

***TM 5-3805-264-13&P**

**TECHNICAL MANUAL
OPERATOR AND FIELD MAINTENANCE MANUAL
INCLUDING
REPAIR PARTS AND SPECIAL TOOLS LIST
FOR**

**TRUCK, DUMP, HEAVY, BODY
M917A1**

NSN 3805-01-431-1165 (EIC E5C)

M917A2

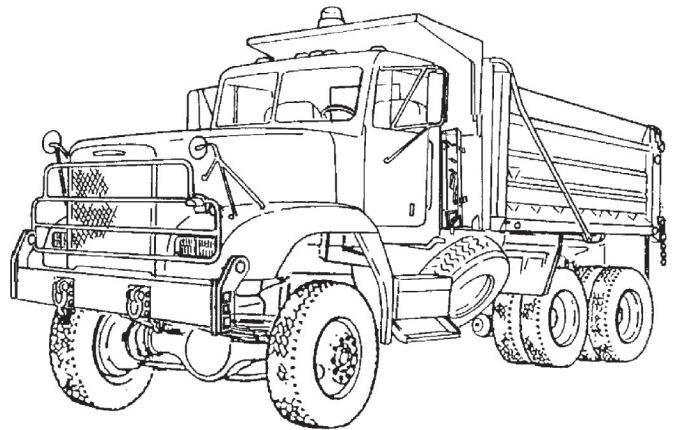
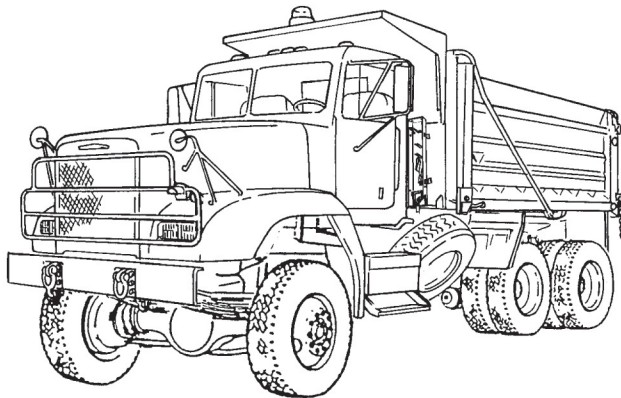
NSN 3805-01-488-7442 (EIC BPB)

M917A1 WITH MATERIAL CONTROL SYSTEM (MCS)

NSN 3805-01-432-8249 (EIC E5D)

M917A2 WITH MATERIAL CONTROL SYSTEM (MCS)

NSN 3805-01-488-6963 (EIC BA4)



*This manual supersedes TM 5-3805-264-14&P, dated 12 December 2005, including all changes.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY
30 JUNE 2014**

WARNING SUMMARY

This warning summary contains general safety warnings and hazardous materials warnings that must be understood and applied during operation and maintenance of this equipment. Failure to comply may result in personnel injury or death. Also included are explanations of safety and hazardous materials icons used within the technical manual. For more first aid information, refer to FM 4-25.11.

EXPLANATION OF SAFETY WARNING ICONS



EAR PROTECTION - Headphones over ears show that noise level will harm ears.



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



EYE PROTECTION - Person with goggles shows that the material will injure the eyes.



FLYING PARTICLES - Arrows bouncing off face shield show that particles flying through the air will harm face.



HEAVY OBJECT - Human figure stooping over heavy object shows physical injury potential from improper lifting technique.



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



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



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



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



MOVING PARTS - Hand with fingers caught between gears shows that the moving parts of the equipment present a danger to life or limb.

WARNING SUMMARY - Continued

EXPLANATION OF SAFETY WARNING ICONS - Continued



MOVING PARTS - Human figure with arm caught between gears shows that the moving parts of the equipment present a danger to life or limb.

GENERAL SAFETY WARNING DESCRIPTIONS

WARNING



CARGO COVER OPERATION

Observe the following safety regulations when operating cargo cover:

- Never operate cargo cover under obstructions, such as trees and power lines.
- Ensure that all personnel are clear of rear of dump body and the immediate area of the cover.
- Ensure that chain cover is in place.
- Keep all clothing away from moving parts.
- DO NOT cover load with crank handle installed.
- DO NOT use cargo cover frame as a grabhandle.

Failure to comply may result in personnel injury or death.

WARNING



COMPRESSED AIR

Particles blown by compressed air are hazardous. DO NOT exceed 15 psi (103 kPa) nozzle pressure when drying parts with compressed air. Use a maximum of 30 psi (207 kPa) when cleaning components. DO NOT direct compressed air against human skin. Use caution and wear protective clothing (goggles/shield, gloves, etc.) when working with compressed air. Make sure air stream is directed away from user and other personnel in the area. Failure to comply may result in personnel injury.

WARNING SUMMARY - Continued

GENERAL SAFETY WARNING DESCRIPTIONS - Continued

WARNING



DUMP BODY OPERATION

- Hearing protection is required when performing loading or dumping operations.
 - Ensure that parking brake is set before loading dump body (TM 9-2320-363-10 or TM 9-2320-302-10). If parking brake is not set, dump truck could roll or shift position.
 - Stand clear of dump body during loading operation. Material being loaded could fall on personnel standing too close.
 - NEVER unlock tailgate or operate Material Control System (MCS) tailgate or gates, or operate hydraulic control lever in cab, without first ensuring that all personnel are clear of dump body.
 - NEVER raise dump body without first checking for overhead obstructions such as trees and power lines. Ensure that overhead clearance is sufficient.
 - NEVER raise dump body more than halfway with tailgate or MCS gates closed. If dump body is raised fully without opening tailgate/MCS gates, dump truck center of gravity will shift rearward.
 - DO NOT spread or dump payload with dump truck facing a steep upgrade or a steep side slope. Dump truck may tip over backward or sideways.
 - DO NOT park on a slope. Park on level ground only. Parking on a slope could cause load to shift and dump truck to tip over.
 - 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.
 - Stay at controls while dumping. If dump body leans or shifts to one side, lower it immediately and check for one of the following:
 - underinflated or flat tires
 - tires sinking in soft soil
 - load shifting to one side of body
 - high or gusty wind
 - weak or broken leaf spring
- If one of these or any other problems are found, do not continue dumping until the problem is corrected.
- DO NOT try to loosen a sticky load by pulling forward or backward and braking abruptly.
 - Failure to comply may result in personnel injury, death, and/or damage to equipment.

WARNING SUMMARY - Continued

GENERAL SAFETY WARNING DESCRIPTIONS - Continued

WARNING



HEAVY COMPONENTS

- Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.
- Dump body side boards weigh approximately 65 lb (30 kg) each. Two personnel are required to install or remove side boards. Failure to comply may result in personnel injury.

WARNING



MATERIAL CONTROL SYSTEM (MCS)

- Use extreme caution when adjusting MCS gate openings. NEVER adjust gate openings when gates are open.
- Keep hands and feet away from gate openings at all times.
- DO NOT stand or walk behind dump body when it is dumping or in raised position. When using MCS remote control, always walk or stand to side of dump body.
- DO NOT connect or disconnect MCS remote control when dump body is being raised or lowered.
- When connected, MCS remote control overrides cab control unit. When remote control is disconnected, cab control activates. To avoid inadvertent opening or closing of gates, ALWAYS check gate positions and position of toggle switches on both cab and remote controls before plugging in or unplugging remote control. Toggle switches should be in CLOSED position.
- Care must be exercised when using the MCS. In the event material fails to flow through gates, open gate using open control and clear jam using Basic Issue Items (BII) shovel. DO NOT attempt to clear material using your hands or feet.
- Failure to comply may result in personnel injury.

WARNING SUMMARY - Continued

GENERAL SAFETY WARNING DESCRIPTIONS - Continued

WARNING



WORK SAFETY

- Unless otherwise specified, perform all maintenance with dump truck on level ground, transmission in N (Neutral), parking brake set, and engine off.
- Wear eye protection when using high-pressure stream of water to clean dump body.
- NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY.
- Although battery ground cable must be connected in order to test electrical circuit voltage, disconnect battery ground cable before performing resistance tests or replacing parts.
- DO NOT touch heat-shrinkable tubing for at least 30 seconds after heating. Heat-shrinkable tubing is hot and will burn you.
- Hydraulic cylinder sleeves may extend downward as hydraulic cylinder is lifted. Expect sleeve movement any time hydraulic cylinder is handled.
- DO NOT disconnect tailgate release or MCS air lines while chassis or MCS air systems are pressurized. Air system pressure must be released before air lines are disconnected.
- Provide adequate ventilation and personal protective equipment before starting any welding operation. Contact your unit/local industrial hygienist or safety officer for assistance.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

WARNING SUMMARY - Continued

EXPLANATION OF HAZARDOUS MATERIALS ICONS



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



CHEMICAL - Drops of liquid on hand shows that the material will cause burns or irritation to human skin or tissue.



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



EYE PROTECTION - Person with goggles shows that the material will injure the eyes.



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



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



POISON - Skull and crossbones shows that a material is poisonous or is a danger to life.



RADIATION - Three circular wedges shows that the material emits radioactive energy and can injure human tissue.



SLICK FLOOR - Wavy line on floor with legs prone shows that slick floor presents a danger for falling.



VAPOR - Human figure in a cloud shows that material vapors present a danger to life or health.

WARNING SUMMARY - Continued

HAZARDOUS MATERIALS WARNING DESCRIPTIONS

WARNING



BATTERIES

- To avoid eye injury, eye protection is required when working around batteries. DO NOT smoke, use open flame, make sparks, or create other ignition sources around batteries. If a battery is giving off gases, it can explode and cause injury to personnel.
- Remove all jewelry, such as rings, ID tags, watches, and bracelets. If jewelry or a tool contacts a battery terminal, a direct short will result in instant heating, damage to equipment, and injury to personnel.
- Sulfuric acid contained in batteries can cause serious burns. If battery corrosion or electrolyte makes contact with skin, eyes, or clothing, take immediate action to stop the corrosive burning effects.
 - Eyes. Flush with cold water for at least 15 minutes and seek medical attention immediately.
 - Skin. Flush with large amounts of cold water until all acid is removed. Seek medical attention as required.
 - Clothing/Equipment. Wash with large amounts of cold water. Neutralize acid with baking soda or household ammonia.
 - Internal. If corrosion or electrolyte is ingested, drink large amounts of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Seek medical attention immediately.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

WARNING SUMMARY - Continued

HAZARDOUS MATERIALS WARNING DESCRIPTIONS - Continued

WARNING



CARBON MONOXIDE (EXHAUST GASES) CAN KILL!

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma. Permanent brain damage or death can result from severe exposure.
- Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
- Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
- If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
- Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
- The best defense against carbon monoxide poisoning is good ventilation!
- Failure to comply may result in personnel injury or death.

WARNING SUMMARY - Continued

HAZARDOUS MATERIALS WARNING DESCRIPTIONS - Continued

WARNING



CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) EXPOSURE

If CBRN exposure is suspected, wear protective equipment and take adequate precautions when working with all air cleaner media. Contaminated filters must be disposed of by trained personnel. Consult your CBRN Officer or CBRN Non-Commissioned Officer (NCO) for appropriate handling and disposal procedures. Failure to comply may result in personnel injury or death.

WARNING



HAZARDOUS WASTE DISPOSAL

When servicing equipment, performing maintenance, or disposing of materials such as engine coolant, hydraulic fluid, lubricants, battery acids or batteries, and Chemical Agent Resistant Coating (CARC) paint, consult your unit/local hazardous waste disposal center or safety office for local regulatory guidance. If further information is needed, please contact the Army Environmental Hotline at 1-800-872-3845. Failure to comply may result in personnel injury.

WARNING



HYDRAULIC SYSTEM

- DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin.
- To prevent burns, use caution when removing fill cap of hydraulic reservoir when hydraulic fluid is hot. Avoid contact with hot hydraulic oil. Use extreme care when filling, sampling, or draining hydraulic oil.
- Hydraulic oil is slippery and may cause falls.
- A suitable container should be used to catch any draining hydraulic fluid. Ensure that all spills are cleaned up and disposed of in accordance with local procedures.
- Failure to comply may result in personnel injury.

WARNING SUMMARY - Continued

HAZARDOUS MATERIALS WARNING DESCRIPTIONS - Continued

WARNING



SOLVENT CLEANING COMPOUND

- Solvent cleaning compound MIL-PRF-680 is an environmentally compliant and low-toxicity material. However, it may be irritating to the eyes and skin. Use protective gloves and goggles. Use in well-ventilated areas. Keep away from open flames and other sources of ignition.
- When not using MIL-PRF-680 solvents, ensure MIL-PRF-680 solvent container is sealed. Store, handle, and dispose of unused and spent solvents in accordance with local procedures and plans.
- Improper cleaning methods and use of unauthorized cleaning solvents may injure personnel and damage equipment.
- Fire extinguishers should be placed nearby when using solvent cleaning compound.
- Cloths or rags saturated with solvent cleaning compound must be disposed of in accordance with authorized facilities' procedures.
- Failure to comply may result in personnel injury.

LIST OF EFFECTIVE PAGES/WORK PACKAGES

NOTE: This manual supersedes TM 5-3805-264-14&P, dated 12 December 2005, including all changes.

Date of issue for the original manual is:

Original 30 JUNE 2014

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**HEADQUARTERS, DEPARTMENT OF THE ARMY
WASHINGTON, DC, 30 JUNE 2014**

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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), located in the back of this manual directly to: U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LCL-IM / TECH PUBS, MS 727, 6501 E. 11 Mile Road, Warren, MI 48397-5000. You may also send in your recommended changes via electronic mail or by fax. Our fax number is DSN 786-1856 or Commercial (586) 282-1856. Our e-mail address is tacomlcmc.daform2028@us.army.mil. A reply will be furnished to you.

Current as of 27 September 2013

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Index

HOW TO USE THIS MANUAL

SCOPE

This manual is designed to help you operate the dump body and perform operator and field troubleshooting and maintenance on the equipment. This manual covers the following models:

- M917A1 Dump Body
- M917A1 with Material Control System (MCS) Dump Body
- M917A2 Dump Body
- M917A2 with MCS Dump Body

You must read and understand this manual before operating the vehicle or performing inspections or maintenance procedures.

CONTENTS OF THIS MANUAL

The information contained in this manual is presented in 10 chapters. Each chapter is divided into Work Packages (WP), which are identified by a four-digit number (e.g., 0001, 0002, etc.) on the upper right corner of each page. The WP page number is centered at the bottom of each page. Work package page numbers consist of the WP number followed by a dash and another number. For example, "0001-9" means WP 0001, page 9.

The Warning Summary begins immediately after the cover and should be read before performing any maintenance on the dump body. It contains general safety warnings and hazardous materials warnings about procedures that could result in personnel death or injury.

The Table of Contents lists the chapters, figures, tables, and WPs in this manual. Listed below are the chapters included in this manual:

- Chapter 1 covers General Information, Equipment Description and Data, and Theory of Operation. It provides general information on the manual and the equipment.
- Chapter 2 covers Operating Instructions, explains and illustrates all operator's controls and indicators, and describes how to perform all operating procedures for the dump body: Operation Under Usual Conditions and Operation Under Unusual Conditions.
- Chapter 3 covers all Operator Troubleshooting. (WP 0008) is a Troubleshooting Index. If the vehicle malfunctions, consult this index to locate the appropriate troubleshooting procedure.
- Chapter 4 covers all Field Troubleshooting. (WP 0012) is a Troubleshooting Index. If the vehicle malfunctions, consult this index to locate the appropriate troubleshooting procedure.
- Chapter 5 covers Operator Preventive Maintenance Checks and Services (PMCS) Instructions. It contains systematic instructions on inspections, adjustments, and corrections to be performed by the operator to keep the equipment in good operating condition and ready for its primary mission.
- Chapter 6 covers Field PMCS instructions. It contains systematic instructions on inspections, adjustments, and corrections to be performed by field maintenance personnel to keep the equipment in good operating condition and ready for its primary mission.
- Chapter 7 covers Operator Maintenance Instructions, which includes operator-level lubrication and cleaning.

HOW TO USE THIS MANUAL - Continued

- Chapter 8 covers Field Maintenance Instructions. All field-level maintenance tasks are covered in this chapter, including Service Upon Receipt, General Maintenance Instructions, Lubrication Instructions, Illustrated List of Manufactured Items, Torque Limits, and Wiring Diagrams.
- Chapter 9 covers Parts Information. It lists and authorizes spares and repair parts; special tools; special Test, Measurement, and Diagnostic Equipment (TMDE); and other special support equipment required for performance of operator and field maintenance of the dump body.
- Chapter 10 covers Supporting Information. It contains References, Maintenance Allocation Chart (MAC), Components of End Item (COEI) and Basic Issue Items (BII) Lists, Additional Authorization List (AAL), Expendable and Durable Items List (EDIL), Tool Identification List (TIL), and Mandatory Replacement Parts (MRP) List.

WARNINGS, CAUTIONS, AND NOTES

Read all WARNINGS, CAUTIONS, and NOTES before performing any procedure.

WARNINGS, CAUTIONS, and NOTES headings indicate essential information and are printed in **BOLD** type, making them easier for the user to see.

- **WARNING:** A warning is used to alert the user to hazardous operating and maintenance procedures, practices, or conditions that could result in personnel death or injury. Warnings must be strictly observed.
- **CAUTION:** A caution is used to alert the user to hazardous operating and maintenance procedures, practices, or conditions that could result in damage to, or destruction of, equipment or mission effectiveness. Cautions must be strictly observed.
- **NOTE:** A note highlights an essential operating or maintenance procedure, condition, or statement.

FEATURES OF THIS MANUAL

Statements and words of particular importance are printed in CAPITAL LETTERS for emphasis.

Within a procedural step, reference may be made to another work package in this manual or to another manual. These references indicate where you should look for more complete information.

- If you are told: "Lubricate tailgate pins (WP 0073)", go to (WP 0073) in this manual for Lubrication Instructions.
- If you are told: "Refer to FM 4-33.31," go to FM 4-33.31, which is listed in the References work package (WP 0107), for complete information on cold weather operations.

Illustrations are placed after, and as close as possible to, the procedural steps to which they apply.

Callouts placed on the art may be text or numbers, whichever method is easier for the soldier.

Numbers located at the lower right corner of an illustration (e.g., 14PT264120) are art control numbers and are used for tracking purposes. Disregard these numbers.

Dashed leader lines used in illustrations indicate that called-out items are not visible (i.e., they are located within the structure).

Technical instructions include metric units as well as standard units. The metric conversion chart on the inside back cover converts U.S. standard measurements to metric equivalents.

Initial Setup information is provided in task-oriented work packages. Before starting a task, you must obtain all the tools, supplies, and personnel listed in the initial setup. Be sure to read the task before

HOW TO USE THIS MANUAL - Continued

performing the maintenance. If any other tasks are referenced, you must go to the Initial Setup section for each of those tasks to find out what tools, supplies, and personnel will be needed.

- Materials/Parts – Lists expendable materials. Each material is followed by a reference.
- References – Lists other publications containing necessary information.
- Equipment Condition – Lists conditions to be met before starting the procedure. The reference on the right of the condition is a work package reference to instructions for setting up the condition.

An alphabetical index is provided at the end of the manual to assist in locating information not readily found in the Table of Contents.

CHAPTER 1

**GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND
THEORY OF OPERATION**

OPERATOR MAINTENANCE GENERAL INFORMATION

SCOPE

Type of Manual

Operator and Field Maintenance Manual Including Repair Parts and Special Tools List.

Equipment Name and Model Number

Truck, Dump, Heavy, Body M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS.

Purpose of Equipment

Used by engineering and construction units to transport and dump or spread aggregate, hot mix asphalt, or similar materials.

MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual; or AR 700-138, Army Logistics Readiness and Sustainability.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs)

If your dump body needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you do not like about your equipment. Let us know why you do not like the design or performance.

All non-Aviation/Missile EIRs and PQDRs must be submitted through the Product Data Reporting and Evaluation Program (PDREP) Web site. The PDREP site is: <https://www.pdrep.csd.disa.mil/>.

If you do not have Internet access, you may submit your information using an SF 368 (Product Quality Deficiency Report). You can send your SF 368 using email, regular mail, or fax using the addresses/fax numbers specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual. We will send you a reply.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion prevention and control of Army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items. The term "corrosion" means the deterioration of a material or its properties due to a reaction of that material with its chemical environment. An example is the rusting of iron. Corrosion damage in metals can be seen, depending on the metal, as tarnishing, pitting, fogging, surface residue, and/or cracking. Plastics, composites, and rubbers can also degrade (also considered to be corrosion based on the above definition of corrosion). Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically ultraviolet) processes. The most common exposures are excessive heat or light. Damage from these processes will appear as cracking, softening, swelling, and/or breaking. The US Army has defined the following nine (9) forms of corrosion used to evaluate the deterioration of metals. These shall be used when evaluating and documenting corrosion.

UNIFORM (or general attack): Affects a large area of exposed metal surface, like rust on steel or tarnish on silver. It gradually reduces the thickness of the metal until it fails.

CREVICE: Occurs in crevices created by rubber seals, gaskets, bolt heads, lap joints, dirt or other surface deposits. It will develop anywhere moisture or other corrosive agents are trapped and unable to drain or evaporate.

CORROSION PREVENTION AND CONTROL (CPC) - Continued

SELECTIVE LEACHING: One element, usually the anodic element of an alloy, corrodes away, leaving the cathodic element. This can create holes in metal.

INTERGRANULAR: Metal deterioration caused by corrosion on the bonds between or across the grain boundaries of the metal. The metal will appear to be peeling off in sheets, flaking, or being pushed apart by layers. A particular type of intergranular corrosion is exfoliation.

PITTING: This can result from conditions similar to those for crevice corrosion. Pits can develop on various materials due to their composition. Rifle boxes are big victims of pitting.

EROSION: Results when a moving fluid (liquid or gas) flows across a metal surface, particularly when solid particles are present in the fluid. Corrosion actually occurs on the surface of the metal, but the moving fluid washes away the corrosion and exposes a new metal surface, which also corrodes.

FRETTING: Occurs as a result of small, repetitive movements (e.g., vibration) between two surfaces in contact with each other. It's usually identified by a black powder corrosion product or pits on the surface.

GALVANIC: Occurs when two different types of metal come in contact with each other, like steel bolts on aluminum, for example. This is a common problem on aircraft because of their mix of metals.

STRESS: Term used to describe corrosion cracking and corrosion fatigue.

Where an item is not ready/available due to one of these forms of corrosion, it shall be recorded as a corrosion failure in the inspection record and the appropriate code (170) for corrosion shall be used when requesting/performing maintenance.

SF Form 368, Product Quality Deficiency Report should be submitted to the address specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Procedures for destruction of Army materiel to prevent enemy use can be found in TM 750-244-6.

PREPARATION FOR STORAGE OR SHIPMENT

Refer to (WP 0071) for instructions for preparing the dump body for storage or shipment.

NOMENCLATURE CROSS-REFERENCE LIST

| COMMON NAME | OFFICIAL NOMENCLATURE |
|----------------|-------------------------------------|
| Check Assembly | Valve, Check |
| Gasket | Seal, Plain |
| Lip Seal | Seal, Plain Encased |
| Locknut | Nut, Self-Locking, Assembled Washer |
| Locknut | Nut, Self-Locking, Hexagon |
| Lockwasher | Washer, Lock |
| Pocket Seal | Seal, Nonmetallic Strip |
| Ring Seal | Gasket |

LIST OF ABBREVIATIONS/ACRONYMS

This list outlines the abbreviations and acronyms used in the operation and maintenance of the dump body.

NOTE

Refer to ASME Y14.38 for standard abbreviations.

| Abbreviation/Acronym | Definition |
|-----------------------------|---|
| AAL | Additional Authorization List |
| ABS | Anti-Lock Brake System |
| ASME | American Society of Mechanical Engineers |
| BII | Basic Issue Items |
| °C | Centigrade or Celsius |
| CAGEC | Commercial and Government Entity Code |
| CARC | Chemical Agent Resistant Coating |
| CBRN | Chemical, Biological, Radiological, and Nuclear |
| cm | Centimeter |
| COEI | Components of End Item |
| CPC | Corrosion Prevention and Control |
| CPR | Cardiopulmonary Resuscitation |
| CTA | Common Table of Allowance |
| CTIS | Central Tire Inflation System |
| Cu yd | Cubic Yard |
| ECU | Electronic Control Unit |
| EDIL | Expendable and Durable Items List |
| EIC | End Item Code |
| EMP | Electromagnetic Pulse |
| FGC | Functional Group Code |
| FIG. | Figure |
| Ft | Foot |
| GAA | Grease, Automotive and Artillery |
| gal. | Gallon |
| GCWR | Gross Combination Weight Rating |
| GVWR | Gross Vehicle Weight Rating |
| HCI | Hardness Critical Item |
| HDO | Heavy Duty Oil |
| in. | Inch |
| km | Kilometer |
| kPa | Kilopascal |
| kph | Kilometers per Hour |
| kW | Kilowatt |
| l | Liter |
| lb | Pound |
| lb-ft | Pound-Foot |
| lph | Liters per Hour |
| m | Meter |
| m ³ | Cubic Meter |
| MAC | Maintenance Allocation Chart |
| MCS | Material Control System |
| mm | Millimeter |
| mph | Miles per Hour |
| MRP | Mandatory Replacement Parts |
| MWO | Maintenance Work Order |
| NCO | Non-Commissioned Officer |
| NIIN | National Item Identification Number |

LIST OF ABBREVIATIONS/ACRONYMS - Continued

| | |
|------------|---|
| N•m | Newton-Meter |
| NSN | National Stock Number |
| OD | Outside Diameter |
| OE | Oil Equivalent |
| OEA | Oil, Engine, Arctic |
| P/N | Part Number |
| PDREP | Product Data Reporting and Evaluation Program |
| PMCS | Preventive Maintenance Checks and Services |
| PQDR | Product Quality Deficiency Report |
| psi | Pounds per Square Inch |
| PTO | Power Take Off |
| qt | Quart |
| QTY | Quantity |
| rpm | Revolutions per Minute |
| RPSTL | Repair Parts and Special Tools List |
| SMR | Source, Maintenance, and Recoverability |
| SRA | Specialized Repair Activity |
| TACOM LCMC | Tank-Automotive and Armaments Command Life Cycle Management Command |
| TAMMS | The Army Maintenance Management System |
| TB | Technical Bulletin |
| TIL | Tool Identification List |
| TMDE | Test, Measurement, and Diagnostic Equipment |
| TOE/MTOE | Table of Equipment/Modified Table of Equipment |
| U/I | Unit of Issue |
| UOC | Usable On Code |
| WP | Work Package |

END OF WORK PACKAGE

OPERATOR MAINTENANCE EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT DESCRIPTION, CAPABILITIES, AND FEATURES

The M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS dump truck body consists of a steel body designed to transport and dump or spread aggregate, hot mix asphalt, or similar materials. A sealed, open-loop hydraulic system raises and lowers the dump body. The hydraulic system operates on pressure supplied by a gear pump that is mounted directly to the transmission's Power Take Off (PTO).

The dump body has a 14 cubic yard (10.7 m³), 18.5 ton (16.8 metric ton) capacity. It is constructed of heavy duty steel with an abrasion-resistant floor.

Wooden side boards along the top on both sides of the dump body add height to help prevent spillage when hauling material.

The dump body is equipped with a cargo cover that is easily operated by one person.

The operator's instrument panel inside the vehicle cab has a Body Up and a Body (Transport) Lock indicator light. These lights allow monitoring of the dump body's status without leaving the cab.

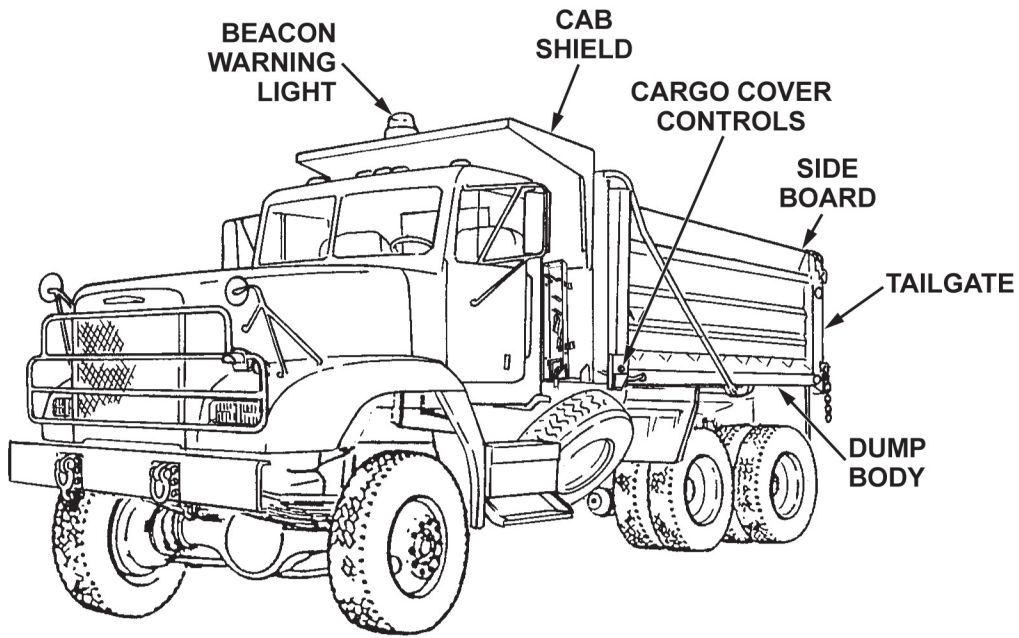
The chassis has limited off-road capabilities with a Central Tire Inflation System (CTIS) (TM 9-2320-363-10 for M917A1 and M917A1 with MCS or TM 9-2320-302-10 for M917A2 and M917A2 with MCS). This provides a wide variety of terrain in which the dump truck can operate.

The M917A1, M917A1 with MCS, M917A2 and M917A2 with MCS are the same except for the tailgate configuration.

The M917A1 and M917A2 (Figure 1) have a double-acting tailgate, which opens at the top or bottom, with chains to adjust the tailgate opening. The tailgate is unlocked and locked by operating the tailgate release control valve lever on the instrument panel inside the cab.

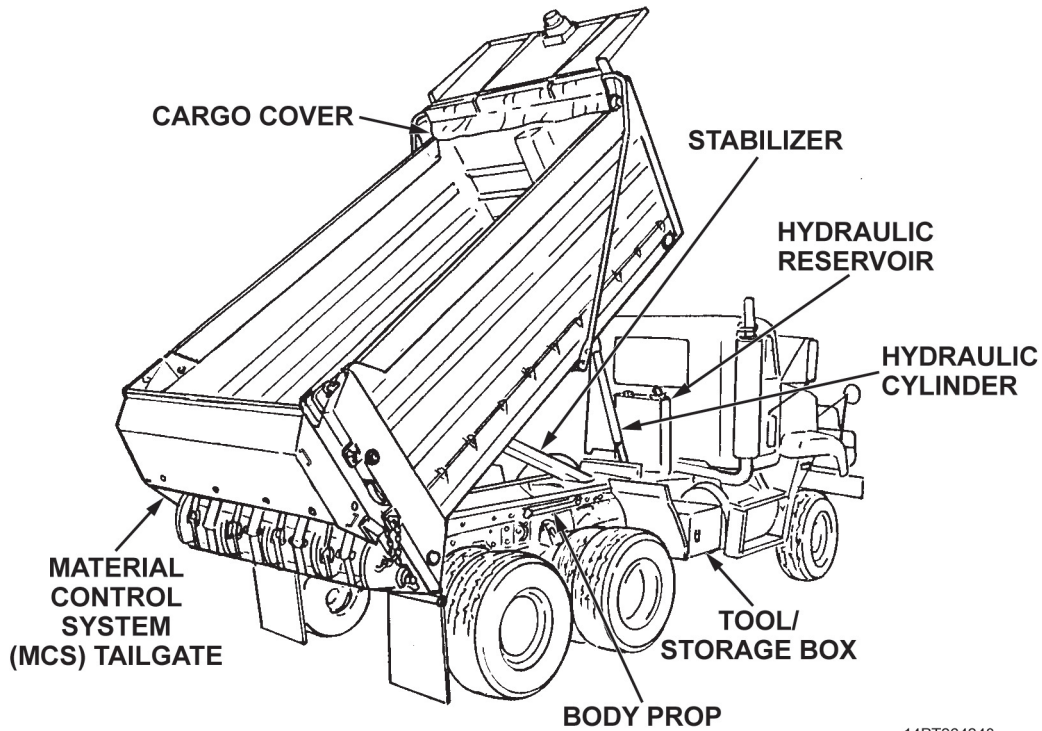
The M917A1 with MCS and M917A2 with MCS (Figure 2) have a tailgate with dual-function capability. It is equipped with an MCS with four independently controlled gates. It can also be operated as a top-hinged tailgate.

EQUIPMENT DESCRIPTION, CAPABILITIES, AND FEATURES - Continued



14PT264242

Figure 1. M917A1 and M917A2.



14PT264243

Figure 2. M917A1 with MCS and M917A2 with MCS.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

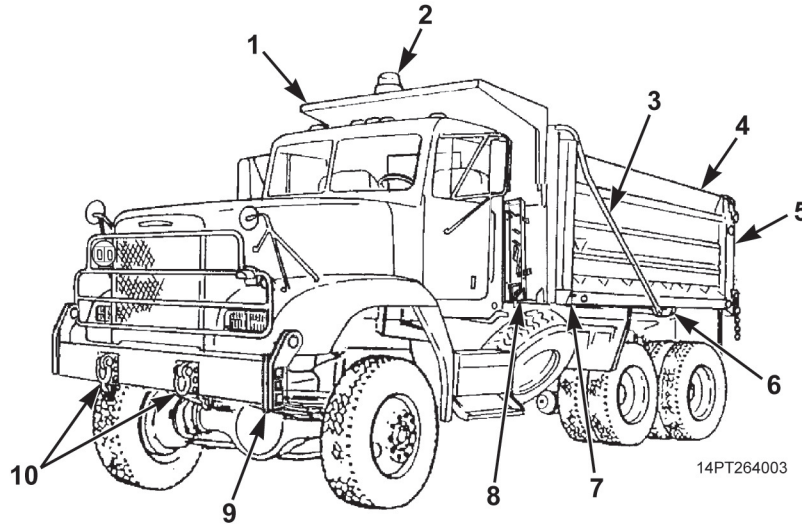


Figure 3. Driver's Side Front of Dump Truck.

Table 1. Driver's Side Front of Dump Truck.

| Key | Component | Description |
|-----|--|--|
| 1 | Cab Shield | Protects cab during loading operations. |
| 2 | Beacon Warning Light | Rotating amber strobe light alerts other vehicles of presence of dump truck. |
| 3 | Dump Body | Bed constructed of steel used for hauling aggregate, hot mix asphalt, and other materials. |
| 4 | Side Boards | Wooden boards add height to sides of dump body to help prevent spillage when hauling material. |
| 5 | Tailgate | Double-acting tailgate, opened at top or bottom with chains to adjust opening. |
| 6 | Cable Guides | Vehicle lifting cables pass through guides to maintain correct center of balance and to protect dump body from damage. |
| 7 | Cargo Cover Controls | Consist of crank handle and control handle. Extend and retract cargo cover. |
| 8 | Shovel Bracket | Provides exterior storage for shovel. |
| 9 | Bumper Extensions (M917A2 and M917A2 with MCS) | Provide adjustable attachment point for slings. |
| 10 | Lift/Tie-Down Shackles | Provide lift and tie-down points for dump truck. |

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued

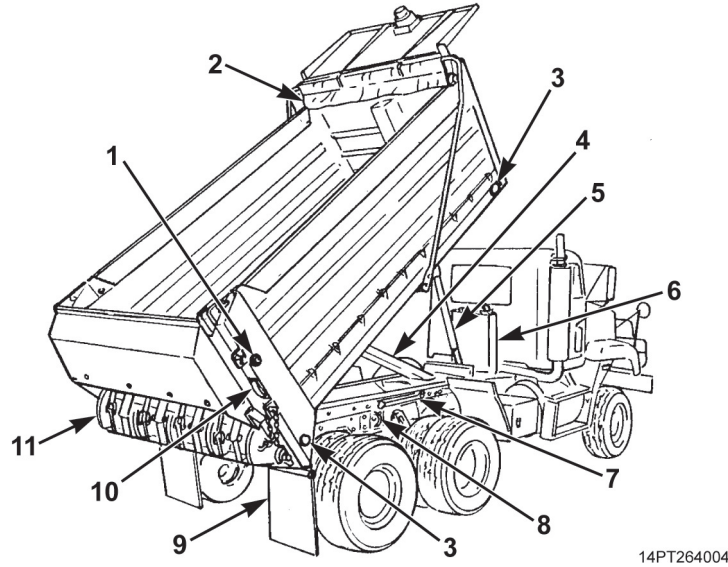


Figure 4. Passenger's Side Rear of Dump Truck.

Table 2. Passenger's Side Rear of Dump Truck.

| Key | Component | Description |
|-----|--|--|
| 1 | Marker Clearance Lights | Indicate presence of dump body. |
| 2 | Cargo Cover | Prevents spillage of dump body contents. |
| 3 | Reflectors | Mark outline of dump body. |
| 4 | Stabilizer | Maintains stability of raised dump body. |
| 5 | Hydraulic Cylinder | Hydraulic cylinder raises and lowers dump body. |
| 6 | Hydraulic Reservoir | Contains hydraulic fluid. |
| 7 | Body Props | Support raised, EMPTY dump body for inspection and maintenance. |
| 8 | Lifting Eyes | Provide lift points for dump truck. |
| 9 | Mud Flaps | Prevent dirt and mud from tires from spraying passers-by or other vehicles. |
| 10 | Taillights | Include tail, stop, and turn signal lights. Backup lights are located only in chassis-mounted taillights (TM 9-2320-363-10 or TM 9-2320-302-10). |
| 11 | MCS Tailgate (M917A1 with MCS and M917A2 with MCS) | Has four electro-pneumatically controlled gates which allow for controlled spreading of material. Can also operate as a standard tailgate. |

DIFFERENCES BETWEEN MODELS

The M917A1 and M917A1 with MCS are the same except for tailgate configuration.

The M917A2 and M917A2 with MCS are the same except for tailgate configuration.

The M917A1 and M917A2 tailgate opens from the bottom for normal dumping. Adjustment chains allow for adjustment of tailgate opening.

The M917A1 with MCS and M917A2 with MCS tailgate has four electro-pneumatically operated gates, controlled by a control unit mounted on the shift tower inside the cab or by a hand-held remote control that plugs into a receptacle on either side of the MCS tailgate. This allows controlled spreading of material. The MCS tailgate also operates as a standard tailgate, opening at the bottom.

EQUIPMENT DATA**Table 3. Equipment Data.**

| | |
|---|---------------------------------|
| VEHICLE DIMENSIONS: | |
| Overall Length: | |
| M917A1/M917A2 | 303.8 in. (771.7 cm) |
| M917A1 with MCS/M917A2 with MCS | 316.8 in. (804.7 cm) |
| Overall Height (M917A1 and M917A1 with MCS) | 143 in. (363 cm) |
| Overall Height (M917A2 and M917A2 with MCS) | 135.5 in. (344 cm) |
| Overall Width (M917A1 and M917A1 with MCS) | 102 in. (259 cm) |
| Overall Width (M917A2 and M917A2 with MCS) | 103.8 in. (364 cm) |
| Wheelbase (M917A1 and M917A1 with MCS) | 174 in. (442 cm) |
| Wheelbase (M917A2 and M917A2 with MCS) | 179 in. (455 cm) |
| Ground Clearance | 9 in. (22.9 cm) |
| Turning Diameter | 38.9 ft (11.9 m) |
| VEHICLE WEIGHTS: | |
| GVWR | 68,000 lb (30,872 kg) |
| Curb Weight: | |
| M917A1 (Empty) | 29,454 lb (13,372 kg) |
| M917A1 with MCS (Empty) | 31,472 lb (14,288 kg) |
| M917A2 (Empty) | 30,600 lb (13,892 kg) |
| M917A2 with MCS (Empty) | 32,618 lb (14,809 kg) |
| DUMP BODY: | |
| Capacity | 14 cu yd (10.7 m ³) |
| Load Capability | 18.5 tons (16.8 metric tons) |
| Length | 13.5 ft (411 cm) |
| Width: | |
| Inside | 87 in. (221 cm) |

EQUIPMENT DATA - Continued

Table 3. Equipment Data - Continued.

| | |
|---|--|
| Outside | 96 in. (244 cm) |
| Height: | |
| Sides | 40 in. (102 cm) |
| Front | 62 in. (157 cm) |
| Rear | 48 in. (122 cm) |
| Cargo Cover: | |
| Model | M400 AERO, side mount |
| Operation | Crank handle |
| MCS TAILGATE (M917A1 with MCS and M917A2 with MCS): | |
| Operation | Inside cab control unit or remote control |
| Actuation | Electro/pneumatic |
| Gates | Four (4) |
| HYDRAULIC SYSTEM: | |
| Operation | PTO driven |
| Reservoir: | |
| Capacity | 12.75 gal. (48.2 l) |
| Hydraulic Fluid | Lubricating oil, OE/HDO 10, MIL-L-2104 or OEA, MIL-L-46167 |
| Hydraulic Pump: | |
| Type | Gear |
| Operating Pressure | 2,500 psi (17,238 kPa) |
| Hydraulic Filter: | |
| Type | 10-micron cartridge element |
| Service Indicator | Service indicator gauge |
| Location | Mounted on reservoir |

EQUIPMENT DATA - Continued**Table 3. Equipment Data - Continued.**

| | |
|--------------------------|--------------------------------|
| Hydraulic Control Valve: | |
| Type | Single spool, three (3) ports |
| Location | Integral with hydraulic pump |
| Relief Valve Setting | 2,500 psi (17,238 kPa) |
| Hydraulic Cylinder: | |
| Weight | 400 lb (181.6 kg) |
| Operating Pressure | 2,500 psi (17,238 kPa) |
| Stroke | 124 in. (315 cm) |
| Stages | Three (3) double-acting stages |

END OF WORK PACKAGE

OPERATOR MAINTENANCE THEORY OF OPERATION

ELECTRICAL SYSTEM

The dump body electrical system consists of wiring harnesses that connect to the vehicle's chassis wiring harnesses.

The dump body wiring harnesses connect to:

Lights

Taillights and marker clearance lights (one on each side of dump body and three in light cluster at rear hinge) are located on dump body. Beacon warning light is located on cab shield.

Instrument Panel Indicator/Warning Lights and Related Switches

Body Up and Body (Transport) Lock indicator lights are located on instrument panel in cab. Body Up and Transport Lock switches are located on cylinder support frame.

Material Control System (MCS) Tailgate (M917A1 with MCS and M917A2 with MCS)

Solenoid-controlled air cylinders open and close MCS gates.

DUMP BODY

Dump Body Assembly

The dump body is a welded assembly of heavy-gauge steel with bolt-on assemblies and components. It is 13.5 ft (411 cm) long with 14 cu yd (10.7 m³), 18.5 ton (16.8 metric ton) capacity.

The dump body is attached to the truck frame at the rear hinge. Other attachment points are at the stabilizer and the hydraulic cylinder.

An abrasion-resistant steel bed resists wear and denting.

A bolt-on cab shield protects the cab. The beacon warning light is mounted on the cab shield.

Wooden side boards along the top on both sides of the dump body add height to help prevent spillage when hauling material.

The dump body has an interlocking understructure.

Stabilizer

A hinged stabilizer, mounted between the truck frame and the dump body, adds stability as the dump body is raised.

Five grease fittings on the stabilizer allow for lubrication.

Body Props

Use of body props permit inspection or maintenance to be safely performed underneath an empty raised dump body.

Body props are located on outside of truck frame. When not in use, they are stowed in the horizontal position.

A grease fitting on each body prop pivot point allows for lubrication.

Lubrication-Free Bearings

There are composite, lubrication-free bearings with removable pins at the rear hinge and at the hydraulic cylinder pivot points.

DUMP BODY - Continued

Transport Lock

A manually-operated transport lock is mounted on the left side of the dump body, near the front; it locks and unlocks the dump body from the truck frame. For normal operation, it is unlocked.

The transport lock is placed in the locked position when the dump truck is being lifted and transported. This actuates a transport lock switch, which disengages the power take off (PTO), thereby preventing the PTO from operating to power the hydraulic cylinder.

Cargo Cover

A cargo cover helps prevent the load from spilling out. It is extended or retracted using the control handle or the removable crank handle.

Tailgate Configuration

The M917A1 and M917A2 differ from the M917A1 with MCS and M917A2 with MCS in tailgate configuration:

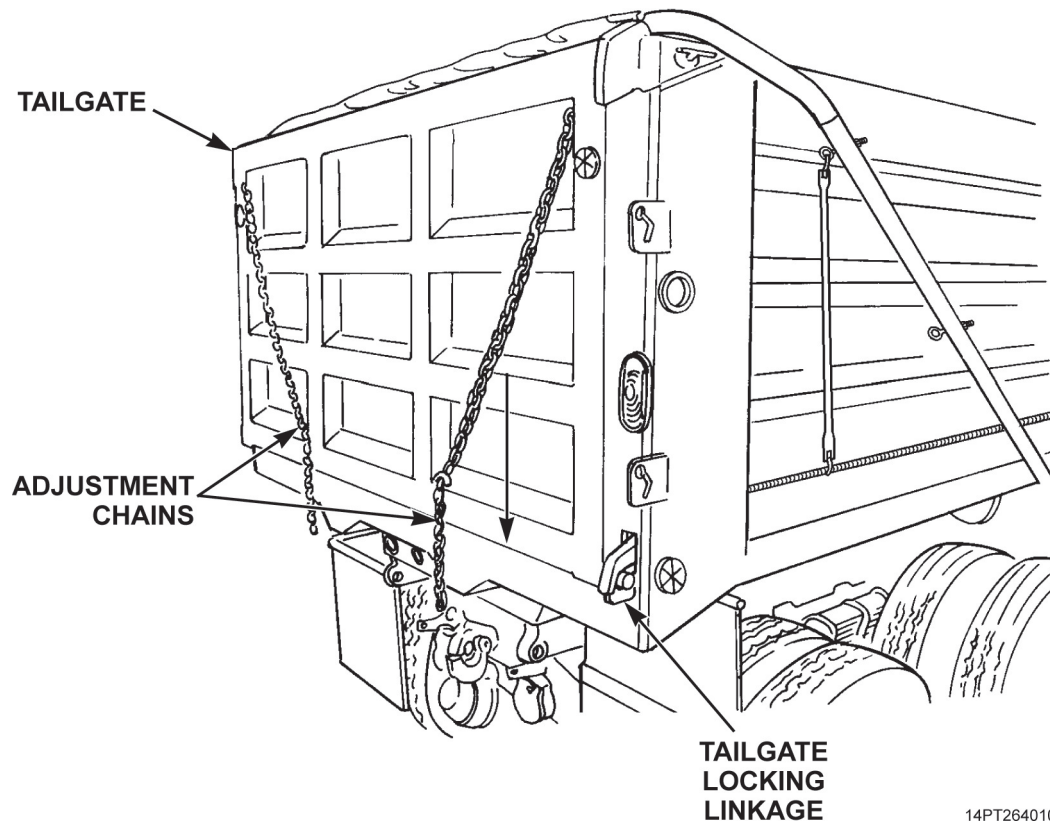
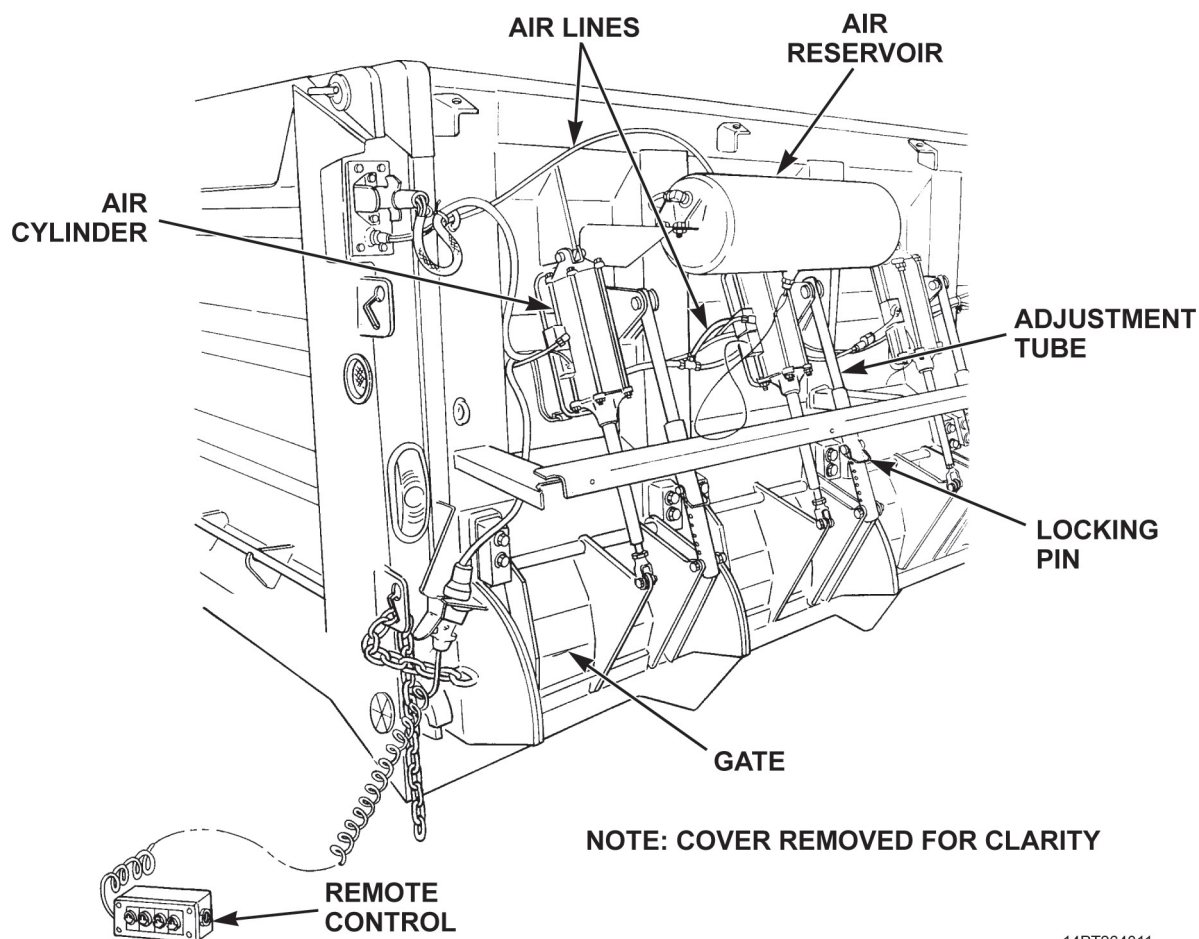


Figure 1. Tailgate Components: M917A1 and M917A2.

The M917A1 and M917A2 use a nine-panel conventional tailgate that opens from the bottom to dump the load. Adjustment chains, mounted to the tailgate, control the tailgate opening for spreading operations.

A tailgate release control valve lever, located on the instrument panel inside the cab, controls the tailgate release air cylinder mounted under the dump body to unlock and lock the tailgate at the bottom.

DUMP BODY - Continued



14PT264011

Figure 2. Tailgate Components: M917A1 and M917A2 with MCS.

The MCS tailgate has four openings (gates) that are electropneumatically controlled by a cab control unit or a handheld remote control. Each gate can be opened and closed independently of the other gates.

Compressed air, plumbed from the chassis's air system and stored in an air reservoir mounted on the MCS tailgate, opens and closes the gates using solenoid-controlled air cylinders.

Gate opening adjustments are made at each gate, using an adjustment tube with a locking pin that can be moved to different holes in the tube. The lower the pin placement, the larger the gate opening. The top pin placement locks the gate closed.

The remote control has a coiled cable that plugs into a receptacle on the driver's or passenger's side of the MCS tailgate. It is operated by a person walking alongside the dump body, while the operator inside the cab is dumping the load. When plugged in, the remote control overrides the control unit inside the cab.

The MCS tailgate can also operate as a conventional tailgate, opening from the bottom.

HYDRAULIC SYSTEM

The hydraulic system powers the hydraulic cylinder, which raises and lowers the dump body.

Major components of the hydraulic system are:

Hydraulic Pump

The gear pump is mounted directly to the vehicle PTO. It supplies the system with a working pressure of 2,500 psi (17,238 kPa), with approximately 1,200 rpm input speed from the PTO.

There is one port at the rear of the pump. It is connected to the bottom of the reservoir and receives, through a suction hose, hydraulic fluid from the reservoir.

Control Valve

The control valve is an integral part of the hydraulic pump. It is a single spool type, with the control spool linked mechanically to the hydraulic control lever in the cab.

When the hydraulic control lever is pulled back, the control valve routes hydraulic fluid through port B to the hydraulic cylinder. This extends the cylinder and raises the dump body.

When the hydraulic control lever is pushed forward, the control valve routes hydraulic fluid through port A to the hydraulic cylinder. This retracts the hydraulic cylinder and lowers the dump body.

A third control valve port returns hydraulic fluid through the filter and into the reservoir.

The control valve has a relief valve which is set at 2,500 psi (17,238 kPa).

Hydraulic Cylinder

The hydraulic cylinder is a three-stage telescoping cylinder with a 124 in. (315 cm) stroke.

The bottom of the hydraulic cylinder is attached by a pivot pin to the cylinder support frame.

The collar of the hydraulic cylinder is attached by pivot pins to the dump body inside the long beam at the front of the dump body.

The pivot pins at the top and bottom of the cylinder allow the cylinder to pivot as it is extended and retracted. Composite lubrication-free bearings at these pivot points ensure smooth, maintenance-free operation.

Hydraulic Filter

The filter is located on top of the reservoir. It filters hydraulic fluid as it returns to the reservoir through the return line from the control valve.

The filter element is made of 10-micron synthetic material. A filter service indicator gauge indicates when the filter needs replacing.

The filter has a bypass feature.

Hydraulic Reservoir

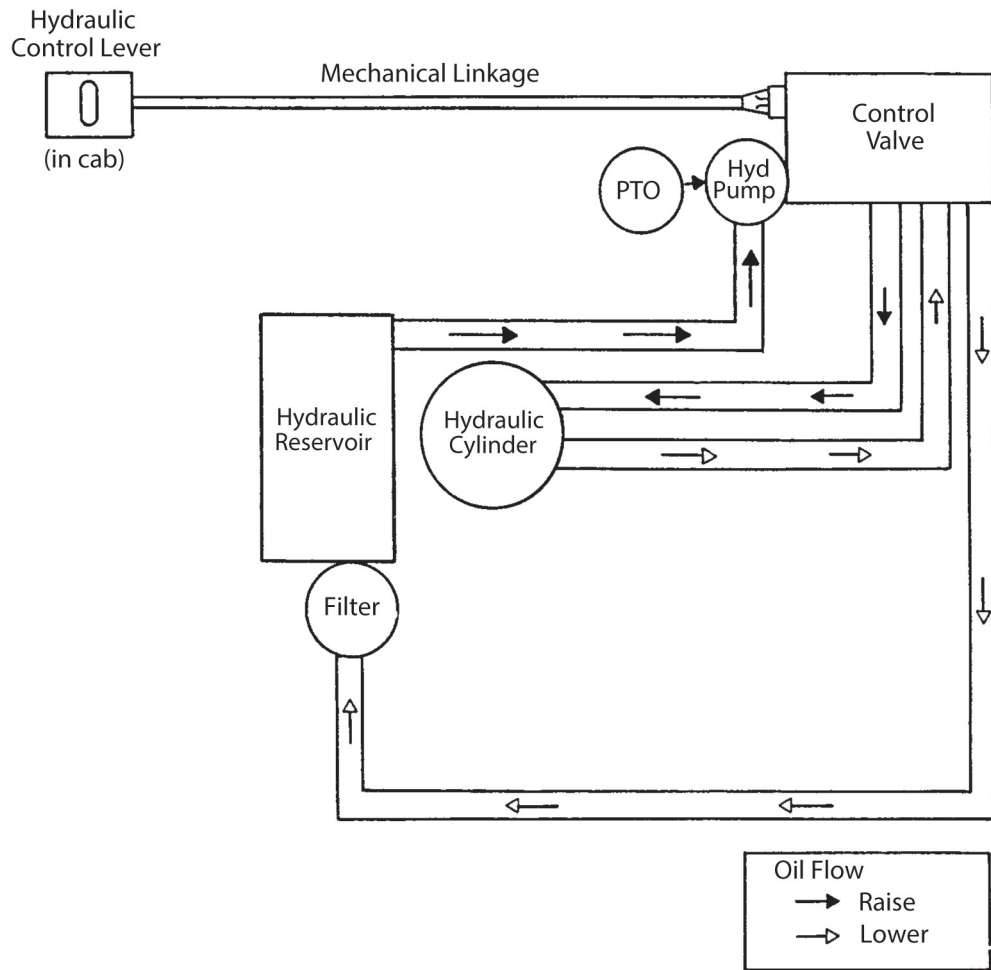
The reservoir is an all-steel container with a 12.75 gal. (48.2 l) capacity.

It is mounted upright, bolted to the hydraulic cylinder mount, between the hydraulic cylinder and the vehicle cab.

The fill cap is also a breather and a strainer. It must be kept clean at all times.

The oil level in the reservoir can be seen through the sight tube on the outside of the reservoir. An oil level decal, mounted adjacent to the sight tube, is marked FULL, ADD 2 QTS, and ADD 1 GAL.

HYDRAULIC SYSTEM - Continued



14PT264012

Figure 3. Hydraulic System.

END OF WORK PACKAGE

CHAPTER 2

OPERATOR INSTRUCTIONS

**OPERATOR MAINTENANCE
DESCRIPTION AND USE OF OPERATOR'S CONTROLS AND INDICATORS**

Table 1. Console.

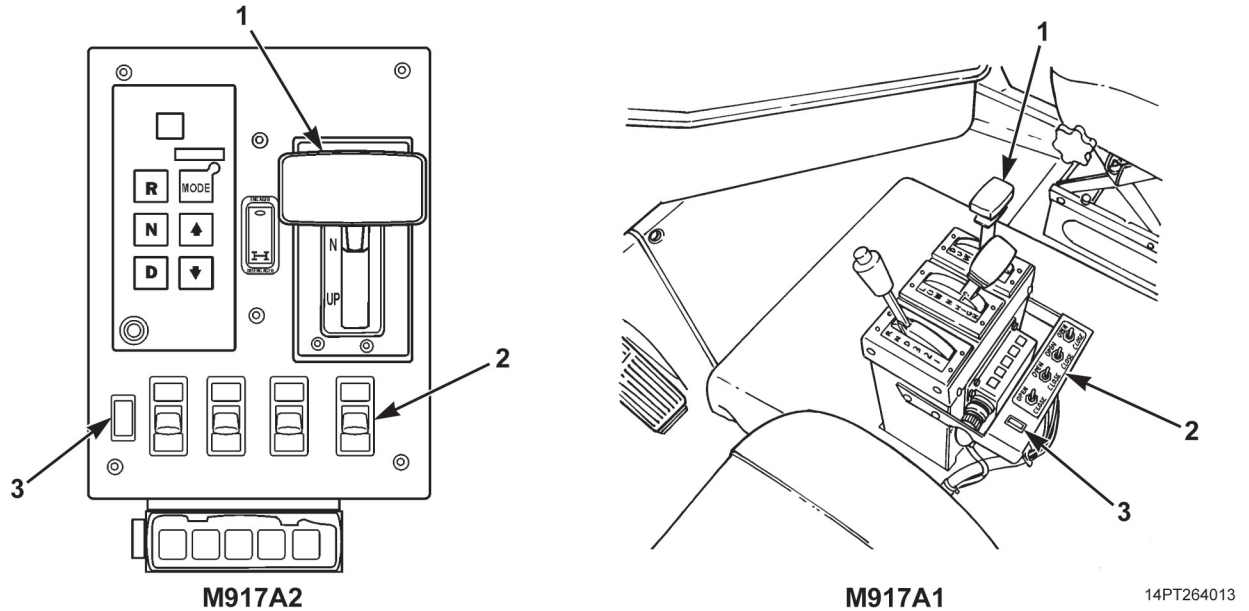


Figure 1. Console.

| Key | Control/Indicator | Function |
|-----|--|--|
| 1 | Hydraulic Control Lever | Raises and lowers dump body. Squeeze T-handle together and pull lever back to UP position to raise dump body. Push lever forward to DOWN position to lower dump body. Place in N (Neutral) detent position to stop dump body movement. Lever will not operate to raise dump body if main light switch is in blackout mode. |
| 2 | Material Control System (MCS) Control Unit (M917A1 with MCS and M917A2 with MCS) | Four toggle switches control LEFT, LEFT CENTER, RIGHT CENTER, and RIGHT MCS gates. Move switch(es) forward to OPEN position and rearward to CLOSE position. |
| 3 | MCS Indicator Light (M917A1 with MCS and M917A2 with MCS) | Red light indicates MCS has power. |

Table 2. Dashboard and Instrument Cluster.

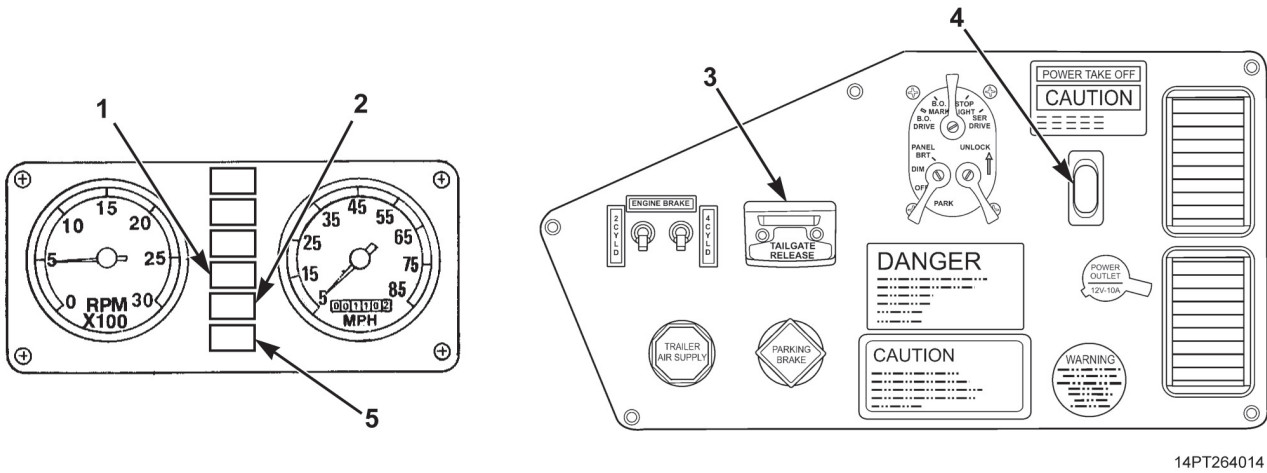
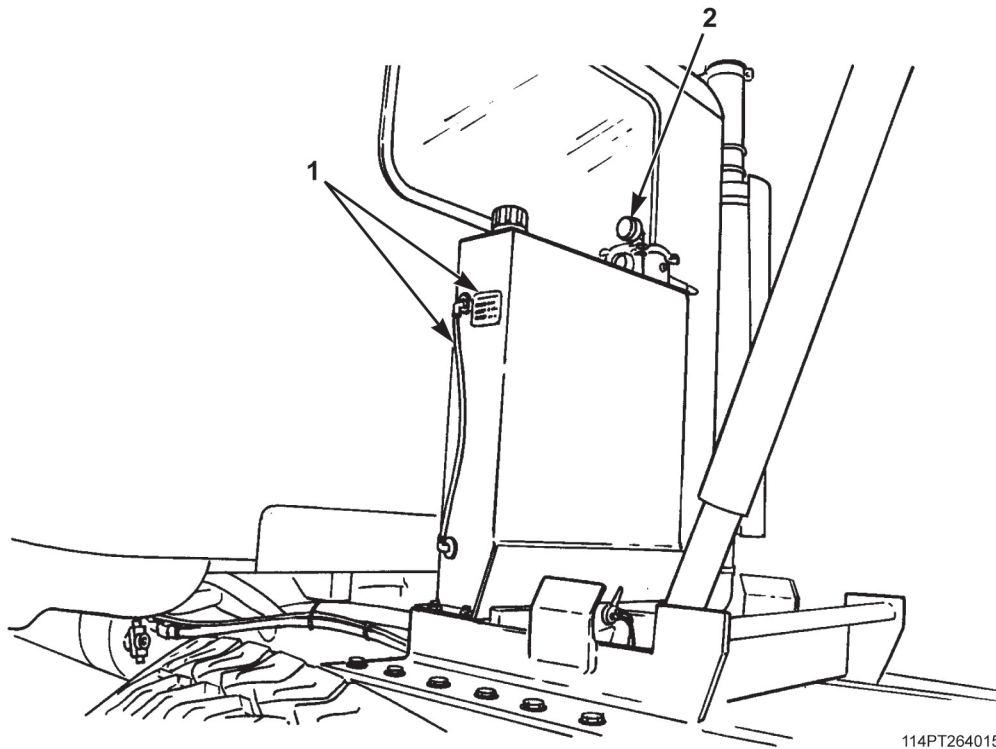


Figure 2. Dashboard and Instrument Cluster.

| Key | Control/Indicator | Function |
|-----|---------------------------------------|--|
| 1 | Reduce MPH Indicator Light | Red light comes on when vehicle is traveling too fast for tire pressure selected on Central Tire Inflation System (CTIS). |
| 2 | Body Up Indicator Light | Red light comes on when dump body is raised. Turns off when dump body is down and in contact with truck frame. |
| 3 | Tailgate Release Control Valve Lever | Air-activated lever controls tailgate release air cylinder to unlock and lock tailgate. Left position is UNLOCK; right position is LOCK. |
| 4 | Power Take Off (PTO) Switch | Engages PTO when turned ON. PTO will not operate unless main light switch is in SER DRIVE or STOP LIGHT position. Light in switch comes on when PTO is ON. |
| 5 | Body (Transport) Lock Indicator Light | Red light comes on when dump body is locked to truck frame in preparation for dump truck transport. Alerts driver that dump body will not raise. |

Table 3. Hydraulics.

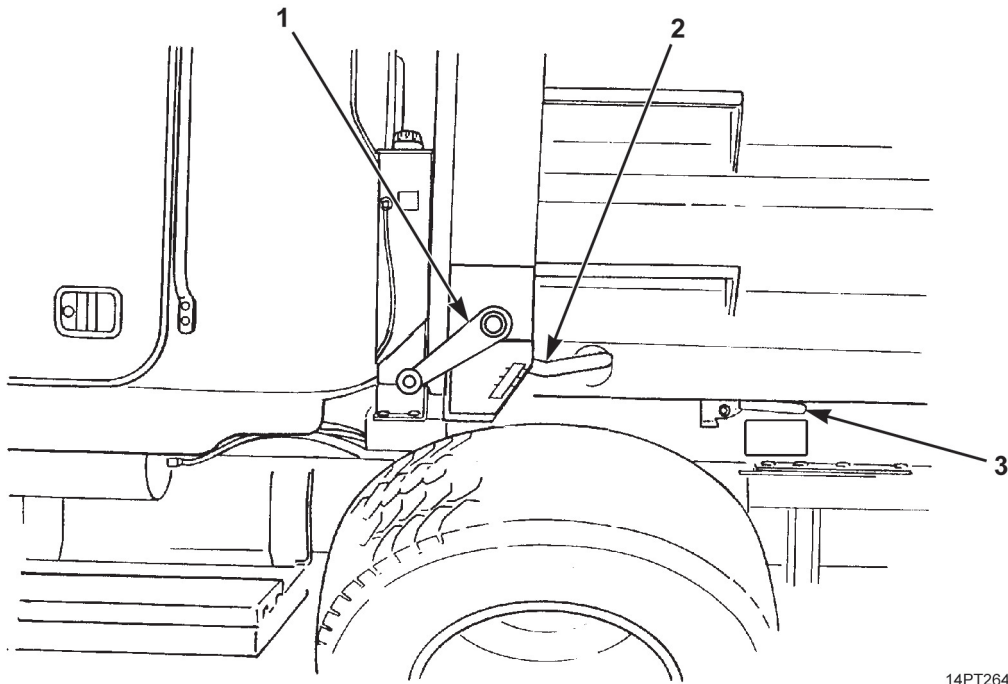


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Figure 3. Hydraulics.

| Key | Control/Indicator | Function |
|-----|--|---|
| 1 | Hydraulic Reservoir Sight Tube and Oil Level Decal | Sight tube shows level of hydraulic fluid in reservoir. Oil level decal is marked FULL, ADD 2 QTS, and ADD 1 GAL. |
| 2 | Hydraulic Filter Service Indicator Gauge | Indicates serviceability of hydraulic filter. |

Table 4. Cargo Cover and Transport Lock.

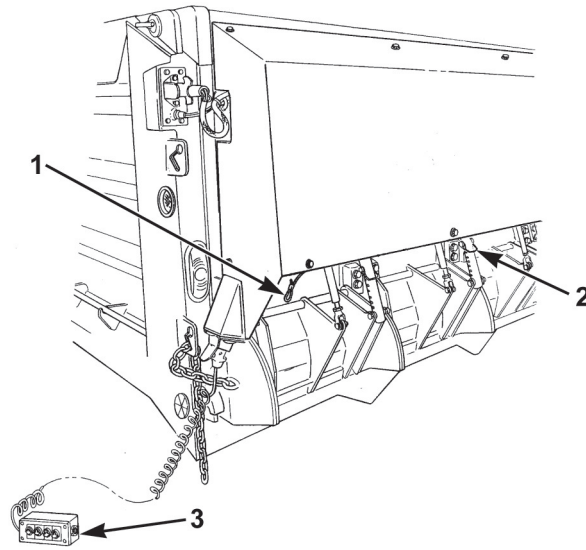


14PT264016

Figure 4. Cargo Cover and Transport Lock.

| Key | Control/Indicator | Function |
|-----|----------------------------|--|
| 1 | Cargo Cover Crank Handle | Turn clockwise to retract cargo cover and uncover load. When not in use, handle is stowed in storage pouch and placed in Basic Issue Items (BII) box. |
| 2 | Cargo Cover Control Handle | Provides braking action for cargo cover as it extends to cover load. Positions are LOCK, RELEASE, and BRAKE. |
| 3 | Transport Lock | Locks dump body to truck frame. Unlocked during normal operation. Locked for transporting of dump truck. Unlocked position is at 3 o'clock. Locked position is at 6 o'clock. A locking pin holds transport lock in desired position. |

Table 5. Material Control System.



14PT264017

Figure 5. Material Control System.

| Key | Control/Indicator | Function |
|-----|--|---|
| 1 | MCS Air Reservoir Cable Pull (M917A1 with MCS and M917A2 with MCS) | Drains MCS air reservoir, when pulled. |
| 2 | Adjustment Tube Locking Pin (M917A1 with MCS and M917A2 with MCS) | Controls amount of MCS gate opening. The lower the pin placement, the larger the gate opening. Top pin placement locks gate closed. |
| 3 | MCS Remote Control (M917A1 with MCS and M917A2 with MCS) | Plugs into receptacle at left or right of MCS tailgate. Four toggle switches control LEFT, LEFT CENTER, RIGHT CENTER, and RIGHT MCS gates. Move switch(es) to OPEN or CLOSED positions. When not in use, remote control is stowed in storage pouch and placed in Bil box. |

END OF WORK PACKAGE

**OPERATOR MAINTENANCE
OPERATION UNDER USUAL CONDITIONS**

INITIAL SETUP:**Personnel Required**

(2)

References

TM 9-2320-302-10

References (cont.)

TM 9-2320-363-10

WP 0004

WP 0021

PREPARING TO LOAD DUMP BODY

1. As required, clean dump body of material previously carried (WP 0021).
2. Ensure that tailgate is closed (WP 0004). If operating an M917A1 with Material Control System (MCS) or M917A2 with MCS, ensure that MCS gates are closed (WP 0004).
3. With engine running, ensure that dump body is fully lowered by checking body up indicator light on instrument panel (WP 0004). Light must be off. Lower dump body, if raised.

WARNING

DO NOT park on a slope. Park on level ground only. Parking on a slope could cause load to shift and dump truck to tip over. Failure to comply may result in personnel injury, death, and/or damage to equipment.

4. Position dump body for loading:
 - a. Position dump truck on firm level ground at a location convenient for loading.
 - b. If dump body is to be loaded using a hopper, check clearance before pulling under hopper. Position dump truck with hopper above center of dump body.

WARNING

- Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device.
- Dump body side boards weigh approximately 65 lb (30 kg) each. Two personnel are required to install or remove side boards.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

PREPARING TO LOAD DUMP BODY - Continued**NOTE**

Dump truck operator should get assistance from loading vehicle operator to remove dump body side boards.

5. Remove dump body side boards, if necessary.

WARNING

Ensure that parking brake is set before loading dump body (TM 9-2320-363-10 or TM 9-2320-302-10). If parking brake is not set, dump truck could roll or shift position. Failure to comply may result in personnel injury, death, and/or damage to equipment.

6. Set parking brake (TM 9-2320-363-10 or TM 9-2320-302-10).
7. Disengage Power Take Off (PTO), if engaged (TM 9-2320-363-10 or TM 9-2320-302-10).

END OF TASK**LOADING DUMP BODY****WARNING**

- Stand clear of dump body during loading operation. Material being loaded could fall on personnel standing too close.
- Hearing protection is required when performing loading operations.
- Failure to comply may result in personnel injury or death.

1. Clear all personnel from around dump truck.

CAUTION

Load dump body evenly. Material must not be heaped so high that it spills over sides of body. DO NOT overload. Failure to comply may result in damage to equipment.

2. Load dump body. Ensure that material is loaded evenly.
3. Cover load with cargo cover.

END OF TASK

TRANSPORTING LOAD

CAUTION

DO NOT transport load with PTO engaged. Always disengage PTO when hydraulic power is no longer needed. Failure to comply may result in damage to equipment.

1. Avoid sudden stops, turns, or accelerations. This may cause load to shift.
2. During off-road operation, avoid terrain with side slope.
3. Use vehicle's Central Tire Inflation System (CTIS) to change tire pressures as road conditions change. Use CTIS in EMER (emergency) mode if dump truck becomes stuck (TM 9-2320-363-10 or TM 9-2320-302-10).

END OF TASK

DUMPING LOAD

WARNING



- Hearing protection is required when performing dumping operations.
- 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.
- Stay at controls while dumping. If dump body leans or shifts to one side, lower it immediately and check for one of the following:
 - underinflated or flat tires
 - tires sinking in soft soil
 - load shifting to one side of body
 - high or gusty wind
 - weak or broken leaf spring
- If one of these or any other problems are found, DO NOT continue dumping until the problem is corrected.
- DO NOT spread or dump payload with dump truck facing a steep upgrade or a steep side slope. Dump truck may tip over backward or sideways.
- DO NOT park on a slope. Park on level ground only. Parking on a slope could cause load to shift and dump truck to tip over.
- Operator inside the cab must be aware of the location of outside personnel at all times.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

NOTE

- The following section describes dumping a load through the tailgate opening of either model dump body.
- Assistance is required for this operation. Driver inside cab operates dumping controls. Assistant driver monitors area around dump body.

DUMPING LOAD - Continued**1. Preparing To Dump**

- a. Position dump truck on level ground. Set parking brake (TM 9-2320-363-10 or TM 9-2320-302-10).
- b. Walk around dump truck and check the following:
 - (1) Wheels are on firm level ground.
 - (2) Dump truck is not leaning to one side.
 - (3) Area behind tailgate is clear.
 - (4) Overhead clearance is sufficient.
 - (5) Transport lock is unlocked (3 o'clock position) (WP 0004).

CAUTION

Adjustment chains are intended for use only during spreading operations. Failure to comply may result in damage to equipment.

- c. Secure mud flaps (Figure 1, Item 1) out of the way on hooks (Figure 1, Item 2) when stockpiling or when dumping into a spreader.

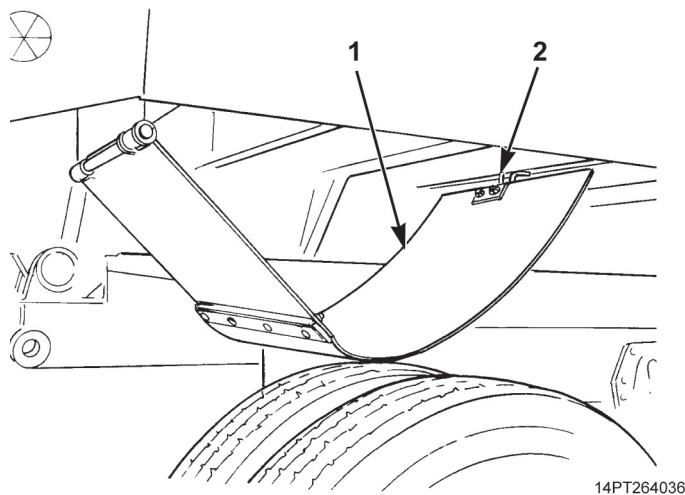


Figure 1. Securing Mud Flaps.

- d. Adjust tailgate opening if required.
- e. Uncover load.

DUMPING LOAD - Continued**WARNING**

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
- f. Start engine (TM 9-2320-363-10 or TM 9-2320-302-10).

DUMPING LOAD - Continued

NOTE

Dump body will not raise when main light switch is in blackout mode.

- g. Place main light switch (Figure 2, Item 2) in SER DRIVE or STOP LIGHT position (TM 9-2320-363-10 or TM 9-2320-302-10).
- h. Engage PTO (TM 9-2320-363-10 or TM 9-2320-302-10).
- i. Check that body (transport) lock indicator light (Figure 2, Item 3) is not lit. If lit, unlock transport lock (WP 0004).

WARNING

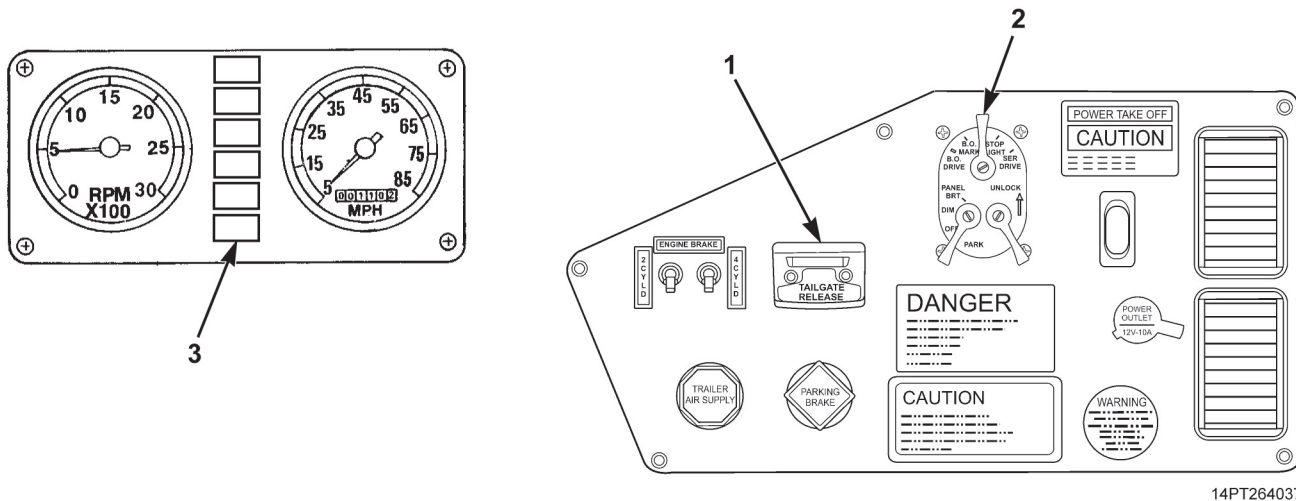


NEVER unlock tailgate or operate MCS gates, or operate hydraulic control lever in cab without first ensuring that all personnel are clear of dump body. Failure to comply may result in personnel injury.

CAUTION

Ensure that tailgate latches are fully opened before raising dump body. Failure to comply may result in damage to equipment.

- j. Slide tailgate release control valve lever (Figure 2, Item 1) left to UNLOCK position. Check that tailgate is unlatched.



14PT264037

Figure 2. Dashboard Controls and Indicators.

DUMPING LOAD - Continued**2. Raising Dump Body****WARNING**

- NEVER raise dump body more than halfway with tailgate or MCS tailgate closed. If dump body is raised fully without opening tailgate, dump truck center of gravity will shift rearward causing dump truck to tip.
 - NEVER raise dump body without first checking for overhead obstructions such as trees and power lines. Ensure that overhead clearance is sufficient.
 - Failure to comply may result in personnel injury, death, and/or damage to equipment.
- a. Sound horn if tactical situation permits.

DUMPING LOAD - Continued**NOTE**

Speed of dump body movement when it is being raised may be controlled with accelerator pedal.

- b. Squeeze T-handle together and pull hydraulic control lever (Figure 3, Item 1) back to UP position. Body up indicator light (Figure 3, Item 2) should come on as dump body is raised.

WARNING

DO NOT try to loosen a sticky load by pulling forward or backward and braking abruptly. Failure to comply may result in personnel injury and/or damage to equipment.

NOTE

Dump body will stop automatically when hydraulic cylinder is fully extended or when hydraulic control lever is placed in N (Neutral) position.

- c. Return hydraulic control lever (Figure 3, Item 1) to N (Neutral) position when dump body is fully raised or has reached desired height.
3. **Lowering Dump Body**

CAUTION

Dump body must be lowered onto truck frame with engine running at idle speed. Failure to comply may result in damage to equipment.

- a. With engine at idle speed, squeeze T-handle together and push hydraulic control lever (Figure 3, Item 1) forward to DOWN position. Body up indicator light (Figure 3, Item 2) should turn off when dump body contacts truck frame.

DUMPING LOAD - Continued

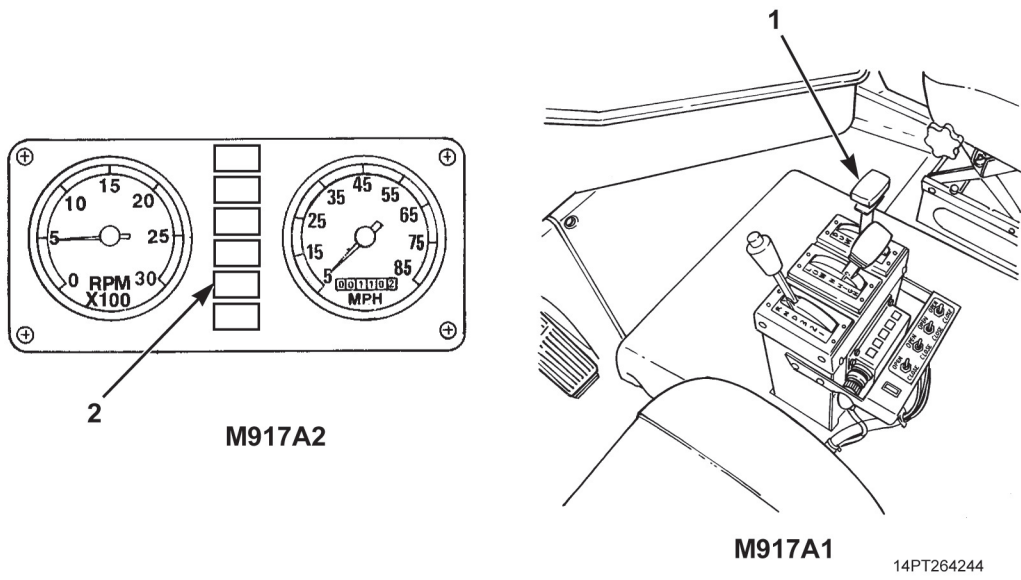


Figure 3. Hydraulic Control Lever and Body Up Indicator Light.

DUMPING LOAD - Continued

- b. Return hydraulic control lever (Figure 4, Item 1) to N (Neutral) position.

4. After Dumping

CAUTION

Always disengage PTO when hydraulic power is no longer needed. Failure to comply may result in damage to equipment.

- a. Disengage PTO (TM 9-2320-363-10 or TM 9-2320-302-10).
- b. Turn off main light switch (Figure 4, Item 3).
- c. Slide tailgate release control valve lever (Figure 4, Item 2) right to LOCK position.

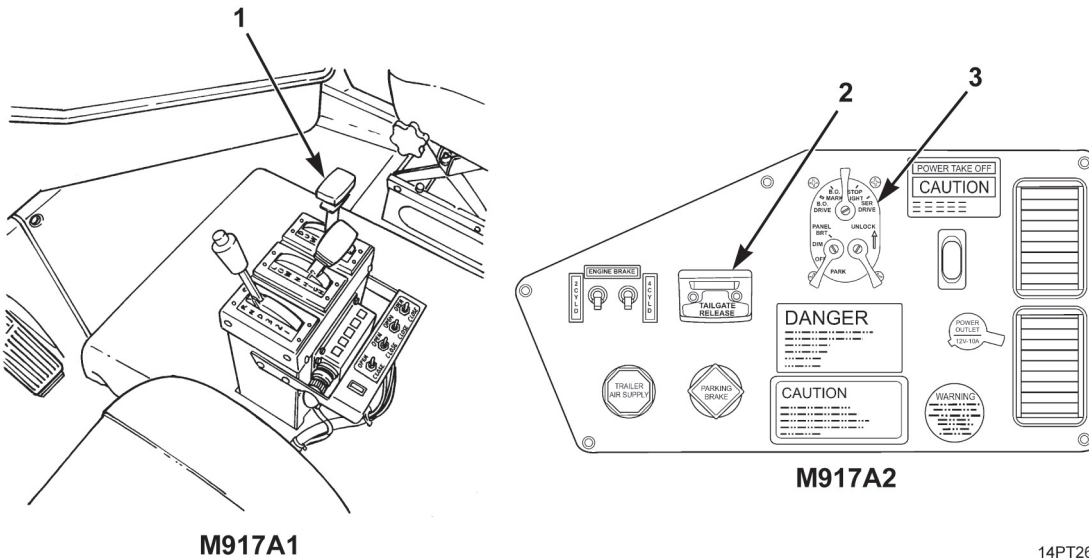


Figure 4. Hydraulic Control Lever and Dashboard Controls and Indicators.

14PT264039

DUMPING LOAD - Continued

- d. As required, release mud flaps (Figure 5, Item 1) from stowed position on hooks (Figure 5, Item 2).

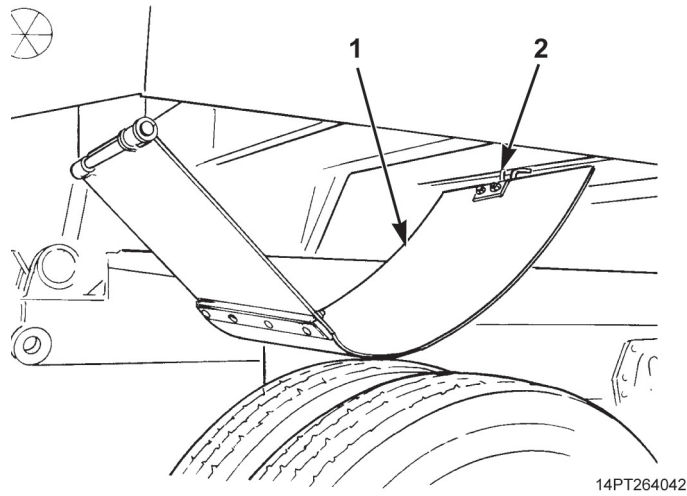


Figure 5. Releasing Mud Flaps.

END OF TASK

ADJUSTING TAILGATE OPENING**WARNING**

Use extreme caution when adjusting tailgate opening. NEVER adjust tailgate opening when tailgate is open. Failure to comply may result in personnel injury.

CAUTION

Adjustment chains are intended for use only during spreading operations. Failure to comply may result in damage to equipment.

NOTE

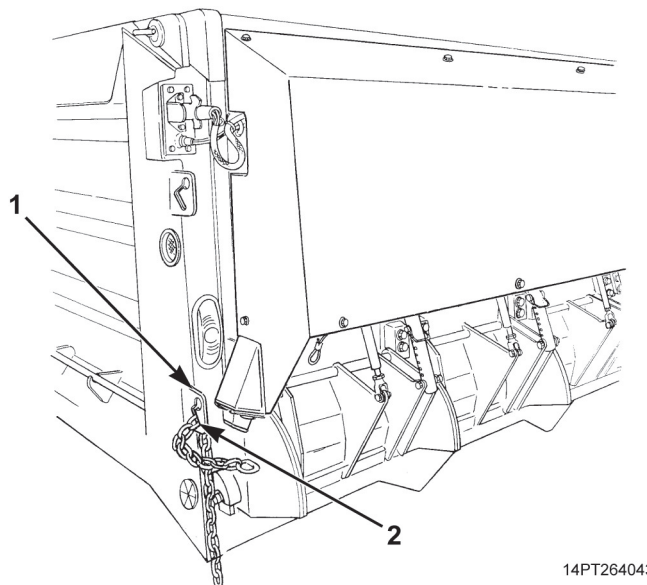
To reduce interference between tailgate chain and tailgate locking linkage, chain must pass through chain latch from the outside inward.

1. In preparation for dumping load, with tailgate closed, lift chain out of slot (Figure 6, Item 2) of chain latch (Figure 6, Item 1).

NOTE

Adjustment must be made equally on both sides of tailgate.

2. Lengthen or shorten chain length by pulling links through chain latch (Figure 6, Item 1).
3. Secure adjustment by sliding chain into slot (Figure 6, Item 2).



14PT264043

Figure 6. Tailgate Opening Adjustment.

END OF TASK

ADJUSTING MCS GATE OPENINGS (M917A1 WITH MCS AND M917A2 WITH MCS)**WARNING**

- Use extreme caution when adjusting MCS gate openings. NEVER adjust gate openings when gates are open.
- Keep hands and feet away from gate openings at all times.
- Failure to comply may result in personnel injury.

NOTE

Adjust MCS gate openings with engine on and MCS air system pressurized.

1. When dump truck is transporting a load or when it is parked, MCS gates must be kept locked. Gates are locked by placing locking pins (Figure 7, Item 2) in top hole in adjustment tubes (Figure 7, Item 1).
2. In preparation for controlled spreading, with dump body down and MCS gates closed, remove locking pins (Figure 7, Item 2) from top hole in adjustment tubes (Figure 7, Item 1).

CAUTION

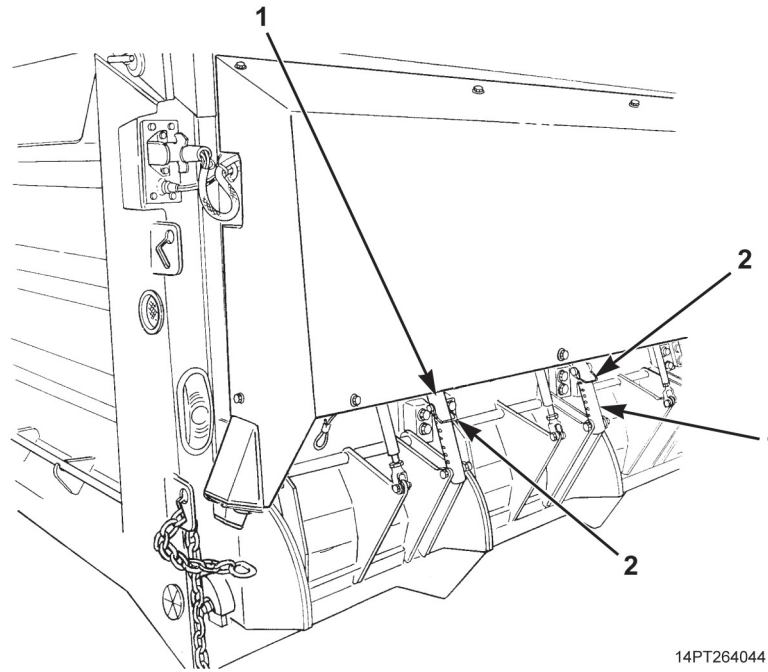
Outer driver's side and outer passenger's side adjustment tube locking pins must be installed with pin heads to outside. If incorrectly installed, end of pins will protrude. Failure to comply may result in damage to equipment.

NOTE

To achieve desired spreading pattern, each gate opening can be adjusted individually.

3. Install locking pin (Figure 7, Item 2) in desired hole in adjustment tube (Figure 7, Item 1). The lower the pin placement, the larger the gate opening.
4. When controlled spreading is completed, after gates have been closed and dump body is down, return locking pins (Figure 7, Item 2) to top hole in adjustment tubes (Figure 7, Item 1) to lock gates closed.

ADJUSTING MCS GATE OPENINGS (M917A1 WITH MCS AND M917A2 WITH MCS) - Continued



14PT264044

Figure 7. MCS Gate Opening Adjustment.

END OF TASK

CONTROLLED SPREADING (M917A1 WITH MCS AND M917A2 WITH MCS)**WARNING**

- DO NOT connect or disconnect MCS remote control when dump body is being raised or lowered.
- When connected, MCS remote control overrides cab control unit. When remote control is disconnected, cab control activates. To avoid inadvertent opening or closing of gates, ALWAYS check gate positions **and** position of toggle switches on both cab and remote controls before plugging in or unplugging remote control. Toggle switches should be in CLOSED position.
- DO NOT spread or dump payload with dump truck facing a steep upgrade or a steep side slope. Dump truck may tip over backward or sideways.
- DO NOT stand or walk behind dump body when it is dumping or in raised position. When using MCS remote control, always walk or stand to side of dump body.
- Keep hands and feet away from gate openings at all times.
- Operator inside the cab must be aware of the location of outside personnel at all times.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

NOTE

Operation requires two personnel: driver and assistant driver.

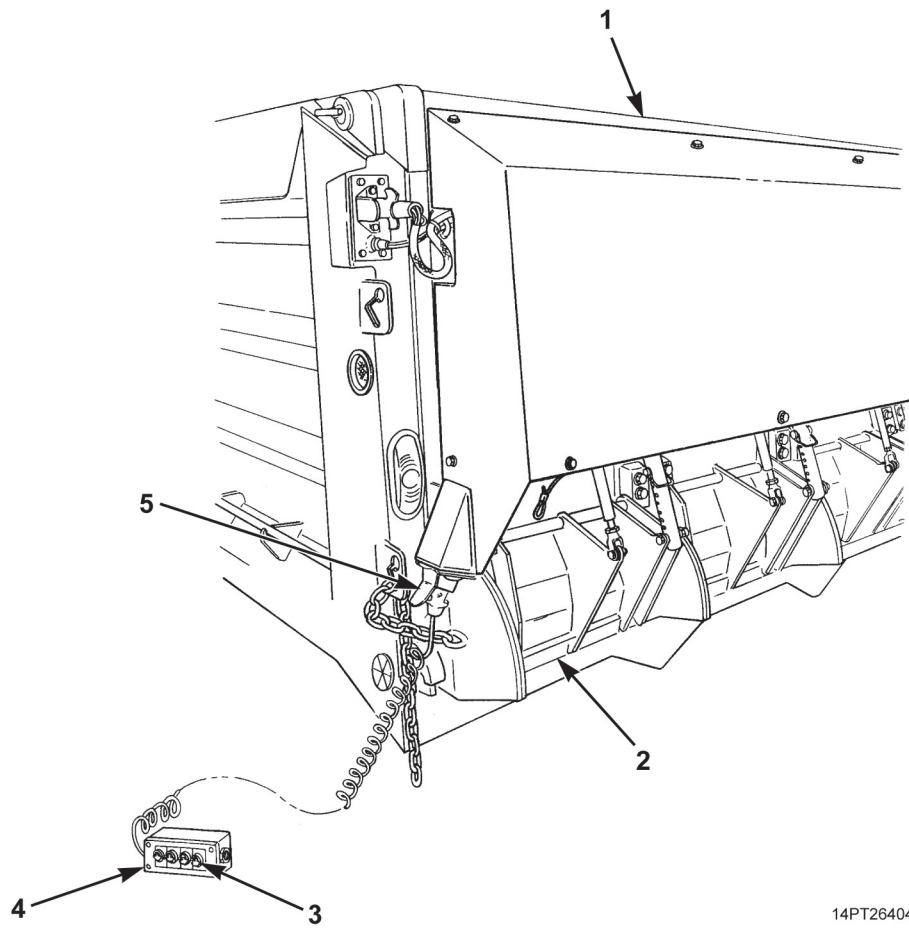
1. Follow instructions for preparing to dump, except for the following steps:
 - a. DO NOT unlock tailgate.
 - b. Adjust MCS gate openings.
2. Ensure that toggle switches on MCS control unit inside cab are in CLOSED position (WP 0004).
3. Remove MCS remote control (Figure 8, Item 4) from stowage. Ensure that toggle switches (Figure 8, Item 3) are in CLOSED position. Plug remote control into receptacle (Figure 8, Item 5) at passenger's side or driver's side of MCS tailgate (Figure 8, Item 1).
4. Move toggle switches (Figure 8, Item 3) to OPEN position. Depending on desired spreading pattern, all gates (Figure 8, Item 2) or selected gates may be opened.
5. Raise dump body 2 to 3 ft (61 to 91 cm) and stop. Material should begin to spill out through gates (Figure 8, Item 2).
6. Have driver pull forward with transmission in first gear (TM 9-2320-363-10 or TM 9-2320-302-10). Maintain a steady speed not to exceed 3 mph (5 kph). Have assistant driver check thickness of dumped material to determine if gate openings need adjusting.
7. If adjustment is needed, stop dump truck, lower dump body, close gates (Figure 8, Item 2), place transmission in N (Neutral), and set parking brake. Adjust MCS gate openings.
8. Maintain a steady speed until all material has been spread. Raise dump body periodically to keep material flowing evenly through gates (Figure 8, Item 2).

CONTROLLED SPREADING (M917A1 WITH MCS AND M917A2 WITH MCS) - Continued**WARNING**

Care must be exercised when using the MCS. In the event material fails to flow through gates, open gate using open control and clear jam using Basic Issue Items (BII) shovel. DO NOT attempt to clear material using your hands or feet. Failure to comply may result in personnel injury.

9. If material becomes jammed in gates, open gate and clear jam with BII shovel.
10. Close gates (Figure 8, Item 2) by moving toggle switches (Figure 8, Item 3) to CLOSED position.
11. Lower dump body.
12. Unplug MCS remote control (Figure 8, Item 4) from receptacle (Figure 8, Item 5). Stow remote control in storage pouch and place in BII box.
13. Lock gates closed by returning adjustment tube locking pins to top hole in tubes.
14. Perform After Dumping steps, as applicable.

CONTROLLED SPREADING (M917A1 WITH MCS AND M917A2 WITH MCS) - Continued



14PT264045

Figure 8. Controlled Spreading.

END OF TASK

OPERATING CARGO COVER**WARNING**

Observe the following safety regulations when operating cargo cover:

- Never operate system under obstructions, such as trees and power lines.
- Ensure that all personnel are clear of rear of dump body and the immediate area of the cover.
- Ensure that chain cover is in place.
- Keep all clothing away from moving parts.
- DO NOT cover load with crank handle installed.
- DO NOT use cargo cover frame as a grabhandle.
- Failure to comply may result in personnel injury or death.

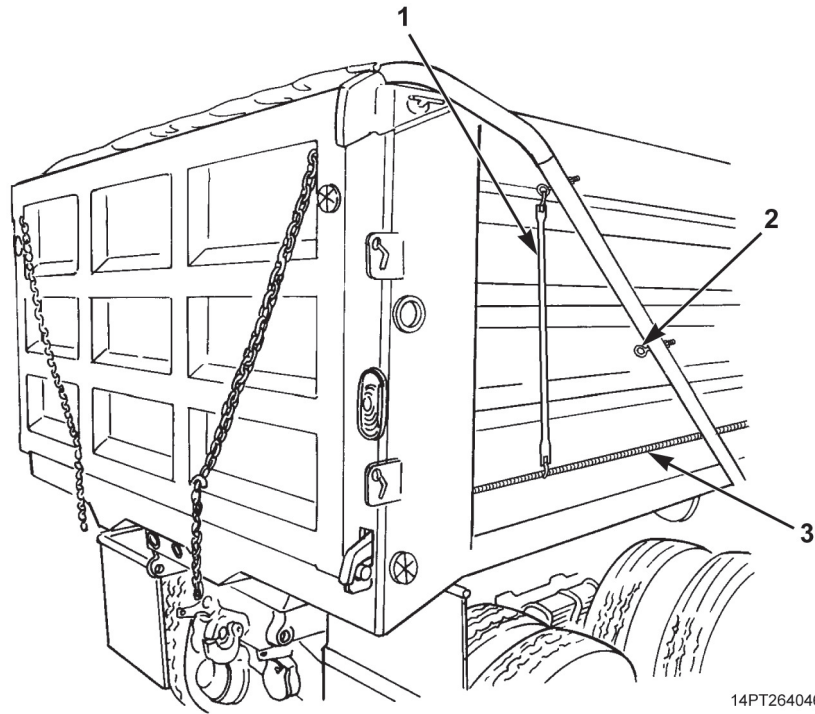
CAUTION

DO NOT attempt to uncover load without first removing any snow or water that has accumulated on cargo cover. Failure to comply may result in damage to equipment.

1. Uncovering Load

- a. Unfasten rubber strap (Figure 9, Item 1) from dump body weldment (Figure 9, Item 3) and fasten to eyebolt (Figure 9, Item 2).

OPERATING CARGO COVER - Continued



14PT264046

Figure 9. Uncovering Load.

OPERATING CARGO COVER - Continued

- b. Remove crank handle (Figure 10, Item 1) from storage pouch in BII box.
- c. Install crank handle (Figure 10, Item 1) on crank shaft (Figure 10, Item 3). Turn handle clockwise to roll up cargo cover. Stop at any time and mechanism will hold cover in place.
- d. Stop cranking when cargo cover is completely rolled up.
- e. Remove crank handle (Figure 10, Item 1) and stow.

2. Covering Load**WARNING**

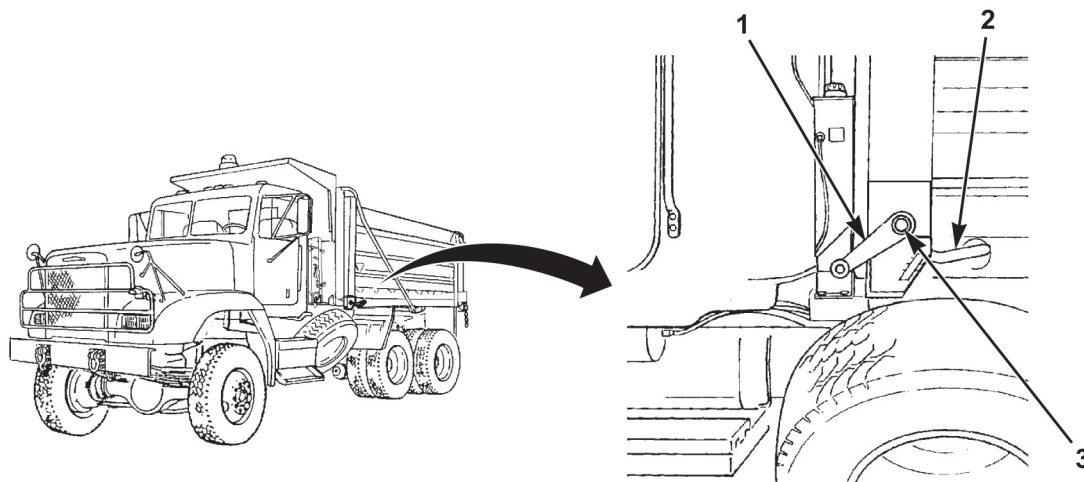
DO NOT cover load with crank handle installed. Failure to comply may result in personnel injury.

- a. Ensure that crank handle (Figure 10, Item 1) is NOT installed.
- b. Quickly move cargo cover control handle (Figure 10, Item 2) to farthest down BRAKE position.

CAUTION

DO NOT let go of cargo cover control handle until cargo cover is fully over load. Handle provides braking action for cargo cover swing. Failure to comply may result in damage to equipment.

- c. Carefully lift cargo cover control handle (Figure 10, Item 2) toward RELEASE position until cargo cover begins to move. Keep hand on handle so that cover moves slowly. If cargo cover moves too fast, move handle down slightly to apply brakes.
- d. When cargo cover is fully over load, release cargo cover control handle (Figure 10, Item 2). Handle will return to top LOCK position.



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Figure 10. Crank and Cargo Cover Components.

OPERATING CARGO COVER - Continued

- e. Unfasten rubber strap (Figure 11, Item 1) from eyebolt (Figure 11, Item 2) and fasten to dump body weldment (Figure 11, Item 3).

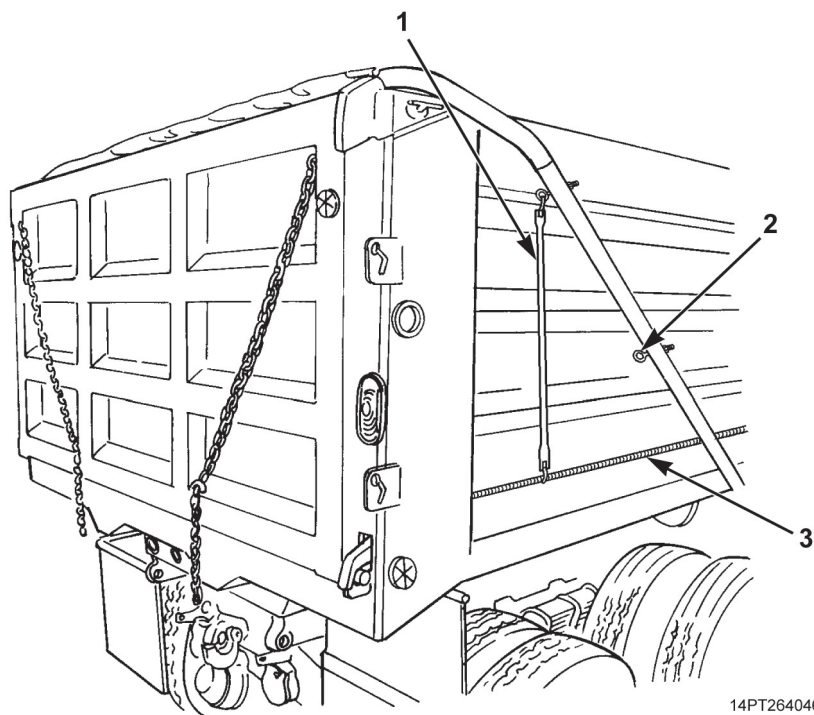


Figure 11. Covering Load.

END OF TASK**OPERATING BODY PROPS****WARNING**

NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

NOTE

Use body props to support a raised, EMPTY dump body for inspection or maintenance. Refer to **Dumping Load** for operation of hydraulic control lever to raise and lower dump body.

1. **Utilizing Body Props**

OPERATING BODY PROPS - Continued**WARNING**

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
- a. Start engine, place main light switch in SER DRIVE or STOP LIGHT position, and engage PTO (TM 9-2320-363-10 or TM 9-2320-302-10).
 - b. Check that transport lock is unlocked (WP 0004).
 - c. Raise dump body (Figure 12, Item 1).
 - d. Raise body prop (Figure 12, Item 4) on each side of vehicle chassis (Figure 12, Item 3) until prop contacts stop (Figure 12, Item 5).

CAUTION

Dump body must be lowered onto body props with PTO disengaged. Failure to comply may result in damage to equipment.

OPERATING BODY PROPS - Continued

- e. Turn off main light switch and disengage PTO (TM 9-2320-363-10 or TM 9-2320-302-10). Operate hydraulic control lever to lower dump body (Figure 12, Item 1) until body props (Figure 12, Item 4) firmly engage V-brackets (Figure 12, Item 2).

2. Stowing Body Props**WARNING**

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
- a. Start engine, place main light switch in SER DRIVE or STOP LIGHT position, and engage PTO (TM 9-2320-363-10 or TM 9-2320-302-10).
- b. Raise dump body (Figure 12, Item 1) until body props (Figure 12, Item 4) are clear of V-brackets (Figure 12, Item 2).
- c. Swing body props (Figure 12, Item 4) down to stowed position in stowage brackets (Figure 12, Item 6).

OPERATING BODY PROPS - Continued

- d. With engine at idle speed, lower dump body (Figure 12, Item 1).
- e. Turn off main light switch, disengage PTO, and shut down engine (TM 9-2320-363-10 or TM 9-2320-302-10).

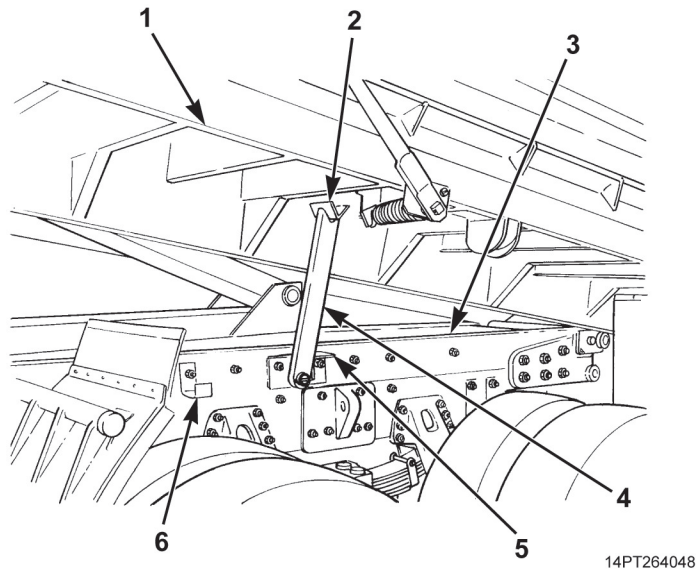


Figure 12. Body Prop Operation.

END OF TASK

END OF WORK PACKAGE

**FIELD MAINTENANCE
OPERATION UNDER UNUSUAL CONDITIONS**

INITIAL SETUP:**References**

TM 9-2320-302-10
TM 9-2320-363-10
WP 0004

OPERATION IN WINDY WEATHER**WARNING**

DO NOT attempt to dump in high wind. High winds may disperse aggregate, or cause dump truck to roll over when bed is raised. Failure to comply may result in personnel injury, death, and/or damage to equipment.

In moderate winds, use cargo cover to keep material from blowing out of dump bed.

END OF TASK**OPERATION IN RAINY OR SNOWY WEATHER**

1. In rainy or snowy weather, use cargo cover to keep loads dry. Wet loads may stick, making dumping difficult.

CAUTION

DO NOT leave cargo cover extended over an empty dump body. DO NOT attempt to uncover load without first removing any snow or water that has accumulated on cargo cover. Failure to comply may result in damage to equipment.

2. Remove any accumulated snow or water from cargo cover before attempting to uncover load.

END OF TASK

OPERATION IN COLD WEATHER

Cold weather presents special problems because cold oil and hydraulic components should not be operated to capacity until the system has warmed up. This can be accomplished by performing the following steps:

1. Engage Power Take Off (PTO) (TM 9-2320-363-10 or TM 9-2320-302-10) while engine is warming up. Run engine at idle speed.
2. Clear all personnel from around the dump body.
3. Operate hydraulic control lever and check operation of dump body at low engine rpms to verify normal operation (WP 0004). Keep in mind that oil has not been circulated through the hydraulic cylinder.
4. Lower dump body and place hydraulic control lever in N (Neutral) position (WP 0004).

END OF TASK**END OF WORK PACKAGE**

**OPERATOR MAINTENANCE
DECALS, INSTRUCTION PLATES, AND STENCILS**

SCOPE

This work package includes illustrations showing the location of all decals, instruction plates, and stencils. This work package also shows the location for stowage of equipment and material required to be carried on the dump body.

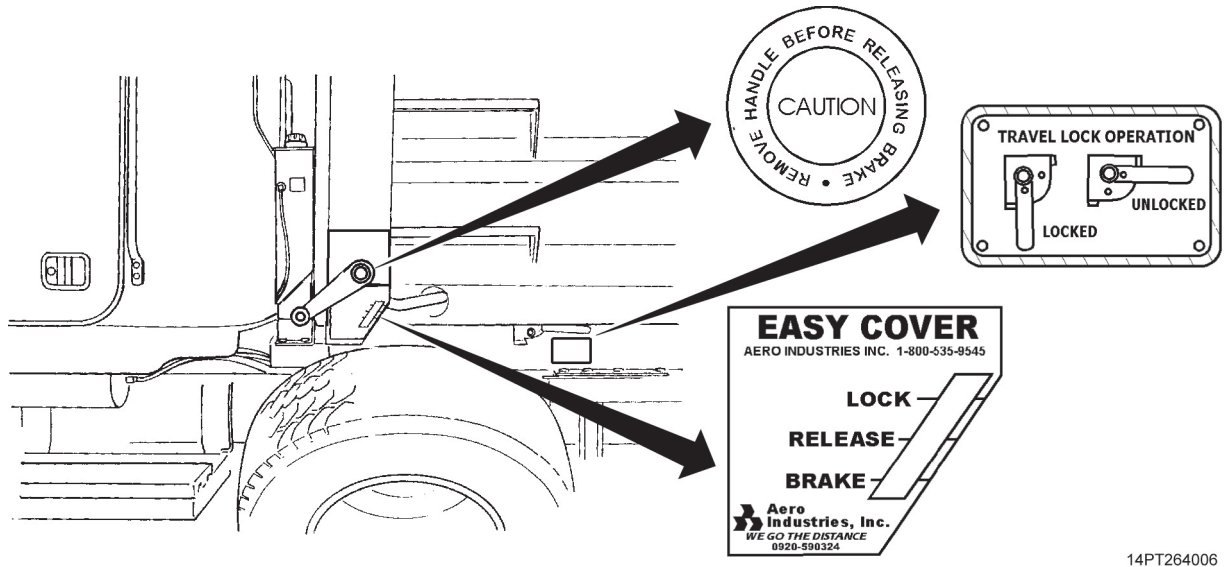
DECALS, INSTRUCTION PLATES, AND STENCILS



14PT264005

Figure 1. Driver's Side Decals.

DECALS, INSTRUCTION PLATES, AND STENCILS - Continued



14PT264006

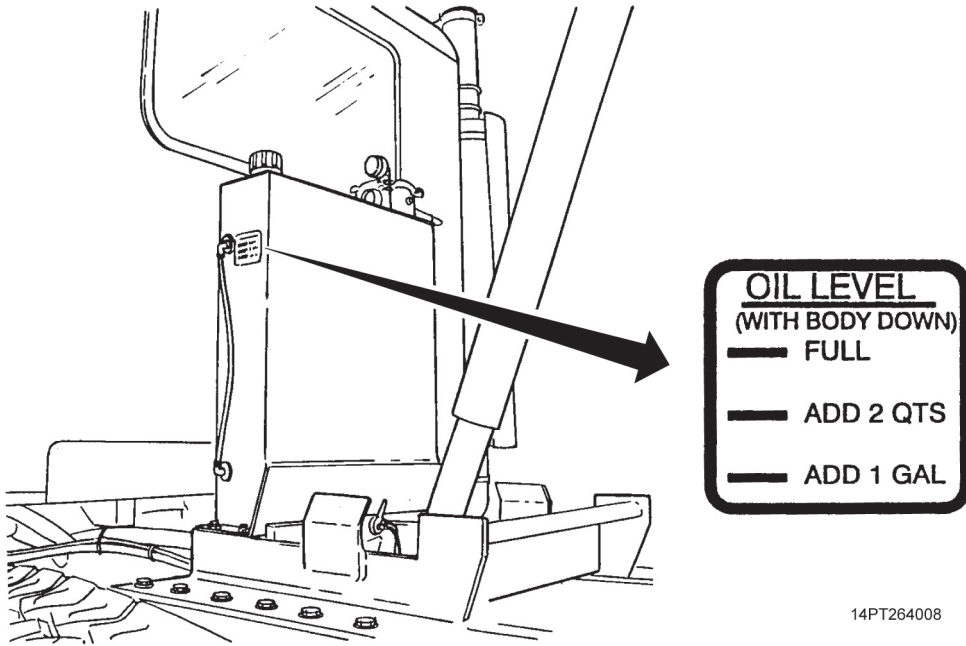
Figure 2. Driver's Side Cargo Cover Decals.



14PT264007

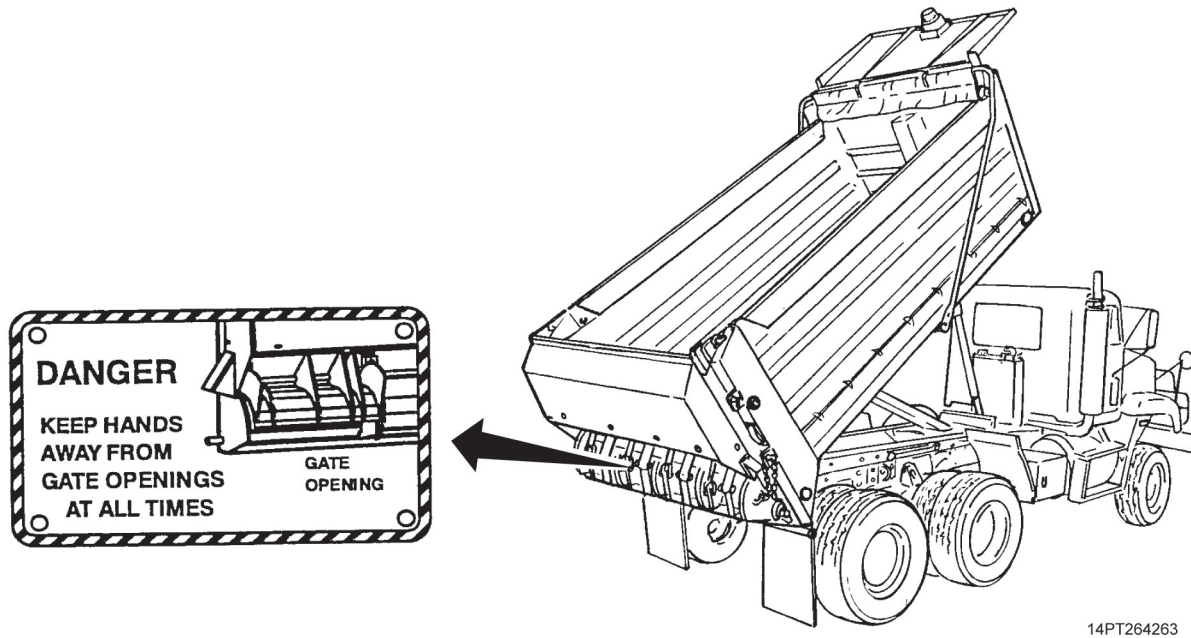
Figure 3. Top Driver's Side Cab Corner Decals.

DECALS, INSTRUCTION PLATES, AND STENCILS - Continued



14PT264008

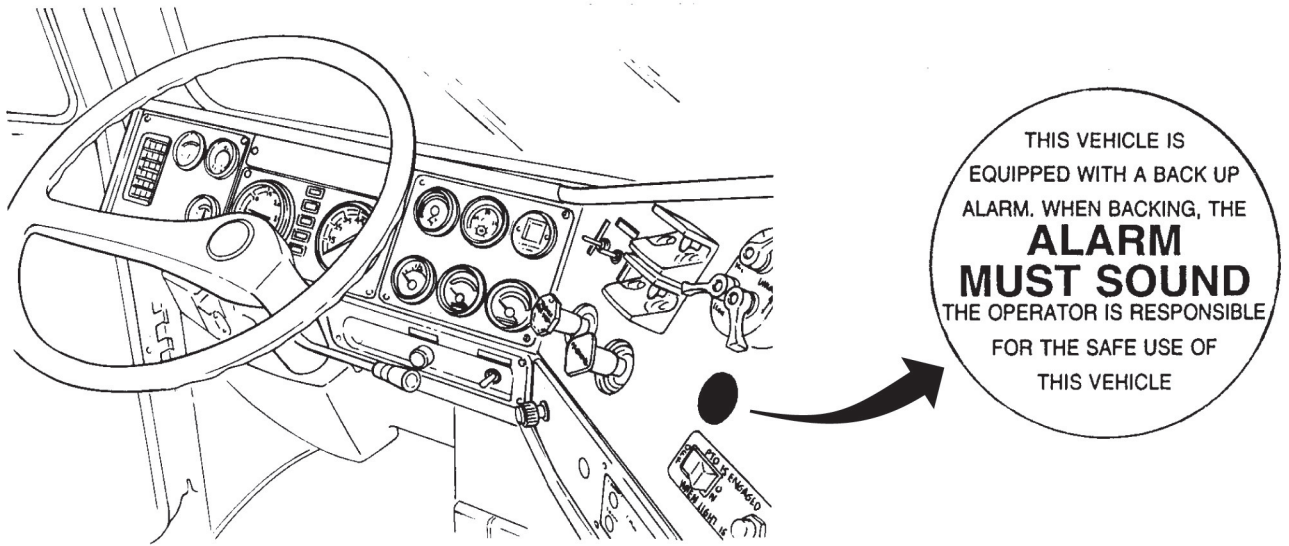
Figure 4. Hydraulic Oil Tank Decal.



14PT264263

Figure 5. Tailgate Decal.

DECALS, INSTRUCTION PLATES, AND STENCILS - Continued



M917A1

14PT264009

Figure 6. Reverse Alarm Decal.

