TECHNICAL MANUAL

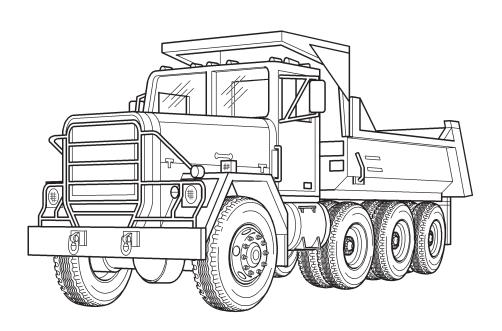
OPERATOR AND FIELD MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

FOR

DUMP TRUCK BODY

M917

(NSN 3805-01-028-4389) (EIC EZZ)



*TM 5-3805-274-13&P dated 12 AUGUST 2013 superseded TM 5-3805-274-10 dated 05 OCTOBER 1979 and superseded TM 5-3805-274-24&P dated 30 DECEMBER 1980, LO 5-3805-274-12 dated 16 DECEMBER 1983 including all changes.

DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited.

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 observe these warnings may result in serious injury or death to personnel.

If artificial respiration becomes necessary, refer to FM 4-25.11, First Aid, for proper procedures. Refer to FM 4-25.11 for information on first aid. Failure to comply may result in serious injury to personnel. Seek medical attention in the event of an injury.

For information on first aid, refer to FM 4-25.11. Seek medical attention in the event of an injury.

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 to personnel can result from severe exposure. Carbon monoxide occurs in exhaust fumes of internal combustion engines.

Carbon monoxide may become dangerously concentrated under conditions of inadequate ventilation. The following precautions must be observed to ensure safety of personnel.

- 1. DO NOT operate vehicle in an enclosed area without proper ventilation.
- 2. BE ALERT for exhaust poisoning symptoms:
 - a. Headache
 - b. Dizziness
 - c. Sleepiness
 - d. Loss of muscular control
- 3. If you see another person with exhaust poisoning symptoms:
 - a. Remove person from area.
 - b. Expose to fresh air.
 - c. Keep person warm.
 - d. DO NOT permit physical exercise.
 - e. Administer Cardiopulmonary Resuscitation (CPR), if necessary.
 - f. Notify a medic.
- 4. BE AWARE. The field protective mask and ambulance Chemical, Biological, Radiological, and Nuclear (CBRN) system does not protect personnel against exhaust gas poisoning.

WARNING SUMMARY - CONTINUED

FOR INFORMATION ON FIRST AID, REFER TO FM 4-25.11.

Engine exhaust gases contain carbon monoxide, a colorless, odorless, and poisonous gas that can cause unconsciousness and death if inhaled. THE BEST DEFENSE AGAINST CARBON MONOXIDE POISONING IS ADEQUATE VENTILATION. If you experience any of the following symptoms, get out into fresh air immediately: dizziness, intense headache, weakness, sleepiness, muscular twitching, throbbing in temples, or vomiting. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Cleaning solvent is combustible. DO NOT use or store near heat, sparks, flame, or other ignition sources. Use mechanical ventilation whenever product is used in a confined space, heated above ambient temperatures, or agitated. Keep container sealed when not in use. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Contact with cleaning solvent may cause skin irritation. Use chemical-resistant gloves. In case of skin contact, remove any contaminated clothing and wash skin thoroughly with soap and water. Wash contaminated clothing before reuse. Eye contact may cause irritation, tearing, or blurring of vision. Use face shield or goggles when eye contact may occur. In case of eye contact, flush eyes with large amounts of water for at least 15 minutes or until irritation subside. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Compressed air source must not exceed 30 psi (207 kPa). When cleaning with compressed air, eye shields must be worn. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Do not attempt to raise dump bed in high wind. Ensure truck is on firm ground. Stay at the controls so you can lower dump bed immediately if it leans or shifts during dumping. Ensure all personnel are clear before you unlock the tailgate or raise the dump bed. If truck body leans or shifts, check for flat tires or low air pressure, weak or broken spring leaves, wheels sinking unevenly, or load sticking to one side of dump bed. Failure to comply may result in death or injury to personnel and/or damage to equipment. Seek medical attention in the event of an injury.

Dump bed assembly weighs approximately 3500 lb (1587 kg). Ensure lifting device has a capacity of over 3500 lb (1587 kg). Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Never operate hydraulic control lever (located in the truck cab) without ensuring all personnel are clear of dump body. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

While loading dump truck, ensure vehicle parking brake is set (TM 9-2320-273-10) otherwise the truck may roll or shift causing injury to personnel or damage to equipment. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Do not try to loosen a sticky load by pulling forward or backward and braking abruptly. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Do not step on pusher axle tire when climbing in or out of the dump body. Pusher axle wheel may rotate and you may fall. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

If dump bed is to be held at a high angle or if maintenance is performed with bed raised, install safety strut in position on bed frame. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Do not perform any maintenance with dump body bed raised until the safety strut is installed in locked position. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

WARNING SUMMARY - CONTINUED

Before attempting replacement of the hoist cylinder bleeder valve, ensure hydraulic cylinder is not pressurized. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

All nonessential personnel must stand clear during lifting operations. Use taglines during removal and installation. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Hoist cylinder must be supported before removal of hoist pin. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Ensure truck has sufficient overhead clearance for all loading, unloading, and there is sufficient overhead clearance for raising and lowering of the dump bed. Failure to comply may result in death or injury to personnel and damage to equipment. Seek medical attention, in the event of an injury.

Ensure area is clear of non-essential personnel while loading and unloading dump truck. Failure to comply may result in death or injury to personnel. Seek medical attention, in the event of an injury.

Leaking or spilled GAA may cause a slip and fall hazard. Clean any leaking or spilled GAA immediately, using suitable fluid absorbent materials. Dispose of contaminated cloths, rags, or cleaning materials in accordance with local procedures and plans. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Accidental or intentional introduction of liquid contaminants into the environment is a violation of state, federal, and military regulations. Refer to Army POL (WP 0001) for information concerning storage, use, and disposal of these liquids. Failure to comply may result in damage to environment and health of personnel. Seek medical attention in the event of an injury.

Wipe up any spilled hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Prolonged contact with hydraulic fluid may cause a skin rash. Skin and clothing that comes in contact with hydraulic fluid should be thoroughly washed immediately. Saturated clothing should be removed immediately. Areas in which hydraulic fluid is used should be well ventilated to keep fumes to a minimum. Failure to comply may result in injury to personnel. In the event of injury, seek medical attention immediately.

Dump bed weighs 5000 lb (2268 kg). Attach suitable lifting device prior to removal or installation. Failure to comply may result in injury to personnel and damage to equipment. In the event of injury, seek medical attention immediately.

Faceshield must be worn when removing rust or surface scale using a wire brush, sandblast, grit blast, or other effective methods. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Have a suitable container that holds up to 27 gal. (120 L) ready to catch oil. Wipe up any spilled hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Subframe weighs 1500 lb (680 kg). Use caution when handling heavy parts. Provide adequate support and use assistance during procedure. Do not attempt to lift tailgate. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Wipe up any spilled lubricating oil, GAA, or hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Prolonged contact with hydraulic fluid may cause a skin rash. Skin and clothing that comes in contact with hydraulic fluid should be thoroughly washed immediately. Saturated clothing should be removed immediately. Areas in which hydraulic fluid is used should be well ventilated to keep fumes to a minimum. Failure to comply may result in injury to personnel. Seek medical attention immediately in the event of injury.

LIST OF EFFECTIVE PAGES/WORK PACKAGES

NOTE: *TM 5-3805-274-13&P dated 12 AUGUST 2013 superseded TM 5-3805-274-10 dated 05 OCTOBER 1979 and superseded TM 5-3805-274-24&P dated 30 DECEMBER 1980, LO 5-3805-274-12 dated 16 DECEMBER 1983 including all changes.

Zero in the "Change No." column indicates an original page or work package.

Date of issue for the original manual is:

Original: 12 AUGUST 2013

TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 30 AND TOTAL NUMBER OF WORK PACKAGES IS 77, CONSISTING OF THE FOLLOWING:

Page/WP No.	Change No.	Page/WP No.	Change No.
Front Cover	0	WP 0028 (4 pgs)	0
Warning Summary (4 pgs)	0	WP 0029 (4 pgs)	0
i–viii (8 pgs)	0	WP 0030 (4 pgs)	0
Chapter 1 title page	0	WP 0031 (6 pgs)	0
WP 0001 (4 pgs)	0	WP 0032 (4 pgs)	0
WP 0002 (6 pgs)	0	WP 0033 (4 pgs)	0
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WP 0071 (6 pgs)	0	Back Cover	0
Chapter 7 title page	0		
WP 0072 (2 pgs)	0		

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TECHNICAL MANUAL

OPERATOR AND FIELD MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) FOR

DUMP TRUCK BODY

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(NSN 3805-01-028-4389) (EIC EZZ)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. If you find any errors, or if you would like to recommend any improvements to the procedures in this publication, please let us know. The preferred method is to submit your DA Form 2028 (Recommended Changes to Publications and Blank Forms) through the Internet on the TACOM Unique Logistics Support Applications (TULSA) Web site. The Internet address is https://tulsa.tacom.army.mil. Access to all applications requires CAC authentication, and you must complete the Access Request form the first time you use it. The DA Form 2028 is located under the TULSA Applications on the left-hand navigation bar. Fill out the form and click on SUBMIT. Using this form on the TULSA Web site will enable us to respond more quickly to your comments and to better manage the DA Form 2028 program. You may also mail, e-mail, or fax your comments or DA Form 2028 directly to the U.S. Army TACOM Life Cycle Management Command. The postal mail address is U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LCL-MPP/ TECH PUBS, MS 727, 6501 E. 11 Mile Road, Warren, MI 48397-5000. The e-mail address is tacomlcmc.daform2028@us.army.mil. The fax number is DSN 786-1856 or Commercial (586) 282-1856. A reply will be furnished to you.

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HOW TO USE THIS MANUAL

ABOUT YOUR MANUAL

Equipment operators shall familiarize themselves with the format and use of this TM prior to operating equipment or performing routine maintenance. Learning how to use this manual will enable personnel to quickly locate information, gain proper knowledge of the equipment, and shorten the time necessary to complete the required procedure.

Features of this TM are:

Work Package Format – This TM is organized in work package (WP) format. Each WP is an individual, stand alone unit of information identified by a four-digit sequence number. WPs are positioned within the TM in sequential order (i.e. 0001, 0002, 0003, etc.), and each WP is page numbered consecutively after the sequence number at the bottom of each page (i.e. 0001-1, 0001-2, 0001-3, etc.). A WP may contain as many as 30 pages.

Text Design – A Table of Contents (TOC) is located in the front matter section of the TM. WP titles and sequence numbers are listed in the TOC in sequential order. WPs are organized into chapters based on subject and chapters listed in the TOC. Chapter title pages are positioned sequentially within the manual and each chapter title page contains an index of the WPs in that chapter only. In addition to the TOC and chapter title pages, a separate subject index is located in the rear matter section of the TM. The subject index is organized in alphabetical order with WP sequence and page numbers provided.

Use of Text and Illustrations – Task steps and illustrations are located side-by-side on facing two-page modules. Part nomenclature is identified by text callout numbers that correspond to illustration callout numbers. Illustrations are presented with exploded views, cutaway views, and individual callouts numbered sequentially, starting at the 11 o'clock position and continuing clockwise around each illustration. Tables and figures are numbered sequentially within each WP. Abbreviations and acronyms are spelled out within the text the first time they appear in the manual only. A list of all abbreviations and acronyms used in this TM is provided in General Information, WP 0001.

HOW TO USE THIS MANUAL

The format of this manual is designed to make accessing information quick and easy. The following example is intended as a guide and should be reviewed and put to memory before attempting to use this manual. If you have any questions after reviewing the following example, ask your supervisor.

PROBLEM: While operating the Dump Truck Body you observe that the dump bed will not rise when the T-handle lever is moved to the up position on the hydraulic control lever.

SOLUTION: Find information on the hydraulic control lever in the manual, review the operating procedures, and if necessary, perform the appropriate troubleshooting tasks to solve the problem.

