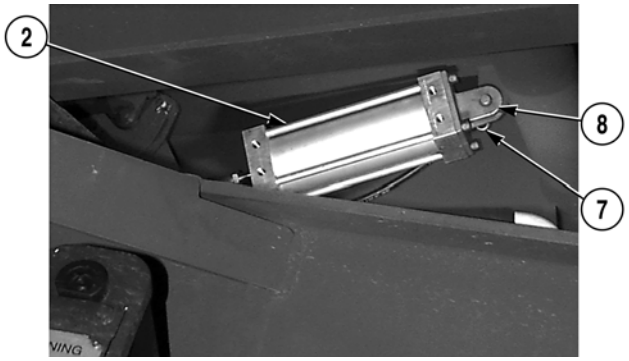
(2) Remove two hoses (1) from air cylinder (2).

(3) Remove spring pin (3) from clevis pin (4).

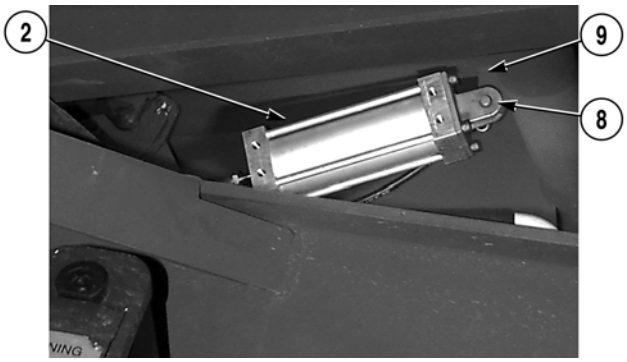
NOTE

Support air cylinder during removal of clevis pin.

(4) Remove clevis pin (4) from tailgate release lever (5) and yoke (6).



(5) Remove spring pin (7) from clevis pin (8).



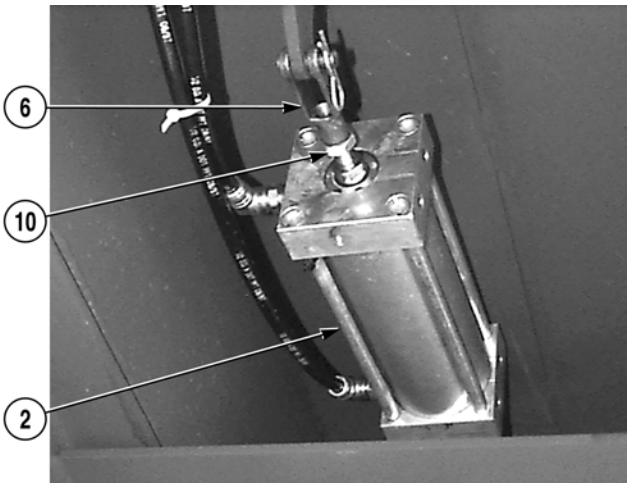
WARNING

Air cylinder will fall when clevis pin is removed. Ensure air cylinder is supported or injury to personnel may result.

NOTE

Note position of air cylinder prior to removal.

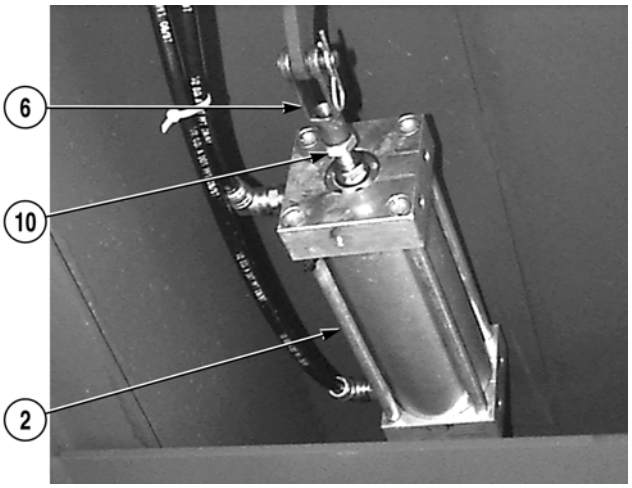
(6) Remove clevis pin (8) and air cylinder (2) from Dump Body (9).



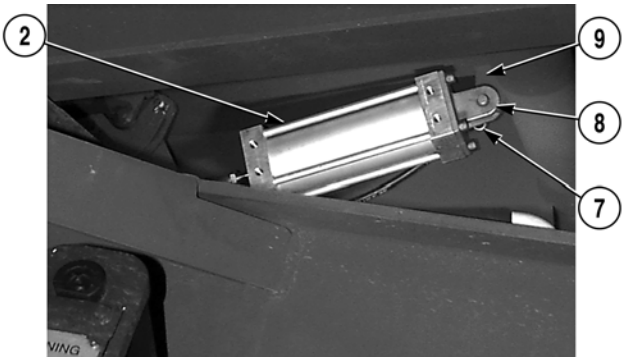
(7) Loosen jam nut (10) and remove yoke (6) and jam nut from air cylinder (2).

3-6. AIR CYLINDER REPLACEMENT (CONT).

b. Installation.



(1) Position jam nut (10) and yoke (6) on air cylinder (2).

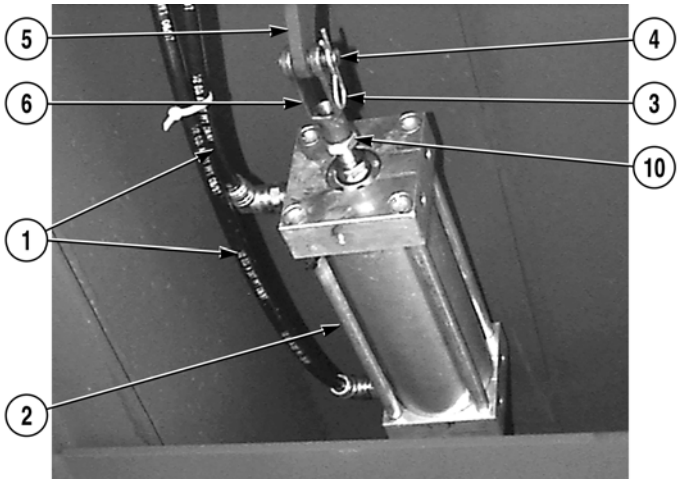


NOTE

Install air cylinder in position as noted prior to removal.

(2) Position air cylinder (2) on under side of Dump Body (9) and install clevis pin (8).

(3) Install spring pin (7) in clevis pin (8).



NOTE

Ensure air cylinder is extended 1/4 to 1/2 in. (6.4 to 12.7 mm) and tailgate release lever is forward.

(4) Rotate yoke (6) and align hoses in tailgate release lever (5) and yoke (6).

(5) Install clevis pin (4) in air cylinder (2) and tailgate release lever (5).

(6) Tighten jam nut (10) on air cylinder (2).

(7) Install spring pin (3) in clevis pin (4).

WARNING

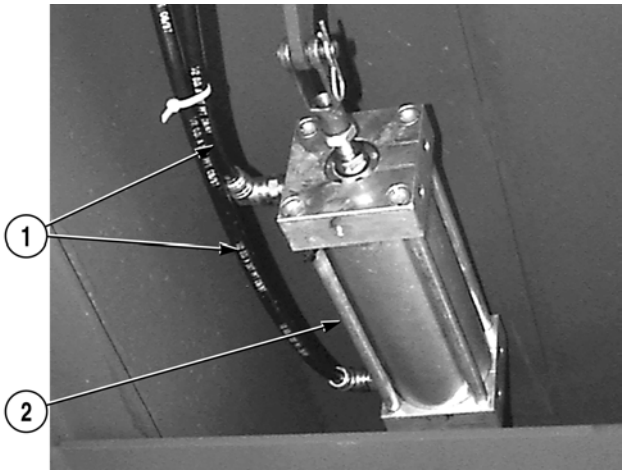
Adhesives, solvents, and sealing compounds can burn easily, can give off harmful vapors, and are harmful to skin and clothing. To avoid injury or death, keep away from open fire and use in well-ventilated area. If adhesives, solvent or sealing compound gets on skin or clothing, wash immediately with soap and water.

NOTE

Install hose in position as noted prior to removal.

(8) Apply sealing compound to threads of two hoses (1).

3-6. AIR CYLINDER REPLACEMENT (CONT).



(9) Install two hoses (1) on air cylinder (2).

NOTE

Perform Steps (10) and (11) if Dump Body is on ground.

(10) Using lifting device, raise rear of Dump Body and remove two jackstands.

(11) Lower Dump Body and remove lifting device.

c. Follow-On Maintenance:

- Connect UPIK air connector, (Para 2-11).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-7. BODY UP SWITCH REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Materials/Parts
Cable Ties (Item 1, Appendix D)
Tags, Identification (Item 4, Appendix D)

Equipment Condition
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
UPIK electrical connector disconnected, (Para 2-11)

a. Removal.

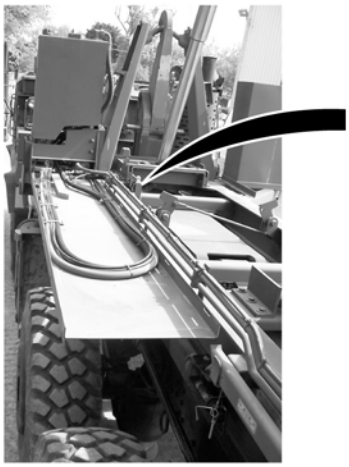
WARNING

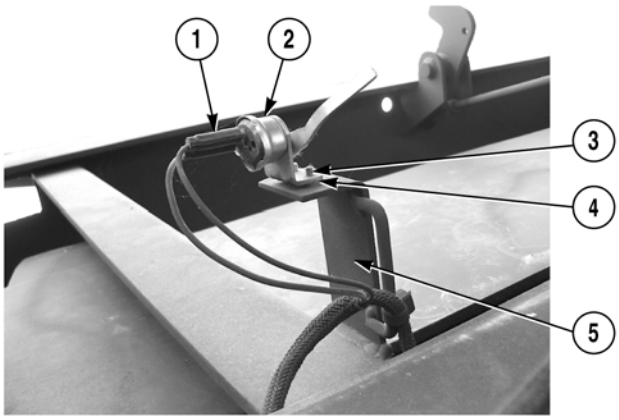
- Chock wheels when working on truck. Failure to comply could result in serious injury to personnel.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.
- Do not walk or stand under a raised Dump Body. Failure to comply may result in death or serious injury to personnel.
- A raised Dump Body can drop suddenly and kill or injure personnel.

NOTE

- Use of body props permits service to be performed safely beneath a raised Dump Body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.

3-7. BODY UP SWITCH REPLACEMENT (CONT).





NOTE

- Tag and mark wires prior to removal.
- Remove cable ties as required.

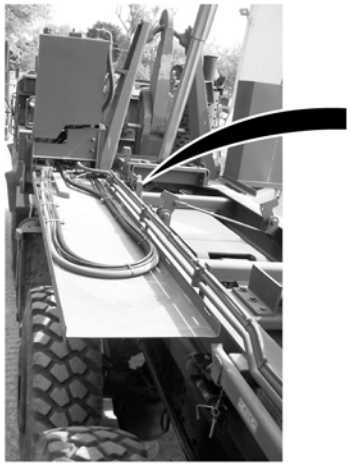
(1) Disconnect two wires (1) from body up switch (2).

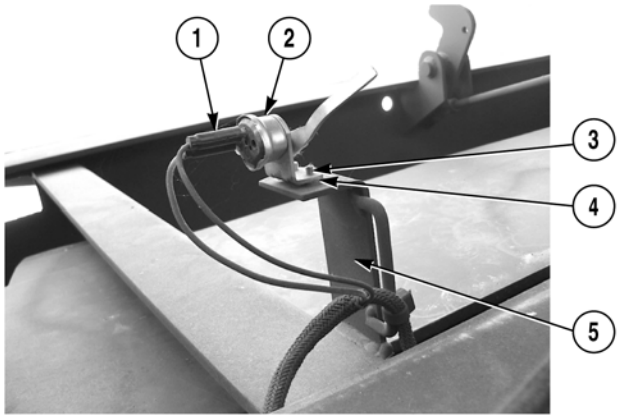
NOTE

- Washer(s) may or may not be present.
- Number of washer(s) may vary.

(2) Remove two screws (3), washer(s) (4) and body up switch (2) from subframe (5).

b. Installation.





NOTE

- Washer(s) may or may not be present.
- Number of washer(s) may vary.

(1) Install body up switch (2) on subframe (5) with two washer(s) (4) and screws (3).

NOTE

Ensure wires are installed in same position as noted during removal.

(2) Connect two wires (1) to body up switch (2).

c. Follow-On Maintenance:

- Connect UPIK electrical connector, (Para 2-11).
- Stow body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-8. STABILIZER BAR REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Jack, Hydraulic (Item 7, Appendix E)
Lifting Device, Minimum Capacity 10,600 lb (4812 kg)

Materials/Parts
Locknut (18) (M45913/1-10CG5C)
Tie Down Strap (BII of truck)

Personnel Required:
Two

Equipment Condition
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)

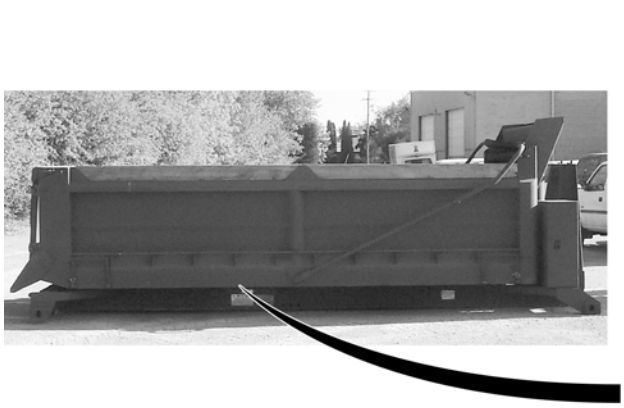
a. Removal.

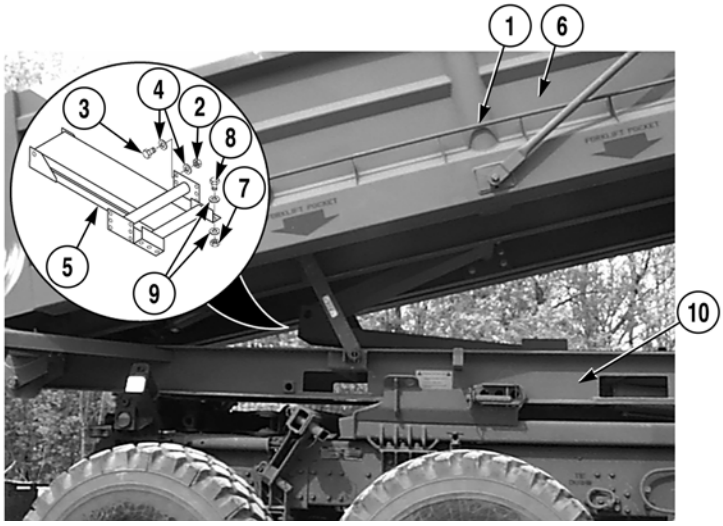
WARNING

- Stabilizer bar weighs 386 lb (175 kg). Do not attempt to lift or remove stabilizer bar without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.
- Chock wheels when working on truck. Failure to comply could result in serious injury to personnel.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.
- Do not walk or stand under raised Dump Body. Failure to comply may result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and kill or injure personnel.

NOTE

- Use of body props permits service to be performed safely beneath a raised body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.
- Hooks of rachet strap are properly installed when hooked just behind center brace on tie down bar.





(1) Position two ratchet strap hooks on tie down bars (1).

WARNING

- Ensure stabilizer upper arm is supported when removing screws or injury or death to personnel may result.
- Ensure ratchet strap is tight and position under stabilizer prior to removal of 12 screws in Step (2). Stabilizer may drop suddenly causing injury or death to personnel.

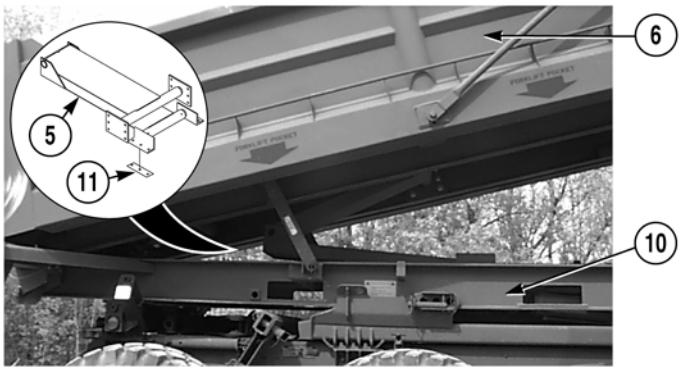
(2) With the aid of an assistant, remove 12 locknuts (2), screws (3), and 24 washers (4) from stabilizer bar (5), and Dump Body (6). Discard locknuts.

(3) With the aid of an assistant and using ratchet strap, lower upper half of stabilizer bar (5).

(4) Remove ratchet strap from Dump Body (6).

(5) Remove 6 locknuts (7), screws (8), and 12 washers (9) from stabilizer bar (5) and subframe (10). Discard locknuts.

3-8. STABILIZER BAR REPLACEMENT (CONT).



WARNING

Stabilizer bar weighs 386 lb (175 kg). Do not attempt to lift or remove stabilizer bar without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

CAUTION

Slide stabilizer bar out on right side of Dump Body to prevent damage to hoses and cables.

(6) Attach lifting device to stabilizer bar (5).

(7) With the aid of an assistant, remove stabilizer bar (5) from Dump Body (6) and subframe (10).

NOTE

Depending on model, spacers may or may not be present.

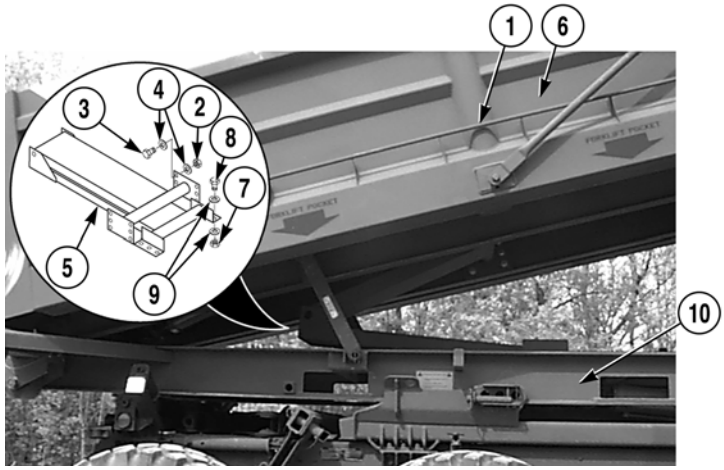
(8) Remove two spacers (11) from subframe (10).

b. Installation.

NOTE

Depending on model, spacers may or may not be used.

(1) Position two spacers (11) on subframe (10).



WARNING

Stabilizer bar weighs 386 lb (175 kg). Do not attempt to lift or remove stabilizer bar without aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

CAUTION

Slide stabilizer bar in on right side of Dump Body to prevent damage to hoses and cables.

(2) Attach lifting device to stabilizer bar (5).

(3) With the aid of an assistant, position stabilizer bar (5) between Dump Body (6) and subframe (10).

(4) Position 12 washers (9), 6 new locknuts (7), and screws (8) on stabilizer bar (5) and subframe (10).

NOTE

Hooks of ratchet strap are properly installed when hooked just behind center beam on tie down bar.

(5) With the aid of an assistant, position ratchet strap under stabilizer bar (5) upper arm, and attach two hooks on tie down bar (1).

(6) With the aid of an assistant, tighten ratchet strap to raise stabilizer bar (5).

NOTE

It will be necessary to raise rear of stabilizer bar with a hydraulic jack or pry bar to install screws in Step (7).

(7) Install 24 washers (4), 12 locknuts (2), and screws (3) on stabilizer bar (5) and Dump Body (6).

(8) Tighten six locknuts (7) on screws (8).

c. Follow-On Maintenance:

- Stow body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-9. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3089020 THRU 3093735).

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

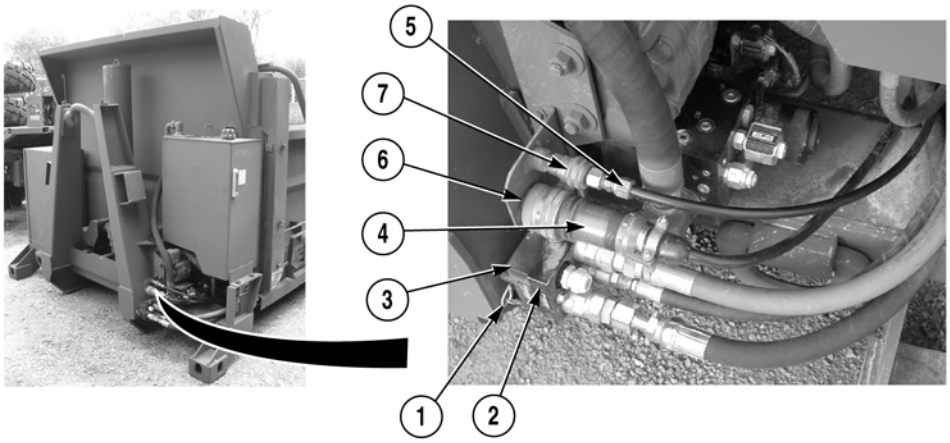
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Cap and Plug Set (Item 3, Appendix E)
Pan, Drain (Item 10, Appendix E)
Wrench, Combination, 1-1/4 in. (Item 12, Appendix E)
Wrench, Combination, 1-1/2 in. (Item 13, Appendix E)
Wrench, Combination, 2 in. (Item 14, Appendix E)

Personnel Required:
Two

Materials/Parts
7/16 in. Lockwasher (8) (HCLE-07)
5/8 in. Locknut (6) (M45913/1-10CG5C)
Hydraulic Oil (Item 2, Appendix D)
Tags, Identification (Item 4, Appendix D)
Preformed Packing Kit (Item 5, Appendix D)

Equipment Condition
Hydraulic reservoir removed, (Para 3-16)
Hydraulic high pressure filter base removed, (Para 3-15)

a. Removal.

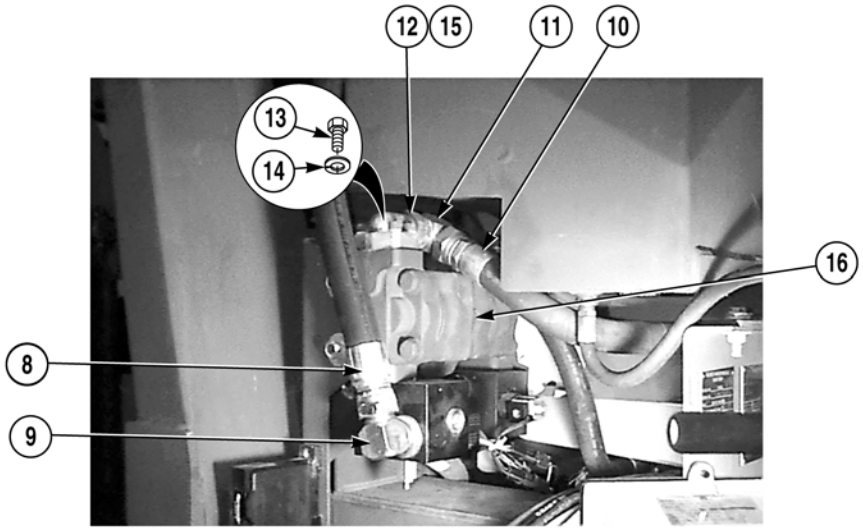


NOTE

- Tag and mark hoses and connectors prior to removal.
- Cap and plug all hoses and fittings prior to removal.
- Use a container to catch hydraulic oil before disconnecting hydraulic lines or fittings.

(1) Remove retainer pin (1) and quick disconnect (2) from dummy coupling (3).

(2) Remove cable (4) and air line (5) from cap (6) and quick disconnect (7).

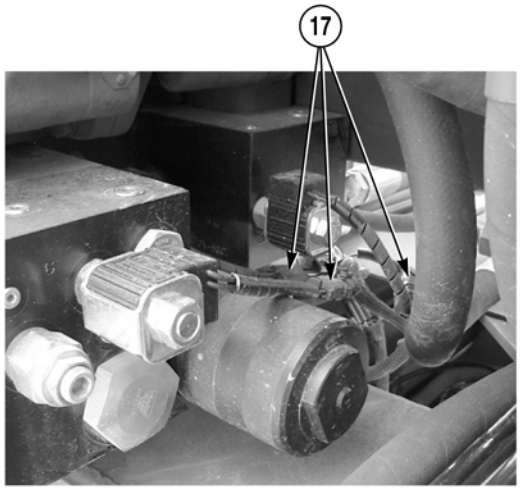


(3) Remove hose (8) from elbow (9).

(4) Remove hose (10) from elbow (11).

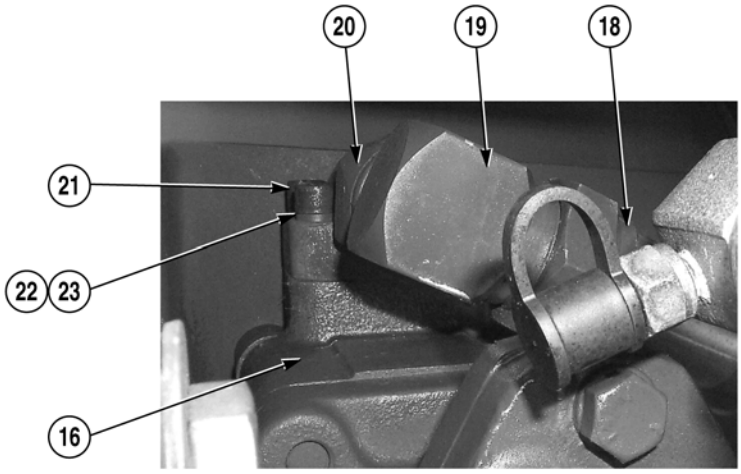
(5) Remove elbow (11) from flange adapter (12).

(6) Remove four screws (13), lockwashers (14), flange adapter (12) and preformed packing (15) from pump section of motor pump assembly (16). Discard lockwashers.



(7) Disconnect three 2-pin connectors (17).

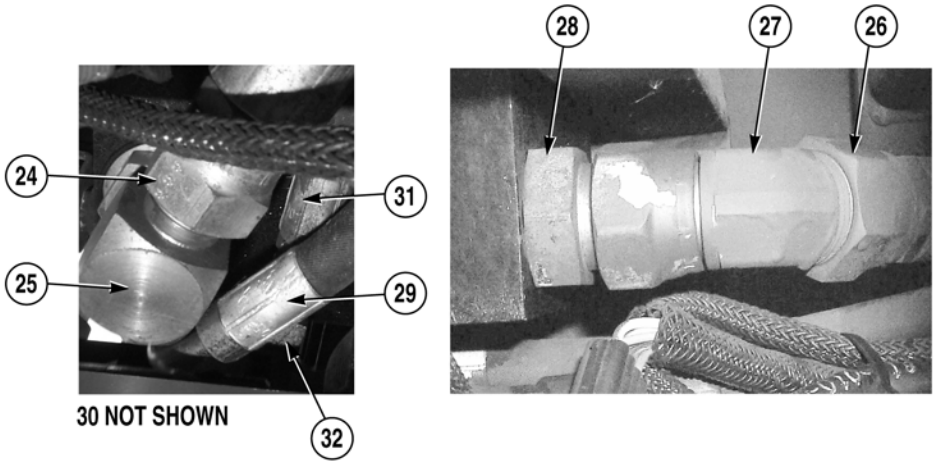
3-9. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3089020 THRU 3093735) (CONT).



(8) Remove hose (18) from elbow (19).

(9) Remove elbow (19) from flange adapter (20).

(10) Remove four screws (21), lockwashers (22), flange adapter (20) and preformed packing (23) from motor pump assembly (16). Discard lockwashers and preformed packing.



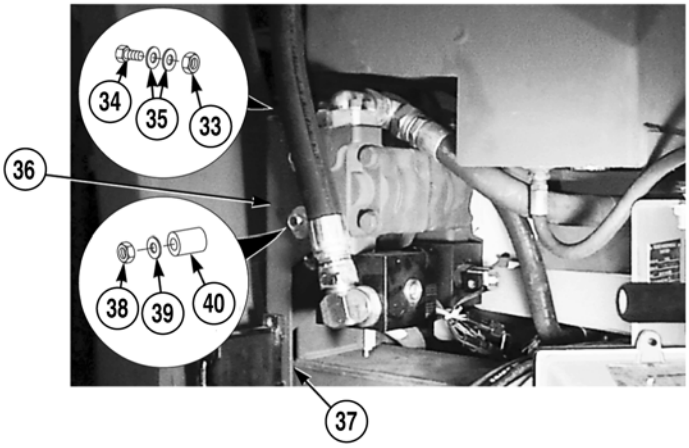
(11) Remove hose (24) from elbow (25).

(12) Remove hose (26) from elbow (27).

(13) Remove elbow (27) from fitting (28).

(14) Remove hose (29) from fitting (30).

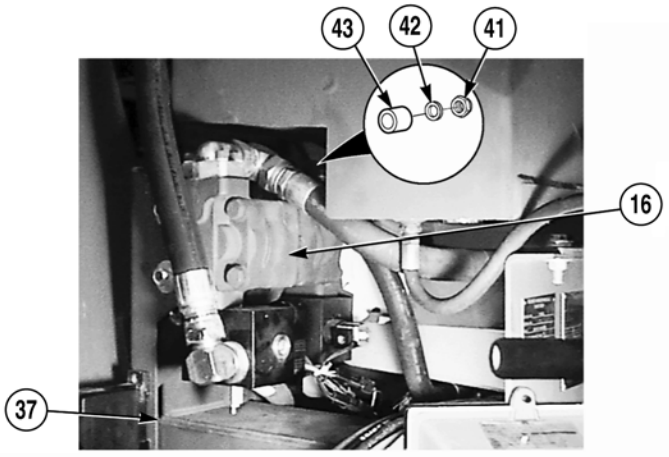
(15) Remove hose (31) from elbow (32).



(16) Remove two locknuts (33), screws (34), four washers (35), and angle motor pump mount (36) from subframe (37). Discard locknuts.

(17) Remove two locknuts (38), washers (39), spacers (40) and angle motor pump mount (36) from motor pump assembly (16). Discard locknuts.

(18) Remove angle motor pump mount (36) from subframe (37).



WARNING

Motor pump assembly weighs 110 lb (49.9 kg). Do not attempt to lift or remove motor pump assembly without aid of an assistant. Failure to comply could result in serious injury to personnel.

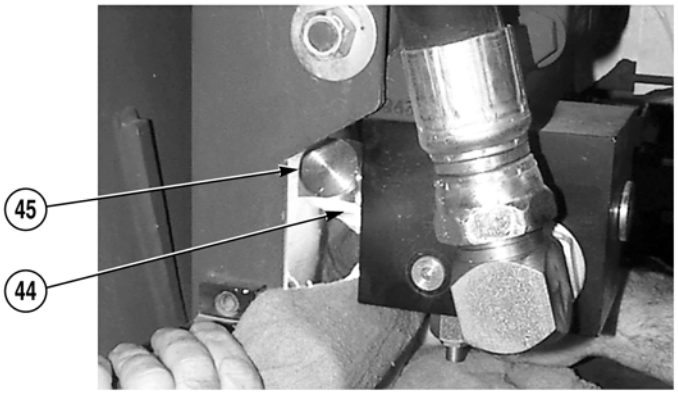
NOTE

- Note position of motor pump assembly prior to removal to ensure proper installation.
- Hose going from front manifold to hoist cylinder is still attached and can only be removed after motor pump assembly is removed from subframe.

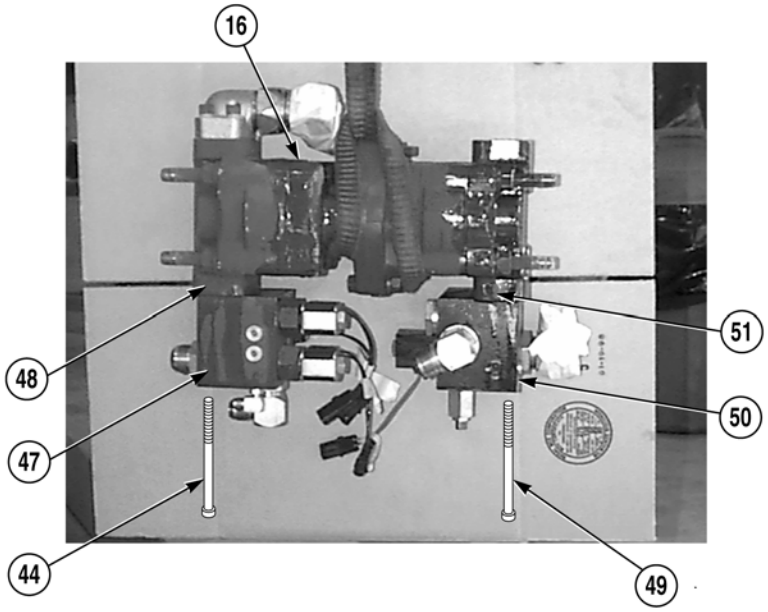
(19) Attach lifting device to motor pump assembly (16).

(20) With the aid of an assistant, remove two locknuts (41), washers (42), spacers (43) and motor pump assembly (16) from subframe (37). Discard locknuts.

3-9. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3089020 THRU 3093735) (CONT).

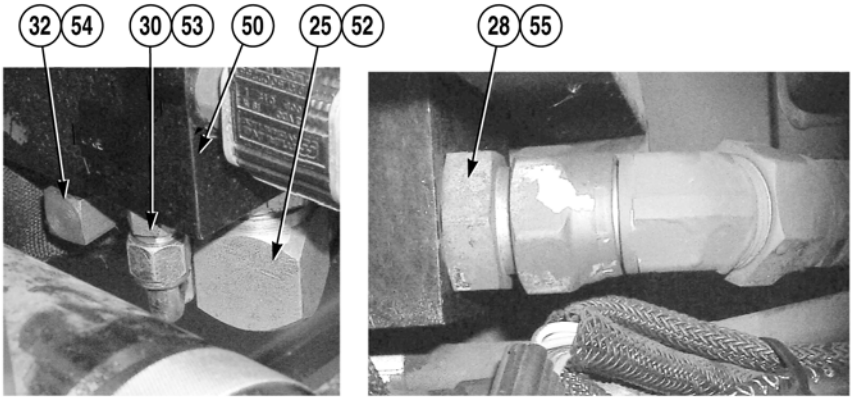


(21) Remove hose (44) from elbow (45).



(22) Remove four socket head screws (46), rear manifold (47) and preformed packing (48) from motor pump assembly (16). Discard preformed packing.

(23) Remove four socket head screws (49), front manifold (50) and preformed packing (51) from motor pump assembly (16). Discard preformed packing.

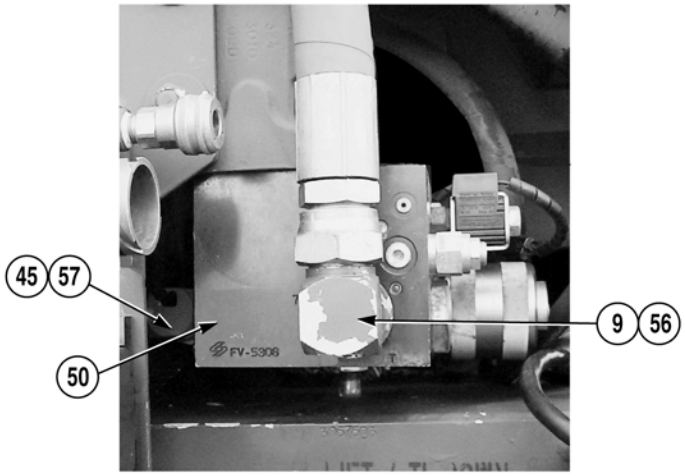


(24) Remove elbow (25) and preformed packing (52) from rear manifold (47). Discard preformed packing.

(25) Remove fitting (30) and preformed packing (53) from rear manifold (47). Discard preformed packing.

(26) Remove elbow (32) and preformed packing (54) from rear manifold (47). Discard preformed packing.

(27) Remove fitting (28) and preformed packing (55) from rear manifold (47). Discard preformed packing.

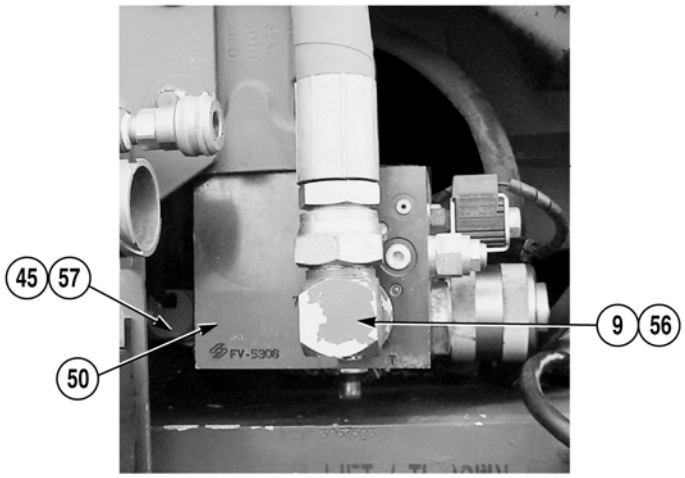


(28) Remove elbow (9) and preformed packing (56) from front manifold (50). Discard preformed packing.

(29) Remove elbow (45) and preformed packing (57) from front manifold (50). Discard preformed packing.

3-9. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3089020 THRU 3093735) (CONT).

b. Installation.



WARNING

Motor pump assembly weighs 110 lb (49.9 kg). Do not attempt to lift or remove motor pump assembly without aid of an assistant. Failure to comply could result in serious injury to personnel.

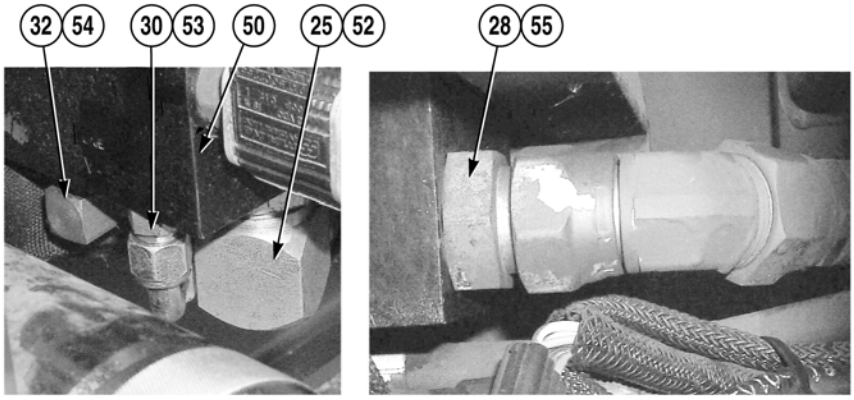
NOTE

Install fittings, elbows and relief valves as noted prior to removal.

(1) Apply hydraulic oil to preformed packings (57, 56, 55, 54, 53 and 52).

(2) Install elbow (45) and preformed packing (57) in front manifold (50).

(3) Install elbow (9) and preformed packing (56) in front manifold (50).

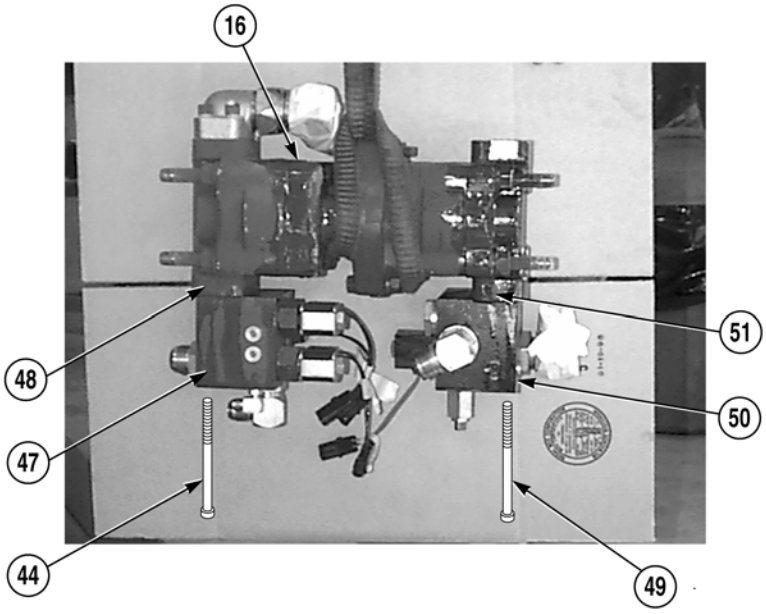


(4) Install fitting (28) and preformed packing (55) in rear manifold (47).

(5) Install elbow (32) and preformed packing (54) in rear manifold (47).

(6) Install fitting (30) and preformed packing (53) in rear manifold (47).

(7) Install elbow (25) and preformed packing (52) in rear manifold (47).



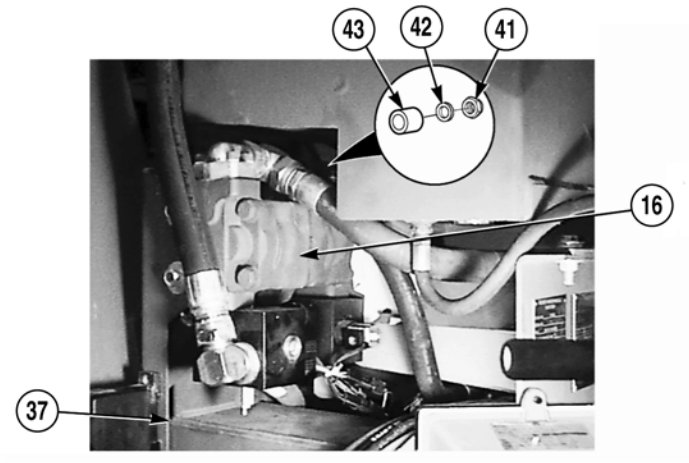
(8) Apply hydraulic oil to preformed packing (51).

(9) Install preformed packing (51) and front manifold (50) on motor pump assembly (16) with four socket head screws (49).

(10) Apply hydraulic oil to preformed packing (48).

(11) Install preformed packing (48) and rear manifold (47) on motor pump assembly (16) with four socket head screws (46).

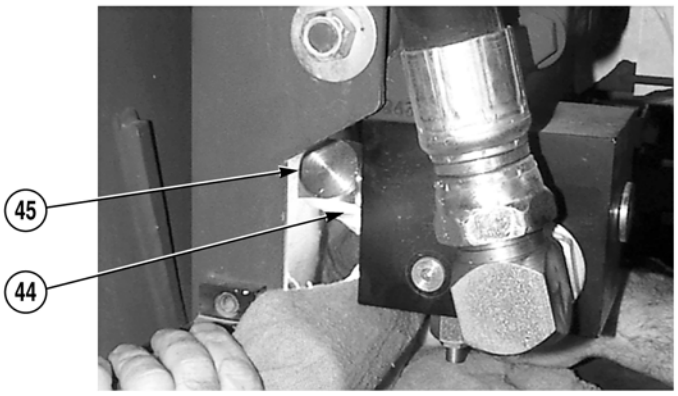
3-9. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3089020 THRU 3093735) (CONT).



NOTE

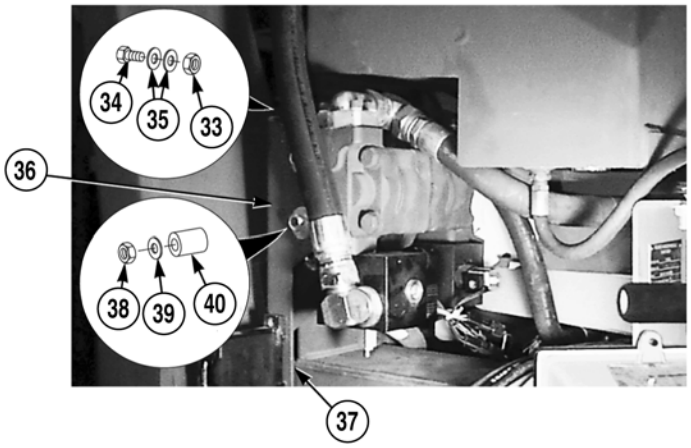
- Motor pump assembly must be positioned so hose going from front manifold to hoist cylinder can be attached.
- Install motor pump assembly as noted prior to removal to ensure proper installation.
- Install hoses and connectors in location and position as noted during removal.

(12) Attach lifting device to motor assembly pump (16) and position motor pump assembly (16) above subframe (37).



(13) Install hose (44) on elbow (45).

(14) With aid of an assistant, install motor pump assembly (16) on subframe (37) with two spacers (43), washers (42) and locknuts (41). Do not tighten locknuts.

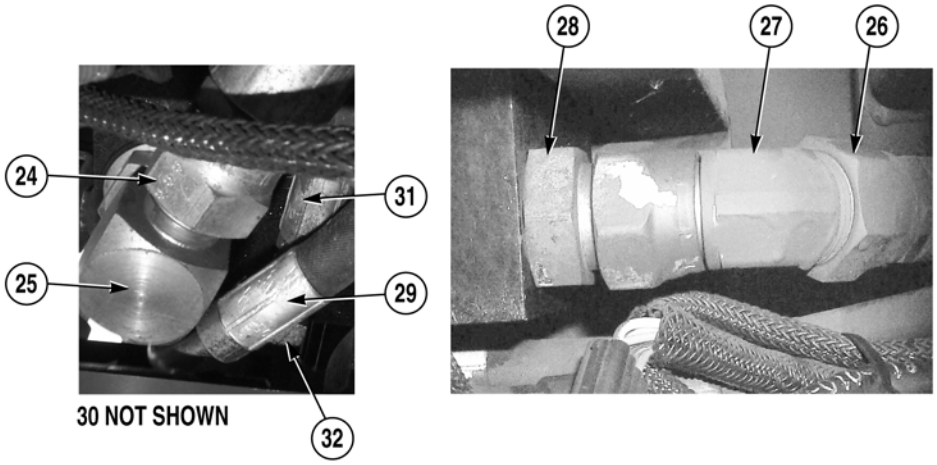


(15) Install angle motor pump mount (36) on motor pump assembly (16) with two spacers (40), washers (39) and locknuts (38). Do not tighten locknuts.

(16) Install angle motor pump mount (36) on subframe (37) with two screws (34), four washers (35) and two locknuts (33).

(17) Tighten four locknuts (38) and (41).

(18) Remove lifting device from motor pump assembly (16).



(19) Install hose (31) on elbow (32).

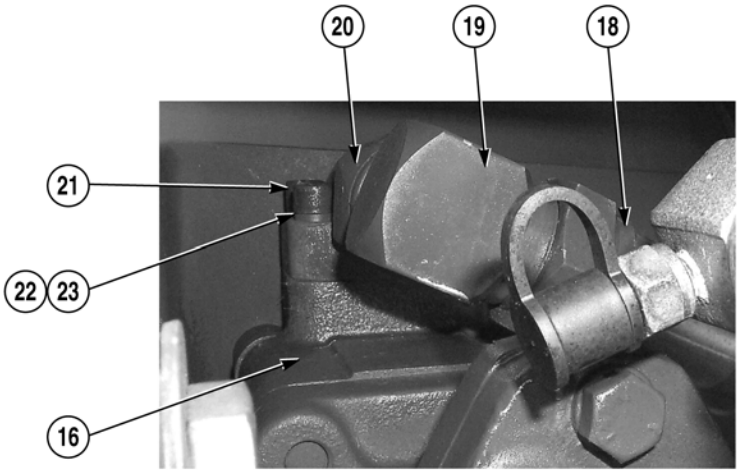
(20) Install hose (29) on fitting (30).

(21) Install elbow (27) on fitting (28).

(22) Install hose (26) on elbow (27).

(23) Install hose (24) on elbow (25).

3-9. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3089020 THRU 3093735) (CONT).

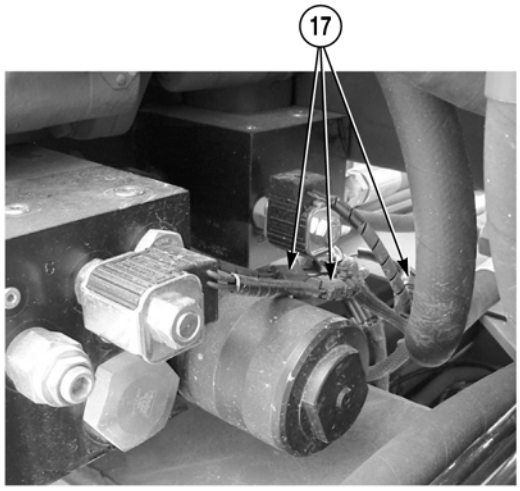


(24) Apply hydraulic oil to preformed packing (23).

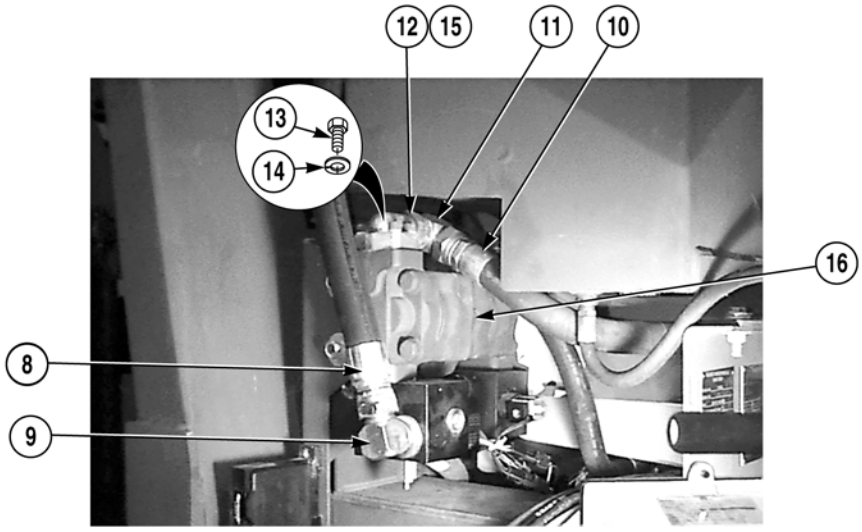
(25) Install preformed packing (23) and flange adapter (20) on motor pump assembly (16) with four lockwashers (22) and screws (21).

(26) Install elbow (19) on flange adapter (20).

(27) Install hose (18) on elbow (19).



(28) Connect three 2-pin (17) connectors.



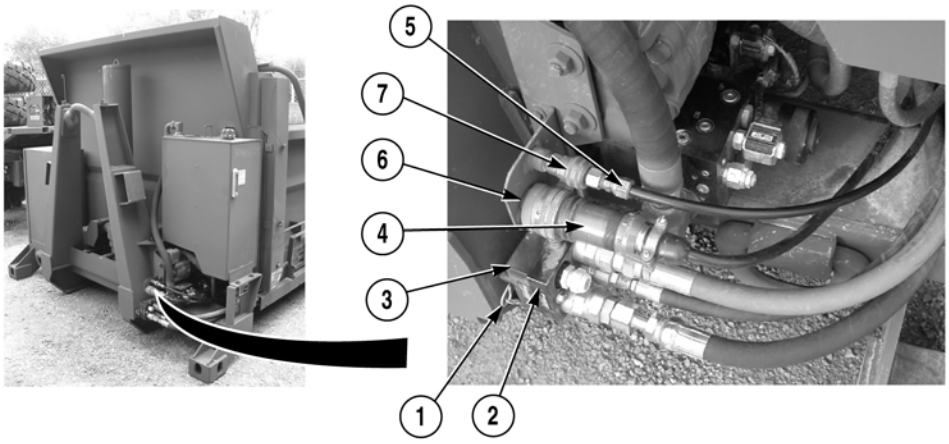
(29) Apply hydraulic oil to preformed packing (15).

(30) Install preformed packing (15) and flange adapter (12) on motor pump assembly (16) with four lockwashers (14) and screws (13).

(31) Install elbow (11) on flange adapter (12).

(32) Install hose (10) on elbow (11).

(33) Install hose (8) on elbow (9).



(34) Connect cable (4) and air line (5) on cap (6) and quick disconnect (7).

(35) Install hydraulic quick disconnect (2) on dump coupling (3) with retainer pin (1).

c. Follow-On Maintenance:

- Install high pressure filter base, (Para 3-15).
- Install hydraulic reservoir, (Para 3-16).

END OF TASK

3-10. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3093843 AND SUBSEQUENT).

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

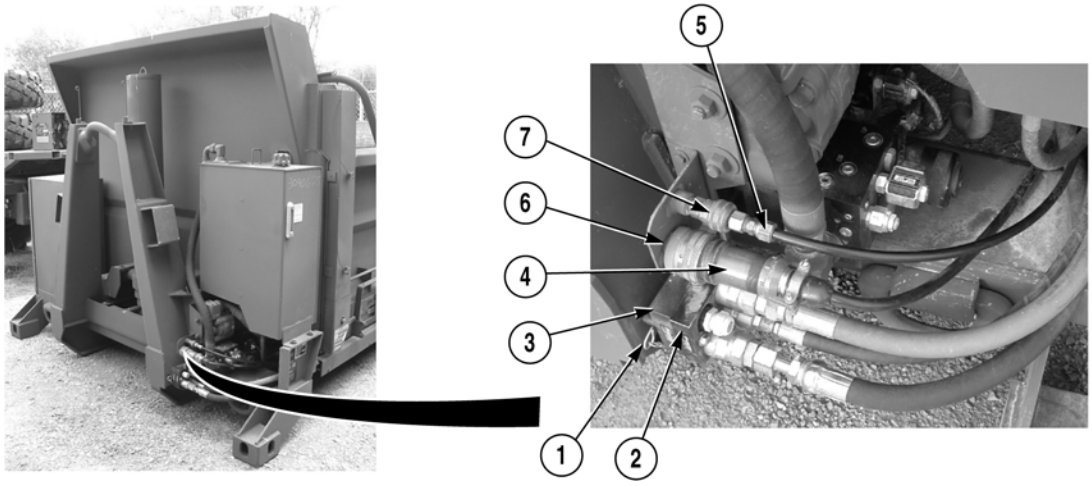
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Cap and Plug Set (Item 3, Appendix E)
Pan, Drain (Item 10, Appendix E)
Wrench, Combination, 1-3/8 in. (Item 15, Appendix E)
Wrench, Combination, 1-5/8 in. (Item 16, Appendix E)
Wrench, Combination, 1-7/8 in. (Item 17, Appendix E)

Personnel Required:
Two

Materials/Parts
7/16 in. Lockwasher (8) (HCLE-07)
5/8 in. Locknut (6) (M45913/1-10CG5C)
Hydraulic Oil (Item 2, Appendix D)
Tags, Identification (Item 4, Appendix D)
Preformed Packing Kit (Item 5, Appendix D)

Equipment Condition
Hydraulic reservoir removed, (Para 3-16)
Hydraulic high pressure oil filter base removed, (3093843 and Subsequent), (Para 3-15)

a. Removal.

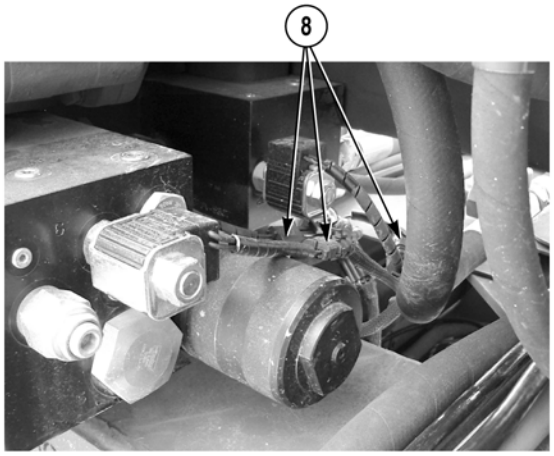


NOTE

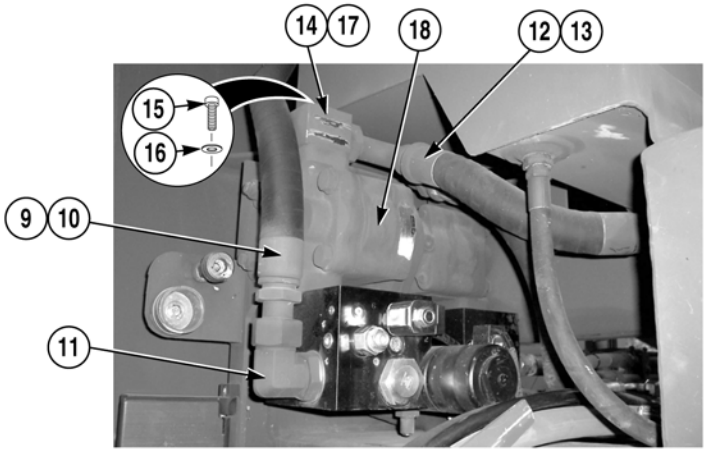
- Tag and mark hoses and connectors prior to removal.
- Cap and plug all hoses and fittings prior to removal.
- Use a container to catch hydraulic oil before disconnecting hydraulic lines or fittings.

(1) Remove retainer pin (1) and quick disconnect (2) from dummy coupling (3).

(2) Disconnect cable (4) and air line (5) from cap (6) and quick disconnect (7).



(3) Disconnect three connectors (8).

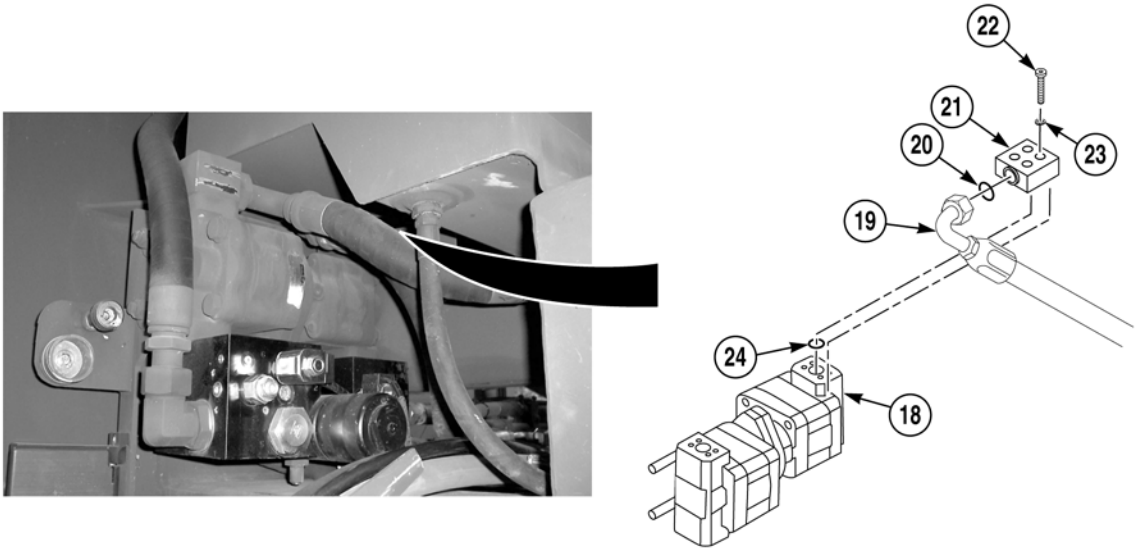


(4) Remove hose (9) and preformed packing (10) from elbow (11). Discard preformed packing.

(5) Remove hose (12) and preformed packing (13) from flange adapter (14). Discard preformed packing.

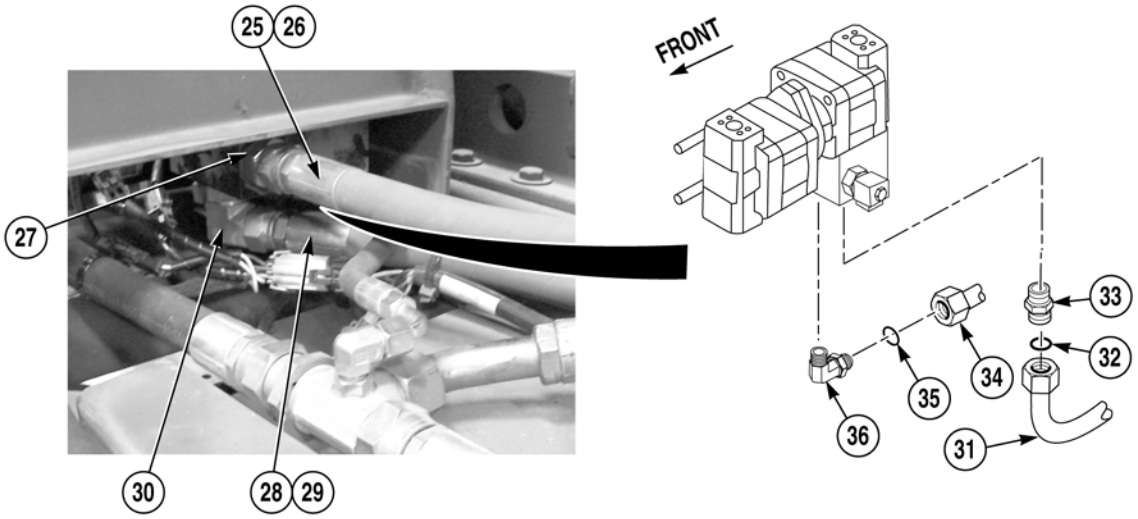
(6) Remove four screws (15), lockwashers (16), flange adapter (14) and preformed packing (17) from pump section of motor pump assembly (18). Discard preformed packing and lockwashers.

3-10. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3093843 AND SUBSEQUENT) (CONT).



(7) Remove hose (19) and preformed packing (20) from flange adapter (21). Discard preformed packing.

(8) Remove four screws (22), lockwashers (23), flange adapter (21) and preformed packing (24) from motor pump assembly (18). Discard lockwashers and preformed packing.

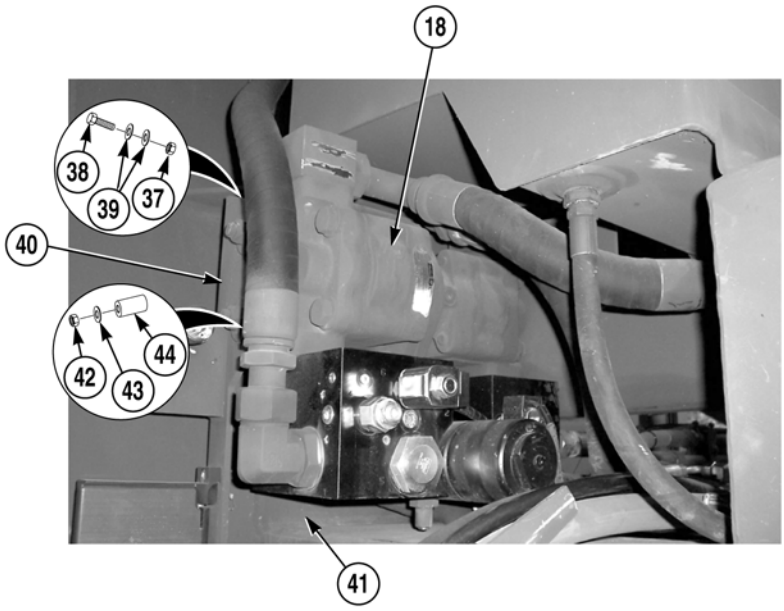


(9) Remove hose (25) and preformed packing (26) from fitting (27). Discard preformed packing.

(10) Remove hose (28) and preformed packing (29) from elbow (30). Discard preformed packing.

(11) Remove hose (31) and preformed packing (32) from fitting (33). Discard preformed packing.

(12) Remove hose (34) and preformed packing (35) from elbow (36). Discard preformed packing.



(13) Remove two locknuts (37), screws (38), four washers (39) and angle motor pump mount (40) from subframe (41). Discard locknuts.

(14) Remove two locknuts (42), washers (43), spacers (44) and angle motor pump mount (40) from motor pump assembly (18). Discard locknuts.

WARNING

Motor pump assembly weighs 110 lb (49.9 kg). Do not attempt to lift or remove motor pump assembly without the aid of an assistant and suitable lifting device. Failure to comply could result in serious injury.

CAUTION

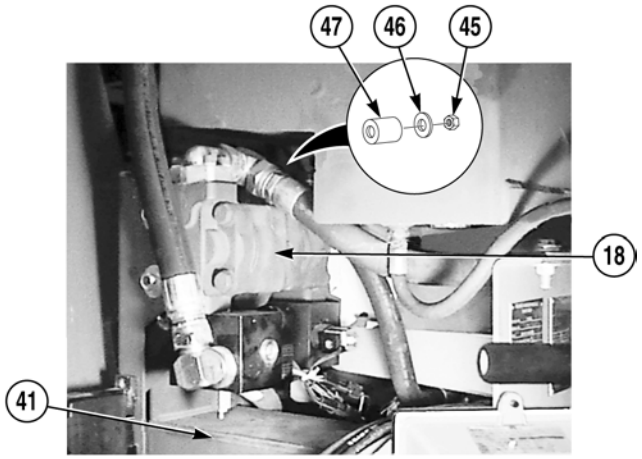
Hydraulic oil filter base must have been removed in equipment condition. Failure to comply will result in damage to equipment.

NOTE

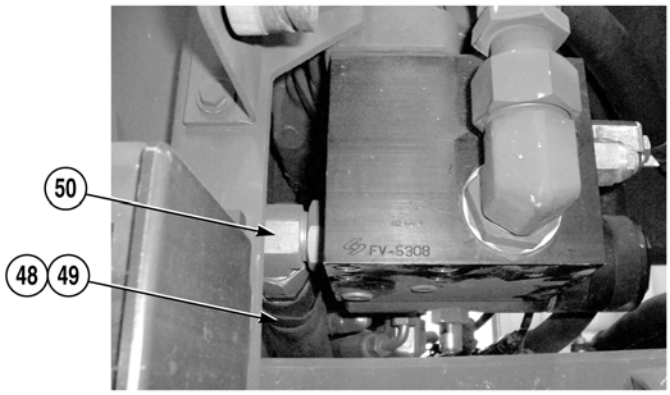
- Hose going from front manifold to hoist cylinder is still attached and can only be removed after motor pump assembly is removed from subframe.
- Note position of motor pump assembly prior to removal to ensure proper installation.

(15) Attach lifting device to motor pump assembly (18).

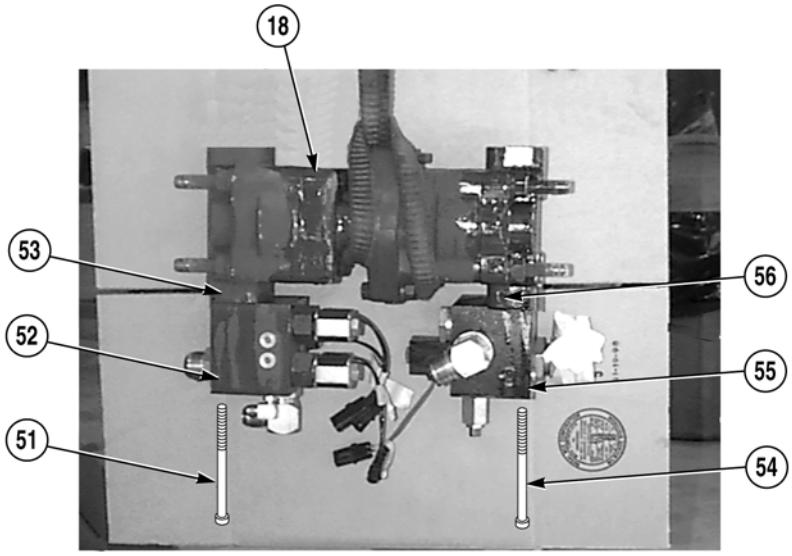
3-10. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3093843 AND SUBSEQUENT) (CONT).



(16) With the aid of an assistant and suitable lifting device, remove two locknuts (45), washers (46), spacers (47) and motor pump assembly (18) from subframe (41). Discard locknuts.

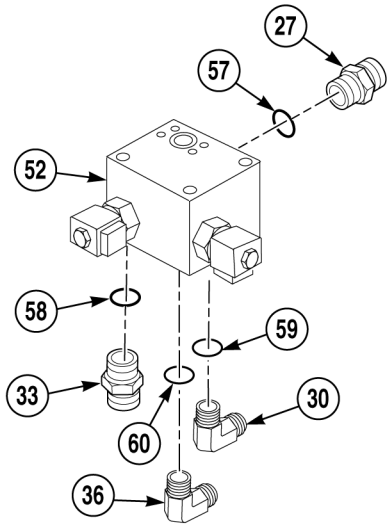


(17) Remove hose (48) and preformed packing (49) from elbow (50). Discard preformed packing.



(18) Remove four socket head screws (51), rear manifold (52) and preformed packing (53) from motor pump assembly (18). Discard preformed packing.

(19) Remove four socket head screws (54), front manifold (55) and preformed packing (56) from motor pump assembly (18). Discard preformed packing.



NOTE

Note position of elbows and fittings prior to removal.

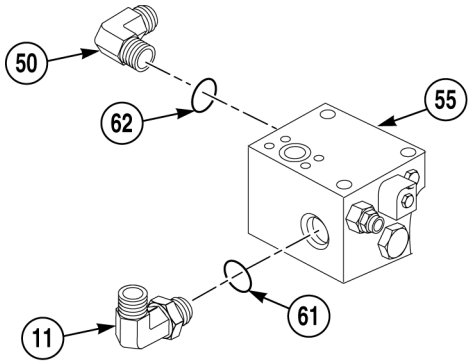
(20) Remove fitting (27) and preformed packing (57) from rear manifold (52). Discard preformed packing.

(21) Remove fitting (33) and preformed packing (58) from rear manifold (52). Discard preformed packing.

(22) Remove elbow (30) and preformed packing (59) from rear manifold (52). Discard preformed packing.

(23) Remove elbow (36) and preformed packing (60) from rear manifold (52). Discard preformed packing.

3-10. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3093843 AND SUBSEQUENT) (CONT).



(24) Remove elbow (11) and preformed packing (61) from front manifold (55). Discard preformed packing.

(25) Remove elbow (50) and preformed packing (62) from front manifold (55). Discard preformed packing.

b. Installation.

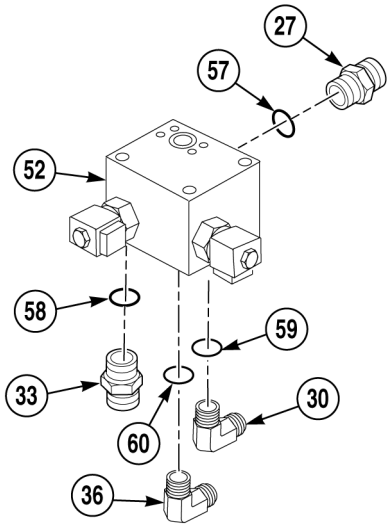
NOTE

Install elbows and fittings as noted prior to removal.

(1) Apply hydraulic oil to two preformed packings (61 and 62).

(2) Install preformed packing (62) and elbow (50) on front manifold (55).

(3) Install preformed packing (61) and elbow (11) on front manifold (55).



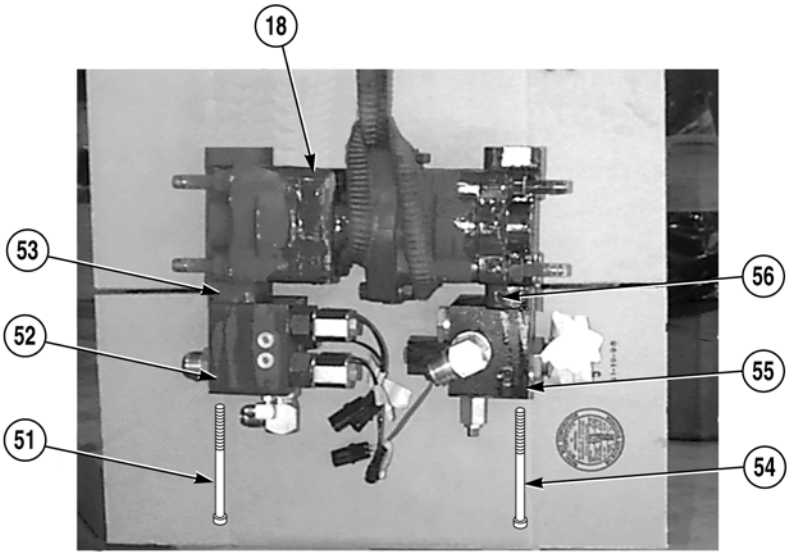
(4) Apply hydraulic oil to four preformed packings (57, 58, 59, and 60).

(5) Install preformed packing (60) and elbow (36) on rear manifold (52).

(6) Install preformed packing (59) and elbow (30) on rear manifold (52).

(7) Install preformed packing (58) and fitting (33) on rear manifold (52).

(8) Install preformed packing (57) and fitting (27) on rear manifold (52).

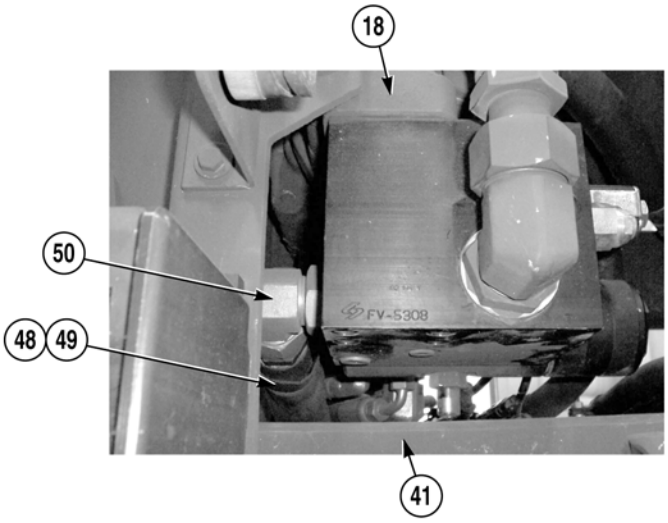


(9) Apply hydraulic oil to two preformed packings (53 and 56).

(10) Install preformed packing (56) and front manifold (55) on motor pump assembly (18) with four socket head screws (54).

(11) Install preformed packing (53) and rear manifold (52) on motor pump assembly (18) with four socket head screws (51).

3-10. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3093843 AND SUBSEQUENT) (CONT).



WARNING

Motor pump assembly weighs 110 lb (49.9 kg). Do not attempt to lift or remove motor pump assembly without the aid of an assistant. Failure to comply could result in serious injury to personnel.

NOTE

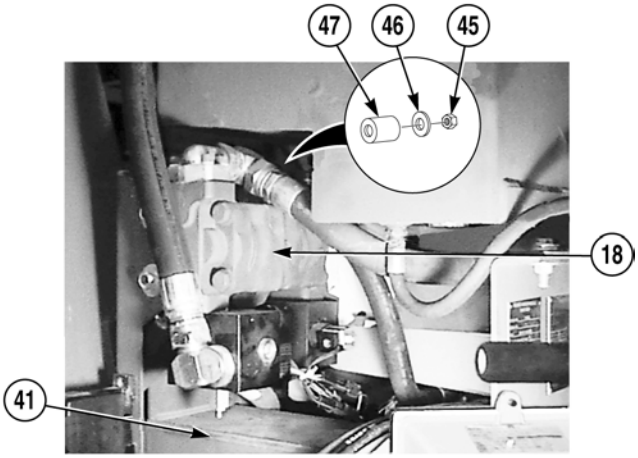
- Motor pump assembly must be positioned so hose going from front manifold to hoist cylinder can be attached.
- Install motor pump as noted prior to removal.

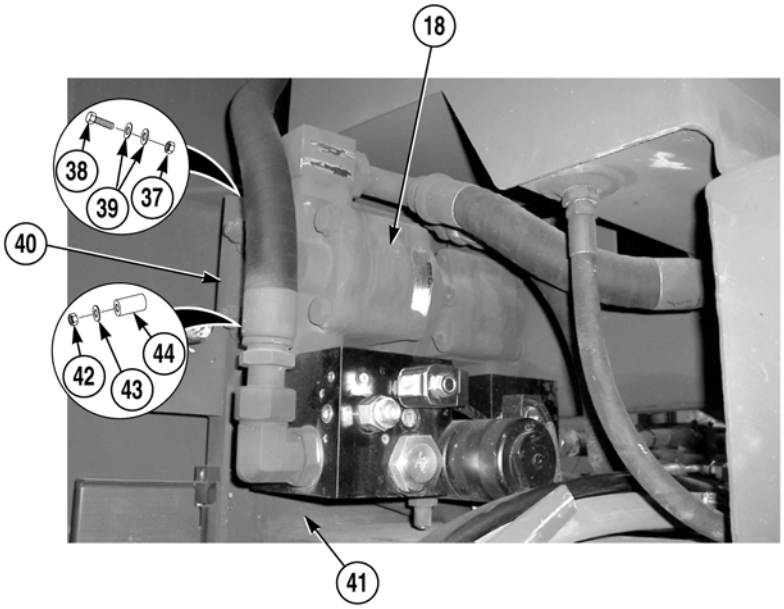
(12) With the aid of an assistant and suitable lifting device, position motor pump assembly (18) above subframe (41).

(13) Apply hydraulic oil to preformed packing (49).

(14) Install preformed packing (49) and hose (48) on elbow (50).

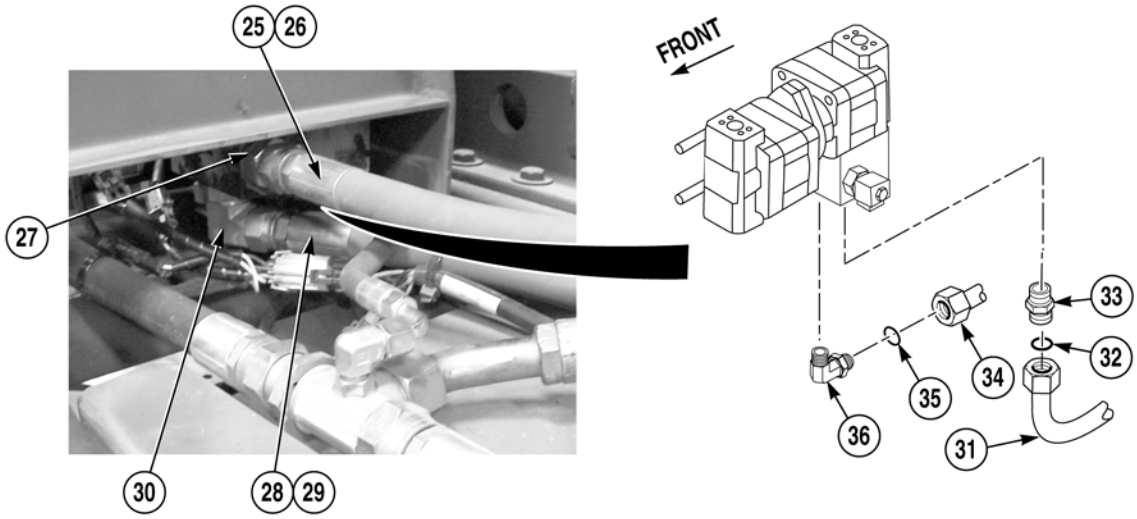
(15) Install motor pump assembly (18) on subframe (41) with two spacers (47), washers (46) and locknuts (45).





(16) Install angle motor pump mount (40) on motor pump assembly (18) with two spacers (44), washers (43) and locknuts (42).

(17) Install angle pump motor mount (40) on subframe (41) with two screws (38), four washers (39) and two locknuts (37).



(18) Apply hydraulic oil to four preformed packings (26, 29, 32 and 35).

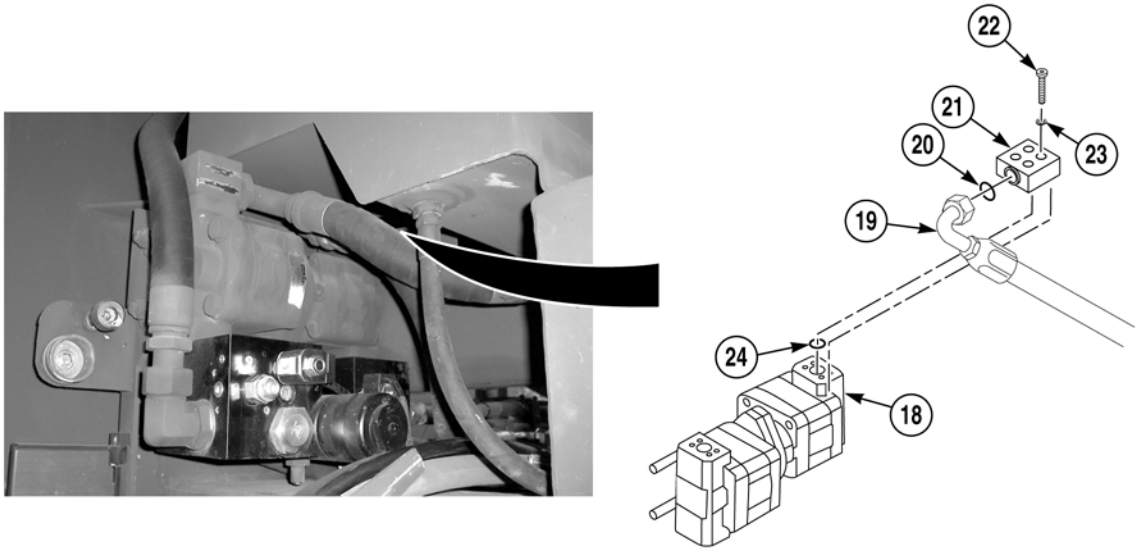
(19) Install preformed packing (35) and hose (34) on elbow (36).

(20) Install preformed packing (32) and hose (31) on fitting (33).

(21) Install preformed packing (29) and hose (28) on elbow (30).

(22) Install preformed packing (26) and hose (25) on fitting (27).

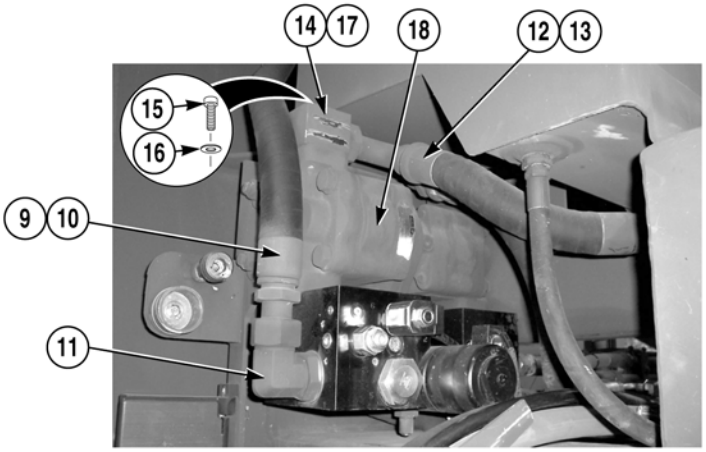
3-10. MOTOR PUMP ASSEMBLY REPLACEMENT (S/N 3093843 AND SUBSEQUENT) (CONT).



(23) Apply hydraulic oil to two preformed packings (20 and 24).

(24) Install preformed packing (24) and flange adapter (21) on motor pump assembly (18) with four lockwashers (23) and screws (22).

(25) Install preformed packing (20) and hose (19) on flange adapter (21).

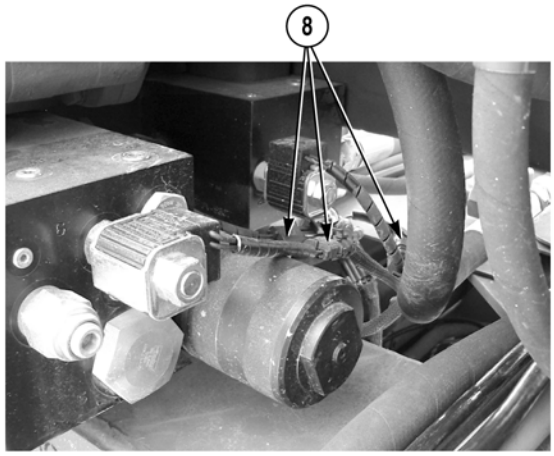


(26) Apply hydraulic oil to three preformed packings (10, 13 and 17).

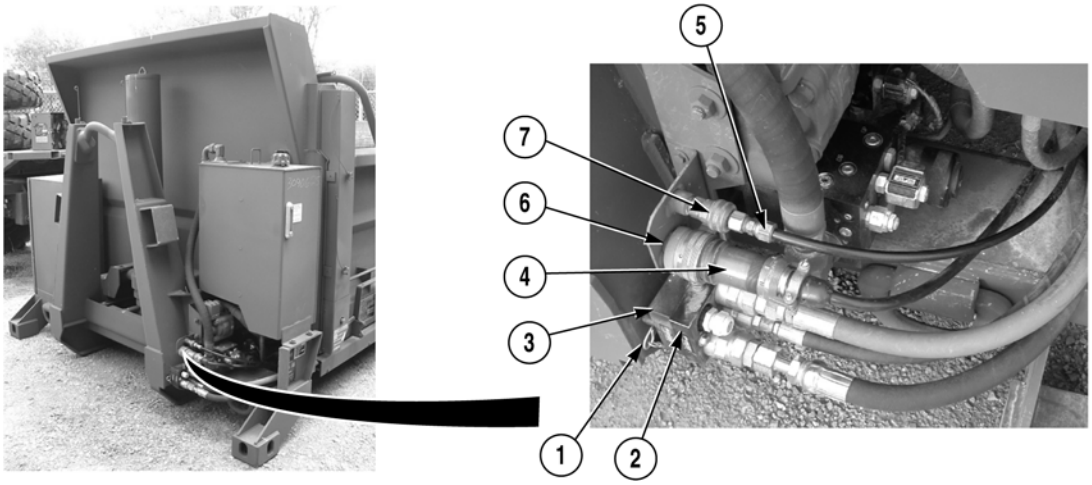
(27) Install preformed packing (17) and flange adapter (14) on pump section of motor pump assembly (18) with four lockwashers (16) and screws (15).

(28) Install preformed packing (13) and hose (12) on flange adapter (14).

(29) Install preformed packing (10) and hose (9) on elbow (11).



(30) Connect three connectors (8).



(31) Connect cable (4) and air line (5) on cap (6) and quick disconnect (7).

(32) Install quick disconnect (2) on dummy coupling (3) with retainer pin (1).

c. Follow-On Maintenance:

- Install hydraulic high pressure oil filter base, (Para 3-15).
- Install hydraulic high pressure reservoir, (Para 3-16).
- Fill hydraulic reservoir, (Para 3-13).
- Check for leaks.

END OF TASK

3-11. DUMP BODY REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Lifting Device, Minimum Capacity 5500 lb (2495 kg)

Materials/Parts
3/4 in. Locknut (2)
MIL-DTL-45913/3A-M45913/3-12CG8

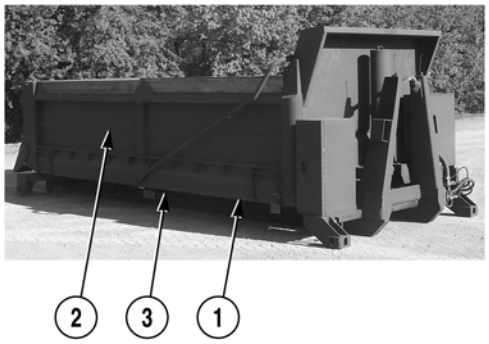
Personnel Required:
Two

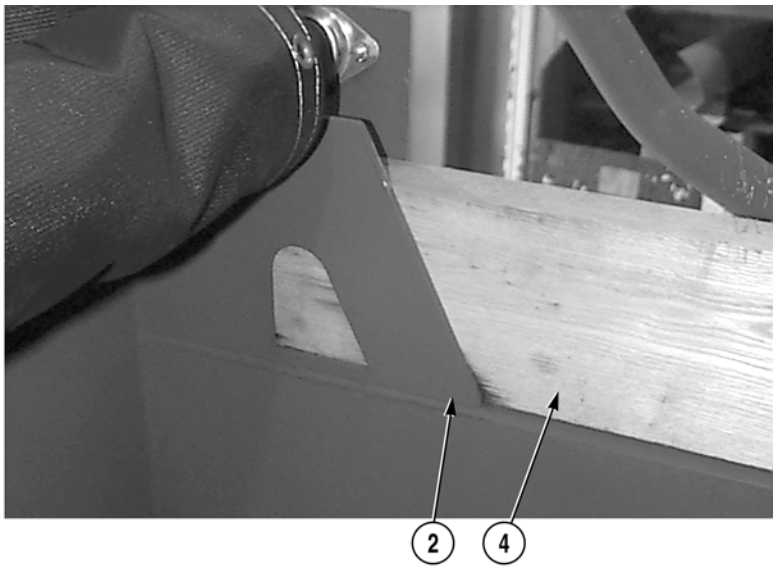
Equipment Condition
Dump Body unloaded, (Para 2-5)
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Tailgate removed, (Para 3-17) (Optional)
Tarp removed, (Para 3-3)
Air valve removed, (Para 3-5)
Air cylinder removed, (Para 3-6)
Dump Body air lines removed, (Para 3-29)
Hoist disconnected from Dump Body, (Para 3-12)
Stabilizer bar disconnected from Dump Body, (Para 3-8)

a. Removal.

WARNING

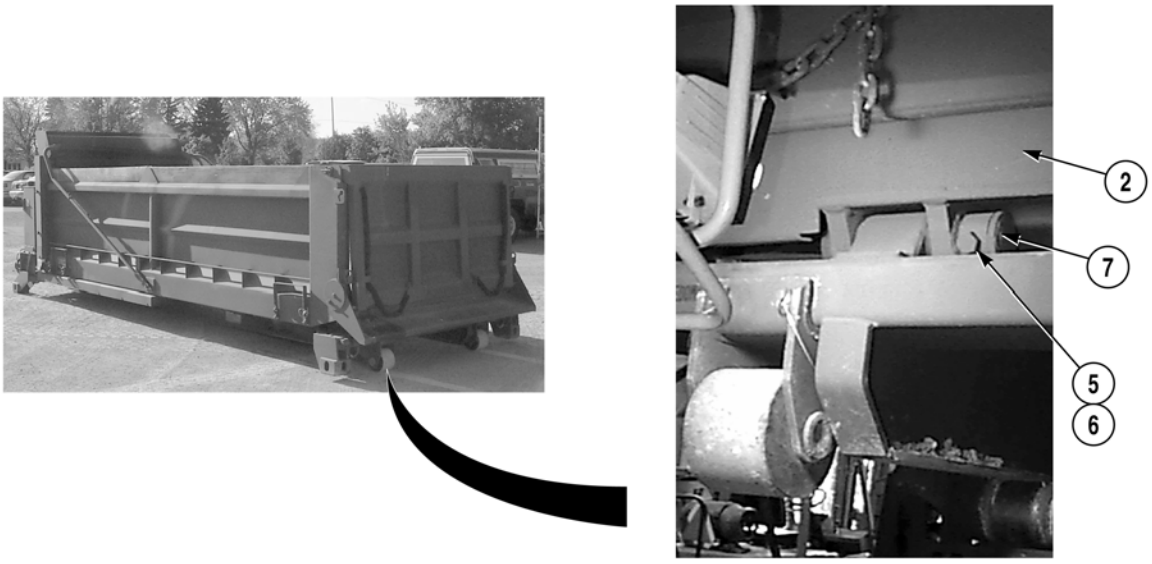
Dump Body weighs 5125 lb (2325 kg). Do not attempt to lift or move Dump Body without the aid of an assistant and a lifting device. Failure to comply could result is serious injury to personnel.





(1) With the aid of an assistant and using a lifting device, stow body props (1) and lower Dump Body (2) to subframe (3).

(2) Remove two side boards (4) from rear half of Dump Body (2).



WARNING

Ensure lifting device is centered and four lifting chains or slings are equal length prior to lifting. Failure to comply may result in injury or death to personnel.

NOTE

When attaching lifting device to Dump Body, use holes located on front and rear of Dump Body where side boards were removed as lifting points. Lifting device should be attached to Dump Body only.

(3) Attach lifting device to Dump Body (2).

(4) At rear of Dump Body (2), remove two locknuts (5) and screws (6) from Dump Body and pin (7). Discard locknuts.

WARNING

Ensure Dump Body is supported with lifting device prior to removing pins. Dump Body could drop suddenly causing injury or death to personnel.

NOTE

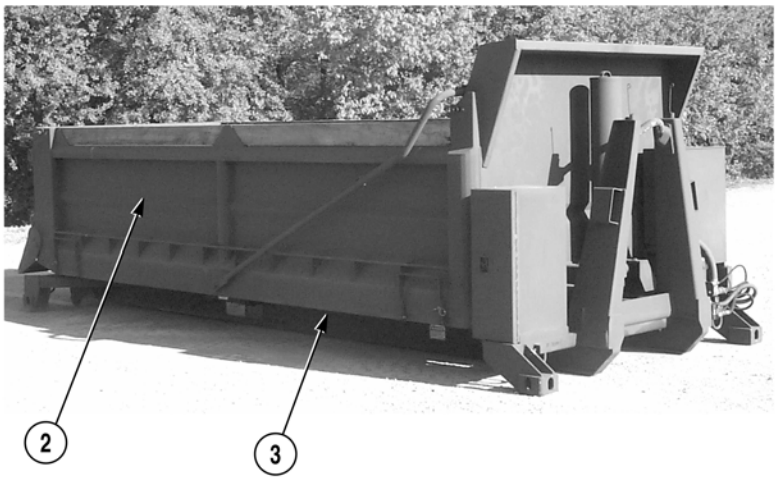
It may be necessary to raise Dump Body slightly to remove pins.

(5) Remove two pins (7) from rear of Dump Body (2).

3-11. DUMP BODY REPLACEMENT (CONT).

WARNING

Dump Body weighs 5125 lb (2325 kg). Do not attempt to lift or move Dump Body without the aid of an assistant and a lifting device. Failure to comply could result is serious injury to personnel.



(6) With the aid of an assistant and using a lifting device, remove Dump Body (2) from subframe (3).

(7) Lower Dump Body (2) on ground and remove lifting device.

b. Installation.

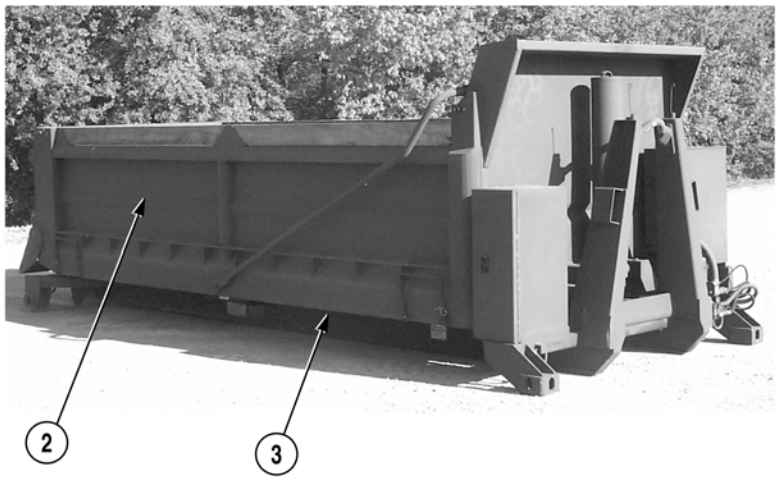
WARNING

- Dump Body weighs 5125 lb (2325 kg). Do not attempt to lift or move Dump Body without the aid of an assistant and a lifting device. Failure to comply could result is serious injury to personnel.
- Ensure lifting device is centered and four lifting chains or slings are equal length prior to lifting. Failure to comply may result in injury or death to personnel.