DECALS, INSTRUCTION PLATES, AND STENCILS - Continued

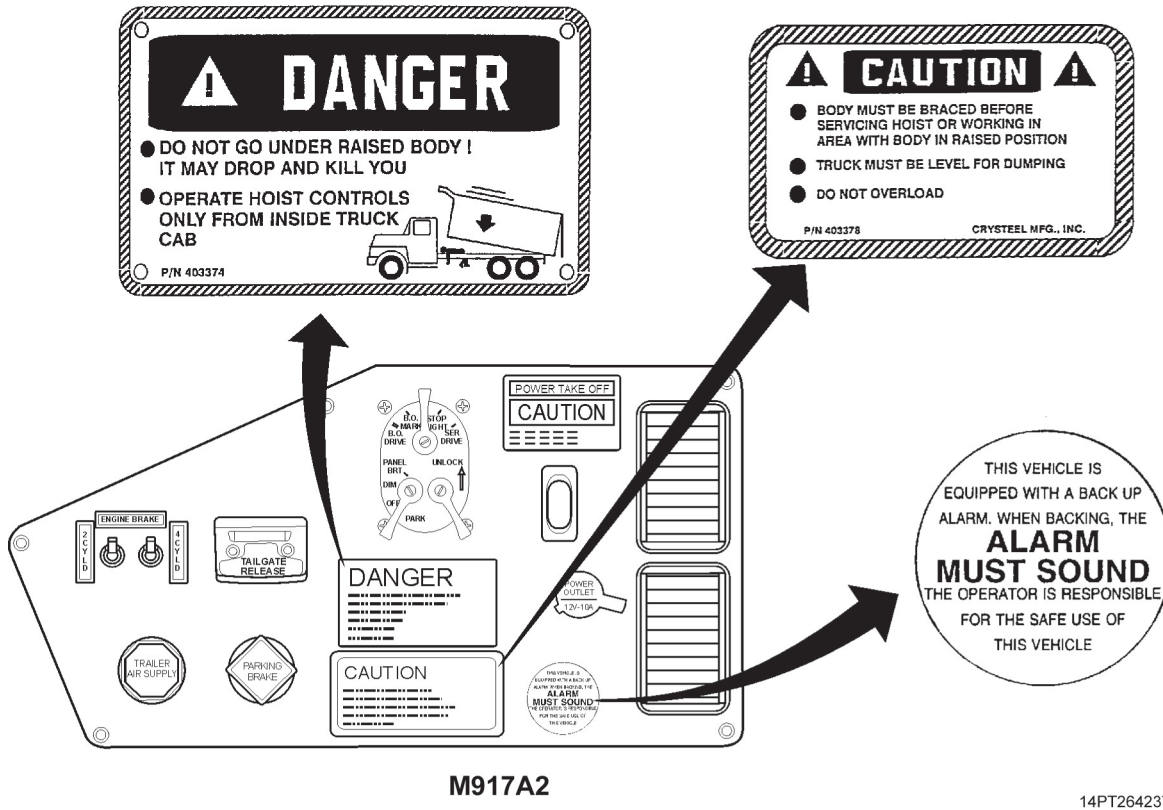


Figure 7. Dashboard Decals.

END OF WORK PACKAGE

CHAPTER 3

OPERATOR TROUBLESHOOTING PROCEDURES

OPERATOR MAINTENANCE TROUBLESHOOTING INDEX

GENERAL

1. This section provides information for identifying and correcting malfunctions that you may find while operating the dump body.
2. The Troubleshooting Index lists common malfunctions which may occur and refers you to the proper Work Package (WP) for a troubleshooting procedure.
3. If you are unaware of the location of an item mentioned in troubleshooting, refer to (WP 0002) or (WP 0003).
4. Before performing troubleshooting, read and follow all safety instructions found in the warning summary at the front of this manual.
5. This section 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 the listed corrective actions, notify your supervisor.
6. When troubleshooting a malfunction:
 - a. Locate the symptom or symptoms that best describes the malfunction. If the appropriate symptom is not listed, notify your supervisor.
 - b. Turn to the WP where the troubleshooting procedures for the malfunction in question are described.
 - c. Perform each step in the order listed until the malfunction is corrected and the item being inspected is operational. DO NOT perform any maintenance task unless the troubleshooting procedure tells you to do so.

EXPLANATION OF HEADINGS

The headings in the Troubleshooting WPs are defined as follows:

1. **SYMPTOM.** A visual or operational indication that something is wrong with the equipment.
2. **MALFUNCTION.** A specific description of the problem.
3. **CORRECTIVE ACTION.** A procedure to correct the problem.

Malfunction/Symptom

Troubleshooting Procedure

DUMP BODY

- 1. Dump Body Raises and Lowers Sluggishly WP 0009
- 2. Dump Body Will Not Lower When Hydraulic Control Lever Is Placed in DOWN Position WP 0009
- 3. Dump Body Will Not Raise When Hydraulic Control Lever Is Placed in UP Position WP 0009

MATERIAL CONTROL SYSTEM (MCS) GATE

- 4. MCS Gate Will Not Operate WP 0010
- 5. MCS Gate Will Not Operate With Driver's Controls WP 0010
- 6. MCS Gate Will Not Operate With Remote Control WP 0010
- 7. MCS Gate(s) Opens or Closes When Remote Control Is Connected WP 0010

TAILGATE

- 8. Tailgate Assembly Lock Will Not Release WP 0011

END OF WORK PACKAGE

**OPERATOR MAINTENANCE
DUMP BODY TROUBLESHOOTING PROCEDURES**

INITIAL SETUP:**References**

TM 9-2320-302-10
TM 9-2320-363-10
WP 0004

References (cont.)

WP 0005
WP 0020

TROUBLESHOOTING PROCEDURE**DUMP BODY****SYMPTOM**

Dump body does not function properly.

MALFUNCTION

Dump body will not raise when hydraulic control lever is placed in up position.

CORRECTIVE ACTION

1. Check position of main light switch.
Place main light switch in SER DRIVE or STOP LIGHT position (TM 9-2320-302-10 or TM 9-2320-363-10).
2. Check if power take off (PTO) is engaged.
Engage PTO (TM 9-2320-302-10 or TM 9-2320-363-10).

CAUTION

To prevent overfilling hydraulic reservoir, DO NOT add hydraulic fluid when dump body is raised. Failure to comply may result in damage to equipment.

3. Check the hydraulic oil level in sight tube on reservoir.
Add hydraulic oil if necessary (WP 0020).
4. Check position of dump body transport lock.
Place transport lock in UNLOCKED position (WP 0004).
5. Dump body still will not raise.
Notify Field Maintenance.

DUMP BODY - Continued**MALFUNCTION**

Dump body raises and lowers sluggishly.

CORRECTIVE ACTION

1. Check the hydraulic oil level in sight tube on reservoir.
Add hydraulic oil if necessary (WP 0020).
2. Check hydraulic oil filter service indicator gauge.
Notify Field Maintenance if gauge is in the RED zone.
3. Check hydraulic system for leaks.
Notify Field Maintenance if a leak is present.
4. Check for binding and inadequate lubrication at dump body, hydraulic cylinder, and stabilizer pivot points.
Lubricate pivot points (WP 0020).
5. Dump body still raises and lowers sluggishly.
Notify Field Maintenance.

MALFUNCTION

Dump body will not lower when hydraulic control lever is placed in down position.

CORRECTIVE ACTION

1. Check for deployed body props.
Stow body props (WP 0005).
2. Check for obstructions.
Remove obstructions.

CAUTION

DO NOT overfill hydraulic reservoir. Add ONLY enough hydraulic oil to safely lower the dump body. Failure to comply may result in damage to equipment.

3. Check the hydraulic oil level in sight tube on reservoir.
Add hydraulic oil if necessary (WP 0020).
4. Dump body still will not lower.
Notify Field Maintenance.

END OF WORK PACKAGE

**OPERATOR MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) GATE TROUBLESHOOTING PROCEDURES**

INITIAL SETUP:**References**

TM 9-2320-302-10
TM 9-2320-363-10
WP 0005

TROUBLESHOOTING PROCEDURE**MCS GATE****SYMPTOM**

MCS gate does not operate properly.

MALFUNCTION

MCS gate will not operate.

CORRECTIVE ACTION

1. Check position of MCS gate(s) adjustment tube locking pins.
Position locking pin(s) to desired operating position (WP 0005).
2. Check that all air tank drain valves are closed.
Close all draincocks.

MCS GATE - Continued

CORRECTIVE ACTION - Continued

WARNING



- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
3. Start engine (TM 9-2320-302-10 or TM 9-2320-363-10) and check for possible air leaks at air reservoirs, hoses, fittings, and MCS gate air cylinders.
Notify Field Maintenance of any leaks.
 4. MCS gate still fails to operate.
Notify Field Maintenance.

MCS GATE - Continued**MALFUNCTION**

MCS gate will not operate with driver's controls.

CORRECTIVE ACTION

1. Check if MCS remote control is connected to driver's or passenger's side of MCS tailgate.
Disconnect MCS remote control from MCS gate.
2. Check position of MCS gate(s) adjustment tube locking pins.
Position locking pin(s) to desired operating position (WP 0005).
3. Check that all air reservoir draincocks are closed.
Close all draincocks.

MCS GATE - Continued

CORRECTIVE ACTION - Continued

WARNING



- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
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 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
4. Start engine (TM 9-2320-302-10 or TM 9-2320-363-10) and check for possible air leaks at air reservoirs, hoses, fittings, and MCS gate air cylinders.
Notify Field Maintenance of any leaks.
 5. MCS gate still fails to operate.
Notify Field Maintenance.

MCS GATE - Continued**MALFUNCTION**

MCS gate will not operate with remote control.

CORRECTIVE ACTION

1. Check if MCS remote control is properly connected to driver's or passenger's side of MCS tailgate.
Connect remote control to MCS tailgate.
2. Check position of MCS gate(s) adjustment tube locking pins.
Position locking pin(s) to desired operating position (WP 0005).
3. Check that all air reservoir draincocks are closed.
Close all draincocks.

MCS GATE - Continued

CORRECTIVE ACTION - Continued

WARNING

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
4. Start engine (TM 9-2320-302-10 or TM 9-2320-363-10) and check for possible air leaks at air reservoirs, hoses, fittings, and MCS gate air cylinders.
Notify Field Maintenance of any leaks.
 5. MCS gate still fails to operate.
Notify Field Maintenance.

MCS GATE - Continued**MALFUNCTION**

MCS gate(s) opens or closes when remote control is connected.

CORRECTIVE ACTION

1. Check position of remote control toggle switches.
Position toggle switches to CLOSED position.
2. Control gate(s) still opens or closes when remote control is connected.
Notify Field Maintenance.

END OF WORK PACKAGE

**OPERATOR MAINTENANCE
TAILGATE TROUBLESHOOTING PROCEDURES**

INITIAL SETUP:

Not Applicable

TROUBLESHOOTING PROCEDURE**TAILGATE****SYMPTOM**

Tailgate does not function properly.

MALFUNCTION

Tailgate assembly lock will not release.

CORRECTIVE ACTION

1. Check that all air reservoir draincocks are closed. Close all draincocks.
2. Start engine and check for possible air leaks at air reservoirs, hoses, fittings, and tailgate locking air cylinder. Notify Field Maintenance of any leaks.

END OF WORK PACKAGE

CHAPTER 4
FIELD TROUBLESHOOTING PROCEDURES

FIELD MAINTENANCE TROUBLESHOOTING INDEX

GENERAL

1. This section provides information for identifying and correcting malfunctions that you may find while operating the dump body.
2. The Troubleshooting Index lists common malfunctions which may occur and refers you to the proper Work Package (WP) for a troubleshooting procedure.
3. If you are unaware of the location of an item mentioned in troubleshooting, refer to (WP 0002) or (WP 0003).
4. Before performing troubleshooting, read and follow all safety instructions found in the warning summary at the front of this manual.
5. This section 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 the listed corrective actions, notify your supervisor.
6. When troubleshooting a malfunction:
 - a. Locate the symptom or symptoms that best describes the malfunction. If the appropriate symptom is not listed, notify your supervisor.
 - b. Turn to the WP where the troubleshooting procedures for the malfunction in question are described.
 - c. Perform each step in the order listed until the malfunction is corrected and the item being inspected is operational. DO NOT perform any maintenance task unless the troubleshooting procedure tells you to do so.

EXPLANATION OF HEADINGS

The headings in the Troubleshooting WPs are defined as follows:

1. **SYMPTOM.** A visual or operational indication that something is wrong with the equipment.
2. **MALFUNCTION.** A specific description of the problem.
3. **CORRECTIVE ACTION.** A procedure to correct the problem.

Malfunction/Symptom

Troubleshooting Procedure

DUMP BODY

- 1. Dump Body Lowers With Hydraulic Control Lever in the Neutral Position and Power Take Off (PTO) Disengaged WP 0013
- 2. Dump Body Lowers With Hydraulic Control Lever in the Neutral Position and PTO Engaged WP 0013
- 3. Dump Body Raises and Lowers Sluggishly WP 0013
- 4. Dump Body Raises With Hydraulic Control Lever in the Neutral Position and PTO Engaged WP 0013
- 5. Dump Body Will Not Raise and/or Lower WP 0013

MATERIAL CONTROL SYSTEM (MCS) GATE

- 6. MCS Gate Will Not Operate WP 0014
- 7. MCS Gate Will Not Operate With Driver's Controls WP 0014
- 8. MCS Gate Will Not Operate With Remote Control WP 0014
- 9. MCS Gate(s) Opens or Closes When Remote Control Is Connected WP 0014
- 10. One or More MCS Gates Will Not Open or Close Properly WP 0014

TAILGATE

- 11. Tailgate Assembly Lock Will Not Release WP 0015

END OF WORK PACKAGE

**FIELD MAINTENANCE
DUMP BODY TROUBLESHOOTING PROCEDURES**

INITIAL SETUP:**References**

TM 9-2320-302-10
TM 9-2320-363-10
TM 9-2320-302-20-1
TM 9-2320-302-20-2
TM 9-2320-363-20-1

References (cont.)

TM 9-2320-363-20-2
WP 0062
WP 0063
WP 0064

TROUBLESHOOTING PROCEDURE**DUMP BODY****SYMPTOM**

Dump body does not function properly.

MALFUNCTION

Dump body will not raise and/or lower.

CORRECTIVE ACTION

1. Check if Power Take Off (PTO) is operating properly.
Check PTO operation (TM 9-2320-363-10 or TM 9-2320-302-10).
2. Check for damaged hydraulic hoses.
Replace damaged hydraulic hoses (WP 0064).
3. Check for damaged or out of adjustment hydraulic control lever cable.
 - a. Adjust hydraulic control lever cable (WP 0062).
 - b. Replace damaged hydraulic control lever cable (WP 0062).
4. Dump body still will not operate properly.
Notify maintenance supervisor.

MALFUNCTION

Dump body raises with hydraulic control lever in the neutral position and Power Take Off (PTO) engaged.

CORRECTIVE ACTION

1. Check for damaged or out of adjustment hydraulic control lever cable.
 - a. Adjust hydraulic control lever cable (WP 0062).
 - b. Replace damaged hydraulic control lever cable (WP 0062).

DUMP BODY - Continued**CORRECTIVE ACTION - Continued**

2. Dump body still will not operate properly.
Notify maintenance supervisor.

MALFUNCTION

Dump body lowers with hydraulic control lever in the neutral position and PTO disengaged.

CORRECTIVE ACTION

1. Check for damaged or out of adjustment hydraulic control lever cable.
 - a. Adjust hydraulic control lever cable (WP 0062).
 - b. Replace damaged hydraulic control lever cable (WP 0062).
2. Dump body still will not operate properly.
Notify maintenance supervisor.

MALFUNCTION

Dump body lowers with hydraulic control lever in the neutral position and PTO engaged.

CORRECTIVE ACTION

1. Check for damaged or out of adjustment hydraulic control lever cable.
 - a. Adjust hydraulic control lever cable (WP 0062).
 - b. Replace damaged hydraulic control lever cable (WP 0062).
2. Dump body still will not operate properly.
Notify maintenance supervisor.

MALFUNCTION

Dump body raises and lowers sluggishly.

CORRECTIVE ACTION

1. Check hydraulic filter service indicator gauge.
Service hydraulic oil filter (WP 0063).
2. Check engine idle speed (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).
3. Check for damaged hydraulic hoses.
Replace damaged hydraulic hoses (WP 0064).
4. Check for binding bearings at pivot points of dump body, hydraulic cylinder, and stabilizer.
Notify maintenance supervisor.

END OF WORK PACKAGE

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) GATE TROUBLESHOOTING PROCEDURES

INITIAL SETUP:**References**

TM 9-2320-302-20-1
TM 9-2320-302-20-2
TM 9-2320-363-20-1
TM 9-2320-363-20-2
WP 0024
WP 0023
WP 0033
WP 0034

References (cont.)

WP 0044
WP 0046
WP 0049
WP 0050
WP 0051
WP 0047
WP 0045
WP 0077

TROUBLESHOOTING PROCEDURE**MCS GATE****SYMPTOM**

MCS gate does not function properly.

MALFUNCTION

MCS gate will not operate.

CORRECTIVE ACTION

1. Check for air leaks throughout vehicle (chassis) air system.
Tighten or replace leaking or damaged air system components (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).
2. Check for leaking or damaged air hoses, fittings, or valves on MCS tailgate.
Tighten or replace leaking or damaged air hoses and fittings (WP 0047).
3. Check for leaking or damaged MCS air reservoir.
Replace MCS air reservoir (WP 0046).
4. Check for leaking or damaged MCS air cylinder.
Replace or repair MCS air cylinder ((WP 0049), (WP 0050), or (WP 0051)).

MCS GATE - Continued**MALFUNCTION**

MCS gate will not operate with driver's controls.

CORRECTIVE ACTION

1. Check for air leaks throughout vehicle (chassis) air system.
Tighten or replace leaking or damaged air system components (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).
2. Check MCS tailgate for leaking or damaged air system components.
Tighten or replace leaking or damaged components ((WP 0046), (WP 0049), (WP 0050), (WP 0051), or (WP 0047)).

NOTE

For assistance in troubleshooting an MCS electrical malfunction, refer to Wiring Diagrams (WP 0077).

3. Check MCS fuse for continuity.
Replace damaged fuse (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).
4. Check driver's MCS control unit switches for voltage and continuity.
Replace damaged switches (WP 0024).
5. Check truck-to-MCS tailgate wiring harness for voltage and continuity.
Repair or replace damaged truck-to-MCS tailgate wiring harness (WP 0034).
6. Check MCS tailgate wiring harness and air cylinder solenoids for voltage and continuity.
 - a. Repair or replace damaged MCS tailgate wiring harness (WP 0034).
 - b. Replace damaged MCS air cylinder solenoids (WP 0050).

MALFUNCTION

MCS gate will not operate with remote control.

CORRECTIVE ACTION

1. Check for air leaks throughout vehicle (chassis) air system.
Tighten or replace leaking or damaged air system components (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).
2. Check MCS tailgate for leaking or damaged air system components.
Tighten or replace leaking or damaged components ((WP 0046), (WP 0049), (WP 0050), (WP 0051), or (WP 0047)).

MCS GATE - Continued**CORRECTIVE ACTION - Continued****NOTE**

For assistance in troubleshooting an MCS electrical malfunction, refer to Wiring Diagrams (WP 0077).

3. Check MCS fuse for continuity.
Replace damaged fuse (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).
4. Check MCS remote control switches for voltage and continuity.
 - a. Replace damaged switches (WP 0023).
 - b. Replace damaged remote control.
5. Check MCS remote control cable for voltage and continuity.
Replace damaged remote control cable (WP 0023).
6. Check truck-to-MCS tailgate wiring harness for voltage and continuity.
Repair or replace damaged truck-to-MCS tailgate wiring harness (WP 0033).
7. Check MCS tailgate wiring harness and MCS air cylinder solenoids for voltage and continuity.
 - a. Repair or replace damaged MCS tailgate wiring harness (WP 0034).
 - b. Replace damaged MCS air cylinder solenoids (WP 0050).

MALFUNCTION

MCS gates open or close when remote control is connected.

CORRECTIVE ACTION**NOTE**

For assistance in troubleshooting an MCS electrical malfunction, refer to Wiring Diagrams (WP 0077).

1. Check MCS remote control switches for voltage and continuity.
 - a. Replace damaged switches (WP 0023).
 - b. Replace damaged remote control.
2. Check MCS remote control cable for voltage and continuity.
Replace damaged remote control cable (WP 0023).
3. Check MCS tailgate wiring harness and MCS air cylinder solenoids for voltage and continuity.
 - a. Repair or replace damaged MCS tailgate wiring harness (WP 0034).
 - b. Replace damaged MCS air cylinder solenoids (WP 0050).

MCS GATE - Continued**MALFUNCTION**

One or more MCS gates will not open or close properly.

CORRECTIVE ACTION

1. Check MCS tailgate for leaking or damaged air system components.
Tighten or replace leaking or damaged components ((WP 0046), (WP 0049), (WP 0050), (WP 0051), or (WP 0047)).
2. Check MCS tailgate for damaged gates.
Replace damaged gate (WP 0044).
3. Check MCS tailgate for damaged gate adjustment tubes and locking pins.
Replace damaged adjustment tube (WP 0045).

END OF WORK PACKAGE

**FIELD MAINTENANCE
TAILGATE TROUBLESHOOTING PROCEDURES**

INITIAL SETUP:**References**

TM 9-2320-302-20-1
TM 9-2320-302-20-2
TM 9-2320-363-20-1

References (cont.)

TM 9-2320-363-20-2
WP 0048

TROUBLESHOOTING PROCEDURE**TAILGATE****SYMPTOM**

Tailgate does not function properly.

MALFUNCTION

Tailgate assembly lock will not release.

CORRECTIVE ACTION

1. Check for air leaks throughout vehicle (chassis) air system. Tighten or replace loose, leaking, or damaged air system components (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).
2. Check for damaged or leaking tailgate release air cylinder. Repair or replace tailgate release air cylinder (WP 0048).
3. Check for damaged tailgate locking linkage.

END OF WORK PACKAGE

CHAPTER 5

**OPERATOR PREVENTIVE MAINTENANCE CHECKS AND
SERVICES (PMCS) INSTRUCTIONS**

**OPERATOR MAINTENANCE
OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INCLUDING LUBRICATION
INSTRUCTIONS INTRODUCTION**

GENERAL**NOTE**

Refer to TM 9-2320-363-10 or TM 9-2320-302-10 for Operator PMCS for the dump truck chassis.

To ensure that the dump body is ready for operation at all times, it must be inspected on a regular basis so that defects may be found and corrected before they result in serious damage, equipment failure, or injury to personnel. The Preventive Maintenance Checks and Services (PMCS) table (WP 0017) contains systematic instructions on inspections, adjustments, and corrections to be performed by the operator/crew to keep your equipment in good operating condition and ready for its primary mission.

EXPLANATION OF TABLE ENTRIES**NOTE**

The WARNINGS and CAUTIONS appearing in your PMCS table should always be observed. WARNINGS and CAUTIONS appear before applicable procedures. You must observe these WARNINGS to prevent serious injury to yourself and others, and CAUTIONS to prevent your equipment from being damaged.

Item Number (Item No.) Column

Numbers in this column are for reference. When completing DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E, include the item number for the check/service indicating a fault. Item numbers also appear in the order that you must perform checks and services for the interval listed.

Interval Column

This column tells you when you must do the procedure listed in the Procedure column.

- *Before* procedures must be done before you operate the truck.
- *During* procedures must be done while you are operating the truck.
- *After* procedures must be done immediately after you have operated the truck.
- *Weekly* procedures must be done once each week.
- *Monthly* procedures must be done once each month.

Item To Be Checked or Serviced Column

This column provides the location and item to be checked or serviced.

Procedure Column

This column gives the procedure you must perform to check or service the item listed in the Item To Be Checked or Serviced column to know if the equipment is ready or available for its intended mission or for operation. You must perform the procedure at the time stated in the interval column.

EXPLANATION OF TABLE ENTRIES - Continued

Equipment Not Ready/Available If: Column

Information in this column tells you what faults keep your equipment from being capable of performing its primary mission. If you make check and service procedures that show faults listed in this column, the equipment is not mission-capable. Follow standard operating procedures for maintaining the equipment or reporting equipment failure.

GENERAL PMCS PROCEDURES

Always perform PMCS in the same order so it gets to be a habit. Once you've had some practice, you'll spot anything wrong in a hurry. If the dump body does not perform as required, refer to the appropriate troubleshooting procedure in the Troubleshooting Index (WP 0008).

If anything looks wrong and you can't fix it, write it on your DA Form 2404 or DA Form 5988-E. If you find something seriously wrong, IMMEDIATELY notify Field Maintenance.

Before performing preventive maintenance, read all the checks required for the applicable interval and prepare all the tools you need to make all the checks. You'll always need a wiping rag (WP 0112, Table 1, Item 29) or two.

WARNING



Degreasing solvent MIL-PRF-680 Type III is an environmentally compliant and low-toxicity material. However, it may be irritating to the eyes and skin. The use of protective gloves and goggles is required. Use in a well-ventilated area. Keep away from open flame and other sources of ignition. When not using MIL-PRF-680 solvents, ensure MIL-PRF-680 solvent container is sealed. Store, handle, and dispose of unused and spent solvents in accordance with local procedures and plans. Failure to comply may result in personnel injury.

Keep It Clean

Dirt, grease, oil, and debris get in the way and may cover up a serious problem. Clean as you work and as needed. Use solvent cleaning compound (WP 0112, Table 1, Item 6) on all metal surfaces. Use dishwashing compound (WP 0112, Table 1, Item 10) and water when you clean rubber or plastic.

Deterioration, Rust, and Corrosion

- Be alert for deterioration of plastic and rubber materials. Report it to your supervisor.
- Check metal parts of vehicle for rust and corrosion. If any bare metal or corrosion exists, clean and apply a light coat of oil (WP 0112, Table 1, Item 26). Notify Field Maintenance.

Bolts, Nuts, and Screws

Check bolts, nuts, and screws for obvious looseness, missing, bent, or broken condition. You can't try them all with a tool, of course, but look for chipped paint, bare metal, or rust around bolt heads. If you find one you think is loose, notify Field Maintenance.

Welds

Look for loose or chipped paint, rust, or gaps where parts are welded together. If you find a bad weld, notify Field Maintenance.

GENERAL PMCS PROCEDURES - Continued

Electric Wires and Connectors

Look for cracked or broken insulation, bare wires, and loose or broken connectors. Tighten loose connectors and ensure that the wires are in good condition.

Hoses and Fluid Lines

Look for wear, damage, and signs of leaks. Ensure that clamps and fittings are tight. Wet spots indicate leaks, of course, but a stain around a fitting or connector can also mean a leak. If a leak comes from a loose fitting or connector, tighten it. If something is broken or worn out, notify Field Maintenance.

Fluid Leakage

It is necessary for you to know how fluid leakage affects the status of your dump truck. The following are definitions of the types/classes of leakage you need to know to be able to determine the status of your equipment. Learn and be familiar with them, and remember – when in doubt, notify Field Maintenance.

LUBRICATION INSTRUCTIONS

NOTE

- These instructions are mandatory.
- Lubrication of M917A1, M917A1 with MCS, M917A2, and M917A2 with MCS chassis is in TM 9-2320-363-10 or TM 9-2320-302-10 and TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2.

The M917A1, M917A1 with MCS, M917A2, and M917A2 with MCS Dump Body must receive lubrication with approved lubricants at recommended intervals in order to be mission-ready at all times.

Recommended intervals are based on normal conditions of operation, temperature, and humidity. When operating under extreme conditions, lubricants should always be changed more frequently. When in doubt, notify your supervisor.

Keep all lubricants in a closed container and store in a clean, dry place away from extreme heat. Keep container covers clean and do not allow dust, dirt, or other foreign material to mix with lubricants. Keep lubrication equipment clean and ready for use.

Maintain a record of lubrication performed and report any problems noted during lubrication. Refer to DA PAM 750-8 for maintenance forms and procedures to record and report any findings.

Keep all external parts of equipment not requiring lubrication free of lubricants. After lubrication, wipe off excess lubricant to prevent accumulation of foreign matter.

Refer to TM 4-33.31 for lubrication instructions in cold weather.

Table 1. Lubricants.

| SYMBOL | NOMENCLATURE | SPECIFICATION |
|---------------|----------------------------------|----------------------|
| GAA | GREASE, AUTOMOTIVE AND ARTILLERY | M-10924-B |

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion prevention and control of Army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to

CORROSION PREVENTION AND CONTROL (CPC) - Continued

prevent the problem in future items. The term "corrosion" means the deterioration of a material or its properties due to a reaction of that material with its chemical environment. An example is the rusting of iron. Corrosion damage in metals can be seen, depending on the metal, as tarnishing, pitting, fogging, surface residue, and/or cracking. Plastics, composites, and rubbers can also degrade (also considered to be corrosion based on the above definition of corrosion). Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically ultraviolet) processes. The most common exposures are excessive heat or light. Damage from these processes will appear as cracking, softening, swelling, and/or breaking. The US Army has defined the following nine (9) forms of corrosion used to evaluate the deterioration of metals. These shall be used when evaluating and documenting corrosion.

UNIFORM (or general attack): Affects a large area of exposed metal surface, like rust on steel or tarnish on silver. It gradually reduces the thickness of the metal until it fails.

CREVICE: Occurs in crevices created by rubber seals, gaskets, bolt heads, lap joints, dirt or other surface deposits. It will develop anywhere moisture or other corrosive agents are trapped and unable to drain or evaporate.

SELECTIVE LEACHING: One element, usually the anodic element of an alloy, corrodes away, leaving the cathodic element. This can create holes in metal.

INTERGRANULAR: Metal deterioration caused by corrosion on the bonds between or across the grain boundaries of the metal. The metal will appear to be peeling off in sheets, flaking, or being pushed apart by layers. A particular type of intergranular corrosion is exfoliation.

PITTING: This can result from conditions similar to those for crevice corrosion. Pits can develop on various materials due to their composition. Rifle boxes are big victims of pitting.

EROSION: Results when a moving fluid (liquid or gas) flows across a metal surface, particularly when solid particles are present in the fluid. Corrosion actually occurs on the surface of the metal, but the moving fluid washes away the corrosion and exposes a new metal surface, which also corrodes.

FRETTING: Occurs as a result of small, repetitive movements (e.g., vibration) between two surfaces in contact with each other. It's usually identified by a black powder corrosion product or pits on the surface.

GALVANIC: Occurs when two different types of metal come in contact with each other, like steel bolts on aluminum, for example. This is a common problem on aircraft because of their mix of metals.

STRESS: Term used to describe corrosion cracking and corrosion fatigue.

Where an item is not ready/available due to one of these forms of corrosion, it shall be recorded as a corrosion failure in the inspection record and the appropriate code (170) for corrosion shall be used when requesting/performing maintenance.

SF Form 368, Product Quality Deficiency Report should be submitted to the address specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual.

ARMY OIL ANALYSIS PROGRAM (AOAP)

The dump body is not enrolled in the Army Oil Analysis Program. HARDTIME INTERVALS APPLY.

Leakage Definitions for PMCS

| | |
|-----------|--|
| Class I | Leakage indicated by wetness or discoloration, but not great enough to form drops. |
| Class II | Leakage great enough to form drops, but not enough to cause drops to drip from the item being checked/inspected. |
| Class III | Leakage great enough to form drops that fall from the item being checked/inspected. |

Leakage Definitions for PMCS - Continued

Operation is allowable with Class I and Class II leakage. WHEN IN DOUBT, notify Field Maintenance. When operating with Class I or Class II leaks, check fluid levels more frequently. Class III leaks must be reported immediately to Field Maintenance. Failure to comply may result in damage to equipment.

END OF WORK PACKAGE

**OPERATOR MAINTENANCE
OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS), INCLUDING LUBRICATION
INSTRUCTIONS**

INITIAL SETUP:

Materials/Parts

Engine Lubricating Oil
(WP 0112, Table 1, Item 20)
Grease, Automotive and Artillery
(WP 0112, Table 1, Item 12)
Wiping Rags
(WP 0112, Table 1, Item 29)

References (cont.)

TM 9-2320-363-10
WP 0005
WP 0073

References

TM 9-2320-302-10

Table 1. Operator Preventive Maintenance Checks and Services (PMCS).


| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|--------------------------------|--|---------------------------------------|
| | | | <p align="center">WARNING</p>  <ul style="list-style-type: none"> • Unless otherwise specified, perform all lubrication and preventive maintenance checks with dump truck on level ground, transmission in N (Neutral), parking brake set, and engine off. • Hydraulic oil is slippery and may cause falls. A suitable container should be used to catch any draining hydraulic fluid. Ensure that all spills are cleaned up and disposed of in accordance with local procedures. • Failure to comply may result in personnel injury or death. | |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|--------------------------------------|---|--|
| | | | <p style="text-align: center;">NOTE</p> <ul style="list-style-type: none"> • Review all WARNINGS, CAUTIONs, and NOTEs before performing PMCS and operating the dump body. • Perform all PMCS checks if: <ul style="list-style-type: none"> • You are the assigned operator but have not operated the dump body since the last <i>Weekly</i> inspection. • You are operating the dump body for the first time. | |
| 1 | Before | Front and Driver's Side Overall View | Check under vehicle for evidence of hydraulic fluid leakage. | Class III hydraulic fluid leaks are evident. |
| 2 | Before | Inside Cab Cargo Cover Crank Handle | Check that crank handle is stowed in storage pouch in Basic Issue Items (BII) box. | |
| 3 | Before | Startup | <p style="text-align: center;">NOTE</p> <p>Dump truck's chassis air system controls both models' tailgate locking mechanism and supplies air to the M917A1 with Material Control System (MCS) and M917A2 with MCS tailgate.</p> <ol style="list-style-type: none"> 1. Start engine and fully pressurize air system (TM 9-2320-363-10 or TM 9-2320-302-10). 2. Listen for air leaks on chassis and at rear of dump body. | Air leakage is evident. |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|-----------------------------------|--|--|
| 4 | During | Dump Body Controls and Indicators | 1. Check hydraulic control lever (Figure 1, Item 1), MCS control unit (Figure 1, Item 2), and indicator light (Figure 1, Item 3) (M917A1 with MCS and M917A2 with MCS) for proper operation. | Hydraulic control lever malfunctions. MCS control unit malfunctions and is required for mission. |

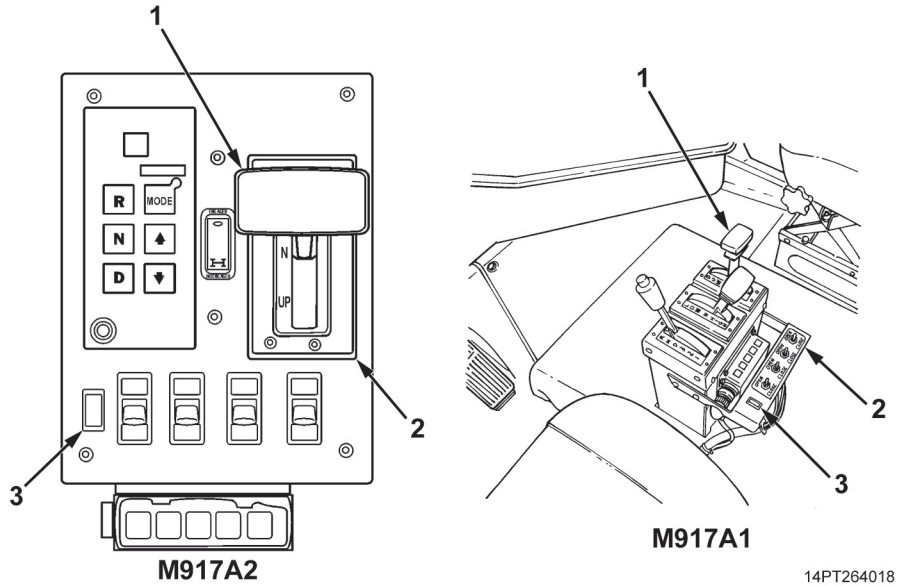


Figure 1. Dump Body Controls and Indicators.

| | | | | |
|--|--|--|--|--|
| | | 2. Monitor body up and body (transport) lock indicator lights (Figure 2, Items 1 and 2), tailgate release control valve lever (Figure 2, Item 3), and Power Take Off (PTO) switch (Figure 2, Item 4) for proper operation. | | Any indicator light or dump body control malfunctions. |
|--|--|--|--|--|

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

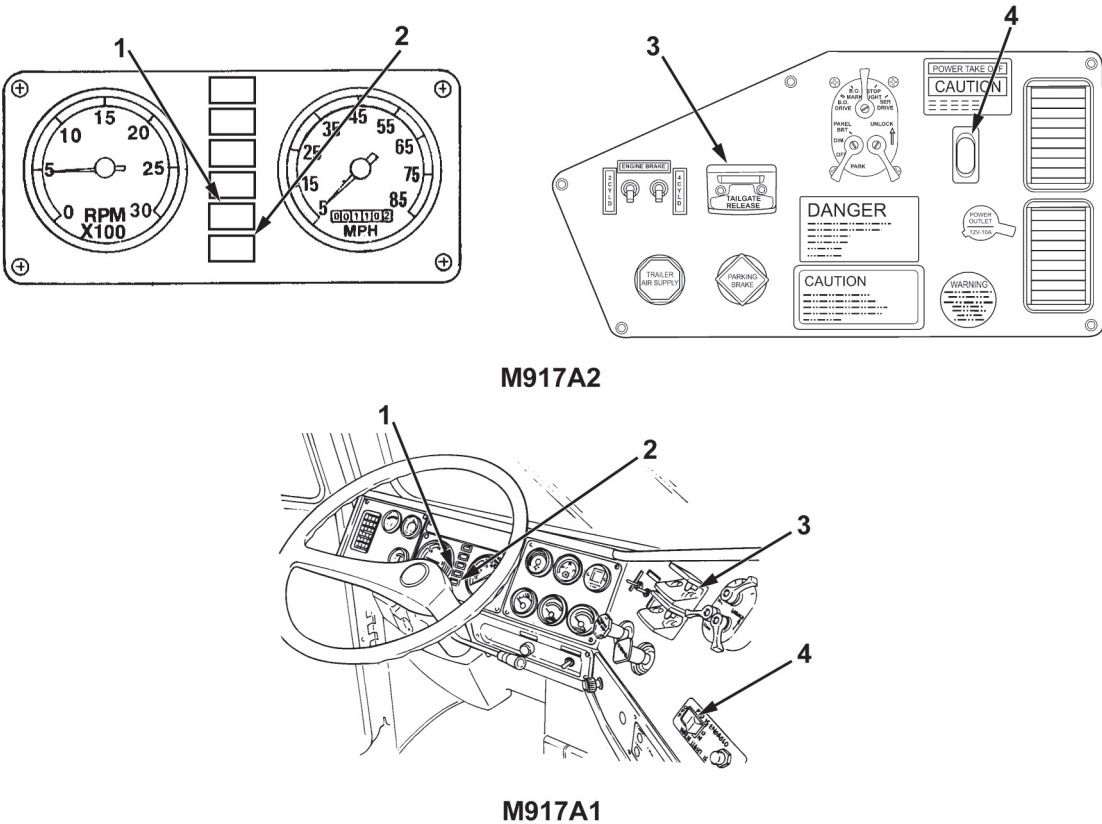
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|----------|--------------------------------------|--|---|
|  <p>M917A2</p> <p>M917A1</p> | | | | |
| 14PT264019 | | | | |
| Figure 2. Dashboard and Instrument Cluster Controls and Indicators. | | | | |
| 5 | During | Overall Leakage | Be alert for evidence of hydraulic fluid leakage. | Class III hydraulic fluid leaks are evident. |
| 6 | After | Front and Driver's Side Overall View | <p style="text-align: center;">NOTE</p> <p>Begin <i>After</i> PMCS checks with dump body lowered and engine off.</p> <p>1. Check under vehicle for evidence of hydraulic fluid leakage.</p> <p>2. Check dump body for obvious damage that would impair operation: e.g., missing or damaged cargo cover controls (Figure 3, Item 1), marker clearance light (Figure 3, Item 2), body prop (Figure 3, Item 4), and adjustment chain (Figure 3, Item 3) at tailgate.</p> | <p>Class III hydraulic fluid leaks are evident.</p> <p>Damage that would impair operation is evident.</p> |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

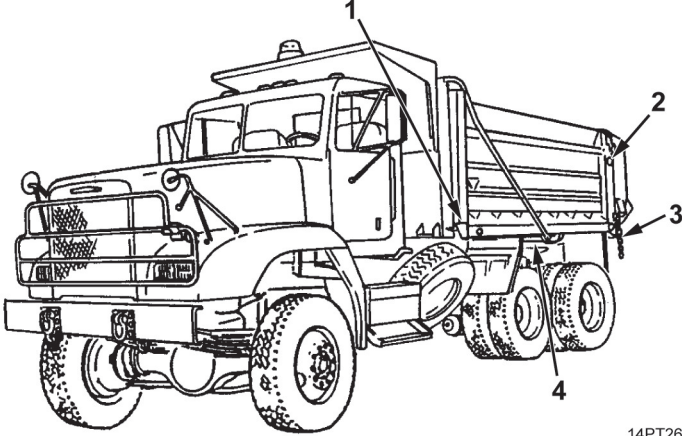
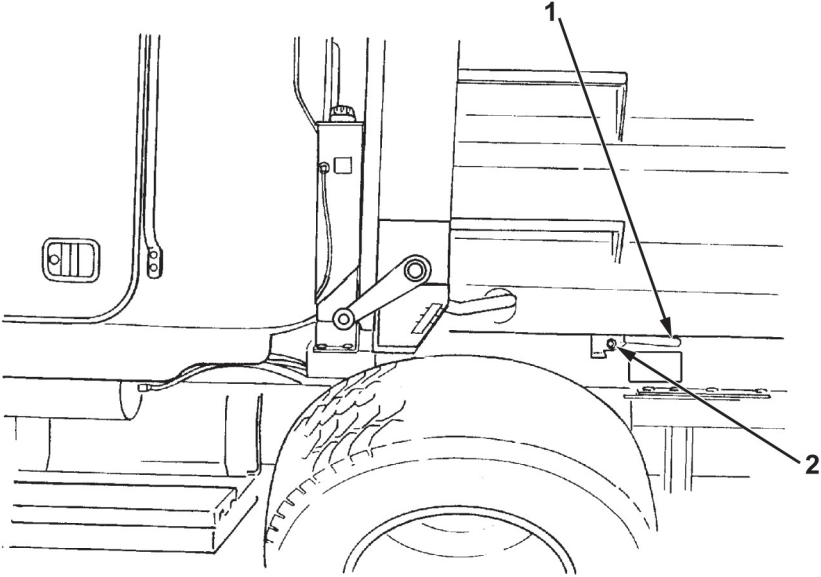
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|----------|--------------------------------|---|------------------------------------|
|  <p style="text-align: right; margin-right: 50px;">14PT264020</p> <p>Figure 3. Front and Driver's Side.</p> | | | | |
| 7 | After | Transport Lock | <p>Check that transport lock (Figure 4, Item 1) is at 3 o'clock UNLOCKED position. If locked, remove pin (Figure 4, Item 2), move transport lock counterclockwise to 3 o'clock position, and reinstall pin.</p> | |
|  <p style="text-align: right; margin-right: 50px;">14PT264021</p> <p>Figure 4. Transport Lock.</p> | | | | |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

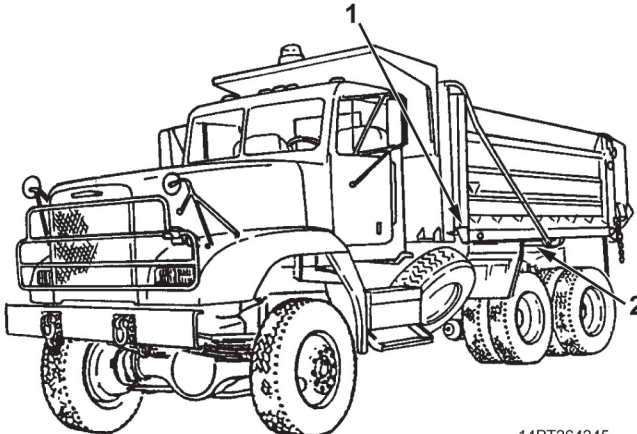
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|----------|--|--|---|
| 8 | After | Cargo Cover | <ol style="list-style-type: none"> 1. Operate cargo cover controls (Figure 5, Item 1) and check for smooth operation (WP 0005). 2. Inspect cargo cover for looseness of mounting to support frame (Figure 5, Item 2), and cuts or tears to cover. Inspect support frame for damage. 3. After operating cargo cover controls (Figure 5, Item 1), ensure that crank handle is stowed in storage pouch in BII box. | <p>Cargo cover does not extend or retract properly.</p> <p>Cargo cover mounting is loose or cover is cut or torn. Support frame is damaged.</p> |
|  <p style="text-align: right; margin-right: 100px;">14PT264245</p> | | | | |
| 9 | After | Tailgate Locking Linkage | Check for damage to tailgate locking linkage (Figure 6, Item 5). | Tailgate locking linkage is damaged. |
| 10 | After | Rear and Passenger's Side Overall View | <ol style="list-style-type: none"> 1. Check under vehicle for evidence of hydraulic fluid leakage. 2. Check dump body for obvious damage that would impair operation: e.g., missing or damaged marker clearance lights (Figure 6, Item 2), taillight (Figure 6, Item 1), body prop (Figure 6, Item 3), and adjustment chain (Figure 6, Item 4) at tailgate. | <p>Class III hydraulic fluid leaks are evident.</p> <p>Damage that would impair operation is evident.</p> |
| 11 | After | Tailgate Locking Linkage | Check for damage to tailgate locking linkage (Figure 6, Item 5). | Tailgate locking linkage is damaged. |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

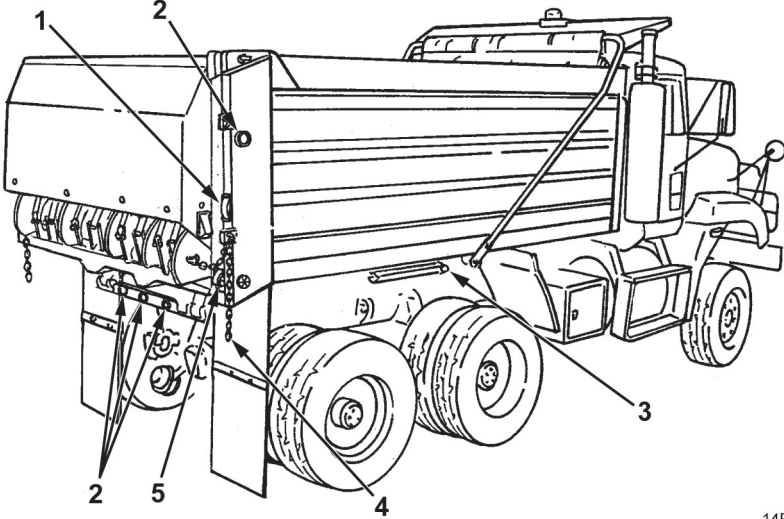
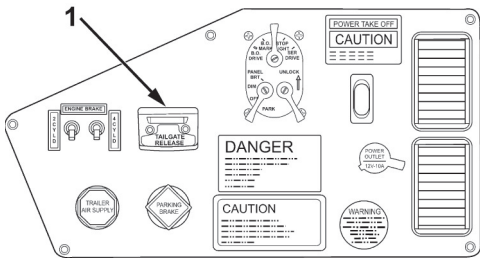
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|--|----------|--------------------------------|---|------------------------------------|
| <div style="text-align: center;">  <p>14PT264022</p> </div> <p style="text-align: center;">Figure 6. Rear and Passenger's Side.</p> | | | | |
| 12 | After | Tailgate Release Lever | <p style="text-align: center;">NOTE</p> <p>Perform the following <i>After</i> PMCS checks with engine on and air system fully pressurized.</p> <ol style="list-style-type: none"> 1. Start engine and fully pressurize air system (TM 9-2320-363-10 or TM 9-2320-302-10). 2. Operate tailgate release control valve lever (Figure 7, Item 1) inside cab (WP 0005). Check that tailgate unlocks and locks properly. | Tailgate will not unlock or lock. |
| <div style="text-align: center;">  <p>M917A2 PANEL SHOWN</p> <p>14PT264023</p> </div> <p style="text-align: center;">Figure 7. Tailgate Release Lever.</p> | | | | |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.


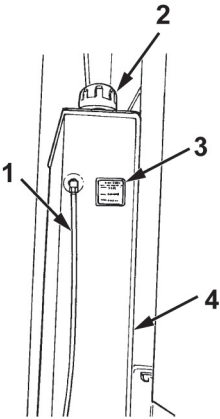
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|--------------------------------|--|------------------------------------|
| 13 | After | Hydraulic Reservoir | <p style="text-align: center;">WARNING</p>  <p>To prevent burns, use caution when removing fill cap of hydraulic reservoir when hydraulic fluid is hot. Avoid contact with hot hydraulic oil. Use extreme care when draining hydraulic oil. Failure to comply may result in personnel injury or death.</p> <p>1. With engine off and dump body lowered, check sight tube (Figure 8, Item 1) to determine level of hydraulic oil in reservoir (Figure 8, Item 4). Level should be even with FULL mark on oil level decal (Figure 8, Item 3). If level is low, remove fill cap (Figure 8, Item 2). Remove any debris from strainer with a clean rag. Add oil through fill cap opening until level is even with FULL mark on decal. Install fill cap (WP 0073).</p>  <p style="text-align: center;">14PT264024</p> | |
| | | | <p>2. Run engine at idle speed and engage PTO (TM 9-2320-363-10 or TM 9- 2320-302-10). Check filter service indicator gauge (Figure 9, Item 1). If gauge needle is in RED zone, hydraulic oil filter element needs replacing. Notify your supervisor.</p> | |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

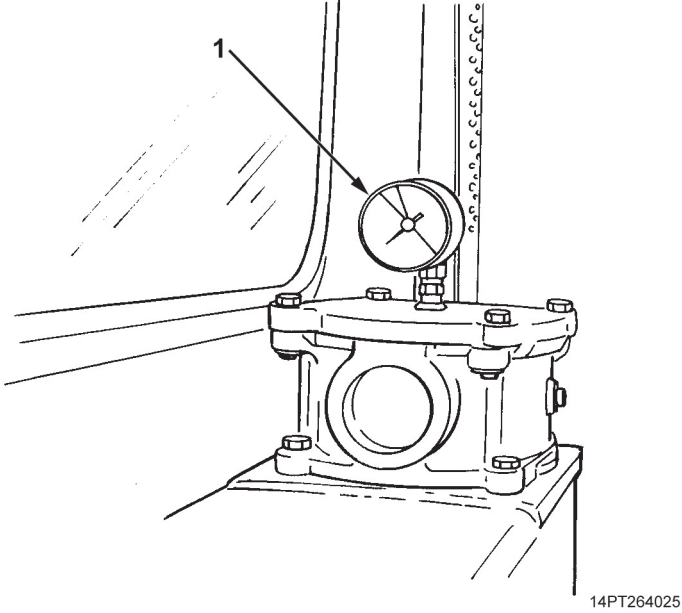
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|----------|--|--|------------------------------------|
|  <p>Figure 9. Filter Service Indicator Gauge.</p> | | | | |
| 14 | After | MCS Tailgate (M917A1 with MCS and M917A2 with MCS) | 1. Remove locking pins (Figure 10, Item 1) from top hole in adjustment tubes (Figure 10, Item 2) and place in bottom hole. | |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

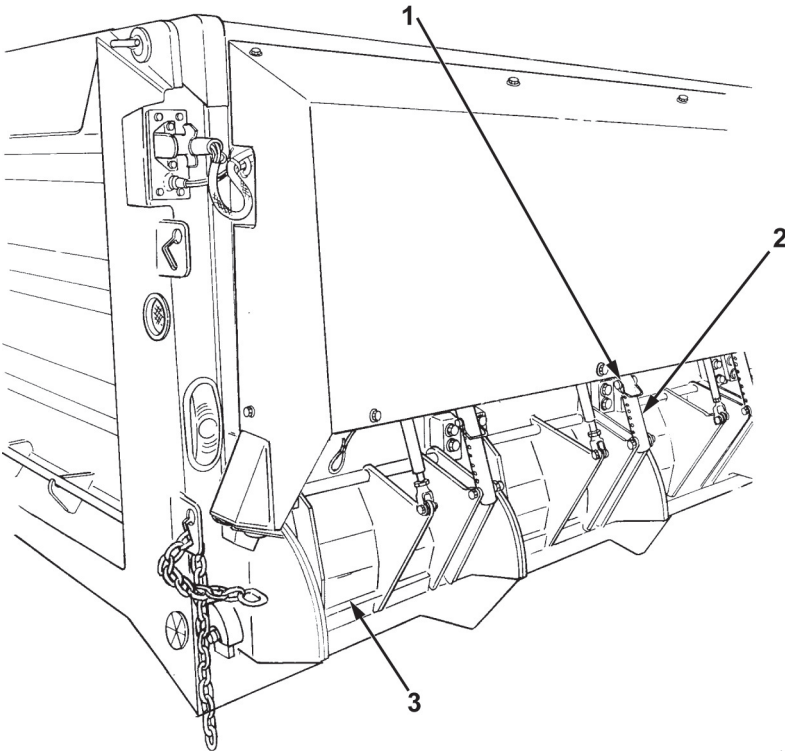
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|--------------------------------|--|--|
| | | |  <p style="text-align: right;">14PT264026</p> <p style="text-align: center;">Figure 10. MCS Tailgate.</p> | <p>2. Operate MCS control unit (Figure 11, Item 1) inside cab (WP 0005). Check that appropriate MCS gate opens and closes as each toggle switch is operated.</p> <p>MCS control unit does not open or close gates and is required for mission.</p> |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

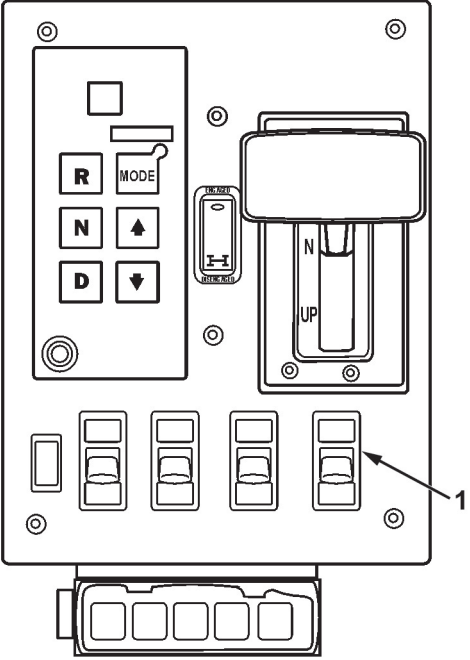
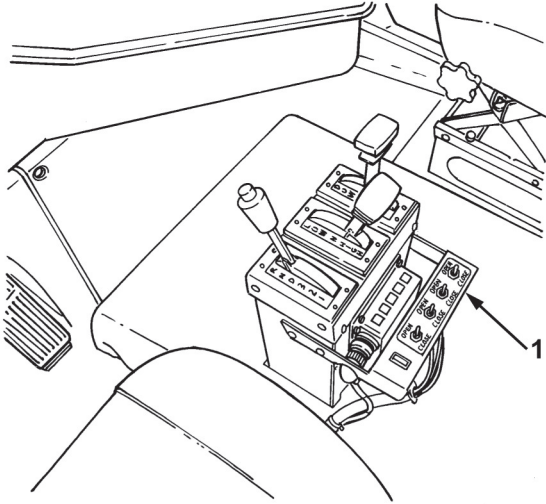

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|--|---|--|
| | |  <p>M917A2</p> |  <p>M917A1</p> <p>14PT264027</p> <p>Figure 11. MCS Control Unit.</p> <p>WARNING</p>  <p>When connected, MCS remote control overrides cab control unit. When remote control is disconnected, cab control activates. To avoid inadvertent opening or closing of gates, ALWAYS check gate positions and position of toggle switches on both cab and remote controls before plugging in or unplugging remote control. Toggle switches should be in CLOSED position. Failure to comply may result in personnel injury or death.</p> <p>3. Plug MCS remote control (Figure 12, Item 6) into receptacle (Figure 12, Item 7) at either side of MCS tailgate (Figure 12, Item 1). Check that appropriate</p> | <p>MCS remote control does not work and is required for mission.</p> |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

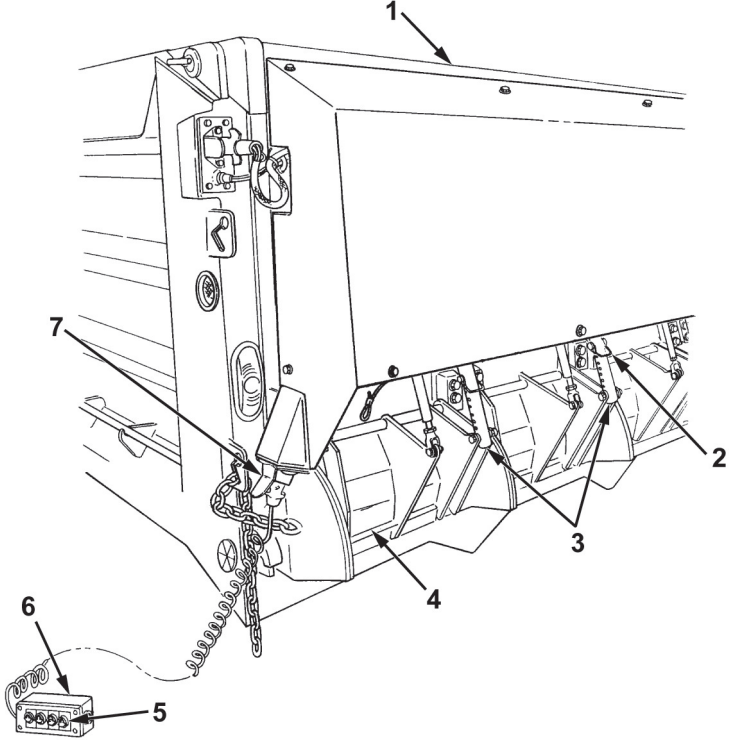

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|--------------------------------|--|---|
| | | | <p>MCS gate (Figure 12, Item 4) opens and closes as each toggle switch (Figure 12, Item 5) is operated.</p> <p>4. Remove locking pins (Figure 12, Item 2) from bottom hole and install in top hole of adjustment tubes (Figure 12, Item 3).</p>  <p style="text-align: right; font-size: small;">14PT264028</p> | |
| 15 | After | Body Props | <p style="text-align: center;">WARNING</p>  <p>NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.</p> <p>Raise dump body and support with body props (WP 0005). Check that body props function properly and do not bind.</p> | <p>Body props are damaged or cannot be installed to safely support dump body.</p> |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

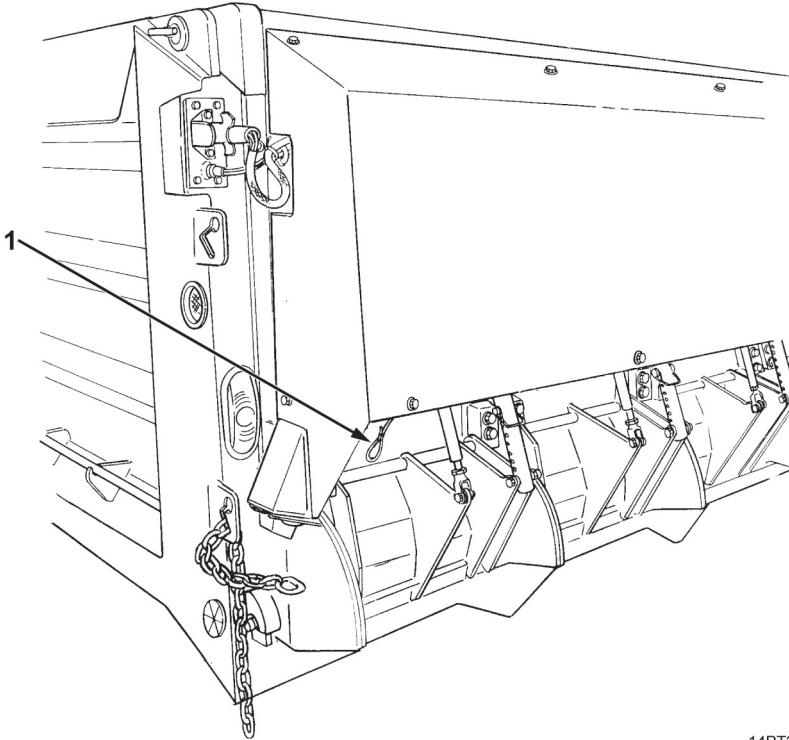

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|---|--|------------------------------------|
| 16 | After | Air Reservoir (M917A1 with MCS and M917A2 with MCS) | <p style="text-align: center;">NOTE</p> <p>Perform the following <i>After</i> PMCS check with engine off.</p> <p>Pull cable pull (Figure 13, Item 1) and drain air reservoir. Release cable pull when all air has drained.</p> <div style="text-align: center;">  <p style="text-align: right; font-size: small;">14PT264029</p> </div> <p style="text-align: center;">Figure 13. Tailgate Cable Pull.</p> | |
| 17 | Weekly | Hydraulic System | <p style="text-align: center;">WARNING</p> <div style="text-align: center;">  </div> <p>NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.</p> <p>1. Raise dump body and support with body props (WP 0005).</p> | |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

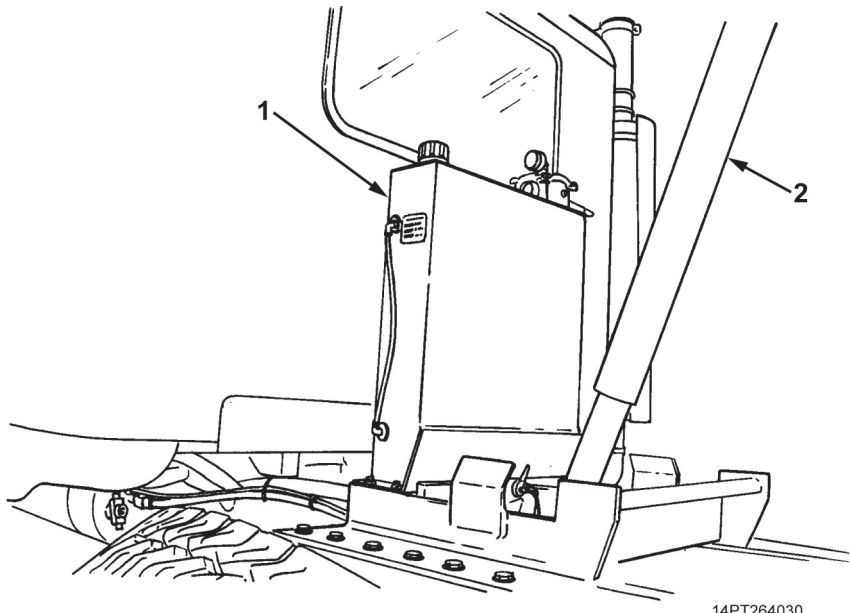

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|----------|--------------------------------|---|---|
| | | | <p>2. Inspect hydraulic cylinder (Figure 14, Item 2), hydraulic reservoir (Figure 14, Item 1), and hydraulic lines and fittings for loose mounting, leaks, or damaged components.</p> <p>3. Remove body props and lower dump body (WP 0005).</p> | <p>Damage to components or Class III hydraulic fluid leaks are evident.</p> |
|  <p>14PT264030</p> | | | | |
| <p>Figure 14. Hydraulic System.</p> | | | | |
| 18 | Monthly | Body Props | <p style="text-align: center;">WARNING</p> <div style="text-align: center;">  </div> <p>NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.</p> <p>1. Raise dump body and support on body props (WP 0005).</p> <p>2. Apply grease to grease fitting (Figure 15, Item 2) on each body prop (Figure 15, Item 1).</p> | <p>Body props are damaged or cannot be installed to safely support dump body.</p> |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

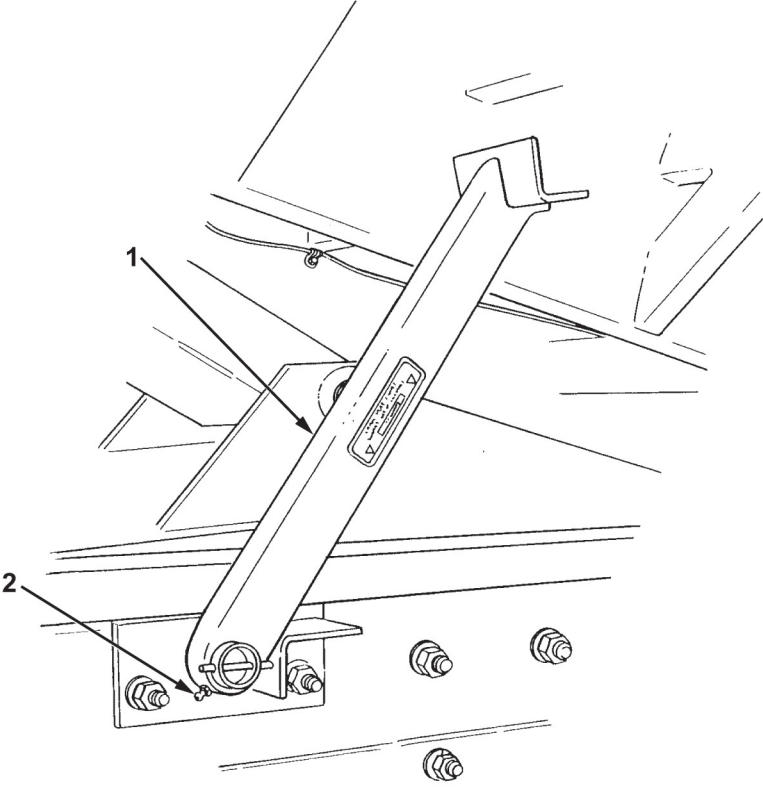
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|----------|--------------------------------|---|------------------------------------|
|  <p style="text-align: right; margin-right: 100px;">14PT264031</p> <p style="text-align: center;">Figure 15. Body Props.</p> | | | | |
| 19 | Monthly | Stabilizer | Apply grease to five grease fittings (Figure 16, Item 1) on stabilizer (Figure 16, Item 2). There are two grease fittings at top and bottom crosses and one grease fitting at center hinge. | |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

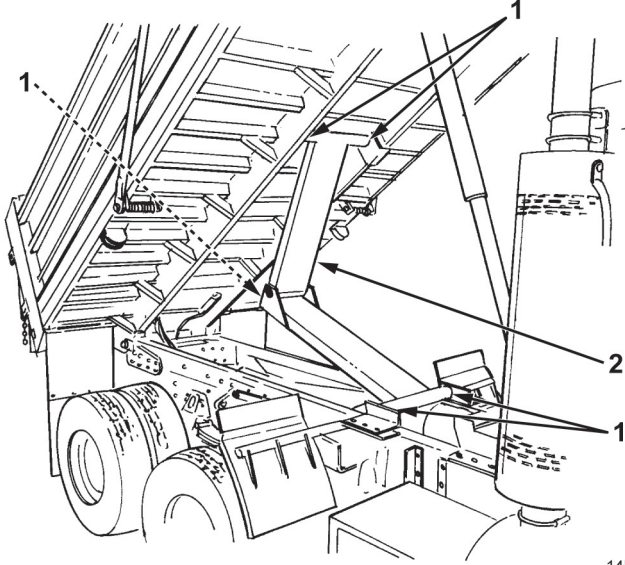
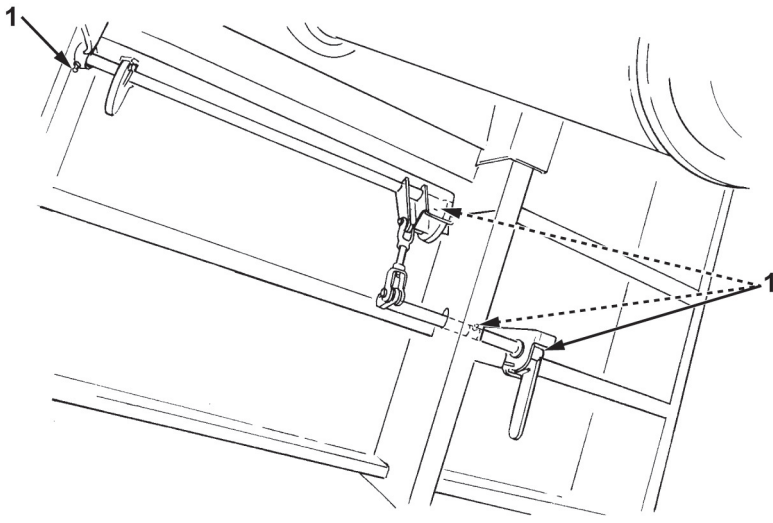
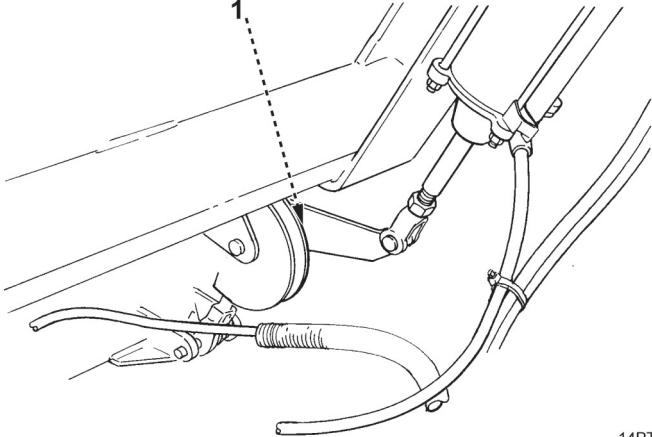
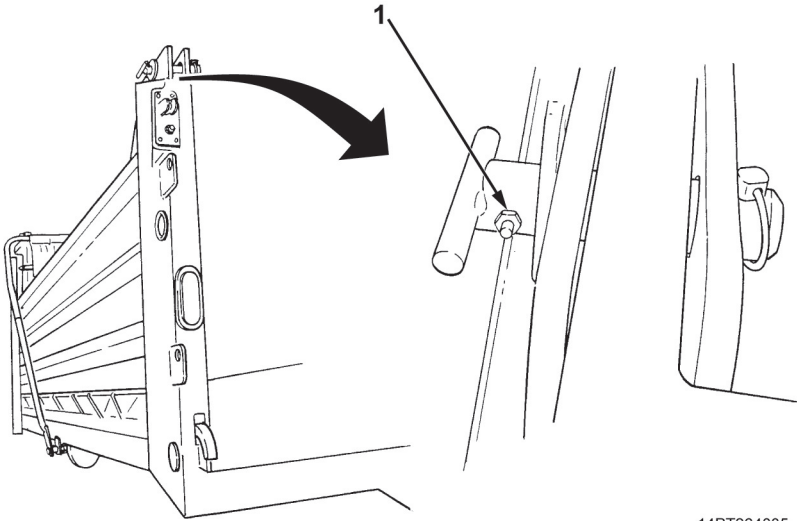
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|----------|--------------------------------|---|---------------------------------------|
|  <p style="text-align: right; margin-right: 50px;">14PT264032</p> <p style="text-align: center;">Figure 16. Stabilizer.</p> | | | | |
| 20 | Monthly | Transport Lock | Apply grease to four transport lock grease fittings (Figure 17, Item 1). | |
|  <p style="text-align: right; margin-right: 50px;">14PT264033</p> <p style="text-align: center;">Figure 17. Transport Lock.</p> | | | | |
| 21 | Monthly | Tailgate Locking Linkage | 1. Apply grease to tailgate locking linkage grease fitting (Figure 18, Item 1). | |

Table 1. Operator Preventive Maintenance Checks and Services (PMCS) - Continued.

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|--------------------------------|---|------------------------------------|
| | | |  <p style="text-align: right;">14PT264034</p> <p style="text-align: center;">Figure 18. Tailgate Locking Linkage.</p> | |
| 22 | Monthly | Tailgate Hinge Pins | <p>2. Remove body props and lower dump body (WP 0005).</p> <p>Apply grease to each tailgate hinge pin grease fitting (Figure 19, Item 1).</p> | |
| | | |  <p style="text-align: right;">14PT264035</p> <p style="text-align: center;">Figure 19. Tailgate Hinge Pins.</p> | |

Mandatory Replacement Parts

There are no replacement parts for these PMCS procedures.

END OF TASK

END OF WORK PACKAGE

CHAPTER 6

**FIELD PREVENTIVE MAINTENANCE CHECKS AND SERVICES
(PMCS) INSTRUCTIONS**

**FIELD MAINTENANCE
FIELD PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INTRODUCTION, INCLUDING
LUBRICATION INSTRUCTIONS**

GENERAL**NOTE**

Refer to TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2 for Field PMCS for the dump truck chassis.

To ensure that the dump body is ready for operation at all times, it must be lubricated and inspected on a regular basis so that defects may be found and corrected before they result in serious damage, equipment failure, or injury to personnel. The Preventive Maintenance Checks and Services (PMCS) table (WP 0019) contains systematic instructions on lubrication, inspections, adjustments, and corrections to be performed by Field Maintenance to keep your equipment in good operating condition and ready for its primary mission.

EXPLANATION OF TABLE ENTRIES**NOTE**

The WARNINGS and CAUTIONS appearing in your PMCS table should always be observed. WARNINGS and CAUTIONS appear before applicable procedures. You must observe these WARNINGS to prevent serious injury to yourself and others, and CAUTIONS to prevent your equipment from being damaged.

Item Number (Item No.) Column

Numbers in this column are for reference. When completing DA Form 2404 (Equipment Inspection and Maintenance Worksheet) or DA Form 5988-E, include the item number for the check/service indicating a fault. Item numbers also appear in the order that you must perform checks and services for the interval listed.

Interval Column

This column tells you when you must do the procedure listed in the Procedure column.

- *Semiannual* procedures must be done once every 6 months.
- *Annual* procedures must be done once each year.

Item To Be Checked or Serviced Column

This column provides the location and item to be checked or serviced.

Procedure Column

This column gives the procedure you must perform to check or service the item listed in the Item To Be Checked or Serviced column to know if the equipment is ready or available for its intended mission or for operation. You must perform the procedure at the time stated in the interval column.

EXPLANATION OF TABLE ENTRIES - Continued**Equipment Not Ready/Available If: Column**

Information in this column tells you what faults keep your equipment from being capable of performing its primary mission. If you make check and service procedures that show faults listed in this column, the equipment is not mission-capable. Follow standard operating procedures for maintaining the equipment or reporting equipment failure.

GENERAL LUBRICATION INSTRUCTIONS**NOTE**

- These instructions are mandatory.
- Lubrication of M917A1, M917A1 with MCS, M917A2, and M917A2 with MCS chassis is in TM 9-2320-363-10 or TM 9-2320-302-10 and TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2.

The M917A1, M917A1 with MCS, M917A2, and M917A2 with MCS Dump Body must receive lubrication with approved lubricants at recommended intervals in order to be mission-ready at all times.

Recommended intervals are based on normal conditions of operation, temperature, and humidity. When operating under extreme conditions, lubricants should always be changed more frequently. When in doubt, notify your supervisor.

Keep all lubricants in a closed container and store in a clean, dry place away from extreme heat. Keep container covers clean and do not allow dust, dirt, or other foreign material to mix with lubricants. Keep lubrication equipment clean and ready for use.

Maintain a record of lubrication performed and report any problems noted during lubrication. Refer to DA PAM 750-8 for maintenance forms and procedures to record and report any findings.

Keep all external parts of equipment not requiring lubrication free of lubricants. After lubrication, wipe off excess lubricant to prevent accumulation of foreign matter.

Refer to TM 4-33.31 for lubrication instructions in cold weather.

GENERAL PMCS PROCEDURES

Always perform PMCS in the same order so it gets to be a habit. Once you've had some practice, you'll spot anything wrong in a hurry. If the dump body does not perform as required, refer to the appropriate troubleshooting procedure in the Troubleshooting Index (WP 0012).

If anything looks wrong and you cannot fix it, write it on your DA Form 2404 or DA Form 5988-E. If you find something seriously wrong, IMMEDIATELY notify your supervisor.

Before performing preventive maintenance, read all the checks required for the applicable interval and prepare all the tools you need to make all the checks. You'll always need a wiping rag or two.

GENERAL PMCS PROCEDURES - Continued**WARNING**

Degreasing solvent MIL-PRF-680 Type III is an environmentally compliant and low-toxicity material. However, it may be irritating to the eyes and skin. The use of protective gloves and goggles is required. Use in a well-ventilated area. Keep away from open flame and other sources of ignition. When not using MIL-PRF-680 solvents, ensure MIL-PRF-680 solvent container is sealed. Store, handle, and dispose of unused and spent solvents in accordance with local procedures and plans. Failure to comply may result in personnel injury.

Keep It Clean

Dirt, grease, oil, and debris get in the way and may cover up a serious problem. Clean as you work and as needed. Use solvent cleaning compound on all metal surfaces. Use dishwashing compound and water when you clean rubber or plastic.

Deterioration, Rust, and Corrosion

- Be alert for deterioration of plastic and rubber materials. Report it to your supervisor.
- Check metal parts of vehicle for rust and corrosion. If any bare metal or corrosion exists, clean and apply a light coat of oil. Notify your supervisor.

Bolts, Nuts, and Screws

Check bolts, nuts, and screws for obvious looseness, missing, bent, or broken condition. Look for chipped paint, bare metal, or rust around bolt heads. If you find one you think is loose, notify your supervisor.

Welds

Look for loose or chipped paint, rust, or gaps where parts are welded together. If you find a bad weld, notify your supervisor.

Electric Wires and Connectors

Look for cracked or broken insulation, bare wires, and loose or broken connectors. Tighten loose connectors and ensure that the wires are in good condition.

GENERAL PMCS PROCEDURES - Continued**Hydraulic Hoses and Fluid Lines**

Look for wear, damage, and signs of leaks. Ensure that clamps and fittings are tight. Wet spots indicate leaks, but a stain around a fitting or connector can also mean a leak. If a leak comes from a loose fitting or connector, tighten it. If something is broken or worn out, correct it if authorized by the Maintenance Allocation Chart (WP 0109). If not authorized, notify your supervisor.

Fluid Leakage

It is necessary for you to know how fluid leakage affects the status of your dump truck. The following are definitions of the types/classes of leakage you need to know to be able to determine the status of your equipment. Learn and be familiar with them, and remember – when in doubt, notify your supervisor.

Leakage Definitions for PMCS

| | |
|-----------|--|
| Class I | Leakage indicated by wetness or discoloration, but not great enough to form drops. |
| Class II | Leakage great enough to form drops, but not enough to cause drops to drip from the item being checked/inspected. |
| Class III | Leakage great enough to form drops that fall from the item being checked/inspected. |

Operation is allowable with Class I and Class II leakage. WHEN IN DOUBT, notify your supervisor. When operating with Class I or Class II leaks, check fluid levels more frequently. Class III leaks must be reported immediately to your supervisor. Failure to comply may result in damage to equipment.

Table 1. Semiannual Lubrication Data.

| SEMIANNUAL LUBRICANTS | | |
|--|------------------------|-------------------------------|
| Lubricant/Component | Refill Capacity | Expected Temperatures* |
| WD-40 Corrosion Preventive <ul style="list-style-type: none"> • Cargo Cover Chain • Cargo Cover Roller Shaft Bearings | As Required | ALL TEMPERATURES |
| * For arctic operation, refer to TM 4-33.31. | | |

Table 2. Annual Lubrication Data.

| ANNUAL LUBRICANTS | | |
|--|------------------------|---|
| Lubricant/Component | Refill Capacity | Expected Temperatures* |
| OE/HDO (MIL-L-2104) Oil, Lubricating, ICE, Tactical OEA (MIL-L-46167) Oil, Lubricating, ICE, Arctic <ul style="list-style-type: none"> • Hydraulic Reservoir | 12.75 gal. (48.2 l) | OE/HDO-10: +6°F to +122°F (-14°C to +50°C) -4°F to +50°F (-20°C to +10°C) OEA: -67°F to +32°F (-55°C to 0°C) |
| WD-40 Corrosion Preventive <ul style="list-style-type: none"> • Cargo Cover Chain • Cargo Cover Roller Shaft Bearings | As Required | ALL TEMPERATURES |
| * For arctic operation, refer to TM 4-33.31. | | |

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion prevention and control of Army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items. The term "corrosion" means the deterioration of a material or its properties due to a reaction of that material with its chemical environment. An example is the rusting of iron. Corrosion damage in metals can be seen, depending on the metal, as tarnishing, pitting, fogging, surface residue, and/or cracking. Plastics, composites, and rubbers can also degrade (also considered to be corrosion based on the above definition of corrosion). Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically ultraviolet) processes. The most common exposures are excessive heat or light. Damage from these processes will appear as cracking, softening, swelling, and/or breaking. The US Army has defined the following nine (9) forms of corrosion used to evaluate the deterioration of metals. These shall be used when evaluating and documenting corrosion.

CORROSION PREVENTION AND CONTROL (CPC) - Continued

UNIFORM (or general attack): Affects a large area of exposed metal surface, like rust on steel or tarnish on silver. It gradually reduces the thickness of the metal until it fails.

CREVICE: Occurs in crevices created by rubber seals, gaskets, bolt heads, lap joints, dirt or other surface deposits. It will develop anywhere moisture or other corrosive agents are trapped and unable to drain or evaporate.

SELECTIVE LEACHING: One element, usually the anodic element of an alloy, corrodes away, leaving the cathodic element. This can create holes in metal.

INTERGRANULAR: Metal deterioration caused by corrosion on the bonds between or across the grain boundaries of the metal. The metal will appear to be peeling off in sheets, flaking, or being pushed apart by layers. A particular type of intergranular corrosion is exfoliation.

PITTING: This can result from conditions similar to those for crevice corrosion. Pits can develop on various materials due to their composition. Rifle boxes are big victims of pitting.

EROSION: Results when a moving fluid (liquid or gas) flows across a metal surface, particularly when solid particles are present in the fluid. Corrosion actually occurs on the surface of the metal, but the moving fluid washes away the corrosion and exposes a new metal surface, which also corrodes.

FRETTING: Occurs as a result of small, repetitive movements (e.g., vibration) between two surfaces in contact with each other. It's usually identified by a black powder corrosion product or pits on the surface.

GALVANIC: Occurs when two different types of metal come in contact with each other, like steel bolts on aluminum, for example. This is a common problem on aircraft because of their mix of metals.

STRESS: Term used to describe corrosion cracking and corrosion fatigue.

Where an item is not ready/available due to one of these forms of corrosion, it shall be recorded as a corrosion failure in the inspection record and the appropriate code (170) for corrosion shall be used when requesting/performing maintenance.

SF Form 368, Product Quality Deficiency Report should be submitted to the address specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual.

ARMY OIL ANALYSIS PROGRAM (AOAP)

The dump body is not enrolled in the Army Oil Analysis Program. HARDTIME INTERVALS APPLY.

END OF WORK PACKAGE

**FIELD MAINTENANCE
FIELD PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS), INCLUDING LUBRICATION
INSTRUCTIONS**

INITIAL SETUP:

Tools and Special Tools

Drain Pan (WP 0113, Table 1, Item 6)

References (cont.)

TM 9-2320-302-10

TM 9-2320-363-10

WP 0004

WP 0005

WP 0017

WP 0038

WP 0055

WP 0063

WP 0067

WP 0072

WP 0114

Materials/Parts

Corrosion Preventive Compound
(WP 0112, Table 1, Item 8)

Engine Lubricating Oil
(WP 0112, Table 1, Item 20)

Detergent, General Purpose: Liquid
(WP 0112, Table 1, Item 9)

References

TB 43-0213

Table 1. Preventive Maintenance Checks and Services (PMCS) for M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS.


| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|----------|--------------------------------|--|---------------------------------------|
| | | | <p align="center">WARNING</p>  <ul style="list-style-type: none"> • Unless otherwise specified, perform all lubrication and preventive maintenance checks with dump truck on level ground, transmission in N (Neutral), parking brake set, and engine off. • Hydraulic oil is slippery and may cause falls. A suitable container should be used to catch any draining hydraulic fluid. Ensure that all spills are cleaned up and disposed of in accordance with local procedures. • Failure to comply may result in personnel injury or death. | |

Table 1. Preventive Maintenance Checks and Services (PMCS) for M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS - Continued.

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|------------|--|---|--|
| <p>NOTE</p> <ul style="list-style-type: none"> • Perform all Operator PMCS (WP 0017), as appropriate, while performing Items 1 through 4 checks. Drive at least 5 mi (8 km) to give enough time to detect malfunctions. • Dump truck's chassis air system activates both models' tailgate locking mechanism and interfaces with MCS air system on the M917A1 with MCS and M917A2 with MCS to operate the MCS tailgate. | | | | |
| 1 | Semiannual | Tailgate Operation | <p>1. Start engine and fully pressurize vehicle air systems (TM 9-2320-363-10 or TM 9-2320-302-10). Listen for air leaks.</p> <p>2. Operate tailgate release control valve lever in cab (WP 0004). Check that tailgate unlocks and locks.</p> | Air leaks are present. |
| 2 | Semiannual | MCS Tailgate Operation (M917A1 with MCS and M917A2 with MCS) | Check operation of MCS gates (WP 0005). Listen for air leaks. | Air leaks are present. |
| 3 | Semiannual | Hydraulic System Operation | Raise and lower dump body and check for smooth operation (WP 0005). Be alert for hydraulic fluid leaks. | Class III hydraulic fluid leaks are present. |

Table 1. Preventive Maintenance Checks and Services (PMCS) for M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS - Continued.


| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|------------|--------------------------------|---|------------------------------------|
| 4 | Semiannual | Cargo Cover | <p style="text-align: center;">WARNING</p> <div style="text-align: center;">  </div> <p>Observe the following safety regulations when operating cargo cover:</p> <ul style="list-style-type: none"> • Never operate system under obstructions, such as trees and power lines. • Ensure that all personnel are clear of rear of dump body and the immediate area of the cover. • Ensure that chain cover is in place. • Keep all clothing away from moving parts. • DO NOT cover load with crank handle installed. • Failure to comply may result in personnel injury or death. <ol style="list-style-type: none"> 1. Operate cargo cover and check for smooth operation (WP 0005). 2. Remove chain cover (WP 0055). Inspect chain for dirt, corrosion or other damage. Check for proper chain adjustment. Replace chain if damaged (WP 0055). 3. Lubricate chain sparingly with corrosion preventive. 4. Lubricate roller shaft bearings (Figure 1, Item 1) at driver's side and passenger's side roll-up bar mounting brackets (Figure 1, Item 2). Apply corrosion preventive sparingly. 5. Install chain cover (WP 0055). | |

Table 1. Preventive Maintenance Checks and Services (PMCS) for M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS - Continued.

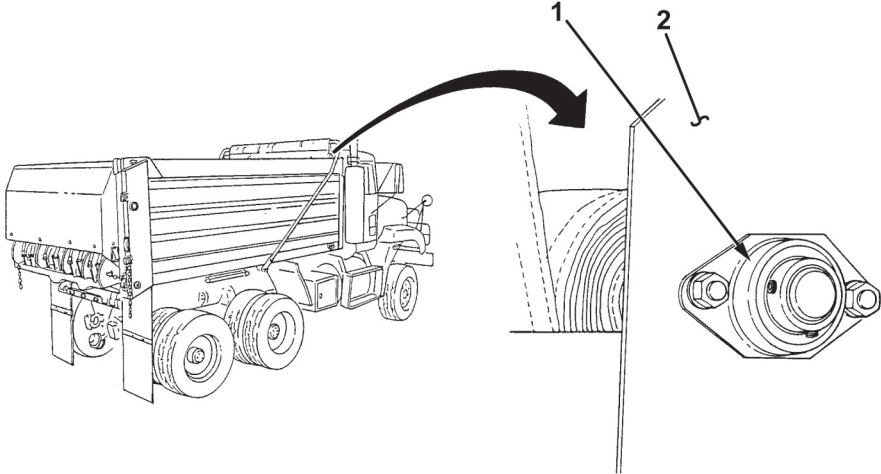

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|--|------------|------------------------------------|---|------------------------------------|
| <div style="text-align: center;">  <p>14PT264052</p> </div> <p>Figure 1. Cargo Cover Roller Shaft Bearings and Brackets.</p> | | | | |
| 5 | Semiannual | Dump Body | <p>1. With dump body down, inspect dump body and tailgate for cracks, breaks, bends, weld breaks, wear, and missing or loose bolts.</p> <p>2. Inspect for corrosion in accordance with TB 43-0213.</p> | |
| 6 | Semiannual | Body Props | Inspect body props for binding or damage (WP 0038). Replace if damaged. | |
| 7 | Semiannual | Hydraulic Reservoir, Fill Cap Vent | <p style="text-align: center;">WARNING</p> <div style="text-align: center;">  </div> <p>NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.</p> <p>1. Raise dump body and support with body props (WP 0005).</p> | |

Table 1. Preventive Maintenance Checks and Services (PMCS) for M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS - Continued.




| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|------------|--------------------------------|---|------------------------------------|
| | | | <p style="text-align: center;">WARNING</p>  <p>To prevent burns, use caution when removing fill cap of hydraulic reservoir when hydraulic fluid is hot. Avoid contact with hot hydraulic oil. Failure to comply may result in personnel injury.</p> <p>2. Remove fill cap from reservoir. Clean fill cap vent in accordance with General Maintenance Instructions (WP 0072). Install fill cap.</p> <p style="text-align: center;">WARNING</p>  <p>DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Failure to comply may result in personnel injury.</p> <p>3. Inspect all hydraulic lines, fittings, and components for signs of leaks. Tighten any connections that are loose. Ensure that hydraulic lines are supported. Replace any damaged component.</p> | |
| 8 | Semiannual | Stabilizer | <p style="text-align: center;">WARNING</p>  <p>NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.</p> <p>Inspect stabilizer for loose mounting or damage. If damaged, notify your supervisor.</p> | |

Table 1. Preventive Maintenance Checks and Services (PMCS) for M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS - Continued.




| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|------------|-------------------------------------|--|------------------------------------|
| 9 | Semiannual | Tailgate Release Air Cylinder Lines | <p style="text-align: center;">WARNING</p>  <p>NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.</p> <p>With vehicle air system pressurized, check air lines, fittings, and tailgate release air cylinder under dump body for loose mounting, leaks or damage. A solution of detergent and water applied to lines and fittings will help locate leaks.</p> | |
| 10 | Semiannual | Tailgate Locking Linkage | <p style="text-align: center;">WARNING</p>  <p>NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.</p> <p>Inspect tailgate locking linkage for breaks, bends, cracks, corrosion, and loose mounting.</p> | |
| 11 | Semiannual | Frame and Crossmembers | <p style="text-align: center;">WARNING</p>  <p>NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.</p> <ol style="list-style-type: none"> 1. Inspect dump body frame and crossmembers for cracks, breaks, bends, weld breaks, wear, and missing or loose bolts and rivets. 2. Inspect for corrosion in accordance with TB 43-0213. 3. Remove body props and lower dump body (WP 0005). | |

Table 1. Preventive Maintenance Checks and Services (PMCS) for M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS - Continued.


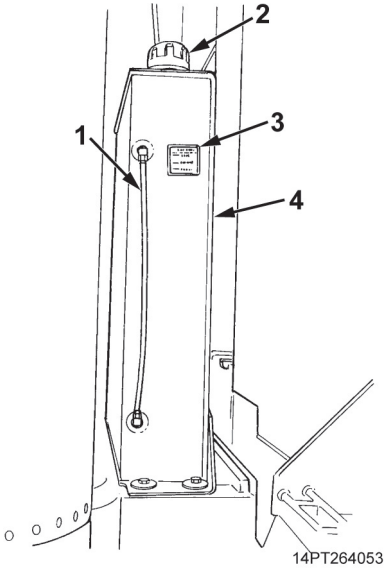
| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|----------|------------------------|--------------------------------|---|------------------------------------|
| 12 | Annual | Decals and Stencils | Check all decals and stencils to ensure legibility. | |
| 13 | 10,000 Miles or Annual | Hydraulic Reservoir | <p style="text-align: center;">WARNING</p>  <p>To prevent burns, use caution when removing fill cap of hydraulic reservoir when hydraulic fluid is hot. Avoid contact with hot hydraulic oil. Use extreme care when draining hydraulic oil. Failure to comply may result in personnel injury or death.</p> <ol style="list-style-type: none"> 1. With dump body down and engine off, remove magnetic drain plug from underside of reservoir (Figure 2, Item 4). Drain hydraulic oil into a suitable container, and dispose of in accordance with local procedures. 2. Remove fill cap (Figure 2, Item 2). Remove strainer from reservoir (Figure 2, Item 4) (WP 0067). Clean strainer and reinstall. 3. Replace hydraulic oil filter element (WP 0063). 4. Clean drain plug and reinstall. <p style="text-align: center;">NOTE</p> <p>Hydraulic reservoir capacity is 12.75 gal. (48.2 l). DO NOT overfill.</p> <ol style="list-style-type: none"> 5. Fill reservoir (Figure 2, Item 4) with lubricating oil until level of fluid in sight tube (Figure 2, Item 1) is at FULL mark as indicated on oil level decal (Figure 2, Item 3). Install fill cap (Figure 2, Item 2). | |

Table 1. Preventive Maintenance Checks and Services (PMCS) for M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS - Continued.

| ITEM NO. | INTERVAL | ITEM TO BE CHECKED OR SERVICED | PROCEDURE | EQUIPMENT NOT READY/ AVAILABLE IF: |
|---|----------|--------------------------------|-----------|------------------------------------|
|  <p>Figure 2. Hydraulic Oil Reservoir.</p> | | | | |

MANDATORY REPLACEMENT PARTS

Refer to (WP 0114) for more information on mandatory replacement parts.

Table 2. Mandatory Replacement Parts for Annual PMCS.

| ITEM NO. | PART NUMBER (CAGEC) | NSN | Nomenclature | Qty |
|----------|---------------------|------------------|-----------------------|-----|
| 1 | 403366 (5X050) | 4430-01-446-3337 | Filter Element, Fluid | 1 |
| 2 | 251-70-BN (60827) | 5330-01-447-4034 | O-Ring | 1 |

END OF TASK

END OF WORK PACKAGE

CHAPTER 7

OPERATOR MAINTENANCE INSTRUCTIONS

**OPERATOR MAINTENANCE
LUBRICATION**

INITIAL SETUP:**References**

WP 0021
WP 0073

GENERAL

Lubrication and cleaning are the only maintenance procedures performed by the operator.

Lubrication instructions are in (WP 0073).

Cleaning instructions are in (WP 0021).

NOTE

All lubrication instructions are mandatory.

END OF WORK PACKAGE

OPERATOR MAINTENANCE CLEANING

INITIAL SETUP:

Materials/Parts

Detergent, General Purpose: Liquid
(WP 0112, Table 1, Item 9)

References

WP 0005
WP 0073

GENERAL

Lubrication and cleaning are the only maintenance procedures performed by the operator.

Lubrication instructions are in (WP 0073).

Cleaning instructions are in this work package.

CLEANING

1. Road grime, mud, dust, salt, and material deposits inside dump body reduce payload and cause corrosion. Clean dump body whenever these materials begin to accumulate.
 - a. With dump body completely lowered, use tailgate release control valve lever to release tailgate (WP 0005).

WARNING



Wear eye protection when using high-pressure stream of water, stiff broom, or brush to clean dump body. DO NOT direct stream of water at one's self or other personnel. Failure to comply may result in personnel injury.

- b. Use a high-pressure stream of water to clean the interior and outer sides.
 - c. Use a stiff broom or brush and detergent to remove remaining dirt from interior and outer sides.
 - d. Raise dump body and support it with body props (WP 0005). Rinse inside of box. Clean underside of dump body with a high-pressure stream of water.
 - e. Use a stiff broom or brush and detergent to remove remaining dirt from underside of dump body.
 - f. Leave dump body raised until it is thoroughly dry.
 - g. When dry, lower dump body. Close and secure tailgate.
2. Cargo cover may be cleaned as required using a high-pressure stream of water.

END OF TASK

END OF WORK PACKAGE

CHAPTER 8

FIELD MAINTENANCE INSTRUCTIONS

**FIELD MAINTENANCE
SERVICE UPON RECEIPT**

INITIAL SETUP:**Materials/Parts**

Solvent Cleaning Compound
(WP 0112, Table 1, Item 6)
Wiping Rags (WP 0112, Table 1, Item 29)

References (cont.)

DA Form 2404
DA PAM 750-8
DD Form 314
SF 361
WP 0073

References

DA Form 1397

GENERAL

When a new, used, or reconditioned M917A1, M917A1 with Material Control System (MCS), M917A2, or M917A2 with MCS Dump Body is first received, determine whether it has been properly prepared for service and is in condition to perform its mission. Follow the inspection instructions and servicing instructions listed below.

INSPECTION INSTRUCTIONS

1. Read and follow all instructions on DD Form 1397.
2. Remove all straps, plywood, tape, seals, wrapping, or any other shipping material.

WARNING

Degreasing solvent MIL-PRF-680 Type III is an environmentally compliant and low-toxicity material. However, it may be irritating to the eyes and skin. The use of protective gloves and goggles is required. Use in a well-ventilated area. Keep away from open flame and other sources of ignition. When not using MIL-PRF-680 solvents, ensure MIL-PRF-680 solvent container is sealed. Store, handle, and dispose of unused and spent solvents in accordance with local procedures and plans. Failure to comply may result in personnel injury.

3. If any exterior parts are coated with rust-preventive compound, remove with cleaning solvent and rags.
4. Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on SF 361, Transportation Discrepancy Report.
5. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with applicable service instructions (e.g., for Army instructions, see DA PAM 750-8).
6. Check to see whether the equipment has been modified.

END OF TASK

SERVICING INSTRUCTIONS

1. Perform all Field Maintenance Preventive Maintenance Checks and Services (PMCS). Schedule the next PMCS on DD Form 314.
2. Perform all lubrication procedures, regardless of interval, as described in Lubrication Instructions (WP 0073).
3. Report any problems on DA Form 2404.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) REMOTE CONTROL REPAIR
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0072

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)

Equipment Condition

MCS remote control disconnected from MCS
tailgate (WP 0005)

DISASSEMBLY**NOTE**

- Wires should be tagged and wire color noted before disconnecting (WP 0072).
 - Perform Steps 1 through 3 to disassemble plug-in connector.
1. Remove screw (Figure 1, Item 4), screw (Figure 1, Item 1), and clamp (Figure 1, Item 2) from connector housing (Figure 1, Item 3).
 2. Pull connector (Figure 1, Item 5) outward and remove seven screws (Figure 1, Item 6) to remove connector and connector housing (Figure 1, Item 3) from wires of cable (Figure 1, Item 8).
 3. Remove jumper wire (Figure 1, Item 7).

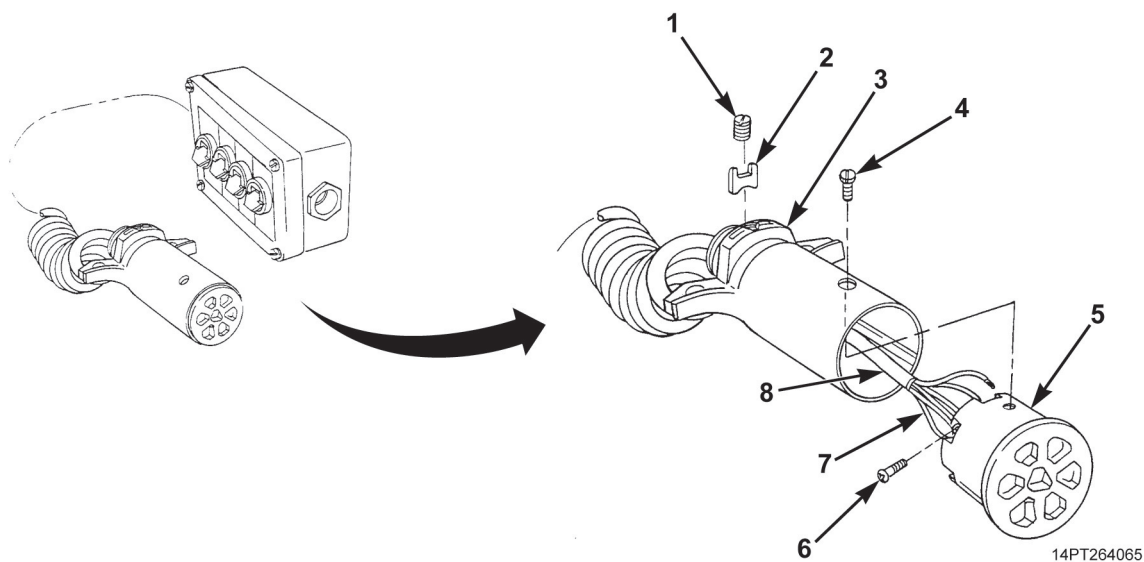


Figure 1. MCS Remote Control Plug Disassembly.

DISASSEMBLY - Continued**NOTE**

Perform Steps 4 through 10 to disassemble control box.

4. Loosen four twist-lock screws (Figure 2, Item 3) and remove cover (Figure 2, Item 4) from control box (Figure 2, Item 1).
5. Remove gasket (Figure 2, Item 2) from cover (Figure 2, Item 4).

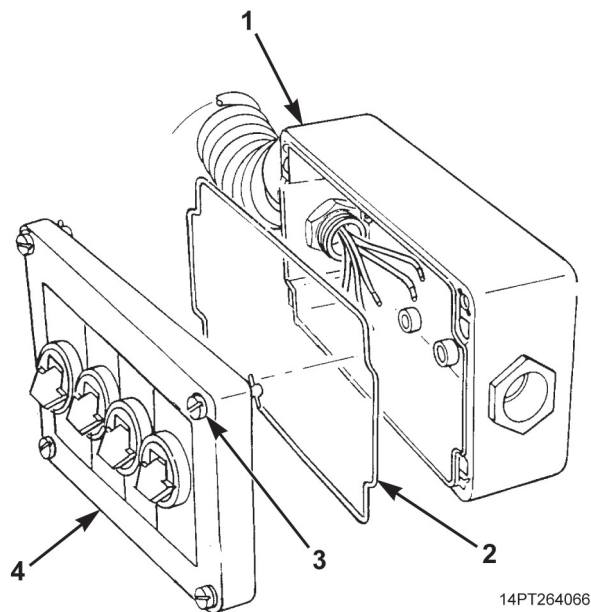


Figure 2. MCS Control Box Cover Disassembly.

NOTE

Perform Steps 6 through 8 for each of four switches.

6. Loosen two screws (Figure 3, Item 3) and disconnect two wires (Figure 3, Item 2) from switch (Figure 3, Item 4).

NOTE

Note position of switch and retainer for assembly.

7. Remove switch (Figure 3, Item 4) and retainer (Figure 3, Item 5) from switch housing (Figure 3, Item 8).
8. Remove ring (Figure 3, Item 6), switch housing (Figure 3, Item 8), and data plate (Figure 3, Item 7) from cover (Figure 3, Item 1).

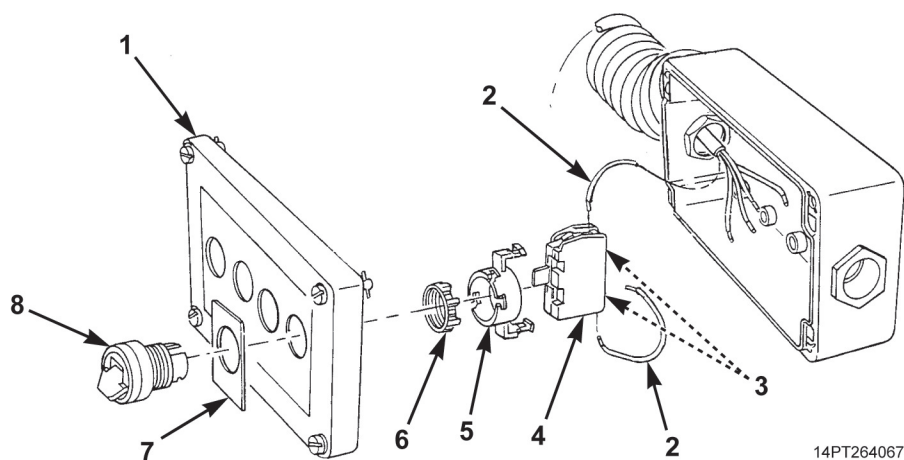
DISASSEMBLY - Continued

Figure 3. MCS Control Box Components Disassembly.

9. Remove locking plug (Figure 4, Item 2), grommet (Figure 4, Item 3), and cable (Figure 4, Item 1) from control box (Figure 4, Item 4).
10. Remove nut (Figure 4, Item 5) and bushing (Figure 4, Item 6).

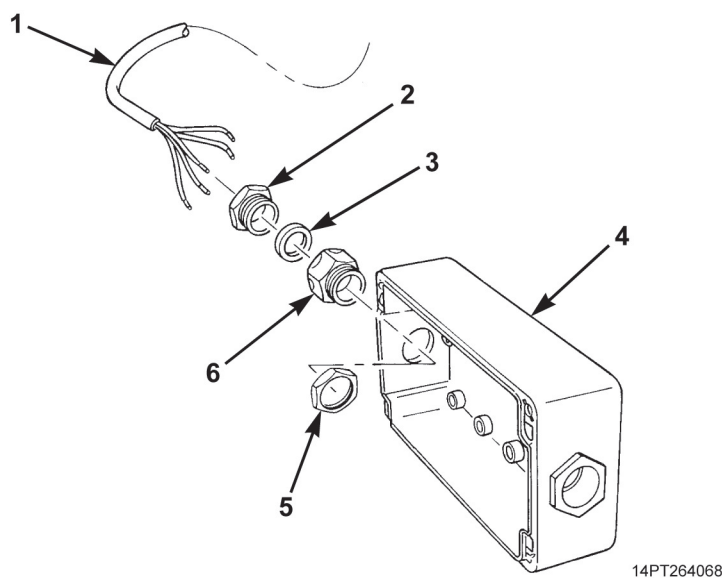


Figure 4. MCS Control Box Cable Disassembly.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

ASSEMBLY**NOTE**

Perform Steps 1 through 7 to assemble control box.

1. Install bushing (Figure 5, Item 6) and nut (Figure 5, Item 5) on control box (Figure 5, Item 4).
2. Install end of cable (Figure 5, Item 1), grommet (Figure 5, Item 3), and locking plug (Figure 5, Item 2).

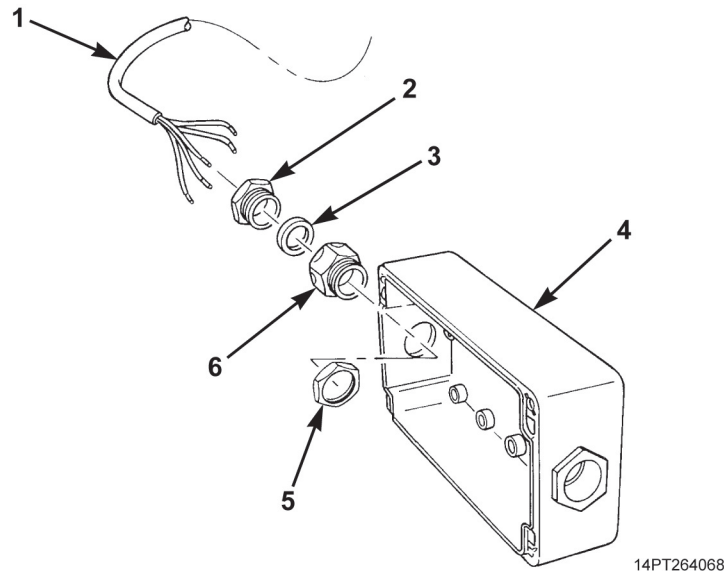


Figure 5. MCS Control Box Cable Assembly.

NOTE

Perform Steps 3 through 5 for each of four switches.

3. Install data plate (Figure 6, Item 7), switch housing (Figure 6, Item 8), and ring (Figure 6, Item 6) on cover (Figure 6, Item 1).
4. Install retainer (Figure 6, Item 5) and switch (Figure 6, Item 4) on switch housing (Figure 6, Item 8).
5. Connect two wires (Figure 6, Item 2) to switch (Figure 6, Item 4) and tighten two screws (Figure 6, Item 3).

ASSEMBLY - Continued

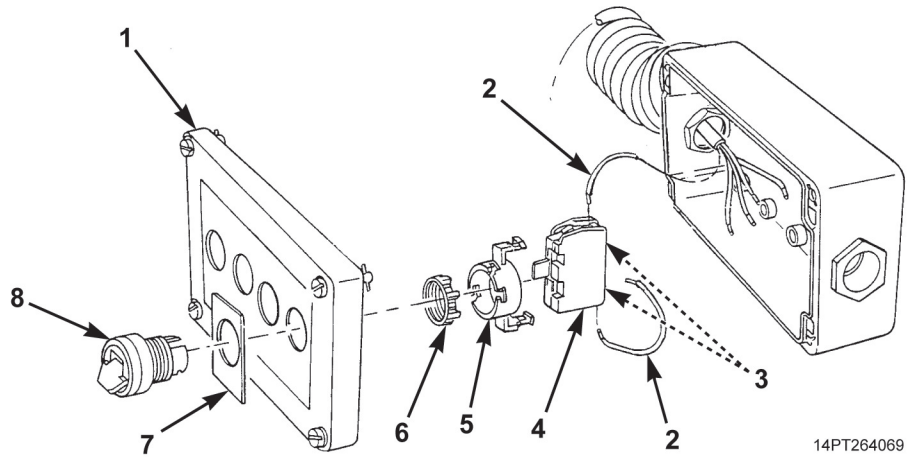


Figure 6. MCS Control Box Components Assembly.

6. Install gasket (Figure 7, Item 2) on cover (Figure 7, Item 4).
7. Install cover (Figure 7, Item 4) on control box (Figure 7, Item 1) and tighten four twist-lock screws (Figure 7, Item 3).

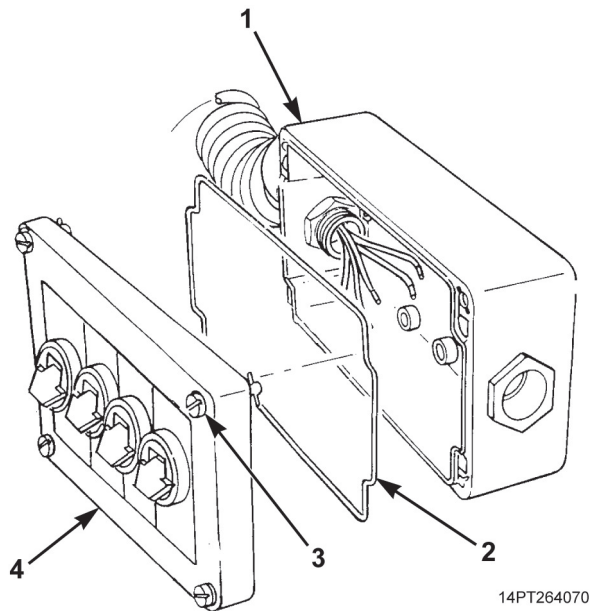


Figure 7. MCS Control Box Cover Assembly.

ASSEMBLY - Continued

8. Install jumper wire (Figure 8, Item 7) on connector (Figure 8, Item 5).
9. With cable (Figure 8, Item 8) through connector housing (Figure 8, Item 3), install connector (Figure 8, Item 5) on wires of cable with seven screws (Figure 8, Item 6). Push connector into connector housing.
10. Install clamp (Figure 8, Item 2), screw (Figure 8, Item 1), and screw (Figure 8, Item 4).

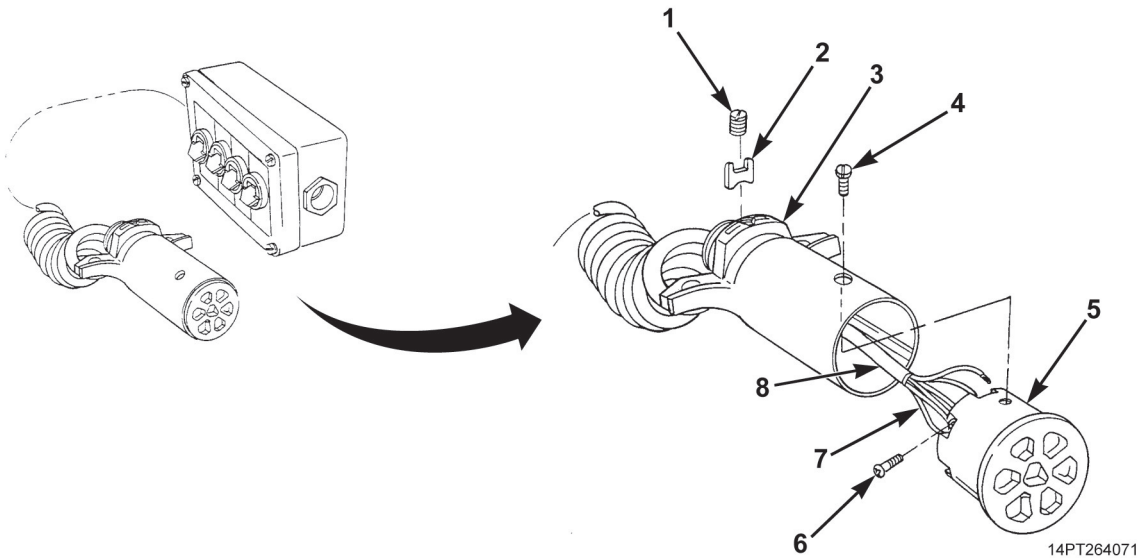


Figure 8. MCS Remote Control Plug Assembly.

END OF TASK**FOLLOW-ON MAINTENANCE**

Check operation of MCS remote control (WP 0005).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) CONTROL UNIT MAINTENANCE
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition

Batteries disconnected (TM 9-2320-363-20-1
or TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)

References

WP 0072

REMOVAL**NOTE**

Wires should be tagged before disconnecting (WP 0072).

1. Remove four screws (Figure 1, Item 7), washers (Figure 1, Item 8), and MCS control unit (Figure 1, Item 3) from shift tower (Figure 1, Item 1).
2. Disconnect indicator light connector (Figure 1, Item 5) from wiring harness connector (Figure 1, Item 6).
3. Disconnect four wiring harness leads (Figure 1, Item 4) from toggle switches (Figure 1, Item 2). Remove MCS control unit (Figure 1, Item 3).

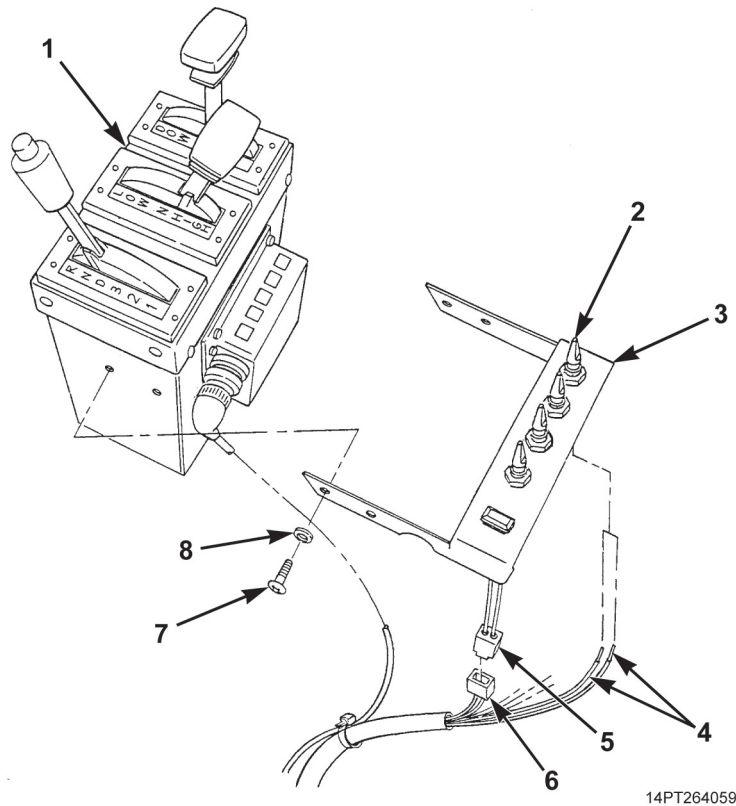


Figure 1. MCS Control Unit Removal.

END OF TASK

DISASSEMBLY

1. Remove indicator light (Figure 2, Item 1) from bracket (Figure 2, Item 3).
2. Remove four nuts (Figure 2, Item 2) and toggle switches (Figure 2, Item 4) from bracket (Figure 2, Item 3).

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**ASSEMBLY**

1. Install four toggle switches (Figure 2, Item 4) on bracket (Figure 2, Item 3) with four nuts (Figure 2, Item 2).
2. Install indicator light (Figure 2, Item 1) on bracket (Figure 2, Item 3).

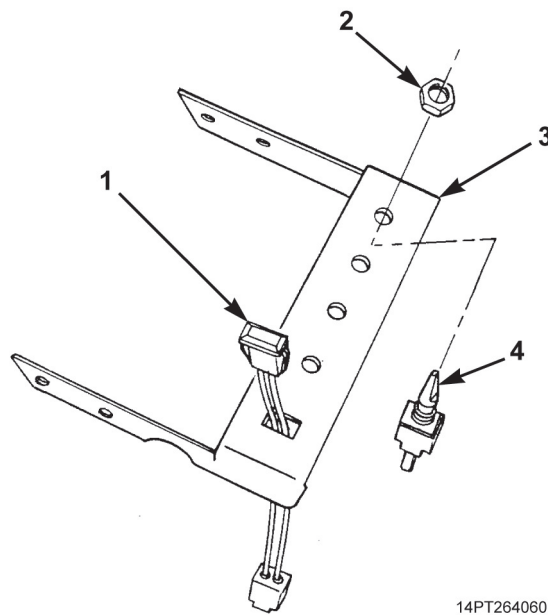


Figure 2. MCS Control Unit.

END OF TASK

INSTALLATION

1. Connect four wiring harness leads (Figure 3, Item 4) to toggle switches (Figure 3, Item 2).
2. Connect wiring harness connector (Figure 3, Item 6) to indicator light connector (Figure 3, Item 5).
3. Install MCS control unit (Figure 3, Item 3) on shift tower (Figure 3, Item 1) with four washers (Figure 3, Item 8) and screws (Figure 3, Item 7).

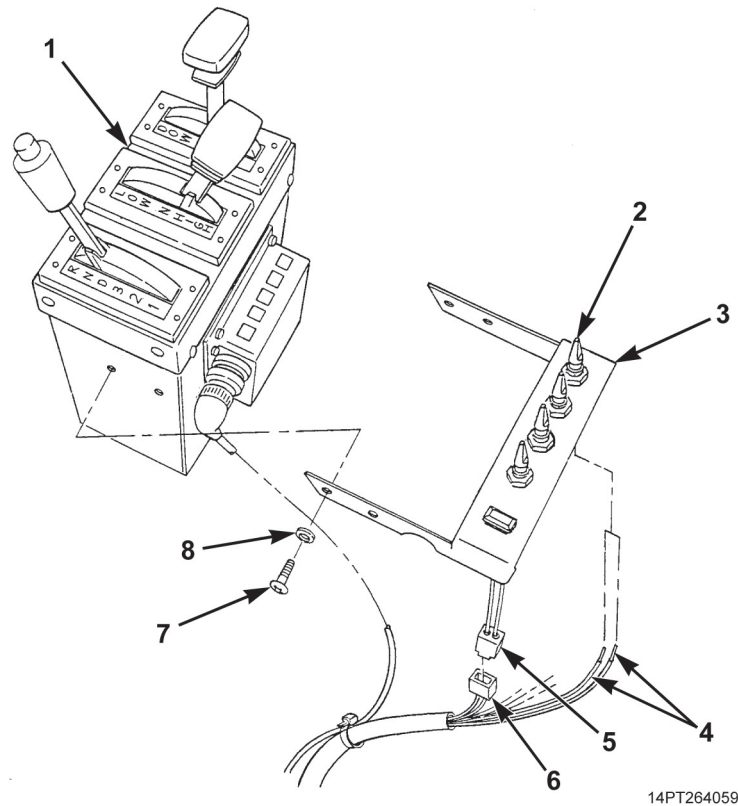


Figure 3. MCS Control Unit Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) SWITCH REPLACEMENT

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition (cont.)

Air system drained (TM 9-2320-302-10)
Master battery switch OFF (TM 9-2320-302-10)

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)

References

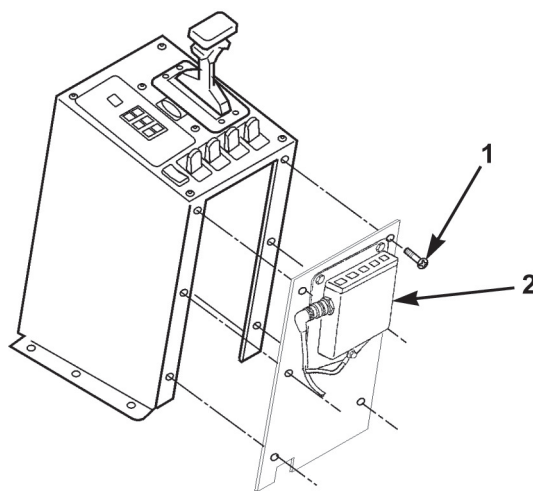
WP 0005
WP 0072

Equipment Condition

Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)

REMOVAL

1. Remove six screws (Figure 1, Item 1) and rear panel (Figure 1, Item 2).



14PT264061

Figure 1. MCS Rear Panel Removal.

REMOVAL - Continued**NOTE**

Wires should be tagged before disconnecting (WP 0072).

2. Disconnect wire lead at faulty switch (Figure 2, Item 1).
3. Depress two tangs (Figure 2, Item 2) on switch (Figure 2, Item 1) and remove switch through top of shift tower cover (Figure 2, Item 3).

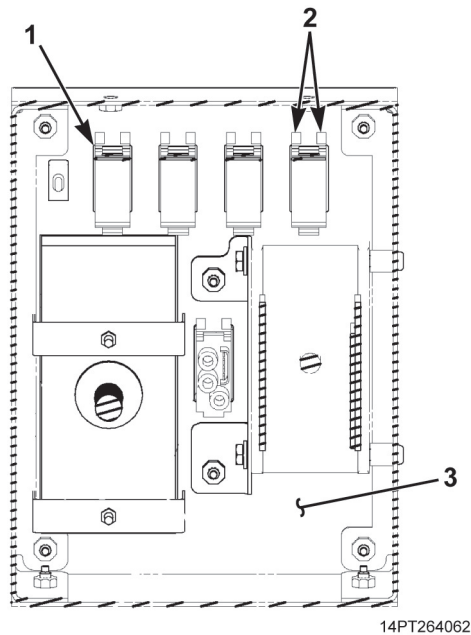


Figure 2. MCS Switch Removal.