- 1. Refer to the TOC to determine what chapter and WP contains information on operation of the hydraulic control lever. If there is not an obvious WP title that indicates information on operation of the levers, you may locate the information more quickly using the subject index. After reviewing the TOC and/or subject index, you determine that Chapter 2, Operating Instructions, WP 0005, and Chapter 3, Troubleshooting Procedures, WP 0015, contain the information you desire.
- 2. Go to WP 0005 and review the operating procedures pertaining to operating the lever. Go to WP 0014 and look through the list of malfunctions in the Operator Troubleshooting Index until you identify the malfunction that most accurately fits the problem.
- 3. Go to WP 0015, Symptom Dump body does not rise when control lever is placed in up position, and follow the steps listed. As you perform the troubleshooting procedure you discover the linkage is loose. Since disassembly of the hydraulic control lever assembly is not authorized at the operators level, notify Field Maintenance as instructed.
- 4. Maintenance will refer to the TOC or subject index for maintenance filed troubleshooting and maintenance procedures. In this example, go to Chapter 5, WP 0038 and/or WP 0039, and verify the lever is at fault as determined at operator level. Using the TOC or subject index, find the maintenance task for the hydraulic control valve. In this example, go to Chapter 4, WP 0038. Review the initial setup, read the entire procedure, then perform the task steps in the order written, making sure you follow all warnings, cautions, and notes. As you disassemble and inspect the hydraulic control valve you discover and remove a damaged lever in the hydraulic control valve. The obvious cause of the problem. You must complete the task, test and verify the dump truck body operates, and return it to service.

CHAPTER 1

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION

FOR

M917 DUMP TRUCK BODY

FIELD MAINTENANCE GENERAL INFORMATION

SCOPE

This technical manual (TM) is used to support the M917 Dump Truck Body and contains Operator and Field Maintenance instructions including Repair Parts and Special Tools List (RPSTL) for the operation, maintenance, and servicing of the M917 Dump Truck Body. Operating instructions include safety requirements, description of equipment, use of controls, and operation under usual and unusual conditions. Servicing instructions include operator and field level Preventive Maintenance Checks and Services (PMCS), lubrication, maintenance procedures, and troubleshooting as allocated by the Maintenance Allocation Chart (MAC). Replacement of components is performed at field level. Parts information is provided for all end items.

Type of Manual—Operator and Field Maintenance including Repair Parts and Special Tools List (RPSTL).

Model Number and Equipment Name—M917 Dump Truck Body mounted on M917 20 Ton, 8X6 vehicle chassis.

Purpose of Equipment—M917 Dump Truck Body is capable of hauling, dumping, or spreading heavy loads of hot asphalt, aggregate, dirt, and similar materials.

MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by (as applicable) DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual; DA PAM 738-751, Functional Users Manual for The Army Maintenance Management Systems - Aviation (TAMMS-A); or AR 700-138, Army Logistics Readiness and Sustainability.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your dump truck 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.

HAND RECEIPT

This manual has a companion document with a TM number followed by "-HR" (which stands for Hand Receipt). TM 5-3805-274-10-HR consists of preprinted hand receipts that list end item related equipment (i.e., COEI, BII, and AAL) that must be accounted for. As an aid to property accountability, additional HR manuals may be requisitioned through normal publication channels.

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 U.S. 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.

<u>PITTING</u>: 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.

OZONE DEPLETING SUBSTANCES (ODS)

The use of ODS for new acquisitions has been curtailed by Executive Order 12856, 3 August 1993, other relevant public laws, and Department of Defense (DOD) and Army Policy.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Procedures for destruction of Army materiel to prevent enemy use can be found in TM 750-244-3, Procedures for Destruction of Equipment to Prevent Enemy Use.

PREPARATION FOR STORAGE OR SHIPMENT

Storage and shipment instructions are located in TM 743-200-1, Shipment and Limited Storage, and TM 746-10, Marking, Packaging, and Shipment of Supplies and Equipment: General Packaging Instructions for Field Use. Refer to TM 9-2320-273-10.

NOMENCLATURE CROSS REFERENCE LIST

The following is a list of official nomenclature used in this manual and the corresponding unofficial nomenclature (common names or jargon terms) used in the field.

OFFICIAL TM NOMENCLATURE

UNOFFICIAL NOMENCLATURE

Liquid indicator, cock plug Sight glass
Support strut Safety strut

LIST OF ABBREVIATIONS/ACRONYMS

Abbreviations and acronyms appearing in this manual are defined in the paragraph from where they first appear, after which only the abbreviation or acronym is used. The following is a quick-reference list of all abbreviations and acronyms and their corresponding word or compound term used in this manual.

@ - ato - Degrees

- - Minus, Negative

% - Percent + - Plus, Positive

°C - Degrees Celsius (e.g. 0 – ° C) °F - Fahrenheit (e.g. 32 – ° F) AAL - Additional Authorization List

AR - Army Regulation BII - Basic Issue Item

CAGEC - Commercial and Government Entity Code

CBRN - Chemical, Biological, Radiological, and

Nuclear

cm - Centimeter

COEI - Components of End Item

CPC - Corrosion Prevention and Control

CTA - Common Table of Allowance

cu-yd - Cubic Yards

DA - Department of the Army

DA-PAM - Department of the Army-Pamphlet

DD - Department of Defense (form)

DIA - Diameter

DOD - Department of Defense

EIR - Equipment Improvement Recommendation

etc. - Et cetera
F - Fahrenheit
FAX - Facsimile
FM - Field Manual
ft - Foot, Feet

GAA - Grease, Artillery and Automotive

gal. - Gallon(s)

gpm - Gallons Per Minute HR - Hand Receipt

ID - Identification

in. - Inch

kg - Kilogram kPa - Kilopascal

L - Liter(s)

lb - Pound(s)

lb-ft - Pound-Feet lb-in. - Pound-Inch

m - Meter

MAC - Maintenance Allocation Chart

N•m - Newton-Meter N/A - Not Applicable

NSN - National Stock Number ODS - Ozone Depleting Substances

OEA - Oil Engine Arctic

oz - Ounce

PAM - Pamphlet

PMCS - Preventive Maintenance Checks and Services

psi - Pounds Per Square Inch PTO - Power Take Off

qt - quart qty - quantity

rpm - Revolutions Per Minute

SAE - Society of Automotive Engineers

SF - Standard Form

TAMMS - The Army Maintenance Management

System

TM - Technical Manual TOC - Table of Contents

TULSA - TACOM Unique Logistics Support

Applications
U/I - Unit of Issue

UOC - Usable On Code

UV - Ultraviolet WP - Work Package

SAFETY, CARE, AND HANDLING

Observe all warnings, cautions, and notes prior to operating and servicing equipment. If uncertain how to perform any maintenance procedure, ask your supervisor for assistance.

ARMY PETROLEUM, OIL, AND LUBRICANTS (POL)

Proper disposal of hazardous waste material is vital to protecting the environment and providing a safe work environment. Materials such as batteries, oils, and antifreeze must be disposed of in a safe and efficient manner.

The following references are provided as a means to ensure that proper disposal methods are followed:

Waste Disposal Instructions (MEIS/MIDI CD ROM)

National Environmental Policy Act of 1969 (NEPA)

Clean Air Act (CAA)

Resource Conservation and Recovery Act (RCRA)

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Emergency Planning and Community Right to Know Act (EPCRA)

Toxic Substances Control Act (TSCA)

Occupational Safety and Health Act (OSHA)

The disposal of Army Petroleum, Oil, and Lubricants (POL) products are affected by some of the above regulations. State regulations also may apply to POL. If you are unsure which legislation affects you, contact state and local agencies for regulations regarding proper disposal of Army POL.

END OF WORK PACKAGE

OPERATOR MAINTENANCE EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

The M917, Dump Truck, 20-Ton, 8X6 provides the capability of hauling, dumping, or spreading heavy loads of hot asphalt, aggregate, dirt, and similar materials. The M917 vehicle chassis has off-road capabilities providing a wide variety of terrain in which the dump truck can operate. The dump truck contains a sealed hydraulic system for raising and lowering the dump bed. The hydraulic system is powered by the vehicle chassis PTO unit. The tailgate can be adjusted for dumping the load or for controlled spreading while the vehicle is moving.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

Figure 1 shows the location of major dump truck body components you will need to become familiar with to operate the M917 dump truck.

GUIDE ROD

This steel rod, bolted to the cab protector, provides the operator a visual indication of when the bed is down.

DUMP BED

This is a rectangular shaped steel bed for hauling hot asphalt, aggregate, or various other materials. It incorporates a cab protector as a structurally integral component. Its purpose is to protect the cab. A dog house is provided in the front of the bed in which the hoist cylinder is mounted.

TARPAULIN HOOKS

There are 14 hooks attached to the dump body for attaching the tarpaulin, five on each side, two in front, and two in the back.

TAILGATE

This is a double-acting tailgate that is hinged at the top and bottom. For normal operation, the tailgate is hinged at the top and opens outward at the bottom. A locking mechanism, operated by the tailgate control lever, is provided to lock the tailgate in the closed position. When the control lever is up, two jaws, one on each side of the tailgate, clamp over the large pins or rods at the bottom of the tailgate. By removing the top pins and lowering the tailgate from the top to a level position and securing with the adjustment chain, extra long materials can be hauled.

ADJUSTABLE CHAIN

Allows adjusting the maximum swing travel of the tailgate for spreading. This is accomplished by shortening or lengthening the linkage of the chain.

SAFETY STRUT

When the bed is raised for purposes of inspection or other maintenance, the safety strut should be raised as a safety precaution. The safety strut is hinged at the back and when raised, forms a cradle with the cross member braced across the bottom of the bed. When not in use, it rests between the chassis frame rails.

HYDRAULIC CONTROL VALVE

This is a single-spool valve with the control piston mechanically linked to the hydraulic control lever in the cab. It supplies hydraulic pressure to raise and lower the dump bed.

HOIST CYLINDER

This is a three stage telescoping cylinder that, under hydraulic pressure, raises the dump bed. The cylinder piston is attached to the dump bed inside the dog house and the cylinder base is attached to the dump body subframe. In the lowering cycle, pressure is relieved through the pilot valve which allows the cylinder to compress under the weight of the dump bed.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - CONTINUED

HYDRAULIC RESERVOIR

The hydraulic reservoir is a 20-gallon, all steel tank mounted between the dump body subframe rails directly behind the cab and in front of the hoist cylinder. The reservoir has top and bottom sight glasses for determining fluid level. The top sight glass can be viewed from the driver side without raising the dump bed.

TARPAULIN

The tarpaulin contains grommets for hooking to the front, sides, and rear of the dump bed. Rubber tie straps are provided for fastening over the tarpaulin hooks on the sides and rear. The tarpaulin is stowed in a stowage box located between the cab and dump body. The stowage box is tubular with an access door on the driver side of the truck.

HYDRAULIC CONTROL LEVER

This is a floor-mounted unit that is mechanically linked to the hydraulic control valve. By squeezing the T-handle control head, the lever can be shifted to the UP position to raise the dump bed, or to the DOWN position to lower the dump bed. Release T-handle and place lever in N (neutral) position when you wish to stop the dump bed.

FILTER AND SERVICE INDICATION GAUGE

The filter collects contaminants in the hydraulic system. When the filter is dirty it restricts oil flow and there is a buildup in pressure at the filter. The service indication gauge registers this pressure. When the gauge needle is in the red, the need for an oil filter change is indicated.

TAILGATE CONTROL LEVER

This control is a direct mechanical link to the tailgate locking mechanism. A safety loop and chain (attached to the dump body) are provided as a safety feature. When the control lever is in the full UP position, place the loop over the control to prevent accidental releasing of tailgate. To release the tailgate for dumping, remove the safety loop and pull the control lever forward and down. After dumping and lowering the bed, push the control lever back and pull up to lock the tailgate closed. If the tailgate is hanging open, the locking mechanism will not engage. Ensure tailgate locking jaws have latched over rod at the bottom of the tailgate. After locking tailgate, slip safety loop over the control lever.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - CONTINUED

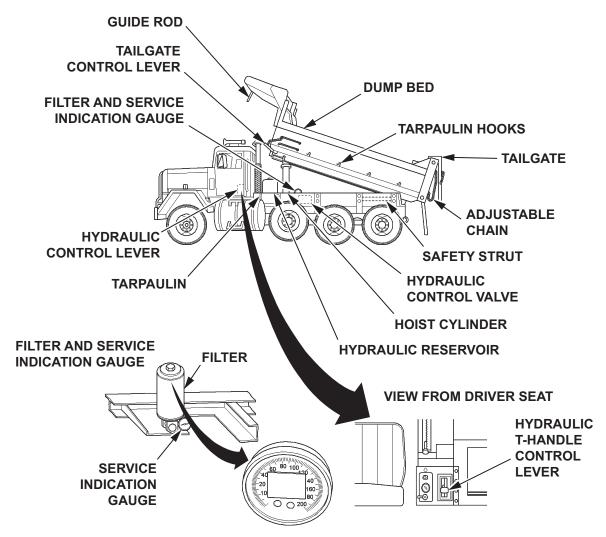


Figure 1. Major Components of Dump Body.