NOTE

When attaching lifting device to Dump Body, use holes located on front and rear of Dump Body where side boards were removed as lifting points. Lifting device should be attached to Dump Body only.

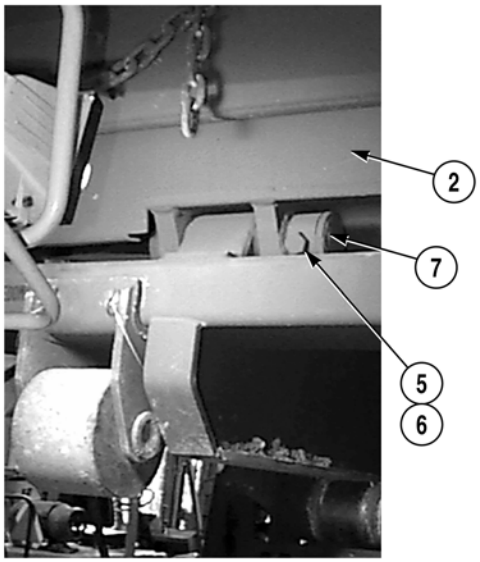
(1) Attach lifting device to Dump Body (2).

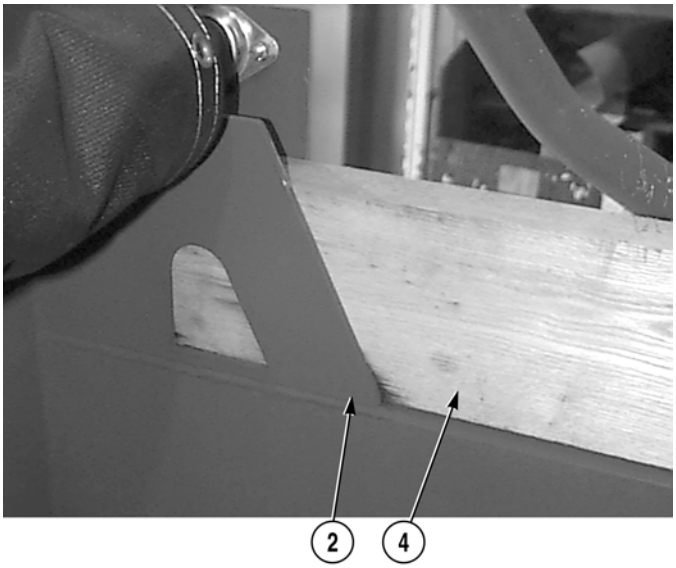


NOTE

Align holes in Dump Body with holes in subframe.

(2) With the aid of an assistant and a lifting device, position Dump Body (2) on subframe (3).





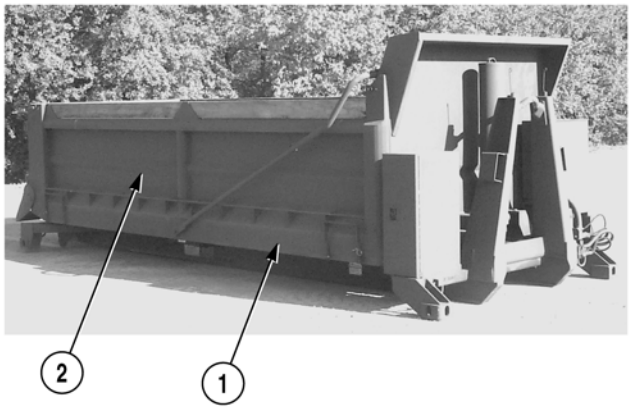
(3) Install two pins (7) in Dump Body (2).

(4) Install two screws (6) and locknuts (5) on pin (7) and Dump Body (2).

(5) Lower Dump Body (2) remove lifting device.

(6) Install two rear side boards (4) on rear half of Dump Body (2).

3-11. DUMP BODY REPLACEMENT (CONT).



NOTE

When attaching lifting device to Dump Body, use holes located on front and rear of Dump Body where side boards were removed as lifting points. Lifting device should be attached to Dump Body only.

(7) Attach lifting device to front of Dump Body (2).

(8) With the aid of an assistant and using a lifting device, raise Dump Body (2).

(9) Deploy body props (1), (Para 2-14).

(10) Remove lifting device from Dump Body (2).

(11) Install two front side boards (4) on Dump Body (2).

c. Follow-On Maintenance:

- Connect stabilizer bar to Dump Body, (Para 3-8).
- Connect hoist connected, (Para 3-12).
- Install Dump Body air lines, (Para 3-29).
- Install air cylinder, (Para 3-6).
- Install air valve, (Para 3-5).
- Install tarp assembly, (Para 3-3).
- Install tailgate, (Para 3-17) (if removed).
- Load Dump Body, (Para 2-5).

END OF TASK

3-12. HOIST REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Lifting Device, Minimum Capacity 5500 lb (2495 kg)
Cap and Plug Set (Item 3, Appendix E)
Pan, Drain (Item 10, Appendix E)
1-1/2 in. Wrench (Item 13, Appendix E)

Materials/Parts
1/2 in. Locknut (60860AX)
5/8 in. Locknut (16) (M45913/1-10CG5C)
Preformed Packing Kit (Item 5, Appendix D)

Personnel Required:
Two

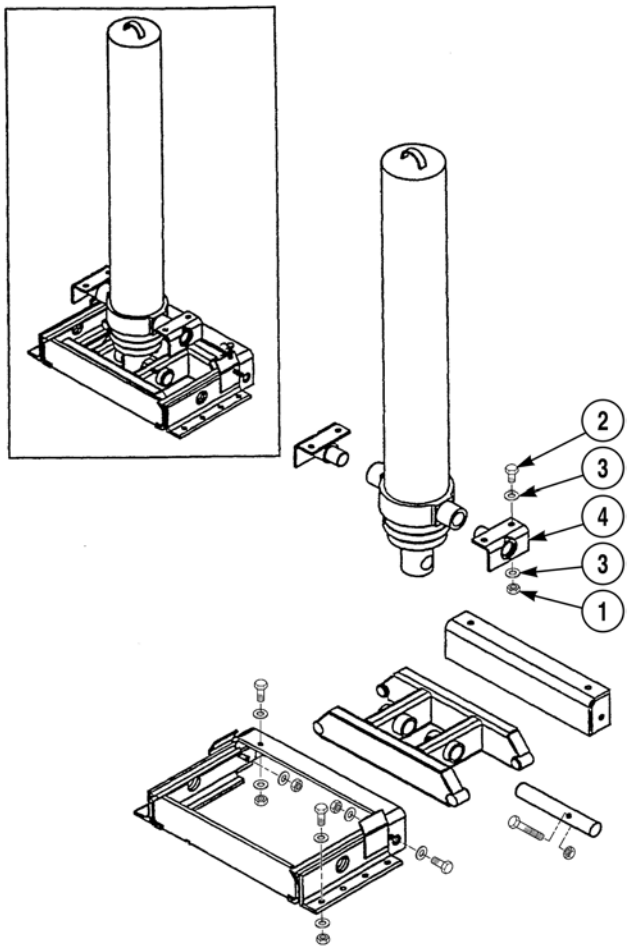
Equipment Condition
Dump Body unloaded, (Para 2-5)
Hydraulic reservoir drained, (Para 3-13)
Travel locks unlocked, (Para 2-13)

a. Removal.

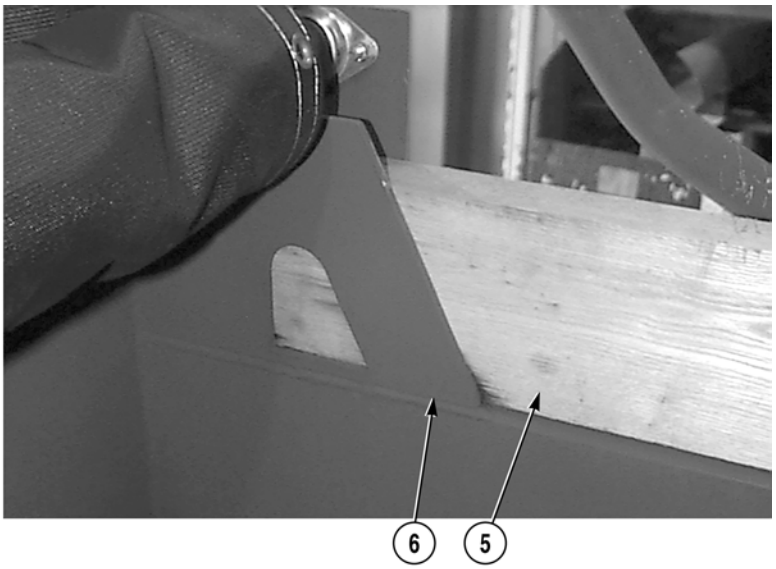
WARNING

Hoist cylinder may shift upon removal of screws. Support hoist cylinder prior to removal of screws to prevent injury to personnel.

(1) Remove four locknuts (1), screws (2), and eight washers (3) from upper hoist mount (4). Discard locknuts.



3-12. HOIST REPLACEMENT (CONT).



(2) Remove two side boards (5) from front section of Dump Body (6).

WARNING

An empty Dump Body with tailgate attached weighs 5500 lb (2495 kg). Do not attempt to lift or remove Dump Body without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

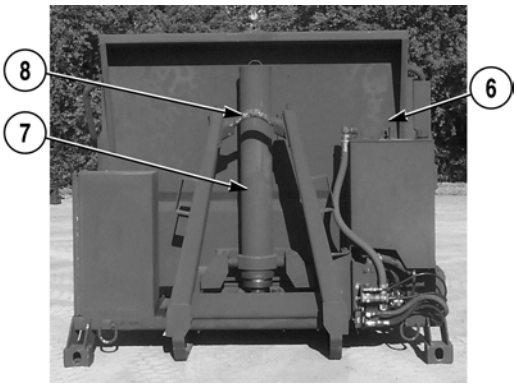
NOTE

When attaching lifting device to Dump Body, use holes located on front section of Dump Body where side boards were removed as lifting points. Lifting device should be attached to Dump Body only.

(3) Attach lifting device to Dump Body (6).

CAUTION

Attach strap to hoist cylinder before raising Dump Body. Cylinder can move front to rear causing damage to cylinder.



(4) Secure hoist cylinder (7) to bail bar (8) with strap.

(5) With the aid of an assistant and using a lifting device, raise Dump Body (6).

(6) Deploy body props, (Para 2-14).

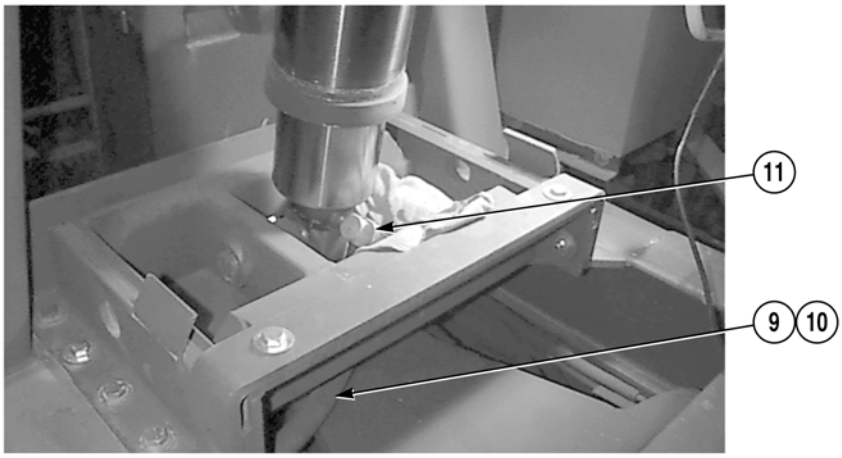
(7) Remove lifting device from Dump Body (6).

WARNING

Hoist cylinder weighs 750 lb (340 kg). Do not attempt to lift hoist cylinder without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

(8) Attach lifting device to hoist cylinder (7).

(9) Remove strap used to secure hoist cylinder (7) in bail bar (8).



(10) Position drain pan under hose (9).

NOTE

- Cap and plug all hoses and fittings upon removal.
- Note position and location of hose prior to removal.
- Preformed packing may or may not be present.

(11) Remove hose (9) and preformed packing (10) from fitting (11).

3-12. HOIST REPLACEMENT (CONT).

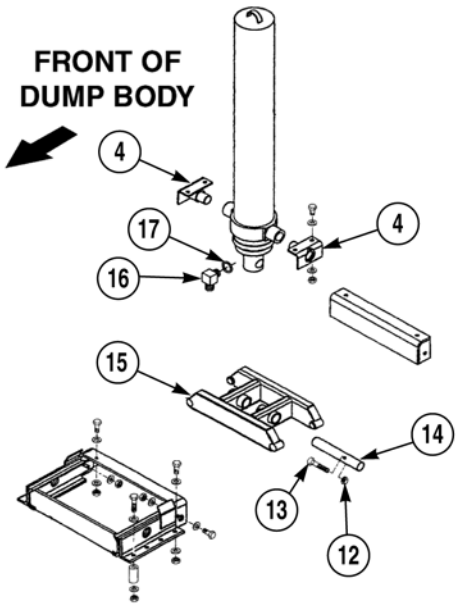
(12) Remove two upper mounts (4) from cylinder assembly (7).

(13) Remove locknut (12) and screw (13) from lower mount pin (14) and lower cylinder mount assembly (15). Discard locknut.

NOTE

It may be necessary to support bottom of cylinder to remove lower mount pin.

(14) Remove lower mount pin (14) from lower cylinder mount assembly (15) and cylinder assembly (7).



WARNING

Hoist cylinder weighs 750 lb (340 kg). Do not attempt to lift hoist cylinder without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

NOTE

Ensure cap is installed on fitting. Cap will prevent hoist cylinder from fully extending.

(15) Remove hoist cylinder (7) from lower cylinder mount (15).

(16) Position hoist cylinder (7) on ground and remove lifting device.

WARNING

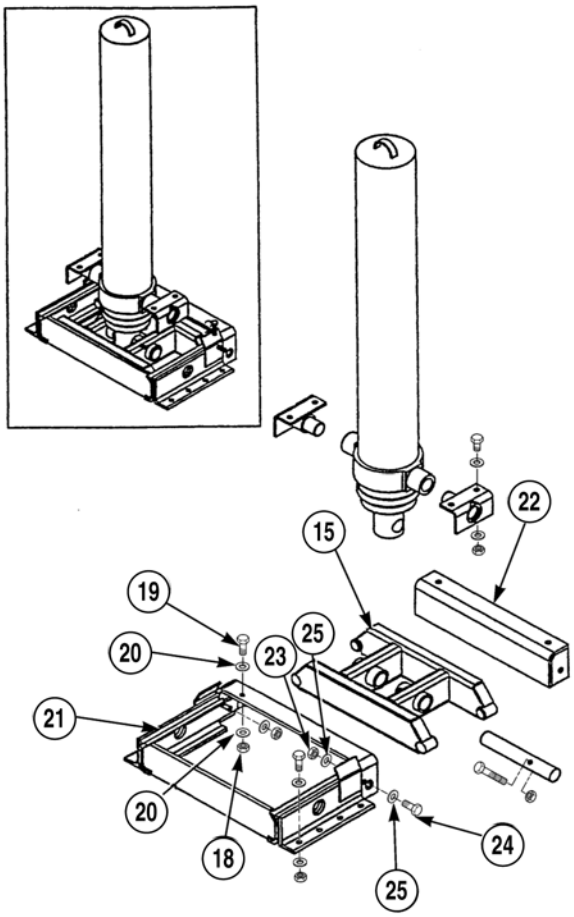
Note position of elbow prior to removal to aid installation. Elbow must be re-installed pointing toward lower right as viewed from the rear of dump body. Failure to comply may result in damage to equipment and injury or death to personnel.

(17) Remove elbow (16) and preformed packing (17) from hoist cylinder (7). Discard preformed packing.

(18) Remove two lock nuts (18), screws (19), and four washers (20) from top of lower mount assembly (21) and rear plate assembly (22). Discard locknuts.

(19) Remove two locknuts (23), screws (24), and four washers (25) from side of lower mount assembly (21) and rear plate assembly (22). Discard locknuts.

(20) Remove rear plate assembly (22) from lower mount assembly (21).



WARNING

Lower cylinder mount assembly weighs 75 lb (34 kg). Do not attempt to slide it out from lower mount assembly without the aid of an assistant. Failure to comply could result in serious injury to personnel.

NOTE

- Lower cylinder mount assembly slides out to rear of Dump Body.
- Note position of lower cylinder mount assembly prior to removal.

(21) With the aid of an assistant, remove lower cylinder mount assembly (15) from lower mount assembly (21).

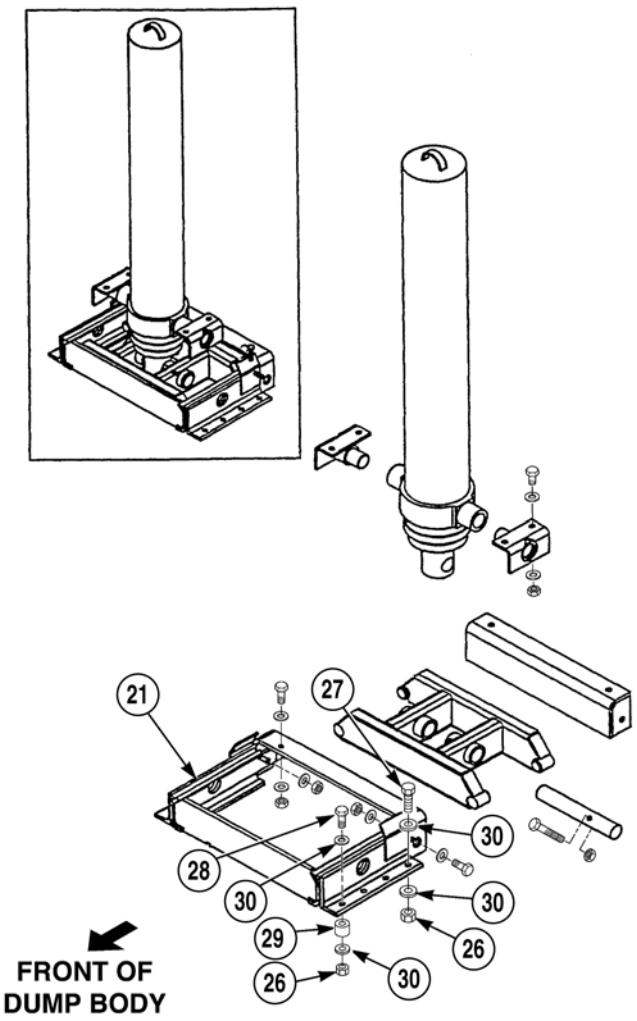
3-12. HOIST REPLACEMENT (CONT).

(22) Remove eight locknuts (26), four screws (27), screws (28), spacers (29), and 16 washers (30) from lower mount assembly (21) and subframe. Discard locknuts.

WARNING

Lower mount assembly weighs 110 lb (50 kg). Do not attempt to slide it out from lower mount assembly without the aid of an assistant. Failure to comply could result in serious injury to personnel.

(23) Remove lower mount assembly (21) from subframe.



b. Installation.

WARNING

Lower mount assembly weighs 110 lb (50 kg). Do not attempt to slide it out from lower mount assembly without the aid of an assistant. Failure to comply could result in serious injury to personnel.

(1) With the aid of an assistant, position lower mount assembly (21) on subframe.

(2) Install lower mount assembly (21) in subframe with four screws (27), screws (28), spacers (30), 16 washers (29), and eight locknuts (26).

WARNING

Lower cylinder mount assembly weighs 75 lb (34 kg). Do not attempt to lift lower mount assembly without the aid of an assistant. Failure to comply could result in serious injury to personnel.

NOTE

- Hole for lower mount pin should be in left front.
- Install lower cylinder mount assembly as noted prior to removal.

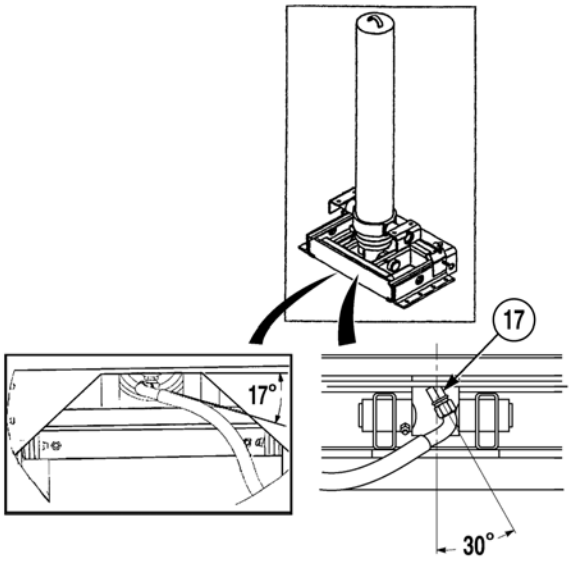
(3) With aid of an assistant, position lower cylinder mount assembly (15) in lower mount assembly (21).

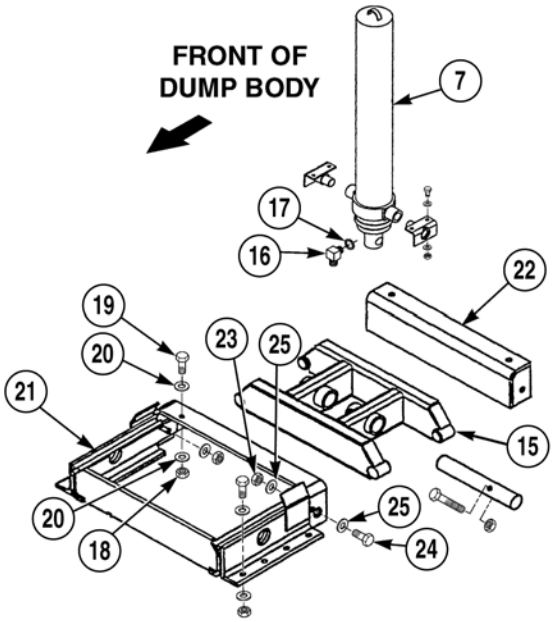
(4) Position rear plate assembly (22) in lower mount assembly (21).

(5) Install two locknuts (21), four washers (23), and screws (24) through side of lower mount assembly (21) and rear plate assembly (20).

(6) Install two locknuts (18), four washers (20), and two screws (19) through top of lower mount assembly (21) and rear plate assembly (22).

(7) Apply hydraulic oil to preformed packing (17).





3-12. HOIST REPLACEMENT (CONT).

WARNING

Note position of elbow prior to removal to aid installation. Elbow must be re-installed pointing toward lower right as viewed from the rear of dump body. Failure to comply may result in damage to equipment and injury or death to personnel.

(8) Install elbow (16) and preformed packing (17) in hoist cylinder (7).

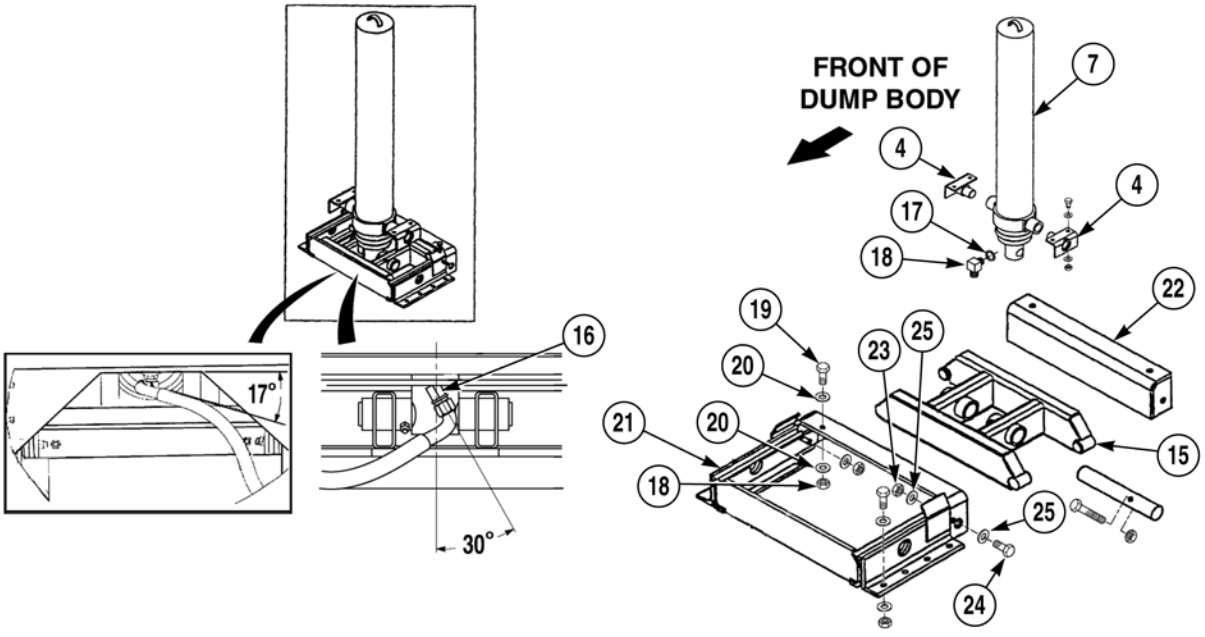
(9) Position two upper mounts (4) on cylinder assembly (7).

WARNING

Hoist cylinder weighs 750 lb (340 kg). Do not attempt to lift hoist cylinder without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

(10) Attach lifting device to hoist cylinder (7).

(11) Position hoist cylinder (7) in lower cylinder mount (15).



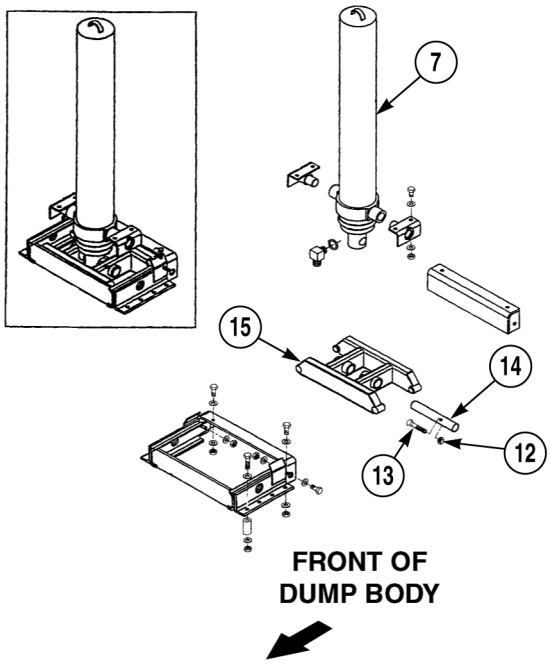
NOTE

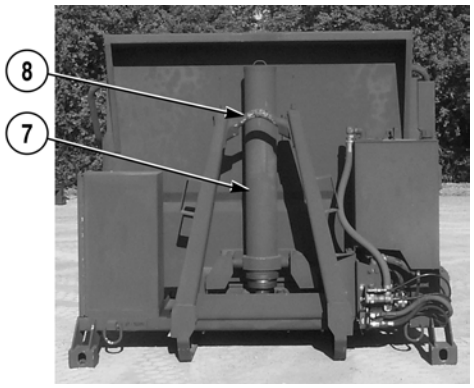
Ensure hole in lower mount pin aligns with hole in lower cylinder mount assembly.

(12) Install lower mount pin (14) in lower cylinder mount assembly (15) and hoist cylinder (7).

(13) Install screw (13) and locknut (12) in lower mount pin (14) and lower cylinder mount assembly (15).

(14) Remove lifting device from hoist cylinder (7).





CAUTION

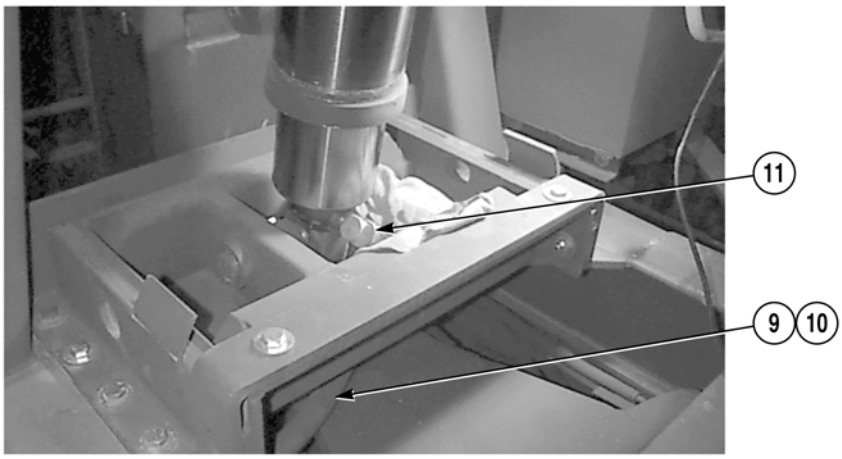
Attach strap to hoist cylinder. Cylinder can move front to rear causing damage to cylinder.

NOTE

It may be necessary to loosen cap to bleed air from cylinder.

(15) Secure hoist cylinder (7) to bail bar (8) with strap.

3-12. HOIST REPLACEMENT (CONT).

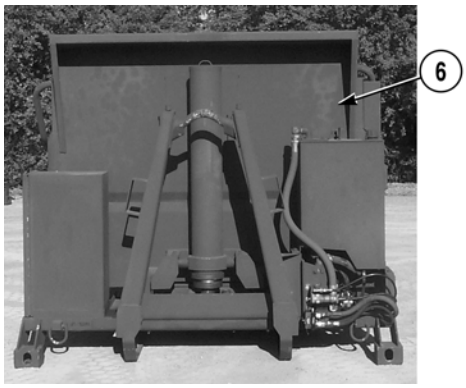


NOTE

- Install hose in position and location as noted prior to removal.
- Preformed packing may or may not be present.

(16) Apply hydraulic oil to preformed packing (10).

(17) Install preformed hose (9) on packing (10) and fitting (11).



WARNING

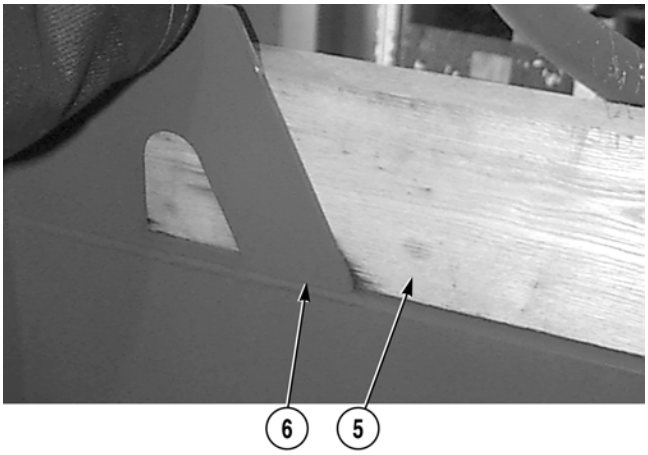
An empty Dump Body with tailgate attached weighs 5500 lb (2495 kg). Do not attempt to lift or move Dump Body without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

(18) Attach lifting device to Dump Body (6) and raise Dump Body (6).

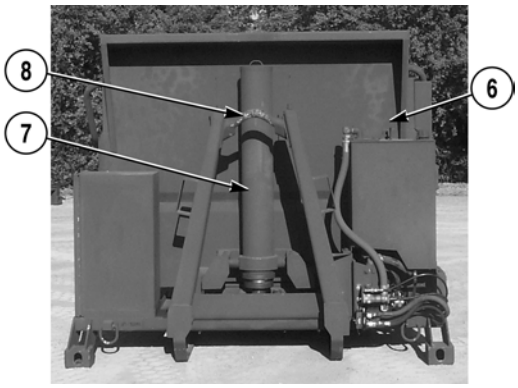
(19) Stow body props, (Para 2-14).

(20) With the aid of an assistant and using a lifting device, lower Dump Body (6).

(21) Remove lifting device from Dump Body (6).



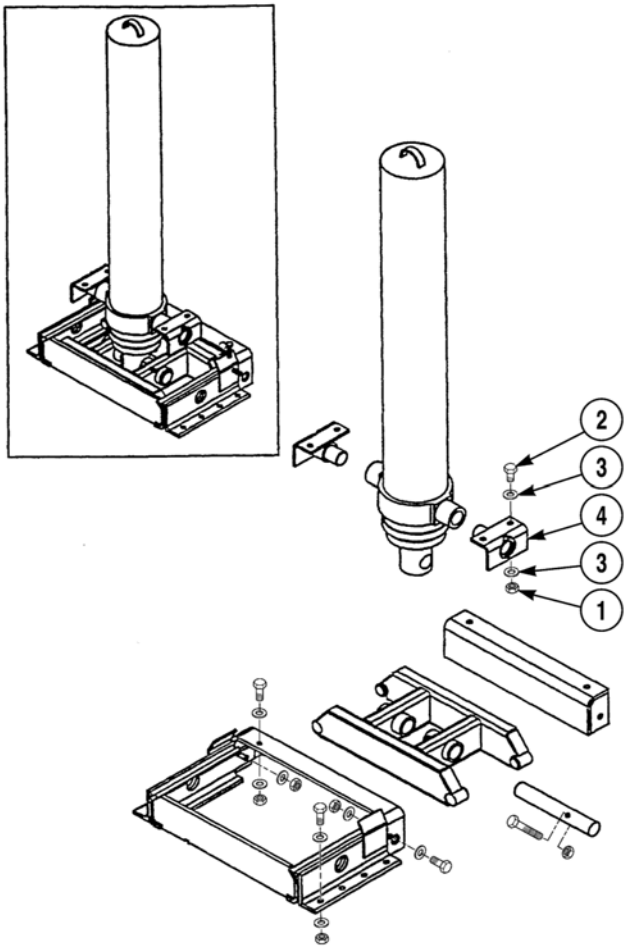
(22) Install two side boards (5) in front section of Dump Body (6).



(23) Remove strap securing hoist cylinder (7) to bail bar (8).

3-12. HOIST REPLACEMENT (CONT).

(24) Install eight washers (3), four locknuts (1), and screws (2) to upper hoist mount (4) and Dump Body (6).



c. Follow-On Maintenance:

- Fill hydraulic reservoir, (Para 3-13).
- Lock travel locks, (Para 2-13).
- Load Dump Body, (Para 2-5).
- Check Dump Body operation, (Para 2-15).
- Check for leaks.

END OF TASK

3-13. HYDRAULIC RESERVOIR DRAIN/FILL.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Pan, Drain (Item 10, Appendix E)

Materials/Parts
Hydraulic Oil (Item 2, Appendix D)
Sealing Compound (Item 3, Appendix D)

Equipment Condition
Dump Body unloaded, (Para 2-5)

a. Removal.

NOTE

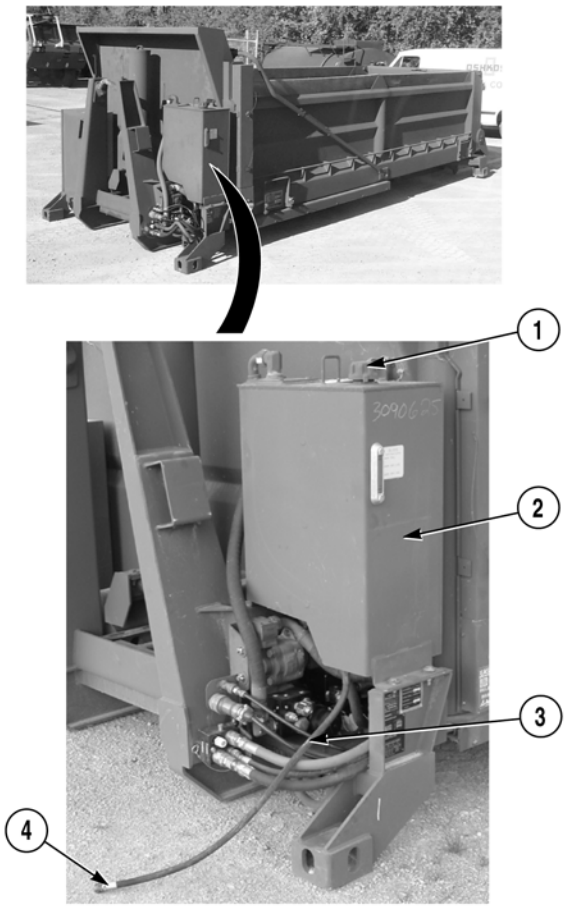
- Removal of fill cap will aid in draining fluid.
- Hydraulic reservoir capacity is approximately 28 gal. (106 L).

(1) Remove fill cap (1) from hydraulic reservoir (2).

(2) Unstow drain hose (3).

(3) Position drain pan under drain hose (3).

(4) Remove drain cap (4) from drain hose (3) and allow oil to drain completely from hydraulic reservoir (2).



3-13. HYDRAULIC RESERVOIR DRAIN/FILL (CONT).

WARNING

Adhesives, solvents, and sealing compounds can burn easily, can give off harmful vapors, and are harmful to skin and clothing. To avoid injury or death, keep away from open fire and use in well-ventilated area. If adhesives, solvent or sealing compound gets on skin or clothing, wash immediately with soap and water.

(5) Apply sealing compound to threads of drain hose (3).

(6) Install drain cap (4) on drain hose (3).

(7) Stow drain hose (3).

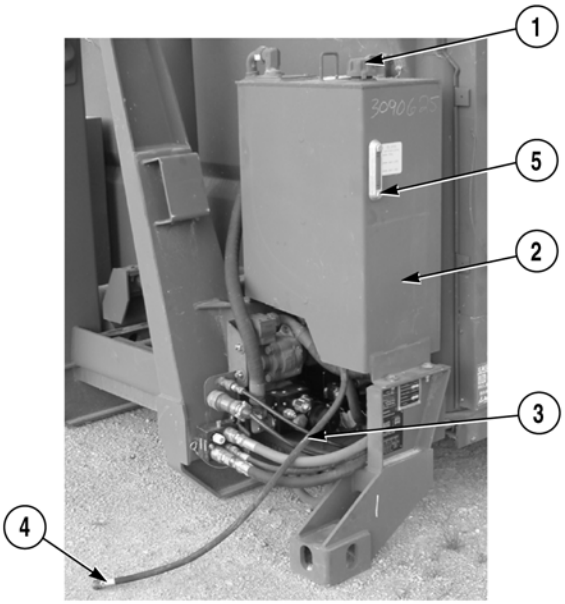
b. Fill.

NOTE

Observe level of oil in hydraulic reservoir through oil level gauge.

(1) Fill hydraulic reservoir (2) until level reaches top black line on oil level gauge (5).

(2) Install fill cap (1) on hydraulic reservoir (2).



c. Follow-On Maintenance:

- Check for leaks.

END OF TASK

3-14. HYDRAULIC HIGH PRESSURE OIL FILTER REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

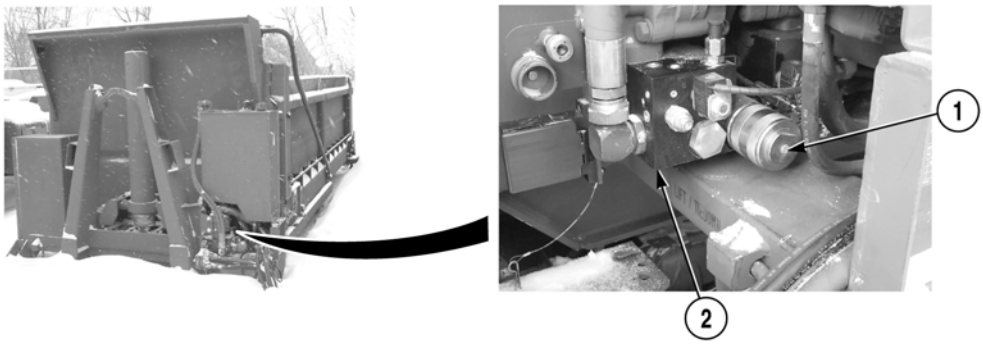
INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

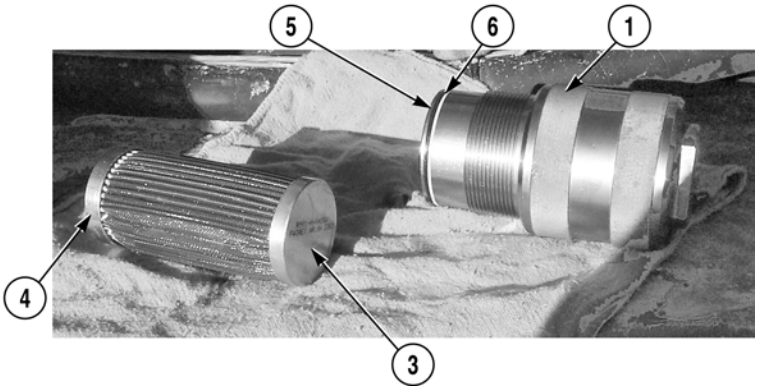
Materials/Parts
Packing, Preformed (N72035)
Packing, Preformed (N72119)
Ring, Backup (400225)
Hydraulic Oil (Item 2, Appendix D)

Equipment Condition
Dump Body unloaded, (Para 2-5)

a. Removal.



(1) Remove oil filter housing (1) from valve pump manifold (2).

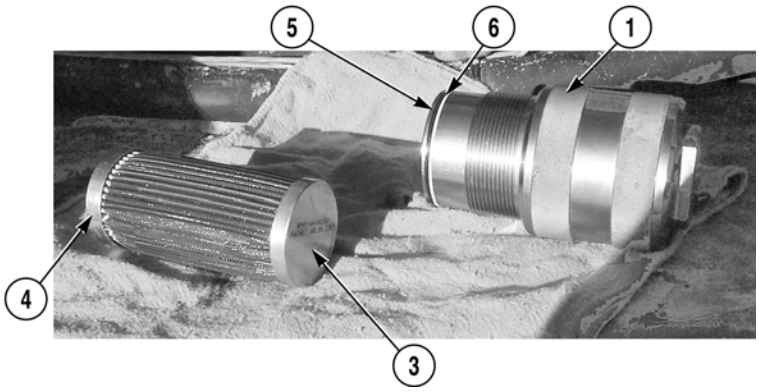


(2) Remove oil filter (3) and preformed packing (4) from oil filter housing (1). Discard preformed packing.

(3) Remove preformed packing (5) and backup ring (6) from oil filter housing (1). Discard preformed packing and backup ring.

3-14. HYDRAULIC HIGH PRESSURE OIL FILTER REPLACEMENT (CONT).

b. Installation.



(1) Apply hydraulic oil to backup ring (6) and preformed packing (5).

(2) Install backup ring (6) and preformed packing (5) on oil filter housing (1).

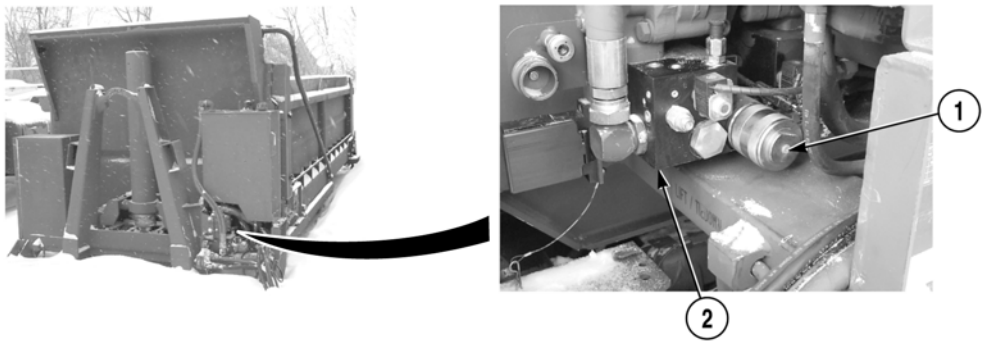
NOTE

Ensure oil filter seats inside oil filter housing.

(3) Install oil filter (3) in oil filter housing (1).

(4) Apply hydraulic oil to preformed packing (4).

(5) Install preformed packing (4) on oil filter (3).



(6) Install oil filter bowl (1) on valve pump manifold (2).

c. Follow-On Maintenance:

- Fill hydraulic reservoir, (Para 3-13).
- Check for leaks.

END OF TASK

3-15. HYDRAULIC HIGH PRESSURE OIL FILTER BASE REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

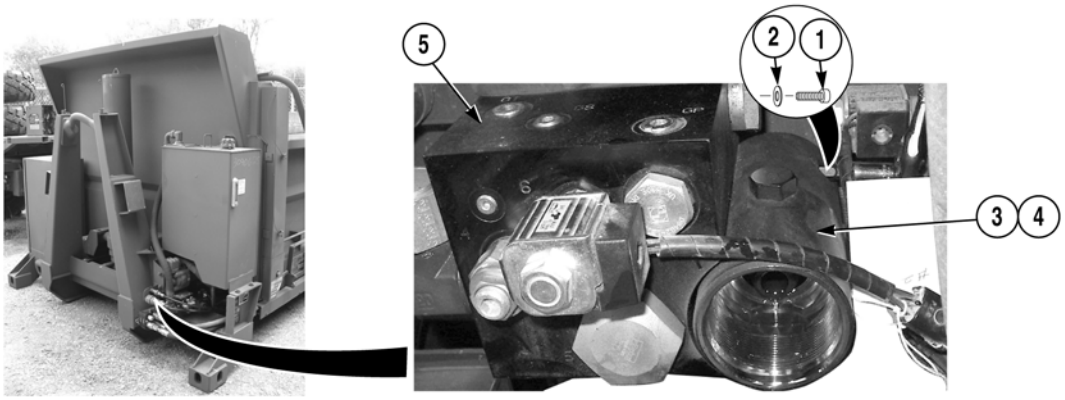
INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Materials/Parts
Cable Ties (Item 1, Appendix D)
Tags, Identification (Item 4, Appendix D)
Lockwasher (2) (HCLE-07)
Preformed Packing (2) (Item 5, Appendix D)

Equipment Condition
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Engine OFF, (TM 9-2320-364-10)
Wheels chocked (TM 9-2320-364-10)
UPIK hydraulic hoses disconnected, (Para 2-11)

a. Removal.



HYDRAULIC RESERVOIR
SHOWN REMOVED FOR CLARITY

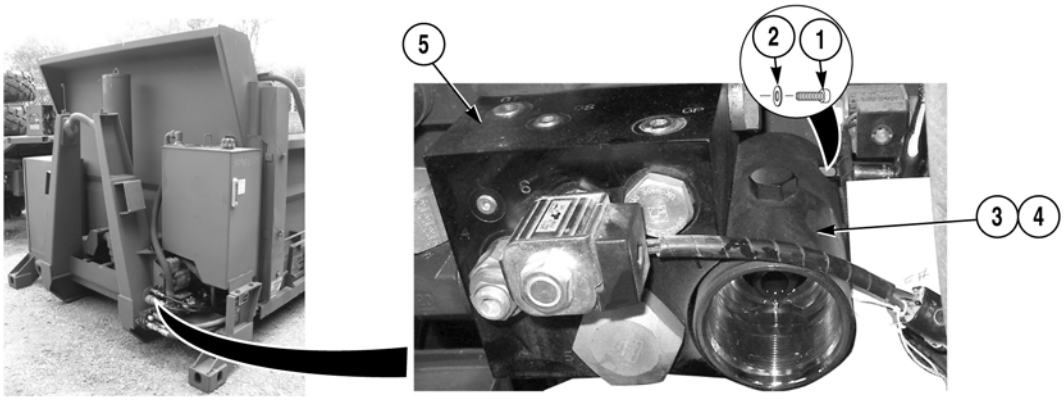
CAUTION

Hydraulic filter indicator is located under hydraulic oil filter base. Hydraulic oil filter base must be supported when replacing. Failure to comply may cause damage to equipment.

(1) Remove two socket head screws (1), lockwashers (2), oil filter base (3) and two preformed packings (4) from manifold (5). Discard lockwashers and preformed packings.

3-15. HYDRAULIC HIGH PRESSURE OIL FILTER BASE REPLACEMENT (CONT).

b. Installation.



HYDRAULIC RESERVOIR
SHOWN REMOVED FOR CLARITY

(1) Apply hydraulic oil to two preformed packings (4).

(2) Install two preformed packings (4) and oil filter base (3) on manifold (5) with two lockwashers (2) and socket head screws (1).

c. Follow-On Maintenance:

- Connect UPIK hydraulic hoses, (Para 2-11)
- Stow body props, (Para 2-14)
- Lower Dump Body, (Para 2-15)
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-16. HYDRAULIC RESERVOIR REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

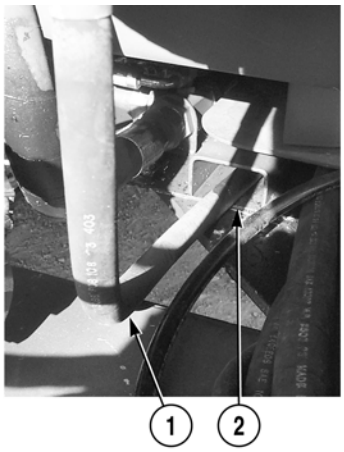
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Cap and Plug Set (Item 3, Appendix E)
Pan, Drain (Item 10, Appendix E)
Wrench, Combination, 2 in. (Item 14, Appendix E)
Lifting Device, Minimum Capacity 150 lb (68 kg)

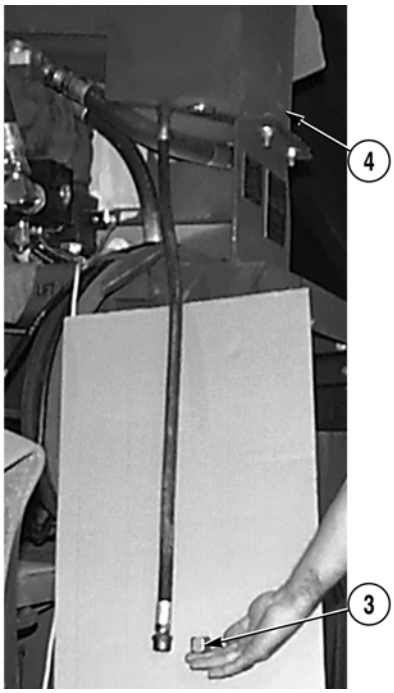
Personnel Required
Two

Materials/Parts
Lockwasher (4) (MS35338-45)
1/2 in. Locknut (4) (60860AX)
Sealing Compound (Item 3, Appendix D)
Tags, Identification (Item 4, Appendix D)
Preformed Packing (Item 5, Appendix D)

Equipment Condition
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Engine OFF (TM 9-2320-364-10)
Wheels chocked (TM 9-2320-364-10)
UPIK electrical connector disconnected (Para 2-11)

a. Removal.





(1) Remove drain hose (1) from storage channel (2) in hose tray.

NOTE

Hydraulic reservoir has an approximate capacity of 32 gal. (121 L). Place a container to catch hydraulic oil before disconnecting hydraulic lines or fittings.

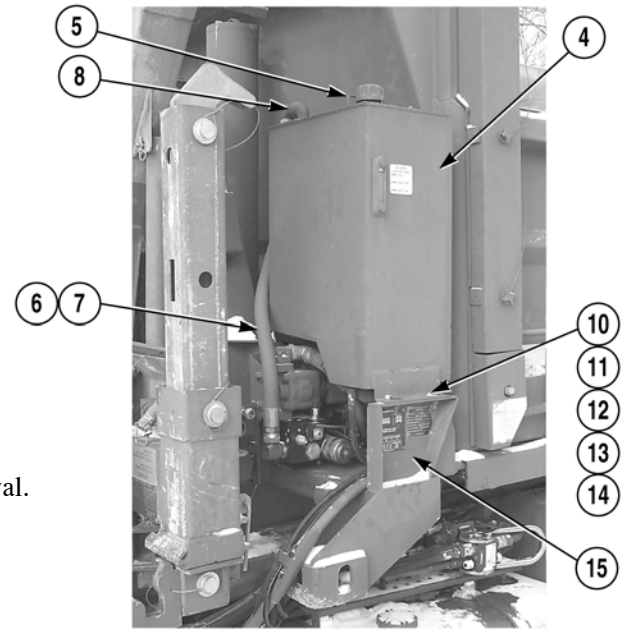
(2) Position drain hose (1) in drain pan.

(3) Remove cap (3) from hose (1) and drain hydraulic reservoir (4).

3-16. HYDRAULIC RESERVOIR REPLACEMENT (CONT).

WARNING

Hydraulic reservoir weighs 150 lb (68 kg). Do not attempt to lift reservoir without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.



(4) Attach lifting device to handle (5) at top of hydraulic reservoir (4).

NOTE

- Tag and mark hoses prior to removal.
- Cap and plug all hoses and fittings prior to removal.
- Preformed packing may or may not be present.

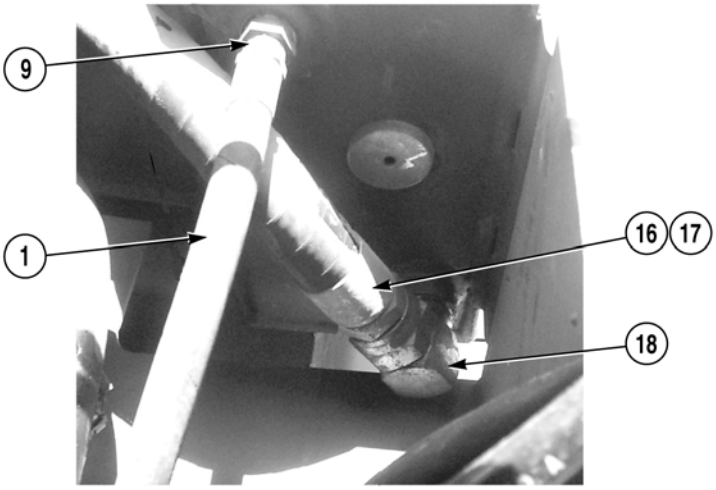
(5) Remove hose (6) and preformed packing (7) from elbow (8). Discard preformed packing.

(6) Remove drain hose (1) from reducer (9).

CAUTION

Note position of spring washers prior to removal. Spring washers must be installed in same position during installation or damage to equipment may occur.

(7) Remove four locknuts (10), screws (11), eight washers (12), four lockwashers (13) and spacers (14) from hydraulic reservoir (4) and subframe (15). Discard locknuts and lockwashers.



NOTE

Preformed packing may or may not be present.

(8) Remove hose (16) and preformed packing (17) from elbow (18). Discard preformed packing.

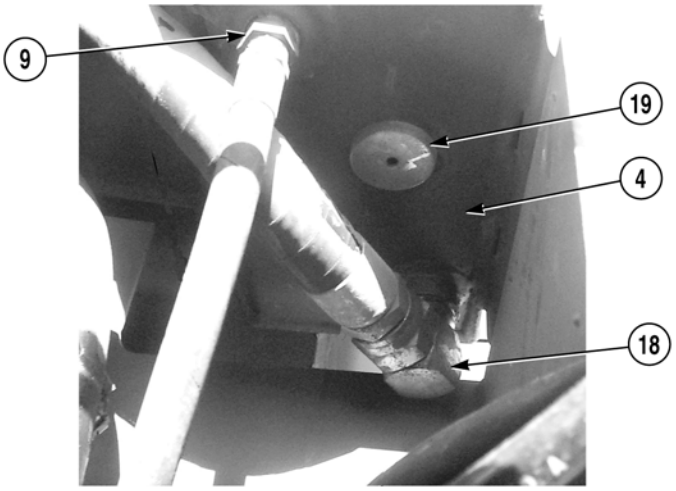
NOTE

Reservoir may be blocked up to allow access to hose and adapter after raising spring loaded latch at top of reservoir.

(9) With the aid of an assistant, remove hydraulic reservoir (4) from subframe (15).

NOTE

Note position of elbows and reducer prior to removal.



(10) Remove elbow (7), elbow (18), and reducer (9) from hydraulic reservoir.

(11) Remove particle magnet (19) from bottom of hydraulic reservoir (4).

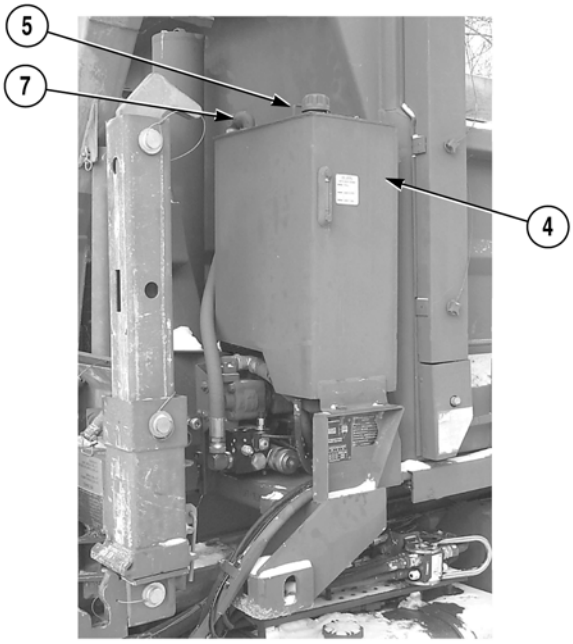
(12) Remove lifting device from hydraulic reservoir (4).

b. Installation.

WARNING

Hydraulic reservoir weighs 150 lb (68 kg). Do not attempt to lift reservoir without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

(1) Attach lifting device to handle (5) at top of hydraulic reservoir (4).



CAUTION

Ensure spring washers are installed as noted during removal. Spring washers must be installed in same position during installation or damage to equipment may occur.

NOTE

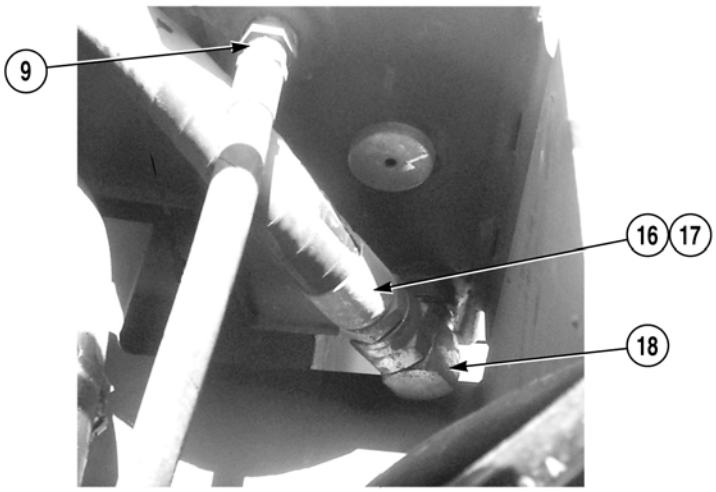
Hoses may be positioned on elbows and reducers for ease of installation.

(2) Install particle magnet (16) on bottom of hydraulic reservoir (4).

3-16. HYDRAULIC RESERVOIR REPLACEMENT (CONT).

WARNING

Adhesives, solvents, and sealing compounds can burn easily, can give off harmful vapors, and are harmful to skin and clothing. To avoid injury or death, keep away from open fire and use in well-ventilated area. If adhesives, solvent or sealing compound gets on skin or clothing, wash immediately with soap and water.



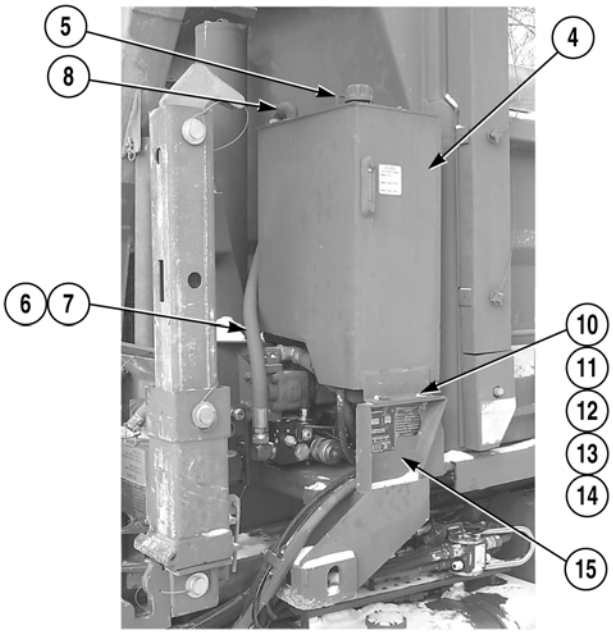
NOTE

Install elbows and reducers in position as noted prior to removal.

(3) Apply sealing compound to threads of reducer (9), elbow (18), and elbow (8).

(4) Install reducer (9), elbow (18), and elbow (8) on hydraulic reservoir (4).

(5) With the aid of an assistant and suitable lifting device, install hydraulic reservoir (4) on subframe (15) with four spacers (14), lockwashers (13), eight washers (12), four screws (11) and locknuts (10).



(6) Remove lifting device from hydraulic reservoir (4).

NOTE

- Ensure hoses are installed in same position as noted during removal.
- Apply hydraulic oil to preformed packing (17).

(7) Install preformed packing (17) and hose (14) on elbow (18).

WARNING

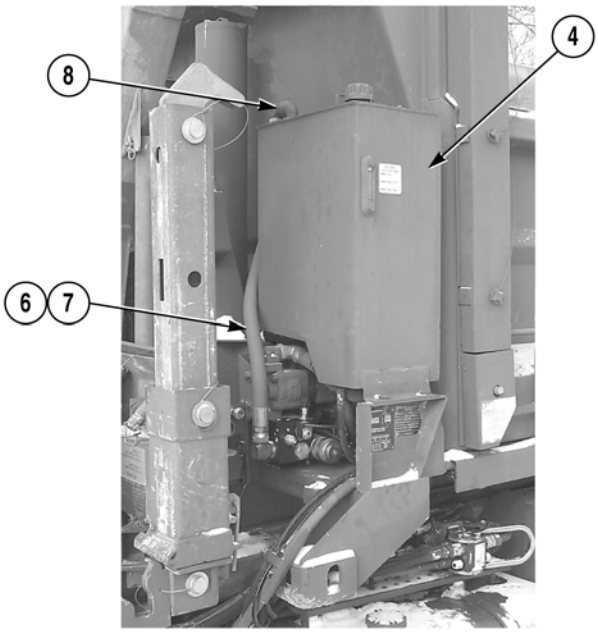
Adhesives, solvents, and sealing compounds can burn easily, can give off harmful vapors, and are harmful to skin and clothing. To avoid injury or death, keep away from open fire and use in well-ventilated area. If adhesives, solvent or sealing compound gets on skin or clothing, wash immediately with soap and water.

(8) Apply sealing compound to threads of drain hose (1).

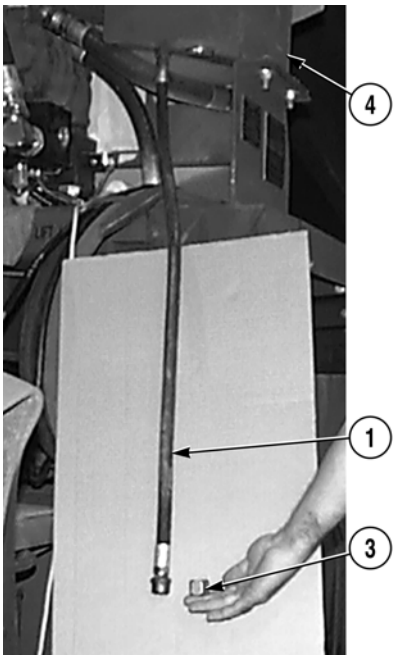
(9) Install drain hose (1) on reducer (9).

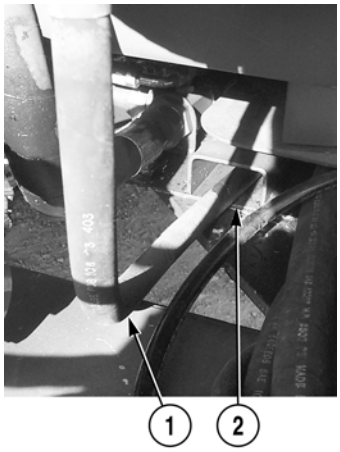
(10) Apply hydraulic oil to preformed packing (7).

(11) Install preformed packing (7) and hose (6) on elbow (8) at top of hydraulic reservoir (4).



3-16. HYDRAULIC RESERVOIR REPLACEMENT (CONT).





(12) Install cap (3) on drain hose (1).

(13) Stow drain hose (1) in storage channel (2) of hose tray.

NOTE

Hydraulic reservoir has an approximate capacity of 32 gal. (121 L). Fill hydraulic reservoir only to full line, which is approximately 28 gal. (106 L). Do not over fill.

(14) Fill hydraulic reservoir (4), (Para 3-13).

c. Follow-On Maintenance:

- Check for leaks.
- Connect UPIK eletrical connectors (Para 2-11)
- Stow body props (Para 2-14)
- Lower Dump Body (Para 2-15)
- Remove wheel chocks (TM 9-2320-364-10).

END OF TASK

3-17. TAILGATE REPLACEMENT.

This task covers:

a. Removal b. Installation

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Lifting Device, Minimum Capacity 375 lb (170 kg)

Personnel Required
Two

Equipment Condition
Dump Body unloaded, (Para 2-5)

a. Removal.

NOTE

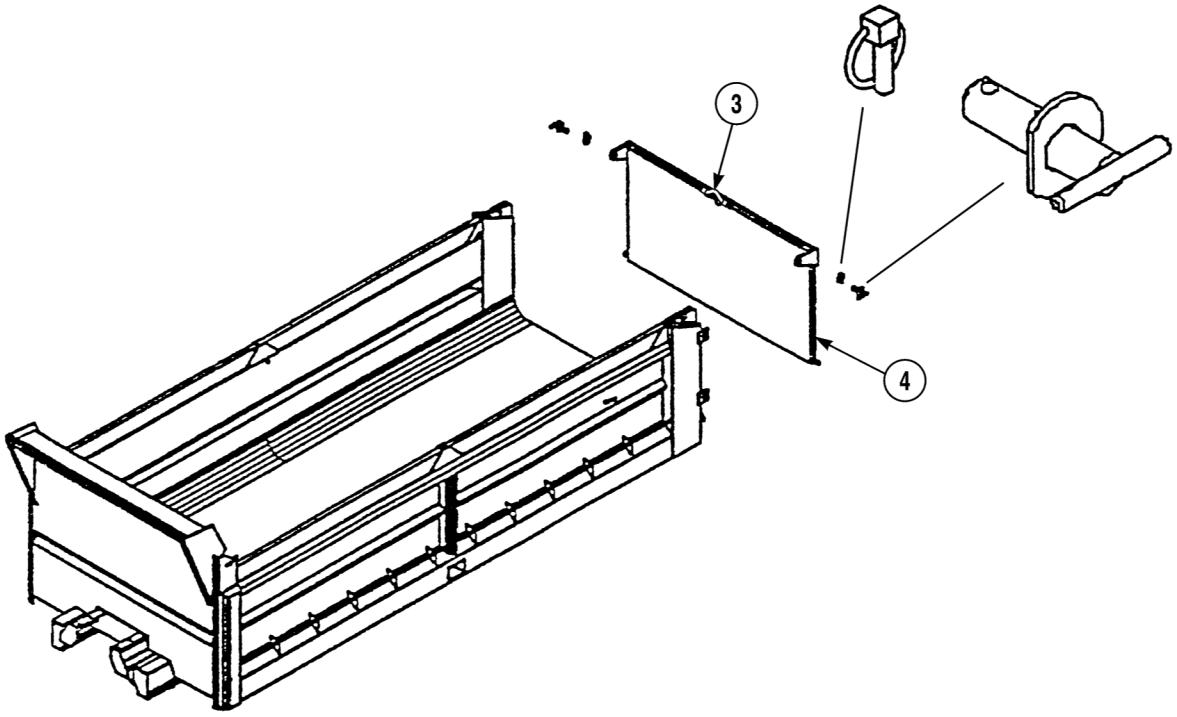
Use lifting handle on center of tailgate to assist in lifting.

(1) Ensure both tailgate safety chains (1) are stowed on stow hooks (2).

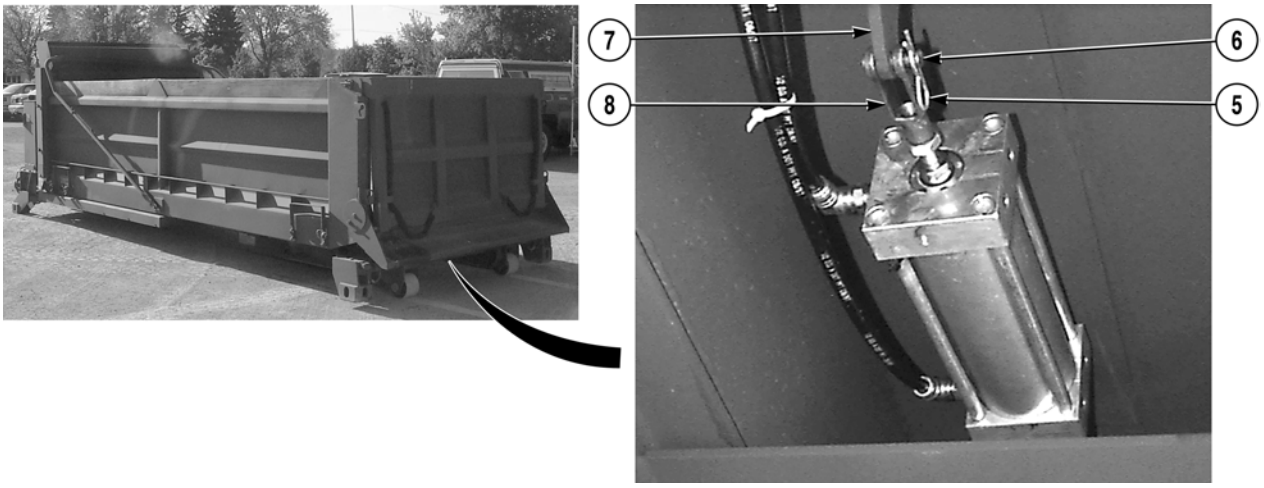
WARNING

Tailgate weighs 375 lb (170 kg). Do not attempt to lift or remove tailgate without the aid of an assistant and a lifting device. Failure to comply could result in serious injury to personnel.

3-17. TAILGATE REPLACEMENT (CONT).

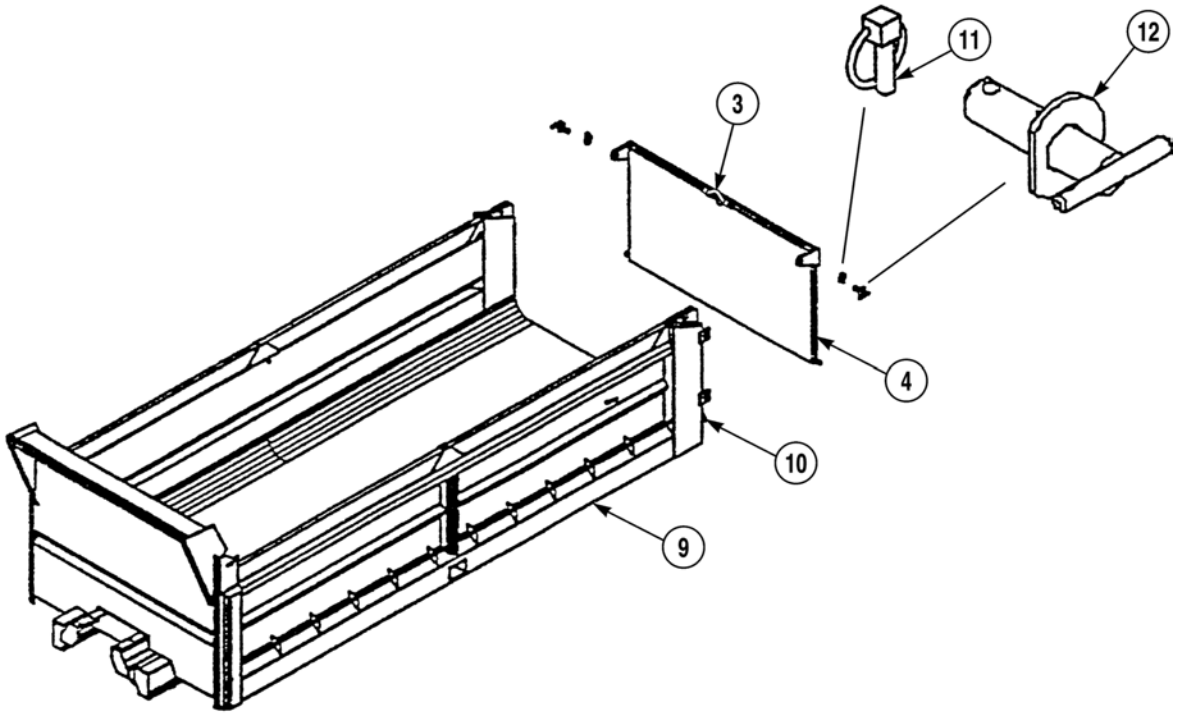


(2) Attach lifting device through handle (3) on top of tailgate (4).



(3) Remove spring pin (5) from clevis pin (6).

(4) Remove clevis pin (6) from tailgate release lever (7) and yoke (8).



(5) Pull tailgate release lever (7) towards rear of Dump Body (9) to release tailgate latch fingers (10).

(6) Remove lynch pin (11) from tailgate hinge pin (12).

(7) Support tailgate (4) with lifting device and remove two hinge pins (12) from Dump Body (9) and tailgate.

(8) With the aid of an assistant, remove tailgate (4) from Dump Body (9).

b. Installation.

WARNING

Tailgate weighs 375 lb (170 kg). Do not attempt to lift or install tailgate without the aid of an assistant and a lifting device. Failure to comply could result is serious injury to personnel.

NOTE

Use lifting handle on center of tailgate to assist in lifting.

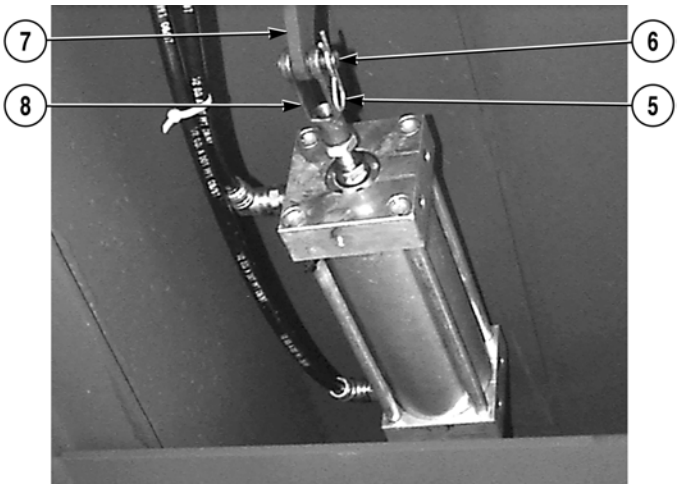
(1) Attach lifting device through handle (3) at top of tailgate (4).

(2) Position tailgate (4) on Dump Body (9).

(3) Position tailgate hinge pin (12) in Dump Body (9) and tailgate (4).

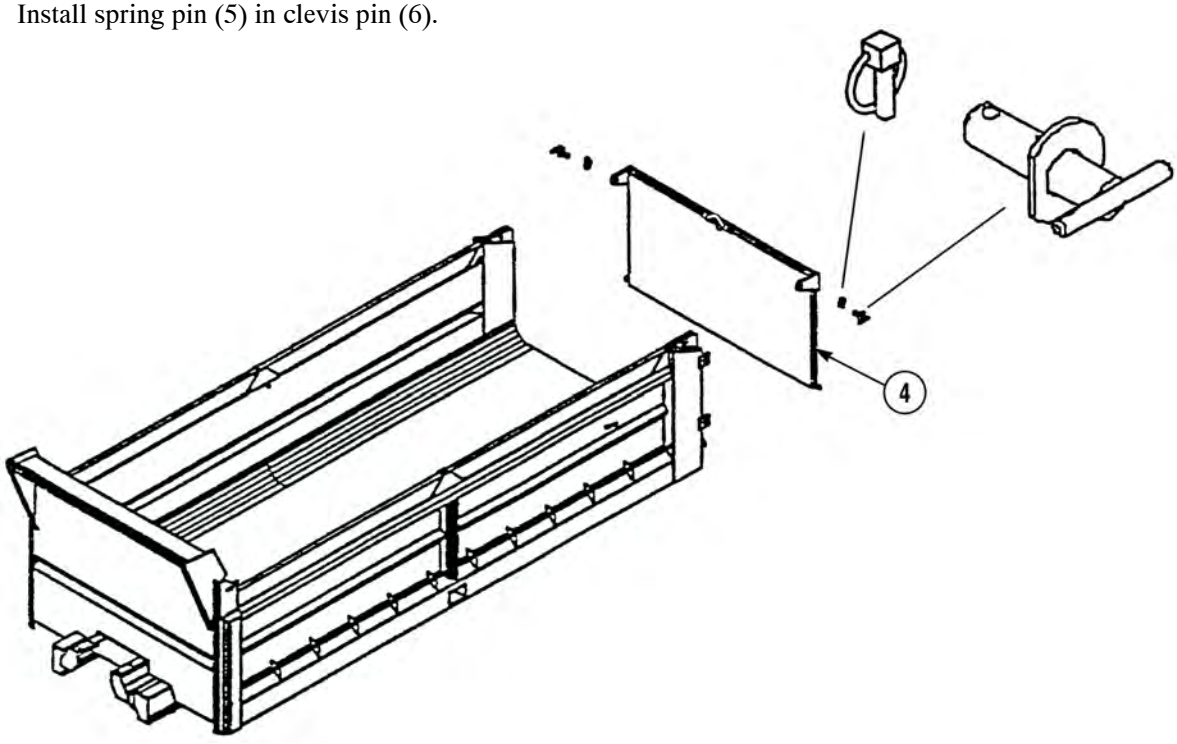
(4) Install lynch pin (11) in tailgate hinge pin (12).

3-17. TAILGATE REPLACEMENT (CONT).



(5) Position yoke (8) on tailgate release lever (7) and install clevis pin (6).

(6) Install spring pin (5) in clevis pin (6).



(7) Remove lifting device from tailgate (4).

END OF TASK

3-18. BODY PROPS REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive
(Item 11, Appendix E)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
Dump Body lowered, (Para 2-15)
Body props stowed, (Para 2-14)

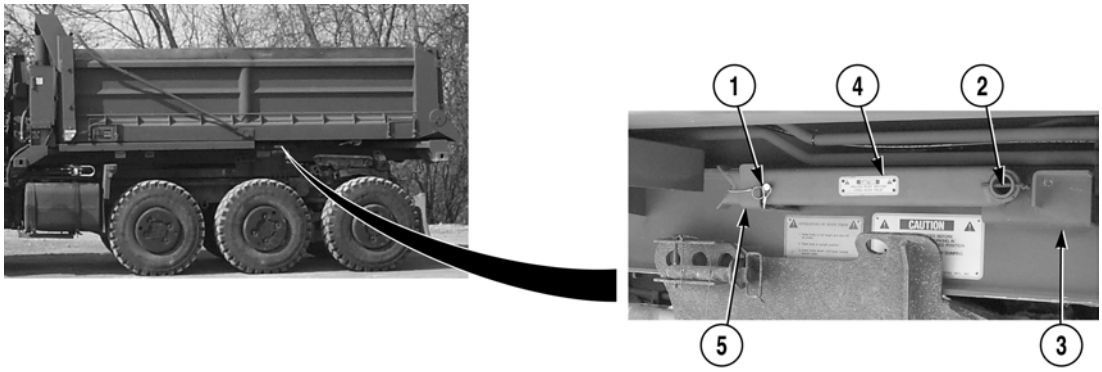
a. Removal.

WARNING

Body props must be stowed and not supporting Dump Body during removal. Failure to comply could result in injury or death to personnel.

NOTE

Both body props are removed the same way. Left side is shown.



(1) Remove retainer pin (1).

(2) Remove roll pin (2) from prop pivot mount (3).

(3) Remove prop arm (4) from prop pivot mount (3) and stow bracket (5).

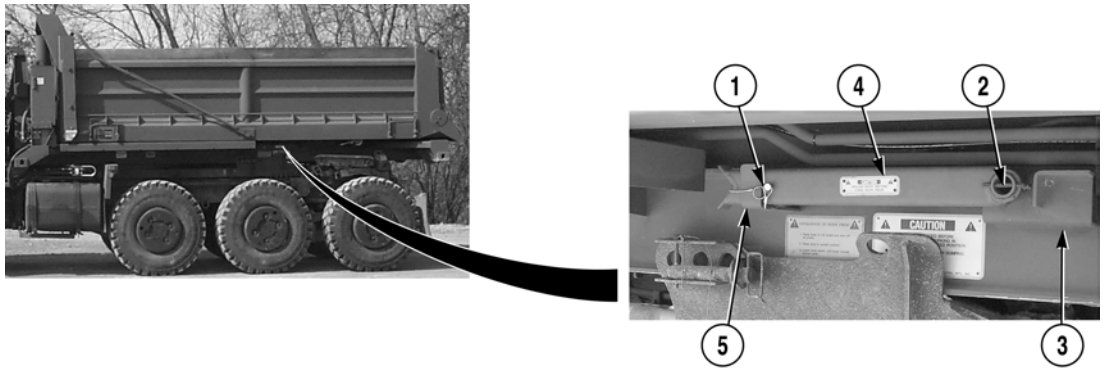
(4) Repeat Steps (1) through (3) for right side.

3-18. BODY PROPS REPLACEMENT (CONT).

b. Installation.

NOTE

Both body props are installed the same way. Left side shown.



(1) Position prop arm (4) on prop pivot mount (3) and stowage bracket (5).

(2) Install prop arm (4) to prop pivot mount (3) with roll pin (2).

(3) Install retainer pin (1).

(4) Perform Steps (1) through (3) for right side.

c. Follow-On Maintenance:

- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-19. UPIK STOWAGE BLOCK AND COVER REPLACEMENT.

This task covers:

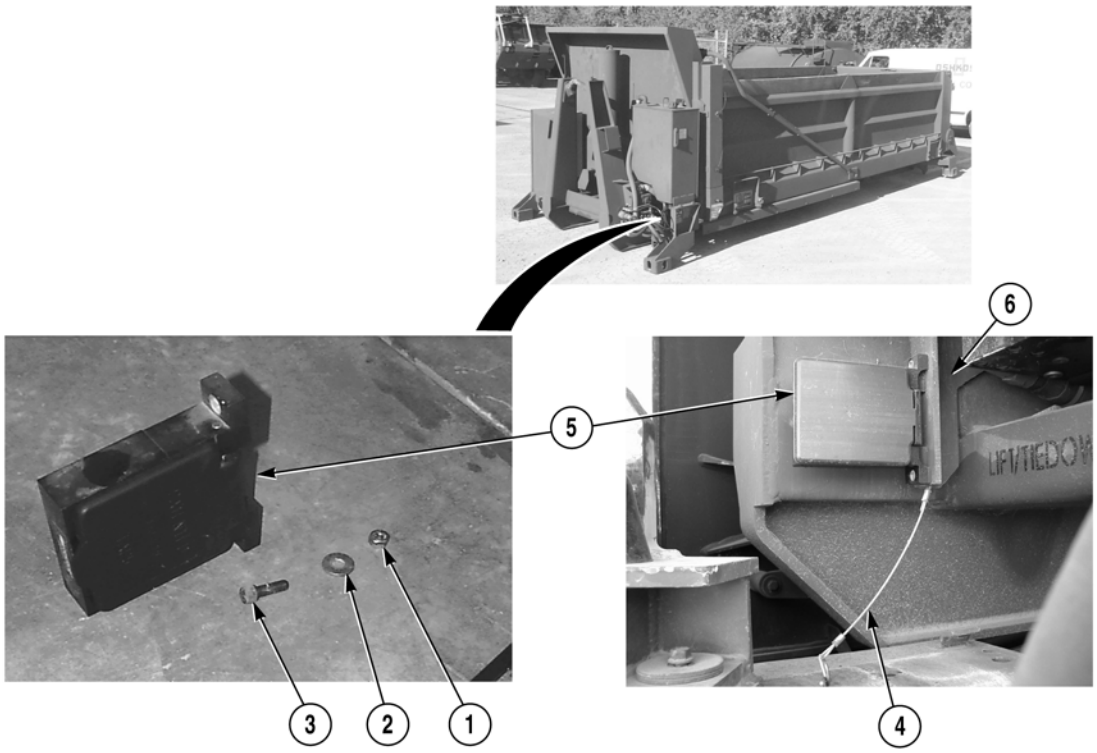
a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive
(Item 11, Appendix E)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
UPIK connectors disconnected, (Para 2-11)

a. Removal.

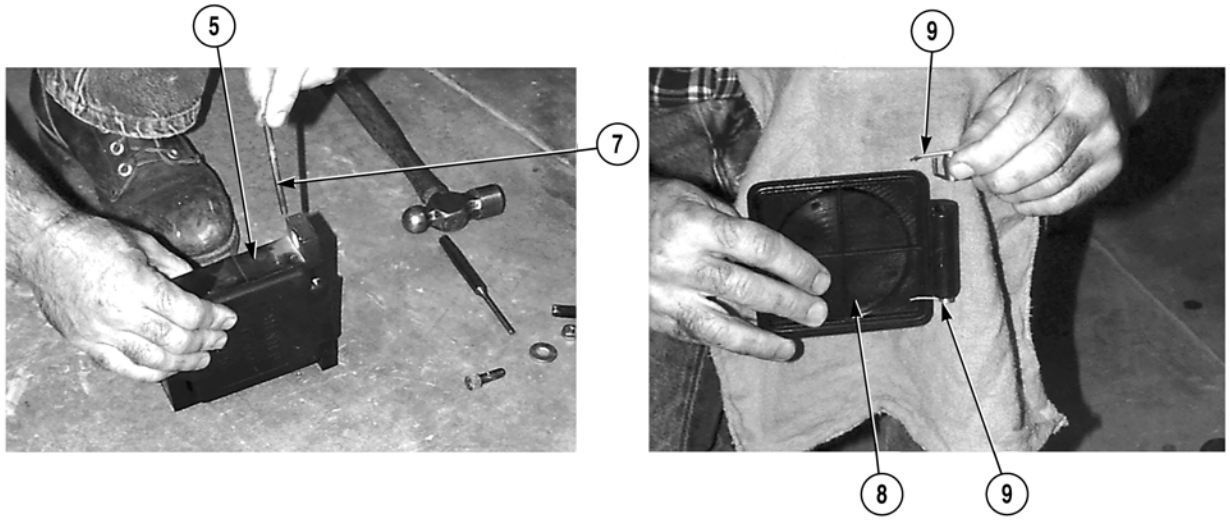


NOTE

Wire rope may or may not be present.

(1) Remove two nuts (1), washers (2), socket head screws (3), wire rope (4) and UPIK block (5) from bracket (6).

3-19. UPIK STOWAGE BLOCK AND COVER REPLACEMENT (CONT).



(2) Remove pin (7) and cover (8) from UPIK block (5).

NOTE

- Note position and location of springs prior to removal.
- If rubber pad on cover is damaged or is leaking, cover must be discarded upon completion of Step (3).

(3) Remove two springs (9) from cover (8).

b. Installation.

NOTE

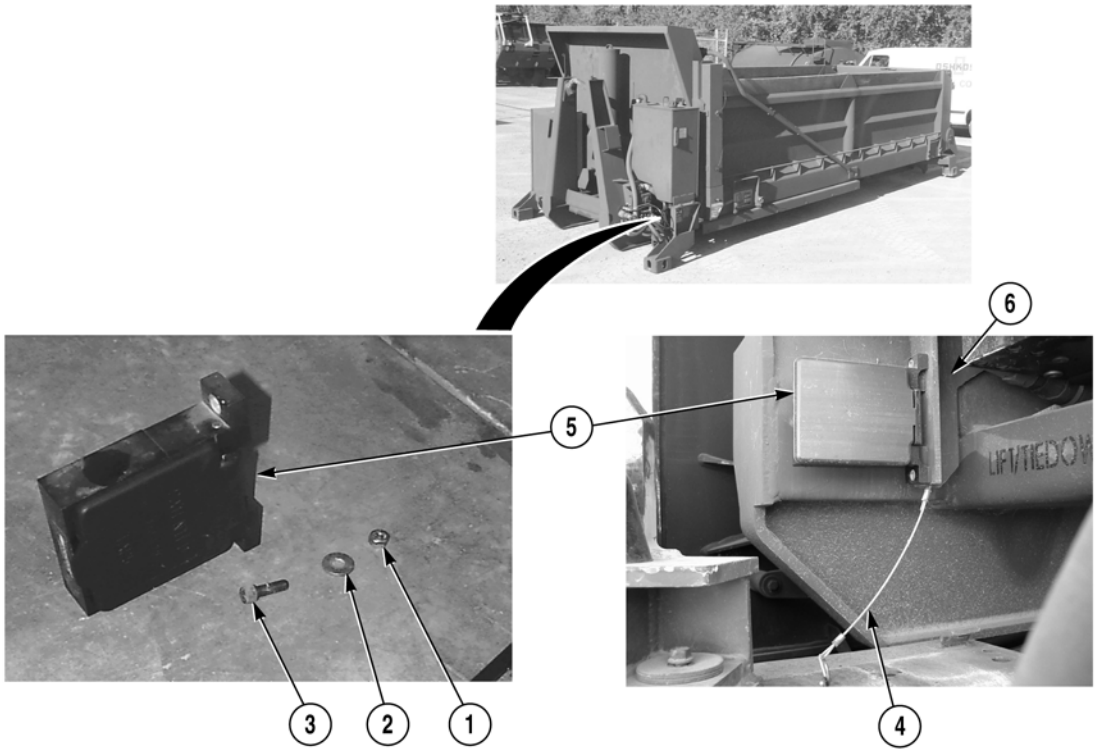
Ensure springs are installed in the same position as noted prior to removal.

(1) Install two springs (9) in cover (8).

NOTE

Install pin until flush with UPIK block.

(2) Install cover (8) on UPIK block (5) with pin (7).



(3) Install UPIK block (5) and wire rope (4) on bracket (5) with two socket head screws (3), washers (2), and nuts (1).

c. Follow-On Maintenance:

- Connect UPIK connectors, (Para 2-11).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-20. SIDEBOARD REPLACEMENT.

This task covers:

a. Removal b. Installation

INITIAL SETUP

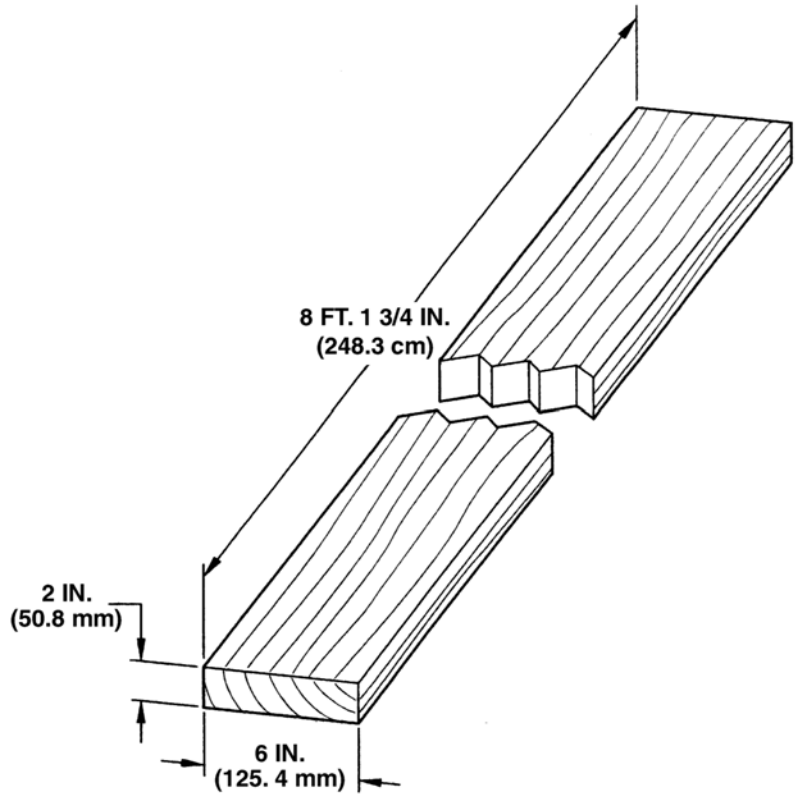
Tools and Special Tools

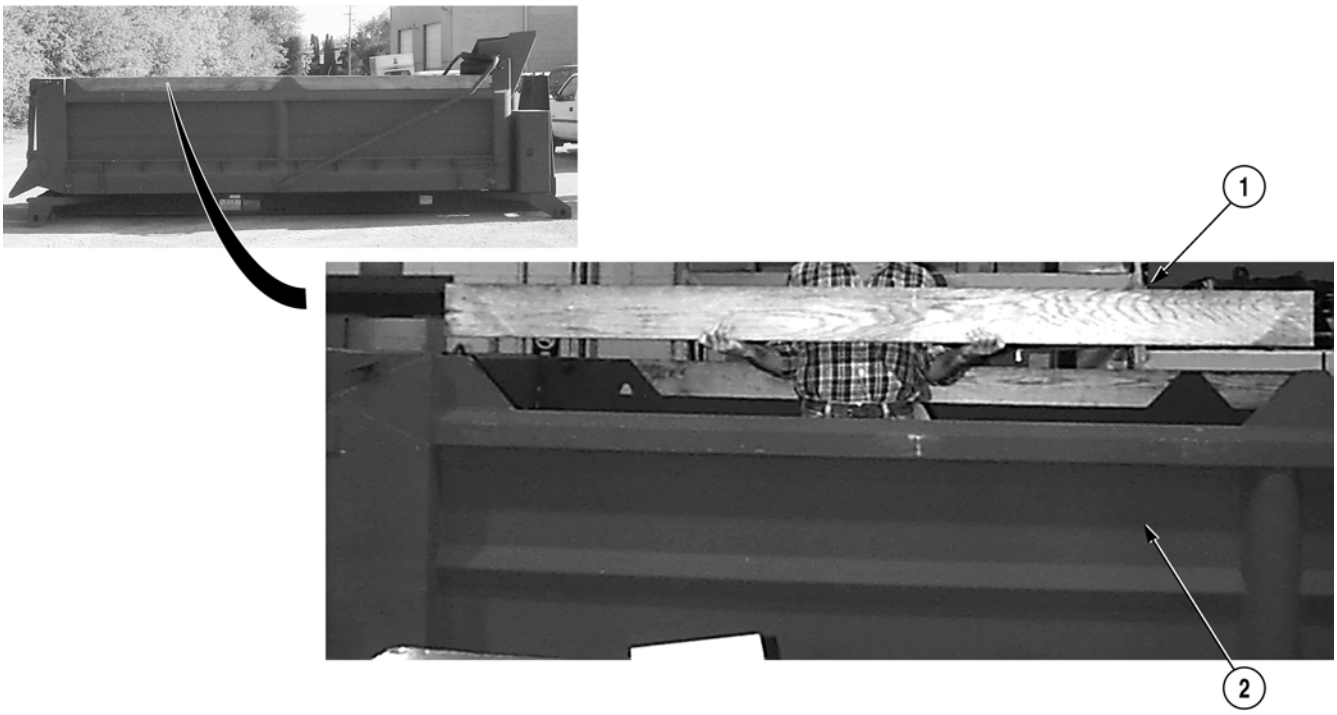
Tool Kit, General Mechanic's: Automotive
(Item 11, Appendix E)

a. Removal.