END OF TASK

INSTALLATION

1. Position switch (Figure 3, Item 1) on shift tower cover (Figure 3, Item 3).
2. Apply slight downward pressure on switch (Figure 3, Item 1) until two tangs (Figure 3, Item 2) snap into place.
3. Connect wire lead on switch (Figure 3, Item 1).

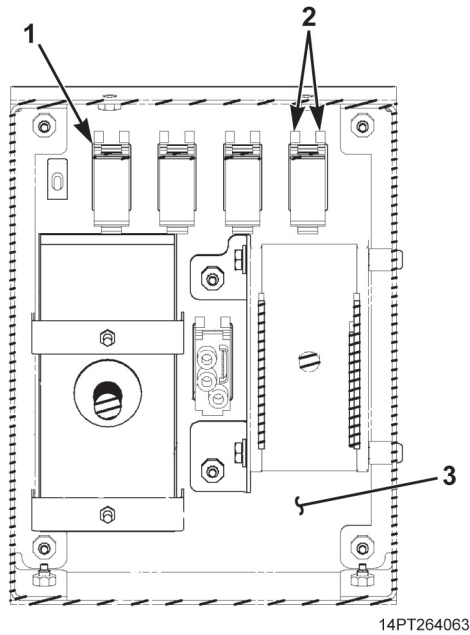
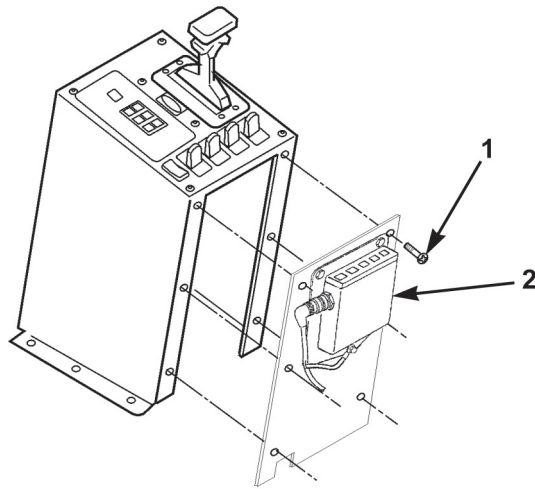


Figure 3. MCS Switch Installation.

INSTALLATION - Continued

4. Install rear panel (Figure 4, Item 2) with six screws (Figure 4, Item 1).



14PT264064

Figure 4. MCS Rear Panel Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Check operation of MCS control unit (WP 0005).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
TAILLIGHT REPLACEMENT**

INITIAL SETUP:

Tools and Special Tools

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition

Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

References

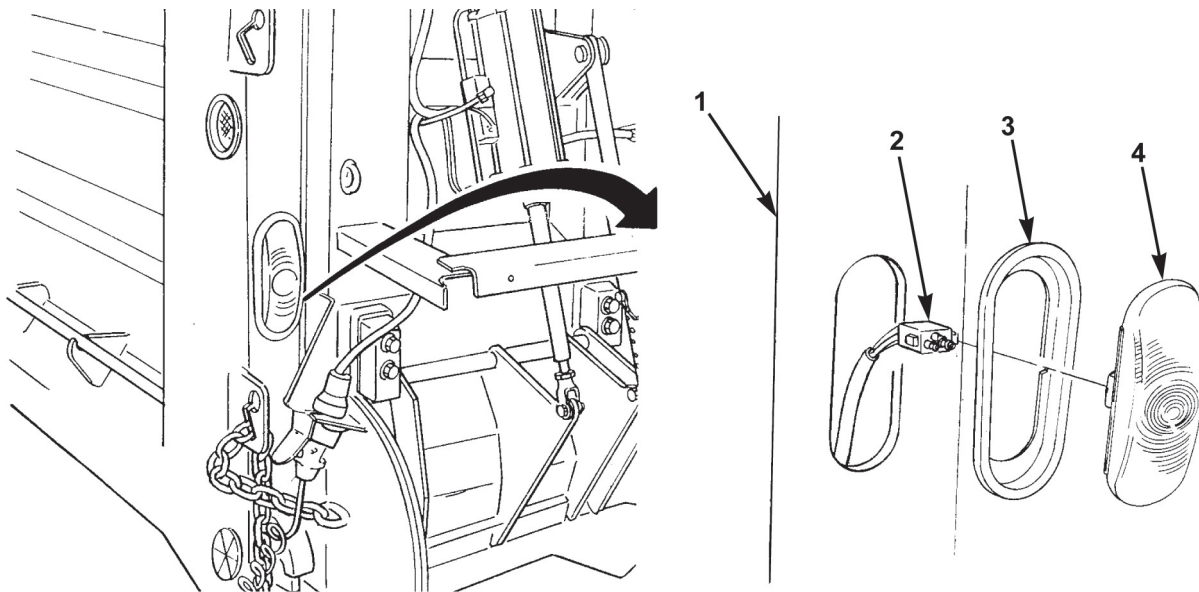
TM 9-2320-363-10

REMOVAL

1. Remove taillight (Figure 1, Item 4) from grommet (Figure 1, Item 3).
2. Disconnect lights wiring harness connector (Figure 1, Item 2) from taillight (Figure 1, Item 4). Remove taillight.
3. Remove grommet (Figure 1, Item 3) from dump body (Figure 1, Item 1).

END OF TASK**INSTALLATION**

1. Install grommet (Figure 1, Item 3) in dump body (Figure 1, Item 1).
2. Connect lights wiring harness connector (Figure 1, Item 2) to taillight (Figure 1, Item 4).
3. Install taillight (Figure 1, Item 4) in grommet (Figure 1, Item 3).



14PT264057

Figure 1. Taillight Replacement.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Check operation of taillight (TM 9-2320-363-10 or TM 9-2320-302-10).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
MARKER CLEARANCE LIGHT REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition

Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

References

TM 9-2320-363-10

NOTE

There is a marker clearance light on each side of dump body and a cluster of three marker clearance lights on bracket at rear hinge. Replacement of a dump body marker clearance light is shown.

REMOVAL

1. Remove marker clearance light (Figure 1, Item 1) from grommet (Figure 1, Item 2).
2. Disconnect lights wiring harness connector (Figure 1, Item 3) from back of marker clearance light (Figure 1, Item 1). Remove marker clearance light.
3. Remove grommet (Figure 1, Item 2) from dump body (Figure 1, Item 4).

END OF TASK**INSTALLATION**

1. Install grommet (Figure 1, Item 2) in dump body (Figure 1, Item 4).
2. Connect lights wiring harness connector (Figure 1, Item 3) to back of marker clearance light (Figure 1, Item 1).
3. Install marker clearance light (Figure 1, Item 1) in grommet (Figure 1, Item 2).

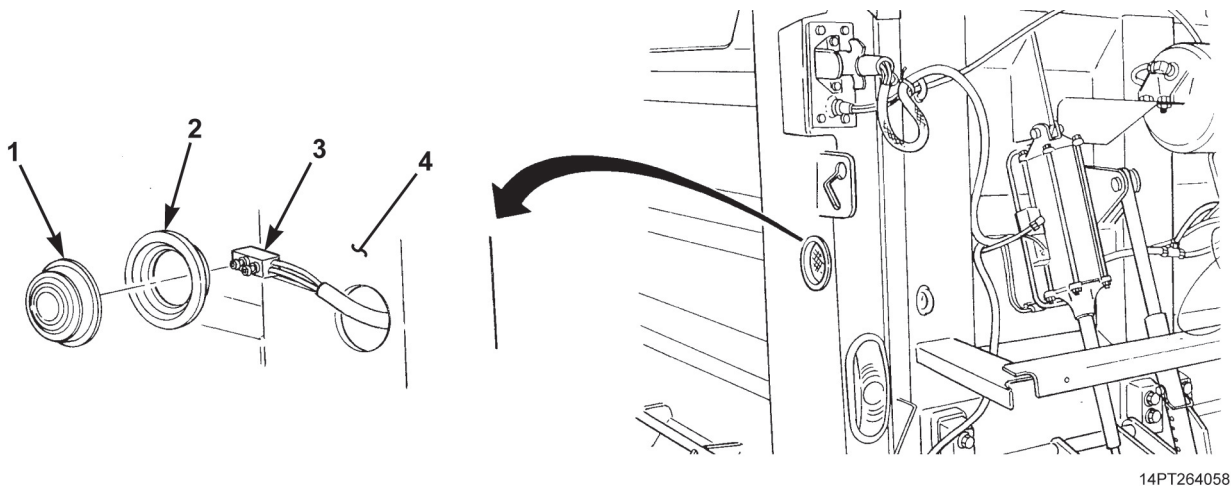


Figure 1. Marker Clearance Light Replacement.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Check operation of marker clearance lights (TM 9-2320-363-10 or TM 9-2320-302-10).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
REFLECTOR REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0072

REMOVAL

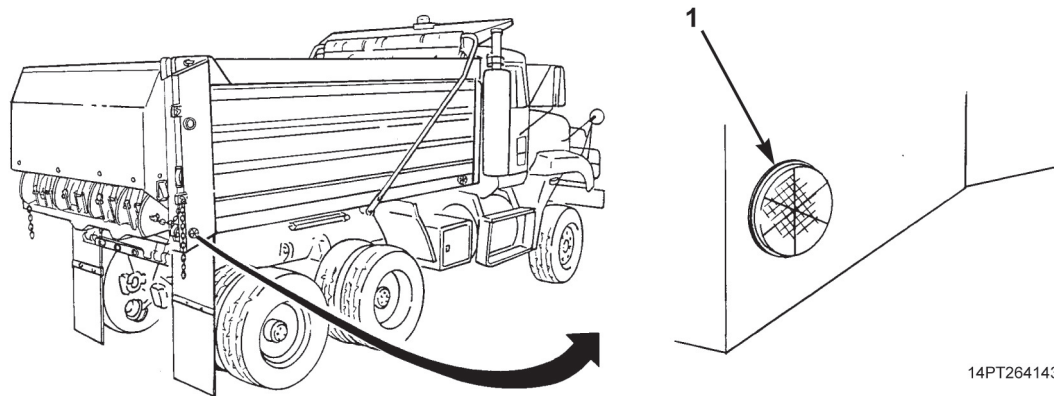
Remove reflector (Figure 1, Item 1) from dump body or tailgate.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION**

Remove backing paper from reflector (Figure 1, Item 1). Install reflector on dump body or tailgate.



14PT264143

Figure 1. Reflector Replacement.

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
BODY UP SWITCH REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition (cont.)

Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)

References

WP 0072

Equipment Condition

Dump body raised and supported on body props
(WP 0005)

WARNING

NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

REMOVAL**NOTE**

Wires should be tagged before disconnecting (WP 0072).

1. Disconnect two wiring harness leads (Figure 1, Item 2) from body up switch (Figure 1, Item 1).

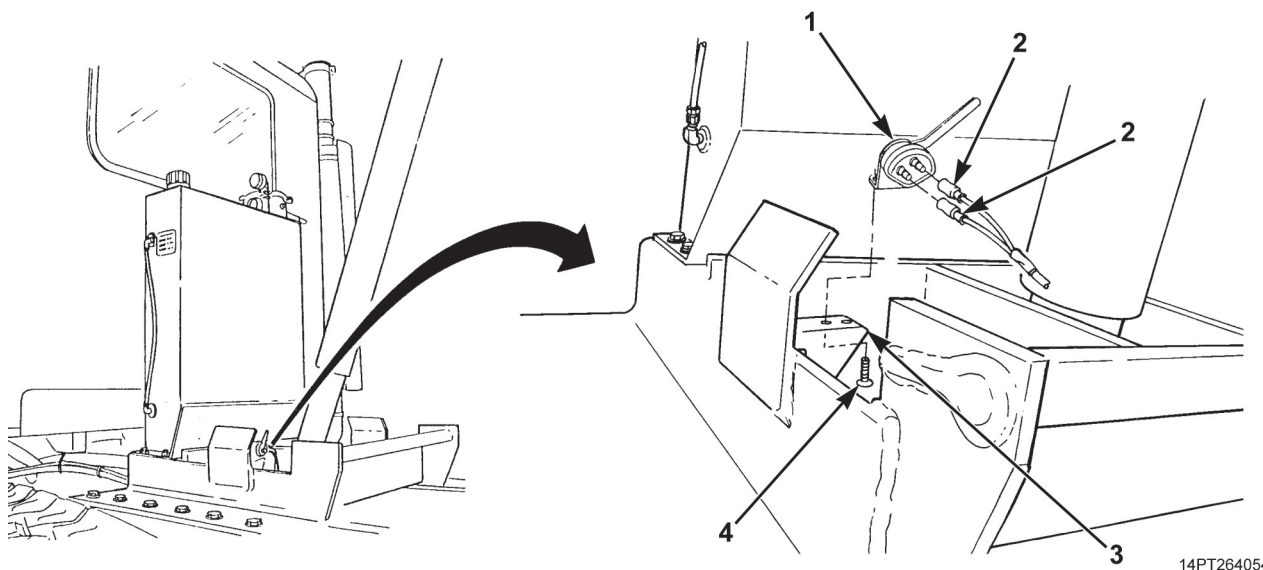
NOTE

To ensure proper installation, note switch lever position.

2. Remove two screws (Figure 1, Item 4) and body up switch (Figure 1, Item 1) from cylinder support frame (Figure 1, Item 3).

END OF TASK**INSTALLATION**

1. Install body up switch (Figure 1, Item 1) on cylinder support frame (Figure 1, Item 3) with two screws (Figure 1, Item 4).
2. Connect two wiring harness leads (Figure 1, Item 2) to body up switch (Figure 1, Item 1).



14PT264054

Figure 1. Body Up Switch Replacement.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Remove body props and lower dump body (WP 0005).
4. Check operation of body up switch (WP 0005).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
TRANSPORT LOCK SWITCH REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition (cont.)

Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

Materials/Parts

Tiedown Straps (WP 0112, Table 1, Item 33)

Equipment Condition

Dump body raised and supported on body props
(WP 0005)

WARNING

NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

REMOVAL**NOTE**

Note location of tiedown straps prior to removal to aid in installation.

1. Disconnect transport lock switch connector (Figure 1, Item 2) from wiring harness connector (Figure 1, Item 1).
2. Remove button (Figure 1, Item 7), nut (Figure 1, Item 6), and transport lock switch (Figure 1, Item 3) from chassis mount (Figure 1, Item 5).

NOTE

To ensure proper installation, note position of jamnut on transport lock switch.

3. Remove jamnut (Figure 1, Item 4) from transport lock switch (Figure 1, Item 3).

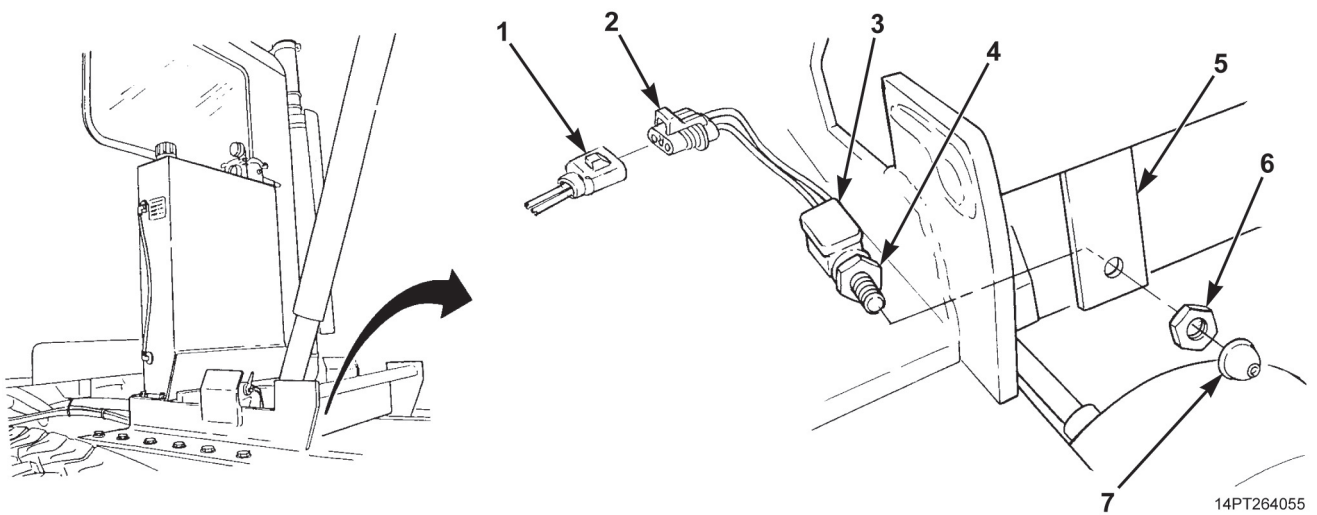


Figure 1. Transport Lock Switch Removal.

END OF TASK

INSTALLATION

1. Install jamnut (Figure 2, Item 4) on transport lock switch (Figure 2, Item 3) in same position as noted during removal.
2. Position transport lock switch (Figure 2, Item 3) through hole in chassis mount (Figure 2, Item 5) and install nut (Figure 2, Item 6) and button (Figure 2, Item 7).
3. Connect transport lock switch connector (Figure 2, Item 2) to wiring harness connector (Figure 2, Item 1).
4. Install new tiedown straps, as required.

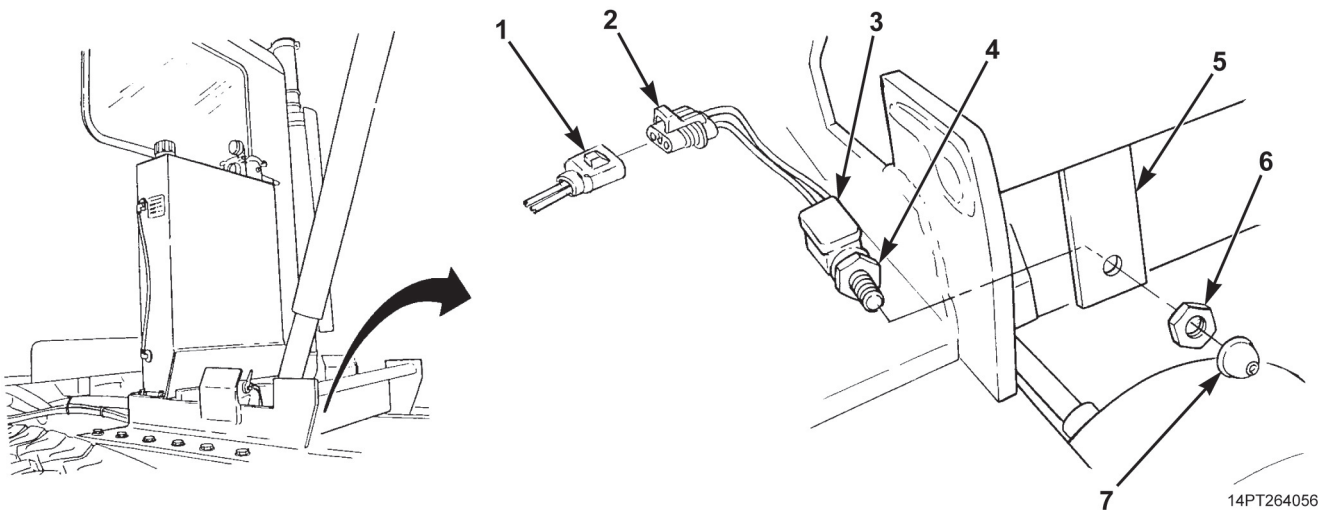


Figure 2. Transport Lock Switch Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Remove body props and lower dump body (WP 0005).
4. Check operation of transport lock switch (WP 0005).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
BEACON WARNING LIGHT WIRING HARNESS MAINTENANCE

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition (cont.)

Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)
Tiedown Straps (WP 0112, Table 1, Item 33)

References

TM 9-2320-363-10
WP 0072

Equipment Condition

Dump body raised and supported on body props
(WP 0005)

WARNING

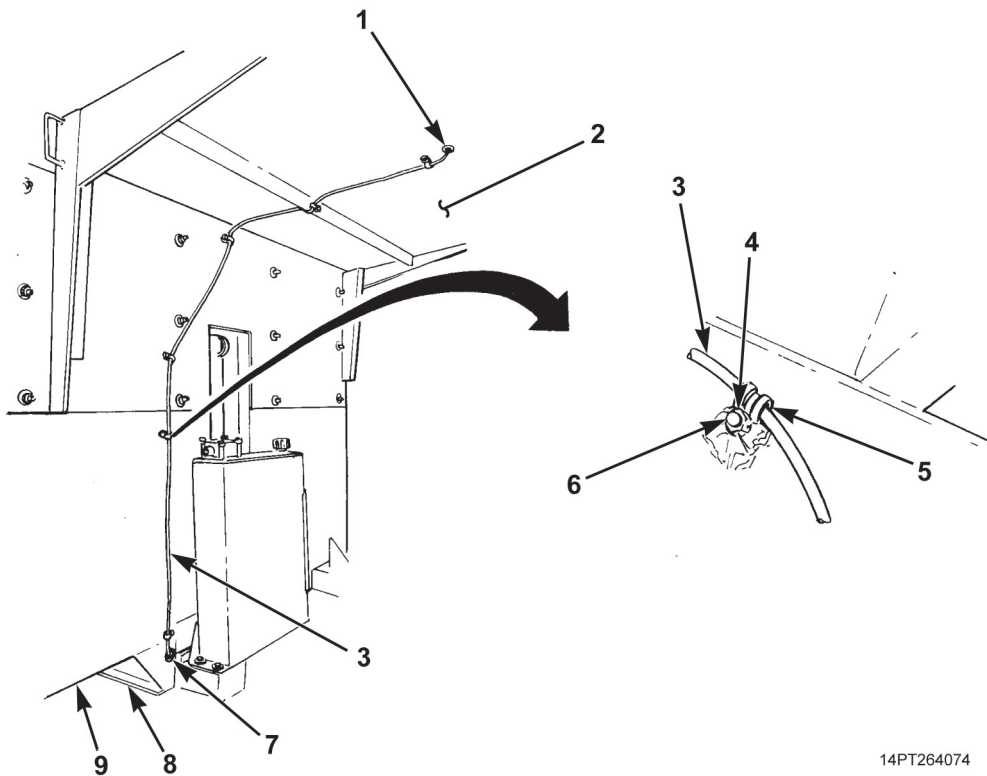
NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

NOTE

- Wires should be tagged before disconnecting (WP 0072).
- Note location of tiedown straps and routing of wiring harness prior to removal to aid in installation.

REMOVAL

1. At beacon warning light, disconnect two wiring harness connectors from beacon warning light connectors.
2. Remove wiring harness (Figure 1, Item 3) from cab shield grommet (Figure 1, Item 1).
3. Remove nuts (Figure 1, Item 4) and clamps (Figure 1, Item 5) securing wiring harness (Figure 1, Item 3) to welded studs (Figure 1, Item 6) on cab shield (Figure 1, Item 2) and dump body (Figure 1, Item 9).
4. Remove wiring harness (Figure 1, Item 3) from grommet (Figure 1, Item 7) at front passenger's side of dump body (Figure 1, Item 9).
5. Repeat Step 3 to release wiring harness (Figure 1, Item 3) from welded studs on inner surface of passenger's side dump body frame rail (Figure 1, Item 8).



14PT264074

Figure 1. Beacon Warning Light Hardware Removal.

REMOVAL - Continued

6. Disconnect wiring harness connector (Figure 2, Item 2) from chassis wiring harness connector (Figure 2, Item 3).
7. Remove wiring harness (Figure 2, Item 1).

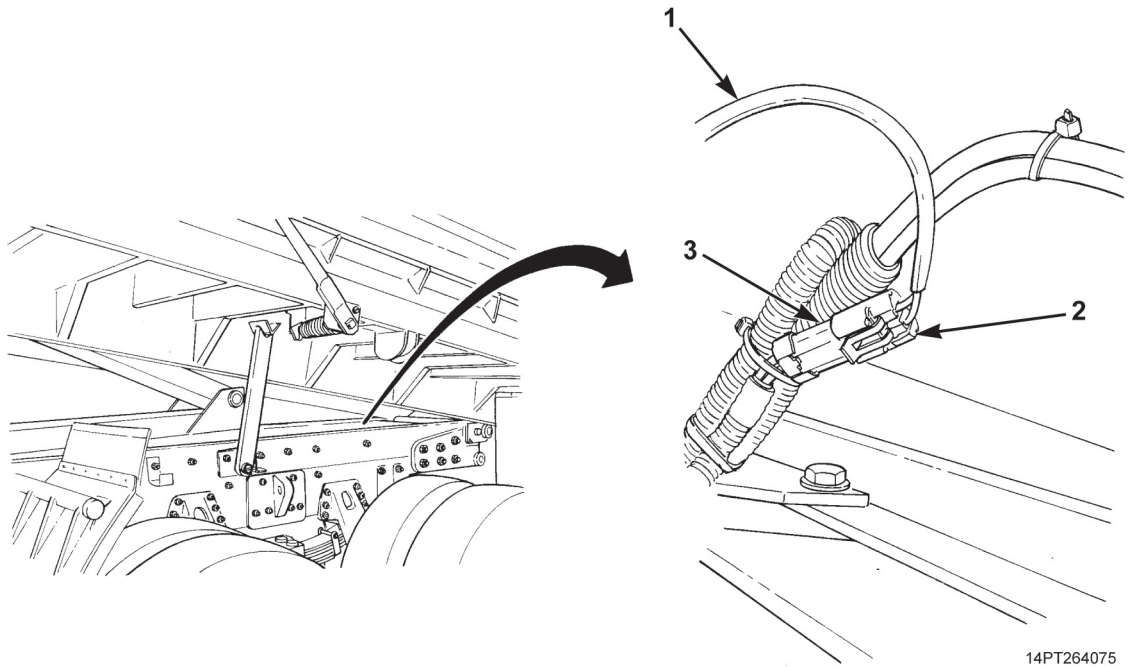


Figure 2. Beacon Warning Light Wiring Harness Removal.

END OF TASK

REPAIR

NOTE

Wiring harness does not need to be removed from vehicle to make repairs.
Repair wiring harness in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

INSTALLATION

1. Position wiring harness (Figure 3, Item 1) between points of connection.
2. Connect wiring harness connector (Figure 3, Item 2) to chassis wiring harness connector (Figure 3, Item 3).

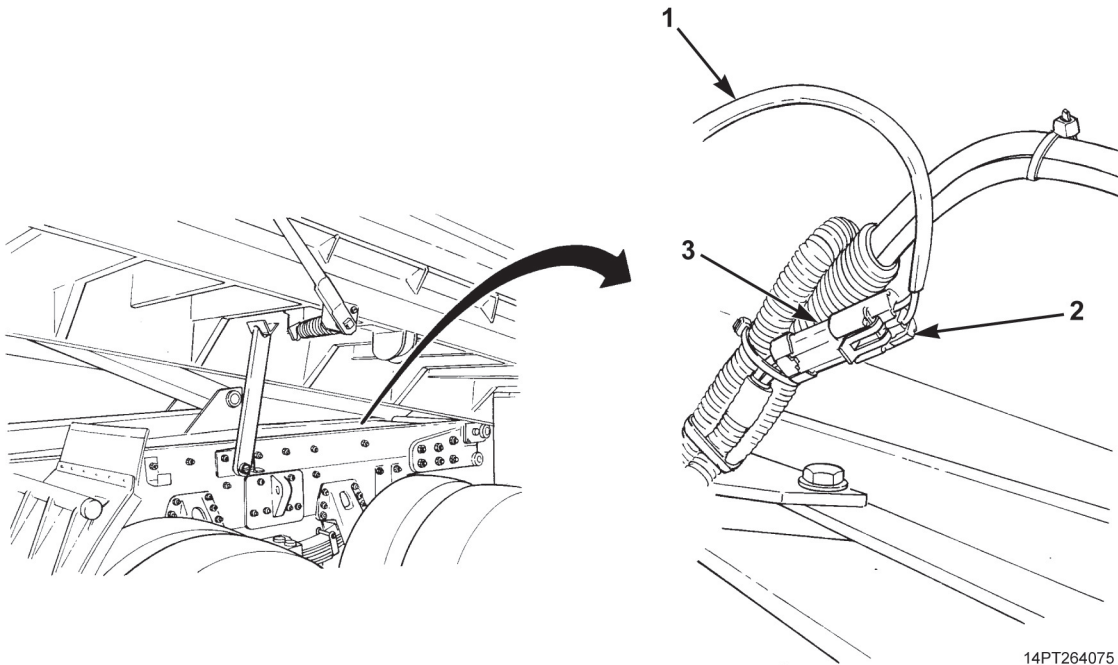


Figure 3. Beacon Warning Light Wiring Harness Installation.

3. Route wiring harness (Figure 4, Item 3) along inner surface of passenger's side dump body frame rail (Figure 4, Item 8) and through grommet (Figure 4, Item 7) at front of passenger's side dump body (Figure 4, Item 9).
4. Route wiring harness (Figure 4, Item 3) up dump body (Figure 4, Item 9) and cab shield (Figure 4, Item 2) Secure with clamps (Figure 4, Item 5) and nuts (Figure 4, Item 4) on welded studs (Figure 4, Item 6).
5. Secure wiring harness (Figure 4, Item 3) along inner surface of passenger's side dump body frame rail (Figure 4, Item 8) with clamps (Figure 4, Item 5) and nuts (Figure 4, Item 4) on welded studs (Figure 4, Item 6).
6. Install wiring harness (Figure 4, Item 3) through cab shield grommet (Figure 4, Item 1).
7. Install new tiedown straps.

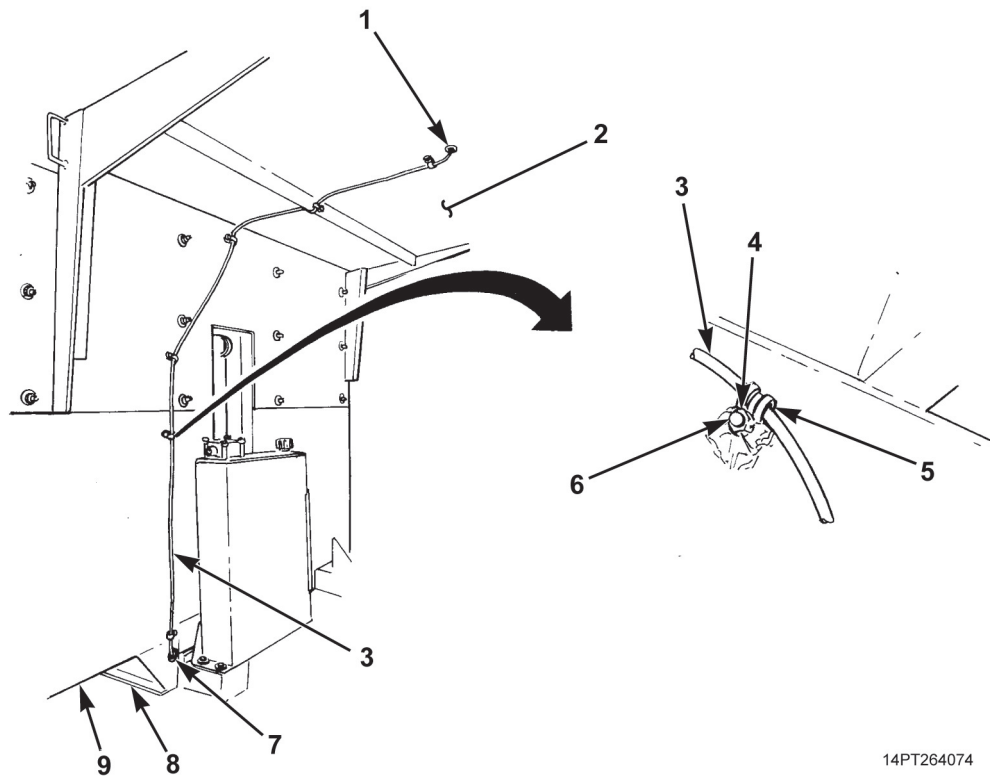
INSTALLATION - Continued

Figure 4. Beacon Warning Light Hardware Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Remove body props and lower dump body (WP 0005).
4. Check operation of beacon warning light (TM 9-2320-363-10 or TM 9-2320-302-10).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
LIGHTS WIRING HARNESS MAINTENANCE**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References (cont.)

WP 0026
WP 0027
WP 0072

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)
Tiedown Straps (WP 0112, Table 1, Item 33)

Equipment Condition

Dump body raised and supported on body props
(WP 0005)
Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

References

TM 9-2320-302-20-1
TM 9-2320-302-20-2
TM 9-2320-363-10

WARNING

NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

REMOVAL**NOTE**

- Wires should be tagged before disconnecting (WP 0072).
- Note location of tiedown straps and routing of wiring harness prior to removal to aid in installation.

1. Remove two wiring harness terminal leads from backup alarm (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2).
2. Remove taillight from each side of dump body and disconnect wiring harness (WP 0026).
3. Remove marker clearance light from each side of dump body and disconnect wiring harness (WP 0027).
4. Disconnect wiring harness leads (Figure 1, Item 2) from three marker clearance lights (Figure 1, Item 3) at rear hinge light bracket (Figure 1, Item 7).
5. Disconnect wiring harness connector (Figure 1, Item 5) from chassis wiring harness connector (Figure 1, Item 6) and remove wiring harness (Figure 1, Item 4) from dump body (Figure 1, Item 1).

END OF TASK**REPAIR****NOTE**

Wiring harness need not be removed from vehicle to make repairs.

Repair wiring harness in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION**

1. Position wiring harness (Figure 1, Item 4) between points of connection, routing it along channels and openings in dump body (Figure 1, Item 1).
2. Connect wiring harness connector (Figure 1, Item 5) to chassis wiring harness connector (Figure 1, Item 6).
3. Connect wiring harness leads (Figure 1, Item 2) to three marker clearance lights (Figure 1, Item 3) at rear hinge light bracket (Figure 1, Item 7).
4. Connect wiring harness to each taillight and install taillights (WP 0026).
5. Connect wiring harness to marker clearance light on each side of dump body and install lights (WP 0027).
6. Install two wiring harness terminal leads to backup alarm (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2).
7. Install new tiedown straps.

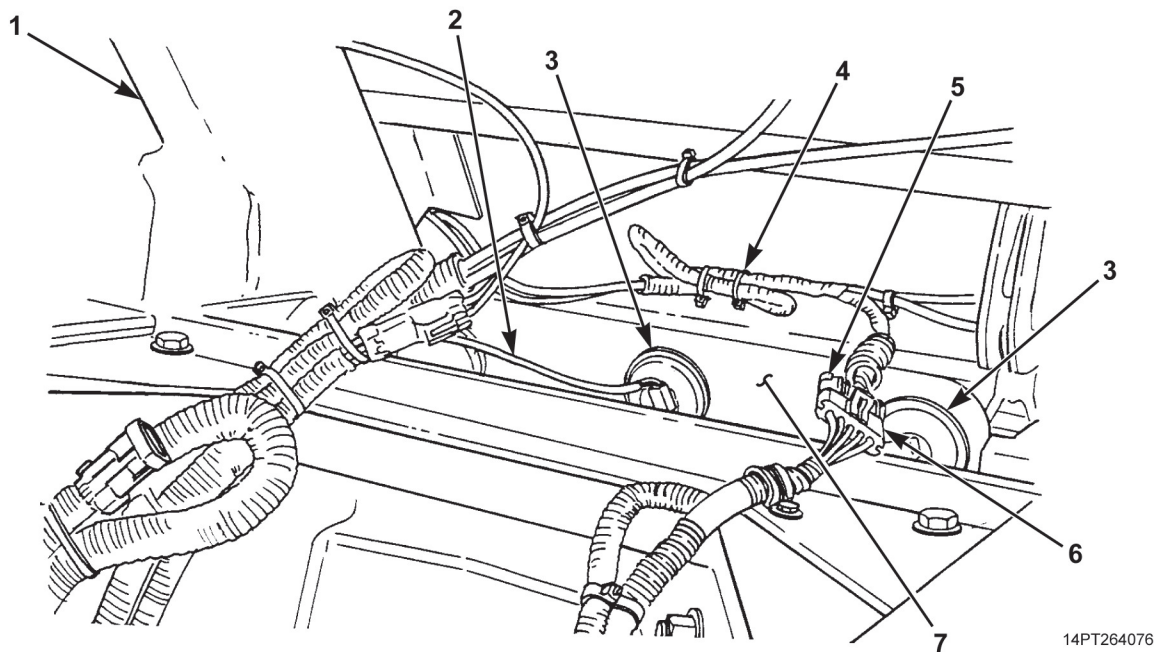
INSTALLATION - Continued

Figure 1. Lights Wiring Harness.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Remove body props and lower dump body (WP 0005).
4. Check operation of dump body lights and backup alarm (TM 9-2320-363-10 or TM 9- 2320-302-10).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
TRUCK-TO-MATERIAL CONTROL SYSTEM (MCS)
TAILGATE WIRING HARNESS MAINTENANCE
(M917A1 WITH MCS AND M917A2 WITH MCS)**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition (cont.)

Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)
Tiedown Straps (WP 0112, Table 1, Item 33)

References

WP 0072

Equipment Condition

Dump body raised and supported on body props
(WP 0005)

WARNING

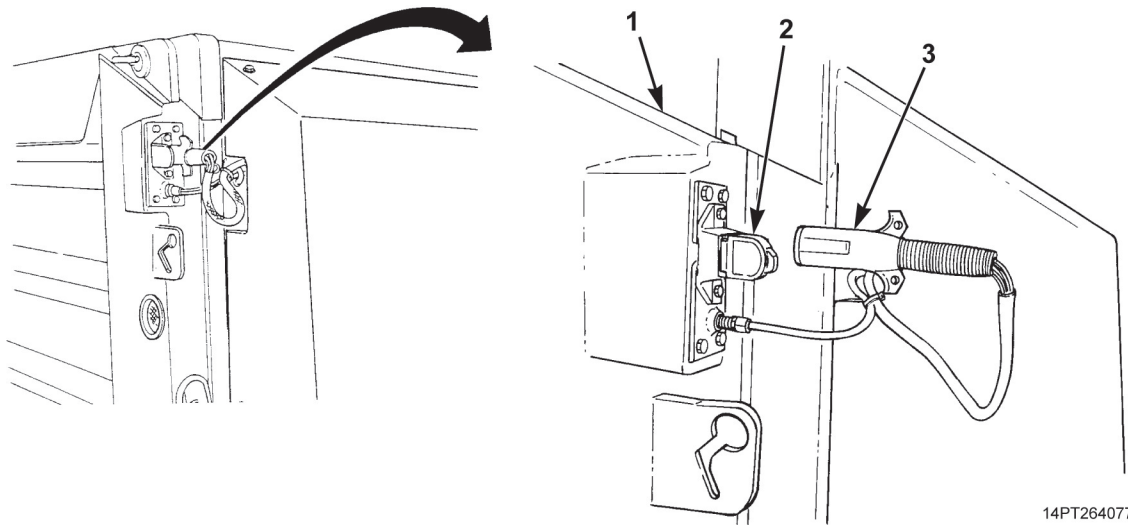
NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

NOTE

- Wires should be tagged before disconnecting (WP 0072).
- Note location of tiedown straps and routing of wiring harness prior to removal to aid in installation.

REMOVAL

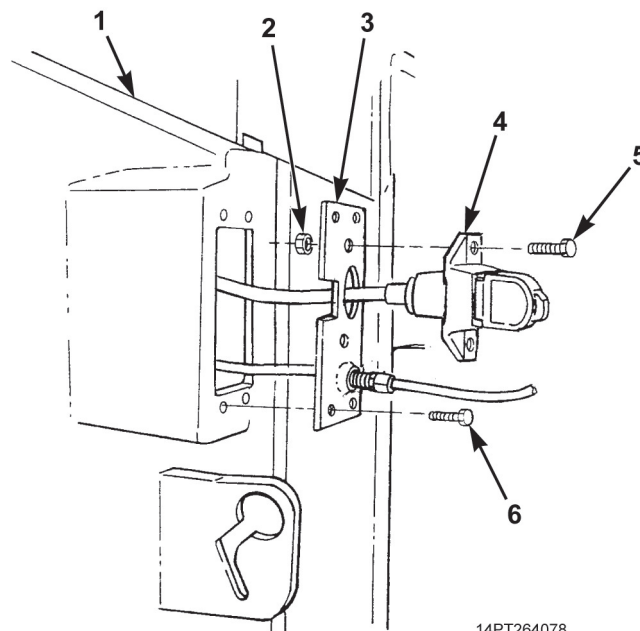
1. Disconnect MCS tailgate wiring harness connector (Figure 1, Item 3) from truck-to-MCS tailgate wiring harness receptacle (Figure 1, Item 2) at driver's side dump body pillar (Figure 1, Item 1).



14PT264077

Figure 1. Truck-to-MCS Tailgate Wiring Harness Removal.

2. Remove four screws (Figure 2, Item 6) and pull cover plate (Figure 2, Item 3) away from dump body pillar (Figure 2, Item 1).
3. Remove two nuts (Figure 2, Item 2) and screws (Figure 2, Item 5) securing truck-to-MCS tailgate wiring harness receptacle (Figure 2, Item 4) to cover plate (Figure 2, Item 3).



14PT264078

Figure 2. Cover Plate Removal.

REMOVAL - Continued

4. Disconnect truck-to-MCS tailgate wiring harness (Figure 3, Item 2) from chassis wiring harness (Figure 3, Item 1).
5. Remove truck-to-MCS tailgate wiring harness (Figure 3, Item 2).

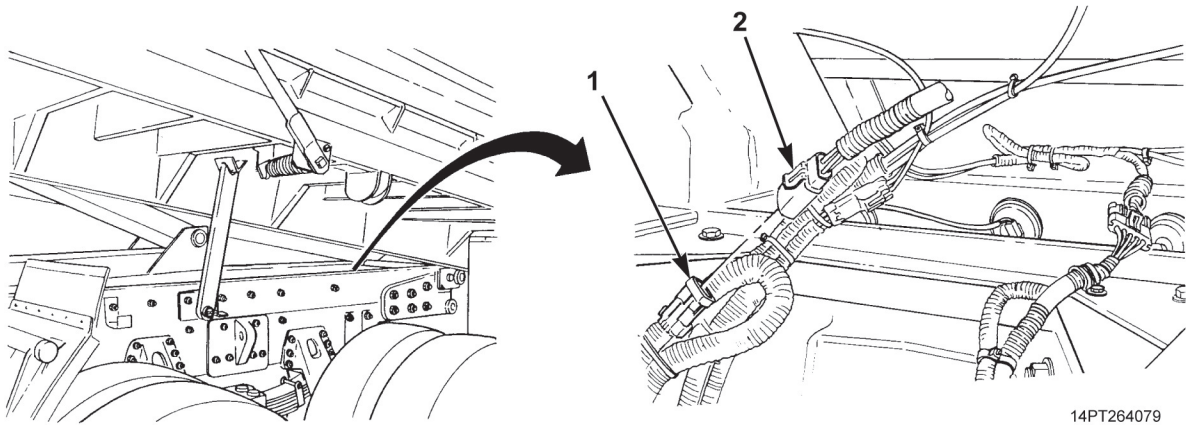


Figure 3. Wiring Harness Removal.

END OF TASK

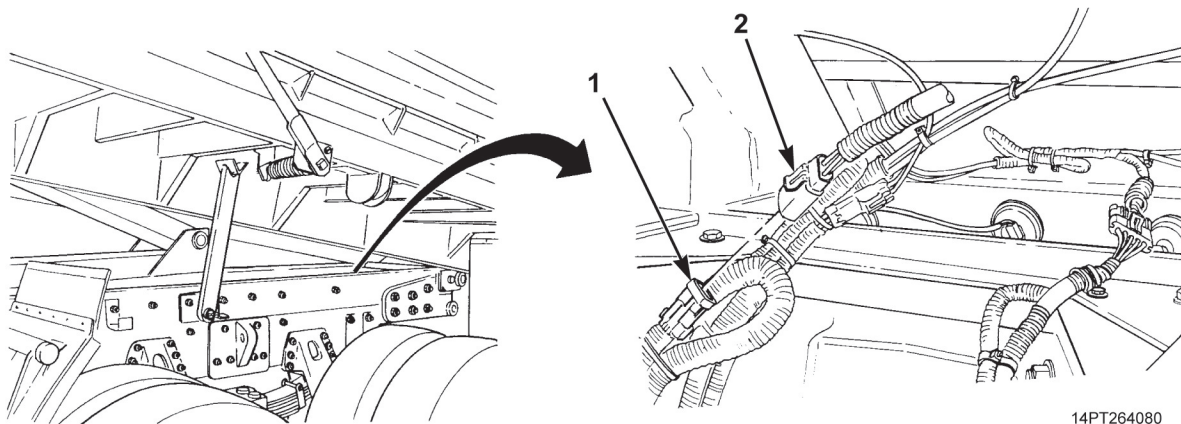
REPAIR**NOTE**

Wiring harness need not be removed from vehicle to make repairs.

Repair wiring harness in accordance with instructions in General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION**

1. Position truck-to-MCS tailgate wiring harness (Figure 4, Item 2) between points of connection.
2. Connect truck-to-MCS tailgate wiring harness (Figure 4, Item 2) to chassis wiring harness (Figure 4, Item 1).



14PT264080

Figure 4. Wiring Harness Installation.

3. Position truck-to-MCS tailgate wiring harness receptacle (Figure 5, Item 4) against cover plate (Figure 5, Item 3). Secure with two screws (Figure 5, Item 5) and nuts (Figure 5, Item 2).
4. Install cover plate (Figure 5, Item 3) on dump body pillar (Figure 5, Item 1) with four screws (Figure 5, Item 6).

INSTALLATION - Continued

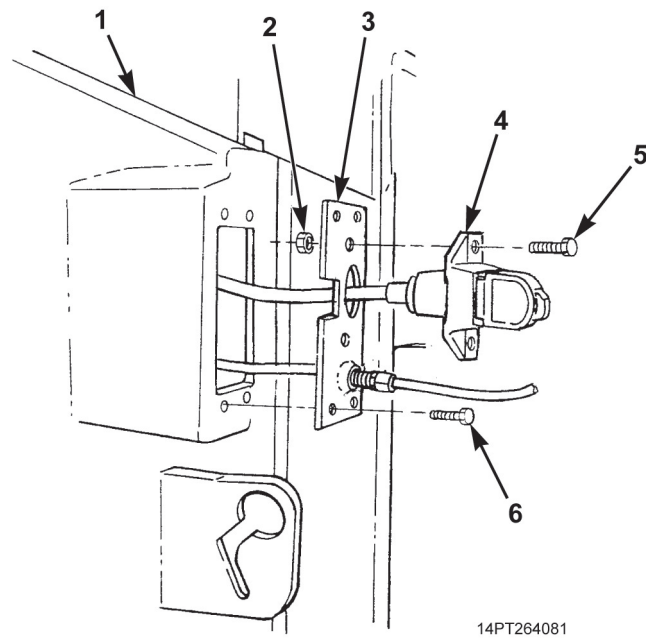


Figure 5. Cover Plate Installation.

5. Connect MCS tailgate wiring harness connector (Figure 6, Item 2) to truck-to-MCS tailgate wiring harness receptacle (Figure 6, Item 1).
6. Install new tiedown straps.

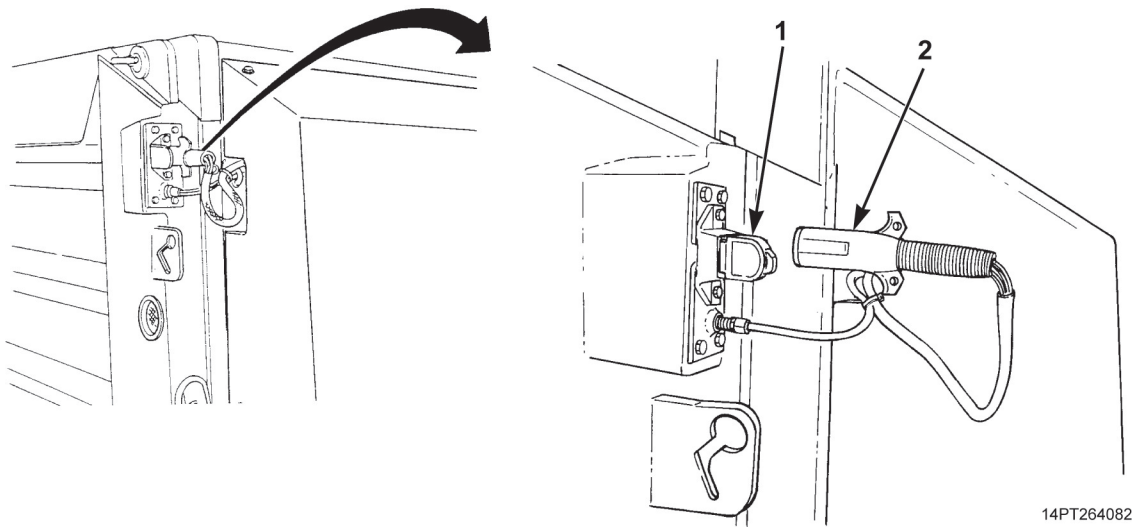


Figure 6. Truck-to-MCS Tailgate Wiring Harness Installation.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Remove body props and lower dump body (WP 0005).
4. Check operation of MCS tailgate using cab-mounted MCS control unit and remote control (WP 0005).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) TAILGATE WIRING HARNESS MAINTENANCE (M917A1 WITH MCS
AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
 (WP 0113, Table 1, Item 12)

References (cont.)

WP 0005
 WP 0072

Materials/Parts

Locknut Qty: 4 (WP 0114, Table 1, Item 21)
 Marker Tags (WP 0112, Table 1, Item 36)
 Tiedown Straps (WP 0112, Table 1, Item 33)

Equipment Condition

Batteries disconnected (TM 9-2320-363-20-1,
 TM 9-2320-363-20-2)
 Master battery switch OFF (TM 9-2320-302-10)
 MCS tailgate cover removed (WP 0043)

References

TM 9-2320-363-10

REMOVAL**NOTE**

- Wires should be tagged before disconnecting (WP 0072).
 - Note location of tiedown straps and routing of wiring harness prior to removal to aid in installation.
1. Disconnect wiring harness connector (Figure 1, Item 3) from truck-to-MCS tailgate wiring harness receptacle (Figure 1, Item 2) at driver's side dump body pillar (Figure 1, Item 1).

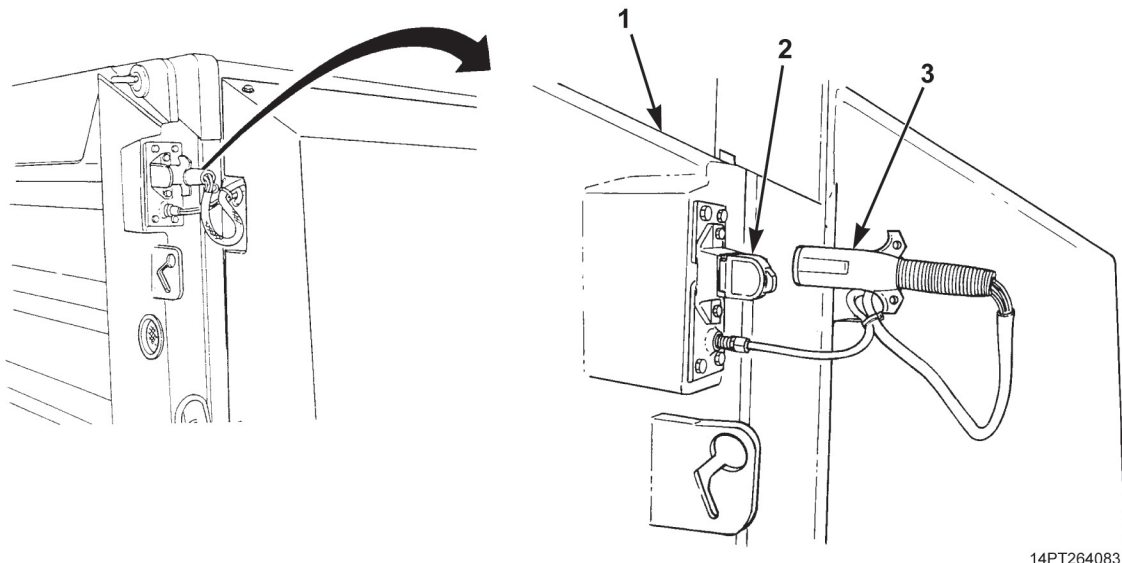


Figure 1. Wiring Harness Removal.

REMOVAL - Continued

2. Disconnect wiring harness connector (Figure 2, Item 1) from each air cylinder solenoid connector (Figure 2, Item 2).

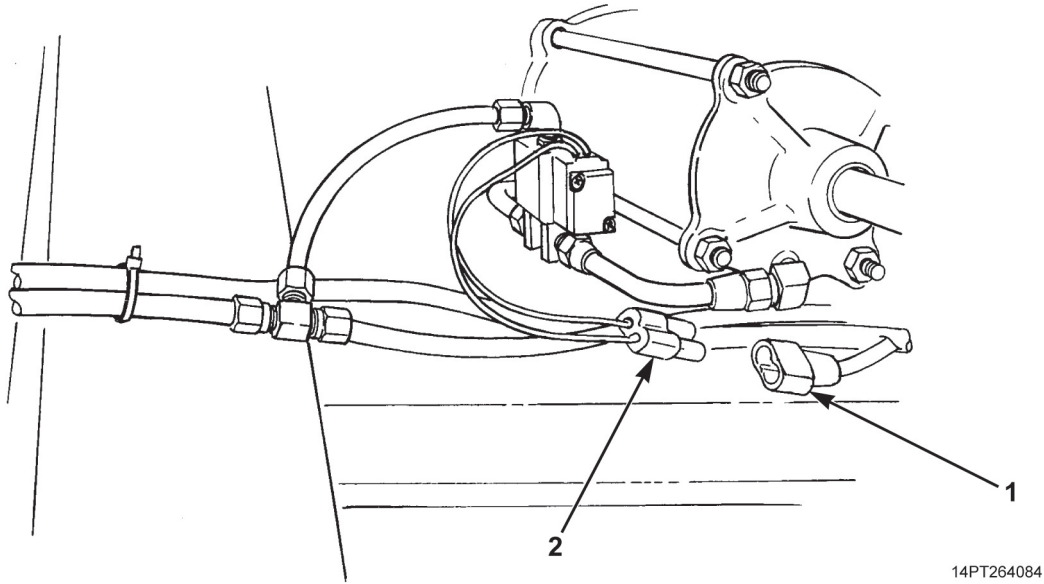


Figure 2. Wiring Harness Removal from Solenoid.

REMOVAL - Continued

3. On each side of MCS tailgate (Figure 3, Item 1), remove two locknuts (Figure 3, Item 3) and screws (Figure 3, Item 4) securing wiring harness receptacle (Figure 3, Item 5) to tailgate weldment (Figure 3, Item 6). Discard locknuts.
4. Remove wiring harness (Figure 3, Item 2) from MCS tailgate (Figure 3, Item 1).

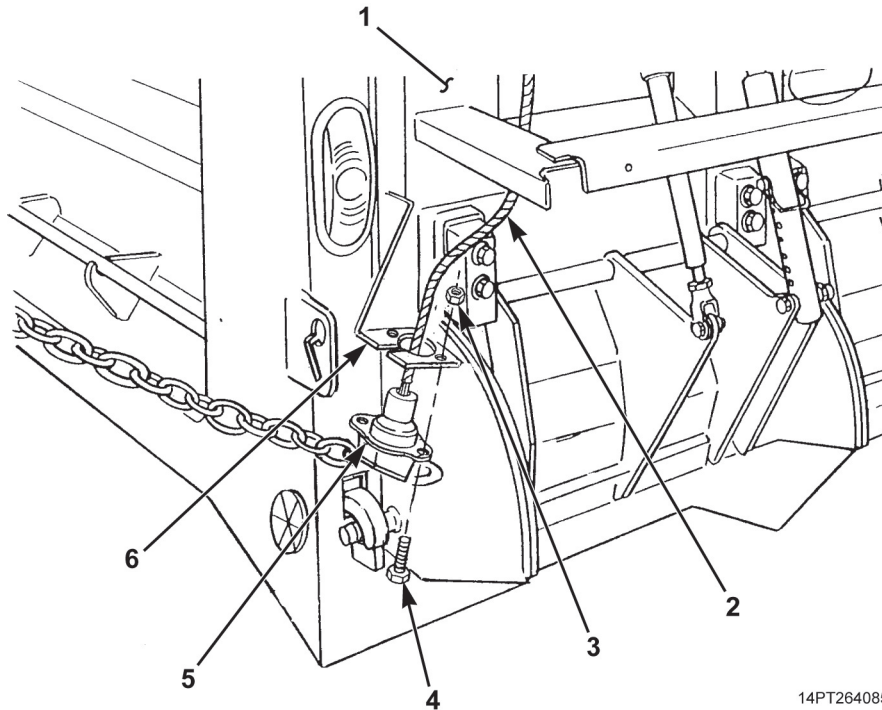


Figure 3. Tailgate Hardware Removal.

END OF TASK

REPAIR

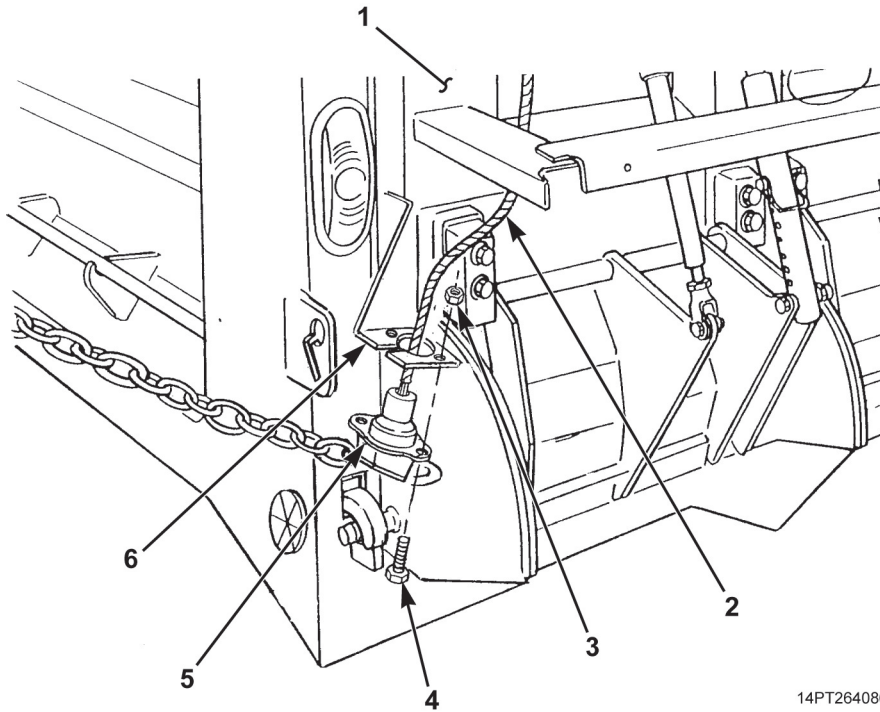
NOTE

Wiring harness need not be removed from vehicle to make repairs.
Repair wiring harness in accordance with instructions in General Maintenance Instructions (WP 0072).

END OF TASK

INSTALLATION

1. Position wiring harness (Figure 4, Item 2) on MCS tailgate (Figure 4, Item 1) between points of connection.
2. On each side of MCS tailgate (Figure 4, Item 1), position wiring harness receptacle (Figure 4, Item 5) on tailgate weldment (Figure 4, Item 6) and secure with two screws (Figure 4, Item 4) and new locknuts (Figure 4, Item 3).



14PT264086

Figure 4. Tailgate Hardware Installation.

INSTALLATION - Continued

3. Connect wiring harness connector (Figure 5, Item 1) to each air cylinder solenoid connector (Figure 5, Item 2).

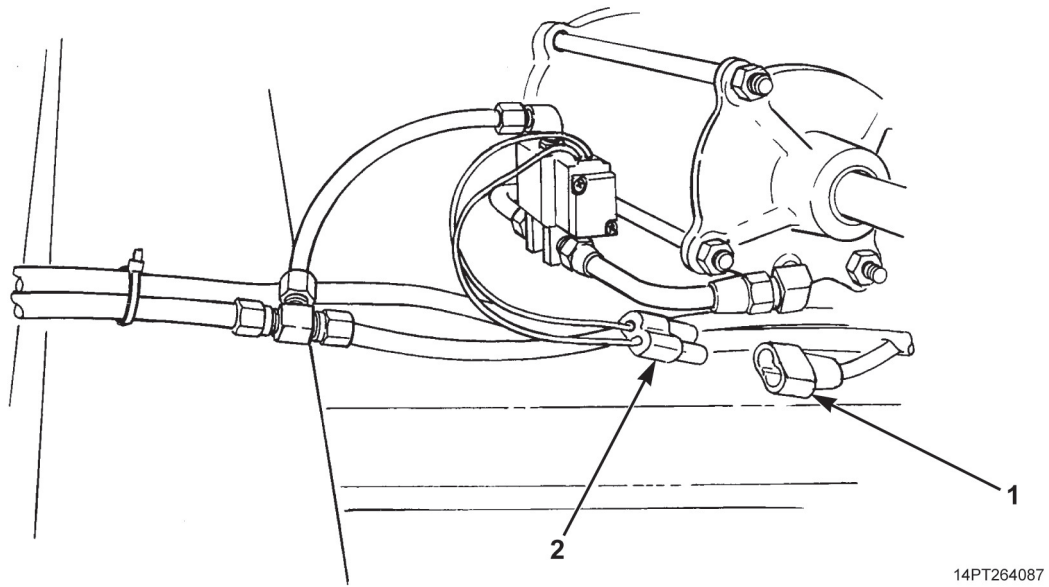


Figure 5. Connections at Solenoid.

INSTALLATION - Continued

4. Connect wiring harness connector (Figure 6, Item 3) to truck-to-MCS tailgate wiring harness receptacle (Figure 6, Item 2) at driver's side dump body pillar (Figure 6, Item 1).
5. Install new tiedown straps.

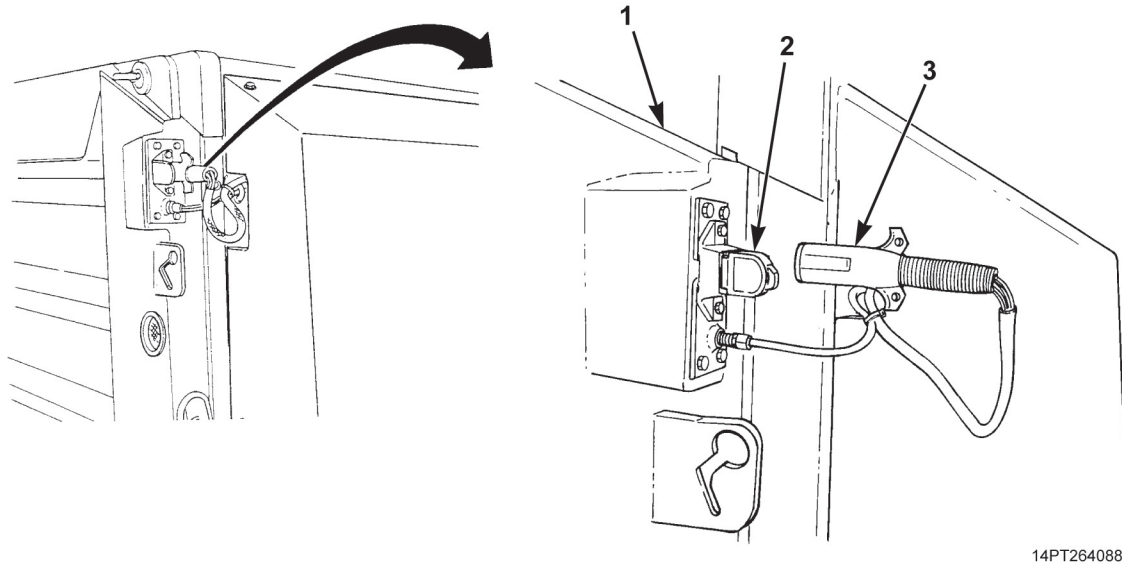


Figure 6. Wiring Harness Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Start vehicle and pressurize air system (TM 9-2320-363-10 or TM 9-2320-302-10).
4. Check operation of MCS tailgate using cab-mounted MCS control unit and remote control (WP 0005).
5. Install MCS tailgate cover (WP 0043).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
BODY UP AND TRANSPORT LOCK SWITCHES WIRING HARNESS MAINTENANCE

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition (cont.)

Batteries disconnected (TM 9-2320-363-20-1,
TM 9-2320-363-20-2)
Master battery switch OFF (TM 9-2320-302-10)

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)
Tiedown Straps (WP 0112, Table 1, Item 33)

References

WP 0072

Equipment Condition

Dump body raised and supported on body props
(WP 0005)

WARNING

NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

REMOVAL**NOTE**

- Wires should be tagged before disconnecting (WP 0072).
- Note location of tiedown straps and routing of wiring harness prior to removal to aid in installation.

1. Remove tiedown straps and discard.
2. Disconnect transport lock switch connector (Figure 1, Item 1) from wiring harness connector (Figure 1, Item 2).
3. Disconnect two wiring harness leads (Figure 1, Item 5) from body up switch (Figure 1, Item 6).
4. Disconnect wiring harness connector (Figure 1, Item 4) from chassis wiring harness connector (Figure 1, Item 3) and remove wiring harness (Figure 1, Item 7).

END OF TASK**REPAIR****NOTE**

Wiring harness need not be removed from vehicle to make repairs.

Repair wiring harness in accordance with instructions in General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION**

1. Connect wiring harness connector (Figure 1, Item 4) to chassis wiring harness connector (Figure 1, Item 3).
2. Connect two wiring harness leads (Figure 1, Item 5) to body up switch (Figure 1, Item 6).
3. Connect transport lock switch connector (Figure 1, Item 1) to wiring harness connector (Figure 1, Item 2).
4. Secure wiring harness (Figure 1, Item 7) with new tiedown straps.

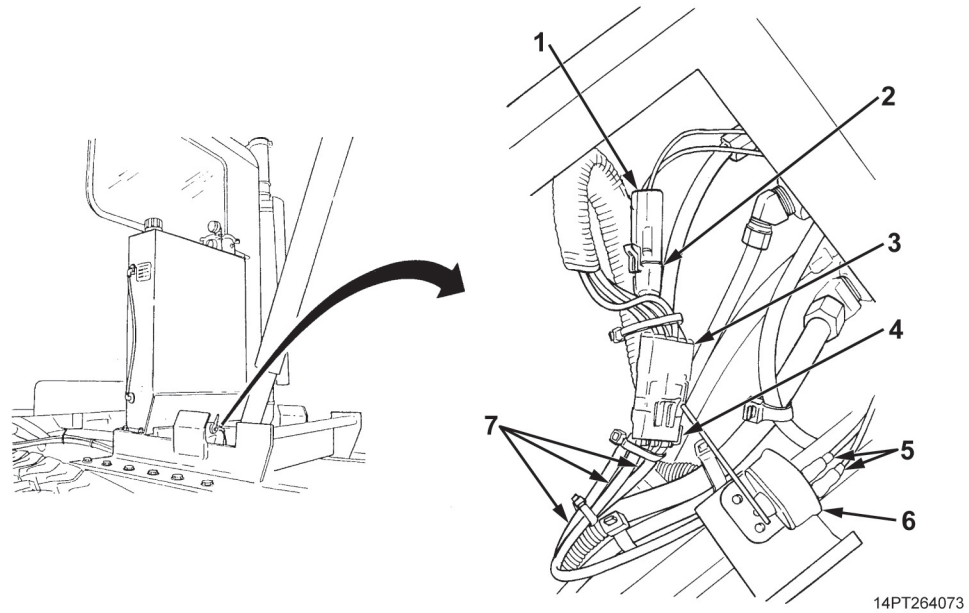
INSTALLATION - Continued

Figure 1. Transport Lock Switch Connector and Wiring Harness.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Connect batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2).
2. Turn master battery switch ON (TM 9-2320-302-10).
3. Check operation of body up and transport lock switch (WP 0005).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
CYLINDER SUPPORT FRAME REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Engine and Transmission Sling: 3-ton
(WP 0113, Table 1, Item 9)
Wrench, Torque: 3/4 in. drive, 0–600 lb-ft
(0–813 N•m) (WP 0113, Table 1, Item 17)
Suitable Lifting Device

Personnel Required

(3)

Equipment Condition

Body up switch removed (WP 0029)
Hydraulic cylinder removed (WP 0065)
Hydraulic reservoir removed (WP 0067)

Materials/Parts

Locknut Qty: 24 (WP 0114, Table 1, Item 18)

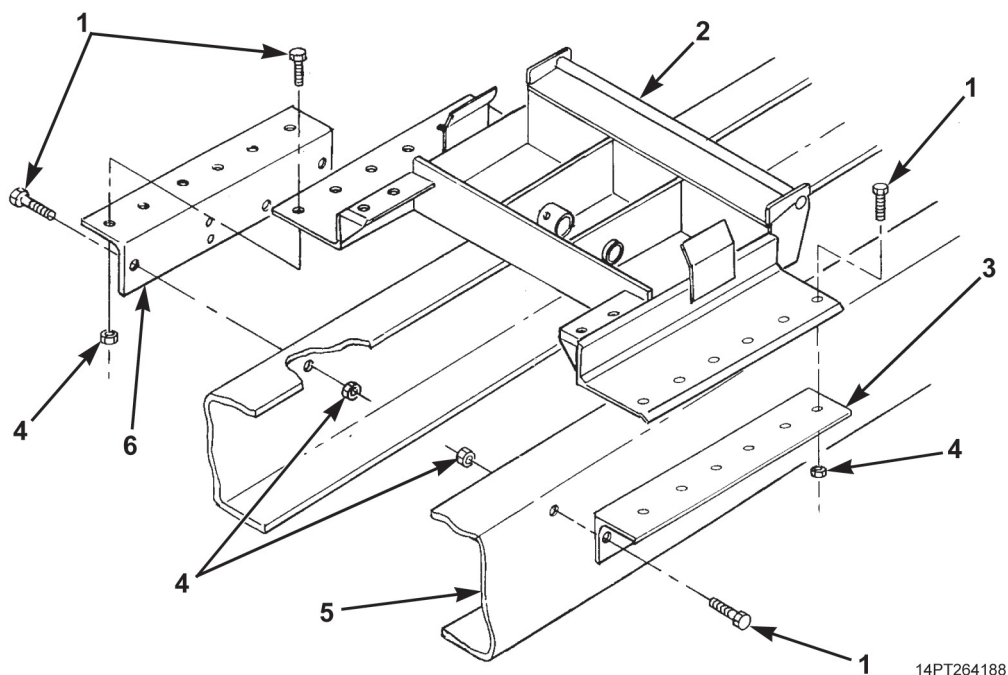
REMOVAL

WARNING



Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

1. Attach slings to cylinder support frame (Figure 1, Item 2) and attach slings to lifting device. Take up slack in slings with lift.
2. Remove 24 locknuts (Figure 1, Item 4), screws (Figure 1, Item 1), driver's side angle bracket (Figure 1, Item 3), and passenger's side angle bracket (Figure 1, Item 6) from cylinder support frame (Figure 1, Item 2) and vehicle chassis (Figure 1, Item 5). Discard locknuts.
3. Remove cylinder support frame (Figure 1, Item 2) from vehicle chassis (Figure 1, Item 5) and move frame to safe work area. Remove slings.



14PT264188

Figure 1. Cylinder Support Frame Removal.

END OF TASK

INSTALLATION**WARNING**

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

1. Attach slings to cylinder support frame (Figure 2, Item 2) and attach slings to lifting device. Take up slack in slings with lift.
2. Lift cylinder support frame (Figure 2, Item 2) and position on vehicle chassis (Figure 2, Item 5).
3. Install passenger's side angle bracket (Figure 2, Item 6) and driver's side angle bracket (Figure 2, Item 3) on vehicle chassis (Figure 2, Item 5) and cylinder support frame (Figure 2, Item 2) with 24 screws (Figure 2, Item 1) and new locknuts (Figure 2, Item 4).
4. Torque locknuts (Figure 2, Item 4) to 200 lb-ft (271 N•m).

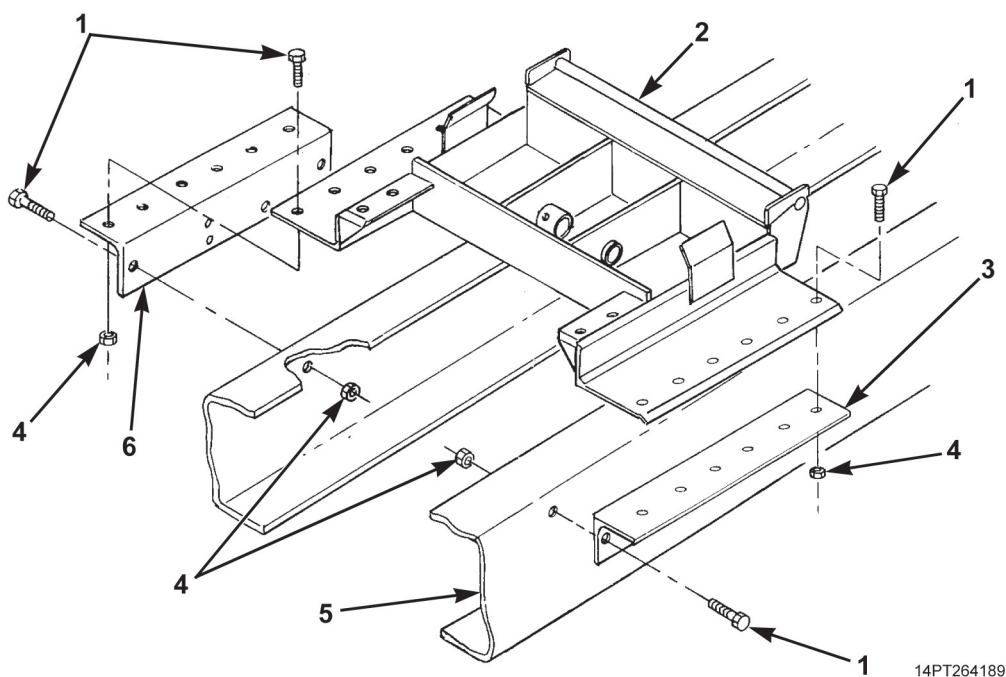


Figure 2. Cylinder Support Frame Installation.

END OF TASK

FOLLOW-ON TASKS

1. Install hydraulic cylinder (WP 0065).
2. Install hydraulic reservoir (WP 0067).
3. Install body up switch (WP 0029).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
DUMP BODY AND STABILIZER REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Engine and Transmission Sling: 3-ton
(WP 0113, Table 1, Item 9)
Shop Set, Machine and Welding
(Tool Kit, Welder's)
(WP 0113, Table 1, Item 8)
Wrench, Torque: 3/4 in. drive, 0–600 lb-ft
(0–813 N•m) (WP 0113, Table 1, Item 17)
Suitable Lifting Device

Materials/Parts

Locknut Qty: 12 (WP 0114, Table 1, Item 18)
Locknut Qty: 2 (WP 0114, Table 1, Item 20)

Personnel Required

(3)

References

TM 9-237

References (cont.)

TM 9-2320-302-10
TM 9-2320-363-10
TM 9-2320-302-20-1
TM 9-2320-302-20-2
TM 9-2320-363-20-1
TM 9-2320-363-20-2
WP 0005

Equipment Condition

Chassis-to-dump body air lines disconnected
(WP 0047)
Chassis-to-dump body electrical harnesses
disconnected (WP 0035) (WP 0031)
(WP 0032) (WP 0033)
Mud flaps removed (WP 0040)

REMOVAL

1. Remove six locknuts (Figure 1, Item 2) and screws (Figure 1, Item 1) from driver's side and passenger's side angle brackets (Figure 1, Item 3). Discard locknuts.

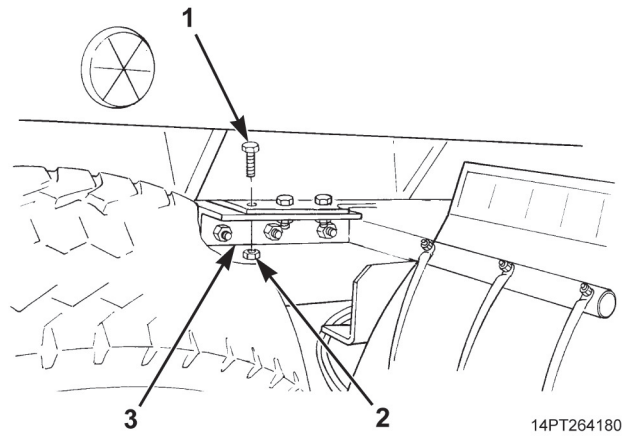


Figure 1. Angle Bracket Hardware Removal.

REMOVAL - Continued

- Working from underside of vehicle, secure lower half (Figure 2, Item 3) of stabilizer to upper half (Figure 2, Item 2) and to dump body (Figure 2, Item 1) using a suitable chain or nylon strap.

WARNING

- Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.
 - NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.
- Raise front of dump body (Figure 2, Item 1) and support on body props (WP 0005) using a suitable lifting device with chains.

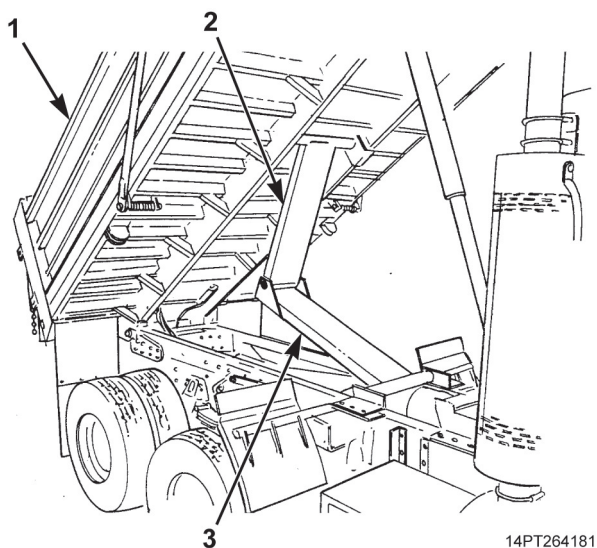


Figure 2. Securing Stabilizer.

REMOVAL - Continued

4. Remove six locknuts (Figure 3, Item 2) and screws (Figure 3, Item 4) from driver's side and passenger's side mounting brackets (Figure 3, Item 3). Remove brackets from hydraulic cylinder pivots (Figure 3, Item 6). Discard locknuts.
5. Disengage Power Take Off (PTO) (TM 9-2320-363-10 or TM 9-2320-302-10). Lower hydraulic cylinder (Figure 3, Item 1) by placing hydraulic control lever in cab in DOWN position (WP 0005). With hydraulic cylinder lowered, place wooden blocks between base of cylinder and cylinder support frame (Figure 3, Item 5) to provide support.

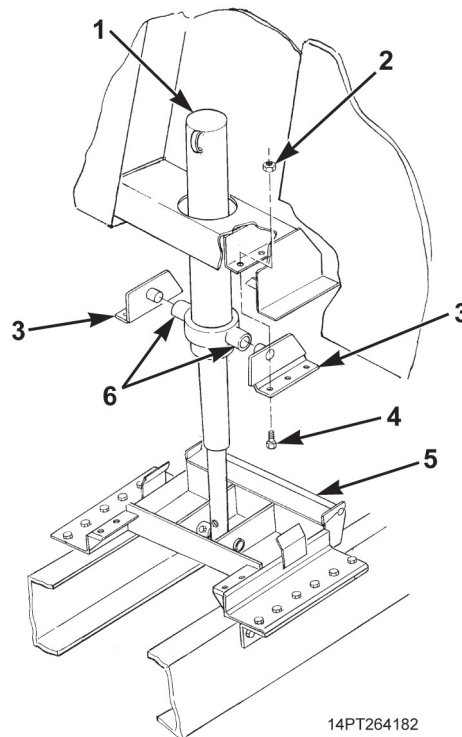


Figure 3. Mounting Bracket Removal.

REMOVAL - Continued

6. Using suitable lift with chains, lower front of dump body (Figure 4, Item 6).
7. Attach suitable lift with chains at four corners of dump body (Figure 4, Item 6). Take up slack in chains with lift.
8. Remove two locknuts (Figure 4, Item 4) and screws (Figure 4, Item 2) from rear hinge (Figure 4, Item 1) and hinge pins (Figure 4, Item 5). Discard locknuts.
9. Remove driver's side and passenger's side hinge pins (Figure 4, Item 5) from rear hinge (Figure 4, Item 1).

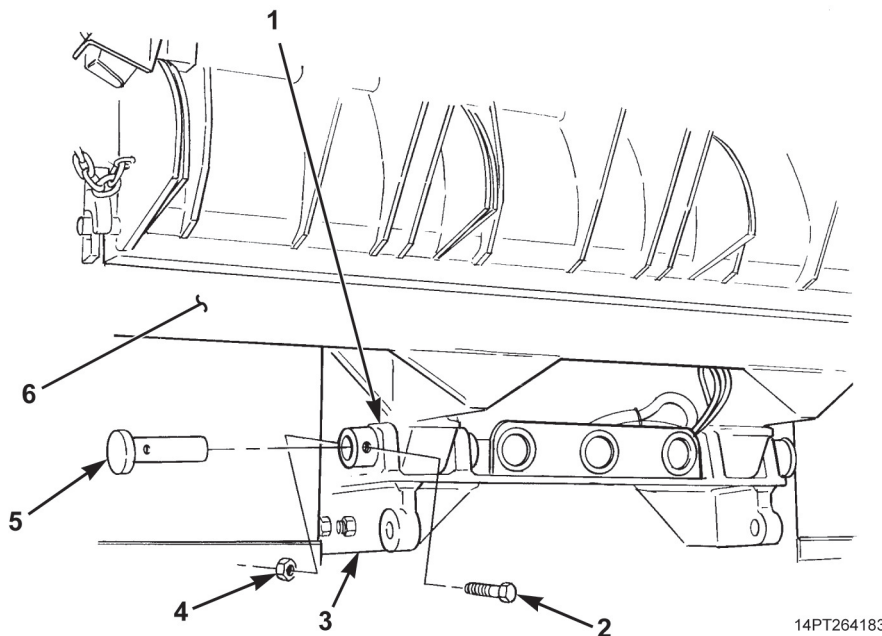
WARNING

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

NOTE

Before removing dump body from vehicle chassis, perform a trial lift to ensure body is balanced and will lift straight and level from vehicle chassis.

10. Remove dump body (Figure 4, Item 6) from vehicle chassis (Figure 4, Item 3). Place dump body on suitable supports and remove lifting device and chains.



14PT264183

Figure 4. Hinge Pin Removal.

REMOVAL - Continued**WARNING**

Provide adequate ventilation and personal protective equipment before starting any welding operation (TM 9-237). Contact your unit/local Industrial Hygienist or Safety Officer for assistance. Failure to comply may result in personnel injury or death.

CAUTION

Before welding, the following components must be disconnected: engine Electronic Control Unit (ECU), Anti-lock Brake System (ABS) ECU, Central Tire Inflation System (CTIS) ECU, Datalogger, and batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2). Failure to comply may result in damage to equipment.

11. If stabilizer is damaged, it may be removed at this time. Refer to TM 9-237 for instructions on welding components.

END OF TASK

INSTALLATION**WARNING**

- Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device.
- Provide adequate ventilation and personal protective equipment before starting any welding operation (TM 9-237). Contact your unit/local Industrial Hygienist or Safety Officer for assistance.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

CAUTION

Before welding, the following components must be disconnected: engine ECU, ABS ECU, CTIS ECU, Datalogger, and batteries (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2). Failure to comply may result in damage to equipment.

1. If removed, install stabilizer. Refer to TM 9-237 for instructions on welding components.
2. Secure lower half (Figure 5, Item 3) of stabilizer to upper half (Figure 5, Item 2) and to dump body (Figure 5, Item 1) using a suitable chain or nylon strap.

NOTE

Before lifting dump body, perform a trial lift to ensure body is balanced and will lift straight and level.

3. Attach suitable lift with chains at four corners of dump body (Figure 5, Item 1). Take up slack in chains with lift.

INSTALLATION - Continued

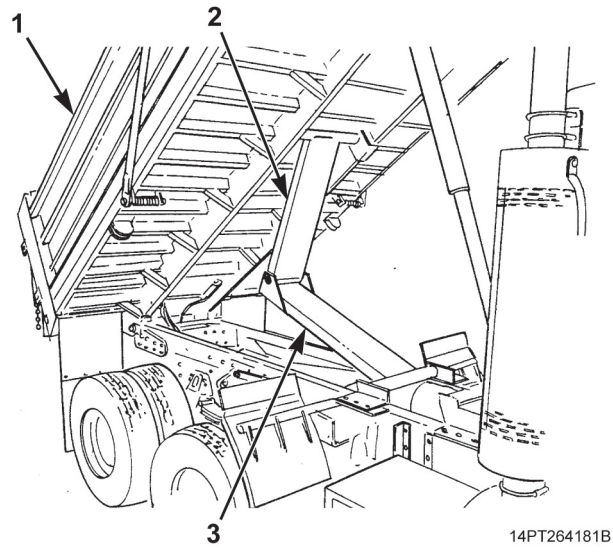


Figure 5. Stabilizer Up.

INSTALLATION - Continued**NOTE**

When positioning dump body on vehicle chassis, pay close attention to hydraulic cylinder positioning and rear hinge assembly alignment.

4. Lift dump body (Figure 6, Item 7) and position over vehicle chassis (Figure 6, Item 4). Lower body until rear hinge (Figure 6, Item 1) and hinge pads (Figure 6, Item 2) are aligned and hydraulic cylinder is properly positioned in recess at front of dump body.
5. Install driver's side and passenger's side hinge pins (Figure 6, Item 6) in rear hinge (Figure 6, Item 1).
6. Install two screws (Figure 6, Item 3) and new locknuts (Figure 6, Item 5) in rear hinge (Figure 6, Item 1) and hinge pins (Figure 6, Item 6).
7. Lower dump body (Figure 6, Item 7) onto vehicle chassis (Figure 6, Item 4). Remove lifting chains from rear of dump body.

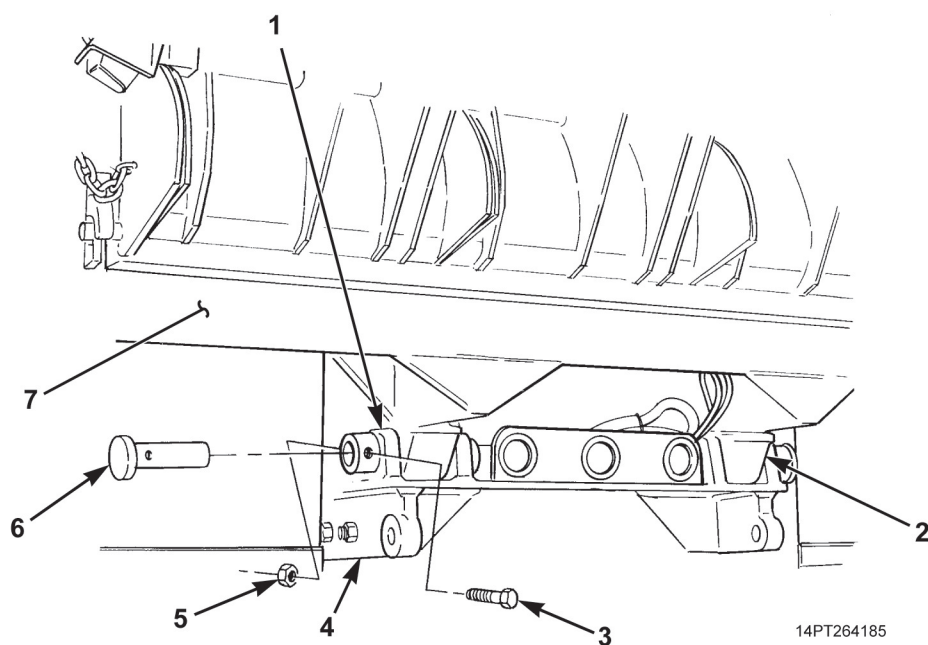


Figure 6. Hinge Pin Installation.

INSTALLATION - Continued

8. Working from underside of vehicle, release lower half (Figure 7, Item 3) and upper half (Figure 7, Item 2) of stabilizer from bottom of dump body (Figure 7, Item 1).

NOTE

It may be necessary to raise front of dump body to align stabilizer with chassis mounting holes.

9. Raise front of dump body (Figure 7, Item 1) and position wooden blocks between dump body frame rails (Figure 7, Item 5) and vehicle chassis (Figure 7, Item 4).

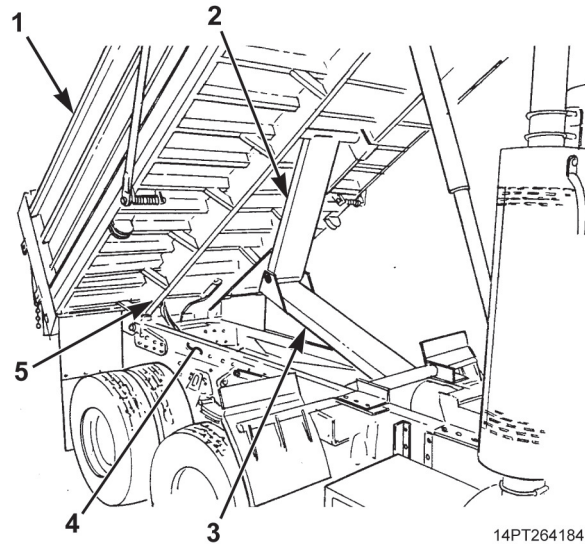


Figure 7. Stabilizer Down.

10. Align lower half of stabilizer mounting surface to angle brackets (Figure 8, Item 3). Install six screws (Figure 8, Item 1) and new locknuts (Figure 8, Item 2) in driver's side and passenger's side angle brackets. Torque locknuts to 150 lb-ft (203 N•m).

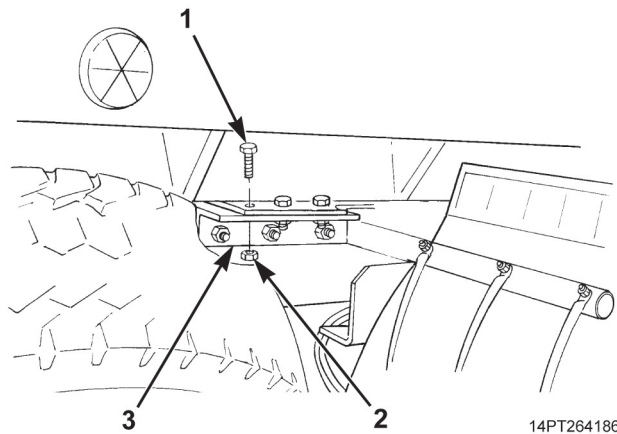


Figure 8. Angle Bracket Hardware Installation.

INSTALLATION - Continued

11. Lift front of dump body (Figure 9, Item 1), remove wooden blocks, position body props in raised position, and lower body onto props (WP 0005).
12. Install driver's side and passenger's side mounting brackets (Figure 9, Item 4) on hydraulic cylinder (Figure 9, Item 2) pivots (Figure 9, Item 7).

NOTE

It may be necessary to raise and/or lower front of dump body to align mounting brackets to dump body.

13. Align mounting brackets (Figure 9, Item 4) with mounting surface of dump body (Figure 9, Item 1).
14. Install six screws (Figure 9, Item 5) and new locknuts (Figure 9, Item 3) to secure mounting brackets (Figure 9, Item 4) to dump body (Figure 9, Item 1). Torque locknuts to 150 lb-ft (203 N•m).
15. Remove dump body (Figure 9, Item 1) from body props and lower body (WP 0005).
16. Remove lifting device with chains from dump body (Figure 9, Item 1).

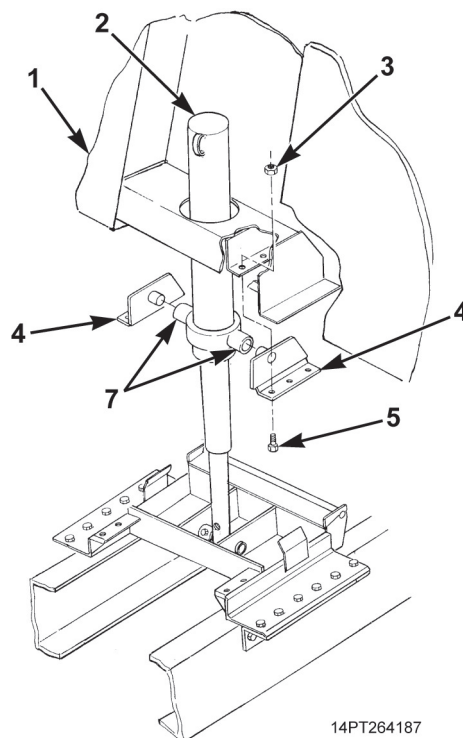


Figure 9. Mounting Bracket Installation.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Connect chassis-to-dump body air lines (WP 0047).
2. Connect chassis-to-dump body electrical harnesses (WP 0035) (WP 0031) (WP 0032) (WP 0033).
3. Install mud flaps (WP 0040).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
BODY PROP REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0073

Materials/Parts

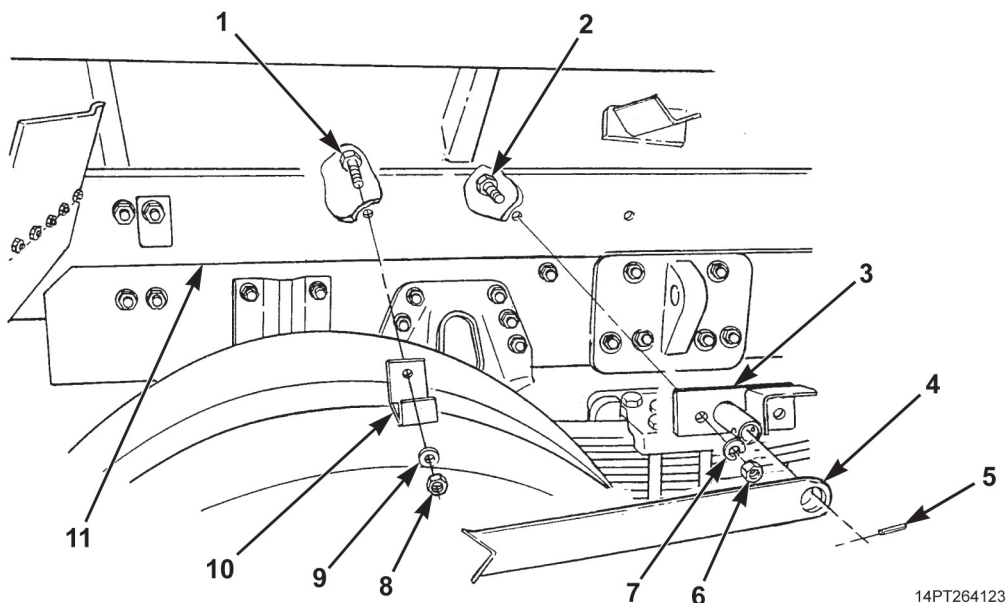
Spring Pin (WP 0114, Table 1, Item 28)

REMOVAL

1. Remove spring pin (Figure 1, Item 5) and body prop (Figure 1, Item 4) from pivot bracket (Figure 1, Item 3). Discard spring pin.
2. Remove two nuts (Figure 1, Item 6), washers (Figure 1, Item 7), screws (Figure 1, Item 2), and pivot bracket (Figure 1, Item 3) from frame (Figure 1, Item 11).
3. Remove nut (Figure 1, Item 8), washer (Figure 1, Item 9), screw (Figure 1, Item 1), and support bracket (Figure 1, Item 10) from frame (Figure 1, Item 11).

END OF TASK**INSTALLATION**

1. Install support bracket (Figure 1, Item 10) on frame (Figure 1, Item 11) with screw (Figure 1, Item 1), washer (Figure 1, Item 9), and nut (Figure 1, Item 8).
2. Install pivot bracket (Figure 1, Item 3) on frame (Figure 1, Item 11) with two screws (Figure 1, Item 2), washers (Figure 1, Item 7), and nuts (Figure 1, Item 6).
3. With body prop (Figure 1, Item 4) positioned above support bracket (Figure 1, Item 10), install body prop on pivot bracket (Figure 1, Item 3) with new spring pin (Figure 1, Item 5).



14PT264123

Figure 1. Body Prop Replacement.

END OF TASK**FOLLOW-ON MAINTENANCE**

Lubricate body prop (WP 0073).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
CAB SHIELD REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Engine and Transmission Sling: 3-ton
(WP 0113, Table 1, Item 9)
Wrench, Torque: 1/2 in. drive, 0–175 lb-ft
(0–237 N•m) (WP 0113, Table 1, Item 17)
Suitable Lifting Device

References

WP 0072

Equipment Condition

Dump body raised and supported on body props
(WP 0005)
Beacon warning light removed
(TM 9-2320-363-10 or TM 9-2320-302-10)
Beacon warning light wiring harness removed
from cab shield (WP 0031)

Materials/Parts

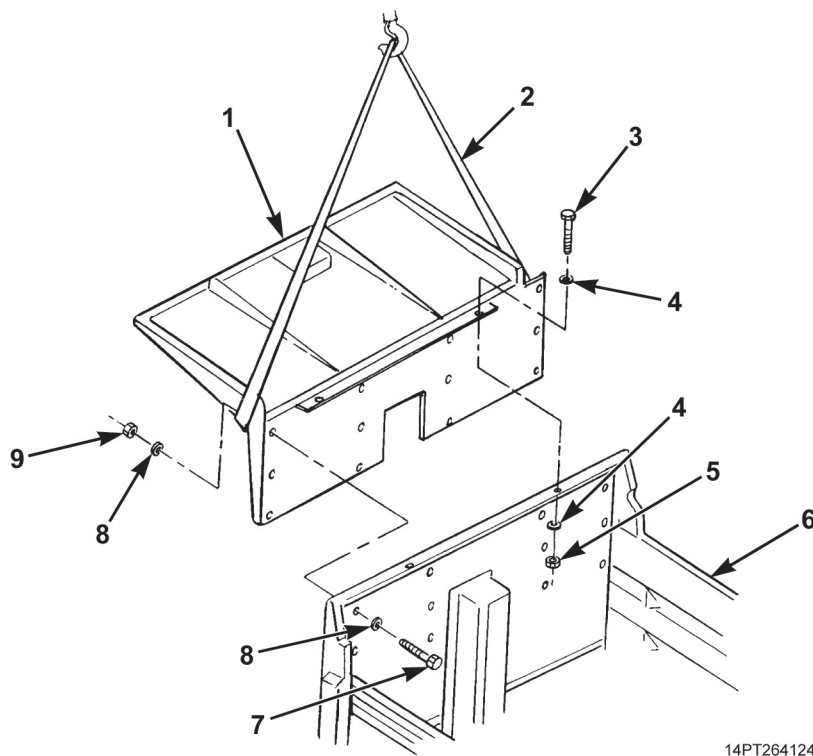
Locknut Qty: 14 (WP 0114, Table 1, Item 18)

WARNING

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

REMOVAL

1. At center of cab shield (Figure 1, Item 1), remove six locknuts (Figure 1, Item 9), 12 washers (Figure 1, Item 8), and six screws (Figure 1, Item 7). Discard locknuts.
2. Remove body props and lower dump body (WP 0005).
3. Attach lifting slings (Figure 1, Item 2) to cab shield (Figure 1, Item 1) and remove slack from lifting slings.
4. Remove six locknuts (Figure 1, Item 9), 12 washers (Figure 1, Item 8), and six screws (Figure 1, Item 7) from outside edges of cab shield (Figure 1, Item 1) and dump body (Figure 1, Item 6). Discard locknuts.
5. Remove two locknuts (Figure 1, Item 5), four washers (Figure 1, Item 4), and two screws (Figure 1, Item 3) from top of cab shield (Figure 1, Item 1) and dump body (Figure 1, Item 6). Discard locknuts.
6. Lift cab shield (Figure 1, Item 1) from dump body (Figure 1, Item 6) and place cab shield in a safe work area.



14PT264124

Figure 1. Cab Shield Removal.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

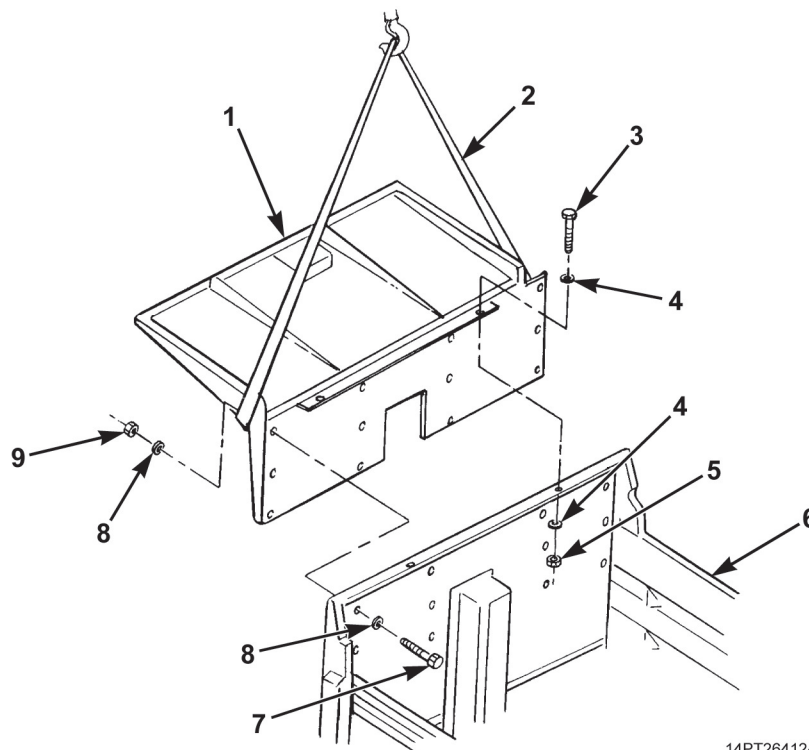
INSTALLATION

WARNING



Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

1. Raise cab shield (Figure 2, Item 1) to dump body (Figure 2, Item 6).
2. Install two screws (Figure 2, Item 3), four washers (Figure 2, Item 4), and two new locknuts (Figure 2, Item 5) on top of cab shield (Figure 2, Item 1) and dump body (Figure 2, Item 6).
3. Install six screws (Figure 2, Item 7), 12 washers (Figure 2, Item 8), and six new locknuts (Figure 2, Item 9) on outside edges of cab shield (Figure 2, Item 1) and dump body (Figure 2, Item 6).
4. Remove lifting slings (Figure 2, Item 2) from cab shield (Figure 2, Item 1).
5. Raise and support dump body on body props (WP 0005).
6. Install six screws (Figure 2, Item 7), 12 washers (Figure 2, Item 8), and six new locknuts (Figure 2, Item 9) on center of cab shield (Figure 2, Item 1) and dump body (Figure 2, Item 6).
7. Torque 12 locknuts (Figure 2, Item 9) and two locknuts (Figure 2, Item 5) to 150 lb-ft (203 N•m).



14PT264124

Figure 2. Cab Shield Installation.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Install beacon warning light wiring harness on cab shield (WP 0031).
2. Remove body props and lower dump body (WP 0005).
3. Install beacon warning light (TM 9-2320-363-10 or TM 9-2320-302-10).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
MUD FLAP REPLACEMENT**

INITIAL SETUP:

Tools and Special Tools

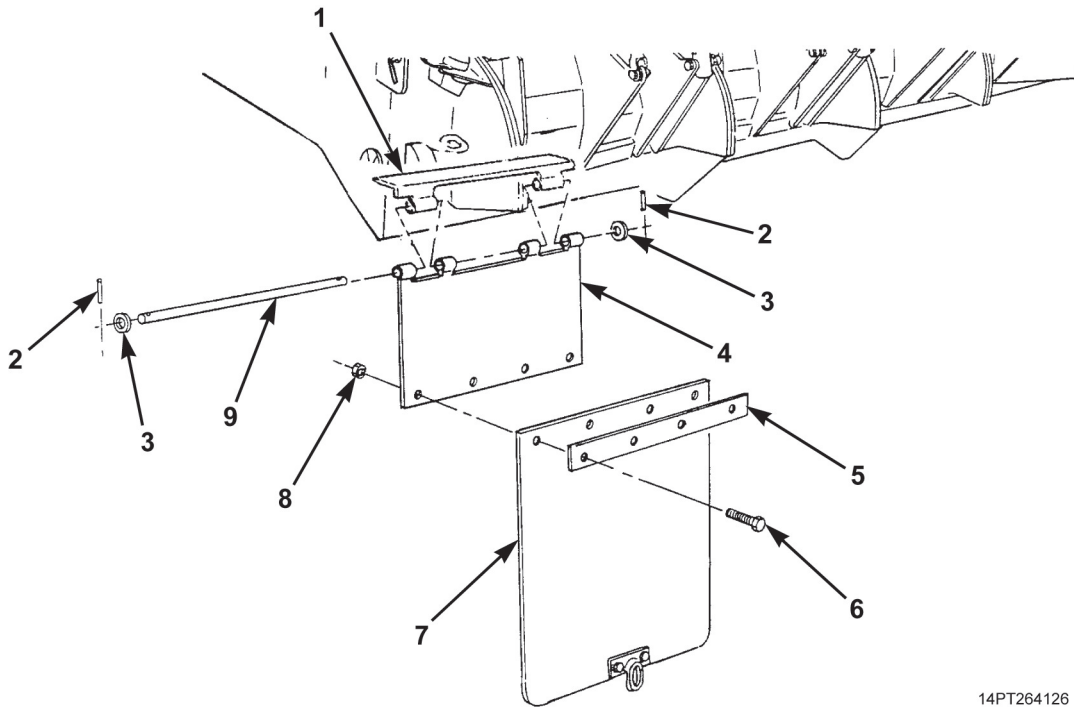
General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Materials/Parts

Locknut Qty: 6 (WP 0114, Table 1, Item 22)
Spring Pin Qty: 2 (WP 0114, Table 1, Item 28)

REMOVAL

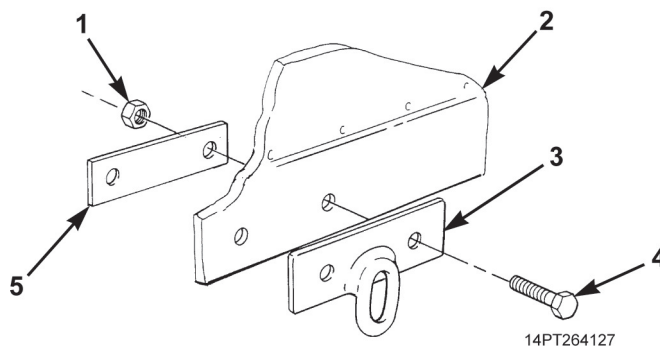
1. Remove four locknuts (Figure 1, Item 8), screws (Figure 1, Item 6), plate (Figure 1, Item 5), and mud flap (Figure 1, Item 7) from mounting plate (Figure 1, Item 4). Discard locknuts.
2. Remove two spring pins (Figure 1, Item 2), washers (Figure 1, Item 3), and shaft (Figure 1, Item 9), and separate mounting plate (Figure 1, Item 4) from weldment (Figure 1, Item 1) on dump body. Discard spring pins.



14PT264126

Figure 1. Mud Flap Removal.

3. Remove two locknuts (Figure 2, Item 1), screws (Figure 2, Item 4), anchor plate (Figure 2, Item 5), and mounting plate (Figure 2, Item 3) from mud flap (Figure 2, Item 2). Discard locknuts.



14PT264127

Figure 2. Mud Flap Hardware Removal.

END OF TASK

INSTALLATION

1. Install mounting plate (Figure 3, Item 3) and anchor plate (Figure 3, Item 5) on mud flap (Figure 3, Item 2) with two screws (Figure 3, Item 4) and new locknuts (Figure 3, Item 1).

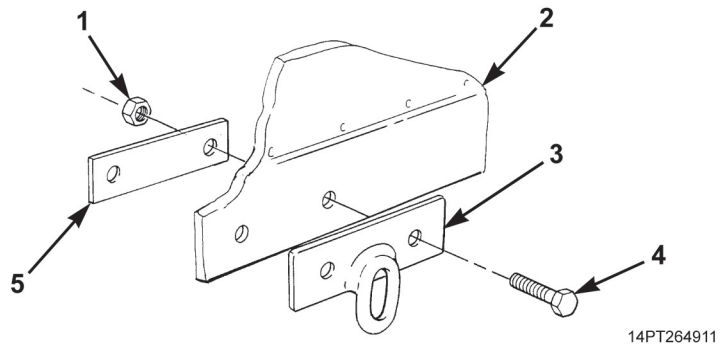
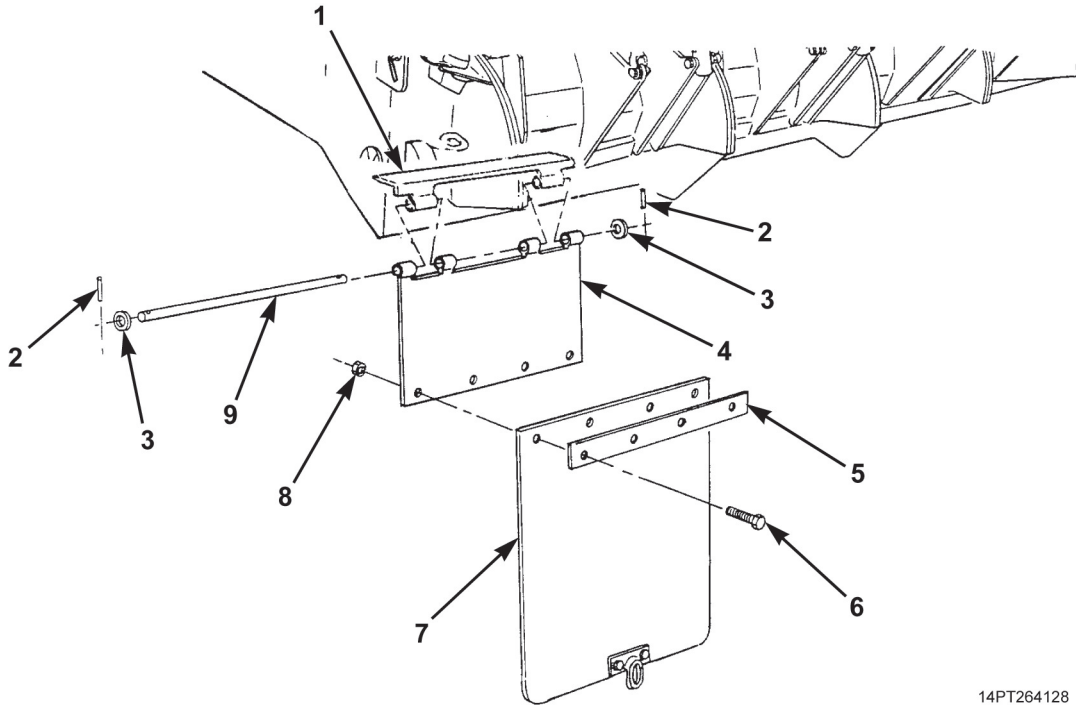


Figure 3. Mud Flap Hardware Installation.

INSTALLATION - Continued

2. Install mounting plate (Figure 4, Item 4) on weldment (Figure 4, Item 1) and dump body with shaft (Figure 4, Item 9), two washers (Figure 4, Item 3), and new spring pins (Figure 4, Item 2) through shaft.
3. Install mud flap (Figure 4, Item 7) and plate (Figure 4, Item 5) on mounting plate (Figure 4, Item 4) with four screws (Figure 4, Item 6) and new locknuts (Figure 4, Item 8).



14PT264128

Figure 4. Mud Flap Installation.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
TAILGATE REPLACEMENT (M917A1 AND M917A2)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Engine and Transmission Sling: 3-ton
(WP 0113, Table 1, Item 9)
Suitable Lifting Device

References (cont.)

TM 9-2320-363-10
WP 0072
WP 0073

Personnel Required

(2)

Equipment Condition

Tailgate release control valve lever in
UNLOCKED position (WP 0004)
Tailgate chains released (WP 0005)

References

TM 9-2320-302-10

WARNING

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

REMOVAL

1. Attach lifting slings (Figure 1, Item 4) to tailgate (Figure 1, Item 5) and remove slack from lifting slings.
2. Remove linch pins (Figure 1, Item 3) and hinge pins (Figure 1, Item 1) from each side of tailgate (Figure 1, Item 5).
3. Lift tailgate (Figure 1, Item 5) from dump body (Figure 1, Item 2) and place tailgate in a safe work area.

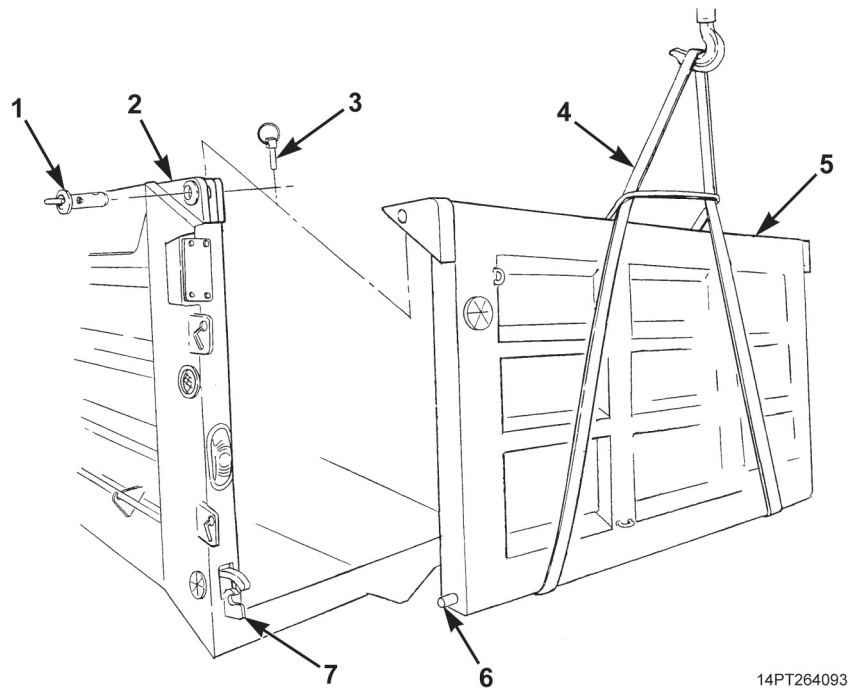
END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION****WARNING**

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

1. Raise tailgate (Figure 1, Item 5) to dump body (Figure 1, Item 2).
2. Position tailgate (Figure 1, Item 5) so that bottom pins (Figure 1, Item 6) are resting on dump body stops (Figure 1, Item 7) and tailgate hinge pin holes are aligned with dump body hinge pin holes.
3. Install hinge pins (Figure 1, Item 1) and linch pins (Figure 1, Item 3) on each side of tailgate (Figure 1, Item 5).
4. Remove lifting slings (Figure 1, Item 4) from tailgate (Figure 1, Item 5).

INSTALLATION - Continued

14PT264093

Figure 1. Tailgate Replacement.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Lubricate tailgate hinge pins (WP 0073).

FOLLOW-ON MAINTENANCE - Continued**WARNING**

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
2. Start engine and pressurize air systems (TM 9-2320-363-10 or TM 9-2320-302-10).
 3. Set tailgate release control valve lever to LOCKED position (WP 0004).
 4. Latch tailgate chains (WP 0005).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) TAILGATE REPLACEMENT
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Engine and Transmission Sling: 3-ton
(WP 0113, Table 1, Item 9)
Suitable Lifting Device

Equipment Condition (cont.)

Tailgate release control valve lever in
UNLOCKED position (WP 0004)
Chassis air system drained (TM 9-2320-363-10 or
TM 9-2320-302-10)
MCS air system drained (WP 0017)
Tailgate chains released (WP 0005)

Personnel Required

(2)

References

WP 0072
WP 0073

Equipment Condition

MCS remote control disconnected (WP 0004)

WARNING

DO NOT disconnect air lines while air system is pressurized. Air system pressure must be released before air lines are disconnected. Failure to comply may result in personnel injury.

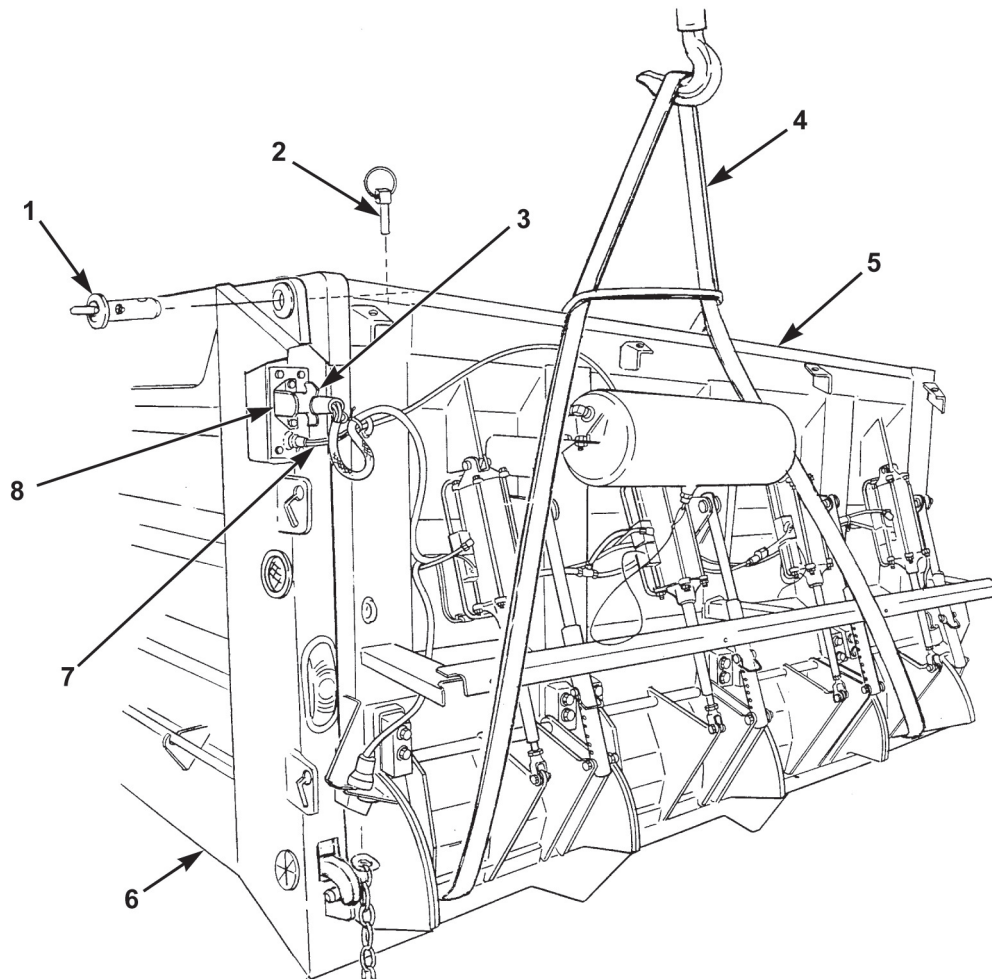
REMOVAL

1. Disconnect MCS tailgate wiring harness connector (Figure 1, Item 3) from receptacle (Figure 1, Item 8).
2. Disconnect MCS quick-disconnect air line (Figure 1, Item 7).

WARNING

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

3. Attach lifting slings (Figure 1, Item 4) to MCS tailgate (Figure 1, Item 5) and remove slack from lifting slings.
4. Remove linch pins (Figure 1, Item 2) and hinge pins (Figure 1, Item 1) from each side of MCS tailgate (Figure 1, Item 5).
5. Lift MCS tailgate (Figure 1, Item 5) from dump body (Figure 1, Item 6) and place tailgate in a safe work area.

REMOVAL - Continued

14PT264095

Figure 1. MCS Tailgate Removal.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

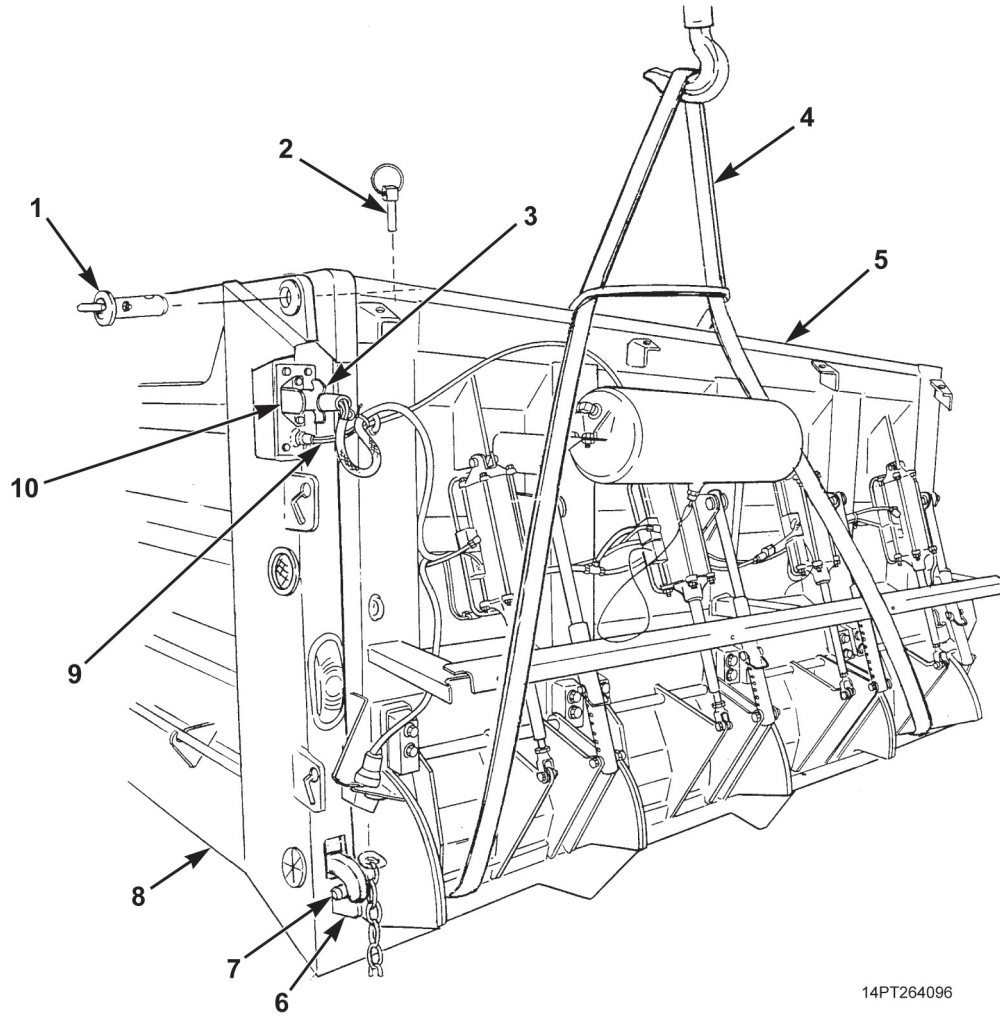
END OF TASK

INSTALLATION**WARNING**

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

1. Raise MCS tailgate (Figure 2, Item 5) to dump body (Figure 2, Item 8).
2. Position MCS tailgate (Figure 2, Item 5) so that bottom pins (Figure 2, Item 7) are resting on dump body stops (Figure 2, Item 6) and tailgate hinge pin holes are aligned with dump body hinge pin holes.
3. Install hinge pins (Figure 2, Item 1) and lynch pins (Figure 2, Item 2) on each side of MCS tailgate (Figure 2, Item 5).
4. Remove lifting slings (Figure 2, Item 4) from MCS tailgate (Figure 2, Item 5).
5. Connect MCS quick-disconnect air line (Figure 2, Item 9).
6. Connect MCS tailgate wiring harness connector (Figure 2, Item 3) to receptacle (Figure 2, Item 10).