CHASSIS COMPONENTS

You must become familiar with the truck chassis components. Refer to TM 9-2320-273-10.

EQUIPMENT DATA

This list is pertinent data on dump body capacities, weights, and dimensions you may need to operate the equipment.

CAPACITIES

Dump Bed Struck (water level) Heaped (excluding cab protector) Heaped (with 12 in. high side boards) Hydraulic reservoir Hydraulic system (including reservoir)	
WEIGHTS (Including Chassis) Empty Loaded	
DIMENSIONS (Including Chassis) Height (empty, over cab protector) Width (outside) Length Loading Bucket Clearances (ground to top of side) Hopper Loading Clearances (drive through)	101 in. (2.56 m)

INSTRUCTION AND DATA PLATES

Figure 2 shows the dump body data and instruction plates.

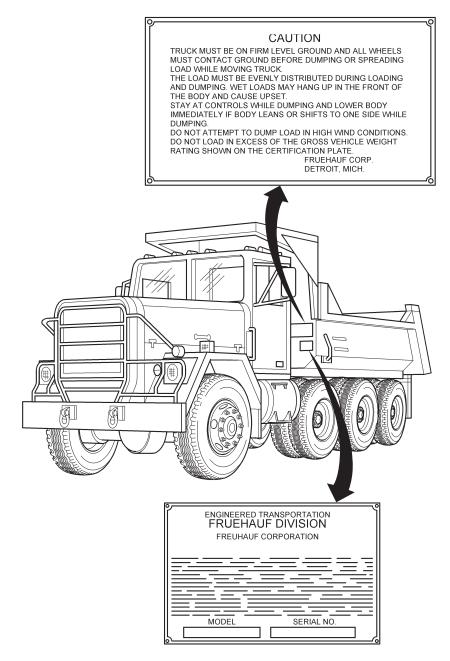


Figure 2. Instructions and Data Plates.

END OF WORK PACKAGE

OPERATOR MAINTENANCE THEORY OF OPERATION

GENERAL

This work package describes components of the M917 Dump Truck and is provided to give the operator and maintenance technician a basic knowledge of the equipment prior to its use. A description of component is provided below.

M917 DUMP TRUCK BODY

The M917 Dump Truck Body consists of a steel dump body designed for transporting and dumping hot asphalt, aggregate, or similar materials.

M917 DUMP TRUCK HYDRAULIC SYSTEM

The M917 Dump Truck has a sealed closed-loop hydraulic system for lifting and lowering the dump bed. The hydraulic system operates on pressure supplied by a hydraulic gear-driven pump mounted directly to the vehicle PTO. The dump bed has a double-acting tailgate that hinges at the top and may be adjusted to regulate the rate at which material is dumped when the bed is raised. A tarpaulin is provided to cover the bed while in transit. The following paragraphs describe each system's function and identify major components within the system.

DUMP BED

The dump bed is constructed of 8 gauge steel without intermediate crossmembers or vertical stiffeners. The floor is of ¼-inch HTLA steel. The dump bed tailgate is slanted and pin hinged at the top with locking jaw/hinge mechanism at the bottom. The locking mechanism is mechanically linked to a control lever mounted on the side of the dump bed, near the driver door of the cab. The control lever, when pulled forward and down, releases two jaws that are locked over large pins at the bottom of the tailgate. This allows the tailgate to swing out at the bottom when the dump bed is raised. Raising the control lever locks the jaws over the large pin and prevents the tailgate from opening. With the control lever locked, the top hinge pins may be removed and the tailgate lowered to a level determined by the placement of the adjustment chain. This allows the operate to haul items too long for the bed, such as long curb forms, etc. A chain threaded through bracket-type eyelets across the tailgate may be adjusted in length to regulate the maximum opening of the tailgate. A dog house, inside the dump bed at the front, houses the top of the hydraulic cylinder and provides an attaching point to the dump bed.

HYDRAULIC SYSTEM

The hydraulic system consists of a pump, hoist cylinder, reservoir, filter, pilot valve, control valve, and mechanically linked control lever located in the cab. A simplified functional diagram of the system is shown in Figure 1.

- 1. **Hydraulic Pump.** The gear-driven pump is mounted directly to the vehicle PTO and supplies the system with working pressure at 2500 psi (17237 kPa) maximum (with approximately 1200 rpm input speed from PTO). There are two hydraulic ports at the opposite end of the pump from the gear spline. One port is connected to the bottom of the hydraulic reservoir for oil supply to the pump. The other port is connected to the control valve and supplies the pressure used to raise and lower the dump bed.
- 2. **Control Valve.** The control valve is a single spool type mounted on the right dump body subframe rail about even with the forward-rear driving axle. The control spool is mechanically linked to the control lever located in the cab. When the lever is operated, a rod connected to the control valve shifts the control spool to another position. When the control lever in the cab is placed in the UP position, the control valve routes hydraulic pressure to the hoist cylinder through the pilot valve. When the control lever is placed in the DOWN position, the control valve provides a path for relief pressure from the pilot valve back to the reservoir. The control valve contains a relief valve to protect the system from excess pressure. The relief valve is set at 2000 psi (13790 kPa).
- 3. **Pilot Valve.** The pilot valve controls the flow rate of hydraulic fluid going to and coming from the hoist cylinder. Flow rate of relief pressure can be adjusted.
- 4. **Hoist Cylinder.** The hoist cylinder is a three stage telescoping cylinder that extends about 130 in. It has a pressure relief port at the top (end of smallest cylinder) that can be opened by hand and is used to bleed air out of the system. The bottom of the hoist cylinder is attached to cross members located between the dump body subframe rails. The top of the hoist cylinder is attached to the dump bed inside the dog house near the top edge of the dump bed. Both attaching points are hinge pin arrangements so the hoist cylinder can pivot as it is extended or retracted.
- 5. **Filter.** The system includes a filter located on the left dump body subframe rail. A 10 micron paper element filters the hydraulic fluid before it reaches the reservoir (in the return pressure line from the control valve). The filter has a gauge to indicate when the filter must be replaced.
- 6. **Reservoir.** The reservoir is an all steel container with a capacity of 20 gal. (75.7 L). Ports are provided in the bottom of the reservoir for connecting a line to the hydraulic pump and connecting a return line from the filter. The reservoir is mounted between the dump body subframe rails directly behind the cab. The fill cap is also an air filter and breather for the reservoir. The breather for the reservoir must be kept clean for proper hydraulic fluid circulation. Two sight glass bubbles are mounted on the side of the reservoir for viewing fluid level.
- 7. **Electrical System.** The dump body has a marker lamp on each side, mounted at the top of the tailgate support frame and one on each side of the tailgate on the back. It also has three marker lamps mounted on a panel in the rear of the truck on the vehicle frame just below the tailgate. The electrical wiring for the upper marker lamps is routed through the tailgate frame structure. All markers are connected to the truck left rear tail/stop light.

HYDRAULIC SYSTEM - CONTINUED

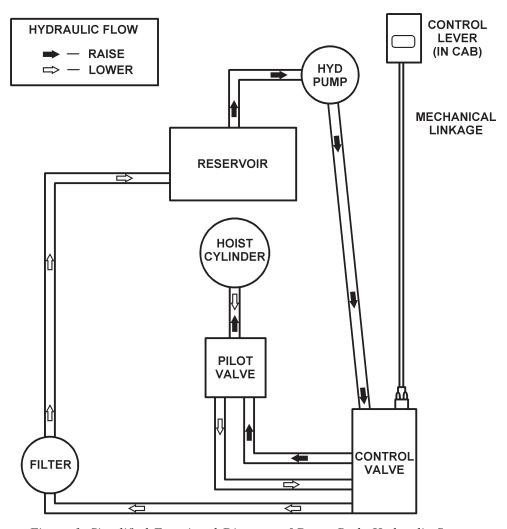


Figure 1. Simplified Functional Diagram of Dump Body Hydraulic System.

TABULATED DATA Dump Body Dimension Bed width (inside) 88.50 in. (2.25 m) Bed width (outside) 95.75 in. (2.43 m) Side height (inside) 36 in. (0.91 m) Tailgate height (inside) 51 in. (1.29 m) Weight **Capacity Dump Bed Electrical System** Clearance lamp type Low-profile, flush mounted with heavy duty fleet service bulb **Hydraulic System Hoist System** Dump bed hoist angle 50 degrees **Pump** Type Gear, direct mount Reservoir Manufacturer Fruehauf Corporation Construction Rectangular, all steel **Filter** Manufacturer Gresen Manufacturing Co. Collapse burst pressure 80 psi collapse, 150 psi operating Filtration ratio 2.3 @ 1 micron **Control Valve** Manufacturer Gresen Manufacturing Co. Normal rating 40 gpm @ 2500 psi Relief valve Integral, 2000 psi setting **Hoist Cylinder** Manufacturer Hyco Inc.

TABULATED DATA - CONTINUED

	Model	
	Type	3 stage, telescopic
	Stroke	
	Diameter (base cylinder)	
Pilot	Valve	
	Manufacturer	Fluid Control, Inc.
	Model	1LKXP 4202-003
	Relief Cartridge	1 L 10-F-25-S
Hydr	aulic Lines	
	Type	High pressure hose with reusable fittings

END OF WORK PACKAGE

CHAPTER 2

OPERATOR INSTRUCTIONS FOR

M917 DUMP TRUCK BODY

OPERATOR MAINTENANCE DESCRIPTION AND USE OF OPERATOR CONTROLS AND INDICATORS

INTRODUCTION

NOTE

This manual contains instructions for the dump truck body operation only. Refer to TM 9-2320-273-10 for chassis operation instructions.

WP 0005–0011 cover operation under usual conditions, how to operate, load, transport cargo, and unload the dump truck body. WP 0012–0013 cover operation under unusual conditions, windy weather, and cold, rainy, or snow weather. The work packages identify controls and tell you how to use them.

OPERATOR MAINTENANCE PREPARING TO LOAD DUMP TRUCK

INITIAL SETUP: NOT APPLICABLE

PREPARING TO LOAD

- 1. Perform Before (B) PMCS, refer to WP 0019. Notify Field Maintenance of any problems.
- 2. Check tailgate control and locking mechanism to ensure it is securely fastened.
 - a. Ensure control lever is in full up position. Chain safety loop must be in place, as shown in Figure 1.

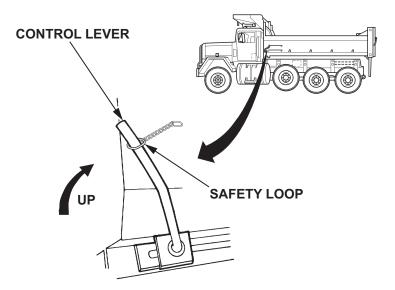


Figure 1. Control Lever and Safety Loop.

b. Ensure jaws of tailgate locking mechanism are closed securely over bottom pins of tailgate as shown in Figure 2.

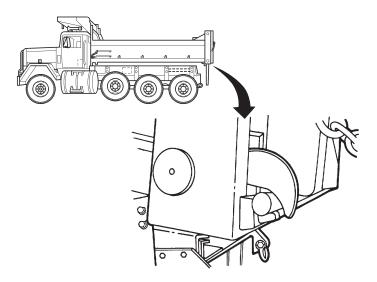


Figure 2. Bottom Latch of Tailgate.

PREPARING TO LOAD - CONTINUED

c. Ensure cotter pins are installed in tailgate top latch as shown in Figure 3.

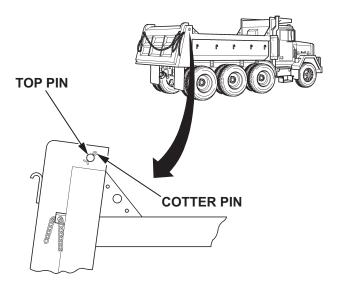


Figure 3. Tailgate Top Latch.

- 3. Ensure door of tarpaulin box is closed and latched as shown in Figure 4.
- 4. Ensure dump bed has been cleaned since last use. Remove any material or debris. If necessary, use hose with water pressure to wash out small deposits of material.

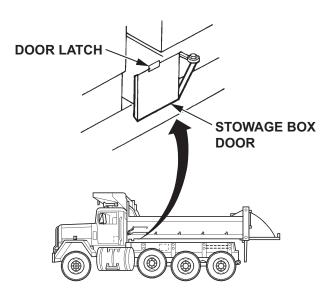


Figure 4. Tarpaulin Box Door Latch.