NOTE

Using saw and standard planing machine, cut wood (MM-L-751 lumber stock) to size indicated below for Dump Body sideboards.





(1) Remove sideboard (1) from Dump Body (2).

(2) Repeat Step (1) for remaining three sideboards (1).

b. Installation.

(1) Install sideboard (1) on Dump Body (2).

(2) Repeat Step (1) for remaining three sideboards (1).

END OF TASK

3-21. SPILL SHIELD REPLACEMENT.

This task covers:

a. Removal b. Installation

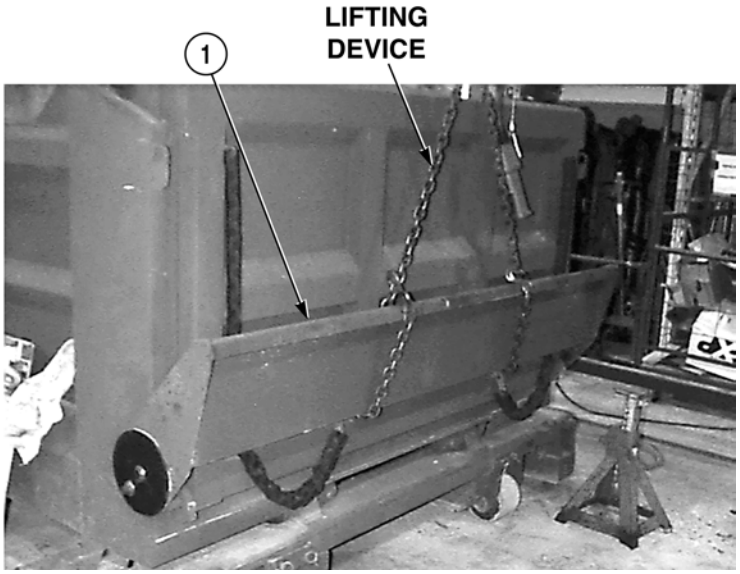
INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Lifting Device, Minimum Capacity 130 lb (59 kg)

Materials/Parts
Locknut (2) (60860AX)

Equipment Condition
Dump Body unloaded, (Para 2-5)

a. Removal.

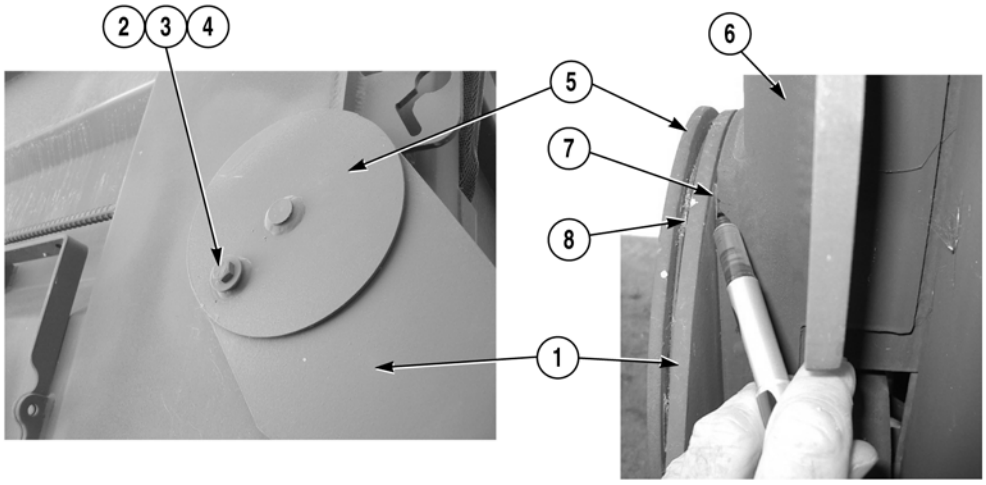


WARNING

Spill shield weighs 130 lb (59 kg). Attach lifting device prior to removal or installation to avoid serious injury or death to personnel.

(1) With the aid of an assistant, support spill shield (1) in vertical position and attach lifting device to spill shield.

(2) Using lifting device, position spill shield (1) upward in vertical position.



NOTE

If binding occurs when removing screws in Step (3), back off lifting device until screws are easily removed.

(3) While assistant supports spill shield (1), remove two locknuts (2), four washers (3), two screws (4), retaining plates (5) and spill shield (1) from Dump Body (6).

(4) Position spill shield (1) on ground.

(5) Remove lifting device from spill shield (1).

NOTE

- Perform Step (6) if inner and outer wear plates need to be removed.
- Note position of inner and outer wear plates prior to removal to ensure proper installation.

(6) Remove two inner wear plates (7) and outer wear plates (8) from Dump Body (6) and spill shield (1).

b. Installation.

NOTE

- Perform Step (1) if inner and outer wear plates were removed.
- Install inner and outer wear plates as noted prior to removal.

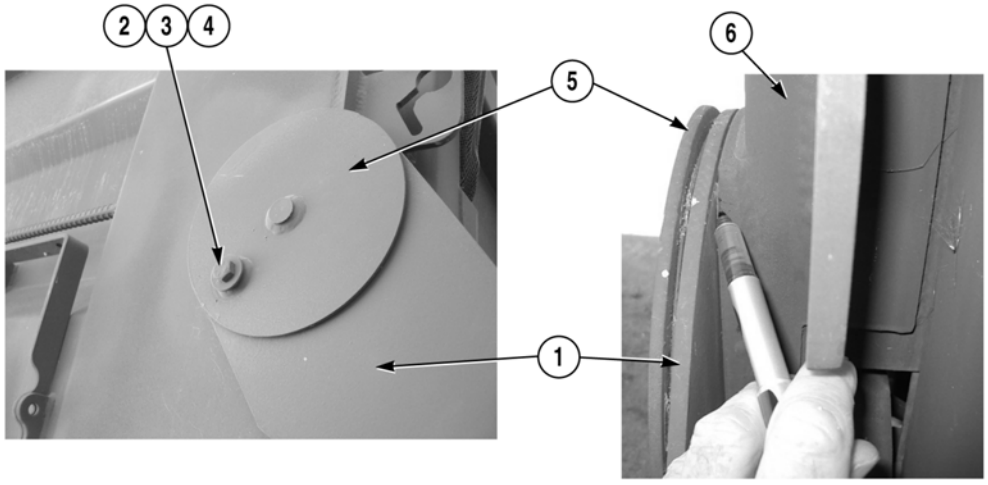
(1) Install two inner wear plates (7) and outer wear plates (8) on Dump Body (6) and spill shield (1).

WARNING

Spill shield weighs 130 lb (59 kg). Attach lifting device prior to removal or installation to avoid serious injury or death to personnel.

(2) With the aid of an assistant, attach lifting device to spill shield (1).

3-21. SPILL SHIELD REPLACEMENT (CONT).



(3) Using lifting device, position spill shield (1) upward in vertical position.

(4) With the aid of an assistant, install spill shield (1) on Dump Body (6) with two retaining plates (5), screws (4), four washers (3) and two locknuts (2).

END OF TASK

3-22. LADDER BRACKET REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

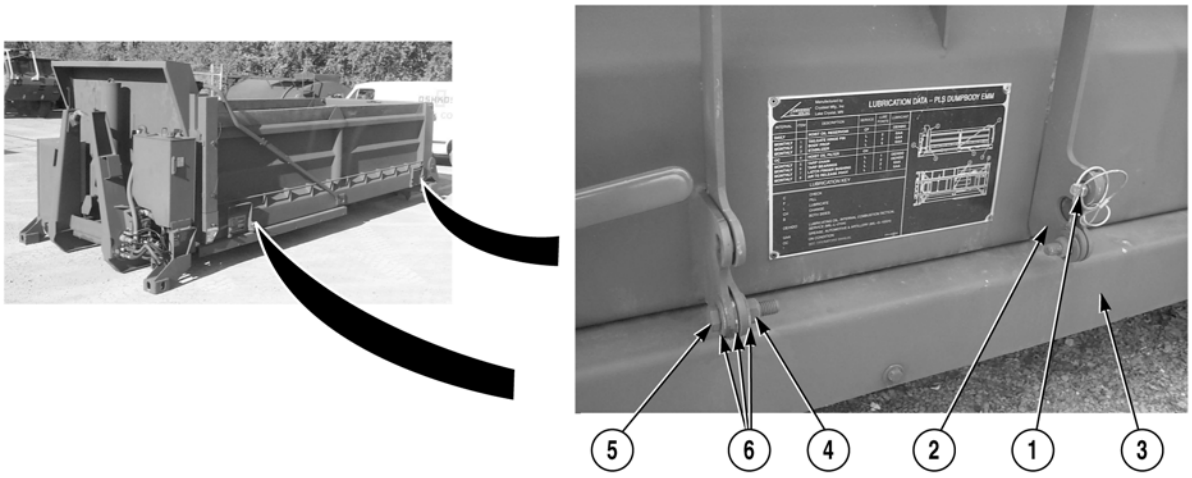
INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive
(Item 11, Appendix E)

Materials/Parts
Locknut (2) (60860AX)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)

a. Removal.



NOTE

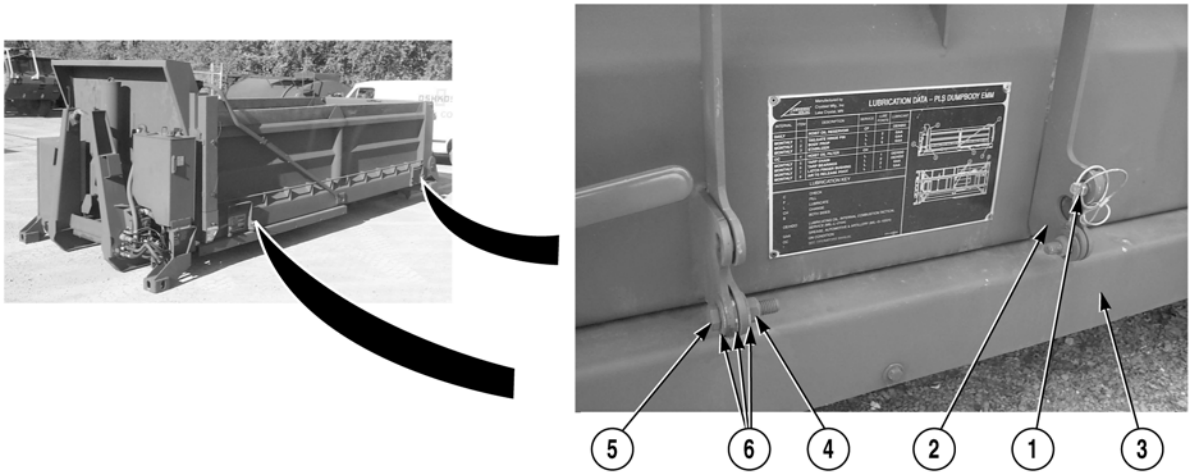
- There are four ladder brackets on corners of Dump Body. All remove in same way.
- Note position of washers prior to removal.

(1) Remove pin (1) from ladder bracket (2), and Dump Body (3).

(2) Remove two locknuts (4), screws (5), six washers (6), and ladder bracket (2) from Dump Body (3). Discard locknuts.

3-22. LADDER BRACKET REPLACEMENT (CONT).

b. Installation.



NOTE

- There are four ladder brackets on corners of Dump Body. All install in same way.
- Install washers as noted prior to removal.
- Do not tighten locknuts. Tightening locknuts will not allow ladder bracket to rotate.

(1) Install ladder bracket (2) on Dump Body (3) with six washers (6), screws (5), and locknuts (4).

(2) Secure ladder bracket (2) on Dump Body (3) with pin (1).

c. Follow-On Maintenance:

- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-23. MAIN WIRE HARNESS REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Material/Parts
Cable Ties (Item 1, Appendix D)
Tags, Identification (Item 4, Appendix D)

Equipment Condition
Wheels chocked, (TM 9-2320-364-10)
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Engine OFF, (TM 9-2320-364-10)
UPIK electrical connector disconnected, (Para 2-11)

a. Removal.

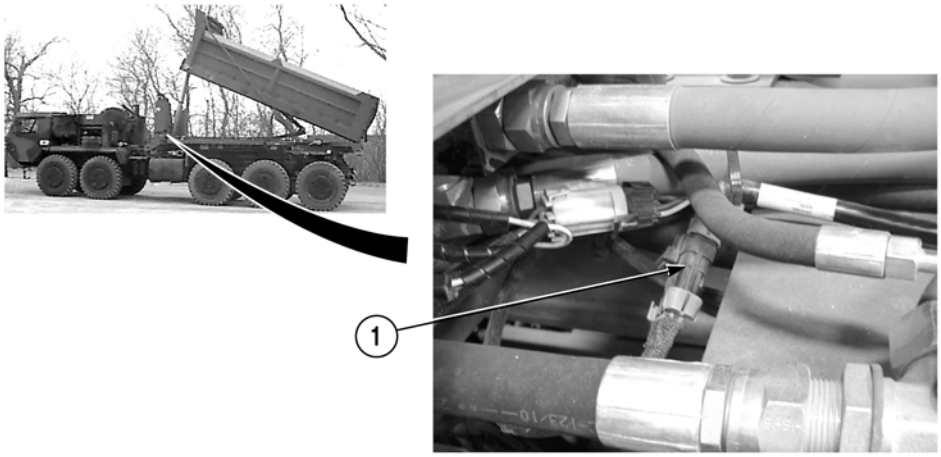
WARNING

- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.

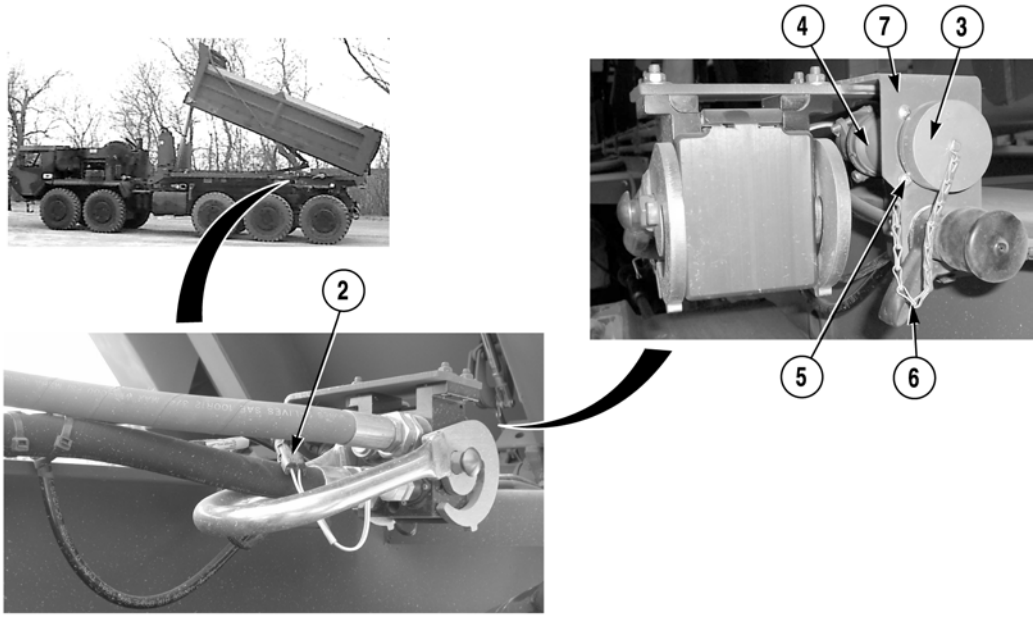
NOTE

- Use of body props permits service to be performed safely beneath a raised body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.
- Tag and mark connectors prior to removal to ensure proper installation.
- Remove cable ties as required.

3-23. MAIN WIRE HARNESS REPLACEMENT (CONT).



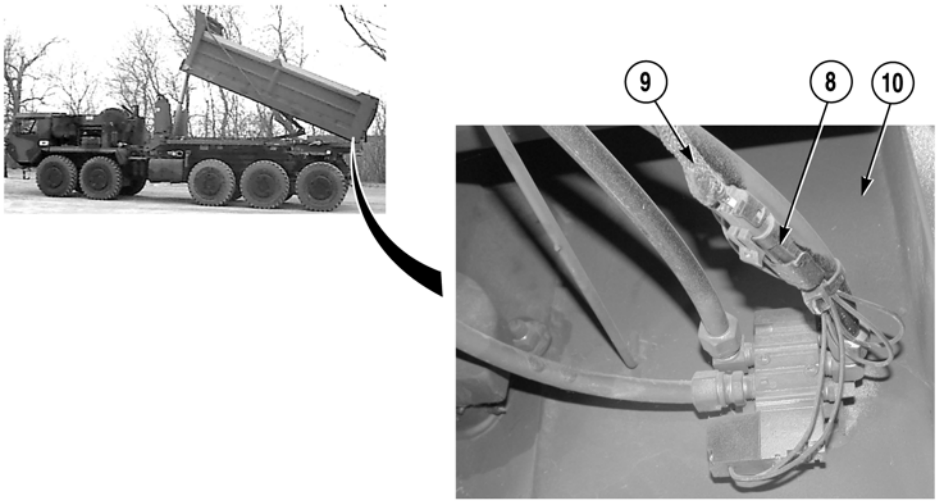
(1) Disconnect connector (1).



(2) Disconnect connector (2).

(3) Remove cover (3) from connector (4).

(4) Remove four screws (5), chain (6) and connector (4) from bracket (7).



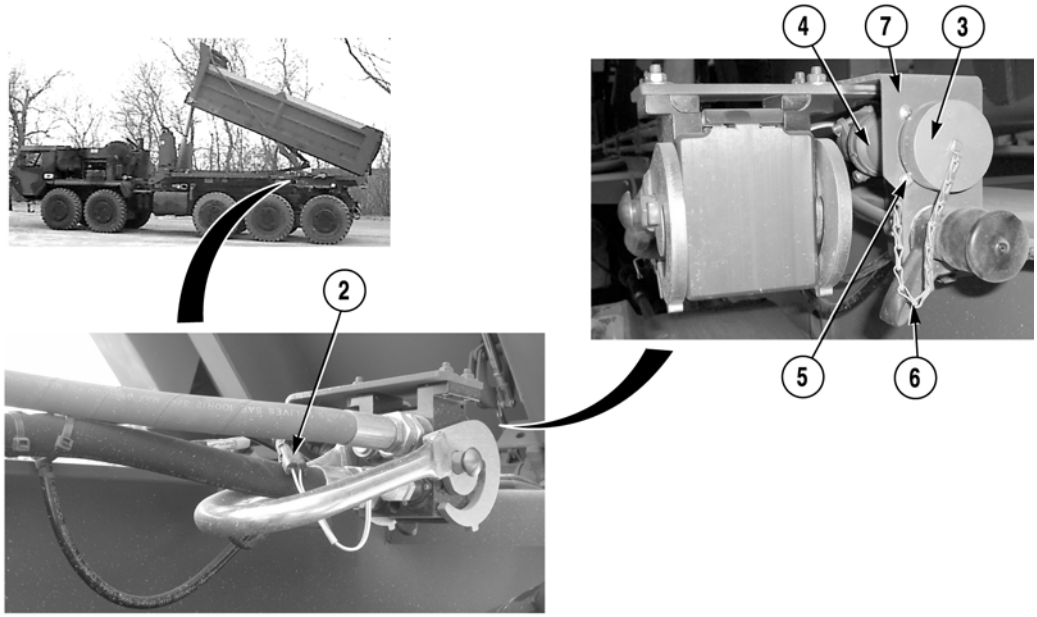
(5) Disconnect connector (8) and remove main wire harness (9) from dump body (10).

b. Installation.

NOTE

Install cable ties as required.

(1) Position main wire harness (9) on dump body (10) and connect connector (8).

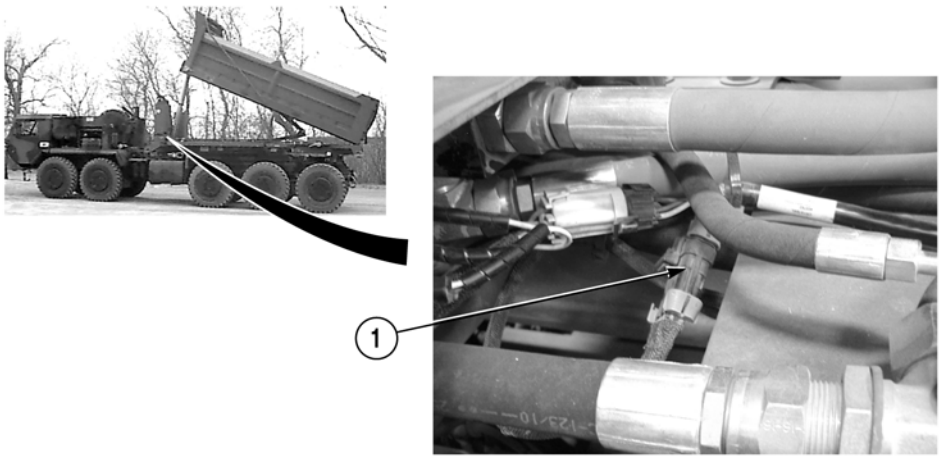


(2) Install connector (4) and chain (6) on bracket (7) with four screws (5).

(3) Install cover (3) on connector (4).

(4) Connect connector (2).

3-23. MAIN WIRE HARNESS REPLACEMENT (CONT).



(5) Connect connector (1).

c. Follow-On Maintenance:

- Connect UPIK electrical connector, (Para 2-11).
- Stow body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-24. JUMPER WIRE HARNESS REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Material/Parts
Cable Ties (Item 1, Appendix D)
Tags, Identification (Item 4, Appendix D)

Equipment Condition
Wheels chocked, (TM 9-2320-364-10)
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Engine OFF, (TM 9-2320-364-10)
UPIK electrical connector disconnected, (Para 2-11)
Hose tray cover removed, (Para 3-30)

a. Removal.

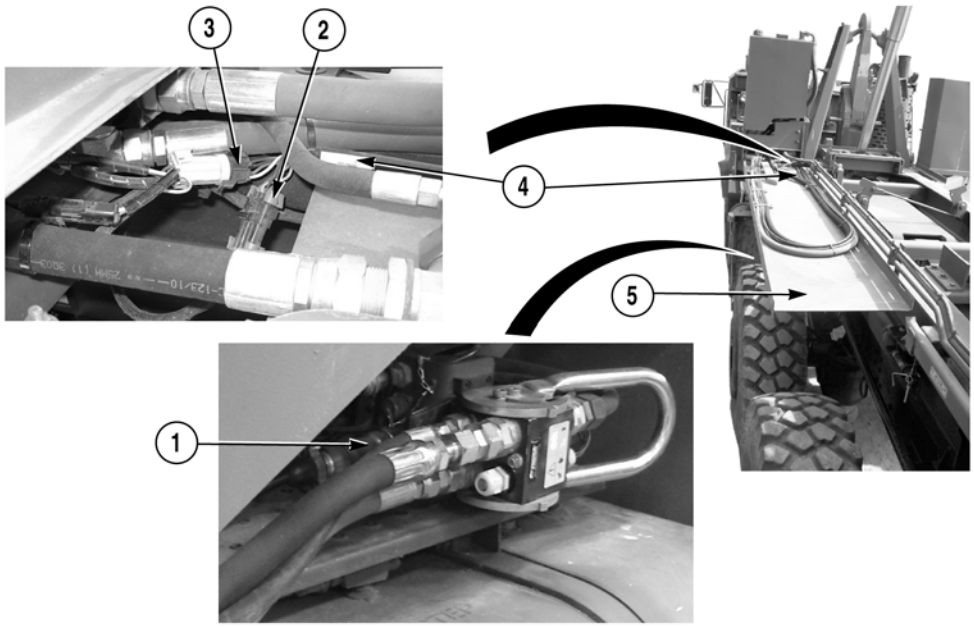
WARNING

- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.

NOTE

- Use of body props permits service to be performed safely beneath a raised body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.
- Tag and mark connectors prior to removal to ensure proper installation.
- Remove cable ties and hose clamps as required.
- Note position of hose clamps prior to removal to ensure proper installation.

3-24. JUMPER WIRE HARNESS REPLACEMENT (CONT).



(1) Disconnect connector (1).

(2) Disconnect two connectors (2 and 3) and remove jumper wire harness (4) from tray (5).

b. Installation.

NOTE

- Install hose clamps as noted prior to removal.
- Install cable ties as required.

(1) Position jumper wire harness (4) on tray (5) and connect two connectors (2 and 3).

(2) Connect connect (1).

c. Follow-On Maintenance:

- Install hose tray cover, (Para 3-30).
- Connect UPIK electrical connector (Para 2-11).
- Remove body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-25. HYDRAULIC WIRE HARNESS REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Material/Parts
Cable Ties (Item 1, Appendix D)
Tags, Identification (Item 4, Appendix D)

Equipment Condition
Wheels chocked, (TM 9-2320-364-10)
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
Engine OFF, (TM 9-2320-364-10)
UPIK electrical connector disconnected, (Para 2-11)

a. Removal.

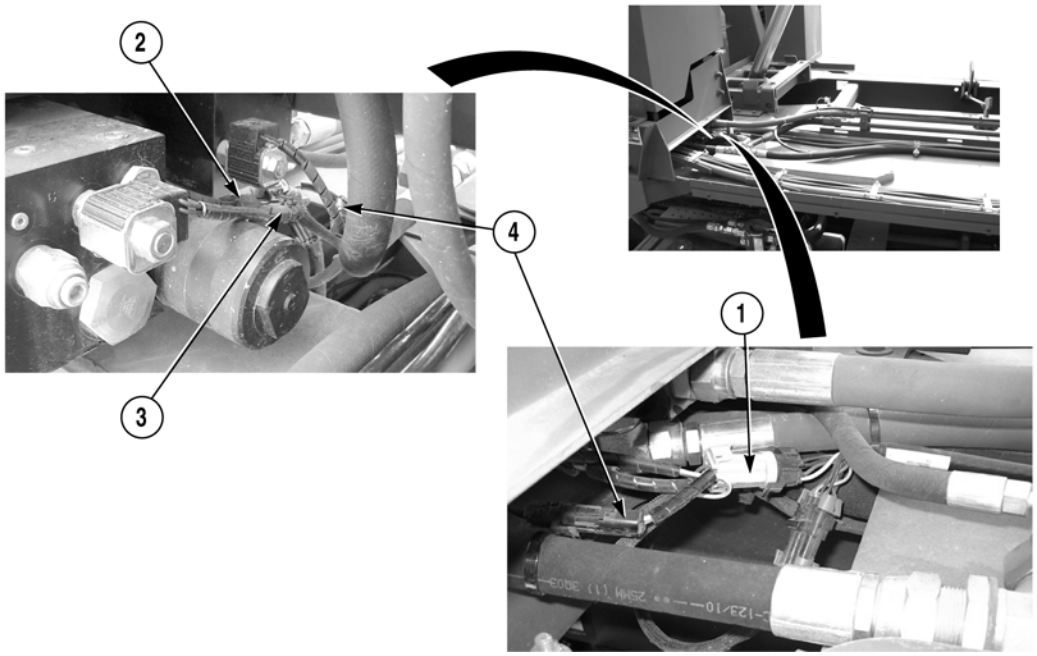
WARNING

- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.

NOTE

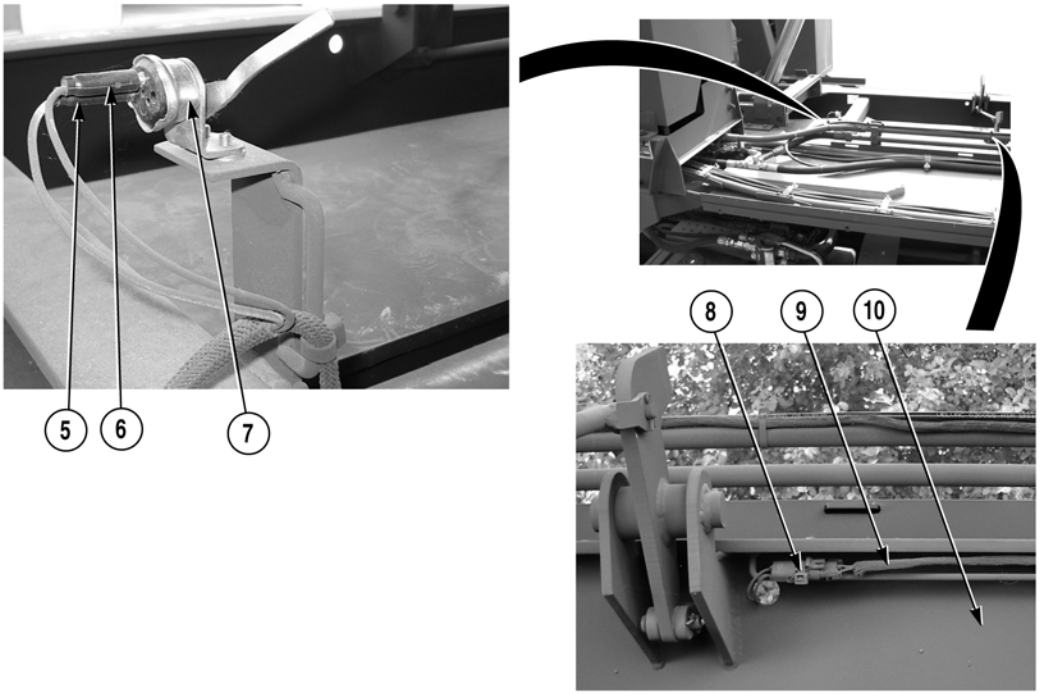
- Use of body props permits service to be performed safely beneath a raised body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.
- Remove cable ties as required.
- Tag and mark connectors prior to removal to ensure proper installation.

3-25. HYDRAULIC WIRE HARNESS REPLACEMENT (CONT).



(1) Disconnect connector (1).

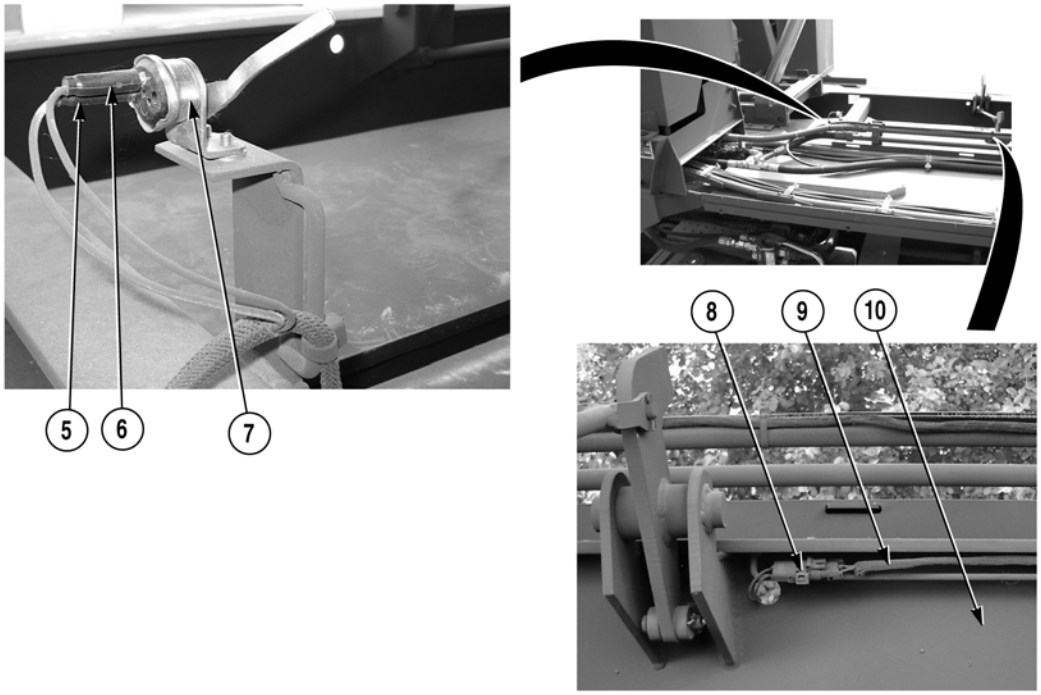
(2) Disconnect three connectors (2, 3 and 4).



(3) Disconnect two wires (5 and 6) from body up sensor (7).

(4) Disconnect connector (8) and remove hydraulic wire harness (9) from dump body (10).

b. Installation.



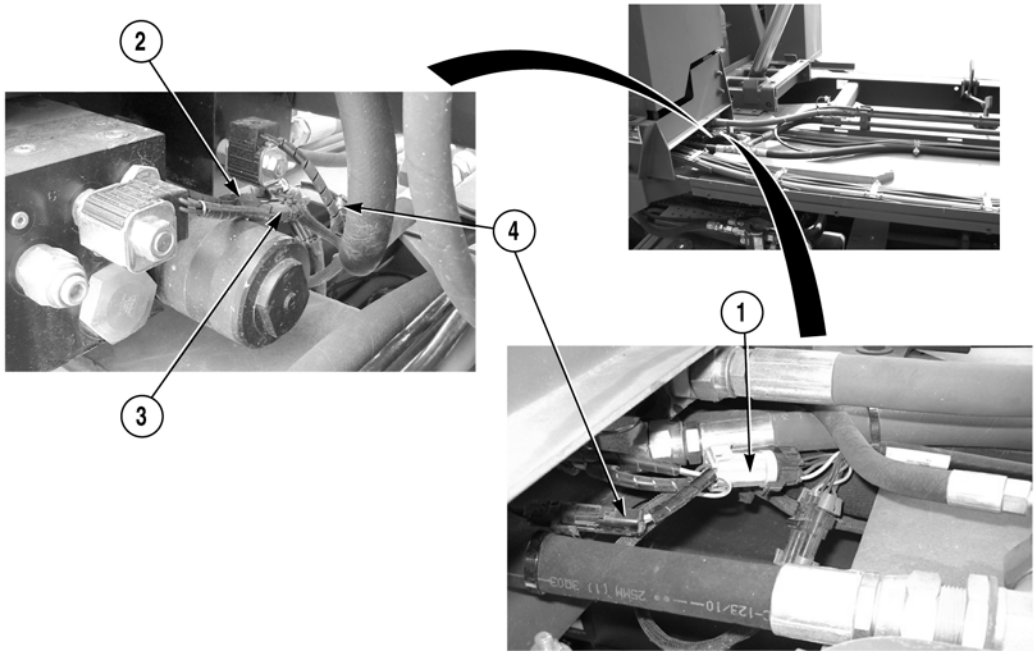
NOTE

Install cable ties as required.

(1) Position hydraulic wire harness (9) on dump body (10) and connect connector (8).

(2) Connect two wires (5 and 6) on body up sensor (7).

3-25. HYDRAULIC WIRE HARNESS REPLACEMENT (CONT).



(3) Connect three connectors (2, 3, and 4).

(4) Connect connector (1).

c. Follow-On Maintenance:

- Connect UPIK electrical connector, (Para 2-11).
- Stow body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-26. PLS TRAILER WIRE HARNESS REPLACEMENT.

This task covers:

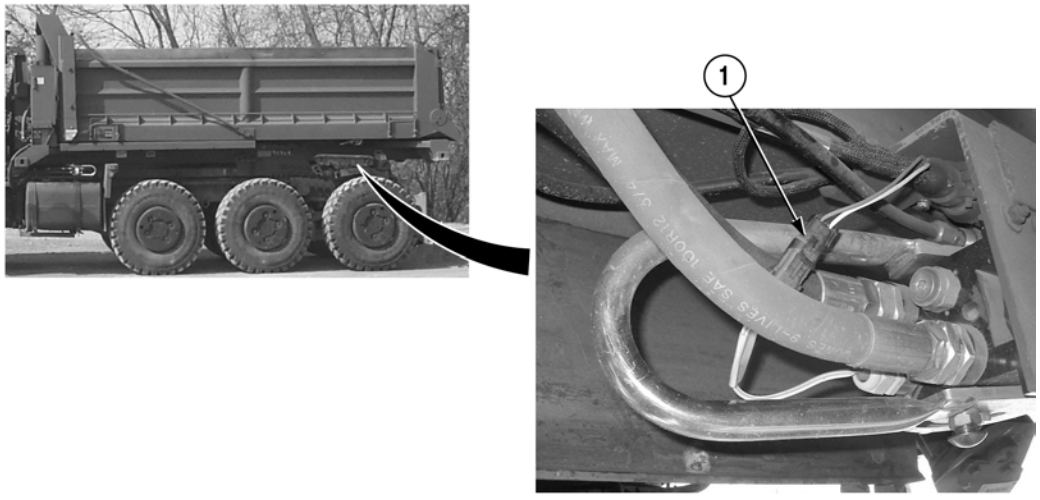
a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

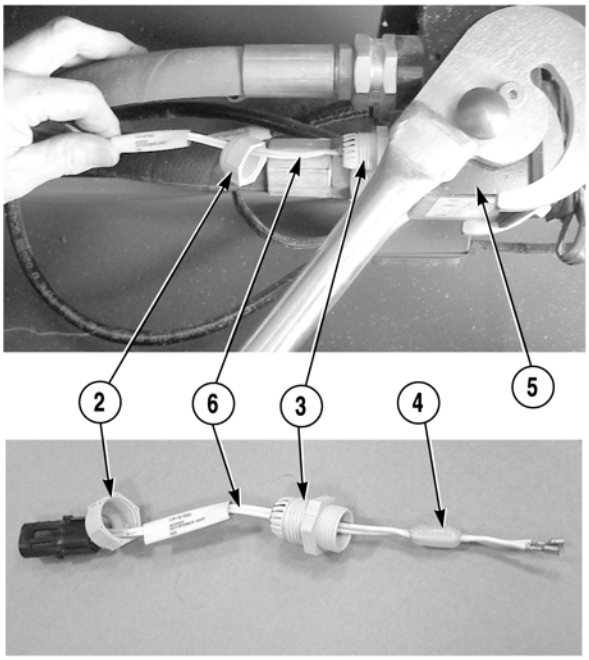
Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
UPIK electrical connectors disconnected, (Para 2-11)

a. Removal.



(1) Disconnect connector (1).

3-26. PLS TRAILER WIRE HARNESS REPLACEMENT (CONT).



CAUTION

Perform Steps (2) through (5) to remove fastener securing wire harness to UPIK connector. Failure to comply may cause damage to equipment.

(2) Remove nut (2) from fastener (3).

NOTE

Plug is held in place with rubber seal. Rubber seal remains in fastener when removing plug.

(3) Push plug (4) in towards UPIK connector (5).

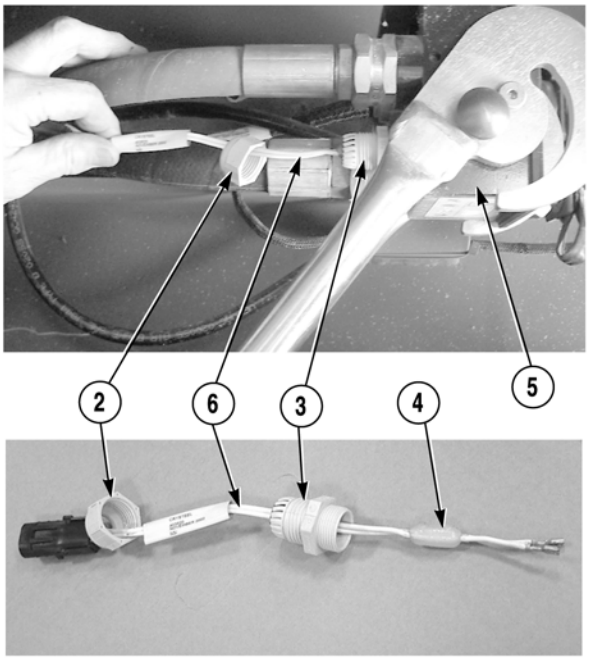
(4) Remove fastener (3) from UPIK connector (5).

NOTE

Note position of wires on terminals on UPIK connector prior to removal to ensure proper installation.

(5) Remove wire harness (6) from UPIK connector (5).

b. Installation.



NOTE

Install wires on terminals in UPIK as noted prior to removal.

(1) Install wire harness (6) on UPIK connector (5).

(2) Install fastener (3) on UPIK connector (5).

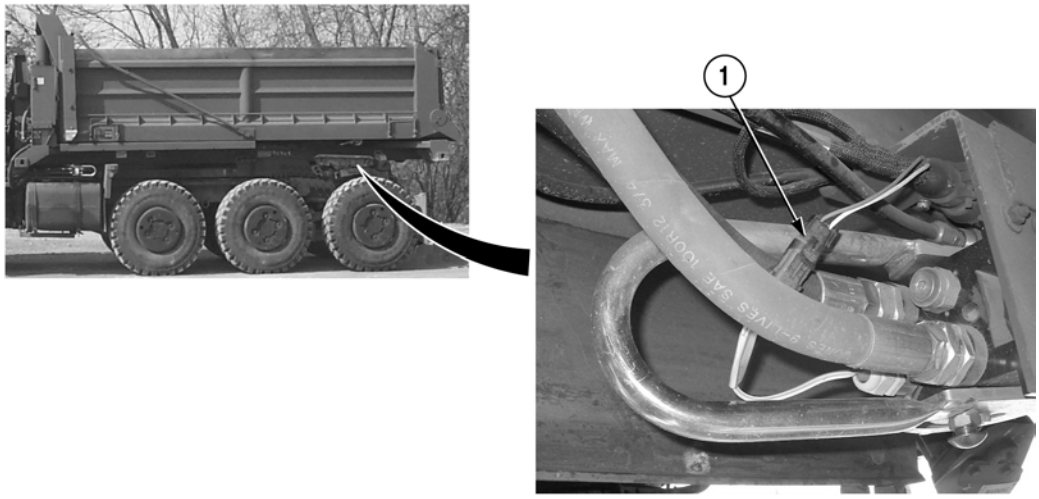
CAUTION

Plug must seat in rubber seal of fastener. Failure to comply will not allow a tight seal and may cause damage equipment.

(3) Pull plug (4) towards back of fastener (3).

(4) Install nut (2) on fastener (3).

3-26. PLS TRAILER WIRE HARNESS REPLACEMENT (CONT).



(5) Connect connector (1).

c. Follow-On Maintenance.

- Connect UPIK electrical connector, (Para 2-11).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-27. PLS LOCK-OUT ASSEMBLY WIRE HARNESS REPLACEMENT.

This task covers:

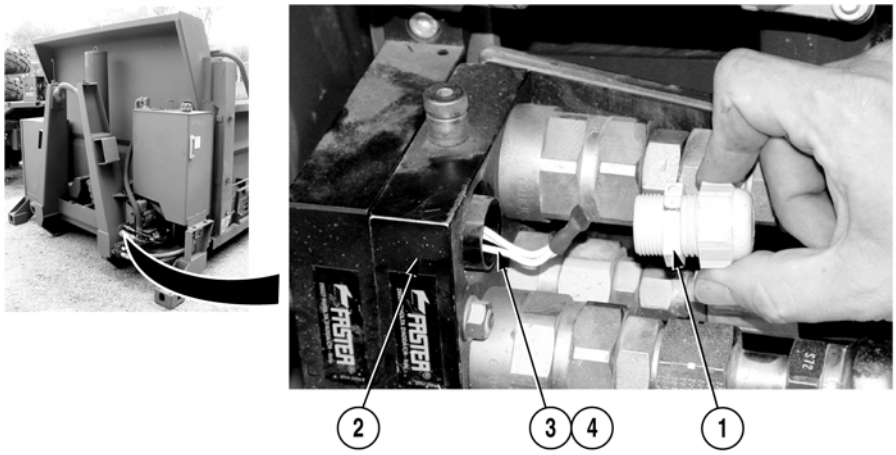
a. Removal b. Installation

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive
(Item 11, Appendix E)

Equipment Condition
Dump Body Unloaded, (Para 2-5)

a. Removal.

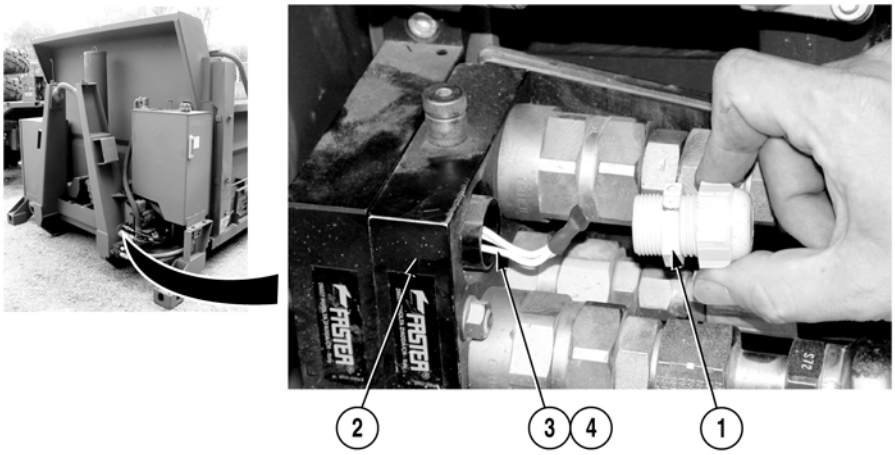


(1) Remove cover (1) from connector assembly (2).

(2) Remove three wires (3) from terminals (4) on connector assembly (2).

3-27. PLS LOCK-OUT ASSEMBLY WIRE HARNESS REPLACEMENT (CONT).

b. Installation.



(1) Install three wires (3) on terminals (4) on connector assembly (2).

(2) Install cover (1) on connector assembly (2).

END OF TASK

3-28. HYDRAULIC HOSE AND TUBE REPLACEMENT.

This task covers:

a. Hydraulic hose location b. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Cap and Plug Set (Item 3, Appendix E)
Pan, Drain (Item 10, Appendix E)

Material/Parts
Cable Ties ((Item 1, Appendix D)
Tags, Identification (Item 4, Appendix D)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
UPIK hydraulic hoses disconnected, (Para 2-11)
Hydraulic reservoir drained, (Para 3-13)
Hose tray cover removed, (Para 3-30)

a. Hydraulic Hose Location.

WARNING

- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.
- Never disconnect any hydraulic line or fitting without dropping pressure to zero. Failure to comply may result in serious injury or death to personnel.

NOTE

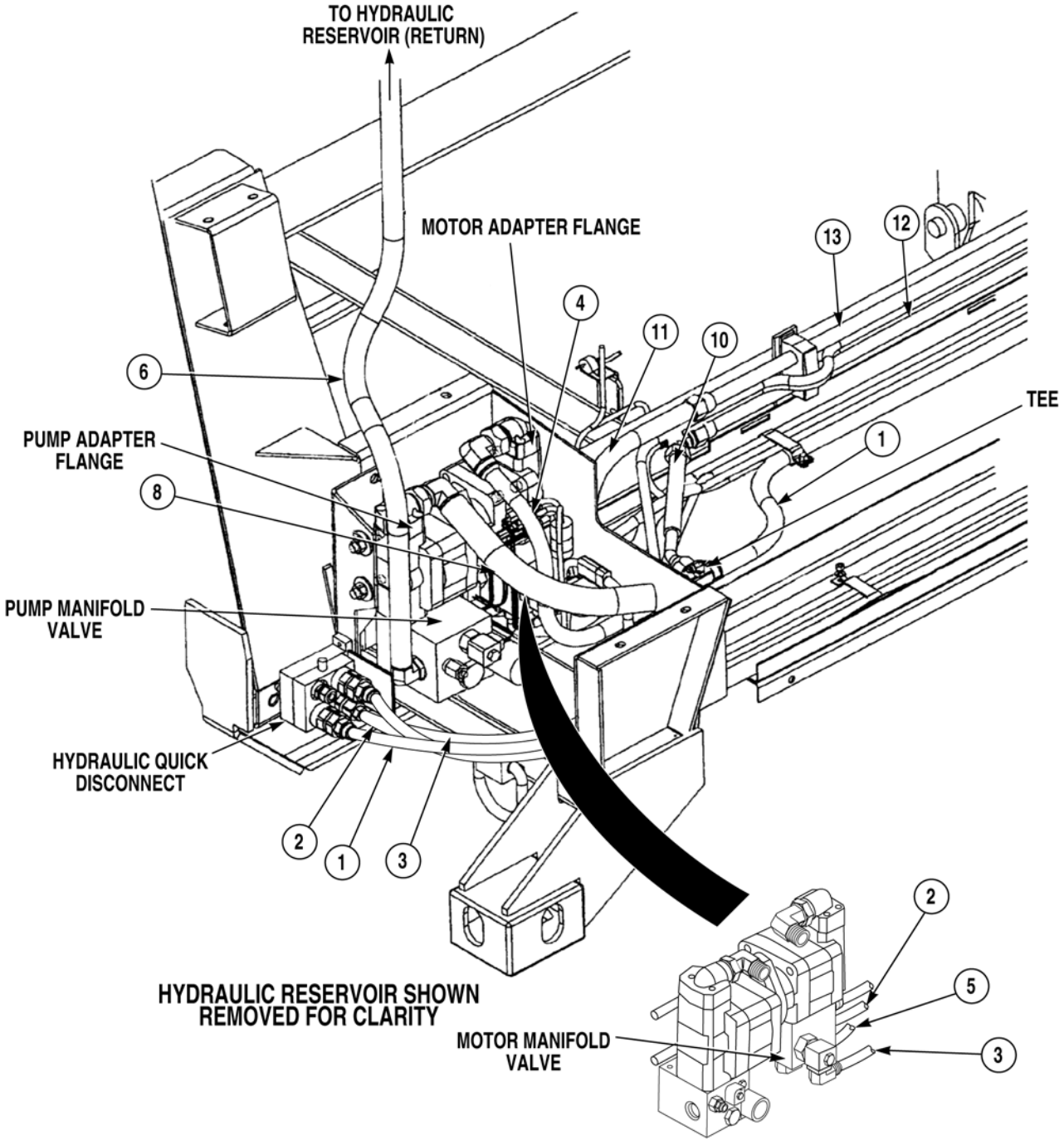
- Use of body props permits service to be performed safely beneath a raised Dump Body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.
- Tag and mark hoses and tubes prior to removal.
- Cap and plug all hoses and fittings prior to removal.
- Use a container to catch hydraulic oil before disconnecting hydraulic lines or fittings.
- Remove cable ties and hose clamps as required.
- Hydraulic hoses between serial No.s 3089020 and 3093735 do not have preformed packings.
- Hydraulic hoses serial No. 3093843 and subsequent have ORS preformed packings.

3-28. HYDRAULIC HOSE AND TUBE REPLACEMENT (CONT).

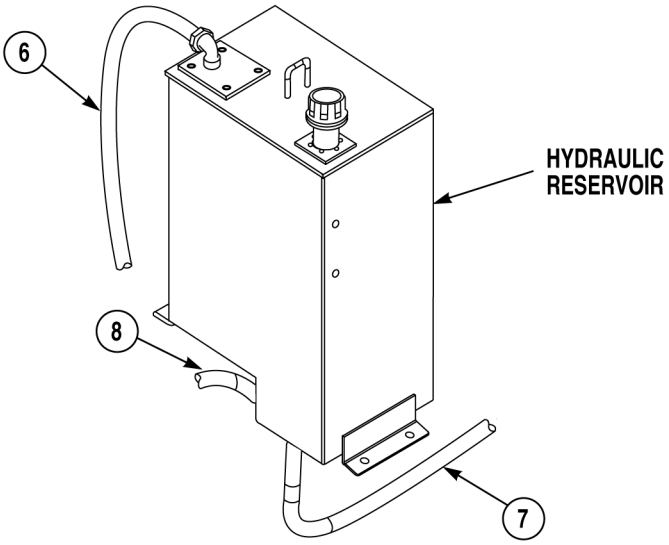
Hose/Steel Tube Item No.	From	To
1	Hydraulic Quick Disconnect	Tee
2	Hydraulic Quick Disconnect	Motor Manifold Valve
3	Hydraulic Quick Disconnect	Motor Manifold Valve
4	Tee	Motor Adapter Flange
5	Tee	Motor Manifold Valve
6	Pump Manifold Valve	Hydraulic Reservoir (Return)
7	Hydraulic Reservoir	Drain
8	Pump Adapter Flange	Hydraulic Reservoir (Supply)
9	Pump Manifold Valve	Hoist Cylinder
10	Tee	Steel Tube #12
11	Motor Manifold Valve	Steel Tube #13
12	Hose #10	Hose #14
13	Hose #11	Hose #15
14	Steel Tube #12	Rear UPIK Connection
15	Steel Tube #13	Rear UPIK Connection

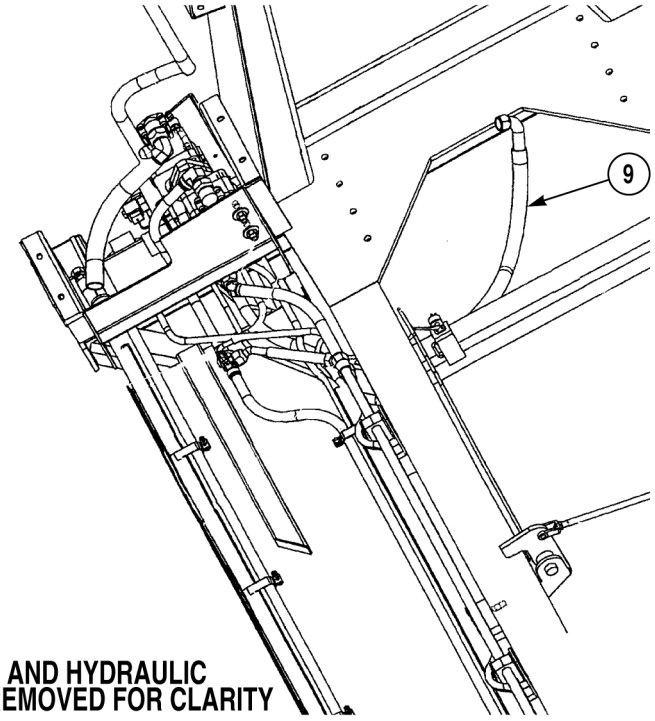
NOTE

Install cable ties and hose clamps as required.

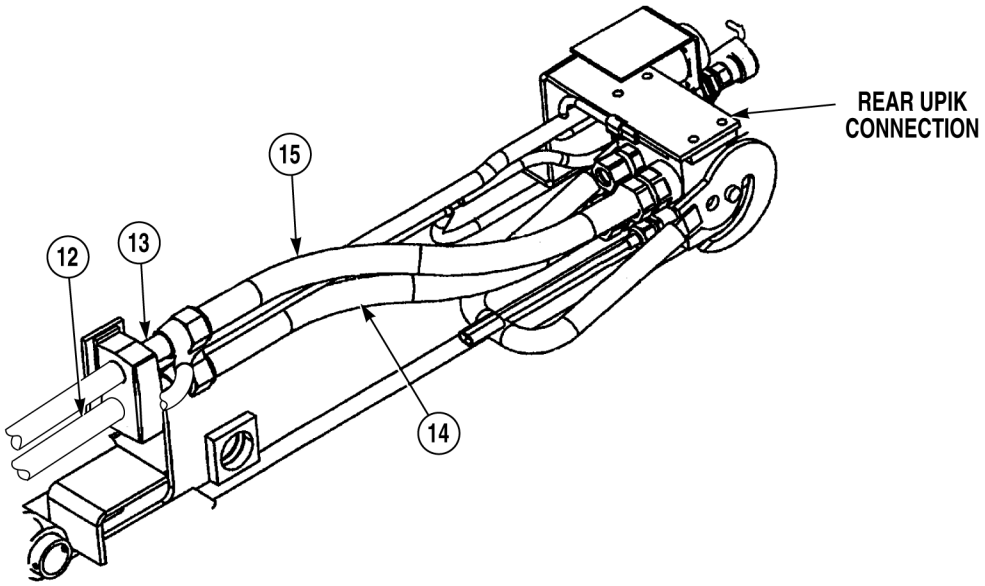

TO HYDRAULIC RESERVOIR (RETURN)
MOTOR ADAPTER FLANGE
13
12
4
11
10
6
TEE
1
PUMP ADAPTER FLANGE
8
PUMP MANIFOLD VALVE
HYDRAULIC QUICK DISCONNECT
2
1
3
HYDRAULIC RESERVOIR SHOWN REMOVED FOR CLARITY
2
5
MOTOR MANIFOLD VALVE
3

3-28. HYDRAULIC HOSE AND TUBE REPLACEMENT (CONT).





HOIST CYLINDER AND HYDRAULIC
RESERVOIR SHOWN REMOVED FOR CLARITY



b. Follow-On Maintenance:

- Install hose tray cover, (Para 3-30).
- Fill hydraulic reservoir, (Para 3-13).
- Stow body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-29. AIR LINE REPLACEMENT.

This task covers:

a. Air Line Locations b. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Material/Parts
Cable Ties (Item 1, Appendix D)
Tags, Identification (Item 4, Appendix D)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)
UPIK air connector disconnected, (Para 2-11)

a. Air Line Locations.

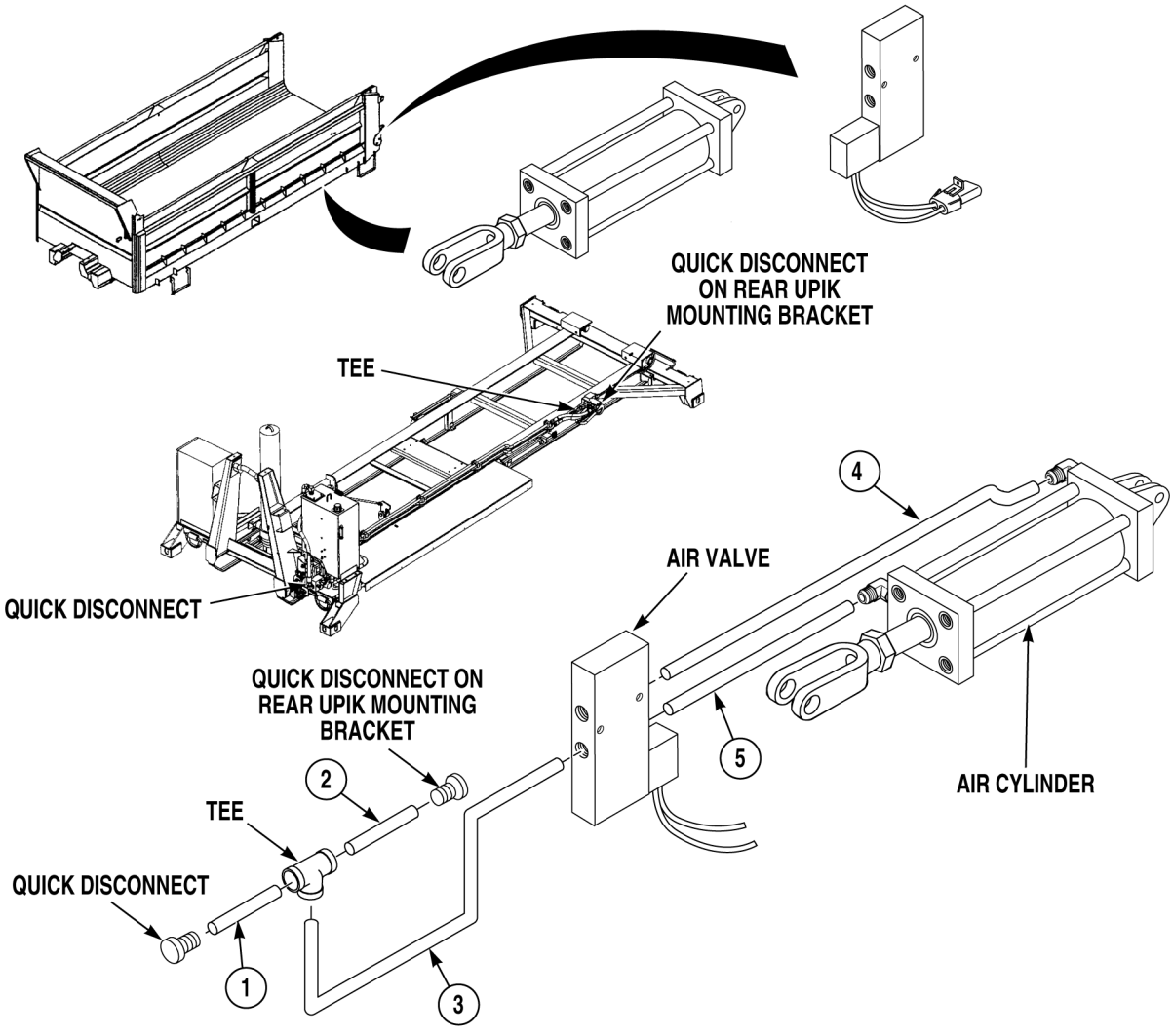
WARNING

- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.
- Air lines may be under extreme pressure. Ensure all personnel wear protective goggles when working around compressed air. Failure to comply may result in serious injuiry or death to personnel.

NOTE

- Use of body props permits service to be performed safely beneath a raised Dump Body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.
- Remove cable ties as required.
- Tag and mark air lines and fittings prior to removal to ensure proper installation.

Air Line No.	From	To
1	Quick disconnect on dump bracket or quick disconnect on vehicle mounting bracket.	Tee
2	Tee	Quick disconnect on rear UPIK mounting bracket.
3	Tee	Air Valve
4	Air Valve	Air Cylinder
5	Air Valve	Air Cylinder



3-29. AIR LINE REPLACEMENT (CONT).

b. Follow-On Maintenance:

- Connect UPIK air connector, (Para 2-11).
- Stow Body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-30. HOSE TRAY COVER REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Personnel Required
Two

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
Dump Body raised, (Para 2-15)
Body props deployed, (Para 2-14)

a. Removal.

WARNING

- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and kill or injure personnel.
- There are two body props located on Dump Body, one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Dump body must be empty when propped on body props. Failure to comply could result in serious injury to personnel.
- Hose tray cover weighs 100 lb (45.5 kg). Do not attempt to lift or remove hose tray cover without the aid of an assistant and a suitable lifting device. Failure to comply may result in serious injury to personnel.

NOTE

- Use of body props permits service to be performed safely beneath a raised Dump Body.
- Always use both body props (one on each side) to support empty Dump Body for inspection, maintenance, or repair operations only.

3-30. HOSE TRAY COVER REPLACEMENT (CONT).

(1) With aid of an assistant and suitable lifting device, remove six screws (1), washer (2) and hose tray cover (3) from vehicle.

b. Installation.

WARNING

Hose tray cover weighs 100 lb (45.5 kg). Do not attempt to lift or install hose tray cover without the aid of an assistant and a suitable lifting device. Failure to comply may result in serious injury to personnel.

(1) With aid of an assistant and suitable lifting device, install hose tray cover (3) on vehicle with six washers (2) and screws (1).

c. Follow-On Maintenance:

- Stow body props, (Para 2-14).
- Lower Dump Body, (Para 2-15).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-31. TAILGATE LINKAGE ASSEMBLY REPLACEMENT.

This task covers:

a. Removal b. Installation c. Follow-On Maintenance

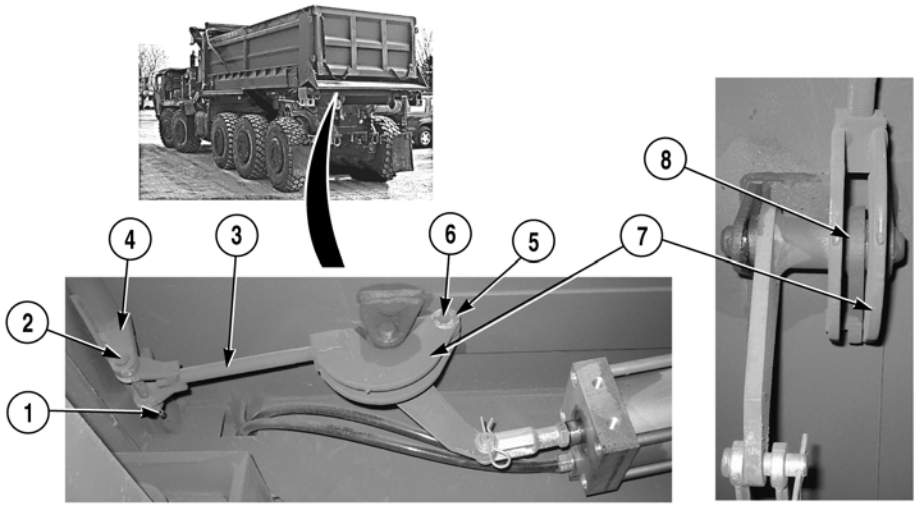
INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Materials/Parts
Cotter Pin (2) (MS24665-368)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
UPIK air connector disconnected, (Para 2-11)
Tailgate closed, (Para 2-15)

a. Removal.



WARNING

Air lines may be under extreme pressure. Ensure all personnel wear protective goggles when working around compressed air. Failure to comply may result in serious injury to death to personnel.

(1) Remove cotter pin (1), clevis pin (2) and shaft (3) from two brackets (4). Discard cotter pin.

NOTE

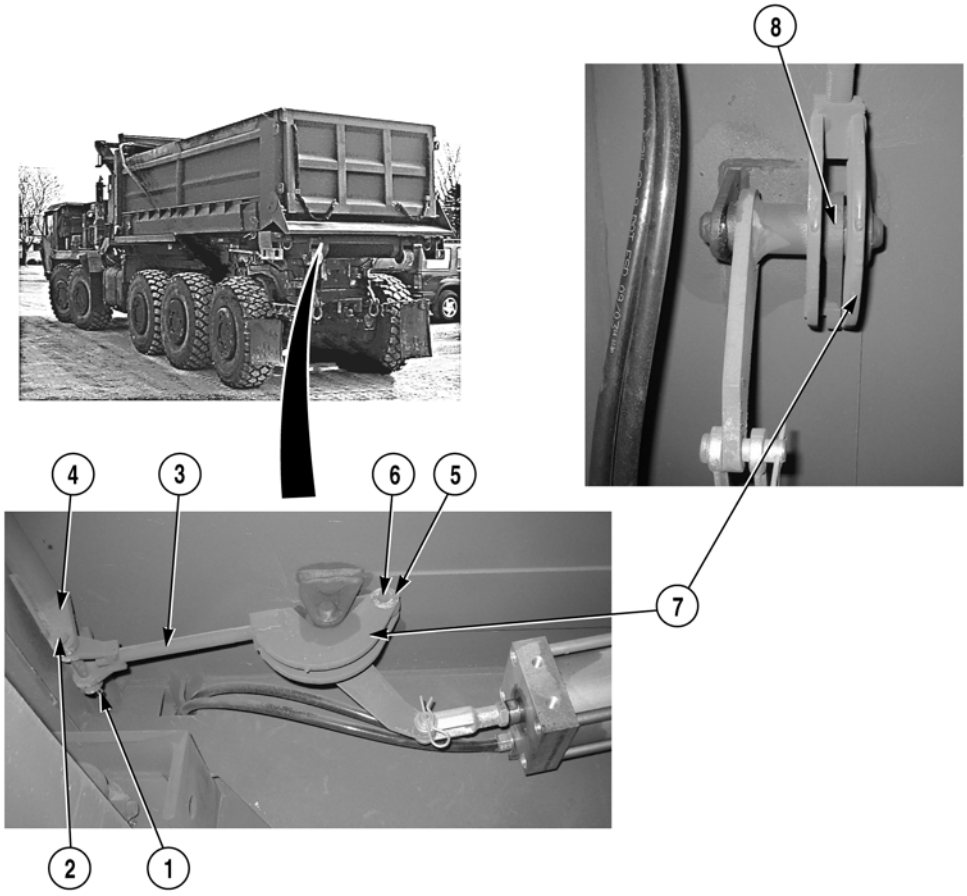
Note position of shaft on yoke prior to removal to ensure proper installation.

(2) Remove cotter pin (5), clevis pin (6) and yoke (7) from pivot assembly (8). Discard cotter pin.

(3) Remove shaft (3) from yoke (7).

3-31. TAILGATE LINKAGE ASSEMBLY REPLACEMENT (CONT).

b. Installation.



NOTE

Install shaft on yoke as noted prior to removal.

(1) Install shaft (3) on yoke (7).

(2) Install yoke (7) on pivot assembly (8) with clevis pin (6) and cotter pin (5).

NOTE

Rotating shaft in yoke allows for proper alignment on two brackets.

(3) Install shaft (3) on two brackets (4) with clevis pin (2) and cotter pin (1).

c. Follow-On Maintenance:

- Connect UPIK air connector, (Para 2-11).
- Remove wheel chocks, (TM 9-2320-364-10).

3-32. HYDRAULIC PRESSURE ADJUSTMENT.

This task covers:

a. Hydraulic Pressure Adjustment

b. Follow-On Maintenance

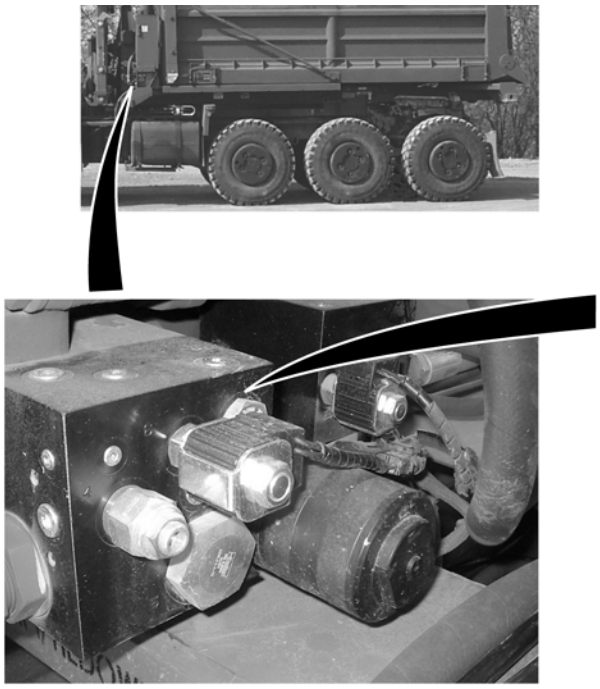
INITIAL SETUP

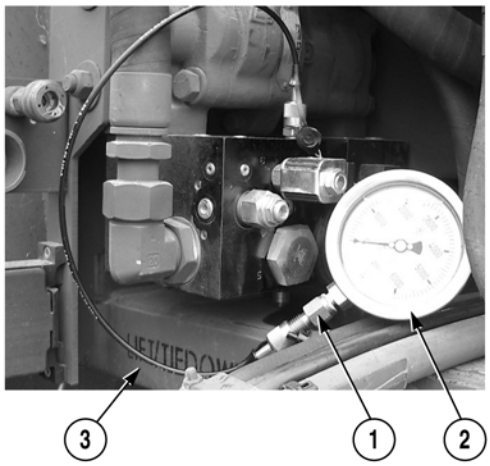
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Gage, Pressure, Dial (Item 4, Appendix E)
Adapter, Straight (Item 2 Appendix E)
Hose Assembly (Item 6, Appendix E)
Adapter (Item 1, Appendix E)

Materials/Parts
Hydraulic Oil (Item 2, Appendix D)
Preformed Packing (Item 5, Appendix D)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)
UPIK hydraulic hose disconnected, (Para 2-11)

a. Hydraulic Pressure Adjustment.

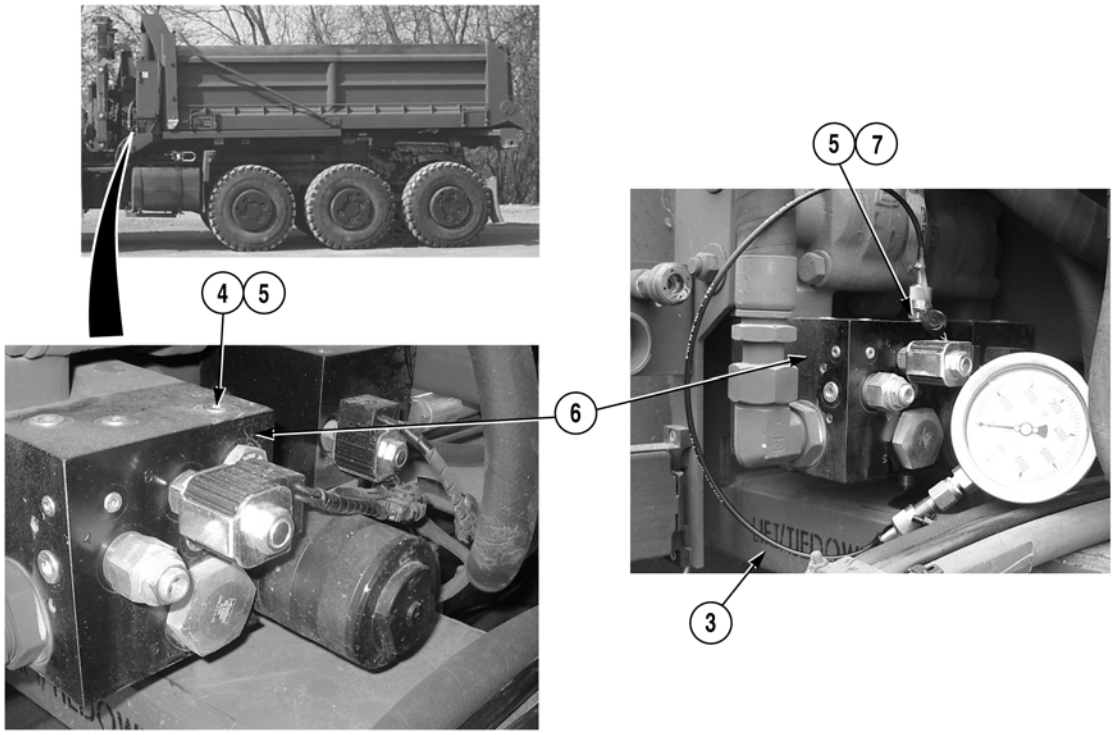




(1) Install adapter (1) on pressure gage (2).

(2) Install test hose (3) on adapter (1).

3-32. HYDRAULIC PRESSURE ADJUSTMENT (CONT).



WARNING

- The Dump Body hydraulic system operates at oil pressures up to 2700 psi (18,617 kPa). Never disconnect any hydraulic line or fitting without first dropping pressure to zero. Failure to comply may result in serious injury or death to personnel.
- Ensure Dump Body is in the lowered position. Failure to comply may result in serious injury or death to personnel.

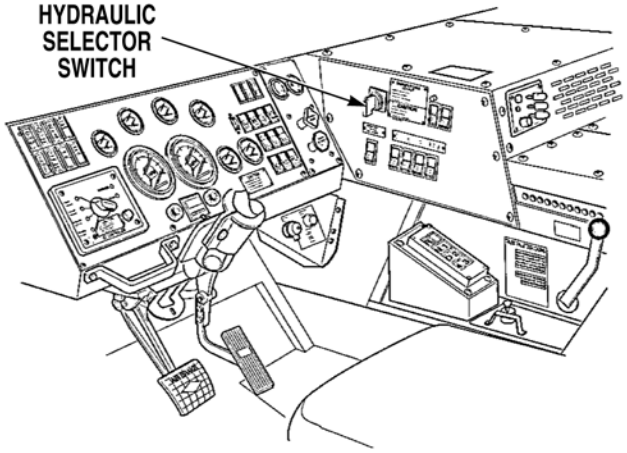
(3) Slowly remove plug (4) and preformed packing (5) from GP port on manifold (6). Discard preform packing.

(4) Install adaptor (7) on manifold (6).

(5) Install test hose (3) on adapter (7).

(6) Connect UPIK hydraulic hose, (Para 2-11).

(7) Start engine, (TM 9-2320-364-10).



CAUTION

Engine speed must be at idle before using hydraulic selector switch, or damage to equipment may result.

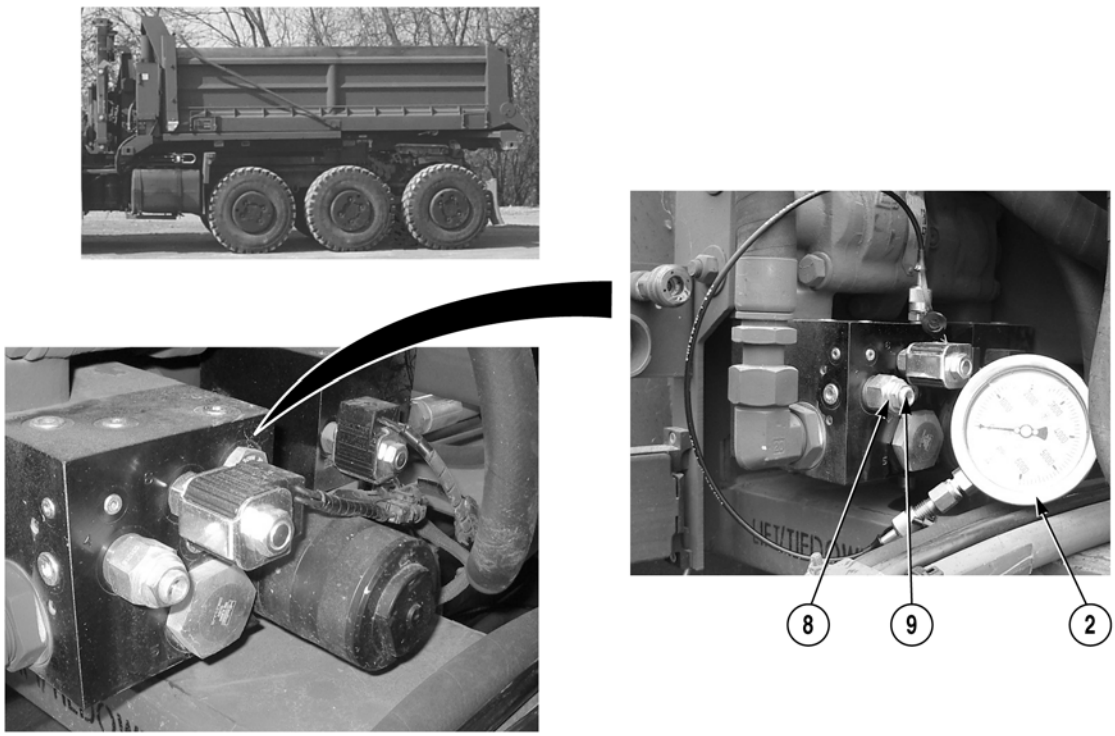
(8) Turn hydraulic selector switch to CRANE/SRW.

NOTE

- Correct pressure for hydraulic system is 2500 psi + 200 psi (17,238 kPa + 1379 kPa).
- When taking hydraulic pressure reading, Dump Body must be in fully raised position while continuing to hold the joystick in the raised position. This will allow hydraulic pressure reading to be taken.

(9) Raise Dump Body fully, (Para 2-15).

3-32. HYDRAULIC PRESSURE ADJUSTMENT (CONT).



(10) With Dump Body in the fully raised position and continuing to hold the joystick in the fully raised position (Para 2-15), record reading on pressure gage (2).

NOTE

Perform Steps (11) through (13) if hydraulic pressure needs to be adjusted.

(11) Loosen jam nut (8).

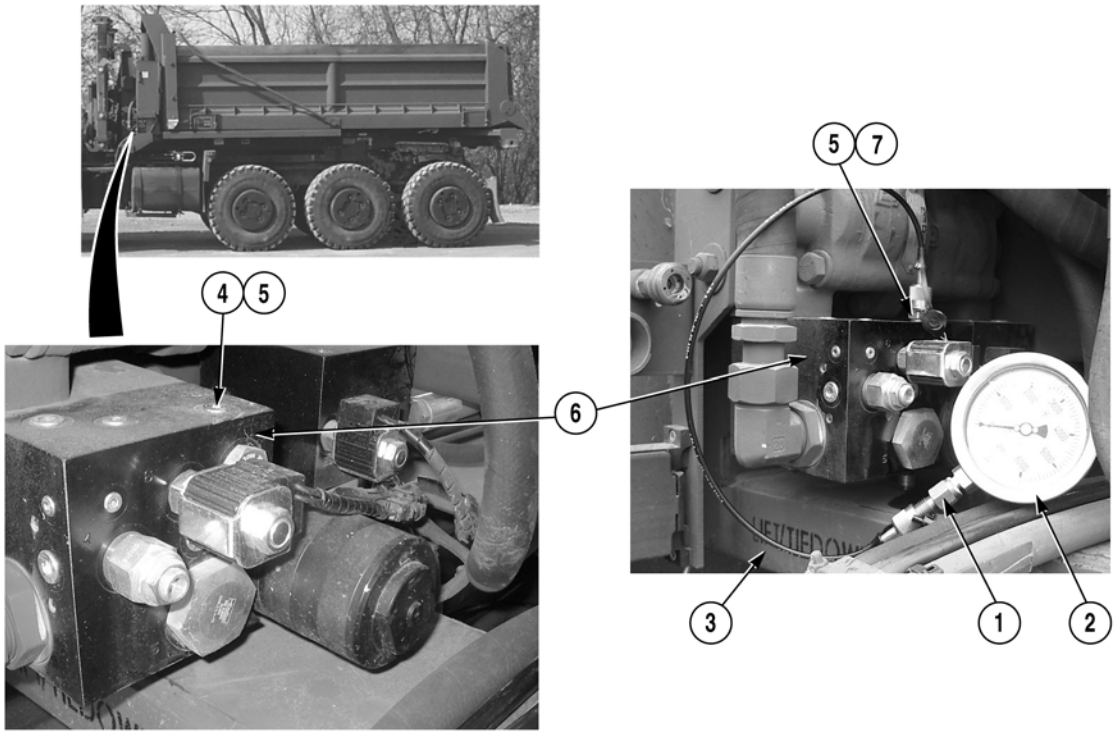
(12) Install hex head wrench in fitting (9) and adjust hydraulic pressure to 2500 psi + 200 psi (17,238 kPa + 1379 kPa).

(13) Tighten jam nut (8).

(14) Lower Dump Body, (Para 2-15).

(15) Shut OFF engine, (TM 9-2320-364-10).

(16) Disconnect UPIK hydraulic hose, (Para 2-11).



(17) Remove test hose (3) from adapter (7).

(18) Remove adapter (7) from manifold (6).

(19) Apply oil to preformed packing (5) and install preformed packing (5) and plug (4) on manifold (6).

(20) Remove test hose (3) from adapter (1).

(21) Remove adapter (1) from pressure gage (2).

b. Follow-On Maintenance:

- Connect UPIK hydraulic hose, (Para 2-11).
- Remove wheel chocks, (TM 9-2320-364-10).

END OF TASK

3-33. CONTROL BOX LAMP REPLACEMENT.

This task covers:

a. Removal

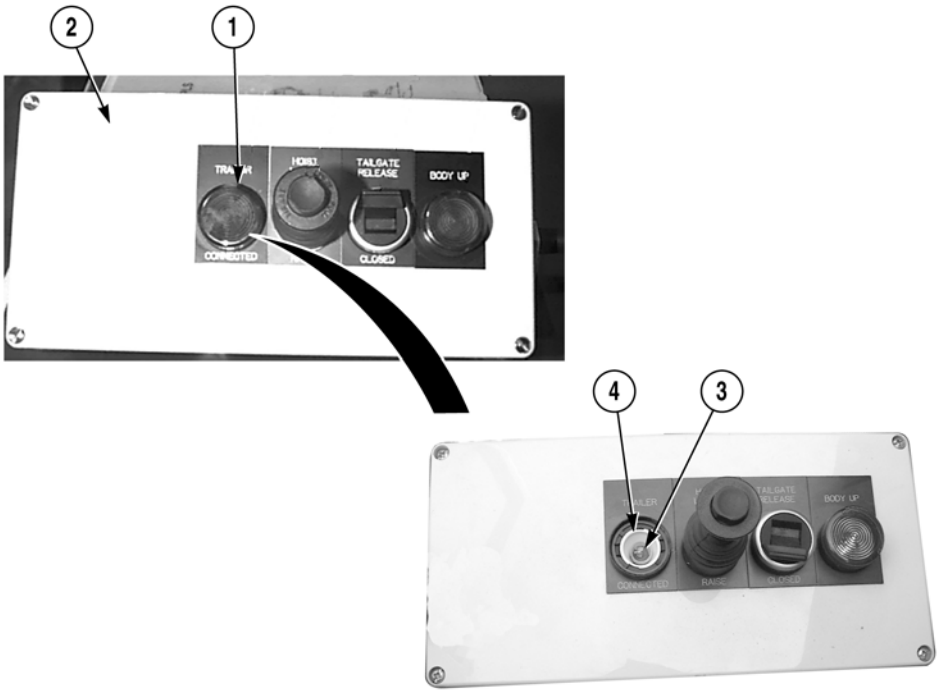
b. Installation

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Equipment Condition
Control box disconnected, (Para 2-11)

a. Removal.



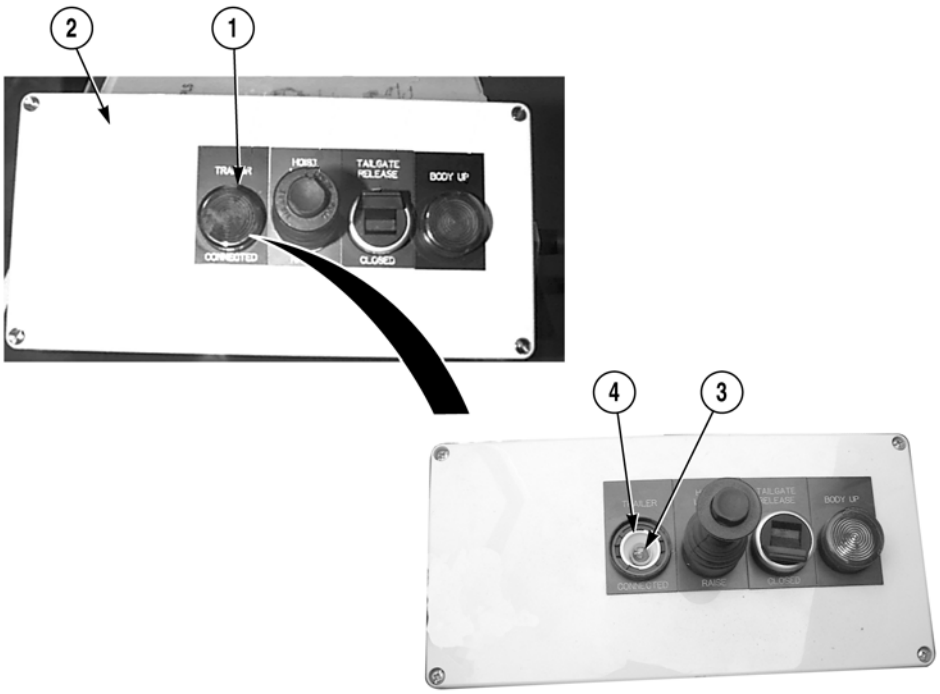
NOTE

Both lamps are replaced the same way.

(1) Remove lamp cover (1) from control box (2).

(2) Remove lamp (3) from lamp socket (4).

b. Installation.

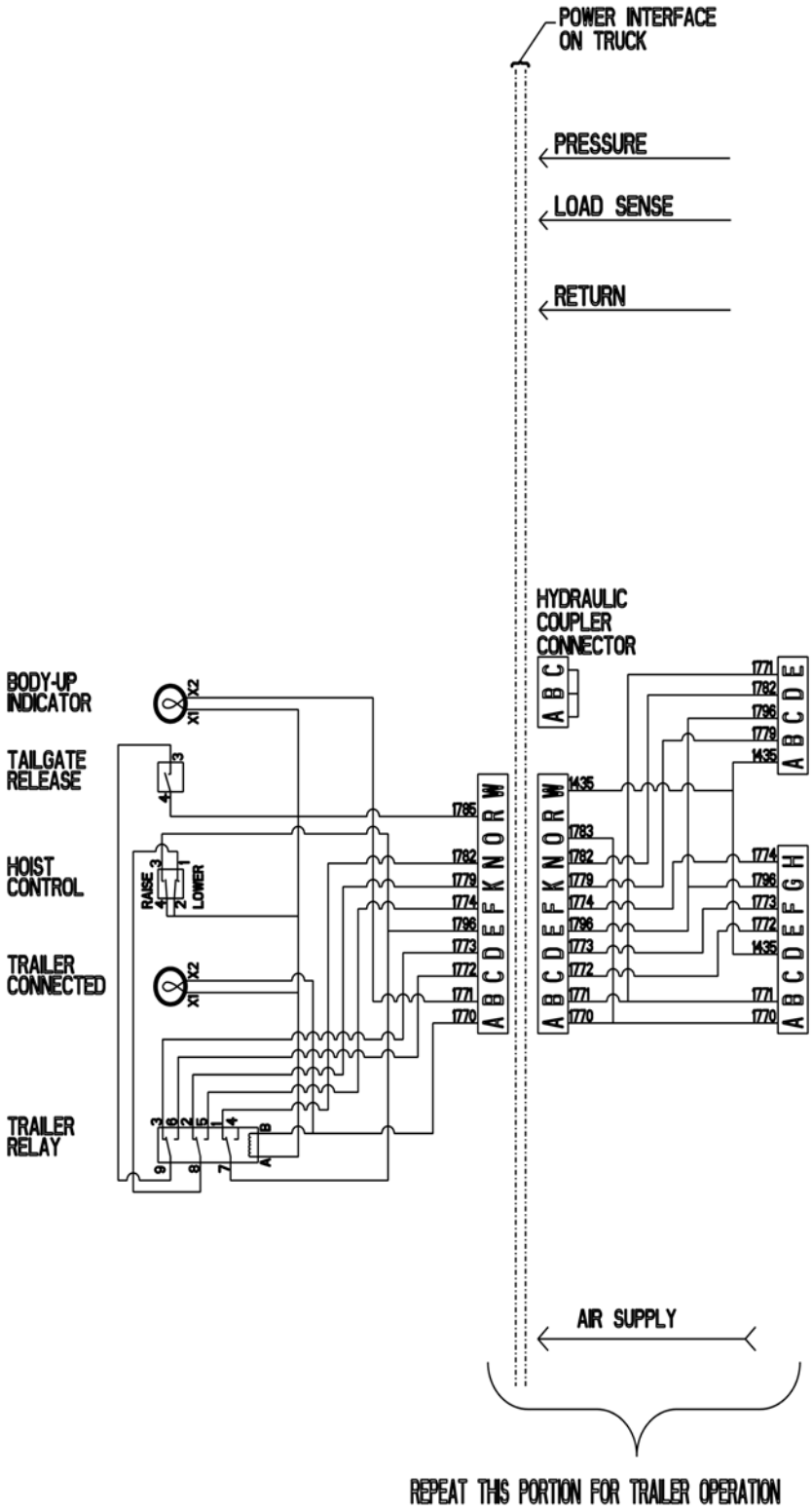


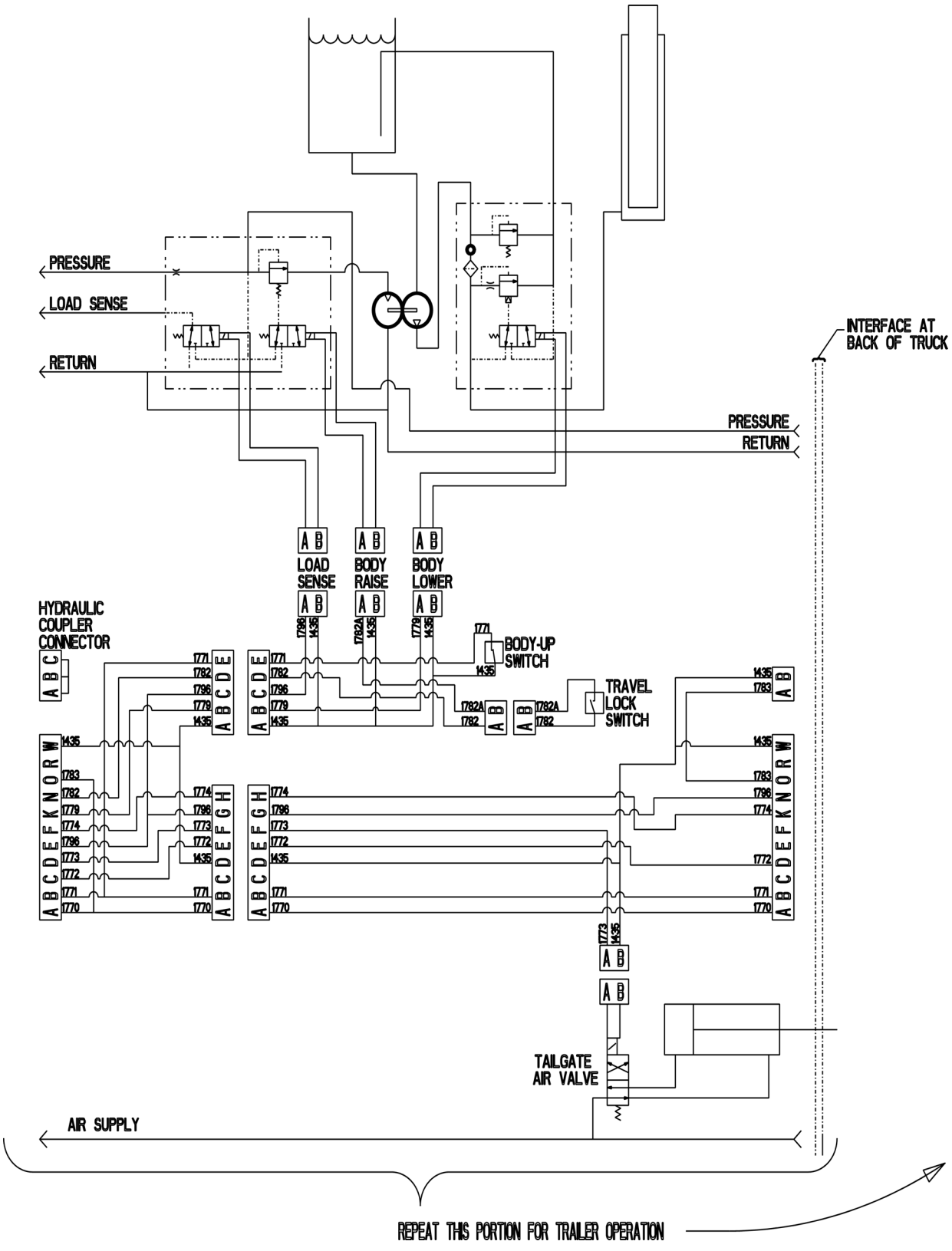
(1) Install lamp (3) in lamp socket (4).

(2) Install lamp cover (1) on control box (2).

END OF TASK

3-34. DUMP BODY ELECTRICAL AND HYDRAULIC SCHEMATIC.