INSTALLATION - Continued



14PT264096

Figure 2. MCS Tailgate Installation.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Lubricate tailgate hinge pins (WP 0073).

WARNING

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
2. Start engine and pressurize air systems (TM 9-2320-363-10 or TM 9-2320-302-10).
 3. Set tailgate release control valve lever to LOCKED position (WP 0004).
 4. Check operation of MCS gates using cab-mounted control unit (WP 0004).
 5. Check operation of MCS gates using MCS remote control (WP 0004).
 6. Latch tailgate chains (WP 0005).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) TAILGATE COVER REPLACEMENT
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0072

Personnel Required

(2)

WARNING

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

REMOVAL

1. Remove nut, screw, clamp, and release air reservoir draincock lanyard (Figure 1, Item 4) from MCS tailgate cover (Figure 1, Item 2).
2. Remove 10 self-tapping screws (Figure 1, Item 3) and MCS tailgate cover (Figure 1, Item 2) from MCS tailgate (Figure 1, Item 1).

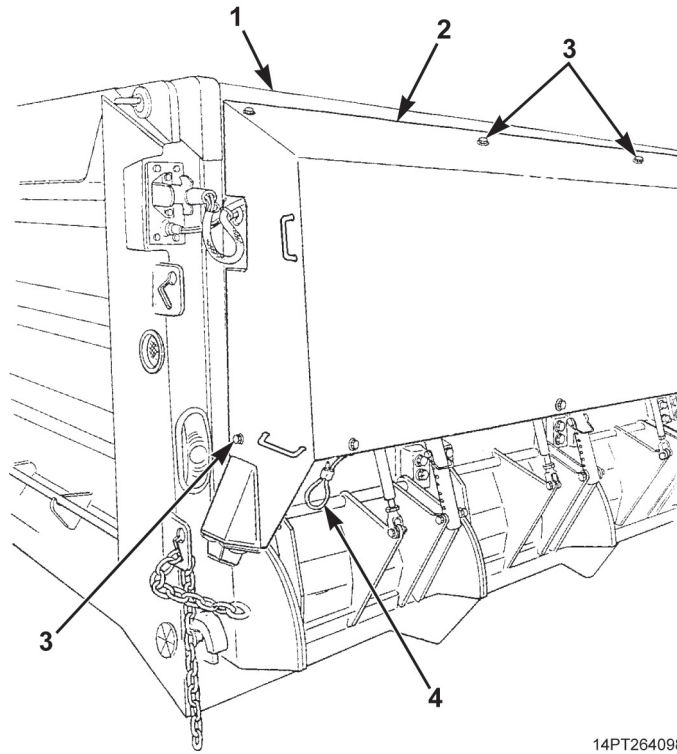
END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION**

1. Align screw holes on MCS tailgate cover (Figure 1, Item 2) with screw holes on MCS tailgate (Figure 1, Item 1).
2. Install and tighten 10 self-tapping screws (Figure 1, Item 3).
3. Secure air reservoir draincock lanyard (Figure 1, Item 4) to MCS tailgate cover (Figure 1, Item 2) with clamp, screw, and nut.

INSTALLATION - Continued



14PT264098

Figure 1. MCS Tailgate Cover Replacement.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) GATE REPLACEMENT
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Suitable Lifting Device

References

WP 0072

Equipment Condition

MCS adjustment tube removed (WP 0045)
MCS air cylinder removed (WP 0049)

Materials/Parts

Lockwasher Qty: 4 (WP 0114, Table 1, Item 26)

Personnel Required

(2)

WARNING

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

REMOVAL

1. Remove four screws (Figure 1, Item 3), lockwashers (Figure 1, Item 2), MCS gate (Figure 1, Item 4), and two brackets (Figure 1, Item 1) from tailgate (Figure 1, Item 5). Discard lockwashers.
2. Remove two brackets (Figure 1, Item 1) from MCS gate (Figure 1, Item 4).

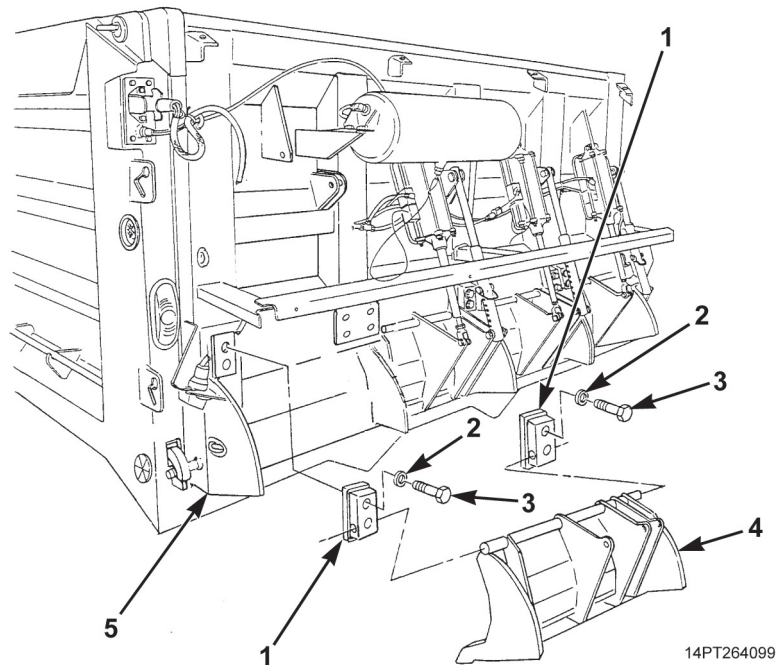


Figure 1. MCS Gate Removal.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION**

1. Position two brackets (Figure 2, Item 1) on MCS gate (Figure 2, Item 4).
2. Install two brackets (Figure 2, Item 1) and MCS gate (Figure 2, Item 4) on tailgate (Figure 2, Item 5) with four new lockwashers (Figure 2, Item 2) and screws (Figure 2, Item 3).

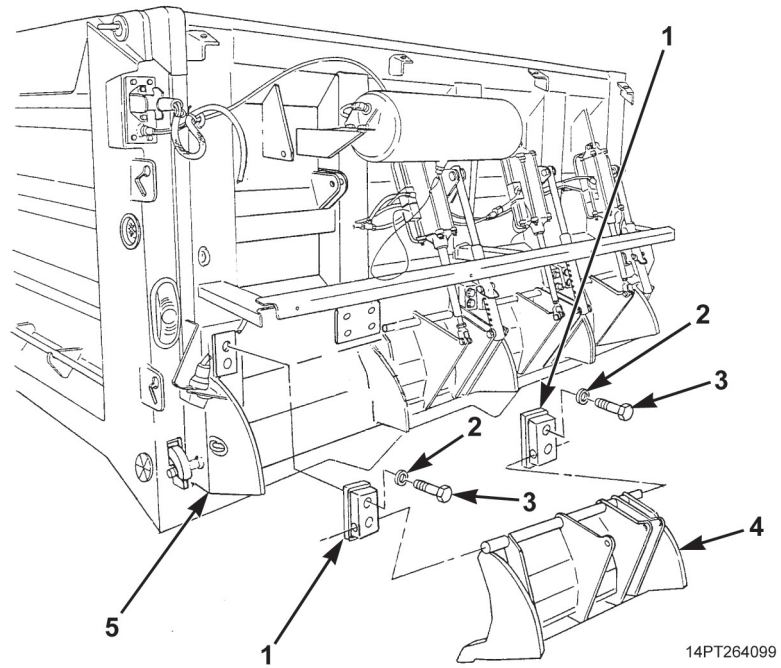
INSTALLATION - Continued

Figure 2. MCS Gate Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Install MCS adjustment tube (WP 0045).
2. Install MCS air cylinder (WP 0049).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) ADJUSTMENT TUBE REPLACEMENT
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Materials/Parts

Locknut Qty: 2 (WP 0114, Table 1, Item 24)

Equipment Condition

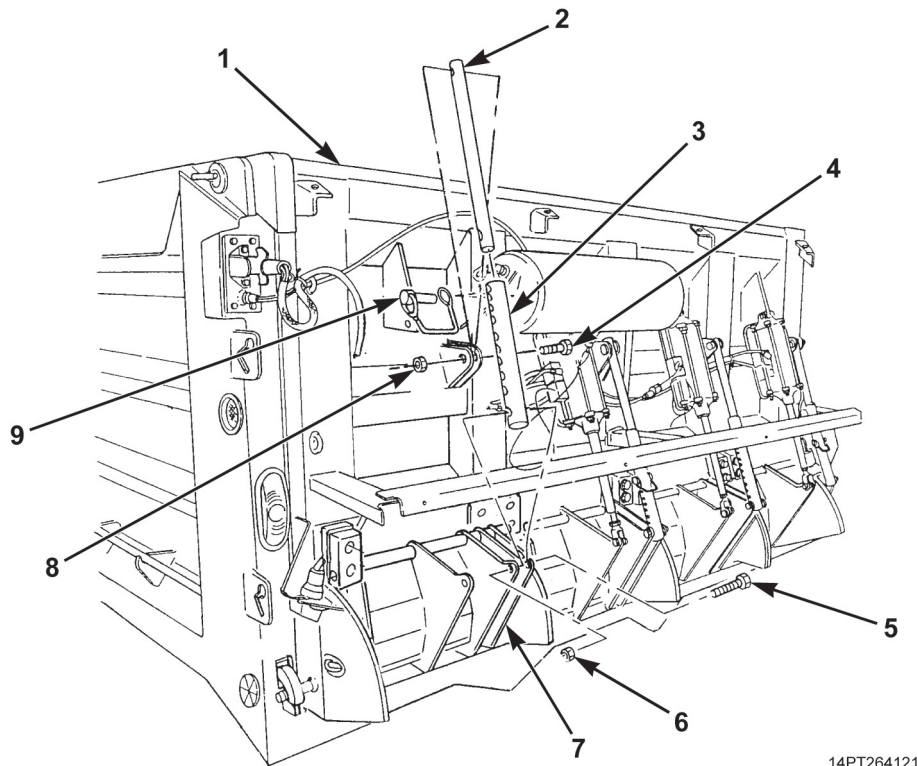
MCS gates closed (WP 0005)

Equipment Condition (cont.)

Chassis air system drained (TM 9-2320-363-10
or TM 9-2320-302-10)
MCS air system drained (WP 0017)
MCS tailgate cover removed (WP 0043)

REMOVAL

1. Remove locking pin (Figure 1, Item 9) from adjustment tube (Figure 1, Item 3).
2. Remove locknut (Figure 1, Item 6), screw (Figure 1, Item 5), and adjustment tube (Figure 1, Item 3) from MCS gate (Figure 1, Item 7). Discard locknut.
3. Remove locknut (Figure 1, Item 8), screw (Figure 1, Item 4), and upper tube (Figure 1, Item 2) from MCS tailgate (Figure 1, Item 1). Discard locknut.



14PT264121

Figure 1. Adjustment Tube Removal.

END OF TASK**INSTALLATION**

1. Install upper tube (Figure 2, Item 2) on MCS tailgate (Figure 2, Item 1) with screw (Figure 2, Item 4) and new locknut (Figure 2, Item 8).
2. Position adjustment tube (Figure 2, Item 3) over upper tube (Figure 2, Item 2). Install adjustment tube on MCS gate (Figure 2, Item 7) with screw (Figure 2, Item 5) and new locknut (Figure 2, Item 6).

CAUTION

Outer passenger's and outer driver's side adjustment tube locking pins must be installed with pin heads to outside. If incorrectly installed, ends of pins will protrude and become bent. Failure to comply may result in damage to equipment.

3. Install locking pin (Figure 2, Item 9) on adjustment tube (Figure 2, Item 3).

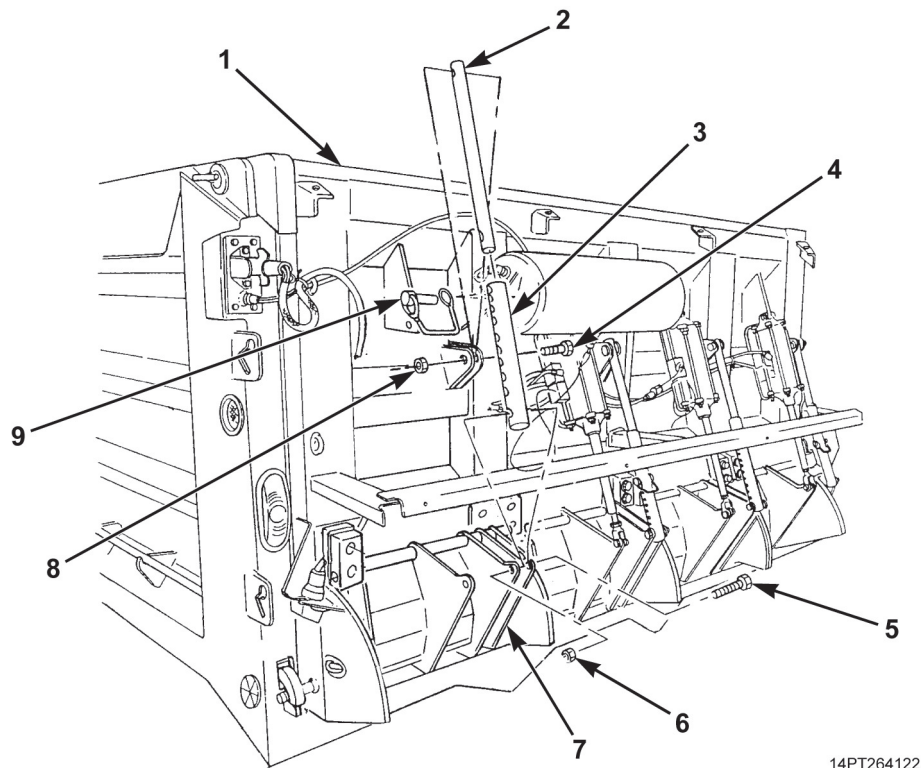
INSTALLATION - Continued

Figure 2. Adjustment Tube Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Check operation of MCS adjustment tube (WP 0005).
2. Install MCS tailgate cover (WP 0043).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) AIR RESERVOIR REPLACEMENT
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0005
WP 0072

Materials/Parts

Locknut Qty: 4 (WP 0114, Table 1, Item 22)
Marker Tags (WP 0112, Table 1, Item 36)

Equipment Condition

Chassis air system drained (TM 9-2320-363-10 or
TM 9-2320-302-10).
MCS air system drained (WP 0016)
MCS tailgate cover removed (WP 0043)

Personnel Required

(2)

WARNING

DO NOT disconnect air lines while air system is pressurized. Air system pressure must be released before air lines are disconnected. Failure to comply may result in personnel injury.

NOTE

Hoses should be tagged before removal (WP 0072).

REMOVAL

1. Disconnect air supply hose (Figure 1, Item 2) from adapter (Figure 1, Item 3).
2. Disconnect air hose (Figure 1, Item 4) from adapter (Figure 1, Item 8).
3. Remove four locknuts (Figure 1, Item 14), washers (Figure 1, Item 15), screws (Figure 1, Item 10), and air reservoir (Figure 1, Item 11) from welded brackets (Figure 1, Item 1). Discard locknuts.
4. Remove adapter (Figure 1, Item 3), bushing (Figure 1, Item 5), check valve (Figure 1, Item 6), elbow (Figure 1, Item 7), and reducer (Figure 1, Item 9) from air reservoir (Figure 1, Item 11).
5. Remove adapter (Figure 1, Item 8) from air reservoir (Figure 1, Item 11).
6. Remove draincock with lanyard (Figure 1, Item 13) and plug (Figure 1, Item 12) from air reservoir (Figure 1, Item 11).

END OF TASK**INSTALLATION**

1. Install draincock with lanyard (Figure 1, Item 13) and plug (Figure 1, Item 12) on air reservoir (Figure 1, Item 11).
2. Install adapter (Figure 1, Item 8) on air reservoir (Figure 1, Item 11).
3. Install reducer (Figure 1, Item 9), elbow (Figure 1, Item 7), check valve (Figure 1, Item 6), bushing (Figure 1, Item 5), and adapter (Figure 1, Item 3) on air reservoir (Figure 1, Item 11).
4. Install air reservoir (Figure 1, Item 11) on welded brackets (Figure 1, Item 1) with four screws (Figure 1, Item 10), washers (Figure 1, Item 15), and new locknuts (Figure 1, Item 14).
5. Connect air hose (Figure 1, Item 4) to adapter (Figure 1, Item 8).
6. Connect air supply hose (Figure 1, Item 2) to adapter (Figure 1, Item 3).

INSTALLATION - Continued

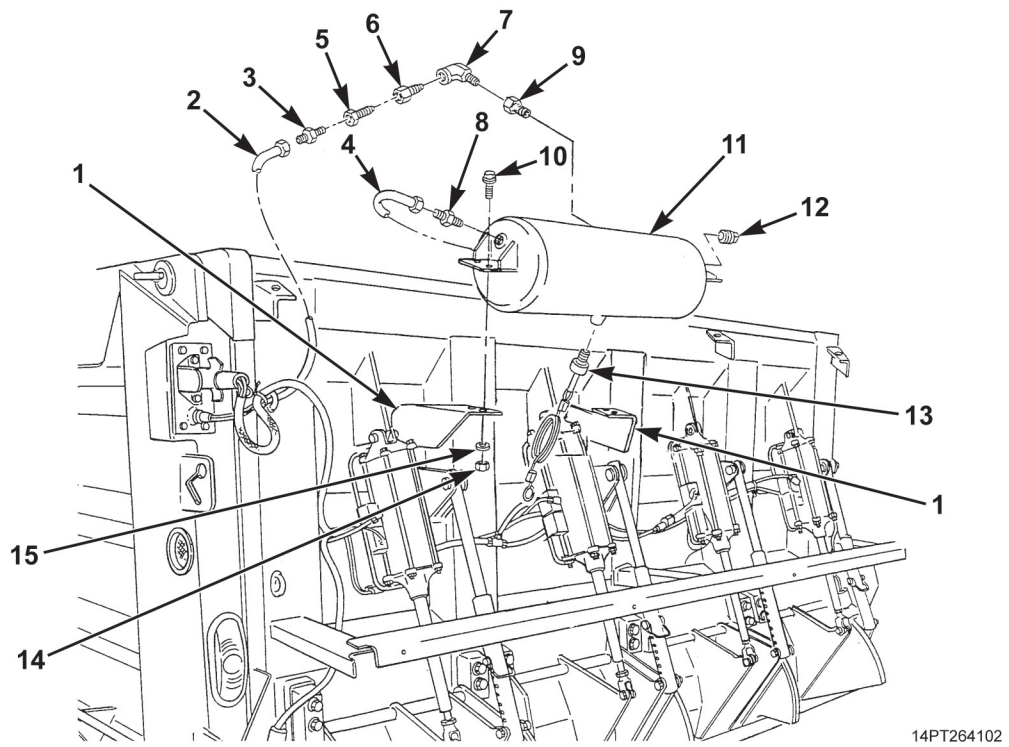


Figure 1. MCS Air Reservoir Replacement.

END OF TASK

FOLLOW-ON MAINTENANCE**WARNING**

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
1. Start engine and pressurize air system (TM 9-2320-363-10 or TM 9-2320-302-10).
 2. Check for leaks.
 3. Check operation of MCS tailgate (WP 0005).
 4. Install MCS tailgate cover (WP 0043).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
TAILGATE RELEASE MATERIAL CONTROL SYSTEM (MCS) AIR LINES AND FITTINGS REPLACEMENT

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References (cont.)

WP 0072
WP 0074

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 33)
Tiedown Straps (WP 0112, Table 1, Item 36)

Equipment Condition

Chassis air system drained (TM 9-2320-363-10 or
TM 9-2320-302-10)
MCS air system drained (WP 0017)
MCS tailgate cover removed, if replacing MCS air
lines (WP 0043)

References

WP 0005

WARNING

DO NOT disconnect air lines while air system is pressurized. Air system pressure must be released before air lines are disconnected. Failure to comply may result in personnel injury.

NOTE

- Replacement of tailgate release or MCS air lines is the same. Replacement of an MCS air line is shown.
- Air lines should be tagged before removal (WP 0072).
- Note location of tiedown straps prior to removal to aid in installation.

REMOVAL

1. If removing an air line, disconnect each end of air line (Figure 1, Item 1) at fitting (Figure 1, Item 2).
2. If removing a fitting, disconnect all air lines (Figure 1, Item 1) from fitting (Figure 1, Item 2).

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION****NOTE**

For information on manufacturing air lines, refer to (WP 0074).

1. If installing a fitting, connect all air lines (Figure 1, Item 1) to fitting (Figure 1, Item 2).
2. If installing an air line, connect each end of air line (Figure 1, Item 1) to fitting (Figure 1, Item 2).
3. Install new tiedown straps, as required.

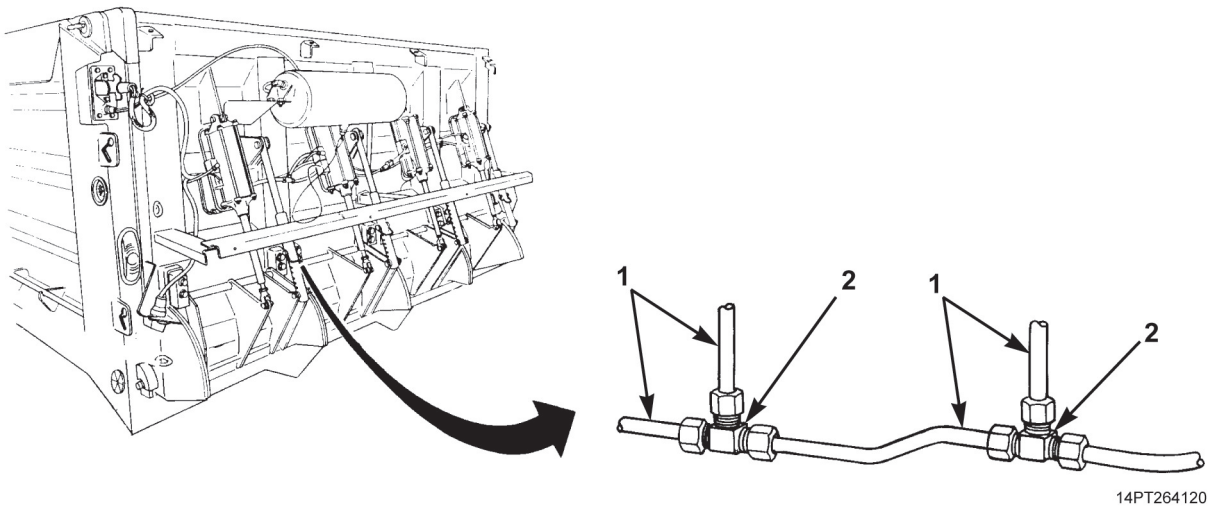


Figure 1. Tailgate Air Fittings Replacement.

END OF TASK

FOLLOW-ON MAINTENANCE**WARNING**

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
1. Start engine and pressurize air systems (TM 9-2320-363-10 or TM 9-2320-302-10).
 2. Operate tailgate release control valve lever or MCS gates (WP 0005). Check for leaks.
 3. Install MCS tailgate cover (WP 0043), if removed.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
TAILGATE RELEASE AIR CYLINDER REPLACEMENT

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Equipment Condition (cont.)

Dump body raised and supported on body props
(WP 0005)
Chassis air system drained (TM 9-2320-363-10 or
TM 9-2320-302-10)

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)

Personnel Required

(2)

References

WP 0072

Equipment Condition

Tailgate release control valve lever in
UNLOCKED position (WP 0005)

WARNING

- NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY.
- DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin.
- Failure to comply may result in personnel injury or death.

REMOVAL**NOTE**

Hoses should be tagged before removal (WP 0072).

1. Disconnect two air lines (Figure 1, Item 5) from two elbows (Figure 1, Item 4) and remove elbows from air cylinder (Figure 1, Item 6).

NOTE

Note position of nut at air cylinder piston shaft clevis to ensure proper adjustment of air cylinder during installation.

2. Remove cotter pin (Figure 1, Item 9) and pin (Figure 1, Item 7) to remove air cylinder (Figure 1, Item 6) from tailgate release lever (Figure 1, Item 8).
3. Remove cotter pin (Figure 1, Item 1) and pin (Figure 1, Item 3) to remove air cylinder (Figure 1, Item 6) from dump body (Figure 1, Item 2).

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION**

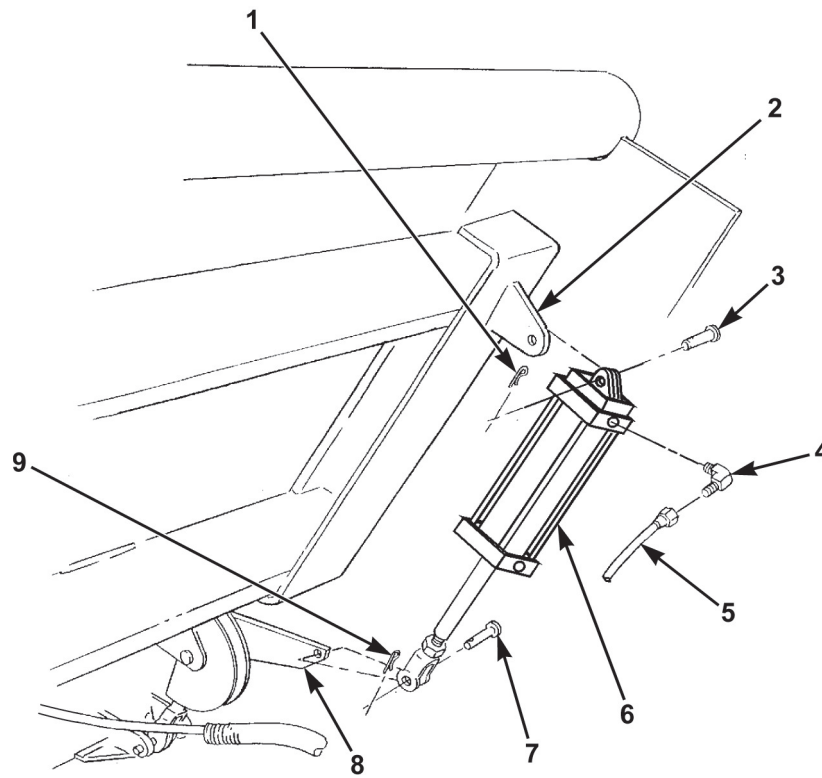
1. Install air cylinder (Figure 1, Item 6) on dump body (Figure 1, Item 2) with pin (Figure 1, Item 3) and cotter pin (Figure 1, Item 1).

NOTE

Ensure that position of nut at air cylinder piston shaft clevis is the same as noted during removal, to ensure proper adjustment of air cylinder during installation.

2. Install air cylinder (Figure 1, Item 6) on tailgate release lever (Figure 1, Item 8) with pin (Figure 1, Item 7) and cotter pin (Figure 1, Item 9).
3. Install two elbows (Figure 1, Item 4) on air cylinder (Figure 1, Item 6). Connect two air lines (Figure 1, Item 5) to elbows.

INSTALLATION - Continued



14PT264094

Figure 1. Tailgate Release Air Cylinder Replacement.

END OF TASK

FOLLOW-ON MAINTENANCE**WARNING**

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
 - DO NOT operate engine in enclosed areas.
 - DO NOT idle engine without adequate ventilation.
 - Be alert for exhaust poisoning symptoms. They are:
 - Headache
 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
1. Start engine and pressurize air system (TM 9-2320-363-10 or TM 9-2320-302-10).
 2. Remove body props and lower dump body (WP 0005).
 3. Set tailgate release control valve lever to LOCKED position (WP 0005).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) AIR CYLINDER REPLACEMENT
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0005
WP 0072

Materials/Parts

Tiedown Straps (WP 0112, Table 1, Item 36)

Equipment Condition

Chassis air system drained (TM 9-2320-363-10 or
TM 9-2320-302-10).
MCS air system drained (WP 0017)
MCS tailgate cover removed (WP 0043)

Personnel Required

(2)

WARNING

DO NOT disconnect air lines while air system is pressurized. Air system pressure must be released before air lines are disconnected. Failure to comply may result in personnel injury.

NOTE

Note location of tiedown straps prior to removal to aid in installation.

REMOVAL

1. Disconnect solenoid connector (Figure 1, Item 5) from MCS tailgate wiring harness connector (Figure 1, Item 4).
2. Disconnect air line (Figure 1, Item 1) from elbow (Figure 1, Item 2). If damaged, remove elbow from air cylinder solenoid (Figure 1, Item 3).

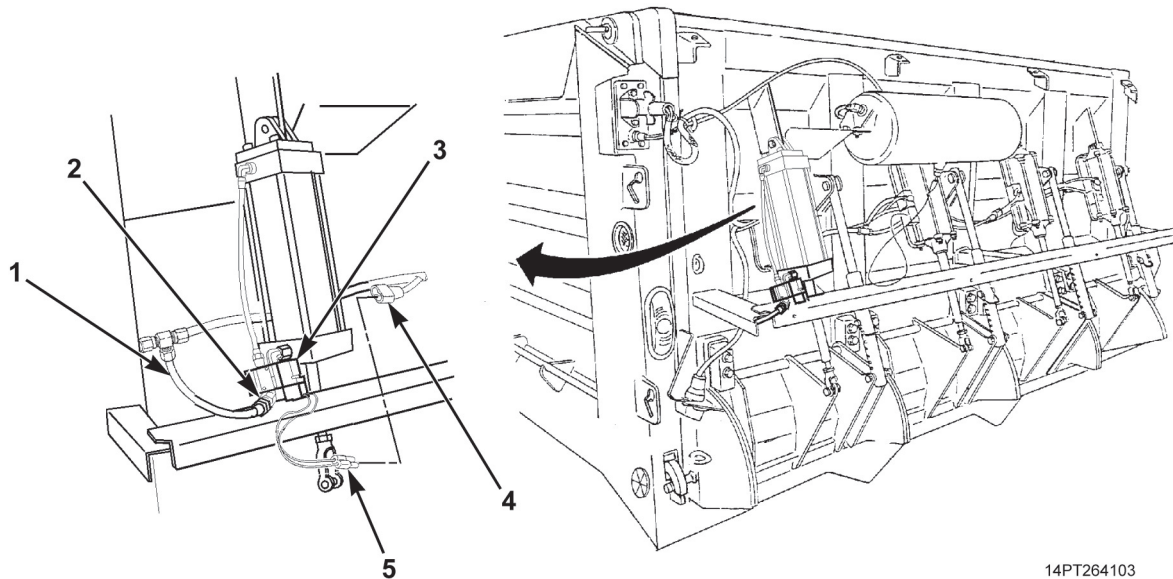


Figure 1. Solenoid Connection Removal.

3. Remove retaining pin (Figure 2, Item 5) and pin (Figure 2, Item 6) to disconnect air cylinder (Figure 2, Item 4) from MCS gate (Figure 2, Item 7).

NOTE

Note position of nut at air cylinder piston shaft clevis to ensure proper adjustment of air cylinder on installation.

4. Remove retaining pin (Figure 2, Item 3) and pin (Figure 2, Item 1) to disconnect air cylinder (Figure 2, Item 4) from MCS tailgate (Figure 2, Item 2).

END OF TASK**CLEANING AND INSPECTION**

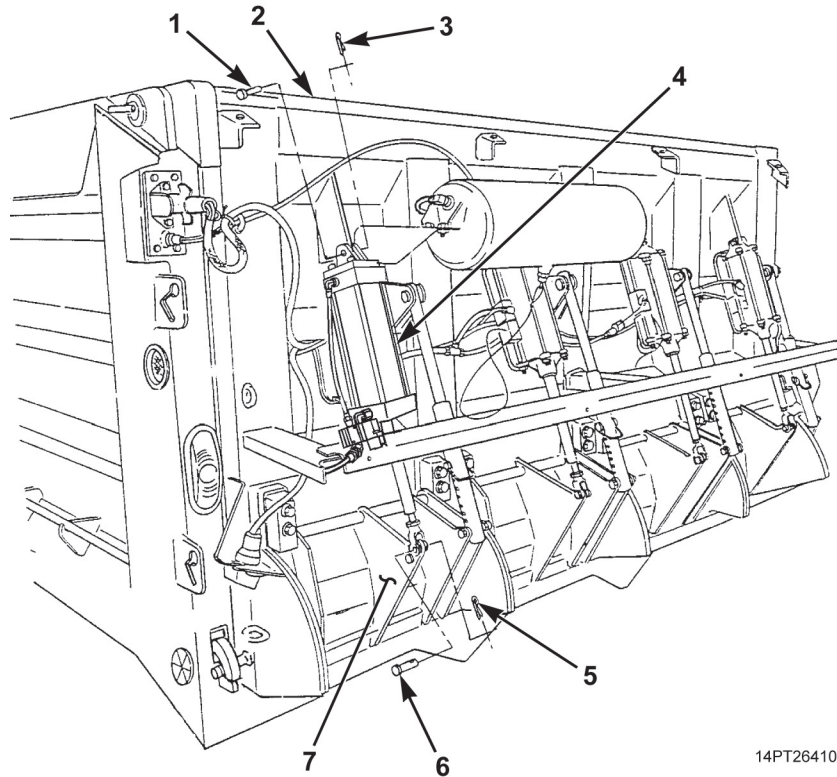
Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

INSTALLATION**NOTE**

Ensure that position of nut at air cylinder piston shaft clevis is the same as noted during removal, to ensure proper adjustment of air cylinder on installation.

1. Install air cylinder (Figure 2, Item 4) on MCS tailgate (Figure 2, Item 2) with pin (Figure 2, Item 1) and retaining pin (Figure 2, Item 3).
2. Install air cylinder (Figure 2, Item 4) on MCS gate (Figure 2, Item 6) with pin (Figure 2, Item 7) and retaining pin (Figure 2, Item 5).



14PT264104

Figure 2. Air Cylinder Replacement.

INSTALLATION - Continued

3. If removed, install elbow (Figure 3, Item 2) on air cylinder solenoid (Figure 3, Item 3). Connect air line (Figure 3, Item 1) to elbow.
4. Connect solenoid connector (Figure 3, Item 5) to MCS tailgate wiring harness connector (Figure 3, Item 4).
5. Install new tiedown straps as required.

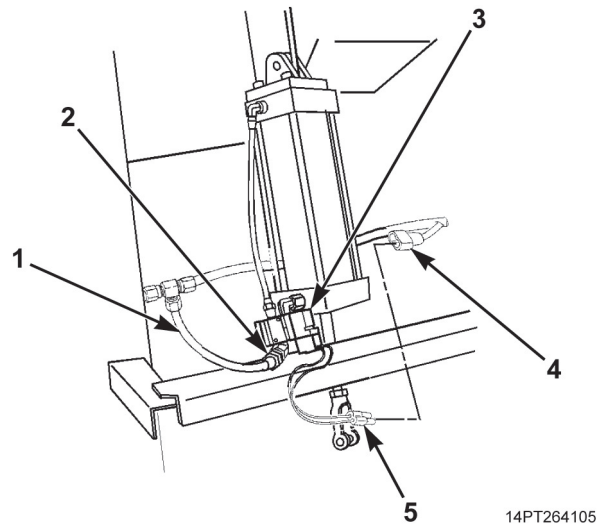


Figure 3. Solenoid Connection Installation.

END OF TASK

FOLLOW-ON MAINTENANCE**WARNING**

- Carbon monoxide is a colorless, odorless, deadly poison, which, when breathed, deprives the body of oxygen and causes suffocation. Exposure to air containing carbon monoxide produces symptoms of headache, dizziness, loss of muscular control, apparent drowsiness, and coma.
 - Carbon monoxide occurs in exhaust fumes of internal combustion engines. Carbon monoxide can become dangerously concentrated under conditions of inadequate ventilation. Take the following safety precautions when operating the vehicle:
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 - DO NOT idle engine without adequate ventilation.
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 - Dizziness
 - Sleepiness
 - Loss of muscular control
 - If you see another person with exhaust poisoning symptoms:
 - Remove person from area.
 - Expose to fresh air.
 - Keep person warm.
 - DO NOT permit physical exercise.
 - Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - Notify a medic.
 - Be aware. The field protective mask for Chemical, Biological, Radiological and Nuclear (CBRN) protection will not protect you from carbon monoxide poisoning.
 - The best defense against carbon monoxide poisoning is good ventilation!
 - Failure to comply may result in personnel injury or death.
1. Start engine and pressurize air systems (TM 9-2320-363-10 or TM 9-2320-302-10).
 2. Check for leaks.
 3. Check operation of MCS tailgate (WP 0005).
 4. Install MCS tailgate cover (WP 0043).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) AIR CYLINDER SOLENOID ASSEMBLY MAINTENANCE
(M917A1 WITH MCS AND M917A2 WITH MCS)

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0072

Materials/Parts

Ball Bearing Grease (WP 0112, Table 1, Item 18)
Gasket (WP 0114, Table 1, Item 12)
Gasket (WP 0114, Table 1, Item 13)
Sealing Compound (WP 0112, Table 1, Item 30)

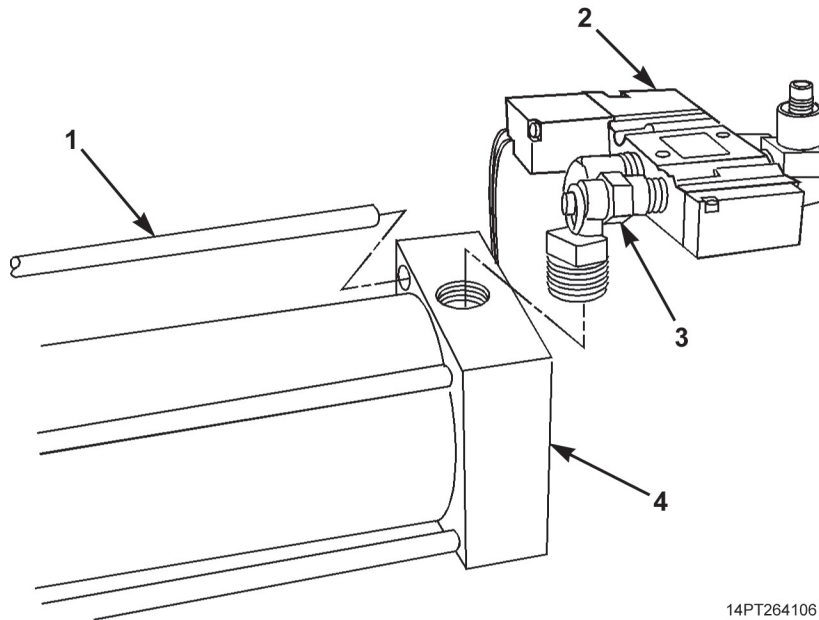
Equipment Condition

MCS air system removed (WP 0049)

REMOVAL**NOTE**

Note position of elbows, tubes, and solenoid assembly to aid in installation.

1. Disconnect tube (Figure 1, Item 1) from fitting (Figure 1, Item 3) on solenoid assembly (Figure 1, Item 2).
2. Remove solenoid assembly (Figure 1, Item 2) from air cylinder (Figure 1, Item 4).



14PT264106

Figure 1. Solenoid Removal.

END OF TASK**DISASSEMBLY**

1. Remove two filters (Figure 2, Item 2) and elbow (Figure 2, Item 3) from valve body (Figure 2, Item 1).

DISASSEMBLY - Continued

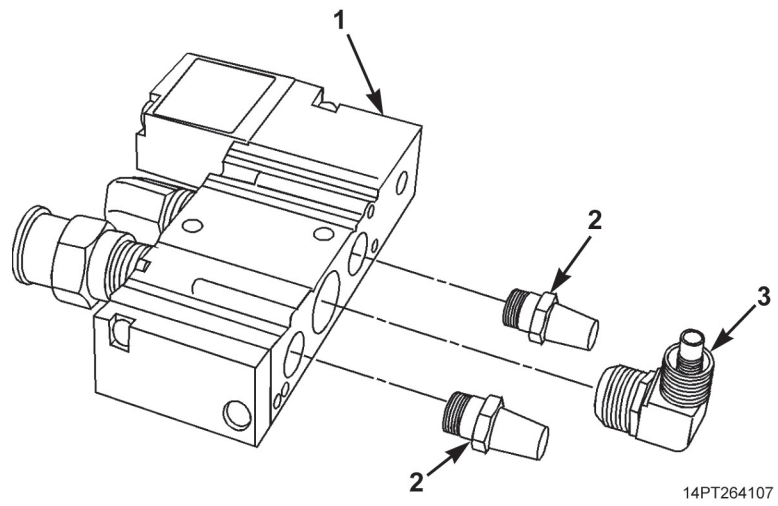
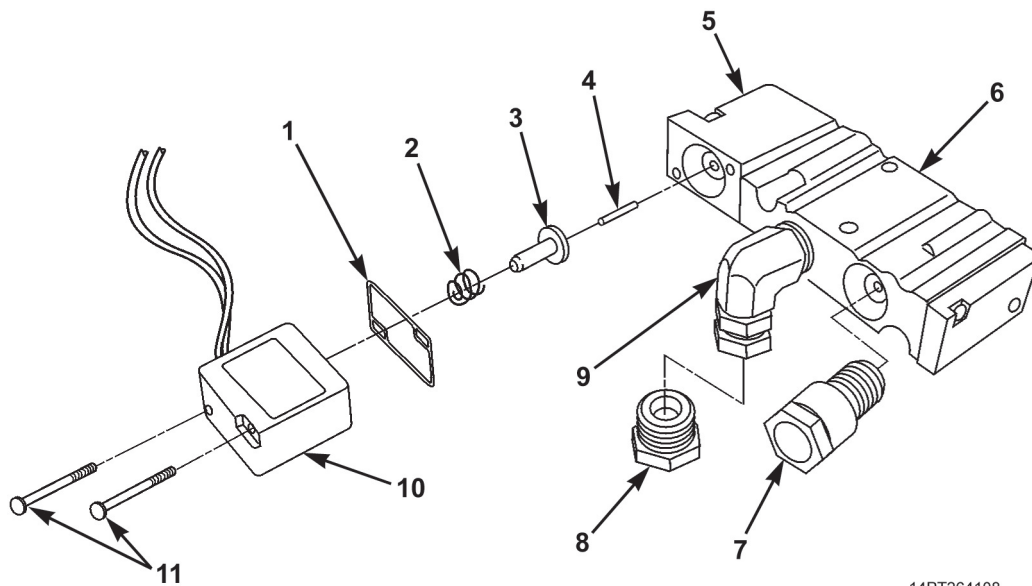


Figure 2. Valve Body Elbow and Filters Disassembly.

DISASSEMBLY - Continued

2. Remove fitting (Figure 3, Item 7) from valve body (Figure 3, Item 6).
3. Remove fitting (Figure 3, Item 8) from elbow (Figure 3, Item 9).
4. Remove two screws (Figure 3, Item 11) and solenoid (Figure 3, Item 10) from filter housing (Figure 3, Item 5).
5. Remove plunger (Figure 3, Item 3) and spring (Figure 3, Item 2) from solenoid (Figure 3, Item 10).
6. Remove pin (Figure 3, Item 4) from plunger (Figure 3, Item 3).
7. Remove gasket (Figure 3, Item 1) from filter housing (Figure 3, Item 5).
8. Remove elbow (Figure 3, Item 9) from valve body (Figure 3, Item 6).

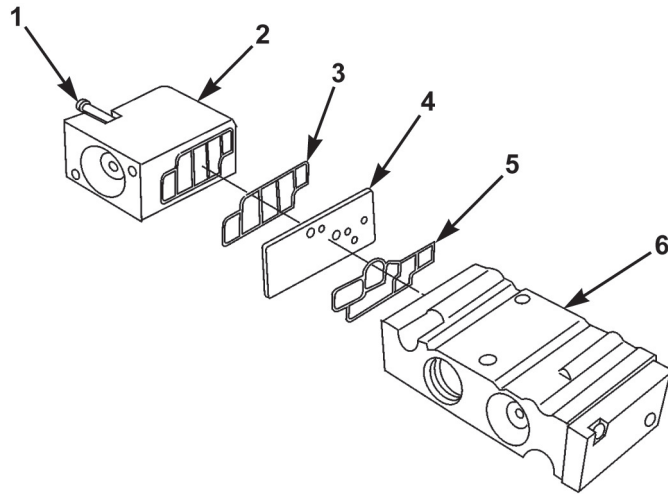


14PT264108

Figure 3. Valve Body Fittings and Solenoid Disassembly.

DISASSEMBLY - Continued

9. Remove two screws (Figure 4, Item 1), filter housing (Figure 4, Item 2), and metal gasket (Figure 4, Item 4) from valve body (Figure 4, Item 6).
10. Remove gasket (Figure 4, Item 3) from filter housing (Figure 4, Item 2). Discard gasket.
11. Remove gasket (Figure 4, Item 5) from valve body (Figure 4, Item 6). Discard gasket.



14PT264109

Figure 4. Valve Body Filter and Components Disassembly.

DISASSEMBLY - Continued

12. Remove two screws (Figure 5, Item 3) and end cap (Figure 5, Item 2) from valve body (Figure 5, Item 1).
13. Remove gasket (Figure 5, Item 4) and plastic insert (Figure 5, Item 5) from end cap (Figure 5, Item 2).
14. Remove valve (Figure 5, Item 6) from valve body (Figure 5, Item 1).

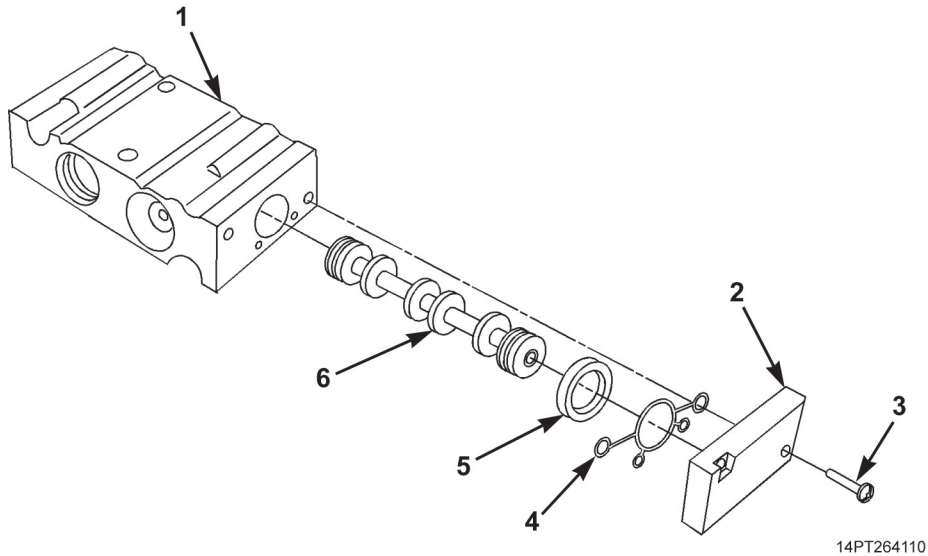


Figure 5. Valve Body End Cap and Valve Disassembly.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

ASSEMBLY**WARNING**

Eye protection and gloves must be worn when using grease or sealing compound. Failure to comply may result in personnel injury.

1. Apply a light coat of grease to valve (Figure 6, Item 6).
2. Install valve (Figure 6, Item 6) in valve body (Figure 6, Item 1).
3. Install gasket (Figure 6, Item 4) and plastic insert (Figure 6, Item 5) on end cap (Figure 6, Item 2).
4. Position end cap (Figure 6, Item 2) on valve body (Figure 6, Item 1) and install two screws (Figure 6, Item 3).

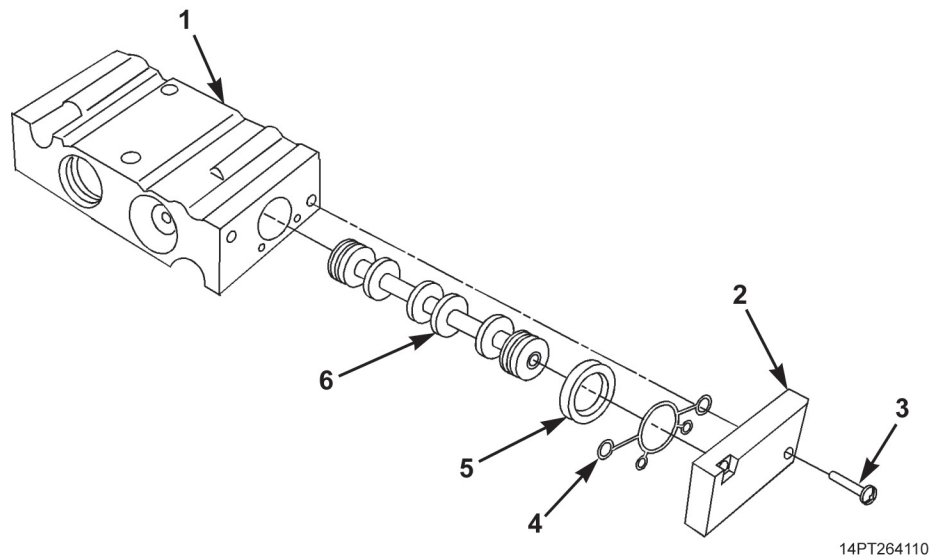


Figure 6. Valve Body End Cap and Valve Assembly.

ASSEMBLY - Continued

5. Install new gasket (Figure 7, Item 5) on valve body (Figure 7, Item 6).
6. Install new gasket (Figure 7, Item 3) on filter housing (Figure 7, Item 2).
7. Position metal gasket (Figure 7, Item 4) and filter housing (Figure 7, Item 2) on valve body (Figure 7, Item 6) and install two screws (Figure 7, Item 1).

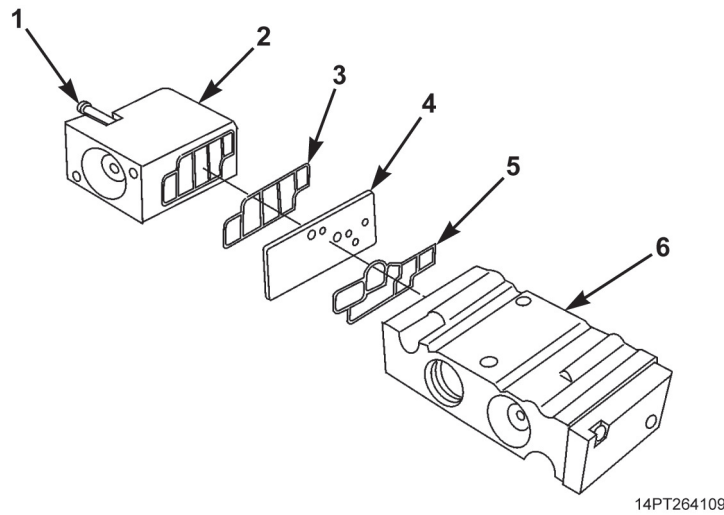


Figure 7. Valve Body Filter and Components Assembly.

ASSEMBLY - Continued

8. Apply pipe sealing compound to elbow (Figure 8, Item 9) and install elbow on valve body (Figure 8, Item 6).
9. Install gasket (Figure 8, Item 1) on filter housing (Figure 8, Item 5).
10. Install pin (Figure 8, Item 4) in plunger (Figure 8, Item 3).
11. Position plunger (Figure 8, Item 3) and spring (Figure 8, Item 2) on solenoid (Figure 8, Item 10).
12. Position solenoid (Figure 8, Item 10) on filter housing (Figure 8, Item 5) and install two screws (Figure 8, Item 11).
13. Apply pipe sealing compound to fitting (Figure 8, Item 8) and install fitting on elbow (Figure 8, Item 9).
14. Apply pipe sealing compound to fitting (Figure 8, Item 7) and install fitting on valve body (Figure 8, Item 6).

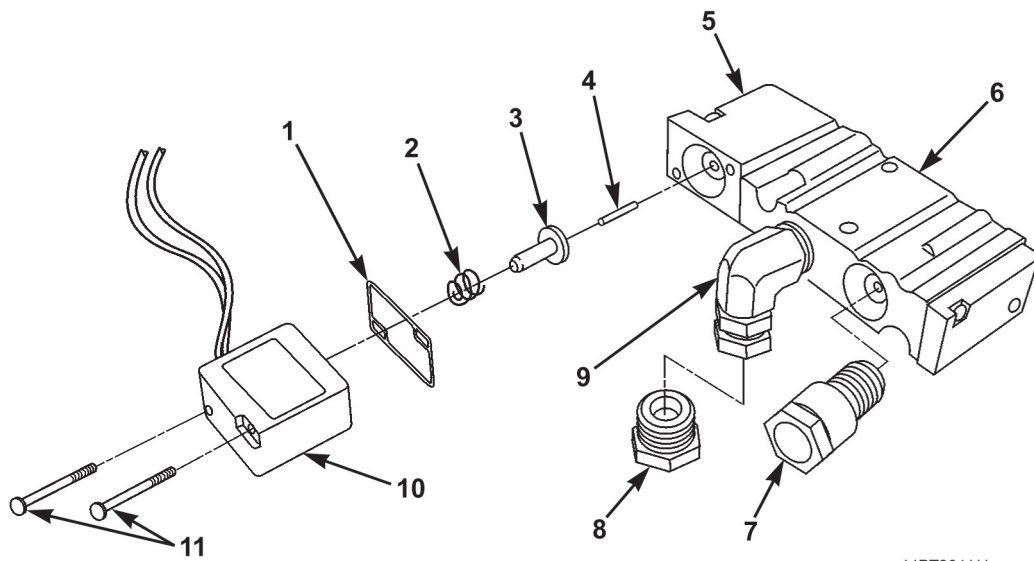


Figure 8. Valve Body Fittings and Solenoid Assembly.

ASSEMBLY - Continued

15. Apply pipe sealing compound to elbow (Figure 9, Item 3) and install elbow on valve body (Figure 9, Item 1).
16. Install two filters (Figure 9, Item 2) on valve body (Figure 9, Item 1).

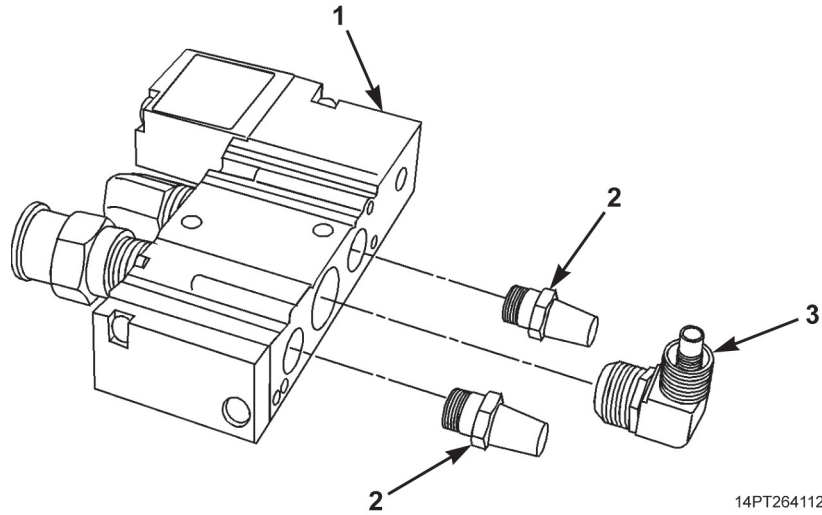
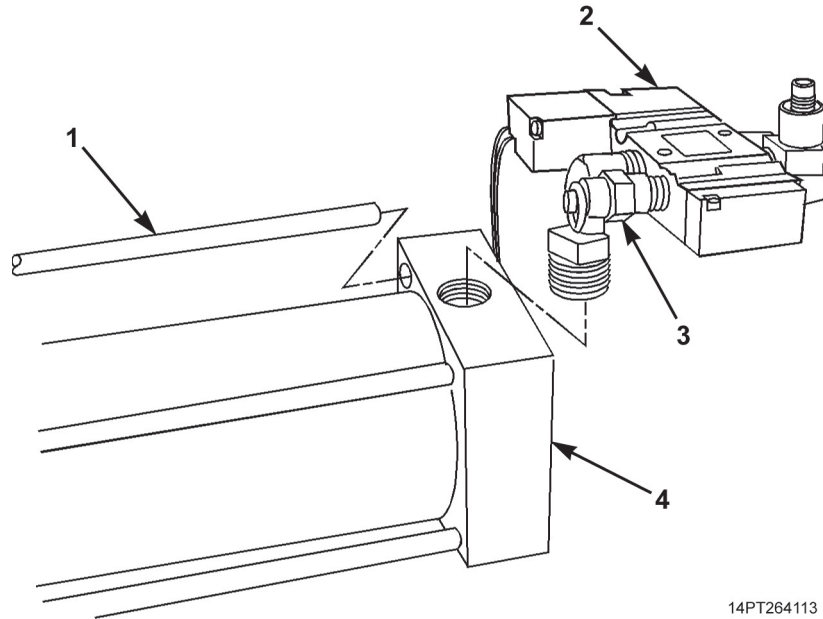


Figure 9. Valve Body Elbow and Filters Assembly.

END OF TASK

INSTALLATION

1. Install solenoid assembly (Figure 10, Item 2) on air cylinder (Figure 10, Item 4).
2. Connect tube (Figure 10, Item 1) to fitting (Figure 10, Item 3) on solenoid assembly (Figure 10, Item 2).



14PT264113

Figure 10. Solenoid Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

Install MCS air cylinder (WP 0049).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
TAILGATE RELEASE/MATERIAL CONTROL SYSTEM (MCS) AIR CYLINDER REPAIR

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0072

Materials/Parts

Grease, Ball Bearing (WP 0112, Table 1, Item 18)
Lockwasher Qty: 4 (WP 0114, Table 1, Item 14)
Parts Kit, Linear Actuating Cylinder Assembly
(WP 0114, Table 1, Item 4)

Equipment Condition

MCS air cylinder solenoid assembly removed
(WP 0050)
Tailgate release/MCS air cylinder removed
(WP 0051)

DISASSEMBLY

1. Remove tube (Figure 1, Item 11) from elbow (Figure 1, Item 12).
2. Remove elbow (Figure 1, Item 12) from top end plate (Figure 1, Item 3).
3. Remove four screws (Figure 1, Item 1) and mounting bracket (Figure 1, Item 2) from top end plate (Figure 1, Item 3).

NOTE

Note position of nut at air cylinder piston shaft clevis during removal to ensure proper adjustment of air cylinder during installation.

4. Remove clevis (Figure 1, Item 8) and nut (Figure 1, Item 7) from piston shaft (Figure 1, Item 5).
5. Remove four retaining nuts (Figure 1, Item 9) and lockwashers (Figure 1, Item 10) from tie rods (Figure 1, Item 4). Discard lockwashers.
6. Remove top end plate (Figure 1, Item 3) with tie rods attached from bottom end plate (Figure 1, Item 6).
7. Separate bottom end plate (Figure 1, Item 6) from piston shaft (Figure 1, Item 5).
8. Remove tie rods (Figure 1, Item 4) from top end plate (Figure 1, Item 3).

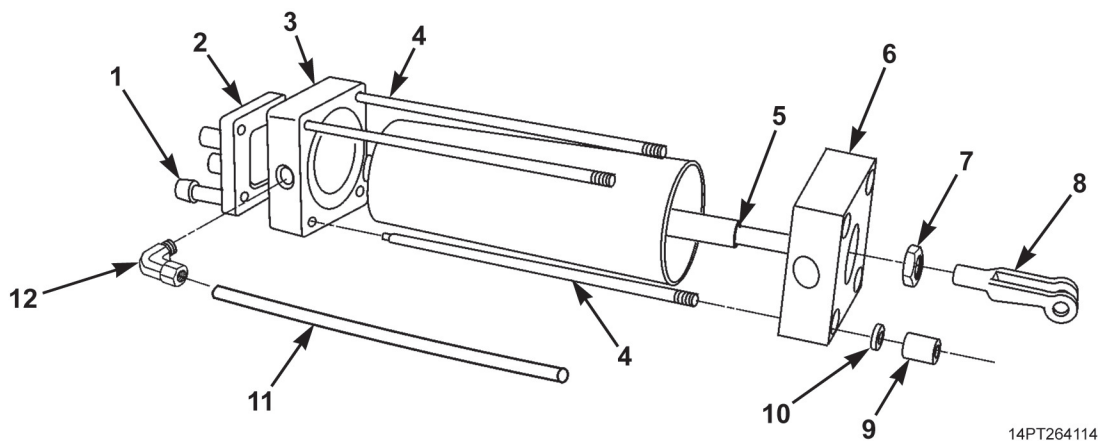
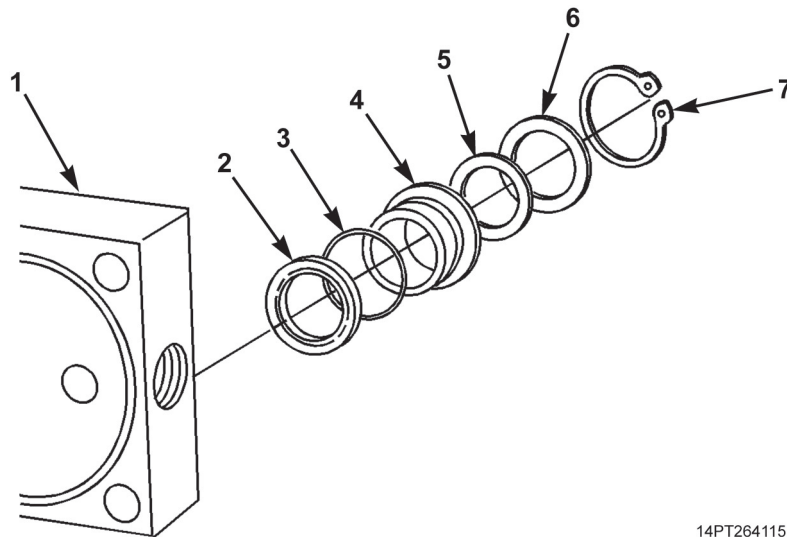


Figure 1. MCS Air Cylinder.

DISASSEMBLY - Continued**NOTE**

Note position and direction of gasket during removal to aid in installation.

9. Remove retaining ring (Figure 2, Item 7), metal washer (Figure 2, Item 6), and plastic gasket (Figure 2, Item 5) from bottom end plate (Figure 2, Item 1). Discard plastic gasket.
10. Remove piston rod bearing (Figure 2, Item 4) and plain seal (Figure 2, Item 3) from bottom end plate (Figure 2, Item 1). Discard piston rod bearing and plain seal.
11. Remove preformed packing (Figure 2, Item 2) from piston rod bearing (Figure 2, Item 4). Discard preformed packing.



14PT264115

Figure 2. Cylinder Components.

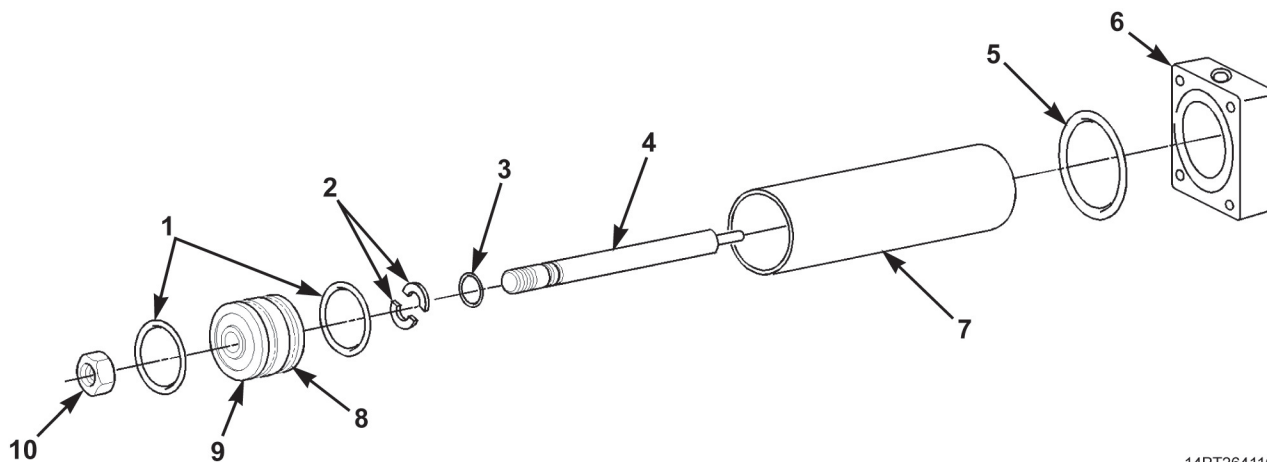
DISASSEMBLY - Continued

12. Remove preformed packing (Figure 3, Item 5) from bottom end plate (Figure 3, Item 6). Discard preformed packing.
13. Remove cylinder sleeve (Figure 3, Item 7) from piston (Figure 3, Item 9).
14. Remove nut (Figure 3, Item 10) from piston shaft (Figure 3, Item 4).
15. Remove piston (Figure 3, Item 9) and metal washer (Figure 3, Item 2) halves from piston shaft (Figure 3, Item 4).

NOTE

Note direction of gaskets during removal to aid in installation.

16. Remove two plain seals (Figure 3, Item 1) and metal strip (Figure 3, Item 8) from piston (Figure 3, Item 9). Discard plain seals and metal strip.
17. Remove preformed packing (Figure 3, Item 3) from piston shaft (Figure 3, Item 4). Discard preformed packing.



14PT264116

Figure 3. Cylinder Piston.

END OF TASK**CLEANING AND INSPECTION**

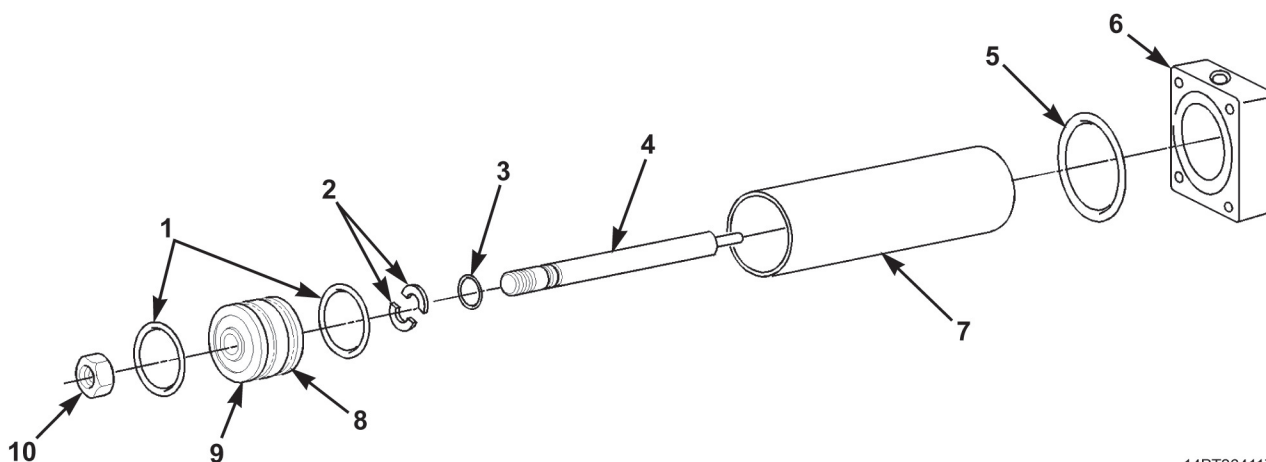
Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

ASSEMBLY**WARNING**

Eye protection and gloves must be worn when using grease or lubricating oils. Failure to comply may result in personnel injury.

1. Apply a light coat of grease to new preformed packing (Figure 4, Item 3) and install on piston shaft (Figure 4, Item 4).
2. Apply a light coat of grease to piston (Figure 4, Item 9).
3. Install two new plain seals (Figure 4, Item 1) and new metal strip (Figure 4, Item 8) on piston (Figure 4, Item 9).
4. Install metal washer (Figure 4, Item 2) halves on piston shaft (Figure 4, Item 4) and install piston (Figure 4, Item 9) on piston shaft.
5. Install nut (Figure 4, Item 10) on piston shaft (Figure 4, Item 4).
6. Install cylinder sleeve (Figure 4, Item 7) on piston (Figure 4, Item 9).
7. Install new preformed packing (Figure 4, Item 5) on bottom end plate (Figure 4, Item 6).

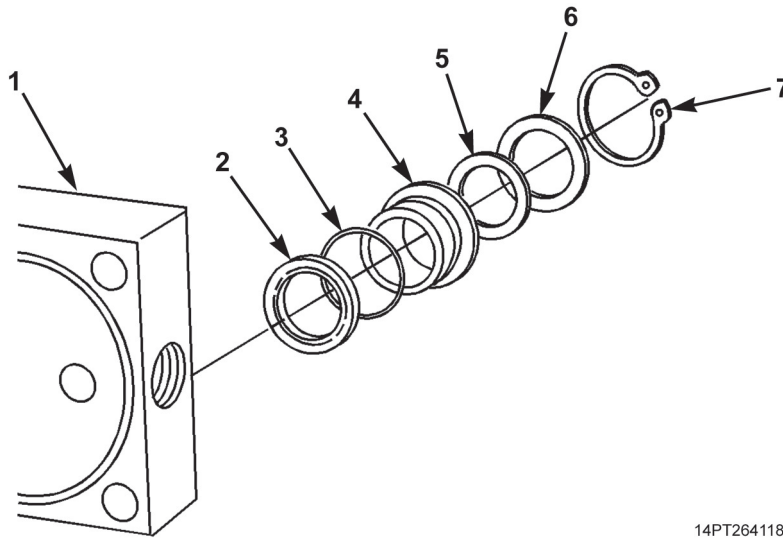


14PT264117

Figure 4. Cylinder Piston Assembly.

ASSEMBLY - Continued

8. Apply a light coat of grease to new preformed packing (Figure 5, Item 2) and install on new piston rod bearing (Figure 5, Item 4).
9. Install new plain seal (Figure 5, Item 3) and new piston rod bearing (Figure 5, Item 4) on bottom end plate (Figure 5, Item 1).
10. Install new plastic gasket (Figure 5, Item 5), metal washer (Figure 5, Item 6), and retaining ring (Figure 5, Item 7) on bottom end plate (Figure 5, Item 1).



14PT264118

Figure 5. Cylinder Component Assembly.

ASSEMBLY - Continued

11. Install tie rods (Figure 6, Item 4) on top end plate (Figure 6, Item 3).
12. Position cylinder sleeve (Figure 6, Item 5) with piston on top end plate (Figure 6, Item 3).
13. Slide bottom end plate (Figure 6, Item 7) on piston shaft (Figure 6, Item 6).
14. Install four new lockwashers (Figure 6, Item 11) and four retaining nuts (Figure 6, Item 10) on tie rods (Figure 6, Item 4).
15. Install nut (Figure 6, Item 8) and clevis (Figure 6, Item 9) on piston shaft (Figure 6, Item 6) in same position as removal.
16. Install mounting bracket (Figure 6, Item 2) and four screws (Figure 6, Item 1) on top end plate (Figure 6, Item 3).
17. Install elbow (Figure 6, Item 13) on top end plate (Figure 6, Item 3).
18. Install tube (Figure 6, Item 12) on elbow (Figure 6, Item 13).

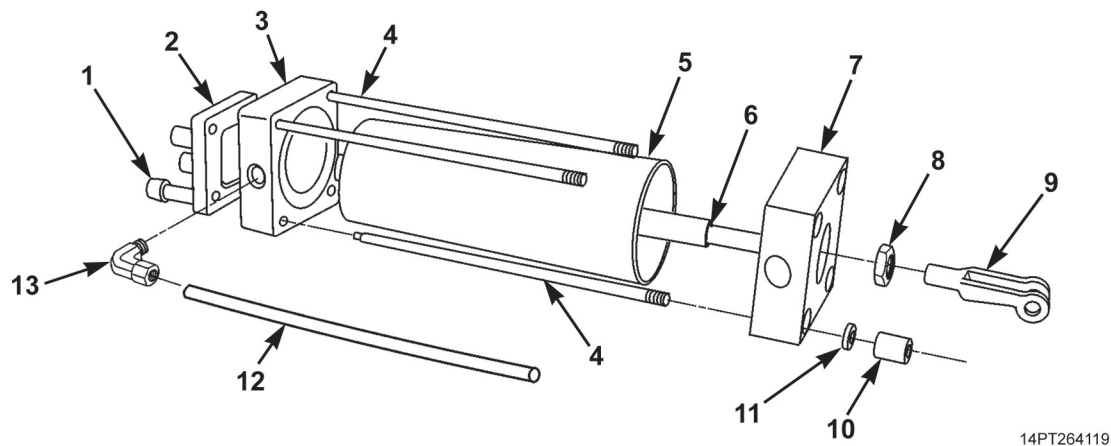


Figure 6. MCS Air Cylinder Assembly.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Install MCS air cylinder solenoid assembly (WP 0050).
2. Install tailgate release/MCS air cylinder (WP 0051).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
CARGO COVER REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

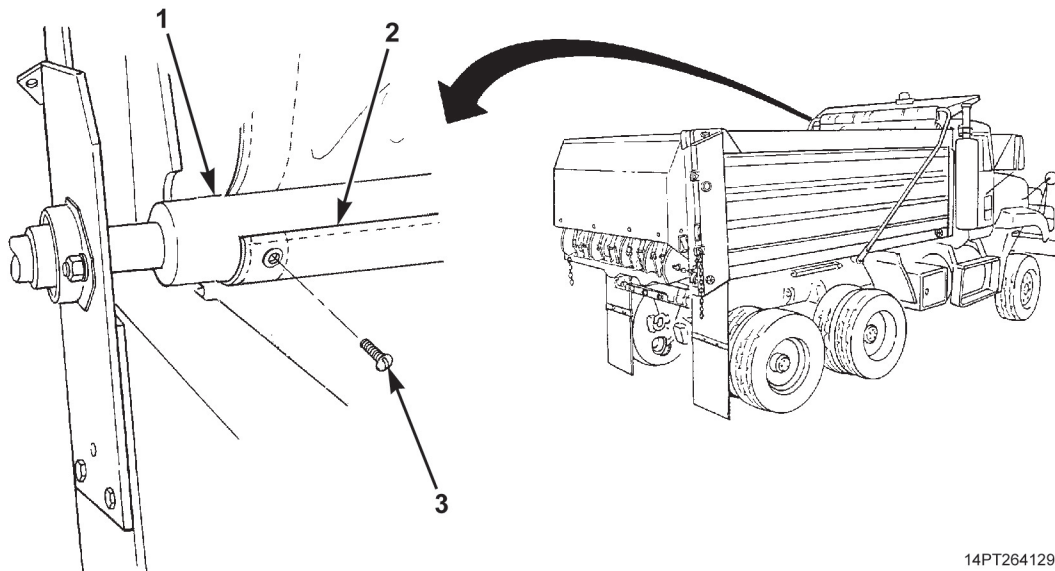
General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Materials/Parts

Locknut Qty: 2 (WP 0114, Table 1, Item 5)

REMOVAL

1. Extend cargo cover (Figure 1, Item 2) over dump body. Release control handle and manually unwind cargo cover to access screws (Figure 1, Item 3).
2. Remove six screws (Figure 1, Item 3) holding cargo cover (Figure 1, Item 2) to roll-up bar (Figure 1, Item 1).



14PT264129

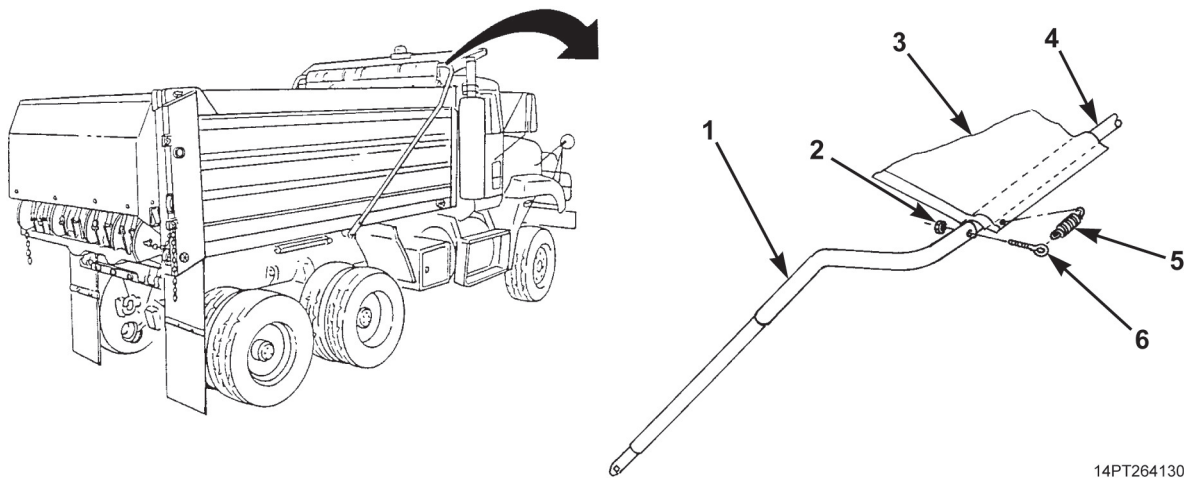
Figure 1. Cargo Cover Removal.

REMOVAL - Continued

3. Uncrimp and remove centering springs (Figure 2, Item 5) from eye bolts (Figure 2, Item 6) and grommets in cargo cover (Figure 2, Item 3).
4. Remove two locknuts (Figure 2, Item 2) and eye bolts (Figure 2, Item 6) from cross arm (Figure 2, Item 4) and connecting arms (Figure 2, Item 1). Discard locknuts.
5. Remove cross arm (Figure 2, Item 4) from connecting arms (Figure 2, Item 1). Slide cross arm from cargo cover (Figure 2, Item 3). Remove cargo cover.

END OF TASK**INSTALLATION**

1. Install cross arm (Figure 2, Item 4) through pocket in cargo cover (Figure 2, Item 3).
2. Install cross arm (Figure 2, Item 4) into each connecting arm (Figure 2, Item 1) and secure with two eye bolts (Figure 2, Item 6) and new locknuts (Figure 2, Item 2).
3. Attach two centering springs (Figure 2, Item 5) to eye bolts (Figure 2, Item 6) and to grommets in cargo cover (Figure 2, Item 3). Crimp spring ends.



14PT264130

Figure 2. Cargo Cover.

INSTALLATION - Continued

4. Pull cargo cover (Figure 3, Item 2) to roll-up bar (Figure 3, Item 1). Pass cover UNDER roll-up bar and secure to roll-up bar with six screws (Figure 3, Item 3).
5. Fully retract cargo cover (Figure 3, Item 2).

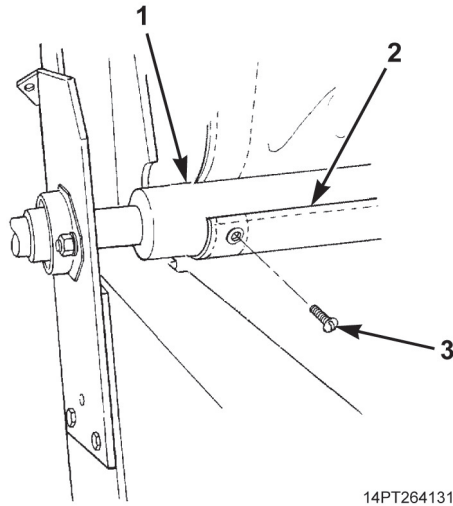


Figure 3. Cargo Cover Installation.

END OF TASK

END OF WORK PACKAGE

**FIELD MAINTENANCE
CARGO COVER REPAIR**

INITIAL SETUP:

References

TM 4-42.21

REPAIR

Repair cargo cover in accordance with TM 4-42.21.

END OF TASK

END OF WORK PACKAGE

**FIELD MAINTENANCE
CARGO COVER CRANK ASSEMBLY MAINTENANCE**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0055
WP 0072

Materials/Parts

Locknut (WP 0114, Table 1, Item 21)
Locknut Qty: 2 (WP 0114, Table 1, Item 19)
Lockwasher Qty: 2 (WP 0114, Table 1, Item 1)

Equipment Condition

Cargo cover extended and crank handle removed
(WP 0005)

REMOVAL**WARNING**

Eye protection must be worn when removing or installing snap rings or retaining rings. Failure to comply may result in personnel injury.

1. Remove chain from sprockets (WP 0055).
2. Remove two nuts (Figure 1, Item 1), lockwashers (Figure 1, Item 2), screws (Figure 1, Item 4), and crank assembly baseplate (Figure 1, Item 23) from dump body. Discard lockwashers.

END OF TASK**DISASSEMBLY**

1. Remove locknut (Figure 1, Item 8) from crank assembly baseplate stud (Figure 1, Item 5). Remove brake band spring (Figure 1, Item 9). Discard locknut.
2. Remove locknut (Figure 1, Item 14) from brake pawl (Figure 1, Item 19). Discard locknut.
3. Remove retaining ring (Figure 1, Item 20) from control handle (Figure 1, Item 21). Remove brake pawl spring (Figure 1, Item 15). Discard retaining ring if damaged.
4. Remove retaining ring (Figure 1, Item 18) and brake pawl (Figure 1, Item 19) from pivot shaft (Figure 1, Item 24). Discard retaining ring if damaged.
5. Remove control handle (Figure 1, Item 21) and brake band (Figure 1, Item 7) from crank assembly baseplate (Figure 1, Item 23). Remove locknut (Figure 1, Item 17) and screw (Figure 1, Item 22) from control handle and brake band. Discard locknut. Replace handle grip (Figure 1, Item 16) if damaged.
6. Remove retaining ring (Figure 1, Item 13) from crank shaft (Figure 1, Item 25). Remove chain sprocket (Figure 1, Item 12) from shaft. Discard retaining ring if damaged.
7. Remove three screws (Figure 1, Item 11) and ratchet (Figure 1, Item 10) from brake drum (Figure 1, Item 6).
8. Remove brake drum (Figure 1, Item 6) and key (Figure 1, Item 3) from crank shaft (Figure 1, Item 25).

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect all components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**ASSEMBLY**

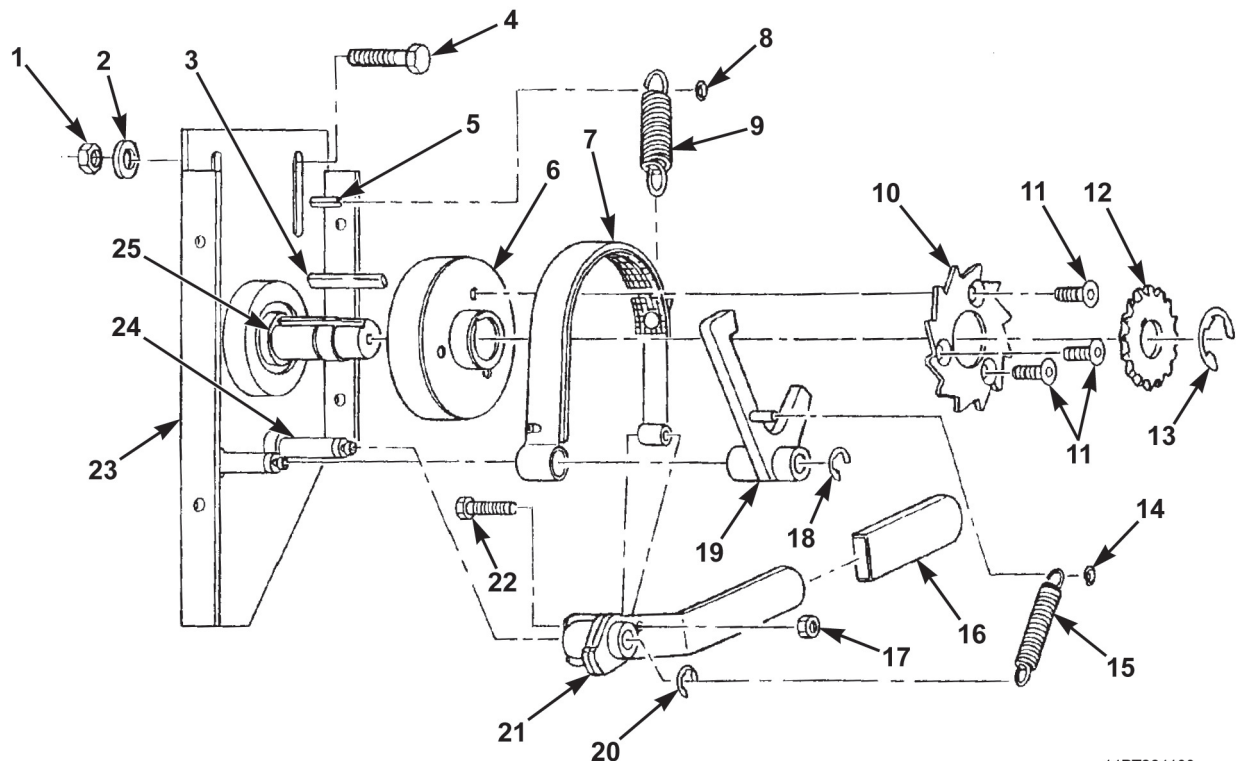
1. Install key (Figure 1, Item 3) and brake drum (Figure 1, Item 6) on crank shaft (Figure 1, Item 25).
2. Position ratchet (Figure 1, Item 10) on brake drum (Figure 1, Item 6) and secure with three screws (Figure 1, Item 11).
3. Install chain sprocket (Figure 1, Item 12) on crank shaft (Figure 1, Item 25) with retaining ring (Figure 1, Item 13).
4. Attach brake band (Figure 1, Item 7) to control handle (Figure 1, Item 21) with screw (Figure 1, Item 22) and new locknut (Figure 1, Item 17).

ASSEMBLY - Continued

5. Install handle grip (Figure 1, Item 16) on control handle (Figure 1, Item 21).
6. Position brake band (Figure 1, Item 7) over brake drum (Figure 1, Item 6). Position control handle (Figure 1, Item 21) on pivot shaft (Figure 1, Item 24).
7. Install brake pawl (Figure 1, Item 19) on crank assembly baseplate (Figure 1, Item 23) with retaining ring (Figure 1, Item 18).
8. Install brake pawl spring (Figure 1, Item 15) between control handle (Figure 1, Item 21) and brake pawl (Figure 1, Item 19). Secure brake pawl spring to pawl with new locknut (Figure 1, Item 14). Secure to control handle with retaining ring (Figure 1, Item 20).
9. Install brake band spring (Figure 1, Item 9) between brake band (Figure 1, Item 7) and crank assembly baseplate stud (Figure 1, Item 5). Secure with new locknut (Figure 1, Item 8).

END OF TASK**INSTALLATION**

1. Install crank assembly baseplate (Figure 1, Item 23) on dump body with two screws (Figure 1, Item 4), new lockwashers (Figure 1, Item 2), and nuts (Figure 1, Item 1). Do not tighten screws.
2. Install chain on sprockets (WP 0055) and tighten screws (Figure 1, Item 4).



14PT264133

Figure 1. Cargo Cover Crank.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Check operation of cargo cover (WP 0005).
2. Fully retract cargo cover (WP 0005).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
CARGO COVER CHAIN AND SPROCKETS REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0072

Materials/Parts

Lockwasher Qty: 4 (WP 0114, Table 1, Item 25)
Sealing Compound (WP 0112, Table 1, Item 30)

Equipment Condition

Cargo cover extended (WP 0005)
Crank handle removed (WP 0054)

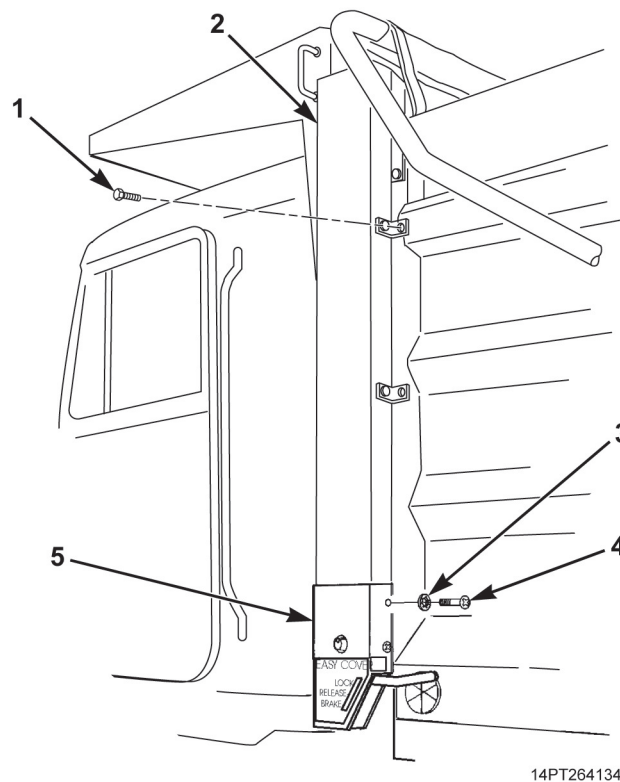
REMOVAL**WARNING**

Eye protection must be worn when removing or installing snap rings or retaining rings. Failure to comply may result in personnel injury.

NOTE

Perform Steps 1, 2, 3, and 5 to remove chain from sprockets.

1. Remove four screws (Figure 1, Item 4), lockwashers (Figure 1, Item 3), and crank assembly cover (Figure 1, Item 5). Discard lockwashers.
2. Remove four screws (Figure 1, Item 1) and chain cover (Figure 1, Item 2).

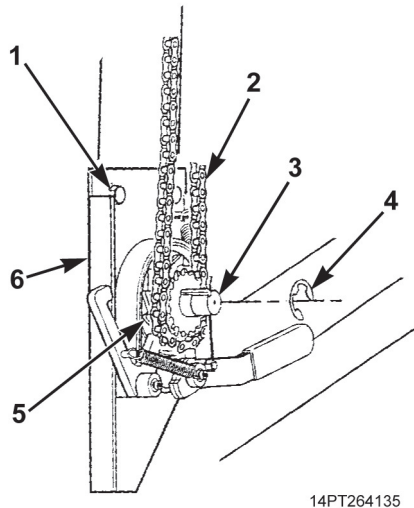


14PT264134

Figure 1. Cover Removal.

REMOVAL - Continued

3. Loosen crank assembly baseplate mounting screws (Figure 2, Item 1).
4. Raise crank assembly baseplate (Figure 2, Item 6) and remove chain (Figure 2, Item 2) from sprocket (Figure 2, Item 5).
5. Remove retaining ring (Figure 2, Item 4) and sprocket (Figure 2, Item 5) from crankshaft (Figure 2, Item 3). Discard retaining ring if damaged.

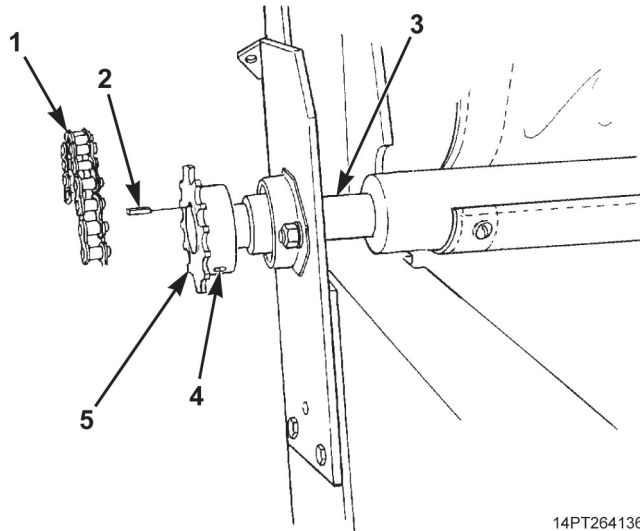


14PT264135

Figure 2. Crank Hardware Removal.

REMOVAL - Continued

6. Remove chain (Figure 3, Item 1) from sprocket (Figure 3, Item 5).
7. Loosen set screw (Figure 3, Item 4) and remove sprocket (Figure 3, Item 5) with sprocket alignment key (Figure 3, Item 2) from roll-up bar (Figure 3, Item 3).



14PT264136

Figure 3. Chain and Sprocket Removal.

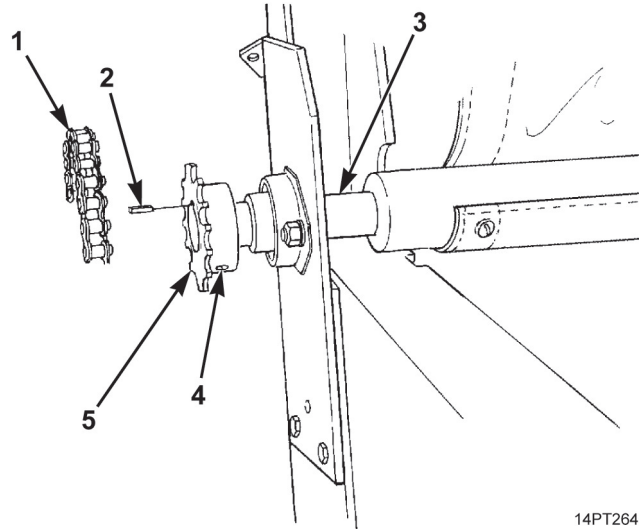
END OF TASK**CLEANING AND INSPECTION**

Clean and inspect all components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

INSTALLATION

1. Install sprocket alignment key (Figure 4, Item 2) and sprocket (Figure 4, Item 5) on roll-up bar (Figure 4, Item 3). Tighten set screw (Figure 4, Item 4).
2. Position chain (Figure 4, Item 1) over sprocket (Figure 4, Item 5).

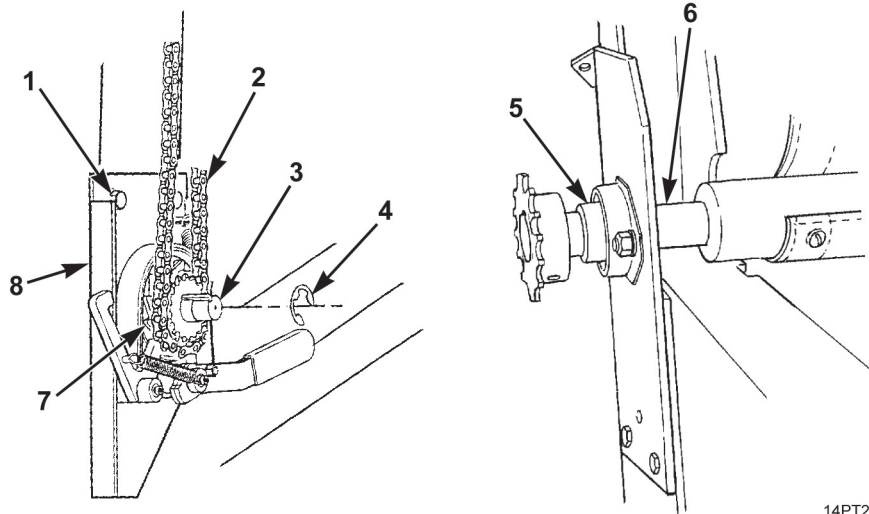


14PT264137

Figure 4. Chain and Sprocket Installation.

INSTALLATION - Continued

3. Install sprocket (Figure 5, Item 7) on crankshaft (Figure 5, Item 3) with retaining ring (Figure 5, Item 4).
4. Raise baseplate (Figure 5, Item 8) and position chain (Figure 5, Item 2) under sprocket (Figure 5, Item 7).
5. Lower baseplate to put tension on chain. Tighten mounting screws (Figure 5, Item 1).
6. Apply sealing compound sparingly to chain (Figure 5, Item 2) and to roller shaft bearings (Figure 5, Item 5) on both ends of roll-up bar (Figure 5, Item 6).



14PT264138

Figure 5. Crank Hardware Installation.

INSTALLATION - Continued

7. Install chain cover (Figure 6, Item 2) with four screws (Figure 6, Item 1).
8. Install crank assembly cover (Figure 6, Item 5) with four new lockwashers (Figure 6, Item 3) and screws (Figure 6, Item 4).

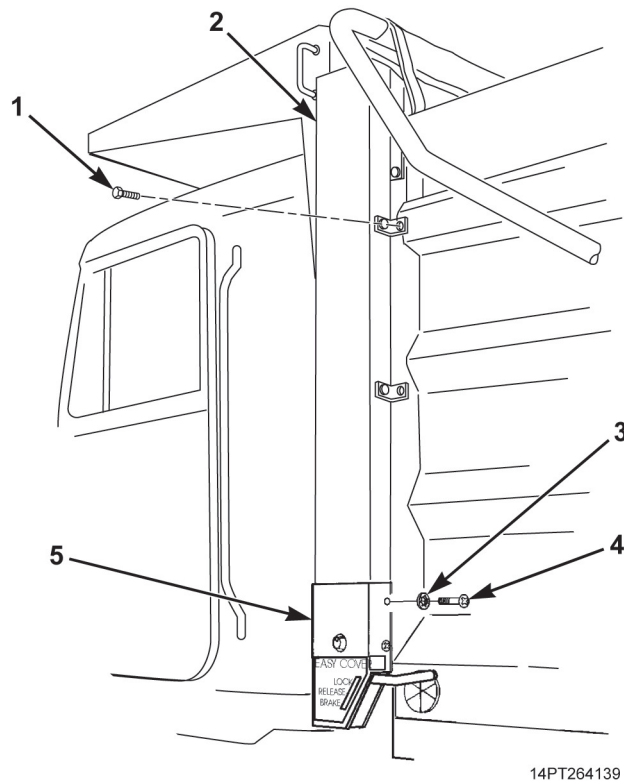


Figure 6. Cover Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Install crank handle assembly (WP 0054).
2. Check operation of cargo cover (WP 0005).
3. Fully retract cargo cover (WP 0005).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
CARGO COVER SUPPORT FRAME AND ROLL-UP BAR REPLACEMENT

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References

WP 0005
WP 0072

Materials/Parts

Locknut (WP 0114, Table 1, Item 5)
Lockwasher Qty: 5 (WP 0114, Table 1, Item 1)
Machine Key (WP 0114, Table 1, Item 3)

Equipment Condition

Cargo cover removed (WP 0052)
Cargo cover chain removed (WP 0055)

NOTE

Driver's and passenger's side components of cargo cover support frame are removed and installed the same way; drivers side is illustrated.

REMOVAL

1. Remove rubber strap from connecting arm (Figure 1, Item 3) and swing arm (Figure 1, Item 5).
2. Remove machine key (Figure 1, Item 11) from shaft (Figure 1, Item 6) on spring assembly (Figure 1, Item 7). Remove swing arm (Figure 1, Item 5) from shaft. Discard machine key.
3. Remove locknut (Figure 1, Item 2) and eyebolt (Figure 1, Item 4) and separate swing arm (Figure 1, Item 5) and connecting arm (Figure 1, Item 3). Discard locknut.
4. Remove two nuts (Figure 1, Item 10), lockwashers (Figure 1, Item 9), and screws (Figure 1, Item 8) from spring assembly (Figure 1, Item 7). Remove spring assembly from dump body and from welded shaft support bar and tube (Figure 1, Item 1). Discard lockwashers.

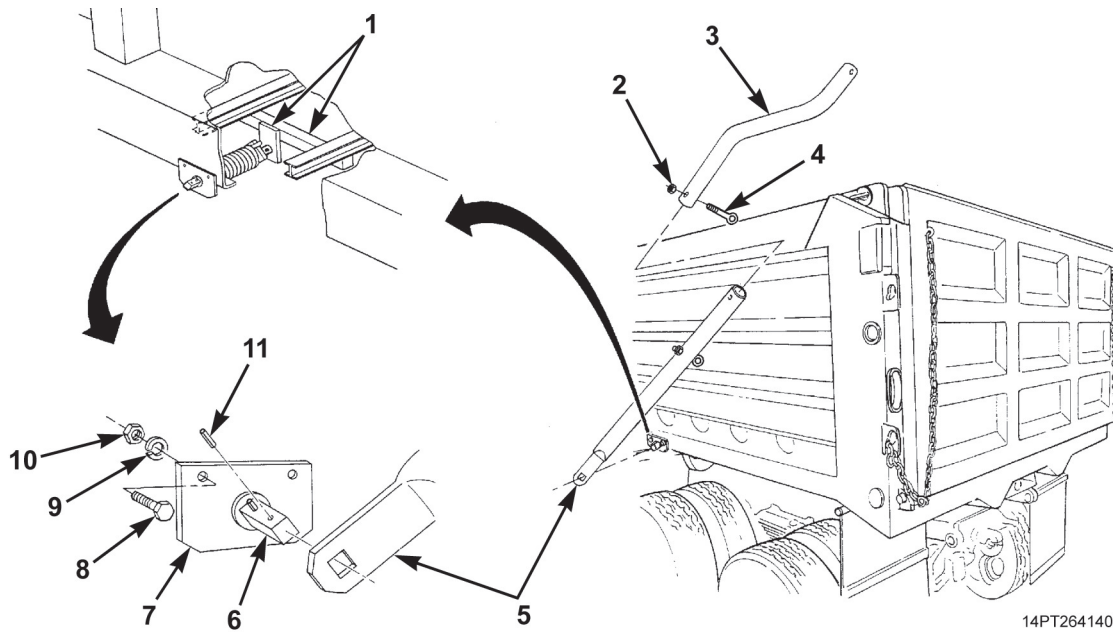


Figure 1. Roll-Up Bar Spring Removal.

REMOVAL - Continued

5. Loosen set screw (Figure 2, Item 8) and remove sprocket (Figure 2, Item 9) with sprocket alignment key (Figure 2, Item 1) from roll-up bar (Figure 2, Item 3).
6. Remove three nuts (Figure 2, Item 5), lockwashers (Figure 2, Item 6), and screws (Figure 2, Item 7) from driver's side mounting bracket (Figure 2, Item 4) and dump body. Discard lockwashers.
7. Loosen set screw (Figure 2, Item 2) at each end of roll-up bar (Figure 2, Item 3). Remove driver's side mounting bracket (Figure 2, Item 4) and roll-up bar. Slide bracket from roll-up bar.

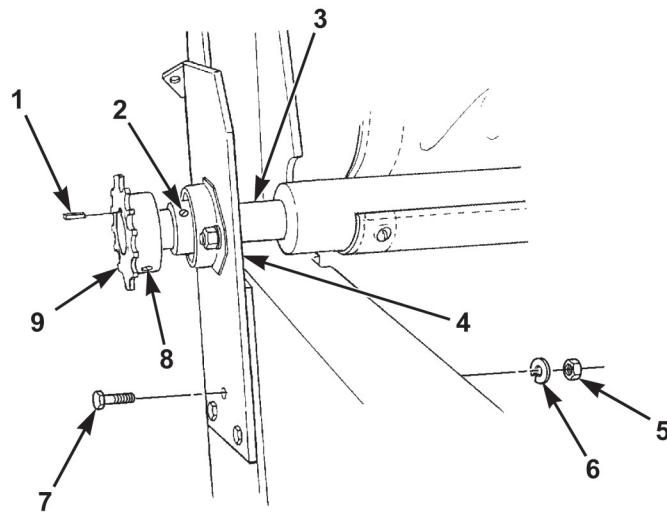


Figure 2. Roll-Up Bar Removal.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect all components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

INSTALLATION

1. Install driver's side mounting bracket (Figure 3, Item 4) on roll-up bar (Figure 3, Item 3). Position roll-up bar on dump body and through passenger's side mounting bracket.
2. Install three screws (Figure 3, Item 7), new lockwashers (Figure 3, Item 6), and nuts (Figure 3, Item 5) to driver's side mounting bracket (Figure 3, Item 4) and dump body.
3. Loosen set screw (Figure 3, Item 2) at each end of roll-up bar (Figure 3, Item 3) and center bar between driver's side and passenger's side mounting brackets (Figure 3, Items 4 and 5). Tighten set screws.
4. Install sprocket alignment key (Figure 3, Item 1) and sprocket (Figure 3, Item 9) on roll-up bar (Figure 3, Item 3). Tighten set screw (Figure 3, Item 8).

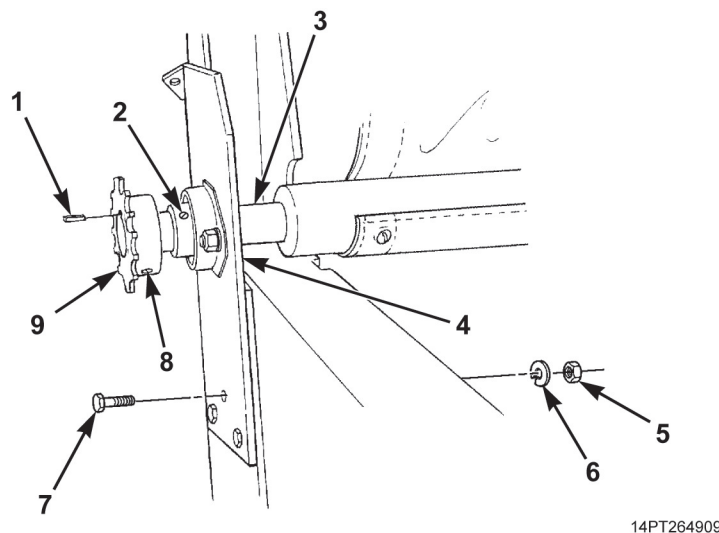
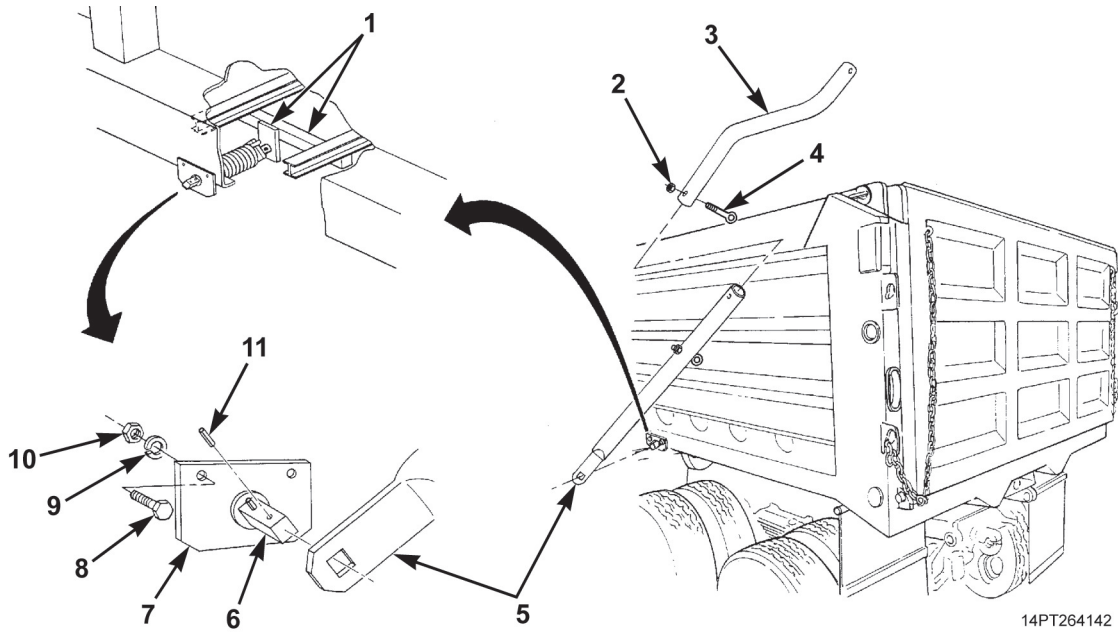


Figure 3. Roll-Up Bar Installation.

5. Install spring assembly (Figure 4, Item 7) on dump body and through welded shaft support bar and tube (Figure 4, Item 1) with two screws (Figure 4, Item 8), new lockwashers (Figure 4, Item 9), and nuts (Figure 4, Item 10).
6. Connect swing arm (Figure 4, Item 5) and connecting arm (Figure 4, Item 3) with eyebolt (Figure 4, Item 4) and new locknut (Figure 4, Item 2).
7. Install swing arm (Figure 4, Item 5) on spring assembly shaft (Figure 4, Item 6). Install new machine key (Figure 4, Item 11) through shaft.
8. Install one end of rubber strap on connecting arm (Figure 4, Item 3) eyebolt and opposite end on swing arm (Figure 4, Item 5) eyebolt.

INSTALLATION - Continued



14PT264142

Figure 4. Roll-Up Bar Spring Installation.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Install cargo cover chain (WP 0055).
2. Install cargo cover (WP 0052).
3. Check operation of cargo cover (WP 0005).
4. Fully retract cargo cover (WP 0005).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
SHOVEL BRACKET REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Materials/Parts

Locknut Qty: 4 (WP 0114, Table 1, Item 23)

REMOVAL

Remove four bolts (Figure 1, Item 3), locknuts (Figure 1, Item 1), eight washers (Figure 1, Item 2), and shovel bracket (Figure 1, Item 4) from dump body. Discard locknuts.

END OF TASK**INSTALLATION**

Position shovel bracket (Figure 1, Item 4) on dump body and install four bolts (Figure 1, Item 3), eight washers (Figure 1, Item 2), and new locknuts (Figure 1, Item 1).

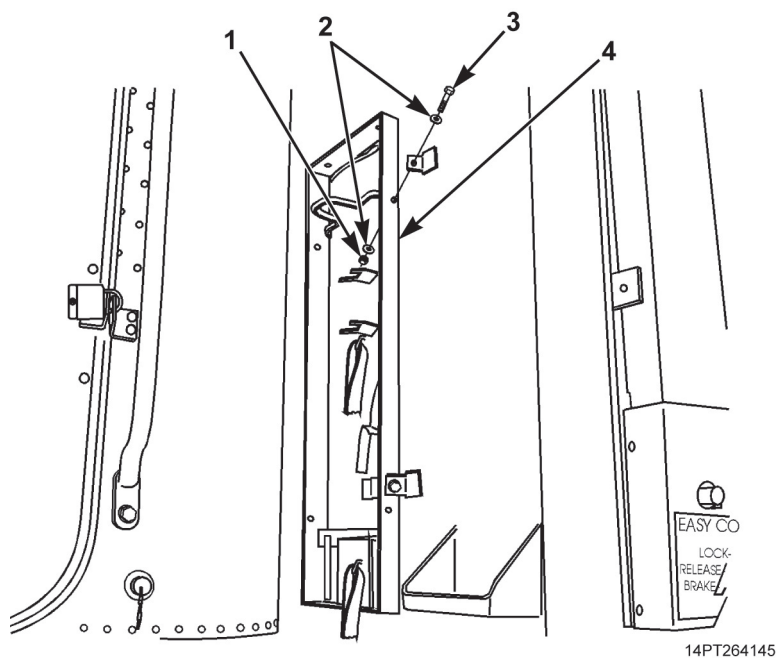


Figure 1. Shovel Bracket Replacement.

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
DATA PLATE REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

REMOVAL

Remove four drive screws (Figure 1, Item 2) and data plate (Figure 1, Item 1) from dump body.

END OF TASK**INSTALLATION**

Install data plate (Figure 1, Item 1) on dump body with four drive screws (Figure 1, Item 2).

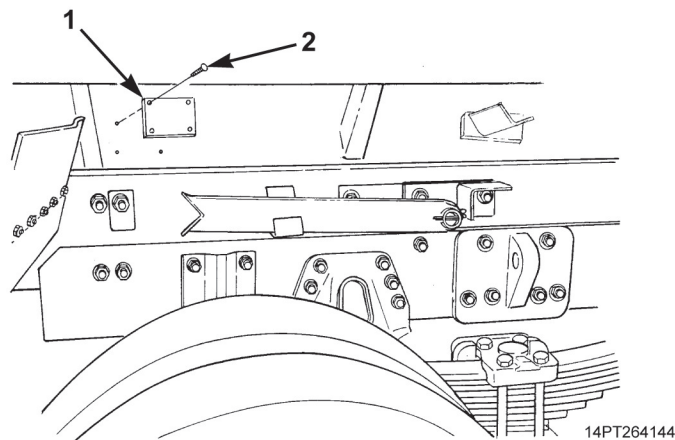


Figure 1. Data Plate Replacement.

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
HYDRAULIC PUMP REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Cap Set, Protective, Dust and Moisture
(WP 0113, Table 1, Item 2)
Wrench, Adjustable, 5/8 in.
(WP 0113, Table 1, Item 15)
Wrench, Torque: 1/2 in. drive, 0–175 lb-ft
(0–237 N•m) (WP 0113, Table 1, Item 17)

Materials/Parts

Antiseizing Tape (WP 0112, Table 1, Item 37)
Marker Tags (WP 0112, Table 1, Item 33)
Wiping Rags (WP 0112, Table 1, Item 29)

Personnel Required

(2)

References

WP 0072

Equipment Condition

Hydraulic control lever cable disconnected from
hydraulic pump (WP 0062)
Hydraulic oil drained (WP 0073)
Transmission tunnel access cover removed
(TM 9-2320-302-20-1, TM 9-2320-302-20-2,
TM 9-2320-363-20-1,
or TM 9-2320-363-20-2)

REMOVAL**WARNING**

DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin. Hydraulic oil is slippery and may cause falls. A suitable container should be used to catch any draining hydraulic fluid. Ensure that all spills are cleaned up immediately and disposed of in accordance with local procedures. Failure to comply may result in personnel injury or death.

CAUTION

Hoses and ports in hydraulic components should be plugged to prevent contamination of hydraulic system (WP 0072). Failure to comply may result in damage to equipment.

NOTE

Hoses should be tagged before removal (WP 0072).

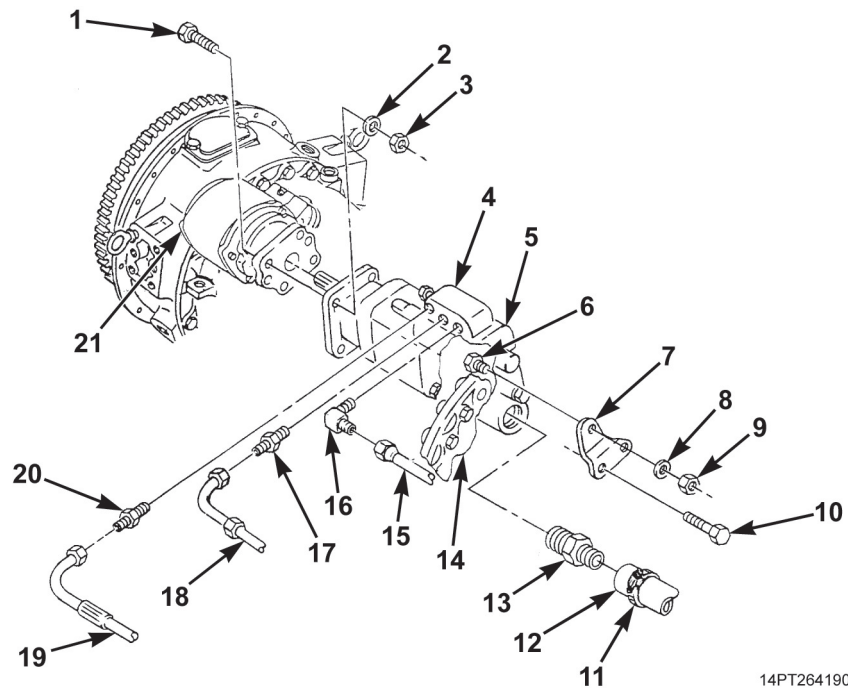
1. Loosen clamp (Figure 1, Item 11) and disconnect suction hose (Figure 1, Item 12) from adapter (Figure 1, Item 13).
2. Remove adapter (Figure 1, Item 13) from hydraulic pump (Figure 1, Item 5).
3. Disconnect hose (Figure 1, Item 19) from adapter (Figure 1, Item 20). Disconnect hose (Figure 1, Item 18) from adapter (Figure 1, Item 17).
4. Remove adapters (Figure 1, Items 17 and 20) from control valve (Figure 1, Item 4).
5. Disconnect hose (Figure 1, Item 15) from elbow (Figure 1, Item 16).
6. Remove elbow (Figure 1, Item 16) from control valve (Figure 1, Item 4).
7. Remove nut (Figure 1, Item 9) and washer (Figure 1, Item 8) from stud (Figure 1, Item 6) of hydraulic pump (Figure 1, Item 5).
8. Remove two screws (Figure 1, Item 10) and support bracket (Figure 1, Item 7) from transmission housing (Figure 1, Item 14).

WARNING

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

9. Remove four nuts (Figure 1, Item 3), washers (Figure 1, Item 2), screws (Figure 1, Item 1), and hydraulic pump (Figure 1, Item 5) from Power Take Off (PTO) (Figure 1, Item 21).

REMOVAL - Continued



14PT264190

Figure 1. Hydraulic Pump Removal.

END OF TASK

CLEANING AND INSPECTION

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

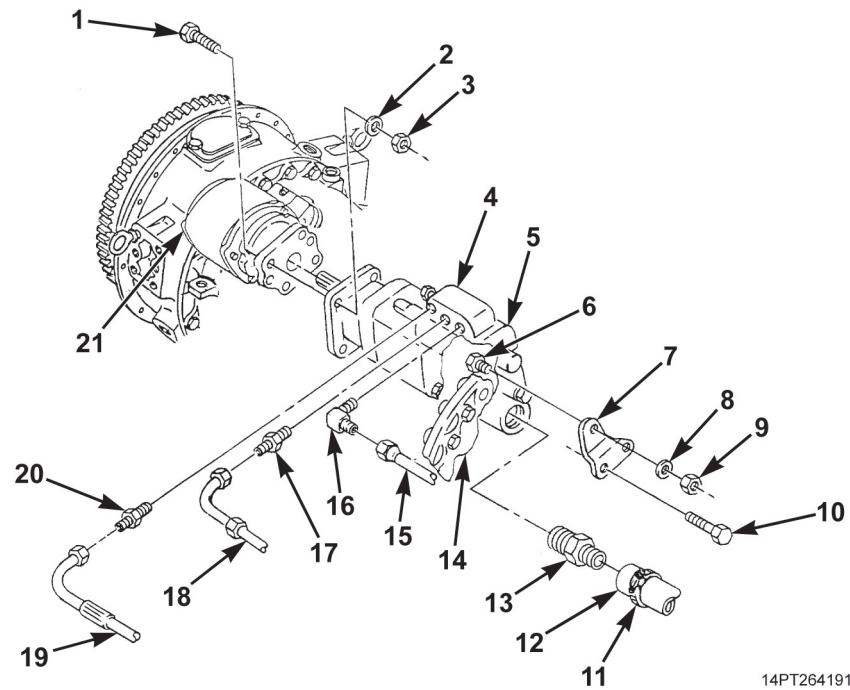
INSTALLATION**WARNING**

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

NOTE

Use antiseizing tape on all pipe threads (WP 0072).

1. Install hydraulic pump (Figure 2, Item 5) on PTO (Figure 2, Item 21) with four screws (Figure 2, Item 1), washers (Figure 2, Item 2), and nuts (Figure 2, Item 3).
2. Install support bracket (Figure 2, Item 7) on transmission housing (Figure 2, Item 14) with two screws (Figure 2, Item 10). Torque screws to 70–80 lb-ft (95–108 N•m).
3. Install washer (Figure 2, Item 8) and nut (Figure 2, Item 9) on stud (Figure 2, Item 6) of hydraulic pump (Figure 2, Item 5).
4. Install elbow (Figure 2, Item 16) on control valve (Figure 2, Item 4).
5. Connect hose (Figure 2, Item 15) to elbow (Figure 2, Item 16).
6. Install adapters (Figure 2, Items 17 and 20) on control valve (Figure 2, Item 4).
7. Connect hoses (Figure 2, Items 18 and 19) on adapters (Figure 2, Items 17 and 20).
8. Install adapter (Figure 2, Item 13) to hydraulic pump (Figure 2, Item 5).
9. Connect suction hose (Figure 2, Item 12) to adapter (Figure 2, Item 13) and tighten clamp (Figure 2, Item 11).

INSTALLATION - Continued

14PT264191

Figure 2. Hydraulic Pump Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Fill hydraulic reservoir (WP 0073).
2. Connect hydraulic control lever cable to hydraulic pump (WP 0062).
3. Install transmission tunnel access cover (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE HYDRAULIC PUMP REPAIR

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Machinist's Vise (WP 0113, Table 1, Item 14)
Socket Wrench Set: 3/4 in. drive
(WP 0113, Table 1, Item 10)
Torque Wrench, 3/4 in. drive, 0–600 ft-lb
(0–813 N•m) (WP 0113, Table 1, Item 17)

Materials/Parts (cont.)