PREPARING TO LOAD - CONTINUED

WARNING

Never operate hydraulic control lever (located in the truck cab) without ensuring all personnel are clear of the dump body. Failure to comply may result in death or injury or to personnel. Seek medical attention in the event of an injury.

Ensure truck has sufficient overhead clearance for all loading, unloading, and there is sufficient overhead clearance for raising and lowering of the dump bed. Failure to comply may result in death or injury to personnel and damage to equipment. Seek medical attention in the event of an injury.

CAUTION

PTO output speed with respect to engine speed is 47% faster in gears R2, F3, 4, 7, 8, 11, 12, 1, and 16. Do not operate PTO in gears other then R1, N, 1, or 2 over 1700 rpm. Failure to comply may cause overheating and pump cavitation.

- 5. Ensure dump bed is fully lowered so its entire length rests on chassis frame. If it needs to be lowered, start the truck engine, engage PTO (TM 9-2320-273-10) and perform the following steps:
 - a. Clear all personnel from around dump body.
 - b. Squeeze hydraulic control lever head together as shown in Figure 5.
 - c. Move shift lever toward down position.
 - d. After dump body is fully lowered, release control lever head and place the lever in N (neutral) position.
- 6. If dump truck is to be loaded with a hopper, ensure truck is positioned so hopper is directly over approximate center of dump bed. When pulling under hopper, check truck clearance. If truck is to be loaded using front-end loader, position truck on firm level ground location convenient for loading operation. Position truck for side loading.

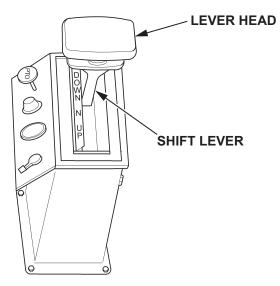


Figure 5. Hydraulic Control Lever.

END OF TASK
END OF WORK PACKAGE

OPERATOR MAINTENANCE LOADING DUMP TRUCK

INITIAL SETUP: NOT APPLICABLE

LOADING DUMP TRUCK

WARNING

Ensure area is clear of non-essential personnel while loading and unloading dump truck. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

While loading dump truck, ensure vehicle parking brake is set (TM 9-2320-273-10) otherwise the truck may roll or shift causing injury to personnel or damage to equipment. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

- 1. Set vehicle parking brake (TM 9-2320-273-10).
- 2. If tarpaulin is installed, remove it by disconnecting from tarpaulin tie strap hooks on sides, front, and back of dump bed as shown in Figure 1.

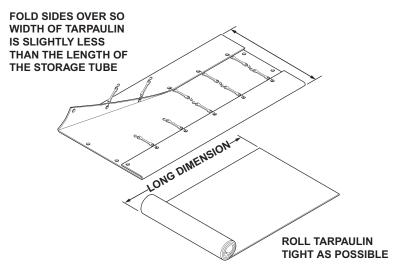


Figure 1. Tarpaulin Removal and Installation.

LOADING DUMP TRUCK - CONTINUED

CAUTION

Load dump body evenly. Do not heap material so high that it falls over side panels of dump bed.

- 3. Ensure dump body is loaded evenly across bed.
- 4. Install tarpaulin, refer to Figure 3.
 - a. To gain access to tarpaulin, lift latch located at top of stowage box door cover as shown in Figure 2.
 - b. Pull tarpaulin from stowage box.
 - c. Lay rolled-up tarpaulin across front of dump bed.
 - d. Hook tarpaulin grommets over tie hooks located on dump bed, as shown in Figure 3.
 - e. Roll tarpaulin across load and hook tarpaulin tie straps over 12 tarpaulin hooks on sides and tailgate as shown in Figure 3.

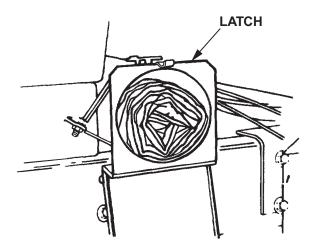


Figure 2. Tarpaulin Stowage Box Door Cover.

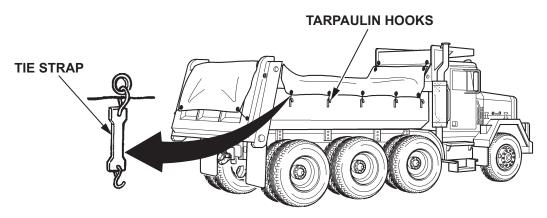


Figure 3. Tarpaulin Grommets.

END OF TASK

OPERATOR MAINTENANCE TRANSPORTING DUMP TRUCK

INITIAL SETUP: NOT APPLICABLE

TRANSPORTING

- 1. Avoid sudden stops, turns, or accelerations. They may cause the load to shift.
- 2. During off-road operation, avoid terrain with side slope. Heavy loads are more apt to sink in soft soil than if you were empty. Should you become stuck, refer to appropriate procedures in TM 9-2320-273-10 for the vehicle chassis.

END OF TASK

OPERATOR MAINTENANCE DUMPING DUMP TRUCK

INITIAL SETUP: NOT APPLICABLE

DUMPING

WARNING

Ensure truck has sufficient overhead clearance for all loading, unloading, and there is sufficient overhead clearance for raising and lowering of the dump bed. Failure to comply may result in death or injury to personnel and damage to equipment. Seek medical attention in the event of an injury.

Do not attempt to raise dump bed in high wind. Ensure truck is on firm ground. Stay at the controls so you can lower dump bed immediately if it leans or shifts during dumping. Ensure all personnel are clear before you unlock the tailgate or raise the dump bed. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

NOTE

Perform During (D) PMCS while following the dumping procedures.

- 1. Before dumping, park truck and apply parking brake. Walk around truck and ensure:
 - a. Wheels are on firm ground.
 - b. Area behind tailgate is clear.
 - c. Tailgate chains are fully loosened. (Instructions for adjustment is given in control spreading.)
 - d. There is adequate overhead clearance for raising the dump bed.
- 2. Remove safety loop from tailgate control lever as shown in Figure 1.

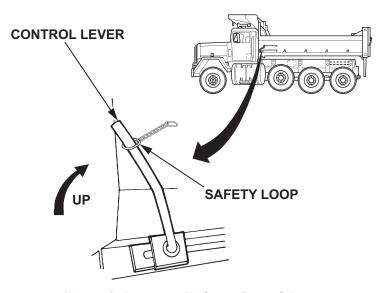


Figure 1. Lowering Tailgate Control Lever.

3. Pull lever to "tailgate open" position as shown in Figure 2. This releases jaws holding bottom pins of tailgate as shown in Figure 3.

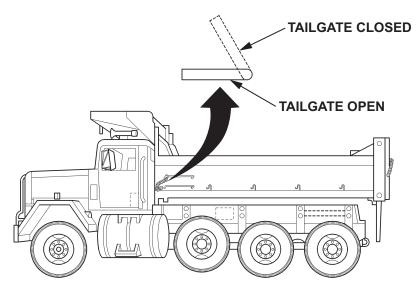


Figure 2. Bottom Latch of Tailgate in Open Position.

- 4. Refer to vehicle Operator Manual (TM 9-2320-273-10) for instruction on how to accomplish the following:
 - a. Start vehicle engine.
 - b. Set hand throttle so engine maintains sufficient rpm.
 - c. Engage PTO.
 - d. If dump body leans or shifts check for:
 Flat tires or low air pressure
 Weak or broken spring leaves
 Wheel sinking unevenly
 High or gusty wind
 - e. Find and correct the problem before you finish dumping. Do not attempt to dump in high winds.

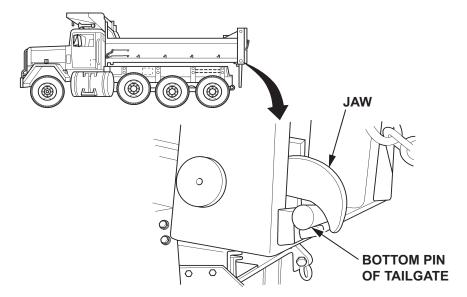


Figure 3. Bottom Pin Jaws in Open Position.

CAUTION

Ensure tailgate latches are fully open before raising bed.

NOTE

The bed will stop automatically when cylinder is fully extended or when hydraulic control lever is in the N (neutral) position.

5. Squeeze T-handle head of hydraulic control lever as shown in Figure 4. Move lever to UP position. When bed is raised to desired range, release head and place lever in N (neutral) position.

WARNING

Do not try to loosen a sticky load by pulling forward or backward and braking abruptly. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

CAUTION

Always disengage PTO when hydraulic power to the dump body is not needed. Do not leave the dump body hoist cylinder extended for long periods of time such as in storage. Atmospheric condition can damage the machined surface of the cylinder.

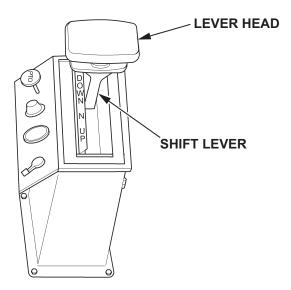


Figure 4. Hydraulic Control Lever.

- 6. If dump bed is to be held at a high angle for an extended period or if maintenance will be performed with dump bed raised, install safety strut as shown in Figure 5.
 - a. Raise dump bed to maximum height.
 - b. Lift safety strut until it is aligned with bottom of bed as shown in Figure 5.
 - c. Lower dump bed until safety strut is firmly engaged against bed cross brace.
 - d. Place T-handle control lever in N (neutral) position. Refer to Figure 4.
 - e. To lower dump bed, slightly raise dump bed to take weight off safety strut, swing safety strut into stowed position, and lower.
- 7. When dumping is finished, squeeze T-handle control head of hydraulic control lever and move lever to down position as shown in Figure 4.
- 8. When dump bed is fully lowered, release T-handle control and place lever in N (neutral) position as shown in Figure 4.
- 9. Disengage the PTO (TM 9-2320-273-10).
- 10. Lift tailgate control lever upward as far as it will go. Slide safety loop over lever as shown in Figure 1.
- 11. Check jaws on both sides of tailgate hinge. Ensure they are closed firmly over pins as shown in Figure 3.

NOTE

Perform After (A) PMCS when you finish operating the dump truck.

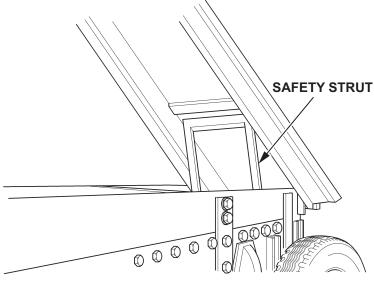


Figure 5. Safety Strut.

END OF TASK

OPERATOR MAINTENANCE CONTROLLED SPREADING

INITIAL SETUP: NOT APPLICABLE

CONTROLLED SPREADING

NOTE

Perform During (D) PMCS as you follow the controlled spreading procedures.

- 1. Position truck for spreading. Park truck and apply parking brake (TM 9-2320-273-10).
- 2. Raise bottom of mud flaps up and toward front of truck. Hook mud flaps on hooks provided on bottom edge of dump body as shown in Figure 1.

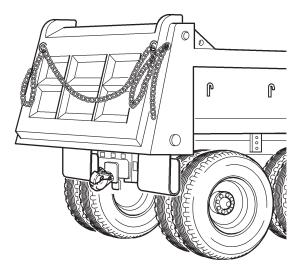


Figure 1. Mud Flaps Stowed During Dump Operation.

CONTROLLED SPREADING - CONTINUED

- 3. Adjust tailgate chain as needed to control opening. Adjust chain equally on both sides.
 - a. Lift chain from slot on upper chain latch (View A, Figure 2).
 - b. Tighten chain as necessary (View B, Figure 2).
 - c. Slide chain link into slot on lower chain latch (View C, Figure 2).
 - d. Remove chain from slot on lower chain latch and pull it tight (View D, Figure 2). Press back into slot on lower chain latch. Ensure chains hang even on both sides (View E, Figure 2).
- 4. Start engine and engage PTO (TM 9-2320-273-10).
- 5. Move T-handle control lever (Figure 4) to up position. Raise dump bed 2–3 ft, release T-handle, and place lever in N (neutral) position.

NOTE

Watch guide rod through rear view mirror to observe dump bed raised height.

- 6. Remove safety loop from tailgate control lever (Figure 3).
- 7. Pull lever to "tailgate open" position (Figure 4). This releases jaws holding bottom pins of tailgate (Figure 5). Material should spill out under tailgate.