PRESSURE
LOAD SENSE
RETURN
INTERFACE AT BACK OF TRUCK
PRESSURE
RETURN
LOAD SENSE
BODY RAISE
BODY LOWER
HYDRAULIC COUPLER CONNECTOR
BODY-UP SWITCH
TRAVEL LOCK SWITCH
TAILGATE AIR VALVE
AIR SUPPLY
REPEAT THIS PORTION FOR TRAILER OPERATION

CHAPTER 4
UNIT MAINTENANCE TROUBLESHOOTING INSTRUCTIONS

4-1. INTRODUCTION.

a. This section contains information for locating and correcting most of the troubles which may develop on the Dump Body. Each malfunction for an individual component, unit, or system is followed by a list of tests or inspections which will help to determine the corrective actions to take. Perform the tests/inspections and corrective action 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 is not corrected by listed corrective actions, notify your supervisor.

4-2. INTRODUCTION TO LOGIC TREE TROUBLESHOOTING.

a. Page Layout. Troubleshooting procedures are divided into logic tree pages and test pages.

(1) A logic tree page is always a left-hand page, facing the test page on the right. The logic tree page provides the sequence of steps required to isolate a fault to a failed component. All critical information for decision making is on the left-hand page. Each logic tree page contains the following information:

(a) **INITIAL SETUP** – This box is located only on the first logic tree page of a fault. INITIAL SETUP lists tools, materials, references, personnel and equipment needed to troubleshoot the fault.

(b) **KNOWN INFO** – This box is located in the top left-hand column. KNOWN INFO lists conditions and information that will eliminate specific components as the cause of the fault.

(c) **POSSIBLE PROBLEMS** – This box is located directly below KNOWN INFO. All of the system components that could cause a fault are listed in the POSSIBLE PROBLEMS box. The first component listed in the POSSIBLE PROBLEMS box is the one that will be tested at that step in the logic sequence. When one of the components is tested and found to be operational, it is entered at the bottom of the KNOWN INFO box as OK.

(d) **QUESTION** – Each question, located in the middle column, refers to the first possible problem listed in POSSIBLE PROBLEMS. If the answer to the question is YES, proceed to the next step. If the answer is NO, follow the NO arrow to obtain directions for correcting the problem. If the step contains a WARNING or CAUTION message, a small shadow box is printed above the question. Text for WARNINGs or CAUTIONs is on the following right-hand page.

(e) **TEST OPTIONS** – This box is located in the top right-hand column. TEST OPTIONS lists tests available for testing parts suspected of failing.

(f) **REASON FOR QUESTION** – This box is located directly below TEST OPTIONS. It explains the purpose for the question in the middle column.

4-2. INTRODUCTION TO LOGIC TREE TROUBLESHOOTING (CONT).

(2) A test page is always a right-hand page, facing the logic tree page on the left. The test provides detailed instructions for testing the first component listed in the POSSIBLE PROBLEMS box. This test will also provide an answer for the question in the middle column. Note the arrow connecting the test on the right-hand page to the REASON FOR QUESTION. When possible, illustrations are included to provide visual details. Warnings, cautions and notes contain additional information for testing.

b. How to Begin Troubleshooting.

(1) Determine the symptom or condition that indicates a problem or failure. Troubleshooting is divided into symptoms peculiar to a module system or component, for example: air system or hydraulics.

(2) Go to the referenced page to begin troubleshooting. Open the manual flat so both the left-hand and right-hand pages are displayed before you. The information on both pages is important to resolve the problem or failure. However, the experienced technician can follow the left-hand page instructions and refer to the right-hand page when necessary.

(3) Follow the Diagnostic Procedure. Answer question No. 1 on the left-hand page and follow the YES or NO path to either the remedy or the next question. If necessary, look on the right-hand page for test instructions and illustrations.

(4) Observe warnings, cautions and notes. The formatting and symbols used in this manual for warnings, cautions and notes are as follows:

WARNING

This is the symbol for a warning statement. If you see the word WARNING above a question on the left-hand page, look on the right-hand page for the text of the message. WARNINGs describe a situation which could cause severe injury or death to personnel.

CAUTION

This is the symbol for a caution statement. If you see the word CAUTION above a question on the left-hand page, look on the right-hand page for the text of the message. CAUTIONs describe a situation which could cause damage to equipment.

NOTE

This is the symbol for a note. Notes are located directly above the test to which they refer. Notes provide additional information for performing a test.

4-3. TROUBLESHOOTING SYMPTOM INDEX.

The following pages contain the malfunctions listed in Unit Maintenance Troubleshooting Symptom Index (Table 4-1), test or inspection instructions required to determine cause of malfunction, and corrective actions for repairing the faulty equipment.

Table 4-1. Unit Troubleshooting Symptom Index

4-4. TROUBLESHOOTING.

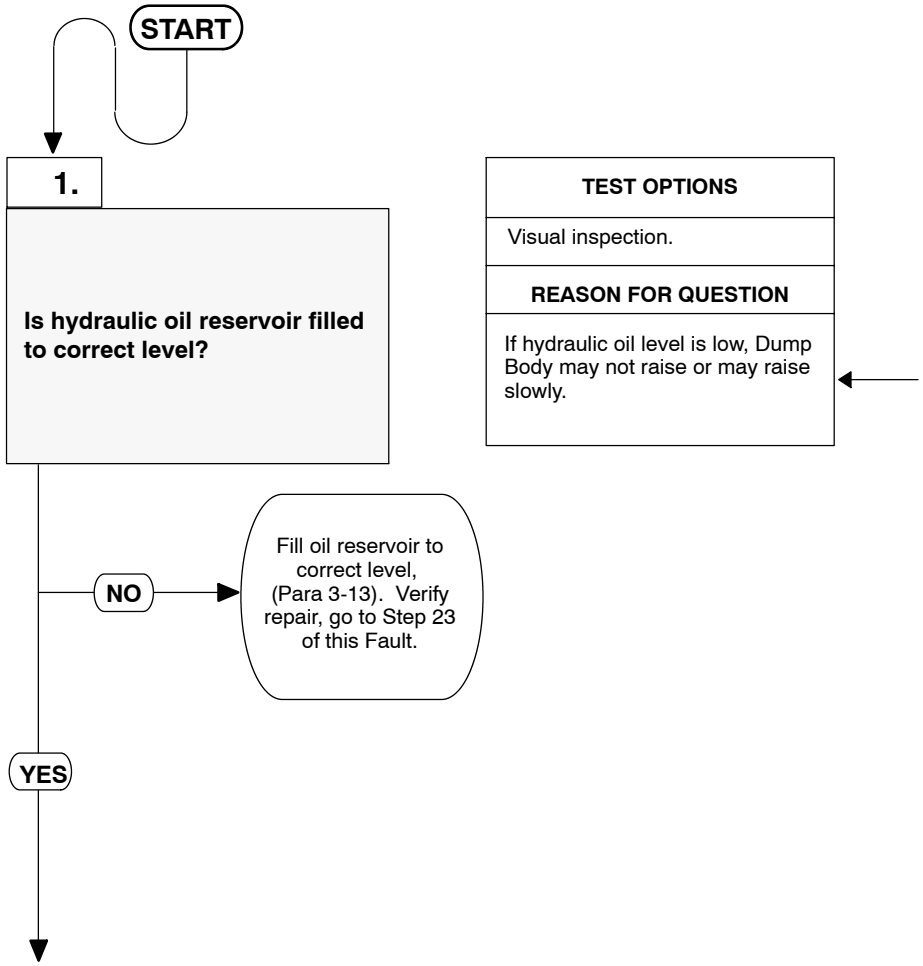
1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY.

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Multimeter (Item 9, Appendix E)
Jumperwire
Suitable Lifting Device Capable of lifting 5500 lb (2495 kg)

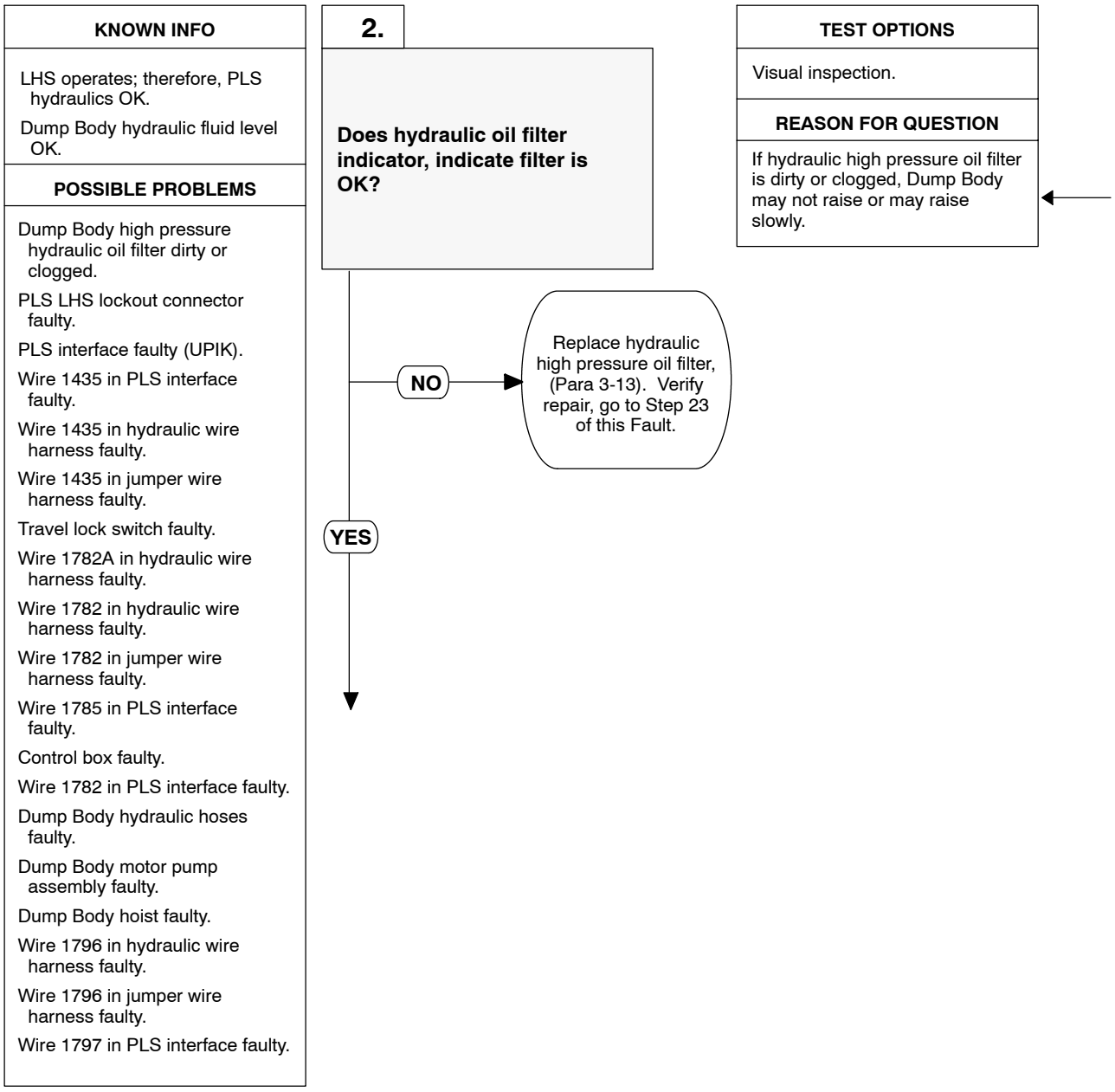
Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels Chocked, (TM 9-2320-364-10)

KNOWN INFO
LHS operates; therefore, PLS hydraulics OK.
POSSIBLE PROBLEMS
Dump Body hydraulic fluid level low.
Dump Body high pressure hydraulic oil filter dirty or clogged.
PLS LHS lockout connector faulty.
PLS interface faulty (UPIK).
Wire 1435 in PLS interface faulty.
Wire 1435 in hydraulic wire harness faulty.
Wire 1435 in jumper wire harness faulty.
Travel lock switch faulty.
Wire 1782A in hydraulic wire harness faulty.
Wire 1782 in hydraulic wire harness wire faulty.
Wire 1782 in jumper wire harness faulty.
Wire 1785 in PLS interface faulty.
Control box faulty.
Wire 1782 in PLS interface faulty.
Dump Body hydraulic hoses faulty.
Dump Body motor pump assembly faulty.
Dump Body hoist faulty.
Wire 1796 in hydraulic wire harness faulty.
Wire 1796 in jumper wire harness faulty.
Wire 1797 in PLS interface faulty.



VISUAL INSPECTION
Inspect fluid level in hydraulic oil reservoir through site glass, (Para 3-13). (a) If hydraulic oil is at correct level, go to Step 2 of this Fault. (b) If hydraulic oil is not at correct level, fill reservoir to correct level, (Para 3-13). Verify repair, go to Step 23 of this Fault.

1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

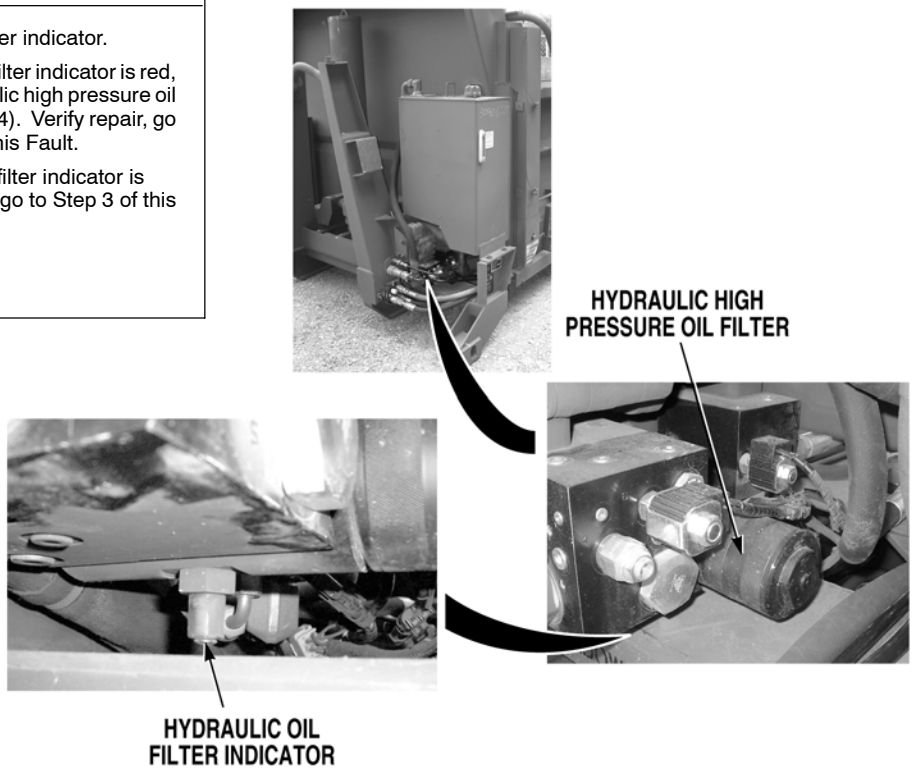


VISUAL INSPECTION

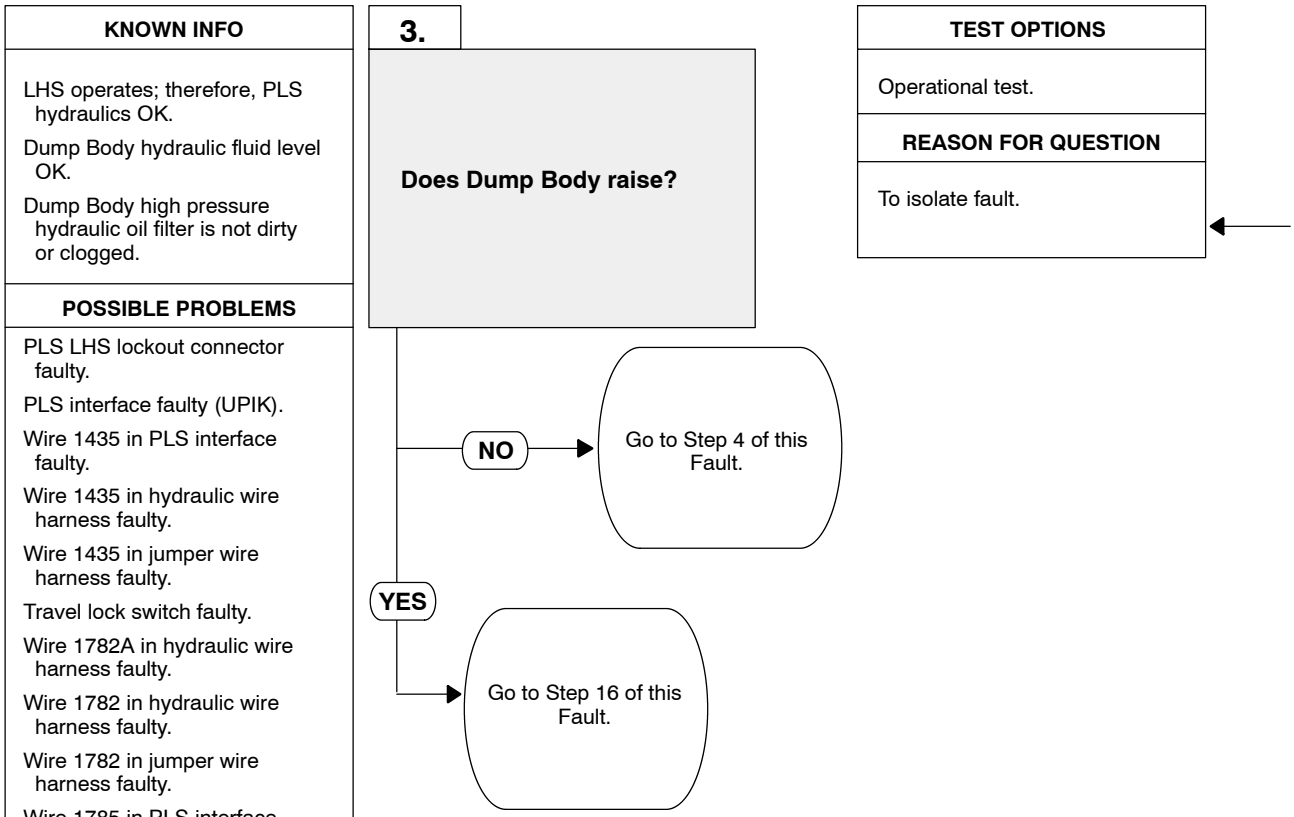
Inspect hydraulic oil filter indicator.

(a) If hydraulic oil filter indicator is red, replace hydraulic high pressure oil filter, (Para 3-14). Verify repair, go to Step 23 of this Fault.

(b) If hydraulic oil filter indicator is white or silver, go to Step 3 of this Fault.



1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



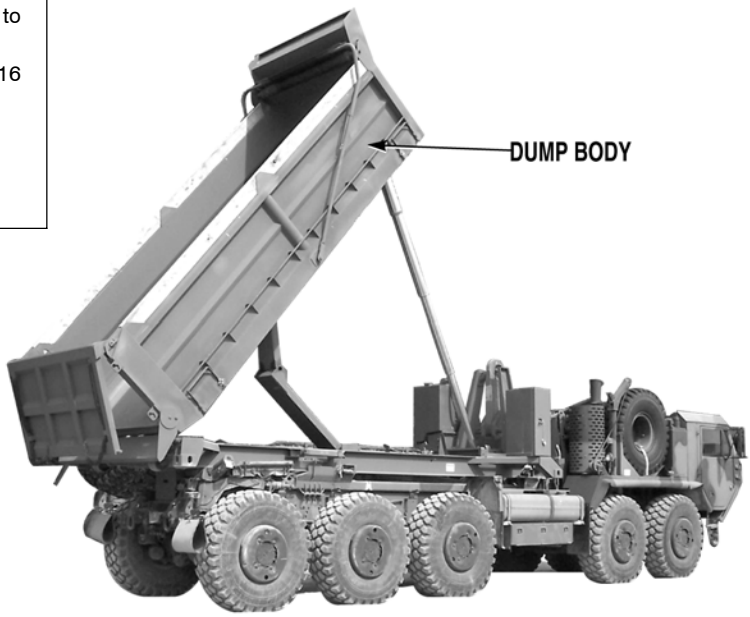
OPERATIONAL TEST

(1) Start engine, (TM 9-2320-364-10).

(2) Raise Dump Body, (Para 2-15).

(a) If Dump Body does not raise, go to Step 4 of this Fault.

(b) If Dump Body raises, go to Step 16 of this Fault.



1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

KNOWN INFO

LHS operates; therefore, PLS hydraulics OK.

Dump Body hydraulic fluid level OK.

Dump Body high pressure hydraulic oil filter is not dirty or clogged.

POSSIBLE PROBLEMS

PLS LHS lockout connector faulty.

PLS interface faulty (UPIK).

Wire 1435 in PLS interface wire faulty.

Wire 1435 in hydraulic wire harness faulty.

Wire 1435 in jumper wire harness faulty.

Travel lock switch faulty.

Wire 1782A in hydraulic wire harness faulty.

Wire 1782 in hydraulic wire harness faulty.

Wire 1782 in jumper wire harness faulty.

Wire 1785 in PLS interface faulty.

Control box faulty.

Wire 1782 in PLS interface faulty.

Dump Body hydraulic hoses faulty.

Dump Body motor pump assembly faulty.

Dump Body hoist faulty.

Wire 1796 in hydraulic wire harness faulty.

Wire 1796 in jumper wire harness faulty.

Wire 1797 in PLS interface faulty.

4.

WARNING

Read WARNING on Page 4-11

Does Dump Body raise when PLS auxiliary valve is bypassed?

NO → Go to Step 6 of this Fault.

YES

TEST OPTIONS

Operational test.

REASON FOR QUESTION

If LHS system operates, PLS interface is faulty.

WARNING

Hydraulic system can reach 3675 psi (25,339 kPa). Never connect/disconnect any hydraulic line or fitting without first dropping pressure to zero. Failure to comply could cause serious injury or death to personnel.

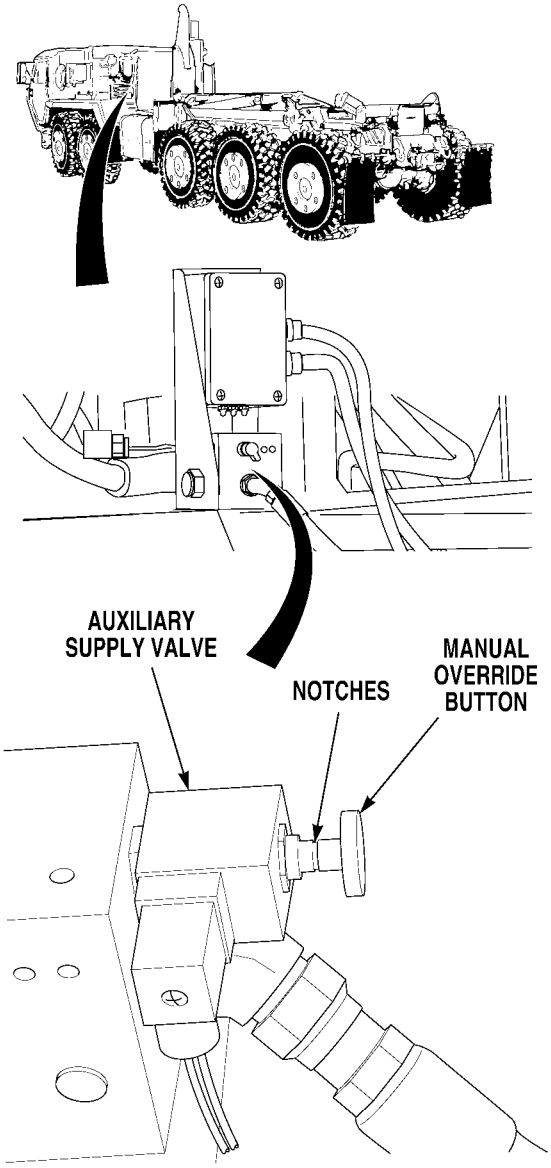
OPERATIONAL TEST

(1) Manually override PLS auxiliary supply valve solenoid by pulling manual override button past notches and turn clockwise, (TM 9-2320-364-10).

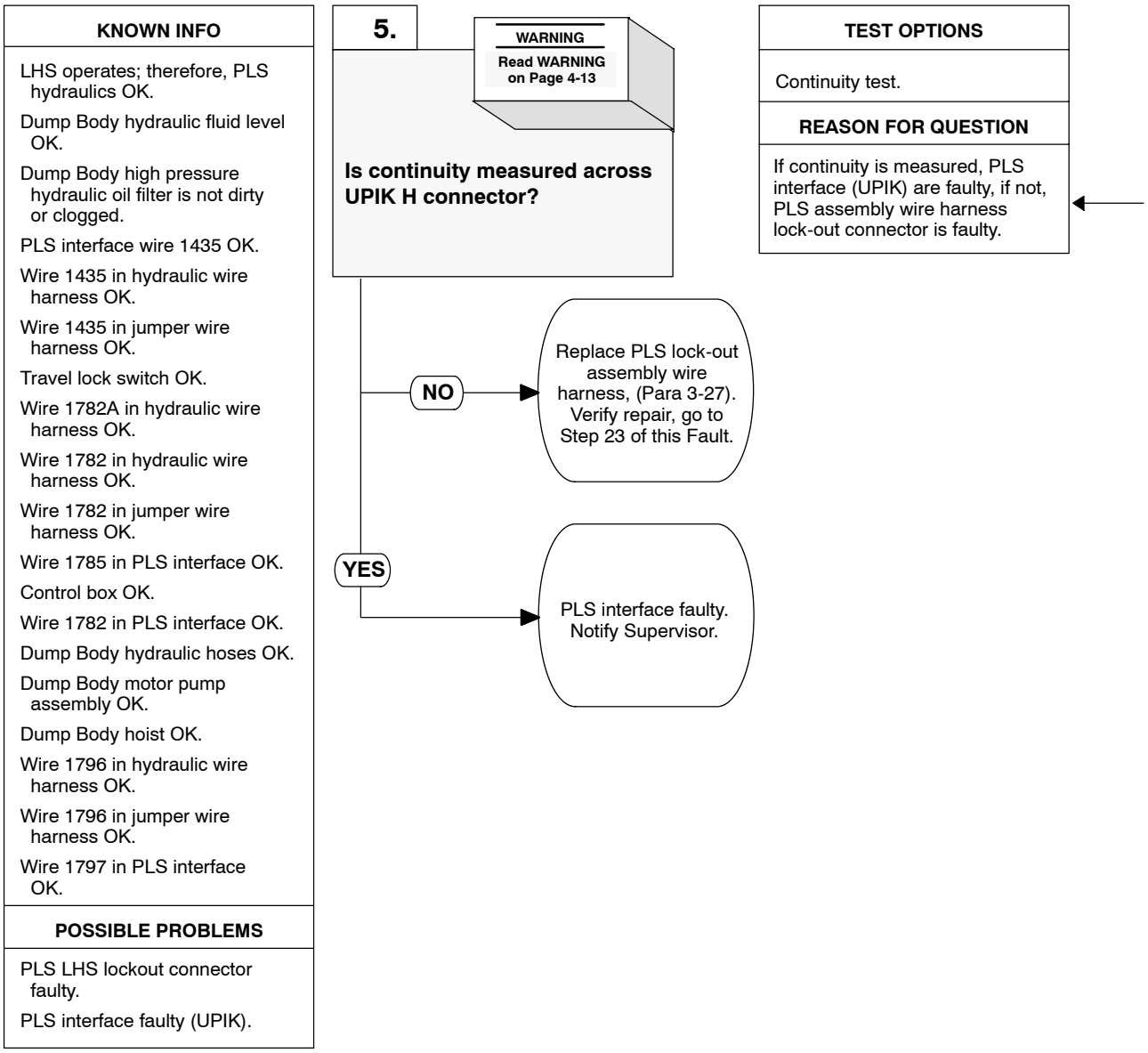
(2) Operate Dump Body, (Para 2-15).

(a) If Dump Body does not raise, go to Step 6 of this Fault.

(b) If Dump Body raises, go to Step 5 of this Fault.



1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.

CONTINUITY TEST

(1) Shut OFF engine, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Disconnect UPIK, (Para 2-11).

(4) Set multimeter select switch to ohms.

(5) Connect positive (+) multimeter lead to UPIK H connector, terminal A. See Dump Body schematic, (Para 3-34).

(6) Connect negative (–) multimeter lead to UPIK H connector, terminal B.

  (a) If continuity is measured, go to Step 6 of this task.

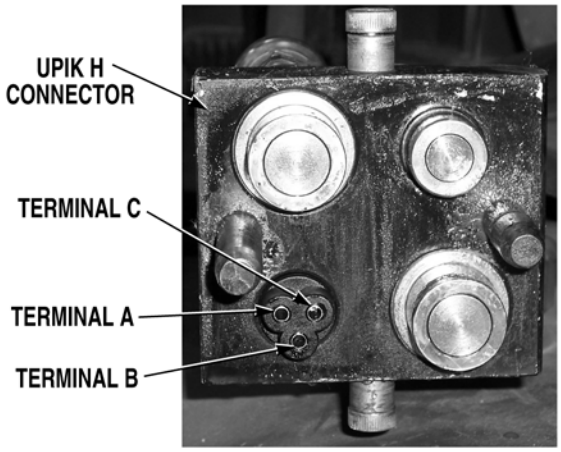
  (b) If continuity is not measured, replace PLS lock-out-harness assembly, (Para 3-27). Verify repair, go to Step 23 of this Fault.

(7) Connect positive (+) multimeter lead to UPIK H connector, terminal A.

(8) Connect negative (–) multimeter lead to UPIK H connector, terminal C.

  (a) If continuity is measured, PLS interface is faulty. Notify Supervisor.

  (b) If continuity is not measured, replace PLS lock-out-harness assembly, (Para 3-27). Verify repair, go to Step 23 of this Fault.



1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

KNOWN INFO

LHS operates; therefore, PLS hydraulics OK.

Dump Body hydraulic fluid level OK.

Dump Body high pressure hydraulic oil filter is not dirty or clogged.

PLS LHS lockout connector OK.

PLS interface OK (UPIK).

POSSIBLE PROBLEMS

Wire 1435 in PLS interface faulty.

Wire 1435 in hydraulic wire harness faulty.

Wire 1435 in jumper wire harness faulty.

Travel lock switch faulty.

Wire 1782A in hydraulic wire harness faulty.

Wire 1782 in hydraulic wire harness faulty.

Wire 1782 in jumper wire harness faulty.

Wire 1785 in PLS interface faulty.

Control box faulty.

Wire 1782 in PLS interface faulty.

Dump Body hydraulic hoses faulty.

Dump Body motor pump assembly faulty.

Dump Body hoist faulty.

Wire 1796 in hydraulic wire harness faulty.

Wire 1796 in jumper wire harness faulty.

Wire 1797 in PLS interface faulty.

6.

WARNING

Read WARNING on Page 4-15

Are 10 to 14 VDC measured between Dump Body raise solenoid valve connector, terminal A and B, when Dump Body joystick is in "RAISE" Dump Body position?

NO → Go to Step 7 of this Fault.

YES → Go to Step 16 of this Fault.

TEST OPTIONS

Voltage test.

REASON FOR QUESTION

If 10 to 14 VDC are not measured, Dump Body may not raise.

WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.

VOLTAGE TEST

(1) Shut OFF engine, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Disconnect Dump Body raise solenoid valve connector.

(4) Push in battery disconnect switch, (TM 9-2320-364-10).

(5) Turn ON ENGINE start switch, (TM 9-2320-364-10).

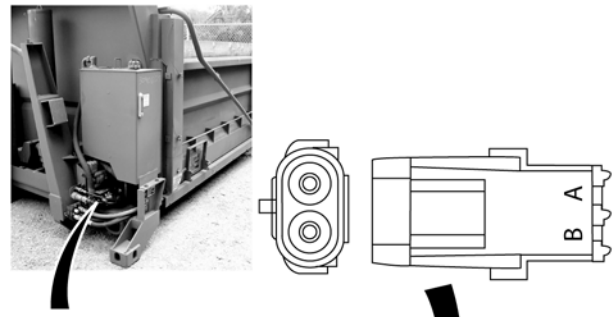
(6) Connect positive (+) multimeter lead to wire 1782A at body raise solenoid valve connector, terminal A. See Dump Body schematic, (Para 3-34).

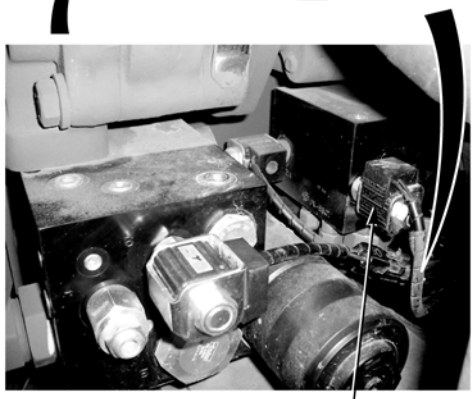
(7) Connect negative (-) multimeter lead to wire 1435 at Dump Body raise solenoid valve connector, terminal B.

(8) While an assistant holds Dump Body joystick in "RAISE" Dump Body position, note meter reading.

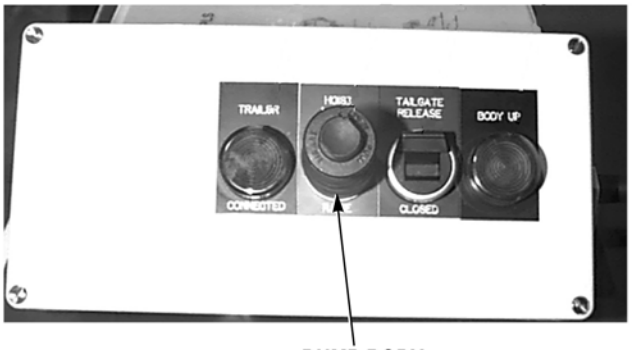
(a) If 10 to 14 VDC are not measured, go to Step 7 of this Fault.

(b) If 10 to 14 VDC are measured, go to Step 16 of this Fault.





BODY RAISE SOLENOID VALVE



DUMP BODY RAISE/LOWER JOYSTICK

1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

KNOWN INFO

LHS operates; therefore, PLS hydraulics OK.

Dump Body hydraulic fluid level OK.

Dump Body high pressure hydraulic oil filter is not dirty or clogged.

PLS LHS lockout connector OK.

PLS interface OK (UPIK).

POSSIBLE PROBLEMS

Wire 1435 in PLS interface faulty.

Wire 1435 in hydraulic wire harness faulty.

Wire 1435 in jumper wire harness faulty.

Travel lock switch faulty.

Wire 1782A in hydraulic wire harness faulty.

Wire 1782 in hydraulic wire harness faulty.

Wire 1782 in jumper wire harness faulty.

Wire 1785 in PLS interface faulty.

Control box faulty.

Wire 1782 in PLS interface faulty.

Dump Body hydraulic hoses faulty.

Dump Body motor pump assembly faulty.

Dump Body hoist faulty.

Wire 1796 in hydraulic wire harness faulty.

Wire 1796 in jumper wire harness faulty.

Wire 1797 in PLS interface faulty.

7.

WARNING

Read WARNING on Page 4-17

Are 10 to 14 VDC measured between 1782A at Dump Body raise solenoid valve connector, terminal A and a known good ground, when Dump Body joystick is in "RAISE" Dump Body position?

NO → Go to Step 10 of this Fault.

YES

TEST OPTIONS

Voltage test.

REASON FOR QUESTION

To isolate fault.

WARNING

Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.

VOLTAGE TEST

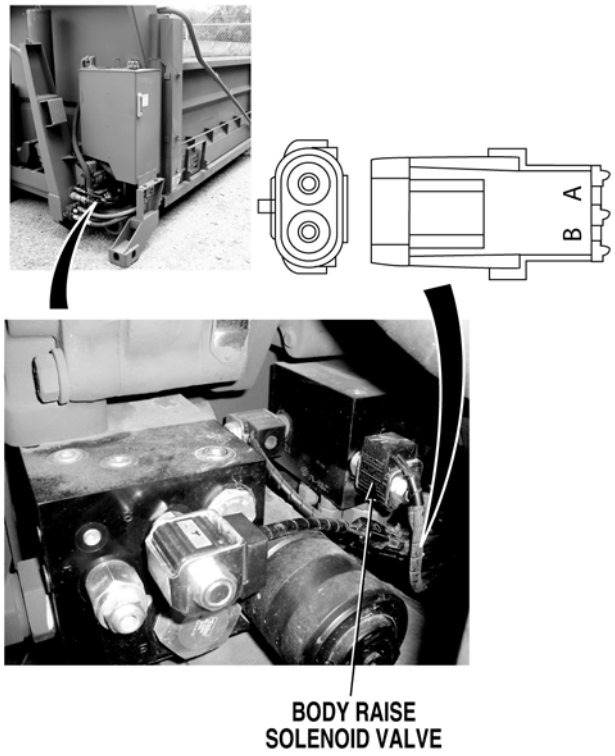
(1) Connect positive (+) multimeter lead to wire 1782A at body raise solenoid valve connector, terminal A. See Dump Body schematic, (Para 3-34).

(2) Connect negative (–) multimeter lead to a known good ground.

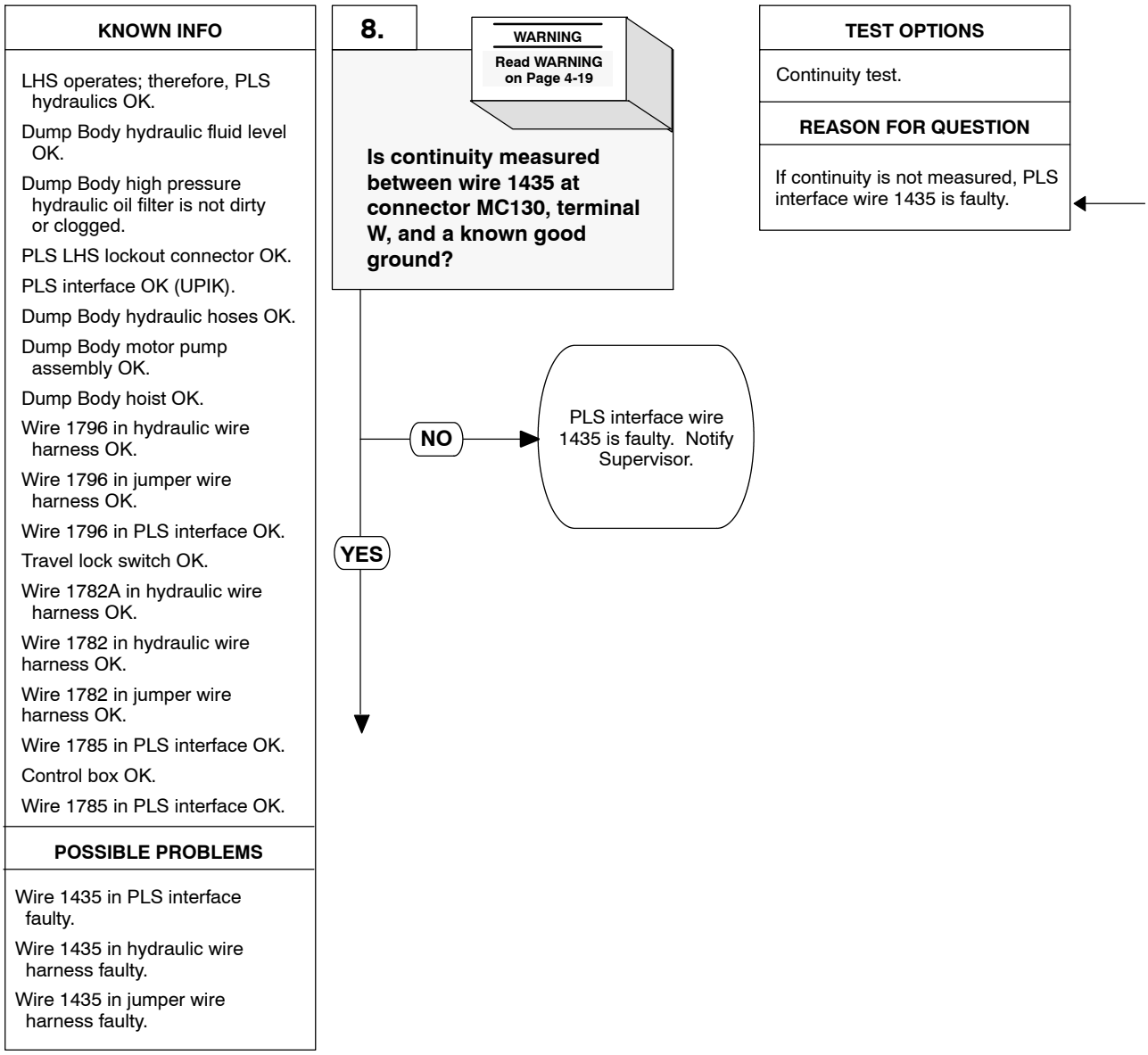
(3) Have an assistant place and hold Dump Body joystick in “RAISE” Dump Body position, note meter reading.

(a) If 10 to 14 VDC are not measured, go to Step 10 of this Fault.

(b) If 10 to 14 VDC are measured, go to Step 8 of this Fault.

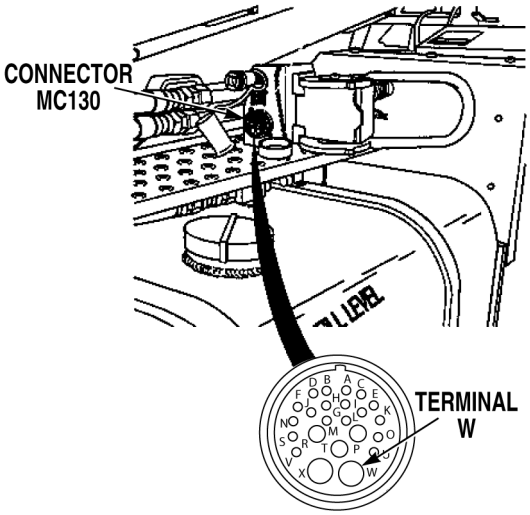


1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.



CONTINUITY TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Disconnect connector MC130, (Para 2-11).

(4) Set multimeter select switch to ohms.

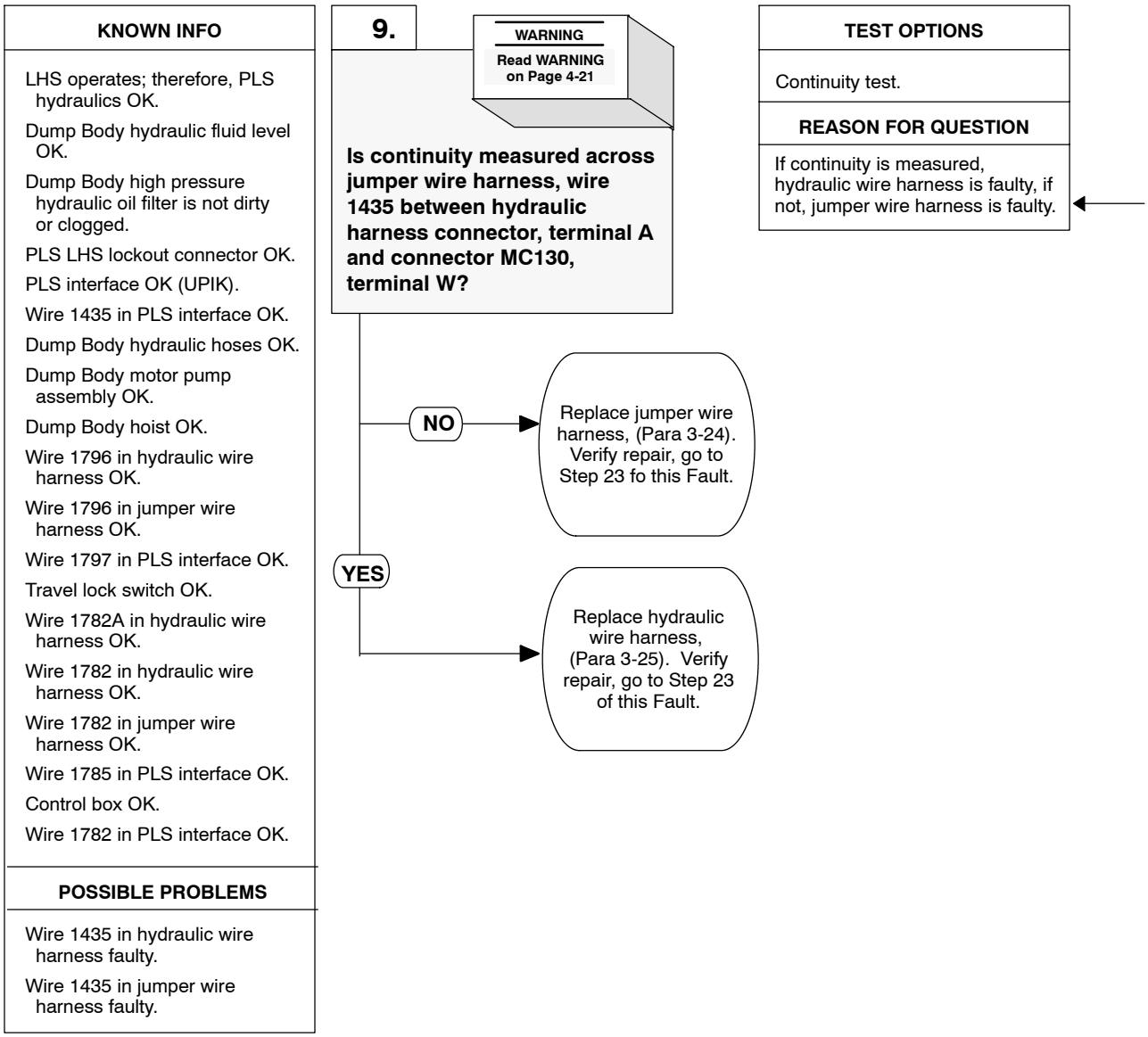
(5) Connect positive (+) multimeter lead to wire 1435 at connector MC130, terminal W. See Dump Body schematic, (Para 3-34).

(6) Connect negative (-) multimeter lead to a known good ground.

(a) If continuity is not measured, PLS interface wire 1435 is faulty. Notify Supervisor.

(b) If continuity is measured, go to Step 9 of this Fault.

1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

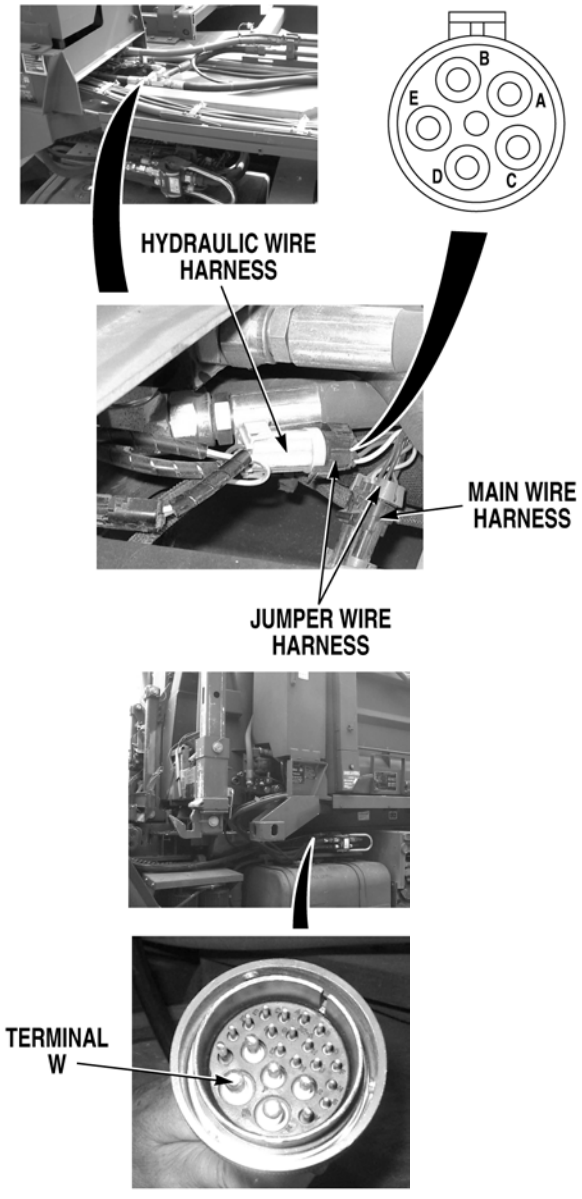


WARNING

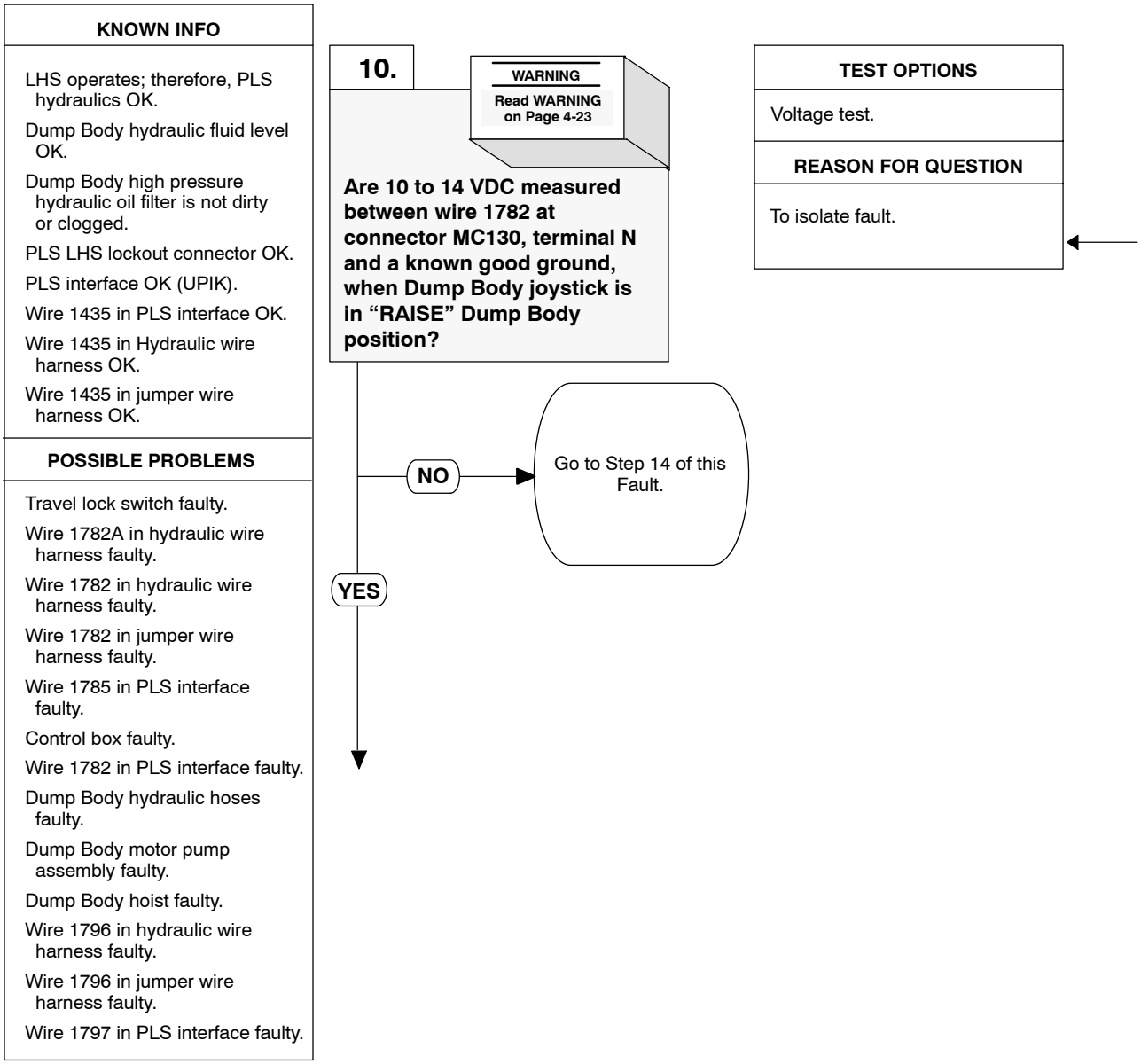
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Remove upper hoist mounting bracket from Dump Body, (Para 3-12).
(2) Attach suitable lifting device to Dump Body.
(3) Ensure travel lock is disengaged.
(4) Lift Dump Body with lifting device until body props can be deployed.
(5) Deploy body props, (Para 2-14).
(6) Lower Dump Body onto body props.
(7) Disconnect jumper wire harness at hydraulic harness connector, (Para 2-11).
(8) Set multimeter select switch to ohms.
(9) Connect positive (+) multimeter lead to wire 1435 at hydraulic harness connector, terminal A. See Dump Body schematic, (Para 3-34).
(10) Connect negative (–) multimeter lead to wire 1435, connector MC130, terminal W.
    (a) If continuity is not measured, replace jumper wire harness, (Para 3-24).
    (b) If continuity is measured, replace hydraulic wire harness, (Para 3-25).
(11) Verify repair, go to Step 23 of this Fault.

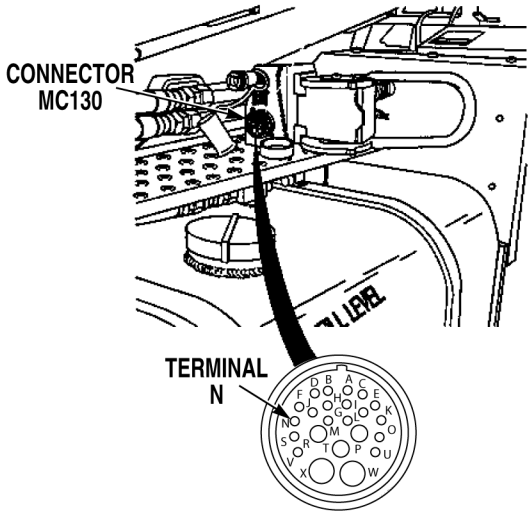


1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.



VOLTAGE TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Disconnect jumper harness at connector MC130, (Para 2-11).

(4) Push in battery disconnect switch, (TM 9-2320-364-10).

(5) Turn ON ENGINE start switch, (TM 9-2320-364-10).

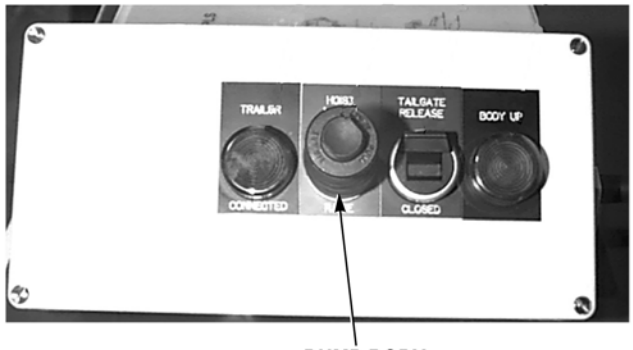
(6) Connect positive (+) multimeter lead to wire 1782 at connector MC130, terminal N. See Dump Body schematic, (Para 3-34).

(7) Connect negative (–) multimeter lead to a known good ground.

(8) Have an assistant place and hold the Dump Body control joystick in the "RAISE" Dump Body position, note meter reading.

  (a) If 10 to 14 VDC are not measured, go to Step 14 of this Fault.

  (b) If 10 to 14 VDC are measured, go to Step 11 of this Fault.



1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

KNOWN INFO

- LHS operates; therefore, PLS hydraulics OK.
- Dump Body hydraulic fluid level OK.
- Dump Body high pressure hydraulic oil filter is not dirty or clogged.
- PLS LHS lockout connector OK.
- PLS interface OK (UPIK).
- Wire 1435 in PLS interface OK.
- Wire 1435 in hydraulic wire harness OK.
- Wire 1435 in jumper wire harness OK.
- Dump Body hydraulic hoses OK.
- Dump Body motor pump assembly OK.
- Dump Body hoist OK.
- Wire 1796 in hydraulic wire harness OK.
- Wire 1796 in jumper wire harness OK.
- Wire 1797 in PLS interface OK.
- Wire 1785 in PLS interface OK.
- Control box OK.
- Wire 1782 in PLS interface OK.

POSSIBLE PROBLEMS

- Travel lock switch faulty.
- Wire 1782A in hydraulic wire harness faulty.
- Wire 1782 in hydraulic wire harness faulty.
- Wire 1782 in jumper wire harness faulty.

11.

WARNING

Read WARNING on Page 4-25

Is continuity measured across wire 1782 between jumper harness connector MC130, terminal N and hydraulic harness, travel lock switch connector, terminal A?

NO → Go to Step 13 of this Fault.

YES

TEST OPTIONS

Continuity test.

REASON FOR QUESTION

To further isolate fault.

WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Remove upper hoist mounting bracket from Dump Body, (Para 3-12).

(2) Attach suitable lifting device to Dump Body.

(3) Ensure travel lock is disengaged.

(4) Lift Dump Body with lifting device until body props can be deployed.

(5) Deploy body props, (Para 2-14).

(6) Lower Dump Body onto body props.

(7) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(8) Pull out battery disconnect switch, (TM 9-2320-364-10).

(9) Disconnect travel lock switch connector.

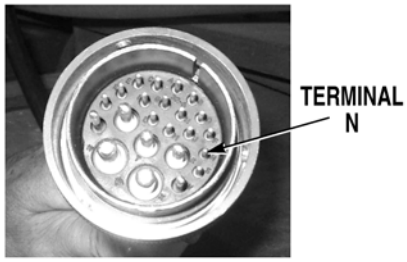
(10) Set multimeter select switch to ohms.

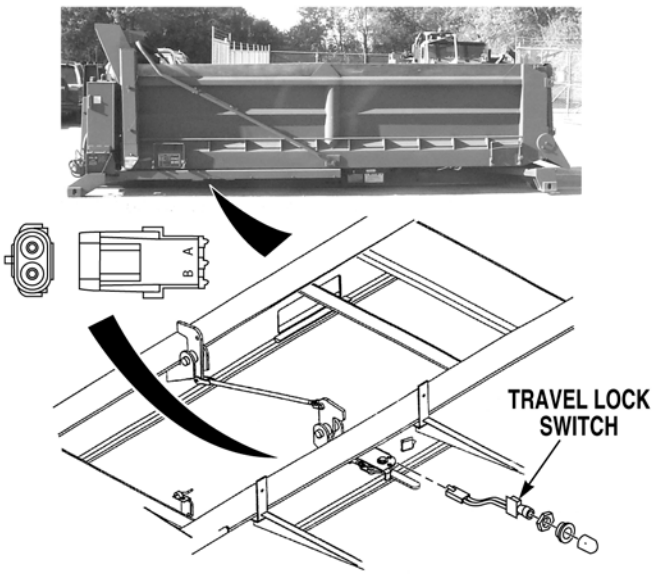
(11) Connect positive (+) multimeter lead to wire 1782 at connector MC130, terminal N. See Dump Body schematic, (Para 3-34).

(12) Connect negative (–) multimeter lead to wire 1782 at hydraulic harness, travel lock switch connector, terminal A.

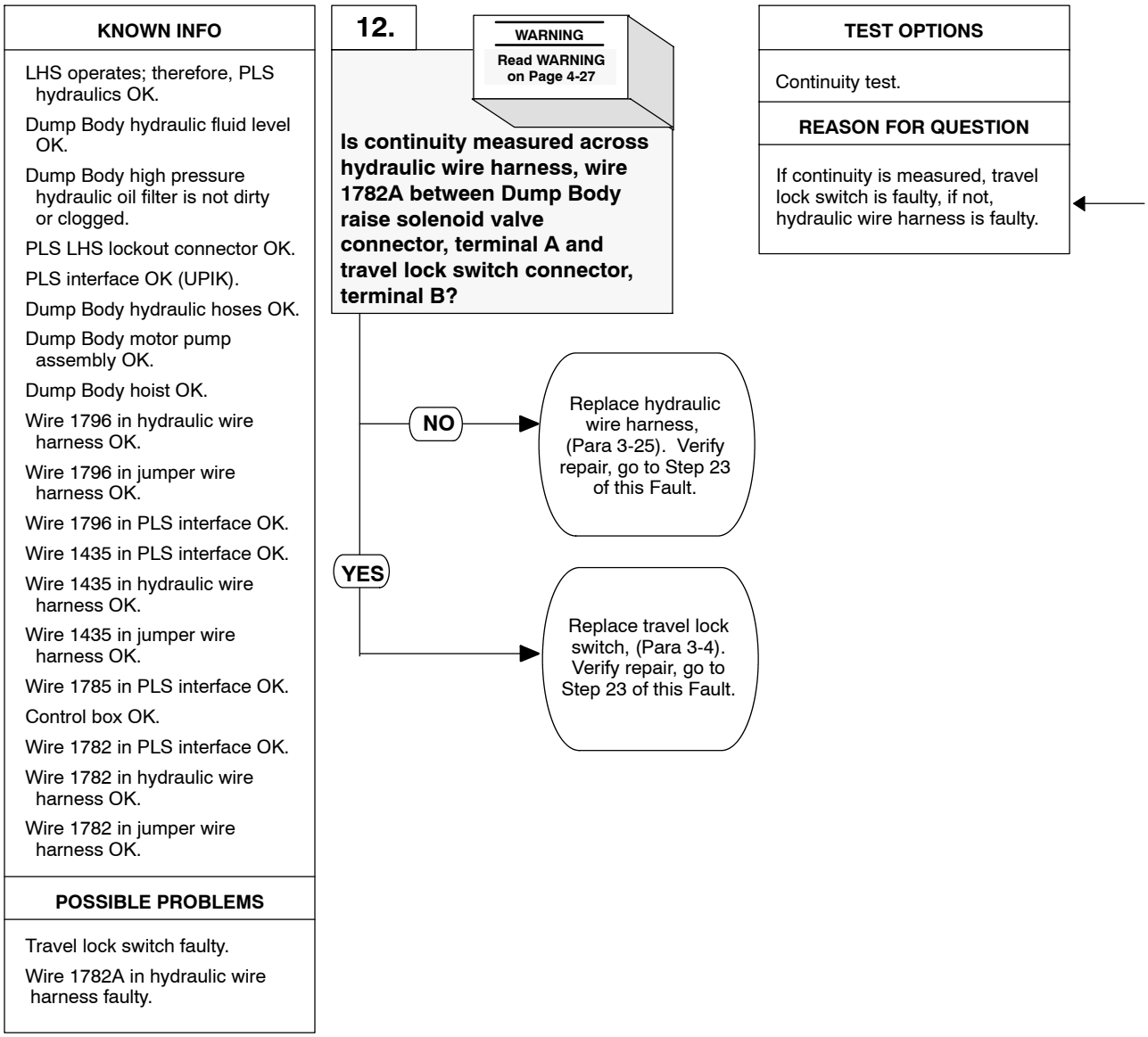
(a) If continuity is not measured, go to Step 13 of this Fault.

(b) If continuity is measured, go to Step 12 of this Fault.





1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Set multimeter select switch to ohms.

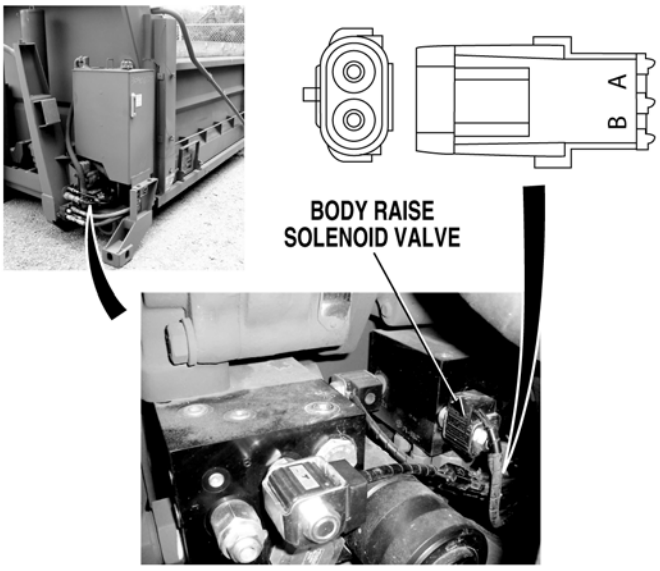
(2) Connect positive (+) multimeter lead to wire 1782A at Dump Body raise solenoid valve connector, terminal A. See Dump Body schematic, (Para 3-34).

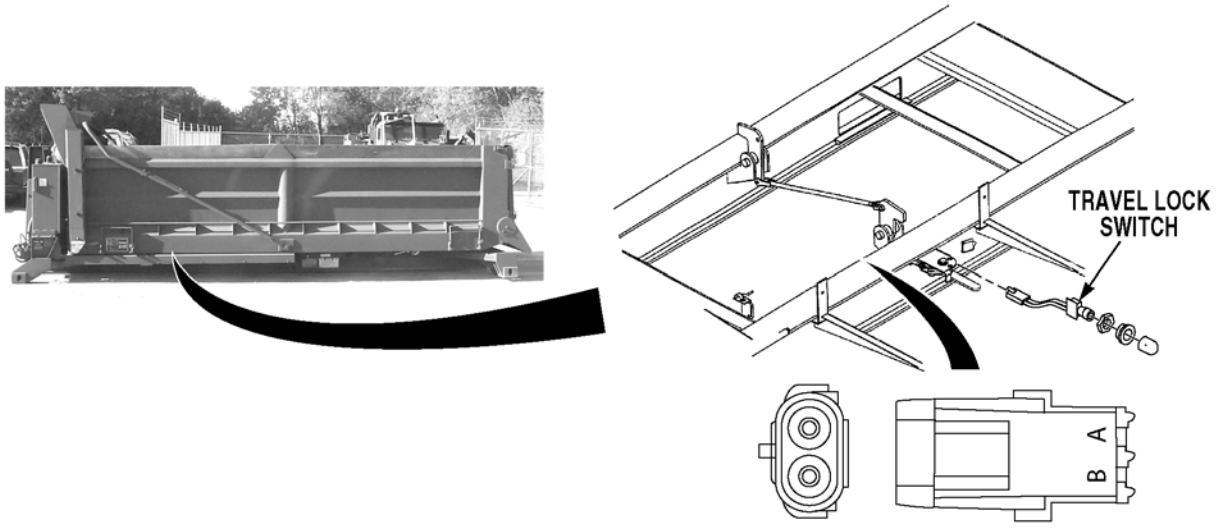
(3) Connect negative (–) multimeter lead to wire 1782A at travel lock switch connector, terminal B.

  (a) If continuity is not measured, replace hydraulic wire harness, (Para 3-25).

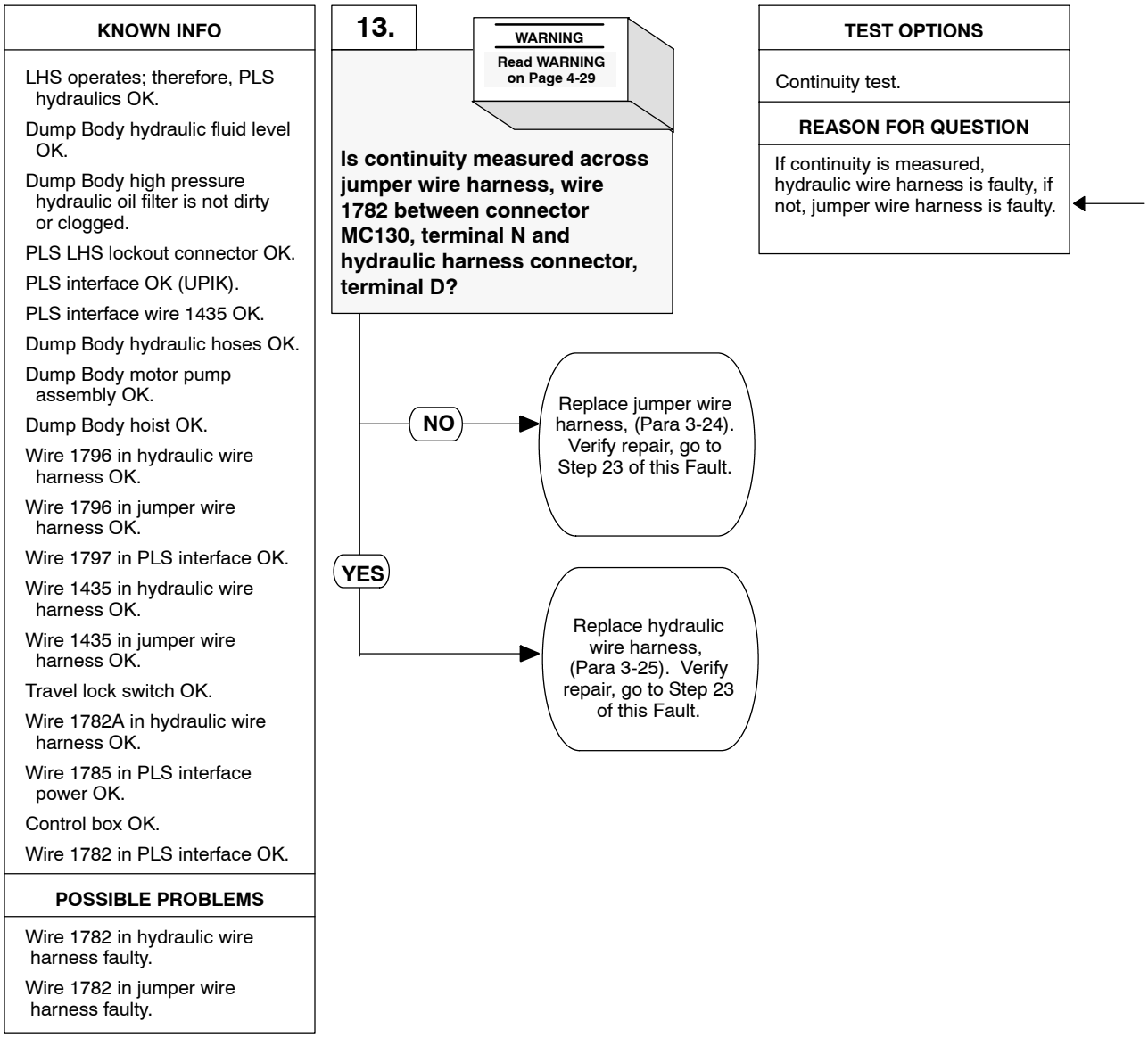
  (b) If continuity is measured, replace travel lock switch, (Para 3-4).

(4) Verify repair, go to Step 23 of this Fault.





1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Set multimeter select switch to ohms.

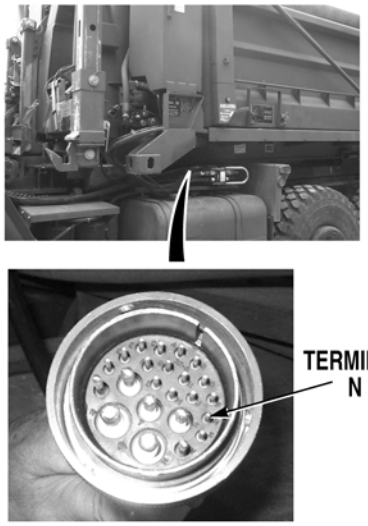
(2) Connect positive (+) multimeter lead on jumper harness, wire 1782, at connector MC130, terminal N. See Dump Body schematic, (Para 3-34).

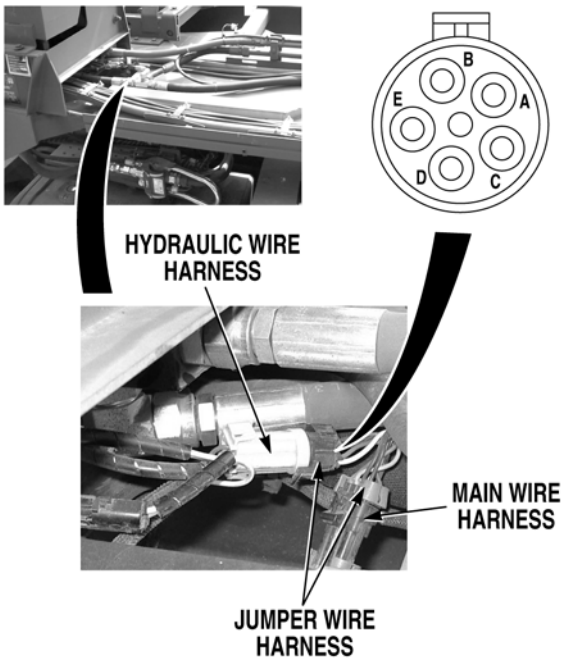
(3) Connect negative (-) multimeter lead on jumper harness, wire 1782, at hydraulic harness switch connector, terminal D.

  (a) If continuity is not measured, replace jumper wire harness, (Para 3-24).

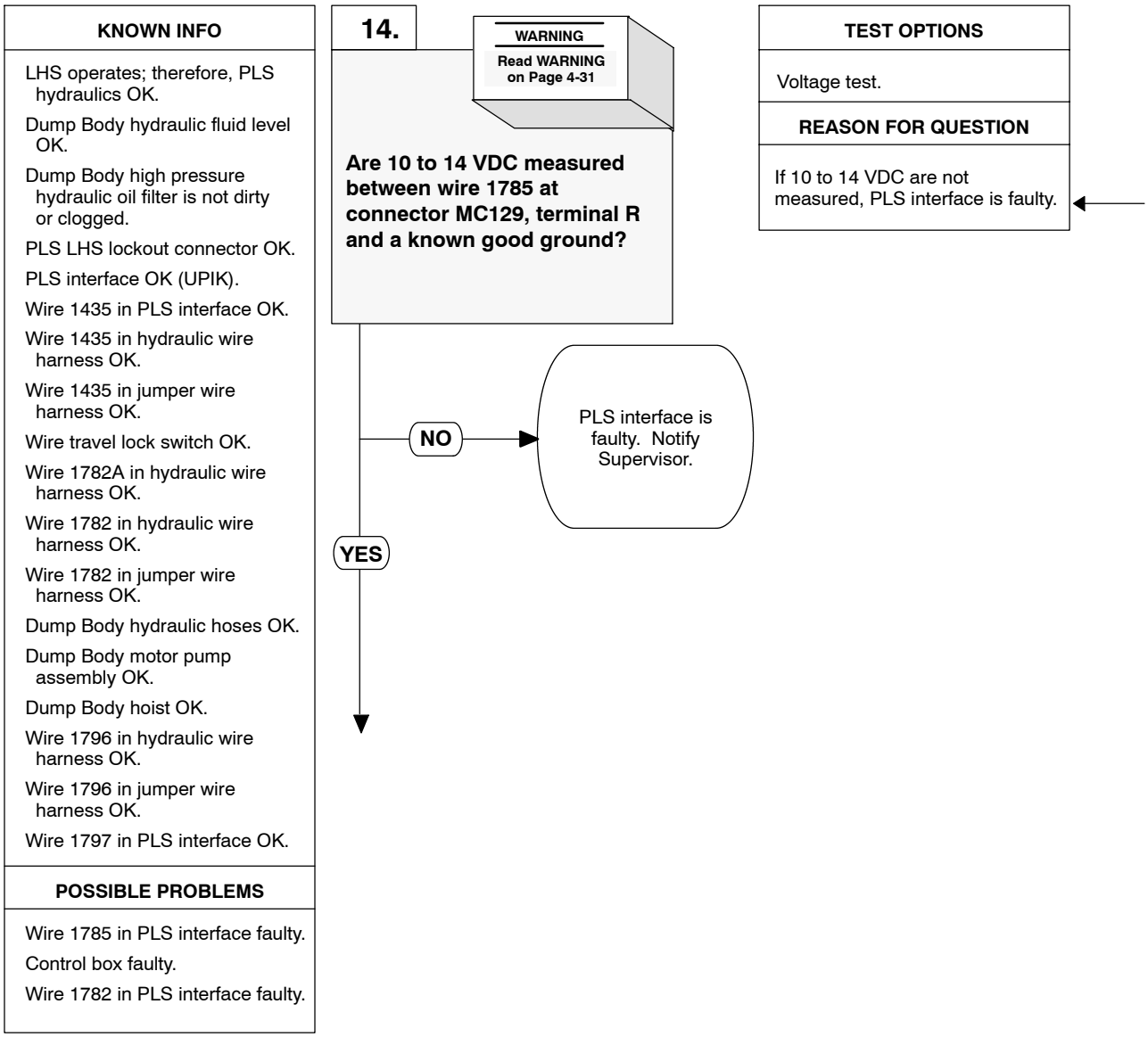
  (b) If continuity is measured, replace hydraulic wire harness, (Para 3-25).

(4) Verify repair, go to Step 23 of this Fault.



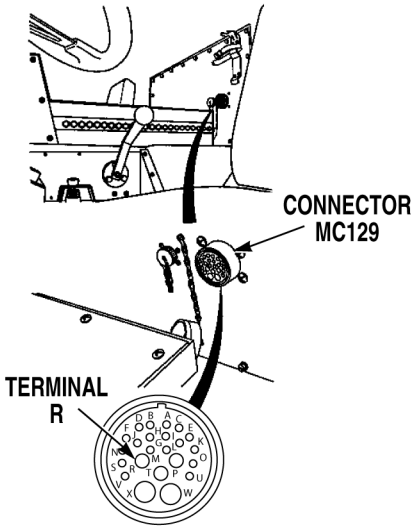


1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.



VOLTAGE TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Disconnect control box, (Para 2-11).

(4) Push in battery disconnect switch, (TM 9-2320-364-10).

(5) Turn ON ENGINE start switch, (TM 9-2320-364-10).

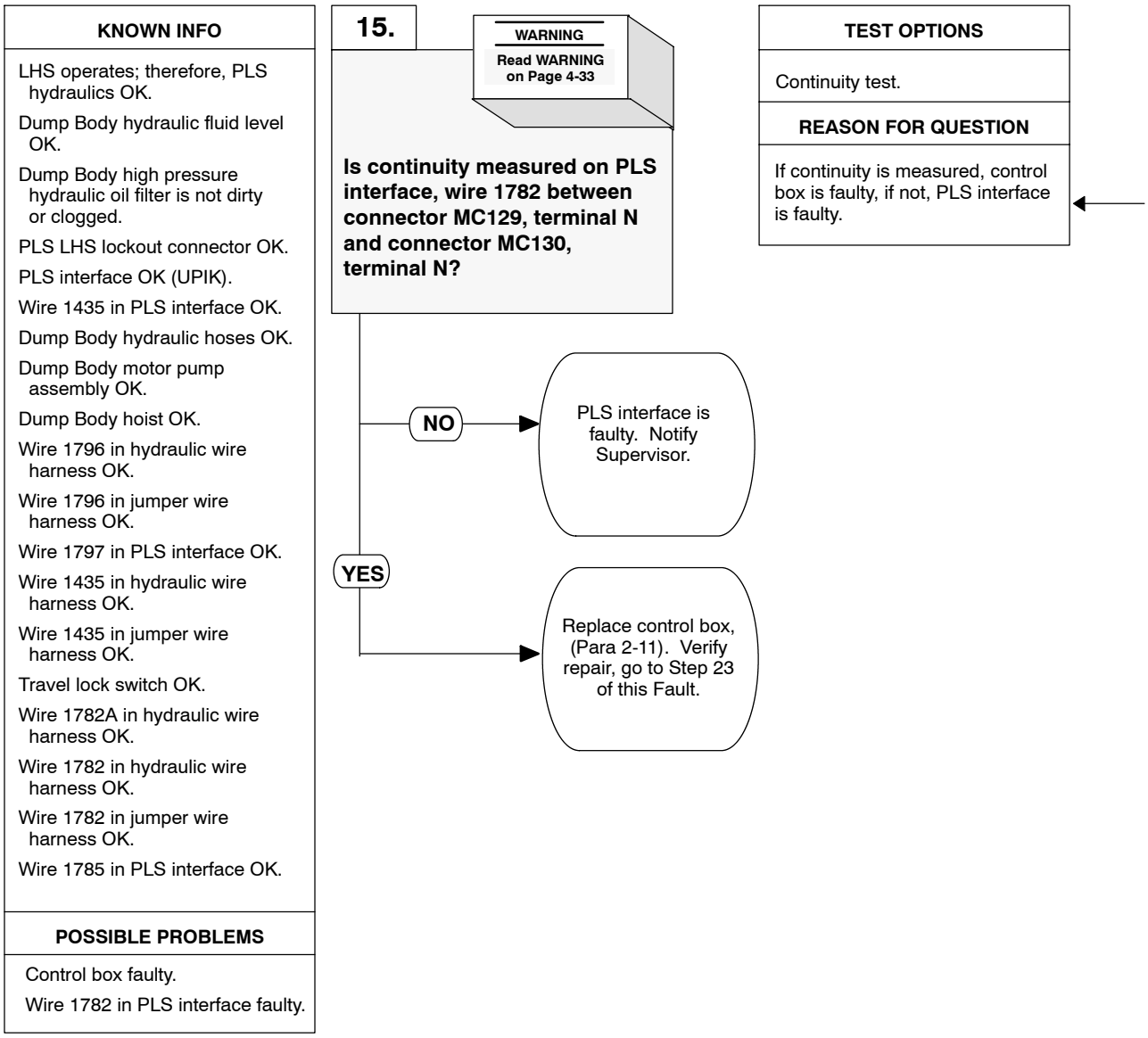
(6) Connect positive (+) multimeter lead to wire 1785 at connector MC129, terminal R. See Dump Body schematic, (Para 3-34).

(7) Connect negative (-) multimeter lead to a known good ground.

(a) If 10 to 14 VDC are not measured, PLS interface is faulty. Notify Supervisor.

(b) If 10 to 14 VDC are measured, go to Step 15 of this Fault.

1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.

CONTINUITY TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Set multimeter select switch to ohms.

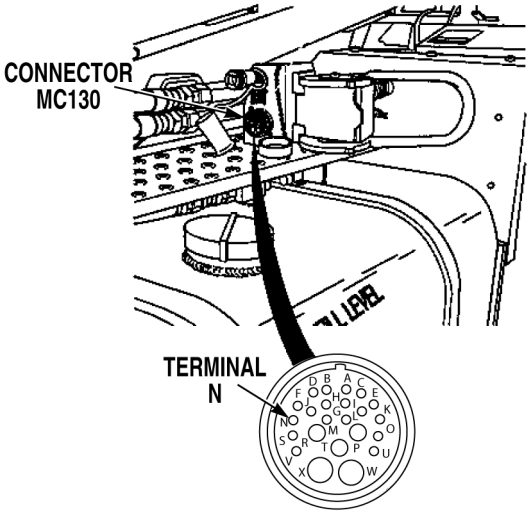
(4) Connect jumperwire between PLS wire harness, wire 1782, connector MC130, terminal N and a known good ground. See Dump Body schematic, (Para 3-34).

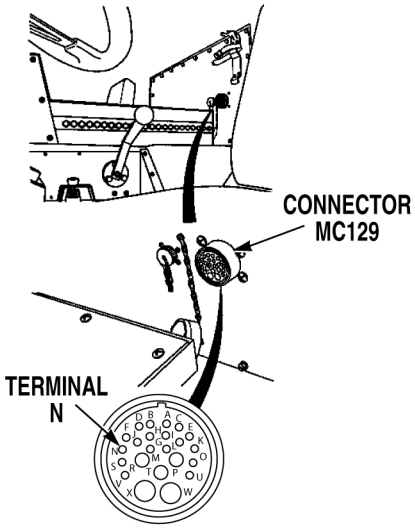
(5) Connect positive (+) multimeter lead on PLS wire harness, wire 1782, connector MC129, terminal N.

(6) Connect negative (-) multimeter lead to a known good ground.

(a) If continuity is not measured, PLS interface is faulty. Notify Supervisor.

(b) If continuity is measured, replace control box, (Para 2-11). Verify repair, go to Step 23 of this Fault.





1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

KNOWN INFO

LHS operates; therefore, PLS hydraulics OK.

Dump Body hydraulic fluid level OK.

Dump Body high pressure hydraulic oil filter is not dirty or clogged.

PLS LHS lockout connector OK.

PLS interface OK (UPIK).

Wire 1435 in PLS interface OK.

Wire 1435 in hydraulic wire harness OK.

Wire 1435 in jumper wire harness OK.

Travel lock switch OK.

Wire 1782A in hydraulic wire harness OK.

Wire 1782 in hydraulic wire harness OK.

Wire 1782 in jumper wire harness OK.

Wire 1785 in PLS interface OK.

Wire 1782 in PLS interface OK.

POSSIBLE PROBLEMS

Control box faulty.

Dump Body hydraulic hoses faulty.

Dump Body motor pump assembly faulty.

Dump Body hoist faulty.

Wire 1796 in hydraulic wire harness faulty.

Wire 1796 in jumper wire harness faulty.

Wire 1797 in PLS interface faulty.

16.

WARNING

Read WARNING on Page 4-35

Are 10 to 14 VDC measured between load sense solenoid valve connector, terminals A and B, when Dump Body joystick is in "RAISE" Dump Body position?

NO → Go to Step 19 of this Fault.

YES

TEST OPTIONS

Voltage test.

REASON FOR QUESTION

To further isolate fault.

WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.

VOLTAGE TEST

(1) If raised, lower Dump Body, (Para 2-15).

(2) Shut OFF engine, (TM 9-2320-364-10).

(3) Pull out battery disconnect switch, (TM 9-2320-364-10).

(4) Disconnect load sense solenoid valve connector.

(5) If disconnected, connect Dump Body raise solenoid valve connector.

(6) Push in battery disconnect switch, (TM 9-2320-364-10).

(7) Turn ON ENGINE start switch, (TM 9-2320-364-10).

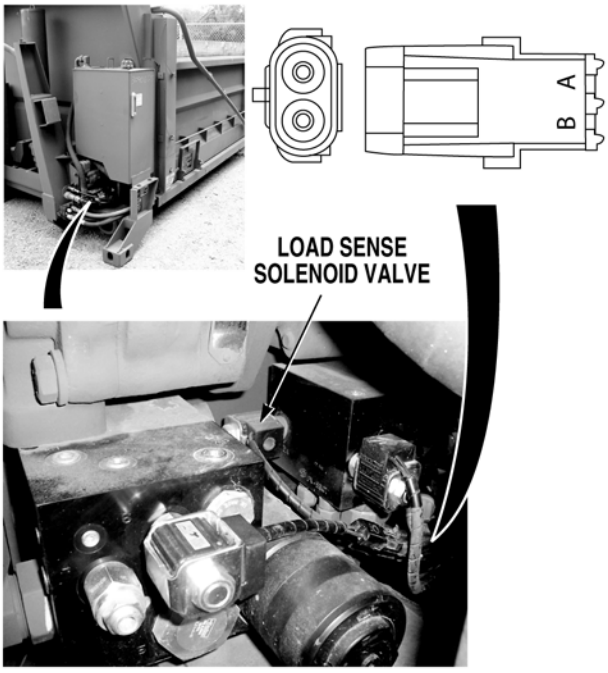
(8) Connect positive (+) multimeter lead to load sense solenoid connector, terminal A. See Dump Body schematic, (Para 3-34).

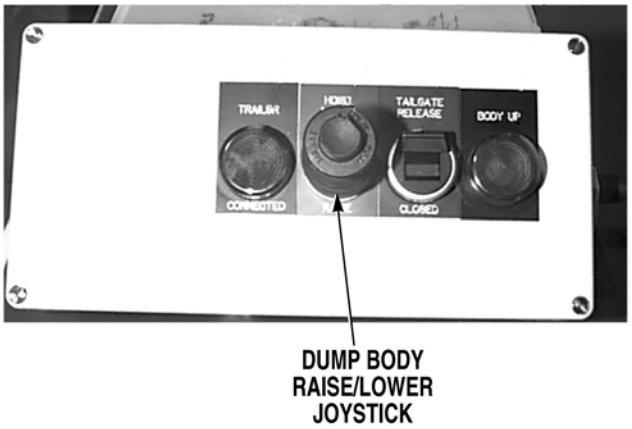
(9) Connect negative (-) multimeter lead to load sense solenoid connector, terminal B.

(10) Have an assistant place and hold Dump Body joystick in "RAISE" Dump Body position, note meter reading.

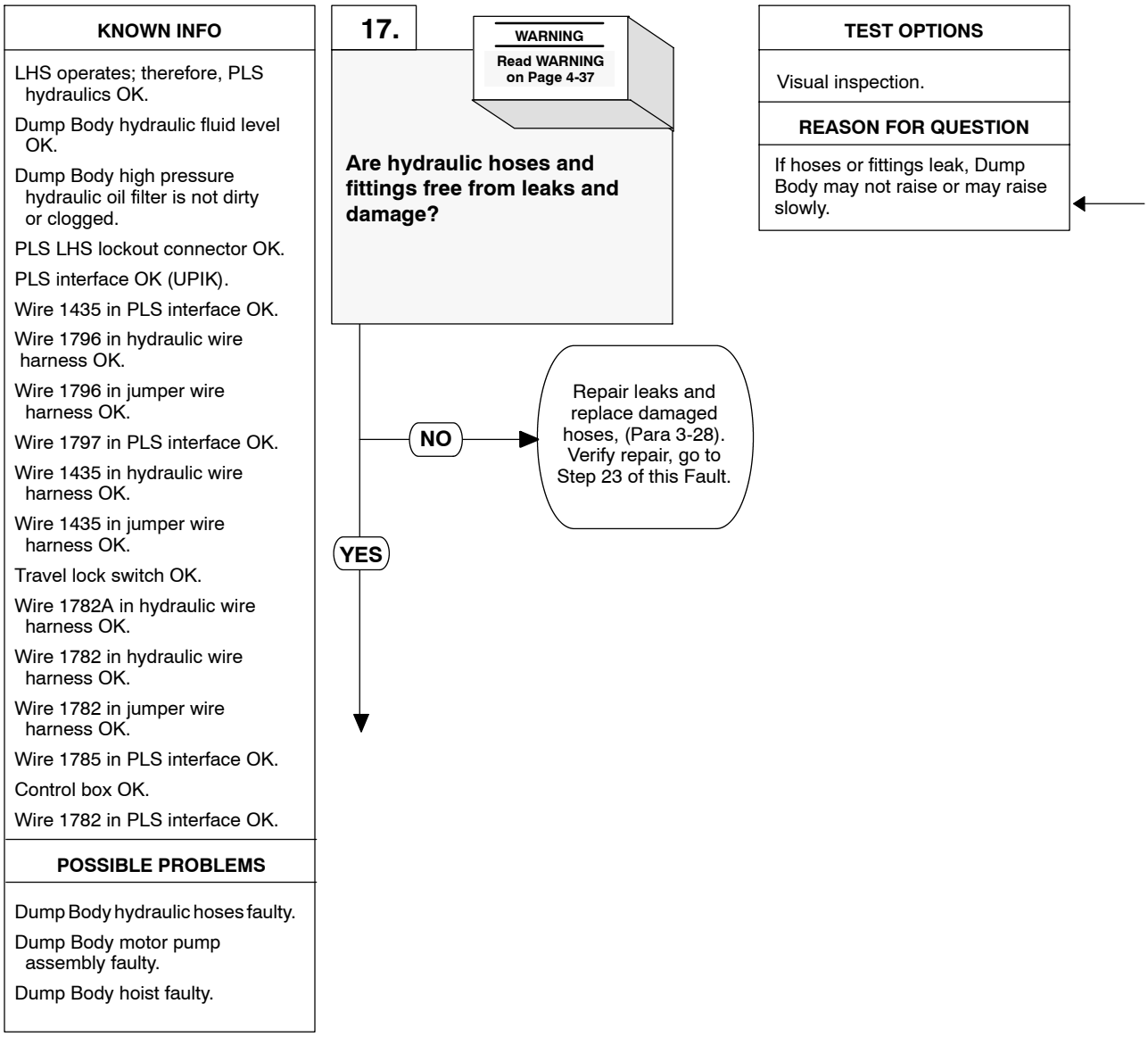
(a) If 10 to 14 VDC are not measured, go to Step 19 of this Fault.

(b) If 10 to 14 VDC are measured, go to Step 17 of this Fault.





1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

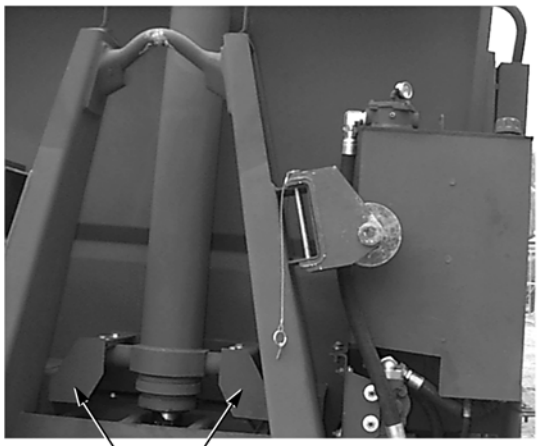


WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.

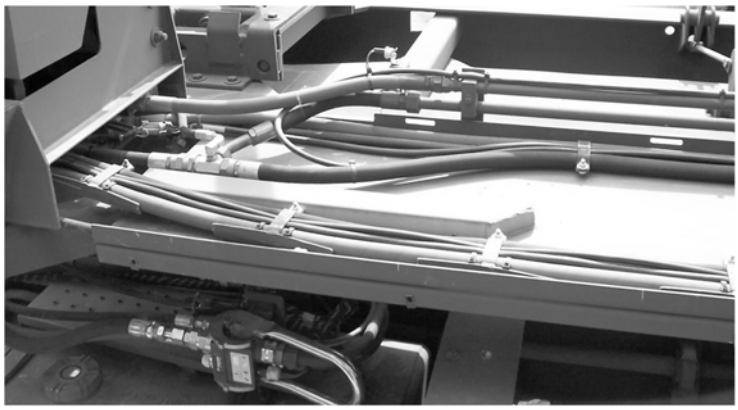
VISUAL INSPECTION

(1) Remove hoist body mounting brackets from Dump Body, (Para 3-12).
(2) Attach suitable lifting device to Dump Body.
(3) Ensure travel lock is disengaged.
(4) Lift Dump Body with lifting device until body props can deploy.
(5) Deploy body props, (Para 2-14).
(6) Lower Dump Body onto body props.
(7) Remove hose tray cover, (Para 3-30).
(8) Inspect hoses and fittings for leaks or damage.
    (a) If hoses or fittings leak or are damaged, repair leaks and replace hoses, (Para 3-28). Verify repair, go to Step 23 of this Fault.
    (b) If hoses or fittings do not leak, go to Step 18 of this Fault.



HOIST BODY MOUNTING BRACKETS

NOTE: HOSE TRAY COVER REMOVED FOR CLARITY



1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

KNOWN INFO

LHS operates; therefore, PLS hydraulics OK.

Dump Body hydraulic fluid level OK.

Dump Body high pressure hydraulic oil filter is not dirty or clogged.

PLS LHS lockout connector OK.

PLS interface OK (UPIK).

Wire 1435 in PLS interface OK.

Wire 1796 in hydraulic wire harness OK.

Wire 1796 in jumper wire harness OK.

Wire 1797 in PLS interface OK.

Wire 1435 in hydraulic wire harness OK.

Wire 1435 in jumper wire harness OK.

Travel lock switch OK.

Wire 1782A in hydraulic wire harness OK.

Wire 1782 in hydraulic wire harness OK.

Wire 1782 in jumper wire harness OK.

Wire 1785 in PLS interface OK.

Control box OK.

Wire 1782 in PLS interface OK.

Dump Body hydraulic hoses OK.

POSSIBLE PROBLEMS

Dump Body motor pump assembly faulty.