Seal, Plain (Gasket) Qty: 2
(WP 0114, Table 1, Item 11)
Seal, Plain Encased (Lip Seal)
(WP 0114, Table 1, Item 10)
Rag, Wiping (WP 0112, Table 1, Item 29)
Ring, Retaining (WP 0114, Table 1, Item 29)
Valve, Check (Check Assembly) Qty: 2
(WP 0114, Table 1, Item 17)

Materials/Parts

Bearing, Roller Qty: 2
(WP 0114, Table 1, Item 9)
Gasket (Ring Seal) Qty: 2
(WP 0114, Table 1, Item 8)
Grease, Ball Bearing (WP 0112, Table 1, Item 12)
Lubricating Oil (WP 0112, Table 1, Item 23)
Seal, Nonmetallic (Pocket Seal) Qty: 12
(WP 0114, Table 1, Item 15)

References

WP 0072

Equipment Condition

Hydraulic pump removed (WP 0059)

WARNING

- Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device.
- Eye protection must be worn when removing or installing snap rings or retaining rings.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

CAUTION

Remove dirt from outside of hydraulic pump. Perform repair in a clean work area to prevent contaminants from causing equipment failure. Failure to comply may result in damage to equipment.

NOTE

Mark castings of pump to aid in assembly.

DISASSEMBLY

1. Remove retaining ring (Figure 1, Item 1), spacer (Figure 1, Item 2), and seal retainer (Figure 1, Item 3) from drive shaft (Figure 1, Item 4). Discard retaining ring.

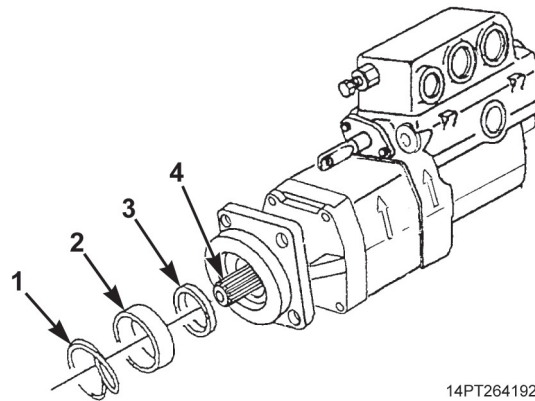


Figure 1. Drive Shaft Retaining Ring Removal.

2. Secure hydraulic pump in vise and remove three screws (Figure 2, Item 1), two nuts (Figure 2, Item 4), and five washers (Figure 2, Item 2) securing pump housings.

NOTE

Note stud location for assembly.

3. Remove stud (Figure 2, Item 3).

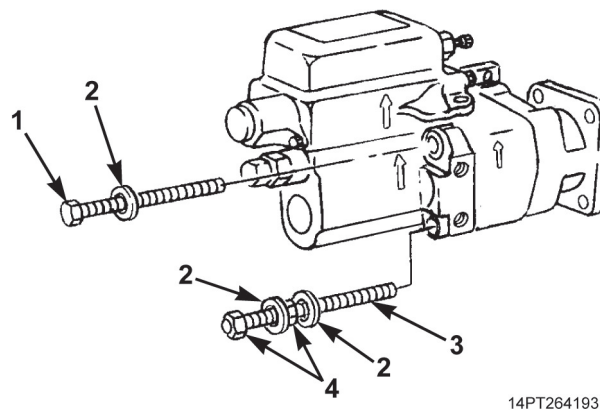


Figure 2. Pump Hardware Removal.

CAUTION

Internal surfaces and parts of hydraulic pump are machined to strict manufacturing tolerances. Care must be taken not to damage machined surfaces. Failure to comply may result in damage to equipment.

NOTE

Drive shaft and gearshaft may slide out with end housing.

DISASSEMBLY - Continued

4. Place hydraulic pump on clean, flat surface and separate end housing (Figure 3, Item 5) from gear housing (Figure 3, Item 1).
5. Remove drive shaft (Figure 3, Item 3) and gearshaft (Figure 3, Item 2) from end housing (Figure 3, Item 5).
6. Remove thrust plate (Figure 3, Item 4) from end housing (Figure 3, Item 5). Remove six pocket seals (Figure 3, Item 6) from thrust plate. Discard pocket seals.

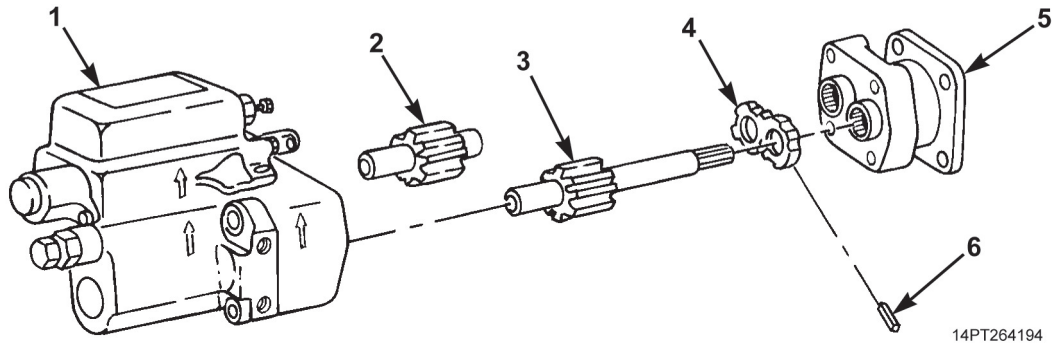


Figure 3. Drive Shaft Removal.

7. Remove two check assemblies (Figure 4, Item 5) from end housing (Figure 4, Item 3). Discard check assemblies.
8. Remove two roller bearings (Figure 4, Item 1), ring seals (Figure 4, Item 2), and lip seal (Figure 4, Item 4) from end housing (Figure 4, Item 3). Discard roller bearings, ring seals, and lip seal.

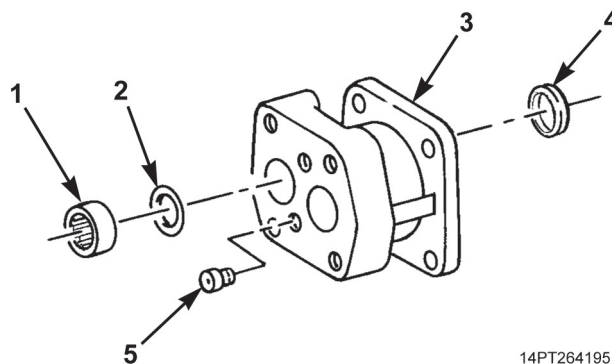


Figure 4. Check Assemblies and Roller Bearings Removal.

DISASSEMBLY - Continued

9. Remove gear housing (Figure 5, Item 2) from pump housing (Figure 5, Item 4). Remove two gasket seals (Figure 5, Items 1 and 3) from gear housing. Discard gasket seals.

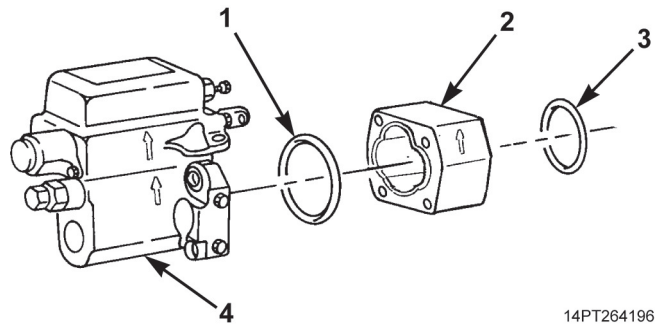


Figure 5. Gear Housing Removal.

10. Remove thrust plate (Figure 6, Item 1) and six pocket seals (Figure 6, Items 2 and 4) from pump housing (Figure 6, Item 3). Discard pocket seals.

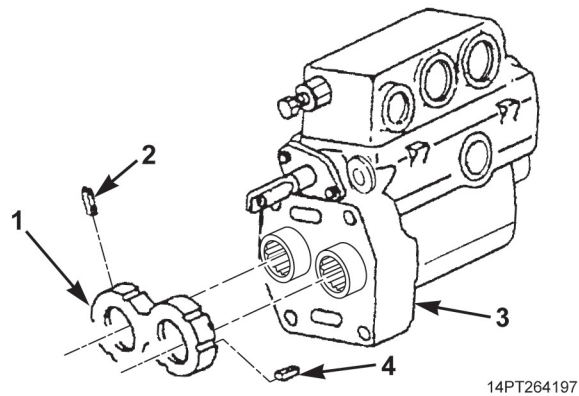


Figure 6. Hydraulic Pump Disassembly.

END OF TASK

CLEANING AND INSPECTION

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072) and the following:

- Inspect drive shaft and gearshaft for scoring or grooving on teeth. Any scoring, grooving, or burring of outside diameter of teeth requires replacement of shafts as a set. If shafts are replaced, roller bearings must also be replaced.
- Inspect thrust plates for wear, pitting, or discoloration. If found, replace thrust plates.

END OF TASK

ASSEMBLY

WARNING

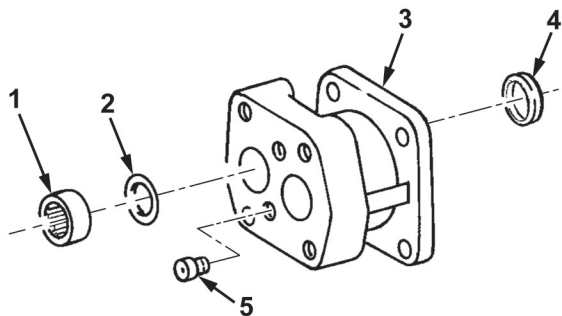


Eye protection and gloves must be worn when using grease or lubricating oils. Failure to comply may result in personnel injury.

NOTE

Apply a light coat of lubricating oil to surfaces of components as they are assembled.

1. Press two new ring seals (Figure 7, Item 2) and new roller bearings (Figure 7, Item 1) into end housing (Figure 7, Item 3).
2. Press new lip seal (Figure 7, Item 4) into drive shaft side of end housing (Figure 7, Item 3).
3. Install two new check assemblies (Figure 7, Item 5) on end housing (Figure 7, Item 3).



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Figure 7. Check Assemblies and Roller Bearings Installation.

ASSEMBLY - Continued

4. Cut two pocket seals (Figure 8, Item 4) 3/16 in. (4.8 mm) long and place in center slots of thrust plate (Figure 8, Item 1). Use light grease to hold in place. Place thrust plate, with pocket seals facing machined surface, over roller bearings (Figure 8, Item 2) of end housing (Figure 8, Item 3) and tap to about 1/32 in. (0.8 mm) from machined surface.
5. Insert remaining four pocket seals (Figure 8, Item 4) into place around thrust plate (Figure 8, Item 1). Tap thrust plate down onto machined surface. Cut excess seal from thrust plate.

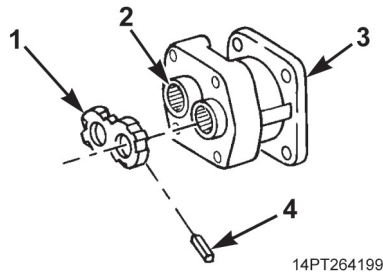


Figure 8. Pocket Seal Installation.

6. Repeat Step 5 for thrust plate on pump housing (Figure 9, Item 1).
7. Install pump housing (Figure 9, Item 1) in vise with machined surface facing up.

NOTE

Use scribe marks from disassembly to properly assemble pump housings. Light tapping with rubber hammer may be required to seat housings in place.

8. Install new gasket seal (Figure 9, Item 2) in gear housing (Figure 9, Item 3) and place gear housing on pump housing (Figure 9, Item 1).
9. Install drive shaft (Figure 9, Item 5) and gearshaft (Figure 9, Item 4) into gear housing (Figure 9, Item 3). Check for free turning of gears.
10. Install new gasket seal (Figure 9, Item 6) on gear housing (Figure 9, Item 3). Apply light coat of grease to drive shaft (Figure 9, Item 5).
11. Place end housing (Figure 9, Item 7) over drive shaft (Figure 9, Item 5) and carefully press housing in place, seating gears against thrust plate (Figure 9, Item 8).

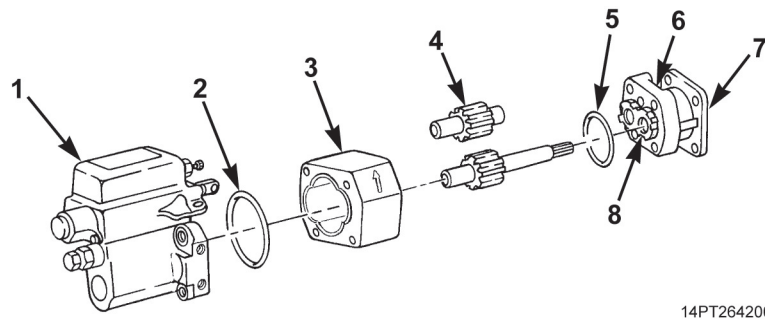


Figure 9. Gear Housing and Drive Shaft Installation.

ASSEMBLY - Continued**NOTE**

Ensure that stud is installed in correct location as noted in disassembly.

12. Install three screws (Figure 10, Item 1), three washers (Figure 10, Item 2), stud (Figure 10, Item 3), washer (Figure 10, Item 2), and nut (Figure 10, Item 4) in place to secure pump housings. Tighten screws and stud in crisscross pattern and torque to 200 lb-ft (271 N•m). Check for free shaft movement by turning drive shaft with a wrench.
13. Install one washer (Figure 10, Item 2) and nut (Figure 10, Item 4) on stud (Figure 10, Item 3) and tighten by hand.

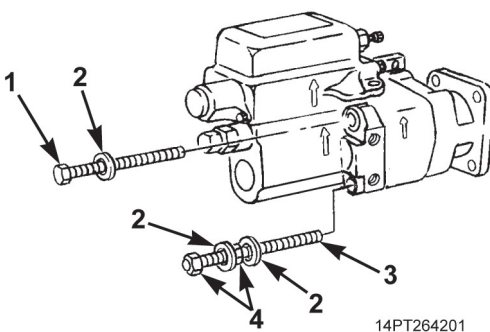


Figure 10. Pump Hardware Installation.

14. Install seal retainer (Figure 11, Item 3), spacer (Figure 11, Item 2), and new retaining ring (Figure 11, Item 1) on drive shaft (Figure 11, Item 4).

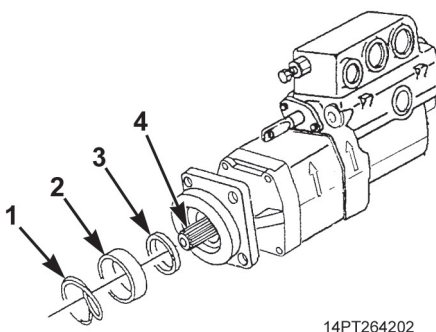


Figure 11. Drive Shaft Retaining Ring Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

Install hydraulic pump (WP 0059).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
HYDRAULIC CONTROL LEVER REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

References (cont.)

WP 0005
WP 0072

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)

Equipment Condition

MCS control unit removed (WP 0037)
Central Tire Inflation System (CTIS) Electronic
Control Unit (ECU) removed
(TM 9-2320-302-20-1, TM 9-2320-302-20-2,
TM 9-2320-363-20-1, or
TM 9-2320-363-20-2).

References

TM 9-2320-302-10
TM 9-2320-363-10

NOTE

Although slightly different in shape, M917A1 and M917A2 shift towers are similar. M917A1 shift tower is illustrated. Perform only those steps that apply to your model.

REMOVAL**NOTE**

Wires and cables should be tagged before removal (WP 0072).

1. Remove six screws (Figure 1, Item 2) and rear access panel (Figure 1, Item 3) from shift tower (Figure 1, Item 1).
2. Repeat Step 1 for front access panel.

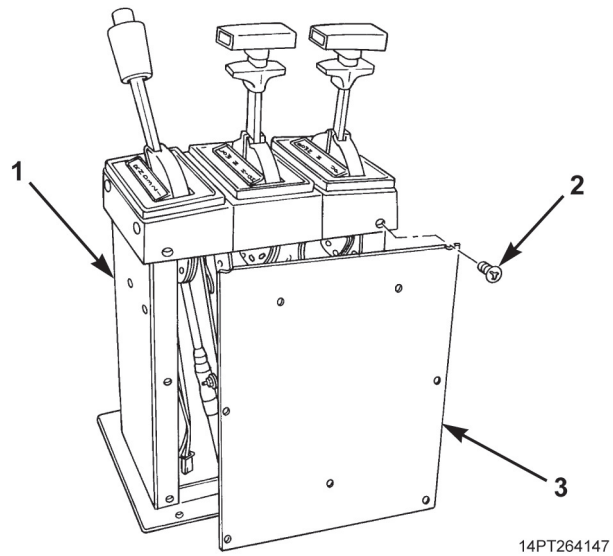


Figure 1. Rear Access Panel Removal.

REMOVAL - Continued

3. To keep shift tower (Figure 2, Item 1) rigid, reinstall two top and two bottom screws (Figure 2, Item 2) on front and rear of shift tower (Figure 2, Item 1).
4. Disconnect six connectors (Figure 2, Item 3) from shift tower jumper harness connectors.

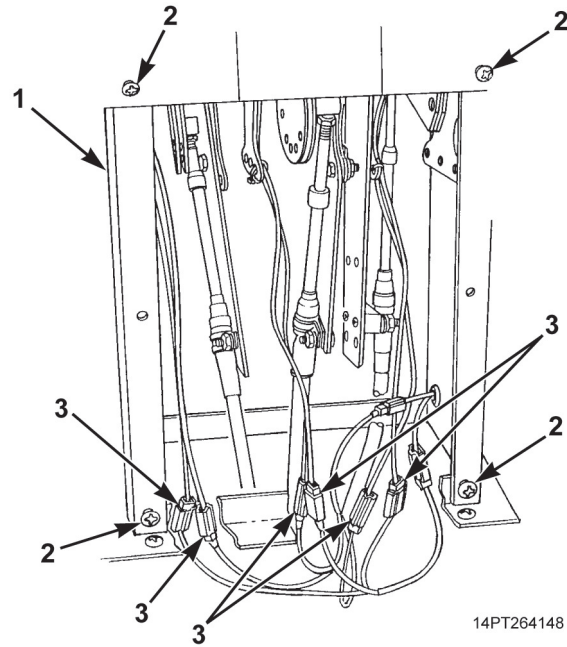


Figure 2. Connector Removal.

REMOVAL - Continued**NOTE**

To ease installation, note mounting position of cable pivot pins and hold-down clamps prior to disconnecting cables.

5. Place transmission selector lever in D (Drive) position (TM 9-2320-363-10 or TM 9-2320-302-10).
6. Tag transmission shift cable (Figure 3, Item 3).
7. Remove two nuts (Figure 3, Item 8), washers (Figure 3, Item 7), screws (Figure 3, Item 4), clamp (Figure 3, Item 6), and spacer (Figure 3, Item 5) from bracket (Figure 3, Item 9).
8. Remove retaining pin (Figure 3, Item 1) from pivot pin (Figure 3, Item 2) and pivot pin from bracket (Figure 3, Item 10).

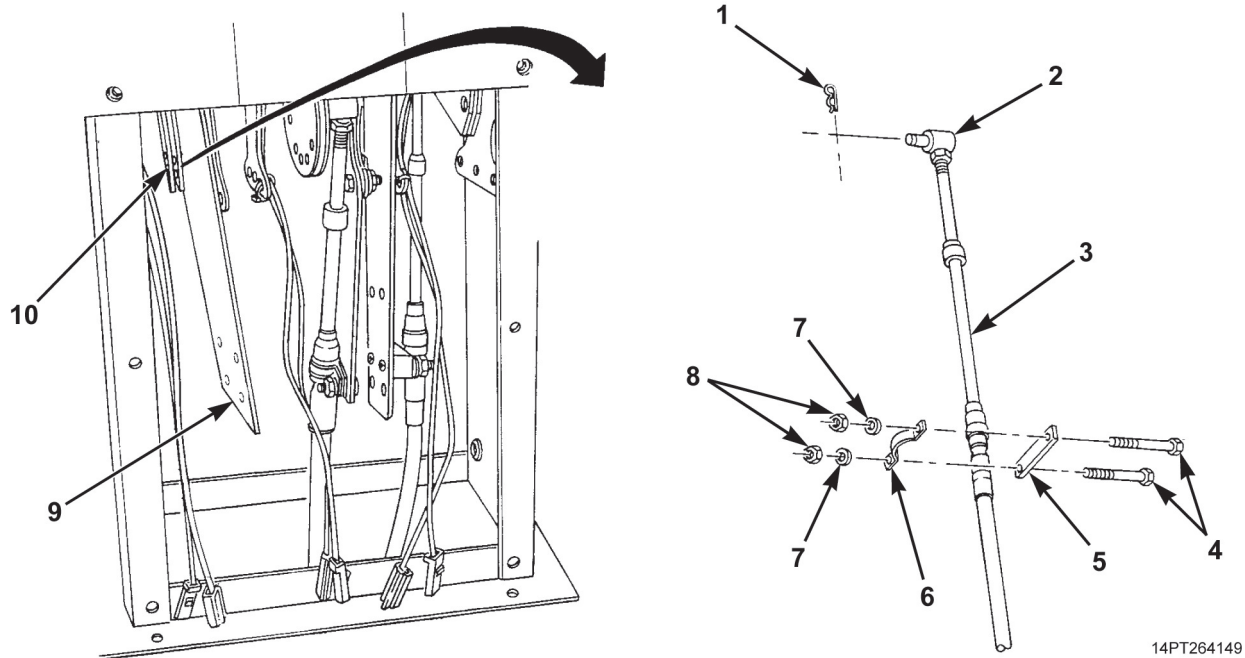


Figure 3. Transmission Shift Cable and Components Removal.

REMOVAL - Continued

9. Place transfer case selector lever in N (Neutral) position (TM 9-2320-363-10 or TM 9-2320-302-10).
10. Tag transfer case shift cable (Figure 4, Item 3).
11. Remove two nuts (Figure 4, Item 8), washers (Figure 4, Item 7), screws (Figure 4, Item 4), clamp (Figure 4, Item 6), and spacer (Figure 4, Item 5) from bracket (Figure 4, Item 9).
12. Remove retaining pin (Figure 4, Item 1) from pivot pin (Figure 4, Item 2) and pivot pin from bracket (Figure 4, Item 10).

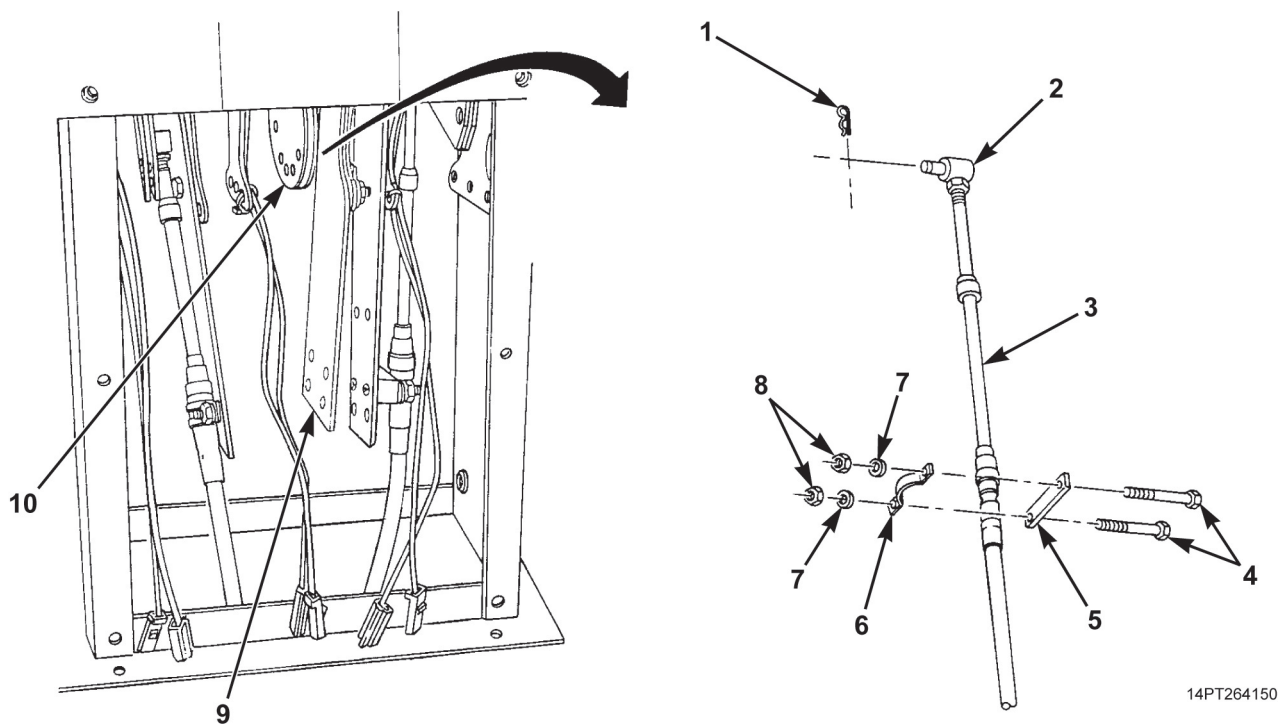


Figure 4. Transfer Case Shift Cable and Components Removal.

REMOVAL - Continued

13. Place hydraulic control lever in DOWN position (WP 0005).
14. Tag hydraulic control cable (Figure 5, Item 3).
15. Remove two nuts (Figure 5, Item 5), washers (Figure 5, Item 4), screws (Figure 5, Item 8), clamp (Figure 5, Item 6), and spacer (Figure 5, Item 7) from bracket (Figure 5, Item 10).
16. Remove retaining pin (Figure 5, Item 2) from pivot pin (Figure 5, Item 1) and pivot pin from bracket (Figure 5, Item 9).

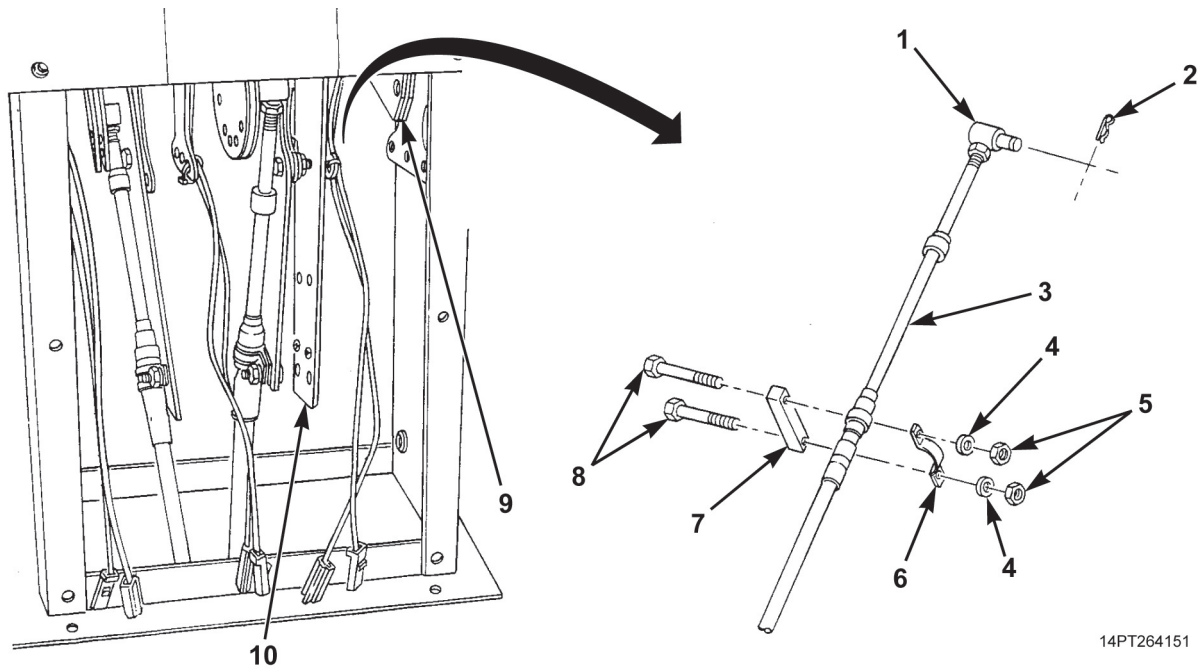


Figure 5. Hydraulic Control Cable and Components Removal.

REMOVAL - Continued

17. Remove two top screws (Figure 6, Item 2) from front and rear of shift tower (Figure 6, Item 3).
18. Lift handle assemblies (Figure 6, Item 1) from shift tower (Figure 6, Item 3).

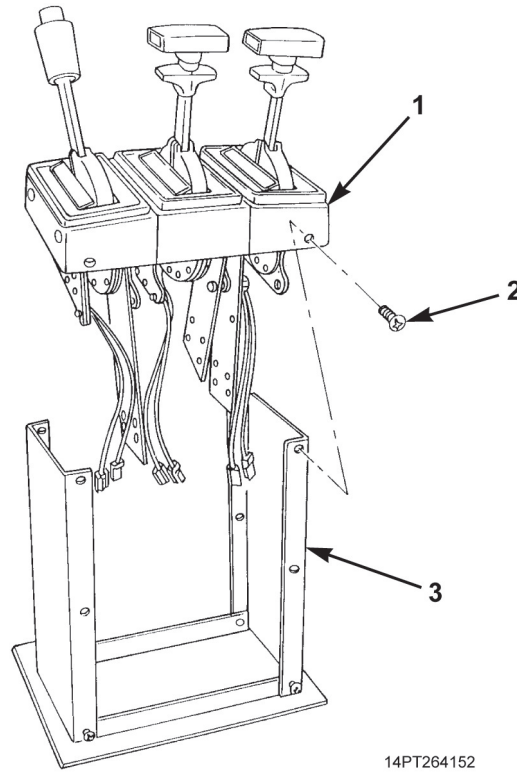


Figure 6. Handle Assemblies Removal.

REMOVAL - Continued

19. Separate hydraulic control lever (Figure 7, Item 2) from transfer case selector lever (Figure 7, Item 3) by removing two bolts (Figure 7, Item 1), flatwashers (Figure 7, Item 5), and nuts (Figure 7, Item 4).

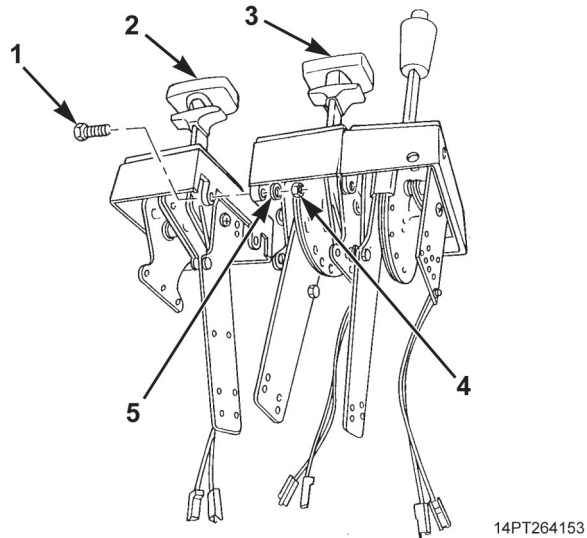


Figure 7. Hydraulic Control Lever Removal.

END OF TASK

INSTALLATION

1. Install hydraulic control lever (Figure 8, Item 2) on transfer case selector lever (Figure 8, Item 3) with two bolts (Figure 8, Item 1), flatwashers (Figure 8, Item 5), and nuts (Figure 8, Item 4).

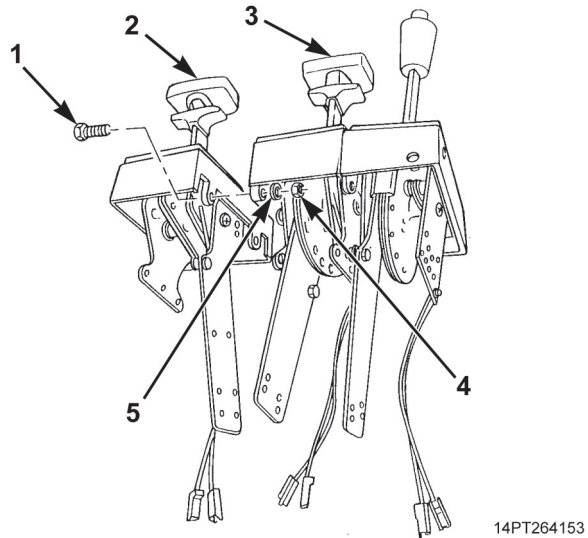


Figure 8. Hydraulic Control Lever Installation.

INSTALLATION - Continued

2. Position handle assemblies (Figure 9, Item 1) on shift tower (Figure 9, Item 3).
3. To keep shift tower (Figure 9, Item 3) rigid, install two top screws (Figure 9, Item 2) on front and rear of shift tower.

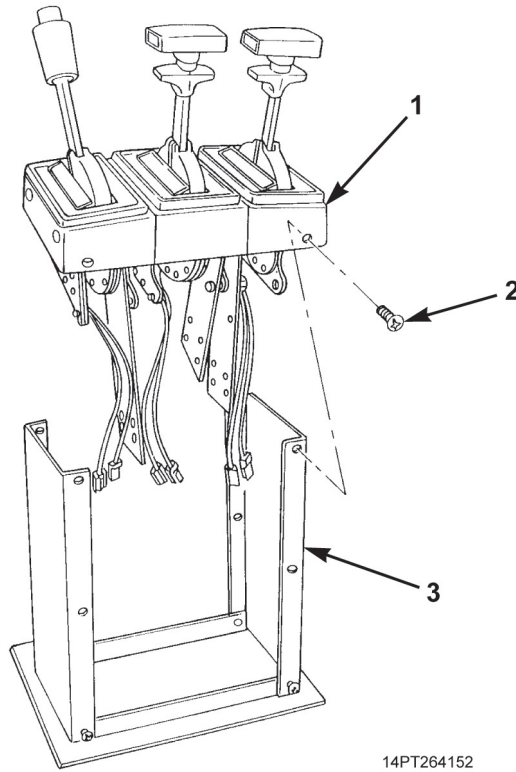
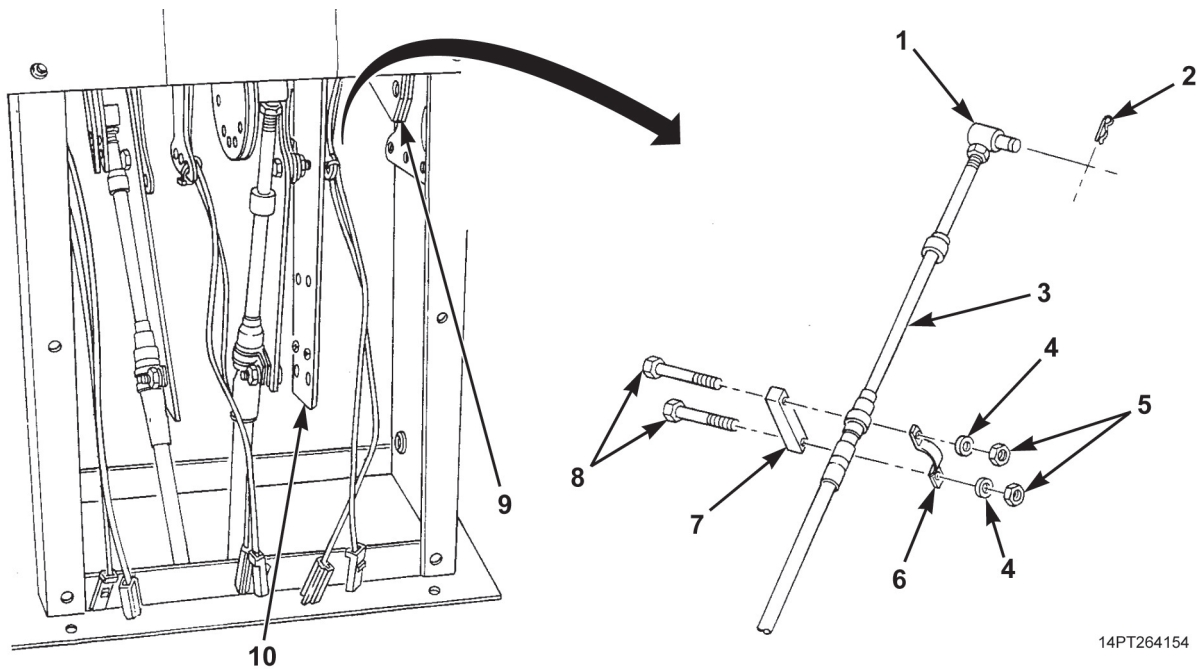


Figure 9. Handle Assemblies Installation.

INSTALLATION - Continued

4. With hydraulic control lever in DOWN position, install hydraulic control cable pivot pin (Figure 10, Item 1) in bracket (Figure 10, Item 9) and secure with retaining pin (Figure 10, Item 2).
5. Install spacer (Figure 10, Item 7), cable (Figure 10, Item 3), clamp (Figure 10, Item 6), two screws (Figure 10, Item 8), washers (Figure 10, Item 4), and nuts (Figure 10, Item 5) on bracket (Figure 10, Item 10).
6. Place hydraulic control lever in N (Neutral) position (WP 0005).



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Figure 10. Hydraulic Control Cable and Components Installation.

INSTALLATION - Continued

7. Install transfer case control cable pivot pin (Figure 11, Item 2) in bracket (Figure 11, Item 10) and secure with retaining pin (Figure 11, Item 1).
8. Install spacer (Figure 11, Item 5), cable (Figure 11, Item 3), clamp (Figure 11, Item 6), two screws (Figure 11, Item 4), washers (Figure 11, Item 7), and nuts (Figure 11, Item 8) on bracket (Figure 11, Item 9).

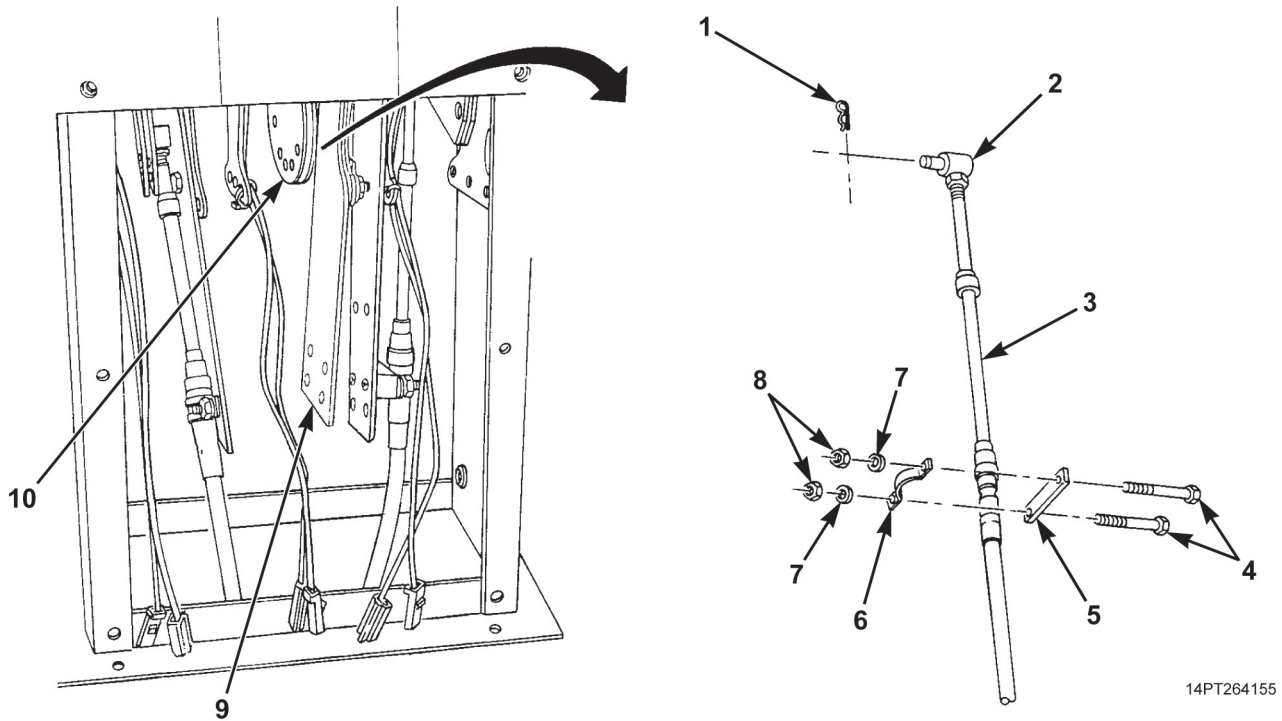
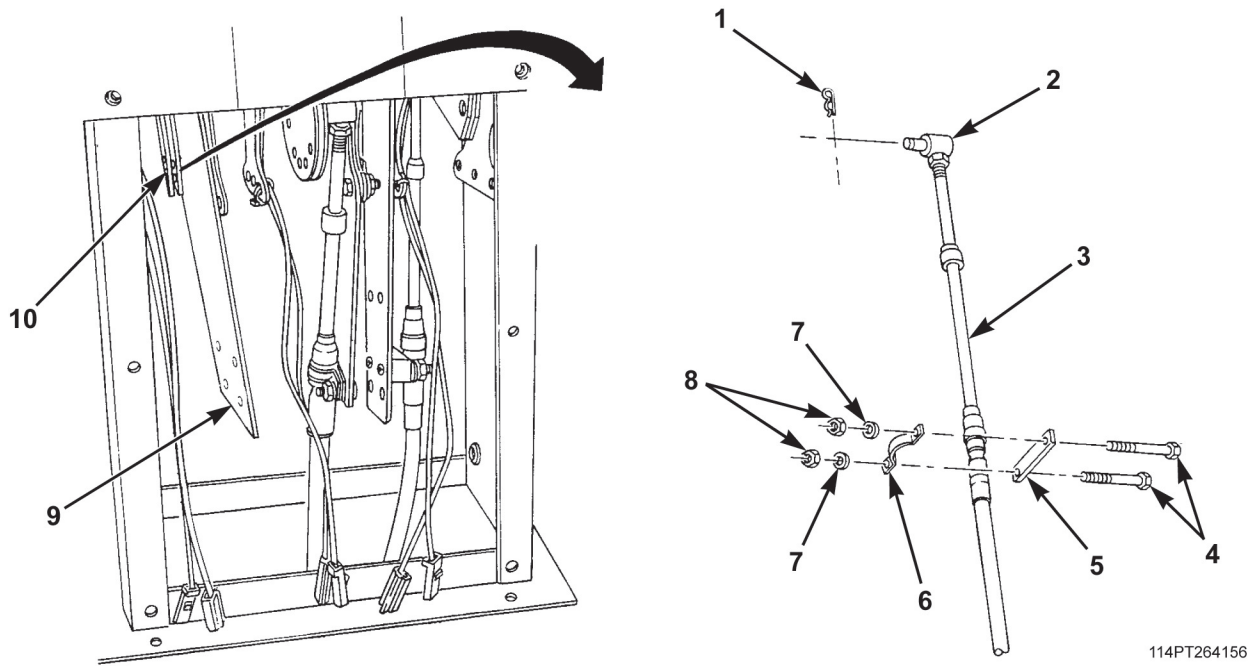


Figure 11. Transfer Case Shift Cable and Components Installation.

INSTALLATION - Continued

9. With transmission selector lever in D (Drive) position, install transmission control cable pivot pin (Figure 12, Item 2) in bracket (Figure 12, Item 10) and secure with retaining pin (Figure 12, Item 1).
10. Install spacer (Figure 12, Item 5), cable (Figure 12, Item 3), clamp (Figure 12, Item 6), two screws (Figure 12, Item 4), washers (Figure 12, Item 7), and nuts (Figure 12, Item 8) on bracket (Figure 12, Item 9).



114PT264156

Figure 12. Transmission Shift Cable and Components Installation.

INSTALLATION - Continued

11. Place transmission selector lever in N (Neutral) position (TM 9-2320-363-10 or TM 9-2320- 302-10).
12. Connect six connectors (Figure 13, Item 3) to shift tower jumper harness connectors.
13. Remove two top and two bottom screws (Figure 13, Item 2) on front and rear of shift tower (Figure 13, Item 1).

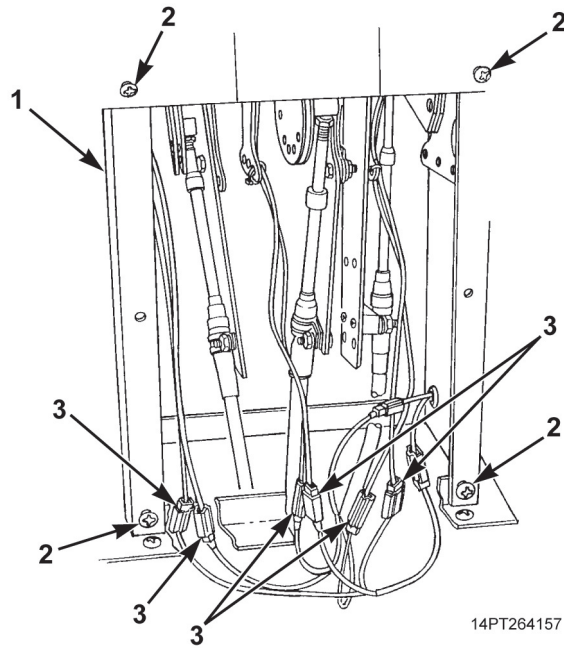


Figure 13. Connector Installation.

INSTALLATION - Continued

14. Install rear access panel (Figure 14, Item 3) and six screws (Figure 14, Item 2) on shift tower (Figure 14, Item 1).
15. Repeat Step 14 for front access panel.

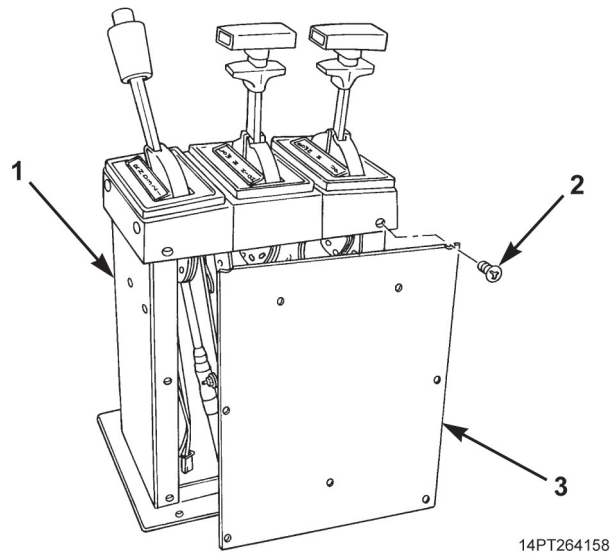


Figure 14. Rear Access Panel Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Install MCS control unit (WP 0037).
2. Install CTIS ECU (TM 9-2320-302-20-1, TM 9-2320-302-20-2, TM 9-2320-363-20-1, or TM 9-2320-363-20-2).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
HYDRAULIC CONTROL LEVER CABLE REPLACEMENT

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Materials/Parts

Marker Tags (WP 0112, Table 1, Item 36)

References

WP 0005

Equipment Condition

Central Tire Inflation System (CTIS) Electronic
Control Unit (ECU) removed
(TM 9-2320-363-20-1, TM 9-2320-363-20-2,
TM 9-2320-302-20-1, or
TM 9-2320-302-20-2)

Equipment Condition (cont.)

Material Control System (MCS) control unit
removed (M917A1 with MCS) (WP 0024)
Wheels chocked
(TM 9-2320-363-10 or TM 9-2320-302-10)

NOTE

Although slightly different in shape, M917A1 and M917A2 shift towers are similar. M917A1 shift tower is illustrated. Perform only those steps that apply to your model.

REMOVAL

1. Remove six screws (Figure 1, Item 2) and rear access panel (Figure 1, Item 3) from shift tower (Figure 1, Item 1).
2. Repeat Step 1 to remove front access panel from shift tower.
3. To keep shift tower rigid, reinstall two top and two bottom screws (Figure 1, Item 2) on front and rear of shift tower (Figure 1, Item 1).

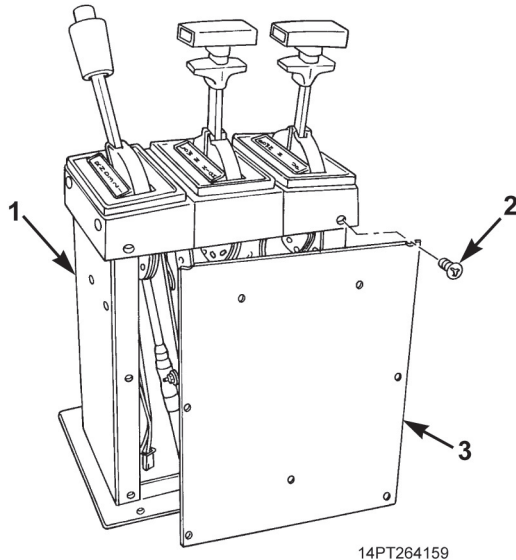


Figure 1. Shift Tower Cover Removal.

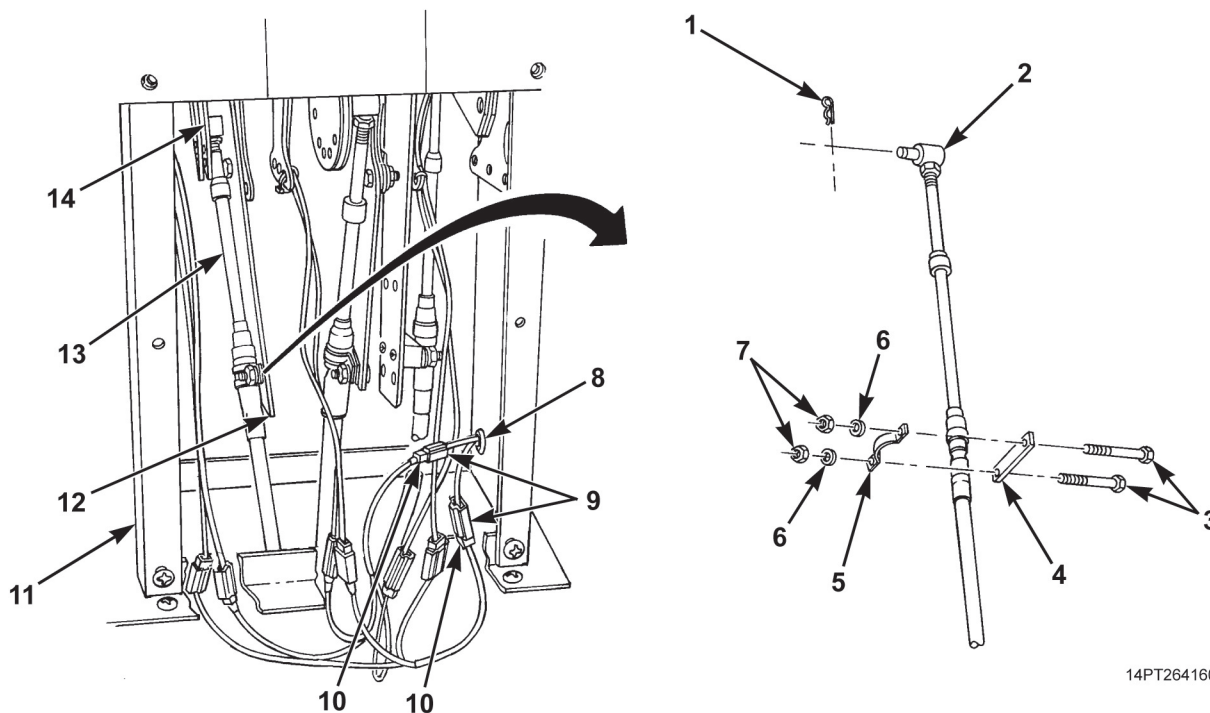
REMOVAL - Continued

4. Tag and disconnect shift tower jumper harness power and ground connectors (Figure 2, Item 10) from cab harness power and ground connectors (Figure 2, Item 9).
5. Remove grommet (Figure 2, Item 8) and cab harness power and ground connectors (Figure 2, Item 9) from shift tower (Figure 2, Item 11).

NOTE

To ease installation, note mounting position of cable pivot pins and hold-down clamps prior to disconnecting cables.

6. Place transmission selector lever in D (Down) position (TM 9-2320-363-10 or TM 9-2320-302-10).
7. Tag transmission shift cable (Figure 2, Item 13).
8. Remove two nuts (Figure 2, Item 7), washers (Figure 2, Item 6), screws (Figure 2, Item 3), clamp (Figure 2, Item 5), and spacer (Figure 2, Item 4) from bracket (Figure 2, Item 12).
9. Remove retaining pin (Figure 2, Item 1) from pivot pin (Figure 2, Item 2) and pivot pin from bracket (Figure 2, Item 14).

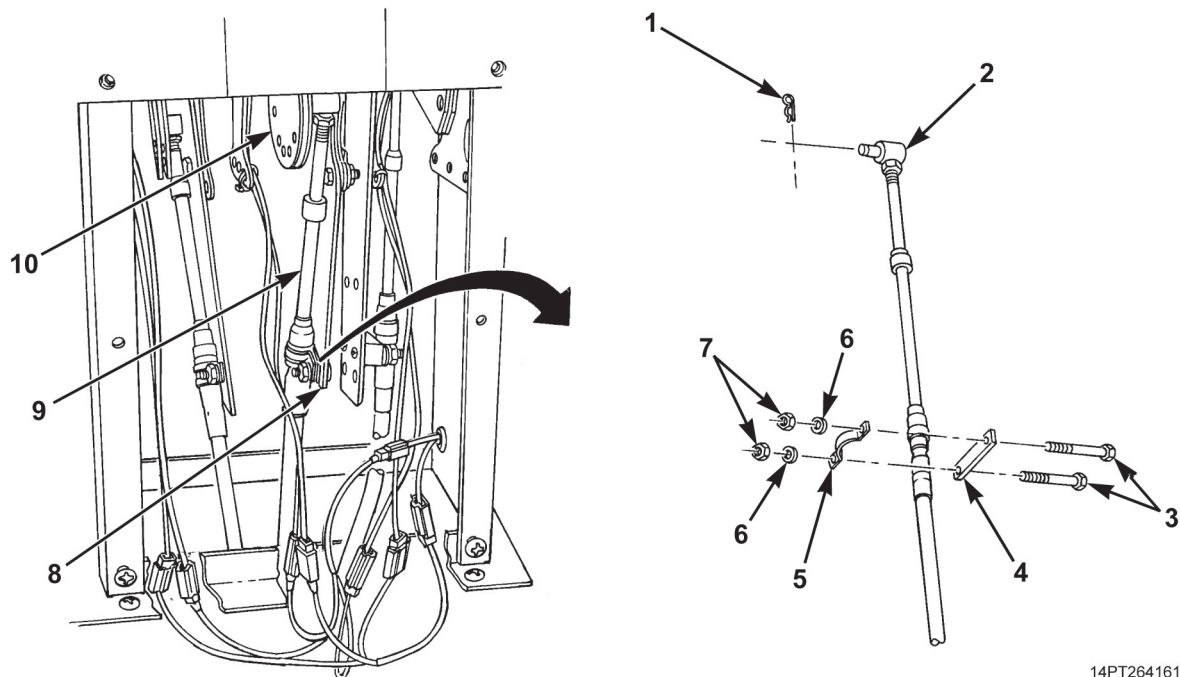


14PT264160

Figure 2. Transmission Shift Cable Disconnection.

REMOVAL - Continued

10. Place transfer case selector lever in N (Neutral) position (TM 9-2320-363-10 or TM 9-2320-302-10).
11. Tag transfer case shift cable (Figure 3, Item 9).
12. Remove two nuts (Figure 3, Item 7), washers (Figure 3, Item 6), screws (Figure 3, Item 3), clamp (Figure 3, Item 5), and spacer (Figure 3, Item 4) from bracket (Figure 3, Item 8).
13. Remove retaining pin (Figure 3, Item 1) from pivot pin (Figure 3, Item 2) and pivot pin from bracket (Figure 3, Item 10).

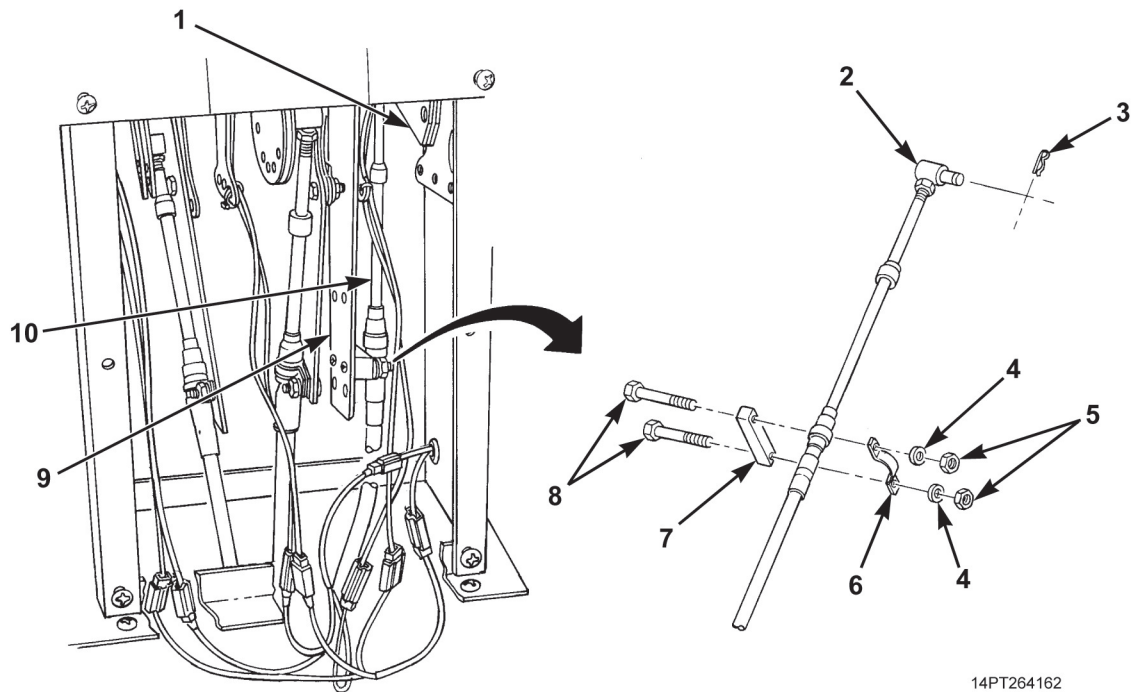


14PT264161

Figure 3. Transfer Case Shift Cable Disconnection.

REMOVAL - Continued

14. Place hydraulic control lever in DOWN position (WP 0005).
15. Tag hydraulic control lever cable (Figure 4, Item 10).
16. Remove two nuts (Figure 4, Item 5), washers (Figure 4, Item 4), screws (Figure 4, Item 8), clamp (Figure 4, Item 6), and spacer (Figure 4, Item 7) from bracket (Figure 4, Item 9).
17. Remove retaining pin (Figure 4, Item 3) from pivot pin (Figure 4, Item 2) and pivot pin from bracket (Figure 4, Item 1).



14PT264162

Figure 4. Hydraulic Control Lever Cable Disconnection.

REMOVAL - Continued

18. Remove four screws (Figure 5, Item 2) and shift tower (Figure 5, Item 1) from cab floor.
19. Remove transmission tunnel access cover (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-363-20-2).

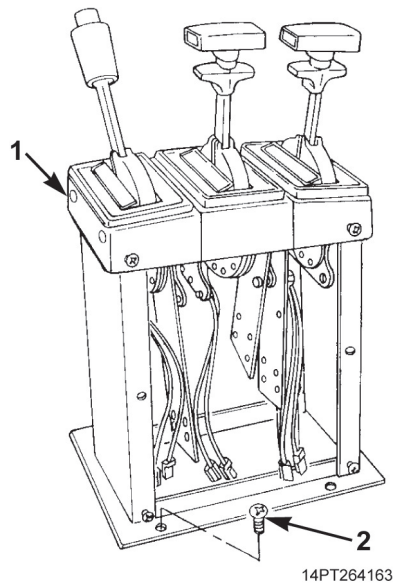


Figure 5. Shift Tower Removal.

REMOVAL - Continued

20. At hydraulic pump, turn jam nut (Figure 6, Item 2) over entire length of threads on cable (Figure 6, Item 1).
21. Remove two screws (Figure 6, Item 4), flatwashers (Figure 6, Item 6), and washers (Figure 6, Item 5) from flange clamp (Figure 6, Item 7).
22. Slide flange clamp (Figure 6, Item 7) away from bonnet (Figure 6, Item 3).
23. Unscrew bonnet (Figure 6, Item 3) and slide spacer (Figure 6, Item 8) along cable (Figure 6, Item 1) until cable bracket (Figure 6, Item 10) can be accessed.
24. Remove cotter pin (Figure 6, Item 13) and clevis pin (Figure 6, Item 9) from hydraulic pump actuator (Figure 6, Item 11).
25. Remove nut (Figure 6, Item 12) and cable bracket (Figure 6, Item 10).
26. Count number of threads from end of cable (Figure 6, Item 1) to nut (Figure 6, Item 14).
27. Remove nut (Figure 6, Item 14).

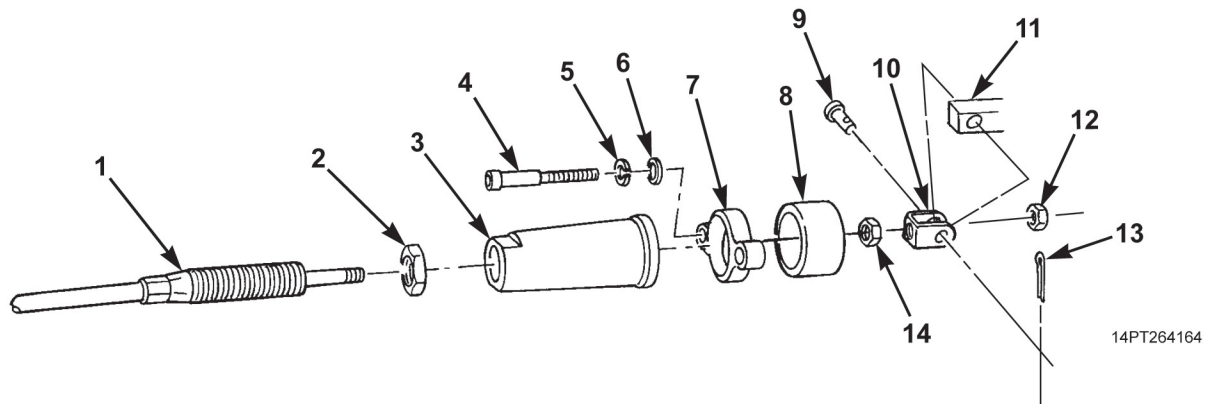


Figure 6. Hardware Removal.

END OF TASK

INSTALLATION

1. Install nut (Figure 7, Item 14) onto cable (Figure 7, Item 1) same number of threads as removal.
2. Slide cable bracket (Figure 7, Item 10) onto cable (Figure 7, Item 1) and install nut (Figure 7, Item 12).
3. Position cable bracket (Figure 7, Item 10) onto hydraulic pump actuator (Figure 7, Item 11) and install clevis pin (Figure 7, Item 9) and cotter pin (Figure 7, Item 13).
4. Slide spacer (Figure 7, Item 8), screw bonnet (Figure 7, Item 3), and slide flange clamp (Figure 7, Item 7) over cable bracket (Figure 7, Item 10).
5. Install two screws (Figure 7, Item 4), flatwashers (Figure 7, Item 6), and washers (Figure 7, Item 5) on flange clamp (Figure 7, Item 7).
6. Slide jam nut (Figure 7, Item 2) onto cable (Figure 7, Item 1).
7. Tighten jam nut (Figure 7, Item 2) against flange clamp (Figure 7, Item 7).
8. Install transmission tunnel access cover (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-363-20-2).

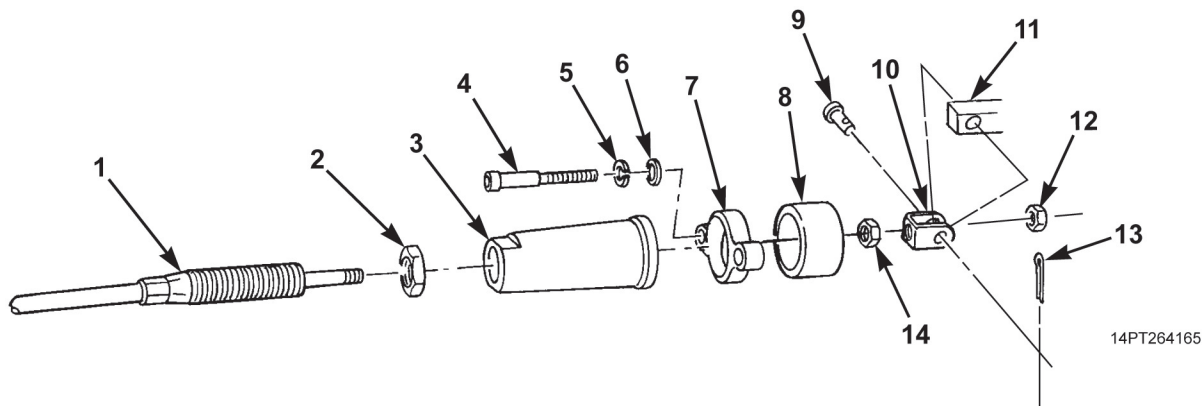


Figure 7. Hardware Installation.

INSTALLATION - Continued

9. Install four screws (Figure 8, Item 2) securing shift tower (Figure 8, Item 1) to cab floor.

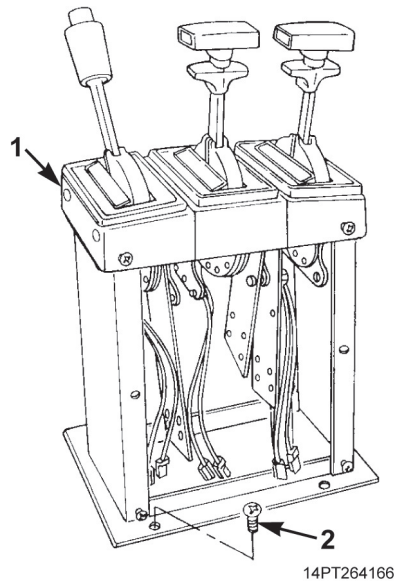


Figure 8. Shift Tower Installation.

INSTALLATION - Continued

10. Install spacer (Figure 9, Item 7), hydraulic control lever cable (Figure 9, Item 10), clamp (Figure 9, Item 6), two screws (Figure 9, Item 8), washers (Figure 9, Item 4), and nuts (Figure 9, Item 5) on bracket (Figure 9, Item 9).
11. Place hydraulic control lever in DOWN position (WP 0005).
12. By hand, push end of cable (Figure 9, Item 10) in as far as it will go and install pivot pin (Figure 9, Item 2) in same hole in bracket (Figure 9, Item 1) as removed. If this cannot be achieved, perform Step 14.
13. Release hand pressure from cable (Figure 9, Item 10). Force of hydraulic pump actuator will cause hydraulic control lever to N (Neutral) position.
14. Loosen nut at pivot pin (Figure 9, Item 2) and rotate pivot pin in desired direction. Tighten nut.
15. Repeat Steps 12 through 14 until pivot pin (Figure 9, Item 2) can be installed in same hole in bracket (Figure 9, Item 1) as removed with cable (Figure 9, Item 10) pushed in all the way. Install retaining pin (Figure 9, Item 3).

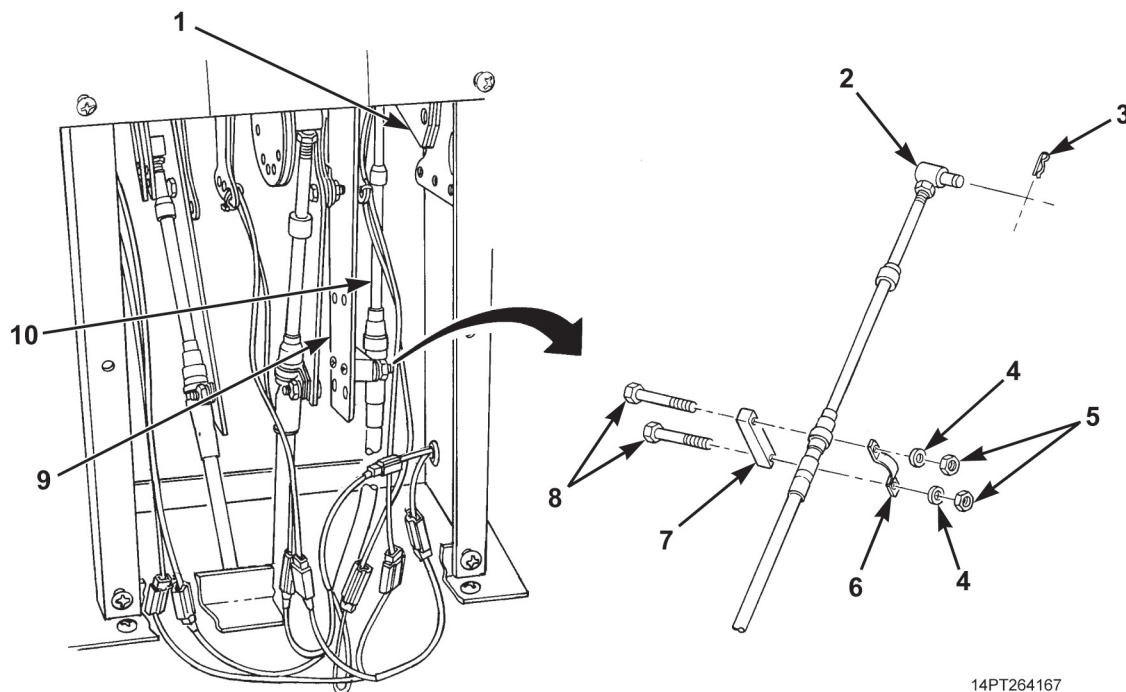
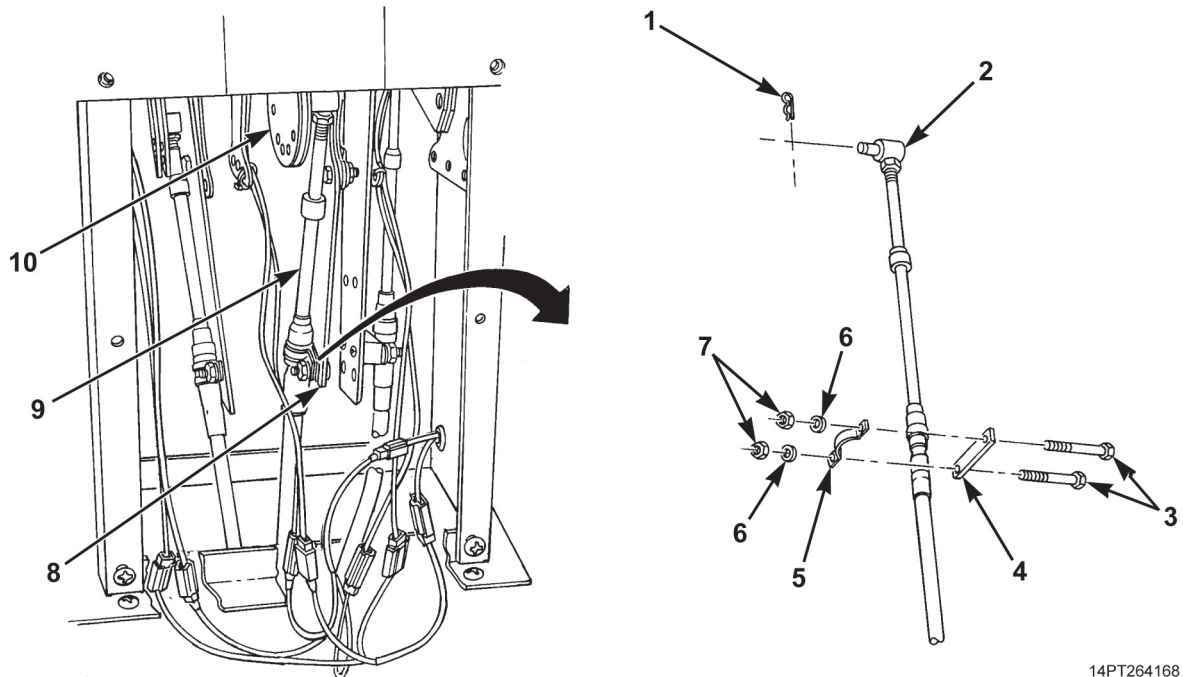


Figure 9. Hydraulic Control Lever Cable Connection.

INSTALLATION - Continued

16. With transfer case selector lever in N (Neutral) position, install pivot pin (Figure 10, Item 2) in bracket (Figure 10, Item 10) and secure with retaining pin (Figure 10, Item 1). Remove tag from cable (Figure 10, Item 9).
17. Install spacer (Figure 10, Item 4), cable (Figure 10, Item 9), clamp (Figure 10, Item 5), two screws (Figure 10, Item 3), washers (Figure 10, Item 6), and nuts (Figure 10, Item 7) on bracket (Figure 10, Item 8).

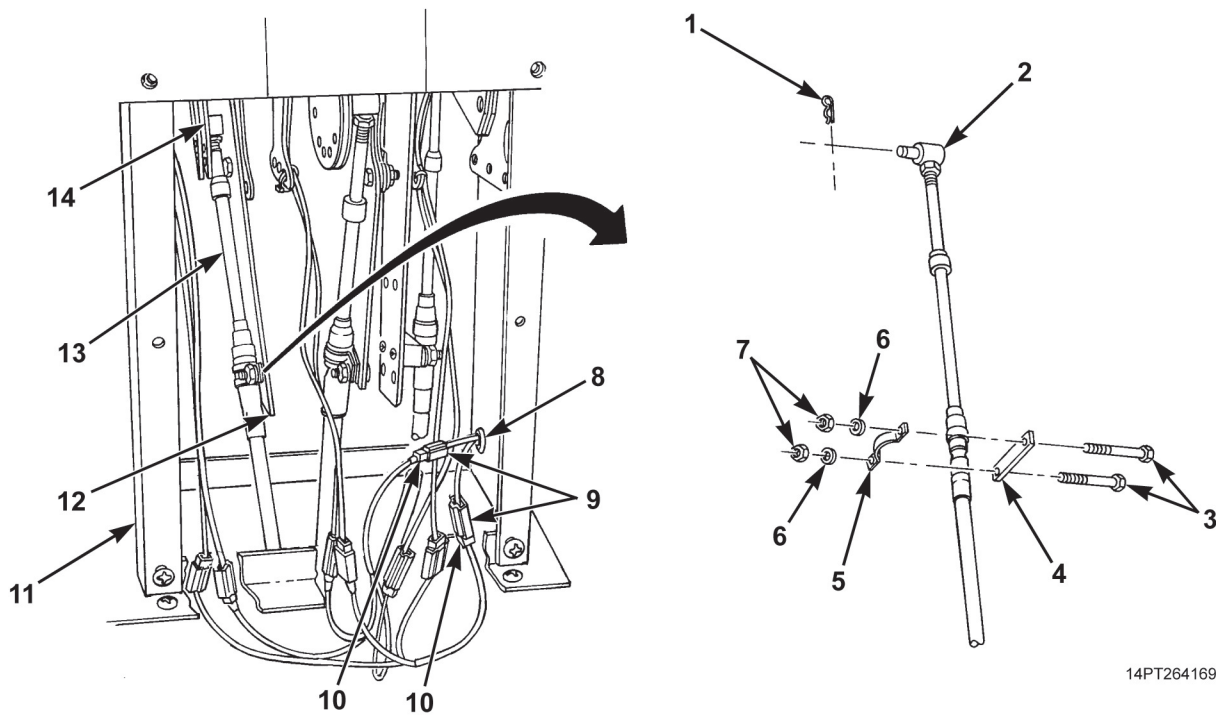


14PT264168

Figure 10. Transfer Case Shift Cable Connection.

INSTALLATION - Continued

18. With transmission selector lever in D (Down) position, install pivot pin (Figure 11, Item 2) in bracket (Figure 11, Item 14) and secure with retaining pin (Figure 11, Item 1). Remove tag from cable (Figure 11, Item 13).
19. Install spacer (Figure 11, Item 4), cable (Figure 11, Item 13), clamp (Figure 11, Item 5), two screws (Figure 11, Item 3), washers (Figure 11, Item 6), and nuts (Figure 11, Item 7) on bracket (Figure 11, Item 12).
20. Place transmission selector lever in N (Neutral) position (TM 9-2320-363-10 or TM 9-2320-302-10).
21. Feed cab harness power and ground connectors (Figure 11, Item 9) into shift tower (Figure 11, Item 11) and install grommet (Figure 11, Item 8).
22. Connect shift tower jumper harness power and ground connectors (Figure 11, Item 10) to cab harness power and ground connectors (Figure 11, Item 9). Remove tags.



14PT264169

Figure 11. Transmission Shift Cable Connection.

INSTALLATION - Continued

23. Remove two top and two bottom screws (Figure 12, Item 2) from front and rear of shift tower (Figure 12, Item 1).
24. Install six screws (Figure 12, Item 2) and rear access panel (Figure 12, Item 3).
25. Repeat Step 24 for front access panel.

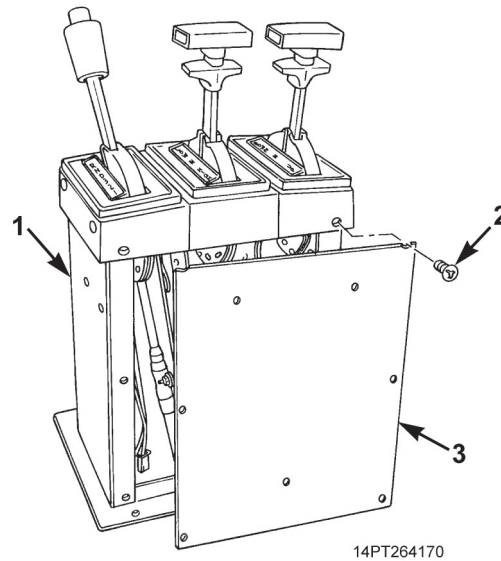


Figure 12. Shift Tower Cover Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Install MCS control unit (WP 0024) (M917A1 with MCS).
2. Install CTIS electronic control unit (ECU) (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-363-20-2).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE HYDRAULIC OIL FILTER ELEMENT REPLACEMENT

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Cap Set, Protective, Dust and Moisture
(WP 0113, Table 1, Item 2)

References

WP 0072
WP 0073

Equipment Condition

Dump body raised and supported on body props
(WP 0005)

Materials/Parts

Lubricating Oil (WP 0112, Table 1, Item 23)
Oil Filter Element (WP 0114, Table 1, Item 31)
O-Ring (WP 0114, Table 1, Item 7)
Wiping Rags (WP 0112, Table 1, Item 29)

WARNING

- NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY.
- DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin.
- Failure to comply may result in personnel injury or death.

REMOVAL**CAUTION**

Ports and hoses in reservoir should be plugged to prevent contamination of hydraulic system (WP 0072). Failure to comply may result in damage to equipment.

1. Loosen four screws (Figure 1, Item 2), rotate filter housing cover (Figure 1, Item 1), and lift cover from filter housing (Figure 1, Item 3).
2. Remove oil filter element (Figure 1, Item 4) and discard.
3. Remove O-ring (Figure 1, Item 5) from groove in filter housing cover (Figure 1, Item 1). Discard O-ring.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**INSTALLATION**

1. Coat new O-ring (Figure 1, Item 5) with lubricating oil and install in groove of filter housing cover (Figure 1, Item 1).
2. Install new oil filter element (Figure 1, Item 4) on filter housing (Figure 1, Item 3).
3. Install filter housing cover (Figure 1, Item 1) on filter housing (Figure 1, Item 3) with four screws (Figure 1, Item 2).

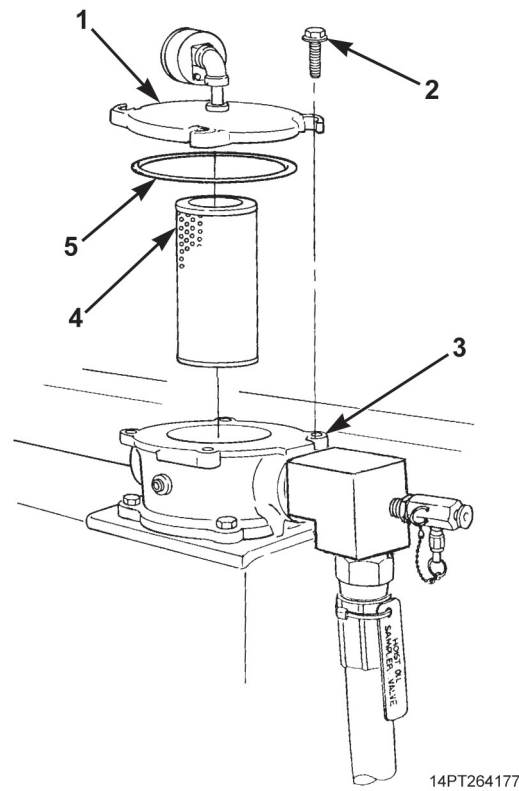
INSTALLATION - Continued

Figure 1. Hydraulic Oil Filter Element Replacement.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Remove body props and lower dump body (WP 0005).
2. Fill hydraulic reservoir as necessary (WP 0073).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
HYDRAULIC HOSES AND FITTINGS REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Cap Set, Protective, Dust and Moisture
(WP 0113, Table 1, Item 2)
Wrench, Adjustable, 5/8 in.
(WP 0113, Table 1, Item 15)

Materials/Parts

Antiseizing Tape (WP 0112, Table 1, Item 37)
Marker Tags (WP 0112, Table 1, Item 36)
Tiedown Straps (WP 0112, Table 1, Item 33)
Wiping Rags (WP 0112, Table 1, Item 29)

References

WP 0072

Equipment Condition

Dump body raised and supported on body props
(WP 0005)
Hydraulic oil drained (WP 0073)
Transmission tunnel access cover removed
(TM 9-2320-363-20-1, TM 9-2320-363-20-2,
TM 9-2320-302-20-1, or
TM 9-2320-302-20-2)

WARNING

NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

REMOVAL**WARNING**

DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin. Hydraulic oil is slippery and may cause falls. A suitable container should be used to catch any draining hydraulic fluid. Ensure that all spills are cleaned up immediately and disposed of in accordance with local procedures. Failure to comply may result in personnel injury or death.

CAUTION

Hoses and ports in hydraulic components should be plugged to prevent contamination of hydraulic system (WP 0072). Failure to comply may result in damage to equipment.

NOTE

- Hoses should be tagged before removal (WP 0072).
 - Remove hose support clamps and tiedown straps as necessary.
 - Perform Steps 1 through 3 to remove suction hose and fittings.
1. Loosen two clamps (Figure 1, Item 14) and remove suction hose (Figure 1, Item 15) and two clamps from adapter (Figure 1, Item 13) and hose barb (Figure 1, Item 16).
 2. Remove adapter (Figure 1, Item 13) from hydraulic pump (Figure 1, Item 12).
 3. Remove hose barb (Figure 1, Item 16) and elbow (Figure 1, Item 17) from bottom of hydraulic reservoir (Figure 1, Item 4).

NOTE

Perform Steps 4 through 7 to remove return hose and fittings.

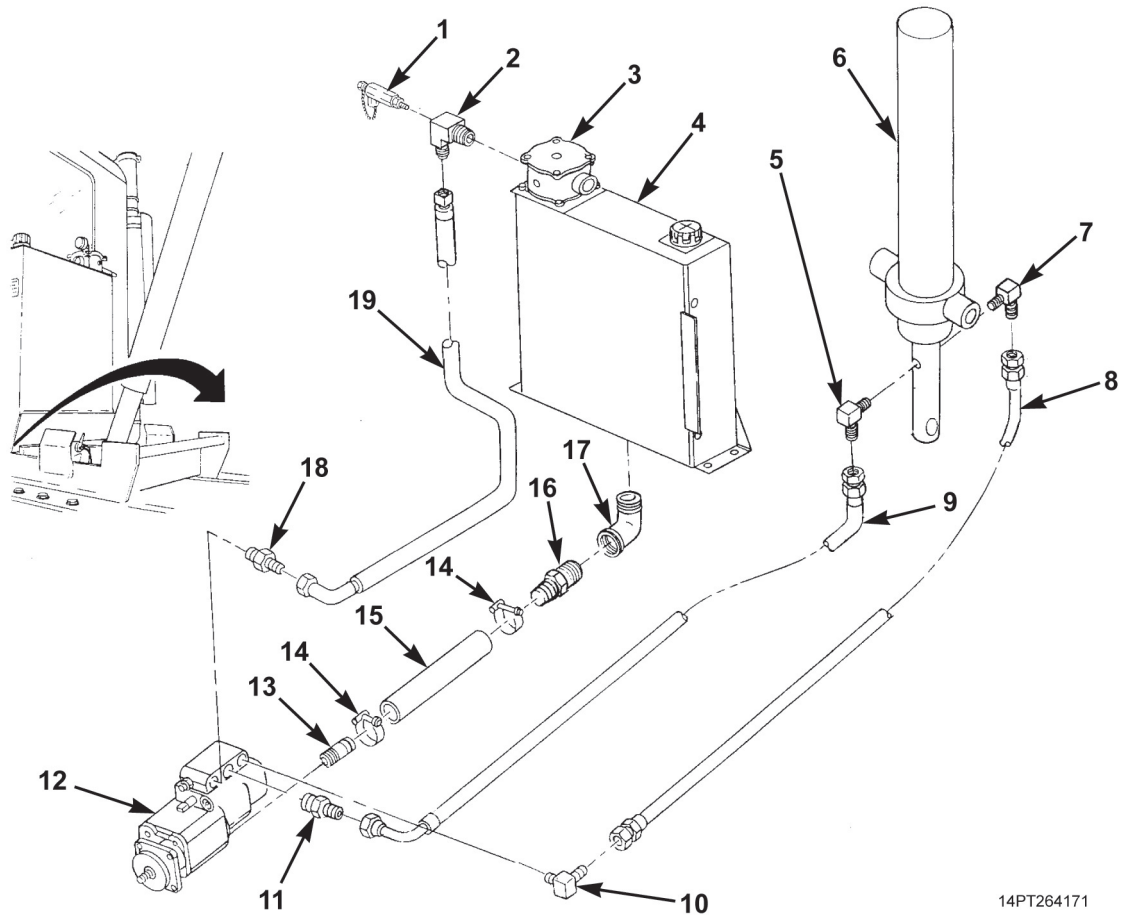
4. Remove return hose (Figure 1, Item 19) from adapter (Figure 1, Item 18) and tee (Figure 1, Item 2).
5. Remove adapter (Figure 1, Item 18) from hydraulic pump (Figure 1, Item 12).
6. Remove oil sampling valve (Figure 1, Item 1) from tee (Figure 1, Item 2).
7. Remove tee (Figure 1, Item 2) from filter housing (Figure 1, Item 3).

NOTE

Perform Steps 8 through 11 to remove two hydraulic cylinder hoses and fittings.

8. Remove hose (Figure 1, Item 9) from adapter (Figure 1, Item 11) and elbow (Figure 1, Item 5).
9. Remove hose (Figure 1, Item 8) from elbow (Figure 1, Item 10) and elbow (Figure 1, Item 7).
10. Remove adapter (Figure 1, Item 11) and elbow (Figure 1, Item 10) from hydraulic pump (Figure 1, Item 12).
11. Remove elbow (Figure 1, Item 5) and elbow (Figure 1, Item 7) from hydraulic cylinder (Figure 1, Item 6).

REMOVAL - Continued



14PT264171

Figure 1. Hydraulic Hoses and Fittings Removal.

END OF TASK

CLEANING AND INSPECTION

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

INSTALLATION**NOTE**

- Use antiseizing tape on all pipe threads (WP 0072).
 - Install hose support clamps and new tiedown straps as necessary.
 - Perform Steps 1 through 4 to install two hydraulic cylinder hoses and fittings.
1. Install elbow (Figure 2, Item 5) and elbow (Figure 2, Item 7) on hydraulic cylinder (Figure 2, Item 6).
 2. Install elbow (Figure 2, Item 10) and adapter (Figure 2, Item 11) on hydraulic pump (Figure 2, Item 12).
 3. Install hose (Figure 2, Item 8) on elbow (Figure 2, Item 7) and elbow (Figure 2, Item 10).
 4. Install hose (Figure 2, Item 9) on adapter (Figure 2, Item 11) and elbow (Figure 2, Item 5).

NOTE

Perform Steps 5 through 7 to install suction hose.

5. Install elbow (Figure 2, Item 17) and hose barb (Figure 2, Item 16) on bottom of hydraulic reservoir (Figure 2, Item 4).
6. Install adapter (Figure 2, Item 13) on hydraulic pump (Figure 2, Item 12).
7. Install suction hose (Figure 2, Item 15) and two clamps (Figure 2, Item 14) on adapter (Figure 2, Item 13) and hose barb (Figure 2, Item 16). Tighten clamps.

NOTE

Perform Steps 8 through 11 to install return hose and fittings.

8. Install tee (Figure 2, Item 2) on filter housing (Figure 2, Item 3).
9. Install oil sampling valve (Figure 2, Item 1) on tee (Figure 2, Item 2).
10. Install adapter (Figure 2, Item 18) on hydraulic pump (Figure 2, Item 12).
11. Install return hose (Figure 2, Item 19) on adapter (Figure 2, Item 18) and tee (Figure 2, Item 2).

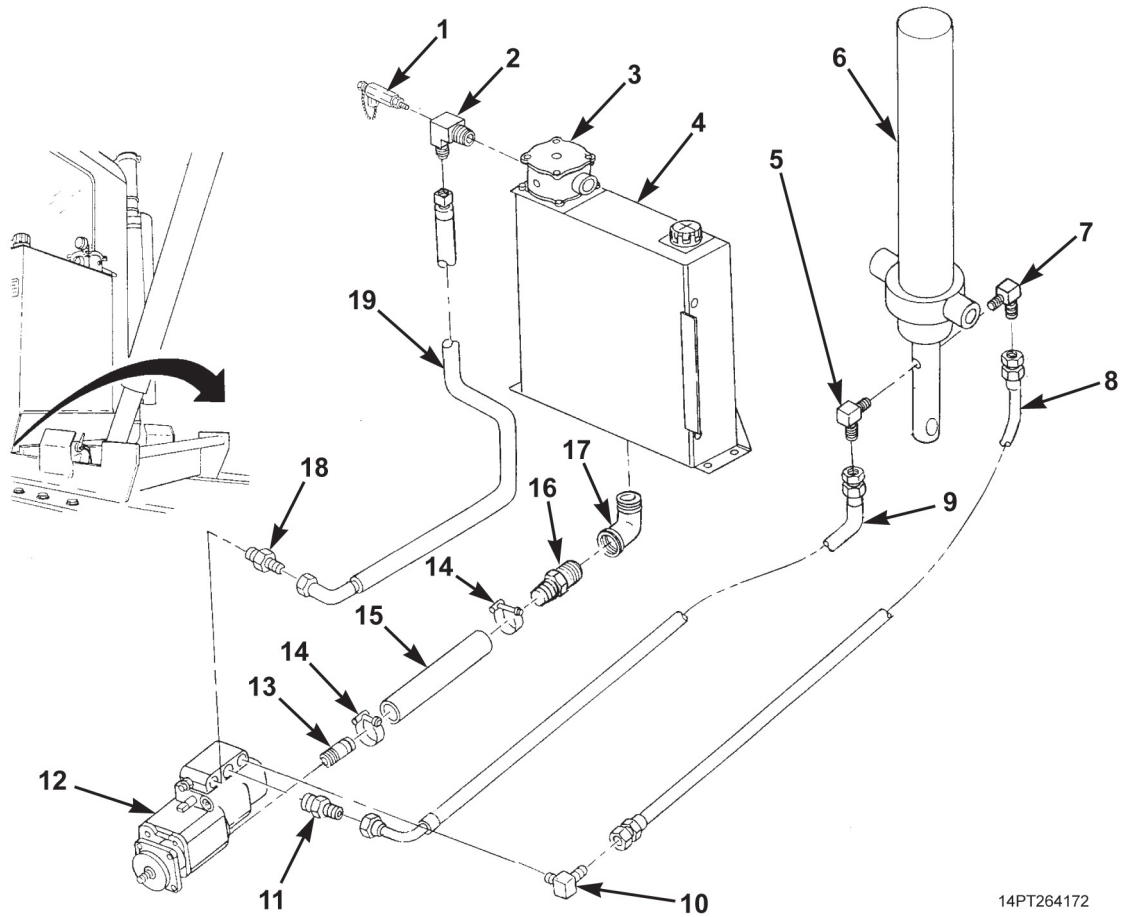
INSTALLATION - Continued

Figure 2. Hydraulic Hoses and Fittings Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

1. Install transmission tunnel access cover (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2).
2. Fill hydraulic reservoir (WP 0073).
3. Remove body props and lower dump body (WP 0005).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
HYDRAULIC CYLINDER REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Cap Set, Protective, Dust and Moisture
(WP 0113, Table 1, Item 2)
Engine and Transmission Sling: 3-ton
(WP 0113, Table 1, Item 9)
Suitable Lifting Device

Materials/Parts

Locknut Qty: 6 (WP 0114, Table 1, Item 18)
Locknut (WP 0114, Table 1, Item 24)
Marker Tags (WP 0112, Table 1, Item 36)
Wiping Rags (WP 0112, Table 1, Item 29)

Personnel Required

(3)

References

WP 0072

Equipment Condition

Cab shield removed (WP 0039)
Dump body raised and supported on body props
(WP 0005)
Hydraulic oil drained (WP 0016)

WARNING

NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

REMOVAL**WARNING**

DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin. Hydraulic oil is slippery and may cause falls. A suitable container should be used to catch any draining hydraulic fluid. Ensure that all spills are cleaned up immediately and disposed of in accordance with local procedures. Failure to comply may result in personnel injury or death.

CAUTION

Hoses and ports in hydraulic components should be plugged to prevent contamination of hydraulic system (WP 0072). Failure to comply may result in damage to equipment.

NOTE

Hoses should be tagged before removal (WP 0072).

1. At lower end of hydraulic cylinder (Figure 1, Item 2), disconnect hose assemblies (Figure 1, Item 7) from elbows (Figure 1, Item 6). Remove elbows.

WARNING

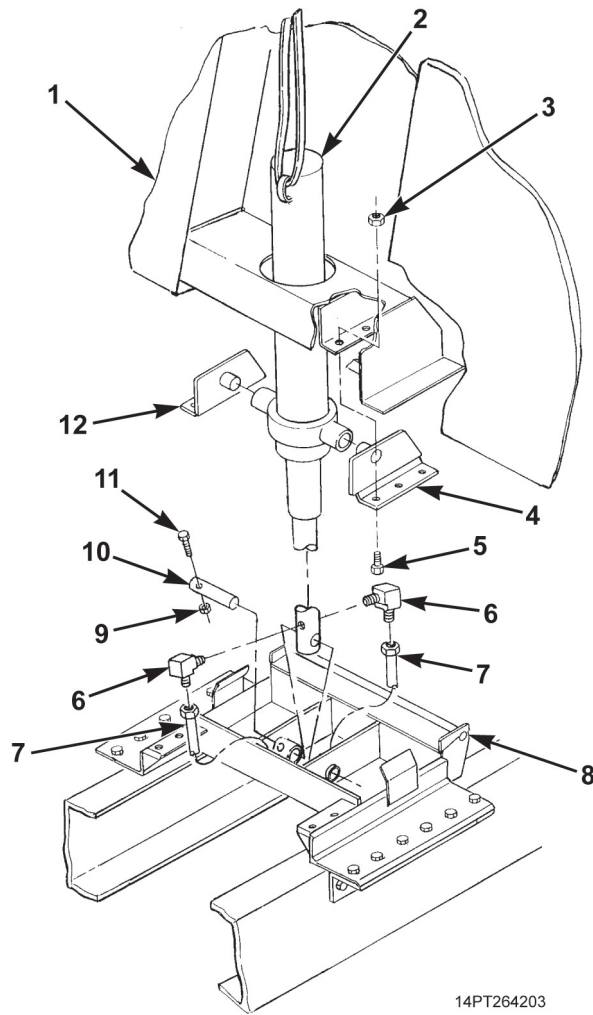
Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

2. Install lifting sling through loop in hydraulic cylinder (Figure 1, Item 2) and attach lifting sling to lifting device.
3. Remove locknut (Figure 1, Item 9), screw (Figure 1, Item 11), and pivot pin (Figure 1, Item 10) from cylinder support frame (Figure 1, Item 8) and hydraulic cylinder (Figure 1, Item 2). Discard locknut.
4. While holding hydraulic cylinder (Figure 1, Item 2) securely, remove six locknuts (Figure 1, Item 3), screws (Figure 1, Item 5), and left and right mounting brackets (Figure 1, Items 4 and 12) from dump body (Figure 1, Item 1). Discard locknuts.
5. Remove left and right mounting brackets (Figure 1, Items 4 and 12) from hydraulic cylinder (Figure 1, Item 2).

REMOVAL - Continued**WARNING**

- Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device.
 - Hydraulic cylinder sleeves may extend downward as hydraulic cylinder is lifted. Expect sleeve movement any time hydraulic cylinder is handled.
 - Failure to comply may result in personnel injury, death, and/or damage to equipment.
6. Remove hydraulic cylinder (Figure 1, Item 2) from vehicle. Move hydraulic cylinder to a safe work area.

REMOVAL - Continued



14PT264203

Figure 1. Hydraulic Cylinder Removal.

END OF TASK

CLEANING AND INSPECTION

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

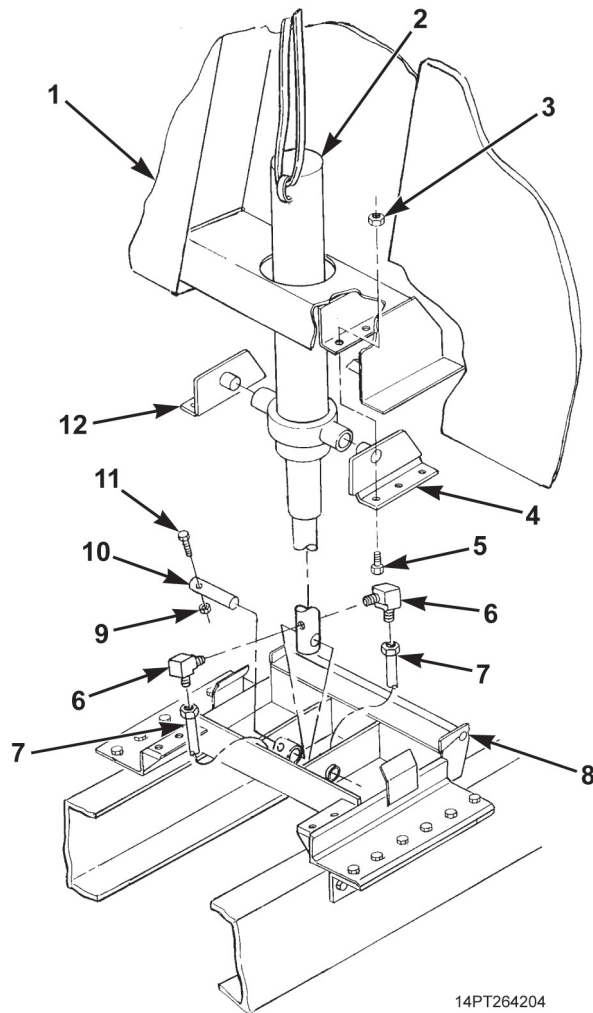
END OF TASK

INSTALLATION**WARNING**

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

1. Install lifting sling through loop in hydraulic cylinder (Figure 2, Item 2) and attach lifting sling to lifting device.
2. Position hydraulic cylinder (Figure 2, Item 2) on vehicle.
3. While holding hydraulic cylinder (Figure 2, Item 2) securely, position left and right mounting brackets (Figure 2, Items 4 and 12) to hydraulic cylinder (Figure 2, Item 2).
4. Install left and right mounting brackets (Figure 2, Items 4 and 12) on dump body (Figure 2, Item 1) with six screws (Figure 2, Item 5) and new locknuts (Figure 2, Item 3).
5. Install lower end of hydraulic cylinder (Figure 2, Item 2) on cylinder support frame (Figure 2, Item 8) with pivot pin (Figure 2, Item 10), screw (Figure 2, Item 11), and new locknut (Figure 2, Item 9).
6. Remove lifting sling from lifting device and hydraulic cylinder (Figure 2, Item 2).
7. Install two elbows (Figure 2, Item 6) on lower end of hydraulic cylinder (Figure 2, Item 2). Connect two hose assemblies (Figure 2, Item 7) to elbows.

INSTALLATION - Continued



14PT264204

Figure 2. Hydraulic Cylinder Installation.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Fill hydraulic reservoir (WP 0016).
2. Remove body props and lower dump body (WP 0005).
3. Install cab shield (WP 0039).

END OF TASK

END OF WORK PACKAGE

**FIELD MAINTENANCE
HYDRAULIC CYLINDER REPAIR**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Bearing and Bushing Inserter and Remover
(4-inch seal installation tool)
(WP 0113, Table 1, Item 5)
Engine and Transmission Sling: 3-ton
(WP 0113, Table 1, Item 9)
Hydraulic Cylinder Disassembly Tool (WP 0075)
Retaining Ring Pliers (WP 0113, Table 1, Item 7)
Seal Inserter (3-inch seal installation tool)
(WP 0113, Table 1, Item 3)
Seal Inserter (5-inch seal installation tool)
(WP 0113, Table 1, Item 4)
Suitable Lifting Device

Materials/Parts (cont.)

Lubricating Oil (WP 0112, Table 1, Item 23)
Marker Tags (WP 0112, Table 1, Item 36)
Seal Parts Kit (WP 0114, Table 1, Item 2)
Wiping Rags (WP 0112, Table 1, Item 29)

Personnel Required

(2)

References

WP 0072

Equipment Condition

Hydraulic cylinder removed (WP 0064)

Materials/Parts

Electrical Insulation Tape
(WP 0112, Table 1, Item 39)

WARNING

- Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device.
- Hydraulic cylinder sleeves may extend downward as hydraulic cylinder is lifted. Expect sleeve movement any time hydraulic cylinder is handled.
- DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin. Hydraulic oil is slippery and may cause falls. A suitable container should be used to catch any draining hydraulic fluid. Ensure that all spills are cleaned up immediately and disposed of in accordance with local procedures.
- Eye protection must be worn when removing or installing snap rings or retaining rings. Failure to comply may result in personnel injury.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

CAUTION

Perform hydraulic cylinder repair in a clean work area to prevent contaminants from causing equipment failure. Failure to comply may result in damage to equipment.

DISASSEMBLY

1. Using overhead lifting device with nylon sling, move hydraulic cylinder assembly to a vertical position with plunger (Figure 1, Item 1) facing upward. Securely block hydraulic cylinder in vertical position.

NOTE

Perform Steps 2 through 10 to remove plunger from sleeve.

2. Remove retaining ring (Figure 1, Item 2) from sleeve (Figure 1, Item 3).

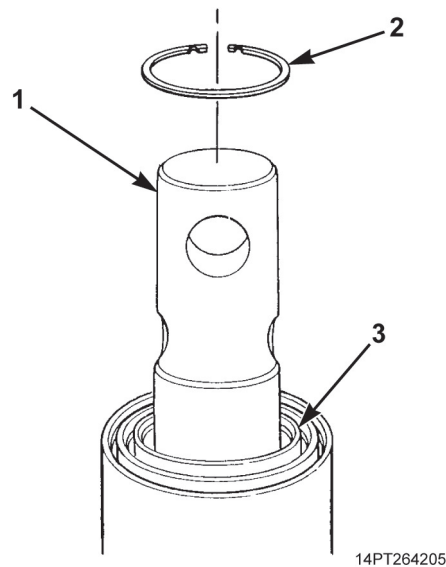


Figure 1. Retaining Ring Removal.

NOTE

- Retaining rings, piston rings, seals, wear rings, guide rings, wipers, and wiper retainers should be noted by name and installed position immediately after removal and replacement parts from parts kit tagged to aid in installation.
 - Wiper retainer and seal should come out as plunger is lifted a few inches. If not, apply a three-inch strip of tape at a 45-degree angle to a cleaned section of plunger. Lower and again lift plunger to remove wiper retainer and seal.
3. Lift plunger (Figure 2, Item 1) to expose wiper retainer (Figure 2, Item 3) and seal (Figure 2, Item 4). Lower plunger and remove nylon sling. Remove wiper retainer and seal from plunger. Remove wiper (Figure 2, Item 2) from wiper retainer. Discard wiper, wiper retainer, and seal. Remove tape from plunger, if used.

DISASSEMBLY - Continued

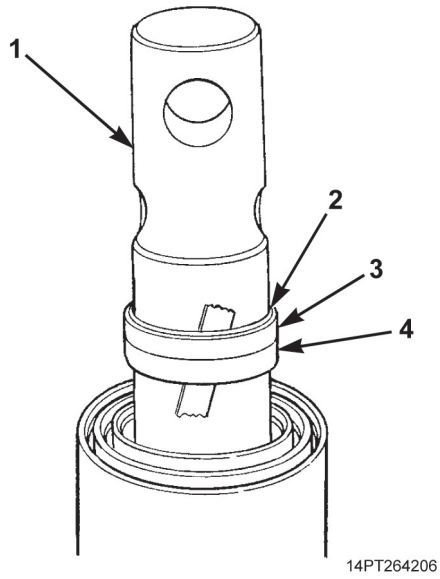


Figure 2. Wiper Components Removal.

4. Remove spiral retaining ring (Figure 3, Item 1) from sleeve (Figure 3, Item 2). Discard spiral retaining ring.

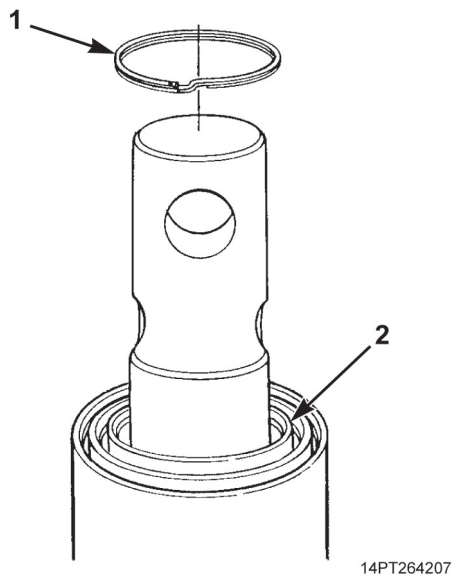


Figure 3. Spiral Retaining Ring Removal.

DISASSEMBLY - Continued

5. Using overhead lifting device with nylon sling, raise plunger (Figure 4, Item 1) a few inches and apply tape to a cleaned section of plunger.
6. Lower and lift plunger (Figure 4, Item 1) to expose bottom guide ring (Figure 4, Item 2). Remove tape.
7. Lower plunger (Figure 4, Item 1) and remove nylon sling. Remove bottom guide ring (Figure 4, Item 2) from plunger. Discard bottom guide ring.

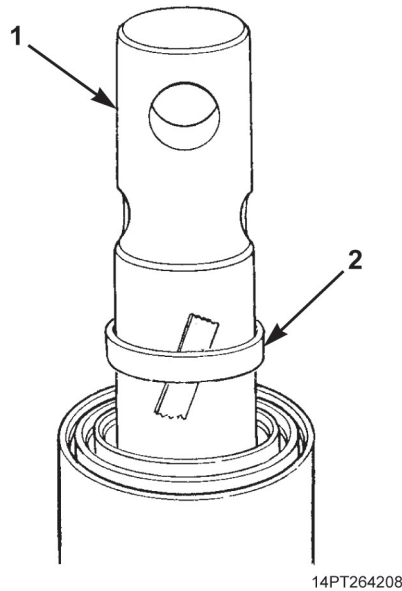


Figure 4. Guide Ring Removal.

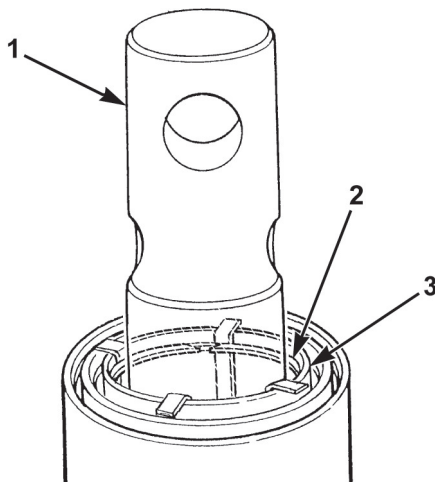
8. Using two small screwdrivers, remove bottom retaining ring (Figure 5, Item 3) from groove of sleeve (Figure 5, Item 2). Position four hydraulic cylinder disassembly tools, equally spaced, between bottom retaining ring and sleeve.

NOTE

Hydraulic cylinder disassembly tools will fall free as plunger, with bottom retaining ring, is removed from sleeve.

9. Remove plunger (Figure 5, Item 1) from sleeve (Figure 5, Item 3). Remove nylon sling and bottom retaining ring (Figure 5, Item 2) from plunger.

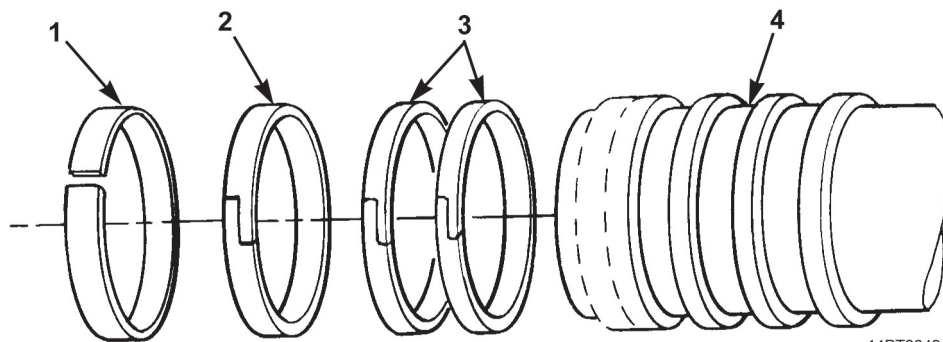
DISASSEMBLY - Continued



14PT264209

Figure 5. Bottom Retaining Ring Removal.

10. Remove wear ring (Figure 6, Item 1), piston ring (Figure 6, Item 2), and two piston rings (Figure 6, Item 3) from other end of plunger (Figure 6, Item 4). Discard wear ring.



14PT264210

Figure 6. Wear Ring and Piston Ring Removal.

DISASSEMBLY - Continued**NOTE**

Perform Steps 11 through 18 to remove next sleeve.

11. Remove retaining ring (Figure 7, Item 1) from sleeve (Figure 7, Item 2).

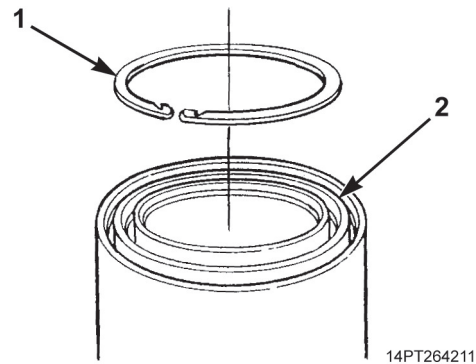


Figure 7. Retaining Ring Removal.

NOTE

Hydraulic cylinder may be positioned horizontally and tipped to extend sleeve. Wiper retainer and seal should come out as sleeve is extended a few inches. If not, apply a three-inch strip of tape at a 45 degree angle to a cleaned section of sleeve. Retract and again extend sleeve to remove wiper retainer and seal.

12. Extend sleeve (Figure 8, Item 1) to expose wiper retainer (Figure 8, Item 3) and seal (Figure 8, Item 4). Remove wiper retainer and seal from sleeve. Remove wiper (Figure 8, Item 2) from wiper retainer. Discard wiper, wiper retainer, and seal. Remove tape from sleeve, if used.

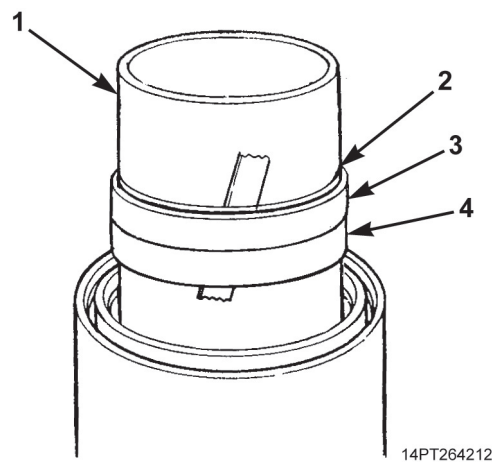


Figure 8. Wiper Component Removal.

DISASSEMBLY - Continued

13. Retract sleeve (Figure 9, Item 1). Remove spiral retaining ring (Figure 9, Item 2) from sleeve (Figure 9, Item 3). Discard spiral retaining ring.

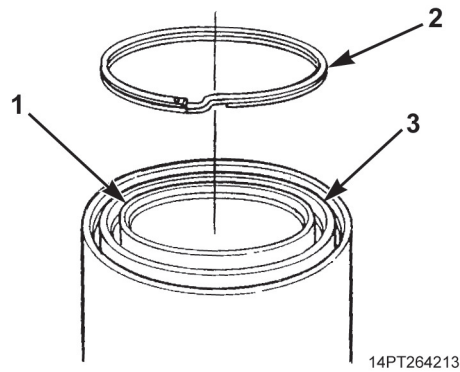


Figure 9. Spiral Retaining Ring Removal.

14. Extend sleeve (Figure 10, Item 1) a few inches and apply tape to a cleaned section of sleeve.
15. Retract and extend sleeve (Figure 10, Item 1) to expose bottom guide ring (Figure 10, Item 2). Remove and discard bottom guide ring.

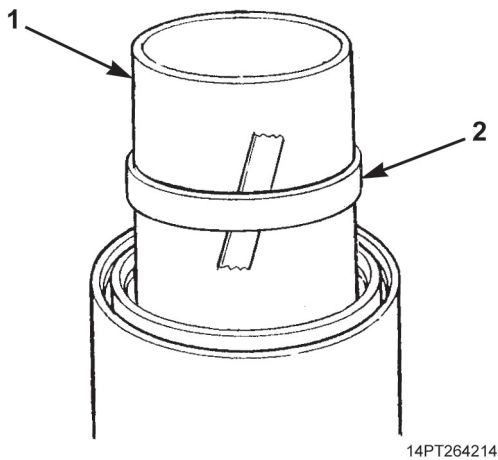


Figure 10. Bottom Guide Ring Removal.

DISASSEMBLY - Continued

16. Using two small screwdrivers, remove bottom retaining ring (Figure 11, Item 3) from groove of sleeve (Figure 11, Item 2). Position four hydraulic cylinder disassembly tools, equally spaced, between bottom retaining ring and sleeve.

NOTE

Hydraulic cylinder disassembly tools will fall free as sleeve, with bottom retaining ring, is removed from larger sleeve.

17. Remove sleeve (Figure 11, Item 1) from sleeve (Figure 11, Item 2). Remove bottom retaining ring (Figure 11, Item 3) from sleeve.

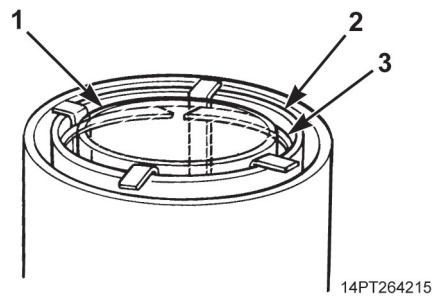


Figure 11. Sleeve Removal.

18. Remove wear ring (Figure 12, Item 1), piston ring (Figure 12, Item 2), and two piston rings (Figure 12, Item 3) from other end of sleeve (Figure 12, Item 4). Discard wear ring.

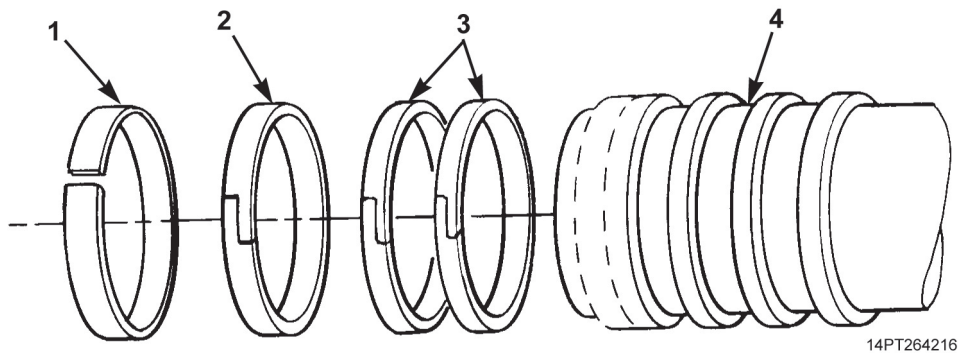


Figure 12. Wear Ring and Piston Ring Removal From Sleeve.

DISASSEMBLY - Continued**NOTE**

Perform Steps 19 through 26 to remove next sleeve.

19. Remove retaining ring (Figure 13, Item 1) from barrel (Figure 13, Item 2).

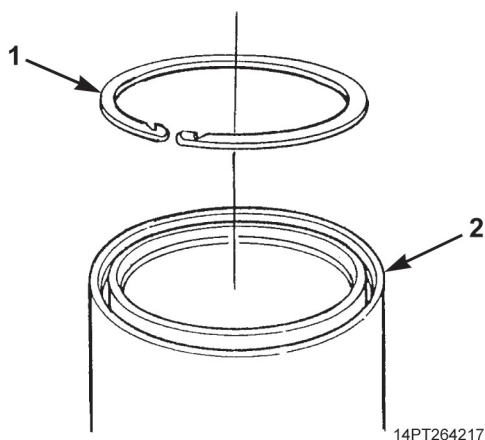


Figure 13. Retaining Ring Removal From Barrel.

NOTE

Wiper retainer and seal should come out as sleeve is extended a few inches. If not, apply a three-inch strip of tape at a 45-degree angle to a cleaned section of sleeve. Retract and again extend sleeve to remove wiper retainer and seal.

20. Extend sleeve (Figure 14, Item 1) to expose wiper retainer (Figure 14, Item 3) and seal (Figure 14, Item 4). Remove wiper retainer and seal from sleeve. Remove wiper (Figure 14, Item 2) from wiper retainer. Discard wiper, wiper retainer, and seal. Remove tape from sleeve, if used.

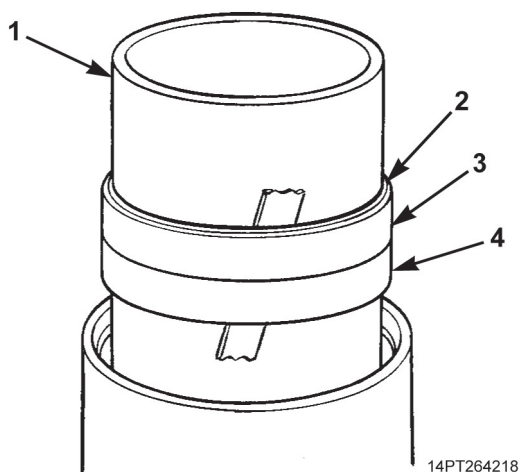


Figure 14. Wiper, Wiper Retainer, and Seal Removal.

DISASSEMBLY - Continued

21. Retract sleeve (Figure 15, Item 1). Remove spiral retaining ring (Figure 15, Item 2) from barrel (Figure 15, Item 3). Discard spiral retaining ring.

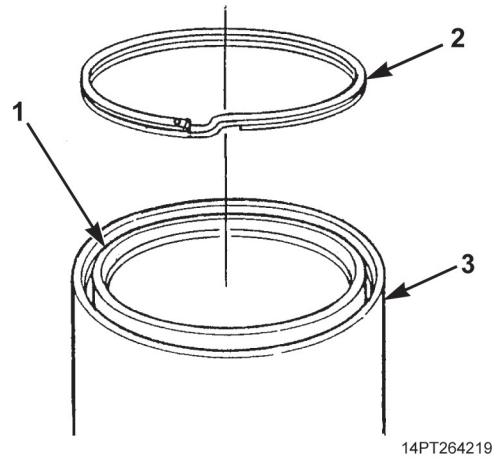


Figure 15. Spiral Retaining Ring Removal.

22. Extend sleeve (Figure 16, Item 1) a few inches and apply tape to a cleaned section of sleeve.
23. Retract and extend sleeve (Figure 16, Item 1) to expose bottom guide ring (Figure 16, Item 2). Remove and discard bottom guide ring.

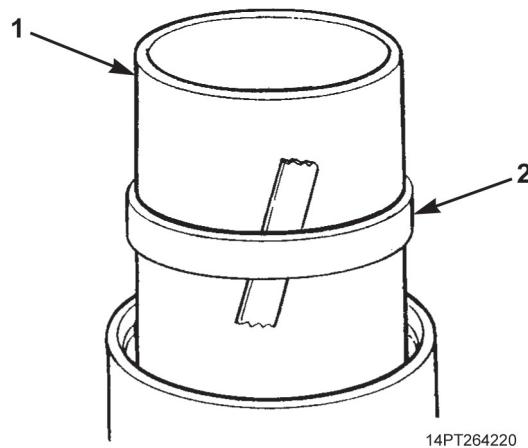


Figure 16. Bottom Guide Ring Removal.

DISASSEMBLY - Continued

24. Using two small screwdrivers, remove bottom retaining ring (Figure 17, Item 3) from groove of barrel (Figure 17, Item 2). Position four hydraulic cylinder disassembly tools, equally spaced, between bottom retaining ring and barrel.

NOTE

Hydraulic cylinder disassembly tools will fall free as sleeve, with bottom retaining ring, is removed from barrel.

25. Remove sleeve (Figure 17, Item 1) from barrel (Figure 17, Item 2). Remove bottom retaining ring (Figure 17, Item 3) from sleeve.

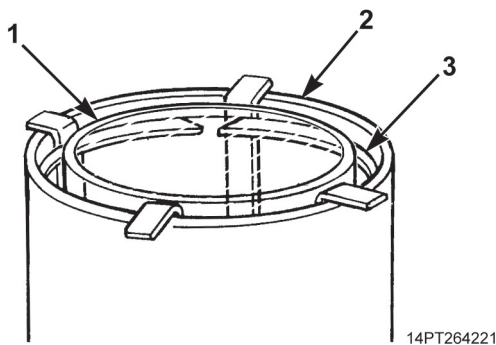


Figure 17. Sleeve Removal From Barrel.