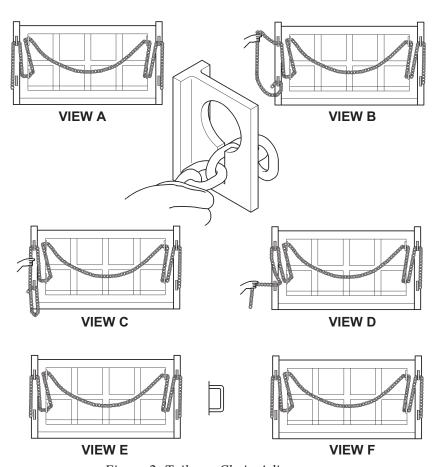


Figure 2. Tailgate Chain Adjustment.

- 8. Release parking brake.
- 9. Place transmission in first gear and drive truck forward slowly.

CONTROLLED SPREADING - CONTINUED

- 10. Have an assistant check thickness of material spread to determine if tailgate opening needs to be adjusted. If so, stop the truck, place transmission in neutral, apply parking brake, and repeat procedure given in step 3.
- 11. Maintain steady speed until all material has been spread. While moving, raise dump bed at interval by moving T-handle control lever to UP position. This will keep material flowing freely under tailgate.
- 12. When dump bed is empty, move T-handle control lever (Figure 4) to down position and lower dump bed completely.

CAUTION

Never leave dump bed raised or PTO engaged when driving to and from job locations.

- 13. Disengage PTO (TM 9-2320-273-10).
- 14. Lift tailgate control lever up as far as possible. Slide safety loop over lever, refer to Figure 3.

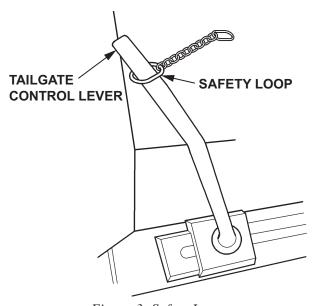


Figure 3. Safety Loop.

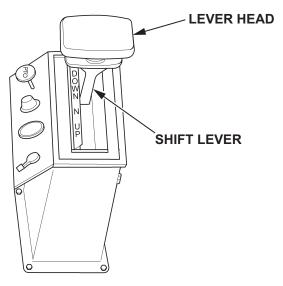


Figure 4. T-Handle Control Lever.

CONTROLLED SPREADING - CONTINUED

15. Check jaws on both sides of tailgate. Ensure they are closed firmly over pins, refer to Figure 5.

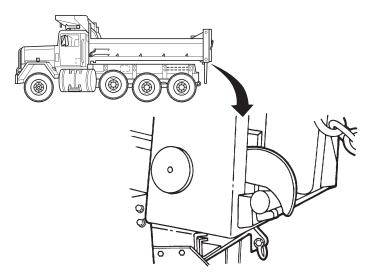


Figure 5. Locking Jaws.

END OF TASK
END OF WORK PACKAGE

OPERATOR MAINTENANCE HAULING LONG MATERIALS

INITIAL SETUP: NOT APPLICABLE

HAULING LONG MATERIALS

WARNING

Do not step on pusher axle tire when climbing in or out of the dump body. Pusher axle wheel may rotate and you may fall. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

- 1. Position truck, apply parking brakes, and refer to TM 9-2320-273-10.
- 2. Remove chains from upper and lower chain latches and lower chain guides.
 - a. Remove chain from slots on lower chain latches (View A, Figure 1).
 - b. Lift chain from slots on upper chain latches (View B, Figure 1).
 - c. Remove chain from lower guide eyes (Views C and D, Figure 1).

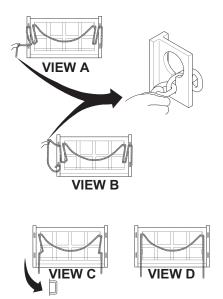


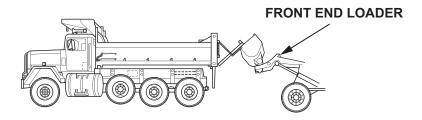
Figure 1. Preparation for Lowering Tailgate for Hauling Long Material.

HAULING LONG MATERIALS - CONTINUED

- 3. Position front end loader bucket against tailgate, refer to Figure 2.
- 4. Remove cotter pins and tap out hinge pins with hammer and punch, refer to Figure 3. Push top of tailgate out to lower front end loader to desired position.
 - a. Put adjustment chain through lower chain latches and pull tight. Slide link into slots (View B, Figure 1). Ensure chains are even on both sides.
 - b. Put adjustment chain through upper chain latches and pull tight. Slide link into slot (View A, Figure 1). Ensure chains are even on both sides.
- 5. Dump truck is now ready to be loaded.

NOTE

Perform After (A) PMCS when you finish operating the dump truck.



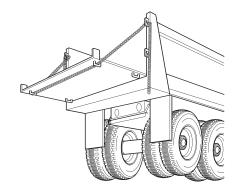


Figure 2. Lowering Tailgate for Hauling Long Material.

HAULING LONG MATERIALS - CONTINUED

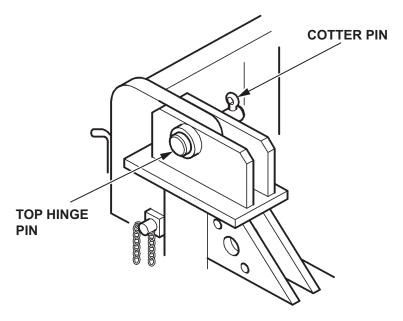


Figure 3. Tailgate Top Hinge Pins.

END OF TASK
END OF WORK PACKAGE

OPERATOR MAINTENANCE STOWING TARPAULIN

INITIAL SETUP: NOT APPLICABLE

STOWING TARPAULIN

- 1. Disconnect tarpaulin from 14 hooks on dump bed, refer to Figure 1.
- 2. Remove tie straps from tarpaulin, refer to Figure 1.

NOTE

Fold tarpaulin sides over so width of tarpaulin is slightly less than length of stowage box.

- 3. Clean and fold tarpaulin, refer to Figure 2.
- 4. Roll tarpaulin as tight as possible.

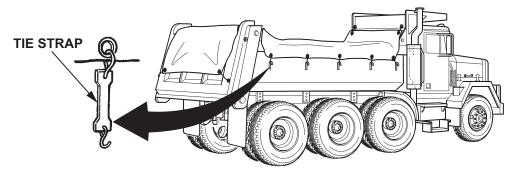


Figure 1. Disconnecting Tarpaulin from Hooks.

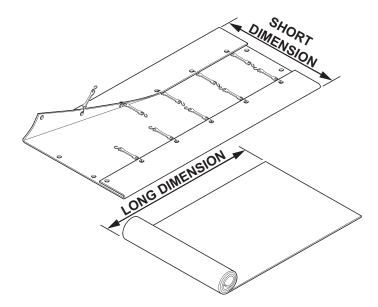


Figure 2. Folding Tarpaulin.

STOWING TARPAULIN - CONTINUED

5. Store tarpaulin in stowage box, refer to Figure 3. Push tarpaulin into stowage box from driver side of truck.

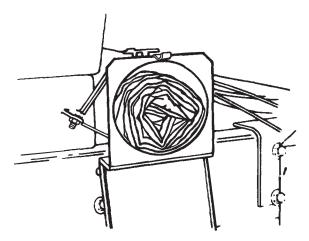


Figure 3. Storing Tarpaulin in Stowage Box.

END OF TASK

OPERATOR MAINTENANCE OPERATION IN WINDY WEATHER

INITIAL SETUP: NOT APPLICABLE

OPERATION IN WINDY WEATHER

WARNING

Do not attempt to raise dump truck bed in high wind. Ensure truck is on firm ground. Stay at the controls so you can lower dump bed immediately if it leans or shifts during dumping. Failure to comply may result in death or injury to personnel and/or damage to equipment. Seek medical attention in the event of an injury.

In moderate wind, use tarpaulin to keep material from blowing out of dump bed. Ensure tie straps are in place to prevent flapping, refer to Figure 1.

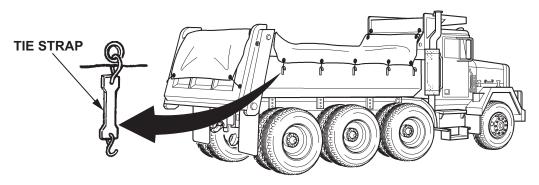


Figure 1. Tarpaulin Tie Straps.

END OF TASK

OPERATOR MAINTENANCE OPERATION IN COLD, RAINY, OR SNOWY WEATHER

INITIAL SETUP: NOT APPLICABLE

OPERATION IN RAINY OR SNOWY WEATHER

CAUTION

Do not leave tarpaulin installed on the dump truck where snow will accumulate on the tarpaulin. This will cause the tarpaulin to become stiff and unmanageable and may damage the tarpaulin.

Use tarpaulin to keep loads dry. Wet loads may stick, making dumping difficult.

OPERATION IN COLD WEATHER

NOTE

Keep in mind that oil must be circulated through the pilot valve and cylinder before dump truck can be operated.

Cold weather presents special problems because cold oil and hydraulic components should be warmed up before dump truck can be operated. This can be accomplished by performing the following steps:

- 1. Start engine and engage PTO (TM 9-2320-273-10) while engine is warming up. Idle speed should not exceed 1100–1200 rpm.
- 2. Clear all personnel from around dump body.
- 3. Squeeze hydraulic control lever head together, refer to Figure 1 and check operation of body at low engine rpm to verify reasonably normal operation.
- 4. Lower dump body, release T-handle, and place control lever in N (neutral) position.

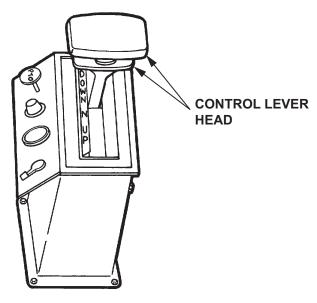


Figure 1. Control Lever Head.

END OF TASK

CHAPTER 3

TROUBLESHOOTING MASTER INDEX FOR

M917 DUMP TRUCK BODY

FIELD MAINTENANCE TROUBLESHOOTING MASTER INDEX

INTRODUCTION

This work package contains troubleshooting information for locating and correcting most operating troubles which may develop during use of the M917 Dump Truck Body. Each malfunction for an individual component, unit, or system is followed by a list of tests or inspections which will help determine corrective actions to take. Perform the test/inspections and corrective actions in the order listed.

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

The table lists the common malfunction you may find during the operation or maintenance of the M917 dump truck body or its components. Perform the tests/inspections and corrective actions in the order listed.

Fault No./Symptom Description Title	Work Package/Page No.
Some marker lights work, others do not light	WP 0015-2
No marker lights work	WP 0015-2
Dump body raises and lowers jerkily	WP 0015-2
Dump body does not rise when control lever is placed in UP position	WP 0015-2
Dump body response to controls is sluggish	WP 0015-3
Dump body leans or shifts when raised	WP 0015-3
Control lever will not release tailgate locking mechanism	WP 0015-3
Dump bed rattles and side or front panels give under load	WP 0016-2
Mud flap(s) are missing or not hanging straight	WP 0016-2
Cab protector rattles	WP 0016-2
Tailgate will not open or close completely and binds during operation	WP 0016-2
Tailgate lock mechanism does not engage or release	WP 0016-3
Hydraulic system gradually operates slower, especially under load conditions	WP 0016-3
Hydraulic pump is noisy and makes grinding sounds	WP 0016-3
System suddenly loses pressure	WP 0016-4
Hoist cylinder leaks	WP 0016-4
Reservoir leaks	WP 0016-4

CHAPTER 4

TROUBLESHOOTING PROCEDURES FOR

M917 DUMP TRUCK BODY

OPERATOR MAINTENANCE TROUBLESHOOTING PROCEDURES

INITIAL SETUP:

References

WP 0019

WP 0049

TM 9-2320-273-10

ELECTRICAL SYSTEM

SYMPTOM

Some marker lights work, others do not light.

MALFUNCTION

Check for loose wire connections at the inoperative lights. Remove lens/bulb and ensure there is a good plug connection.

CORRECTIVE ACTION

- 1. Notify Field Maintenance if connection is poor.
- 2. Notify Field Maintenance if plug connection appears good.

END OF TASK

SYMPTOM

No marker lights work.

MALFUNCTION

Ensure headlight switch on the cab instrument panel is pulled out. Check for bad wire connections at the left rear taillight.

CORRECTIVE ACTION

- 1. Pull out headlight switch.
- 2. Notify Field Maintenance if connection is poor.