Dump Body hoist faulty.

18.

WARNING

Read WARNING on Page 4-39

Is hoist cylinder free from leaks and damage?

NO → Replace hoist cylinder, (Para 3-12). Verify repair, go to Step 23 of this Fault.

YES → Replace motor pump assembly, (Para 3-9, 3-10). Verify repair, go to Step 23 of this Fault.

TEST OPTIONS

Visual inspection.

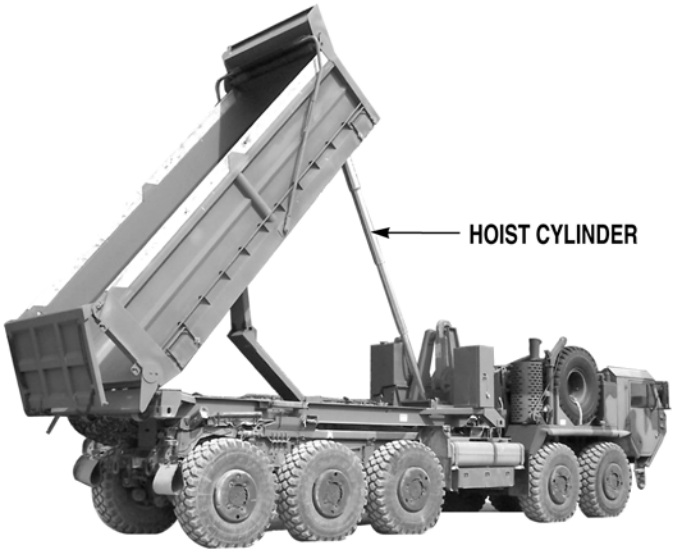
REASON FOR QUESTION

If hoist cylinder leaks or is damaged, Dump Body may not raise or may raise slowly.

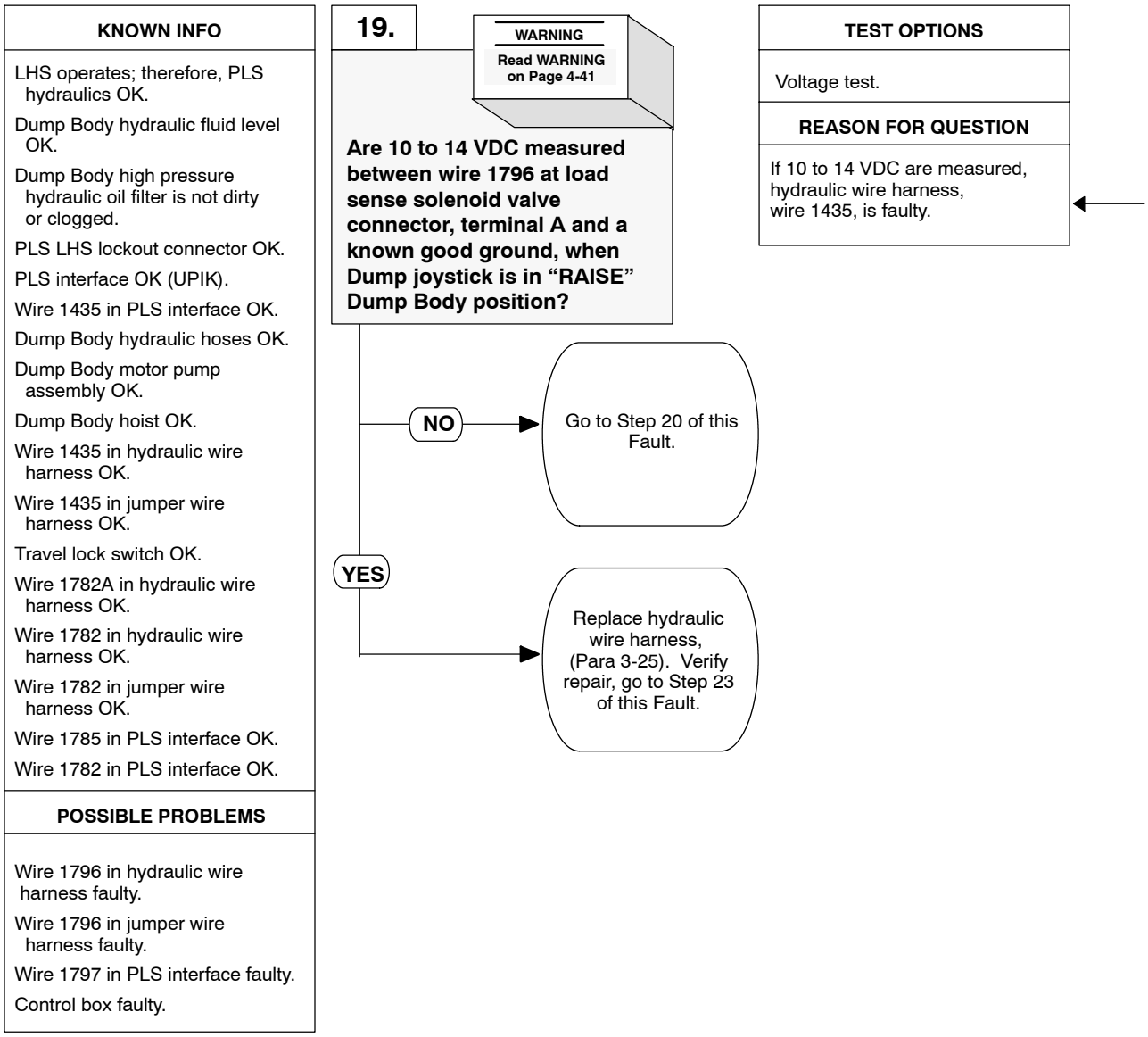
WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.

VISUAL INSPECTION
(1) Inspect hoist cylinder for leaks or damage. (a) If hoist cylinder leaks or is damaged, repair leaks or replace hoist cylinder, (Para 3-12). (b) If hoist cylinder does not leak, replace motor pump assembly, (Para 3-9, 3-10). (2) Verify repair, go to Step 23 of this Fault.

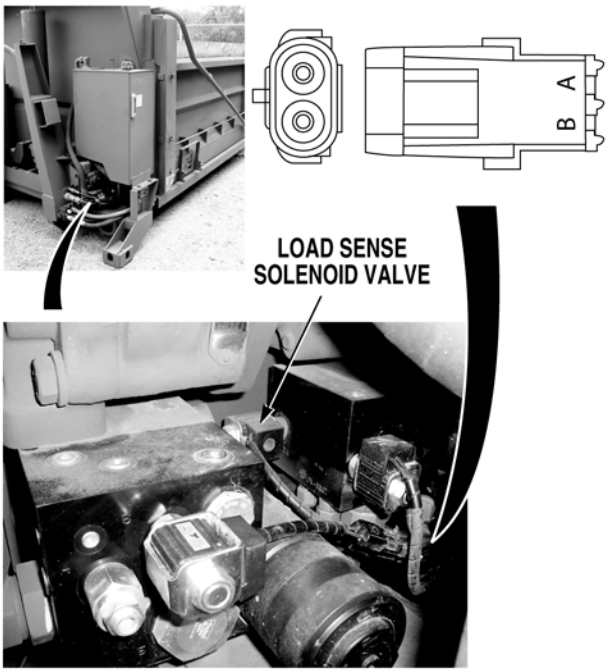


1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.



VOLTAGE TEST

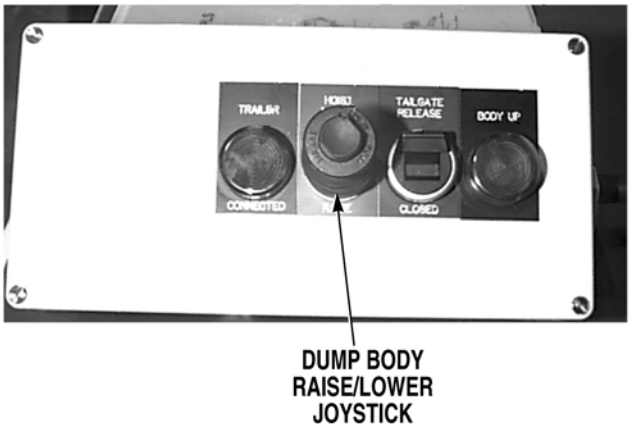
(1) Connect positive (+) multimeter lead to wire 1796 at load sense solenoid valve connector, terminal A. See Dump Body schematic, (Para 3-34).

(2) Connect negative (-) multimeter lead to a known good ground.

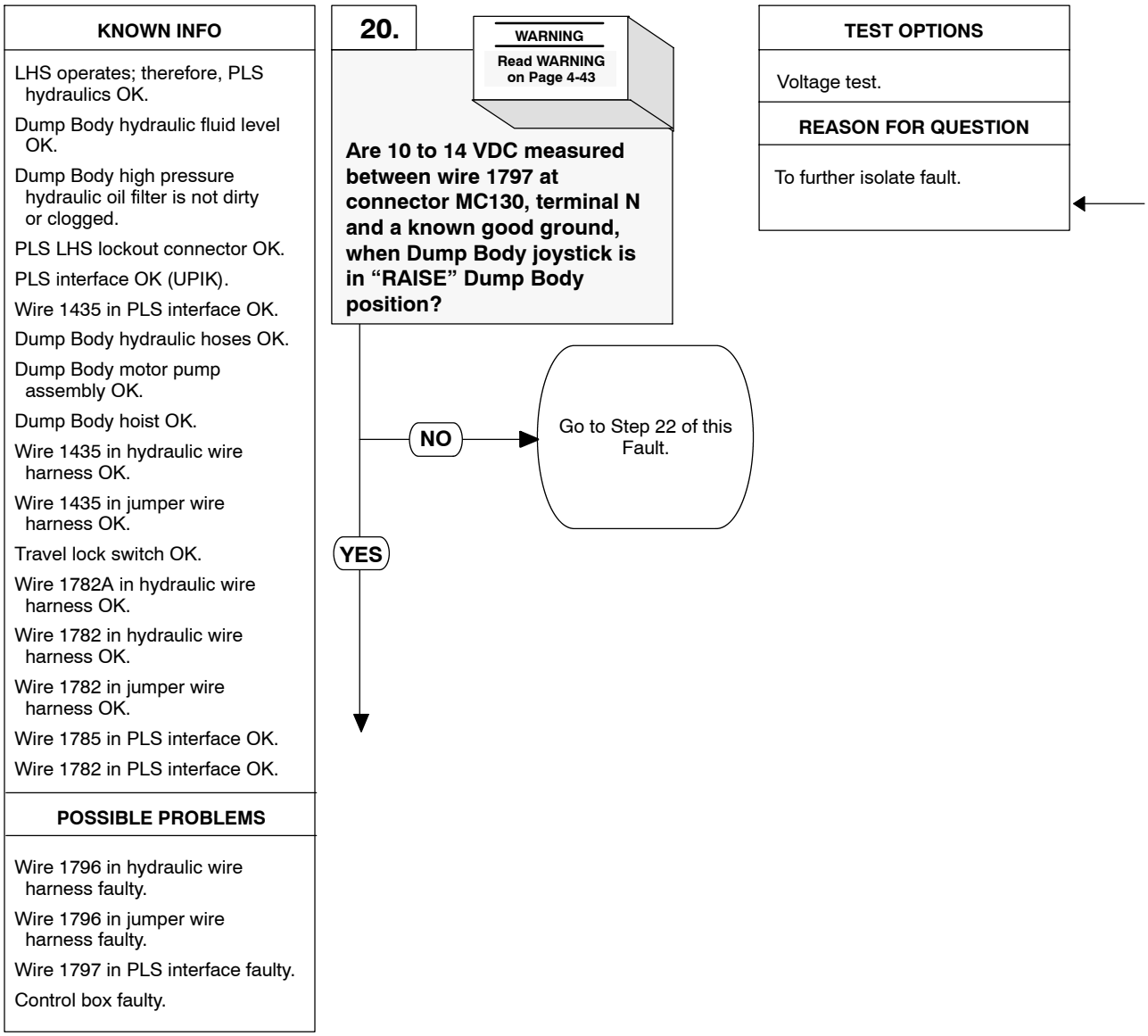
(3) Have an assistant place and hold Dump Body joystick in "RAISE" Dump Body position, note meter reading.

(a) If 10 to 14 VDC are measured, replace hydraulic wire harness, (Para 3-34). Verify repair, go to Step 23 of this Fault.

(b) If 10 to 14 VDC are not measured, go to Step 20 of this Fault.

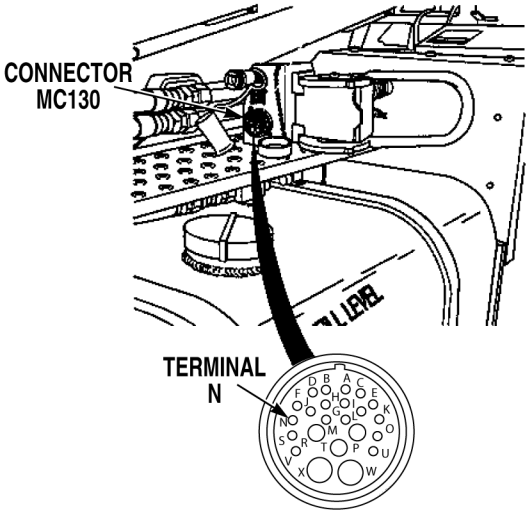


1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.



VOLTAGE TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Disconnect connector MC130, (Para 2-11).

(4) Push in battery disconnect switch, (TM 9-2320-364-10).

(5) Turn ON ENGINE start switch, (TM 9-2320-364-10).

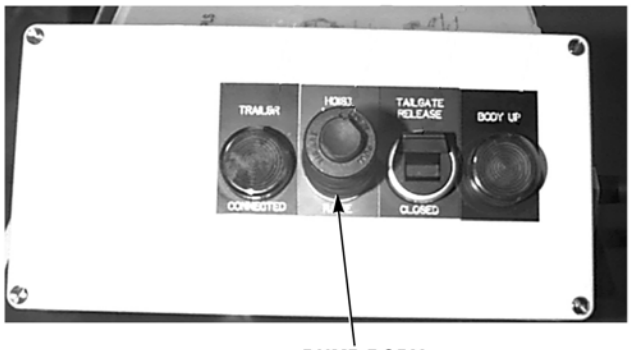
(6) Connect positive (+) multimeter lead to wire 1797 at connecter MC130, terminal N. See Dump Body schematic, (Para 3-34).

(7) Connect negative (-) multimeter lead to a known good ground.

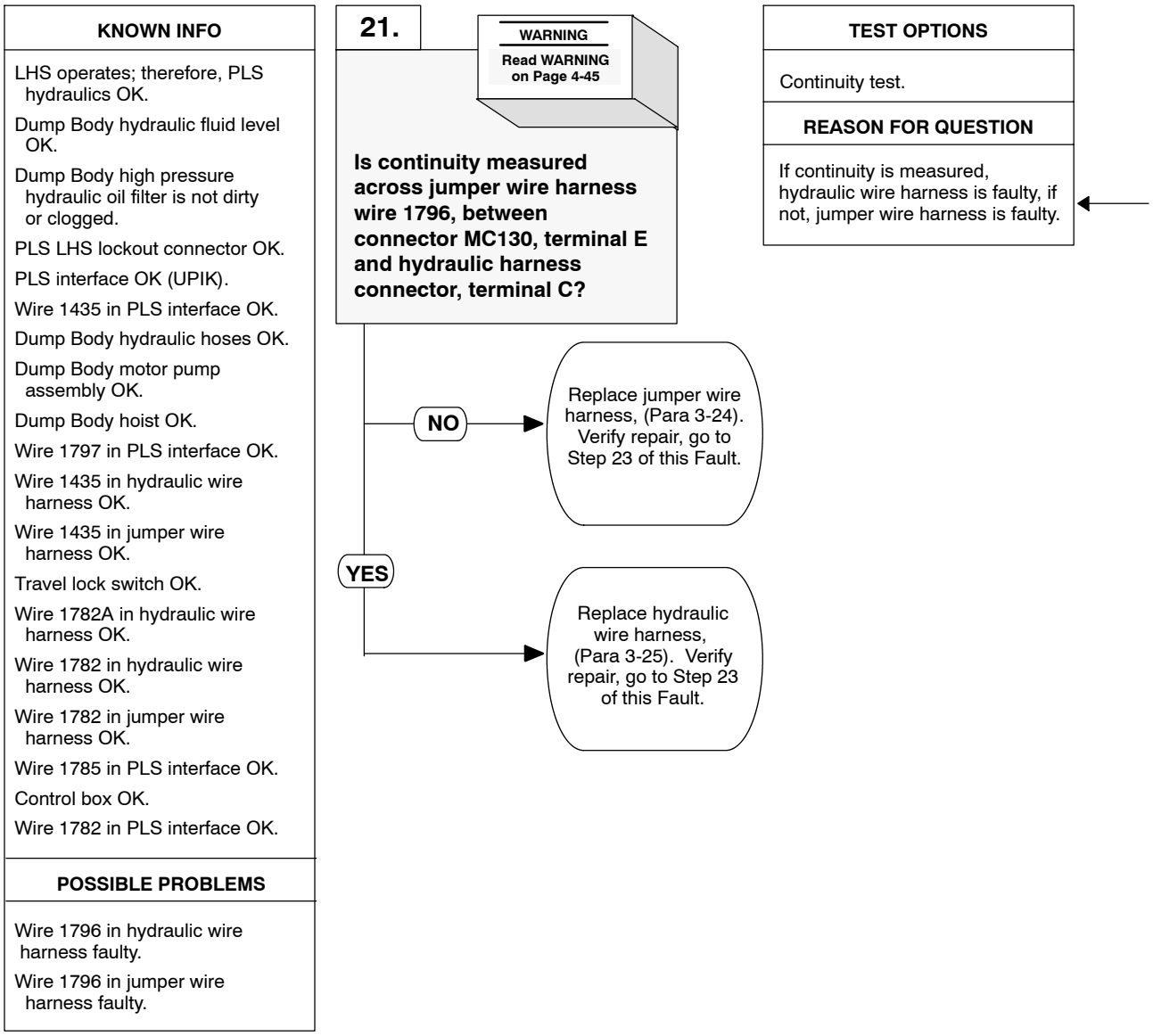
(8) Have an assistant place and hold Dump Body joystick in the "RAISE" Dump Body position, note meter reading.

(a) If 10 to 14 VDC are measured, go to Step 21 of this Fault.

(b) If 10 to 14 VDC are not measured, go to Step 22 of this Fault.



1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Remove upper hoist mounting bracket from Dump Body, (Para 3-12).

(2) Attach suitable lifting device to Dump Body.

(3) Ensure travel lock is disengaged.

(4) Lift Dump Body with lifting device until body props can deploy.

(5) Deploy body props, (Para 2-14).

(6) Lower Dump Body onto body props.

(7) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(8) Pull out battery disconnect switch, (TM 9-2320-364-10).

(9) Set multimeter select switch to ohms.

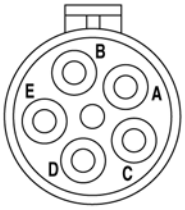
(10) Connect positive (+) multimeter lead to wire 1796 at connector MC130, terminal E. See Dump Body schematic, (Para 3-34).

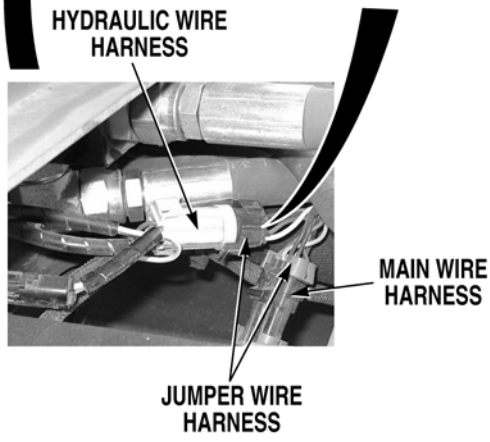
(11) Connect negative (-) multimeter lead to wire 1796 at hydraulic harness connector, terminal C.

(a) If continuity is not measured, replace jumper wire harness, (Para 3-24).

(b) If continuity is measured, replace hydraulic wire harness, (Para 3-25).

(12) Verify repair, go to Step 23 of this Fault.





1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

KNOWN INFO

LHS operates; therefore, PLS hydraulics OK.

Dump Body hydraulic fluid level OK.

Dump Body high pressure hydraulic oil filter is not dirty or clogged.

PLS LHS lockout connector OK.

PLS interface OK (UPIK).

Wire 1435 in PLS interface OK.

Dump Body hydraulic hoses OK.

Dump Body motor pump assembly OK.

Dump Body hoist OK.

Wire 1796 in hydraulic wire harness OK.

Wire 1796 in jumper wire harness OK.

Wire 1435 in hydraulic wire harness OK.

Wire 1435 in jumper wire harness OK.

Travel lock switch OK.

Wire 1782A in hydraulic wire harness OK.

Wire 1782 in hydraulic wire harness OK.

Wire 1782 in jumper wire harness OK.

Wire 1785 in PLS interface OK.

Wire 1782 in PLS interface OK.

POSSIBLE PROBLEMS

Wire 1797 in PLS interface faulty.

Control box faulty.

22.

WARNING

Read WARNING on Page 4-47

Is continuity measured on PLS interface wire 1797 between connector MC129, terminal E and connector MC130, terminal E?

NO → PLS interface is Faulty. Notify Supervisor.

YES → Replace control box, (Para 2-11). Verify repair, go to Step 23 of this Fault.

TEST OPTIONS

Continuity test.

REASON FOR QUESTION

If continuity is measured, control box is faulty, if not, PLS interface is faulty.

WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.

CONTINUITY TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Set multimeter select switch to ohms.

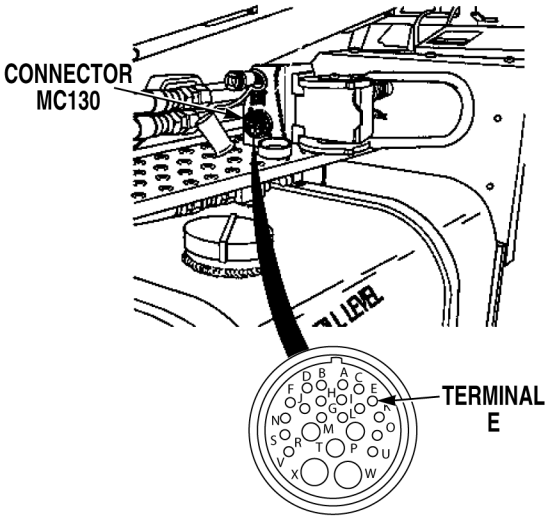
(4) Connect jumperwire between wire 1797 at connector MC130, terminal E and a known good ground. See Dump Body schematic, (Para 3-34).

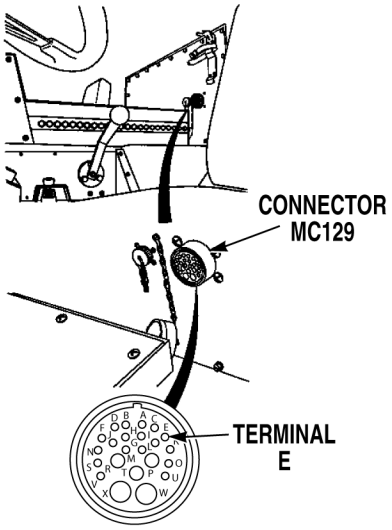
(5) Connect positive (+) multimeter lead to wire 1797 at connector MC129, terminal E.

(6) Connect negative (-) multimeter lead to a known good ground.

(a) If continuity is not measured, PLS interface harness is Faulty. Notify Supervisor.

(b) If continuity is measured, replace control box, (Para 2-11). Verify repair, go to Step 23 of this Fault.





1. DUMP BODY WILL NOT RAISE OR RAISES SLOWLY (CONT).

KNOWN INFO
LHS operates; therefore, PLS hydraulics OK.
Dump Body hydraulic fluid level OK.
Dump Body high pressure hydraulic oil filter is not dirty or clogged.
PLS LHS lockout connector OK.
PLS interface OK (UPIK).
Wire 1435 in PLS interface OK.
Dump Body hydraulic hoses OK.
Dump Body motor pump assembly OK.
Dump Body hoist OK.
Wire 1796 in hydraulic wire harness OK.
Wire 1796 in jumper wire harness OK.
Wire 1797 in PLS interface OK.
Wire 1435 in hydraulic wire harness OK.
Wire 1435 in jumper wire harness OK.
Travel lock switch OK.
Wire 1782A in hydraulic wire harness OK.
Wire 1782 in hydraulic wire harness OK.
Wire 1782 in jumper wire harness OK.
Wire 1785 in PLS interface OK.
Control box OK.
Wire 1782 in PLS interface OK.

POSSIBLE PROBLEMS
None.

23.

WARNING

Read WARNING on Page 4-49

Does Dump Body raise at normal operating speed?

NO → Fault not corrected. Notify Supervisor.

YES → Fault corrected.

TEST OPTIONS
Verify repair.

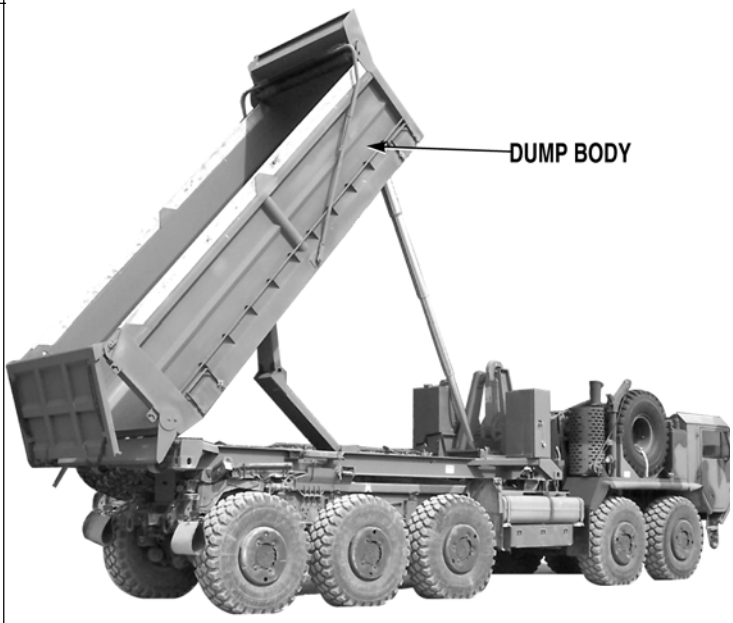
REASON FOR QUESTION
If Dump Body raises at normal operating speeds, fault has been corrected.

WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

VERIFY REPAIR

(1) If disconnected, connect jumper harness at hydraulic harness connector.
(2) If disconnected, connect body raise solenoid valve connector.
(3) If disconnected, connect travel lock switch connector.
(4) If disconnected, connect jumper harness, at connector MC130.
(5) If disconnected, connect control box at connector MC129.
(6) If disconnected, connect load sense solenoid valve connector.
(7) If removed, install hose tray cover, (Para 3-30).
(8) If deployed, using suitable lifting device, lift Dump Body off of body props.
(9) Stow body props, (Para 2-14).
(10) If raised, using suitable lifting device, lower Dump Body.
(11) If detached, attach upper hoist mounting bracket to Dump Body.
(12) If out, push in battery disconnect switch, (TM 9-2320-364-10).
(13) Start engine, (TM 9-2320-364-10).
(14) Raise Dump Body, (Para 2-15).
(15) Lower Dump Body, (Para 2-15).
(16) Shut OFF engine, (TM 9-2320-364-10).
(17) If Dump Body does not raise at normal operating speeds, fault not corrected. Notify Supervisor.
(18) If Dump Body does raise at normal operating speeds, fault has been corrected.

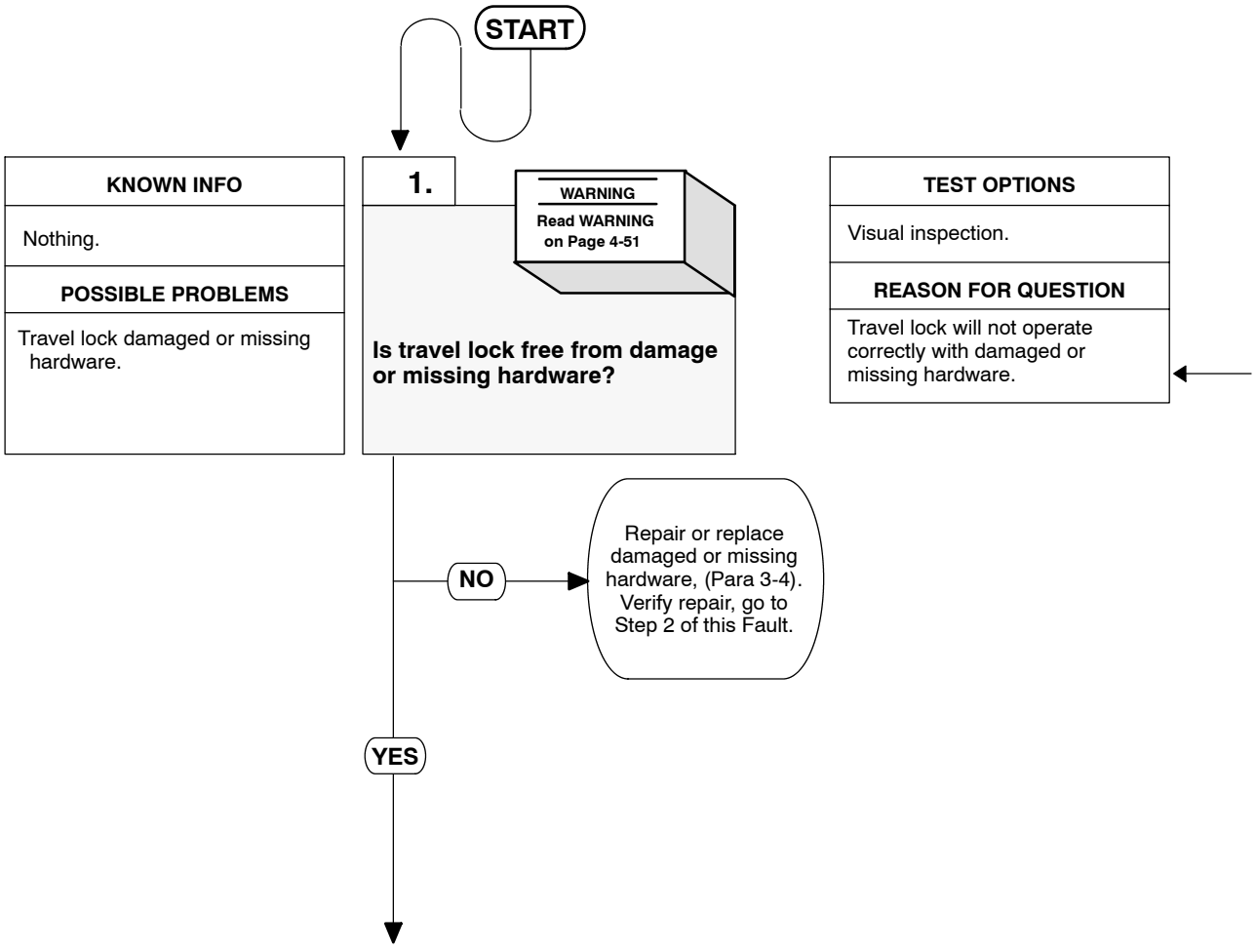


2. TRAVEL LOCK DOES NOT LOCK.

INITIAL SETUP

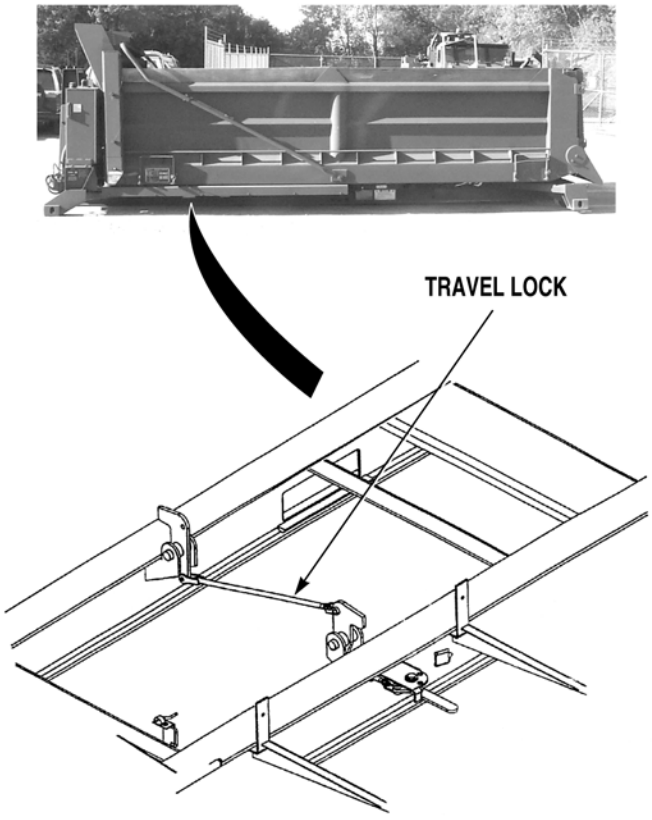
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)



WARNING

- Dump Body reaches height of 24 ft 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in the raised position without Dump Body resting on body props. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on truck, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Operate Dump Body control only from inside truck cab. Failure to comply could result in death or serious injury to personnel.



VISUAL INSPECTION

(1) Start engine, (TM 9-2320-364-10).

(2) Raise Dump Body, (Para 2-15).

(3) Deploy body props, (Para 2-14).

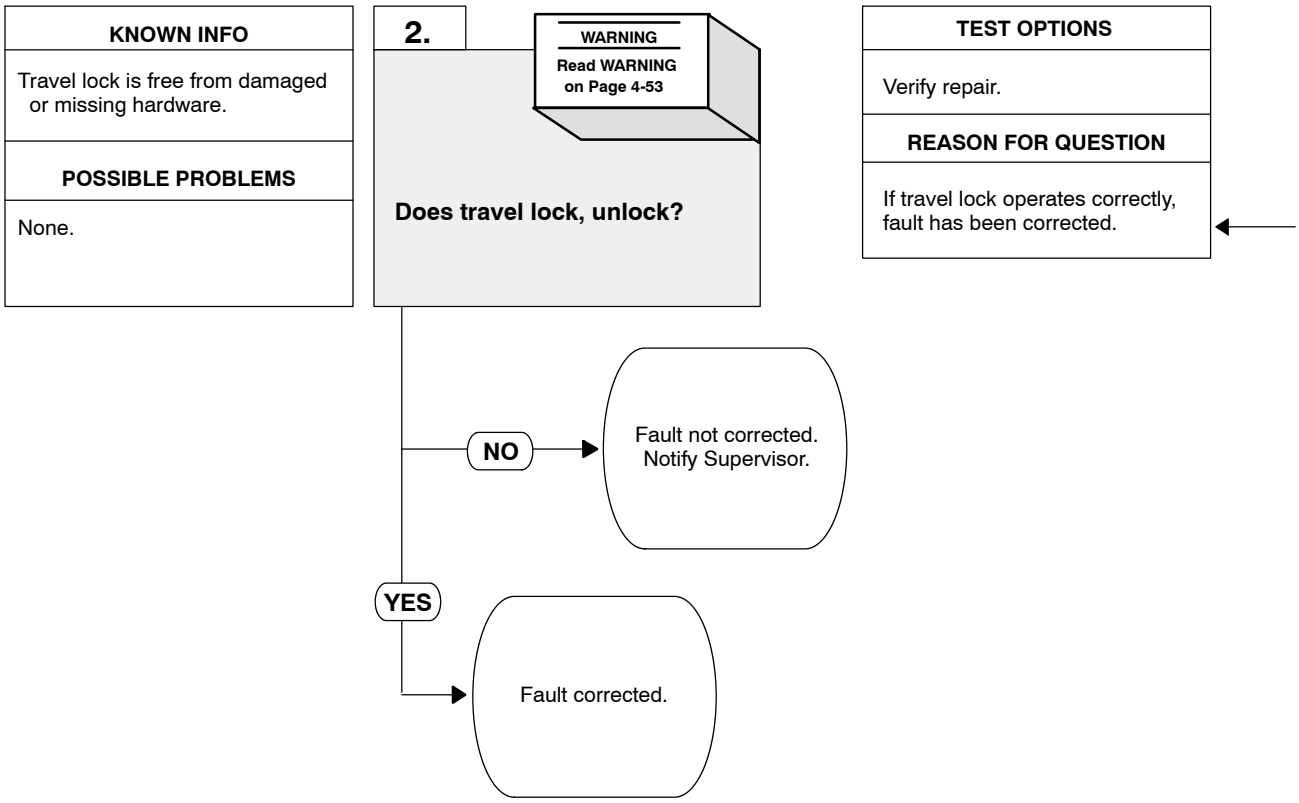
(4) Shut OFF engine, (TM 9-2320-364-10).

(5) Inspect travel lock for damaged or missing hardware.

  (a) If travel lock has damaged or missing hardware. Repair or replace damaged or missing hardware, (Para 3-4). Verify repair, go to Step 2 of this Fault.

  (b) If travel lock has no damaged or missing hardware, go to Step 2 of this Fault.

2. TRAVEL LOCK DOES NOT LOCK (CONT).

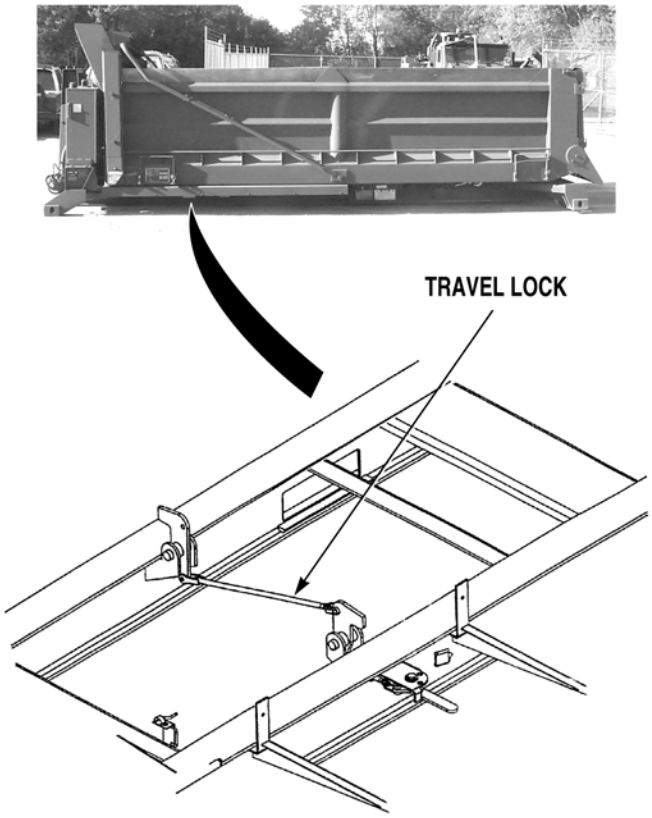


WARNING

- Dump Body reaches height of 24 ft 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in the raised position without Dump Body resting on body props. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on truck, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.
- Operate Dump Body control only from inside truck cab. Failure to comply could result in death or serious injury to personnel.

VERIFY REPAIR

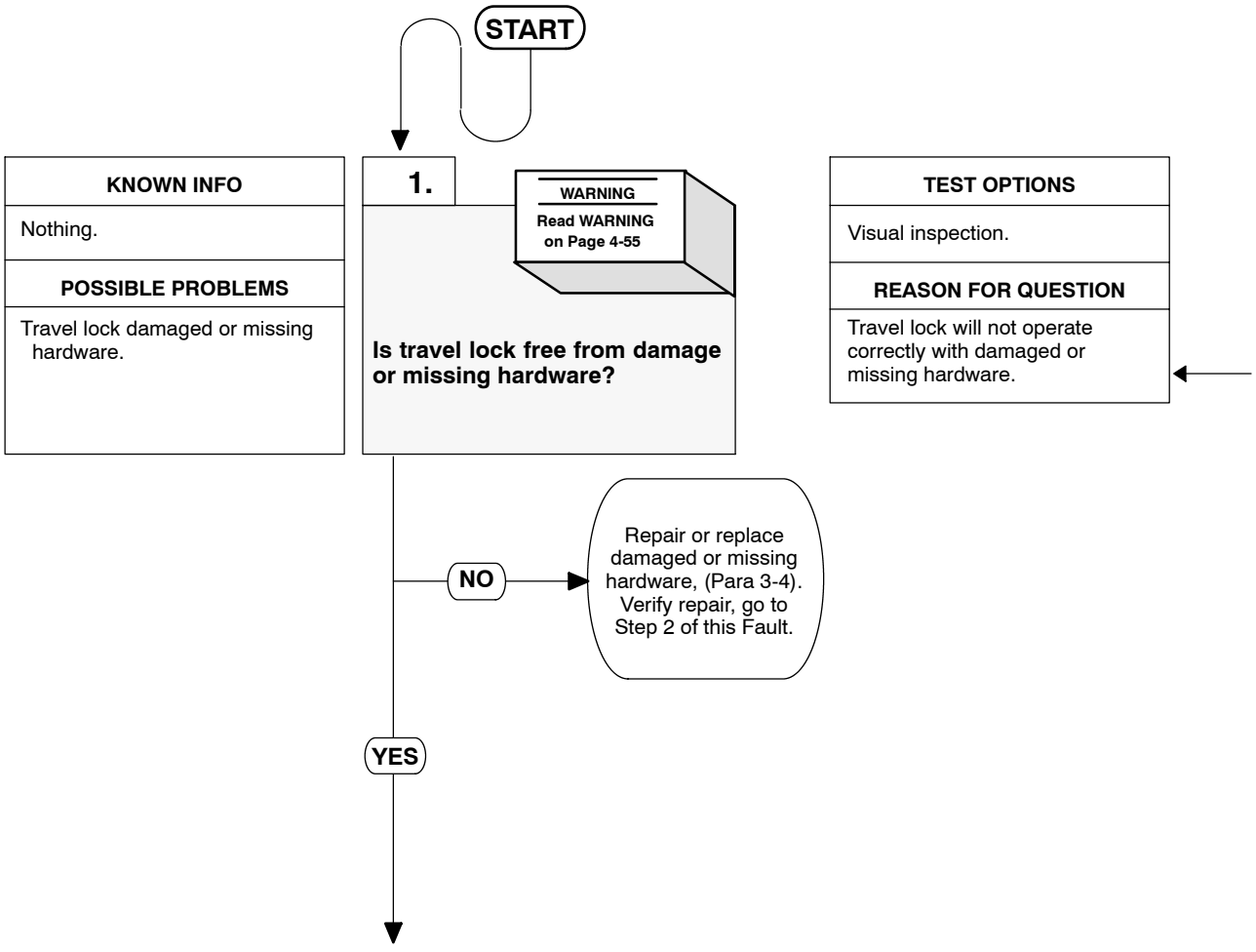
(1) Start engine, (TM 9-2320-364-10).
(2) Raise Dump Body, (Para 2-15).
(3) Deploy body props, (Para 2-14).
(4) Shut OFF engine, (TM 9-2320-364-10).
(5) Check if travel lock operates correctly.
  (a) If travel lock operates correctly, fault has been corrected.
  (b) If travel lock does not operate correctly, fault not corrected. Notify Supervisor.
(6) Start engine, (TM 9-2320-364-10).
(7) Raise Dump Body, (Para 2-15).
(8) Stow body props, (Para 2-14).
(9) Lower Dump Body, (Para 2-15).
(10) Shut OFF engine, (TM 9-2320-364-10).



3. TRAVEL LOCK DOES NOT UNLOCK.

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)



WARNING

- Do not attempt loading or unloading operations on a side slope greater than 5 degrees and/or fore/aft slope greater than 20 percent. Before attempting loading or unloading operations on slopes you must determine if ground surface conditions permit safe loading or unloading operations. Slopes that contain snow, ice, loose gravel or sand may not permit safe loading or unloading.
- When loading or unloading containers on uneven ground (side slope up to 5 degrees and downgrades up to 20 percent), it may be necessary to apply truck service brakes to prevent truck roll away or severe injury or death could result.
- Check ground conditions for firmness and extreme sideways inclination before picking-up or off-loading a flatrack. Any ground instability beneath road wheels could cause serious injury or death to personnel.
- Check for overhead power lines or other obstructions before attempting LHS operations. LHS reaches a height of 18 ft (5.5 m). Injury or death could result if LHS contacts power lines.
- Prior to and during any load or unload cycle, all personnel should stay clear of LHS, lifting frame, and container or serious injury or death may result.

CAUTION

- PLS interface kit must be disconnected prior to performing this task or damage to equipment may result.
- Ensure air line, hydraulic lines, and electrical lines are stowed in tray and chains and straps are stowed and will not contact any moving parts.
- Ensure Dump Body is completely lowered.
- Ensure LHS switch is in the “AUTO” mode before attempting to unload a Dump Body.

VISUAL INSPECTION

(1) Disconnect and stow UPIK connectors, (Para 2-11).

(2) Start engine, (TM 9-2320-364-10).

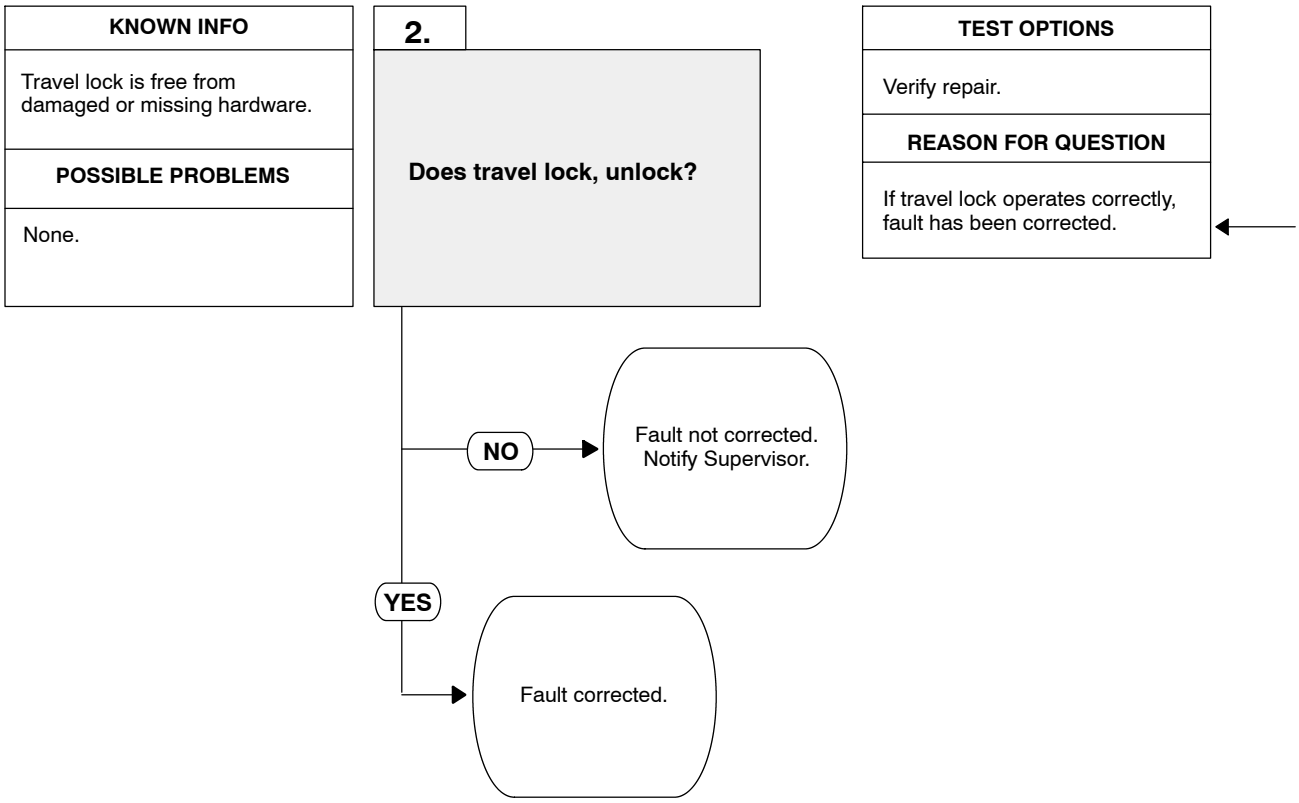
(3) Using LHS operations, lift Dump Body up off of PLS truck approximately 3 ft (1 m). Using a wooden wheel chock as a support, lower Dump Body onto wooden wheel chock as shown.

(4) Inspect travel lock for damaged or missing hardware.

(a) If there is damaged or missing hardware. Unload Dump Body from PLS, (TM 9-2320-364-10) onto a sturdy support system that will support entire Dump Body above ground high enough that maintenance can be performed under Dump Body. Repair or replace damaged or missing hardware, (Para 3-4). Verify repair, go to Step 2 of this Fault.

(b) If travel lock has no damage or missing hardware, go to Step 2 of this Fault.

3. TRAVEL LOCK DOES NOT UNLOCK (CONT).



VERIFY REPAIR

(1) Start engine, (TM 9-2320-364-10).

(2) If Dump Body is supported on wooden wheel chock, lift Dump Body approximately 3 ft (1 m), remove wooden wheel chock and lower Dump Body onto PLS frame.

(3) If Dump Body is on support system, load Dump Body on PLS, (TM 9-2320-364-10).

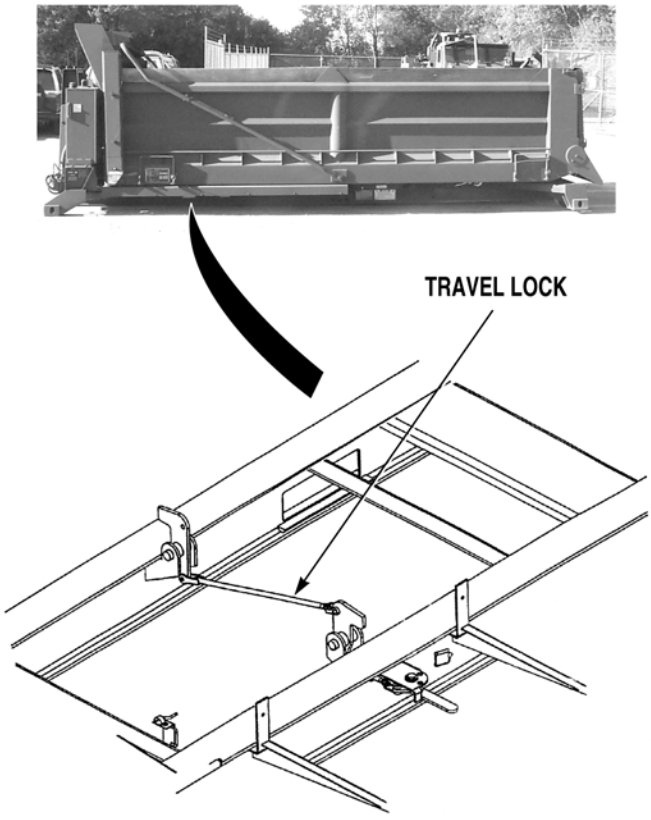
(4) Shut OFF engine, (TM 9-2320-364-10).

(5) Check if travel lock operates correctly.

  (a) If travel lock operates correctly, fault has been corrected.

  (b) If travel lock does not operate correctly, fault not corrected. Notify Supervisor.

(6) Connect UPIK connectors, (Para 2-11).

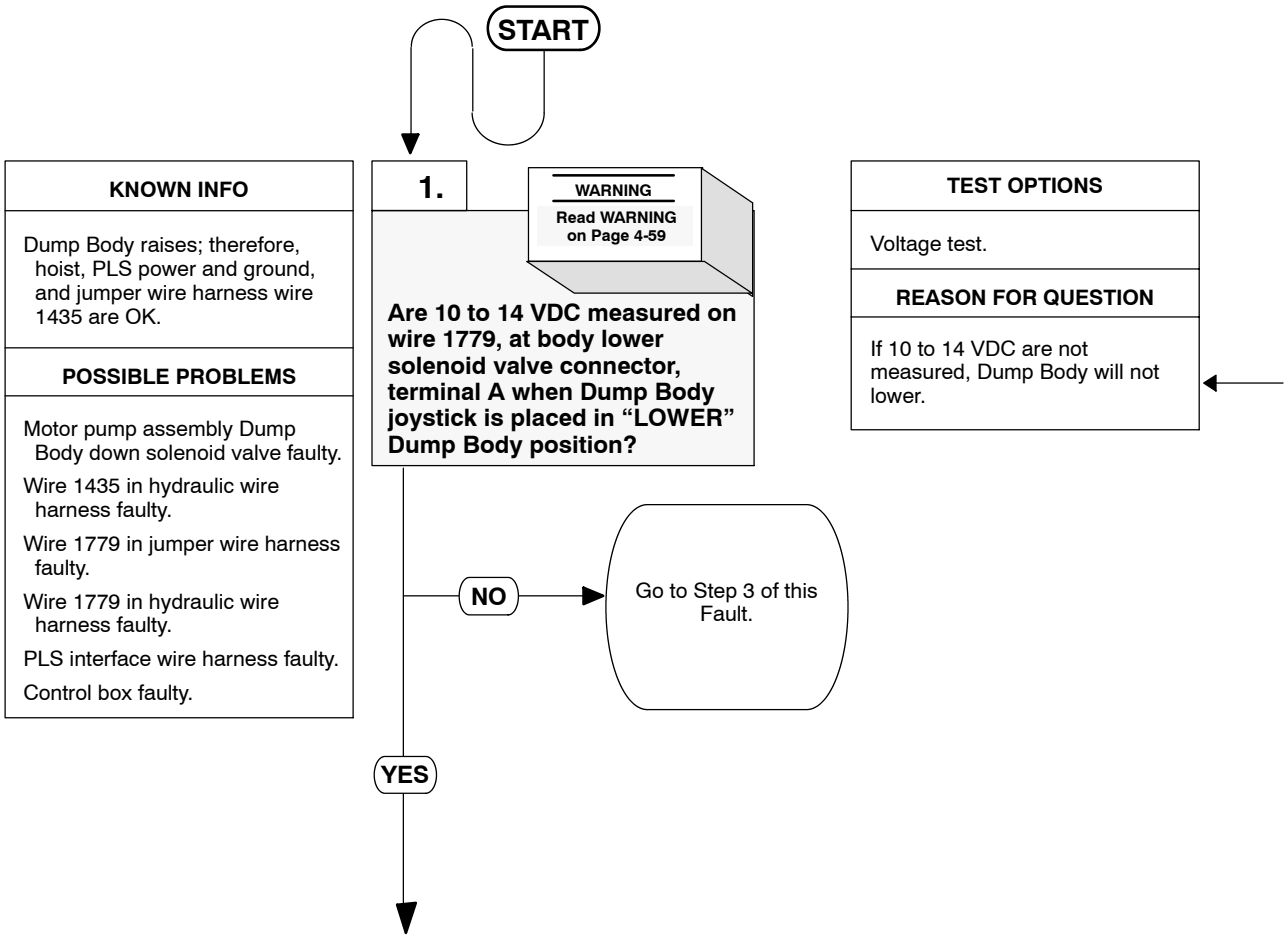


4. DUMP BODY WILL NOT LOWER OR LOWERS SLOWLY.

INITIAL SETUP

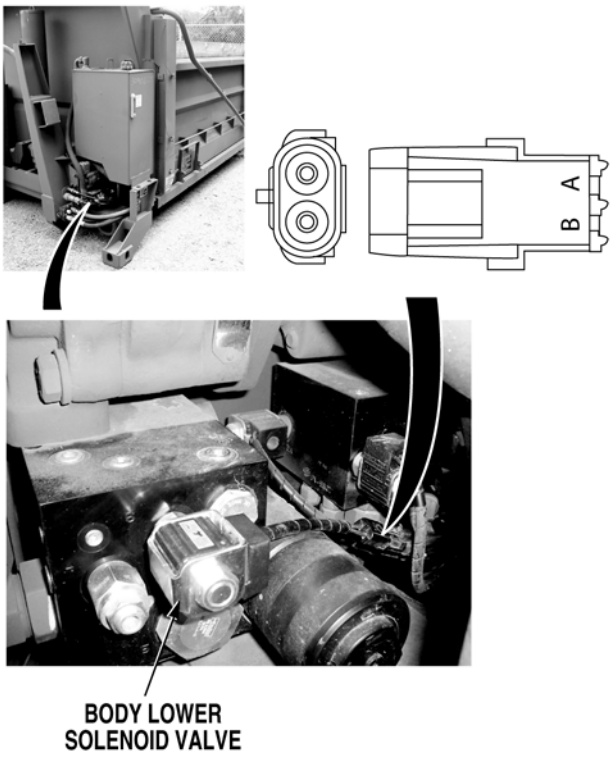
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Multimeter, (Item 9, Appendix E)
Jumperwire

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.



VOLTAGE TEST

(1) Place PLS battery disconnect switch in OPEN position, (TM 9-2320-364-10).

(2) Disconnect body lower solenoid valve connector.

(3) Push in battery disconnect switch, (TM 9-2320-364-10).

(4) Turn ON ENGINE start switch, (TM 9-2320-364-10).

(5) Have an assistant place and hold Dump Body joystick in “LOWER” Dump Body position.

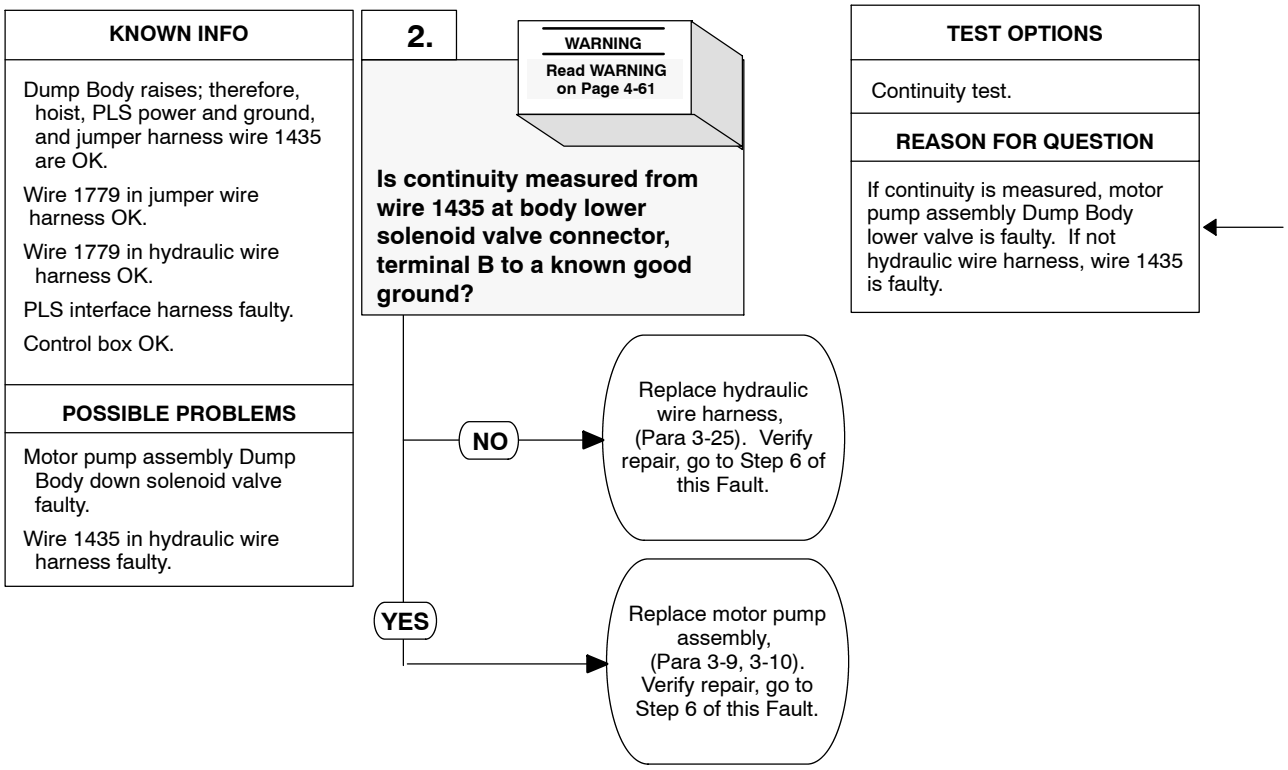
(6) Connect positive (+) multimeter lead to wire 1779 at body lower solenoid valve connector, terminal A. See Dump Body schematic, (Para 3-34).

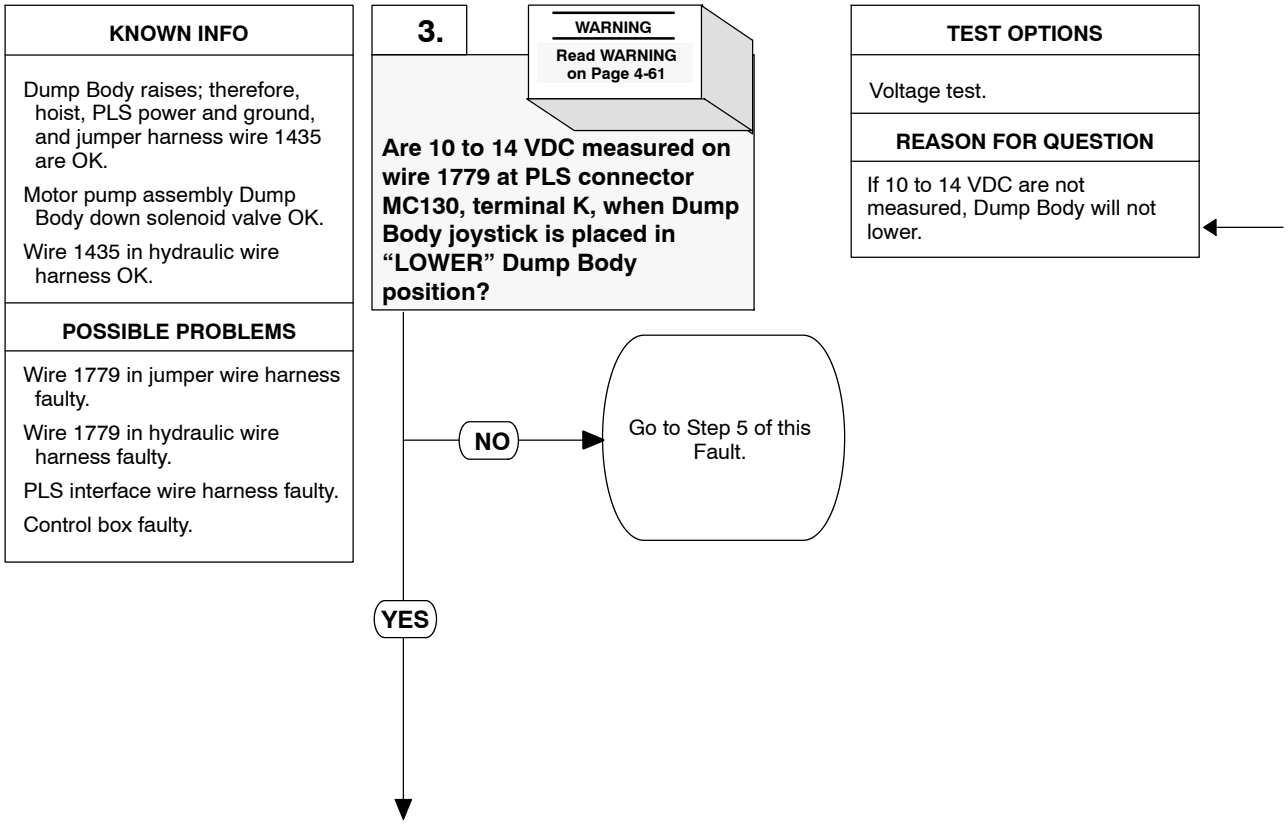
(7) Connect negative (-) multimeter lead to a known good ground.

(a) If 10 to 14 VDC are measured, go to Step 2 of this Fault.

(b) If 10 to 14 VDC are not measured, go to Step 3 of this fault.

4. DUMP BODY WILL NOT LOWER OR LOWERS SLOWLY (CONT).





WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Set multimeter select switch to ohms.

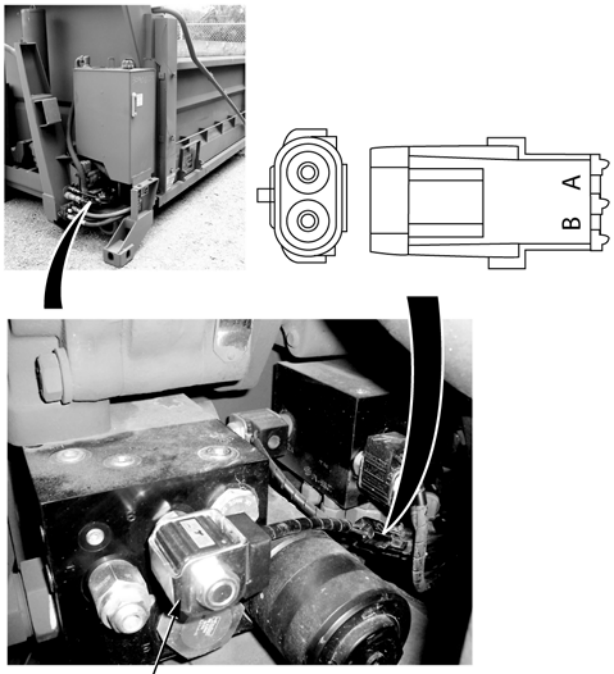
(4) Connect positive (+) multimeter lead to wire 1435 at body lower solenoid valve connector, terminal B. See Dump Body schematic, (Para 3-34).

(5) Connect negative (–) multimeter lead to a known good ground.

(a) If continuity is measured, replace motor pump assembly, (Para 3-9, 3-10).

(b) If continuity is not measured, replace hydraulic wire harness, (Para 3-25).

(6) Verify repair, go to Step 6 of this Fault.



VOLTAGE TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Disconnect jumper wire harness from connector MC130, (Para 2-11).

(4) Push in battery disconnect switch, (TM 9-2320-364-10).

(5) Turn ON ENGINE start switch, (TM 9-2320-364-10).

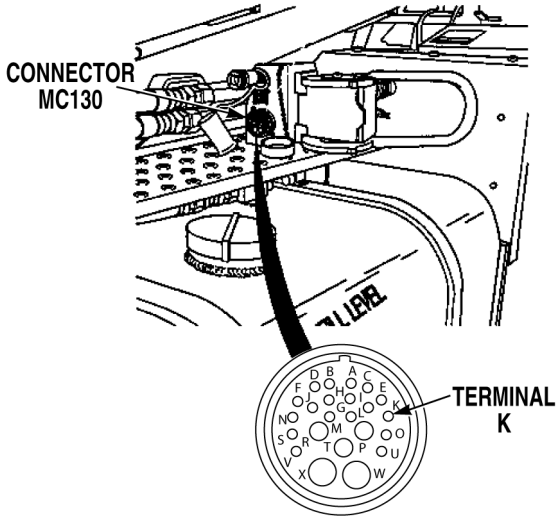
(6) Connect positive (+) multimeter lead to wire 1779 at connector MC130, terminal K. See Dump Body schematic, (Para 3-34).

(7) Connect negative (–) multimeter lead to a know good ground.

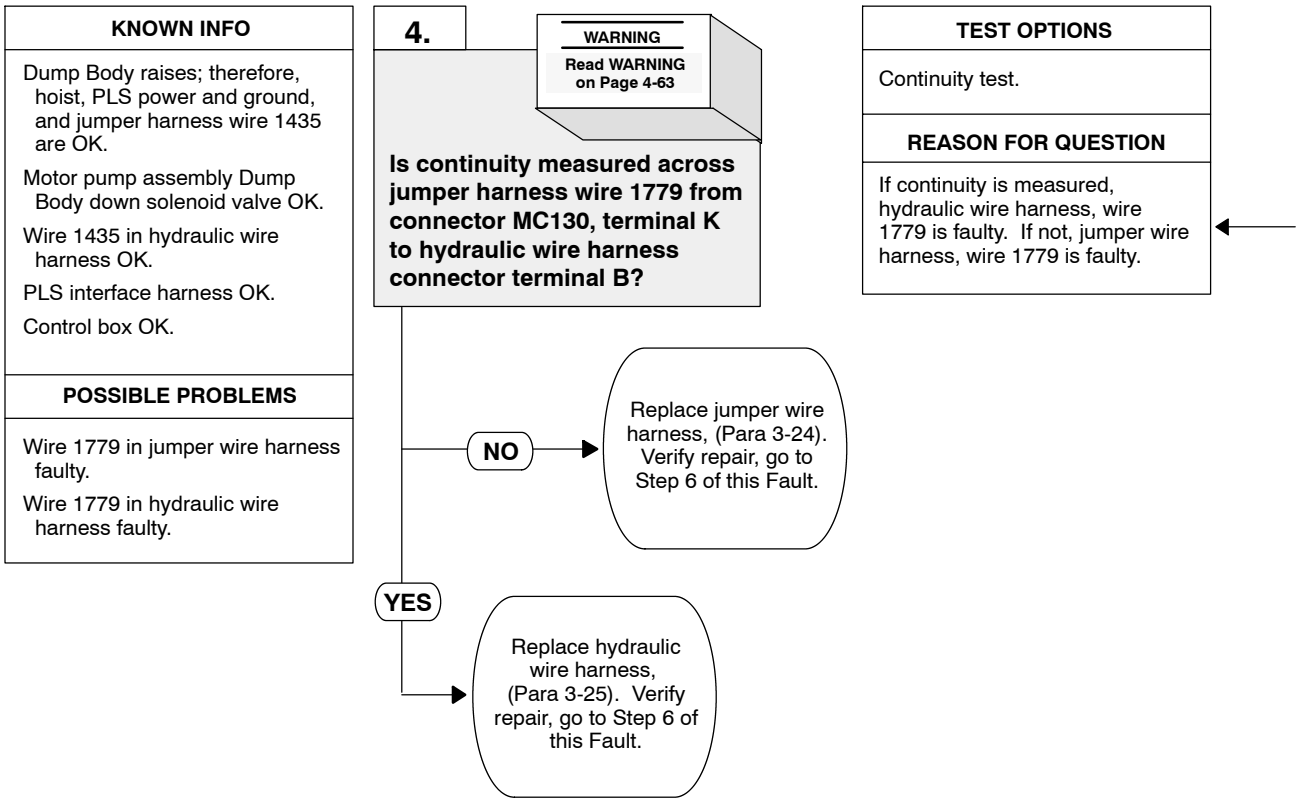
(8) Have an assistant place and hold Dump Body joystick in “LOWER” Dump Body position.

(a) If 10 to 14 VDC are measured, go to Step 4 of this Fault.

(b) If 10 to 14 VDC are not measured, go to Step 5 of this Fault.



4. DUMP BODY WILL NOT LOWER OR LOWERS SLOWLY (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

NOTE

Perform Steps 1 through 6 if Dump Body is not in the raised position.

(1) Connect body lower solenoid valve connector, (Para 2-11).

(2) Connect jumper wire harness connector MC130, (Para 2-11).

(3) Start engine, (TM 9-2320-364-10).

(4) Raise Dump Body, (Para 2-15).

(5) Using blocks or suitable lifting device, support Dump Body in raised position.

(6) Shut OFF engine, (TM 9-2320-364-10).

(7) Pul out battery switch, (TM 9-2320-364-10).

(8) Disconnect jumper wire harness from connector MC130, (Para 2-11).

(9) Disconnect jumper harness connector from hydraulic harness connector, (Para 2-11).

(10) Set multimeter select switch to ohms.

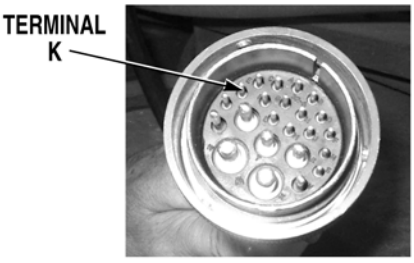
(11) Connect positive (+) multimeter lead to wire 1779 at connector MC130, terminal K.

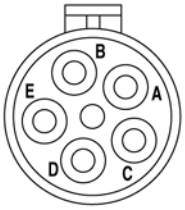
(12) Connect negative (–) multimeter lead to wire 1779 at hydraulic wire harness connector, terminal B.

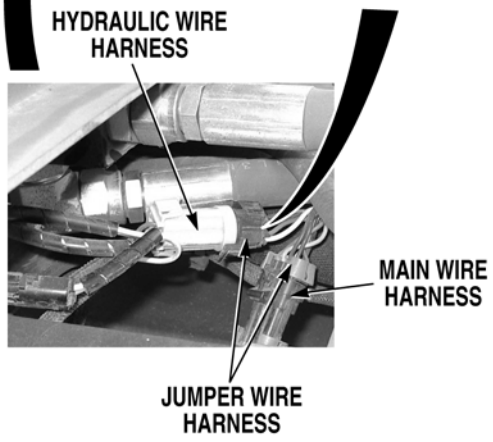
(a) If continuity is measured, replace hydraulic wire harness, (Para 3-25).

(b) If continuity is not measured, replace jumper wire harness, (Para 3-24).

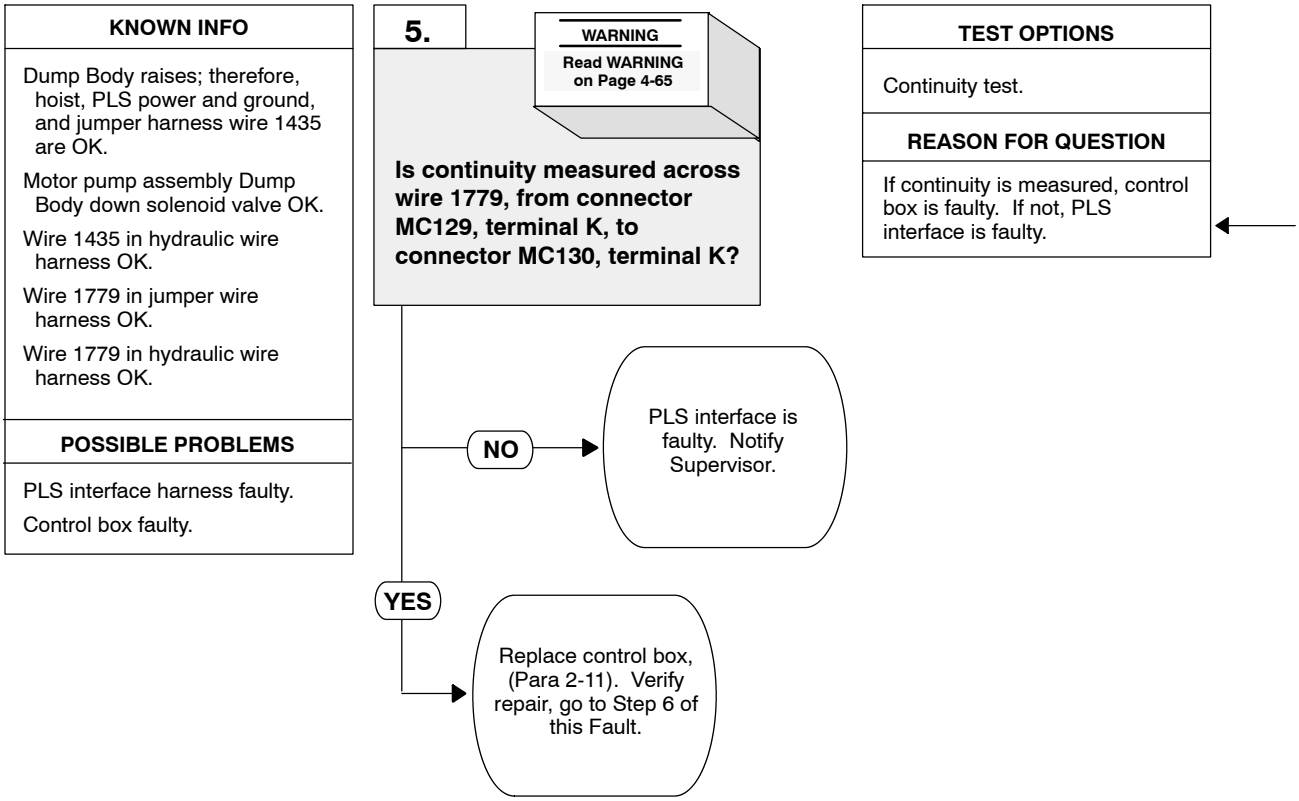
(13) Verify repair, go to Step 6 of this Fault.

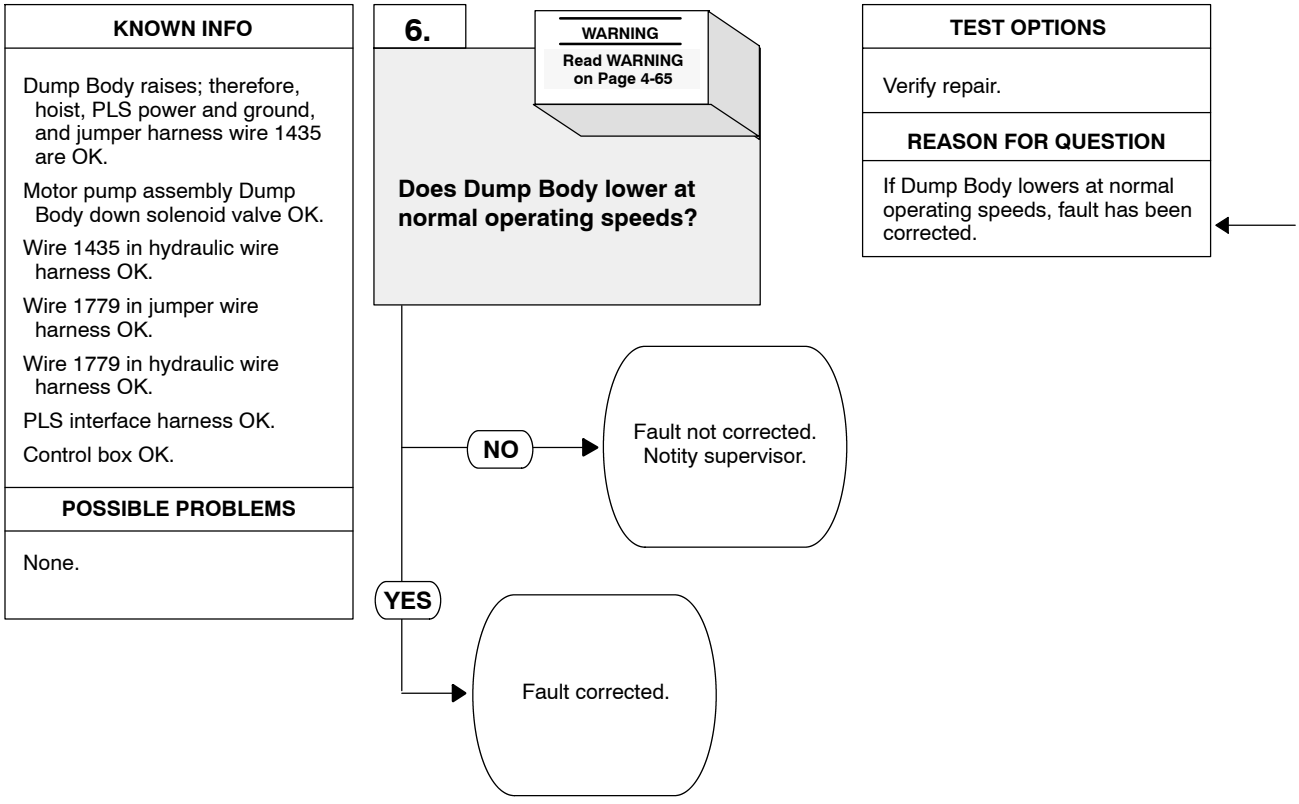






4. DUMP BODY WILL NOT LOWER OR LOWERS SLOWLY (CONT).





WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Place PLS battery disconnect switch in OPEN position, (TM 9-2320-364-10).

(3) Disconnect control box connector, (Para 2-11).

(4) Set multimeter select switch to ohms.

(5) Connect jumperwire between connector MC130, terminal K and a known good ground. See Dump Body schematic, (Para 3-34).

(6) Connect positive (+) multimeter lead to connector MC129, terminal K.

(7) Connect negative (–) multimeter lead to a known good ground.

(a) If continuity is measured, PLS interface harness is faulty. Notify Supervisor.

(b) If continuity is measured, replace control box, (Para 2-11). Verify repair, go to Step 6 of this Fault.

VERIFY REPAIR

(1) If disconnected, connect Dump Body lower solenoid valve connector, (Para 2-11).

(2) If disconnected, connect connector MC130, (Para 2-11).

(3) If OPEN, place PLS battery disconnect switch in CLOSED position, (TM 9-2320-364-10).

(4) Start engine, (TM 9-2320-364-10).

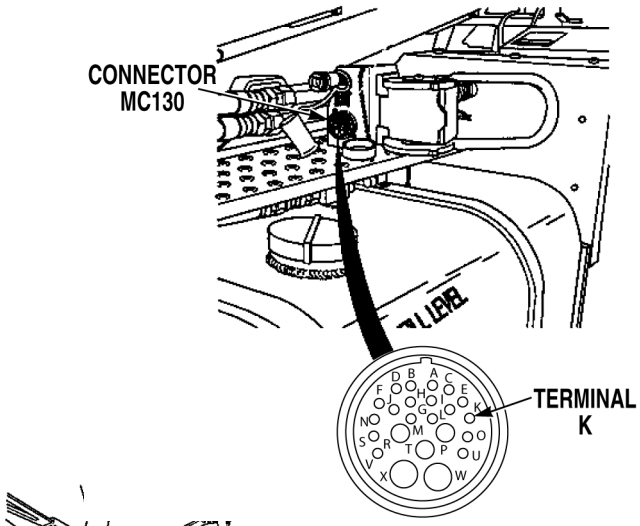
(5) Raise Dump Body, (Para 2-15).

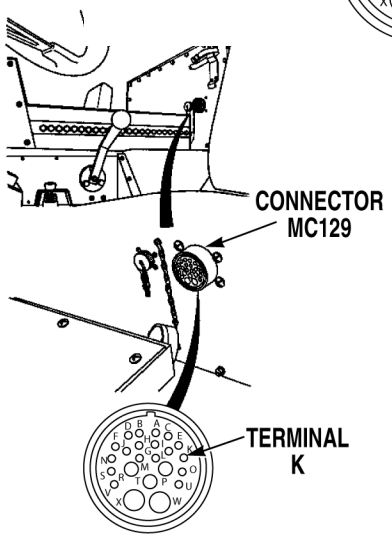
(6) If Dump Body is supported by blocks or lifting device, remove blocks and lifting device.

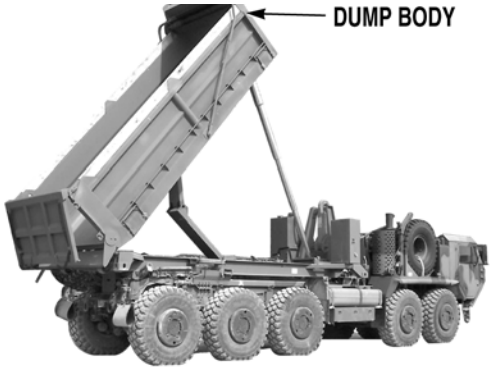
(7) Lower Dump Body, (Para 2-15).

(a) If Dump Body lowers at normal operating speeds, fault has been corrected.

(b) If Dump Body will not lower or lowers slowly, fault not corrected. Notify Supervisor.





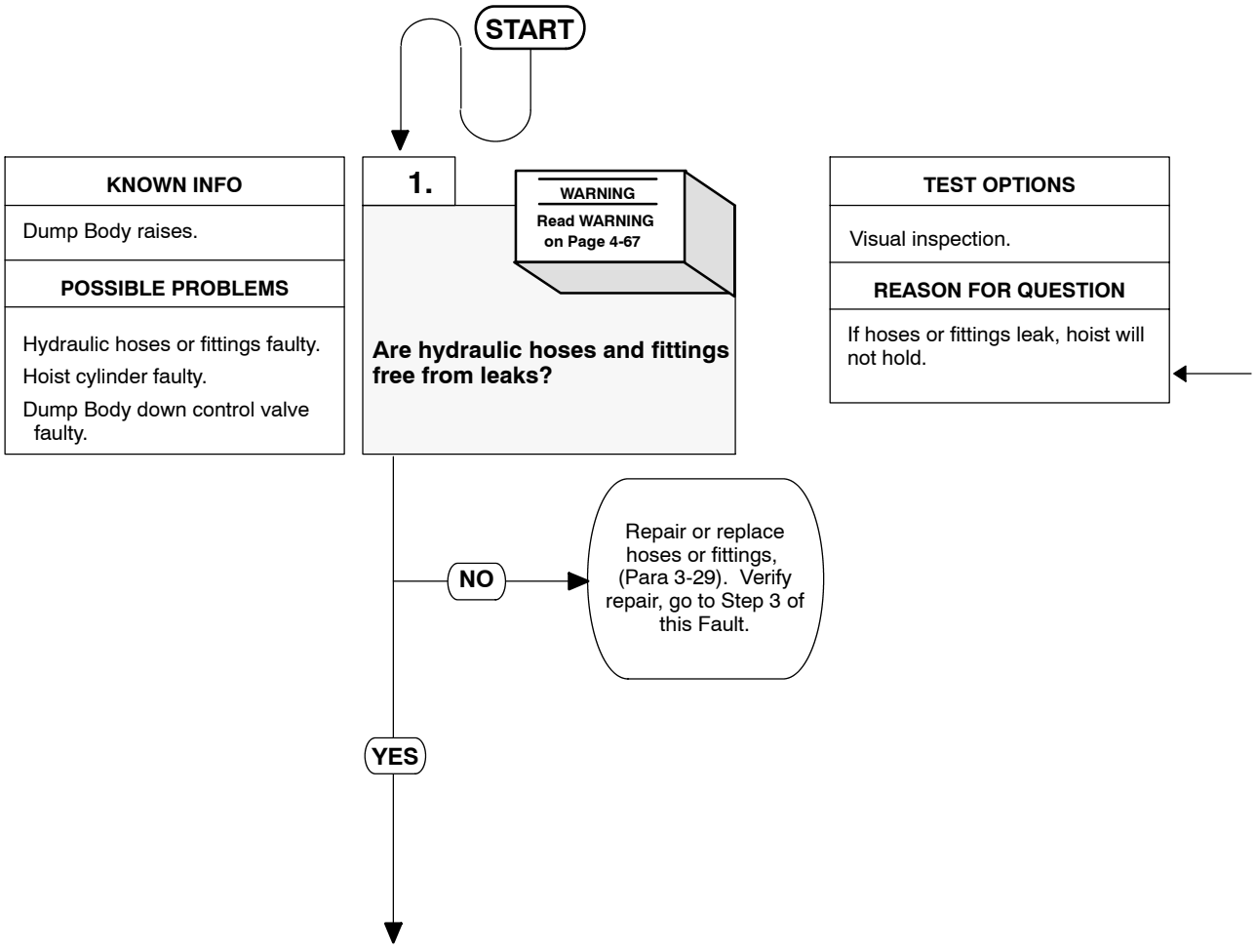


5. DUMP BODY DOES NOT HOLD IN RAISED POSITION.

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

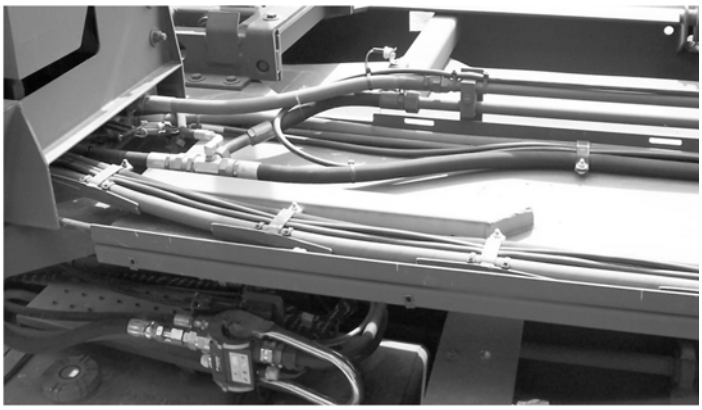
Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)



WARNING

- Operate Dump Body controls only from inside truck cab. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body reaches height of 24 ft 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in the raised position without Dump Body resting on body props. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on truck, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.

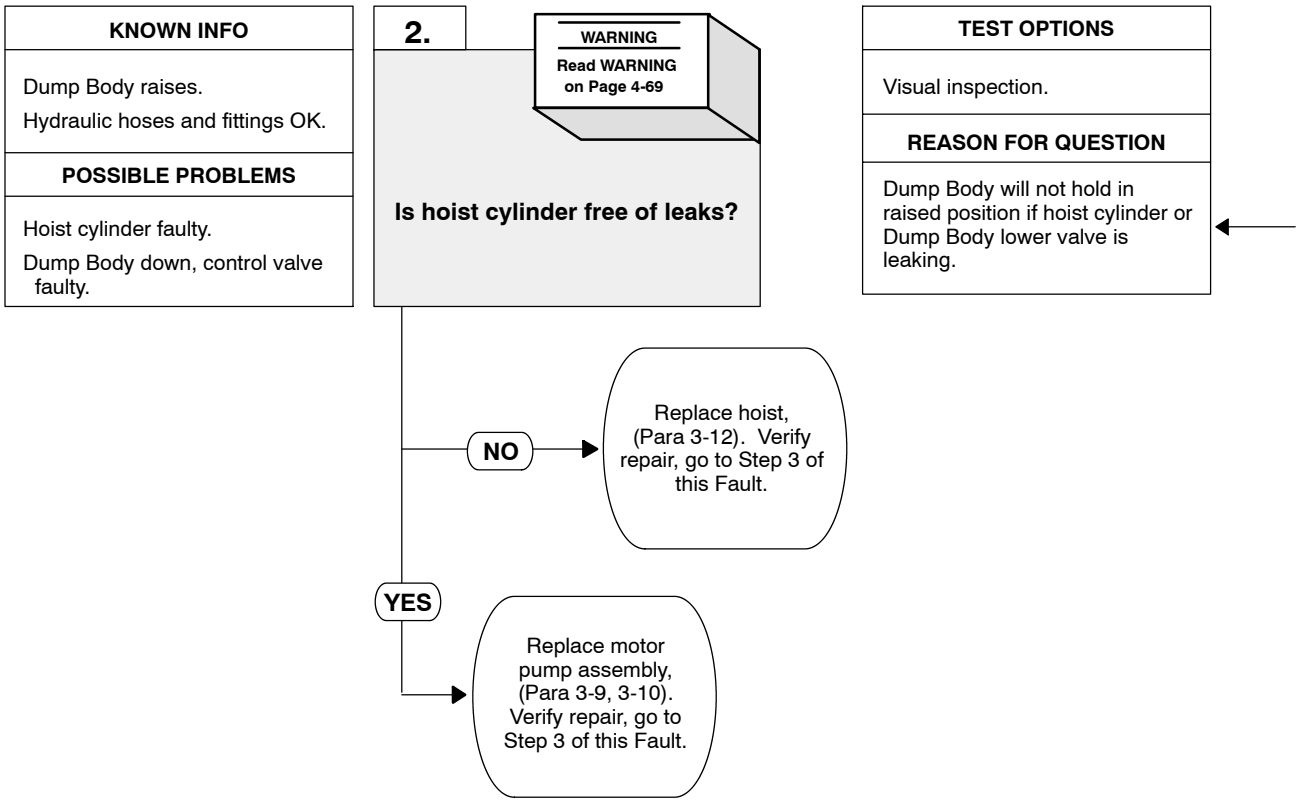
NOTE: HOSE TRAY COVER REMOVED FOR CLARITY



VISUAL INSPECTION

(1) Start engine, (TM 9-2320-364-10).
(2) Raise Dump Body, (Para 2-15).
(3) Deploy body props, (Para 2-14).
(4) Shut OFF engine, (TM 9-2320-364-10).
(5) Remove hose tray cover, (Para 3-30).
(6) Inspect hoses and fittings for leaks.
    (a) If hydraulic hoses or fittings are leaking, repair or replace hoses or fittings, (Para 3-29). Verify repair go to Step 3 of this Fault.
    (b) If hoses and fittings are not leaking, go to Step 2 of this Fault.
(7) Install hose tray cover, (Para 3-30).

5. DUMP BODY DOES NOT HOLD IN RAISED POSITION (CONT).



WARNING

- Operate Dump Body controls only from inside truck cab. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body reaches height of 24 ft 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in the raised position without Dump Body resting on body props. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on truck, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.

VISUAL INSPECTION

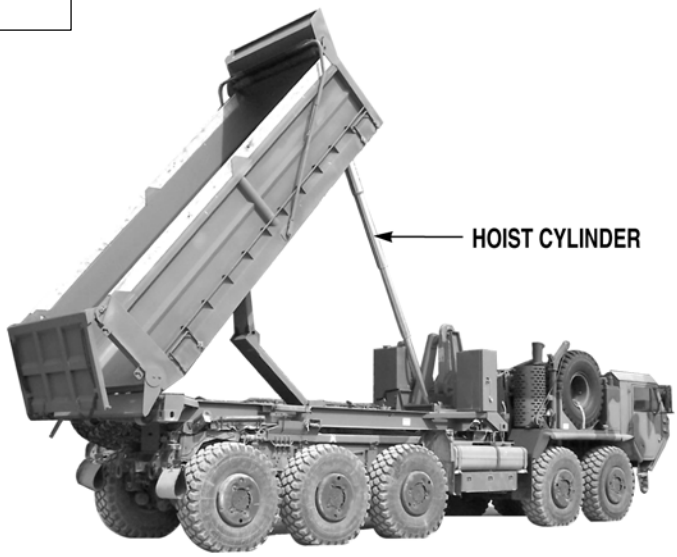
(1) Inspect hoist for leaks.