26. Remove wear ring (Figure 18, Item 1) and two piston rings (Figure 18, Item 2) from other end of sleeve (Figure 18, Item 3). Discard wear ring.

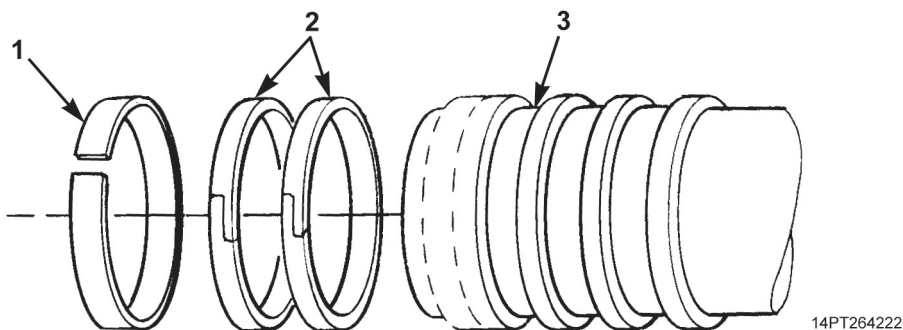


Figure 18. Wear Ring and Piston Ring Removal.

DISASSEMBLY - Continued

27. If worn or damaged, remove two bushings (Figure 19, Item 4) from barrel (Figure 19, Item 1) and bushing (Figure 19, Item 3) from plunger (Figure 19, Item 2).

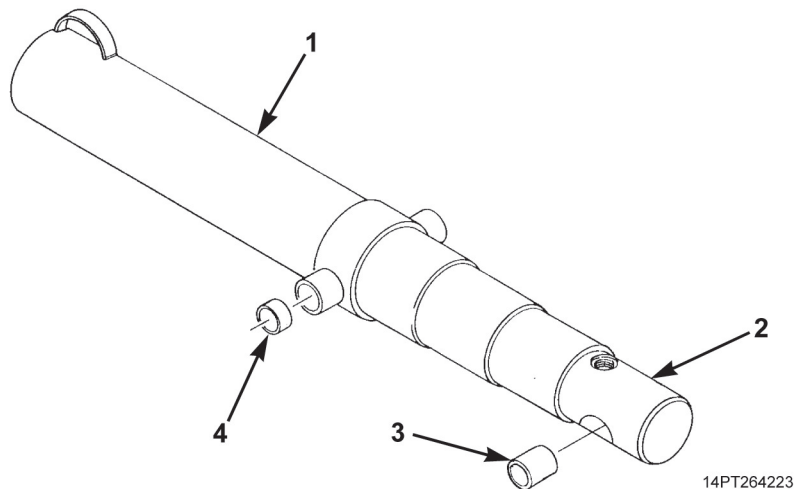


Figure 19. Bushing Removal.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK**ASSEMBLY****WARNING**

- Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device.
- Hydraulic cylinder sleeves may extend downward as hydraulic cylinder is lifted. Expect sleeve movement any time hydraulic cylinder is handled.
- Failure to comply may result in personnel injury, death, and/or damage to equipment.

ASSEMBLY - Continued**NOTE**

- Apply a light coat of lubricating oil to surfaces of components as they are assembled.
- Assemble hydraulic cylinder starting with the largest diameter sleeve and working inward.

1. If removed, install two bushings (Figure 20, Item 4) in barrel (Figure 20, Item 1) and bushing (Figure 20, Item 3) in plunger (Figure 20, Item 2).

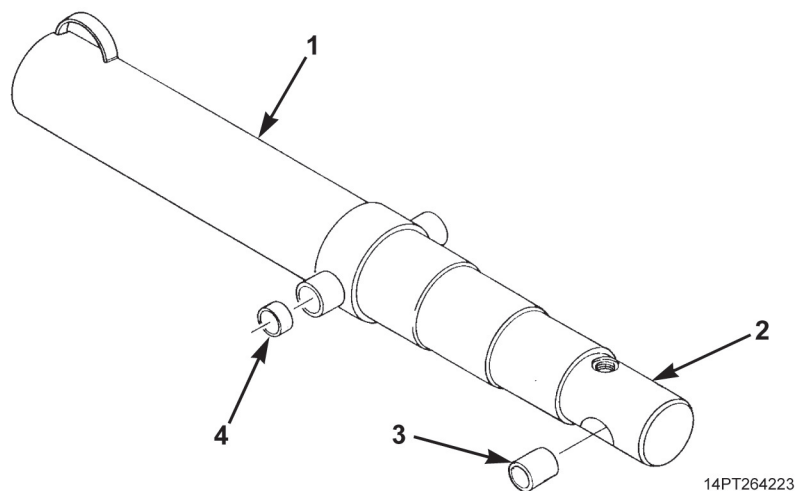


Figure 20. Bushing Installation.

NOTE

Perform Steps 2 through 7 to install largest diameter sleeve.

2. With hydraulic cylinder components in horizontal position, install two piston rings (Figure 21, Item 2) and new wear ring (Figure 21, Item 1) on sleeve (Figure 21, Item 3).

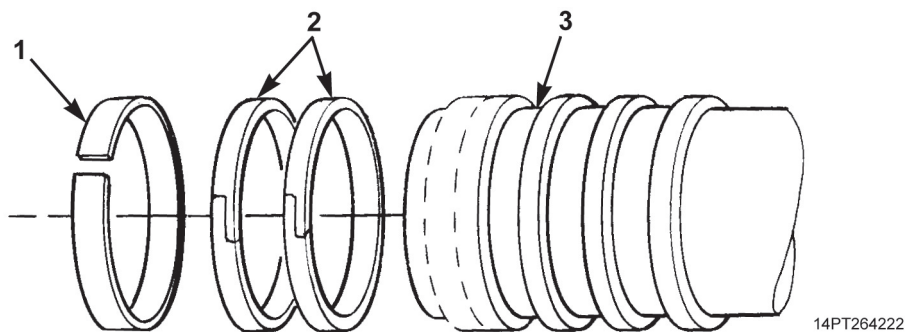


Figure 21. Wear Ring and Piston Ring Installation.

ASSEMBLY - Continued

3. Install sleeve (Figure 22, Item 1) in barrel (Figure 22, Item 3) and install bottom retaining ring (Figure 22, Item 2) in barrel using 5-inch seal installation tool.

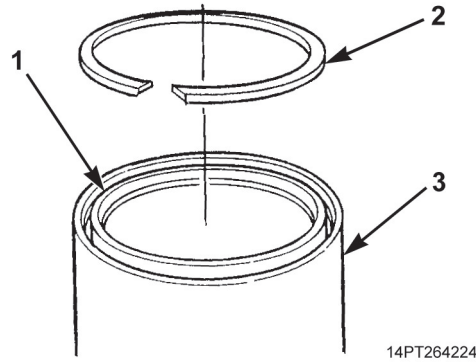


Figure 22. Sleeve Installation.

4. Install new bottom guide ring (Figure 23, Item 6) and new spiral retaining ring (Figure 23, Item 5).
5. Install new seal (Figure 23, Item 4).
6. Install new wiper (Figure 23, Item 2) in new wiper retainer (Figure 23, Item 3) and install wiper retainer.
7. Install retaining ring (Figure 23, Item 1).

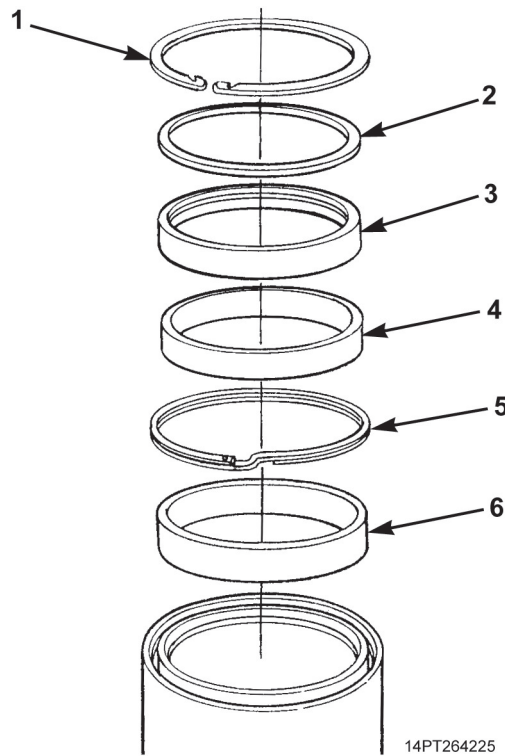


Figure 23. Ring, Seal, and Wiper Installation.

ASSEMBLY - Continued**NOTE**

Perform Steps 8 through 13 to install next sleeve.

8. Install two piston rings (Figure 24, Item 3), piston ring (Figure 24, Item 2), and new wear ring (Figure 24, Item 1) on sleeve (Figure 24, Item 4).

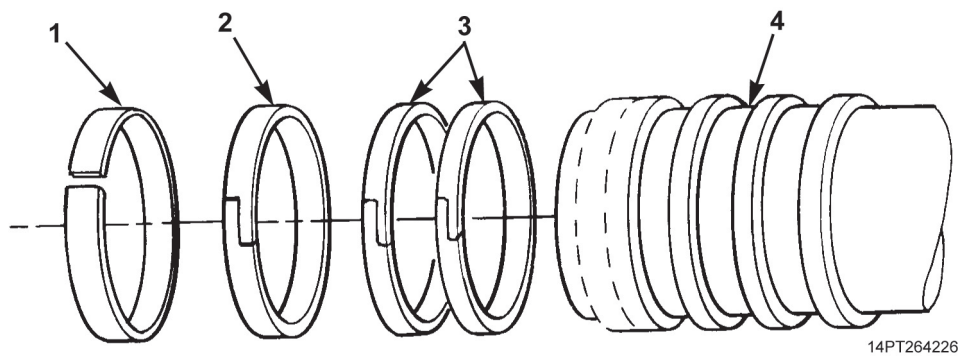


Figure 24. Wear Ring and Piston Ring Installation.

9. Install sleeve (Figure 25, Item 1) in sleeve (Figure 25, Item 3) and install bottom retaining ring (Figure 25, Item 2) in sleeve (Figure 25, Item 3) using 4-inch seal installation tool.

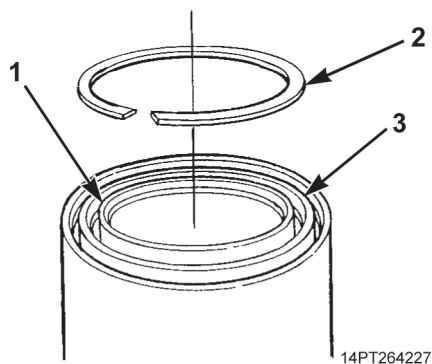


Figure 25. Bottom Retaining Ring Installation.

ASSEMBLY - Continued

10. Install new bottom guide ring (Figure 26, Item 6) and new spiral retaining ring (Figure 26, Item 5).
11. Install new seal (Figure 26, Item 4).
12. Install new wiper (Figure 26, Item 2) in new wiper retainer (Figure 26, Item 3) and install wiper retainer.
13. Install retaining ring (Figure 26, Item 1).

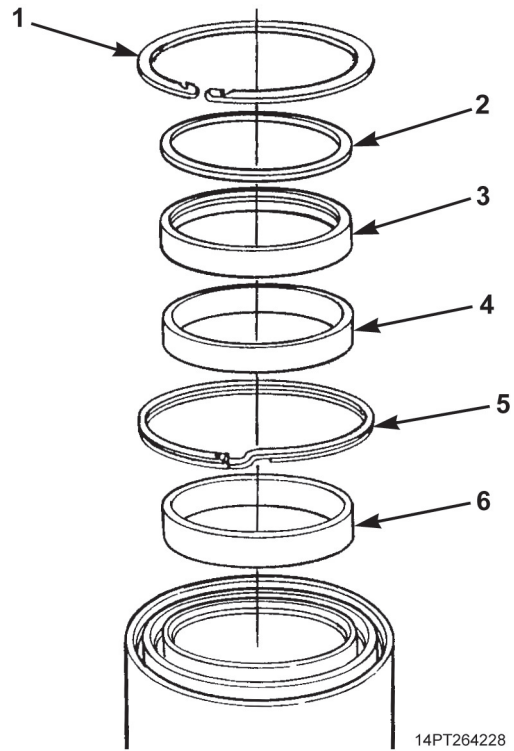


Figure 26. Ring, Seal, and Wiper Installation.

ASSEMBLY - Continued**NOTE**

Perform Steps 14 through 19 to install plunger.

14. Install two piston rings (Figure 27, Item 3), piston ring (Figure 27, Item 2), and new wear ring (Figure 27, Item 1) on plunger (Figure 27, Item 4).

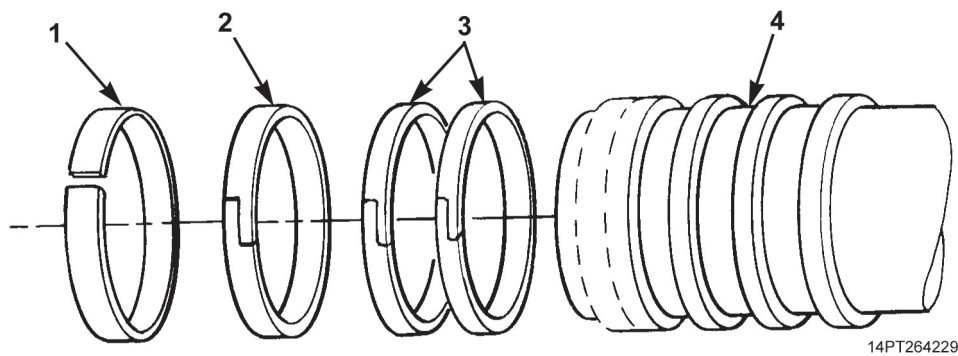


Figure 27. Piston Ring and Wear Ring Installation.

15. Install plunger (Figure 28, Item 2) in sleeve (Figure 28, Item 3) and install bottom retaining ring (Figure 28, Item 1) in sleeve using 3-inch seal installation tool.

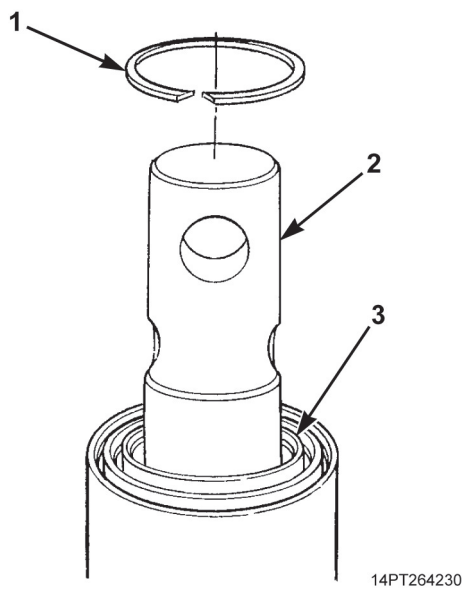


Figure 28. Plunger Installation.

ASSEMBLY - Continued

16. Install new bottom guide ring (Figure 29, Item 6) and new spiral retaining ring (Figure 29, Item 5).
17. Install new seal (Figure 29, Item 4).
18. Install new wiper (Figure 29, Item 2) in new wiper retainer (Figure 29, Item 3) and install wiper retainer.
19. Install retaining ring (Figure 29, Item 1).

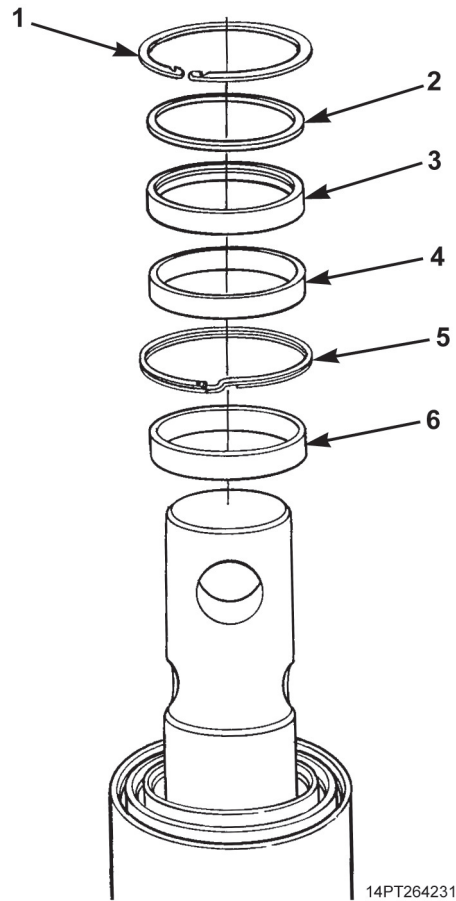


Figure 29. Ring, Seal, and Wiper Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

Install hydraulic cylinder (WP 0064).

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE
HYDRAULIC RESERVOIR REPLACEMENT

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Cap Set, Protective, Dust and Moisture
(WP 0113, Table 1, Item 2)
Engine and Transmission Sling: 3-ton
(WP 0113, Table 1, Item 9)
Torque Wrench, 1/2 in. drive, 0–175 ft-lb
(0–237 N•m) (WP 0113, Table 1, Item 16)
Wrench, Adjustable, 5/8 in.
(WP 0113, Table 1, Item 15)
Suitable Lifting Device

Materials/Parts

Antiseizing Tape (WP 0112, Table 1, Item 37)
Locknut Qty: 4 (WP 0114, Table 1, Item 24)

Materials/Parts (cont.)

Lockwasher Qty: 4 (WP 0114, Table 1, Item 27)
Marker Tags (WP 0112, Table 1, Item 36)
Rags, Wiping (WP 0112, Table 1, Item 29)

Personnel Required

(2)

References

WP 0072

Equipment Condition

Dump body raised and supported on body props
(WP 0005)
Hydraulic oil drained (WP 0017)

WARNING

NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY. Failure to comply may result in personnel injury or death.

REMOVAL**WARNING**

DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin. Hydraulic oil is slippery and may cause falls. A suitable container should be used to catch any draining hydraulic fluid. Ensure that all spills are cleaned up immediately and disposed of in accordance with local procedures. Failure to comply may result in personnel injury or death.

CAUTION

Hoses and ports in hydraulic components should be plugged to prevent contamination of hydraulic system (WP 0072). Failure to comply may result in damage to equipment.

NOTE

Hoses should be tagged before removal (WP 0072).

1. Disconnect hydraulic return hose (Figure 1, Item 5) from tee (Figure 1, Item 3).
2. Remove tee (Figure 1, Item 3) with oil sampling valve (Figure 1, Item 4) from filter housing (Figure 1, Item 2).
3. Loosen clamp (Figure 1, Item 11) and disconnect suction hose (Figure 1, Item 12) from hose barb (Figure 1, Item 13).
4. Remove hose barb (Figure 1, Item 13) and elbow (Figure 1, Item 14) from hydraulic reservoir (Figure 1, Item 1).
5. Attach a nylon sling and suitable lifting device to hydraulic reservoir (Figure 1, Item 1). Take up slack in sling.
6. Remove four locknuts (Figure 1, Item 10), spacers (Figure 1, Item 9), lockwashers (Figure 1, Item 8), washers (Figure 1, Item 7), and screws (Figure 1, Item 6). Discard locknuts and lockwashers.

WARNING

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

7. Remove hydraulic reservoir (Figure 1, Item 1) from cylinder support frame (Figure 1, Item 15).

REMOVAL - Continued

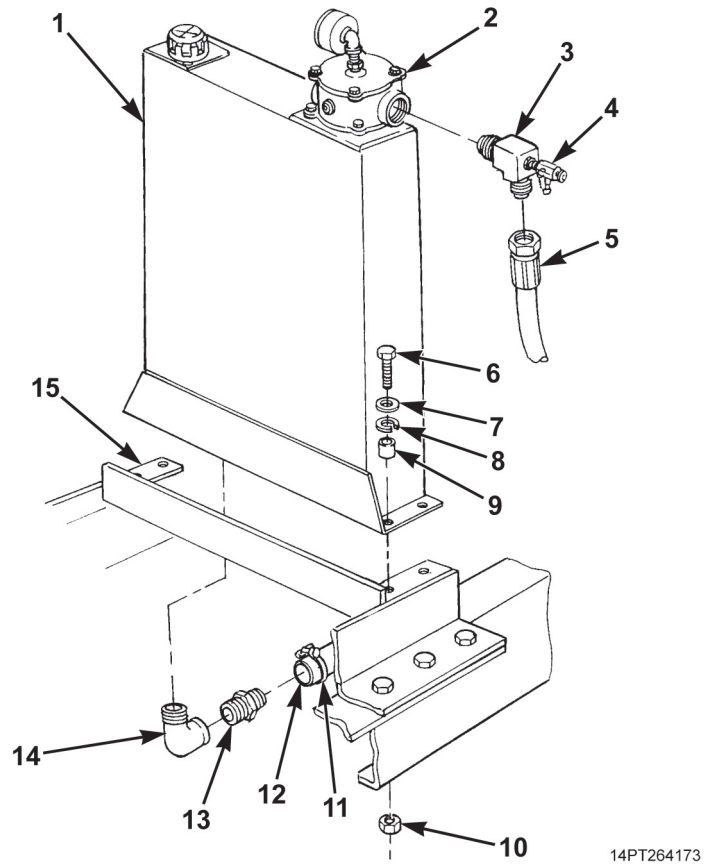


Figure 1. Hydraulic Reservoir Removal.

END OF TASK

CLEANING AND INSPECTION

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

INSTALLATION**WARNING**

Use extreme care when handling heavy parts. Lifting cables, chains, hooks, and slings must be in good condition and of suitable capacity. Keep clear of parts supported only by lifting device. Failure to comply may result in personnel injury, death, and/or damage to equipment.

NOTE

Use antiseizing tape on all pipe threads (WP 0072).

1. Attach a nylon sling and suitable lifting device to hydraulic reservoir (Figure 2, Item 1). Take up slack in sling.
2. Position hydraulic reservoir (Figure 2, Item 1) on cylinder support frame (Figure 2, Item 15).
3. Install four screws (Figure 2, Item 6), washers (Figure 2, Item 7), new lockwashers Figure 2, Item 8), spacers (Figure 2, Item 9), and new locknuts (Figure 2, Item 10). Torque locknuts to 100 to 110 lb-ft (136 to 149 N•m). Remove nylon sling.
4. Install elbow (Figure 2, Item 14) and hose barb (Figure 2, Item 13) on hydraulic reservoir (Figure 2, Item 1).
5. Connect suction hose (Figure 2, Item 12) to hose barb (Figure 2, Item 13) and tighten clamp (Figure 2, Item 11).
6. Install tee (Figure 2, Item 3) with oil sampling valve (Figure 2, Item 4) on filter housing (Figure 2, Item 2).
7. Connect hydraulic return hose (Figure 2, Item 5) to tee (Figure 2, Item 3).

INSTALLATION - Continued

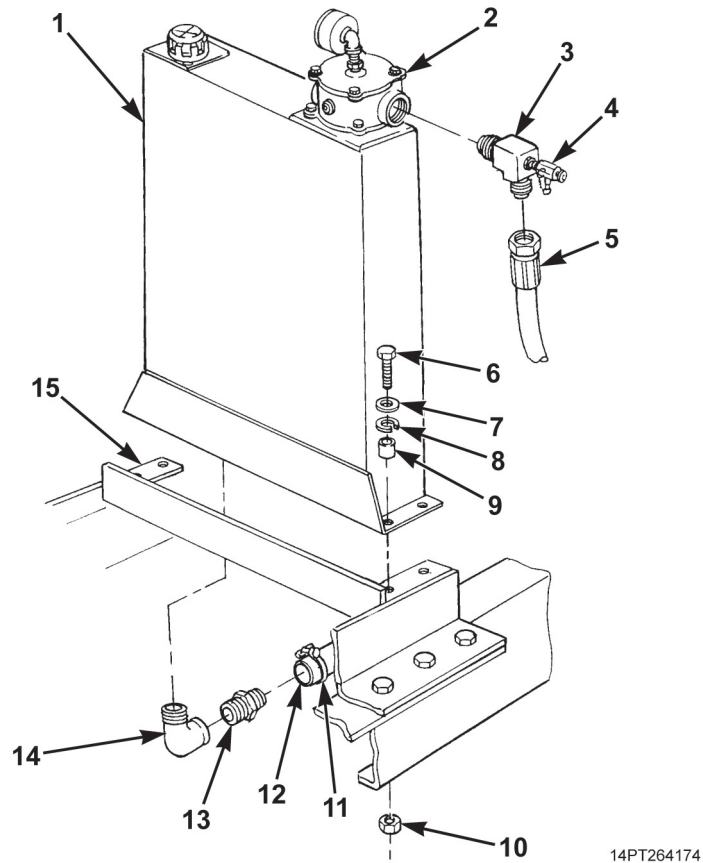


Figure 2. Hydraulic Reservoir Installation.

END OF TASK

FOLLOW-ON MAINTENANCE

1. Fill hydraulic reservoir (WP 0017).
2. Remove body props and lower dump body (WP 0005).

END OF TASK

END OF WORK PACKAGE

**FIELD MAINTENANCE
HYDRAULIC RESERVOIR REPAIR**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Cap Set, Protective, Dust and Moisture
(WP 0113, Table 1, Item 2)

Materials/Parts

Antiseizing Tape (WP 0112, Table 1, Item 37)
Lubricating Oil (WP 0112, Table 1, Item 23)
O-Ring (WP 0114, Table 1, Item 30)

Materials/Parts (cont.)

O-Ring (WP 0114, Table 1, Item 6)
Wiping Rags (WP 0112, Table 1, Item 29)

References

WP 0063
WP 0069
WP 0072
WP 0073
WP 0074

DISASSEMBLY**CAUTION**

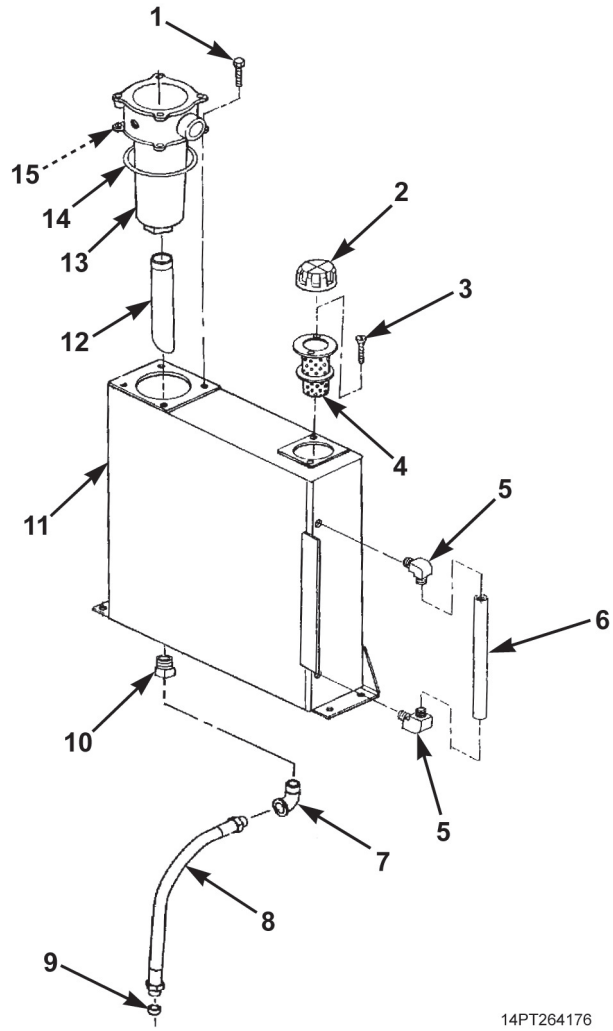
Ports in reservoir should be plugged to prevent contamination of hydraulic system. Failure to comply may result in damage to equipment.

1. Remove hydraulic oil filter service indicator gauge (WP 0069).
2. Remove hydraulic oil filter element (WP 0063).
3. Remove four screws (Figure 1, Item 1) and filter housing (Figure 1, Item 13) from hydraulic reservoir (Figure 1, Item 11).
4. Remove pipe (Figure 1, Item 12) from filter housing (Figure 1, Item 13).
5. Remove O-ring (Figure 1, Item 14) from filter housing mounting flange. Discard O-ring.
6. Separate filter housing (Figure 1, Item 13) and remove O-ring (Figure 1, Item 15). Discard O-ring.
7. Remove fill cap (Figure 1, Item 2), six screws (Figure 1, Item 3), and strainer (Figure 1, Item 4).
8. Remove sight tube (Figure 1, Item 6) and two elbows (Figure 1, Item 5).
9. Remove drain plug (Figure 1, Item 10), elbow (Figure 1, Item 7), hose (Figure 1, Item 8), and cap (Figure 1, Item 9).

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

CLEANING AND INSPECTION - Continued



14PT264176

Figure 1. Hydraulic Reservoir Disassembly.

END OF TASK

ASSEMBLY**NOTE**

Use antiseizing tape on all pipe threads.

1. Install drain plug (Figure 2, Item 10), elbow (Figure 2, Item 7), hose (Figure 2, Item 8), and cap (Figure 2, Item 9).

NOTE

For information on manufacturing sight tube, refer to (WP 0074).

2. Install two elbows (Figure 2, Item 5) and sight tube (Figure 2, Item 6) to hydraulic reservoir (Figure 2, Item 11).
3. Install strainer (Figure 2, Item 4) with six screws (Figure 2, Item 3). Install fill cap (Figure 2, Item 2).

WARNING

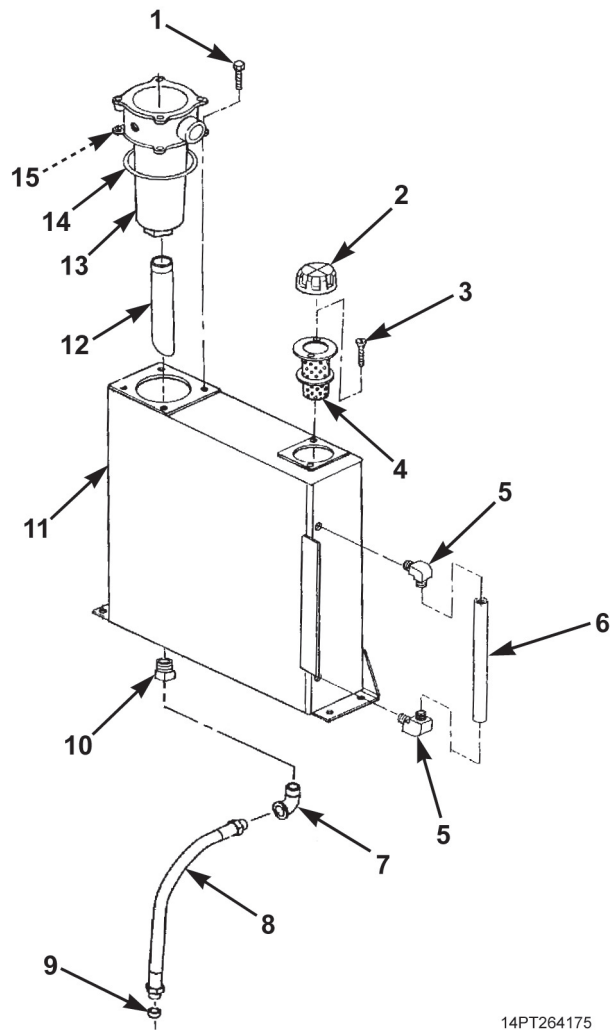
Eye protection and gloves must be worn when using grease or lubricating oils. Failure to comply may result in personnel injury.

NOTE

Apply a light coat of lubricating oil to O-rings as they are assembled.

4. Assemble filter housing (Figure 2, Item 13) with new O-ring (Figure 2, Item 15).
5. Install new O-ring (Figure 2, Item 14) in filter housing mounting flange.
6. Install pipe (Figure 2, Item 12) to filter housing (Figure 2, Item 13).
7. Install filter housing (Figure 2, Item 13) to hydraulic reservoir (Figure 2, Item 11) with four screws (Figure 2, Item 1).
8. Install hydraulic oil filter element (WP 0063).
9. Install hydraulic oil filter service indicator gauge (WP 0069).

ASSEMBLY - Continued



14PT264175

Figure 2. Hydraulic Reservoir Assembly.

END OF TASK

FOLLOW-ON MAINTENANCE

Fill hydraulic reservoir (WP 0073).

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
HYDRAULIC OIL SERVICE INDICATOR GAUGE REPLACEMENT

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Cap Set, Protective, Dust and Moisture
(WP 0113, Table 1, Item 2)

References

WP 0072

Equipment Condition

Dump body raised and supported on body props
(WP 0005)

Materials/Parts

Antiseizing Tape (WP 0112, Table 1, Item 37)
Wiping Rags (WP 0112, Table 1, Item 29)

WARNING

- NEVER work under a raised dump body unless it is secured in the raised position with body props and dump body is EMPTY.
- DO NOT disconnect hydraulic lines while engine is running. Engine must be shut down and dump body fully lowered or supported on body props before lines are disconnected. Escaping hydraulic fluid under pressure can penetrate the skin.
- Failure to comply may result in personnel injury or death.

REMOVAL**CAUTION**

Ports and hoses in reservoir should be plugged to prevent contamination of hydraulic system (WP 0072). Failure to comply may result in damage to equipment.

1. Remove gauge (Figure 1, Item 1) from elbow (Figure 1, Item 2).
2. Remove elbow (Figure 1, Item 2) and nipple (Figure 1, Item 3) from filter housing cover (Figure 1, Item 4).

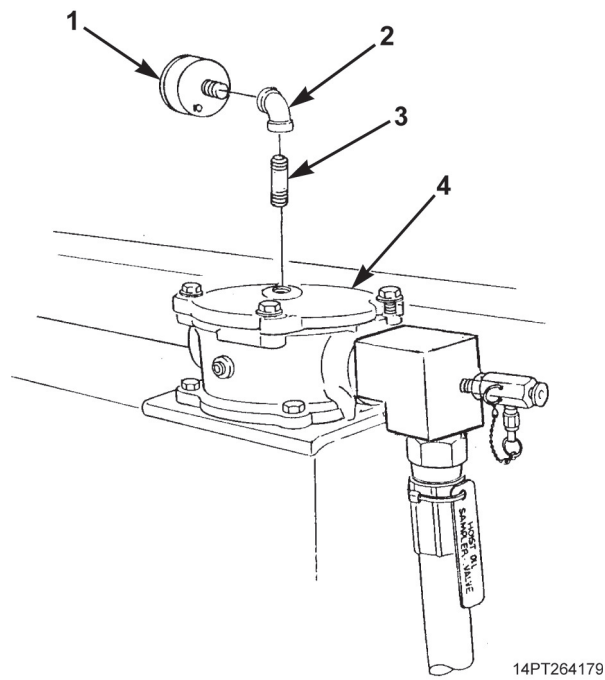


Figure 1. Hydraulic Oil Filter Service Indicator Gauge Removal.

END OF TASK**CLEANING AND INSPECTION**

Clean and inspect components in accordance with General Maintenance Instructions (WP 0072).

END OF TASK

INSTALLATION**NOTE**

Use antiseizing tape on all pipe threads (WP 0072).

1. Apply antiseizing tape to pipe threads of nipple (Figure 2, Item 3) and install nipple and elbow (Figure 2, Item 2) on filter housing cover (Figure 2, Item 4).
2. Install gauge (Figure 2, Item 1) on elbow (Figure 2, Item 2).

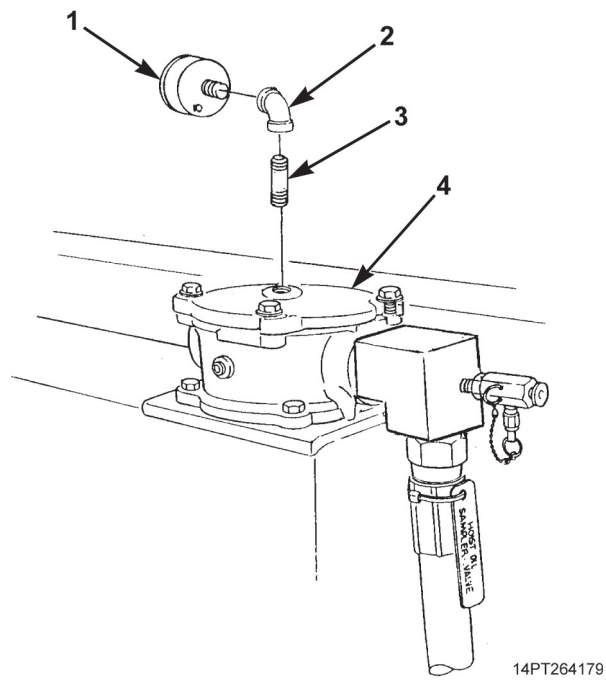


Figure 2. Hydraulic Oil Filter Service Indicator Gauge Installation.

END OF TASK**FOLLOW-ON MAINTENANCE**

Remove body props and lower dump body (WP 0005).

END OF TASK**END OF WORK PACKAGE**

**FIELD MAINTENANCE
SPILL SHIELD REPLACEMENT**

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)

Personnel Required

(2)

Materials/Parts

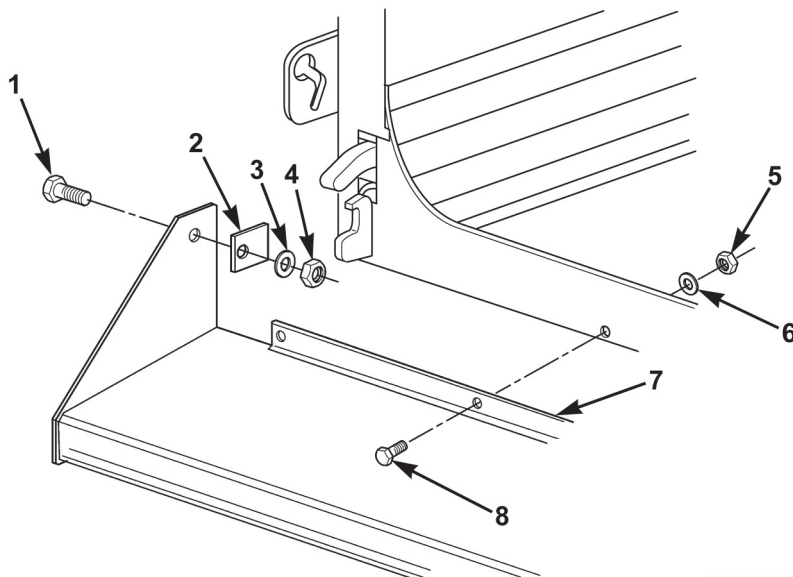
Locknut Qty: 8 (WP 0114, Table 1, Item 16)

REMOVAL

1. Remove locknut (Figure 1, Item 4), washer (Figure 1, Item 3), bolt (Figure 1, Item 1), and tab (Figure 1, Item 2) from spill shield (Figure 1, Item 7). Discard locknut.
2. Repeat Step 1 for opposite side.
3. Remove six locknuts (Figure 1, Item 5), washers (Figure 1, Item 6), bolts (Figure 1, Item 8), and spill shield (Figure 1, Item 7). Discard locknuts.

END OF TASK**INSTALLATION**

1. Position spill shield (Figure 1, Item 7) on dump body and install six bolts (Figure 1, Item 8), washers (Figure 1, Item 6), and new locknuts (Figure 1, Item 5).
2. Position tab (Figure 1, Item 2) on spill shield (Figure 1, Item 7) and install bolt (Figure 1, Item 1), washer (Figure 1, Item 3), and new locknut (Figure 1, Item 4).
3. Repeat Step 2 for opposite side.



14PT264146

Figure 1. Spill Shield Replacement.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE PREPARATION FOR STORAGE OR SHIPMENT

INITIAL SETUP:**Materials/Parts**

Barrier Material (WP 0112, Table 1, Item 3)

References

DA PAM 750-8
DA Form 2404
DA Form 2407
DA Form 2408
DD Form 1397

References (cont.)

TM 9-2320-302-20-1
TM 9-2320-302-20-2
TM 9-2320-363-20-1
TM 9-2320-363-20-2
SF Form 364
WP 0005
WP 0073

GENERAL

This work package contains requirements and procedures for administrative storage of equipment that is issued to and in use by Army activities worldwide.

The requirements specified herein are necessary to maintain equipment in administrative storage in such a way as to achieve the maximum readiness condition.

Equipment that is placed in administrative storage should be capable of being readied to perform its mission within a 24-hour period, or as otherwise may be prescribed by the approving authority. Before equipment is placed in administrative storage, a current Preventive Maintenance Checks and Services (PMCS) should be completed and deficiencies corrected.

Report equipment in administrative storage as prescribed for all reportable equipment.

Perform inspections, maintenance services, and lubrication as specified herein.

Records and reports to be maintained for equipment in administrative storage are those prescribed by DA PAM 750-8 for equipment in use.

A 10 percent variance is acceptable on time used to determine the required maintenance actions.

Accomplishment of applicable PMCS, as mentioned throughout this work package, will be on a semiannual basis.

DEFINITION OF ADMINISTRATIVE STORAGE

The placement of equipment in administrative storage can be for short periods of time when a shortage of maintenance effort exists. Items should be ready for use within the time factors as determined by the directing authority. During the storage period, appropriate maintenance records will be kept.

PREPARATION OF EQUIPMENT FOR ADMINISTRATIVE STORAGE**Storage Site**

Select the best available site for administrative storage. Separate stored equipment from equipment in use. Conspicuously mark the area "Administrative Storage".

Covered space is preferred.

PREPARATION OF EQUIPMENT FOR ADMINISTRATIVE STORAGE - Continued

Open sites should be improved hardstand, if available. Unimproved sites should be firm, well-drained, and free of excessive vegetation.

Storage Plan

Store equipment so as to provide maximum protection from the elements and to provide access for inspection, maintenance, and exercising. Anticipate removal or deployment problems and take suitable precautions.

Take into consideration environmental conditions, such as extreme heat or cold; high humidity; blowing sand, dust, or loose debris; soft ground; mud; heavy snows; or any combination thereof, and take adequate precautions.

Establish a fire plan and provide for adequate fire fighting equipment and personnel.

Maintenance Services and Inspections

Maintenance Services. Prior to storage, perform the next scheduled PMCS.

Inspection. Inspect and approve the equipment prior to storage. DO NOT place nonmission-capable equipment in storage.

Correction of Shortcomings and Deficiencies

Correct all shortcomings and deficiencies prior to storage, or obtain a deferment from the approving authority.

Lubrication

Lubricate equipment in accordance with WP 0073.

General Cleaning, Painting, and Preservation

CAUTION

DO NOT direct water under pressure against unsealed electrical systems or any exterior opening. Failure to comply may result in damage to equipment.

Cleaning. Clean the equipment of dirt, grease, and other contaminants, but DO NOT use vapor degreasing.

Painting. Remove rust and damaged paint by scraping, wire brushing, sanding, or buffing. Sand to a smooth finish and spot paint as necessary.

Preservation. After cleaning and drying, immediately coat unpainted metal surfaces with oil or grease, as appropriate.

NOTE

- Place a piece of barrier material between desiccant bags and metal surfaces.
- Air circulation under draped covers reduces deterioration from moisture or heat.

Weatherproofing. Sunlight, heat, moisture (humidity), and dirt tend to accelerate deterioration. Install all covers authorized for the equipment. Close and secure all openings except those required for venting and draining. Seal openings to prevent the entry of rain, snow, or dust. Insert desiccant when complete seal is required. Place equipment, and provide blocking or framing, to allow for ventilation and water drainage. Support cover away from item surfaces which may rust, rot, or mildew.

END OF TASK

CARE OF EQUIPMENT IN ADMINISTRATIVE STORAGE

Maintenance Services

After equipment has been placed in administrative storage, inspect, service, and exercise as specified herein.

Inspection

Inspection will usually be visual and must consist of at least a walkaround examination of all equipment to detect any deficiencies. Inspect equipment in open storage weekly and equipment in covered storage monthly. Inspect all equipment immediately after any severe storm or environmental change. The following are examples of things to look for during a visual inspection:

- Low or flat tires.
- Coolant, fuel, or oil leaks.
- Condition of preservatives, seals, and wraps.
- Corrosion or other deterioration.
- Missing or damaged parts.
- Water in compartments.
- Any other readily recognizable shortcomings or deficiencies.

Repair During Administrative Storage

Keep equipment in an optimum state of readiness. Accomplish the required services and repairs as quickly as possible. Whenever possible, perform all maintenance on-site.

Exercising

Exercise equipment in accordance with Table 1 and the following instructions.

Vehicle Major Exercise. Depreserve equipment by removing only that material restricting exercise. Close all drains, remove blocks, and perform all BEFORE operational checks. Make several right and left 90-degree turns. Make several hard braking stops without skidding. While exercising, and when it is safe and convenient, operate all other functional components and perform all DURING and AFTER operational checks.

Scheduled Services. Scheduled services will include inspection as described above and will be conducted in accordance with Field Preventive Maintenance Checks and Services (PMCS). Lubricate in accordance with instructions in WP 0073.

Corrective Action. Immediately take action to correct shortcomings and deficiencies noted. Record inspection and exercise results on DA Form 2404. Record and report all maintenance actions on DA Form 2407. After exercising, restore the preservation to the original condition. Replenish lubricants used during exercising and note the amount on DA Form 2408.

CARE OF EQUIPMENT IN ADMINISTRATIVE STORAGE - Continued

Table 1. Exercise Schedule.

| WEEKS | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 |
|--------------------|----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Scheduled Services | | | | | | | | | | | | X |
| Major Exercise | | | | | | | | | | | | X |

Rotation

Rotate items in accordance with any rotational plan that will keep the equipment in an operational condition and reduce the maintenance effort.

END OF TASK

PROCEDURES FOR COMMON COMPONENTS AND MISCELLANEOUS ITEMS

Tires

Visually inspect tires during each walkaround inspection. This inspection includes checking tires with a tire gauge. Inflate, repair, or replace as necessary those found to be low, damaged, or excessively worn. Mark inflated and repaired tires with a crayon for checking at the next inspection.

Batteries

Leave batteries in place in equipment. Disconnect battery cables (TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2). Ensure that batteries are fully charged when equipment is stored and are returned to a full charge during each equipment exercising.

Seals

Seals may develop leaks during storage or shortly thereafter. If leaking persists, refer to the applicable maintenance section in this manual for corrective maintenance procedures.

END OF TASK

REMOVAL OF EQUIPMENT FROM ADMINISTRATIVE STORAGE

Activation

Restore the equipment to normal operating condition in accordance with the instructions contained in WP 0005.

Servicing

Resume the maintenance service schedule in effect at the commencement of storage or service the equipment before the scheduled dates in order to produce a staggered maintenance workload.

END OF TASK

PREPARATION OF EQUIPMENT FOR SHIPMENT

Vehicles that have been removed from storage for shipment do not have to be reprocessed if they will reach their destination within the administrative storage period. Reprocess only if inspection reveals any corrosion or if anticipated in-transit weather conditions make it necessary.

When a vehicle is received and has already been processed for domestic shipment, as indicated on DD Form 1397, it does not have to be reprocessed for storage unless corrosion and deterioration are found during the inspection upon receipt. List on SF Form 364 all discrepancies found because of poor preservation, packaging, packing, marking, handling, loading, storage, or excessive preservation. Repairs that cannot be handled by the receiving unit must have tags attached listing needed repairs. A report of these conditions will be submitted by the unit commander for action by an ordnance maintenance unit.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE GENERAL MAINTENANCE INSTRUCTIONS

INITIAL SETUP:**Tools and Special Tools**

General Mechanic's Tool Kit
(WP 0113, Table 1, Item 12)
Blow Gun, Air (WP 0113, Table 1, Item 1)
Cap Set, Protective, Dust and Moisture
(WP 0113, Table 1, Item 2)
Soldering Gun (WP 0113, Table 1, Item 11)
Wrench, Adjustable (WP 0113, Table 1, Item 15)

Materials/Parts

Adhesive (WP 0112, Table 1, Item 1)
Adhesive: White Silicon
(Sealing Compound)
(WP 0112, Table 1, Item 2)
Brush, Scrub (WP 0112, Table 1, Item 5)
Brush, Wire (WP 0112, Table 1, Item 4)
Cleaning Compound, Solvent
(WP 0112, Table 1, Item 6)
Detergent, General Purpose: Liquid
(WP 0112, Table 1, Item 9)
Flux, Soldering (WP 0112, Table 1, Item 11)
Insulation Sleeving, Electrical
(WP 0112, Table 1, Item 19)

Materials/Parts (cont.)

Lubricating Oil, Engine: Internal Combustion
Engine, OE/HDO 30
(WP 0112, Table 1, Item 26)
Marker Tags (WP 0112, Table 1, Item 36)
Sealing Compound (WP 0112, Table 1, Item 30)
Solder, Lead Alloy (WP 0112, Table 1, Item 32)
Tape, Antiseizing: 1/2 In. Width
(WP 0112, Table 1, Item 37)
Tape, Duct: 2 Inch Width
(WP 0112, Table 1, Item 38)
Wiping Rags (WP 0112, Table 1, Item 29)

References

TM 9-214
TM 9-2320-302-20-1
TM 9-2320-302-20-2
TM 9-2320-363-20-1
TM 9-2320-363-20-2
TM 43-0139
WP 0073

GENERAL

These general maintenance instructions contain general shop practices and specific methods you must be familiar with to properly maintain the equipment. You should read and understand these practices and methods before performing any maintenance procedures.

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

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

- Do not remove dowel pins or studs unless loose, bent, broken, or otherwise damaged.
- Do not remove bearings or bushings unless damaged. If you need to remove them to access parts behind, carefully pull out bearings and bushings.
- Replace all gaskets, lockwashers, locknuts, seals, cotter pins, and O-rings.

The following "Initial Setup" information applies to all maintenance procedures:

- Resources are not listed unless they apply to the procedure.
- "Personnel Required" is listed only if more than one mechanic is required to complete the procedure.

GENERAL - Continued

All tags and forms attached to the equipment must be checked to learn the reason for removal of equipment from service. Modification Work Orders (MWOs) and Technical Bulletins (TBs) must also be checked for equipment changes and updates.

WORK SAFETY

Before beginning a procedure, think about the safety risks and hazards to yourself and to others. Wear protective gear such as safety goggles or lenses, safety shoes, rubber apron, or gloves.

Before beginning a procedure, ensure that the following conditions have been observed, unless otherwise specified:

- Vehicle should be parked on level ground with parking brake set and wheels chocked.
- Transmission must be in N (Neutral).
- Engine must be off and, unless otherwise indicated, cool.
- Components must be at operating temperature to be tested. If engine must be run, vent exhaust fumes.

Immediately clean up spilled fluids to avoid slipping.

When lifting heavy parts, have someone help you. Ensure that lifting equipment or jack is working properly, that it meets weight requirement of part being lifted, and that it is securely fastened to part.

Always use power tools carefully.

END OF TASK**CLEANING INSTRUCTIONS****General**

Cleaning instructions will be the same for the majority of parts and components which make up the equipment. The following applies to all cleaning operations:

- Clean all parts before inspection, after repair, and before assembly.
- Keep hands free of grease which can collect dust, dirt, and grit.
- After cleaning, all parts should be covered or wrapped to protect them from dust and dirt. Parts that are subject to rust should be lightly oiled after cleaning.

CLEANING INSTRUCTIONS - Continued**WARNING**

- Degreasing solvent MIL-PRF-680 Type III is an environmentally compliant and low-toxicity material. However, it may be irritating to the eyes and skin. The use of protective gloves and goggles is suggested. Use in a well-ventilated area. Keep away from open flame and other sources of ignition. When not using MIL-PRF-680 solvents, ensure MIL-PRF-680 solvent container is sealed. Store, handle, and dispose of unused and spent solvents in accordance with local procedures and plans.
- Particles blown by compressed air are hazardous. DO NOT exceed 15 psi (103 kPa) nozzle pressure when drying parts with compressed air. Use a maximum of 30 psi (207 kPa) when cleaning components. DO NOT direct compressed air against human skin. Use caution and wear protective clothing (goggles/shield, gloves, etc.) when working with compressed air. Make sure air stream is directed away from user and other personnel in the area.
- Failure to comply may result in personnel injury.

CAUTION

DO NOT wash oil seals, electrical cables, and flexible hoses with degreasing solvent or mineral spirits. Serious damage or destruction of material will result. Failure to comply may result in damage to equipment.

Castings, Forgings, and Machined Metal Parts

Clean inner and outer surfaces with cleaning solvent and dry with clean rags.
Remove grease and accumulated deposits with a scrub brush.
Clear all threaded holes with compressed air to remove dirt and cleaning fluids.

Oil Seals, Electrical Cables, and Flexible Hoses

Wash oil seals, electrical cables, and flexible hoses with a solution of detergent and water, and wipe dry with a clean rag.

END OF TASK**PRESERVATION OF PARTS**

Unpainted metal parts that will not be installed immediately after cleaning should be covered with a thin coat of lubricating oil.

END OF TASK

PAINTING

On painted areas where paint has been removed, paint in accordance with procedures outlined in TM 43-0139..

END OF TASK**INSPECTION INSTRUCTIONS****NOTE**

All damaged areas should be marked for repair or replacement.

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

Inspect drilled and tapped (threaded) holes for the following:

- Wear, distortion, cracks, and any other damage in or around holes.
- Threaded areas for wear distortion (stretching) and evidence of cross-threading.

Inspect metal lines, flexible lines or hoses, and metal fittings and connectors for the following:

- Metal lines for sharp kinks, cracks, bad bends, and dents.
- Flexible lines or hoses for fraying, evidence of leakage, and loose metal fittings or connectors.
- Metal fittings and connectors for thread damage and worn or rounded hex heads.

Inspect castings, forging, and machined metal parts for the following:

- Machined surfaces for nicks, burrs, scoring, grooves, raised metal wear, and other damage.
- Inner and outer surfaces for breaks and cracks.

Inspect bearings in accordance with TM 9-214.

END OF TASK**DISASSEMBLY INSTRUCTIONS**

Follow these general practices when performing disassembly and assembly procedures:

- Keep major components together whenever possible and practical.
- Tag hoses, electrical wires, cables, and harnesses to identify them and aid during installation.
- Keep related parts together for identification purposes.
- Temporarily install attaching hardware such as screws, bolts, washers, and nuts to prevent loss.
- Only disassemble to the point of the problem.
- Ensure that parts are clean and lubricated before assembly.

END OF TASK

LUBRICATION INSTRUCTIONS

Refer to (WP 0073) for detailed, illustrated instructions on proper lubrication. Some general practices to remember:

- Use the correct lubricant.
- Keep lubricants clean.
- Clean all fittings prior to lubrication.
- Lubricate clean, disassembled, and new parts to prevent rust.

END OF TASK

APPLICATION OF ADHESIVES

General

Adhesives are recommended in some tasks to ensure and strengthen seals. The following information describes their correct use and application.

Sealing Compound

Sealing compound is used to seal parts against moisture. Use the following instructions when applying:

- Any time a seal is broken, the part must be thoroughly cleaned to remove any remaining sealing compound and dirt.
- Thoroughly clean surface before applying sealing compound.
- When applying sealing compound, ensure that the area is completely covered. Press sealing compound into and around parts as necessary.
- Sealing compound will set in 15 to 30 minutes depending on temperature and humidity.

Adhesive

Adhesive provides a seal against leakage and a resistance to loosening when used in the assembly of threaded, slip-fitted, or press-fitted parts. Always use the grade of adhesive specified and never use when other retaining means are provided, such as lockwires, lockwashers, lockplates, and fasteners. DO NOT use adhesive on brass fittings, plugs, or items that need frequent servicing, or when operating temperature exceeds 300°F (149°C).

Apply adhesive as follows:

- Before application, clean threads to remove oil, grease, and metal chips.
- Apply adhesive to second and third threads. DO NOT apply to first thread to ensure system cleanliness.
- Adhesive will dry in 6 to 24 hours at room temperature.
- Adjustments for elbows, gauges, and valves can be made up to 24 hours after application without affecting the seal.

END OF TASK

STANDARD TOOL REQUIREMENTS

The following are general practices regarding the use of tools:

- Always use the proper tool kit and tools for the procedure being performed.
- Ensure that tools are clean and lubricated to reduce wear and to prevent rust.
- Keep track of tools. Do not be careless with them.
- Return tools to toolbox when finished with repair or maintenance.
- Return toolboxes and tools to tool storage when not in use.
- Inventory tools before and after each use.

Some maintenance tasks may require special or fabricated tools. The "Initial Setup" of the procedure will specify any special or fabricated tools needed to perform that procedure. Use these special tools only for the maintenance procedures for which they are designed or called out. If you are unfamiliar with a required tool, see your supervisor.

END OF TASK

TAGGING WIRES AND HOSES

Use marker tags to identify all electrical wires, lines, and any other parts which may be hard to identify or replace later. Fasten tags to parts during removal by wrapping wire fasteners around or through parts and twisting ends together. Position tags to be out of the way during cleaning, inspection, and repair. Mark tags with a pencil, pen, or marker.

Whenever possible, identify electrical wires with the number of the terminal or wire to which it connects. If no markings can be found, tag both wires or wire and terminal, and use the same identifying mark for both. If you cannot tag a wire because it must fit through a small hole or you cannot reach it, write down the description of the wire and the point to which it connects or draw a simple diagram on paper. Be sure to write down enough information so you will be able to properly connect the wires during assembly. If you need to identify a loose wire, look for identifying numbers near the end of the wire, stamped on a permanent metal tag. Compare this number to wire number on the appropriate electrical schematic.

Identify lines when you are taking off more than one line at the same time. Mark tags with points to which lines and hoses must be connected. If it is not obvious which end of a line goes where, tag each end of the line.

Identify and tag other parts as required by name and installed location.

END OF TASK

SOLDERING

CAUTION

Use low-wattage soldering gun when soldering electrical wires, connectors, terminal lugs, and receptacles. High-wattage soldering guns may damage parts by overheating.

Solder connection must be bright and clean before soldering. Remove dirt and grease with a wire brush or a pocket knife. Solder used must be of lead alloy with soldering flux. All wires, parts, and soldering gun must be tinned for good connection and maximum transfer of heat.

To prevent overheating damage to electrical parts when soldering and unsoldering connections, hold bare wire, lead, or terminal lug close to soldering point with long roundnose pliers. Pliers act as heat sink and absorb excess heat.

END OF TASK

HEAT-SHRINKABLE TUBING**WARNING**

DO NOT touch heat-shrinkable tubing for at least 30 seconds after heating.
Heat-shrinkable tubing is hot and will burn you.

Use the insulation sleeving to insulate soldered and crimped electrical connections as follows:

- Cut desired length of new heat-shrinkable tubing twice the length of the connection to be covered.
- Slide the heat-shrinkable tubing onto the wire and out of the way before making electrical connection.
- After making electrical connection, slide heat-shrinkable tubing into place over electrical connection.
- Hold hot air blow gun 4 to 5 in. (10.2 to 12.7 cm) away from heat-shrinkable tubing and apply heat for approximately 30 seconds. Stop applying heat as soon as heat-shrinkable tubing forms to the shape of the electrical connection.

END OF TASK**ELECTRICAL GROUND POINTS****WARNING**

- Although battery ground cable must be connected in order to test electrical circuit voltage, disconnect battery ground cable before performing resistance tests or replacing parts. This will prevent shock to personnel and damage to parts and equipment.
- Degreasing solvent MIL-PRF-680 Type III is an environmentally compliant and low-toxicity material. However, it may be irritating to the eyes and skin. The use of protective gloves and goggles is suggested. Use in a well-ventilated area. Keep away from open flame and other sources of ignition. When not using MIL-PRF-680 solvents, ensure MIL-PRF-680 solvent container is sealed. Store, handle, and dispose of unused and spent solvents in accordance with local procedures and plans.
- Failure to comply may result in personnel injury and/or damage to equipment.

Many electrical problems are the result of a poor ground connection. You can ensure that ground connections are good by performing the following steps:

- Remove hardware connecting ground cable terminal lug to ground point.
- Clean mounting hardware, ground cable terminal lugs, and ground point with cleaning solvent and scrub brush.
- Remove any rust with wire brush.
- Look for cracks, loose terminal lugs, and stripped threads. Replace any defective parts.
- Install hardware connecting ground cable terminal lug to ground point. Ensure that all hardware is tight.

END OF TASK

LINES AND PORTS

To keep dirt from contaminating fluid systems when removing and installing lines, perform the following steps:

- Clean fittings and surrounding area before disconnecting lines.
- Cover, cap, plug, or tape lines and ports after disconnecting lines. Use cap and plug set on hydraulic lines.
When these are not available, use hand-carved wooden plugs, clean rags, duct tape, or other similar materials to prevent dirt from entering system.
- Ensure that new and used parts are clean before installing.
- Wait to remove cover, cap, plug, or tape from lines and ports until just before installing lines.

END OF TASK

ANTISEIZING TAPE

CAUTION

- DO NOT use antiseizing tape on air lines. Damage to air valves may result if antiseizing tape is used.
- Apply antiseizing tape only to pipe threads of male fittings of hydraulic system.
- DO NOT exceed specified torque or use power tools to tighten fittings taped with antiseizing tape. Overtightening could damage fitting threads and cause connection to leak.
- Failure to comply may result in damage to equipment.

When connecting hydraulic lines and fittings without compression sleeves or O-rings, antiseizing tape may be used to keep connections from leaking. Use as follows:

- Ensure that threads are clean and dry.
- Start antiseizing tape one or two threads from small or leading edge of fitting, joining tape together with an overlap of about 1/8 in. (3.18 mm) for fittings with fine threads. For fittings with coarse threads, tape should be wrapped around threads two or three times.
- Tightly wrap antiseizing tape in the same direction as you would tighten a nut. Tape must be pressed into threads without cutting or ripping.
- Using hand tools, tighten fittings to specified torque.

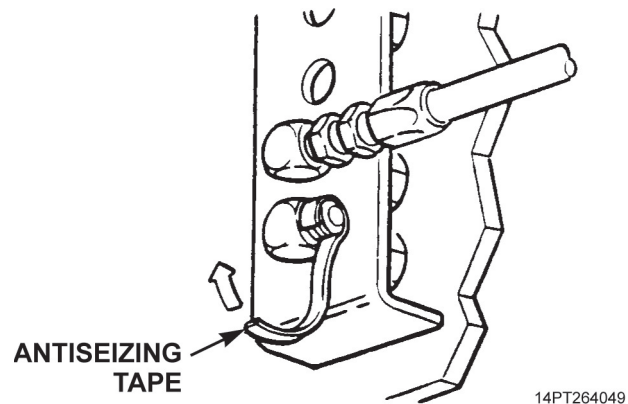
ANTISEIZING TAPE - Continued

Figure 1. Antiseizing Tape.

END OF TASK**TUBES AND COMPRESSION FITTINGS**

Tubes with inverted nuts and compression fittings are designed for one-time assembly. Once assembled, they must be replaced as a unit if any parts are found defective. Used parts may not seal properly when used with new ones.

Used tube assemblies in good condition can be installed in their original location without leaking.

Assemble new tubes, compression sleeves, and inverted nuts as follows:

- Slide inverted nut onto end of tube.
- Slide compression sleeve onto end of tube.
- Repeat previous two steps for other end of tube as required.

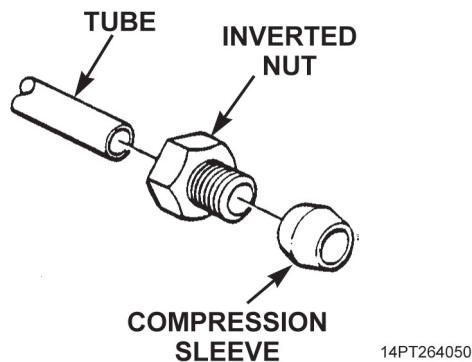


Figure 2. Tubes and Compression Fittings.

Install new tube assemblies as follows:

- Insert end of tube as far as it will go into compression fitting to which tube is being installed.

TUBES AND COMPRESSION FITTINGS - Continued

- Twist inverted nut into compression fitting and tighten inverted nut against compression sleeve with open-end wrench. Compression sleeve will clamp down around tube and conform to internal surface of compression fitting and inverted nut.
- Repeat previous two steps for other end of tube as required.

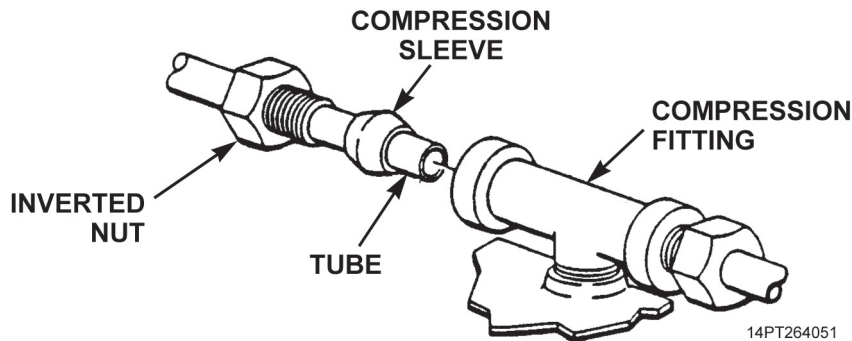


Figure 3. Tubes and Compression Fittings.

END OF TASK**FLUID DISPOSAL****WARNING**

When servicing this vehicle, performing maintenance, or disposing of materials such as engine coolant, transmission fluid, lubricants, battery acids or batteries and CARC paint, consult your unit/local hazardous waste disposal center or safety office for local regulatory guidance. If further information is needed, please contact the Army Environmental Hotline at 1-800-872-3845. Failure to comply may result in personnel injury, death, and/or damage to equipment.

END OF TASK**SERVICE REPLACEMENT PARTS AND KITS**

Many service replacement parts are available in standard sizes as well as various undersized and/or oversized sizes. Service kits for reconditioning certain parts and service sets, which include all parts necessary to complete a procedure, are also available.

END OF TASK

ELECTRICAL REPAIR**Wiring Harness and Cable Repair**

Wiring harness and cable repair for the dump truck body is the same as for the dump truck chassis. Refer to TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2.

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE LUBRICATION INSTRUCTIONS

INITIAL SETUP:**Materials/Parts**

Solvent Cleaning Compound
(Degreasing Solvent)
(WP 0112, Table 1, Item 6)
Wiping Rags (WP 0112, Table 1, Item 29)

References

DA PAM 750-8
TM 4-33.31
TM 9-2320-302-10

References (cont.)

TM 9-2320-302-20-1
TM 9-2320-302-20-2
TM 9-2320-363-10
TM 9-2320-363-20-1
TM 9-2320-363-20-2
WP 0005
WP 0055
WP 0063
WP 0064

GENERAL**NOTE**

- These instructions are mandatory.
- Lubrication of M917A1, M917A1 with Material Control System (MCS), M917A2, and M917A2 with MCS chassis is in TM 9-2320-363-10 or TM 9-2320-302-10 and TM 9-2320-363-20-1, TM 9-2320-363-20-2, TM 9-2320-302-20-1, or TM 9-2320-302-20-2.

The M917A1, M917A1 with MCS, M917A2, and M917A2 with MCS Dump Body must receive lubrication with approved lubricants at recommended intervals in order to be mission-ready at all times.

Hydraulic oil/filter are changed by Field Maintenance annually.

The Lubrication Chart shows lubrication points, items to be lubricated, the required lubricants, and recommended intervals for lubrication. Any special lubrication instructions required for specific components are contained in the NOTES section of the chart.

The KEY provides information needed to select the proper lubricant for various temperature ranges and uses, and identifies the capacities and intervals.

Recommended intervals are based on normal conditions of operation, temperature, and humidity. When operating under extreme conditions, lubricants should always be changed more frequently. When in doubt, notify your supervisor.

SPECIFIC LUBRICATION INSTRUCTIONS

Keep all lubricants in a closed container and store in a clean, dry place away from extreme heat. Keep container covers clean and do not allow dust, dirt, or other foreign material to mix with lubricants. Keep lubrication equipment clean and ready for use.

Maintain a record of lubrication performed and report any problems noted during lubrication. Refer to DA PAM 750-8 for maintenance forms and procedures to record and report any findings.

Keep all external parts of equipment not requiring lubrication free of lubricants. After lubrication, wipe off excess lubricant to prevent accumulation of foreign matter.

SPECIFIC LUBRICATION INSTRUCTIONS - Continued

Refer to TM 4-33.31 for lubrication instructions in cold weather.

LUBRICATION CHART

This Lubrication Chart is for operator/crew (C) and Field Maintenance (F). Lubrication intervals (on-condition or hard time) are based on normal operation. Lubricate more during constant use and less during inactive periods. Use correct grade of lubricant for seasonal temperature expected.

For equipment under manufacturer's warranty, hard-time oil service intervals shall be followed. Intervals shall be shortened if lubricants are known to be contaminated or if operation is under adverse conditions (e.g., longer than usual operating hours, extended idling periods, extreme dust, etc.).

WARNING

Degreasing solvent MIL-PRF-680 Type III is an environmentally compliant and low-toxicity material. However, it may be irritating to the eyes and skin. The use of protective gloves and goggles is required. Use in a well-ventilated area. Keep away from open flame and other sources of ignition. When not using MIL-PRF-680 solvents, ensure MIL-PRF-680 solvent container is sealed. Store, handle, and dispose of unused and spent solvents in accordance with local procedures and plans. Failure to comply may result in personnel injury.

Clean area around lubrication points with degreasing solvent or equivalent before lubricating equipment. After lubrication, wipe off excess lubricant to prevent accumulation of foreign matter.

Before you start your lubrication service:

ALWAYS

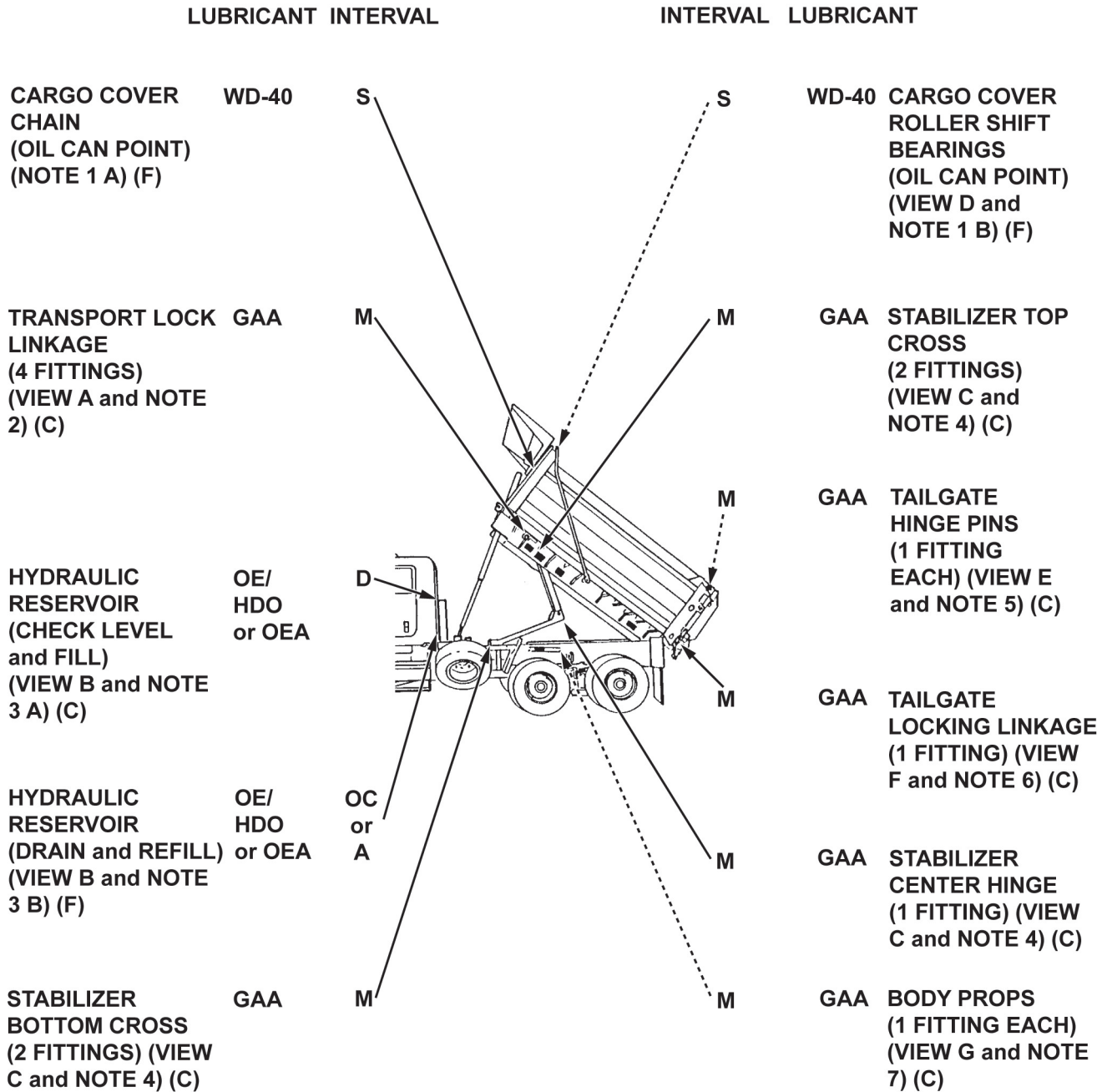
- Clean area around lubrication point before lubricating.
- Use the Lubrication Chart as your guide.

NEVER

- Use wrong type/grade lubricant.
- Use too much lubricant.

LUBRICATION CHART - Continued

M917A1, M917A1 WITH MCS, M917A2, AND M917A2 WITH MCS



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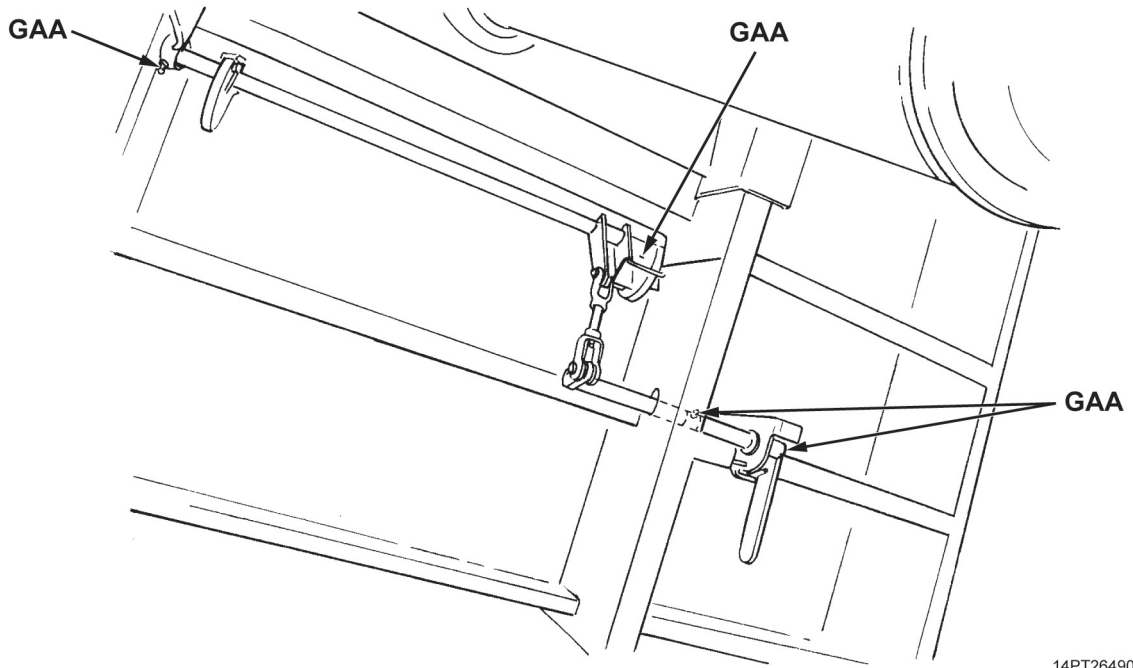
LUBRICATION CHART - Continued

KEY

| LUBRICANT/ COMPONENT | REFILL CAPACITY | EXPECTED TEMPERATURES * | | | INTERVALS |
|--|---------------------------|------------------------------------|------------------------------------|-----------------------------------|---|
| | | +6°F to +122°F (-14°C to +50°C) | - 4°F to +50°F (-20°C to +10°C) | - 67°F to +32°F (-55°C to 0°C) | |
| OE/HDO (MIL-L-2104) LUBRICATING OIL, ICE TACTICAL OEA (MIL-L-2104) LUBRICATING OIL, ICE ARCTIC • HYDRAULIC RESERVOIR | 12.75 GAL. (48.2 l) | OE/HDO 10 | OE/HDO 10 | OEA | D-DAILY M-MONTHLY S-SEMI- ANNUAL OC-ON CONDITION |
| GAA (MIL-G-10924) GREASE, AUTOMOTIVE AND ARTILLERY • BODY PROPS • STABILIZER • TRANSPORT LOCK LINKAGE • TAILGATE HINGE PINS • TAILGATE LOCKING LINKAGE | AS REQUIRED | ALL TEMPERATURES | | | |
| WD-40 CORROSION PREVENTIVE • CARGO COVER CHAIN • CARGO COVER ROLLER SHIFT BEAR- INGS | AS REQUIRED | ALL TEMPERATURES | | | |

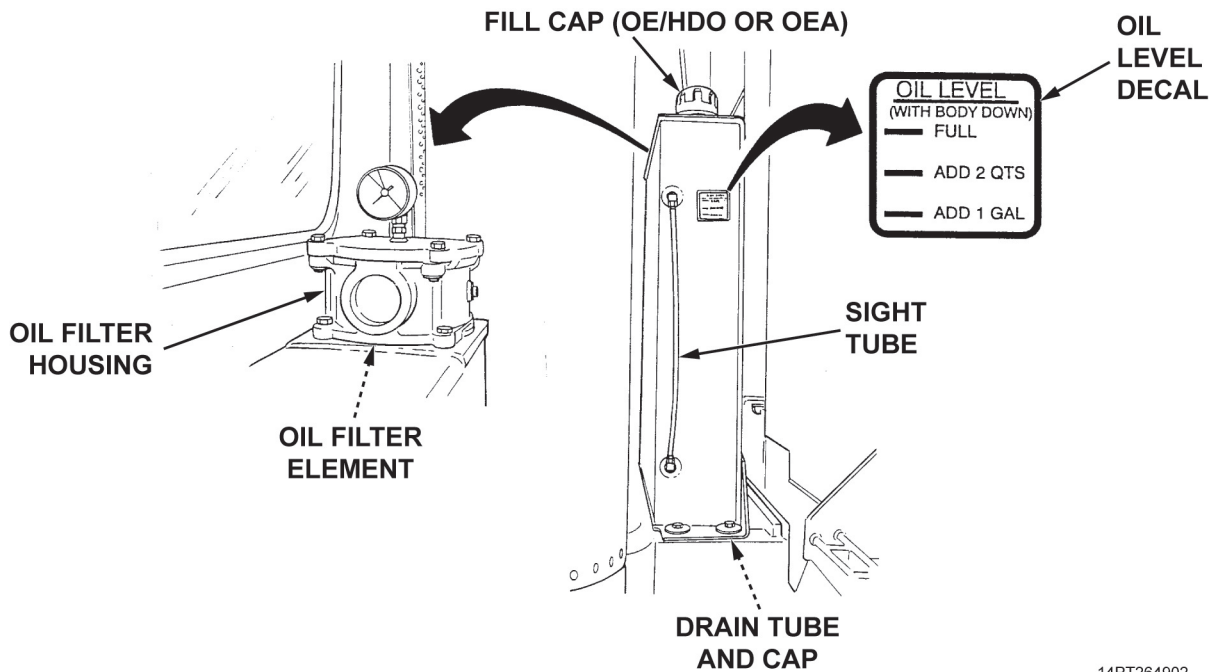
* For Arctic Operations, Refer to TM 4-33.31

LUBRICATION CHART - Continued



14PT264901

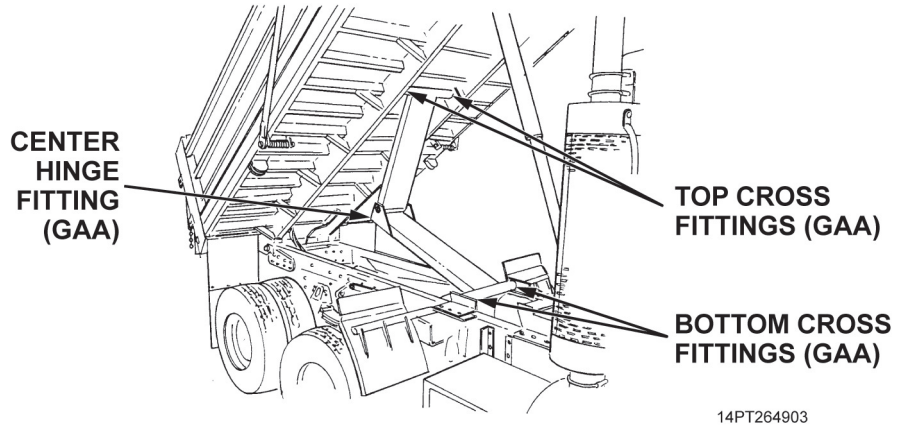
Figure 1. View A: Transport Lock Linkage.



14PT264902

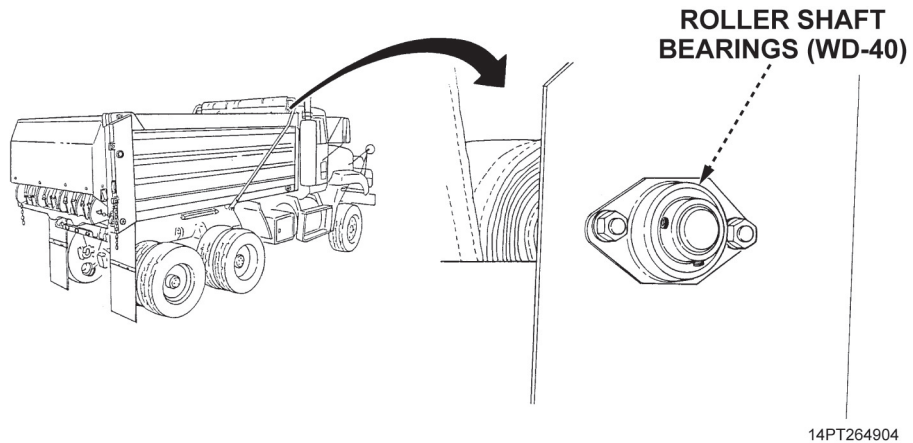
Figure 2. View B: Hydraulic Reservoir.

LUBRICATION CHART - Continued



14PT264903

Figure 3. View C: Stabilizer.



14PT264904

Figure 4. View D: Cargo Cover.

LUBRICATION CHART - Continued

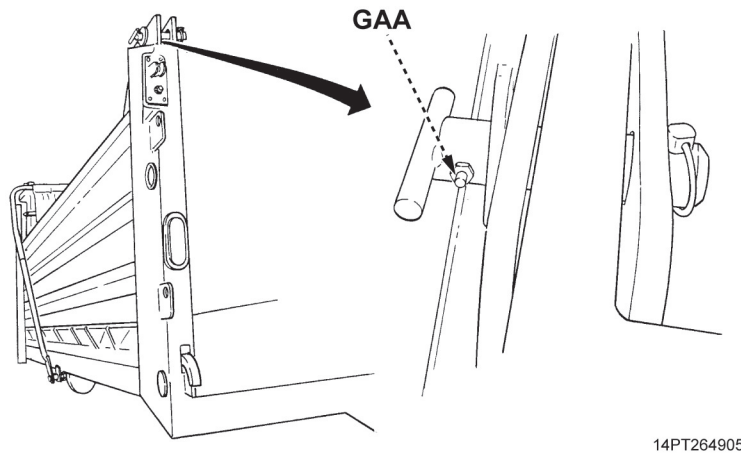


Figure 5. View E: Tailgate Hinge Pins.

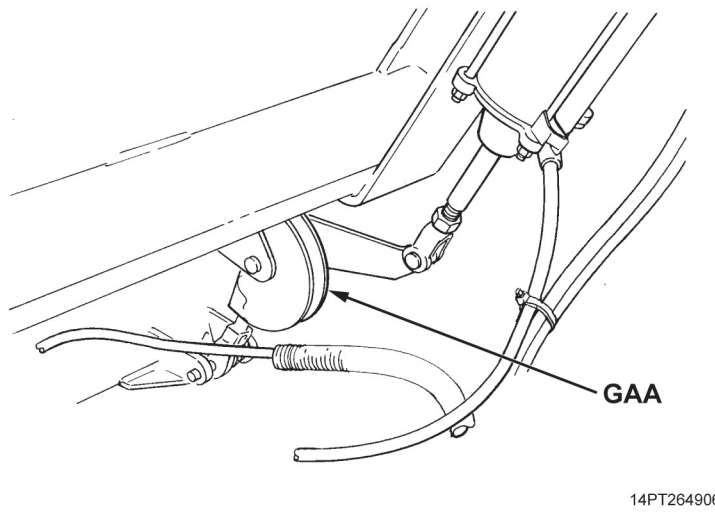


Figure 6. View F: Tailgate Locking Linkage.

LUBRICATION CHART - Continued

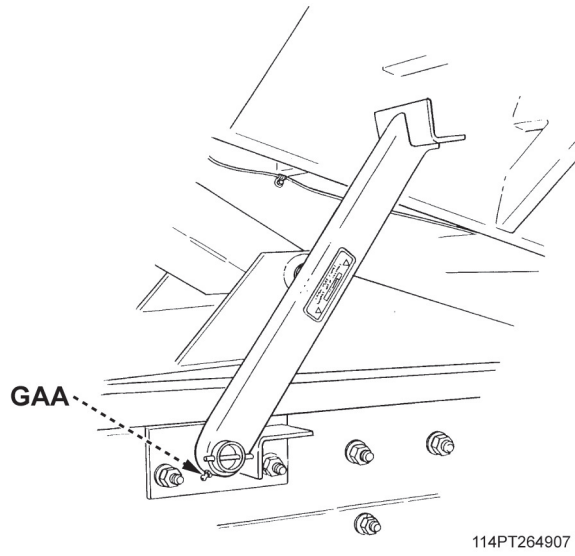


Figure 7. View G: Body Props.

NOTES:**1. CARGO COVER.**

- a. Semiannually, remove chain cover. Clean chain as required and lubricate sparingly with corrosion preventive. Install chain cover (WP 0055).
- b. Semiannually, lubricate roller shaft bearings at roll-up bar mounting brackets. Apply corrosion preventive sparingly.

2. TRANSPORT LOCK LINKAGE.

- a. Monthly, raise dump body and support on body props (WP 0005). Apply GAA to four lubrication fittings on linkage. Remove dump body from body props and lower.
- b. Remove locking pin and operate transport lock. Reinstall locking pin with transport lock at 3 o'clock position (WP 0005).

3. HYDRAULIC RESERVOIR.**WARNING**

To prevent burns, use caution when removing fill cap of hydraulic reservoir when hydraulic fluid is hot. Avoid contact with hot hydraulic oil. Use extreme care when filling, sampling or draining hydraulic oil. Failure to comply may result in personnel injury.

- a. Daily, with dump body down, vehicle parked on level ground, and engine off, check sight tube to determine level of hydraulic oil in reservoir. Level should be even with FULL mark on oil level decal. If low, remove fill cap, remove any debris from strainer, and clean fill cap and strainer with a clean rag. Add OE/HDO or OEA through fill cap opening to bring oil level up to FULL mark. DO NOT overfill.

NOTE

- If reservoir must be filled while dump body is raised and supported on body props, level of oil should be at bottom of sight tube.
 - Whenever hydraulic oil filter service indicator shows RED, hydraulic oil filter element must be replaced.
- b. Annually, with dump body down, remove cap from drain tube on underside of reservoir and drain all oil. Remove and clean fill cap and strainer. Install strainer (WP 0064). Replace hydraulic oil filter element (WP 0063). Clean drain plug and install. Fill reservoir with OE/HDO or OEA until level in sight tube is at FULL mark on oil level decal. DO NOT overfill.
4. **STABILIZER.** Monthly, raise dump body and support on body props (WP 0005). Apply GAA to five lubrication fittings on stabilizer. Remove dump body from body props and lower.
 5. **TAILGATE HINGE PINS.** Monthly, apply GAA to each tailgate hinge pin lubrication fitting.
 6. **TAILGATE LOCKING LINKAGE.** Monthly, apply GAA to tailgate locking linkage lubrication fitting.
 7. **BODY PROPS.** Semiannually, raise dump body and support on body props (WP 0005). Apply GAA to each body prop lubrication fitting.

END OF WORK PACKAGE

**FIELD MAINTENANCE
ILLUSTRATED LIST OF MANUFACTURED ITEMS INTRODUCTION**

INITIAL SETUP:

Not Applicable

INTRODUCTION**Scope**

This work package includes complete instructions for making items authorized to be manufactured or fabricated at field maintenance level.

How To Use the Index of Manufactured Items

A part number index in alphanumeric order is provided for cross-referencing the part number of the item to be manufactured to the information which covers fabrication criteria.

Explanation of the Illustrations of Manufactured Items

All instructions needed by maintenance personnel to manufacture the item are included on the illustrations. Parts information may be found in Chapter 9. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list on the illustration.

Only items requiring complicated manufacturing instructions are illustrated.

Table 1. Manufactured Items Part Number Cross-Reference Index.

| PART NUMBER | NAME | REFERENCE |
|--------------------|---|------------------|
| 010029X12 | Tube, Material Control System (MCS), Air Cylinder | (WP 0075) |
| 239635X1.5 | Tube, Sight, Hydraulic Reservoir | (WP 0075) |
| 245538X66 | Tube, Air, MCS Tailgate | (WP 0075) |
| 245539X21 | Tube, Air, MCS Tailgate | (WP 0075) |
| 245540X17 | Tube, Air, MCS Tailgate | (WP 0075) |
| 245541X8 | Tube, Air, MCS Tailgate | (WP 0075) |
| 245542X31 | Tube, Air, MCS Tailgate | (WP 0075) |
| 245543X9 | Tube, Air, MCS Tailgate | (WP 0075) |
| 245544X144 | Tube, Air, MCS Tailgate | (WP 0075) |

INTRODUCTION - Continued

Table 1. Manufactured Items Part Number Cross-Reference Index - Continued.

| PART NUMBER | NAME | REFERENCE |
|--------------------|--------------------------------------|------------------|
| 245786X36 | Tube, Air, Tailgate Release | (WP 0075) |
| 245787X38 | Tube, Air, Tailgate Release | (WP 0075) |
| 403345X148.75 | Board, Side, Dump Body | (WP 0075) |
| N/A | Disassembly Tool, Hydraulic Cylinder | (WP 0075) |

END OF WORK PACKAGE

**FIELD MAINTENANCE
ILLUSTRATED LIST OF MANUFACTURED ITEMS**

INITIAL SETUP:**References**WP 0104

MANUFACTURING PROCEDURES

For bulk materials mentioned below, refer to (WP 0104).

Tailgate Release Air Cylinder Tubes

1. Fabricate from bulk Part Number NT10006 (79470), 3/8 in. OD nonmetallic tubing.
2. Cut to 36 in. long to make Part Number 245786X36.
3. Cut to 38 in. long to make Part Number 245787X38.

Material Control System (MCS) Air Cylinder Tube

1. Fabricate from bulk Part Number 020003-7 (79146), 3/8 in. OD copper tubing.
2. Cut to approximately 12 in. long, then cut to fit and flare ends to make Part Number 010029X12.
3. Two required per each MCS air cylinder.

MCS Tailgate Air Tubes

1. Fabricate from bulk Part Number NT10006 (79470), 3/8 in. OD nonmetallic tubing.
2. Cut to 66 in. long to make Part Number 245538X66.
3. Cut to 21 in. long to make Part Number 245539X21.
4. Cut to 17 in. long to make Part Number 245540X17.
5. Cut to 8 in. long to make Part Number 245541X8.
6. Cut to 31 in. long to make Part Number 245542X31.
7. Cut to 9 in. long to make Part Number 245543X9.
8. Cut to 144 in. long to make Part Number 245544X144.

Dump Body Side Board

1. Fabricate from bulk Part Number MILL2037 (81349), 2.0 in. x 8.0 in. rough sawn hardwood.
2. Cut to fit 148.75 in. long to make Part Number 403345X148.75.
3. Two required per dump body.

Hydraulic Reservoir Sight Tube

1. Fabricate from bulk Part Number PT 24006NA (79470), 3/8 in. OD clear tubing.
2. Cut to 1.50 ft long to make Part Number 239635X1.50.

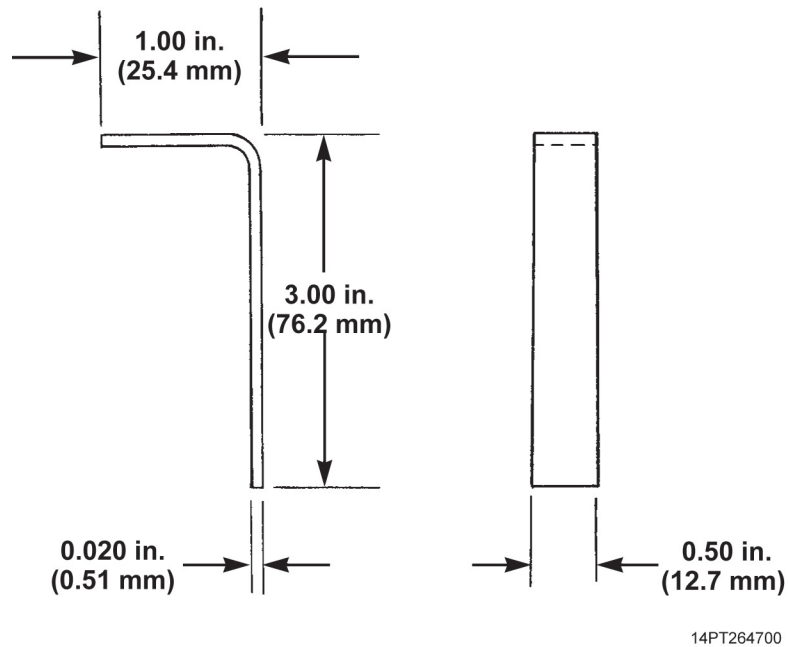
MANUFACTURING PROCEDURES - Continued**Hydraulic Cylinder Disassembly Tool**

Figure 1. Hydraulic Cylinder Disassembly Tool.

1. Fabricate from 0.020 in. shim stock.
2. All dimensions are approximate.
3. Four required.

END OF WORK PACKAGE

FIELD MAINTENANCE TORQUE LIMITS

GENERAL

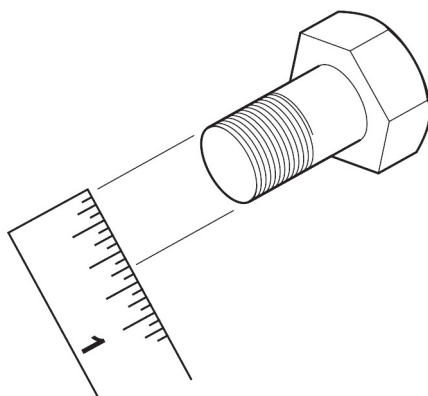
This work package provides general torque limits for screws used on the dump body. Special torque limits are indicated in the maintenance procedures for applicable components. The general torque limits in this WP shall be used when specific torque limits are not indicated in the maintenance procedure. These general torque limits cannot be applied to screws that retain rubber components. The rubber components will be damaged before the correct 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 complete revolution.

TORQUE TABLES

Figure 4 lists dry torque limits. Dry torque limits are used on screws that do not have lubricants applied to the threads. Figure 5 lists wet torque limits. Wet torque limits are used on screws that have high-pressure lubricants applied to the threads. For metric fasteners dry torque, refer to Figure 6, and for metric fasteners wet torque, refer to Figure 7 for torque limit requirements.

HOW TO USE TORQUE LIMITS

1. Measure the diameter of the screw you are installing (Figure 1).



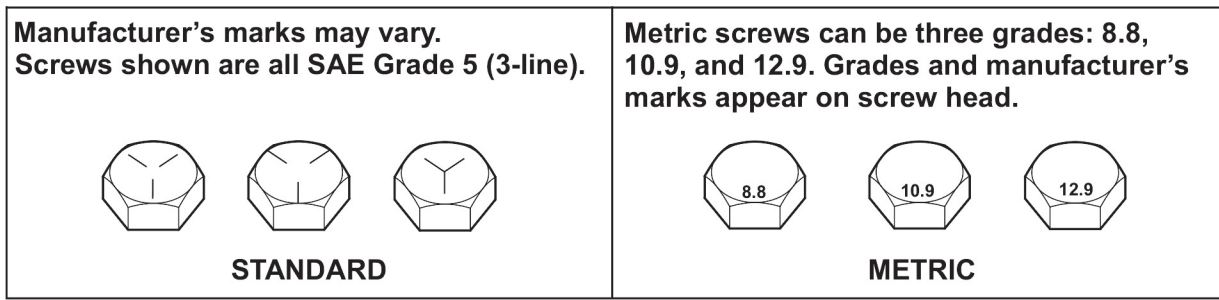
14PT264912

Figure 1. Measuring Screw Diameter.

NOTE

Perform Step 2 for standard screws only. To determine if screw is standard or metric, check capscrew head and refer to Figure 2.

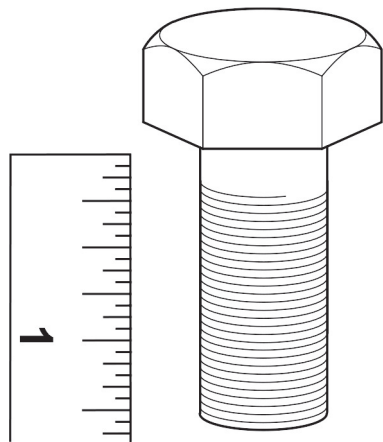
TORQUE TABLES - Continued



14PT264913

Figure 2. Capscrew Head Markings.

- Count the number of threads per inch (Figure 3).



14PT264914

Figure 3. Measuring Screw.

- 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.)
- In the second column under **SIZE**, find the number of threads per inch that matches the number of threads you counted in Step 2. (Not required for metric screws.)
- To find the grade screw you are installing, match the markings on the head to the correct picture of Capscrew Head Markings in the illustration preceding the torque tables.
- Look down the column under the picture you found in Step 5, until you find the torque limit (lb-in., lb-ft, or N•m) for the diameter and threads per inch of the screw.

TORQUE TABLES - Continued

| SIZE | | | TORQUE | | | | | | | |
|-------------|------------------|------------------|----------------------|---------------|-----------------|---------------|----------------------|---------------|-----------------|---------------|
| | | | SAE GRADE NO. 1 OR 2 | | SAE GRADE NO. 5 | | SAE GRADE NO. 6 OR 7 | | SAE GRADE NO. 8 | |
| DIA. INCHES | THREADS PER INCH | DIA. MILLIMETERS | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS |
| 1/4 | 20 | 6.35 | 5 | 7 | 8 | 11 | 10 | 14 | 10 | 16 |
| 1/4 | 28 | 6.35 | 6 | 8 | 10 | 14 | 12 | 16 | 12 | 16 |
| 5/16 | 18 | 7.94 | 11 | 15 | 17 | 23 | 21 | 28 | 24 | 33 |
| 5/16 | 24 | 7.94 | 12 | 16 | 19 | 26 | 24 | 33 | 27 | 37 |
| 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 | 230 |
| 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 | 596 |
| 7/8 | 9 | 22.23 | 140 | 190 | 400 | 542 | 520 | 705 | 600 | 813 |
| 7/8 | 14 | | 155 | 210 | 440 | 597 | 580 | 786 | 660 | 895 |
| 1 | 8 | 25.40 | 220 | 298 | 580 | 786 | 800 | 1,085 | 900 | 1,220 |
| 1 | 12 | | 240 | 325 | 640 | 868 | 860 | 1,166 | 1,000 | 1,356 |
| 1-1/8 | 7 | 25.58 | 300 | 407 | 800 | 1,085 | 1,120 | 1,519 | 1,280 | 1,735 |
| 1-1/8 | 12 | | 340 | 461 | 880 | 1,193 | 1,260 | 1,708 | 1,440 | 1,952 |
| 1-1/4 | 7 | 31.75 | 420 | 569 | 1,120 | 1,519 | 1,580 | 2,142 | 1,820 | 2,468 |
| 1-1/4 | 12 | | 460 | 624 | 1,240 | 1,681 | 1,760 | 2,386 | 2,000 | 2,712 |
| 1-3/8 | 6 | 34.93 | 560 | 759 | 1,460 | 1,979 | 2,080 | 2,820 | 2,380 | 3,227 |
| 1-3/8 | 12 | | 640 | 868 | 1,690 | 2,291 | 2,380 | 3,227 | 2,720 | 3,688 |
| 1-1/2 | 6 | 38.10 | 740 | 1,003 | 1,940 | 2,630 | 2,780 | 3,769 | 3,160 | 4,284 |
| 1-1/2 | 12 | | 840 | 1,139 | 2,200 | 2,983 | 3,100 | 4,203 | 3,560 | 4,827 |

14PT264915

Figure 4. Torque Limits for Dry Fasteners.

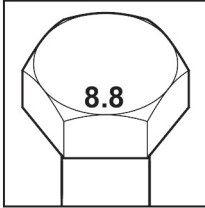
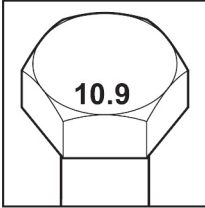
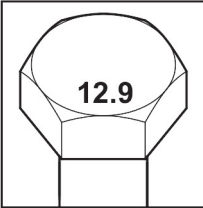
TORQUE TABLES - Continued

| SIZE | | | TORQUE | | | | | | | |
|-------------|------------------|------------------|----------------------|---------------|-----------------|---------------|----------------------|---------------|-----------------|---------------|
| | | | SAE GRADE NO. 1 OR 2 | | SAE GRADE NO. 5 | | SAE GRADE NO. 6 OR 7 | | SAE GRADE NO. 8 | |
| DIA. INCHES | THREADS PER INCH | DIA. MILLIMETERS | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS |
| 1/4 | 20 | 6.35 | 4 | 5 | 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 | 40 | 54 |
| 3/8 | 24 | 9.53 | 17 | 23 | 25 | 34 | 30 | 41 | 44 | 60 |
| 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 | 239 |
| 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 | 813 | 680 | 922 |
| 1 | 12 | | 170 | 230 | 480 | 651 | 660 | 895 | 740 | 1,003 |
| 1-1/8 | 7 | 25.58 | 220 | 298 | 600 | 813 | 840 | 1,139 | 960 | 1,302 |
| 1-1/8 | 12 | | 260 | 353 | 660 | 895 | 940 | 1,274 | 1,080 | 1,464 |
| 1-1/4 | 7 | 31.75 | 320 | 434 | 840 | 1,139 | 1,100 | 1,491 | 1,360 | 1,844 |
| 1-1/4 | 12 | | 360 | 488 | 920 | 1,247 | 1,320 | 1,790 | 1,500 | 2,034 |
| 1-3/8 | 6 | 34.93 | 420 | 569 | 1,100 | 1,491 | 1,560 | 2,115 | 1,780 | 2,413 |
| 1-3/8 | 12 | | 460 | 624 | 1,260 | 1,708 | 1,780 | 2,413 | 2,040 | 2,766 |
| 1-1/2 | 6 | 38.10 | 560 | 759 | 1,460 | 1,979 | 2,080 | 2,820 | 2,360 | 3,200 |
| 1-1/2 | 12 | | 620 | 841 | 1,640 | 2,224 | 2,320 | 3,145 | 2,660 | 3,606 |

14PT264916

Figure 5. Torque Limits for Wet Fasteners.

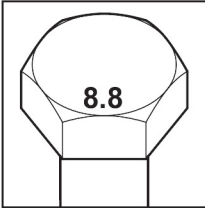
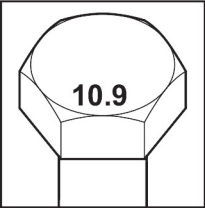
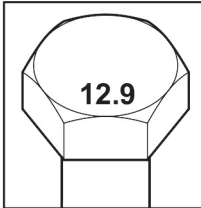
TORQUE TABLES - Continued

| CAPSCREW HEAD MARKINGS | | | | | | | |
|------------------------|---------------------|---|------------------|--|------------------|---|------------------|
| | |  | |  | |  | |
| SIZE | | TORQUE | | | | | |
| | | METRIC GRADE 8.8 | | METRIC GRADE 10.9 | | METRIC GRADE 12.9 | |
| DIA. INCHES | THREADS PER INCH | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS |
| 0.157 | 4 | 2 | 3 | 3 | 4 | 4 | 5 |
| 0.197 | 5 | 4 | 5 | 6 | 8 | 7 | 9 |
| 0.237 | 6 | 7 | 9 | 10 | 14 | 11 | 15 |
| 0.276 | 7 | 11 | 15 | 16 | 22 | 20 | 27 |
| 0.315 | 8 | 18 | 24 | 25 | 34 | 29 | 39 |
| 0.394 | 10 | 32 | 43 | 47 | 64 | 58 | 79 |
| 0.473 | 12 | 58 | 79 | 83 | 113 | 100 | 136 |
| 0.552 | 14 | 94 | 127 | 133 | 180 | 159 | 216 |
| 0.630 | 16 | 144 | 195 | 196 | 266 | 235 | 319 |
| 0.709 | 18 | 190 | 258 | 269 | 365 | 323 | 438 |
| 0.788 | 20 | 260 | 353 | 366 | 496 | 440 | 597 |
| 0.867 | 22 | 368 | 499 | 520 | 705 | 678 | 919 |
| 0.946 | 24 | 470 | 637 | 664 | 900 | 794 | 1,077 |
| 1.064 | 27 | 707 | 959 | 996 | 1,350 | 1,235 | 1,674 |
| 1.182 | 30 | 967 | 1,311 | 1,357 | 1,840 | 1,630 | 2,210 |

14PT264917

Figure 6. Torque Limits for Dry Metric Fasteners.

TORQUE TABLES - Continued

| CAPSCREW HEAD MARKINGS | | | | | | | |
|------------------------|------------------|---|---------------|--|---------------|---|---------------|
| | |  | |  | |  | |
| SIZE | | TORQUE | | | | | |
| | | METRIC GRADE 8.8 | | METRIC GRADE 10.9 | | METRIC GRADE 12.9 | |
| DIA. INCHES | THREADS PER INCH | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS | POUND FEET | NEWTON METERS |
| 0.197 | 5 | 3 | 4 | 5 | 7 | 6 | 8 |
| 0.237 | 6 | 6 | 8 | 8 | 11 | 10 | 14 |
| 0.276 | 7 | 10 | 14 | 14 | 19 | 16 | 22 |
| 0.315 | 8 | 14 | 19 | 20 | 27 | 24 | 33 |
| 0.394 | 10 | 28 | 38 | 40 | 54 | 47 | 64 |
| 0.473 | 12 | 49 | 66 | 69 | 94 | 81 | 94 |
| 0.552 | 14 | 78 | 106 | 111 | 150 | 130 | 176 |
| 0.630 | 16 | 121 | 164 | 172 | 233 | 202 | 274 |
| 0.709 | 18 | 167 | 226 | 238 | 323 | 279 | 378 |
| 0.788 | 20 | 235 | 319 | 337 | 457 | 394 | 534 |
| 0.867 | 22 | 321 | 435 | 460 | 624 | 537 | 728 |
| 0.946 | 24 | 407 | 552 | 582 | 789 | 681 | 923 |
| 1.064 | 27 | 597 | 809 | 854 | 1,157 | 998 | 1,353 |
| 1.182 | 30 | 809 | 1,097 | 1,158 | 1,570 | 1,353 | 1,834 |

14PT264918

Figure 7. Torque Limits for Wet Metric Fasteners.

TORQUE WRENCH ADAPTERS

Some tasks require the use of a torque wrench adapter when the nut or screw cannot be reached with a regular socket on the end of the torque wrench. These adapters add to the overall length of the torque wrench and make the dial or scale reading less than actual torque applied to the nut or screw. To prevent overtorquing and damage to equipment, calculate correct dial or scale reading using the conversion formula below.

CONVERSION FORMULA

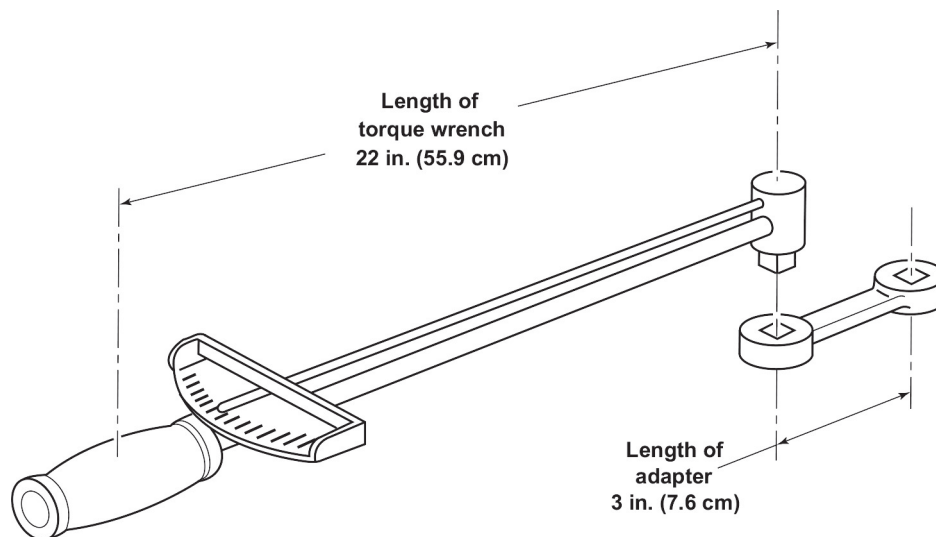
Correct dial or scale readings are determined by the use of the following formula:

Correct Reading = Required torque value ÷ Length of torque wrench + length of adapter ÷ length of torque wrench.

TORQUE TABLES - Continued

NOTE

Length of torque wrench is measured from center of handle to center of drive. The length of adapter is measured from center of drive to center of wrench.



14PT264919

Figure 8. Measurement of Torque Wrench.

NOTE

In this example, the torque wrench is 22 in. (55.9 cm) and the adapter is 3 in. (7.6 cm). Required torque is 19 lb-ft (25.8 N•m).

- Correct Reading = 19 lb-ft (25.8 N•m) ÷ 22 in. (55.9 cm) + 3 in. (7.6 cm) ÷ 22 in. (55.9 cm)
- Correct Reading = 19 lb-ft (25.8 N•m) ÷ 25 in. (63.5 cm) ÷ 22 in. (55.9 cm)
- Correct Reading = 19 lb-ft (25.8 N•m) ÷ 1.14
- Correct Reading = 17 lb-ft (23.0 N•m)

END OF TASK**END OF WORK PACKAGE**

FIELD MAINTENANCE WIRING DIAGRAMS

INITIAL SETUP:

Not Applicable

INTRODUCTION

Scope

This work package shows the wiring of the dump body components, including all systems or equipment which can be installed or removed. Wiring diagrams and essential wiring information are provided for all electrical and electronic systems and circuits.

Wiring Identification

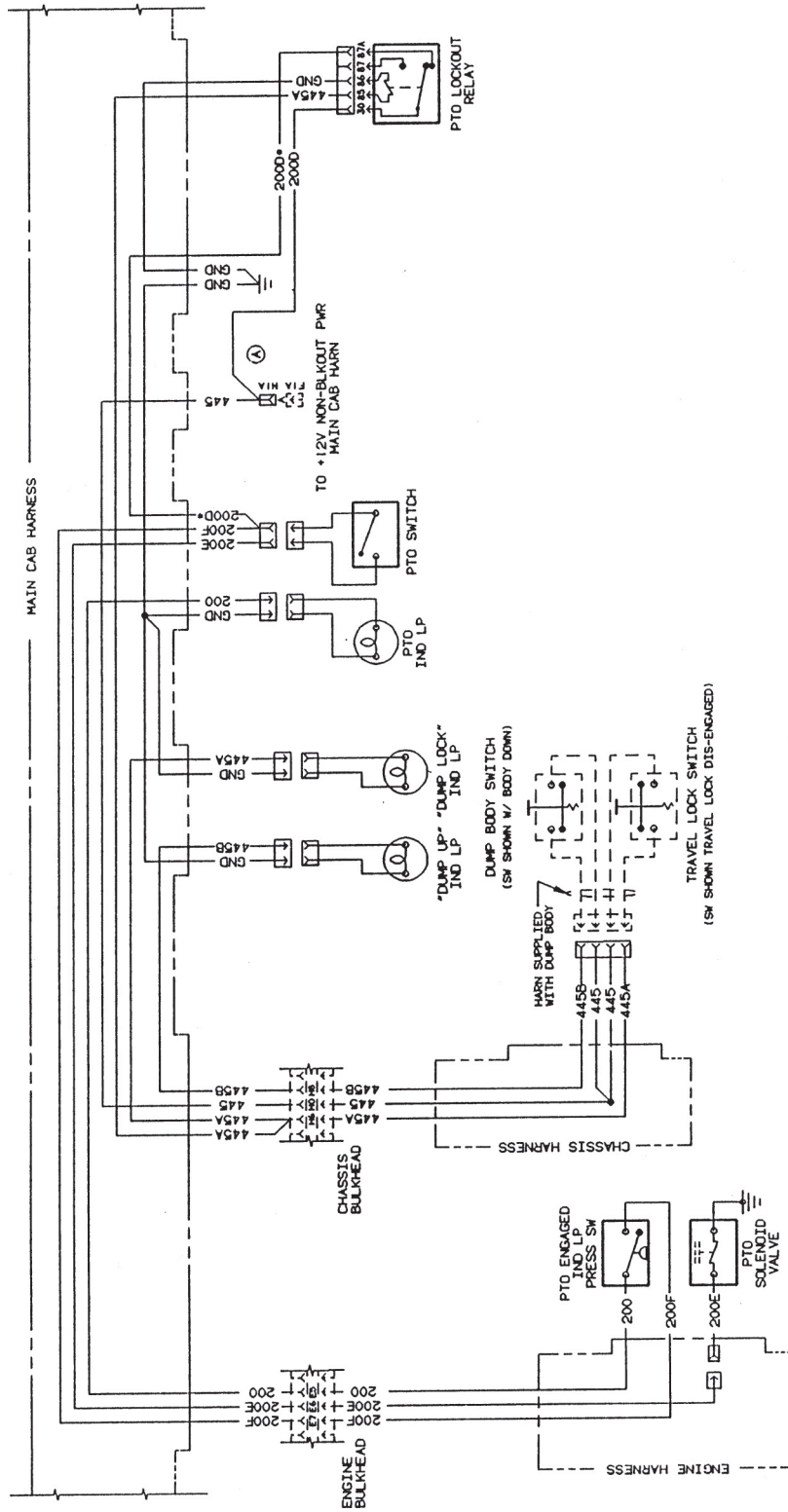
All information to identify wires is contained in the following figures:

- Figure 1 Power Take Off (PTO) Lockout Diagram.
- Figure 2 Material Control System (MCS) Diagram.
- Figure 3 Body Up and Transport Lock Switch Diagram.
- Figure 4 Beacon Warning Light Diagram.
- Figure 5 Dump Body Taillights and Marker Clearance Lights Diagram.

Abbreviations and Acronyms

Abbreviations and acronyms are in accordance with ASME Y14.38, except when the abbreviation or acronym stands for a marking actually found on the dump body.

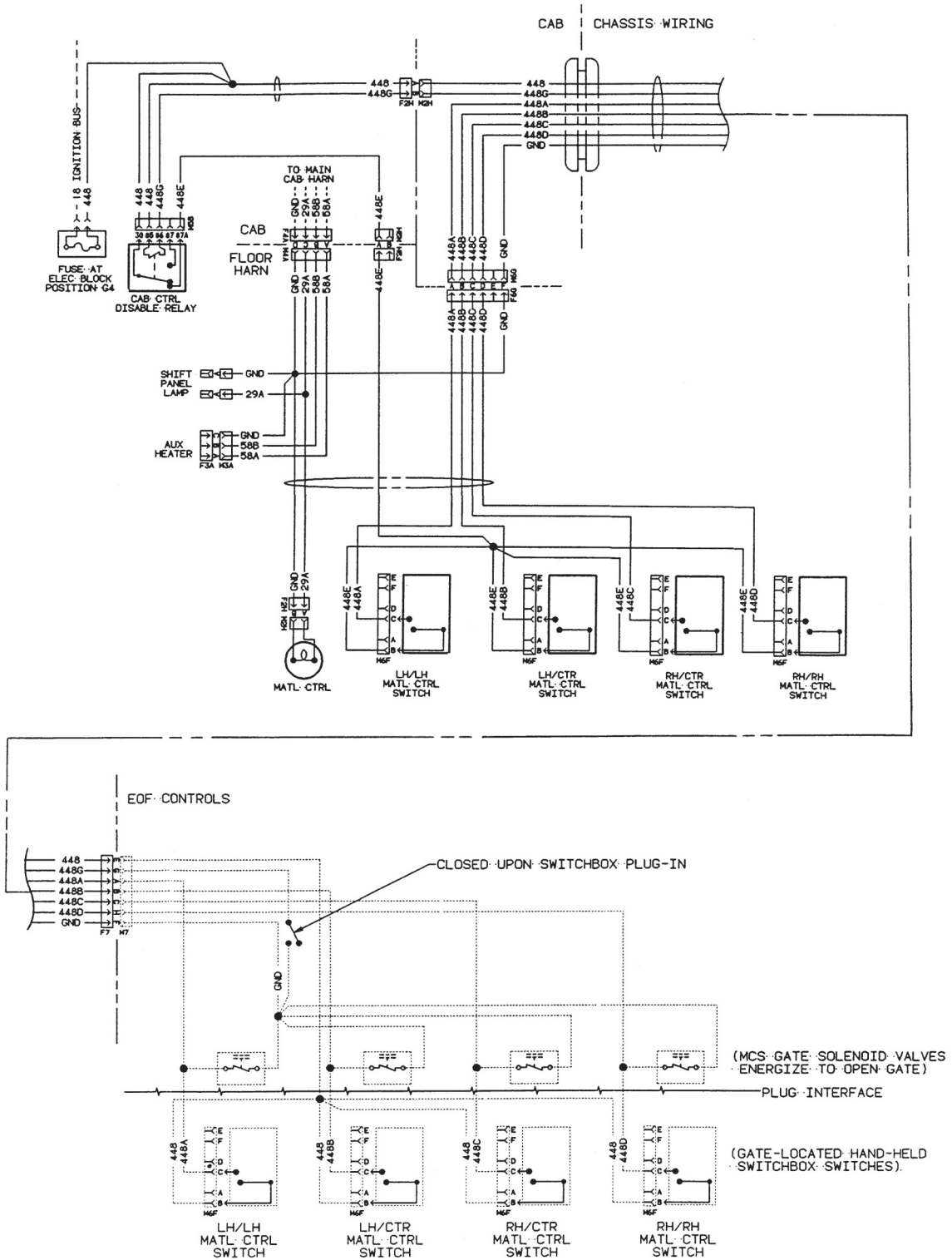
WIRING DIAGRAMS



14PT264089

Figure 1. Power Take Off (PTO) Lockout Diagram.

WIRING DIAGRAMS - Continued



14PT264090

Figure 2. Material Control System (MCS) Diagram.

WIRING DIAGRAMS - Continued

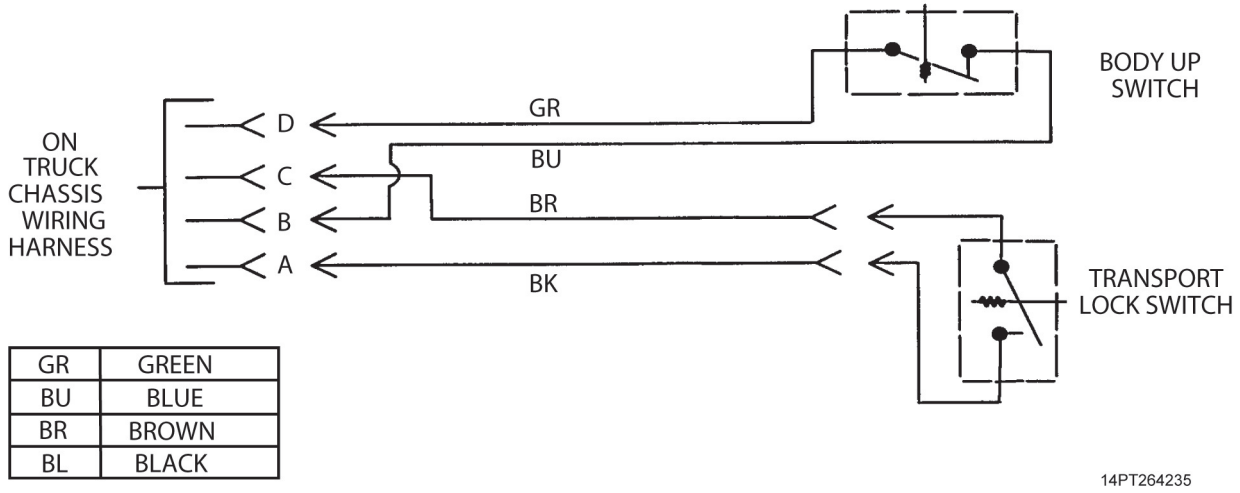


Figure 3. Body Up and Transport Lock Switch Diagram.

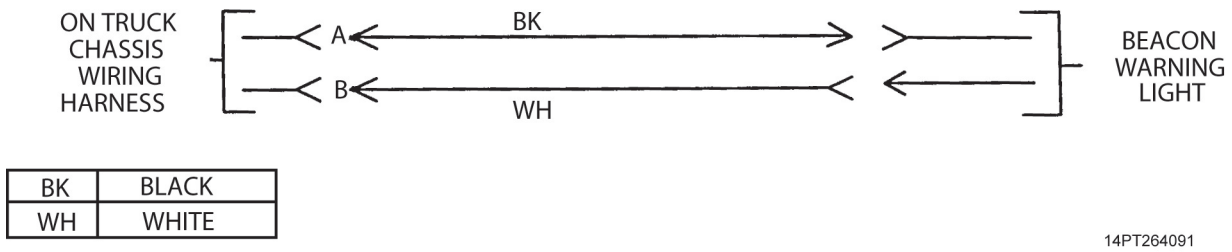


Figure 4. Beacon Warning Light Diagram.