END OF TASK

HYDRAULIC SYSTEM

SYMPTOM

Dump body raises and lowers jerkily.

MALFUNCTION

Check hydraulic oil lever in hydraulic reservoir, refer to WP 0019 Operator PMCS. Check oil filter service indication gauge. If steps 1 and 2 checkout ok, system probably requires bleeding.

CORRECTIVE ACTION

- 1. Add oil, as necessary.
- 2. Notify Field Maintenance if needle is in or near red area of warning decal.
- 3. Notify Field Maintenance if bleeding is required.

END OF TASK

SYMPTOM

Dump body does not rise when control lever is placed in UP position.

MALFUNCTION

Ensure PTO is engaged. Check hydraulic oil level, refer to WP 0019 Operator PMCS. Check mechanical linkage between cab controls and control valve for loose connection. Check for leaks in hydraulic components and lines.

CORRECTIVE ACTION

- 1. Engage PTO (TM 9-2320-273-10).
- 2. Add oil, if necessary.
- 3. Notify Field Maintenance if linkage is loose.
- 4. Notify Field Maintenance if leaks are evident.

END OF TASK

SYMPTOM

Dump body response to controls is sluggish.

MALFUNCTION

Check hydraulic filter service indication gauge. Check hydraulic oil level, refer to WP 0019 Operator PMCS. Check for leaks.

CORRECTIVE ACTION

- 1. Notify Field Maintenance if needle is in or near red area of warning decal.
- 2. Add oil, if necessary.
- 3. Notify Field Maintenance if class III leaks are evident.

END OF TASK

DUMP BODY

WARNING

Dump body may lean or shift during high wind. Do not attempt to dump under these conditions. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

SYMPTOM

Dump body leans or shifts when raised.

MALFUNCTION

Ensure dump truck is on level, firm ground. Check air pressure in tires. Check for broken spring on chassis. Check for wheels sinking unevenly in soft terrain. Check for load sticking on one side of dump body.

CORRECTIVE ACTION

- 1. Reposition truck if necessary.
- 2. Adjust air pressure in tires.

Front: 100 psi Rear: 90 psi Pusher Axle: 90 psi

- 3. Report problem to Field Maintenance.
- 4. Move truck so wheels will not sink.
- 5. Lower body all the way. Break up sticky load.

END OF TASK

SYMPTOM

Control lever will not release tailgate locking mechanism.

MALFUNCTION

Check for signs of dry lube points. Check for loose connections in the control lever linkage.

CORRECTIVE ACTION

- 1. Lubricate as necessary, refer to WP 0019 Operator PMCS and Lubrication WP 0049.
- 2. Notify Field Maintenance if linkage is out of alignment.

END OF TASK

FIELD MAINTENANCE FIELD TROUBLESHOOTING PROCEDURES

INITIAL SETUP:

References

DA Form 2402

DA Form 2404

DA Form 5504

DA Form 5988-E

WP 0027

WP 0030

WP 0032

WP 0033

WP 0034

WP 0035

WP 0039

WP 0040

WP 0042

WP 0045

WP 0046

WP 0047

WP 0049

INTRODUCTION

This work package contains field level troubleshooting procedures for detecting, isolating, and correcting equipment malfunctions and failures on the M917 Dump Truck Body.

Each troubleshooting procedure lists a fault symptom describing a specific problem. Under each symptom is a list of possible malfunctions in the order of probability that may be the cause of the problem. Finally, a corrective action is provided for each malfunction followed by a work package or instruction to notify your supervisor to correct the problem.

Prior to performing any troubleshooting procedure, the following recommendations must be observed.

NOTE

This manual cannot list all possible malfunctions that may occur, nor all tests or inspection and corrective actions. If the symptom for a particular problem or malfunction is not listed in this work package, notify your supervisor.

- 1. Check the Equipment Inspection and Maintenance Worksheet, DA Form 2404 or DA Form 5988-E, and Maintenance Request Form, DA Form 5504 to find out why the equipment has been dead lined. Note the operator's written description of the problem and, whenever possible, ask the operator about the problem. This can save time and effort in diagnosing the malfunction.
- 2. It is best not to assume the operator's diagnosis is correct, even if it sounds accurate. Always perform the appropriate troubleshooting procedure(s) to verify the cause of the problem. Performing a corrective action without proof of a fault wastes time and increases the maintainability of the equipment.
- 3. Use the approved Field Maintenance tasks provided in this manual and those provided in other publications.
- 4. If a problem cannot be corrected after performing all corrective actions listed for a given symptom, notify your supervisor.
- 5. Fill out and attach an Exchange Tag, DA Form 2402, for any component that will be exchanged as a core and turned in for repair or rebuilding at the Sustainment Level Maintenance.

TROUBLESHOOTING PROCEDURES

SYMPTOM

Dump bed rattles and side or front panels give under load.

MALFUNCTION

Inspect for broken weld seams.

Inspect for misaligned or damaged tailgate.

Inspect for severely dented front or side panels and reinforcement braces.

CORRECTIVE ACTION

- 1. Repair any broken welds, notify your supervisor.
- 2. Repair or replace tailgate. Refer to WP 0030.
- 3. Straighten as necessary and repair any damaged welds, notify your supervisor.

END OF TASK

SYMPTOM

Mud flap(s) are missing or not hanging straight.

MALFUNCTION

Inspect for loose or missing mounting hardware.

Inspect for damaged mud flap(s).

CORRECTIVE ACTION

- 1. Install mud flap(s) and hardware as required. Refer to WP 0027.
- 2. Replace mud flap(s). Refer to WP 0027.

END OF TASK

SYMPTOM

Cab protector rattles.

MALFUNCTION

Inspect for broken weld seams at bracing.

Inspect for damage causing misalignment of bottom plate.

CORRECTIVE ACTION

- 1. Repair any broken welds, notify your supervisor.
- 2. Straighten bracing and repair any broken welds, notify your supervisor.

END OF TASK

SYMPTOM

Tailgate does not open or close completely and binds during operation.

MALFUNCTION

Inspect for bent hinge pins.

Inspect for misalignment caused by broken welds and/or bent reinforcement braces.

CORRECTIVE ACTION

- 1. Straighten or replace hinge pins. Refer to WP 0030.
- 2. Straighten and repair welds as required, notify your supervisor.

END OF TASK

SYMPTOM

Tailgate lock mechanism does not engage or release.

MALFUNCTION

Inspect tailgate control lever, rod, and mount brackets for binding caused by bent parts or broken welds. Check pivot points of lock mechanism for misalignment. Check for tailgate damage that has resulted in misalignment.

CORRECTIVE ACTION

- 1. Straighten bent parts and repair any broken weld seams. Refer to WP 0030, WP 0039, or notify your supervisor to repair any broken weld seams.
- 2. Straighten parts. Refer to WP 0039.
- 3. Replace tailgate. Refer to WP 0030.

END OF TASK

SYMPTOM

Hydraulic system gradually operates slower, especially under load conditions.

MALFUNCTION

Check for low fluid level in reservoir.

Check all hydraulic components for leaks.

Check filter service indicator gauge for indication of dirty filter element.

Check reservoir fill cap by running system without fill cap.

Check control valve pressure.

Check hydraulic pump for excessive or erratic noise and low pressure.

CORRECTIVE ACTION

- 1. Fill reservoir. Refer to WP 0049.
- 2. Replace leaking parts. Refer to WP 0040.
- 3. Replace filter element. Refer to WP 0042.
- 4. If system speed increases, replace fill cap. Refer to WP 0047.
- 5. Adjust control. Refer to WP 0032.
- 6. Rebuild or replace hydraulic pump. Refer to WP 0033 and WP 0034.

END OF TASK

SYMPTOM

Hydraulic pump is noisy and makes grinding sounds.

MALFUNCTION

Check for low fluid in hydraulic reservoir.

Check filter service indicator gauge for 10 psi restriction or greater than reading with new filter element.

CORRECTIVE ACTION

- 1. Hydraulic reservoir. Refer to WP 0049.
- 2. Replace filter element, refer to WP 0042. Replace hydraulic pump, refer to WP 0033 if problem is not corrected.

END OF TASK

SYMPTOM

System suddenly loses pressure.

MALFUNCTION

Check system for a massive leak.

Check for missing or disconnected lines or hoses.

Check for incorrect installation of system components. Check pump for signs of abnormal operation, such as noise and over speeding.

Check control valve pressure.

CORRECTIVE ACTION

- 1. Replace leaking component. Refer to WP 0040.
- 2. Install lines or hoses correctly. Refer to WP 0040.
- 3. Install component correctly. Refer to WP 0040.
- 4. Replace hydraulic pump. Refer to WP 0033.
- 5. Replace or adjust control valve. Refer to WP 0035 or WP 0032.

END OF TASK

SYMPTOM

Hoist cylinder leaks.

MALFUNCTION

Check if leak is coming from packing nut.

Check cylinder for cracks or grooves on chrome surfaces.

CORRECTIVE ACTION

- 1. Adjust packing nut. Refer to WP 0046.
- 2. Replace hoist cylinder. Refer to WP 0045.

END OF TASK

SYMPTOM

Reservoir leaks.

MALFUNCTION

Inspect for leaks at connectors or hoses under reservoir.

Check for leaks in container structure.

CORRECTIVE ACTION

- 1. Repair hoses or connectors. Refer to WP 0040.
- 2. Replace or repair hydraulic reservoir. Refer to WP 0047.

END OF TASK

CHAPTER 5

MAINTENANCE INSTRUCTIONS FOR

M917 DUMP TRUCK BODY

FIELD MAINTENANCE SERVICE UPON RECEIPT

INITIAL SETUP:	
References	eferences - Continued
WP 0004	WP 0044
WP 0014	WP 0048
WP 0019	WP 0049
WP 0022	DA PAM 750-8
WP 0030	DD Form 361
WP 0042	TM 9-2320-273-10

SERVICE UPON RECEIPT OF MATERIEL

NOTE

The operator will assist when performing service upon receipt inspection.

This work package contains the procedures for inspecting and servicing the M917 Dump Truck Body upon receipt to ensure its readiness for service. No special tools or equipment are required to perform these procedures. Only visual inspections are required. However, if servicing required you may need a repair part. See the (RPSTL) work package or (PMCS) lubrication work package in this manual.

Upon receipt of a new, used, or reconditioned M917 Dump Truck, perform the following steps to determine if the M917 Dump Truck has been properly prepared for service.

CHECKING UNPACKED EQUIPMENT

Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on DD Form 361, Transportation Discrepancy Report.

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).

Check to see whether the equipment has been modified.

INSTALLATION INSTRUCTIONS

Perform Preventive Maintenance Checks and Services (PMCS) WP 0019 and Lubrication Instructions WP 0049 for the M917 Dump Truck Body.

Dump Body

- 1. Check dump bed and cab protector for structural damage such as broken weld seams, loose supports, large dents, etc. If this type damage exists, refer to WP 0048.
- 2. Inspect tailgate locking mechanism. Pull release lever all the way forward and down. Locking jaws should release so tailgate can swing out at the bottom. Release lever should operate freely. Ensure tailgate is closed and raise release lever to engage locking jaws. If tailgate does not operate properly, make repairs as directed in WP 0030.

Electrical System

- Check operation of marker lights. Pull out headlight switch knob on instrument panel in cab (TM 9-2320-273-10) and check that all marker lights are on. If lights are not on, refer to troubleshooting WP 0014. Individual lights can be checked for defective lamps by replacing lens and lamp assembly, refer to WP 0022.
- 2. Inspect wiring to ensure proper connection to vehicle chassis system.

Hydraulic System

- 1. Start vehicle engine and engage PTO (TM 9-2320-273-10).
- 2. Check for fluid level in reservoir upper sight glass bubble. If no fluid is shown, remove filter cap and fill until fluid is visible in top sight glass bubble. Raise dump bed to maximum height. Check for hydraulic fluid level in reservoir lower sight glass bubble. If no fluid shows, remove filter cap and fill until fluid is visible in lower sight glass bubble, refer to PMCS WP 0019 and Lubrication WP 0049. If reservoir is empty or very low, system may require bleeding before it will operate properly. Refer to WP 0044 for bleeding procedures.
- 3. Check hydraulic filter restriction gauge. With engine running and PTO engaged, set engine at 1200 rpm. Check restriction gauge. If needle is in or close to red decal on gauge face, service filter. Refer to WP 0042.
- 4. Check operation of hoist system, refer to WP 0004. If a malfunction is evident, refer to troubleshooting procedures WP 0014.
 - a. Start vehicle engine and engage PTO (TM 9-2320-273-10).
 - b. Place control lever in the UP position. Dump bed should raise steadily.
 - c. Place control lever in the N (neutral) position. Dump bed should stop in the raised position.
 - d. Place control lever in the DOWN position. Dump bed should lower steadily.
- 5. Check system for leaks.
 - a. Lubricate dump body as directed in Lubrication WP 0049.
 - b. Special Tools and Equipment. No special tools or equipment are required to perform the maintenance, inspections, or service functions allocated to Field Level Maintenance.
 - c. Repair Parts. Repair parts are listed and illustrated in the Repair Parts and Special Tools List (RPSTL) contained in this manual.