NOTE

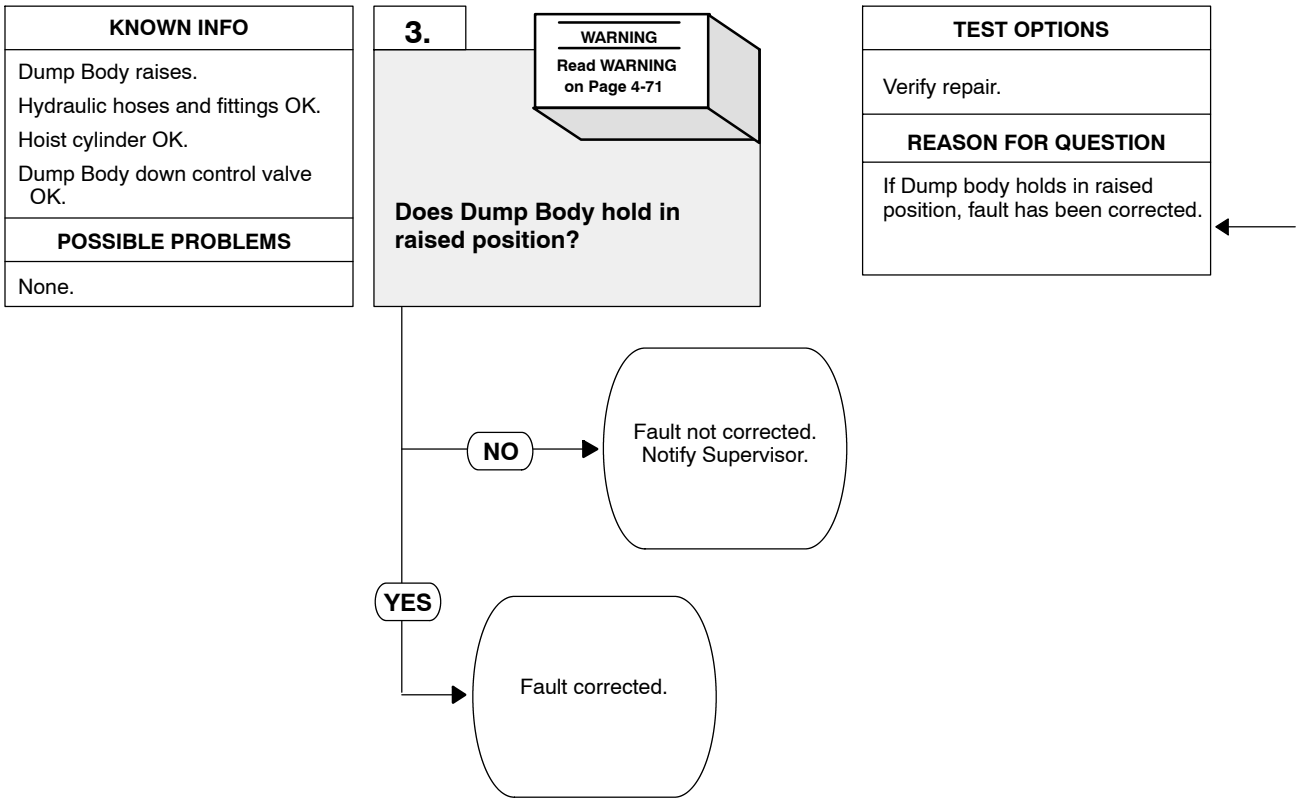
Hoist cylinder may have light film of oil on rods when extended. Hoist cylinder is leaking if oil film is excessive.

(a) If hoist is leaking, replace hoist, (Para 3-12). Verify repair, go to Step 3 of this Fault.

(b) If hoist is not leaking, replace motor pump assembly, (Para 3-9, 3-10). Verify repair, go to Step 3 of this Fault.



5. DUMP BODY DOES NOT HOLD IN RAISED POSITION (CONT).

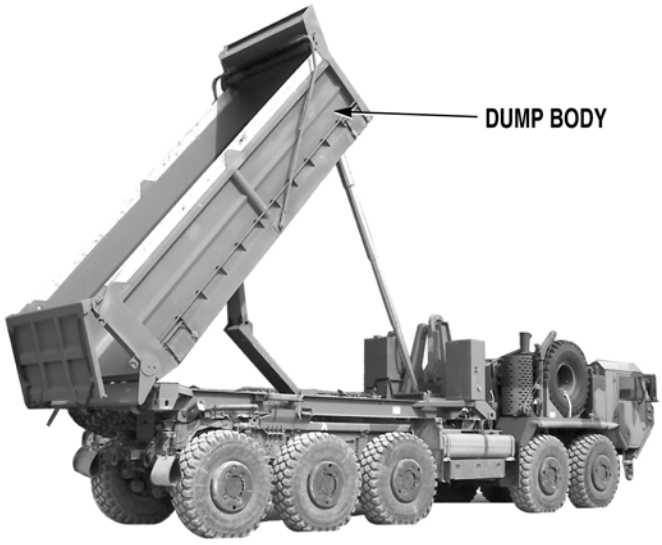


WARNING

- Operate Dump Body controls only from inside truck cab. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body reaches height of 24 ft 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in the raised position without Dump Body resting on body props. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on truck, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury or death to personnel.

VERIFY REPAIR

(1) Start engine, (TM 9-2320-364-10).
(2) Raise Dump Body, (Para 2-15).
(3) If deployed, stow body props, (Para 2-14).
(4) Check if Dump Body holds in raised position.
  (a) If Dump Body holds in raised position, fault has been corrected.
  (b) If Dump Body does not hold in raised position, fault not corrected. Notify Supervisor.
(5) Lower Dump Body, (Para 2-15).
(6) Shut OFF engine, (TM 9-2320-364-10).

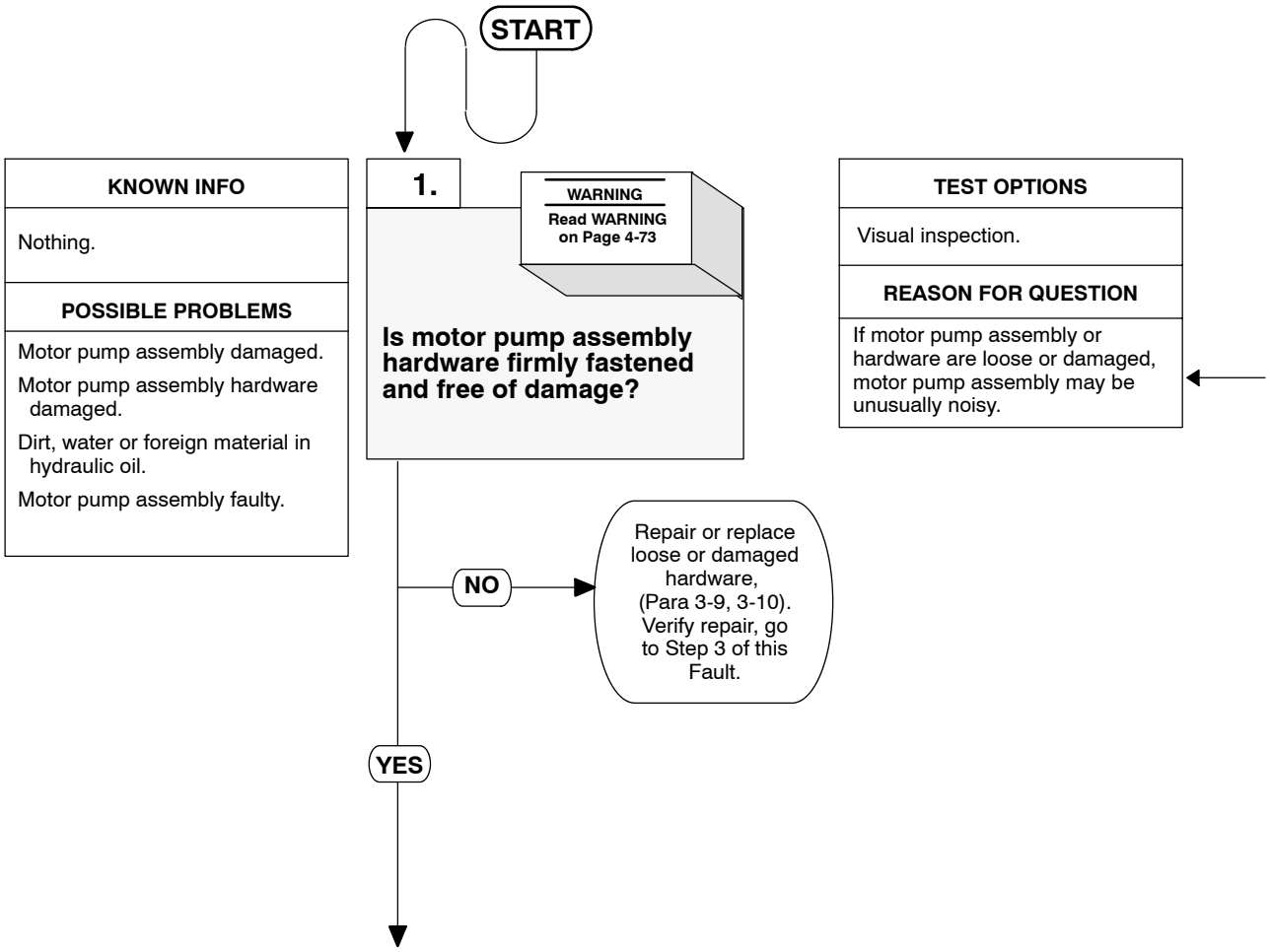


6. MOTOR PUMP ASSEMBLY UNUSUALLY NOISY.

INITIAL SETUP

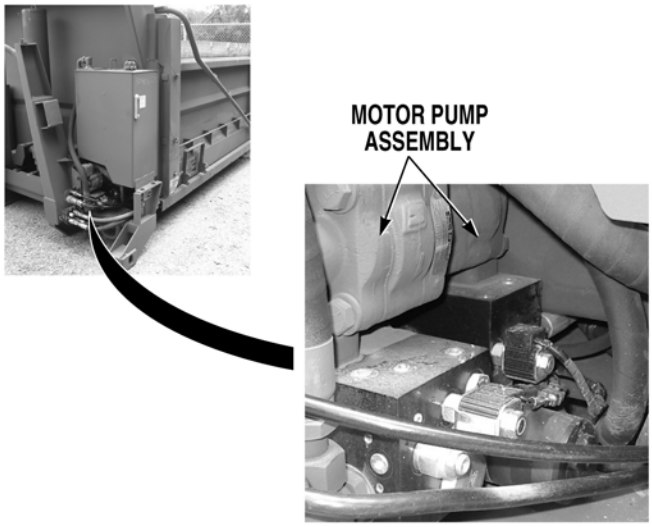
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)



WARNING

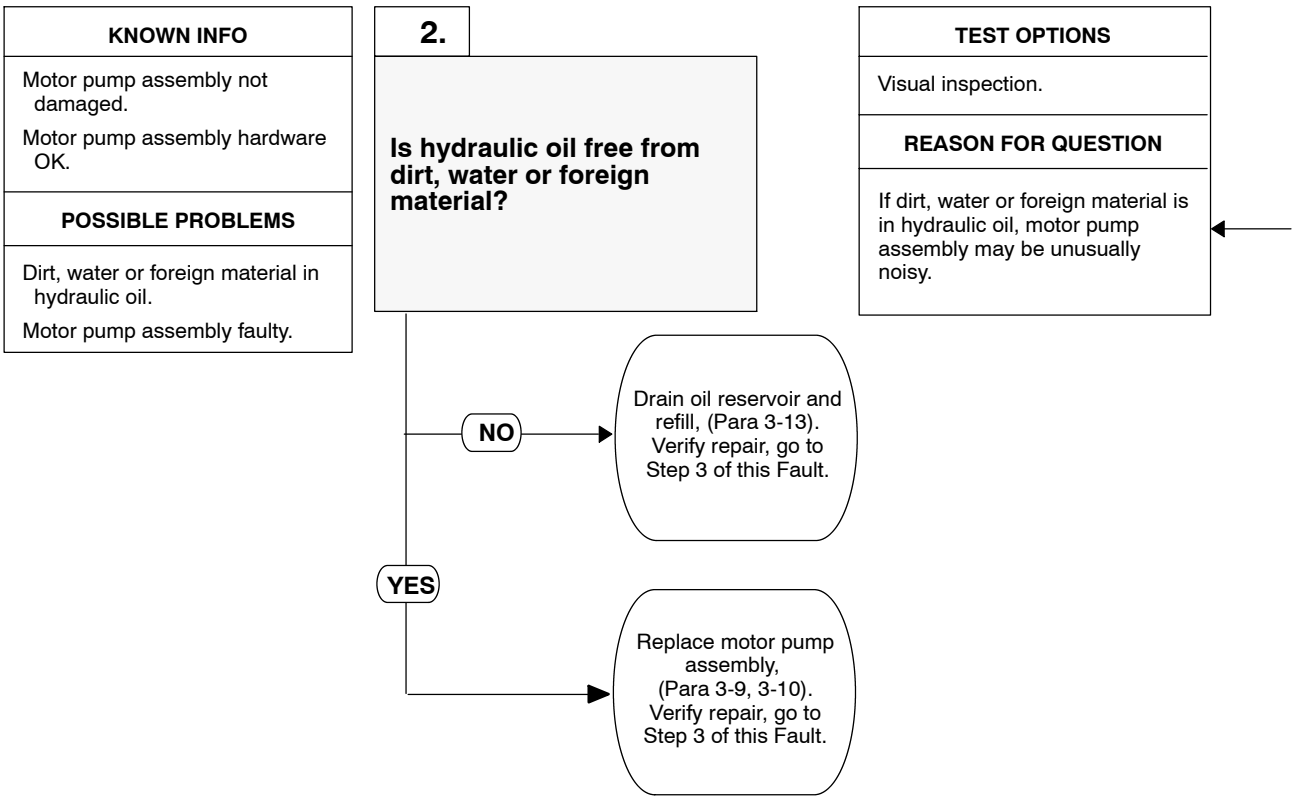
- Dump Body reaches height of 24 ft 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in the raised position without Dump Body resting on body props. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on truck, one on each side. Both body props must be used to support Dump Body. Working under Dump Body with only one side supported could result in serious injury to personnel.
- Operate Dump Body control only from inside truck cab. Failure to comply could result in death or serious injury to personnel.

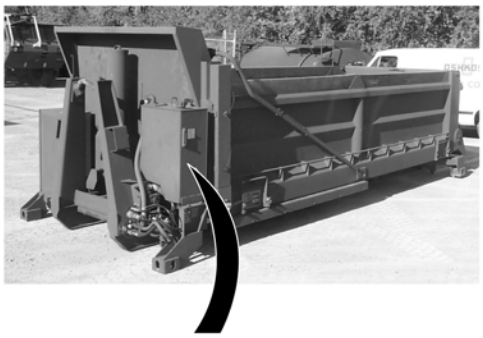


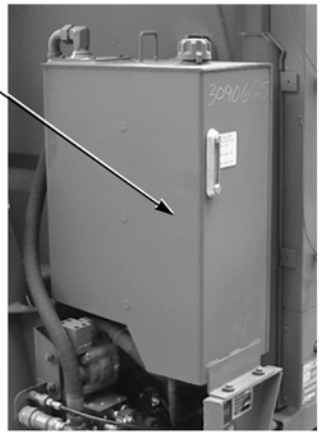
VISUAL INSPECTION

(1) Start engine, (TM 9-2320-364-10).
(2) Raise Dump Body, (Para 2-15).
(3) Deploy body props, (Para 2-14).
(4) Shut OFF engine, (TM 9-2320-364-10).
(5) Inspect motor pump assembly for damaged and loose or missing hardware.
    (a) If hardware is loose, missing or damaged, tighten loose hardware or replace missing and damaged hardware, (Para 3-9, 3-10).
    (b) If no hardware is loose, missing or damaged, go to Step 2 of this Fault.
(6) Start engine, (TM 9-2320-364-10).
(7) Stow body props, (Para 2-14).
(8) Lower Dump Body, (Para 2-15).
(9) Shut OFF engine, (TM 9-2320-364-10).

6. MOTOR PUMP ASSEMBLY UNUSUALLY NOISY (CONT).







VISUAL INSPECTION

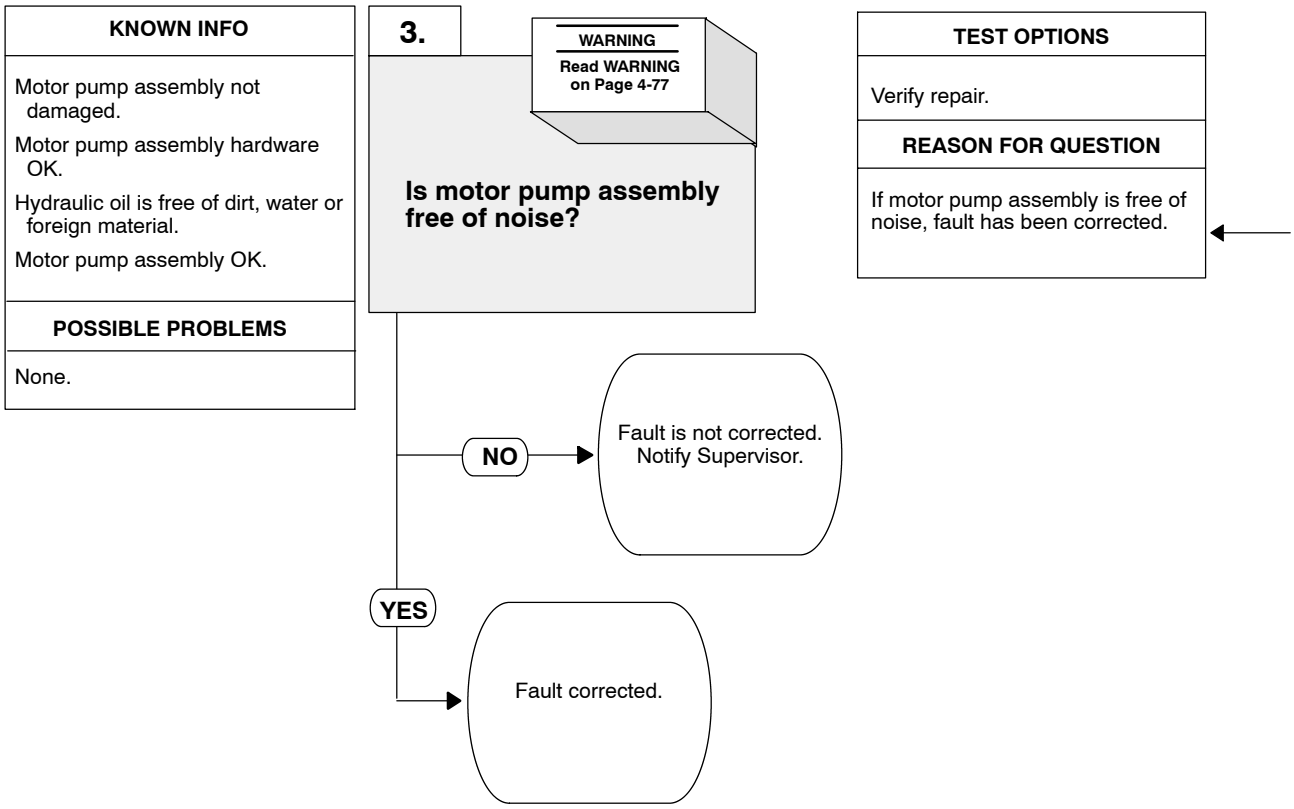
(1) Remove reservoir oil fill cap.

(2) Inspect interior of oil reservoir for dirt, water or foreign material.

  (a) If there is dirt, water or foreign material in oil reservoir, drain and refill reservoir, (Para 3-13). Verify repair, go to Step 3 of this Fault.

  (b) If reservoir is free of dirt, water or foreign material, replace motor pump assembly, (Para 3-9, 3-10). Verify repair, go to Step 3 of this Fault.

6. MOTOR PUMP ASSEMBLY UNUSUALLY NOISY (CONT).



WARNING

- Do not walk or stand under raised Dump Body. Failure to comply could result in death or serious injury to personnel.
- Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Dump Body reaches height of 24 ft 2 in. (7.35 m); never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.

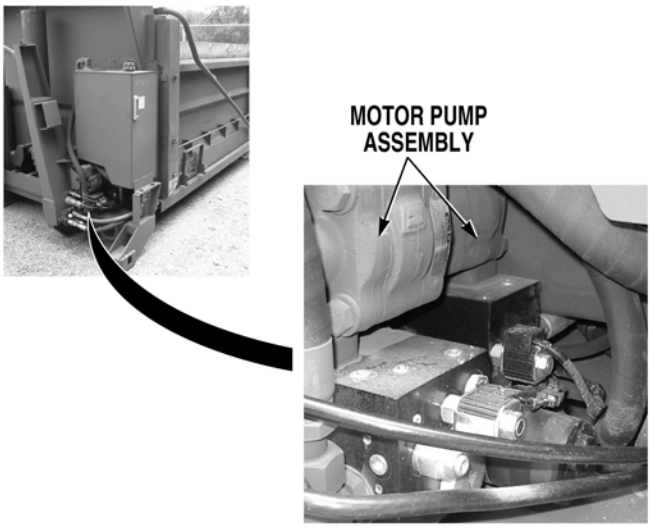
VERIFY REPAIR

(1) Start engine, (TM 9-2320-364-10).

(2) While assistant raises and lowers Dump Body, (Para 2-15), listen to motor pump assembly for unusual noise from motor pump assembly.

  (a) If motor pump assembly is not unusually noisy, fault has been corrected.

  (b) If motor pump assembly is unusually noisy, fault not corrected. Notify Supervisor.

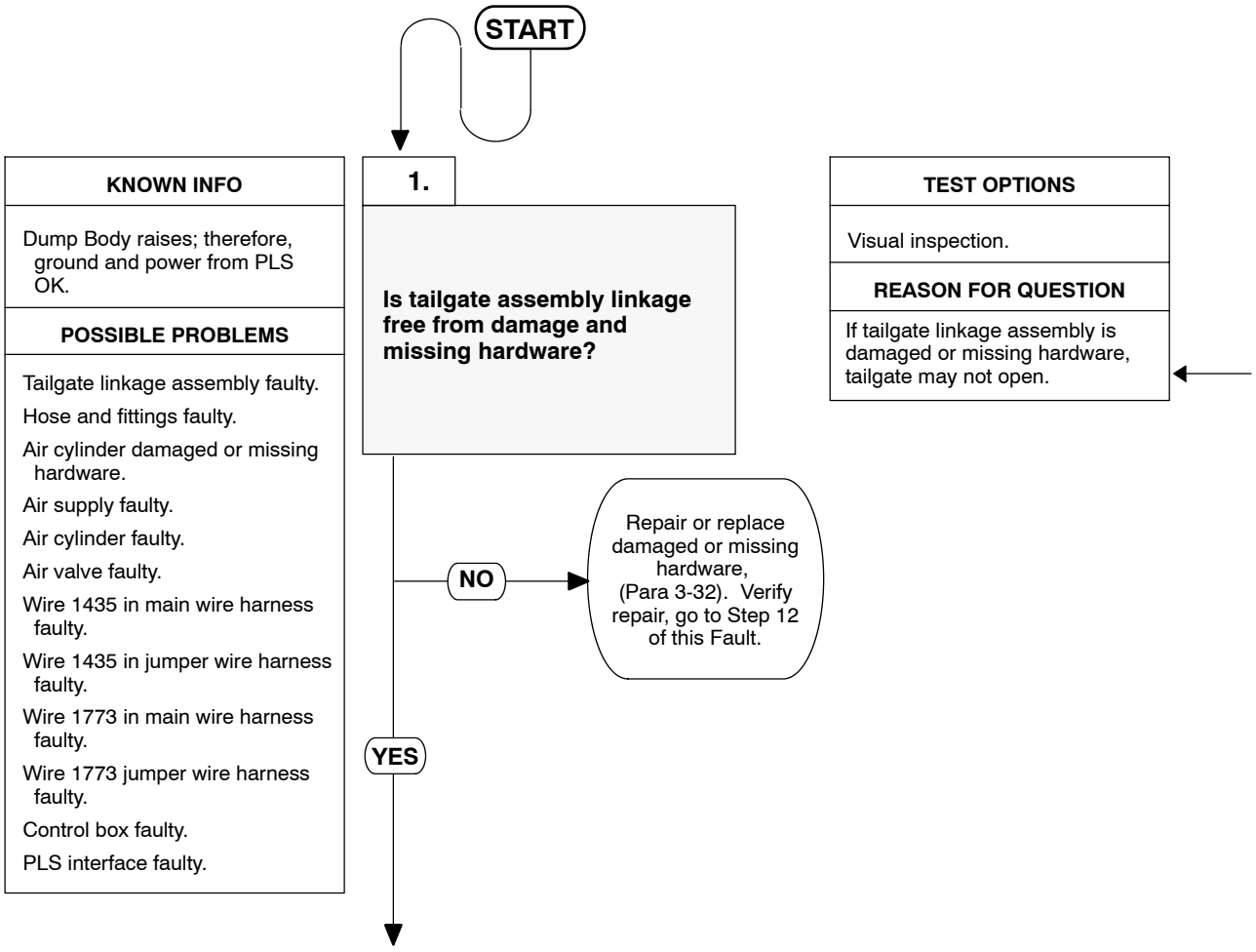


7. TAILGATE DOES NOT OPEN.

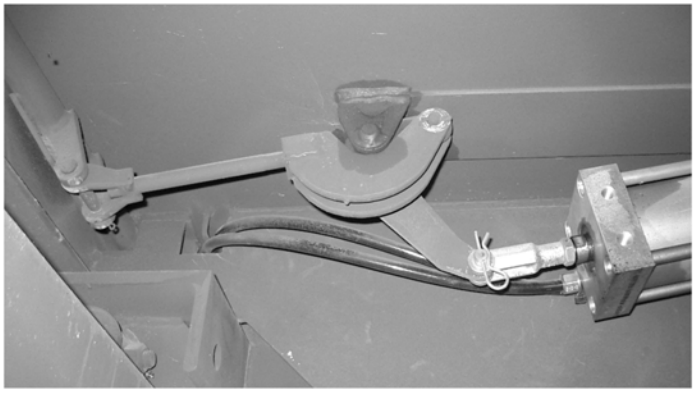
INITIAL SETUP

Tools and Special Tools
- Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
- Multimeter (Item 9, Appendix E)
- Spray Bottle
- Soap Solution
- Jumperwire

Equipment Condition
- Engine OFF, (TM 9-2320-364-10)
- Wheels chocked, (TM 9-2320-364-10)

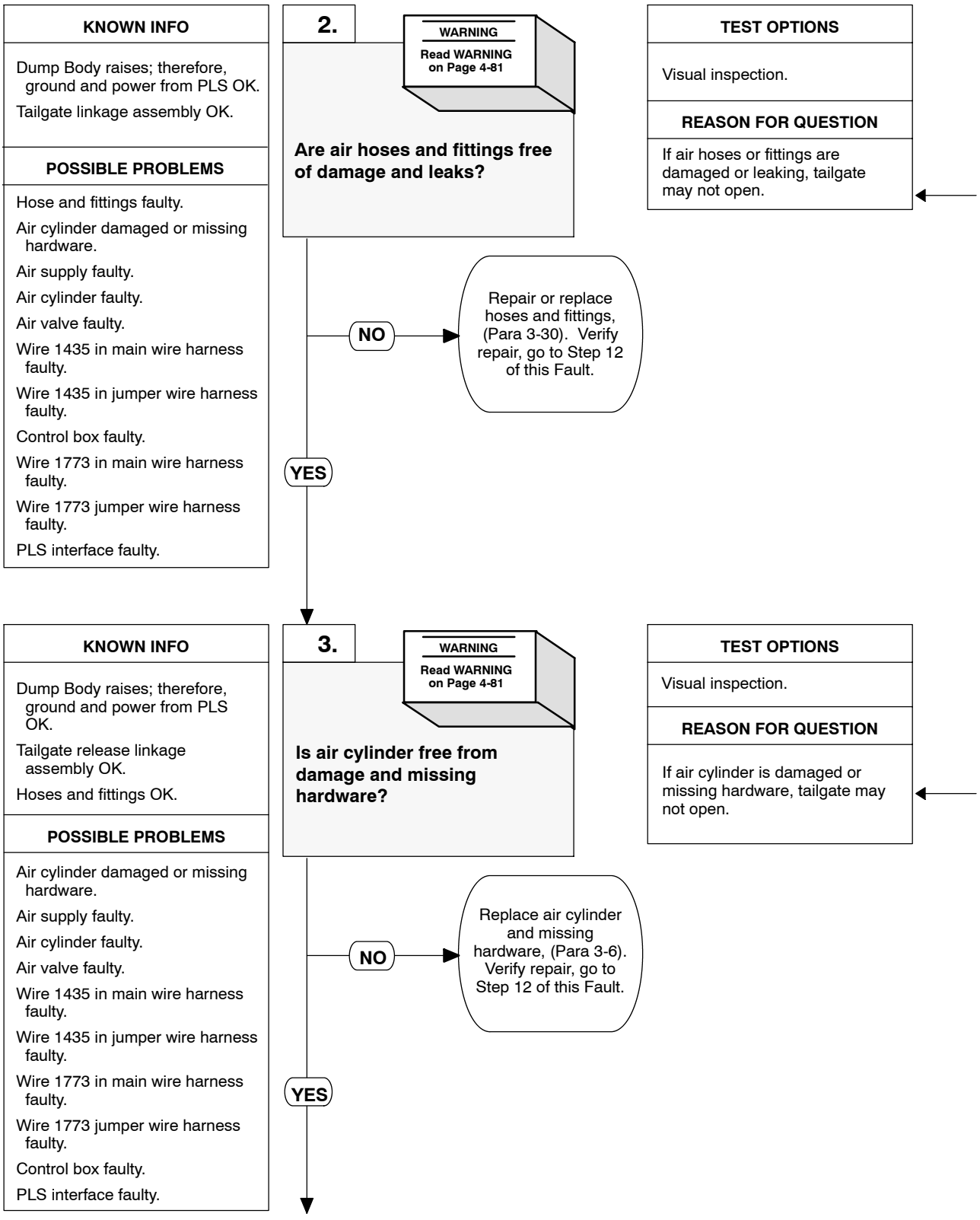


TAILGATE LINKAGE ASSEMBLY



VISUAL INSPECTION
Inspect tailgate assembly linkage for damage and missing hardware. (a) If tailgate assembly linkage is damaged or missing hardware, repair damage and replace missing hardware, (Para 3-32). Verify repair, go to Step 12 of this Fault. (b) If tailgate linkage assembly is free from damage and missing hardware, go to Step 2 of this Fault.

7. TAILGATE DOES NOT OPEN (CONT).



WARNING

- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.

VISUAL INSPECTION

(1) Start engine, (TM 9-2320-364-10).

(2) Raise Dump Body, (Para 2-15).

(3) Deploy body props, (Para 2-14).

NOTE

Run engine idle until air pressure gauge reads 125 +/- 4 psi (861 +/- 28 kPa).

(4) Shut OFF engine, (TM 9-2320-364-10).

(5) Remove hose tray cover, (Para 3-31).

NOTE

Air leaks can be located by spraying hoses and fittings with soapy water and watching for bubbles to form.

(a) If hoses or fittings are damaged or leaking, repair leaks or replace damaged hoses and fittings, (Para 3-30). Verify repair, go to Step 12 of this Fault.

(b) If hoses and fittings are free of damage and leaks, go to Step 3 of this Fault.

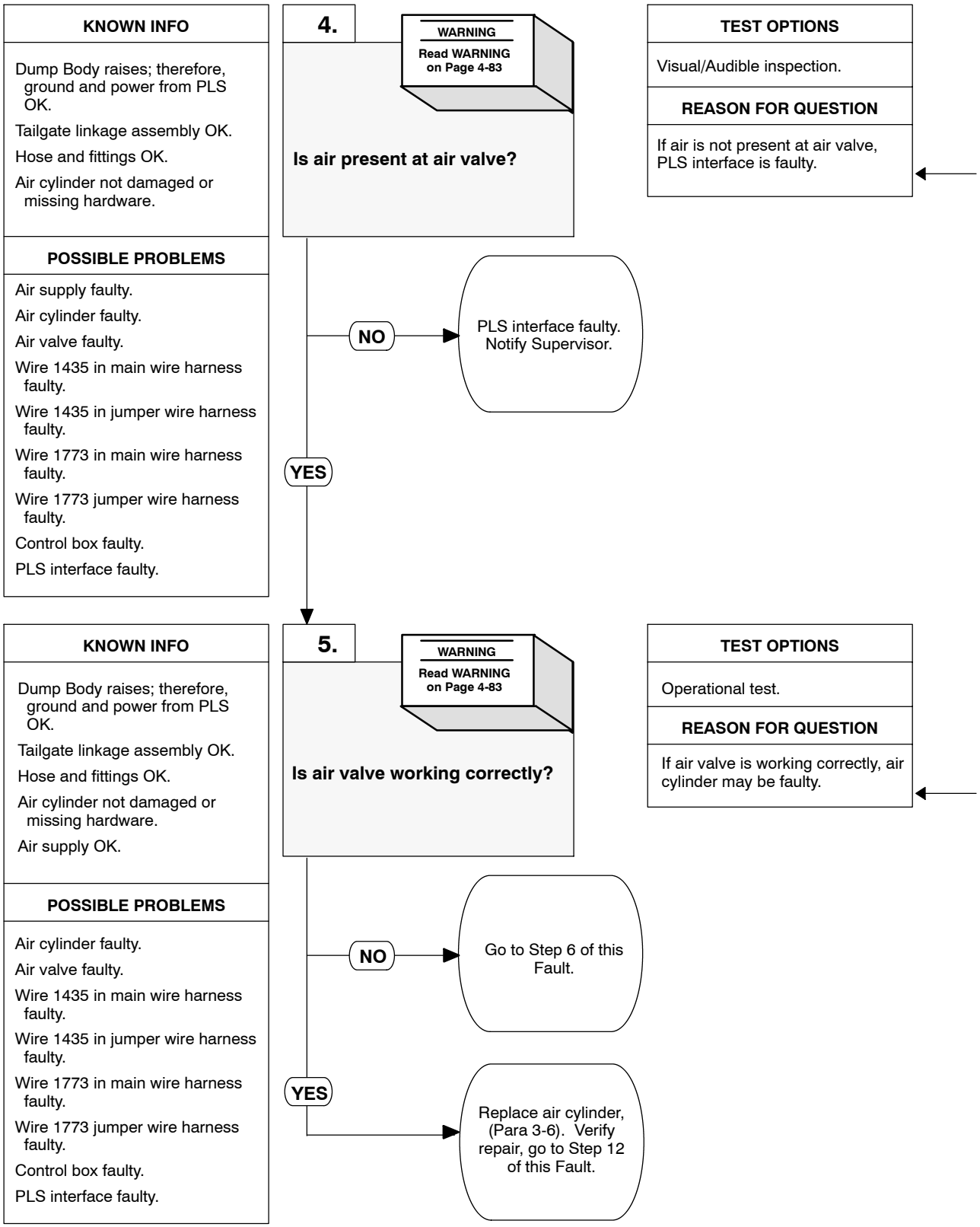
VISUAL INSPECTION

(1) Inspect air cylinder for damage or missing hardware.

(a) If air cylinder is damaged or missing hardware, replace damaged cylinder and missing hardware, (Para 3-6). Verify repair, go to Step 12 of this Fault.

(b) If air cylinder is free of damage and missing hardware, go to Step 4 of this Fault.

7. TAILGATE DOES NOT OPEN (CONT).



WARNING

Air lines may be under extreme pressure. Ensure all personnel wear protective goggles when working around compressed air. Failure to comply may result in serious injury or death to personnel.

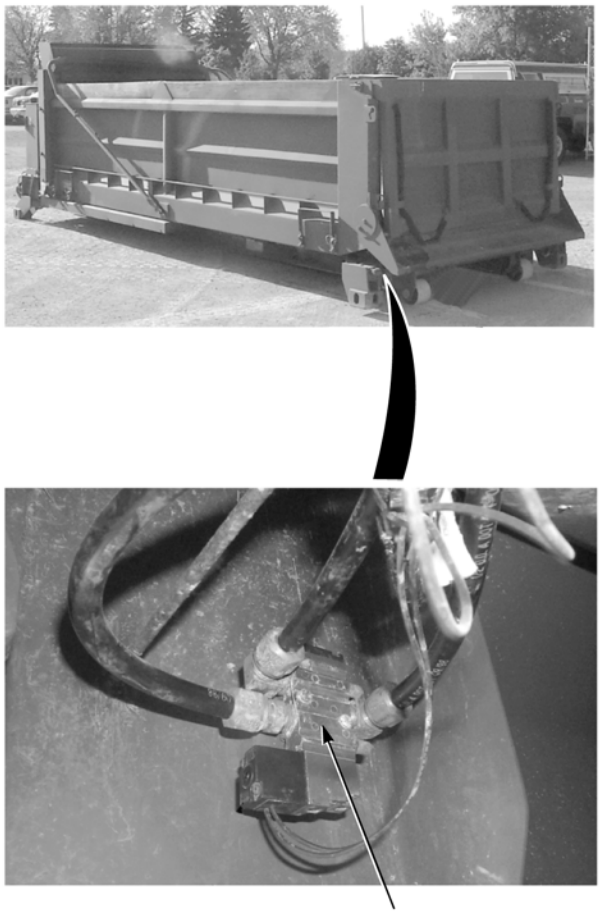
VISUAL/AUDIBLE INSPECTION

(1) Slowly loosen supply air hose connection at air solenoid valve, (Para 3-6).

(2) Listen for air leak from air hose.

(a) If air leaks from hose, tighten air hose connections and go to Step 5 of this Fault.

(b) If air does not leak from hose, PLS interface is faulty. Tighten air hose connections. Notify Supervisor.



OPERATIONAL TEST

(1) Turn ON ENGINE start switch (TM 9-2320-364-10).

(2) Operate tailgate release switch, (Para 2-15) and listen for clicking sound from air valve.

(a) If air valve is making clicking sound, replace air cylinder, (Para 3-6). Verify repair, go to Step 12 of this Fault.

(b) If air valve is not making clicking sound, go to Step 6 of this Fault.

7. TAILGATE DOES NOT OPEN (CONT).

KNOWN INFO

Dump Body raises; therefore, ground and power from PLS OK.

Tailgate linkage assembly OK.

Hose and fittings OK.

Air cylinder not damaged or missing hardware.

Air supply OK.

Air cylinder OK.

POSSIBLE PROBLEMS

Air valve faulty.

Wire 1435 in main wire harness faulty.

Wire 1435 in jumper wire harness faulty.

Wire 1773 in main wire harness faulty.

Wire 1773 jumper wire harness faulty.

Control box faulty.

PLS interface faulty.

6.

WARNING
Read WARNING on Page 4-85

Are 10 to 14 VDC measured between wire 1773, at tailgate air valve connector, terminal A and a known good ground, when tailgate release switch is operated?

TEST OPTIONS

Voltage test.

REASON FOR QUESTION

If 10 to 14 VDC are not present, tailgate will not open.

NO → Go to Step 9 of this Fault.

YES

KNOWN INFO

Dump Body raises; therefore, ground and power from PLS OK.

Tailgate linkage assembly OK.

Hose and fittings OK.

Air cylinder not damaged or missing hardware.

Air supply OK.

Air cylinder OK.

POSSIBLE PROBLEMS

Air valve faulty.

Wire 1435 in main wire harness faulty.

Wire 1435 in jumper wire harness faulty.

Wire 1773 in main wire harness faulty.

Wire 1773 jumper wire harness faulty.

Control box faulty.

PLS interface faulty.

7.

WARNING
Read WARNING on Page 4-85

Is continuity measured across wire 1435, from tailgate air valve connector, terminal B to a known good ground?

TEST OPTIONS

Continuity test.

REASON FOR QUESTION

If continuity is measured, air valve is faulty.

NO → Go to Step 8 of this Fault.

YES → Replace air valve, (Para 3-5). Verify repair, go to Step 12 of this Fault.

WARNING

- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.

VOLTAGE TEST

(1) Pull out battery disconenct switch, (TM 9-2320-364-10).

(2) Disconnect tailgate air valve connector, (Para 2-11).

(3) Push in battery disconnect switch, (TM 9-2320-364-10).

(4) Turn ON ENGINE start switch, (TM 9-2320-364-10).

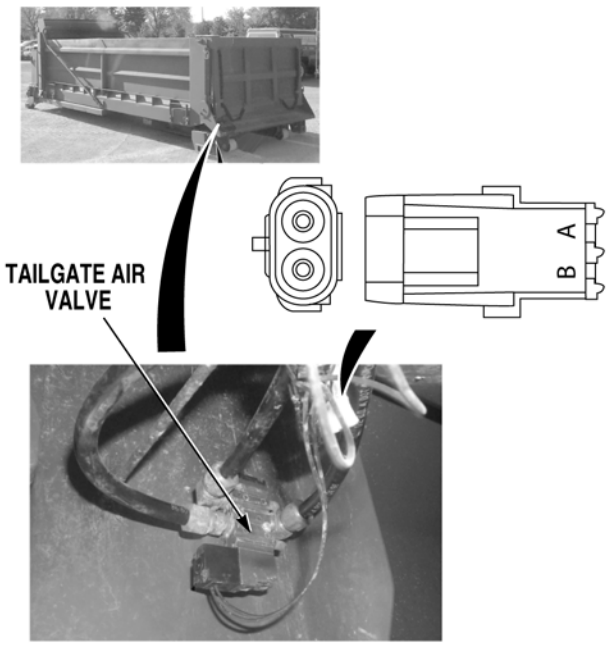
(5) Connect positive (+) multimeter lead to wire 1773 at tailgate air valve connector, terminal A. See Dump Body schematic, (Para 3-34).

(6) Connect negative (-) multimeter lead to a known good ground.

(7) While an assistant operates tailgate release switch, note meter reading.

(a) If 10 to 14 VDC are present, go to Step 7 of this Fault.

(b) If 10 to 14 VDC are not present, go Step 9 of this Fault.



CONTINUITY TEST

(1) Turn OFF ENGINE start switch, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Set multimeter select switch to ohms.

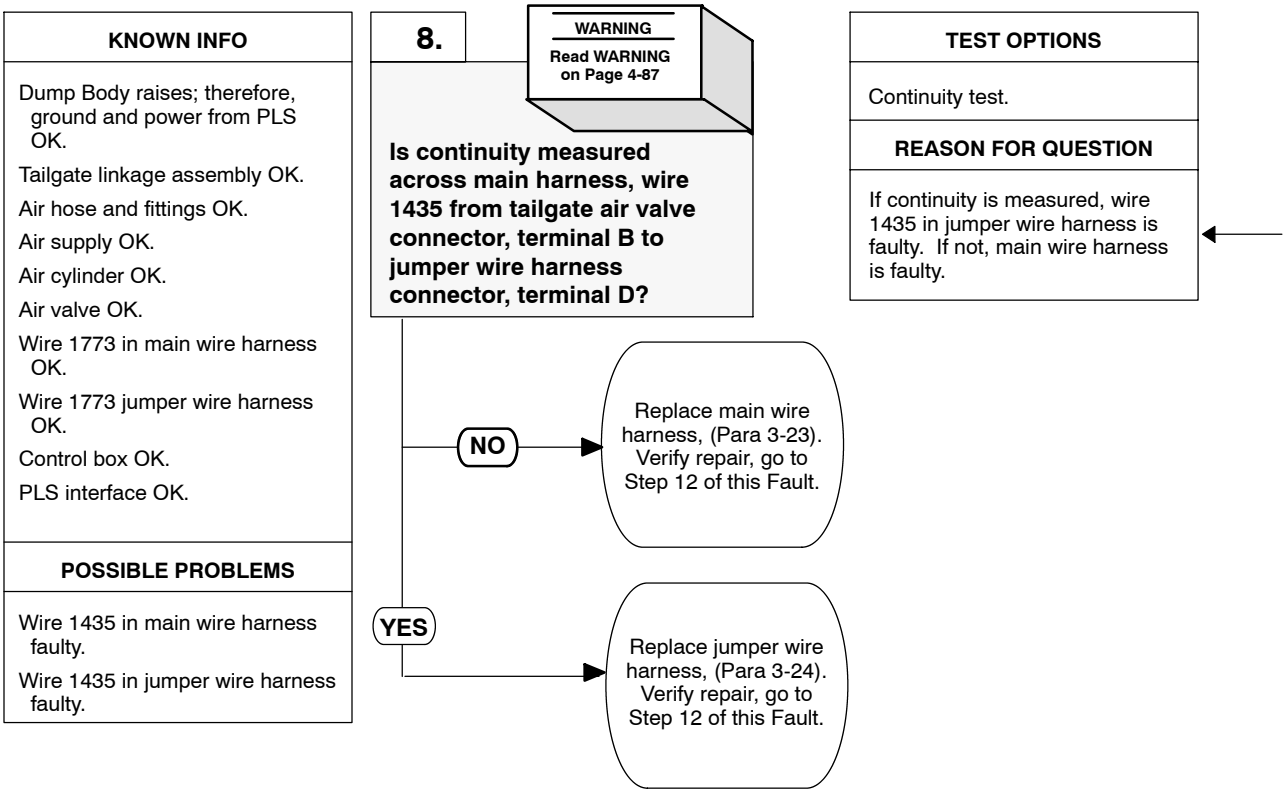
(4) Connect positive (+) multimeter lead to wire 1435 at tailgate air valve connector, terminal B. See Dump Body schematic, (Para 3-34).

(5) Connect negative (-) multimeter lead to a know good ground.

(a) If continuity is measured, replace air valve, (Para 3-5). Verify repair, go to Step 12 of this Fault.

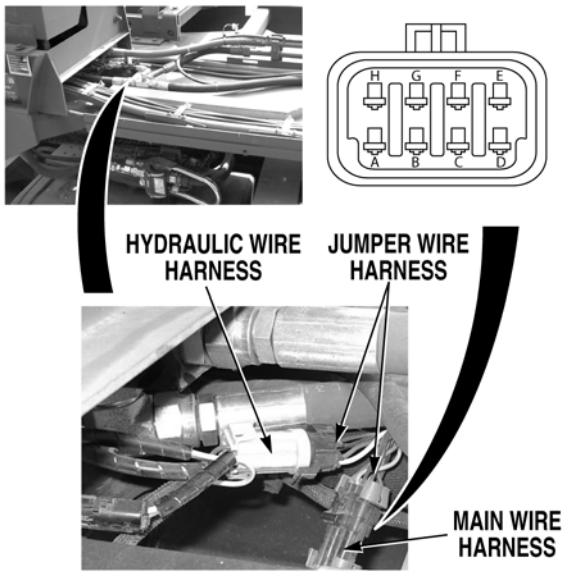
(b) If continuity is not measured, go to Step 8 of this Fault.

7. TAILGATE DOES NOT OPEN (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.



CONTINUITY TEST

(1) Disconnect main wire harness, jumper wire harness connector.

(2) Set multimeter select switch to ohms.

(3) Connect jumperwire between wire 1435, at jumper wire harness connector, terminal D and a known good ground. See Dump Body schematic, (Para 3-34).

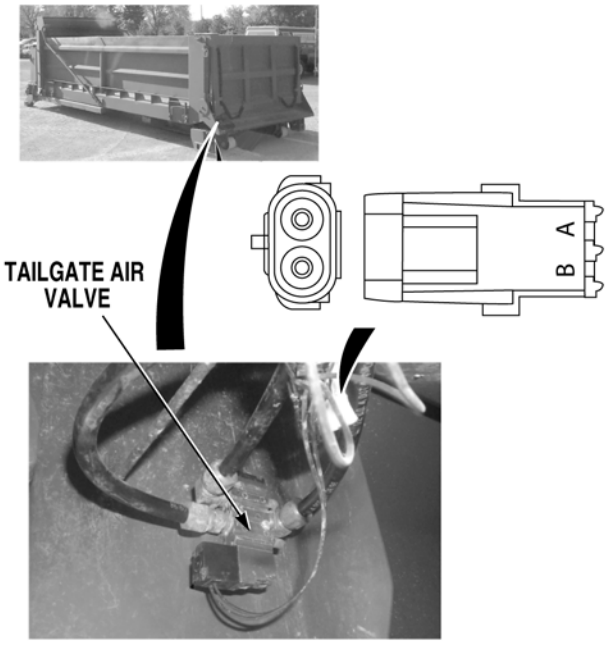
(4) Connect positive (+) multimeter lead to wire 1435, at tailgate air valve connector, terminal B.

(5) Connect negative (–) multimeter lead to a known good ground.

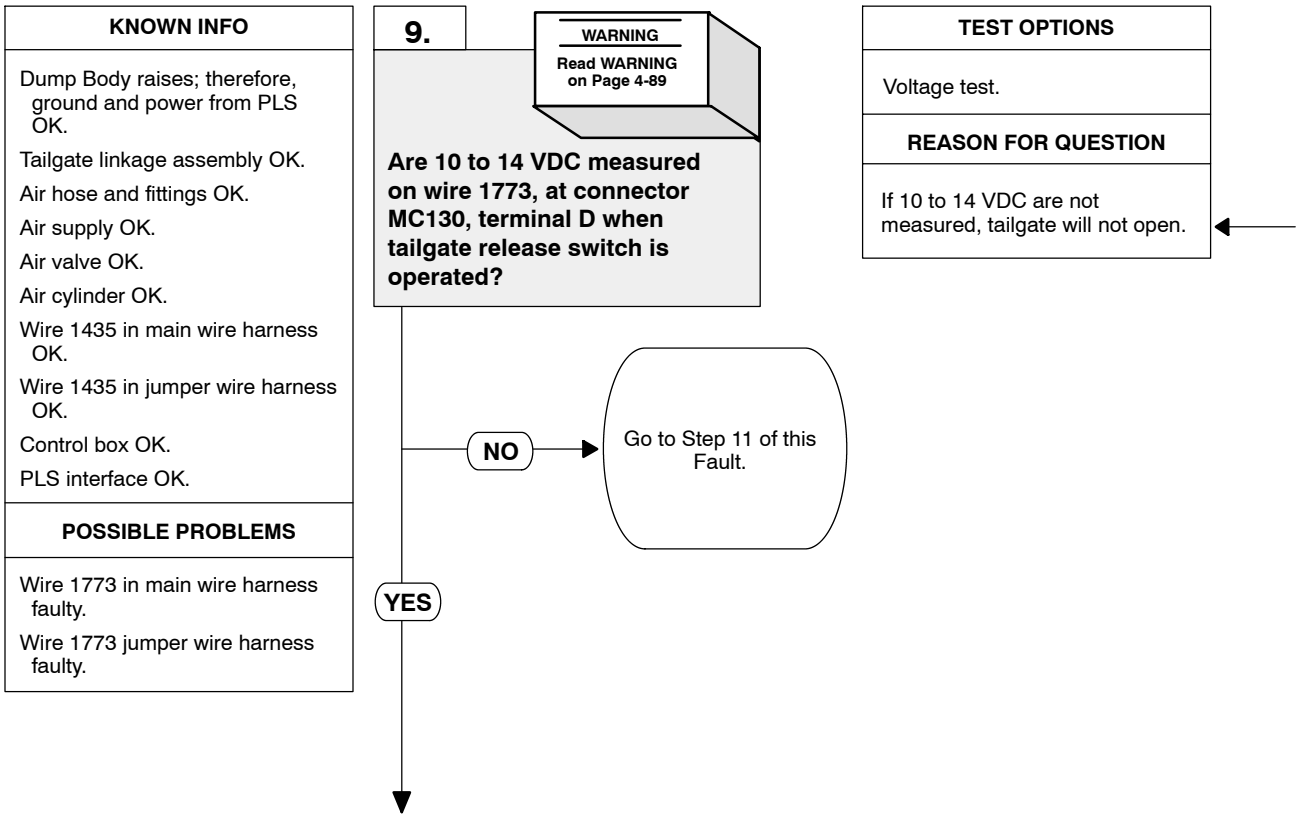
(a) If continuity is measured, replace jumper wire harness, (Para 3-24).

(b) If continuity is not measured, replace main wire harness, (Para 3-23).

(6) Verify repair, go to Step 12 of this Fault.



7. TAILGATE DOES NOT OPEN (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.

VOLTAGE TEST

(1) Disconnect connector MC130, (Para 2-11).

(2) Push in battery disconnect switch, (TM 9-2320-364-10).

(3) Turn ON ENGINE start switch, (TM 9-2320-364-10).

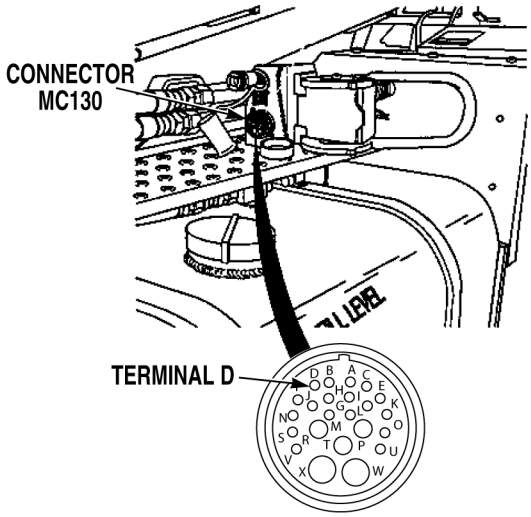
(4) Connect positive (+) multimeter lead to wire 1773 at connector MC130, terminal D. See Dump Body schematic, (Para 3-34).

(5) Connect negative (-) multimeter lead to a known good ground.

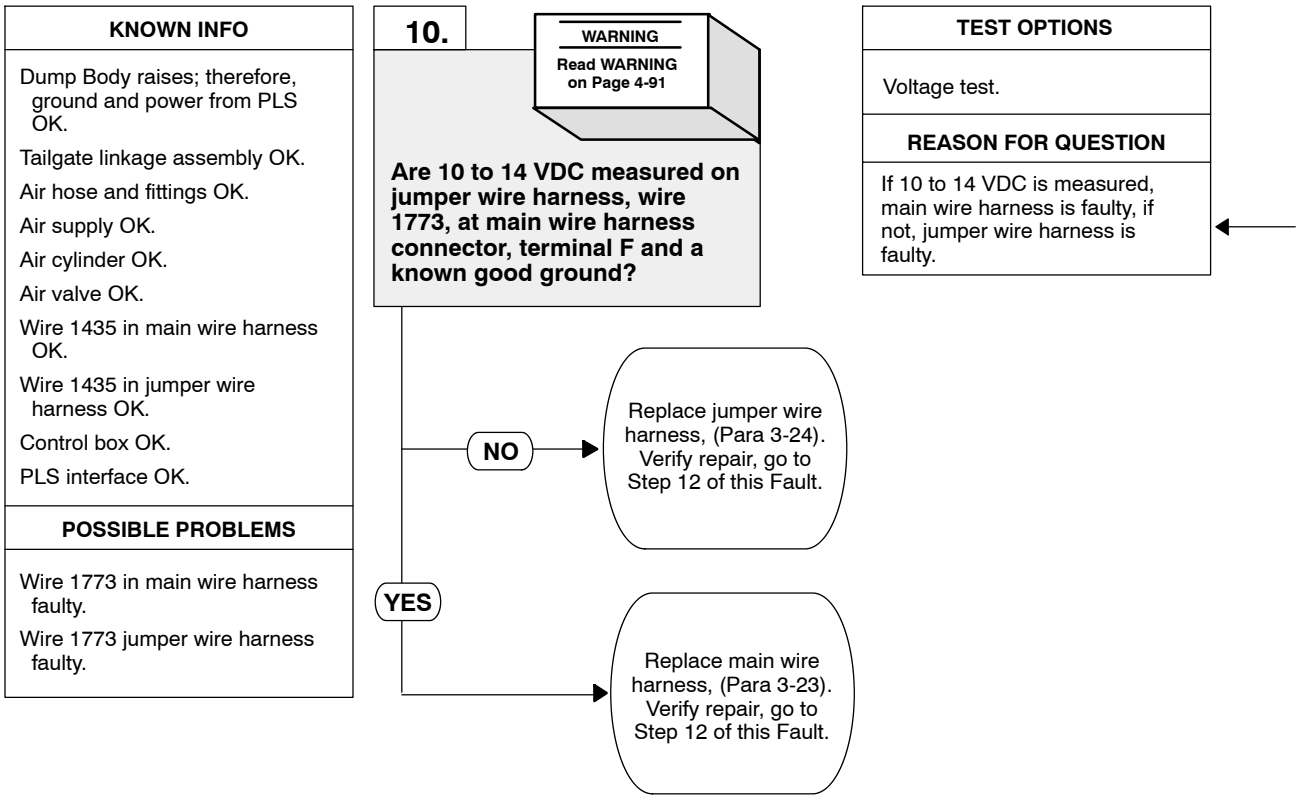
(6) While an assistant operates the tailgate release switch, note meter reading.

(a) If 10 to 14 VDC are present, go to Step 10 of this Fault.

(b) If 10 to 14 VDC are not present, go to Step 11 of this Fault.



7. TAILGATE DOES NOT OPEN (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.

VOLTAGE TEST

(1) Connect connector MC130, (Para 2-11).

(2) Push in battery disconnect switch, (TM 9-2320-364-10).

(3) Turn ON ENGINE start switch, (TM 9-2320-364-10).

(4) Attach positive (+) multimeter lead to jumper harness at main wire harness connector, terminal F. See Dump Body schematic, (Para 3-34).

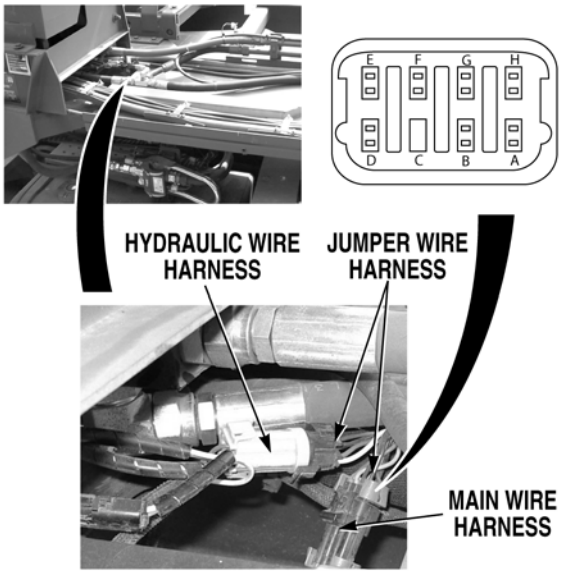
(5) Attach negative (-) multimeter lead to a known good ground.

(6) While assistant operates tailgate release switch, note meter reading.

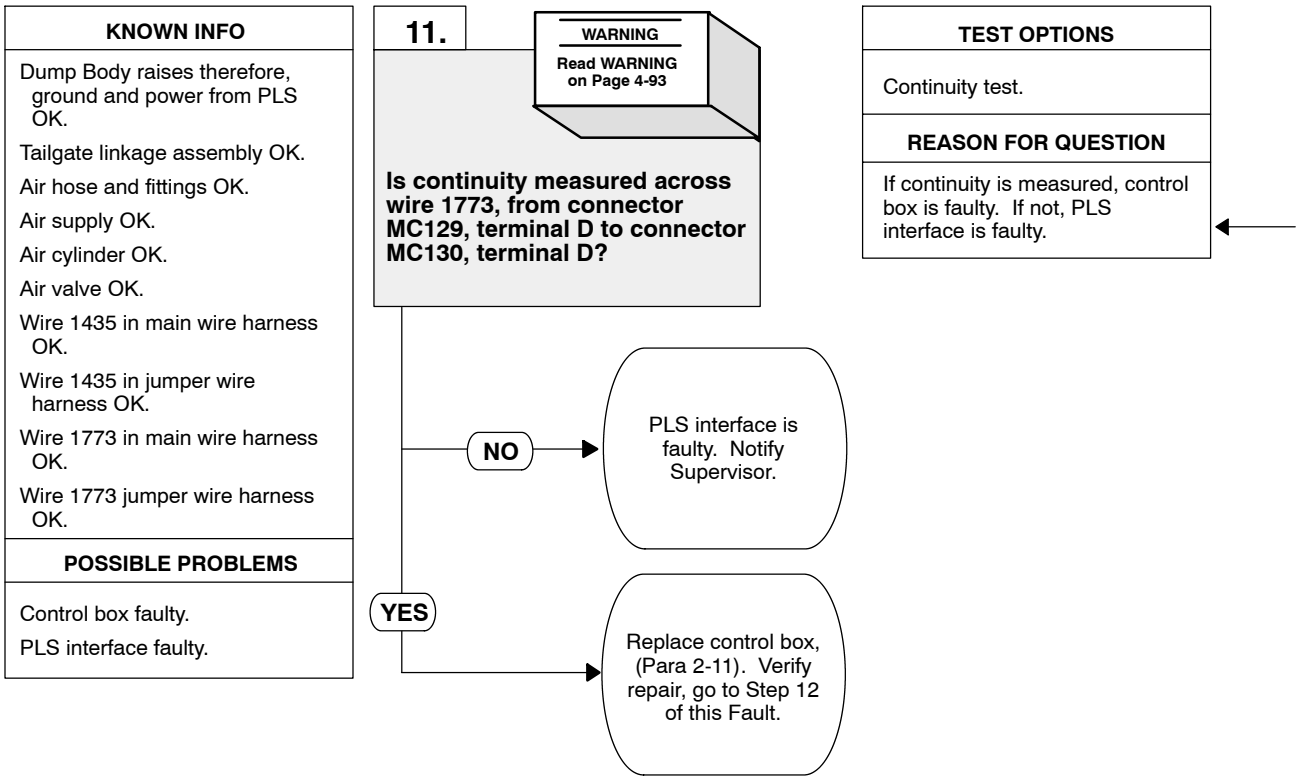
(a) If 10 to 14 VDC are present, replace main wire harness, (Para 3-23).

(b) If 10 to 14 VDC are not present, replace jumper wire harness, (Para 3-24).

(7) Verify repair, go to Step 12 of this Fault.



7. TAILGATE DOES NOT OPEN (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Turn OFF ENGINE start switch (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Disconnect control box, (Para 2-11).

(4) Set multimeter select switch to ohms.

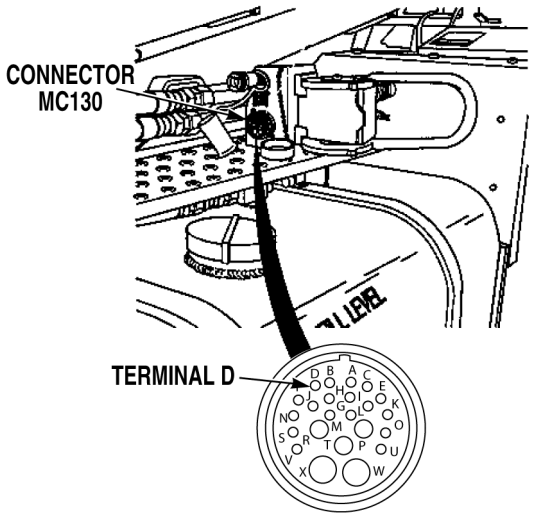
(5) Connect jumperwire between connector MC130, terminal D and a known good ground. See Dump Body schematic, (Para 3-34).

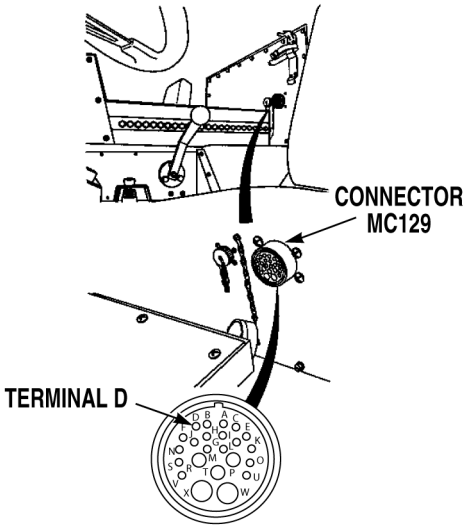
(6) Connect positive (+) multimeter lead to connector MC129, terminal D.

(7) Connect negative (-) multimeter lead to a known good ground.

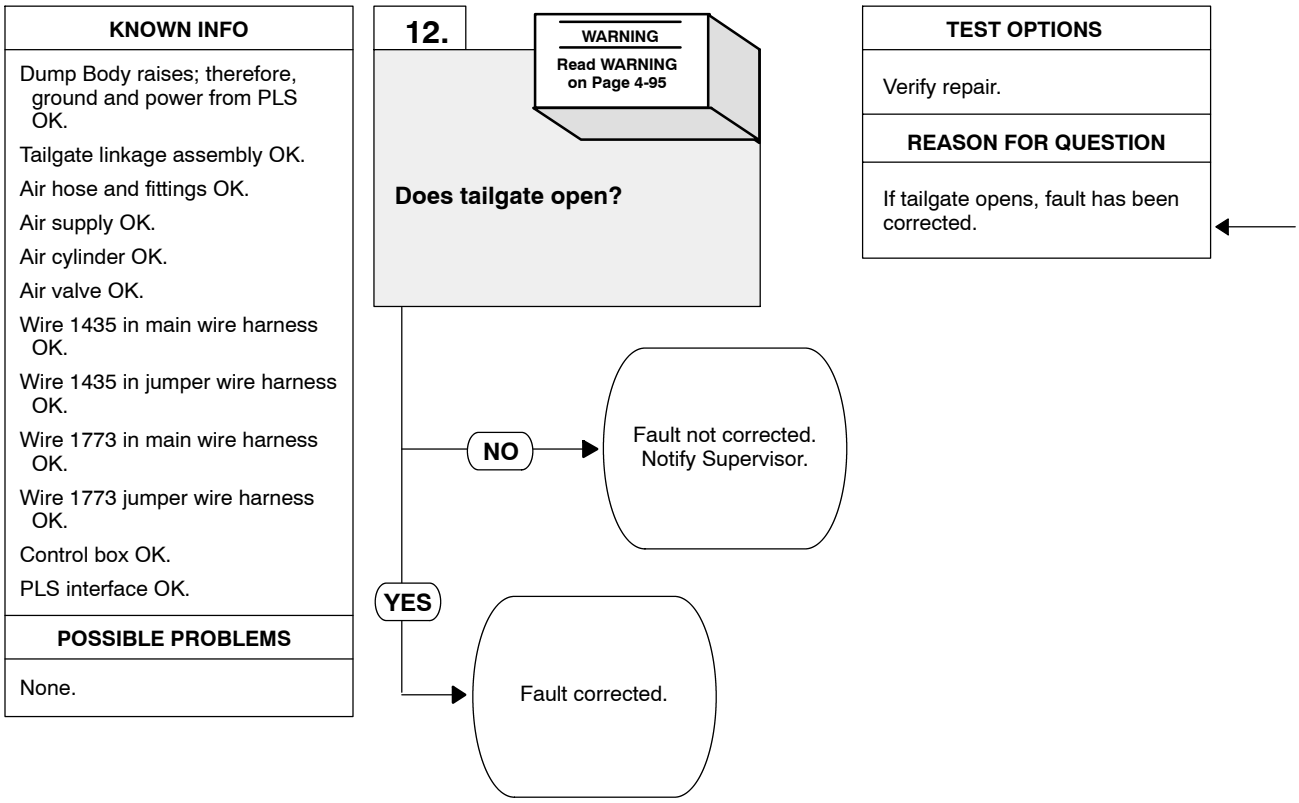
(a) If continuity is measured, replace control box, (Para 2-11). Verify repair, go to Step 12 of this Fault.

(b) If continuity is not measured, PLS interface is faulty. Notify Supervisor.





7. TAILGATE DOES NOT OPEN (CONT).



WARNING

- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- Keep clear of tailgate opening. Failure to comply could result in serious injury to personnel.

VERIFY REPAIR

(1) If removed, install hose tray cover, (Para 3-30).

(2) If out, push in battery disconnect switch, (TM 9-2320-364-10).

(3) If OFF, start engine, (TM 9-2320-364-10).

(4) If deployed, stow body props, (Para 2-14).

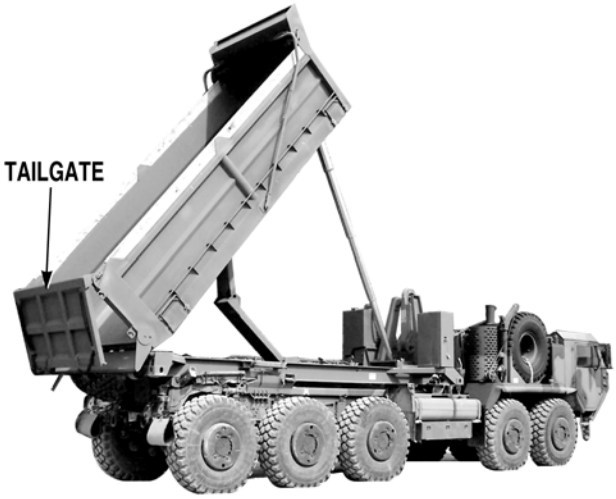
(5) If raised, lower Dump Body, (Para 2-15).

(6) Operate tailgate release switch, (Para 2-15).

(a) If tailgate opens, fault has been corrected.

(b) If tailgate does not open, fault not corrected. Notify Supervisor.

(7) Shut OFF engine, (TM 9-2320-364-10).

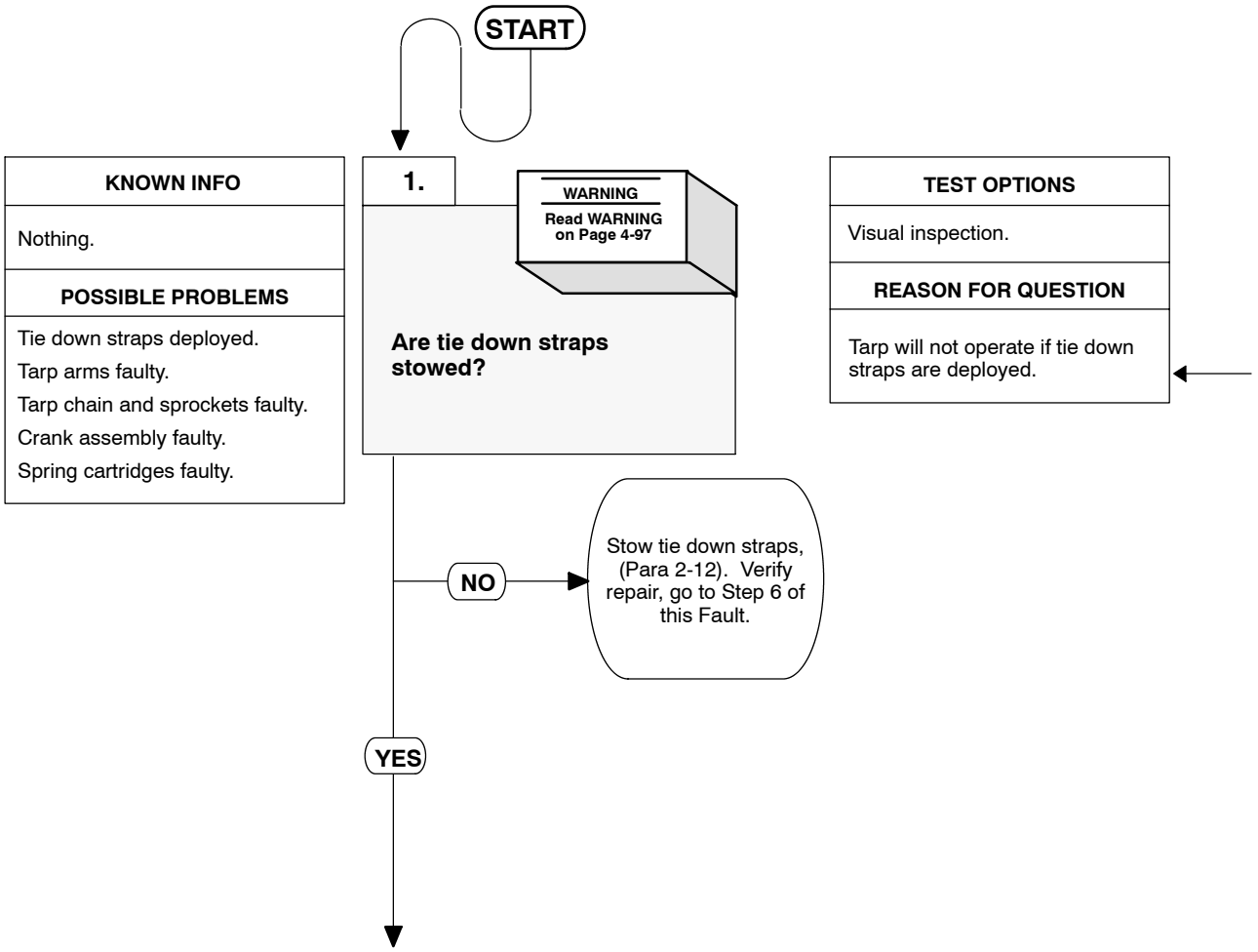


8. TARP DOES NOT OPERATE.

INITIAL SETUP

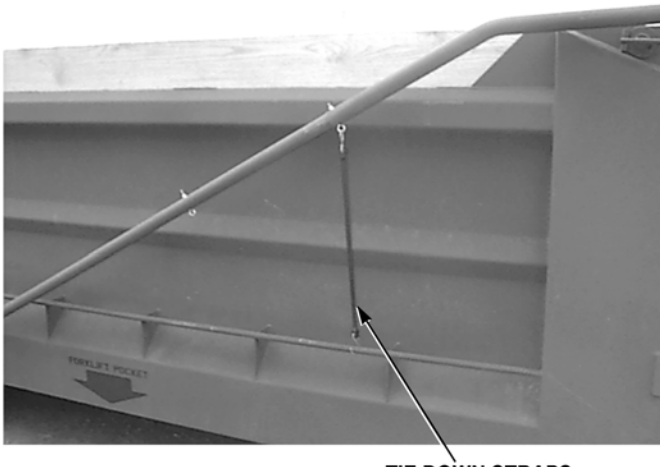
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)



WARNING

- Never open or close tarp within 40 ft (12.2 m) of overhead power lines or trees. Failure to comply may result in death or serious injury to personnel.
- Never move truck with tarp swing arms partially raised. Failure to comply may result in serious injury to personnel.
- Always remove crank handle before touching or moving tarp brake lever. Failure to comply may result in serious injury to personnel.
- Ensure all personnel are clear of tarp path before lowering tarp. Failure to comply may result in death or serious injury to personnel.
- When brake lever is pulled down, tarp will immediately spring rearward until handle reaches BRAKE position. Pulling handle quickly down will minimize tarp travel. Ensure personnel are clear of tarp path. Failure to comply may result in serious injury to personnel.



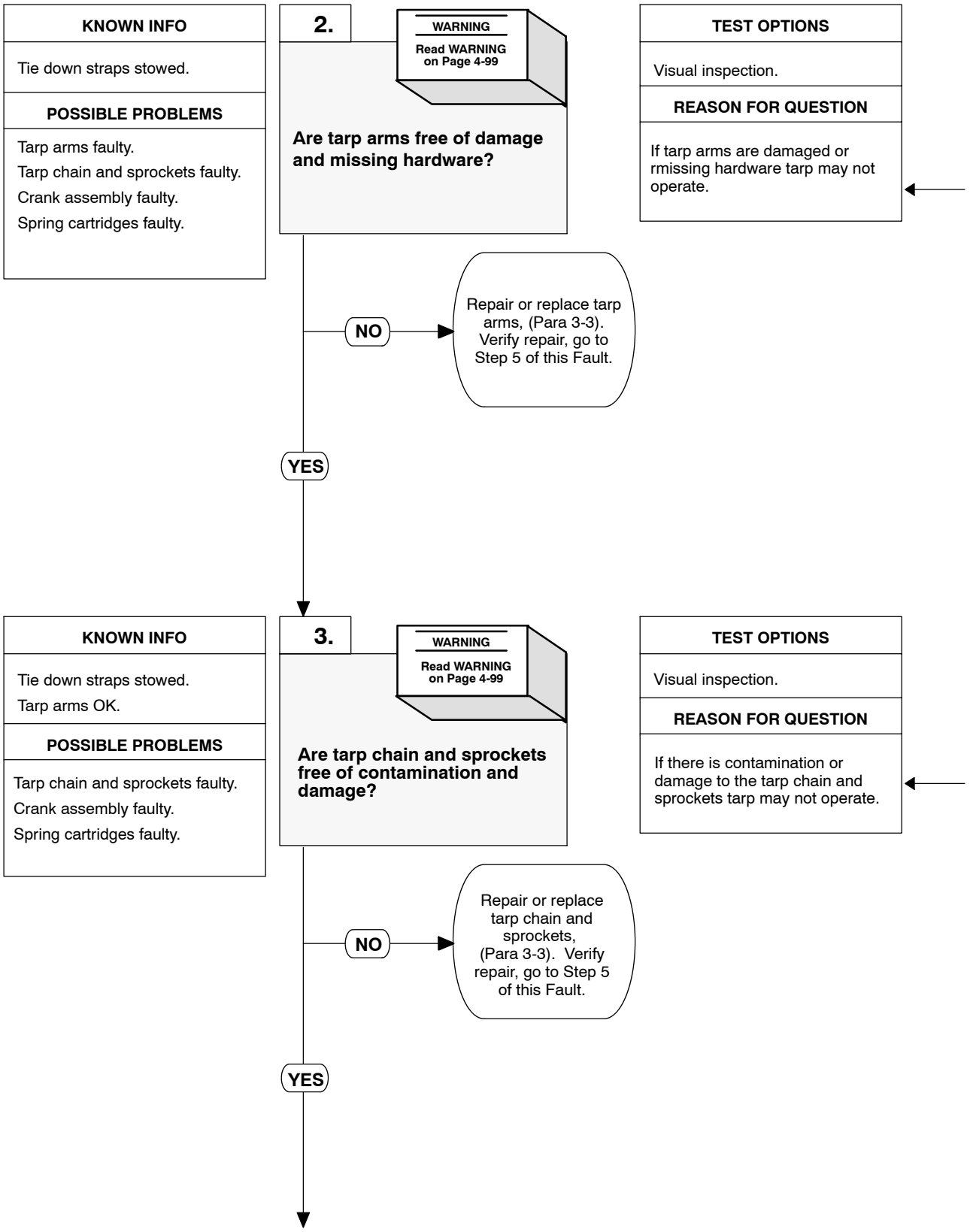
VISUAL INSPECTION

Inspect tie down straps on both sides of Dump Body.

(a) If tie down straps are not stowed, stow tie down straps, (Para 2-12). Verify repair, go to Step 5 of this Fault.

(b) If tie down straps are stowed, go to Step 2 of this Fault.

8. TARP DOES NOT OPERATE (CONT).



WARNING

- Never open or close tarp within 40 ft (12.2 m) of overhead power lines or trees. Failure to comply may result in death or serious injury to personnel.
- Ensure all personnel are clear of tarp path before lowering tarp. Failure to comply may result in death or serious injury to personnel.
- Always remove crank handle before touching or moving tarp brake lever. Failure to comply may result in serious injury to personnel.
- When brake lever is pulled down, tarp will immediately spring rearward until handle reaches BRAKE position. Pulling handle quickly down will minimize tarp travel. Ensure personnel are clear of tarp path. Failure to comply may result in serious injury to personnel.

VISUAL INSPECTION

Visually inspect tarp arms for damage and missing hardware.

(a) If tarp arms are damaged or missing hardware, repair damage or replace missing hardware. Verify repair, go to Step 5 of this Fault.

(b) If tarp arms are free from damage and missing hardware, go to Step 4 of this Fault.

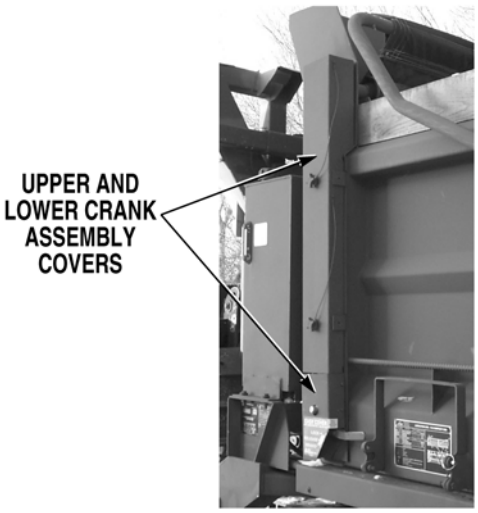
VISUAL INSPECTION

(1) Remove upper and lower crank assembly covers, (Para 3-3).

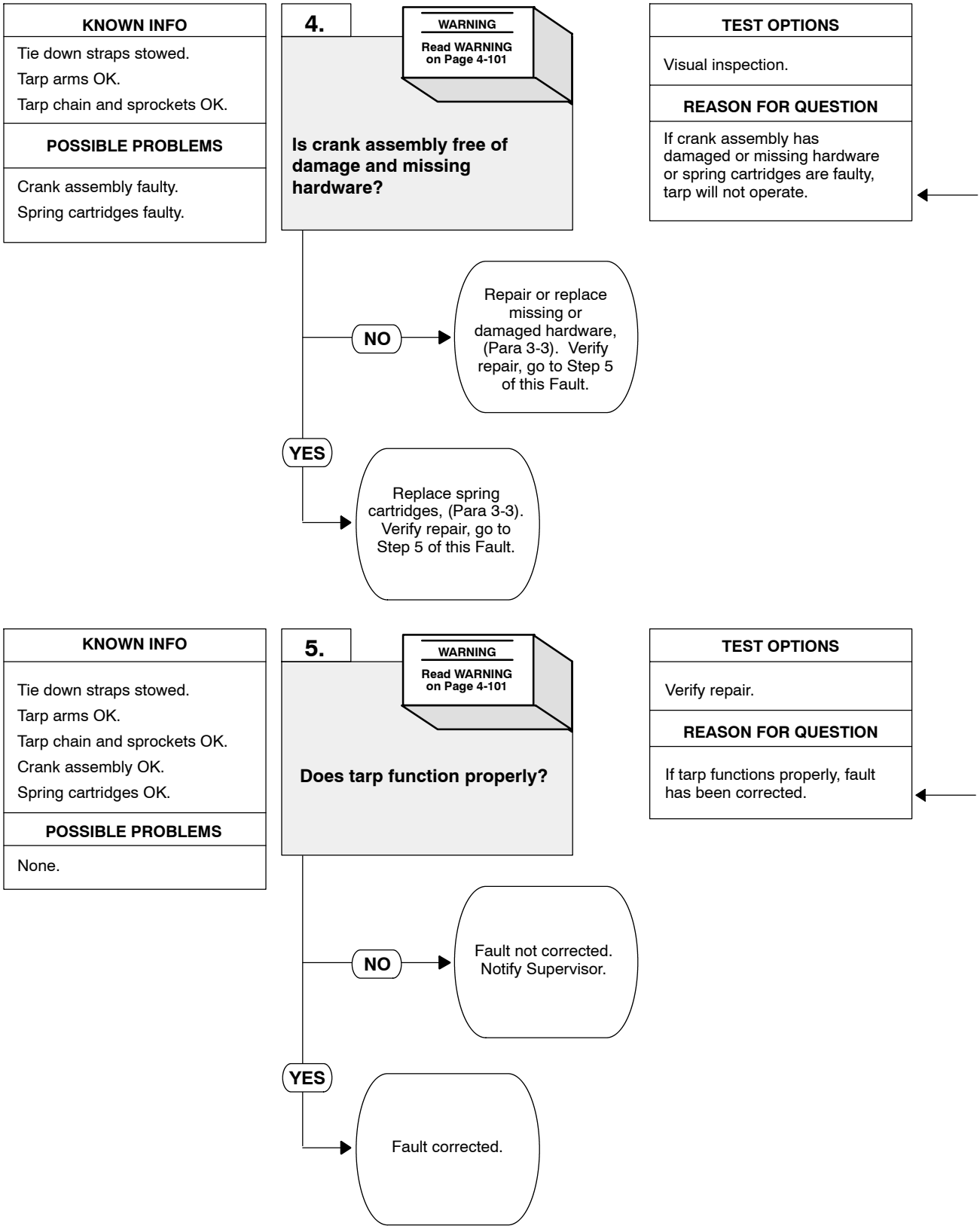
(2) Inspect chain and sprockets for contamination or damage.

(a) If chain and sprockets are contaminated, clean chain and sprockets; if damaged, repair or replace chain and sprockets, (Para 3-3). Verify repair, go to Step 5 of this Fault.

(b) If chain and sprockets are free from contamination and damage, go to Step 4 of this Fault.



8. TARP DOES NOT OPERATE (CONT).

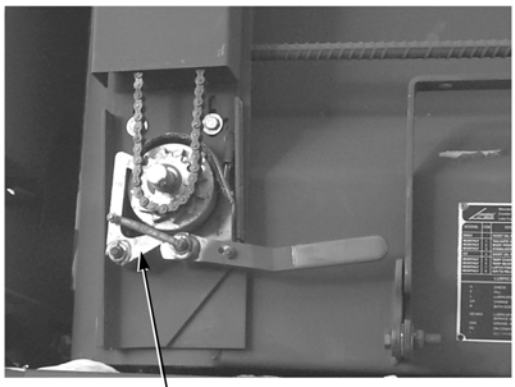


WARNING

- Never open or close tarp within 40 ft (12.2 m) of overhead power lines or trees. Failure to comply may result in death or serious injury to personnel.
- Ensure all personnel are clear of tarp path before lowering tarp. Failure to comply may result in death or serious injury to personnel.
- Always remove crank handle before touching or moving tarp brake lever. Failure to comply may result in serious injury to personnel.
- When brake lever is pulled down, tarp will immediately spring rearward until handle reaches BRAKE position. Pulling handle quickly down will minimize tarp travel. Ensure personnel are clear of tarp path. Failure to comply may result in serious injury to personnel.

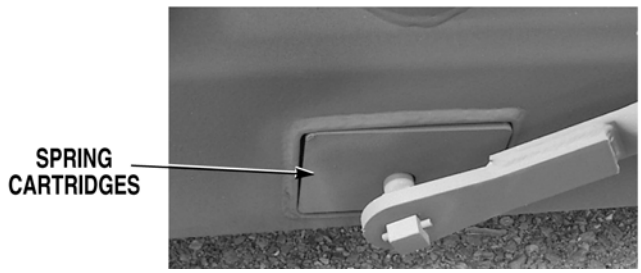
VISUAL INSPECTION

(1) Inspect crank assembly for damage or missing hardware.
   (a) If crank assembly is damaged or missing hardware, repair damage or replace missing hardware. Verify repair, go to Step 5 of this Fault.
   (b) If crank assembly is free from damage or missing hardware, replace spring cartridges, (Para 3-3).
(2) Install crank assembly covers, (Para 3-3).



VERIFY REPAIR

(1) Release locking mechanism for tarp operation, (Para 2-12).
(2) Verify that tarp automatically springs over Dump Body.
(3) Manually crank tarp back to stowed position, (Para 2-12).
   (a) If tarp operates properly, fault has been corrected.
   (b) If tarp does not operate properly, fault not corrected. Notify Supervisor.

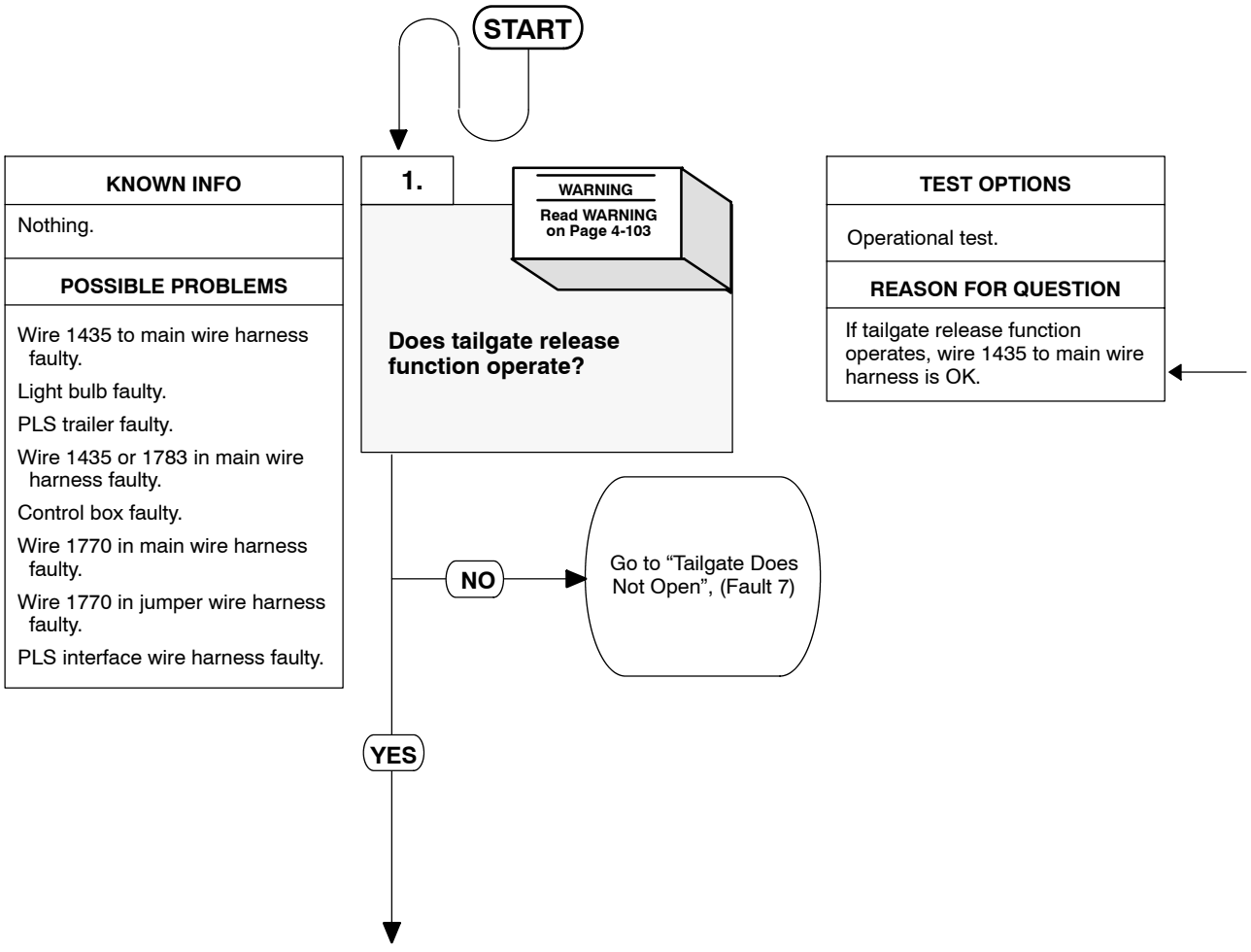


9. TRAILER CONNECTED INDICATOR LIGHT DOES NOT WORK.

INITIAL SETUP

Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Multimeter (Item 9, Appendix E)
Jumperwire

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)



WARNING

Keep clear of tailgate opening. Failure to comply could result in serious injury to personnel.

OPERATIONAL TEST

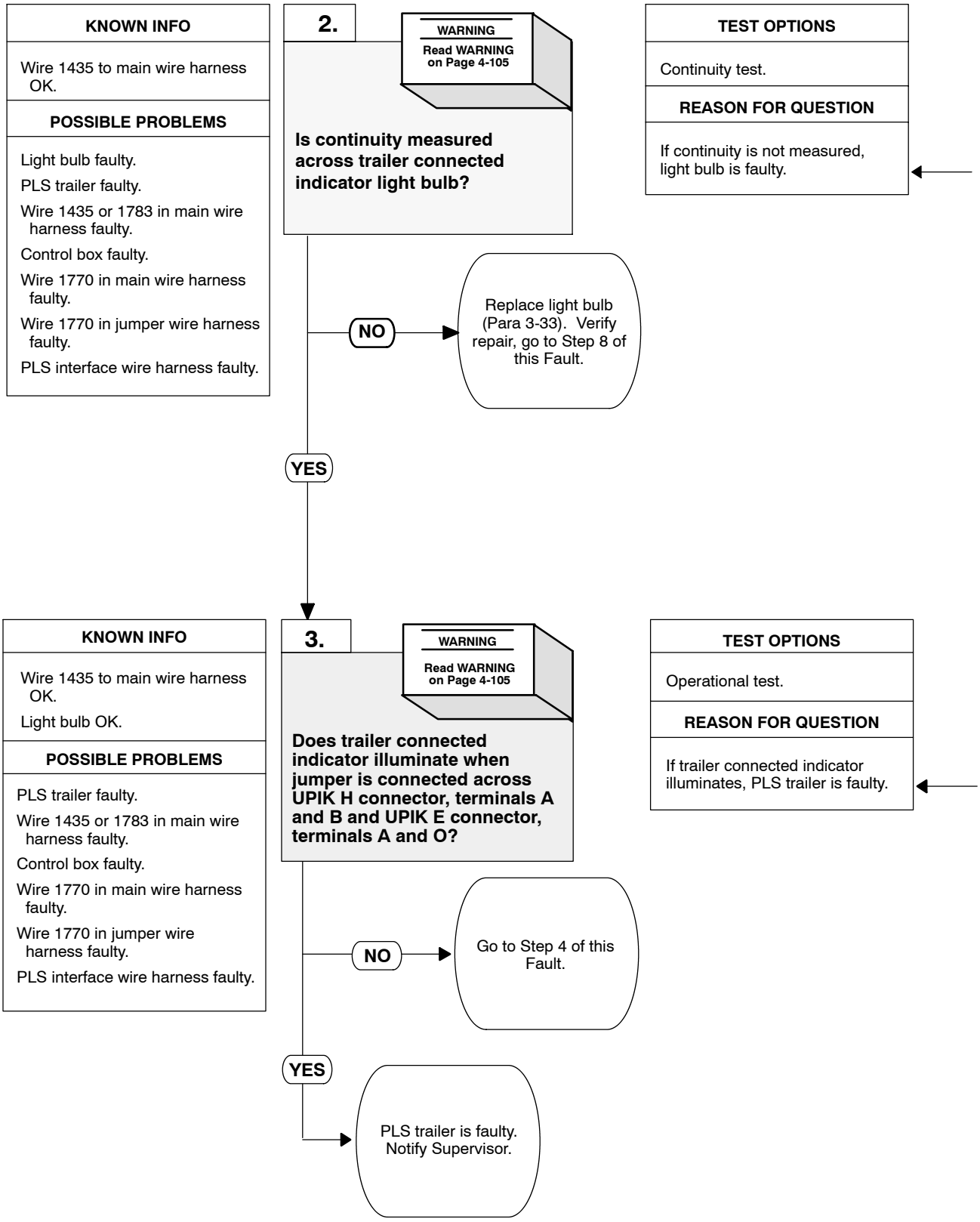
(1) Start engine, (TM 9-2320-364-10).

(2) Operate tailgate release function, (Para 2-15).

(a) If tailgate release function operates, shut OFF engine, (TM 9-2320-364-10) and go to Step 2 of this Fault.

(b) If tailgate release function does not operate, shut OFF engine, (TM 9-2320-364-10) and go to “Tailgate Does Not Open”, (Fault 7).

9. TRAILER CONNECTED INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Shut OFF engine, (TM 9-2320-364-10).

(2) Pull out battery disconnect switch, (TM 9-2320-364-10).

(3) Set multimeter select switch to ohms.

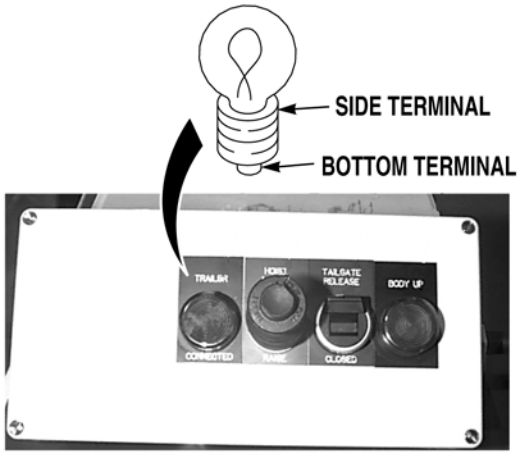
(4) Remove trailer connected indicator light bulb from control box, (Para 3-33).

(5) Connect positive (+) multimeter lead to end terminal of light bulb.

(6) Connect negative (-) multimeter lead to side terminal of light bulb.

(a) If continuity is measured, re-install light bulb and go to Step 3 of this Fault.

(b) If continuity is not measured, replace light bulb, (Para 3-33). Verify repair, go to Step 8 of this Fault.