WIRING DIAGRAMS - Continued

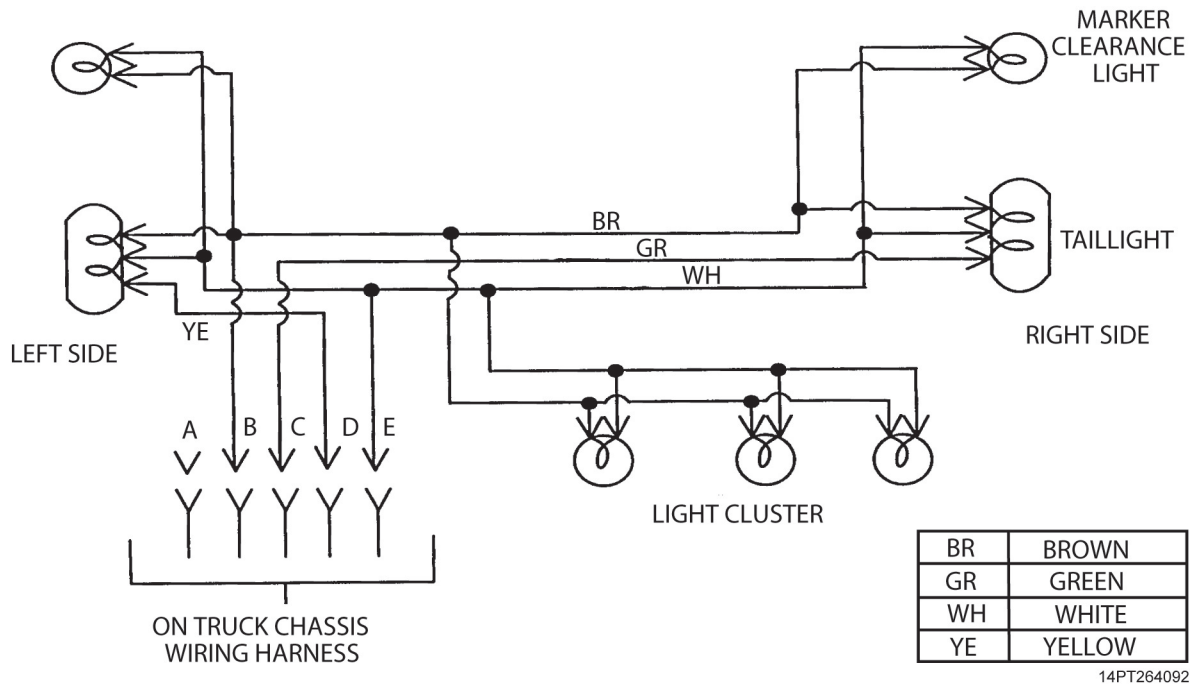


Figure 5. Dump Body Taillights and Marker Clearance Lights Diagram.

END OF WORK PACKAGE

CHAPTER 9
PARTS INFORMATION

FIELD MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) INTRODUCTION

SCOPE

This RPSTL lists and authorizes spares and repair parts; special tools; special Test, Measurement, and Diagnostic Equipment (TMDE); and other special support equipment required for performance of operator and field maintenance of the dump body. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the Source, Maintenance, and Recoverability (SMR) codes.

GENERAL

In addition to the Introduction work package, this RPSTL is divided into the following work packages:

1. **Repair Parts List Work Packages.** Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work package. Repair parts kits are listed separately in their own functional group and work packages. Repair for reparable special tools are also listed in a separate work package. Items listed are shown on the associated illustrations.
2. **Special Tools List Work Packages.** Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) Column). Tools that are components of common tool sets and/or Class VII are not listed.
3. **Cross-Reference Indexes Work Packages.** There are two cross-reference index work packages in this RPSTL: the National Stock Number (NSN) Index work package and the Part Number (P/N) Index work package. The NSN Index work package refers you to the figure and item number. The P/N Index work package refers you to the figure and item number.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES

ITEM NO (Column (1)). Indicates the number used to identify items called out in the illustration.

SMR CODE (Column (2)). The SMR code contains supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout. This entry may be subdivided into four subentries, one for each service.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

Table 1. SMR Code Explanation.

| <u>Source Code</u> <u>XX</u> | <u>Maintenance Code</u> <u>XX</u> | <u>Recoverability Code</u> <u>X</u> |
|---|--|---|
| 1st two positions: How to get an item. | 3rd position: Who can install, replace, or use the item. | 4th position: Who can do complete repair* on the item. |
| | | 5th position: Who determines disposition action on unserviceable items. |

***Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.**

Source Code.The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

| <u>Source Code</u> | <u>Application/Explanation</u> |
|---|--|
| PA | |
| PB | |
| PC | |
| PD | |
| PE | |
| PF | |
| PG | |
| PH | |
| PR | |
| PZ | |
| | NOTE |
| | Items coded PC are subject to deterioration. |
| | Stocked items; use the applicable NSN to requisition/request items with these source codes. They are authorized to the level indicated by the code entered in the third position of the SMR code. |
| KD | Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the third position of the SMR code. The complete kit must be requisitioned and applied. |
| KF | |
| KB | |
| MF - Made at field | Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the P/N in the DESCRIPTION AND USABLE ON CODE (UOC) Column and listed in the bulk material functional group of this RPSTL. If the item is authorized to you by the third position 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. |
| MH - Made at below depot/sustainment level | |
| ML - Made at SRA | |
| MD - Made at depot | |
| AF - Assembled by field | 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 third position of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance. |
| AH - Assembled by below depot/sustainment level | |
| AL - Assembled by SRA | |
| AD - Assembled by depot | |
| XA | Do not requisition an "XA" coded item. Order the next higher assembly. (Refer to NOTE below.) |
| XB | If an item is not available from salvage, order it using the Commercial and Government Entity Code (CAGEC) and P/N. |

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

| | |
|----|---|
| XC | Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's P/N. |
| XD | Item is not stocked. Order an "XD" coded item through local purchase or normal supply channels using the CAGEC and P/N 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 items source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

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:

Third Position. 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 the following levels of maintenance:

| <u>Maintenance Code</u> | <u>Application/Explanation</u> |
|-------------------------|---|
| C - | Crew maintenance can service, remove, replace, and use the item. |
| F - | Field maintenance can remove, replace, and use the item. |
| H - | Below Depot Sustainment maintenance can remove, replace, and use the item. |
| L - | Specialized Repair Activity (SRA) can remove, replace, and use the item. |
| K - | Contractor facility can remove, replace, and use the item. |
| Z - | Item is not authorized to be removed, replaced, or used at any maintenance level. |
| D - | Depot can remove, replace, and use the item. |

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

Fourth Position. The maintenance code entered in the fourth position tells you whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (perform all authorized repair functions).

NOTE

Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

| <u>Maintenance Code</u> | <u>Application/Explanation</u> |
|-------------------------|---|
| F - | Field is the lowest level that can do complete repair of the item. |
| H - | Below Depot Sustainment is the lowest level that can do complete repair of the item. |
| L - | SRA 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. |
| K - | Complete repair is done at contractor facility. |
| Z - | Nonreparable. No repair is authorized. |
| B - | No repair is authorized. No parts or special tools are authorized for maintenance of "B" coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level. |

Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is shown in the fifth position of the SMR code as follows:

| <u>Recoverability Code</u> | <u>Application/Explanation</u> |
|----------------------------|---|
| Z - | Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the third position of the SMR code. |
| F - | Reparable item. When uneconomically repairable, condemn and dispose of the item at the field level. |
| H - | Reparable item. When uneconomically repairable, condemn and dispose of the item at the below depot sustainment level. |
| D - | Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item are not authorized below depot level. |
| L - | Reparable item. Condemnation and disposal not authorized below SRA. |
| A - | Item requires special handling or condemnation procedures because of specific reasons (such as precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions. |
| K - | Reparable item. Condemnation and disposal to be performed at contractor facility. |

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

NSN (Column (3)). The NSN for the item is listed in this column.

CAGEC (Column (4)). The CAGEC is a five-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

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 an NSN to requisition an item, the item you receive may have a different P/N from the number listed.

DESCRIPTION AND USABLE ON CODE (UOC) (Column (6)).

This column includes the following information:

1. The federal item name and, when required, a minimum description to identify the item.
2. P/Ns of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
3. Hardness Critical Item (HCI). A support item that provides the equipment with special protection from Electromagnetic Pulse (EMP) damage during a nuclear attack.
4. The statement END OF FIGURE appears just below the last item description in Column (6) for a given figure in both the repair parts list and special tools list work packages.

QTY (Column (7)). The QTY (quantity per figure) Column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and quantity may change from application to application.

EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS

1. **NATIONAL STOCK NUMBER (NSN) INDEX Work Package.** NSNs in this index are listed in National Item Identification Number (NIIN) sequence.

STOCK NUMBER Column. This column lists the NSN in NIIN sequence. The NIIN consists of the last nine digits of the NSN. When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number. For example, if the NSN is 5385-01-574-1476, the NIIN is 01-574-1476.

FIG. Column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts list and special tools list work packages.

ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIG. Column. This item is also identified by the NSN listed on the same line.

EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS - Continued

2. **PART NUMBER (P/N) INDEX Work Package.** P/Ns in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combination which places the first letter or digit of each group in order "A" through "Z," followed by the numbers "0" through "9" and each following letter or digit in like order).

PART NUMBER Column. Indicates the P/N assigned to the item.

FIG. Column. This column lists the number of the figure where the item is identified/located in the repair parts list and special tools list work packages.

ITEM Column. The item number is that number assigned to the item as it appears in the figure referenced in the adjacent FIG. Column.

SPECIAL INFORMATION

UOC. The UOC appears in the lower left corner of the DESCRIPTION Column heading. Usable on codes are shown as "UOC:..." in the DESCRIPTION Column (justified left) on the first line under the applicable item/nomenclature. Uncoded items are applicable to all models. Identification of the UOCs used in the RPSTL are:

| <u>Code</u> | <u>Used On</u> |
|-------------|---|
| 7A1 | M917A1 |
| 7A2 | M917A2 |
| 7E1 | M917A1 with Material Control System (MCS) |
| 7E2 | M917A2 with MCS |

Fabrication Instructions. Bulk materials required to manufacture items are listed in the bulk material functional group of this RPSTL. P/Ns for bulk material are also referenced in the DESCRIPTION Column of the line item entry for the item to be manufactured/fabricated. Detailed fabrication instructions for items source coded to be manufactured or fabricated are found in (WP 0074).

Index Numbers. Items which have the word BULK in the FIG. Column will have an index number shown in the ITEM NO. Column. This index number is a cross-reference between the National Stock Number (NSN) Index work package, the Part Number (P/N) Index work package, and the bulk material list in the repair parts list work package.

HOW TO LOCATE REPAIR PARTS

1. When NSNs or P/Ns Are Not Known.

First. Use the table of contents to determine the assembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and lists are divided into the same groups.

Second. Find the figure covering the functional group or subfunctional group to which the item belongs.

Third. Identify the item on the figure and note the number(s).

Fourth. Look in the repair parts list work packages for the figure and item numbers. The NSNs and P/Ns are on the same line as the associated item numbers.

2. When NSN Is Known.

First. If you have the NSN, look in the STOCK NUMBER column of the NSN Index work package. The NSN Index work package is arranged in NIIN sequence. Note the figure and item number next to the NSN.

Second. Turn to the figure and locate the item number. Verify that the item is the one you are looking for.

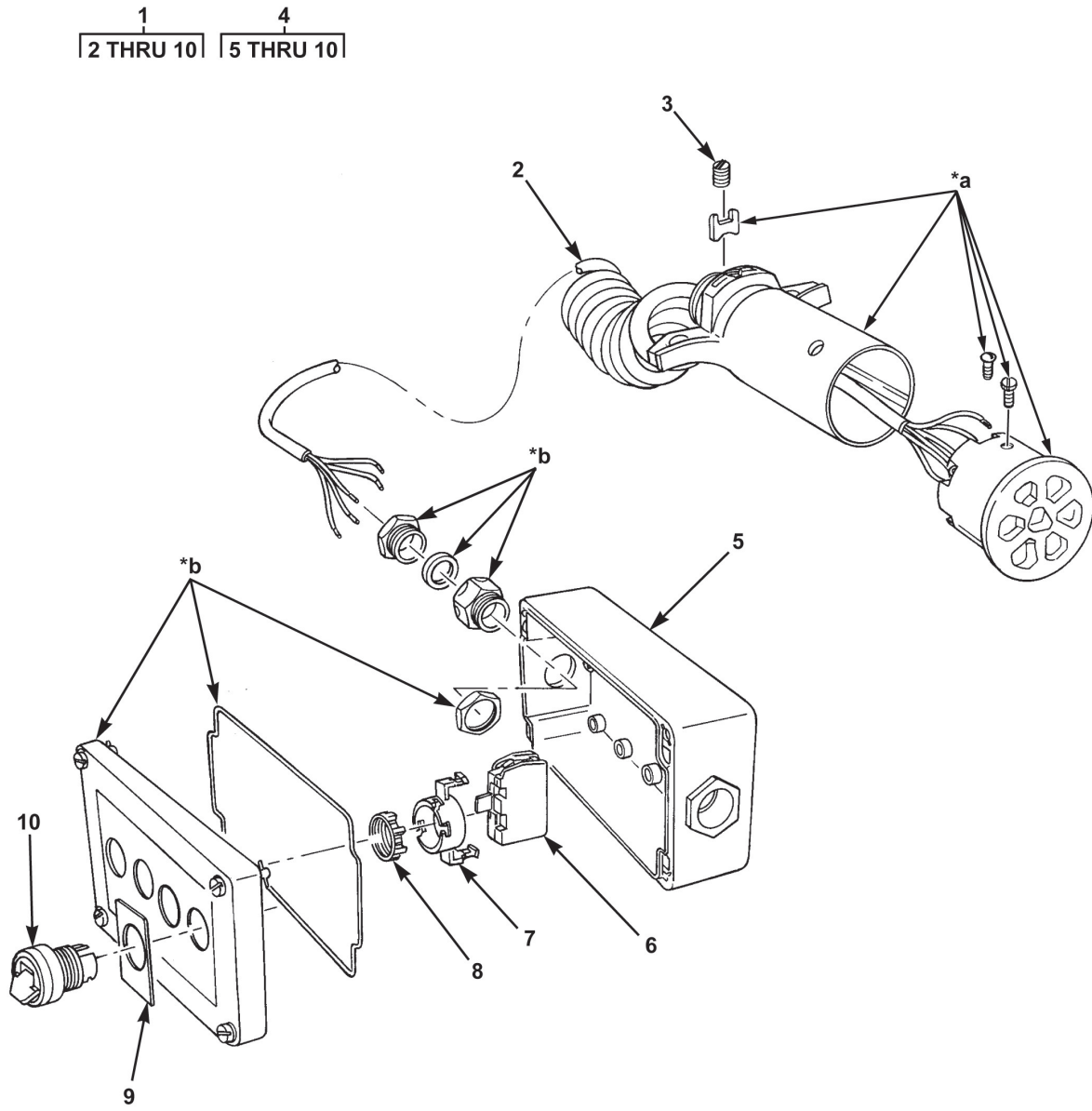
3. When P/N Is Known.

First. If you have the P/N and not the NSN, look in the PART NUMBER Column of the Part Number (P/N) Index work package. Identify the figure and item number.

Second. Look up the item on the figure in the applicable repair parts list work package.

END OF WORK PACKAGE

**FIELD MAINTENANCE
REMOTE CONTROL, MATERIAL CONTROL SYSTEM (MCS)**



*a Part of Item 3
*b Part of Item 5

14PT264500

Figure 1. Remote Control, Material Control System (MCS).

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|---|------------|
| GROUP 0608 MISCELLANEOUS ITEMS | | | | | | |
| FIG. 1. REMOTE CONTROL, MATERIAL CONTROL SYSTEM (MCS) | | | | | | |
| 1 | PAFFF | 3040-01-459-5141 | 5X050 | 128214 | CABLE ASSEMBLY,CONT UOC: 7E1,7E2 | 1 |
| 2 | PAFZZ | 6150-01-497-5582 | 5X050 | 403412 | . CABLE ASSEMBLY,POWE UOC: 7E1,7E2 | 1 |
| 3 | PAFZZ | 5935-00-856-3513 | 77326 | 11-700 | . CONNECTOR,PLUG,ELEC UOC: 7E1,7E2 | 1 |
| 4 | PFFFF | 5930-01-507-6990 | 7J764 | BNT22002 | . SWITCH ASSEMBLY UOC: 7E1,7E2 | 1 |
| 5 | XDFZZ | | 7J764 | BNT220 | .. COVER,ACCESS UOC: 7E1,7E2 | 1 |
| 6 | PAFZZ | 5925-01-499-3416 | 7J764 | 23E10 | .. CIRCUIT BREAKER UOC: 7E1,7E2 | 4 |
| 7 | XDFZZ | | 64678 | BCI/231E | .. CLIP,ELECTRICAL UOC: 7E1,7E2 | 4 |
| 8 | XDFZZ | | 7J764 | CM10P | .. NUT,GLAND,ELECTRICA UOC: 7E1,7E2 | 4 |
| 9 | XDFZZ | | 7J764 | WE11H416E | .. PLATE,IDENTIFICATIO OPEN/ CLOSED-LEFT CENTER UOC: 7E1,7E2 | 1 |
| 9 | XDFZZ | | 7J764 | WE11H415E | .. PLATE,IDENTIFICATIO OPEN/ CLOSED-LEFT UOC: 7E1,7E2 | 1 |
| 9 | XDFZZ | | 7J764 | WE11H417E | .. PLATE,IDENTIFICATIO OPEN/ CLOSED-RIGHT CENTER UOC: 7E1,7E2 | 1 |
| 9 | XDFZZ | | 7J764 | WE11H418E | .. PLATE,IDENTIFICATIO OPEN/ CLOSED-RIGHT UOC: 7E1,7E2 | 1 |
| 10 | PAFZZ | 5930-01-497-0704 | 7J764 | C21PA03 | .. SWITCH,TOGGLE UOC: 7E1,7E2 | 4 |

END OF FIGURE

**FIELD MAINTENANCE
CONTROL UNIT, MATERIAL CONTROL SYSTEM (MCS)**

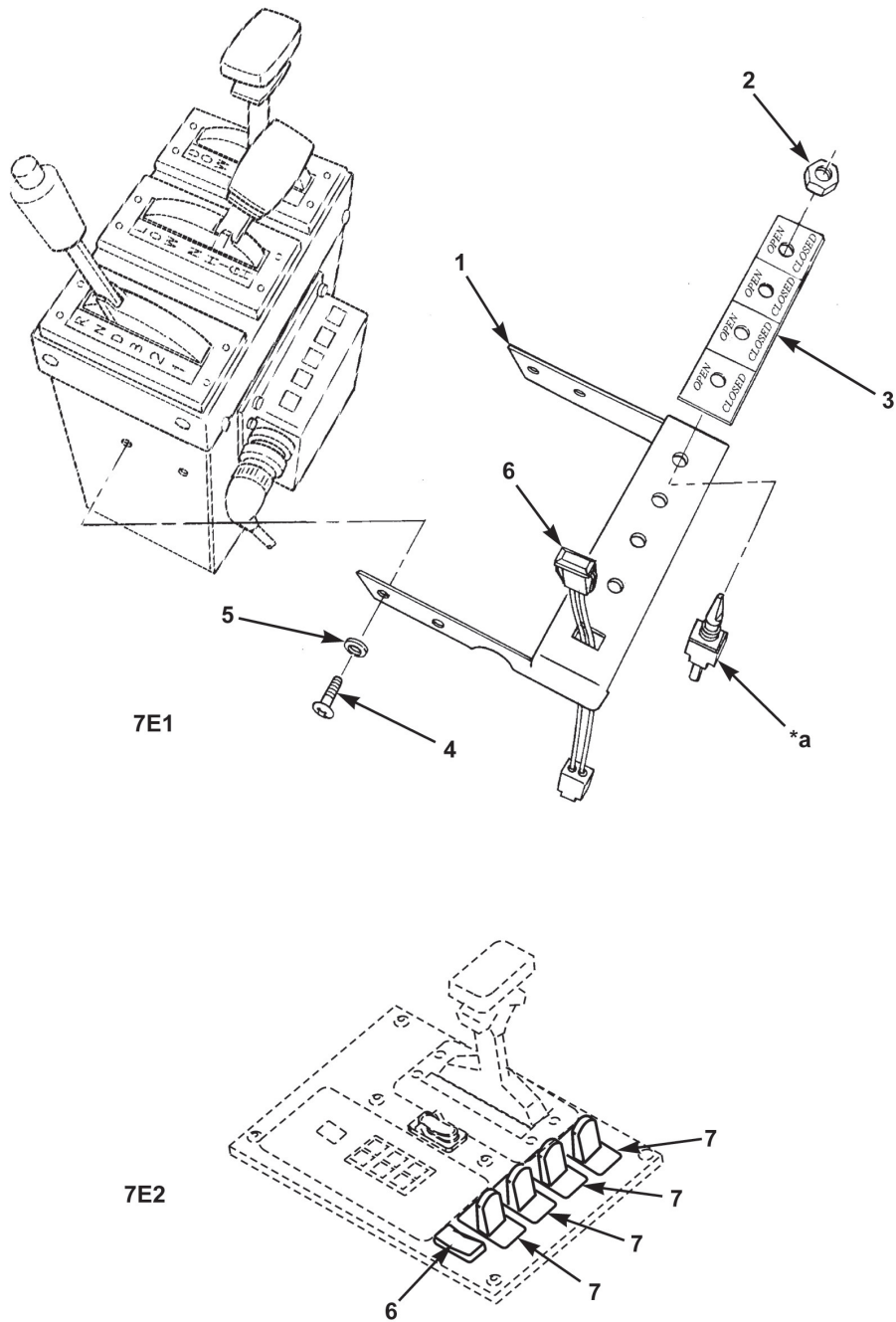
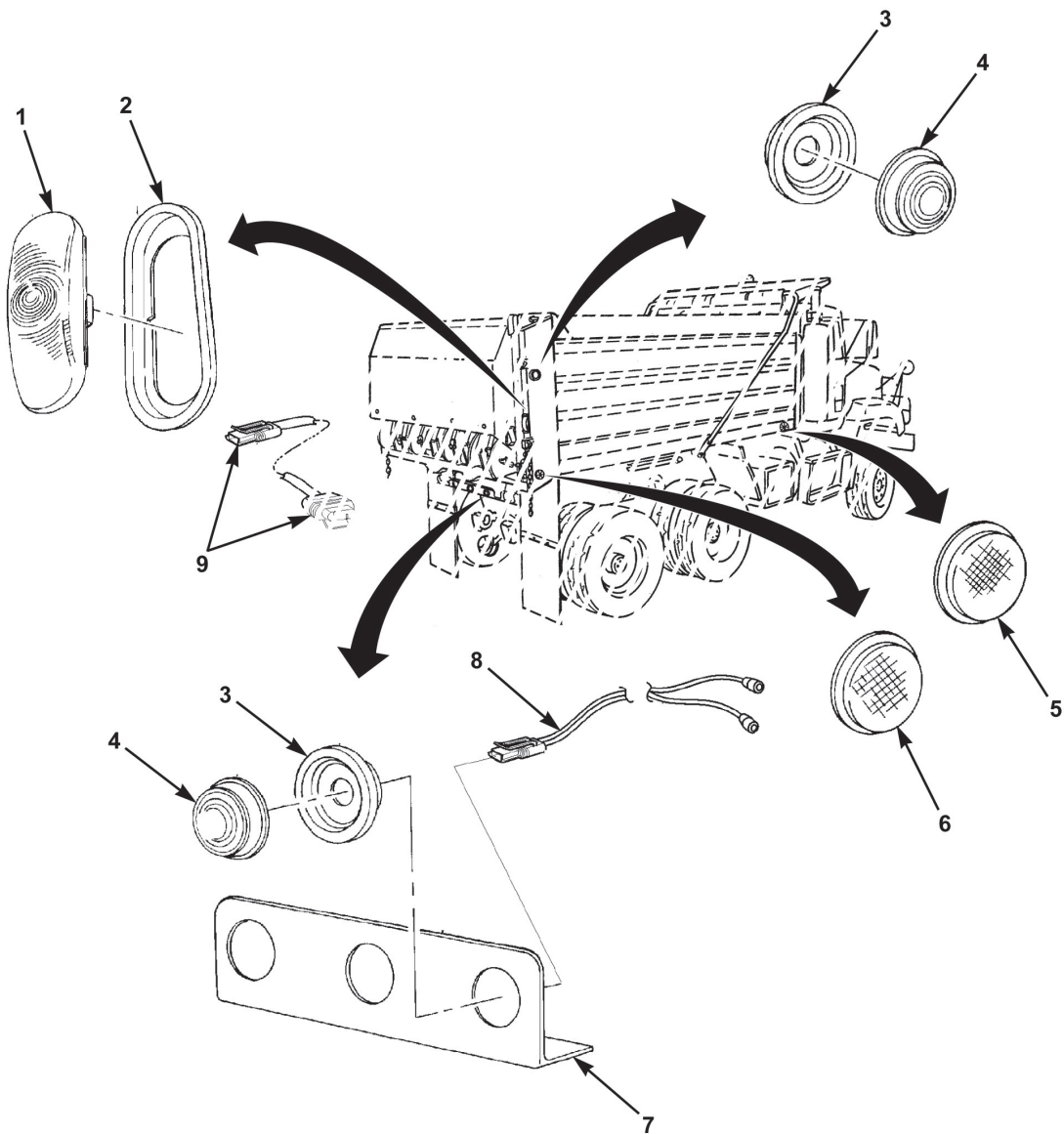


Figure 2. Control Unit, Material Control System (MCS).

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 0608 MISCELLANEOUS ITEMS | | | | | | |
| FIG. 2. CONTROL UNIT, MATERIAL CONTROL SYSTEM (MCS) | | | | | | |
| 1 | XDFZZ | | 64678 | 06-24618-000 | BRACKET, SWITCH PANE UOC: 7E1 | 1 |
| 2 | PAFZZ | 5930-01-332-0680 | 64678 | 681 545 07 22 | SWITCH, TOGGLE UOC: 7E1 | 4 |
| 3 | XDFZZ | | 64678 | 24-00783-000 | 4X-MAT'L CTRL LABEL UOC: 7E1 | 1 |
| 4 | PFFZZ | 5305-01-466-7940 | 64678 | 23-10864-706 | SCREW, MACHINE 1/4-20 X 0.75 IN UOC: 7E1 | 4 |
| 5 | PAFZZ | 5310-00-347-0021 | 99321 | 3507 | WASHER, FLAT 1/4 IN UOC: 7E1 | 4 |
| 6 | PAFZZ | 6220-01-469-5480 | 64678 | 06-22309-048 | LIGHT, INDICATOR MATERIAL CONTROL UOC: 7E1, 7E2 | 1 |
| 7 | PFFZZ | 5930-01-520-4456 | 64678 | A06-30769-101 | SWITCH, TOGGLE UOC: 7E2 | 4 |

END OF FIGURE

**FIELD MAINTENANCE
TAILLIGHTS, MARKER CLEARANCE LIGHTS, AND REFLECTORS**



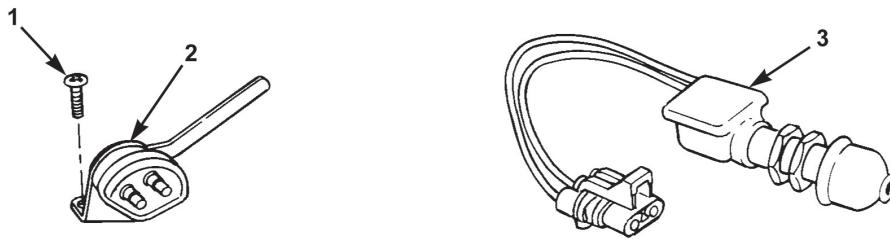
14PT264502

Figure 3. Taillights, Marker Clearance Lights, and Reflectors.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|---|------------|
| GROUP 0609 LIGHTS | | | | | | |
| FIG. 3. TAILLIGHTS, MARKER CLEARANCE LIGHTS, AND REFLECTORS | | | | | | |
| 1 | PAFZZ | 6220-01-518-6827 | 13548 | 60085R | LAMP UNIT,VEHICULAR UOC: 7A2,7E2 | 2 |
| 1 | PAFZZ | 6220-01-086-5691 | 13548 | 60202R | STOP LIGHT-TAILLIGH STOP/ TURN/TAIL LIGHT ASSY UOC: 7A1,7E1 | 2 |
| 2 | PAFZZ | 5325-01-163-6558 | 13548 | 60700 | GROMMET,NONMETALLIC..... | 2 |
| 3 | PAFZZ | 5325-01-283-3513 | 12662 | 142-18 | GROMMET..... | 5 |
| 4 | PAFZZ | 6220-01-095-0011 | 13548 | 10004R | LIGHT,MARKER,CLEARA UOC: 7A1,7E1 | 5 |
| 4 | PAFZZ | 6240-01-518-6843 | 13548 | 10250R | LAMP,INCANDESCENT UOC: 7A2,7E2 | 5 |
| 5 | PAFZZ | 6220-01-445-9978 | 12662 | B490A | REFLECTOR,LIGHT AMBER..... | 4 |
| 6 | PAFZZ | 6220-01-445-9981 | 12662 | B490R | REFLECTOR,LIGHT RED..... | 2 |
| 7 | PFFZZ | 5340-01-445-7781 | 5X050 | 238021 | BRACKET,ANGLE..... | 1 |
| 8 | PAFZZ | 5935-01-518-3692 | 13548 | 93745 | CONNECTOR ASSEMBLY, UOC: 7A2,7E2 | 5 |
| 9 | PAFZZ | 5935-01-518-3690 | 13548 | 94706 | CONNECTOR ASSEMBLY, UOC: 7A2,7E2 | 2 |

END OF FIGURE

**FIELD MAINTENANCE
BODY UP AND TRANSPORT LOCK SWITCHES**



14PT264504

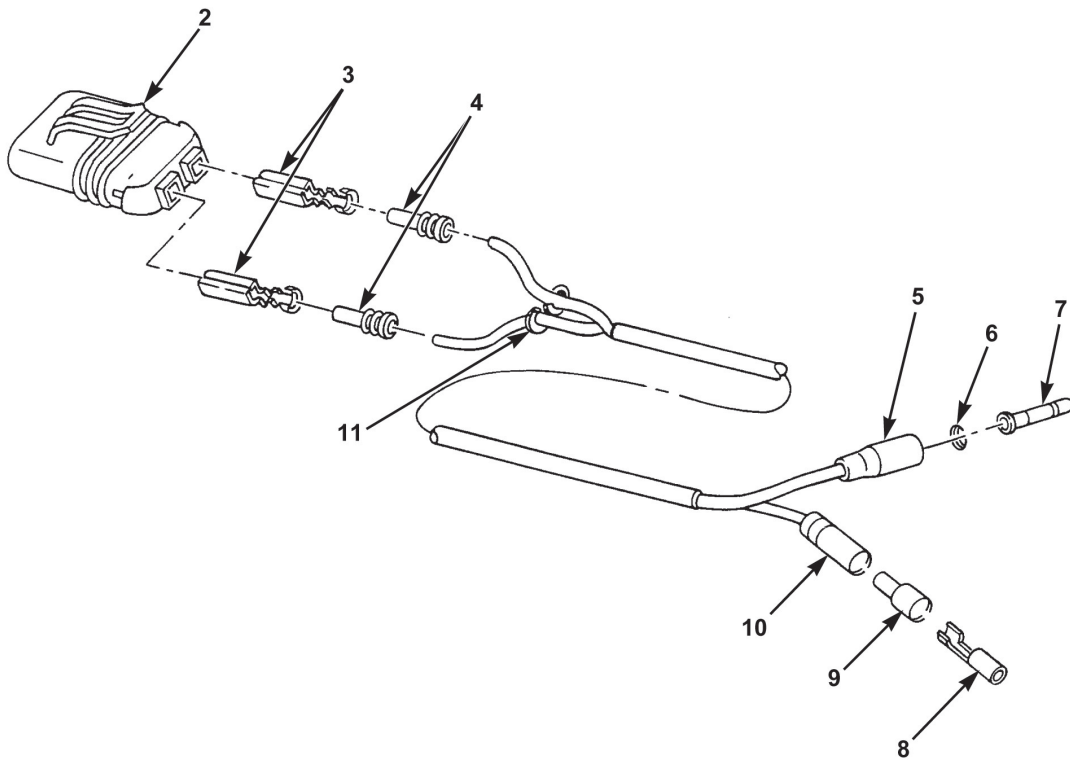
Figure 4. Body Up and Transport Lock Switches.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 0610 SENDING UNITS AND WARNING SWITCHES | | | | | | |
| FIG. 4. BODY UP AND TRANSPORT LOCK SWITCHES | | | | | | |
| 1 | PAFZZ | 5305-00-989-7434 | 96906 | MS35207-263 | SCREW,MACHINE 10-32 X 0.50..... | 2 |
| 2 | PAFZZ | 5930-01-336-0919 | 13445 | 8486 | SWITCH,LEVER..... | 1 |
| 3 | PAFZZ | 5930-01-446-0980 | 5X050 | 129871 | SWITCH,PUSH-PULL TRAVEL LOCK SWITCH..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
WIRING HARNESS, BEACON LIGHT**

1
2 THRU 11



14PT264503

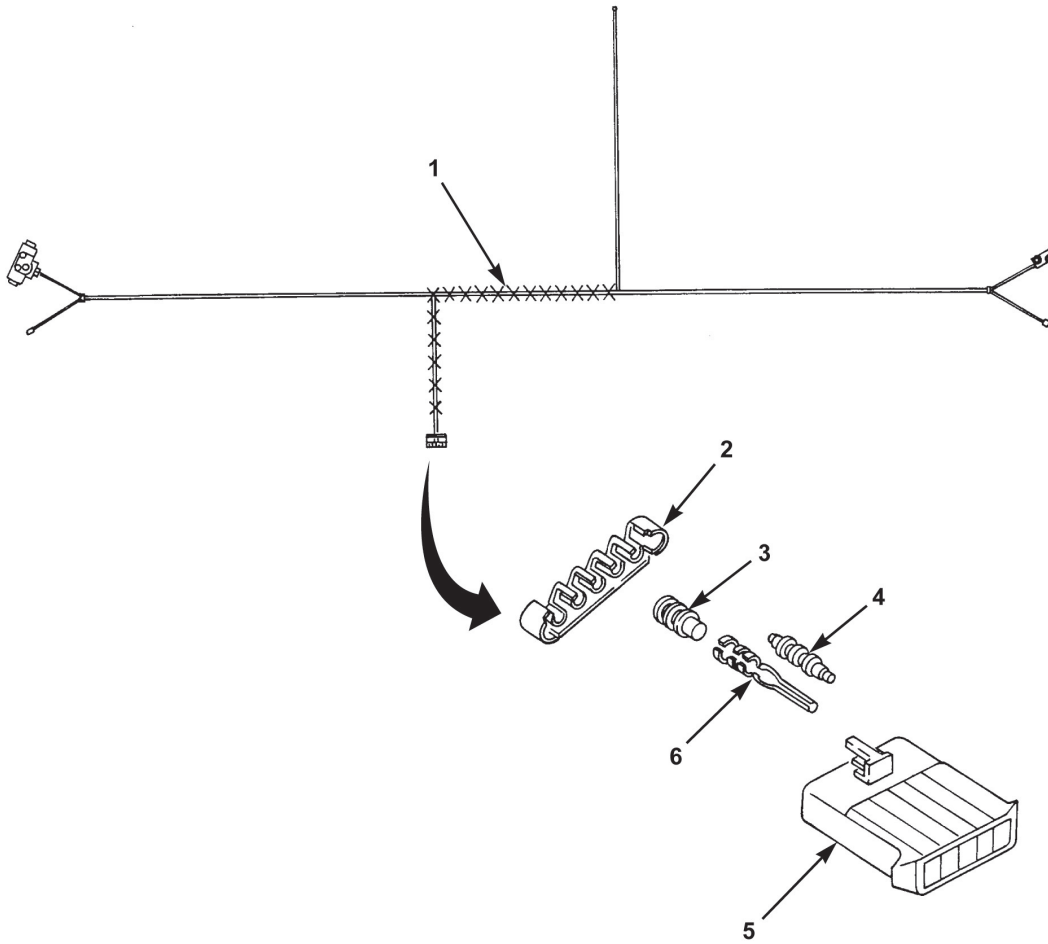
Figure 5. Wiring Harness, Beacon Light.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 0613 HULL OR CHASSIS WIRING HARNESS | | | | | | |
| FIG. 5. WIRING HARNESS, BEACON LIGHT | | | | | | |
| 1 | PAFFF | 6150-01-445-9130 | 5X050 | 403255 | WIRING HARNESS,BRAN BEACON LIGHT..... | 1 |
| 2 | PAFZZ | 5935-01-308-7866 | 77060 | 15300027 | . CONNECTOR BODY,PLUG..... | 1 |
| 3 | PAFZZ | 5940-01-469-7988 | 77060 | 12129493 | . TERMINAL,STUD..... | 2 |
| 4 | PAFZZ | 5975-01-226-8078 | 77060 | 12010293 | . BOOT,DUST AND MOIST..... | 2 |
| 5 | PAFZZ | 5975-01-230-4370 | 5A910 | 8338566 | . CABLE NIPPLE,ELECTR..... | 1 |
| 6 | PAFZZ | 5310-00-833-8567 | 19207 | 8338567 | . WASHER,SLOTTED..... | 1 |
| 7 | PAFZZ | 5999-00-057-2929 | 19204 | 572929 | . CONTACT,ELECTRICAL NO. 14 WIRE GAGE..... | 1 |
| 8 | PAFZZ | 5940-00-399-6676 | 19207 | 8338564 | . TERMINAL SET,QUICK..... | 1 |
| 9 | PAFZZ | 5970-00-833-8562 | 19207 | 8338562 | . INSULATOR,BUSHING..... | 1 |
| 10 | PAFZZ | 5935-00-833-8561 | 19207 | 8338561 | . SHELL,ELECTRICAL CO..... | 1 |
| 11 | PAFZZ | 5940-01-462-1718 | 77060 | 15300014 | . TERMINAL,LUG..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
WIRING HARNESS, DUMP BODY LIGHTS**

1
2 THRU 6



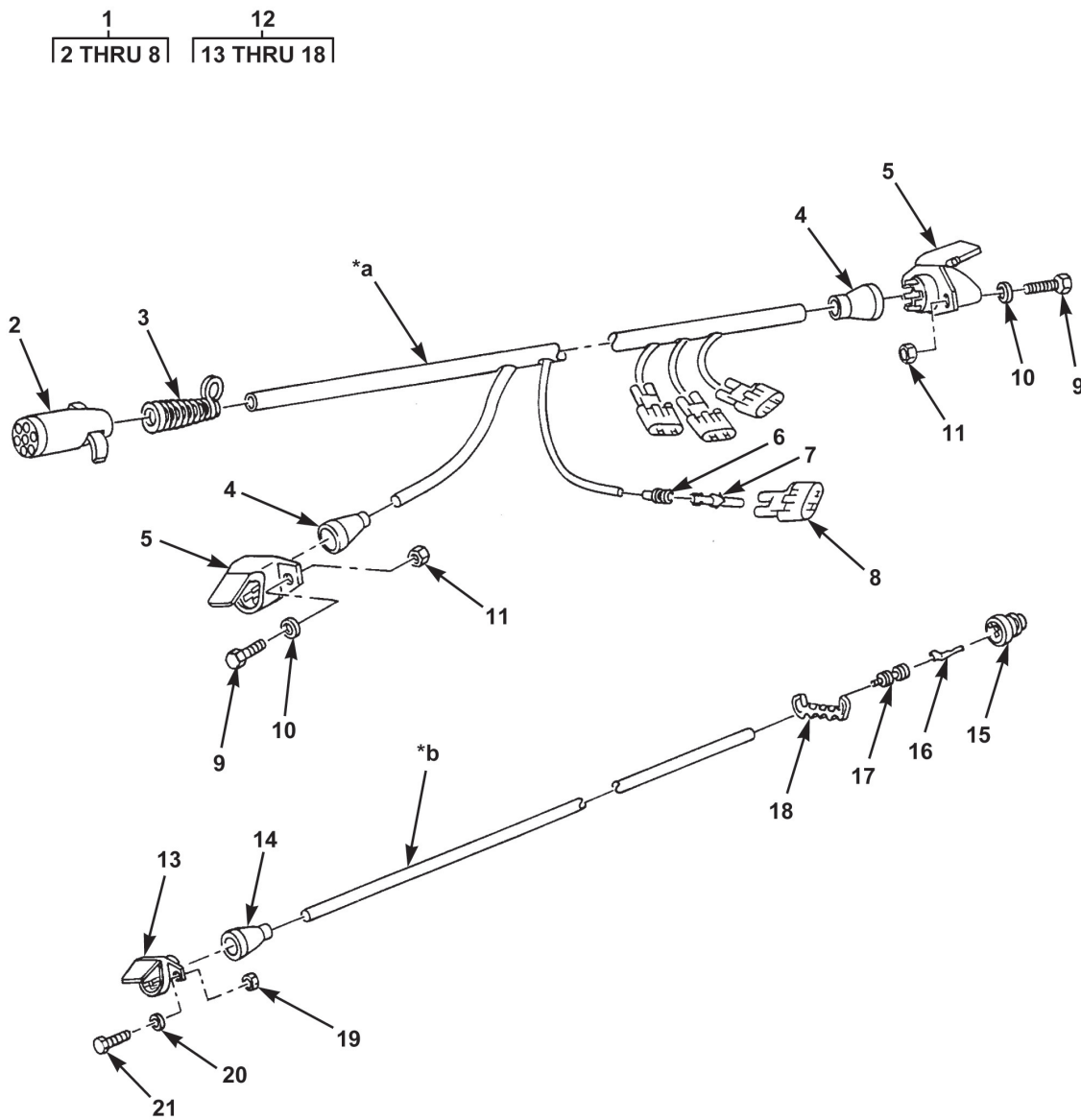
14PT264505

Figure 6. Wiring Harness, Dump Body Lights.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 0613 HULL OR CHASSIS WIRING HARNESS | | | | | | |
| FIG. 6. WIRING HARNESS, DUMP BODY LIGHTS | | | | | | |
| 1 | PAFFF | 6150-01-446-6345 | 5X050 | 403254 | CABLE ASSEMBLY,SPEC DUMP BODY LIGHTS..... | 1 |
| 2 | XDFZZ | | 77060 | 12084673 | . LOCK,SECONDARY..... | 1 |
| 3 | PAFZZ | 5975-01-310-5011 | 77060 | 12015323 | . BOOT,DUST AND MOIST..... | 4 |
| 4 | PAFZZ | 5935-01-339-9574 | 77060 | 1201 0300 | . PLUG,END SEAL,ELECT..... | 1 |
| 5 | XDFZZ | | 77060 | 12085036 | . CONNECTOR,HOUSING..... | 1 |
| 6 | PAFZZ | 5940-01-462-1717 | 77060 | 12048159 | . TERMINAL,LUG..... | 4 |

END OF FIGURE

**FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) GATE WIRING HARNESS AND MCS POWER WIRING HARNESS**



*a Part of Item 1
 *b Part of Item 12

14PT264506

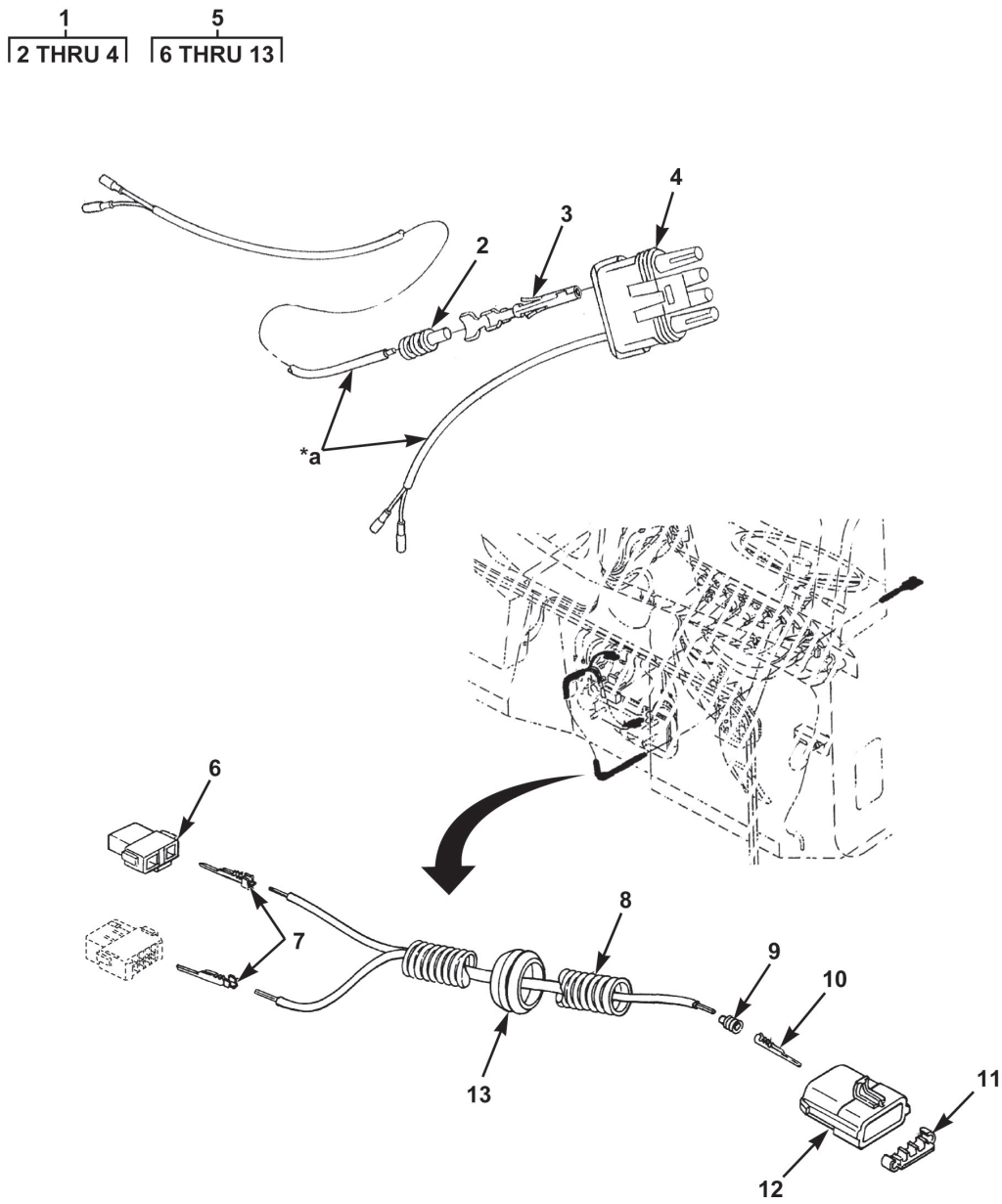
Figure 7. Material Control System (MCS) Gate Wiring Harness and MCS Power Wiring Harness.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|---|-----------------|------------------|--------------|--------------------|---|------------|
| GROUP 0613 HULL OR CHASSIS WIRING HARNESS | | | | | | |
| FIG. 7. MATERIAL CONTROL SYSTEM (MCS) GATE WIRING HARNESS AND MCS POWER WIRING HARNESS | | | | | | |
| 1 | PAFFF | 6150-01-497-4886 | 5X050 | 403484 | WIRING HARNESS,BRAN UOC: 7E1,7E2 | 1 |
| 2 | PAFZZ | 5935-00-856-3513 | 77326 | 11-700 | . CONNECTOR,PLUG,ELEC UOC: 7E1,7E2 | 1 |
| 3 | XDFZZ | | 77326 | 11-763 | . SPRING,HELICAL,COMP UOC: 7E1,7E2 | 1 |
| 4 | PAFZZ | 5975-01-355-6985 | 77326 | 11-761 | . BOOT,DUST AND MOIST UOC: 7E1,7E2 | 2 |
| 5 | PAFZZ | 5935-00-153-4397 | 77326 | 11-720 | . CONNECTOR,RECEPTACL UOC: 7E1,7E2 | 2 |
| 6 | PAFZZ | 5975-01-310-5011 | 77060 | 12015323 | . BOOT,DUST AND MOIST UOC: 7E1,7E2 | 8 |
| 7 | PAFZZ | 5999-01-422-9740 | 19207 | 12420936 | . CONTACT,ELECTRICAL UOC: 7E1,7E2 | 8 |
| 8 | PAFZZ | 5935-01-214-5259 | 77060 | 12015792 | . CONNECTOR BODY,PLUG UOC: 7E1,7E2 | 4 |
| 9 | PAFZZ | 5305-00-068-0508 | 80204 | B1821BH025C075N | SCREW,CAP,HEXAGON H 1/4-20 X 0.75 UOC: 7E1,7E2 | 4 |
| 10 | PAFZZ | 5310-00-823-8804 | 96906 | MS27183-9 | WASHER,FLAT 1/4 IN UOC: 7E1,7E2 | 4 |
| 11 | PAFZZ | 5310-00-061-4650 | 45152 | 114356A | NUT,SELF-LOCKING,HE 1/4-20 UOC: 7E1,7E2 | 4 |
| 12 | PAFFF | 6150-01-497-4879 | 5X050 | 403248 | CABLE ASSEMBLY,SPEC UOC: 7E1,7E2 | 1 |
| 13 | PAFZZ | 5935-00-153-4397 | 77326 | 11-720 | . CONNECTOR,RECEPTACL UOC: 7E1,7E2 | 1 |
| 14 | PAFZZ | 5975-01-355-6985 | 77326 | 11-761 | . BOOT,DUST AND MOIST UOC: 7E1,7E2 | 1 |
| 15 | XDFZZ | | 77060 | 1204 7938 | . CONNECTOR,PLUG,ELEC UOC: 7E1,7E2 | 1 |
| 16 | PAFZZ | 5940-01-366-1563 | 77060 | 12048074 | . TERMINAL,QUICK DISC UOC: 7E1,7E2 | 7 |
| 17 | PFZZ | 2530-01-464-9916 | 77060 | 12048086 | . BOOT,VEHICULAR COMP UOC: 7E1,7E2 | 7 |
| 18 | XDFZZ | | 77060 | 12066304 | . CONNECTOR,LOCKING UOC: 7E1,7E2 | 1 |
| 19 | PAFZZ | 5310-00-061-4650 | 45152 | 114356A | NUT,SELF-LOCKING,HE UOC: 7E1,7E2 | 2 |
| 20 | PAFZZ | 5310-00-823-8804 | 96906 | MS27183-9 | WASHER,FLAT UOC: 7E1,7E2 | 2 |

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--------------------|-----------------|------------------|--------------|--------------------|--|------------|
| 21 | PAFZZ | 5305-00-068-0508 | 80204 | B1821BH025C075N | SCREW,CAP,HEXAGON H UOC: 7E1,7E2 | 2 |

END OF FIGURE

**FIELD MAINTENANCE
BODY UP/TRANSPORT LOCK SWITCH WIRING HARNESS AND MATERIAL CONTROL SYSTEM (MCS)
CHASSIS WIRING HARNESS**



*a Part of Item 1

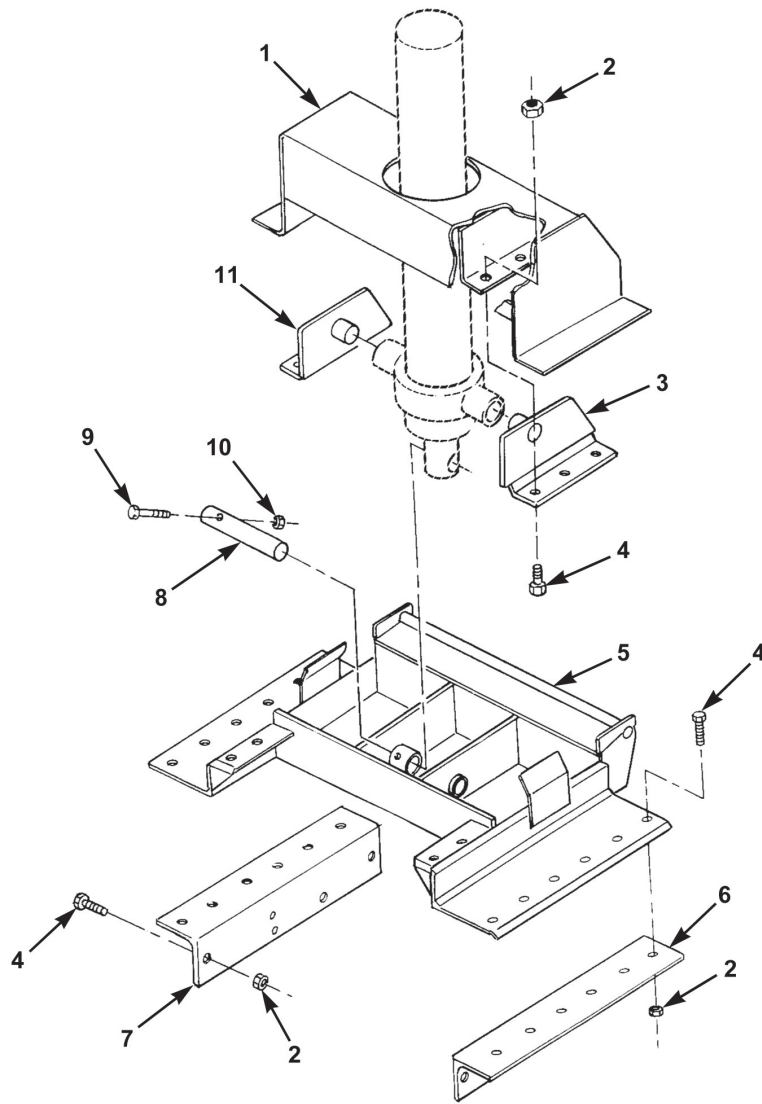
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Figure 8. Body Up/Transport Lock Switch Wiring Harness and Material Control System (MCS) Chassis Wiring Harness.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 0613 HULL OR CHASSIS WIRING HARNESS | | | | | | |
| FIG. 8. BODY UP/TRANSPORT LOCK SWITCH WIRING HARNESS AND MATERIAL CONTROL SYSTEM (MCS) CHASSIS WIRING HARNESS | | | | | | |
| 1 | PAFFF | 6150-01-446-6344 | 5X050 | 403256 | LEAD ASSEMBLY,ELECT..... | 1 |
| 2 | PAFZZ | 5975-01-226-8078 | 77060 | 12010293 | . BOOT,DUST AND MOIST..... | 4 |
| 3 | PAFZZ | 5999-01-422-9740 | 19207 | 12420936 | . CONTACT,ELECTRICAL..... | 4 |
| 4 | PAFZZ | 5935-01-308-8599 | 77060 | 12015797 | . CONNECTOR BODY,PLUG..... | 1 |
| 5 | PFFFF | 6150-01-466-9174 | 64678 | A06-24606-276 | WIRING HARNESS,BRAN UOC: 7E1,7E2 | 1 |
| 6 | PAFZZ | 5935-01-544-1069 | 77060 | 12015199 | . CONNECTOR,PLUG,ELEC UOC: 7E1,7E2 | 1 |
| 7 | PAFZZ | 5940-01-340-0587 | 77060 | 1202 0116 | . TERMINAL,QUICK DISC UOC: 7E1,7E2 | 7 |
| 8 | XDFZZ | | 77060 | 68240R-276 | . CONDUIT UOC: 7E1,7E2 | 1 |
| 9 | PAFZZ | 5325-01-446-8320 | 64678 | PAC/12052924 | . GROMMET BLANK,NONME UOC: 7E1,7E2 | 7 |
| 10 | PAFZZ | 5999-01-364-1237 | 77060 | 12045773 | . CONTACT,ELECTRICAL UOC: 7E1,7E2 | 7 |
| 11 | XDFZZ | | 77060 | 12047933 | . HOUSING, 8 PIN UOC: 7E1,7E2 | 1 |
| 12 | PCFZZ | 5325-00-174-9341 | 96906 | MS35489-52 | . GROMMET,NONMETALLIC UOC: 7E1,7E2 | 1 |
| 13 | PFFZZ | 5935-01-518-0417 | 77060 | 12015344 | . CONNECTOR,PLUG,ELEC UOC: 7E1,7E2 | 1 |

END OF FIGURE

**FIELD MAINTENANCE
CYLINDER SUPPORT FRAME AND BRACKETS**



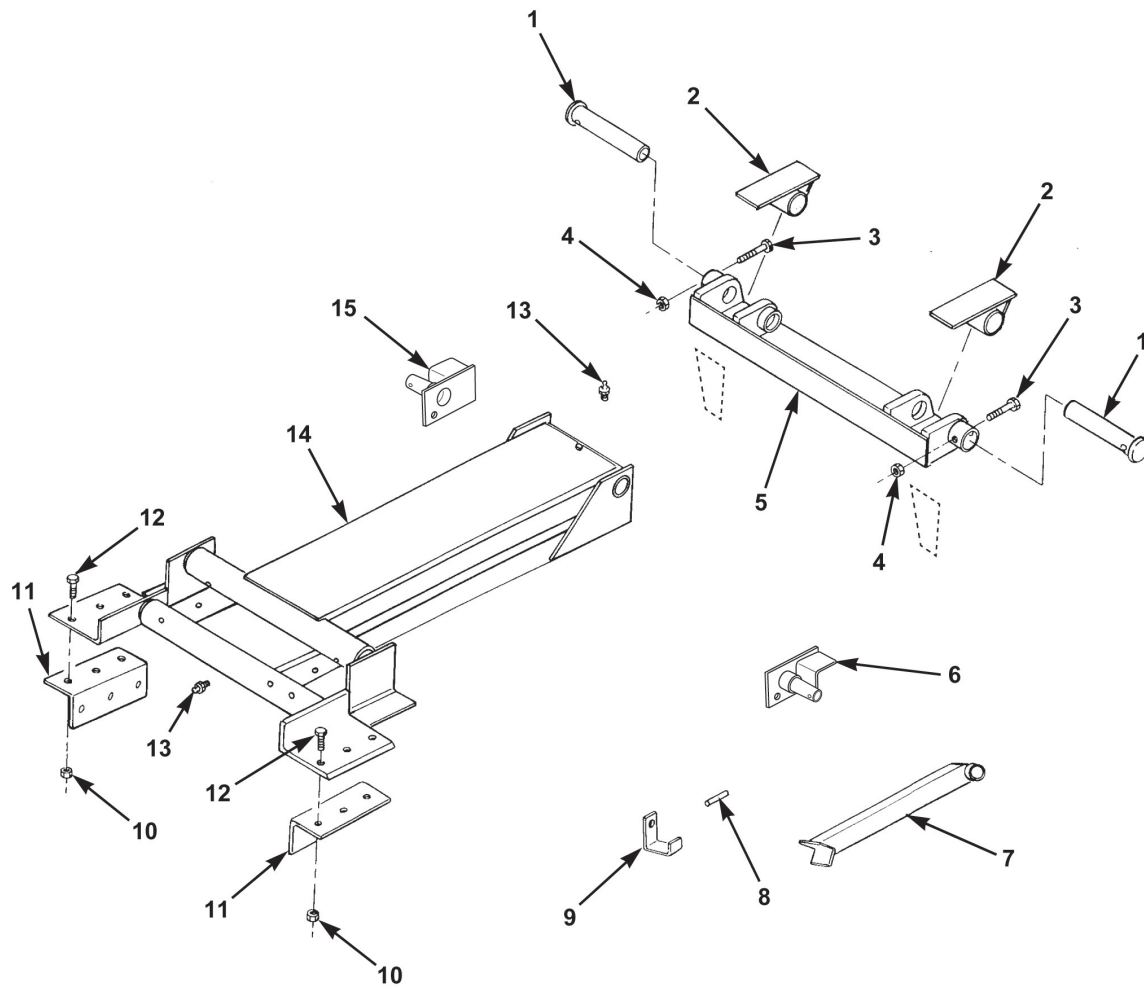
14PT264508

Figure 9. Cylinder Support Frame and Brackets.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 1810 CARGO BODY | | | | | | |
| FIG. 9. CYLINDER SUPPORT FRAME AND BRACKETS | | | | | | |
| 1 | XDFZZ | | 5X050 | 128129 | COVER ASSY,UPPER..... | 1 |
| 2 | PAFZZ | 5310-00-061-4651 | 19207 | 12387349-43 | NUT,SELF-LOCKING,HE 5/8-11..... | 30 |
| 3 | PFFZZ | 5340-01-445-9486 | 5X050 | 128130 | BRACKET,MOUNTING LEFT HAND..... | 1 |
| 4 | PAFZZ | 5305-00-724-7222 | 80204 | B1821BH063C200N | SCREW,CAP,HEXAGON H 5/8-11 X 2.00 | 30 |
| 5 | XDFZZ | | 5X050 | 126617 | CRADLE ASSEMBLY..... | 1 |
| 6 | XDFZZ | | 5X050 | 237386 | BRACKET,ANGLE,LH LEFT HAND..... | 1 |
| 7 | XDFZZ | | 5X050 | 237387 | BRACKET,ANGLE,RH RIGHT HAND..... | 1 |
| 8 | PFFZZ | 5315-01-446-3121 | 5X050 | 208047 | PIN,SHOULDER,HEADLE..... | 1 |
| 9 | PAFZZ | 5305-00-071-2076 | 80204 | B1821BH050C325N | SCREW,CAP,HEXAGON H 1/2-13 X 3.25.. | 1 |
| 10 | PAFZZ | 5310-00-488-3889 | 96906 | MS51943-39 | NUT,SELF-LOCKING,HE 1/2-13..... | 1 |
| 11 | PFFZZ | 5340-01-449-5470 | 5X050 | 128131 | BRACKET,MOUNTING RIGHT HAND..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
STABILIZER AND REAR HINGE**



14PT264509

Figure 10. Stabilizer and Rear Hinge.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|---|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 1810 CARGO BODY | | | | | | |
| FIG. 10. STABILIZER AND REAR HINGE | | | | | | |
| 1 | PPFZZ | 5315-01-447-0480 | 5X050 | 127170 | PIN,STRAIGHT,HEADED..... | 2 |
| 2 | XDFZZ | | 5X050 | 110543 | HINGE ASSY,UPPER..... | 2 |
| 3 | PAFZZ | 5305-00-947-4358 | 80204 | B1821BH075C400N | SCREW,CAP,HEXAGON H 3/4-10 X 4.00.. | 2 |
| 4 | PAFZZ | 5310-00-409-3333 | 96906 | MS51943-45 | NUT,SELF-LOCKING,HE 3/4-10..... | 2 |
| 5 | XDFZZ | | 5X050 | 128125 | HINGE ASSY,LOWER..... | 1 |
| 6 | PAFZZ | 2590-01-541-3894 | 5X050 | 129305 | BRACKET,VEHICULAR C LEFT HAND..... | 1 |
| 7 | PGFZZ | 2510-01-446-1842 | 5X050 | 128126 | LEG,PROP,BODY..... | 2 |
| 8 | PAFZZ | 5315-00-721-8370 | 80205 | NAS561-8-48 | PIN,SPRING 1/4 X 3.00..... | 2 |
| 9 | PAFZZ | 5340-01-541-3812 | 5X050 | 239693 | BRACKET,MOUNTING..... | 2 |
| 10 | PAFZZ | 5310-00-061-4651 | 19207 | 12387349-43 | NUT,SELF-LOCKING,HE 5/8-11..... | 12 |
| 11 | XDFZZ | | 5X050 | 239694 | BRACKET,ANGLE..... | 2 |
| 12 | PAFZZ | 5305-00-724-7222 | 80204 | B1821BH063C200N | SCREW,CAP,HEXAGON H 5/8-11 X 2.00 | 12 |
| 13 | PAFZZ | 4730-00-050-4208 | 81343 | AS15003-1 | FITTING,LUBRICATION 1/8 NPT..... | 5 |
| 14 | XDFZZ | | 5X050 | 127838 | STABILIZER ASSY..... | 1 |
| 15 | PAFZZ | 2590-01-541-3775 | 5X050 | 129306 | BRACKET,VEHICULAR RIGHT HAND..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
DUMP BODY ASSEMBLY**

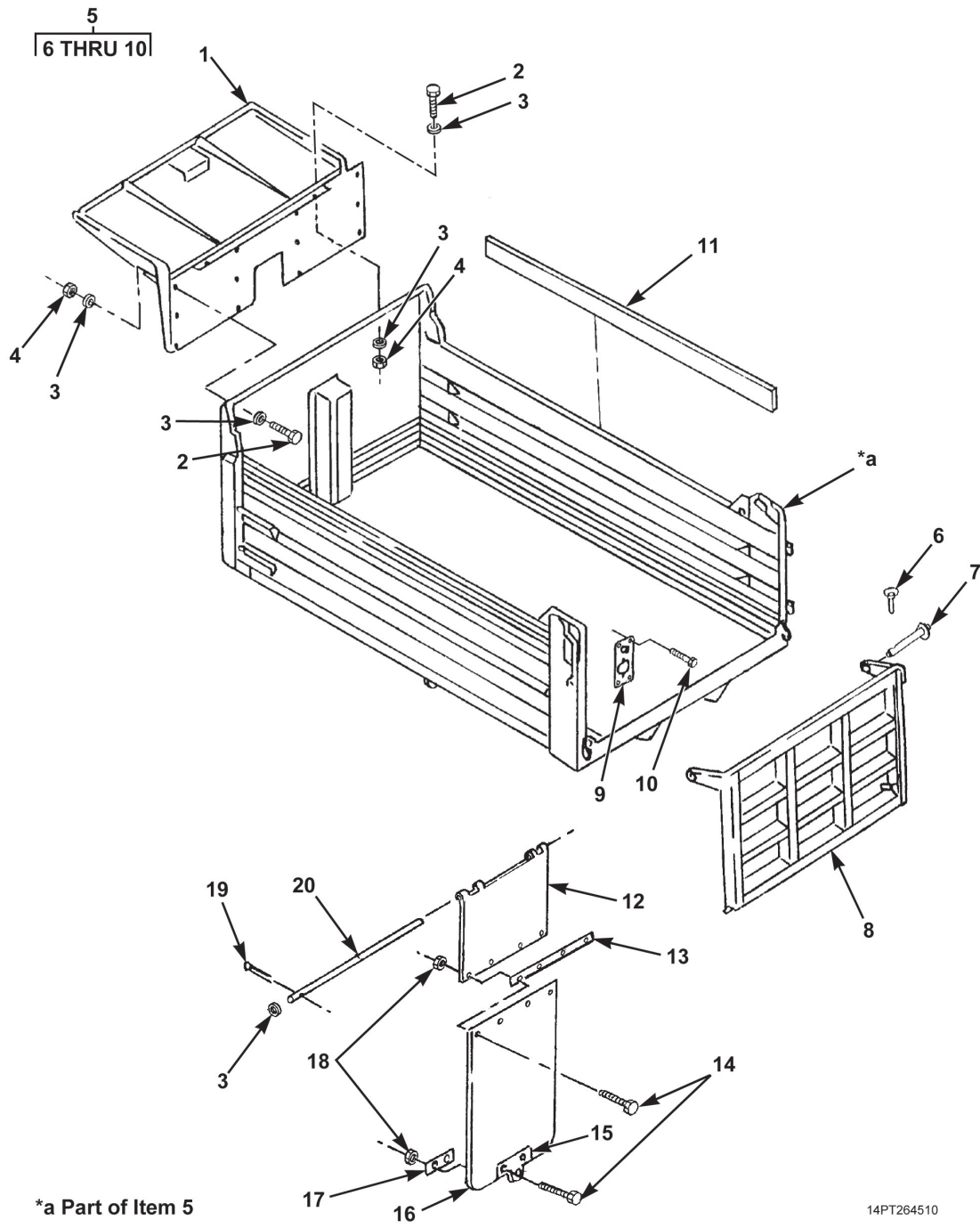


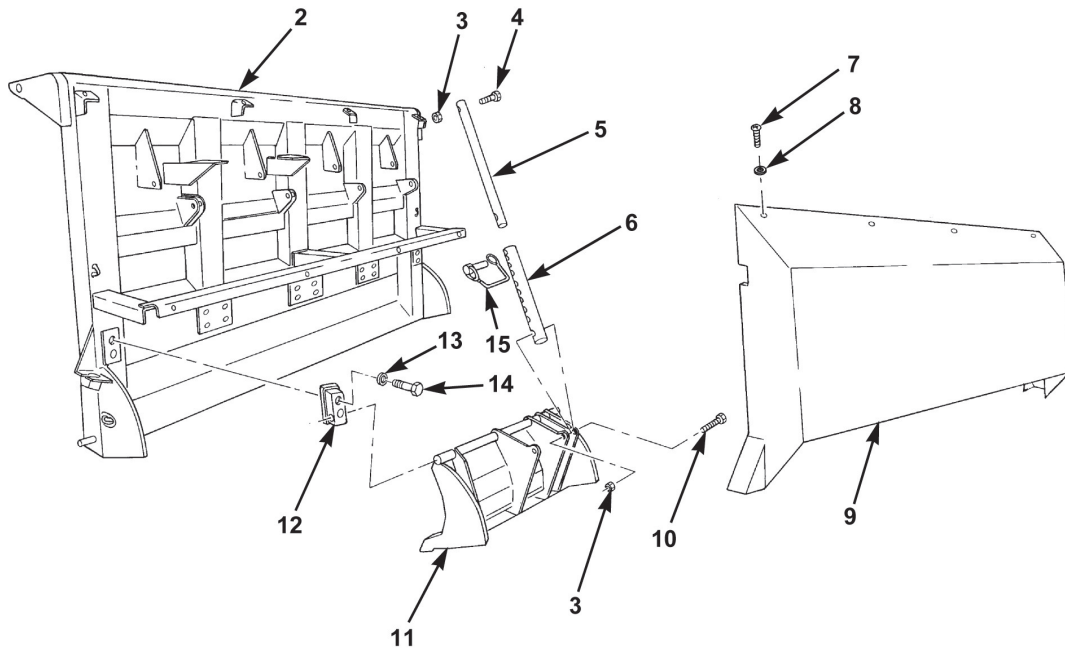
Figure 11. Dump Body Assembly.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|------------------------------------|-----------------|------------------|--------------|--------------------|---|------------|
| GROUP 1810 CARGO BODY | | | | | | |
| FIG. 11. DUMP BODY ASSEMBLY | | | | | | |
| 1 | PAFZZ | 2510-01-536-0577 | 5X050 | 129568 | SHIELD,CAB..... | 1 |
| 2 | PAFZZ | 5305-00-724-7222 | 80204 | B1821BH063C200N | SCREW,CAP,HEXAGON H 5/8-11 X 2.00 | 14 |
| 3 | PAFZZ | 5310-00-003-9174 | 81348 | FFW92 | WASHER,FLAT 5/8..... | 28 |
| 4 | PAFZZ | 5310-00-061-4651 | 19207 | 12387349-43 | NUT,SELF-LOCKING,HE 5/8-11..... | 14 |
| 5 | XDFFF | | 5X050 | 126427 | DUMP BOX W/MCS GATE WITH MCS GATE UOC: 7E1,7E2 | 1 |
| 5 | XDFFF | | 5X050 | 126426 | DUMP BOX W/STD GATE UOC: 7A1,7A2 | 1 |
| 6 | PAFZZ | 5315-01-447-0479 | 0PXJ7 | 63-04 | . PIN,COTTER..... | 2 |
| 7 | PAFZZ | 5315-01-447-0481 | 5X050 | 117122 | . PIN,SHOULDER,HEADLE..... | 2 |
| 8 | XDFZZ | | 5X050 | 127892 | . TAILGATE ASSEMBLY STANDARD UOC: 7A1,7A2 | 1 |
| 9 | PFZZ | 5340-01-469-6693 | 5X050 | 127373 | . COVER,ACCESS..... | 1 |
| 10 | PAFZZ | 5305-01-162-2358 | 45152 | 1354190 | . SCREW,TAPPING 5/16 X 3/4..... | 4 |
| 11 | MFFZZ | | 5X050 | 403345X148.75 | SIDEBOARD MAKE FROM LUMBER,HARDWOOD MILL2037 (81349), CUT TO 2.0 X 8.0 X 148.75 IN..... | 2 |
| 12 | PAFZZ | 5340-01-446-5137 | 5X050 | 127852 | PLATE,MOUNTING..... | 2 |
| 13 | PAFZZ | 5340-01-446-4927 | 5X050 | 237409 | PLATE,MOUNTING..... | 2 |
| 14 | PAFZZ | 5305-00-725-2317 | 80204 | B1821BH038C150N | SCREW,CAP,HEXAGON H 3/8-16 X 1.50 | 12 |
| 15 | PAFZZ | 5340-01-446-0947 | 5X050 | 129732 | PLATE,MOUNTING..... | 2 |
| 16 | PAFZZ | 2540-01-446-6831 | 9X737 | B30LXP | GUARD,SPLASH,VEHICU..... | 1 |
| 17 | XDFZZ | | 5X050 | 245352 | PLATE,ANCHOR,FLAP..... | 2 |
| 18 | PAFZZ | 5310-01-509-2488 | 81349 | M45913/3-6CG8C | NUT,SELF-LOCKING,HE 3/8-16..... | 12 |
| 19 | PAFZZ | 5315-00-809-8786 | 80205 | MS16562-51 | PIN,SPRING 3/16 X 1.25..... | 4 |
| 20 | PAFZZ | 3040-01-446-2413 | 5X050 | 237410 | SHAFT,STRAIGHT..... | 2 |

END OF FIGURE

**FIELD MAINTENANCE
MATERIAL CONTROL SYSTEM (MCS) TAILGATE ASSEMBLY**

1
2 THRU 15



14PT264511

Figure 12. Material Control System (MCS) Tailgate Assembly.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|---|-----------------|------------------|--------------|--------------------|---|------------|
| GROUP 1810 CARGO BODY | | | | | | |
| FIG. 12. MATERIAL CONTROL SYSTEM (MCS) TAILGATE ASSEMBLY | | | | | | |
| 1 | PAFFF | 2510-01-473-8251 | 5X050 | 140409 | C915A2MGG MCS TYPE - GREEN UOC: 7E1,7E2 | 1 |
| 1 | PAFFF | 2510-01-473-8250 | 5X050 | 140410 | C915A2MGT MCS TYPE - TAN UOC: 7E1,7E2 | 1 |
| 2 | XDFZZ | | 5X050 | 129652 | . TAILGATE BARE MCS GATE UOC: 7E1,7E2 | 1 |
| 3 | PAFZZ | 5310-00-488-3889 | 96906 | MS51943-39 | . NUT,SELF-LOCKING,HE 1/2-13 UOC: 7E1,7E2 | 8 |
| 4 | PAFZZ | 5305-00-071-2071 | 80204 | B1821BH050C200N | . SCREW,CAP,HEXAGON H 1/2-13 X 2.00 UOC: 7E1,7E2 | 4 |
| 5 | PFFZZ | 4710-01-460-1546 | 5X050 | 239974 | . TUBE,METALLIC UOC: 7E1,7E2 | 4 |
| 6 | PAFZZ | 4710-01-497-5644 | 5X050 | 239973 | . TUBE,METALLIC UOC: 7E1,7E2 | 4 |
| 7 | PAFZZ | 5306-00-226-4827 | 80204 | B1821BH031C100N | . BOLT,MACHINE 5/16-18 X 1.00 UOC: 7E1,7E2 | 10 |
| 8 | PFFZZ | 5310-01-518-7454 | 5X050 | CMG 400892 | . WASHER,FLAT 5/16 UOC: 7E1,7E2 | 10 |
| 9 | PFFZZ | 5340-01-497-8124 | 5X050 | 129653 | . COVER,ACCESS UOC: 7E1,7E2 | 1 |
| 10 | PAFZZ | 5305-00-071-2076 | 80204 | B1821BH050C325N | . SCREW,CAP,HEXAGON H 1/2-13 X 3.25 UOC: 7E1,7E2 | 4 |
| 11 | XDFZZ | | 5X050 | 129528 | . GATE,MCS UOC: 7E1,7E2 | 4 |
| 12 | PFFZZ | 3040-01-497-0345 | 5X050 | 239963 | . BRACKET,EYE,ROTATIN UOC: 7E1,7E2 | 8 |
| 13 | PAFZZ | 5310-00-820-6653 | 80205 | MS35338-50 | . WASHER,LOCK 5/8 IN UOC: 7E1,7E2 | 16 |
| 14 | PAFZZ | 5305-00-724-7228 | 80204 | B1821BH063C300N | . SCREW,CAP,HEXAGON H 5/8-11 X 3.00 UOC: 7E1,7E2 | 16 |
| 15 | PAFZZ | 5315-01-507-0537 | 50620 | 38-22LP | . PIN,STRAIGHT,HEADED 3/8 X 2-1/2 IN SQ SPRING UOC: 7E1,7E2 | 4 |

END OF FIGURE

**FIELD MAINTENANCE
AIR TANK, LINES, AND FITTINGS**

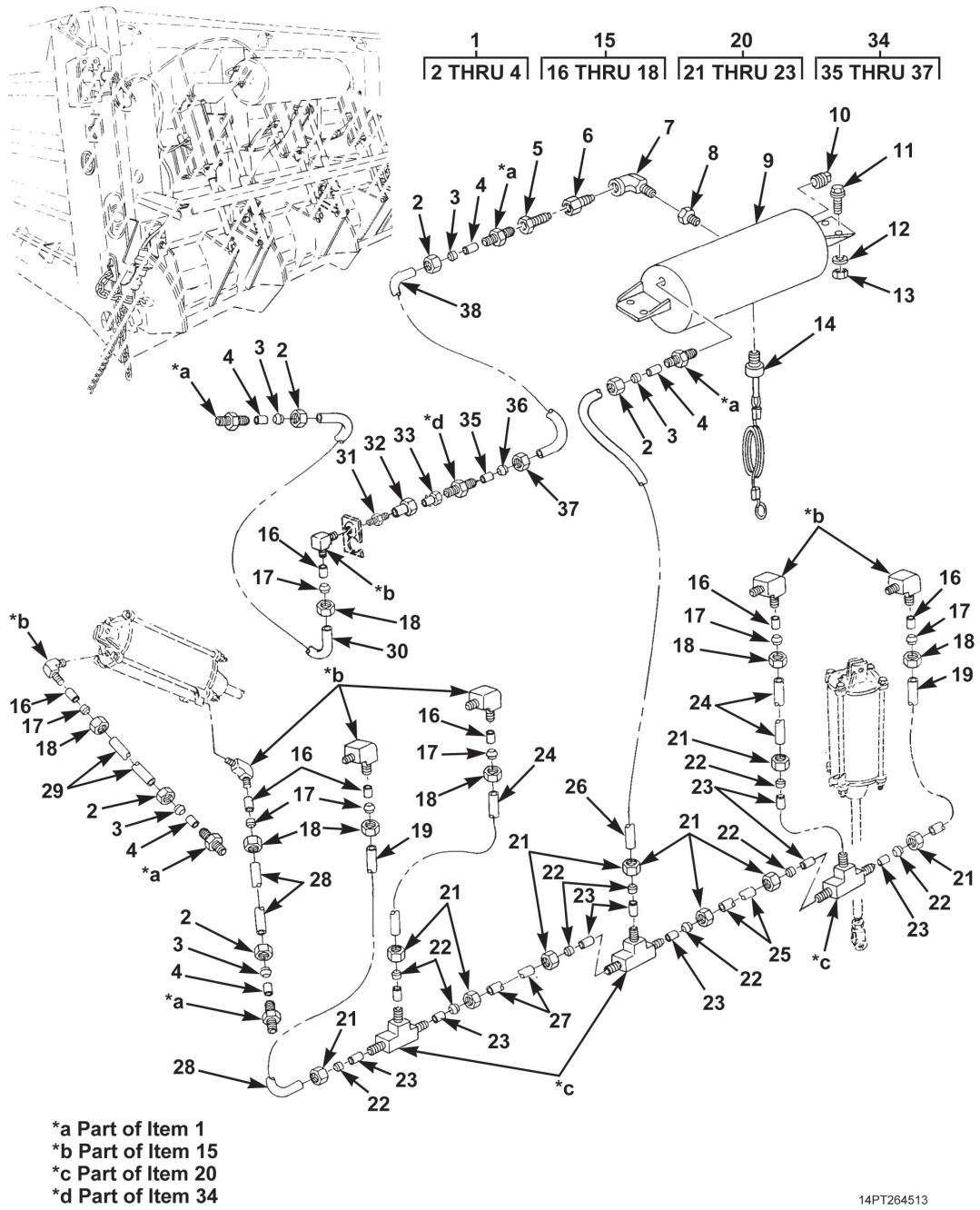


Figure 13. Air Tank, Lines, and Fittings.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|---|-----------------|------------------|--------------|--------------------|---|------------|
| GROUP 1810 CARGO BODY | | | | | | |
| FIG. 13. AIR TANK, LINES, AND FITTINGS | | | | | | |
| 1 | PAFFF | 4730-01-096-9128 | 93061 | 68NTA-6-6 | ADAPTER,STRAIGHT,PI QTY=2 7A1,7A2 QTY=4 7E1,7E2..... | 4 |
| 2 | PAFZZ | 4730-01-048-7873 | 93061 | 61NTA-6 | . NUT,TUBE COUPLING..... | 1 |
| 3 | PAFZZ | 4730-01-048-5260 | 93061 | 60NTA-6 | . SLEEVE,COMPRESSION,..... | 1 |
| 4 | PAFZZ | 4730-01-056-4990 | 93061 | 63NTA-6 | . INSERT,TUBE FITTING..... | 1 |
| 5 | PAFZZ | 4730-00-044-4035 | 79470 | C3109X8X6 | BUSHING,PIPE UOC: 7E1,7E2 | 1 |
| 6 | XDFZZ | | 79146 | 320001 | VALVE,CHECK UOC: 7E1,7E2 | 1 |
| 7 | PAFZZ | 4730-00-289-2357 | 30780 | 2102-8-8 | ELBOW,PIPE UOC: 7E1,7E2 | 1 |
| 8 | PFFZZ | 4730-00-278-3888 | 30780 | 0102-12-8 | REDUCER,PIPE UOC: 7E1,7E2 | 1 |
| 9 | XDFZZ | | 79146 | 035055 | TANK,PRESSURE UOC: 7E1,7E2 | 1 |
| 10 | PAFZZ | 4730-00-057-5555 | 30780 | 01HP-6 | PLUG,PIPE 3/8 UOC: 7E1,7E2 | 1 |
| 11 | PAFZZ | 5305-00-068-0510 | 80204 | B1821BH038C100N | SCREW,CAP,HEXAGON H 3/8-16 X 1.00 UOC: 7E1,7E2 | 4 |
| 12 | PAFZZ | 5310-00-080-6004 | 96906 | MS27183-14 | WASHER,FLAT 3/8 IN UOC: 7E1,7E2 | 4 |
| 13 | PAFZZ | 5310-01-509-2488 | 81349 | M45913/3-6CG8C | NUT,SELF-LOCKING,HE 3/8-16 UOC: 7E1,7E2 | 4 |
| 14 | PAFZZ | 4820-01-418-4232 | 79146 | 032135 | COCK,POPPET DRAIN UOC: 7E1,7E2 | 1 |
| 15 | PAFFF | 4730-01-244-3552 | 93061 | VS269NTA-6-4 | ELBOW,PIPE TO TUBE QTY=2 7A1,7A2 QTY=7 7E1,7E2..... | 7 |
| 16 | PAFZZ | 4730-01-056-4990 | 93061 | 63NTA-6 | . INSERT,TUBE FITTING..... | 1 |
| 17 | PAFZZ | 4730-01-048-5260 | 93061 | 60NTA-6 | . SLEEVE,COMPRESSION,..... | 1 |
| 18 | PAFZZ | 4730-01-048-7873 | 93061 | 61NTA-6 | . NUT,TUBE COUPLING..... | 1 |
| 19 | MFFZZ | | 5X050 | 245542X31 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 31 IN UOC: 7E1,7E2 | 2 |
| 20 | PAFFF | 4730-01-134-3571 | 30780 | 264NTA-6 | TEE,TUBE UOC: 7E1,7E2 | 3 |
| 21 | PAFZZ | 4730-01-048-7873 | 93061 | 61NTA-6 | . NUT,TUBE COUPLING UOC: 7E1,7E2 | 1 |
| 22 | PAFZZ | 4730-01-048-5260 | 93061 | 60NTA-6 | . SLEEVE,COMPRESSION, UOC: 7E1,7E2 | 1 |

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--------------------|-----------------|------------------|--------------|--------------------|--|------------|
| 23 | PAFZZ | 4730-01-056-4990 | 93061 | 63NTA-6 | . INSERT,TUBE FITTING UOC: 7E1,7E2 | 1 |
| 24 | MFFZZ | | 5X050 | 245543X9 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 9 IN UOC: 7E1,7E2 | 2 |
| 25 | MFFZZ | | 5X050 | 245540X17 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 17 IN UOC: 7E1,7E2 | 1 |
| 26 | MFFZZ | | 5X050 | 245539X21 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 21 IN UOC: 7E1,7E2 | 1 |
| 27 | MFFZZ | | 5X050 | 245541X8 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 8 IN UOC: 7E1,7E2 | 1 |
| 28 | MFFZZ | | 5X050 | 245786X36 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 36 IN..... | 1 |
| 29 | MFFZZ | | 5X050 | 245787X38 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 38 IN..... | 1 |
| 30 | MFFZZ | | 5X050 | 245544X144 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 144 IN UOC: 7E1,7E2 | 1 |
| 31 | PAFZZ | 4730-00-277-8289 | 93061 | 216P-4 | NIPPLE,PIPE 1/4 X 1.375 UOC: 7E1,7E2 | 1 |
| 32 | PAFZZ | 4730-01-473-9699 | 5X050 | 403620 | QUICK COUPLING,BODY UOC: 7E1,7E2 | 1 |
| 33 | PAFZZ | 4730-01-473-9667 | 5X050 | 403621 | QUICK COUPLING,AIR UOC: 7E1,7E2 | 1 |
| 34 | PAFFF | 4730-01-062-2570 | 93061 | 68NTA-6-4 | ADAPTER,STRAIGHT,PI UOC: 7E1,7E2 | 1 |
| 35 | PAFZZ | 4730-01-056-4990 | 93061 | 63NTA-6 | . INSERT,TUBE FITTING UOC: 7E1,7E2 | 1 |
| 36 | PAFZZ | 4730-01-048-5260 | 93061 | 60NTA-6 | . SLEEVE,COMPRESSION, UOC: 7E1,7E2 | 1 |
| 37 | PAFZZ | 4730-01-048-7873 | 93061 | 61NTA-6 | . NUT,TUBE COUPLING UOC: 7E1,7E2 | 1 |

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--------------------|-----------------|------------|--------------|--------------------|---|------------|
| 38 | MFFZZ | | 5X050 | 245538X66 | TUBE,NYLON MAKE FROM TUBING,NONMETALLIC NT10006 (01276), CUT TO 66 IN UOC: 7E1,7E2 | 1 |

END OF FIGURE

**FIELD MAINTENANCE
AIR CYLINDER ASSEMBLY**

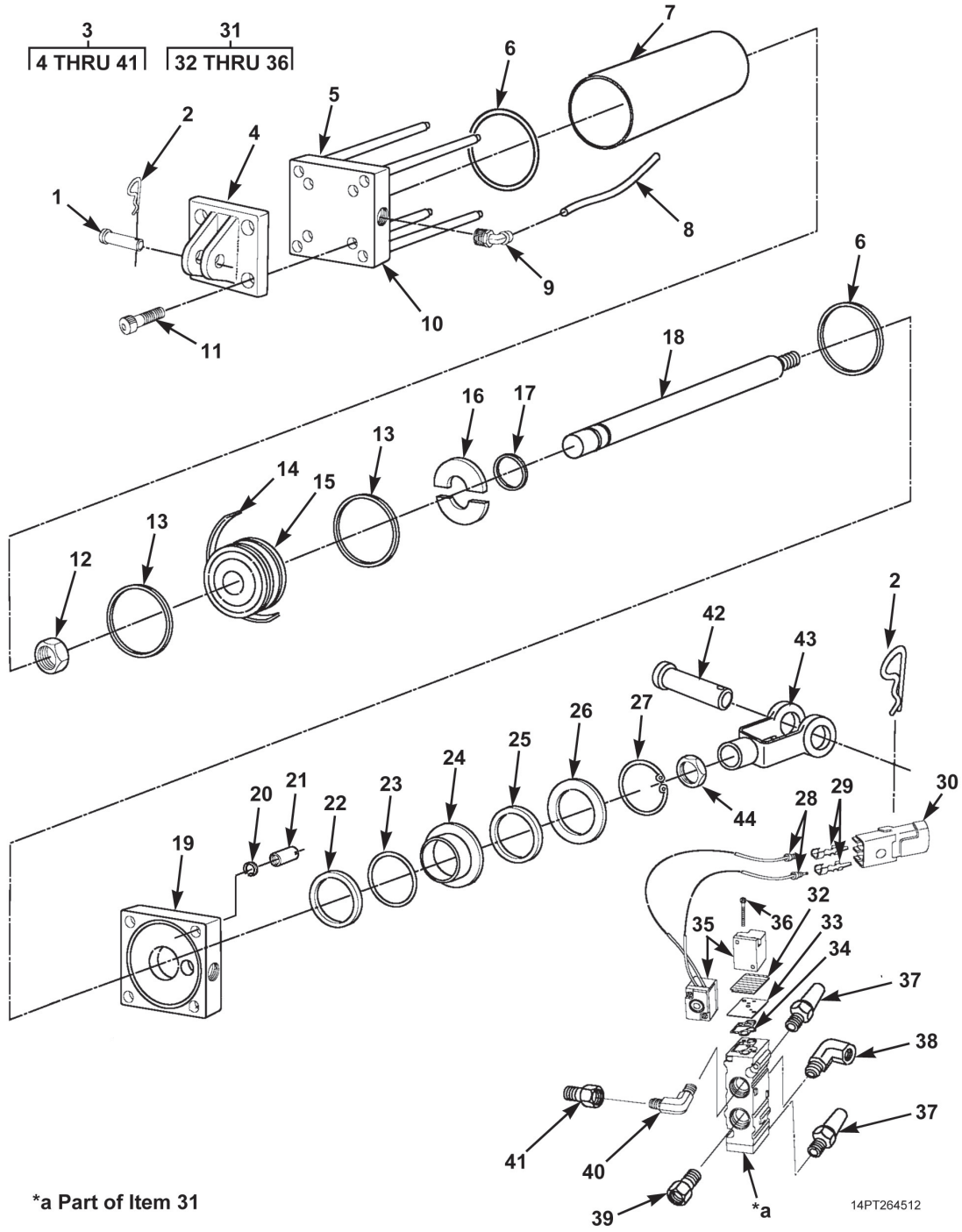


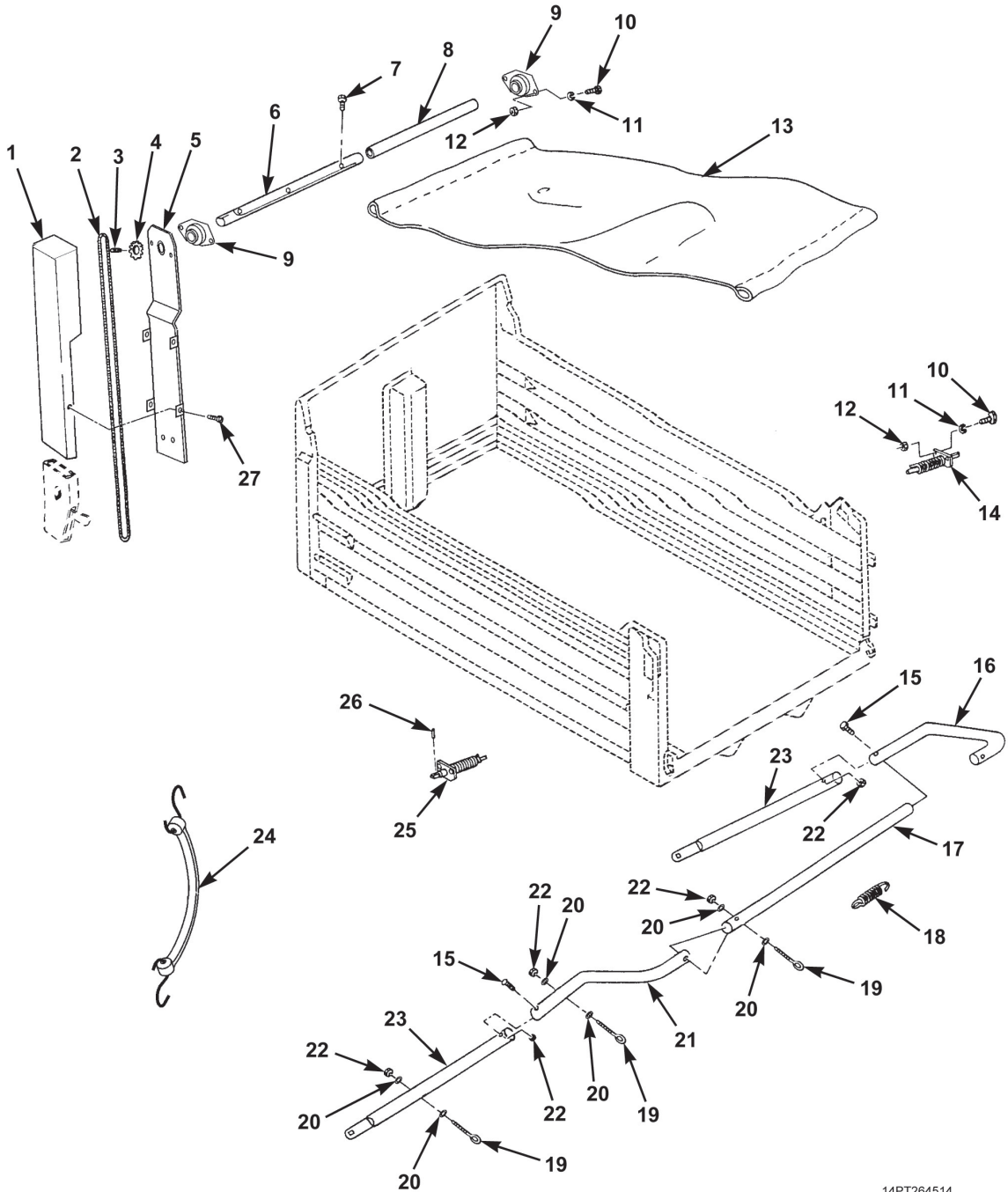
Figure 14. Air Cylinder Assembly.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|---------------------------------------|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 1810 CARGO BODY | | | | | | |
| FIG. 14. AIR CYLINDER ASSEMBLY | | | | | | |
| 1 | XDFZZ | | 5X050 | 404934 | PIN,STRAIGHT,HEADED 0.50 OD X 1.50 LG..... | 1 |
| 1 | XDFZZ | | 5X050 | 404932 | PIN,STRAIGHT,HEADED 0.493 OD X 1.97 LG..... | 1 |
| 1 | PAFZZ | 5315-01-446-9177 | 79146 | 019070 | PIN,STRAIGHT,HEADED 1/2 X 2 IN INCLUDES SPRING PIN..... | 1 |
| 2 | XDFZZ | | 5X050 | 404933 | PIN,LOCK 0.125 X 2.359..... | 2 |
| 3 | PAFFF | 3040-01-447-2738 | 5X050 | 403607 | CYLINDER ASSEMBLY,A QTY=1 7A1,7A2 QTY=5 7E1,7E2, PLAIN CYLINDER ASSY..... | 1 |
| 3 | PAFFF | 3040-01-515-7916 | 5X050 | 13141 | CYLINDER,ACTUATING,..... | 4 |
| 4 | XAFZZ | | 5X050 | 403633 | . COVER,REAR..... | 1 |
| 5 | XDFZZ | | 5X050 | 403643 | . TIE ROD,TENSIONING..... | 4 |
| 6 | KFFZZ | | 5X050 | 403638 | . PACKING,PREFORMED PART OF KIT P/N 404939..... | 2 |
| 7 | XAFZZ | | 5X050 | 403627 | . TUBE,CYLINDER..... | 1 |
| 8 | MFFZZ | | 79146 | 010029X11+/- | . TUBE,NONMETALLIC MAKE FROM TUBE,NONMETALLIC PFT-6B-BLK-100 (61424) CUT TO LENGTH AS REQUIRED..... | 1 |
| 9 | PAFZZ | 4730-01-446-2108 | 79146 | 016964 | . ELBOW,PIPE TO TUBE 3/8 TO 1/4 IN.... | 1 |
| 10 | XAFZZ | | 5X050 | 403630 | . COVER,END..... | 1 |
| 11 | XDFZZ | | 5X050 | 403644 | . SCREW..... | 4 |
| 12 | PAFZZ | 5310-01-481-4919 | 5X050 | 403632 | . NUT,PLAIN,HEXAGON 1/2-20..... | 1 |
| 13 | KFFZZ | | 5X050 | 403639 | . SEAL,PLAIN PART OF KIT P/N 404939... | 2 |
| 14 | KFFZZ | | 5X050 | 403640 | . STRIP,METAL PART OF KIT P/N 404939 | 1 |
| 15 | XDFZZ | | 5X050 | 403626 | . PISTON..... | 1 |
| 16 | PAFZZ | 5220-01-474-8432 | 5X050 | 403631 | . GAGE,RING,PLAIN SET (2 HALVES)..... | 1 |
| 17 | PFFZZ | 5330-01-482-8766 | 5X050 | 403636 | . PACKING,PREFORMED PART OF KIT P/N 404939..... | 1 |
| 18 | XDFZZ | | 5X050 | 403641 | . PISTON ROD..... | 1 |
| 19 | XAFZZ | | 5X050 | 403628 | . HEAD,END CYLINDER..... | 1 |
| 20 | PFFZZ | 5310-01-502-2940 | 5X050 | 404931 | . WASHER,LOCK 1/2 IN..... | 4 |
| 21 | XDFZZ | | 5X050 | 404930 | . NUT,PLAIN,BARREL 1/2-20 UNF..... | 4 |
| 22 | KFFZZ | | 5X050 | 404929 | . PREFORMED,PACKING PART OF KIT P/N 404939..... | 1 |
| 23 | KFFZZ | | 5X050 | 403637 | . SEAL,PLAIN PART OF KIT P/N 404939... | 2 |

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--------------------|-----------------|------------------|--------------|--------------------|---|------------|
| 24 | KFFZZ | | 5X050 | 403629 | . BEARING,PISTON ROD PART OF KIT P/N 404939..... | 1 |
| 25 | KFFZZ | | 5X050 | 403635 | . GASKET,PLASTIC PART OF KIT P/N 404939..... | 1 |
| 26 | XDFZZ | | 5X050 | 404927 | . WASHER,FLAT,SPECIAL 1.130 ID X 1.750 OD X .064 THK..... | 1 |
| 27 | PFFZZ | 5325-01-502-5209 | 5X050 | 404928 | . RING,RETAINING 1.942 OD X 0.062 THK, INTERNAL TYPE..... | 1 |
| 28 | PAFZZ | 5975-01-310-5011 | 77060 | 12015323 | . BOOT,DUST AND MOIST..... | 2 |
| 29 | PAFZZ | 5999-01-406-4110 | 77060 | 12124582 | . CONTACT,ELECTRICAL..... | 2 |
| 30 | PAFZZ | 5935-01-214-4163 | 22785 | 12010973 | . CONNECTOR BODY,PLUG..... | 1 |
| 31 | KFFFF | | 5X050 | 403645 | . VALVE,REGULATING,FL PART OF KIT P/N 404940..... | 1 |
| 32 | PAFZZ | 5330-01-473-2903 | 5X050 | 403648 | . . GASKET..... | 1 |
| 33 | PAFZZ | 5365-01-475-2277 | 5X050 | 403649 | . . SPACER,PLATE..... | 1 |
| 34 | PAFZZ | 5330-01-474-2447 | 5X050 | 403650 | . . GASKET..... | 1 |
| 35 | KFFZZ | | 5X050 | 403647 | . . VALVE,PILOT ASSY PART OF KIT P/N 404940..... | 1 |
| 36 | XDFZZ | | 5X050 | 403646 | . . SCREW,SOCKET HEAD 0.50 MM X 25.4 MM..... | 2 |
| 37 | PAFZZ | 4130-01-535-3511 | 79146 | 030084 | . FILTER ELEMENT,AIR..... | 2 |
| 38 | XDFZZ | | 93061 | 404938 | . ELBOW,PIPE TO TUBE 1/2 IN NPT..... | 1 |
| 39 | PAFZZ | 4730-01-455-1068 | 93061 | 68PMT-6-4 | . ADAPTER,STRAIGHT,PI..... | 1 |
| 39 | XDFZZ | | 79146 | 012037 | . ADAPTER,STRAIGHT,PI 3/8 X 1/4 IN..... | 2 |
| 40 | PAFZZ | 4730-00-137-7875 | 30780 | 2101-4-4C | . ELBOW,PIPE 1/4 IN..... | 1 |
| 41 | PAFZZ | 4730-01-345-6065 | 93061 | VS209P-8-4 | . BUSHING,PIPE 1/2-14 X 1/4-18 NPTF, QTY 1 FOR CYLINDER PN: 131341, QTY 2 FOR CYLINDER PN: 403607..... | 2 |
| 43 | XDFZZ | | 5X050 | 403634 | CLEVIS,ROD END..... | 1 |
| 44 | PAFZZ | 5315-01-446-9174 | 79146 | 019067 | PIN,STRAIGHT,HEADED 1/2 X 1-11/32 IN INCLUDES SPRING PIN 1/8 X 2 1/4 IN..... | 1 |
| 44 | XDFZZ | | 5X050 | 403642 | NUT, JAM 5/8-18..... | 1 |

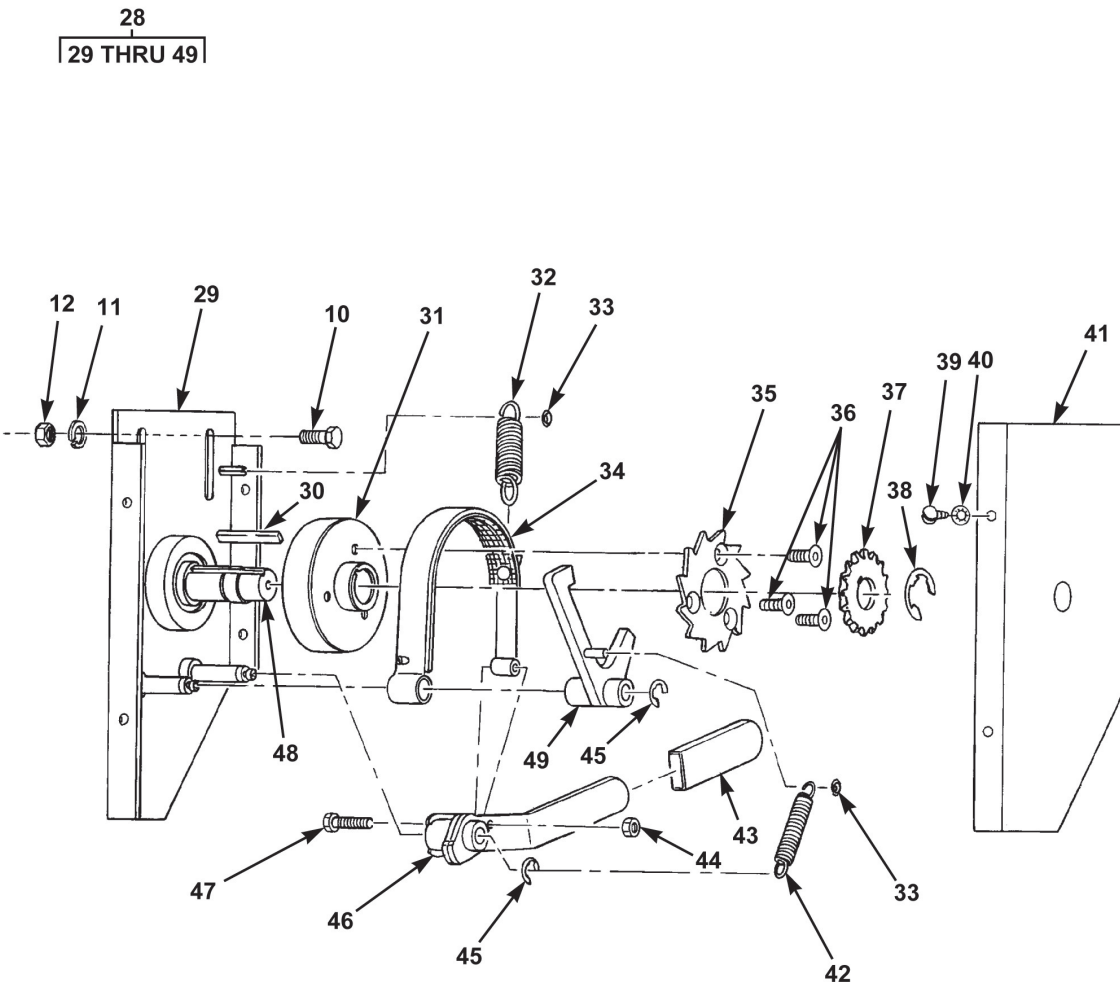
END OF FIGURE

**FIELD MAINTENANCE
CARGO COVER AND COMPONENT PARTS**



14PT264514

Figure 15. Cargo Cover and Component Parts (Sheet 1 of 2).



14PT264515

Figure 15. Cargo Cover and Component Parts (Sheet 2 of 2).