OPERATOR MAINTENANCE OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INTRODUCTION

GENERAL

PMCS is required to keep the equipment in good operating condition. Operator level PMCS is performed before, during, and after operation to ensure the equipment is fully operational and ready at all times. Failure to perform PMCS as required may result in major damage or a failure which could compromise the mission or cause injury to personnel. Operators will perform PMCS as follows:

Ensure PMCS is performed each time the M917 Dump Truck is operated.

If the equipment is being operated for the first time or has not been operated for a three month period, notify Field Maintenance to perform quarterly PMCS inspection.

If the equipment has been operated for three months or 250 hours of operation (whichever comes first), notify Field Maintenance to perform quarterly PMCS inspection.

Observe all warnings, cautions, and notes when performing PMCS.

Always perform PMCS in the same order as written. With practice, operator will become familiar with the equipment and able to quickly spot anything wrong with the equipment.

Before operating the M917 Dump Truck Body, perform all "Before" PMCS steps.

During operation of the M917 Dump Truck Body, perform "During" PMCS steps.

After operating the M917 Dump Truck Body perform all "After" PMCS steps.

At any PMCS interval, if the item to be checked or serviced is not ready or available, that problem must be corrected by troubleshooting and, if necessary, notifying Field Maintenance to perform the task.

Ensure operator PMCS for the M917 Dump Truck Body, are performed each time the M917 Dump Truck Body has been operated.

When equipment is not ready or available and the problem cannot be resolved at the operator level, describe what is wrong with the equipment using DA Form 2404 or DA Form 5988-E. This will document the problem and help Field Maintenance locate and correct it. For information on how to use this form, see DA PAM 750-8.

PURPOSE OF PMCS TABLE

The purpose of the PMCS table is to provide a systematic method of inspection and servicing of equipment. In this way, small defects can be detected early and corrected before they become a major problem causing the equipment to fail. The PMCS table is arranged with the individual PMCS procedures listed in sequence under assigned intervals. The most logical time (before, during, and after operation) to perform each procedure determines the interval to which it is assigned. Make a habit of performing the checks in the same order each time. Anything wrong will be seen quickly. Refer to WP 0017 for Operator PMCS.

The following is a list and description of the column headings in the PMCS table.

Item Number – This column shows the sequence in which the checks and services are to be performed, and is used to identify the equipment area on the Equipment Inspection and Maintenance Worksheet, DA Form 2404 or DA Form 5988-E.

Interval - This column indicates when each check is to be performed.

Item To Be Checked or Serviced – This column identifies the item and location to be checked by part, component, or assembly name.

Procedure - This column explains what type of service, specific damage, or defect is to be checked.

Equipment Not Ready/Available If - This column lists conditions that make the equipment unavailable for use as a result of damage, missing parts, or improper functioning that would present a safety hazard. Do not accept or operate equipment with a condition noted in this column.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion Prevention and Control (CPC) is a continuing concern. It is important that any corrosion problems with this equipment be reported so improvements can be made and future problems eliminated.

Corrosion is typically associated with rusting of metals or galvanic corrosion, which produces a white powder. This category of corrosion also includes deterioration of other materials such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of materials may be the result of corrosion. If a corrosion problem is identified, it can be reported using SF 368, Product Quality Deficiency Report. Use of key words such as "corrosion," "rust," "deterioration," or "cracking" will ensure the information is identified as a CPC problem. The form should be submitted to the address specified in DA PAM 750-8.

ARMY OIL ANALYSIS PROGRAM (AOAP)

The M917 Dump Truck Body is not enrolled in the AOAP. Hardtime intervals apply.

FLUID LEAKAGE

It is necessary to know how fluid leakage affects the status of the M917 Dump Truck Body. The following types/classes of leakage are defined to enable the operator to be able to determine the status of the M917 Dump Truck Body equipment should a leak occur. It is essential that operators learn to identify the type/class of leak by definition and, when in doubt, notify their supervisor.

CAUTION

Equipment operation is allowed with minor leakages (Class I or II). Consideration must be given to fluid capacity in the item/system being checked/inspected. When in doubt, notify your supervisor. Failure to comply may result in damage to equipment.

When operating with Class I or II leaks, continue to check fluid levels as required in PMCS table. Class III leaks will be reported immediately to your supervisor.

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

SPECIAL INSTRUCTIONS

NOTE

If the M917 Dump Truck Body must be kept in continuous operation, check and service only those items that must be checked during operation without shutting down the equipment.

Preventive maintenance is not limited to performing the checks and services listed in the PMCS table. When performing PMCS, check all components as follows:

WARNING

Cleaning solvent is combustible. Use mechanical ventilation whenever product is used in a confined space. DO NOT use or store near heat, sparks, flame, or other ignition sources. Keep container sealed when not in use. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Contact with cleaning solvent compound may cause skin irritation. Use chemical-resistant gloves. In case of skin contact, remove any contaminated clothing before reuse. Eye contact may cause irritation, tearing, or blurring of vision. Use face shield or goggles when eye contact may occur. In case of eye contact, flush eyes with large amounts of water for at least 15 minutes or until irritation subsides. Inhalation may cause irritation to upper respiratory passages. DO NOT have food or drink in the vicinity. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Compressed air source will not exceed 30 psi (207 kPa). When cleaning with compressed air, eye shields must be worn. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

- 1. Keep it clean Dirt, grease, oil, and debris get in the way and may cover up a serious problem. Clean work area as needed. Use cleaning solvent to clean oil and grease from all exterior metal surfaces of equipment. Use a soap and water solution to clean dirt and debris from all exterior and interior surfaces, and rinse thoroughly with clean water.
- 2. Bolts, nuts, and screws Check for obvious looseness and missing, bent, or broken condition. Look for corrosion around bolt heads. If mounting hardware is loose, damaged, or corroded, notify Field Maintenance.
- 3. Wiring harnesses, wires, and connectors Look for cracked or broken wiring where present. If damaged wiring or loose connections are found, notify Field Maintenance.

OPERATOR MAINTENANCE OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

INITIAL SETUP:

References

WP 0049

GENERAL

This PMCS uses the one-look format beginning with dump body (cargo) Before.

While performing PMCS, ensure components and assemblies are correctly installed.

When checking/servicing an item, ensure that all attaching/mounting hardware is properly secured. Loose, cracked, broken, or missing hardware may affect equipment performance or cause premature failure.

LUBRICATION

For lubrication instructions for the M917 Dump Truck Body, refer to WP 0049.

Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
1.	Before	Dump body (Figure 1, Item 2), cab protector (Figure 1, Item 1), and tailgate (Figure 1, Item 3)	Visually inspect cargo body, cab protector, and tailgate for obvious damage, cracked welds, or breaks.	Cracked or broken welds.

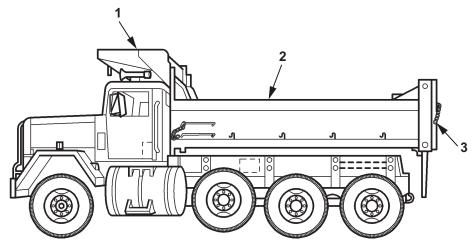


Figure 1. Cargo Body, Cab Protector, and Tailgate.					
2.	Before	Hydraulic hoses (Figure 2, Item 1), reservoir (Figure 2, Item 2), and hydraulic pump (Figure 2, Item 3)	Visually inspect for hydraulic leaks.	Class III leaks are evident.	

Figure 2. Hydraulic Hoses, Reservoir, and Pump.

Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:		
3.	During	Clearance lamps (Figure 3, Item 1) and marker lamp (Figure 3, Item 2)	Ensure all clearance lamps and marker lamps are working.			
	2					
	1 Figure 3. Clearance Lamps and Marker Lamps.					

Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:		
		WARNING If dump bed is to be held at a high angle or if maintenance is performed with bed raised, install safety strut in position on bed frame. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.			
During	Tailgate control handle (Figure 4, Item 1)	Ensure tailgate control handle operates freely.	Control handle will not operate tailgate.		
During	Jaws (Figure 5, Item 1), lock mechanism (Figure 5, Item 3), and hinge pins (Figure 5, Item 2)	Operate control handle and ensure lock mechanism engages hinge pins when handle is in full up position. Releases hinge pins when handle is in full down position.	Lock mechanism does not operate smoothly and lock securely.		
Figure 5. Jaws, Lock Mechanism, and Hinge Pins.					
	During	During Tailgate control handle (Figure 4, Item 1) Fig. During Jaws (Figure 5, Item 1), lock mechanism (Figure 5, Item 3), and hinge pins (Figure 5, Item 2)	During During Jaws (Figure 5, Item 1), lock mechanism (Figure 5, Item 2), and hinge pins (Figure 5, Item 2). During Figure 4. Proceedings of the manufacture of t		

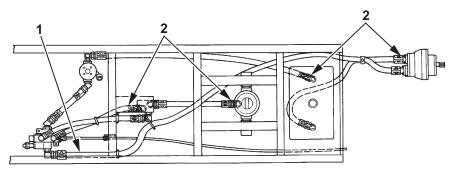
Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
6.	During	Adjustment chains (Figure 6, Item 1) and chain guides (Figure 6, Item 2)	Check broken or damaged adjustment chains and chain guide.	Adjustment chain or chain guides broken or damaged.
		Figure 6.	Adjustment Chains and Chain Guides.	
7.	During	Tailgate pivot pins (Figure 7, Item 1) and tailgate (Figure 7, Item 2)	Check pivot pins at the top of tailgate for damage and that tailgate swings open freely with dump body up and tailgate control lever down.	Pivot pins damaged. Tailgate will not swing open freely.
	2	1		

Figure 7. Tailgate and Tailgate Pivot Pins.

Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
8.	During	Hydraulic lines (Figure 8, Item 1) and hoses (Figure 8, Item 2)	Check all hydraulic lines and hoses for evidence of leaking.	Class III leaks evident.



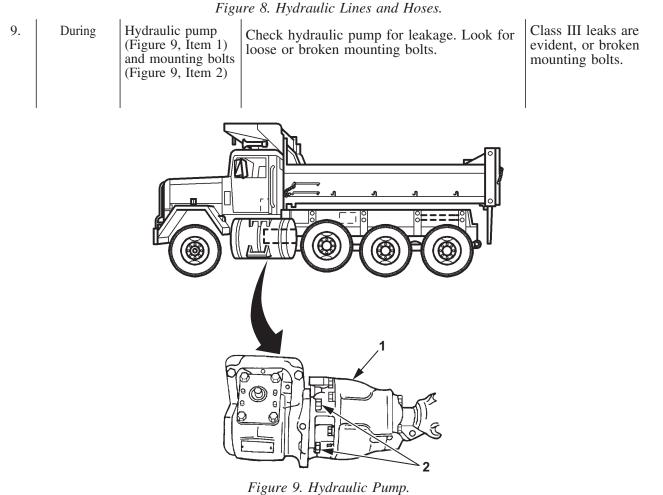


Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
During	Pilot relief valve (Figure 10, Item 1)	Check pilot relief valve or signs of leakage.	Class III leaks are evident.
l			
		Figure 10. Pilot Relief Valve	
During	Control lever (Figure 11, Item 1)	Check that control lever returns to N (neutral) from UP or DOWN position.	Control mechanism does not work properly or Class III leaks evident.
	During	During Control lever	During Pilot relief valve (Figure 10, Item 1) Pigure 10, Item 1) Check pilot relief valve or signs of leakage. Figure 10. Pilot Relief Valve. During Control lever (Figure 11, Item 1) Check that control lever returns to N (neutral) from UP or DOWN position.

			1W 3-3003-274-13&F	0019		
Table '	Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.					
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:		
12.	During	Grip head (Figure 12, Item 1)	Ensure grip head operates smoothly and control lever moves without binding.	Control mechanism does not work properly.		
13.	During	Control valve (Figure 13, Item 1)	Figure 12. Grip Handle. Ensure control lever returns to N (neutral) from UP or DOWN position.	Control mechanism does not work properly or Class III leaks are evident.		