OPERATIONAL TEST

(1) Connect one end of jumper wire to UPIK H connector, terminal A. See Dump Body schematic, (Para 3-34).

(2) Connect other end of jumper wire to UPIK H connector terminal B. See Dump Body schematic, (Para 3-34).

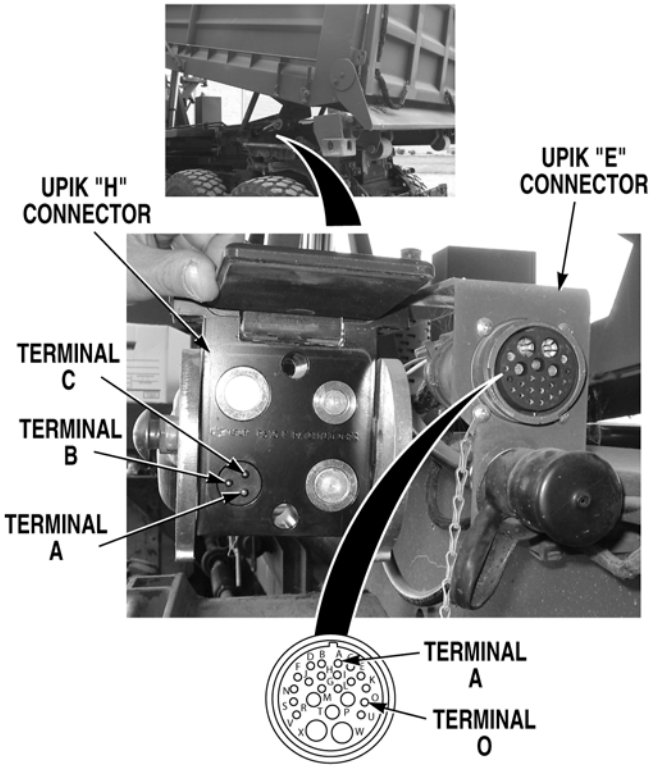
(3) Connect one end of another jumper wire to UPIK E connector, terminal A. See Dump Body schematic, (Para 3-34).

(4) Connect other end of jumper wire to UPIK E connector, terminal O. See Dump Body schematic, (Para 3-34).

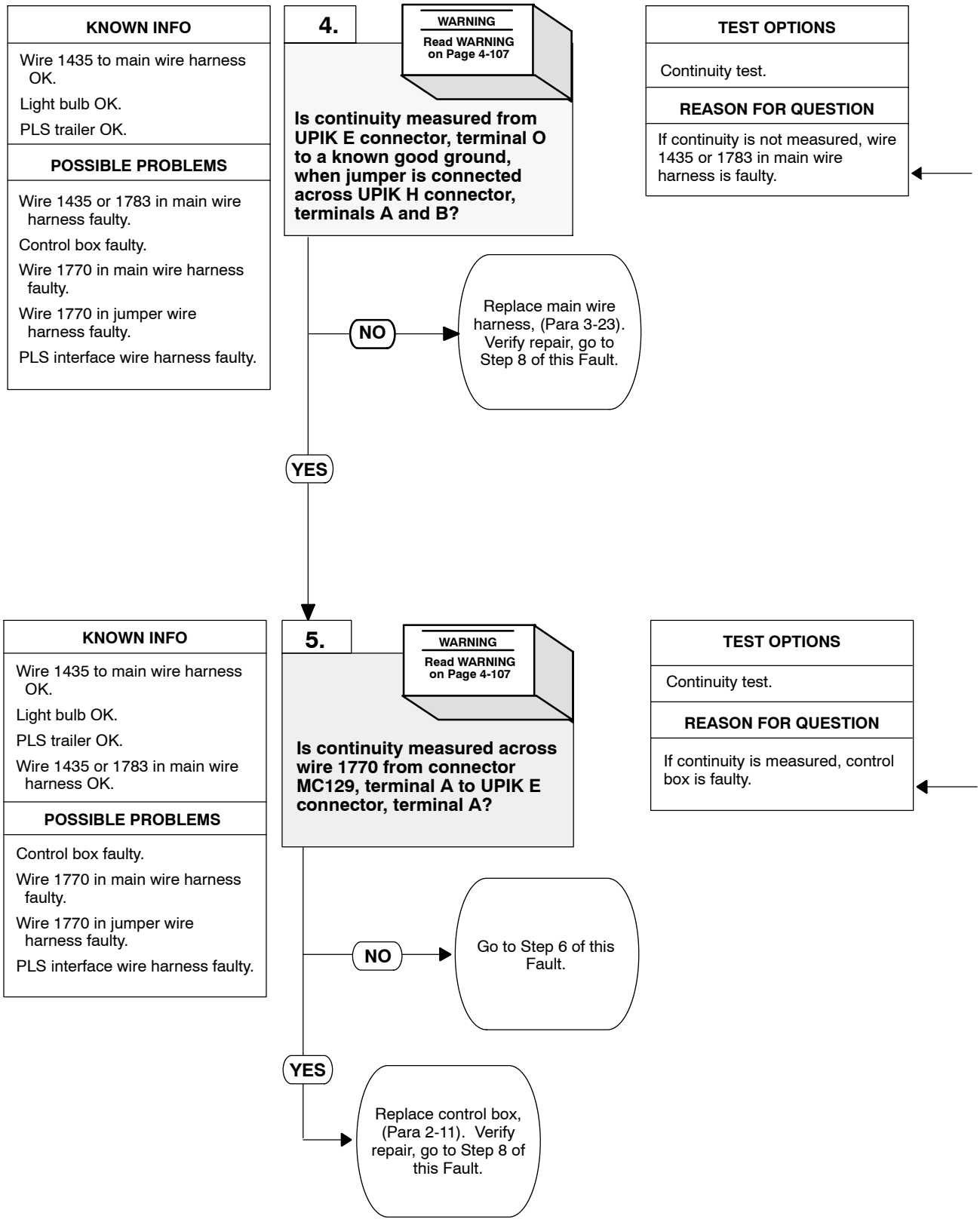
(5) Turn ON ENGINE start switch, (TM 9-2320-364-10).

(a) If trailer connected indicator illuminates, PLS trailer is faulty. Notify Supervisor.

(b) If trailer connected indicator does not illuminate, go to Step 4 of this Fault.



9. TRAILER CONNECTED INDICATOR LIGHT DOES NOT WORK (CONT).

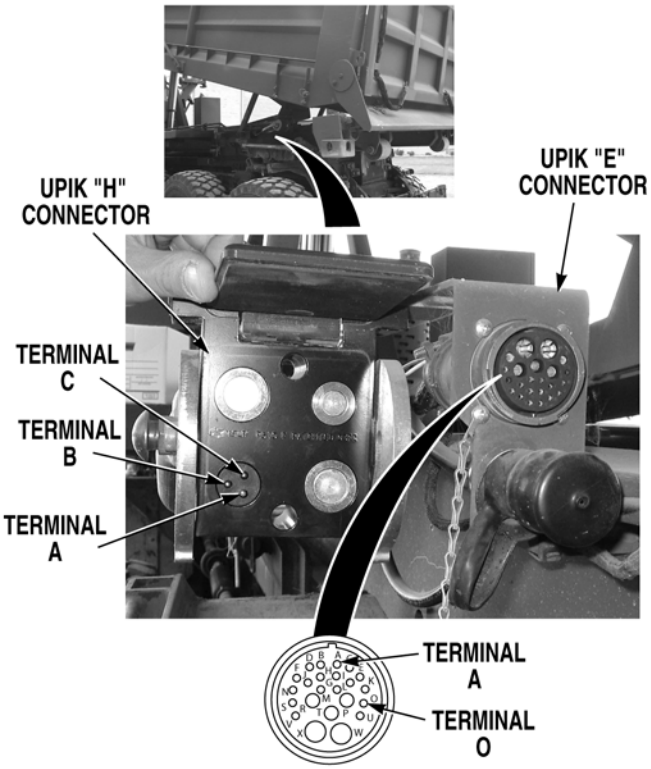


WARNING

Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.

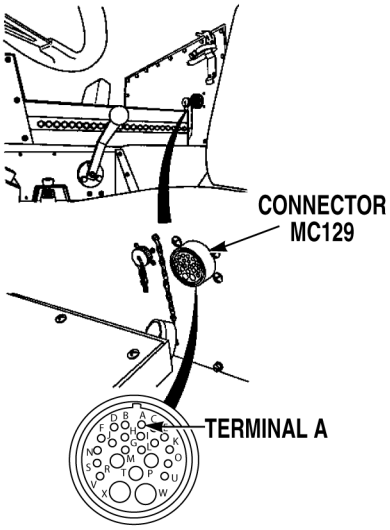
CONTINUITY TEST

(1) Set multimeter select switch to ohms.
(2) Connect positive (+) multimeter lead to UPIK E connector, terminal O. See Dump Body schematic (Para 3-34).
(3) Connect negative (–) multimeter lead to a known good ground.
(4) Connect one end of jumperwire to UPIK H connector, terminal A.
(5) Connect other end of jumperwire to UPIK H connector, terminal B.
    (a) If continuity is not measured, replace main wire harness, (Para 3-23). Verify repair, go to Step 8 of this Fault.
    (b) If continuity is measured, go to Step 5 of this Fault.

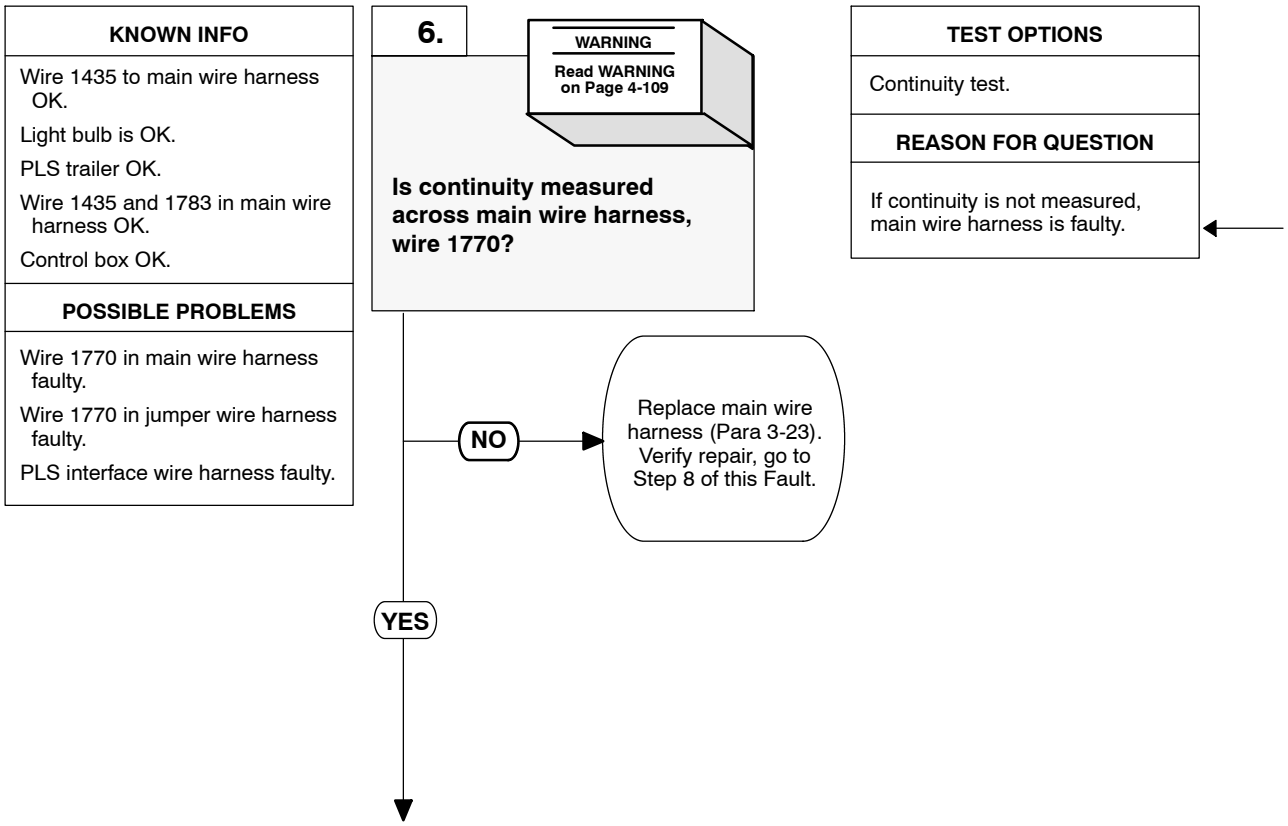


CONTINUITY TEST

(1) Set multimeter select switch to ohms.
(2) Connect jumperwire between wire 1770, at UPIK E connector, terminal A and a known good ground. See Dump Body schematic, (Para 3-34).
(3) Connect positive (+) multimeter lead to wire 1770, at connector MC129, terminal A.
(4) Connect negative (–) multimeter lead to a known good ground.
    (a) If continuity is measured, replace control box, (Para 2-11). Verify repair, go to Step 8 of this Fault.
    (b) If continuity is not measured, go to Step 6 of this Fault.



9. TRAILER CONNECTED INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Push in battery disconnect switch, (TM 9-2320-364-10).

(2) Start engine, (TM 9-2320-364-10).

(3) Raise Dump Body, (Para 2-15).

(4) Deploy body props, (Para 2-14).

(5) Shut OFF engine, (TM 9-2320-364-10).

(6) Pull out battery disconnect switch, (TM 9-2320-364-10).

(7) Set multimeter select switch to ohms.

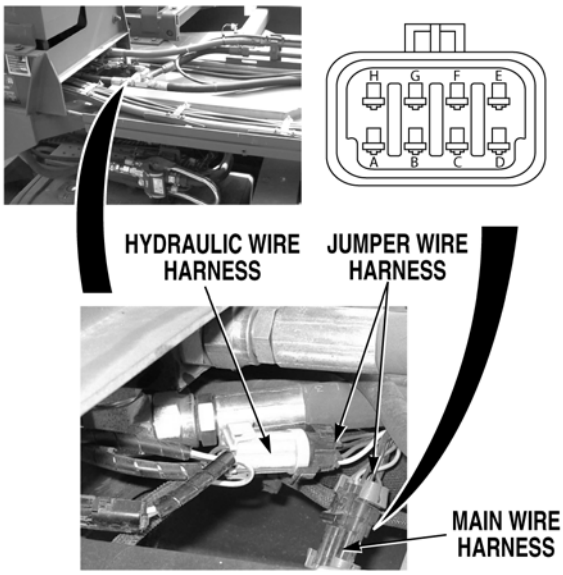
(8) Disconnect main wire harness, jumper wire harness connector.

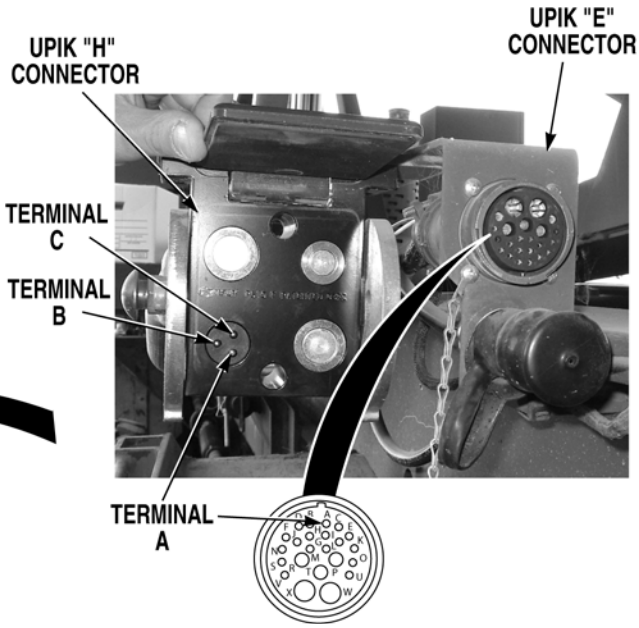
(9) Connect positive (+) multimeter lead to wire 1770 at UPIK E connector, terminal A, see Dump Body schematic, (Para 3-34).

(10) Connect negative (–) multimeter lead to wire 1770 at jumper wire harness connector, terminal A.

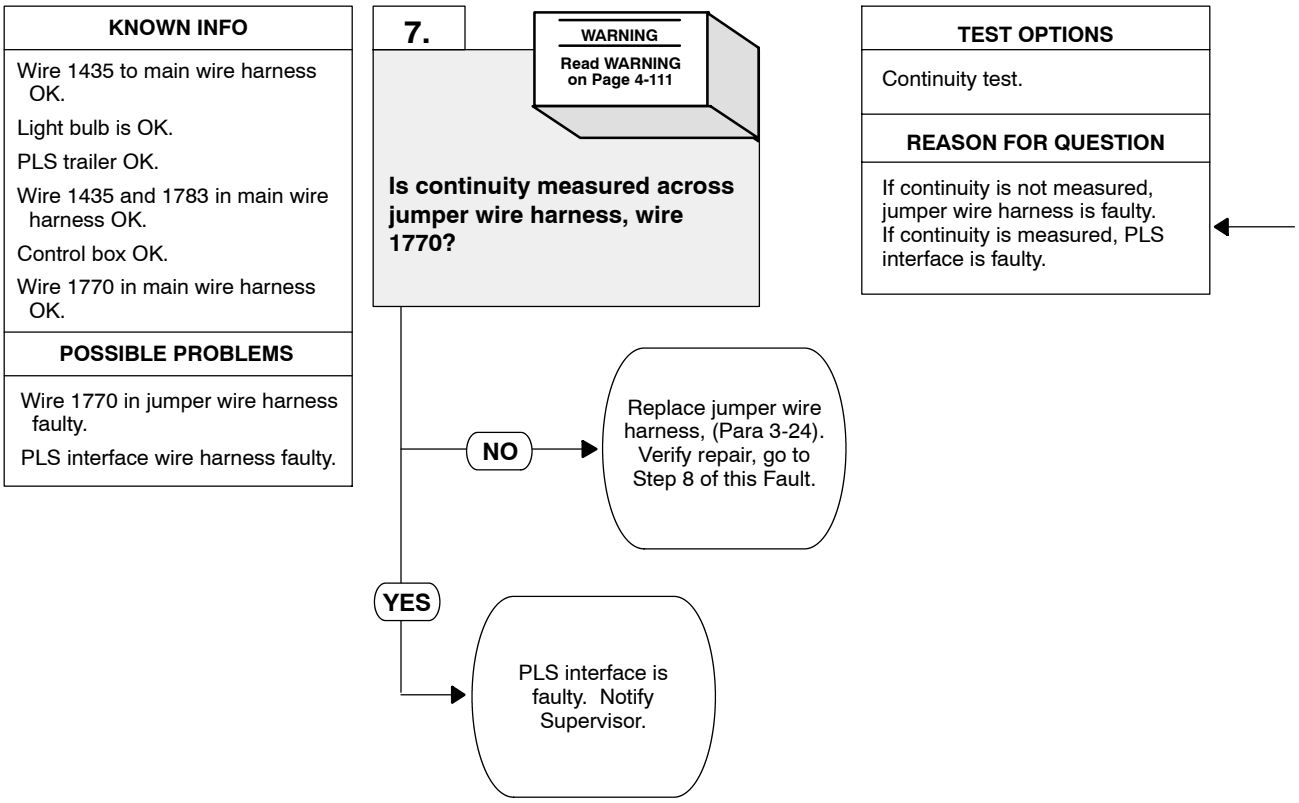
(a) If continuity is not measured, replace main wire harness, (Para 3-23). Verify repair, go to Step 8 of this Fault.

(b) If continuity is measured, go to Step 7 of this Fault.





9. TRAILER CONNECTED INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.

CONTINUITY TEST

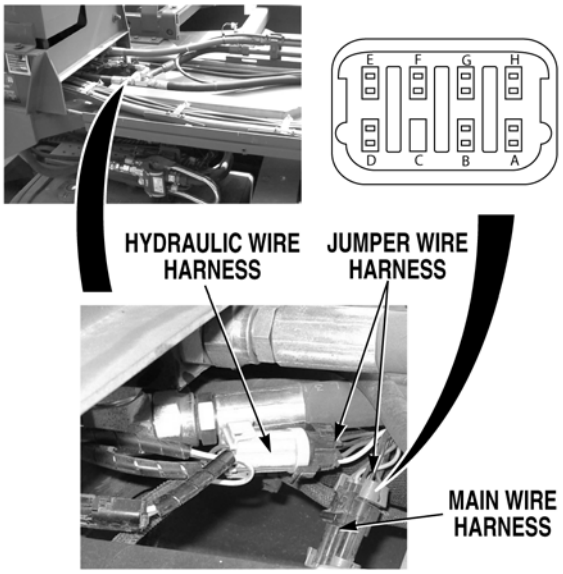
(1) Set multimeter select switch to ohms.

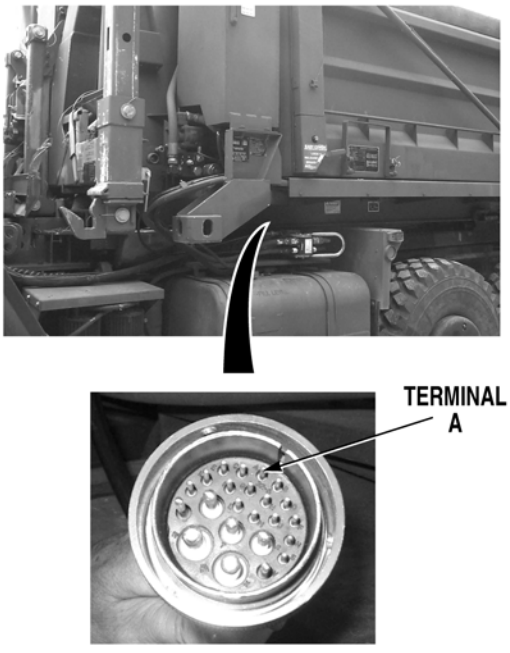
(2) Connect positive (+) multimeter lead to wire 1770, at main wire harness connector, terminal A, see Dump Body schematic, (Para 3-34).

(3) Connect negative (-) multimeter lead to wire 1770, at connector MC130 terminal A. See Dump Body schematic, (Para 3-34).

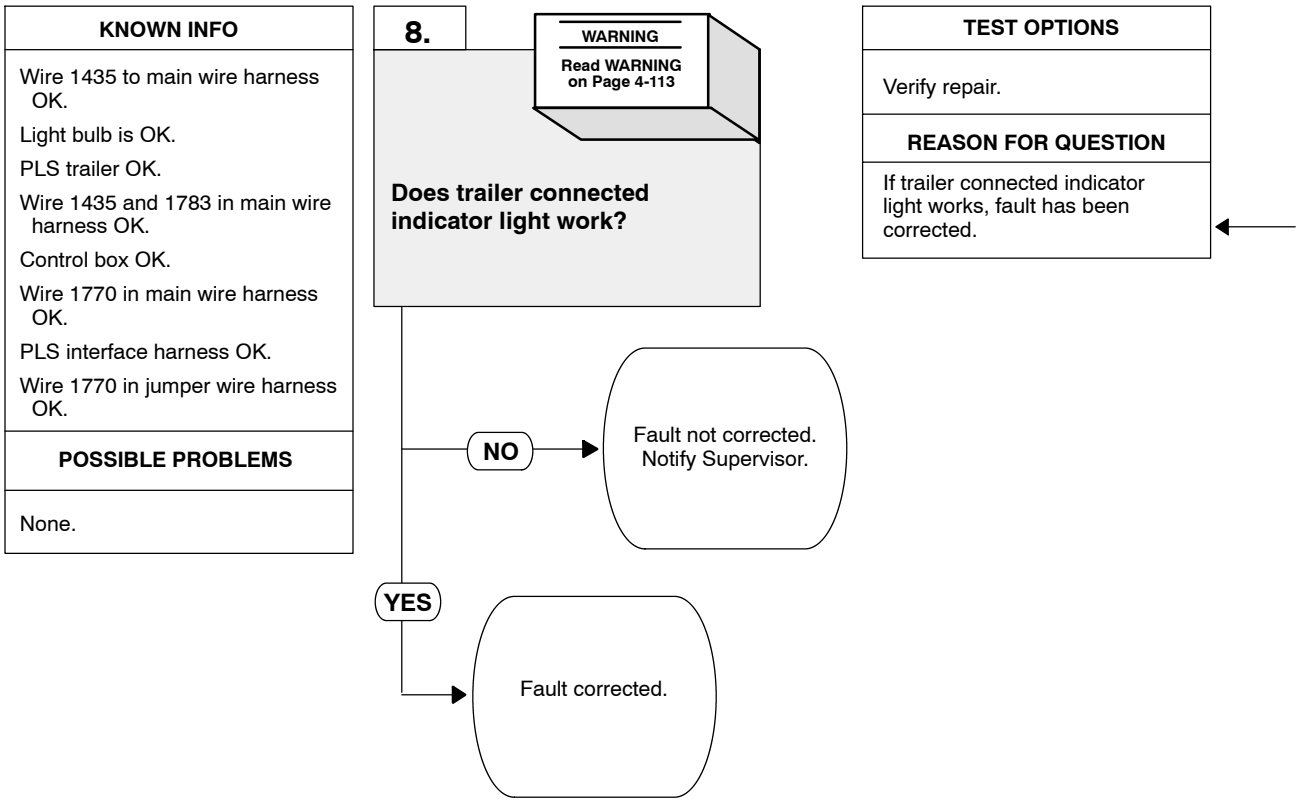
(a) If continuity is measured, PLS interface wire harness is faulty. Notify Supervisor.

(b) If continuity is not measured, replace jumper wire harness, (Para 3-24). Verify repair, go to Step 8 of this Fault.



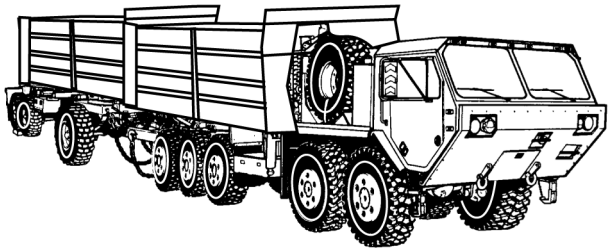


9. TRAILER CONNECTED INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.



VERIFY REPAIR

(1) If out, push in battery disconnect switch, (TM 9-2320-364-10).

(2) If OFF, start engine, (TM 9-2320-364-10).

(3) If deployed, stow body props, (Para 2-14).

(4) If raised, lower Dump Body, (Para 2-15).

(5) Connect PLS trailer, (TM 9-2330-385-14), with Dump Body loaded.

  (a) If trailer connected indicator light works, fault has been corrected.

  (b) If trailer connected indicator light does not work, fault not corrected. Notify Supervisor.

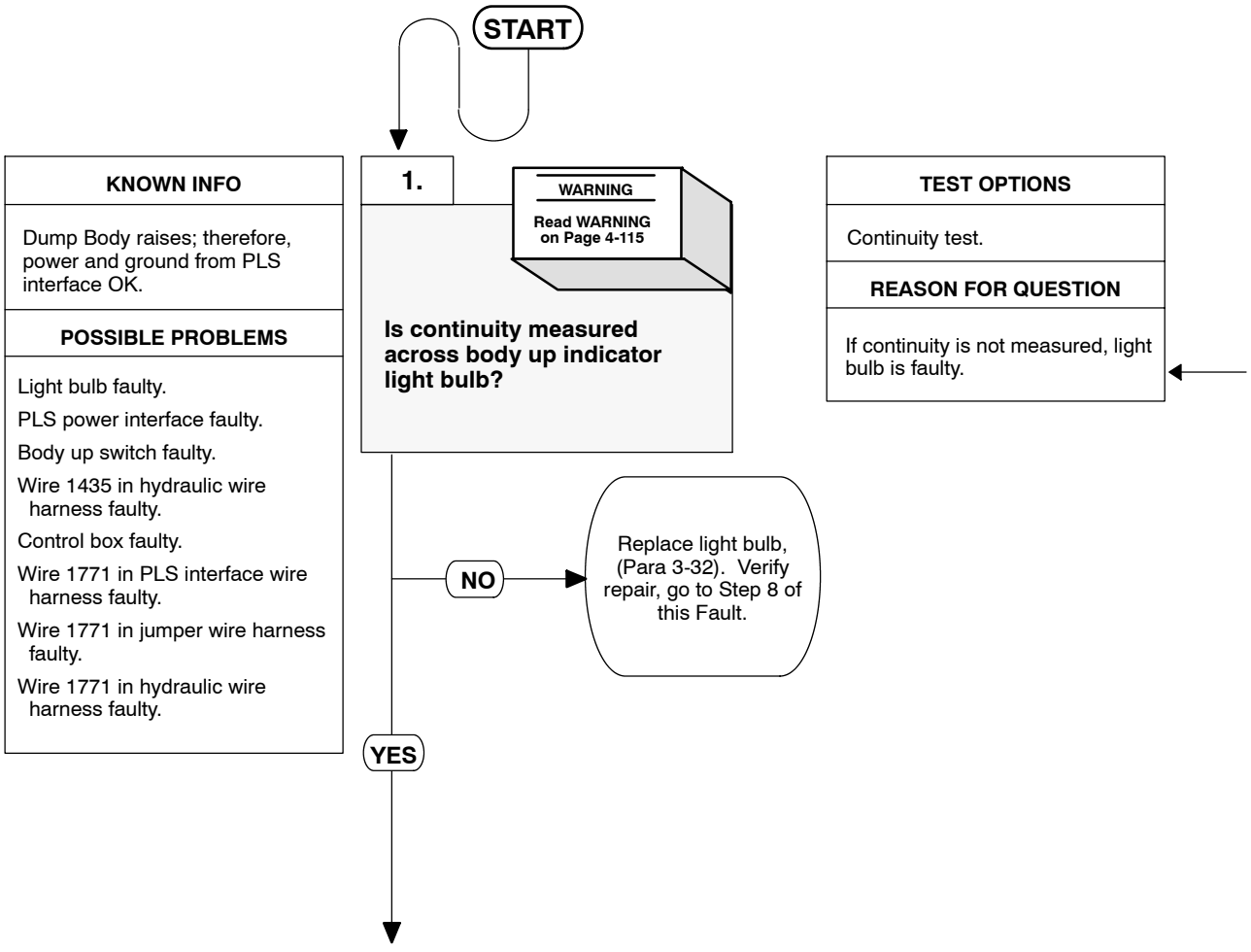
(6) Shut OFF engine, (TM 9-2320-364-10).

10. BODY UP INDICATOR LIGHT DOES NOT WORK.

INITIAL SETUP

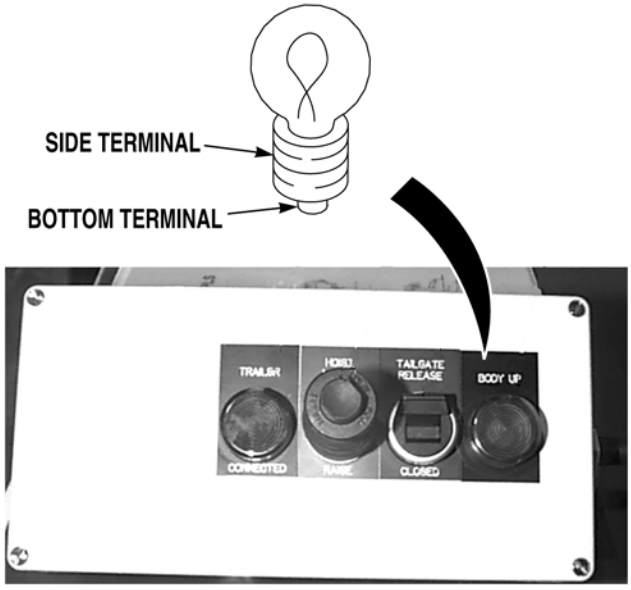
Tools and Special Tools
Tool Kit, General Mechanic's: Automotive (Item 11, Appendix E)
Jumperwire

Equipment Condition
Engine OFF, (TM 9-2320-364-10)
Wheels chocked, (TM 9-2320-364-10)



WARNING

Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.



CONTINUITY TEST

(1) Set multimeter select switch to ohms.

(2) Remove body up light bulb, (Para 3-33).

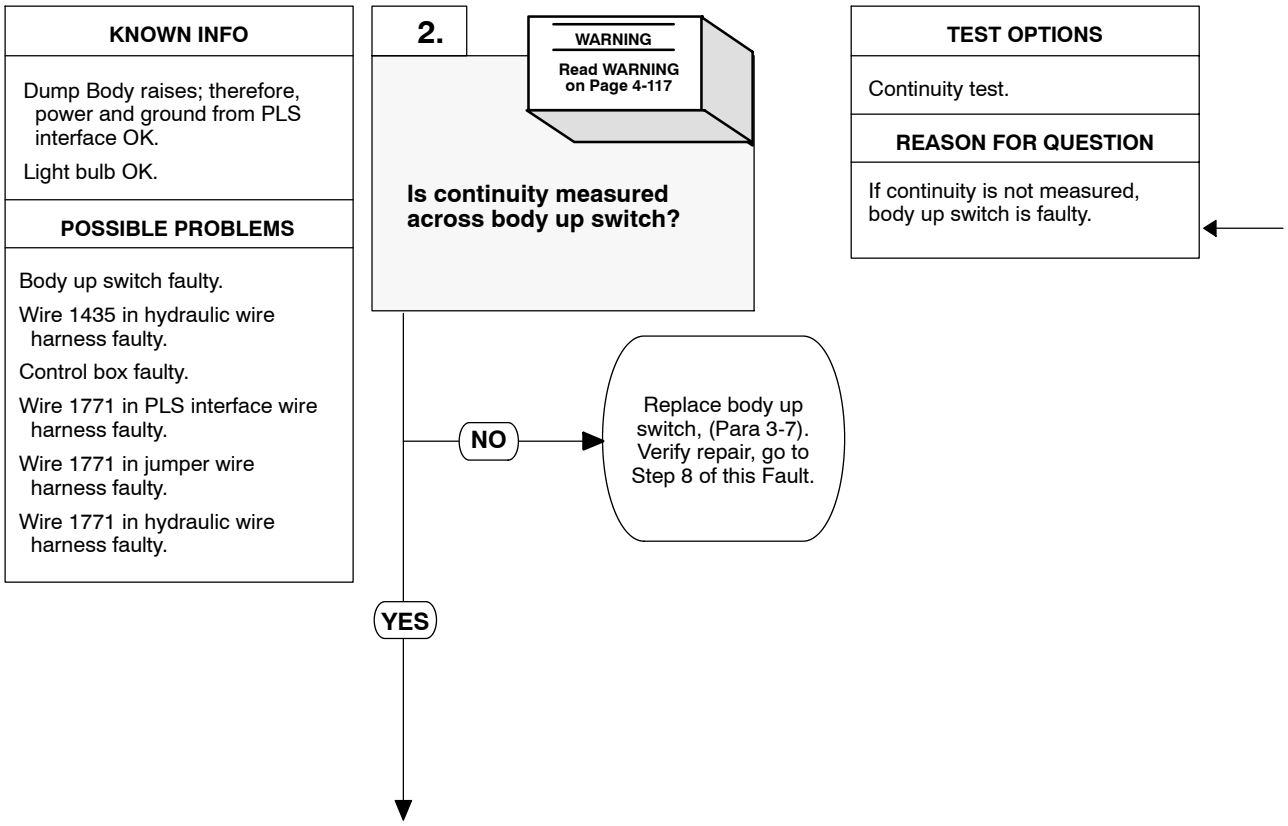
(3) Connect positive (+) multimeter lead to end terminal of light bulb.

(4) Connect negative (-) multimeter lead to side terminal of light bulb.

(a) If continuity is measured, re-install light bulb, go to Step 2 of this Fault.

(b) If continuity is not measured, replace light bulb, (Para 3-33). Verify repair, go to Step 8 of this Fault.

10. BODY UP INDICATOR LIGHT DOES NOT WORK (CONT).

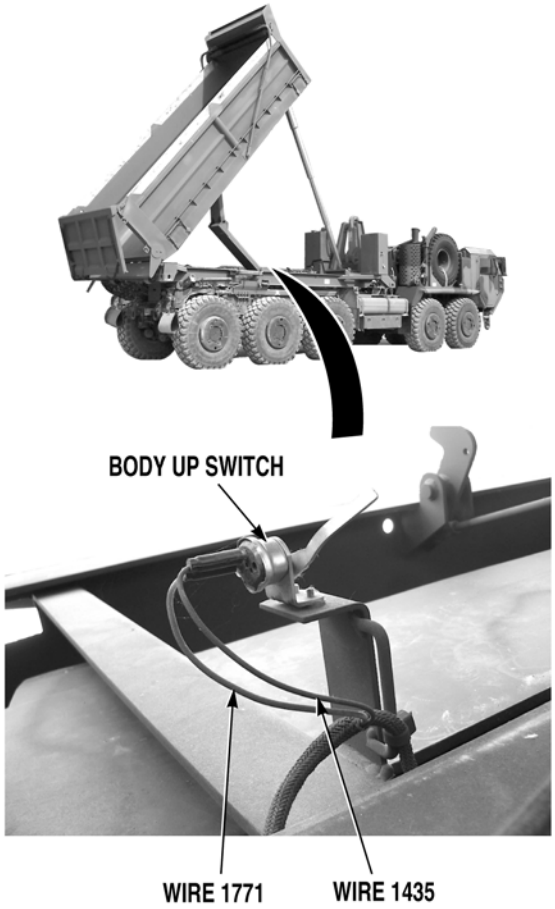


WARNING

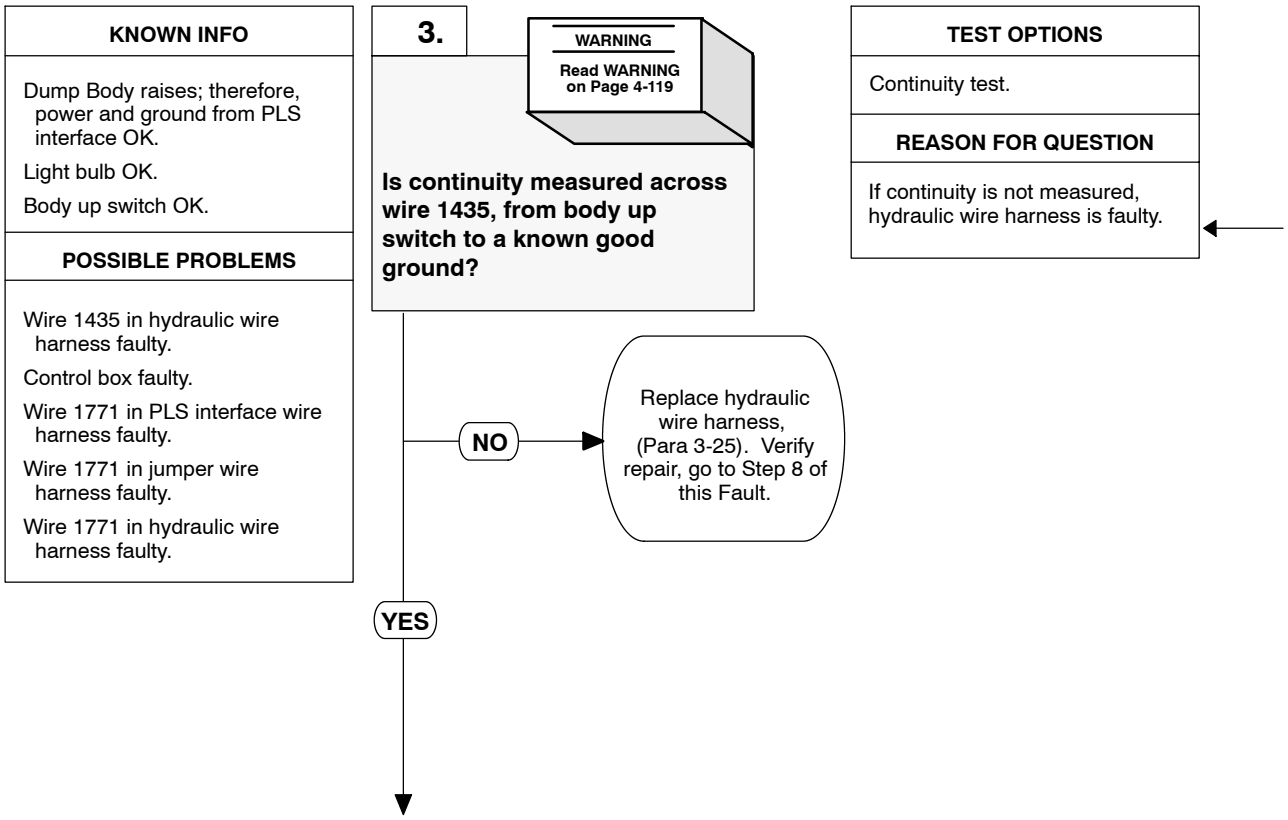
- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

(1) Start engine, (TM 9-2320-364-10).
(2) Raise Dump Body, (Para 2-15).
(3) Deploy body props, (Para 2-14).
(4) Shut OFF engine, (TM 9-2320-364-10).
(5) Pull out battery disconnect switch, (TM 9-2320-364-10).
(6) Set multimeter select switch to ohms.
(7) Connect positive (+) multimeter lead to wire 1771 terminal on body up switch. See Dump Body schematic, (Para 3-34).
(8) Connect negative (-) multimeter lead to wire 1435 terminal on body up switch.
    (a) If continuity is measured, go to Step 3 of this Fault.
    (b) If continuity is not measured, replace body up switch, (Para 3-7). Verify repair, go to Step 8 of this Fault.



10. BODY UP INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.

CONTINUITY TEST

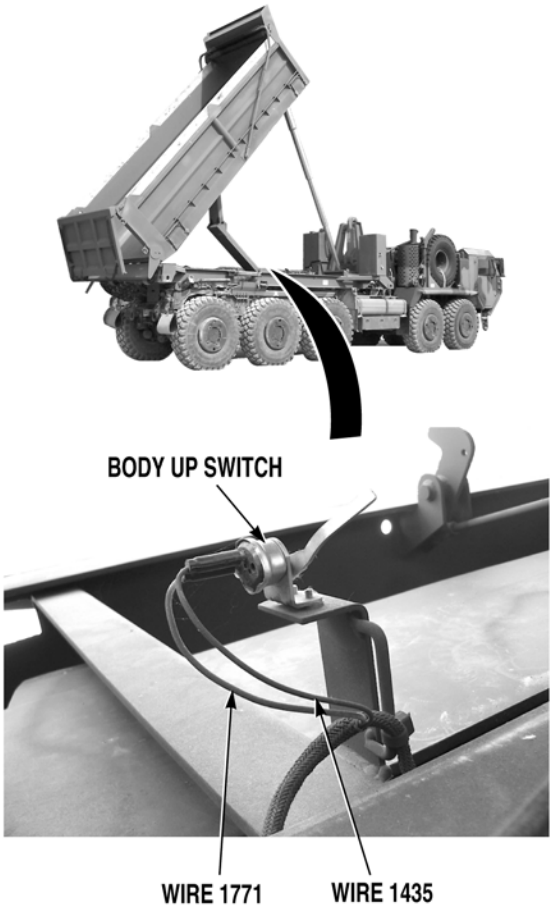
(1) Set multimeter select switch to ohms.

(2) Connect positive (+) multimeter lead to wire 1435, at body up switch. See Dump Body schematic, (Para 3-34).

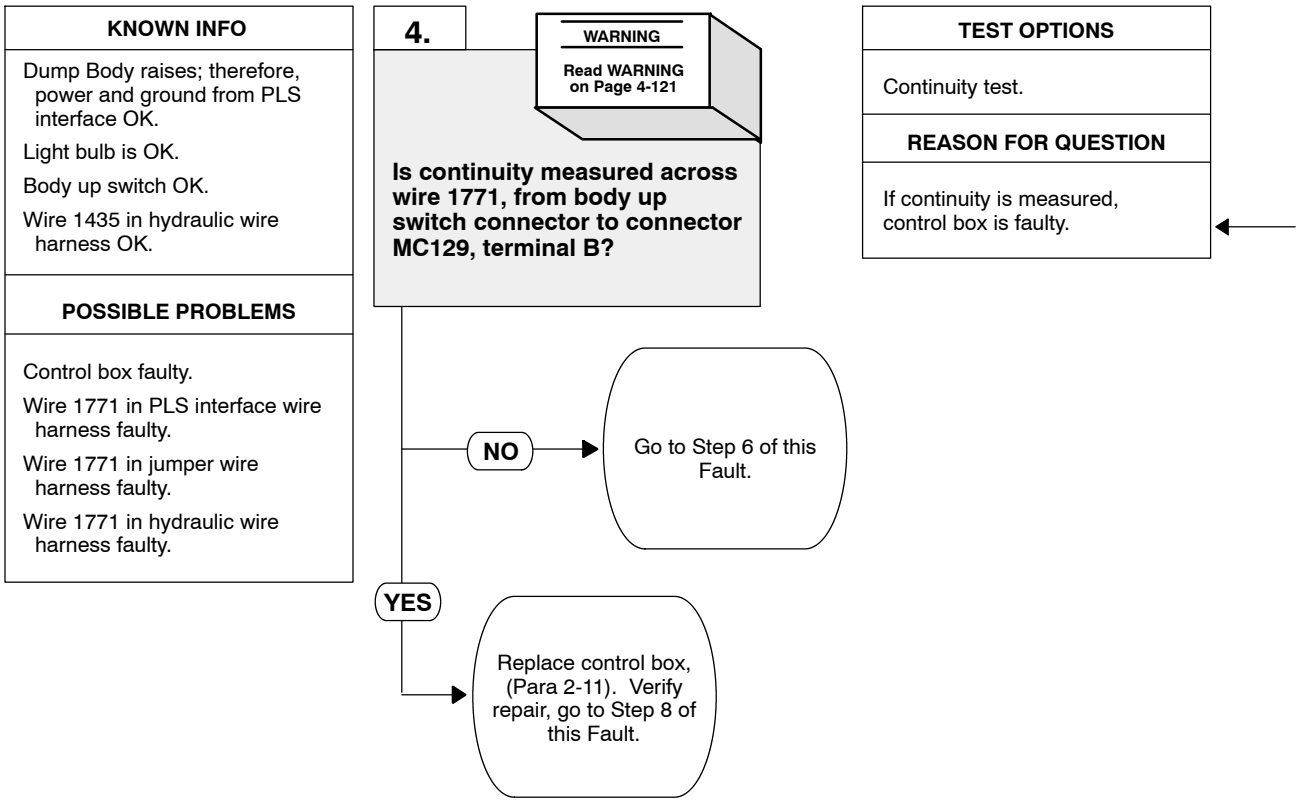
(3) Connect negative (-) multimeter lead to a known good ground.

(a) If continuity is measured, go to Step 4 of this Fault.

(b) If continuity is not measured, replace hydraulic wire harness, (Para 3-25). Verify repair, go to Step 8 of this Fault.



10. BODY UP INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.

CONTINUITY TEST

(1) Disconnect control box, (Para 2-11).

(2) Set multimeter select switch to ohms.

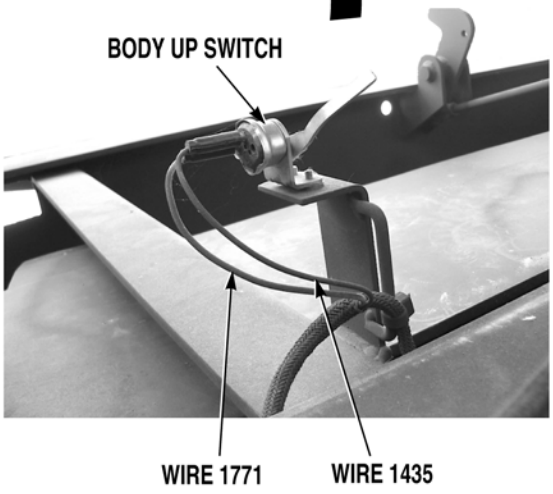
(3) Connect jumperwire between wire 1771 at connector MC129, terminal B and a known good ground. See Dump Body schematic, (Para 3-34).

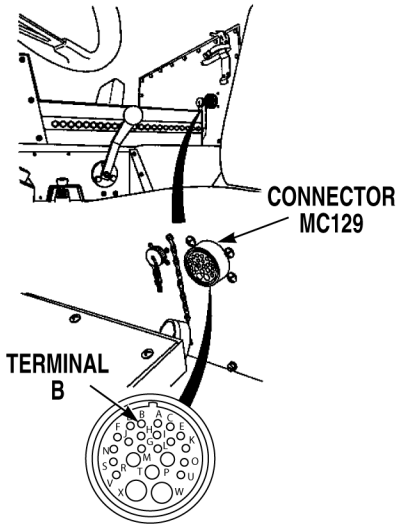
(4) Connect positive (+) multimeter lead to wire 1771 at body up switch.

(5) Connect negative (–) multimeter lead to wire 1771 at connector MC129, terminal B.

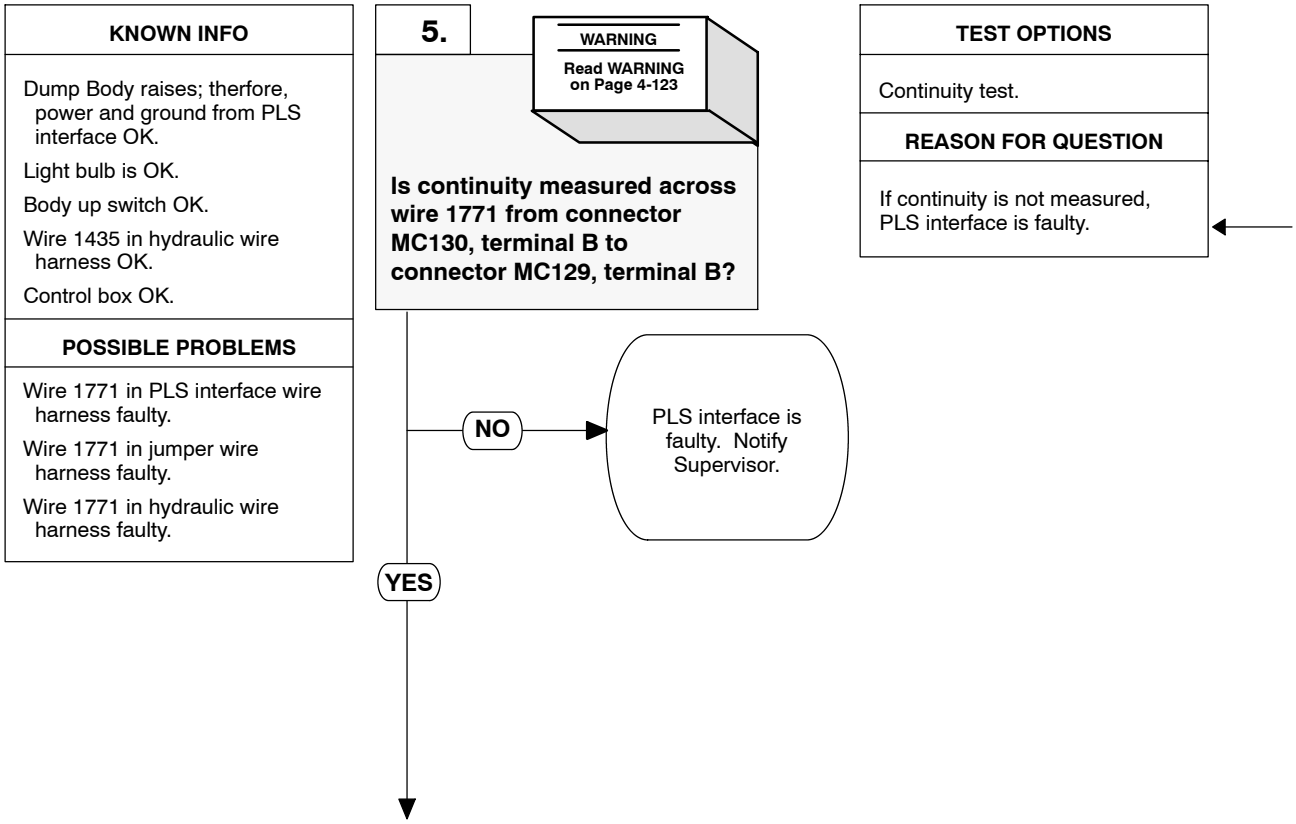
(a) If continuity is measured, replace control box, (Para 2-11). Verify repair, go to Step 8 of this Fault.

(b) If continuity is not measured, go to Step 6 of this Fault.





10. BODY UP INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.

CONTINUITY TEST

(1) Disconnect connector MC130, (Para 2-11).

(2) Set multimeter select switch to ohms.

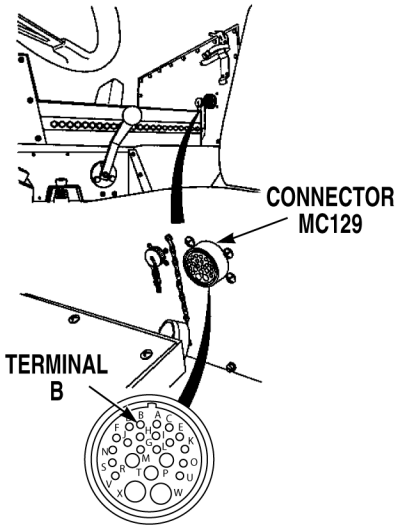
(3) Connect jumperwire between wire 1771 at connector MC129, terminal B and a known good ground. See Dump Body schematic, (Para 3-34).

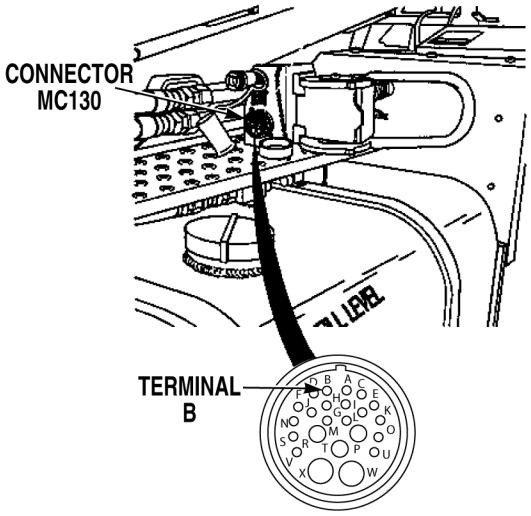
(4) Connect positive (+) multimeter lead to wire 1771 at connector MC130, terminal B.

(5) Connect negative (-) multimeter lead to a known good ground.

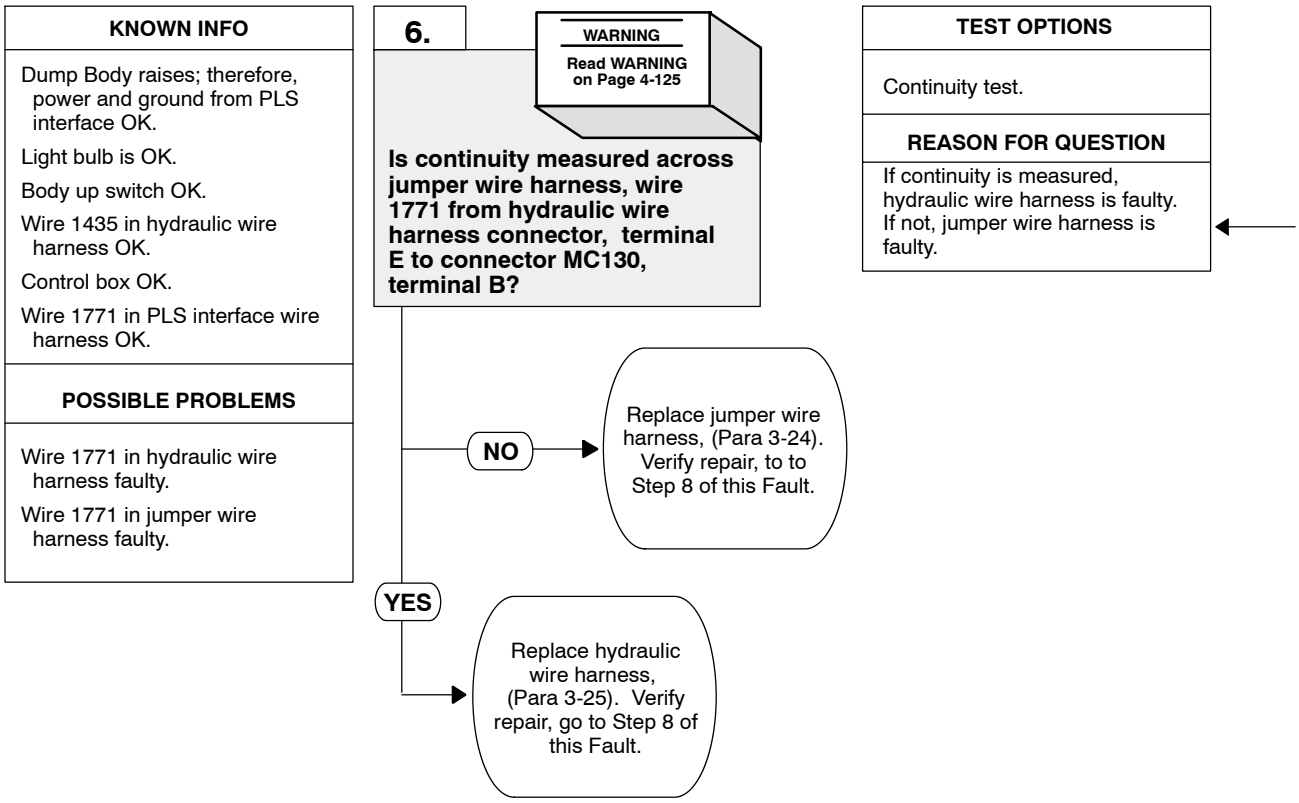
(a) If continuity is not measured, PLS interface is faulty. Notify Supervisor.

(b) If continuity is measured, replace jumper wire harness, (Para 3-24). Verify repair, go to Step 8 of this Fault.





10. BODY UP INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- Never raise Dump Body under obstructions, such as power lines or trees. Failure to comply could result in death or serious injury to personnel.
- Never work under Dump Body in raised position without body props installed. Raised Dump Body can drop suddenly and injury or death to personnel may result.
- There are two body props located on Dump Body; one on each side. Ensure both body props are used to support Dump Body. Working under Dump Body with only one side supporting load could result in serious injury or death to personnel if body props give way.
- Dump Body must be empty when propped on body props. Failure to comply could result in serious injury or death.

CONTINUITY TEST

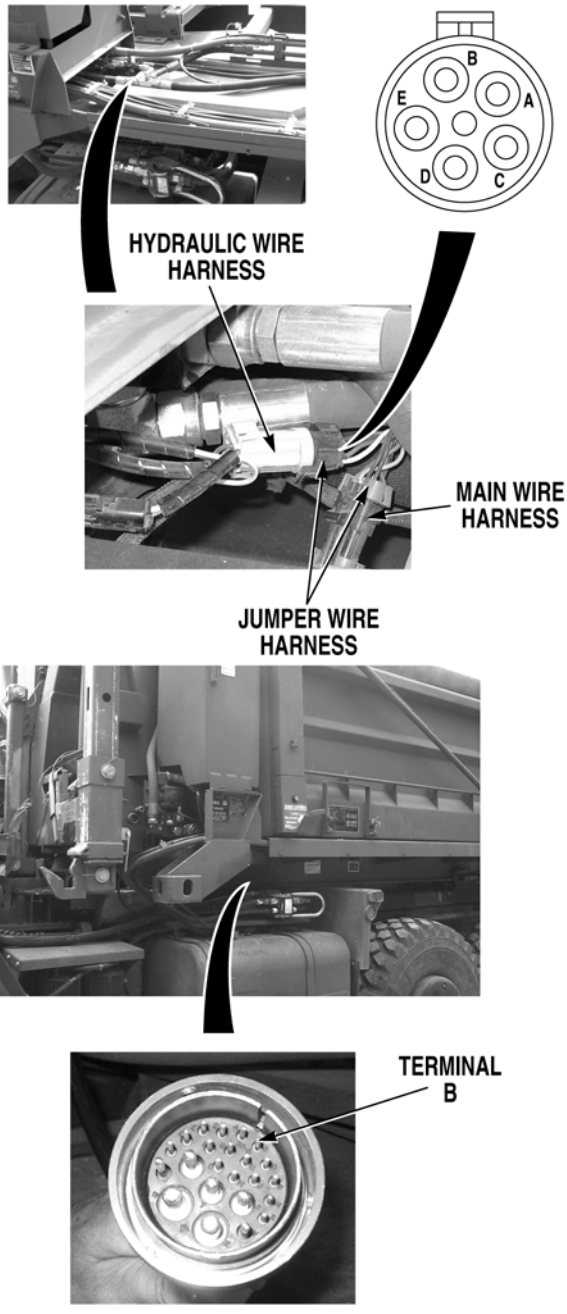
(1) Set multimeter select switch to ohms.

(2) Connect positive (+) multimeter lead to wire 1771 at hydraulic wire harness connector, terminal E. See Dump Body schematic, (Para 3-34).

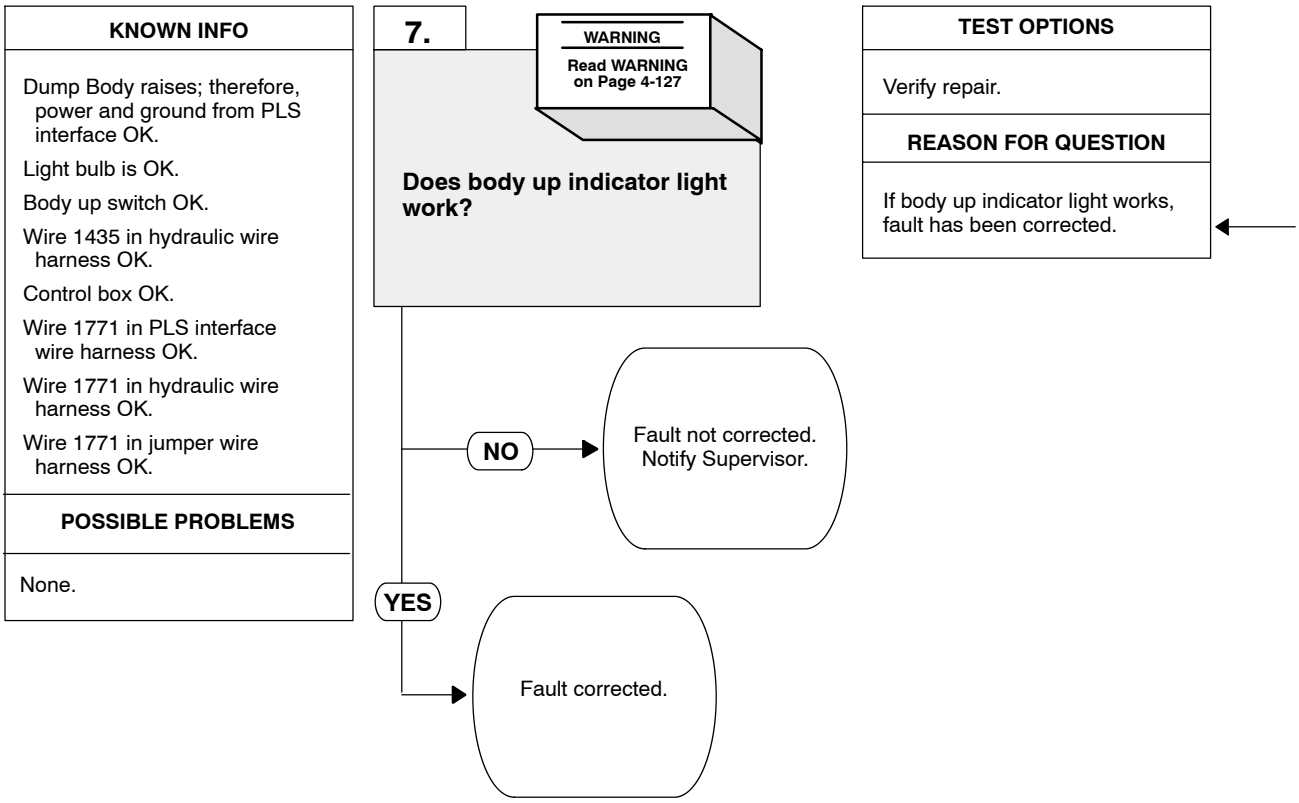
(3) Connect negative (–) multimeter lead to wire 1771 at connector MC130, terminal B.

(a) If continuity is not measured, PLS interface is faulty. Notify Supervisor.

(b) If continuity is measured, replace jumper wire harness, (Para 3-24). Verify repair, go to Step 8 of this Fault.

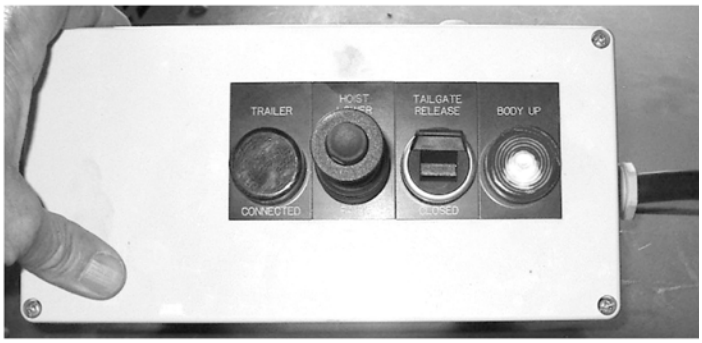


10. BODY UP INDICATOR LIGHT DOES NOT WORK (CONT).



WARNING

- Remove all jewelry such as rings, dog tags, bracelets, etc. If jewelry or tools contact positive electrical circuits, a direct short may result. Damage to equipment, injury or death to personnel may occur.
- 12 and 24 VDC are present at PLS interface connectors MC129 and MC130, when PLS battery disconnect is closed. Care must be exercised when working with these connectors. Failure to comply may cause injury to personnel.



VERIFY REPAIR

(1) If disconnected, connect connector MC130, (Para 2-11).

(2) If disconnected, connect control box, (Para 2-11).

(3) If out, push in battery disconnect switch, (TM 9-2320-364-10).

(4) Start engine, (TM 9-2320-364-10).

(5) Raise Dump Body, (Para 2-15).

(6) Check if body up indicator light works.

  (a) If body up indicator light works. Fault has been corrected.

  (b) If body up indicator light does not work, fault not corrected. Notify Supervisor.

(7) If deployed, stow body props, (Para 2-14).

(8) Lower Dump Body, (Para 2-15).

(9) Shut OFF engine, (TM 9-2320-364-10).

APPENDIX A

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

Section I. INTRODUCTION

A-1. SCOPE.

This RPSTL lists and authorizes spares and repair parts and special tools for maintenance of the Dump Body Engineering Mission Module for the PLS system.

A-2. GENERAL.

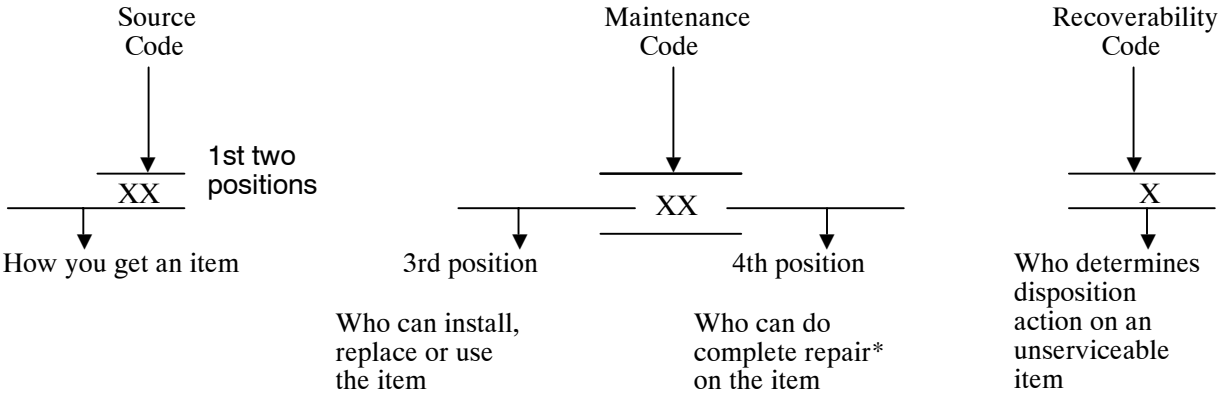
This Repair Parts and Special Tools List (RPSTL) is divided into two sections; Section I, the introduction; and Section II, the repair parts list.

A-3. EXPLANATION OF COLUMNS (SECTION II).

a. **ITEM No. [Column (1)].** Indicates the number used to identify items called out in the illustration. Not all items called out in an illustration will be identified by a part number.

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:

A-3. EXPLANATION OF COLUMNS (SECTION II) (CONT).



* Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks for the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

(1) Source Code. The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follows:

Code	Explanation
PA pb pc** pd pe pf pg	Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3rd position of the SMR code. **NOTE: Items coded PC are subject to deterioration.
kd kf kb	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.
MO- (Made at org Level) MF- (Made at DS Level) MH- (Made at GS Level) ML- (Made at Specialized Re-pair Act (SRA) MD- (Made at Depot)	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION column of this IPL. If the item is authorized to you by the 3rd 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.

Code		Explanation
AO-	(Assembled by org Level)	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 3rd position code of the SMR code authorizes you to replace the item, but the source code indicated the item is assembled at a higher level, order the item from the higher level of maintenance.
AF-	(Assembled by DS Level)	
AH-	(Assembled by GS Level)	
AL-	(Assembled by SRA)	
AD-	(Assembled by Depot)	

XA- Do not requisition an "XA"-coded item. Order its next higher assembly. (Also, refer to the NOTE below.)

XB- If an "XB" item is not available from salvage, order it using the CAGEC and part number given.

XC- Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.

XD- Item is not stocked. Order an "XD"-coded item through normal supply channels using the CAGEC and part number given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA".

(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.

Code	Application/Explanation
C	- Crew or operator maintenance done within organizational maintenance.
O	- Unit Maintenance can remove, replace, and use the item.
F	- Direct support 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.

A-3. EXPLANATION OF COLUMNS (SECTION II) (CONT).

(b) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). (NOTE: Some limited repair may be done on the item at a lower level of maintenance, if authorized by the SMR codes.) This position will contain one of the following maintenance codes:

Code	Application/Explanation
O	- Unit Maintenance is the lowest level that can do complete repair of the item.
F	- Direct support is the lowest level that 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 "B"-coded item.) However, the item may be reconditioned by adjusting, lubrication, etc., at the user level.

(3) Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the SMR Code as follows:

Code	Application/Explanation
Z	- Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the 3rd position of SMR Code.
O	- Reparable item. When uneconomically reparable, condemn and dispose of the item at organizational level.
F	- Reparable item. When uneconomically reparable, condemn and dispose of the item at the direct support level.
H	- Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
D	- Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
L	- Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
A	- Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material or hazardous material). Refer to appropriate manuals/directives for specific instructions.

c. NSN [Column (3)]. The National Stock Number for the item is listed in this column.

d. CAGEC [Column (4)]. The Commercial and Government Entity Code (CAGEC) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplied the item.

e. PART NUMBER [Column (5)]. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements to identify an item or range of items.

NOTE

When you use a NSN to requisition an item, the item you receive may have a different part number from the part ordered.

f. DESCRIPTION [Column (6)]. This column includes the following information:

(1) The item name and, when required, a minimum description to identify the item.

(2) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured/fabricated.

g. QTY [Column (7)]. The QTY (quantity per figure column) indicates the quantity of the item used.

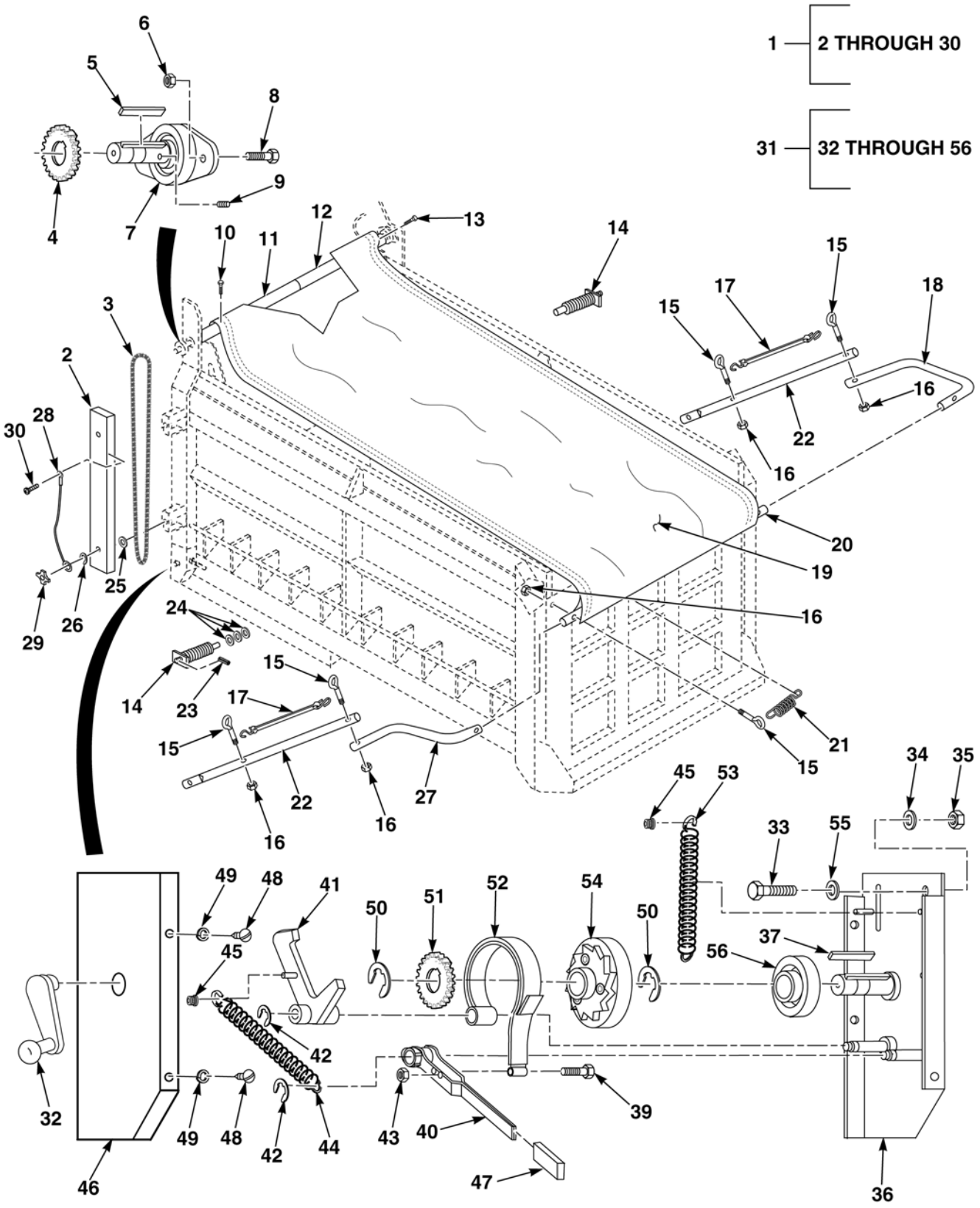


FIG. 1 TARP AND CRANK ASSEMBLY

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 1 TARP AND CRANK ASSEMBLY	
1	PFFFFA	2540-01-539-0907	5X050	403771	TARP ASSEMBLY	1
2	PAFZZA	5340-01-538-4241	5B752	0311-961405	•COVER,ACCESS,CHAIN	1
3	PAFZZA	3020-01-446-6412	5B752	0720-603557	•CHAIN,ROLLER	1
4	PAFZZA	3020-01-446-6409	5B752	0750-619594	•SPROCKET,WHEEL	1
5	PAFZZA	5315-01-446-6724	5B752	0840-618512	•KEY,WOODRUFF	1
6	PAFZZA	5310-00-984-3806	81349	M45913/1-5CG5C	•NUT,SELF-LOCKING,HEX	4
7	PAFZZA	5340-01-538-3658	5B752	0311-961404	•PLATE,BEARING	2
8	PAFZZA	5306-00-226-4827	80204	B1821BH031C100N	•SCREW,CAP, HEX HD	4
9	PAFZZA	5305-00-723-9383	96906	MS51963-67	•SETSCREW	2
10	PAFZZA	5305-00-988-1732	96906	MS35206-291	•SCREW,MACHINE	6
11	PAFZZA	5342-01-539-1497	5B752	0311-961274	•CONTROL ROD	1
12	PAFZZA	5342-01-449-5475	5B752	0311-961267	•CONTROL ROD	1
13	PAFZZA	5305-00-988-1723	96906	MS35206-279	•SCREW,MACHINE	2
14	PAFZZA	5360-01-538-6856	5B752	0311-960328	•SPRING CARTRIDGE RH	4
14	PAFZZA	5360-01-537-1131	5B752	0311-960329	•SPRING CARTRIDGE LH	1
15	PAFZZA	5306-00-957-7531	14153	00574	•BOLT,EYE	6
16	PAFZZA	5310-00-061-4650	80205	M45913/3-4CGB8C	•NUT,SELF-LOCKING,HEX	6
17	PAFZZA	5342-01-123-3914	39428	3891T14	•STRAP	2
18	PAFZZA	5342-01-475-2802	5B752	0311-861590	•CONTROL ROD	1
19	PAFZZA	2540-01-449-5775	5B752	ECT 13 CRY	•TARPAULIN	1
20	PAFZZA	2540-01-539-2753	5B752	0311-860664	•ARM,CROSS	1
21	PAFZZA	5360-01-446-7903	5B752	0715-619601	•SPRING,HELICAL,EXTENSION	2
22	PAFZZA	3040-01-539-2024	5B752	0311-961281	•SWING ARM UNDERMOUN	1
23	PAFZZA	5315-00-838-4584	96906	MS16562-66	•PIN, SPRING	6
24	PAFZZA	5310-00-883-9529	96906	MS15795-828	•WASHER, FLAT	6
25	PAFZZA	5310-00-087-7493	96906	MS27183-13	•WASHER,FLAT	2
26	PAFZZA	5325-00-803-7301	96906	MS16624-1050	•RING,SNAP	2
27	PAFZZA	5342-01-446-0902	5B752	0311-860589	•ARM,HAND CRANK	1
28	PAFZZA	4010-01-538-2830	5B752	311-961407	•LEASH,KNOB	2
29	PAFZZA		5X050	KNOBFIG1/14	•KNOB ASSEMBLY	2
30	XAFZZA	5320-00-967-8720	80205	MS24662-9	•RIVET,BLIND	2
31	PAFFFA	2990-01-538-4717	5B752	0311-961357	•CRANK ASSEMBLY	1
32	PAFZZA		5B752	0311-960316	••HANDLE,CRANK	1
33	XAFZZA	5305-00-068-0510	80204	B1821BH038C100N	••SCREW,CAP, HEX HD	2
34	PAFZZA	5310-00-637-9541	51436	95081857	••WASHER,LOCK	2
35	PAFZZA	5310-00-732-0558	96906	MS51967-8	••NUT,HEX	2
36	PAFZZA		5B752	0311-860743	••CRANK BASE PLATE AS	1
37	PAFZZA	5315-01-448-8804	64678	AIN/0840-618513	••KEY 6MM X 2 1/4	1
38	PAFZZA	3040-01-446-3782	5B752	0311-860732	••SHAFT,SHOULDERED	1
39	PAFZZA	5305-01-075-0957	96906	MS51849-100	••SCREW,MACHINE	1
40	PAFZZA	5340-01-445-9354	5B752	0311-960736	••BRAKE HANDLE	1
41	PAFZZA	3040-01-473-2741	5B752	0311-962128	••PAWL	1
42	PAFZZA	5325-00-803-7301	96906	MS16624-1050	••RING,SNAP	2
43	PAFZZA	5310-00-929-1807	81349	M45913/1-4CS3	••NUT,SELF-LOCKING	1
44	PAFZZA	5360-01-446-3190	5B752	0715-619602	••SPRING PAWL	1
45	PAFZZA	5310-01-143-0542	45152	2AX255	••PUSH ON NUT	2
46	PAFZZA		5B752	0311-862407	••CRANK COVER	1
47	XAFZZA	5340-01-445-7778	5B752	0765-618830	••BRAKE HANDLE,RUBBER	1
48	PAFZZA	5305-01-537-0742	80205	NASMS35206-281	••SCREW,MACHINE	4

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
49	PAFZZA	5310-00-550-1130	96906	MS35333-40	••WASHER,LOCK	2
50	XDFZZA	5325-00-530-7968	96906	MS16624-1100	••RING,SNAP,	2
51	PAFZZA	3020-01-446-6405	5B752	0750-619592	••SPROCKET,WHEEL	1
52	PAFZZA	2530-01-446-3340	5B752	0311-960739	••BRAKE BAND ASSY	1
53	PAFZZA	5360-01-446-4054	5B752	0715-619800	••SPRING BRAKE BAND	1
54	XDFZZA	3040-01-446-4689	5B752	0311-860730	••BRAKE,DRUM	1
55	PAFZZA	5310-00-087-7493	96906	MS27183-13	••WASHER,FLAT	2
56	XDF22A		38YH2	SA205-16G	••BEARING	1

END OF FIGURE

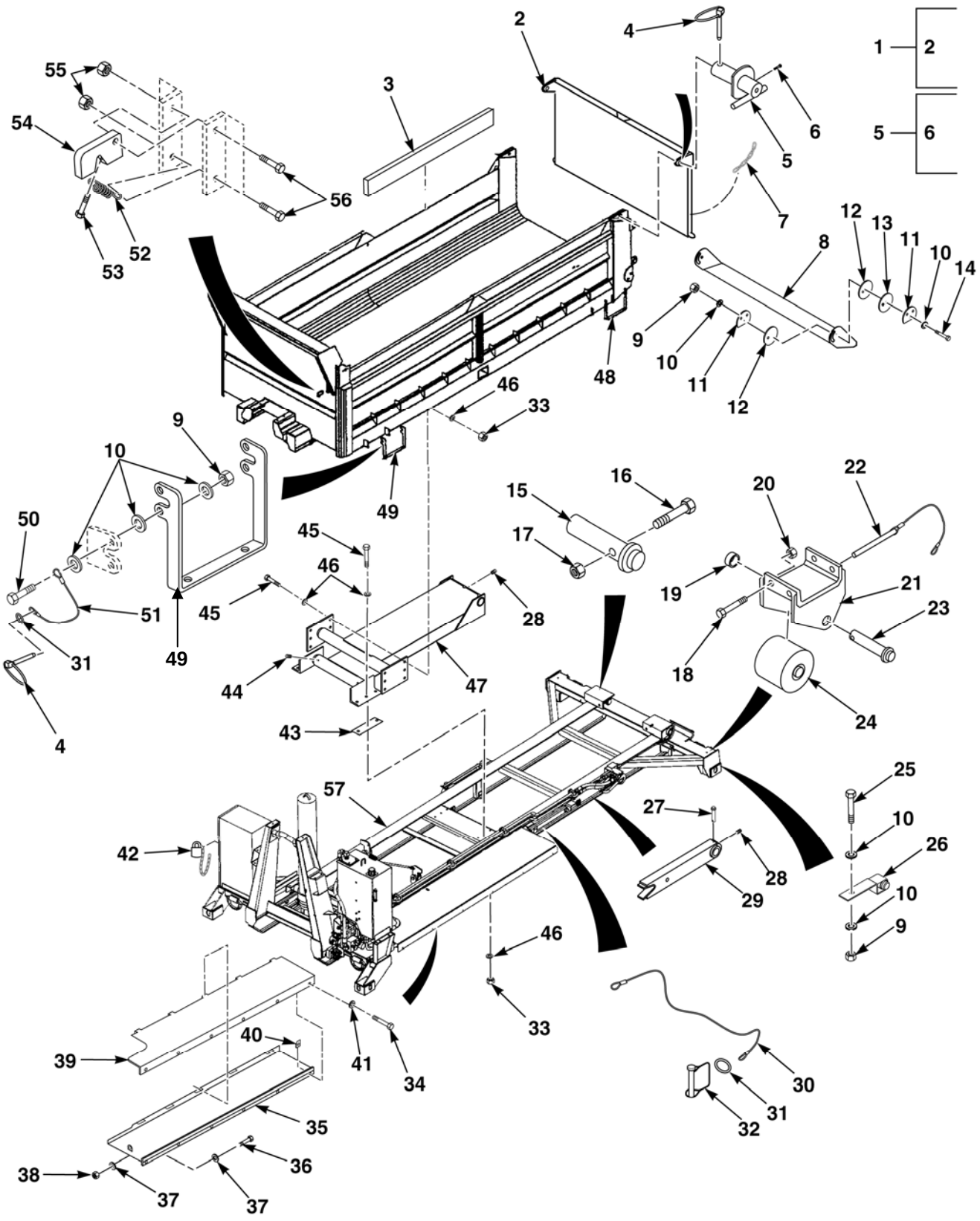


FIG. 2 BODY/RACK/STABILIZER

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 2 BODY/RACK/STABILIZER	
1	XDFZZA		5X050	137429	BODY,OTC PLS	1
2	PAFZZA	2510-01-539-0936	5X050	137430	•TAILGATE,VEHICLE BODY	1
3	XDFZZA		5X050	403772	WOOD	4
4	PAFZZA	5315-01-447-0479	5X050	402063	LYNCH PIN	6
5	XDFZZA		5X050	125094	PAD,HINGE	2
6	PAFZZA	4730-00-172-0022	81343	AS15003-2	•FITTING,LUBRICATION	1
7	MFFZZA		5X050	403708	SLEEVE WEB MAKE FROM P/N SW-15 (99017),24 INCH	2
8	XDFZZA		5X050	137452	SPILLSHIELD ASSY	1
9	PAFZZA	5310-01-081-8244	45152	60860AX	NUT,SELF-LOCKING,HEX	12
10	PAFZZA	5310-01-343-3590	96906	MS15795-855	WASHER,FLAT	32
11	XDFZZA		5X050	404433	WEAR PLATE,INNER	2
12	XDFZZA		5X050	404432	WEAR PLATE,OUTER	2
13	XDFZZA		5X050	137453	PIN ASSY,RETAINING	2
14	PAFZZA	5305-00-071-2074	80204	B1821BH050C275N	SCREW,CAP,HEXAGON HD	2
15	PFFZZA	5315-01-538-3548	5X050	137449	PIN ASSEMBLY,HINGE	2
16	PAFZZA	5305-00-947-4358	80204	B1821BH075C400N	SCREW,CAP,HEXAGON HD	2
17	PAFZZA	5310-00-409-3333	81349	M45913/3-12CG8C	NUT,SELF-LOCKING,HEX	2
18	PAFZZA	5305-00-543-2866	80204	B1821BH038C250N	SCREW,CAP, HEX HD	2
19	PAFZZA	3040-01-538-3074	5X050	249336	RETAINER,ROLLER ASSY	2
20	PAFZZA	5310-00-935-9021	96906	MS51943-35	NUT,LOCK	2
21	PAFZZA	5340-01-538-5775	5X050	137434	BRACKET,ROLLER	2
22	PAFZZA	5315-01-538-2096	5X050	403702	PIN,ROLLER KEEPER	4
23	PAFZZA	5315-01-538-5036	5X050	137444	PIN ASSY,REAR ROLLER	2
24	PAFZZA	5365-01-538-1444	5X050	403695	ROLLER,RUBBER	2
25	PAFZZA	5305-00-071-2082	80204	B1821BH050C475N	SCREW,CAP,HEXAGON HD	2
26	XDFZZA		5X050	137451	GUIDE ASSY,ROLLER	2
27	PAFZZA	5315-01-538-3932	0CUJ4	SP-293-S	PIN,SPRING	2
28	PAFZZA	4730-01-231-4122	96906	MS15003-7	FITTING,LUBRICATION	3
29	XDFZZA		5X050	137443	BODY ASSY,PROP LEG	2
30	MFFZZA		39428	90312A310-10	LANYARD MAKE FROM LANYARD KIT P/N 97840A66 (39428)	3
31	PAFZZA	5325-01-536-3421	0CUJ4	RING-17	RING SPLIT 1	7
32	PAFZZA	5315-01-507-0537	05047	403502	PIN,SNAP LOCK	1
33	PAFZZA	5310-00-269-4040	81349	M45913/1-10CG5C	NUT,SELF-LOCKING,HEX	22
34	PAFZZA	5306-00-226-4827	80204	B1821BH031C100N	SCREW,CAP, HEX HD	6
35	XDFZZA		5X050	137446	TRAY ASSEMBLY,HOSE	1
36	PAFZZA	5305-00-068-0510	80204	B1821BH038C100N	SCREW,CAP, HEX HD	9
37	PAFZZA	5310-00-802-4701	80205	MS15795-813	WASHER,FLAT	18
38	PAFZZA	5310-00-935-9021	96906	MS51943-35	NUT,LOCK	9
39	XDFZZA		5X050	137447	COVER,HOSE TRAY	1
40	PAFZZA	5310-01-538-4252	39428	94850A150	NUT,CAGE	6
41	PAFZZA	5310-00-625-5756	80205	MS15795-812	WASHER,FLAT	6
42	PAFZZA	5340-00-158-3807	58536	A-A-59487-2SC	PADLOCK	1
43	XDFZZA		5X050	256396	SPACER,STABILIZER	2
44	PAFZZA	4730-00-172-0022	81343	AS15003-2	FITTING,LUBRICATION	4

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
45	PAFZZA	5305-00-724-7222	80204	B1821BH063C200N	SCREW,CAP, HEX HD	18
46	PAFZZA	5310-00-614-3505	96906	MS15795-820	WASHER,FLAT	44
47	PFFZZA	2510-01-481-5036	5X050	132687	STABILIZER ASSEMBL	1
48	PAFZZA	2540-01-537-0199	5X050	256393	STRAP,LADDER MOUNT	3
49	PAFZZA	2540-01-537-0204	5X050	256394	STRAP,LADDER MOUNT	1
50	PAFZZA	5305-00-701-7628	96906	MS35307-415	SCREW,CAP, HEX HD	8
51	MFFZZA		39428	90312A310-10	LANYARD	4
					MAKE FROM LANYARD KIT P/N 97840A66 (39428)	
52	PAFZZA	5360-01-538-1775	84830	400909	SPRING EXTENSION	1
53	PAFZZA	5305-00-068-0502	00365	F98	SCREW,CAP,HEX HD	1
54	XDFZZA		5X050	256392	LATCH,HOLD DOWN	1
55	PAFZZA	5310-00-935-9021	96906	MS51943-35	NUT,LOCK, 3/8-16	2
56	PAFZZA	5305-00-725-2317	80204	B1821BH038C150N	SCREW,CAP,HEXAGON HD	2
57	PFFZZA	2540-01-481-5039	5X050	137431	RACK,VEHICULAR ASSEMBLY	1

END OF FIGURE

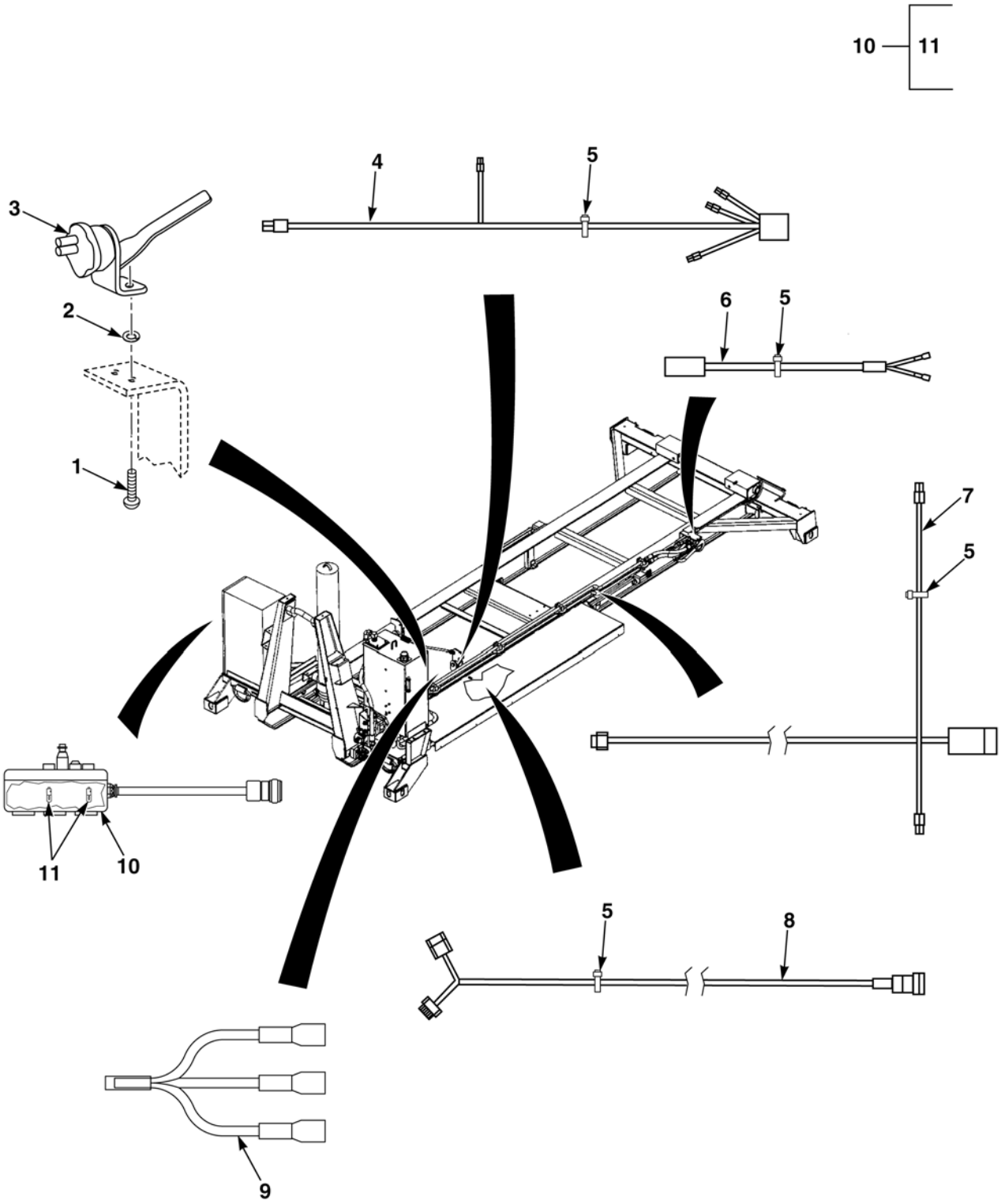


FIG. 3 ELECTRICAL SYSTEM

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 3 ELECTRICAL SYSTEM	
1	PAFZZA	5305-00-071-1322	96906	MS51960-65	SCREW,MACHINE	2
2	PAFZZA	5310-00-045-3296	96906	MS35338-43	WASHER,LOCK	2
3	PAFZZA	5930-01-538-4739	5X050	402138	SWITCH,BODY UP	1
4	PAFZZA	6150-01-538-6865	5X050	403787	HARNESS ASSEMBLY	1
5	PAFZZA	5975-00-451-5001	81343	404578	TIE, CABLE	54
6	PAFZZA	6150-01-538-6874	5X050	403820	HARNESS ASSEMBLY	1
7	PAFZZA	6150-01-481-6164	5X050	403781	HARNESS ASSEMBLY,MAIN	1
8	PAFZZA	6150-01-485-1183	45152	4BH813	CABLE ASSEMBLY	1
9	PAFZZA	6150-01-538-7848	5X050	403821	HARNESS ASSEMBLY	1
10	PAFZZA	5975-01-537-5554	5X050	132950	CONTROL BOX ASSY	1
11	PAFZZA	6240-00-155-7859	96906	MS15571-8	LAMP, INDCANDESCENT	2
					END OF FIGURE	