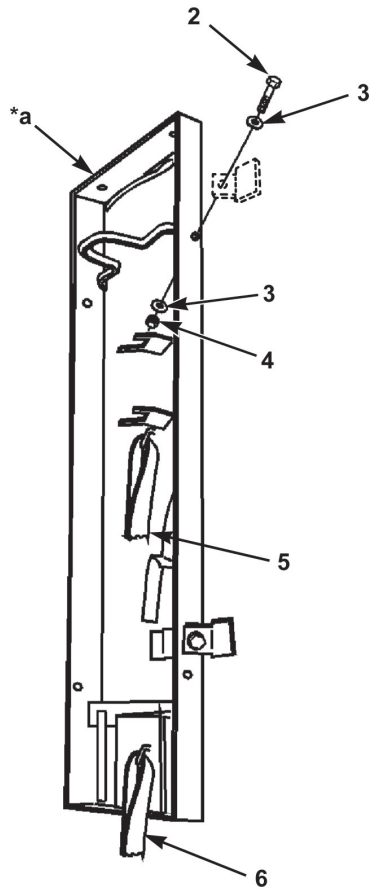
| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 2201 CANVAS, RUBBER, OR PLASTIC ITEMS | | | | | | |
| FIG. 15. CARGO COVER AND COMPONENT PARTS | | | | | | |
| 1 | PFZZ | 5340-01-474-6455 | 5B752 | 0311-961402 | COVER,ACCESS..... | 1 |
| 2 | PAFZZ | 3020-01-446-6412 | 5B752 | 0720-603557 | CHAIN,ROLLER #40 X 168 IN..... | 1 |
| 3 | PAFZZ | 5315-01-446-6724 | 5B752 | 0840-618512 | KEY,WOODRUFF 1/4 X 1 1/2 IN..... | 1 |
| 4 | PAFZZ | 3020-01-446-6409 | 5B752 | 0750-619594 | SPROCKET WHEEL..... | 1 |
| 5 | PFZZ | 5340-01-474-6462 | 5B752 | 0311-961401 | PLATE,MOUNTING LEFT SIDE..... | 1 |
| 6 | PFZZ | 5342-01-445-9481 | 5B752 | 0311-961273 | CONTROL ROD LEFT SIDE..... | 1 |
| 7 | PAFZZ | 5305-00-988-1725 | 96906 | MS35206-281 | SCREW,MACHINE 1/4-20 X 0.75..... | 6 |
| 8 | PFZZ | 5342-01-449-5475 | 5B752 | 0311-961267 | CONTROL ROD RIGHT SIDE..... | 1 |
| 9 | PFZZ | 3130-01-474-9064 | 5B752 | 0710-602155 | HOUSING,BEARING UNI..... | 2 |
| 10 | PAFZZ | 5305-00-543-4372 | 80204 | B1821BH038C075N | SCREW,CAP,HEXAGON H 3/8-16 X 0.75 | 12 |
| 11 | PAFZZ | 5310-00-637-9541 | 80205 | MS35338-46 | WASHER,LOCK 3/8 IN..... | 6 |
| 12 | PAFZZ | 5310-00-732-0558 | 96906 | MS51967-8 | NUT,PLAIN,HEXAGON 3/8-16..... | 6 |
| 13 | PAFZZ | 2540-01-449-5775 | 5B752 | ECT 13 CRY | TARPAULIN..... | 1 |
| 14 | PAFZZ | 5360-01-446-3122 | 5B752 | 0311-960238 | SPRING,SPIRAL,TORSI RIGHT SIDE..... | 1 |
| 15 | PAFZZ | 5305-00-071-2513 | 80204 | B1821BH025C250N | SCREW,CAP,HEXAGON H 1/4-20 X 2.50.. | 2 |
| 16 | PAFZZ | 5342-01-475-2802 | 5B752 | 0311-861590 | CONTROL ROD RIGHT SIDE..... | 1 |
| 17 | PAFZZ | 3040-01-446-3793 | 5B752 | 0311-861591 | SHAFT,STRAIGHT REAR..... | 1 |
| 18 | PAFZZ | 5360-01-446-7903 | 5B752 | 0715-619601 | SPRING,HELICAL,EXTE 4 IN..... | 2 |
| 19 | PAFZZ | 5306-00-957-7531 | 10266 | 213 1-4 20X2 1-2 | BOLT,EYE 1/4-20 X 2.50..... | 6 |
| 20 | PAFZZ | 5310-00-809-4058 | 96906 | MS27183-10 | WASHER,FLAT 1/4 IN..... | 8 |
| 21 | PAFZZ | 5342-01-446-0902 | 5B752 | 0311-861589 | ARM,HAND CRANK LEFT SIDE..... | 1 |
| 22 | PAFZZ | 5310-01-333-6436 | 64678 | 23-10340-125 | NUT,SELF-LOCKING,AS 1/4-20..... | 8 |
| 23 | PAFZZ | 3040-01-446-3790 | 5B752 | 0311-961280 | SHAFT,SHOULDERED..... | 2 |
| 24 | PAFZZ | 5340-01-474-9576 | 5B752 | 1545-619860 | STRAP,ELASTIC 15 IN..... | 2 |
| 25 | PAFZZ | 5360-01-446-3194 | 5B752 | 0311-960237 | SPRING,SPIRAL,TORSI..... | 1 |
| 26 | PAFZZ | 5315-01-447-5712 | 5B752 | 0835-691616 | KEY,MACHINE 1/4 X 1 5/8 IN..... | 2 |
| 27 | PAFZZ | 5305-01-446-8972 | 5B752 | 0825-670460 | SCREW,TAPPING #14 X 1.00 IN..... | 4 |
| 28 | PAFFF | 5340-01-492-7615 | 5B752 | 0311-961356 | CRANK,HAND..... | 1 |
| 29 | XAFZZ | | 5B752 | 0311-962125 | . PLATE,BASE CRANK..... | 1 |
| 30 | PFZZ | 5315-01-448-8804 | 5B752 | 0840-618513 | . KEY,WOODRUFF 6 MM X 2.25 IN..... | 1 |
| 31 | PAFZZ | 3040-01-446-4689 | 5B752 | 0311-860730 | . BRAKE DRUM..... | 1 |

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--------------------|-----------------|------------------|--------------|--------------------|--|------------|
| 32 | PAFZZ | 5360-01-446-4054 | 5B752 | 0715-619800 | . SPRING,HELICAL,COMP..... | 1 |
| 33 | PAFZZ | 5310-00-088-1251 | 81349 | M45913/1-4CG5C | . NUT,SELF-LOCKING,HE 1/4-20..... | 2 |
| 34 | PAFZZ | 2530-01-446-3340 | 5B752 | 0311-960739 | . BRAKE BAND AND LINI..... | 1 |
| 35 | XDFZZ | | 5B752 | 0311-862406 | . RATCHET WHEEL..... | 1 |
| 36 | PAFZZ | 5305-00-984-7353 | 96906 | MS35191-306 | . SCREW,MACHINE 5/16-24 X 0.75..... | 3 |
| 37 | PAFZZ | 3020-01-446-6405 | 5B752 | 0750-619592 | . SPROCKET WHEEL..... | 1 |
| 38 | PAFZZ | 5325-00-530-7968 | 96906 | MS16624-1100 | . RING,RETAINING 1 IN EXTERNAL..... | 1 |
| 39 | PAFZZ | 5305-00-988-1725 | 80205 | MS35206-281 | . SCREW,MACHINE 1/4-20 X 0.75..... | 4 |
| 40 | PAFZZ | 5310-00-550-1130 | 80205 | MS35333-40 | . WASHER,LOCK 1/4 IN..... | 4 |
| 41 | PPFZZ | 5340-01-474-6449 | 5B752 | 0311-861596 | . COVER,ACCESS..... | 1 |
| 42 | PAFZZ | 5360-01-446-3190 | 5B752 | 0715-619602 | . SPRING,HELICAL,COMP..... | 1 |
| 43 | PAFZZ | 5340-01-445-7778 | 5B752 | 0765-618830 | . GRIP,HANDLE..... | 1 |
| 44 | PAFZZ | 5310-00-061-4650 | 45152 | 114356A | . NUT,SELF-LOCKING,HE 1/4-20..... | 1 |
| 45 | PAFZZ | 5325-00-803-7301 | 96906 | MS16624-1050 | . RING,RETAINING 1/2 IN EXTERNAL..... | 2 |
| 46 | PPFZZ | 5340-01-474-6446 | 5B752 | 0311-962132 | . HANDLE,MANUAL CONTR..... | 1 |
| 47 | PAFZZ | 5305-01-075-0957 | 96906 | MS51849-100 | . SCREW,MACHINE 1/4-20 X 1.50..... | 1 |
| 48 | PPFZZ | 3040-01-446-3782 | 5B752 | 0311-860732 | . SHAFT,SHOULDERED..... | 1 |
| 49 | PPFZZ | 3040-01-473-2741 | 5B752 | 0311-962128 | . PAWL..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
SHOVEL MOUNTING**

1
| 2 THRU 4 |



*a Part of Item 1

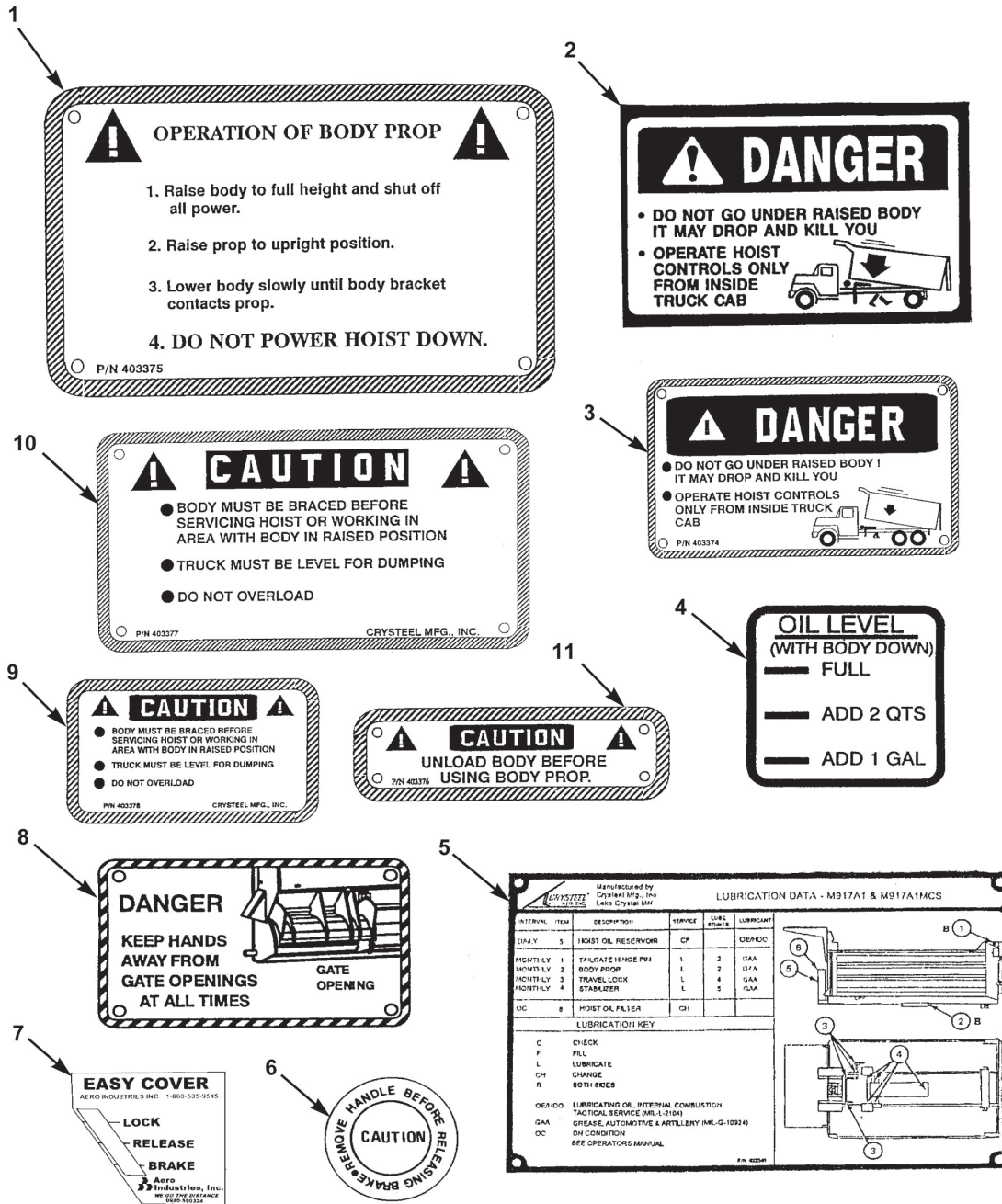
14PT264516

Figure 16. Shovel Mounting.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 2201 CANVAS, RUBBER, OR PLASTIC ITEMS | | | | | | |
| FIG. 16. SHOVEL MOUNTING | | | | | | |
| 1 | PAFFF | 2540-01-175-7257 | 19207 | 12302814 | MOUNTING KIT, TOOL S..... | 1 |
| 2 | PAFZZ | 5305-00-269-2803 | 80205 | MS90726-60 | . SCREW,CAP,HEXAGON H 3/8-24X1..... | 4 |
| 3 | PAFZZ | 5310-00-809-4061 | 96906 | MS27183-15 | . WASHER,FLAT 3/8 IN..... | 8 |
| 4 | PAFZZ | 5310-00-814-0672 | 96906 | M45913/3-6FG8C | . NUT,SELF-LOCKING,HE 3/8-24..... | 4 |
| 5 | PAFZZ | 5340-00-753-3741 | 19200 | 7550233-1 | STRAP,WEBBING 14 IN..... | 1 |
| 6 | PAFZZ | 5340-01-032-8448 | 19200 | 7550233-2 | STRAP,WEBBING 20 IN..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
DECALS, INSTRUCTION PLATES, AND STENCILS**



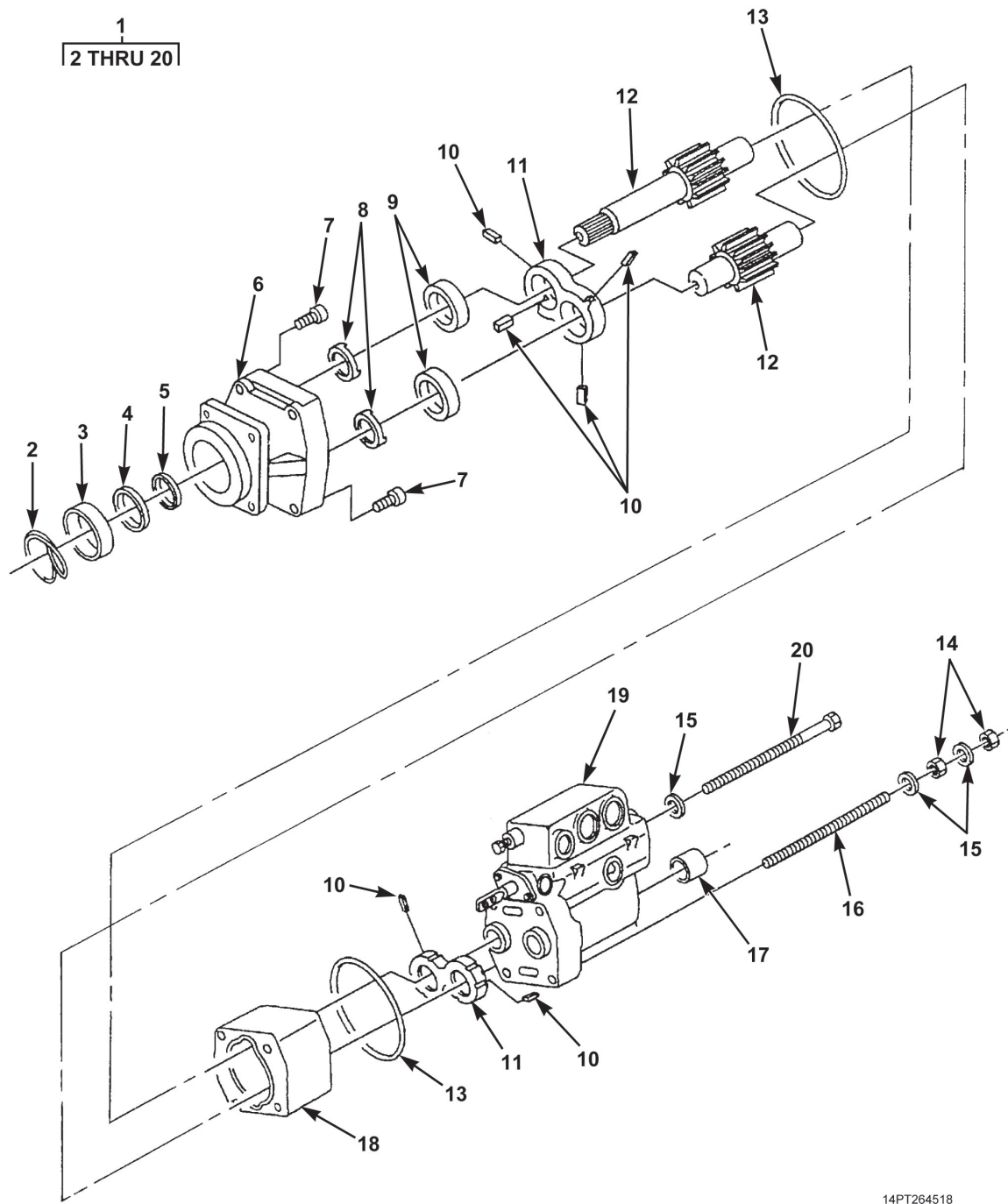
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Figure 17. Decals, Instruction Plates, and Stencils.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|---|------------|
| GROUP 2210 DATA PLATES AND INSTRUCTION HOLDERS | | | | | | |
| FIG. 17. DECALS, INSTRUCTION PLATES, AND STENCILS | | | | | | |
| 1 | PCFZZ | 7690-01-445-8976 | 5X050 | 403375 | MARKER,IDENTIFICATI CAUTION, BODY PROP..... | 2 |
| 2 | PCFZZ | 7690-01-445-9903 | 5X050 | 403374 | MARKER,IDENTIFICATI DANGER..... | 2 |
| 3 | PCFZZ | 7690-01-445-9897 | 5X050 | 401577 | MARKER,IDENTIFICATI DANGER..... | 1 |
| 4 | PCFZZ | 7690-01-445-8961 | 5X050 | 403492 | MARKER,IDENTIFICATI OIL LEVEL..... | 1 |
| 5 | XDFZZ | | 5X050 | 403541 | PLATE,IDENTIFICATIO..... | 1 |
| 6 | PCFZZ | 7690-01-449-1447 | 5B752 | 0920-590325 | DECAL..... | 1 |
| 7 | XDFZZ | | 5B752 | 0920-590324 | DECAL..... | 1 |
| 8 | XDFZZ | | 5X050 | 403514 | PLATE,INSTRUCTION DANGER GATE OPENING MCS..... | 4 |
| 9 | PCFZZ | 7690-01-445-8967 | 5X050 | 403378 | MARKER,IDENTIFICATI CAUTION..... | 1 |
| 10 | PCFZZ | 7690-01-445-9933 | 5X050 | 403377 | MARKER,IDENTIFICATI CAUTION..... | 2 |
| 11 | PCFZZ | 7690-01-445-8973 | 5X050 | 403376 | MARKER,IDENTIFICATI CAUTION, BODY PROP..... | 2 |

END OF FIGURE

**FIELD MAINTENANCE
HYDRAULIC PUMP ASSEMBLY**



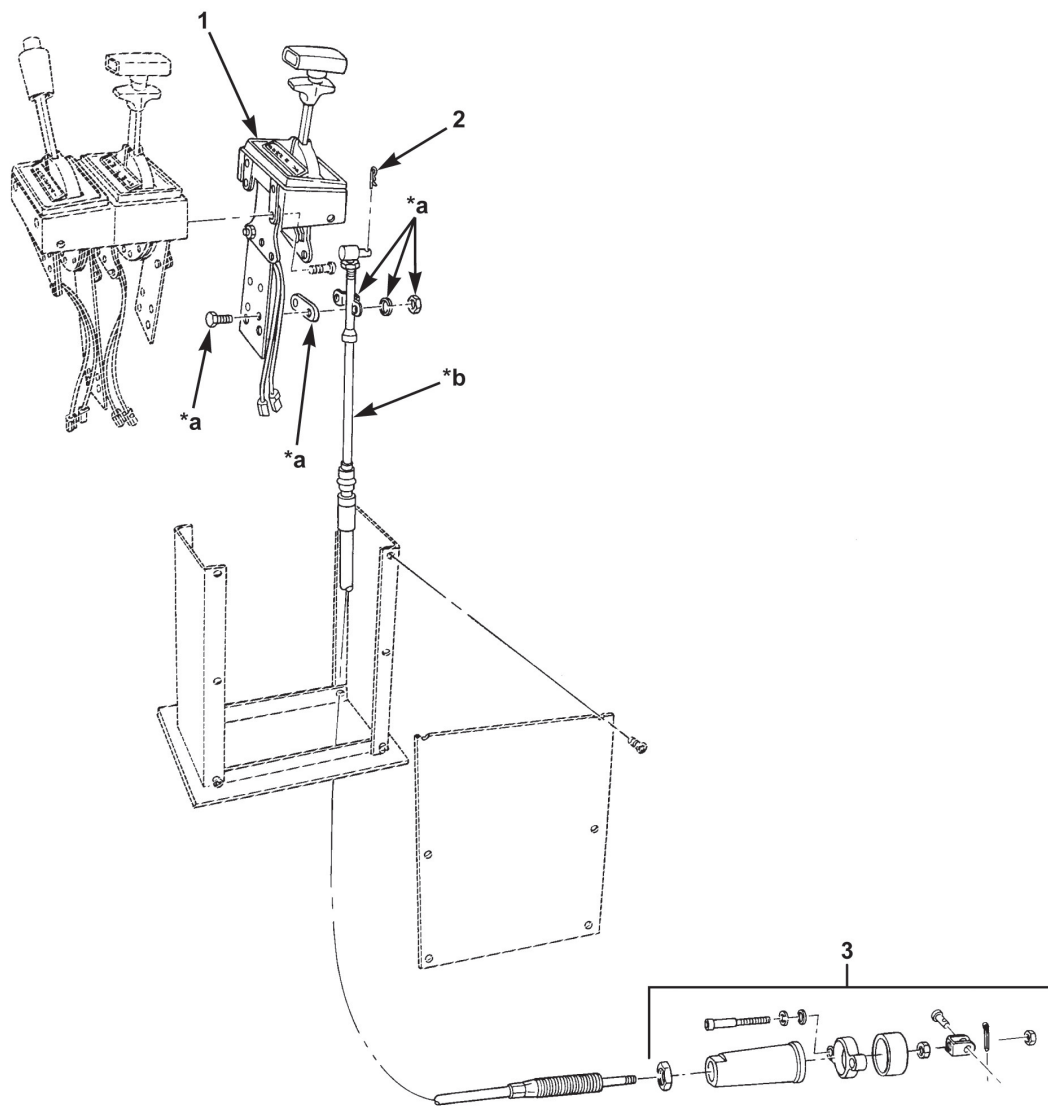
14PT264518

Figure 18. Hydraulic Pump Assembly.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|---|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 2401 PUMP AND MOTOR | | | | | | |
| FIG. 18. HYDRAULIC PUMP ASSEMBLY | | | | | | |
| 1 | PAFFF | 4320-01-451-0045 | 13829 | 308 9310 156 | PUMP, HYDRAULIC..... | 1 |
| 2 | PAFZZ | 5325-00-768-8563 | 80756 | RRT206 | . RING, RETAINING..... | 1 |
| 3 | PAFZZ | 5365-01-361-4609 | 13829 | 391 3383 069 | . SPACER, SLEEVE..... | 1 |
| 4 | PAFZZ | 5365-01-236-0717 | 13829 | 391 3381 040 | . SPACER, RING..... | 1 |
| 5 | PAFZZ | 5330-01-236-0469 | 82338 | 391-2883-119 | . SEAL, PLAIN ENCASED..... | 1 |
| 6 | XAFZZ | | 13829 | 308 5030 201 | . COVER, SHAFT END HOU..... | 1 |
| 7 | PAFZZ | 4820-00-435-4391 | 13829 | M1391K | . VALVE, CHECK..... | 2 |
| 8 | PAFZZ | 5330-01-212-2222 | 38335 | 25316 | . GASKET..... | 2 |
| 9 | PAFZZ | 3110-01-260-2561 | 13829 | 391-0381-906 | . BEARING, ROLLER, NEED..... | 2 |
| 10 | PAFZZ | 5330-00-809-1052 | 13829 | 391 2882 051 | . SEAL, NONMETALLIC ST..... | 12 |
| 11 | PAFZZ | 3120-01-328-4294 | 13829 | 391-2185-913 | . BEARING, WASHER, THRU..... | 2 |
| 12 | PAFZZ | 3040-01-446-2408 | 13829 | 312 2920 130 | . GEARSHAFT SET, SPUR, 2 IN..... | 1 |
| 13 | PAFZZ | 5330-01-340-8159 | 13829 | 3912884019 | . SEAL, PLAIN..... | 2 |
| 14 | PAFZZ | 5310-01-340-8088 | 13829 | 3911451115 | . NUT, PLAIN, HEXAGON..... | 2 |
| 15 | PAFZZ | 5310-01-340-8353 | 13829 | 3913782146 | . WASHER, FLAT..... | 5 |
| 16 | PAFZZ | 5307-01-446-7531 | 13829 | 391 1425 437 | . STUD, PLAIN..... | 1 |
| 17 | PAFZZ | 5365-01-446-0280 | 13829 | 391 3283 052 | . SPACER, SLEEVE..... | 1 |
| 18 | XAFZZ | | 13829 | 308 8020 901 | . HOUSING, GEAR..... | 1 |
| 19 | XAFZZ | | 13829 | 308 9414 024 | . COVER, PORT END HOUS..... | 1 |
| 20 | PAFZZ | 5305-01-447-1330 | 13829 | 391 1401 382 | . SCREW, CAP, SOCKET HE 2 IN..... | 3 |

END OF FIGURE

**FIELD MAINTENANCE
DUMP CONTROL AND CABLE**



*a Part of Item 1
*b Part of Item 2

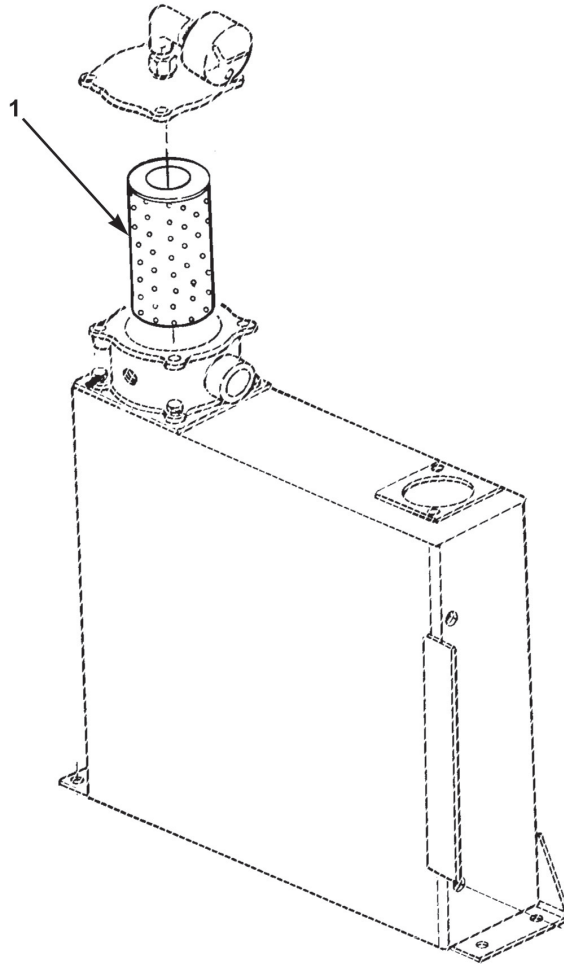
14PT264519

Figure 19. Dump Control and Cable.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|---|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 2403 HYDRAULIC CONTROLS AND/OR MANUAL CONTROLS | | | | | | |
| FIG. 19. DUMP CONTROL AND CABLE | | | | | | |
| 1 | PAFZZ | 2590-01-442-7238 | 60602 | 55940-4 | CONTROL ASSEMBLY,PU UOC: 7A1,7E2 | 1 |
| 2 | PFFZZ | 2590-01-445-7883 | 60602 | 45884-48 | CONTROL ASSEMBLY,PU UOC: 7A1,7E1 | 1 |
| 2 | PFFZZ | 2590-01-528-7521 | 64678 | FLD/458840072 | CONTROL ASSEMBLY,PU UOC: 7A2,7E2 | 1 |
| 3 | PAFZZ | 4820-01-446-8874 | 04710 | 01-5000-35 | PARTS KIT,VALVE..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
FILTER ELEMENT, HYDRAULIC**



14PT264520

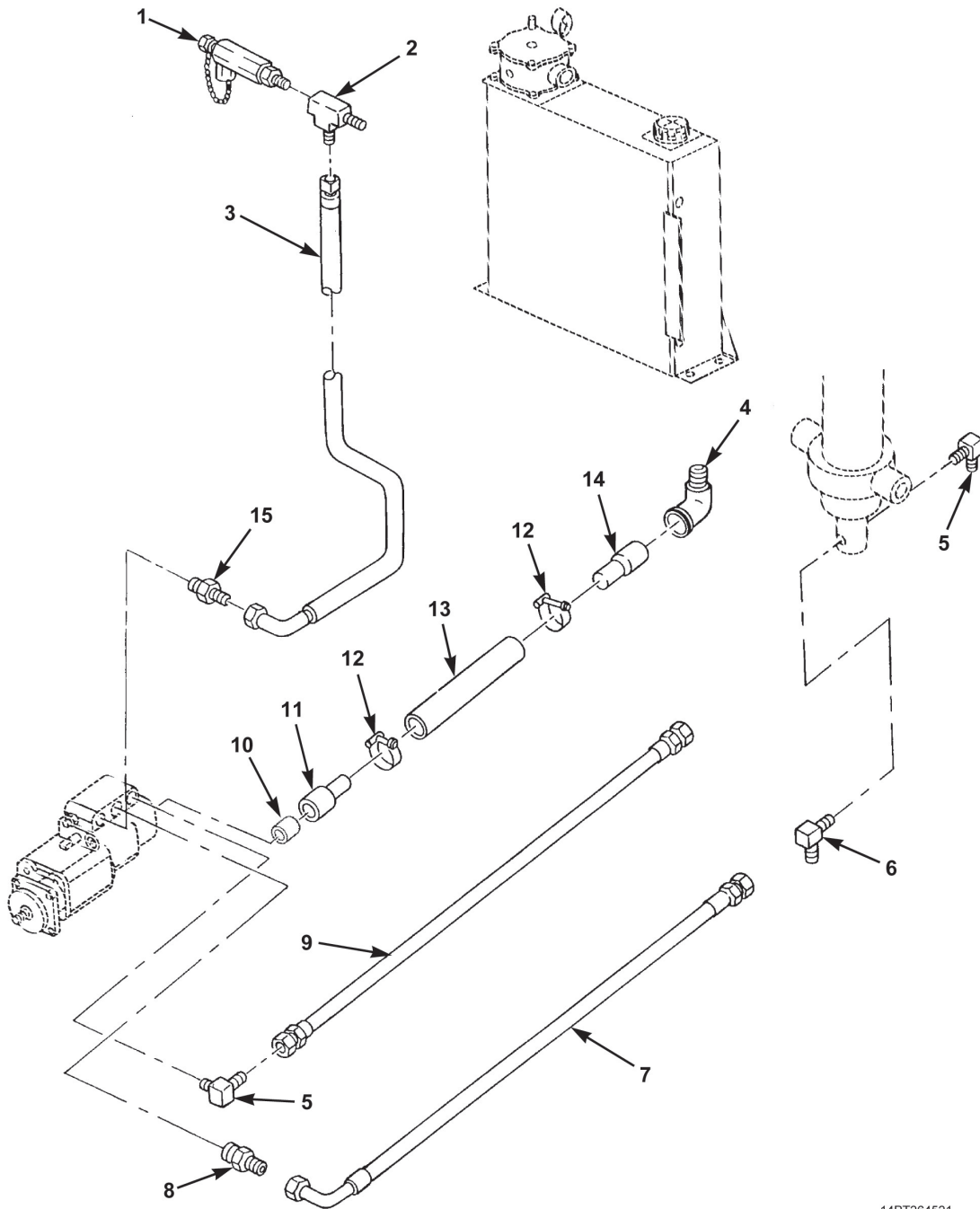
Figure 20. Filter Element, Hydraulic.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--------------------|-----------------|------------|--------------|--------------------|--|------------|
|--------------------|-----------------|------------|--------------|--------------------|--|------------|

| | | | | | | |
|---|-------|------------------|-------|--------|--|---|
| | | | | | GROUP 2406 STRAINERS, FILTERS, LINES AND FITTINGS, ETC. | |
| | | | | | FIG. 20. FILTER ELEMENT, HYDRAULIC | |
| 1 | PAFZZ | 4330-01-446-3337 | 5X050 | 403366 | FILTER ELEMENT,FLUI 10 MICRON..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
HYDRAULIC HOSES AND FITTINGS**



14PT264521

Figure 21. Hydraulic Hoses and Fittings.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 2406 STRAINERS, FILTERS, LINES AND FITTINGS, ETC. | | | | | | |
| FIG. 21. HYDRAULIC HOSES AND FITTINGS | | | | | | |
| 1 | PAFZZ | 4820-01-298-8416 | 81349 | M81940/2-1 | VALVE,BLEEDER,HYDRA..... | 1 |
| 2 | PAFZZ | 4730-01-446-2110 | 5X050 | 239932 | ELBOW,PIPE TO TUBE..... | 1 |
| 3 | PFFZZ | 4720-01-518-9183 | 5X050 | 406342 | HOSE ASSEMBLY,NONME 1 5/16 JIC X 105 IN SF/SF 90L UOC: 7A2,7E2 | 1 |
| 3 | PAFZZ | 4720-01-446-1508 | 5X050 | 403459 | HOSE ASSEMBLY,NONME UOC: 7A1,7E1 | 1 |
| 4 | XDFZZ | | 5X050 | 406356 | NIPPLE,PIPE 1 1/2 X 6 UOC: 7A2 | 1 |
| 4 | XDFZZ | | 5X050 | 406355 | ELBOW,PIPE 1 1/2 NPT 450 UOC: 7E2 | 1 |
| 4 | PAFZZ | 4730-01-028-5540 | 30780 | 1-1/2CDS | ELBOW,PIPE UOC: 7A1,7E1 | 1 |
| 5 | PAFZZ | 4730-01-011-7736 | 96906 | MS51527A12 | ELBOW,TUBE TO BOSS..... | 2 |
| 6 | PAFZZ | 4730-00-822-5609 | 00624 | MS51527A8 | ELBOW,TUBE TO BOSS..... | 1 |
| 7 | PAFZZ | 4720-01-446-1541 | 5X050 | 403457 | HOSE ASSEMBLY,NONME UOC: 7A1,7E1 | 1 |
| 7 | PFFZZ | 4730-01-518-9540 | 5X050 | 406341 | HOSE ASSEMBLY,NONME 3/4 JIC X 57 IN SF/SF 90L UOC: 7A2,7E2 | 1 |
| 8 | PAFZZ | 4730-01-046-4034 | 30780 | 0503-12-8 | ADAPTER,STRAIGHT,TU..... | 1 |
| 9 | PAFZZ | 4720-01-446-1481 | 5X050 | 403458 | HOSE ASSEMBLY,NONME UOC: 7A1,7E1 | 1 |
| 9 | PFFZZ | 4720-01-519-0924 | 5X050 | 406340 | HOSE ASSEMBLY,NONME 1 1/16 JIC X 57 IN SF/SF UOC: 7A2,7E2 | 1 |
| 10 | PFFZZ | 5365-01-533-1299 | 5X050 | 401540 | SLEEVE INLET VALVE..... | 1 |
| 11 | PAFZZ | 4730-01-446-2112 | 60827 | FT-1215-ZP | ADAPTER,STRAIGHT,PI..... | 1 |
| 12 | PAFZZ | 4730-01-446-2107 | 9X737 | HC150 | CLAMP,HOSE 1.91-2.22 IN..... | 2 |
| 13 | PAFZZ | 4720-01-446-1729 | 5X050 | 403456 | HOSE,NONMETALLIC 1.50 ID X 24.00 IN. | 1 |
| 14 | PAFZZ | 4730-01-446-3255 | 60827 | FT-150-ZP | ADAPTER,STRAIGHT,PI..... | 1 |
| 15 | PAFZZ | 4730-00-173-1881 | 96906 | MS51525A12-16 | ADAPTER,STRAIGHT,TU..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
CYLINDER ASSEMBLY, HOIST**

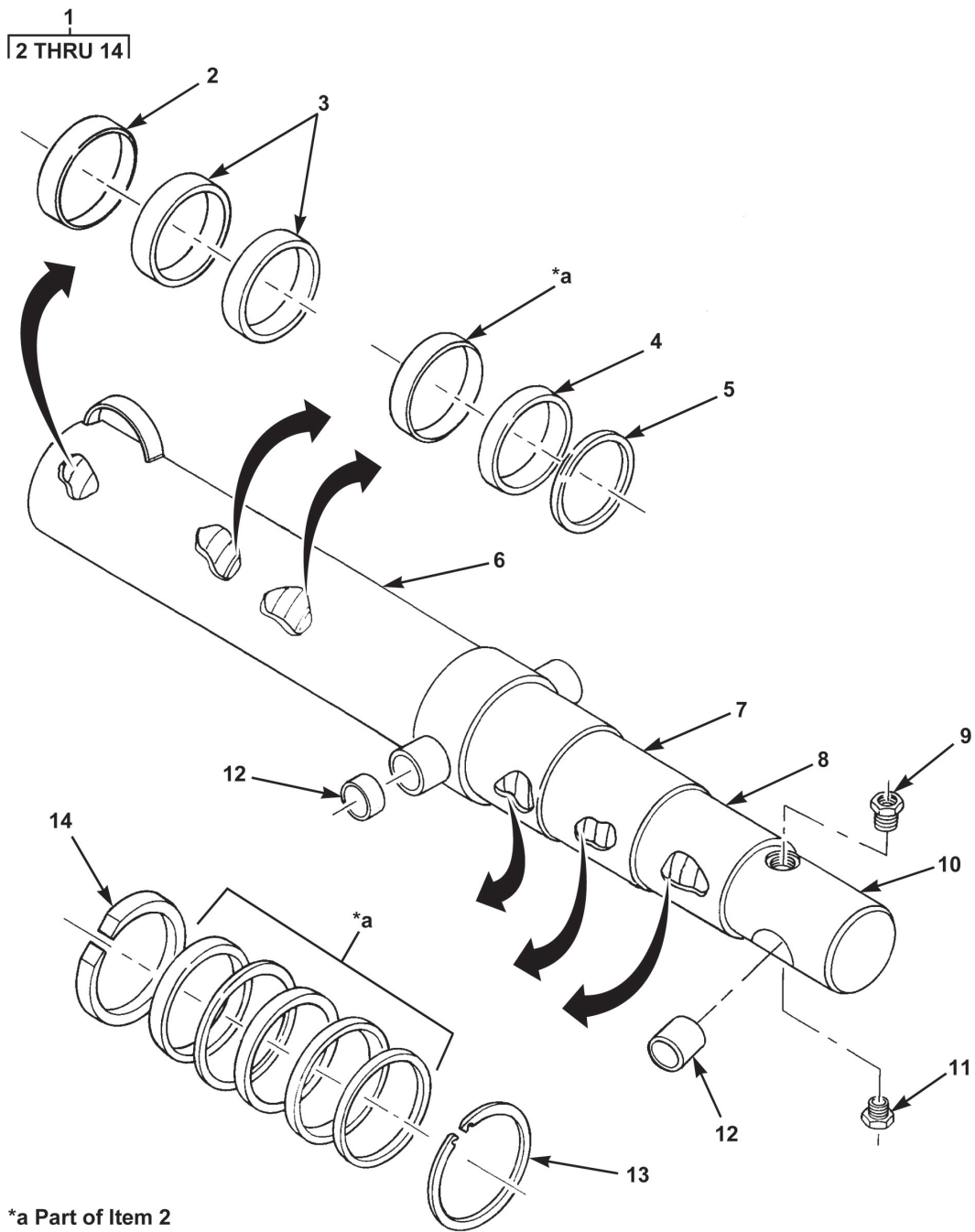


Figure 22. Cylinder Assembly, Hoist.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 2407 HYDRAULIC CYLINDERS | | | | | | |
| FIG. 22. CYLINDER ASSEMBLY, HOIST | | | | | | |
| 1 | PPFFF | 3040-01-446-3620 | 5X050 | 403236 | CYLINDER ASSEMBLY,A..... | 1 |
| 2 | PAFZZ | 5330-01-447-1113 | 02249 | 034-55008-53118 | . PARTS KIT,SEAL REPL INCLUDES ALL WEAR RINGS, GUIDE RINGS, RET. RINGS, WIPERS, RET. WIPERS, U-CUP SEALS..... | 1 |
| 3 | PAFZZ | 3040-01-446-4665 | 02249 | B12071-0500 | . RING,PISTON 5 IN..... | 2 |
| 4 | PAFZZ | 3040-01-446-6277 | 02249 | B12071-0400 | . RING,PISTON 4 IN..... | 1 |
| 4 | PAFZZ | 3040-01-446-6274 | 02249 | B12071-0300 | . RING,PISTON 3 IN..... | 1 |
| 5 | XDFZZ | | 02249 | 0263984 | . RING,PISTON 4.5 IN..... | 2 |
| 5 | PAFZZ | 3040-01-446-6280 | 02249 | 0263914 | . RING,PISTON 3.5 IN..... | 1 |
| 6 | XDFZZ | | 02249 | 002-55074-04844 | . BARREL ASSEMBLY..... | 1 |
| 7 | XDFZZ | | 02249 | 062-50049-04752 | . SLEEVE ASSY 5 IN..... | 1 |
| 8 | XDFZZ | | 02249 | 062-40044-04689 | . SLEEVE ASSY 4 IN..... | 1 |
| 9 | PCFZZ | 5365-01-340-3898 | 01276 | 900598-12S | . PLUG,MACHINE THREAD 1 1/16-12, WITH O-RING..... | 1 |
| 10 | XDFZZ | | 02249 | 063-30135-04992 | . PLUNGER ASSY 3 IN..... | 1 |
| 11 | PAFZZ | 5365-01-217-4133 | 01276 | 900598-8S | . PLUG,MACHINE THREAD 3/4-16, WITH O-RING..... | 1 |
| 12 | PAFZZ | 5365-01-446-4322 | 02249 | 035-17002-00225 | . SPACER,SLEEVE..... | 3 |
| 13 | PAFZZ | 5325-01-446-4053 | 02249 | 083-50003-00362 | . RING,RETAINING 3 IN..... | 1 |
| 13 | PAFZZ | 5325-01-446-4051 | 02249 | 083-10005-00562 | . RING,RETAINING 5 IN..... | 1 |
| 13 | PAFZZ | 5325-01-446-4052 | 02249 | 083-50003-00462 | . RING,RETAINING 4 IN..... | 1 |
| 14 | PAFZZ | 5325-01-446-9204 | 02249 | 083-50002-00450 | . RING,RETAINING 4 IN..... | 1 |
| 14 | PAFZZ | 5325-01-446-9182 | 02249 | B9971-00550 | . RING,RETAINING 5 IN..... | 1 |
| 14 | PAFZZ | 5325-01-446-9210 | 02249 | 083-50002-00350 | . RING,RETAINING 3 IN..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
HYDRAULIC RESERVOIR ASSEMBLY**

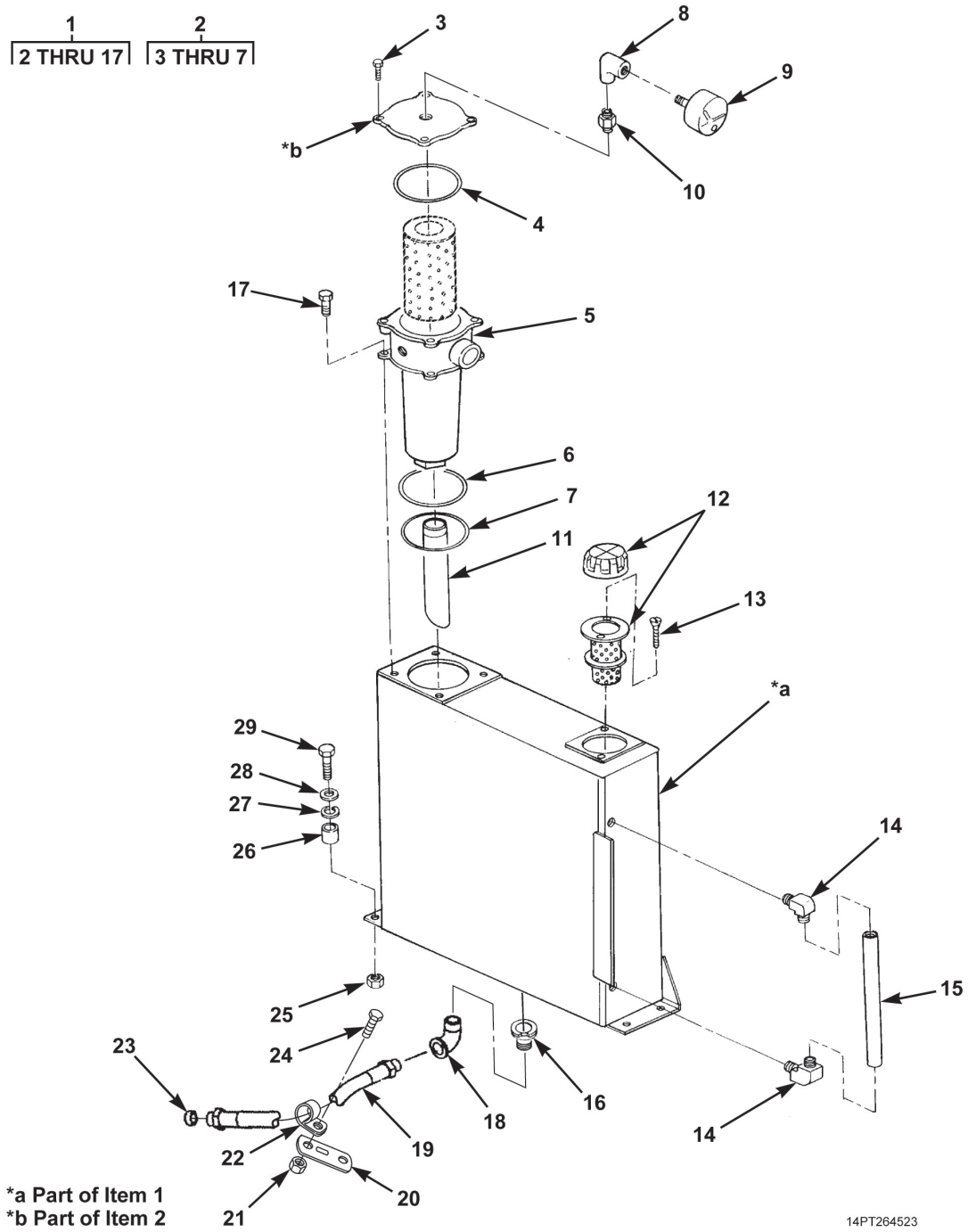


Figure 23. Hydraulic Reservoir Assembly.

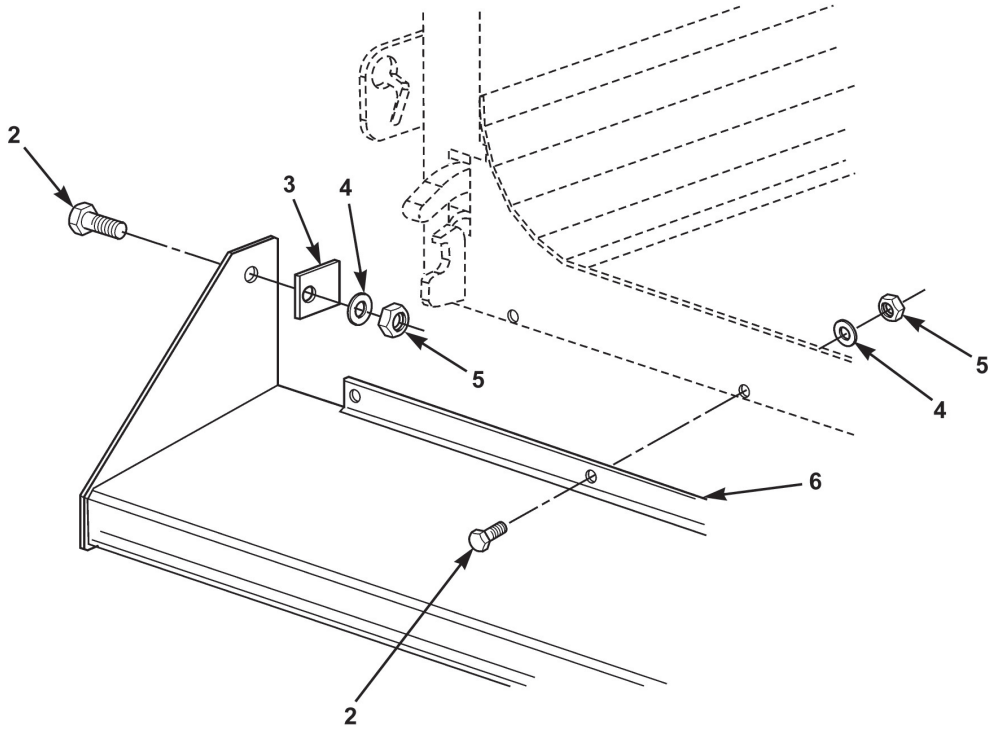
| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 2408 LIQUID TANKS OR RESERVOIRS | | | | | | |
| FIG. 23. HYDRAULIC RESERVOIR ASSEMBLY | | | | | | |
| 1 | PGFFF | 2590-01-447-0748 | 5X050 | 126615 | TANK,OIL,HYDRAULIC..... | 1 |
| 2 | PFFFF | 2940-01-446-3570 | 5X050 | 403365 | . FILTER BODY,FLUID..... | 1 |
| 3 | PAFZZ | 5306-01-271-9425 | 60827 | PS-0001 | .. BOLT,MACHINE 5/16-18 X 1.00 IN..... | 4 |
| 4 | PAFZZ | 5331-01-447-4034 | 60827 | 251-70-BN | .. O-RING..... | 1 |
| 5 | XAFZZ | | 60827 | TR-1200-01 | .. HOUSING,PORT..... | 1 |
| 6 | PAFZZ | 5331-01-447-4040 | 60827 | 246-70-BN | .. O-RING..... | 1 |
| 7 | PAFZZ | 5331-01-447-3098 | 60827 | TS-355-70-BN | .. O-RING..... | 1 |
| 8 | PAFZZ | 4730-00-204-1272 | 30780 | 2102-2-2 | . ELBOW,PIPE..... | 1 |
| 9 | PAFZZ | 6685-01-447-1188 | 5X050 | 403367 | . GAGE,PRESSURE,DIAL..... | 1 |
| 10 | PAFZZ | 4730-00-921-3624 | 81346 | A733S-6CFG | . NIPPLE,PIPE 1/8 NPT X 1.50..... | 1 |
| 11 | XDFZZ | | 5X050 | 403368 | . PIPE,SPECIAL 1.50 X 18.75 INCH..... | 1 |
| 12 | PAFZZ | 2590-01-446-1903 | 5X050 | 403246 | . CAP,FILLER OPENING..... | 1 |
| 13 | PAFZZ | 5305-00-993-1848 | 70318 | A1BMW6024G | . SCREW,MACHINE 10-32 X 0.75..... | 6 |
| 14 | PAFZZ | 4730-00-068-6616 | 79470 | 69X6 | . ELBOW,PIPE TO TUBE..... | 2 |
| 15 | MFFZZ | | 5X050 | 239635X1.50 | . TUBE,SIGHT MAKE FROM TUBING,NONMETALLIC PT24006NA (79470), CUT TO 18 IN..... | 1 |
| 16 | PFFZZ | 4730-00-278-3888 | 30780 | 0102-12-8 | . REDUCER,PIPE 3/4 IN M X 1/2 IN F..... | 1 |
| 17 | PAFZZ | 5305-00-068-0510 | 80204 | B1821BH038C100N | . SCREW,CAP,HEXAGON H 3/8-16 X 1.00 | 4 |
| 18 | PFFZZ | 4730-00-289-2357 | 30780 | 2102-8-8 | ELBOW,PIPE 1/2 IN..... | 1 |
| 19 | XDFZZ | | 5X050 | 401288 | HOSE ASSY 1/2 X 20 IN..... | 1 |
| 20 | PAFZZ | 5365-01-245-8802 | 64678 | 23-09130-003 | SPACER,PLATE..... | 1 |
| 21 | PAFZZ | 5310-00-061-4650 | 45152 | 114356A | NUT,SELF-LOCKING,HE 1/4-20..... | 1 |
| 22 | XDFZZ | | 5X050 | 403678 | CLAMP,HOSE,SST..... | 1 |
| 23 | XDFZZ | | 5X050 | 403677 | CAP,PIPE 1/2 IN NPT..... | 1 |
| 24 | PAFZZ | 5305-00-068-0509 | 80204 | B1821BH025C125N | SCREW,CAP,HEXAGON H..... | 1 |
| 25 | PAFZZ | 5310-00-488-3889 | 96906 | MS51943-39 | NUT,SELF-LOCKING,HE..... | 4 |
| 26 | XDFZZ | | 5X050 | 237379 | SPACER..... | 4 |
| 27 | PAFZZ | 5310-00-584-7888 | 96906 | MS35338-51 | WASHER,LOCK 3/4 IN..... | 4 |
| 28 | PAFZZ | 5310-00-809-8533 | 96906 | MS27183-23 | WASHER,FLAT 3/4 IN UOC: 7A1,7E1 | 4 |
| 28 | PAFZZ | 5310-01-267-1684 | 96906 | MS51412-10 | WASHER,FLAT 1/2 IN..... | 8 |

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--------------------|-----------------|------------------|--------------|--------------------|--|------------|
| 29 | PAFZZ | 5305-00-071-2071 | 80204 | B1821BH050C200N | SCREW,CAP,HEXAGON H 1/2-13 X 2.00.. | 4 |

END OF FIGURE

**FIELD MAINTENANCE
SPILL SHIELD**

1
2 THRU 6



14PT264524

Figure 24. Spill Shield.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|--|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 3307 SPECIAL PURPOSE KITS | | | | | | |
| FIG. 24. SPILL SHIELD | | | | | | |
| 1 | PAFFF | 2510-01-518-4549 | 5X050 | 142607 | SPILL SHIELD..... | 1 |
| 2 | PAFZZ | 5305-01-538-8251 | 5X050 | 400121 | . CAPSCREW,HEXHEAD 3/8NC X 1..... | 8 |
| 3 | XDFZZ | | 5X050 | 201834 | . TAB, SPILL SHIELD M..... | 2 |
| 4 | PAFZZ | 5310-00-080-6004 | 96906 | MS27183-14 | . WASHER,FLAT..... | 8 |
| 5 | PAFZZ | 5310-01-549-8591 | 64678 | CMG/402038 | . HEX,LOCKNUT 3/8 NC..... | 8 |
| 6 | XAFZZ | | 5X050 | 150380 | . SPILL SHIELD 12"..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
BULK MATERIAL**

ILLUSTRATION NOT REQUIRED

Figure BULK. Bulk Material.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|---|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 9501 HARDWARE SUPPLIES AND BULK MATERIAL, COMMON | | | | | | |
| FIG. BULK. BULK MATERIAL | | | | | | |
| 1 | PAFZZ | 5510-00-255-9269 | 81349 | MILL2037 | LUMBER,HARDWOOD UOC: 7A1,7E1 | 1 |
| 2 | PAFZZ | 4710-01-466-4881 | 79146 | 020003-7 | TUBE,METALLIC UOC: 7E1 | 1 |
| 3 | PAFZZ | 4720-00-925-4955 | 79470 | PT24006NA | TUBING,NONMETALLIC UOC: 7A1,7E1 | 1 |
| 4 | PAFZZ | 4720-01-395-8773 | 79470 | NT10006 | TUBING,NONMETALLIC..... | 1 |
| 5 | PAFZZ | 4720-01-182-9067 | 61424 | PFT-6B-BLK-100 | TUBING,NONMETALLIC..... | 1 |

END OF FIGURE

**FIELD MAINTENANCE
REPAIR PART KITS**

ILLUSTRATION NOT REQUIRED

Figure KITS. Repair Part Kits.

| (1) ITEM NO. | (2) SMR CODE | (3) NSN | (4) CAGEC | (5) PART NUMBER | (6) DESCRIPTION AND USABLE ON CODE (UOC) | (7) QTY |
|------------------------------------|-----------------|------------------|--------------|--------------------|--|------------|
| GROUP 9401 REPAIR KITS | | | | | | |
| FIG. KITS. REPAIR PART KITS | | | | | | |
| 1 | PAFZZ | 3040-01-498-1887 | 5X050 | 404939 | PARTS KIT,LINEAR AC UOC: 7A1,7E1 | 1 |
| | | | | | ARM,WINDSHIELD (001) 14-25 WIPE | |
| | | | | | BEARING,PISTON (001) 14-24 ROD | |
| | | | | | PACKING,PREFORM (002) 14-6 ED | |
| | | | | | PACKING,PREFORM (001) 14-17 ED | |
| | | | | | PREFORMED,PACKI (001) 14-22 NG | |
| | | | | | SEAL,PLAIN (002) 14-13 | |
| | | | | | SEAL,PLAIN (002) 14-23 | |
| | | | | | STRIP,METAL (001) 14-14 | |
| 2 | PAFZZ | 3040-01-498-1885 | 5X050 | 404940 | PARTS KIT,LINEAR AC UOC: 7A1,7E1 | 1 |
| | | | | | VALVE,PILOT ASSY (001) 14-35 | |
| | | | | | VALVE,REGULATING (001) 14-31 ,FL | |

END OF FIGURE

**FIELD MAINTENANCE
NATIONAL STOCK NUMBER (NSN) INDEX**

| STOCK NUMBER | FIG. | ITEM | STOCK NUMBER | FIG. | ITEM |
|------------------|------|------|------------------|------|------|
| 5310-00-003-9174 | 11 | 3 | 5305-00-543-4372 | 15 | 10 |
| 4730-00-044-4035 | 13 | 5 | 5310-00-550-1130 | 15 | 40 |
| 4730-00-050-4208 | 10 | 13 | 5310-00-584-7888 | 23 | 27 |
| 5999-00-057-2929 | 5 | 7 | 5310-00-637-9541 | 15 | 11 |
| 4730-00-057-5555 | 13 | 10 | 5315-00-721-8370 | 10 | 8 |
| 5310-00-061-4650 | 7 | 11 | 5305-00-724-7222 | 9 | 4 |
| | 7 | 19 | | 10 | 12 |
| | 15 | 44 | | 11 | 2 |
| | 23 | 21 | 5305-00-724-7228 | 12 | 14 |
| 5310-00-061-4651 | 9 | 2 | 5305-00-725-2317 | 11 | 14 |
| | 10 | 10 | 5310-00-732-0558 | 15 | 12 |
| | 11 | 4 | 5340-00-753-3741 | 16 | 5 |
| 5305-00-068-0508 | 7 | 9 | 5325-00-768-8563 | 18 | 2 |
| | 7 | 21 | 5325-00-803-7301 | 15 | 45 |
| 5305-00-068-0509 | 23 | 24 | 5330-00-809-1052 | 18 | 10 |
| 5305-00-068-0510 | 13 | 11 | 5310-00-809-4058 | 15 | 20 |
| | 23 | 17 | 5310-00-809-4061 | 16 | 3 |
| 4730-00-068-6616 | 23 | 14 | 5310-00-809-8533 | 23 | 28 |
| 5305-00-071-2071 | 12 | 4 | 5315-00-809-8786 | 11 | 19 |
| | 23 | 29 | 5310-00-814-0672 | 16 | 4 |
| 5305-00-071-2076 | 9 | 9 | 5310-00-820-6653 | 12 | 13 |
| | 12 | 10 | 4730-00-822-5609 | 21 | 6 |
| 5305-00-071-2513 | 15 | 15 | 5310-00-823-8804 | 7 | 10 |
| 5310-00-080-6004 | 13 | 12 | | 7 | 20 |
| | 24 | 4 | 5935-00-833-8561 | 5 | 10 |
| 5310-00-088-1251 | 15 | 33 | 5970-00-833-8562 | 5 | 9 |
| 4730-00-137-7875 | 14 | 40 | 5310-00-833-8567 | 5 | 6 |
| 5935-00-153-4397 | 7 | 5 | 5935-00-856-3513 | 1 | 3 |
| | 7 | 13 | | 7 | 2 |
| 4730-00-173-1881 | 21 | 15 | 4730-00-921-3624 | 23 | 10 |
| 5325-00-174-9341 | 8 | 12 | 4720-00-925-4955 | BULK | 3 |
| 4730-00-204-1272 | 23 | 8 | 5305-00-947-4358 | 10 | 3 |
| 5306-00-226-4827 | 12 | 7 | 5306-00-957-7531 | 15 | 19 |
| 5510-00-255-9269 | BULK | 1 | 5305-00-984-7353 | 15 | 36 |
| 5305-00-269-2803 | 16 | 2 | 5305-00-988-1725 | 15 | 7 |
| 4730-00-277-8289 | 13 | 31 | | 15 | 39 |
| 4730-00-278-3888 | 13 | 8 | 5305-00-989-7434 | 4 | 1 |
| | 23 | 16 | 5305-00-993-1848 | 23 | 13 |
| 4730-00-289-2357 | 13 | 7 | 4730-01-011-7736 | 21 | 5 |
| | 23 | 18 | 4730-01-028-5540 | 21 | 4 |
| 5310-00-347-0021 | 2 | 5 | 5340-01-032-8448 | 16 | 6 |
| 5940-00-399-6676 | 5 | 8 | 4730-01-046-4034 | 21 | 8 |
| 5310-00-409-3333 | 10 | 4 | 4730-01-048-5260 | 13 | 3 |
| 4820-00-435-4391 | 18 | 7 | | 13 | 17 |
| 5310-00-488-3889 | 9 | 10 | | 13 | 22 |
| | 12 | 3 | | 13 | 36 |
| | 23 | 25 | 4730-01-048-7873 | 13 | 2 |
| 5325-00-530-7968 | 15 | 38 | | 13 | 18 |

| STOCK NUMBER | FIG. | ITEM | STOCK NUMBER | FIG. | ITEM |
|------------------|------|------|------------------|------|------|
| | 13 | 21 | 4720-01-395-8773 | BULK | 4 |
| | 13 | 37 | 5999-01-406-4110 | 14 | 29 |
| 4730-01-056-4990 | 13 | 4 | 4820-01-418-4232 | 13 | 14 |
| | 13 | 16 | 5999-01-422-9740 | 7 | 7 |
| | 13 | 23 | | 8 | 3 |
| | 13 | 35 | 2590-01-442-7238 | 19 | 1 |
| 4730-01-062-2570 | 13 | 34 | 5340-01-445-7778 | 15 | 43 |
| 5305-01-075-0957 | 15 | 47 | 5340-01-445-7781 | 3 | 7 |
| 6220-01-086-5691 | 3 | 1 | 2590-01-445-7883 | 19 | 2 |
| 6220-01-095-0011 | 3 | 4 | 7690-01-445-8961 | 17 | 4 |
| 4730-01-096-9128 | 13 | 1 | 7690-01-445-8967 | 17 | 9 |
| 4730-01-134-3571 | 13 | 20 | 7690-01-445-8973 | 17 | 11 |
| 5305-01-162-2358 | 11 | 10 | 7690-01-445-8976 | 17 | 1 |
| 5325-01-163-6558 | 3 | 2 | 6150-01-445-9130 | 5 | 1 |
| 2540-01-175-7257 | 16 | 1 | 5342-01-445-9481 | 15 | 6 |
| 4720-01-182-9067 | BULK | 5 | 5340-01-445-9486 | 9 | 3 |
| 5330-01-212-2222 | 18 | 8 | 7690-01-445-9897 | 17 | 3 |
| 5935-01-214-4163 | 14 | 30 | 7690-01-445-9903 | 17 | 2 |
| 5935-01-214-5259 | 7 | 8 | 7690-01-445-9933 | 17 | 10 |
| 5365-01-217-4133 | 22 | 11 | 6220-01-445-9978 | 3 | 5 |
| 5975-01-226-8078 | 5 | 4 | 6220-01-445-9981 | 3 | 6 |
| | 8 | 2 | 5365-01-446-0280 | 18 | 17 |
| 5975-01-230-4370 | 5 | 5 | 5342-01-446-0902 | 15 | 21 |
| 5330-01-236-0469 | 18 | 5 | 5340-01-446-0947 | 11 | 15 |
| 5365-01-236-0717 | 18 | 4 | 5930-01-446-0980 | 4 | 3 |
| 4730-01-244-3552 | 13 | 15 | 4720-01-446-1481 | 21 | 9 |
| 5365-01-245-8802 | 23 | 20 | 4720-01-446-1508 | 21 | 3 |
| 3110-01-260-2561 | 18 | 9 | 4720-01-446-1541 | 21 | 7 |
| 5310-01-267-1684 | 23 | 28 | 4720-01-446-1729 | 21 | 13 |
| 5306-01-271-9425 | 23 | 3 | 2510-01-446-1842 | 10 | 7 |
| 5325-01-283-3513 | 3 | 3 | 2590-01-446-1903 | 23 | 12 |
| 4820-01-298-8416 | 21 | 1 | 4730-01-446-2107 | 21 | 12 |
| 5935-01-308-7866 | 5 | 2 | 4730-01-446-2108 | 14 | 9 |
| 5935-01-308-8599 | 8 | 4 | 4730-01-446-2110 | 21 | 2 |
| 5975-01-310-5011 | 6 | 3 | 4730-01-446-2112 | 21 | 11 |
| | 7 | 6 | 3040-01-446-2408 | 18 | 12 |
| | 14 | 28 | 3040-01-446-2413 | 11 | 20 |
| 3120-01-328-4294 | 18 | 11 | 5315-01-446-3121 | 9 | 8 |
| 5930-01-332-0680 | 2 | 2 | 5360-01-446-3122 | 15 | 14 |
| 5310-01-333-6436 | 15 | 22 | 5360-01-446-3190 | 15 | 42 |
| 5930-01-336-0919 | 4 | 2 | 5360-01-446-3194 | 15 | 25 |
| 5935-01-339-9574 | 6 | 4 | 4730-01-446-3255 | 21 | 14 |
| 5940-01-340-0587 | 8 | 7 | 4330-01-446-3337 | 20 | 1 |
| 5365-01-340-3898 | 22 | 9 | 2530-01-446-3340 | 15 | 34 |
| 5310-01-340-8088 | 18 | 14 | 2940-01-446-3570 | 23 | 2 |
| 5330-01-340-8159 | 18 | 13 | 3040-01-446-3620 | 22 | 1 |
| 5310-01-340-8353 | 18 | 15 | 3040-01-446-3782 | 15 | 48 |
| 4730-01-345-6065 | 14 | 41 | 3040-01-446-3790 | 15 | 23 |
| 5975-01-355-6985 | 7 | 4 | 3040-01-446-3793 | 15 | 17 |
| | 7 | 14 | 5325-01-446-4051 | 22 | 13 |
| 5365-01-361-4609 | 18 | 3 | 5325-01-446-4052 | 22 | 13 |
| 5999-01-364-1237 | 8 | 10 | 5325-01-446-4053 | 22 | 13 |
| 5940-01-366-1563 | 7 | 16 | 5360-01-446-4054 | 15 | 32 |

| STOCK NUMBER | FIG. | ITEM | STOCK NUMBER | FIG. | ITEM |
|------------------|------|------|------------------|------|------|
| 5365-01-446-4322 | 22 | 12 | 5340-01-469-6693 | 11 | 9 |
| 3040-01-446-4665 | 22 | 3 | 5940-01-469-7988 | 5 | 3 |
| 3040-01-446-4689 | 15 | 31 | 3040-01-473-2741 | 15 | 49 |
| 5340-01-446-4927 | 11 | 13 | 5330-01-473-2903 | 14 | 32 |
| 5340-01-446-5137 | 11 | 12 | 2510-01-473-8250 | 12 | 1 |
| 3040-01-446-6274 | 22 | 4 | 2510-01-473-8251 | 12 | 1 |
| 3040-01-446-6277 | 22 | 4 | 4730-01-473-9667 | 13 | 33 |
| 3040-01-446-6280 | 22 | 5 | 4730-01-473-9699 | 13 | 32 |
| 6150-01-446-6344 | 8 | 1 | 5330-01-474-2447 | 14 | 34 |
| 6150-01-446-6345 | 6 | 1 | 5340-01-474-6446 | 15 | 46 |
| 3020-01-446-6405 | 15 | 37 | 5340-01-474-6449 | 15 | 41 |
| 3020-01-446-6409 | 15 | 4 | 5340-01-474-6455 | 15 | 1 |
| 3020-01-446-6412 | 15 | 2 | 5340-01-474-6462 | 15 | 5 |
| 5315-01-446-6724 | 15 | 3 | 5220-01-474-8432 | 14 | 16 |
| 2540-01-446-6831 | 11 | 16 | 3130-01-474-9064 | 15 | 9 |
| 5307-01-446-7531 | 18 | 16 | 5340-01-474-9576 | 15 | 24 |
| 5360-01-446-7903 | 15 | 18 | 5365-01-475-2277 | 14 | 33 |
| 5325-01-446-8320 | 8 | 9 | 5342-01-475-2802 | 15 | 16 |
| 4820-01-446-8874 | 19 | 3 | 5310-01-481-4919 | 14 | 12 |
| 5305-01-446-8972 | 15 | 27 | 5330-01-482-8766 | 14 | 17 |
| 5315-01-446-9174 | 14 | 44 | 5340-01-492-7615 | 15 | 28 |
| 5315-01-446-9177 | 14 | 1 | 3040-01-497-0345 | 12 | 12 |
| 5325-01-446-9182 | 22 | 14 | 5930-01-497-0704 | 1 | 10 |
| 5325-01-446-9204 | 22 | 14 | 6150-01-497-4879 | 7 | 12 |
| 5325-01-446-9210 | 22 | 14 | 6150-01-497-4886 | 7 | 1 |
| 5315-01-447-0479 | 11 | 6 | 6150-01-497-5582 | 1 | 2 |
| 5315-01-447-0480 | 10 | 1 | 4710-01-497-5644 | 12 | 6 |
| 5315-01-447-0481 | 11 | 7 | 5340-01-497-8124 | 12 | 9 |
| 2590-01-447-0748 | 23 | 1 | 3040-01-498-1885 | KITS | 2 |
| 5330-01-447-1113 | 22 | 2 | 3040-01-498-1887 | KITS | 1 |
| 6685-01-447-1188 | 23 | 9 | 5925-01-499-3416 | 1 | 6 |
| 5305-01-447-1330 | 18 | 20 | 5310-01-502-2940 | 14 | 20 |
| 3040-01-447-2738 | 14 | 3 | 5325-01-502-5209 | 14 | 27 |
| 5331-01-447-3098 | 23 | 7 | 5315-01-507-0537 | 12 | 15 |
| 5331-01-447-4034 | 23 | 4 | 5930-01-507-6990 | 1 | 4 |
| 5331-01-447-4040 | 23 | 6 | 5310-01-509-2488 | 11 | 18 |
| 5315-01-447-5712 | 15 | 26 | | 13 | 13 |
| 5315-01-448-8804 | 15 | 30 | 3040-01-515-7916 | 14 | 3 |
| 7690-01-449-1447 | 17 | 6 | 5935-01-518-0417 | 8 | 13 |
| 5340-01-449-5470 | 9 | 11 | 5935-01-518-3690 | 3 | 9 |
| 5342-01-449-5475 | 15 | 8 | 5935-01-518-3692 | 3 | 8 |
| 2540-01-449-5775 | 15 | 13 | 2510-01-518-4549 | 24 | 1 |
| 4320-01-451-0045 | 18 | 1 | 6220-01-518-6827 | 3 | 1 |
| 4730-01-455-1068 | 14 | 39 | 6240-01-518-6843 | 3 | 4 |
| 3040-01-459-5141 | 1 | 1 | 5310-01-518-7454 | 12 | 8 |
| 4710-01-460-1546 | 12 | 5 | 4720-01-518-9183 | 21 | 3 |
| 5940-01-462-1717 | 6 | 6 | 4730-01-518-9540 | 21 | 7 |
| 5940-01-462-1718 | 5 | 11 | 4720-01-519-0924 | 21 | 9 |
| 2530-01-464-9916 | 7 | 17 | 5930-01-520-4456 | 2 | 7 |
| 4710-01-466-4881 | BULK | 2 | 2590-01-528-7521 | 19 | 2 |
| 5305-01-466-7940 | 2 | 4 | 5365-01-533-1299 | 21 | 10 |
| 6150-01-466-9174 | 8 | 5 | 4130-01-535-3511 | 14 | 37 |
| 6220-01-469-5480 | 2 | 6 | 2510-01-536-0577 | 11 | 1 |

| STOCK NUMBER | FIG. | ITEM | STOCK NUMBER | FIG. | ITEM |
|------------------|------|------|------------------|------|------|
| 5305-01-538-8251 | 24 | 2 | 2590-01-541-3894 | 10 | 6 |
| 2590-01-541-3775 | 10 | 15 | 5935-01-544-1069 | 8 | 6 |
| 5340-01-541-3812 | 10 | 9 | 5310-01-549-8591 | 24 | 5 |

END OF WORK PACKAGE

**FIELD MAINTENANCE
PART NUMBER (P/N) INDEX**

| PART NUMBER | FIG. | ITEM | PART NUMBER | FIG. | ITEM |
|-----------------|------|------|----------------|------|------|
| A06-24606-276 | 8 | 5 | M45913/3-6FG8C | 16 | 4 |
| A06-30769-101 | 2 | 7 | M81940/2-1 | 21 | 1 |
| A1BMW6024G | 23 | 13 | MILL2037 | BULK | 1 |
| A733S-6CFG | 23 | 10 | MS16562-51 | 11 | 19 |
| AS15003-1 | 10 | 13 | MS16624-1050 | 15 | 45 |
| B12071-0300 | 22 | 4 | MS16624-1100 | 15 | 38 |
| B12071-0400 | 22 | 4 | MS27183-10 | 15 | 20 |
| B12071-0500 | 22 | 3 | MS27183-14 | 13 | 12 |
| B1821BH025C075N | 7 | 9 | | 24 | 4 |
| | 7 | 21 | MS27183-15 | 16 | 3 |
| B1821BH025C125N | 23 | 24 | MS27183-23 | 23 | 28 |
| B1821BH025C250N | 15 | 15 | MS27183-9 | 7 | 10 |
| B1821BH031C100N | 12 | 7 | | 7 | 20 |
| B1821BH038C075N | 15 | 10 | MS35191-306 | 15 | 36 |
| B1821BH038C100N | 13 | 11 | MS35206-281 | 15 | 7 |
| | 23 | 17 | | 15 | 39 |
| B1821BH038C150N | 11 | 14 | MS35207-263 | 4 | 1 |
| B1821BH050C200N | 12 | 4 | MS35333-40 | 15 | 40 |
| | 23 | 29 | MS35338-46 | 15 | 11 |
| B1821BH050C325N | 9 | 9 | MS35338-50 | 12 | 13 |
| | 12 | 10 | MS35338-51 | 23 | 27 |
| B1821BH063C200N | 9 | 4 | MS35489-52 | 8 | 12 |
| | 10 | 12 | MS51412-10 | 23 | 28 |
| | 11 | 2 | MS51525A12-16 | 21 | 15 |
| B1821BH063C300N | 12 | 14 | MS51527A12 | 21 | 5 |
| B1821BH075C400N | 10 | 3 | MS51527A8 | 21 | 6 |
| B30LXP | 11 | 16 | MS51849-100 | 15 | 47 |
| B490A | 3 | 5 | MS51943-39 | 9 | 10 |
| B490R | 3 | 6 | | 12 | 3 |
| B9971-00550 | 22 | 14 | | 23 | 25 |
| BCI/231E | 1 | 7 | MS51943-45 | 10 | 4 |
| BNT220 | 1 | 5 | MS51967-8 | 15 | 12 |
| BNT22002 | 1 | 4 | MS90726-60 | 16 | 2 |
| C21PA03 | 1 | 10 | NAS561-8-48 | 10 | 8 |
| C3109X8X6 | 13 | 5 | NT10006 | BULK | 4 |
| CM10P | 1 | 8 | PAC/12052924 | 8 | 9 |
| CMG 400892 | 12 | 8 | PFT-6B-BLK-100 | BULK | 5 |
| CMG/402038 | 24 | 5 | PS-0001 | 23 | 3 |
| ECT 13 CRY | 15 | 13 | PT24006NA | BULK | 3 |
| FFW92 | 11 | 3 | RRT206 | 18 | 2 |
| FLD/458840072 | 19 | 2 | TR-1200-01 | 23 | 5 |
| FT-1215-ZP | 21 | 11 | TS-355-70-BN | 23 | 7 |
| FT-150-ZP | 21 | 14 | VS209P-8-4 | 14 | 41 |
| HC150 | 21 | 12 | VS269NTA-6-4 | 13 | 15 |
| M1391K | 18 | 7 | WE11H415E | 1 | 9 |
| M45913/1-4CG5C | 15 | 33 | WE11H416E | 1 | 9 |
| M45913/3-6CG8C | 11 | 18 | WE11H417E | 1 | 9 |
| | 13 | 13 | WE11H418E | 1 | 9 |

| PART NUMBER | FIG. | ITEM | PART NUMBER | FIG. | ITEM |
|-----------------|------|------|-----------------|------|------|
| 002-55074-04844 | 22 | 6 | 083-50002-00350 | 22 | 14 |
| 01-5000-35 | 19 | 3 | 083-50002-00450 | 22 | 14 |
| 010029X11+/- | 14 | 8 | 083-50003-00362 | 22 | 13 |
| 0102-12-8 | 13 | 8 | 083-50003-00462 | 22 | 13 |
| | 23 | 16 | 0835-691616 | 15 | 26 |
| 012037 | 14 | 39 | 0840-618512 | 15 | 3 |
| 016964 | 14 | 9 | 0840-618513 | 15 | 30 |
| 019067 | 14 | 44 | 0920-590324 | 17 | 7 |
| 019070 | 14 | 1 | 0920-590325 | 17 | 6 |
| 01HP-6 | 13 | 10 | 1-1/2CDS | 21 | 4 |
| 020003-7 | BULK | 2 | 10004R | 3 | 4 |
| 0263914 | 22 | 5 | 10250R | 3 | 4 |
| 0263984 | 22 | 5 | 11-700 | 1 | 3 |
| 030084 | 14 | 37 | | 7 | 2 |
| 0311-860730 | 15 | 31 | 11-720 | 7 | 5 |
| 0311-860732 | 15 | 48 | | 7 | 13 |
| 0311-861589 | 15 | 21 | 11-761 | 7 | 4 |
| 0311-861590 | 15 | 16 | | 7 | 14 |
| 0311-861591 | 15 | 17 | 11-763 | 7 | 3 |
| 0311-861596 | 15 | 41 | 110543 | 10 | 2 |
| 0311-862406 | 15 | 35 | 114356A | 7 | 11 |
| 0311-960237 | 15 | 25 | | 7 | 19 |
| 0311-960238 | 15 | 14 | | 15 | 44 |
| 0311-960739 | 15 | 34 | | 23 | 21 |
| 0311-961267 | 15 | 8 | 117122 | 11 | 7 |
| 0311-961273 | 15 | 6 | 1201 0300 | 6 | 4 |
| 0311-961280 | 15 | 23 | 12010293 | 5 | 4 |
| 0311-961356 | 15 | 28 | | 8 | 2 |
| 0311-961401 | 15 | 5 | 12010973 | 14 | 30 |
| 0311-961402 | 15 | 1 | 12015199 | 8 | 6 |
| 0311-962125 | 15 | 29 | 12015323 | 6 | 3 |
| 0311-962128 | 15 | 49 | | 7 | 6 |
| 0311-962132 | 15 | 46 | | 14 | 28 |
| 032135 | 13 | 14 | 12015344 | 8 | 13 |
| 034-55008-53118 | 22 | 2 | 12015792 | 7 | 8 |
| 035-17002-00225 | 22 | 12 | 12015797 | 8 | 4 |
| 035055 | 13 | 9 | 1202 0116 | 8 | 7 |
| 0503-12-8 | 21 | 8 | 1204 7938 | 7 | 15 |
| 06-22309-048 | 2 | 6 | 12045773 | 8 | 10 |
| 06-24618-000 | 2 | 1 | 12047933 | 8 | 11 |
| 062-40044-04689 | 22 | 8 | 12048074 | 7 | 16 |
| 062-50049-04752 | 22 | 7 | 12048086 | 7 | 17 |
| 063-30135-04992 | 22 | 10 | 12048159 | 6 | 6 |
| 0710-602155 | 15 | 9 | 12066304 | 7 | 18 |
| 0715-619601 | 15 | 18 | 12084673 | 6 | 2 |
| 0715-619602 | 15 | 42 | 12085036 | 6 | 5 |
| 0715-619800 | 15 | 32 | 12124582 | 14 | 29 |
| 0720-603557 | 15 | 2 | 12129493 | 5 | 3 |
| 0750-619592 | 15 | 37 | 12302814 | 16 | 1 |
| 0750-619594 | 15 | 4 | 12387349-43 | 9 | 2 |
| 0765-618830 | 15 | 43 | | 10 | 10 |
| 0825-670460 | 15 | 27 | | 11 | 4 |
| 083-10005-00562 | 22 | 13 | 12420936 | 7 | 7 |

| PART NUMBER | FIG. | ITEM | PART NUMBER | FIG. | ITEM |
|------------------|------|------|---------------|------|------|
| | 8 | 3 | 239694 | 10 | 11 |
| 126426 | 11 | 5 | 239932 | 21 | 2 |
| 126427 | 11 | 5 | 239963 | 12 | 12 |
| 126615 | 23 | 1 | 239973 | 12 | 6 |
| 126617 | 9 | 5 | 239974 | 12 | 5 |
| 127170 | 10 | 1 | 23E10 | 1 | 6 |
| 127373 | 11 | 9 | 24-00783-000 | 2 | 3 |
| 127838 | 10 | 14 | 245352 | 11 | 17 |
| 127852 | 11 | 12 | 245538X66 | 13 | 38 |
| 127892 | 11 | 8 | 245539X21 | 13 | 26 |
| 128125 | 10 | 5 | 245540X17 | 13 | 25 |
| 128126 | 10 | 7 | 245541X8 | 13 | 27 |
| 128129 | 9 | 1 | 245542X31 | 13 | 19 |
| 128130 | 9 | 3 | 245543X9 | 13 | 24 |
| 128131 | 9 | 11 | 245544X144 | 13 | 30 |
| 128214 | 1 | 1 | 245786X36 | 13 | 28 |
| 129305 | 10 | 6 | 245787X38 | 13 | 29 |
| 129306 | 10 | 15 | 246-70-BN | 23 | 6 |
| 129528 | 12 | 11 | 251-70-BN | 23 | 4 |
| 129568 | 11 | 1 | 25316 | 18 | 8 |
| 129652 | 12 | 2 | 264NTA-6 | 13 | 20 |
| 129653 | 12 | 9 | 308 5030 201 | 18 | 6 |
| 129732 | 11 | 15 | 308 8020 901 | 18 | 18 |
| 129871 | 4 | 3 | 308 9310 156 | 18 | 1 |
| 13141 | 14 | 3 | 308 9414 024 | 18 | 19 |
| 1354190 | 11 | 10 | 312 2920 130 | 18 | 12 |
| 140409 | 12 | 1 | 320001 | 13 | 6 |
| 140410 | 12 | 1 | 3507 | 2 | 5 |
| 142-18 | 3 | 3 | 38-22LP | 12 | 15 |
| 142607 | 24 | 1 | 391 1401 382 | 18 | 20 |
| 150380 | 24 | 6 | 391 1425 437 | 18 | 16 |
| 15300014 | 5 | 11 | 391 2882 051 | 18 | 10 |
| 15300027 | 5 | 2 | 391 3283 052 | 18 | 17 |
| 1545-619860 | 15 | 24 | 391 3381 040 | 18 | 4 |
| 201834 | 24 | 3 | 391 3383 069 | 18 | 3 |
| 208047 | 9 | 8 | 391-0381-906 | 18 | 9 |
| 2101-4-4C | 14 | 40 | 391-2185-913 | 18 | 11 |
| 2102-2-2 | 23 | 8 | 391-2883-119 | 18 | 5 |
| 2102-8-8 | 13 | 7 | 3911451115 | 18 | 14 |
| | 23 | 18 | 3912884019 | 18 | 13 |
| 213 1-4 20X2 1-2 | 15 | 19 | 3913782146 | 18 | 15 |
| 216P-4 | 13 | 31 | 400121 | 24 | 2 |
| 23-09130-003 | 23 | 20 | 401288 | 23 | 19 |
| 23-10340-125 | 15 | 22 | 401540 | 21 | 10 |
| 23-10864-706 | 2 | 4 | 401577 | 17 | 3 |
| 237379 | 23 | 26 | 403236 | 22 | 1 |
| 237386 | 9 | 6 | 403246 | 23 | 12 |
| 237387 | 9 | 7 | 403248 | 7 | 12 |
| 237409 | 11 | 13 | 403254 | 6 | 1 |
| 237410 | 11 | 20 | 403255 | 5 | 1 |
| 238021 | 3 | 7 | 403256 | 8 | 1 |
| 239635X1.50 | 23 | 15 | 403345X148.75 | 11 | 11 |
| 239693 | 10 | 9 | 403365 | 23 | 2 |

| PART NUMBER | FIG. | ITEM | PART NUMBER | FIG. | ITEM |
|-------------|------|------|---------------|------|------|
| 403366 | 20 | 1 | 404930 | 14 | 21 |
| 403367 | 23 | 9 | 404931 | 14 | 20 |
| 403368 | 23 | 11 | 404932 | 14 | 1 |
| 403374 | 17 | 2 | 404933 | 14 | 2 |
| 403375 | 17 | 1 | 404934 | 14 | 1 |
| 403376 | 17 | 11 | 404938 | 14 | 38 |
| 403377 | 17 | 10 | 404939 | KITS | 1 |
| 403378 | 17 | 9 | 404940 | KITS | 2 |
| 403412 | 1 | 2 | 406340 | 21 | 9 |
| 403456 | 21 | 13 | 406341 | 21 | 7 |
| 403457 | 21 | 7 | 406342 | 21 | 3 |
| 403458 | 21 | 9 | 406355 | 21 | 4 |
| 403459 | 21 | 3 | 406356 | 21 | 4 |
| 403484 | 7 | 1 | 45884-48 | 19 | 2 |
| 403492 | 17 | 4 | 55940-4 | 19 | 1 |
| 403514 | 17 | 8 | 572929 | 5 | 7 |
| 403541 | 17 | 5 | 60085R | 3 | 1 |
| 403607 | 14 | 3 | 60202R | 3 | 1 |
| 403620 | 13 | 32 | 60700 | 3 | 2 |
| 403621 | 13 | 33 | 60NTA-6 | 13 | 3 |
| 403626 | 14 | 15 | | 13 | 17 |
| 403627 | 14 | 7 | | 13 | 22 |
| 403628 | 14 | 19 | | 13 | 36 |
| 403629 | 14 | 24 | 61NTA-6 | 13 | 2 |
| 403630 | 14 | 10 | | 13 | 18 |
| 403631 | 14 | 16 | | 13 | 21 |
| 403632 | 14 | 12 | | 13 | 37 |
| 403633 | 14 | 4 | 63-04 | 11 | 6 |
| 403634 | 14 | 43 | 63NTA-6 | 13 | 4 |
| 403635 | 14 | 25 | | 13 | 16 |
| 403636 | 14 | 17 | | 13 | 23 |
| 403637 | 14 | 23 | | 13 | 35 |
| 403638 | 14 | 6 | 681 545 07 22 | 2 | 2 |
| 403639 | 14 | 13 | 68240R-276 | 8 | 8 |
| 403640 | 14 | 14 | 68NTA-6-4 | 13 | 34 |
| 403641 | 14 | 18 | 68NTA-6-6 | 13 | 1 |
| 403642 | 14 | 44 | 68PMT-6-4 | 14 | 39 |
| 403643 | 14 | 5 | 69X6 | 23 | 14 |
| 403644 | 14 | 11 | 7550233-1 | 16 | 5 |
| 403645 | 14 | 31 | 7550233-2 | 16 | 6 |
| 403646 | 14 | 36 | 8338561 | 5 | 10 |
| 403647 | 14 | 35 | 8338562 | 5 | 9 |
| 403648 | 14 | 32 | 8338564 | 5 | 8 |
| 403649 | 14 | 33 | 8338566 | 5 | 5 |
| 403650 | 14 | 34 | 8338567 | 5 | 6 |
| 403677 | 23 | 23 | 8486 | 4 | 2 |
| 403678 | 23 | 22 | 900598-12S | 22 | 9 |
| 404927 | 14 | 26 | 900598-8S | 22 | 11 |
| 404928 | 14 | 27 | 93745 | 3 | 8 |
| 404929 | 14 | 22 | 94706 | 3 | 9 |

END OF WORK PACKAGE

CHAPTER 10
SUPPORTING INFORMATION

**FIELD MAINTENANCE
REFERENCES**

SCOPE

This work package lists forms, field manuals, technical manuals, and other publications that are referenced in this manual.

DA PAM 25-30 should be consulted frequently for changes or revisions and for new publications relating to material covered in this technical manual.

FORMS

Refer to DA PAM 25-33 for instructions on the use of maintenance forms.

| | |
|----------------|---|
| DA Form 2028 | Recommended Changes to Publications and Blank Forms |
| DA Form 2404 | Equipment Inspection and Maintenance Worksheet |
| DD Form 314 | Preventive Maintenance Schedule and Record |
| DD Form 1397 | Processing and Deprocessing Record for Shipment, Storage, and Issue of Vehicles and Spare Engines |
| DA Form 5988-E | Equipment Inspection Maintenance Worksheet (EGA) |
| SF Form 361 | Transportation Discrepancy Report |
| SF Form 364 | Report of Discrepancy (ROD) |
| SF Form 368 | Product Quality Deficiency Report |

FIELD MANUALS

| | |
|------------|-----------|
| FM 4-25.11 | First Aid |
|------------|-----------|

TECHNICAL MANUALS

| | |
|--------------------|--|
| TM 4-33.31 | Operations and Maintenance of Ordnance Materiel in Cold Weather |
| TM 4-42.21 | General Fabric Repair |
| TM 9-214 | Inspection, Care, and Maintenance of Antifriction Bearings |
| TM 9-237 | Operator's Manual for Welding Theory and Application |
| TM 9-2320-302-10 | Operator's Manual for M915A3, M916A3, M917A2, M917A2 with Material Control System, Chassis |
| TM 9-2320-363-10 | Operator's Manual for M915A2, M916A1, M916A2, M917A1, M917A1 with Material Control System, Chassis |
| TM 9-2320-302-20-1 | Unit Maintenance Manual For M915A3, M916A3, M917A2, M917A2 with Material Control System, Chassis |
| TM 9-2320-302-20-2 | Unit Maintenance Manual For M915A3, M916A3, M917A2, M917A2 with Material Control System, Chassis |
| TM 9-2320-363-20-1 | Unit Maintenance Manual For M915A2, M916A1, M916A2, M917A1, M917A1 with Material Control System, Chassis |
| TM 9-2320-363-20-2 | Unit Maintenance Manual For M915A2, M916A1, M916A2, M917A1, M917A1 with Material Control System, Chassis |
| TM 43-0139 | Painting Instructions for Army Materiel |
| TM 750-244-6 | Procedures for Destruction of Tank-Automotive Equipment to Prevent Enemy Use (US Army Tank-Automotive Command) |

OTHER PUBLICATIONS

| | |
|------------------|---|
| AR 25-30 | The Army Publishing Program |
| AR 70-12 | Fuels and Lubricants Standardization Policy for Equipment Design, Operation, and Logistic Support |
| AR 700-138 | Army Logistics Readiness And Sustainability |
| AR 750-1 | Army Materiel Maintenance Policy |
| ASME Y14.38-2007 | Abbreviations and Acronyms for Use on Drawings and Related Documents |
| CTA 8-100 | Army Medical Department Expendable/Durable Items |
| CTA 50-909 | Field and Garrison Furnishings and Equipment |
| CTA 50-970 | Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items) |
| DA PAM 25-30 | Consolidated Index of Army Publications and Blank Forms |
| DA PAM 25-33 | User's Guide for Army Publications and Forms |
| DA PAM 750-8 | The Army Maintenance Management System (TAMMS) Users Manual |

OTHER PUBLICATIONS - Continued

TB 43-0213

Corrosion Prevention and Control (CPC) for Tactical Vehicles

END OF WORK PACKAGE

FIELD MAINTENANCE MAINTENANCE ALLOCATION CHART (MAC) INTRODUCTION

INTRODUCTION

The Army Maintenance System MAC

This introduction provides a general explanation of all maintenance and repair functions authorized at the two maintenance levels under the Two-Level Maintenance System concept.

This MAC (immediately following the introduction) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field – includes two subcolumns, Crew (C) and Maintainer (F).

Sustainment – includes two subcolumns, Below Depot (H) and Depot (D)

The maintenance to be performed at field and sustainment levels is described as follows:

1. Crew maintenance. The responsibility of a using organization to perform maintenance on its assigned equipment. It normally consists of inspecting, servicing, lubricating, adjusting, and replacing parts, minor assemblies, and subassemblies. The replace function for this level of maintenance is indicated by the letter "C" in the third position of the SMR code. A "C" appearing in the fourth position of the SMR code indicates complete repair is possible at the crew maintenance level.
2. Maintainer maintenance. Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "F" appearing in the third position of the SMR code. An "F" appearing in the fourth position of the SMR code indicates complete repair is possible at the field maintenance level. Items are returned to the user after maintenance is performed at this level.
3. Below depot sustainment. Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "H" appearing in the third position of the SMR code. An "H" appearing in the fourth position of the SMR code indicates complete repair is possible at the below depot sustainment maintenance level. Items are returned to the supply system after maintenance is performed at this level.
4. Depot sustainment. Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "D" or "K" appearing in the third position of the SMR code. Depot sustainment maintenance can be performed by either depot personnel or contractor personnel. A "D" or "K" appearing in the fourth position of the SMR code indicates complete repair is possible at the depot sustainment maintenance level. Items are returned to the supply systems after maintenance is performed at this level.

The tools and test equipment requirements table (immediately following the MAC) lists the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks table (immediately following the tools and test equipment requirements) contains supplemental instructions and explanatory notes for a particular maintenance function.

INTRODUCTION - Continued

Maintenance Functions

Maintenance functions are limited to and defined as follows:

1. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel). This includes scheduled inspection and gaugings and evaluation of cannon tubes.
2. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, e.g., load testing of lift devices and hydrostatic testing of pressure hoses.
3. Service. Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:
 - a. Unpack. To remove from packing box for service or when required for the performance of maintenance operations.
 - b. Repack. To return item to packing box after service and other maintenance operations.
 - c. Clean. To rid the item of contamination.
 - d. Touch up. To spot paint scratched or blistered surfaces.
 - e. Mark. To restore obliterated identification.
4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper position, or by setting the operating characteristics to specified parameters.
5. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.
6. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.
7. Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
8. Paint (ammunition only). To prepare and spray color coats of paint so that the ammunition can be identified and protected. The color indicating primary use is applied, preferably, to the entire exterior surface as the background color of the item. Other markings are to be repainted as original so as to retain proper ammunition identification.
9. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and assigned maintenance level is shown as the third position code of the Source, Maintenance, and Recoverability (SMR) code.
10. Repair. The application of maintenance services, including fault location/troubleshooting, removal/installation, disassembly/assembly procedures and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

INTRODUCTION - Continued**NOTE**

The following definitions are applicable to the "repair" maintenance function:

Services. Inspect, test, service, adjust, align, calibrate, and/or replace.

Fault location/troubleshooting. The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (UUT).

Disassembly/assembly. The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

Actions. Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

11. Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.
12. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/components.

Explanation of Columns in the MAC

Column (1) Group Number. Column (1) lists Functional Group Code (FGC) numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

Column (2) Component/Assembly. Column (2) contains the item names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

Column (3) Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to "Maintenance Functions" outlined above).

Column (4) Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as manhours in whole hours or decimals) in the appropriate subcolumn. This work time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

INTRODUCTION - ContinuedField:

- C Crew maintenance
- F Maintainer maintenance

Sustainment:

- L Specialized Repair Activity (SRA)
- H Below depot maintenance
- D Depot maintenance

NOTE

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE and special support equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) Remarks Code. When applicable, this column contains a letter code, in alphabetical order, which is keyed to the remarks table entries.

Explanation of Columns in the Tools and Test Equipment Requirements

Column (1) - Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) - Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) - Nomenclature. Name or identification of the tool or test equipment.

Column (4) - National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) - Tool Number. The manufacturer's part number.

Explanation of Columns in the Remarks

Column (1) - Remarks Code. The code recorded in column (6) of the MAC.

Column (2) - Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

END OF WORK PACKAGE

**FIELD MAINTENANCE
MAINTENANCE ALLOCATION CHART (MAC)**

Table 1. Maintenance Allocation Chart (MAC) for Dump Body.

| (1) GROUP NUMBER | (2) COMPONENT/ ASSEMBLY | (3) MAINTENANCE FUNCTION | (4) MAINTENANCE LEVEL | | | | (5) TOOLS AND EQUIPMENT REFERENCE CODE | (6) REMARKS CODE |
|------------------------|--|--------------------------------|--------------------------|------------|-------------|-------|--|------------------------|
| | | | FIELD | | SUSTAINMENT | | | |
| | | | CREW | MAINTAINER | BELOW DEPOT | DEPOT | | |
| | | | C | F | H | D | | |
| 0608 | MCS CONTROL UNIT (M917A1 WITH MCS AND M917A2 WITH MCS) | Inspect | 0.1 | | | | | |
| | | Replace | | 0.5 | | | 1 | |
| | | Repair | | 1.0 | | | 1 | |
| | MCS REMOTE CONTROL (M917A1 WITH MCS AND M917A2 WITH MCS) | Repair | | 1.0 | | | 1 | |
| | MCS CONTROL SWITCHES | Replace | | 0.3 | | | | |
| 0609 | TAILLIGHT | Inspect | 0.1 | | | | | |
| | | Replace | | 0.3 | | | 1 | |
| | MARKER CLEARANCE LIGHT | Inspect | 0.1 | | | | | |
| | | Replace | | 0.3 | | | 1 | |
| REFLECTOR | Replace | | 0.3 | | | 1 | | |
| 0610 | BODY UP SWITCH | Replace | | 0.3 | | | 1 | |
| | TRANSPORT LOCK SWITCH | Replace | | 0.3 | | | 1 | |
| 0613 | BEACON WARNING LIGHT | Replace | | 0.3 | | | 1 | |

Table 1. Maintenance Allocation Chart (MAC) for Dump Body - Continued.

| (1) GROUP NUMBER | (2) COMPONENT/ ASSEMBLY | (3) MAINTENANCE FUNCTION | (4) MAINTENANCE LEVEL | | | | (5) TOOLS AND EQUIPMENT REFERENCE CODE | (6) REMARKS CODE |
|------------------------|--|--------------------------------|--------------------------|------------|-------------|-------|--|------------------------|
| | | | FIELD | | SUSTAINMENT | | | |
| | | | CREW | MAINTAINER | BELOW DEPOT | DEPOT | | |
| | | | C | F | H | D | | |
| 1810 | WIRING HARNESS | Repair | | 0.5 | | | 1 | |
| | LIGHTS | Replace | | 1.0 | | | 1 | |
| | WIRING HARNESS | Repair | | 0.3 | | | 1 | |
| | TRUCK-TO-MCS TAILGATE WIRING HARNESS (M917A1 WITH MCS AND M917A2 WITH MCS) | Replace | | 1.5 | | | 1 | |
| | MCS TAILGATE WIRING HARNESS (M917A1 WITH MCS AND M917A2 WITH MCS) | Repair | | 1.0 | | | 1 | |
| | MCS TAILGATE WIRING HARNESS (M917A1 WITH MCS AND M917A2 WITH MCS) | Replace | | 0.5 | | | 1 | |
| | BODY UP AND TRANSPORT LOCK SWITCHES WIRING HARNESS | Repair | | 0.5 | | | 1 | |
| | BODY UP AND TRANSPORT LOCK SWITCHES WIRING HARNESS | Replace | | 0.3 | | | 1 | |
| | | Repair | | 0.3 | | | 1 | |
| | CYLINDER SUPPORT FRAME | Replace | | 1.0 | | | 1, 2, 9 | |

Table 1. Maintenance Allocation Chart (MAC) for Dump Body - Continued.

| (1) GROUP NUMBER | (2) COMPONENT/ ASSEMBLY | (3) MAINTENANCE FUNCTION | (4) MAINTENANCE LEVEL | | | | (5) TOOLS AND EQUIPMENT REFERENCE CODE | (6) REMARKS CODE |
|------------------------|--|--------------------------------|--------------------------|------------|-------------|-------|--|------------------------|
| | | | FIELD | | SUSTAINMENT | | | |
| | | | CREW | MAINTAINER | BELOW DEPOT | DEPOT | | |
| | | | C | F | H | D | | |
| | DUMP BODY AND STABILIZER | Inspect | 0.3 | 1.0 | | | | |
| | | Service | 0.3 | | | | | |
| | | Replace | | 4.0 | | | 1, 2, 9, 10 | |
| | BODY PROPS | Inspect | 0.5 | 1.0 | | | | |
| | | Service | 0.3 | | | | | |
| | | Replace | | 1.5 | | | 1 | |
| | CAB SHIELD | Replace | | 1.5 | | | 1, 8 | |
| | MUD FLAP | Replace | | 0.3 | | | 1 | |
| | TAILGATE (M917A1 AND M917A2) | Replace | | 1.0 | | | 1 | |
| | MCS TAILGATE (M917A1 WITH MCS AND M917A2 WITH MCS) | Inspect | 0.1 | 1.0 | | | | |
| | | Service | 0.3 | | | | | |
| | | Replace | | 1.0 | | | 1 | |
| | MCS TAILGATE COVER (M917A1 WITH MCS AND M917A2 WITH MCS) | Replace | | 1.0 | | | 1 | |
| | MCS GATE (M917A1 WITH MCS AND M917A2 WITH MCS) | Replace | | 1.0 | | | 1 | |
| | MCS ADJUSTMENT TUBE (M917A1 WITH MCS) | Replace | | 1.5 | | | 1 | |

Table 1. Maintenance Allocation Chart (MAC) for Dump Body - Continued.

| (1) GROUP NUMBER | (2) COMPONENT/ ASSEMBLY | (3) MAINTENANCE FUNCTION | (4) MAINTENANCE LEVEL | | | | (5) TOOLS AND EQUIPMENT REFERENCE CODE | (6) REMARKS CODE |
|------------------------|---|--------------------------------|--------------------------|------------|-------------|-------|--|------------------------|
| | | | FIELD | | SUSTAINMENT | | | |
| | | | CREW | MAINTAINER | BELOW DEPOT | DEPOT | | |
| | | | C | F | H | D | | |
| | AND M917A2 WITH MCS) | | | | | | | |
| | AIR SYSTEM COMPON- ENTS | Inspect | 1.0 | 1.3 | | | | |
| | TAILGATE RELEASE/ MCS AIR LINES AND FITTINGS | Replace | | 0.5 | | 1 | | |
| | MCS AIR RESERVOIR (M917A1 WITH MCS AND M917A2 WITH MCS) | Replace | | 1.5 | | 1 | | |
| | TAILGATE RELEASE AIR CYLINDER | Replace | | 0.5 | | 1 | | |
| | | Repair | | 0.8 | | 1 | | |
| | MCS AIR CYLINDER (M917A1 WITH MCS AND M917A2 WITH MCS) | Replace | | 0.5 | | 1 | | |
| | | Repair | | 1.0 | | 1 | | |
| | MCS AIR CYLINDER SOLENOID ASSEMBLY (M917A1 WITH MCS AND M917A2 WITH MCS) | Replace | | 0.5 | | 1 | | |
| | | Repair | | 1.5 | | 1 | | |

Table 1. Maintenance Allocation Chart (MAC) for Dump Body - Continued.

| (1) GROUP NUMBER | (2) COMPONENT/ ASSEMBLY | (3) MAINTENANCE FUNCTION | (4) MAINTENANCE LEVEL | | | | (5) TOOLS AND EQUIPMENT REFERENCE CODE | (6) REMARKS CODE |
|------------------------|--|--------------------------------|--------------------------|------------|-------------|-------|--|------------------------|
| | | | FIELD | | SUSTAINMENT | | | |
| | | | CREW | MAINTAINER | BELOW DEPOT | DEPOT | | |
| | | | C | F | H | D | | |
| 2201 | CARGO COVER | Inspect | 0.1 | 0.1 | | | | |
| | | Service | 1.0 | 2.0 | | | | |
| | | Replace | | 0.5 | | | 1 | |
| | | Repair | | 0.5 | | | | A |
| | CARGO COVER CRANK ASSEMBLY | Replace | | 0.7 | | | 1 | |
| | | Repair | | 1.0 | | | 1 | |
| | CARGO COVER CHAIN AND SPROCKETS | Replace | | 1.0 | | | 1 | |
| | | Replace | | 1.7 | | | 1 | |
| SHOVEL BRACKET | Replace | | 0.5 | | | 1 | | |
| | Inspect | | | 0.1 | | | | |
| 2210 | DATA PLATES | Replace | | 0.3 | | | 1 | |
| | | Replace | | 1.0 | | | 1, 2, 6, 8 | |
| 2401 | HYDRAULIC PUMP | Repair | | 1.0 | | | 1, 2, 9 | |
| | | Inspect | 1.5 | 2.0 | | | | |
| 2403 | HYDRAULIC COMPON- ENTS | Replace | | 0.5 | | | 1 | |
| | HYDRAULIC CONTROL LEVER | Replace | | 2.5 | | | 1 | |
| | HYDRAULIC CONTROL | Replace | | 2.5 | | | 1 | |

Table 1. Maintenance Allocation Chart (MAC) for Dump Body - Continued.

| (1) GROUP NUMBER | (2) COMPONENT/ ASSEMBLY | (3) MAINTENANCE FUNCTION | (4) MAINTENANCE LEVEL | | | | (5) TOOLS AND EQUIPMENT REFERENCE CODE | (6) REMARKS CODE |
|------------------------|--|--------------------------------|--------------------------|------------|-------------|-------|--|------------------------|
| | | | FIELD | | SUSTAINMENT | | | |
| | | | CREW | MAINTAINER | BELOW DEPOT | DEPOT | | |
| | | | C | F | H | D | | |
| 2406 | LEVER CABLE | | | | | | | |
| | HYDRAULIC OIL FILTER ELEMENT | Inspect | 0.3 | | | | | |
| | | Service | | 0.3 | | | 1 | |
| 2407 | HYDRAULIC HOSES AND FITTINGS | Replace | | 0.5 | | | 1, 6 | |
| | | Replace | | 0.3 | | | 1, 2, 6 | |
| | HYDRAULIC CYLINDER | Replace | | 2.0 | | | 1, 6 | |
| 2408 | HYDRAULIC RESERVOIR | Repair | | 2.0 | | | 1, 2, 3, 4, 5, 7 | |
| | | Inspect | 0.3 | | | | | |
| | Service | 1.0 | 2.0 | | | | | |
| 3307 | HYDRAULIC OIL FILTER SERVICE INDICATOR GAUGE | Replace | | 0.5 | | | 1, 2, 6, 8 | |
| | | Repair | | 0.5 | | | 1, 6 | |
| | SPILL SHIELD | Replace | | 0.3 | | | 1, 6 | |
| | | | | | | | | |

Table 2. Tools and Test Equipment Requirements for Dump Body.

| TOOLS OR TEST EQUIPMENT | MAINTENANCE LEVEL | NOMENCLATURE | NATIONAL STOCK NUMBER | TOOL NUMBER |
|-------------------------|-------------------|--|-----------------------|------------------|
| 1 | F | TOOL KIT, GENERAL MECHANIC'S | 5180-00-177-7033 | SC5180-90-CL-N26 |
| 2 | F | TOOL SET, SATS, BASE | 4910-01-490-6453 | SC 4910-95-A81 |
| 3 | F | INSERTER, SEAL: 3-INCH | 5120-01-441-1065 | J-42381 |
| 4 | F | INSERTER AND REMOVER,BEARING AND BUSHING: 4-INCH | 5120-01-440-5119 | J-42382 |
| 5 | F | INSERTER, SEAL: 5-INCH | 5120-01-441-1064 | J-42383 |
| 6 | F | CAP AND PLUG SET | 5340-00-450-5718 | 10935405 |
| 7 | F | HYDRAULIC CYLINDER DISASSEMBLY TOOL | | |
| 8 | F | WRENCH, TORQUE, 1/2 IN. DRIVE, 0-250 FT-LB (0-339 N•M) | | KTC S0991 |
| 9 | F | WRENCH, TORQUE, 3/4 IN. DRIVE, 0-600 FT-LB (0-813 N•M) | | KTC S0988 |
| 10 | F | SHOP SET, MACHINE AND WELDING (TOOL KIT, WELDER'S) | 4920-01-139-4533 | SC492099CLA63 |

Table 3. Remarks for Dump Body.

| REMARK CODE | REMARKS |
|-------------|--|
| A | REPAIR CARGO COVER IN ACCORDANCE WITH TM 4-42.21, GENERAL FABRIC REPAIR. |

END OF WORK PACKAGE

**OPERATOR MAINTENANCE
COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS**

INTRODUCTION**Scope**

This work package lists COEI and BII for the dump body to help you inventory items for safe and efficient operation of the equipment.

Refer to TM 9-2320-363-10 or TM 9-2320-302-10 for COEI and BII related to the dump truck chassis.

General

The COEI and BII information is divided into the following lists:

Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the dump body. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII). These essential items are required to place the dump body in operation, operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the dump body during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns in the COEI List and BII List

Column (1) Illus Number. Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, Part Number/(CAGEC). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

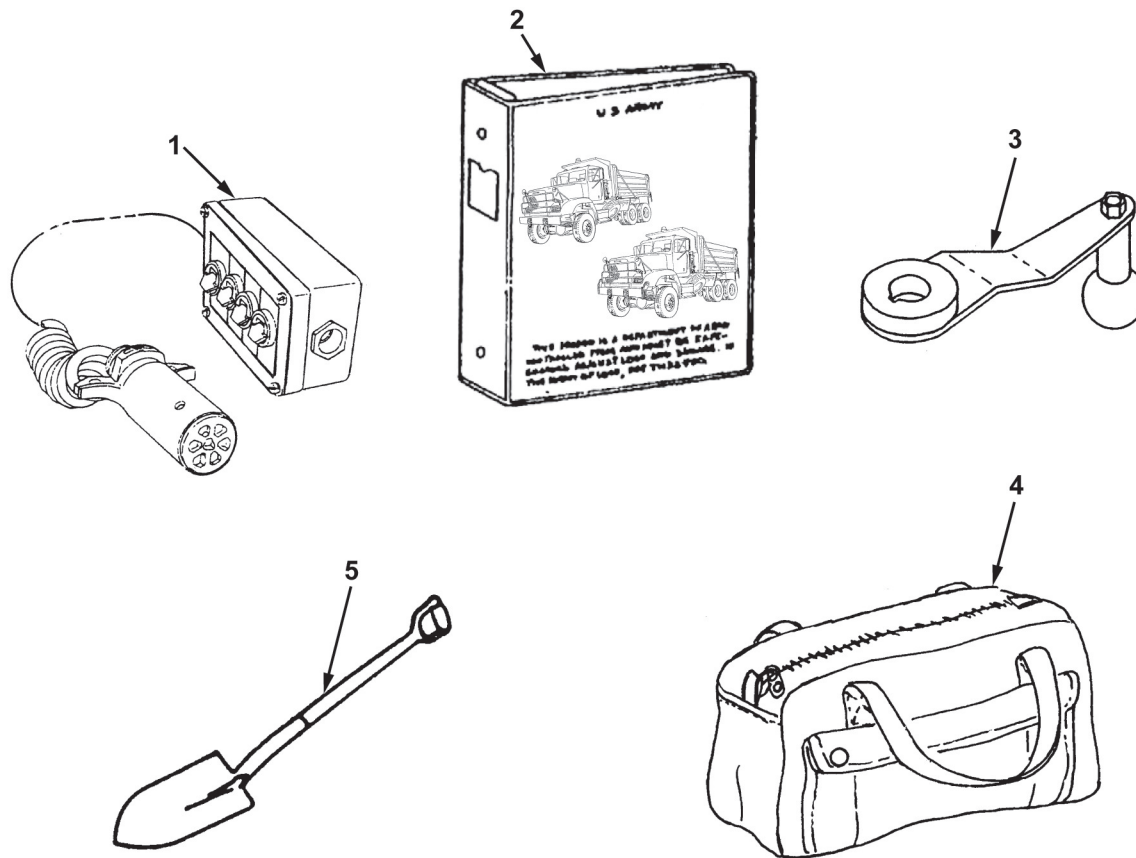
Column (4) Usable On Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. These codes are identified below:

| <u>Code</u> | <u>Used on</u> |
|--------------------|-----------------------|
| 7A1 | M917A1 |
| 7E1 | M917A1 with MCS |
| 7A2 | M917A2 |
| 7E2 | M917A2 with MCS |

Column (5) U/I. Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) Qty Rqr. Indicates the quantity required.

There are currently no COEI assigned.



14PT264908-A

Table 1. Basic Issue Items (BI).

| (1) ILLUS NUMBER | (2) NATIONAL STOCK NUMBER (NSN) | (3) DESCRIPTION, PART NUMBER/ (CAGEC) | (4) USABLE ON CODE | (5) U/I | (6) QTY RQR |
|------------------------|---------------------------------------|--|--------------------------|------------|-------------------|
| 1 | 3040-01-459-5141 | CABLE ASSEMBLY, CONTROL (in tool pouch in BI storage box) CMG/128214 (64678) | 7E1, 7E2 | EA | 1 |
| 2 | | PUBLICATIONS: MANUAL, OPERATOR AND FIELD MAINTENANCE TM 5-3805-264-13&P (in cab glove box) | | EA | 1 |
| 3 | 5340-01-445-9357 | HANDLE, CRANK (in tool pouch in BI storage box) 0311-960301 (5B752) | | EA | 1 |
| 4 | 5140-00-329-4306 | POUCH, MECHANIC'S TOOL (in BI storage box) 50J8016 (80049) | | EA | 1 |

Table 1. Basic Issue Items (BII) - Continued.

| (1) ILLUS NUMBER | (2) NATIONAL STOCK NUMBER (NSN) | (3) DESCRIPTION, PART NUMBER/ (CAGEC) | (4) USABLE ON CODE | (5) U/I | (6) QTY RQR |
|------------------------|---------------------------------------|---|--------------------------|------------|-------------------|
| 5 | 5120-00-293-3336 | SHOVEL, HAND Rd Pt, D-Hdl, Short Size 2 5120-00-293-3336 (80244) | | EA | 1 |

END OF WORK PACKAGE

**OPERATOR MAINTENANCE
ADDITIONAL AUTHORIZATION LIST (AAL)**

Refer to TM 9-2320-363-10 or TM 9-2320-302-10.

END OF WORK PACKAGE

**FIELD MAINTENANCE
EXPENDABLE AND DURABLE ITEMS LIST (EDIL)**

INTRODUCTION**Scope**

This work package lists expendable and durable items that you will need to operate and maintain the dump body. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items), CTA 50-909, Field and Garrison Furnishings and Equipment or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in the Expendable/Durable Items List

Column (1) Item No. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., Use brake fluid (WP 0098, Item 5)).

Column (2) Level. This column identifies the lowest level of maintenance that requires the listed item (C = Crew, F = Maintainer).

Column (3) National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4) Item Name, Description, Part Number/(CAGEC). This column provides the other information you need to identify the item. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (5) U/I. Unit of Issue (U/I) code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

Table 1. Expendable and Durable Items List.

| (1) ITEM NO. | (2) LEVEL | (3) NATIONAL STOCK NUMBER (NSN) | (4) ITEM NAME, DESCRIPTION, PART NUMBER/ (CAGEC) | (5) U/I |
|--------------------|--------------|---------------------------------------|--|------------|
| 1 | F | 8040-01-024-6991 | ADHESIVE 50 Milliliter Bottle 31231 (05972) | BT |
| 2 | F | 8040-00-833-9563 | ADHESIVE: White Silicon 5 Ounce Tube RTV102 WTT 85ML (B0936) | KT |
| 3 | F | 8135-00-171-0930 | BARRIER MATERIAL, GREASEPROOFED- WATERPROO 100 Yard Roll MIL-B-121 (81349) | RO |
| 4 | F | 7920-00-900-3577 | BRUSH: Wire 3577 (17897) | EA |
| 5 | F | 7920-00-061-0038 | BRUSH, SCRUB 7920-00-061-0038 (83421) | EA |
| 6 | C | 6850-01-474-2320 | CLEANING COMPOUND, SOLVENT 5 Gallon Can MIL-PRF-680 (81349) | BX |
| 7 | C | 6850-01-474-2321 | CLEANING COMPOUND, SOLVENT 50 Gallon Drum MIL-PRF-680 (81349) | DR |
| 8 | F | 8030-01-418-9006 | CORROSION PREVENTIVE COMPOUND Box of 12 Aerosol Cans, 9 Ounces Each WD-40 (09137) | BX |
| 9 | C | 7930-00-282-9699 | DETERGENT, GENERAL PURPOSE: Liquid Box of 6, 1 Gallon Can 7930-00-282-9699 (83421) | BX |
| 10 | F | 7930-00-899-9534 | DISHWASHING COMPOUND, HAND 5 Gallon Can 1064012 (83421) | CN |
| 11 | F | 3439-00-255-9935 | FLUX, SOLDERING 1 Pound Can A-A-51145 TY 1 FORM A (58536) | LB |
| 12 | C | 9150-01-197-7693 | GREASE, AUTOMOTIVE AND ARTILLERY: (GAA) 14 Ounce Cartridge M-10924-B (81349) | CA |
| 13 | C | 9150-01-197-7688 | GREASE, AUTOMOTIVE AND ARTILLERY: (GAA) 1-1/4 Ounce Tube M-10924-A (81349) | TU |
| 14 | C | 9150-01-197-7690 | GREASE, AUTOMOTIVE AND ARTILLERY: (GAA) 2-1/4 Pound Can M-10924-C (81349) | CN |
| 15 | C | 9150-01-197-7689 | GREASE, AUTOMOTIVE AND ARTILLERY: (GAA) 6-1/2 Pound Can | CN |

Table 1. Expendable and Durable Items List - Continued.

| (1) ITEM NO. | (2) LEVEL | (3) NATIONAL STOCK NUMBER (NSN) | (4) ITEM NAME, DESCRIPTION, PART NUMBER/ (CAGEC) | (5) U/I |
|--------------------|--------------|---------------------------------------|--|------------|
| 16 | C | 9150-01-197-7692 | M-10924-D (81349) GREASE, AUTOMOTIVE AND ARTILLERY: (GAA) 35 Pound Pail M-10924-E (81349) | CN |
| 17 | C | 9150-01-197-7691 | GREASE, AUTOMOTIVE AND ARTILLERY: (GAA) 120 Pound Drum M-10924-F (81349) | DR |
| 18 | F | 9150-00-076-1574 | GREASE, BALL BEARING 5 Pound Can LUBRIPLATE (73219) | CN |
| 19 | F | 5970-00-815-1295 | INSULATION SLEEVING, ELECTRICAL M23053/5-106-0 (81343) | FT |
| 20 | C | 9150-00-402-4478 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, Arctic, OEA 1 Quart Can MIL-L-46167 (81349) | QT |
| 21 | C | 9150-00-402-2372 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, Arctic, OEA 5 Gallon Can MIL-L-46167 (81349) | CN |
| 22 | C | 9150-00-491-7197 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, Arctic, OEA 55 Gallon Drum MIL-L-46167 (81349) | DR |
| 23 | C | 9150-01-518-9471 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, OE/HDO 10 1 Quart Can MIL-PRF-2104 (81349) | QT |
| 24 | C | 9150-01-496-1962 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, OE/HDO 10 5 Gallon Can MIL-PRF-2104 (81349) | GL |
| 25 | C | 9150-00-191-2772 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, OE/HDO 10 55 Gallon Drum M2104-4-10W (81349) | DR |
| 26 | C | 9150-01-518-9484 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, OE/HDO 30 1 Quart Can MIL-PRF-2104 (81349) | QT |
| 27 | C | 9150-00-188-9858 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, OE/HDO 30 5 Gallon Can M2104-3-30W (81349) | CN |

Table 1. Expendable and Durable Items List - Continued.

| (1) ITEM NO. | (2) LEVEL | (3) NATIONAL STOCK NUMBER (NSN) | (4) ITEM NAME, DESCRIPTION, PART NUMBER/ (CAGEC) | (5) U/I |
|--------------------|--------------|---------------------------------------|--|------------|
| 28 | C | 9150-00-189-6729 | LUBRICATING OIL, ENGINE: Internal Combustion Engine, OE/HDO 30 55 Gallon Drum M2104-4-30W (81349) | DR |
| 29 | C | 7920-00-205-1711 | RAG, WIPING 50 Pound Bale 7920-00-205-1711 (80244) | BE |
| 30 | F | 8030-01-054-0740 | SEALING COMPOUND Box of 10, 50 Cubic Centimeter Tube 59231 (05972) | BX |
| 31 | F | 3439-00-247-6921 | SOLDER, LEAD ALLOY 1 Pound Bar SN40BS (81346) | BR |
| 32 | F | 3439-00-265-7102 | SOLDER, LEAD ALLOY 1 Pound Spool/Roll SN10WRP2 0.063 1LB (81346) | SL |
| 33 | F | 5975-00-984-6582 | STRAP, TIEDOWN, ELECTRICAL COMPONENTS 6 Inch Length, Black MS3367-1-0 (96906) | HD |
| 34 | F | 5975-01-049-2927 | STRAP, TIEDOWN, ELECTRICAL COMPONENTS 14.5 Inch Length, Black 696-40380 (56501) | HD |
| 35 | F | 5975-00-903-2284 | STRAP, TIEDOWN, ELECTRICAL COMPONENTS 4 Inch Length, Black MS3367-4-0 (96906) | HD |
| 36 | F | 9905-00-537-8954 | TAG, MARKER 9905-00-537-8954 (64067) | BD |
| 37 | F | 8030-00-889-3535 | TAPE, ANTISEIZING: 1/2 In. Width 260 Inch Roll 9384768 (19200) | EA |
| 38 | F | 5640-00-103-2254 | TAPE, DUCT: 2 Inch Width 60 Yard Roll 5640-00-103-2254 (5A291) | RO |
| 39 | F | 5970-00-682-8536 | TAPE, INSULATION, ELECTRICAL 60 Yard Roll HH-T-101 GRA (81348) | EA |

END OF WORK PACKAGE

FIELD MAINTENANCE TOOL IDENTIFICATION LIST

INTRODUCTION

Scope

This work package lists all common tools and supplements and special tools/fixtures needed to maintain the dump body.

Explanation of Columns in the Tool Identification List

Column (1) Item No. This number is assigned to the entry in the list and is referenced in the initial setup to identify the item (e.g., Extractor, (WP 0090, Item 32)).

Column (2) Item Name. This column lists the item by noun nomenclature and other descriptive features (e.g., Gauge, belt tension).

Column (3) National Stock Number (NSN). This is the National Stock Number (NSN) assigned to the item; use it to requisition the item.

Column (4) Part Number/(CAGEC). 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. The manufacturer's Commercial and Government Entity Code (CAGEC) is also included.

Column (5) Reference. This column identifies the authorizing supply catalog or RPSTL for items listed in this work package.

Table 1. Tool Identification List.

| (1) ITEM NO. | (2) ITEM NAME | (3) NATIONAL STOCK NUMBER (NSN) | (4) PART NUMBER /(CAGEC) | (5) REFERENCE |
|--------------------|--|---------------------------------------|-----------------------------------|-----------------------|
| 1 | Blow Gun, Air | - | KTC S0142 00NS2 | SC 4910-95-A81 |
| 2 | Cap Set, Protective, Dust and Moisture Seal | 5340-00-450-5718 | 10935405 (19207) | TM 5-3805-264-13&P |
| 3 | Insertor, Seal: 3-inch | 5120-01-441-1065 | J-42381 (33287) | |
| 4 | Insertor, Seal: 5-inch | 5120-01-441-1064 | J-42383 (33287) | |
| 5 | Insertor and Remover, Bearing and Bushing: 4-inch | 5120-01-440-5119 | J-42382 (33287) | |
| 6 | Pan, Drain | - | KTC S0255 00NS2 | SC 4910-95-A81 |

Table 1. Tool Identification List - Continued.

| (1) ITEM NO. | (2) ITEM NAME | (3) NATIONAL STOCK NUMBER (NSN) | (4) PART NUMBER /(CAGEC) | (5) REFERENCE |
|--------------------|---|---------------------------------------|-----------------------------------|------------------|
| 7 | Pliers Set, Retaining Ring | - | KTC S0258 00NS2 | SC 4910-95-A81 |
| 8 | Shop Set, Machine and Welding (Tool Kit, Welder's) | 4920-01-139-4533 | SC492099CL A63 (81996) | SC 4920-99-A63 |
| 9 | Sling, Engine and Transmission (3 Ton) | - | KTC S1050 00NS2 | SC 4910-95-A81 |
| 10 | Socket Set, 3/4 in. drive, standard size | - | KTC S0373 00NS2 | SC 4910-95-A81 |
| 11 | Soldering Gun | - | KTC S0695 00NS2 | SC 4910-95-A81 |
| 12 | Tool Kit, General Mechanic's | 5180-00-177-7033 | SC5180-90- CL-N26 (50980) | SC5180-90-CL-N26 |
| 13 | Tool Set, SATS, Base | 4910-01-490-6453 | KTC-S2000 00NS2 | SC 4910-95-A81 |
| 14 | Vise, Machinist's | - | KTC S0725 00NS2 | SC 4910-95-A81 |
| 15 | Wrench, Adjustable | - | KTC S0978 00NS2 | SC 4910-95-A81 |
| 16 | Wrench, Torque, 1/2 in. drive, 0-250 ft-lb (0-339 N•m) | - | KTC S0991 00NS2 | SC 4910-95-A81 |
| 17 | Wrench, Torque, 3/4 in. drive, 0-600 ft-lb (0-813 N•m) | - | KTC S0988 00NS2 | SC 4910-95-A81 |

END OF WORK PACKAGE

**FIELD MAINTENANCE
MANDATORY REPLACEMENT PARTS LIST**

INTRODUCTION

This work package includes a list of all mandatory replacement parts referenced in the task initial setups and procedures. These are items that must be replaced during maintenance whether they have failed or not. This includes items based on usage intervals such as miles, time, rounds fired, etc.

Table 1. Mandatory Replacement Parts List.

| ITEM NO. | PART NUMBER /(CAGEC) | NATIONAL STOCK NUMBER (NSN) | NOMENCLATURE | QTY |
|----------|----------------------------|--------------------------------|---|-----|
| 1 | 019-00004-42 (59556) | 5310-00-637-9541 | Washer, Lock | 6 |
| 2 | 034-55008-53118 (09990) | 5330-01-447-1113 | Parts Kit, Seal Replacement | 1 |
| 3 | 0835-691616 (5B752) | 5315-01-447-5712 | Key, Machine | 2 |
| 4 | 1643812 (5X050) | 3040-01-498-1887 | Parts Kit, Linear Actuating Cylinder Assembly | 1 |
| 5 | 23-10340-125 (64678) | 5310-01-333-6436 | Nut, Self-Locking, Assembled Washer | 8 |
| 6 | 246-70-BN (60827) | 5331-01-447-4040 | O-Ring | 1 |
| 7 | 251-70-BN (60827) | 5330-01-447-4034 | O-Ring | 1 |
| 8 | 25316 (38335) | 5330-01-212-2222 | Gasket | 2 |
| 9 | 391-0381-906 (13829) | 3110-01-260-2561 | Bearing, Roller, Needle | 2 |
| 10 | 391-2883-119 (82338) | 5330-01-236-0469 | Seal, Plain Encased | 1 |
| 11 | 3912884019 (13829) | 5330-01-340-8159 | Seal, Plain | 2 |
| 12 | 403648 (5X050) | 5330-01-473-2903 | Gasket | 1 |
| 13 | 403650 (5X050) | 5330-01-474-2447 | Gasket | 1 |
| 14 | 404931 (5X050) | 5310-01-502-2940 | Washer, Lock | 4 |

Table 1. Mandatory Replacement Parts List - Continued.

| ITEM NO. | PART NUMBER /(CAGEC) | NATIONAL STOCK NUMBER (NSN) | NOMENCLATURE | QTY |
|----------|----------------------------|--------------------------------|----------------------------|-----|
| 15 | BA3026-2 (13829) | 5330-00-809-1052 | Seal, Nonmetallic Strip | 12 |
| 16 | CMG/402038 (64678) | 5310-01-549-8591 | Nut, Self-Locking, Hexagon | 8 |
| 17 | M1391K (13829) | 4820-00-435-4391 | Valve, Check | 2 |
| 18 | M45913/1-10CG8C (81349) | 5310-00-061-4651 | Nut, Self-Locking, Hexagon | 56 |
| 19 | M45913/1-4CG5C (81349) | 5310-00-088-1251 | Nut, Self-Locking, Hexagon | 2 |
| 20 | M45913/3-12CG8C (81349) | 5310-00-409-3333 | Nut, Self-Locking, Hexagon | 2 |
| 21 | M45913/3-4CG8C (81349) | 5310-00-061-4650 | Nut, Self-Locking, Hexagon | 8 |
| 22 | M45913/3-6CG8C (81349) | 5310-01-509-2488 | Nut, Self-Locking, Hexagon | 16 |
| 23 | M45913/3-6FG8C (96906) | 5310-00-814-0672 | Nut, Self-Locking, Hexagon | 4 |
| 24 | M45913/3-8CG8C (81349) | 5310-00-488-3889 | Nut, Self-Locking, Hexagon | 13 |
| 25 | MS35333-40 (80205) | 5310-00-550-1130 | Washer, Lock | 4 |
| 26 | MS35338-50 (80205) | 5310-00-820-6653 | Washer, Lock | 16 |
| 27 | MS35338-51 (FAHK8) | 5310-00-584-7888 | Washer, Lock | 4 |
| 28 | NAS561-8-48 (80205) | 5315-00-721-8370 | Pin, Spring | 2 |
| 29 | RRT206 (80756) | 5325-00-768-8563 | Ring, Retaining | 1 |
| 30 | TS-355-70-BN (60827) | 5331-01-447-3098 | O-Ring | 1 |
| 31 | ZRE-409-10 (60827) | 4330-01-446-3337 | Filter Element, Fluid | 1 |

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| RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS | | | | | | Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM). | DATE <i>Date you filled out this form.</i> |
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| For use of this form, see AR 25-30; the proponent agency is OAASA. | | | | | | | |
| TO (Forward to proponent of publication or form) (Include ZIP Code) U.S. Army TACOM Life Cycle Management Command ATTN: AMSTA-LCL-IM/TECH PUBS 6501 E. 11 Mile Road, Warren, MI 48397-5000 | | | | | | FROM (Activity and location) (Include ZIP Code) <i>Your mailing address</i> | |
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| PUBLICATION/FORM NUMBER <i>TM Number</i> | | | | | DATE <i>DD MMMM YYYY</i> | TITLE <i>TM Title</i> | |
| ITEM | PAGE | PARA-GRAPH | LINE | FIGURE NO. | TABLE | RECOMMENDED CHANGES AND REASON (Exact wording of recommended change must be given) | |
| | 0007-3 | | | | | <i>Figure 2, Item 9 should show a lockwasher. Currently shows a flat washer.</i> | |
| | 0018-2 | | | | | <i>Cleaning and inspection, Step 6, reference to governor support pin (14) is wrong reference. Reference should be change to (12).</i> | |
| <h1>SAMPLE</h1> | | | | | | | |
| TYPED NAME, GRADE OR TITLE <i>Your Name</i> | | | | | TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION <i>Your Phone Number</i> | | SIGNATURE <i>Your Signature</i> |

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PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

| | | |
|---|-----------------------------|--------------------------|
| PUBLICATION/FORM NUMBER <i>TM Number</i> | DATE <i>DD MMMM YYYY</i> | TITLE <i>TM Title</i> |
|---|-----------------------------|--------------------------|

| PAGE NO. | COLM NO. | LINE NO. | NATIONAL STOCK NUMBER | REFERENCE NO. | FIGURE NO. | ITEM NO. | TOTAL NO. OF MAJOR ITEMS SUPPORTED | RECOMMENDED ACTION |
|-----------------|----------|----------|-----------------------|---------------|------------|----------|------------------------------------|--------------------|
| <h1>SAMPLE</h1> | | | | | | | | |

PART III – REMARKS (Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)

| | | |
|--|--|------------------------------------|
| TYPED NAME, GRADE OR TITLE <i>Your Name</i> | TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION <i>Your Phone Number</i> | SIGNATURE <i>Your Signature</i> |
|--|--|------------------------------------|

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|--|------|----------------|------|---------------|---|---|--|
| RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS | | | | | | Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM). | DATE |
| For use of this form, see AR 25-30; the proponent agency is OAASA | | | | | | | |
| TO (Forward to proponent of publication or form) (Include ZIP Code) U.S. Army TACOM Life Cycle Management Command ATTN: AMSTA-LCL-IM/TECH PUBS 6501 E. 11 Mile Road, Warren, MI 48397-5000 | | | | | | FROM (Activity and location) (Include ZIP Code) | |
| PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS | | | | | | | |
| PUBLICATION/FORM NUMBER TM 5-3805-264-13&P | | | | | | DATE 30 JUNE 2014 | TITLE OPERATOR AND FIELD MAINTENANCE MANUAL INCLUDING RPSTL FOR M917A1, M917A1 WITH MCS, M917A2 AND M917A2 WITH MCS |
| | PAGE | PARA- GRAPH | LINE | FIGURE NO. | TABLE | RECOMMENDED CHANGES AND REASON | |
| | | | | | | | |
| TYPED NAME, GRADE OR TITLE | | | | | TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION | | SIGNATURE |

| | | |
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| TO (Forward direct to addressee listed in publication) U.S. Army TACOM Life Cycle Management Command ATTN: AMSTA-LCL-IM/TECH PUBS 6501 E. 11 Mile Road, Warren, MI 48397-5000 | FROM (Activity and location) (Include ZIP Code) | DATE |
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PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

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|----------|----------|----------|-----------------------|---------------|------------|----------|------------------------------------|--------------------|
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PART III – REMARKS (Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)

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| TYPED NAME, GRADE OR TITLE | TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION | SIGNATURE |
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| RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS | | | | | | Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM). | DATE |
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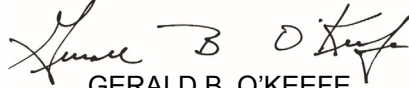
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By Order of the Secretary of the Army:

Official:

Handwritten signature of Gerald B. O'Keefe in black ink.

GERALD B. O'KEEFE
*Administrative Assistant to the
Secretary of the Army*

1414803

RAYMOND T. ODIERNO
*General, United States Army
Chief of Staff*

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THE METRIC SYSTEM AND EQUIVALENTS

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| <p>Linear Measure</p> <p>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</p> <p>Weights</p> <p>1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces 1 Kilogram = 1000 Grams = 2.2 Pounds 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons</p> <p>Liquid Measure</p> <p>1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces</p> | <p>Square Measure</p> <p>1 Sq Centimeter = 100 Sq Millimeter = 0.155 Sq Inches 1 Sq Meter = 10,000 Sq Centimeters = 10.76 Sq Feet 1 Sq Kilometer = 1,000,000 Sq Meters = 0.0386 Sq Miles</p> <p>Cubic Measure</p> <p>1 Cu Centimeter = 1,000 Cu Millimeters = 0.06 Cu Inches 1 Cu Meter = 1,000,000 Cu Centimeters = 35.31 Cu Feet</p> <p>Temperature</p> <p>$9/5\text{ }^{\circ}\text{C} + 32 = \text{ }^{\circ}\text{F}$ $5/9 (\text{ }^{\circ}\text{F} - 32) = \text{ }^{\circ}\text{C}$ 212° Fahrenheit is equivalent to 100° Celsius 90° Fahrenheit is equivalent to 32.2° Celsius 32° Fahrenheit is equivalent to 0° Celsius</p> |
|--|--|

APPROXIMATE CONVERSION FACTORS

| To Change | To | Multiply By |
|--------------------|----------------------|-------------|
| Inches | Centimeters | 2.540 |
| Feet | Meters | 0.305 |
| Yards | Meters | 0.914 |
| Miles | Kilometers | 1.609 |
| Sq Inches | Sq Centimeters | 6.451 |
| Sq Feet | Sq Meters | 0.093 |
| Sq Yards | Sq Meters | 0.836 |
| Sq Miles | Sq Kilometers | 2.590 |
| Acres | Sq Hectometers | 0.405 |
| Cubic Feet | Cubic Meters | 0.028 |
| Cubic Yards | Cubic Meters | 0.765 |
| Fluid Ounces | Milliliters | 29.573 |
| Pints | Liters | 0.473 |
| Quarts | Liters | 0.946 |
| Gallons | Liters | 3.785 |
| Ounces | Grams | 28.349 |
| Pounds | Kilograms | 0.454 |
| Short Tons | Metric Tons | 0.907 |
| Pound-Feet | Newton-Meters | 1.356 |
| Pounds per 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 | Sq Inches | 0.155 |
| Sq Meters | Sq Feet | 10.764 |
| Sq Meters | Sq Yards | 1.196 |
| Sq Kilometers | Sq 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 |
| Kilometers per Liter | Miles per Gallon | 2.354 |
| Kilometers per Hour | Miles per Hour | 0.621 |