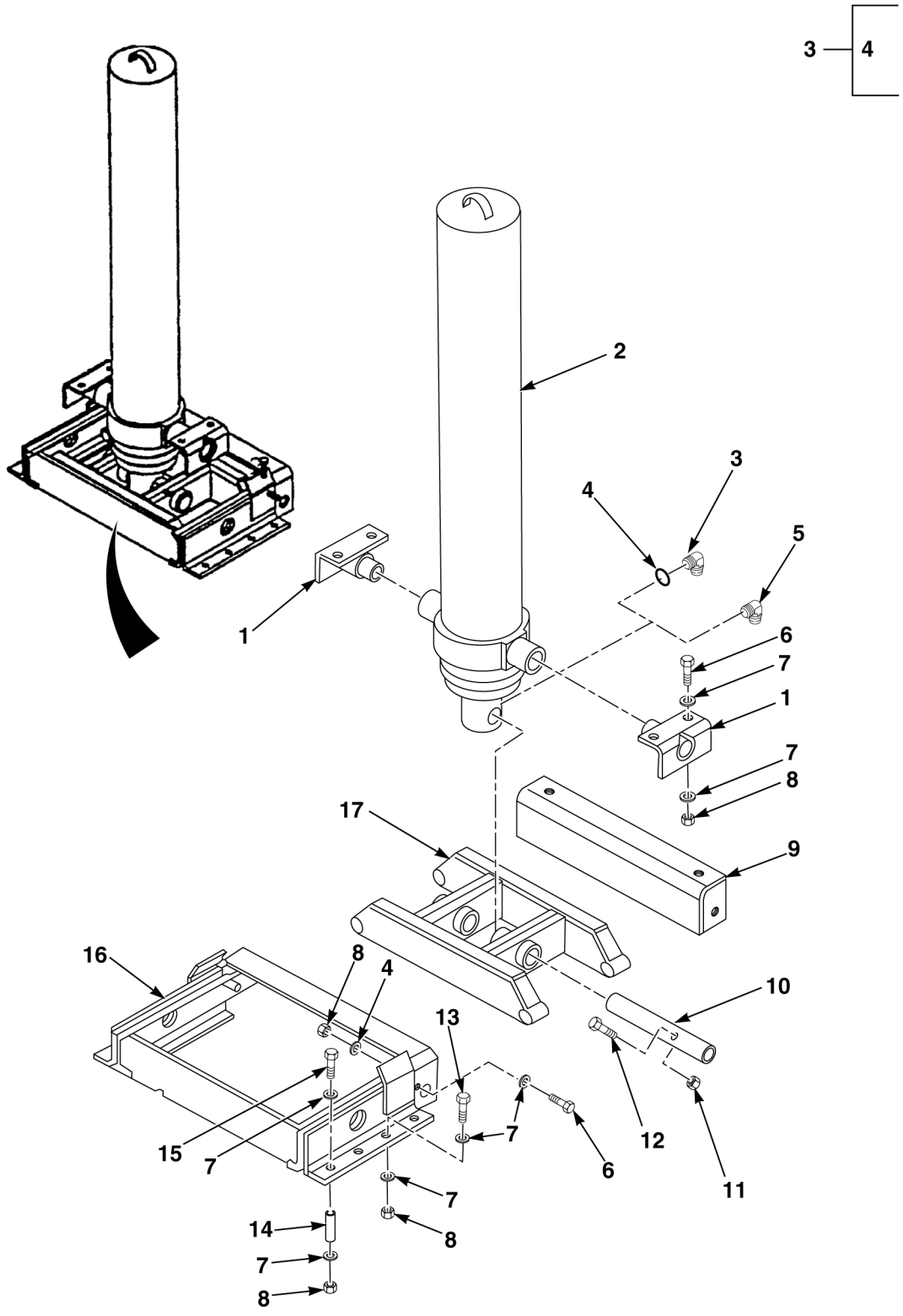


FIG. 4 PLS HOIST PARTS

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 4 PLS HOIST PARTS	
1	XDFZZA		5X050	137448	MOUNT,UPPER	2
2	PAFZZA	3040-01-538-9084	5X050	404767	CYLINDER ASSEMBLY	1
3	PAFZZA	4730-01-538-1883	0S1H5	FGFF6801-16	ADAPTER (USED ON S/N 3093843 AND SUBSEQUENT)	2
4	PAFZZA	5331-01-538-4219	0S1H5	90DFF-16	•O-RING (USED ON S/N 3093843 AND SUBSEQUENT)	1
5	XDFZZA		5X050	403863	ADAPTER,90 DEG (USED ON S/N 3089020 THRU 3093735)	1
6	PAFZZA	5305-00-724-7222	80204	B1821BH063C200N	SCREW,CAP, HEX HD	8
7	PAFZZA	5310-00-614-3505	80205	MS15795-820	WASHER,FLAT	36
8	PAFZZA	5310-00-269-4040	81349	M45913/1-10CG5C	NUT,SELF-LOCKING,HEX	20
9	XDFZZA		5X050	137437	PLATE ASSEMBLY,REAR	1
10	PAFZZA	5315-01-538-4323	5X050	246994	PIN,LOWER MOUNT	1
11	PAFZZA	5310-01-081-8244	45152	60860AX	NUT,SELF-LOCKING,HEX	8
12	PAFZZA	5305-00-071-2077	80204	B1821BH050C350N	SCREW,CAP,HEX HD	1
13	PAFZZA	5305-00-724-7224	80204	B1821BH063C250N	SCREW,CAP,HEXAGON HD	4
14	XDFZZA		5X050	256384	SPACER, HOIST MOUNT	4
15	PAFZZA		5X050	403896	SCREW CAP,HEX HD	4
16	XDFZZA		5X050	137428	MOUNT ASSY, LOWER	1
17	XDFZZA		5X050	137436	MOUNT ASSY,LOWER CYLINDER	1

END OF FIGURE

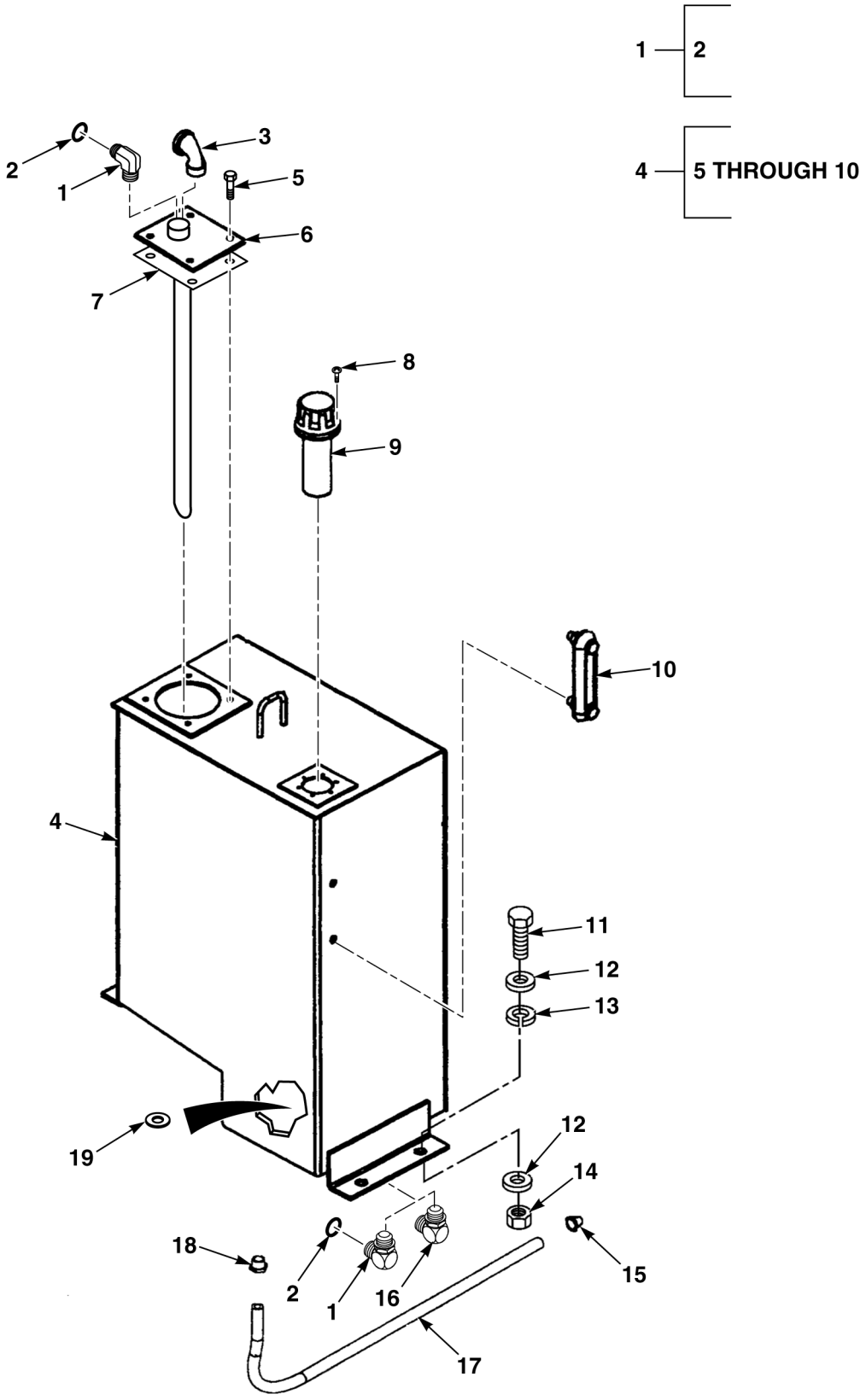


FIG. 5 RESERVOIR PARTS

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 5 RESERVOIR ASSEMBLY	
1	PAFZZA	4730-01-538-5822	0S1H5	FF2501-20-20	ELBOW,90 DEG (USED ON S/N 3093843 AND SUBSEQUENT)	2
2	PAFZZA	5331-01-538-2876	0S1H5	90DFF-20	•O-RING (USED ON S/N 3093843 AND SUBSEQUENT)	1
3	XDFZZA		5X050	401296	ELBOW,PIPE (USED ON S/N 3093843 THRU 3093735)	1
4	PAFZZA	4320-01-538-3775	5X050	137438	RESERVOIR ASSEMBLY	1
5	PAFZZA	5305-00-942-2196	80204	B1821BH038C100D	•SCREW,CAP, HEX HD	4
6	XDFZZA		5X050	136664	•PLATE,RETURN,RESERVOR	1
7	PAFZZA	5330-01-538-4850	5X050	405175	•GASKET,COVER	1
8	PAFZZA	5305-00-993-1848	80205	MS35207-265	•SCREW,MACHINE	6
9	PAFZZA	2590-01-446-1903	5X050	403246	•CAP-FILLER,BREATHER	1
10	PAFZZA	6680-01-526-0114	45152	6KK730	HOUSING,GAGE	1
11	PAFZZA	5305-00-701-7628	96906	MS35307-415	SCREW,CAP, HEX HD	4
12	PAFZZA	5310-01-343-3590	80205	MS15795-855	WASHER,FLAT	8
13	PAFZZA	5310-00-407-9566	96906	MS35338-45	WASHER,LOCK	4
14	PAFZZA	5310-01-081-8244	45152	60860AX	NUT,SELF-LOCKING,HEX	4
15	PAFZZA	4730-01-536-4568	5X050	403677	CAP,PIPE	1
16	XDFZZA		5X050	403806	ELBOW,MALE (USED ON S/N 3089020 THRU 3093735)	1
17	PAFZZA	4720-01-538-7009	5X050	402141	HOSE	1
18	PAFZZA	4730-01-536-6187	5X050	401091	BUSHING,HEX	1
19	XDFZZA		5X050	403723	MAGNET	1
					END OF FIGURE	

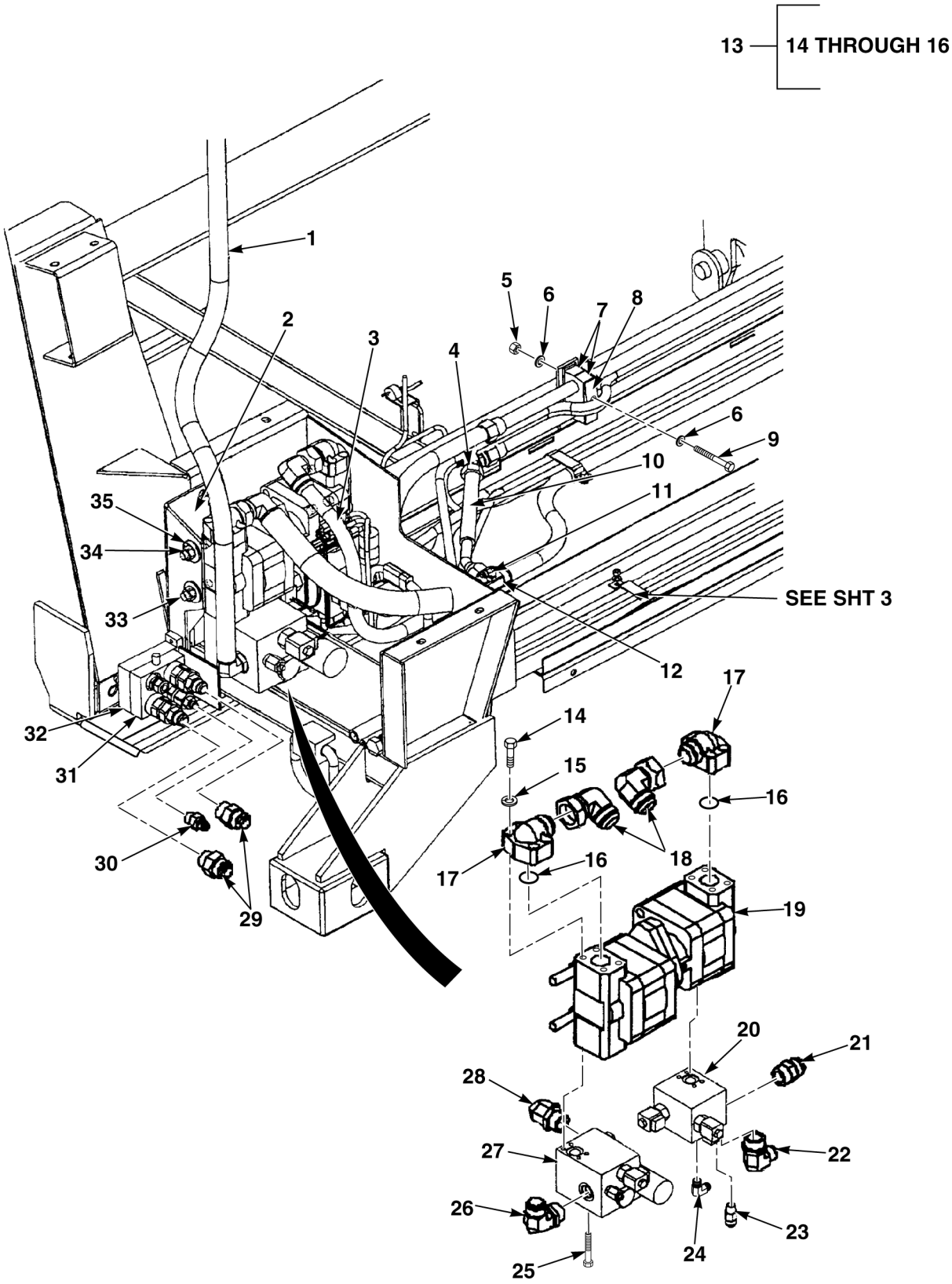


FIG. 6 HYDRAULIC SYSTEM SHEET 1 OF 4 (USED ON S/N 3089020 THRU 3093735)

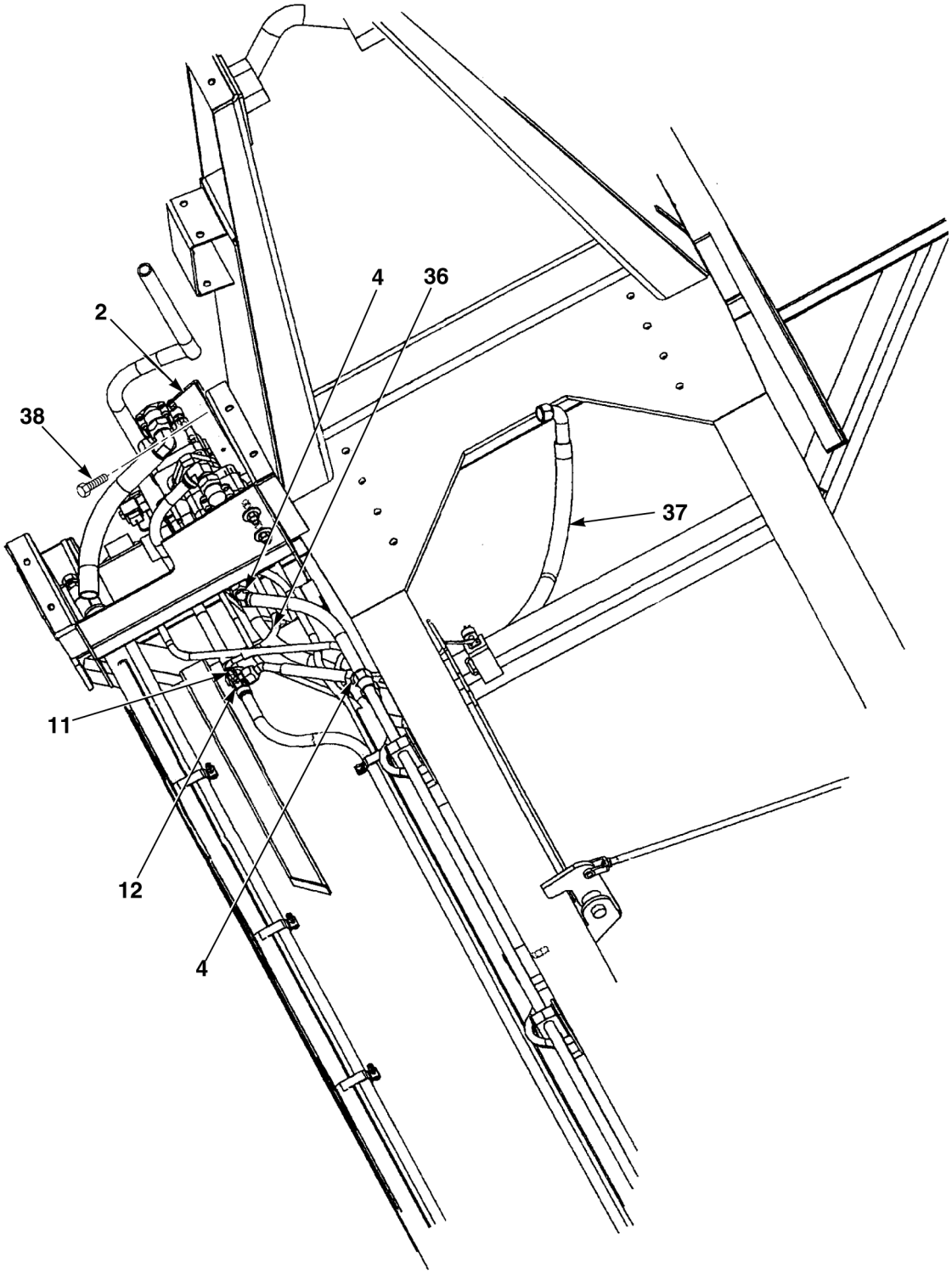


FIG. 6 HYDRAULIC SYSTEM SHEET 2 OF 4 (USED ON S/N 3089020 THRU 3093735)

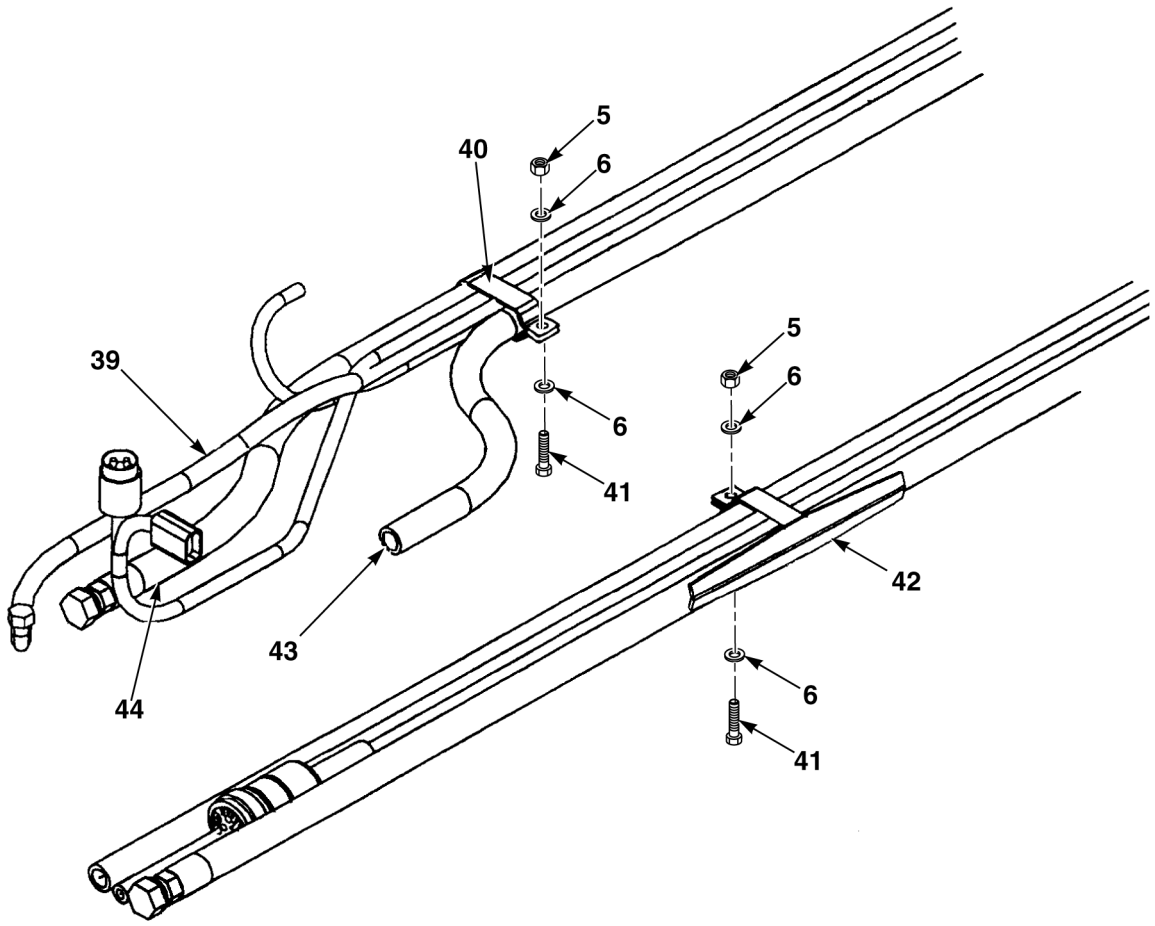


FIG. 6 HYDRAULIC SYSTEM SHEET 3 OF 4 (USED ON S/N 3089020 THRU 3093735)

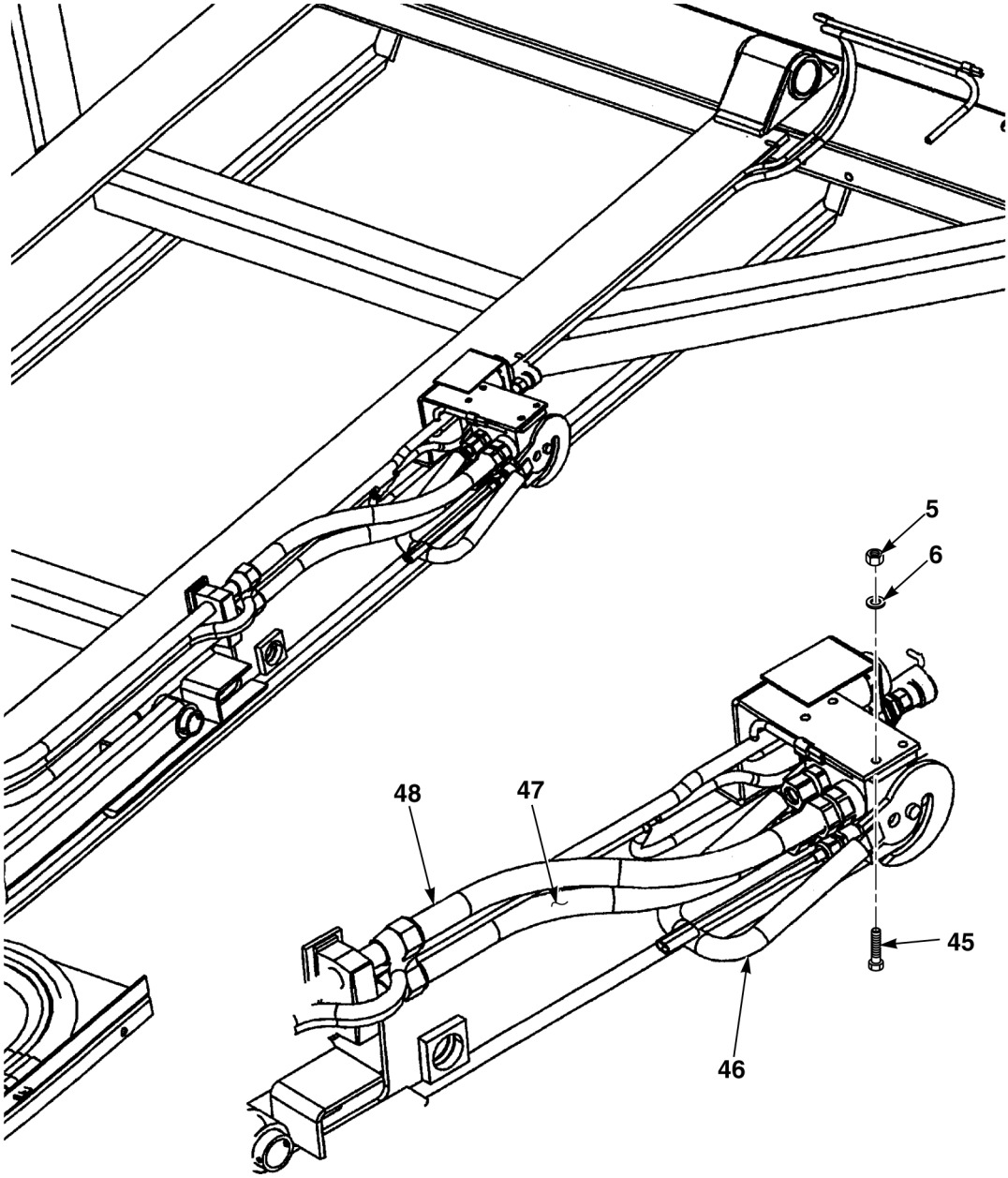


FIG. 6 HYDRAULIC SYSTEM SHEET 4 OF 4 (USED ON S/N 3089020 THRU 3093735)

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 6 HYDRAULIC SYSTEM (used on S/N 3089020 thru 3093735)	
1	PAFZZA	4720-01-538-1873	5X050	403795	HOSE 1 5/16X40	1
2	XDFZZA		5X050	256385	MOUNT AND MOTOR PUMP	1
3	PAFZZA	4720-01-538-3543	5X050	403801	HOSE	1
4	PAFZZA	4730-01-537-0107	5X050	6502-16	ADAPTER	2
5	PAFZZA	5310-00-934-9758	0S1H5	MS35649-202	NUT,PLAIN,HEXAGON	14
6	PAFZZA	5310-00-625-5756	80205	MS15795-812	WASHER,FLAT	29
7	PAFZZA	4730-01-538-5821	53790	4254/254-PP	CLAMP,TWIN HOSE	4
8	PAFZZA	4730-01-538-4223	53790	GD-4D	COVER,CLAMP,TWIN	4
9	PAFZZA	5306-00-226-4837	80204	B1821BH031C300N	SCREW,CAP, HEX HD	10
10	PAFZZA	4720-01-538-7025	5X050	403802	HOSE	1
11	PAFZZA	4730-01-537-2733	5X050	404546	ADAPTER	1
12	PAFZZA	4730-01-538-4796	0S1H5	2704-LN-16	TEE,BULKHEAD	1
13	PAFZZA	5340-01-538-4333	0KPU2	BFKH20-3	HARDWARE PACKAGE	2
14	PAFZZA		0KPU2	SHCS0714/1.75	•SCREW,CAP,SOCKET HD	4
15	PAFZZA		0KPU2	HCLE-07	•WASHER,LOCK	4
16	PAFZZA		0KPU2	OR-222	•O-RING	1
17	PAFZZA	4730-01-538-5766	5X050	403732	ADAPTER,FLANGE	2
18	PAFZZA	4730-01-538-1493	5X050	403789	ADAPTER	2
19	PBFLAA	6105-01-484-6790	5X050	403688	MOTOR,PUMP	1
20	PAFZZA	4810-01-538-2120	1B6W4	FV-5307-GGN KIT	VALVE,MOTOR MANIFOLD	1
21	PAFZZA	4730-01-538-3968	0S1H5	6400-16	ADAPTER	1
22	PAFZZA	5945-01-538-3666	5X050	403783	RELAY,FLANGE MOUNT	1
23	PAFZZA	4730-01-537-3110	0S1H5	6400-6-4	ADAPTER	1
24	PAFZZA	4730-01-538-9298	0S1H5	6801-3-2	ADAPTER	1
25	PAFZZA	5305-00-781-3929	80204	B1821BH038C425N	SCREW,CAP, HEX HD	8
26	PAFZZA	4730-01-538-3973	0S1H5	6801-20	ADAPTER	1
27	PBDZZA		1B6W4	FV-5308-ADDGFN KIT	VALVE,HOLD,BOOM	1
28	PAFZZA	4730-01-538-3782	0S1H5	6801-16	ADAPTER	1
29	PAFZZA	4730-01-538-3509	0S1H5	6400-12	ADAPTER	2
30	PAFZZA	4730-01-538-5818	0S1H5	6400-6-8	ADAPTER	1
31	PAFZZA		1C1F4	2P510-1-2-34SM-MOD	COUPLE,QUICK HYDRAULIC	1
32	PAFZZA	5935-01-521-2007	1C1F4	S P510-AL	CONNECTOR ASSEMBLY	1
33	PAFZZA	5310-00-269-4040	81349	M45913/1-10CG5C	NUT,SELF-LOCKING,HEX	20
34	PAFZZA	5310-00-614-3505	96906	MS15795-820	WASHER,FLAT	36
35	PAFZZA	5365-01-538-3911	5X050	256386	SPACER,MOTOR PUMP	4
36	PAFZZA	4720-01-538-3533	5X050	404549	HOSE	1
37	PAFZZA	4720-01-538-3545	5X050	403844	HOSE	1
38	PAFZZA	5305-00-724-7221	80204	B1821BH063C175N	SCREW,CAP,HEXAGON H	4
39	PAFZZA	4720-01-538-1422	5X050	403805	HOSE	1
40	PAFZZA	4730-01-538-4274	5X050	251102	CLAMP,HOSE	1
41	PAFZZA	5306-00-226-4827	80204	B1821BH031C100N	SCREW,CAP,HEX HD	10
42	PAFZZA	4730-01-538-5787	5X050	137450	CLAMP ASSEMBLY,HOSE	6
43	PAFZZA	4720-01-538-2064	5X050	403804	HOSE	1
44	PAFZZA	4720-01-538-9271	5X050	403803	HOSE	1
45	PAFZZA	5305-00-983-6621	96906	MS16997-80	SCREW,CAP,SOCKET HE	6
46	PAFZZA	3010-01-460-1760	1C1F4	P510-1-2-34S-FAL	COUPLING HALF,SHAFT	1

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
47	PAFZZA	4720-01-538-3957	5X050	403798	HOSE	1
48	PAFZZA	4720-01-538-3984	5X050	403799	HOSE	1

END OF FIGURE

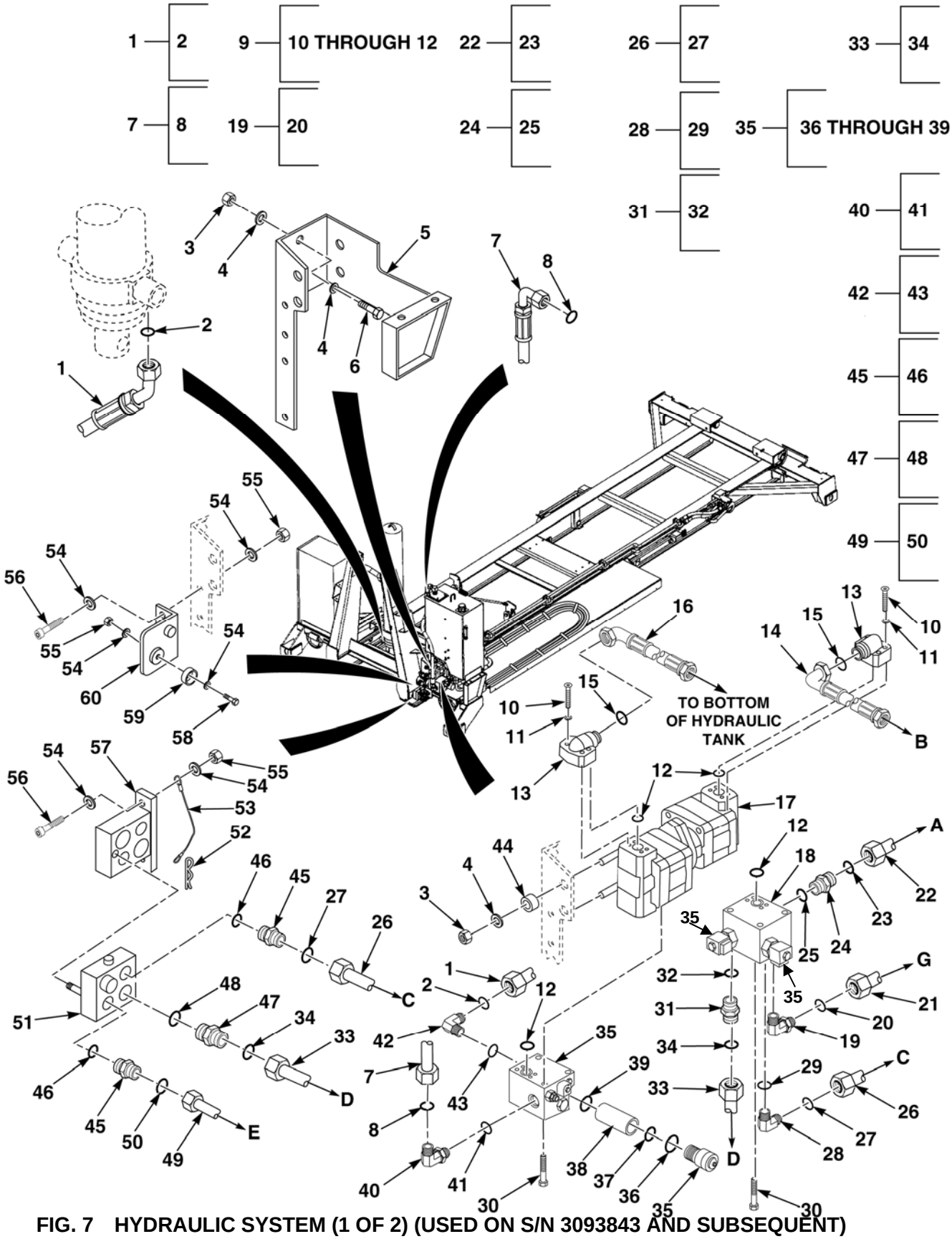


FIG. 7 HYDRAULIC SYSTEM (1 OF 2) (USED ON S/N 3093843 AND SUBSEQUENT)

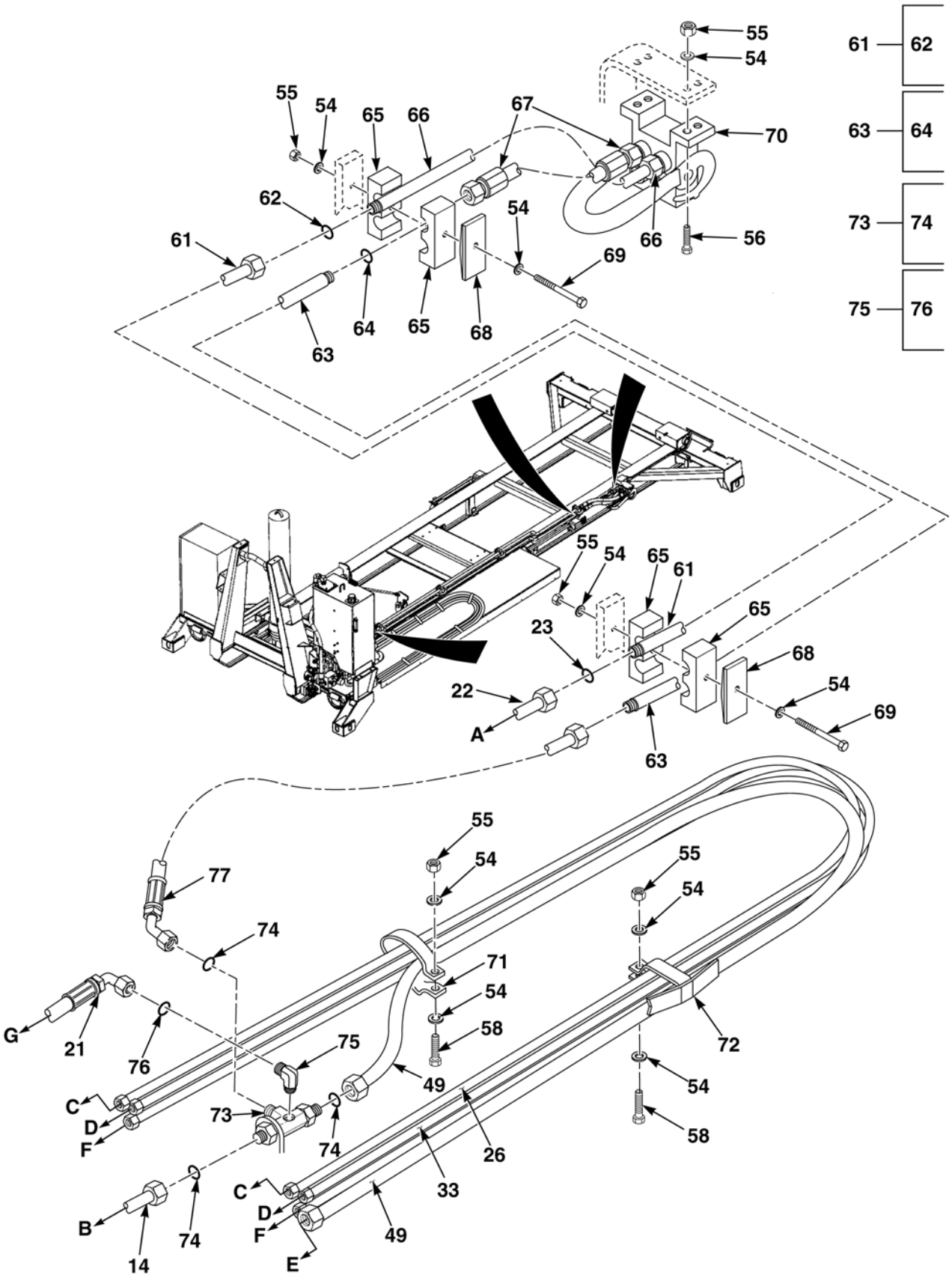


FIG. 7 HYDRAULIC SYSTEM (2 OF 2) (USED ON S/N 3093843 AND SUBSEQUENT)

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 7 HYDRAULIC SYSTEM (USED ON S/N 3093843 AND SUBSEQUENT)	
1	PAFZZA	4720-01-538-4281	5X050	405916	HOSE ASSSEMBLY	1
2	PAFZZA	5331-00-641-3763	81343	MS28775-221	O-RING	2
3	PAFZZA	5310-00-269-4040	81349	M45913/1-10CG5C	NUT,SELF-LOCKING,HEX	20
4	PAFZZA	5310 00 6143505	80205	MS15795-820	WASHER,FLAT	36
5	XDFZZA		5X050	256385	MOUNT,AND MOTOR PMP	1
6	PAFZZA	5305-00-724-7221	80204	B1821BH063C175N	SCREW,CAP,HEXAGON HD	4
7	PAFZZA	4720-01-538-2055	5X050	405917	HOSE ASSSEMBLY	1
8	PAFZZA	5331-00-559-6184	81343	MS28775-326	O-RING	2
9	PAFZZA	5340-01-538-4333	0KPU2	BFKH20-3	HARDWARE PACKAGE	2
10	XAFZZA		0KPU2	SHCS0714/1.75	•SCREW,CAP,SOCKET HED	4
11	XAFZZA		0KPU2	HCLE-07	•WASHER,LOCK	4
12	XAFZZA		0KPU2	OR-222	•O-RING	4
13	PAFZZA	4730-01-538-3784	5X050	405897	FLANGE,ADAPTER	2
14	PAFZZA	4720-01-538-2034	5X050	405910	HOSE ASSSEMBLY	1
15	PAFZZA	5331-01-538-2769	5X050	404823	O-RING	2
16	PAFZZA	4720-01-538-2815	5X050	405906	HOSE ASSSEMBLY	1
17	PAFZZA	6105-01-484-6790	5X050	403688	MOTOR,PUMP	1
18	PAFZZA	4810-01-538-2120	1B6W4	FV-5307-GGN KIT	VALVE,MOTOR MANIFOL	1
19	PAFZZA	4730-01-538-1810	0S1H5	FGFF6801-6-4	ELBOW,90 DEG	1
20	PAFZZA	5331-01-538-1716	0S1H5	90DFF-6	•O-RING	1
21	PAFZZA	4720-01-538-3118	5X050	405922	HOSE ASSSEMBLY	1
22	PAFZZA	4720-01-538-1878	5X050	405909	HOSE ASSSEMBLY	1
23	PAFZZA	5331-00-579-7916	81343	MS28775-115	O-RING	2
24	PAFZZA	4730-01-538-2030	0S1H5	FF6400-12-16	ADAPTER,STRAIGHT	1
25	PAFZZA	5331-01-538-4351	0S1H5	90DFF-12	•O-RING	1
26	PAFZZA	4720-01-538-2072	5X050	405912	HOSE ASSSEMBLY	1
27	PAFZZA	5331-00-579-7914	81343	MS28775-217	O-RING	2
28	PAFZZA	4730-01-538-1710	0S1H5	FGFF6801-12-16	ELBOW,90 DEG	1
29	PAFZZA	5331-01-538-4351	0S1H5	90DFF-12	•O-RING	1
30	PAFZZA	5305-00-781-3929	80204	B1821BH038C425N	SCREW,CAP, HEX HD	8
31	PAFZZA	4730-01-538-1645	0S1H5	FF-6400-6-4	ADAPTER	1
32	PAFZZA	5331-01-538-1716	0S1H5	90DFF-6	•O-RING	1
33	PAFZZA	4720-01-538-5755	5X050	405914	HOSE ASSSEMBLY	1
34	PAFZZA	5331-00-579-7916	81343	MS28775-115	O-RING	2
35	PAFZZA		1B6W4	FV-5308-ADDGFN K	VALVE,PUMP MANIFOLD	1
36	PAFZZA	5331-01-538-3209	1B6W4	400125	•O-RING,BOWL	1
37	PAFZZA	5330-01-538-8758	1B6W4	4000225	•RING,BACK-UP	1
38	PAFZZA	4330-01-538-3852	1B6W4	9351927	•ELEMENT	1
39	PAFZZA		1B6W4	FF2106/119/75 VI	•O-RING,ELEMENT	1
40	PAFZZA	4730-01-538-6761	0S1H5	FGFF6801-20	ELBOW,90 DEG	1
41	PAFZZA	5331-01-538-2876	0S1H5	90DFF-20	•O-RING	1
42	PAFZZA	4730-01-538-1883	0S1H5	FGFF6801-16	ADAPTER	1
43	PAFZZA	5331-01-538-4219	0S1H5	90DFF-16	•O-RING	1
44	PAFZZA	5365-01-538-3911	5X050	256386	SPACER,MOTOR PUMP	4
45	PAFZZA	4730-01-538-1841	0S1H5	FF6400-12	ADAPTER,STRAIGHT	2
46	PAFZZA	5331-01-538-4351	0S1H5	90DFF-12	•O-RING	1

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
47	PAFZZA	4730-01-538-7002	0S1H5	FF6400-6-8	ADAPTER,STRAIGHT	1
48	PAFZZA	5331-01-5381716	0S1H5	90DFF-6	•O-RING	1
49	PAFZZA	4720-01-538-3976	5X050	405913	HOSE ASSSEMBLY	1
50	PAFZZA	5331-00-579-7914	81343	MS28775-217	O-RING	2
51	PAFZZA		1C1F4	2P510-1-2-34SM-M	COUPLE,QUICK HYDRAU	1
52	PAFZZA	5315-01-318-9724	0CUJ4	HAIR-8	PIN,LOCK	1
53	MFFZZA		39428	90312A310-10	LANYARD MAKE FROM LANYARD KIT P/N 97840A66 (39428)	1
54	PAFZZA	5310-00-625-5756	80205	MS15795-812	WASHER,FLAT	29
55	PAFZZA	5310-00-934-9758	80205	MS35649-202	NUT,PLAIN,HEXAGON	14
56	PAFZZA	5305-00-983-6621	96906	MS16997-80	SCREW,CAP,SOCKET HEX	6
57	PAFZZA	5935-01-521-2007	1C1F4	SP510-AL	CONNECTOR ASSEMBLY	1
58	PAFZZA	5306-00-226-4827	80204	B1821BH031C100N	SCREW,CAP, HEX HD	10
59	PAFZZA	5340-01-538-1867	5X050	259216	CAP,DUST	1
60	XDFZZA		5X050	139124	BRACKET ASSEMBLY	1
61	XDFZZA		5X050	405900	TUBE,HYDRAULIC SUPPLY	1
62	PAFZZA	5331-00-579-7914	81343	MS28775-217	O-RING	1
63	XDFZZA		5X050	405923	TUBE,HYDRAULIC RETURN	1
64	PAFZZA	5331-00-641-3763	81343	MS28775-221	O-RING	2
65	PAFZZA	4730-01-538-5821	53790	4254/254-PP	CLAMP,TWIN HOSE	4
66	PAFZZA	4720-01-538-1861	5X050	405907	HOSE ASSSEMBLY	1
67	PAFZZA	4720-01-538-2033	5X050	405908	HOSE ASSSEMBLY	1
68	PAFZZA	4730-01-538-4223	53790	GD-4D	CLAMP,TWIN HOSE COVER	4
69	PAFZZA	5306-00-226-4837	80204	B1821BH031C300N	SCREW,CAP, HEX HD	4
70	PAFZZA	3010-01-460-1760	1C1F4	P510-1-2-34S-FAL	COUPLING HALF,SHAFT	1
71	PAFZZA	4730-01-538-4274	5X050	251102	CLAMP,HOSE	1
72	PAFZZA	4730-01-538-5787	5X050	137450	CLAMP ASSEMBLY,HOSE	6
73	PAFZZA	4730-01-539-1449	5X050	273648	TEE,BULKHEAD	1
74	PAFZZA	4730-01-5384219	0S1H5	90DFF-16	•O-RING	3
75	PAFZZA	5331-01-538-3791	0S1H5	FGFF6801-6	ADAPTER	1
76	PAFZZA	5331-01-538-1716	0S1H5	90DFF-6	•O-RING	1
77	PAFZZA	4720-01-538-3528	5X050	405911	HOSE ASSSEMBLY	1

END OF FIGURE

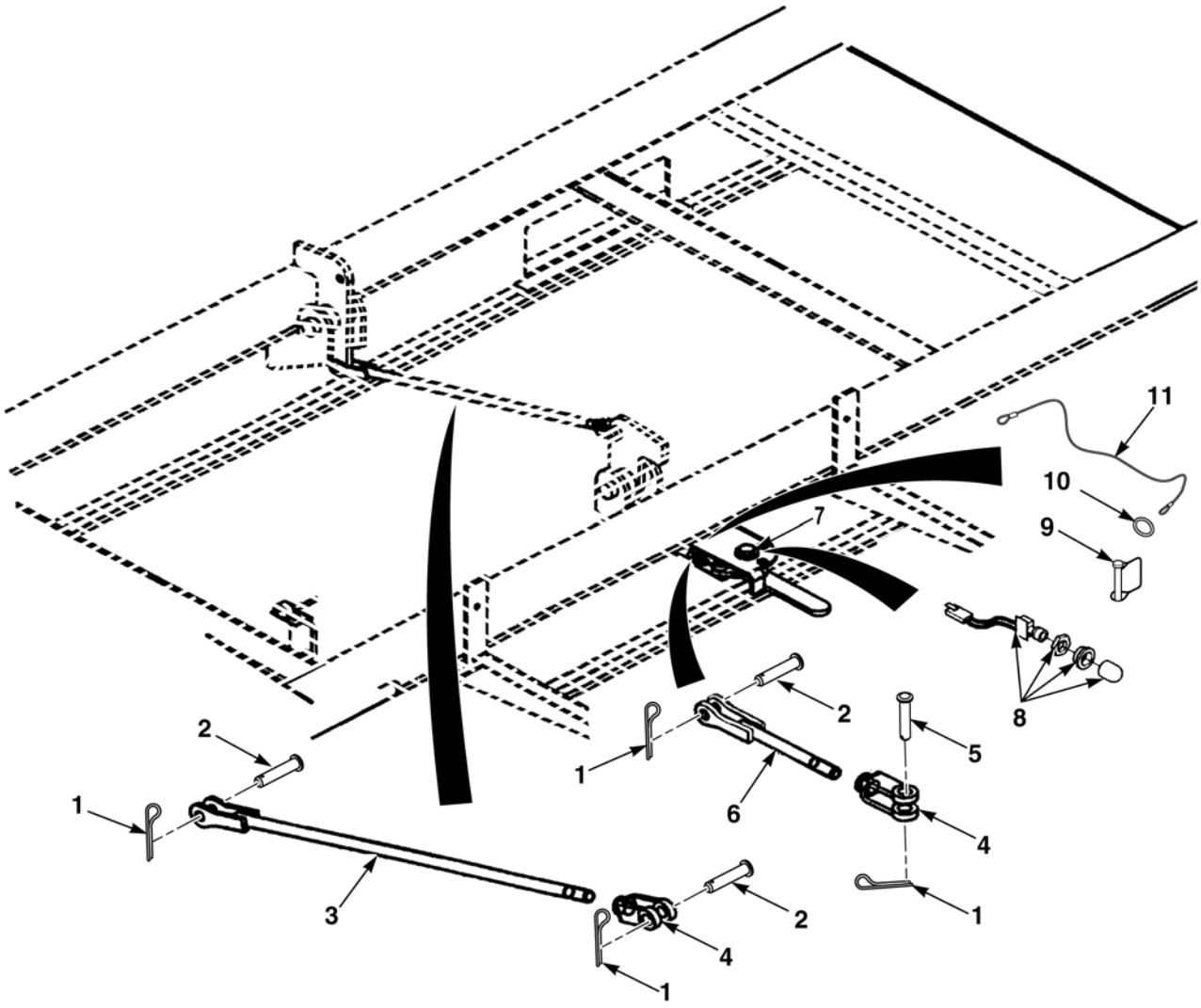


FIG. 8 LOCK DOWN PARTS

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 8 LOCK DOWN PARTS	
1	PAFZZA	5315-00-236-8357	80205	MS24665-368	PIN,COTTER	4
2	PAFZZA	5315-01-538-6763	OCUJ4	CP260	PIN,CLEVIS	2
3	PAFZZA	3040-01-539-2839	5X050	137440	STUD ASSY,CROSS	1
4	PAFZZA	5340-01-539-1438	5X050	402459	YOKE	2
5	PAFZZA	5315-01-446-9177	79146	019070	PIN,CLEVIS	2
6	PAFZZA	3040-01-538-4743	5X050	137441	STUD ASSY,LEVER	1
7	7XDFZZA		5X050	132896	HANDLE, LOCK	1
8	PAFZZA	5930-01-446-0980	5X050	129871	SWITCH ASSEMBLY	1
9	PAFZZA	5315-01-507-0537	5X050	403502	PIN,SNAP LOCK	1
10	PAFZZA	5325-01-536-3421	OCUJ4	RING-17	RING SPLIT	1
11	MFFZZA		39428	90312A310-10	LANYARD MAKE FROM LANYARD KIT P/N 97840A66 (39428)	1

END OF FIGURE

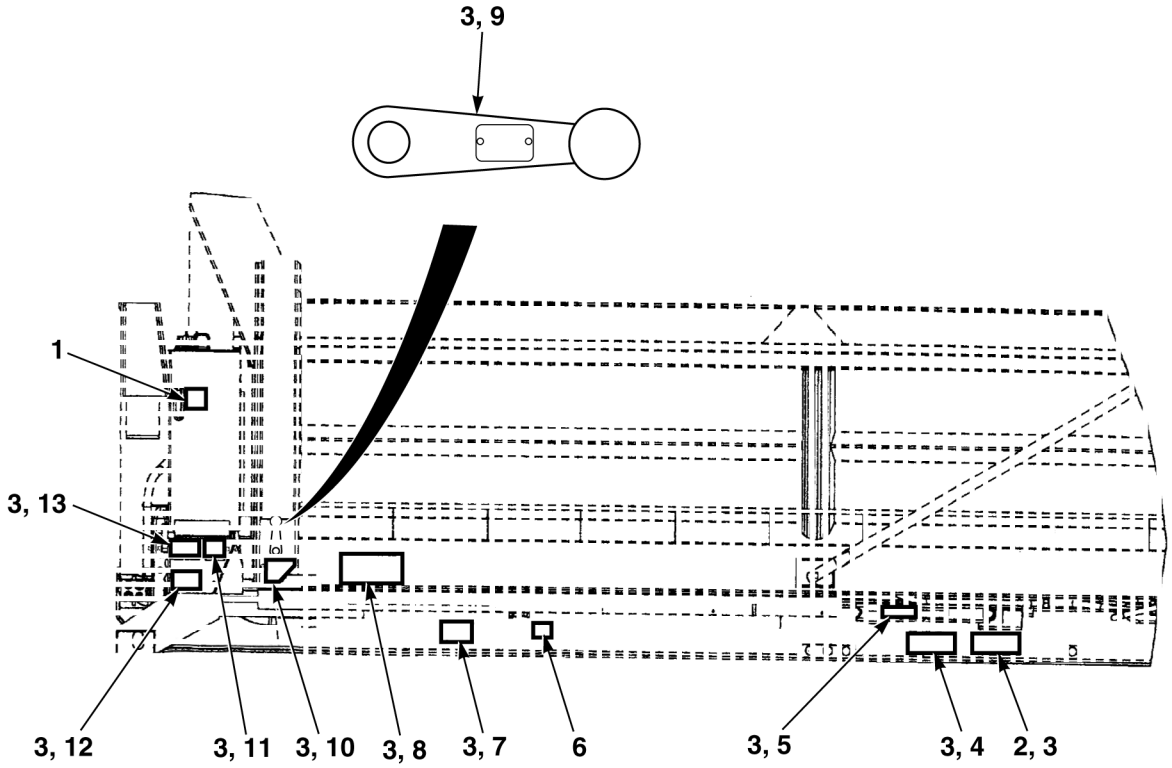


FIG. 9 DECAL PLACEMENT

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 9 DECAL PLACEMENT	
1	PCFZZA	7690-01-445-8961	5X050	403492	MARKER ID	1
2	PAFZZA	7690-01-445-9933	5X050	403377	MARKER ID	2
3	PAFZZA	5320-00-967-8720	80205	MS24662-9	RIVET,BLIND	62
4	PAFZZA	7690-01-445-8976	5X050	403375	MARKER ID	2
5	PAFZZA	7690-01-445-8973	5X050	403376	MARKER ID	2
6	PAFZZA	7690-01-538-3143	5X050	403827	DECAL,TRAVEL LOCK	1
7	PAFZZA	7690-01-445-9903	5X050	403374	MARKER ID	2
8	PAFZZA		5X050	403826	DATA PLATE, LUBE	1
9	PAFZZA	7690-01-538-3977	5B752	0920-590312	DATAPLATE,NAMEPLATE	1
10	PAFZZA	7690-01-538-3122	5B752	0920-590311	DATAPLATE,CAUTION	1
11	PAFZZA		5X050	406645	DATAPLATE, WARRANTY	1
12	PAFZZA		5X050	406656	DATAPLATE,IDENTIFICATION	1
13	PAFZZA	7690-01-538-5784	5X050	403829	DATA PLATE,TRANSPORT	1
					END OF FIGURE	

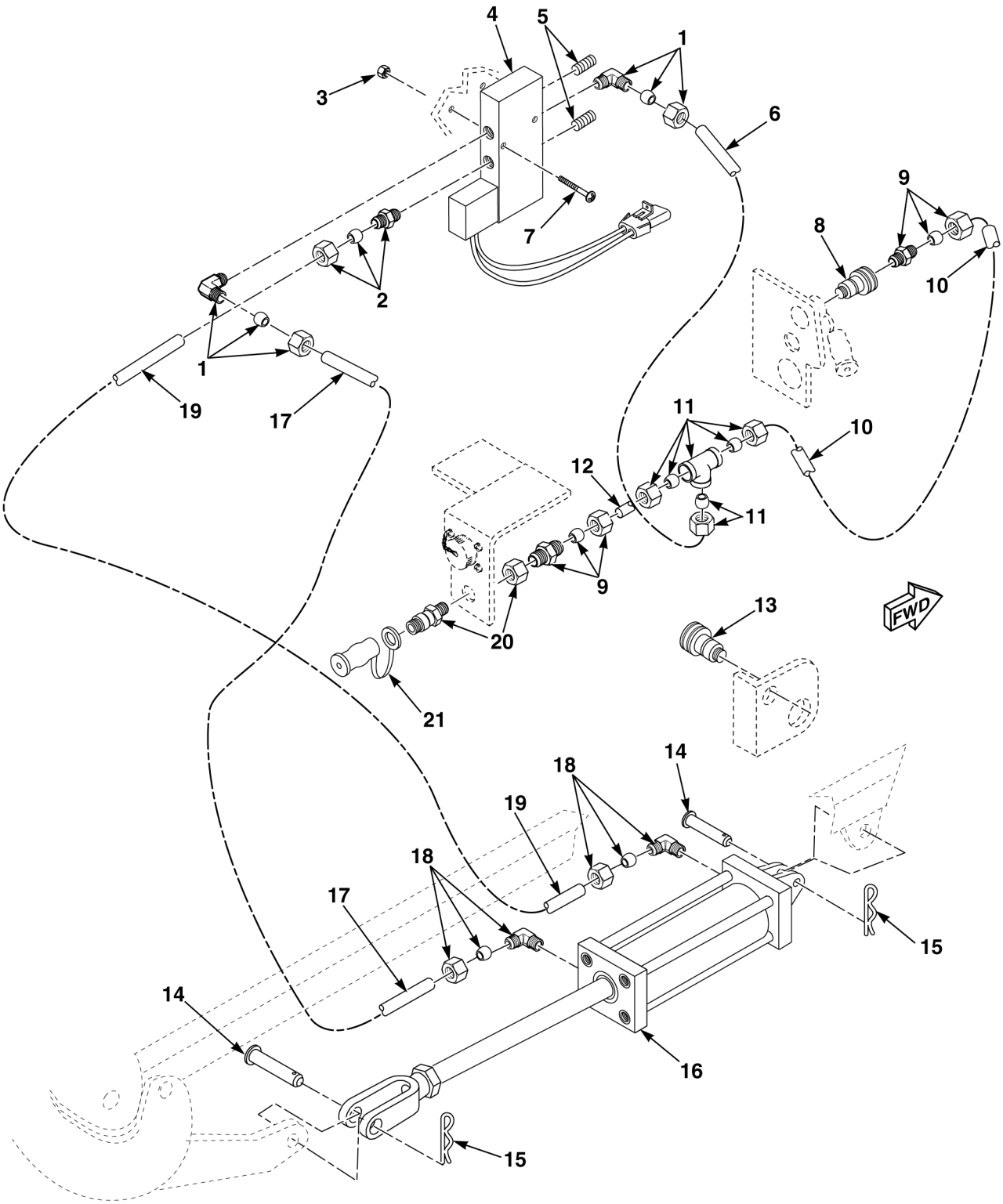


FIG. 10 AIR SYSTEM

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 10 AIR SYSTEM	
1	PAFZZA	4730-01-538-3633	79146	016984	ELBOW,COMPRESSION	2
2	PAFZZA	4730-01-388-4866	79146	016884	CONNECTOR,COMPRESSI	1
3	PAFZZA	5310-00-934-9757	80205	MS35649-282	NUT,PLAIN,HEXAGON	2
4	PAFFFZ	4810-01-538-5753	5X050	133321	VALVE ASSY	1
5	PAFZZA	4730-01-538-5837	5X050	403835	MUFFLER EXHAUST	2
6	MFFZZA		5X050	403822-61	TUBE,NYLON,1/2 MAKE FROM P/N 020055 (79146),61 INCH	1
7	PAFZZA	5305-00-984-6199	96906	MS35206-251	SCREW,MACHINE	2
8	PAFZZA	4730-00-189-4731	73992	43	COUPLING,HALF,QUICK	1
9	PAFZZA	4730-01-538-3617	79146	016884	CONNECTOR,COMPRESSI	2
10	MFFZZA		5X050	403822-114	TUBE,NYLON,1/2 MAKE FROM P/N 020055 (79146),114 INCH	1
11	PAFZZA	4730-01-388-4866	79146	016480	T,ADAPTER	1
12	MFFZZA		5X050	403822-16	TUBE,NYLON,1/2 MAKE FROM P/N 020055 (79146),16 INCH	1
13	PAFZZA	4730-01-538-1773	5X050	403818	COUPLER,QUICK CAP	1
14	PAFZZA	5315-01-538-2154	0CUJ4	CP-224	PIN,CLEVIS	2
15	PAFZZA	5315-01-318-9724	0CUJ4	HAIR-8	PIN,LOCK	2
16	PAFZZA	3040-01-447-2738	5X050	403607	CYLINDER ASSEMBLY,A	1
17	MFFZZA		5X050	403822-55	TUBE,NYLON,1/2 MAKE FROM P/N 020055 (79146),55 INCH	1
18	PAFZZA	4730-01-538-4742	79146	404423	ELBOW,COMPRESSION	2
19	MFFZZA		5X050	403822-43	TUBE,NYLON,1/2 MAKE FROM P/N 020055 (79146),43 INCH	1
20	PAFZZA	5306-01-538-1865	79146	035087	COUPLING FRAME	1
21	PAFZZA	5340-01-538-5785	5X050	400498	PLUG, CAP	2
					END OF FIGURE	

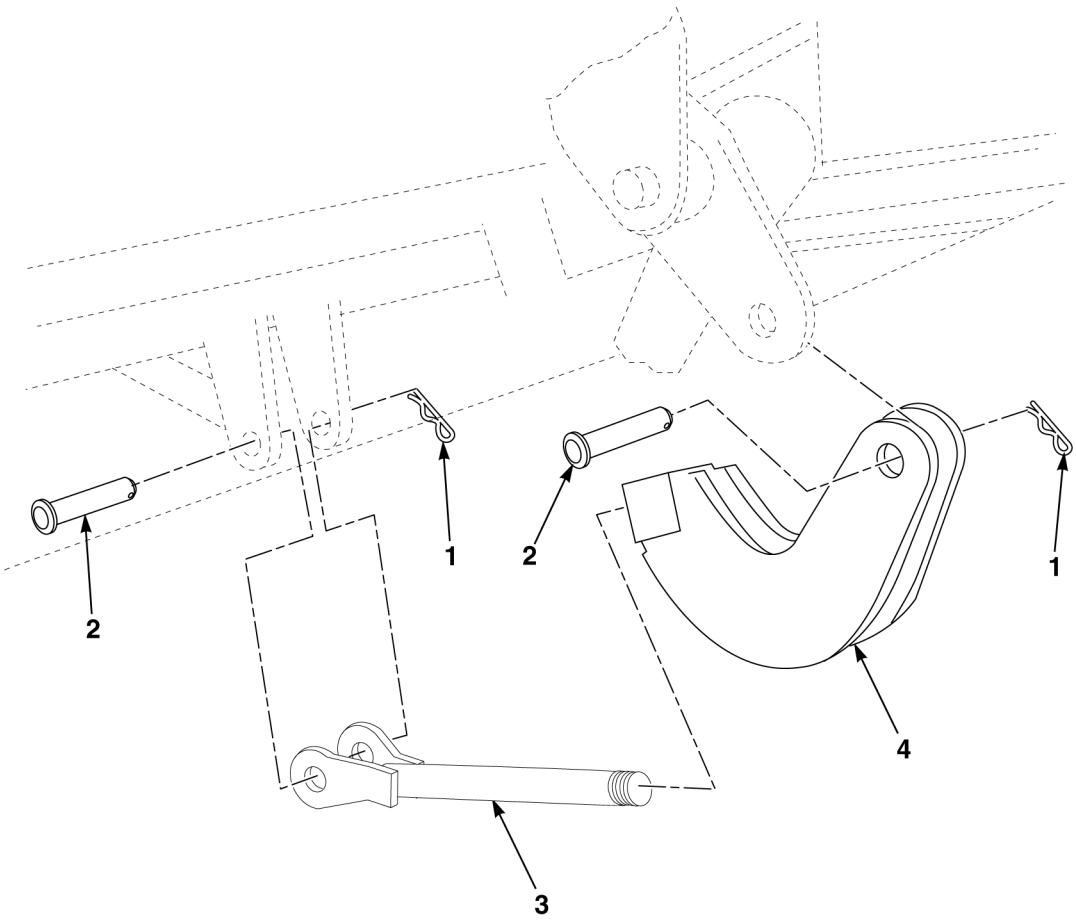


FIG. 11 TAILGATE LINKAGE ASSEMBLY

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION	(7) QTY
					FIG. 11 TAILGATE LINKAGE ASSEMBLY	
1	PAFZZA	5315-01-538-2154	0CUJ4	CP-224	PIN, CLEVIS	2
2	PAFZZA	5315-01-318-9724	0CUJ4	HAIR-8	PIN, LOCK	2
3	PAFZZA		5X050	123924	STUD ASSY, AIR TRIP	1
4	PAFZZA		5X050	132689	LINK, OFFSET	1
					END OF FIGURE	

APPENDIX B

TORQUE LIMITS

B-1. SCOPE.

This section provides general torque limits for the screws, hoses and fittings used on the truck. Special torque limits are listed in the maintenance procedures for applicable components. The general torque limits given in this appendix shall be used when specific torque limits are not indicated in the maintenance procedure. These general torque limits cannot be applied to screws that retain rubber components. The rubber components will be damaged before the torque limit is reached. If a special torque limit is not given in the maintenance instructions, tighten the screw or nut until it touches the metal bracket then tighten it one more turn.

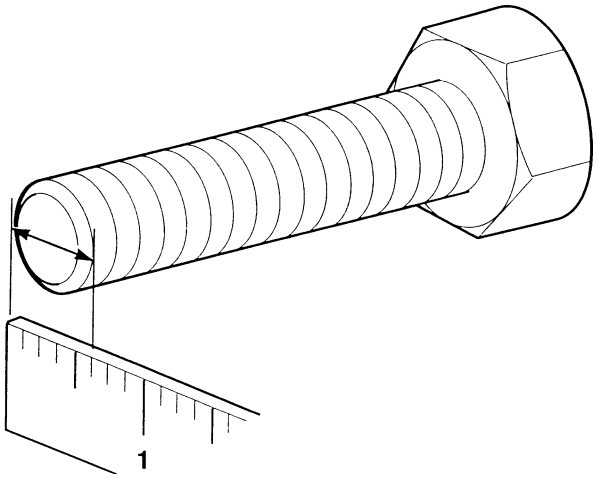
B-2. TORQUE LIMITS.

Table B-1 lists the torque limits for wet flange nuts. Table B-2 lists the torque limits for wet socket head capscrews. Table B-3 lists dry torque limits for capscrews. Dry torque limits are used on screws that do not have high pressure lubricants applied to the threads. Table B-4 lists wet torque limits for capscrews. Wet torque limits are used on screws that have high pressure lubricants applied to the threads. Table B-5 lists the torque limits for SAE 37 degree flare hose connections. Table B-6 lists the torque limits for SAE 45 degree flare hose connections. Table B-7 lists the torque limits for ORS pre-formed packing face seal hose connections. Table B-8 lists the torque limits for NPSM swivel connections.

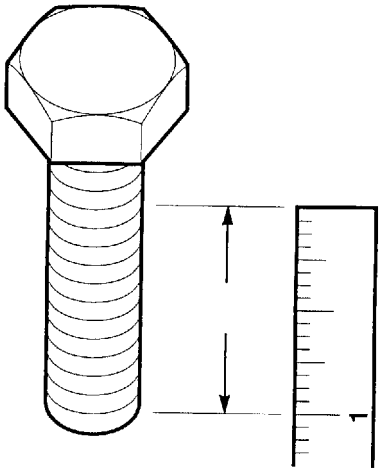
B-3. HOW TO USE TORQUE TABLE.

a. ***Screws and Nuts.***

(1) Measure the diameter of the screw you are installing with a ruler.



C-3. HOW TO USE TORQUE TABLE (CONT).



(2) Measure out one inch with a ruler and count the number of threads per inch.

(3) Under the heading SIZE, look down the left hand column until you find the diameter of the screw you are installing (there will usually be two lines beginning with the same size).

(4) In the second column under SIZE, find the number of threads per inch that matches the number of threads per inch you counted in Step 2. (Not required for metric screws.)

(5) To find the grade screw you are installing, match the markings on the head to the correct picture of CAPSCREW HEAD MARKINGS on the torque table.

(6) Look down the column under the picture you found in Step 5 until you find the torque limit (lb-ft or N·m) for the diameter and threads per inch of the screw you are installing.

(7) Use wet torque values.

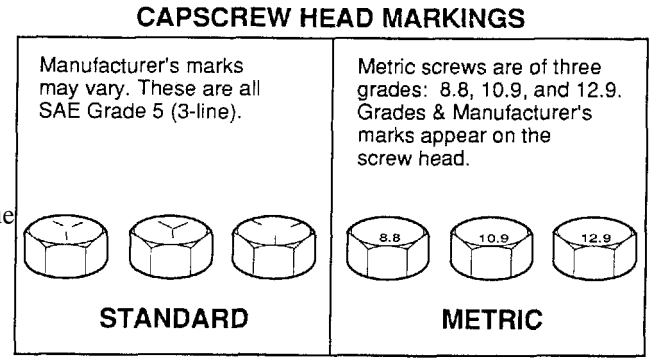


Table B-1. Torque Limits For Wet Flange Nuts

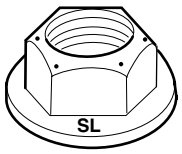
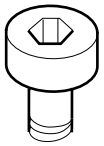
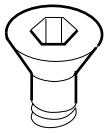
SPIRALOCK FLANGE NUT MARKINGS GRADE 8	DIAMETER		THREADS PER INCH	TORQUE	
	IN.	MM		LB-FT	N·m
	1/4	6.35	20	15	20
	5/16	7.94	18	25	34
	3/8	9.65	16	45	61
	1/2	12.70	13	110	149
	5/8	15.87	11	210	285
	3/4	19.05	10	375	508

Table B-2. Torque Limits For Wet Socket Head Cap Screws

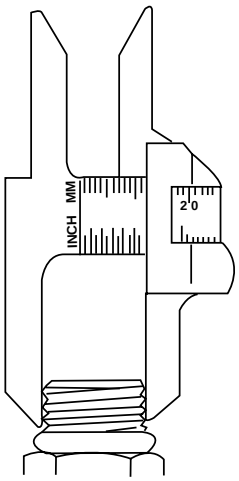
	TORQUE IN FT. LBS. (CAP SCREWS) LUBED		
SOC HEAD/12 PT.  SOC FLAT HEAD 	SIZE	SOC HD OR 12 PT	SOC FLAT HD
	.10-24	5	2.5
	.25-20	12	6
	.31-18	25	12
	.38-16	44	22
	.50-13	70	36
	.56-12	106	53
	.62-11	212	106
	.75-10	375	187
	1.00-8	781	

b. Hoses and Fittings.

NOTE

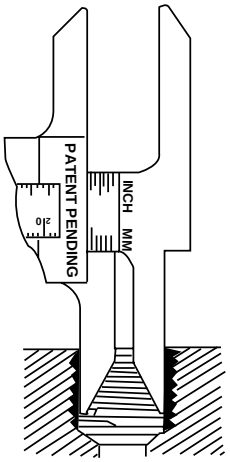
Most fluid piping system sizes are measured by dash numbers. These are universally used abbreviations for the size of the component expressed as the numerator of the fraction with the denominator always being 16. For example, a -04 port is 4/16 or 1/4-inch. Dash numbers are usually nominal (in name only) and are abbreviations that make ordering of components easier.

(1) Measure the I.D./O.D. diameter with a caliper as shown.



O.D.
(MALE THREADS)

(2) Under the heading MALE THREAD O.D. and FEMALE THREAD I.D., match the measurements with the row in table to determine proper torque.



I.D.
(FEMALE THREADS)

(3) To find the sealing surface angle, use a protractor and measure the sealing surface parallel to the center line of the fitting.

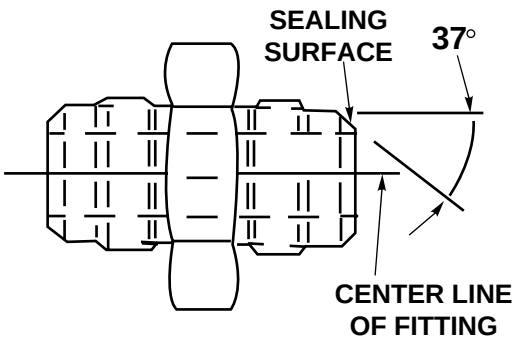
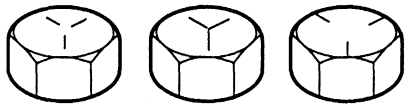
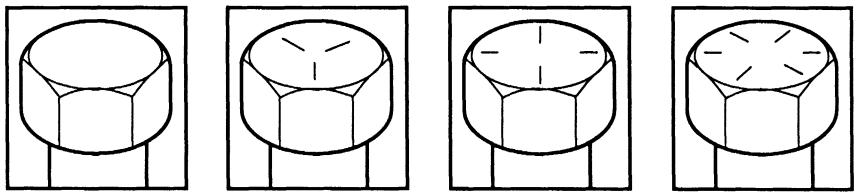


Table B-3. Torque Limits For Dry Fasteners

CAPSCREW HEAD MARKINGS



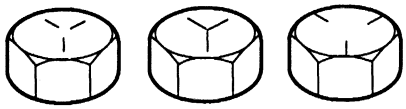


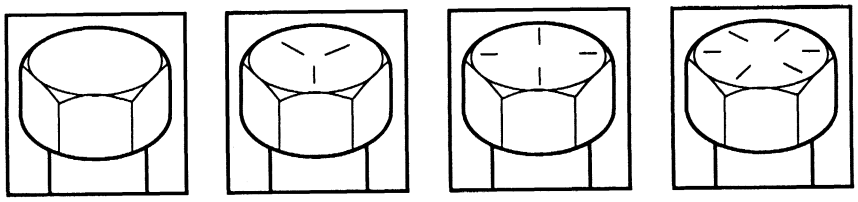
Manufacturer's marks may vary.
These are all SAE Grade 5 (3-line).

SIZE			TORQUE							
			SAE GRADE NO. 2		SAE GRADE NO. 5		SAE GRADE NO. 6 or 7		SAE GRADE NO. 8	
DIA. INCHES	THREADS PER INCH	MILLIMETERS	POUNDS FEET	NEWTON METERS	POUNDS FEET	NEWTON METERS	POUNDS FEET	NEWTON METERS	POUNDS FEET	NEWTON METERS
1/4	20	6.35	5	7	8	11	10	14	12	16
1/4	28	6.35	6	9	10	14	12	16	14	19
5/16	18	7.94	11	15	17	23	21	28	25	34
5/16	24	7.94	12	16	19	26	24	33	25	34
3/8	16	9.53	20	27	30	41	40	54	45	61
3/8	24	9.53	23	31	35	47	45	61	50	68
7/16	14	11.11	30	41	50	68	60	81	70	95
7/16	20		35	47	55	75	70	95	80	108
1/2	13	12.70	50	68	75	102	95	129	110	149
1/2	20		55	75	90	122	100	136	120	163
9/16	12	14.29	65	88	110	149	135	183	150	203
9/16	18		75	102	120	163	150	203	170	231
5/8	11	15.88	90	122	150	203	190	258	220	298
5/8	18		100	136	180	244	210	285	240	325
3/4	10	19.05	160	217	260	353	320	434	380	515
3/4	16		180	244	300	407	360	488	420	570
7/8	9	22.23	140	190	400	542	520	705	600	814
7/8	14		155	210	440	597	580	786	660	895
1	8	25.40	220	298	580	786	800	1085	900	1220
1	12		240	325	640	868	860	1166	1000	1356
1-1/8	7	25.58	300	407	800	1085	1120	1519	1280	1736
1-1/8	12		340	461	880	1193	1260	1709	1440	1953
1-1/4	7	31.75	420	570	1120	1519	1580	2142	1820	2468
1-1/4	12		460	624	1240	1681	1760	2387	2000	2712
1-3/8	6	34.93	560	759	1460	1980	2080	2820	2380	3227
1-3/8	12		640	868	1680	2278	2380	3227	2720	3688
1-1/2	6	38.10	740	1003	1940	2631	2780	3770	3160	4285
1-1/2	12		840	1139	2200	2983	3100	4204	3560	4827

Table B-4. Torque Limits For Wet Fasteners

CAPSCREW HEAD MARKINGS

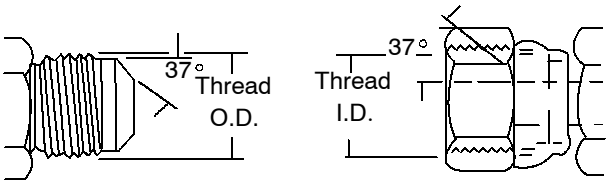




Manufacturer's marks may vary.
These are all SAE Grade 5 (3-line).

SIZE			TORQUE							
			SAE GRADE NO. 2		SAE GRADE NO. 5		SAE GRADE NO. 6 or 7		SAE GRADE NO. 8	
DIA. INCHES	THREADS PER INCH	MILLIMETERS	POUNDS FEET	NEWTON METERS	POUNDS FEET	NEWTON METERS	POUNDS FEET	NEWTON METERS	POUNDS FEET	NEWTON METERS
1/4	20	6.35	4	6	6	8	8	11	9	12
1/4	28	6.35	5	7	7	9	9	12	10	14
5/16	18	7.94	8	11	13	18	16	22	18	24
5/16	24	7.94	9	12	14	19	18	24	20	27
3/8	16	9.53	15	20	23	31	30	41	35	47
3/8	24	9.53	17	23	25	34	30	41	35	47
7/16	14	11.11	24	33	35	47	45	61	55	75
7/16	20		25	34	40	54	50	68	60	81
1/2	13	12.70	35	47	55	75	70	95	80	108
1/2	20		40	54	65	88	80	108	90	122
9/16	12	14.29	50	68	80	108	100	136	110	149
9/16	18		55	75	90	122	110	149	130	176
5/8	11	15.88	70	95	110	149	140	190	170	231
5/8	18		80	108	130	176	160	217	180	244
3/4	10	19.05	120	163	200	271	240	325	280	380
3/4	16		140	190	220	298	280	380	320	434
7/8	9	22.23	110	149	300	407	400	542	460	624
7/8	14		120	163	320	434	440	597	500	678
1	8	25.40	160	217	440	597	600	814	680	922
1	12		170	231	480	651	660	895	740	1003
1-1/8	7	25.58	220	298	600	814	840	1139	960	1320
1-1/8	12		260	353	660	895	940	1275	1080	1464
1-1/4	7	31.75	320	434	840	1139	1100	1492	1360	1844
1-1/4	12		360	488	920	1248	1320	1790	1500	2034
1-3/8	6	34.93	420	570	1100	1492	1560	2115	1780	2414
1-3/8	12		460	624	1260	1709	1780	2414	2040	2776
1-1/2	6	38.10	560	760	1460	1980	2080	2820	2360	3200
1-1/2	12		620	841	1640	2224	2320	3146	2660	3607

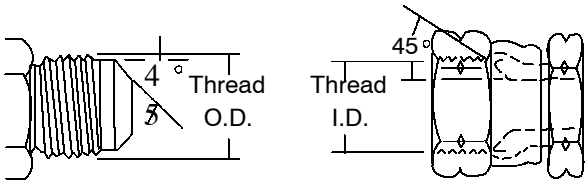
Table B-5. Torque Limits For 37 Degree Flare Hose Connections



Male Half Female Half

INCH SIZE	DASH NO.	THREAD SIZE	TORQUE LB.FT.	TORQUE N·m
1/4	04	7/16-20	11-12	15-16
3/8	06	9/16-18	18-21	24-28
1/2	08	3/4-16	36-39	49-53
5/8	10	7/8-14	57-62	77-84
3/4	12	1 1/16-12	79-87	107-118
7/8	14	1 3/16-12	83-91	113-123
1	16	1 5/16-12	108-113	146-153
1 1/4	20	1 5/8-12	127-133	172-180
1 1/2	24	1 7/8-12	158-167	214-224
2	32	2 1/2-12	245-258	332-350

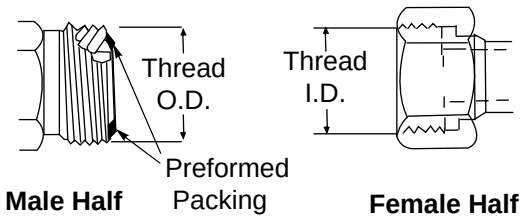
Table B-6. Torque Limits For 45 Degree Flare Hose Connections



Male Half Female Half

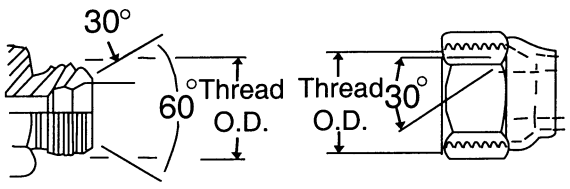
INCH SIZE	DASH NO.	THREAD SIZE	TORQUE LB.FT.	TORQUE N·m
1/4	04	7/16-20	8-9	11-12
3/8	06	5/8-18	18-20	24-27
1/2	08	3/4-16	36-38	49-51
5/8	10	7/8-14	52-54	70-73
3/4	12	1 1/16-14	71-74	97-100

Table B-7. Torque Limits For ORS Preformed Packing Face Seal Hose Connections



INCH SIZE	DASH NO.	THREAD SIZE	TORQUE LB.FT.	TORQUE N·m
1/4	04	9/16-18	10-12	14-16
3/8	06	11/16-16	18-20	24-27
1/2	08	13/16-16	32-35	43-47
5/8	10	1-14	46-50	62-68
3/4	12	1 3/16-12	65-70	88-95
1	16	1 7/16-12	108-113	146-153
1 1/4	20	1 11/16-12	127-133	172-180
1 1/2	24	2-12	158-167	214-226

Table B-8. Torque Limits For NPSM Swivel Connections



INCH SIZE	DASH NO.	NOMINAL THREAD SIZE	TORQUE LB.FT.	TORQUE N·m
1/8	02	1/8-27	3-4	4-5
1/4	04	1/4-18	10-11	14-15
3/8	06	3/8-18	16-18	22-24
1/2	08	1/2-14	25-27	34-37
3/4	12	3/4-14	46-48	62-65
1	16	1-11/2	80-83	108-113
1 1/4	20	1 1/4-11/2	130-134	176-182
1 1/2	24	1 1/2-11/2	160-164	217-222
2	32	2-11/2	170-174	231-240

APPENDIX C

MAINTENANCE ALLOCATION CHART (MAC)

Section I. INTRODUCTION

C-1. GENERAL

a. This section provides a general explanation of all maintenance and repair functions authorized at various maintenance levels.

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 levels.

Field - includes two columns: Unit maintenance and Direct Support maintenance. The Unit maintenance column is divided again into two more subcolumns, C for Operator or Crew and O for Unit maintenance.

Sustainment - includes two subcolumns: General Support (H) and Depot (D).

c. Section III lists the tools and test equipment required for each maintenance function as referenced from Section II.

d. Section IV lists remarks (identified by an alphabetic code in Column 6 of the MAC) to provide a ready reference to the definition of the remark.

C-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.

C-2. MAINTENANCE FUNCTIONS (CONT).

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 equipments used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

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 3rd 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.

(1) Service includes inspection, testing, service, adjustment, alinement, calibration and/or replacement.

(2) Fault locate/troubleshooting is the process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (UUT).

(3) Disassemble/Assemble encompasses the step–by–step taking apart (or breakdown) of a spare/functional group coded item to the level of its least componency identified as maintenance significant (i.e., assigned an SMR code) for the category of maintenance under consideration.

(4) Actions include welding, grinding, riveting, straightening, facing, remachining and/or resurfacing.

j. Overhaul. The 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 material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours/miles, etc.) considered in classifying Army equipment/components.

C-3. EXPLANATION OF COLUMNS IN 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 be "OO."

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

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

d. Column 4, Maintenance Level. Column 4 specifies, by the listing of a work time figure in the appropriate subcolumn(s), the level of maintenance authorized to perform the function listed in Column 3. This figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance levels, appropriate work time figures will be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation 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 for the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance levels are as follows:

Field:
- C Operator or Crew Maintenance
- O Unit Maintenance
- F Direct Support Maintenance

Sustainment:
- H General Support Maintenance
- D Depot Maintenance

*Asterisk indicates level of maintenance authorized to complete this function. No time is established.

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.

C-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, Maintenance Level. The lowest category of maintenance authorized to use the tool or test equipment.

c. Column 3, Nomenclature. Name or identification of the tool or test equipment.

d. Column 4, National Stock Number. The national stock number of the tool or test equipment.

e. Column 5, Tool Number. The manufacturer's part number.

C-5. EXPLANATION OF COLUMNS IN REMARKS, SECTION IV.

a. Column 1, Reference Code. An alphabetic code listed in the sixth column of the MAC and first column of the Remarks section to identify remarks made to the MAC.

b. Column 2, Remarks. The complete text of the remarks made to the MAC.

Section II. MAINTENANCE ALLOCATION CHART

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND TEST EQUIPMENT	(6) REMARKS CODE
			FIELD			SUSTAINMENT			
			UNIT		DS	GS	DEPOT		
			C	O	F	H	D		
0613	Main Wiring Harness	Replace		0.5				1,2	
0613	Jumper Wiring Harness	Replace		0.5				1,2	
0613	PLS Lockout Wiring Harness	Replace		0.5				1,2	
0613	Hydraulic Wiring Harness	Replace		0.5				1,2	
0613	PLS Trailer Harness	Replace		0.5				1,2	
0613	Control Box Lamp	Replace		0.1				1,2	
1810	Dump Body	Inspect	0.1						
1810	Dump Body	Service	1.0						
1810	Dump Body	Inspect		0.1				1	
1810	Dump Body	Replace		1.2				1	
1812	Body Props	Replace		1.0				1	
1812	Hose Tray Cover	Replace		0.5				1,2	
1812	Ladder Bracket	Replace		0.5				1	
1812	Spill Shield	Replace		1.2				1	
1812	Stabilizer Bar	Replace		2.2				1,2	
1812	Tailgate	Replace		1.0				1	
1812	Tailgate Linkage	Replace		0.5				1,2	
1812	Tarp Assembly	Replace		1.9				1	
1812	Travel Lock	Adjust		0.5				1	
1812	Travel Lock	Replace		1.0				1	
2400	Air Cylinder	Replace		0.6				1,2	
2400	Body Up Switch	Replace		0.5				1	
2400	Hydraulic Reservoir	Replace		2.0				1,2	
2400	Hydraulic Reservoir	Service		1.0				1,2	
2400	Hydraulic High Pressure Oil Filter	Replace		1.0				1	
2400	Hydraulic High Pressure Oil Filter Base	Replace		1.2				1	
2400	Manual Override Switch	Replace		0.3				1,2	

Section II. MAINTENANCE ALLOCATION CHART (CONT)

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND TEST EQUIPMENT	(6) REMARKS CODE
			FIELD			SUSTAINMENT			
			UNIT		DS	GS	DEPOT		
			C	O	F	H	D		
2401	Motor Pump Assembly	Replace		1.0				1,2	
2401	Motor Pump Assembly	Adjust		0.5				1,2,3,4,5,6	
2405	Hoist	Replace		2.0				1,2	
2406	Hoses, Lines, and Fittings	Replace		*				1,2	A

Section III. TOOLS AND TEST EQUIPMENT REQUIREMENTS

Reference Code	Maintenance Level	Nomenclature	NSN	Tool Part Number
1	O	Tool Kit, General Mechanics	5180-00-177-7033	SC 5180-95-CL-N26
2	O	Shop Equipment, Common No. 2	4910-00-754-0650	SC 4910-95-A72HR
3	O	Adapter	4730-01-372-9701	TCM20-1/2UNF-V
4	O	Adapter, Straight, PI	4730-01-373-0474	GAH20-1/4NPT-V
5	O	Gage, Pressure Dial	6685-01-373-7976	356021
6	O	Hose Assembly, Nonme	4720-01-373-9871	SMS-20-060-A

Section IV. REMARKS

Reference Code	Remarks
A	No specific times established. Time required for replacement or repair will depend on extent of work required.

APPENDIX D

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

D-1. SCOPE.

This Appendix lists expendable supplies and materials you will need to operate and maintain the Dump Body. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts and Heraldic Items) or CTA 8-100, Army Medical Department Expendable/Durable Items.

D-2. EXPLANATION OF COLUMNS.

a. Column (1)—Item Number. This number is assigned to the entry in the listing and is referenced in the narrative task box to identify the material (e.., “Sealing Compound, Item 3, Appendix D”).

b. Column (2)—Level. This is the maintenance level approved to use the item listed.

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 Commercial and Government Entity (CAGE) code in parentheses followed by the part number.

e. Column (5)—Unit of Measure. Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., PK, GL, or EA). 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 SUPPLIES AND MATERIALS LIST

(1) Item No.	(2) Level	(3) National Stock Number	(4) Description	(5) U/M
1	O	5975-01-273-8133	Cable Ties (96906) MS3367-3 12 inches long, 100 per package	PK
2	O	9150-00-189-6267 9150-01-177-3988 9150-00-191-2772 9150-00-183-7807	Hydraulic Oil, OE/HDO 10 (81349) MIL-L-2104 1 quart can 12 quart box 55 gallon drum bulk	 QT QT GL GL
3	O	8030-01-054-0740 8030-01-166-0675 8030-00-204-9149	Sealing Compound (05972) Loctite #567 50 mL bottle 50 mL tube 250 mL tube	 ML ML ML
4	O	9905-00-720-3577	Tags, Identification (16956) 12-105 white	 EA
5	O	5330-01-125-5704	Preformed Packing (Packing Assortment) (C-7-88)	EA

APPENDIX E

TOOL IDENTIFICATION LIST

Section I. INTRODUCTION

E-1. SCOPE.

This appendix lists all the tools needed to repair the Dump Body.

E-2. GENERAL.

This Appendix is a list of tools, both common and special, test equipment and tool kits used at Unit level to repair the Dump Body. This list is arranged alphabetically and shows the item number, nomenclature, Part Number (P/N), National Stock Number (NSN), and reference when applicable. The item number corresponds to the item number found in the initial setup box of the maintenance procedures.

Section II. COMMON TOOLS, TEST EQUIPMENT AND TOOL KITS

Item No.	Description	CAGE	P/N	NSN
1	Adapter	53790	TCM20-1/2 UNF-V	4730-01-372-9901
2	Adapter, Straight, PI	61349	GAH20-1/4 NPT-V	4730-01-373-0474
3	Cap and Plug Set	19207	10935405	5340-00-450-5718
4	Gage, Pressure, Dial	61349	356021	6685-01-373-7976
5	Goggles, Industrial	80204	ANS1 Z87.1	4140-00-269-7912
6	Hose Assembly, Nonme	53790	SMS-20-060-A	4720-01-373-9871
7	Jack, Hydraulic, Hand	99696	5029209-111-101	5120-00-224-7330
8	Jackstand, Trestle	79805	306	4910-00-251-8013
9	Multimeter	80058	ANURM105C	6625-00-999-6282
10	Pan, Drain (4 gal)	36540	17942	4940-00-387-9592
11	Tool Kit, General Mechanic's: Automotive	50980	SC-5180-90-CL-N26	5180-00-177-7033
12	Wrench, Combination 1 1/4 in.	05506	1173	5120-00-228-9517
13	Wrench, Combination 1 1/2 in.	05047	B107.100	5120-00-277-8834
14	Wrench, Combination 2 in.	05506	1190	5120-00-957-3115
15	Wrench, Combination 1 3/8 in.	05506	1176	5120-00-228-9519
16	Wrench, Combination 1 5/8 in.	05506	1180	5120-00-016-7144
17	Wrench, Combination 1 7/8 in.	05047	B107.100	5120-00-020-8632

By Order of the Secretary of the Army:

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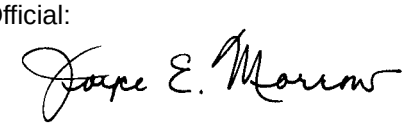

JOYCE E. MARROW
Administrative Assistant to the
Secretary of the Army

0617004

GEORGE W. CASEY, JR.
General, United States Army
Chief of Staff

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PUBLICATION/FORM NUMBER	DATE	TITLE
TM 9-3990-259-13&P	30 June 2007	Operator, Unit & Direct Support Maintenance Manual and RPSTL for Dump Body Module

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON (Provide exact wording of recommended changes, if possible).
	0004 00-2	4-7				Wrong POC is listed.

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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

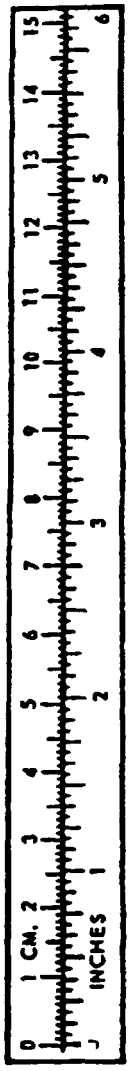
CUBIC MEASURE
1 Cu Centimeter=1000 Cu Millimeters=0.06 Cu Inches
1 Cu Meter=1,000,000 Cu Centimeters=35.31 Cu Feet

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

APPROXIMATE CONVERSION FACTORS

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

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



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