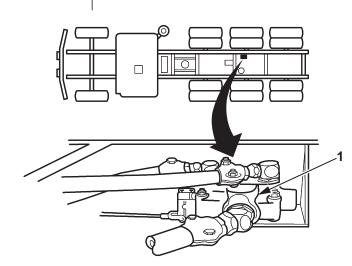


Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
14.	During	Hoist cylinder (Figure 14, Item 1)	NOTE The automatic bleeder vents air from the hydraulic cylinder, is completely filled with oil, and seats automatically. This process produces an oil mist. A small accumulation of oil around the bleeder is not necessarily an indication of a malfunction. Check hoist cylinder for signs of leakage and hoist extension scoring. Hoist should operate smoothly and quietly.	Hoist cylinder will not raise dump bed. Class III leaks are evident.
		1		
15.	During	Hydraulic filter (Figure 15, Item 1) and service indication gauge (Figure 15, Item 2)	Figure 14. Hoist Cylinder. Check hydraulic filter for signs of leakage. Check service indication gauge with engine operating at 1200 rpm and PTO engaged. If the gauge needle is in or close to the red, notify Field Maintenance.	Pressure is too high or low. Class III leaks are evident.

Figure 15. Hydraulic Filter and Service Indication Gauge.

Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
16.	During	Hydraulic reservoir (Figure 16, Item 1), hose connectors (Figure 16, Item 2) under reservoir (not shown), and breather cap (Figure 16, Item 3)	Check hydraulic reservoir and hose connectors under reservoir for signs of leaks. Fully raise dump bed and install safety strut. Check oil level in bottom sight glass, add oil if level is below sight glass. Check breather filler cap and clean if clogged.	Class III leaks are evident or oil level is below acceptable level.
ı		1		

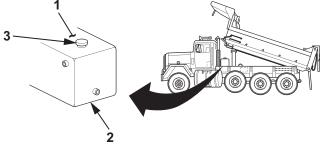


Figure 16. Hydraulic Reservoir, Connectors, and Breather Cap.

		1 18111 C 10. 11 yara	Reservoir, Connectors, and Breamer Cup.	
			NOTE	
			Ensure dump bed is lowered before checking hydraulic reservoir oil level sight glass.	
17.	During	Hydraulic reservoir (Figure 17, Item 1)	Check hydraulic reservoir top oil level sight glass through hole in front of bed. If not visible in top sight glass, add oil.	

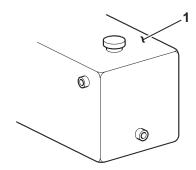


Figure 17. Top Oil Level Sight Glass.

Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
18.	After	Hydraulic control valve (Figure 18, Item 1)	Check for signs of hydraulic leaks from control valve.	Class III leaks are evident.
'	1			
		Fig	ure 18. Hydraulic Control Valve.	
19.	Weekly	Wiring (Figure 19, Item 1) and connectors	Check for frayed or damaged wires or connectors.	
		1	1	
		F:	1 gure 19. Wiring and Connector.	

Table 1. Operator Preventive Maintenance Checks and Services for M917 Dump Truck Body - Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
20.	Monthly	Tarpaulin cover (Figure 20, Item 1), tie straps (Figure 20, Item 2), and grommets (Figure 20, Item 3).	Check tarpaulin cover for rips, tears, and damaged or missing tie straps or grommets.	
	3 — 2 ^			
	Figure 20. Tarpaulin Cover.			

MANDATORY REPLACEMENT PARTS

There are no replacement parts required for these PMCS procedures.

FIELD MAINTENANCE FIELD PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INTRODUCTION

GENERAL

Field Maintenance PMCS is performed at quarterly intervals or 250 hours of operation, to ensure the equipment is fully operational and ready at all times. Maintaining the M917 Dump Truck requires inspection on a regular basis so minor damage or faults can be discovered and corrected. Performing Field Maintenance PMCS is essential to the reliability and expected longevity of the equipment. Failing to correct a minor problem may result in major damage or a complete failure of the equipment which could compromise the mission or result in injury to personnel.

Any effective preventive maintenance program must begin with the training of operators to report equipment problems to field maintenance as noted during daily operator PMCS. This information will be recorded by the operator on DA Form 2404 or DA Form 5988-E, Equipment Inspection and Maintenance Worksheet. The Maintainer will use this information during maintenance inspections to verify and correct the problem. The corrective action taken is recorded on DA Form 2404 or DA Form 5988-E by the maintainer.

Maintainer will perform operator and field PMCS as follows:

- 1. A schedule for field preventive maintenance inspection and service should be established immediately after receiving the M917 Dump Truck.
- 2. When operating under unusual conditions such as dusty or sandy environment, it may be necessary to increase the interval from quarterly to monthly or even weekly, if conditions are extreme.
- 3. If the equipment is operated for the first time or has not been operated for a three month period, perform quarterly PMCS inspection using the operator PMCS table. Refer to WP 0019.
- 4. If the equipment has been operated for three months or 250 hours of operation (whichever comes first), perform quarterly PMCS inspection following operator PMCS table. Refer to WP 0019.
- 5. Observe all warnings, cautions, and notes when performing PMCS.
- 6. Always perform PMCS in the same order as written.
- 7. At any PMCS interval, if the item to be inspected is found to be not ready or available, that item must be corrected by troubleshooting and making the necessary repair.
- 8. Ensure Field PMCS for the M917 Dump Truck is performed during each M917 Dump Truck inspection.
- 9. Whenever the equipment is found to be not ready or available and the problem could not be resolved at the operator level, refer to DA Form 2404 or DA Form 5988-E, for the operator's description of the problem.

PURPOSE OF PMCS TABLE

The purpose of the PMCS table is to provide a systematic method of inspection and servicing of equipment. In this way, small defects can be detected early and corrected before they become a major problem causing the equipment to fail. The PMCS table is arranged with the individual PMCS procedures listed in sequence under assigned intervals. The most logical time (before, during, and after operation) to perform each procedure determines the interval to which it is assigned. Make a habit of performing the checks in the same order each time; anything wrong will be seen quickly. Refer to WP 0019 for Operator PMCS.

The following is a list and description of the column headings in the PMCS table.

- 1. Item Number This column shows the sequence in which the checks and services are to be performed and is used to identify the equipment area on the Equipment Inspection and Maintenance Worksheet, DA Form 2404 or DA Form 5988-E.
- 2. Interval This column indicates when each check is to be performed.
- 3. Item To Be Checked or Serviced This column identifies the item and location to be checked by part, component, or assembly name.
- 4. Procedure This column explains what type of service, specific damage, or defect is to be checked.
- 5. Equipment Not Ready/Available If This column lists conditions that make the equipment unavailable for use as a result of damage, missing parts, or improper functioning that would present a safety hazard. Do not accept or operate equipment with a condition noted in this column.

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.

Corrosion specifically occurs with metals. It is an electrochemical process that causes the degradation of metals. It is commonly caused by exposure to moisture, acids, bases, or salts. 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. 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.

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 M917 Dump Truck Body is not enrolled in the AOAP. Hardtime intervals apply.

FLUID LEAKAGE

It is necessary to know how fluid leakage affects the status of the M917 Dump Truck Body. The following types/classes of leakage are defined to enable the operator to be able to determine the status of the M917 Dump Truck Body equipment should a leak occur. It is essential that operators learn to identify the type/class of leak by definition and, when in doubt, notify their supervisor.

CAUTION

Equipment operation is allowed with minor leakage (Class I or II). Consideration must be given to fluid capacity in the item/system being checked/inspected. When in doubt, notify your supervisor. Failure to comply may result in damage to equipment.

When operating with Class I or II leaks, continue to check fluid levels as required in PMCS table. Class III leaks will be reported immediately to your supervisor.

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

SPECIAL INSTRUCTIONS

NOTE

If the M917 Dump Truck Body must be kept in continuous operation, check and service only those items that must be checked during operation without shutting down the equipment.

When performing PMCS, check all components as follows:

WARNING

Cleaning solvent is combustible. Use mechanical ventilation whenever product is used in a confined space. DO NOT use or store near heat, sparks, flame, or other ignition sources. Keep container sealed when not in use. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Contact with cleaning solvent compound may cause skin irritation. Use chemical-resistant gloves. In case of skin contact, remove any contaminated clothing before reuse. Eye contact may cause irritation, tearing, or blurring of vision. Use face shield or goggles when eye contact may occur. In case of eye contact, flush eyes with large amounts of water for at least 15 minutes or until irritation subsides. Inhalation may cause irritation to upper respiratory passages. DO NOT have food or drink in the vicinity. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Compressed air source will not exceed 30 psi (207 kPa). When cleaning with compressed air, eye shields must be worn. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

- 1. Keep it clean Dirt, grease, oil, and debris get in the way and may cover up a serious problem. Clean work area as needed. Use cleaning solvent to clean oil and grease from all exterior metal surfaces of equipment. Use a soap and water solution to clean dirt and debris from all exterior and interior surfaces and rinse thoroughly with clean water.
- 2. Bolts, nuts, and screws Check for obvious looseness, missing, bent, or broken condition. Look for corrosion around bolt heads. If mounting hardware is loose, damaged, or corroded, notify Field Maintenance.
- 3. Wiring harnesses, wires, and connectors Look for cracked or broken wiring where present. If damaged wiring or loose connections are found, notify Field Maintenance.

FIELD MAINTENANCE FIELD PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Cloth, cleaning (WP 0077, Item 2)

References

DA Form 2404

DA Form 5988-E

WP 0023

WP 0024

WP 0026

WP 0040

WP 0042

WP 0044

WP 0048

GENERAL

While performing field maintenance, ensure components and assemblies are correctly installed. Incorrect installation may affect performance and cause equipment damage or failure.

When inspecting an item, ensure that all attaching/mounting hardware is properly secured. Tighten all loose hardware and replace any cracked, broken, or missing parts found during inspection.

Verify and correct any discrepancies recorded on DA Form 2404 or DA Form 5988-E, Equipment Inspection and Maintenance Worksheet, while performing field PMCS.

FIELD PMCS

Field Maintenance of the M917 Dump Truck Body is limited to performing a Quarterly or 250 hour inspection.

Field Preventive Maintenance Checks and Services (PMCS) for M917 Dump Truck.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
1.	Quarterly or 250 hrs.	Side marker lights (Figure 1, Item 1) and rear marker lights (Figure 1, Item 2).	 Inspect all lamps for proper operation. Inspect lens and housings for damage. Replace marker lights as required. Refer to WP 0023. Replace lamps as required. Refer to WP 0024. 	

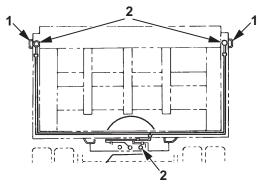


Figure 1. Side Marker Lights and Rear Marker Lights.

		1 igure 1. Si	ie Marker Lighis and Rear Marker Lights.	
2.	Quarterly or 250 hrs.	Hydraulic reservoir (Figure 2, Item 1), upper sight glass (Figure 2, Item 2), and lower sight glass (Figure 2, Item 3).	 Inspect reservoir for leaks or damage. Check fluid level through hole in front of dump bed. Add fluid if not visible in upper sight glass. Raise dump bed to maximum height and check lower sight glass for fluid. Add fluid until fluid is visible in sight glass. 	Class III leaks are evident.
		1- 0	2	

Figure 2. Hydraulic Reservoir, Upper Sight Glass, and Lower Sight Glass.

Field Preventive Maintenance Checks and Services (PMCS) for M917 Dump Truck - Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:	
3.	Quarterly or 250 hrs.	Reservoir breather cap (Figure 3, Item 1).	1. Inspect filter in cap for cleanliness. Clean filter or replace cap.		
	Figure 3. Reservoir Breather Cap.				

Field Preventive Maintenance Checks and Services (PMCS) for M917 Dump Truck - Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
4.	Quarterly or 250 hrs.	Hoist cylinder (Figure 4, Item 1).	 Inspect hoist cylinder for leaks, wear, or damage. Check cylinder for proper operation. Bleed system if required. Refer to WP 0044. 	Hoist cylinder will not raise dump body.

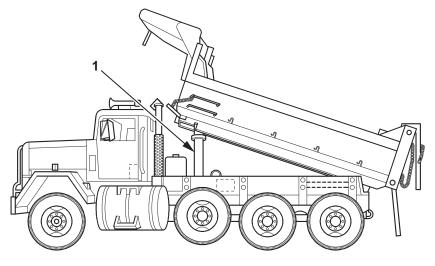


Figure 4. Hoist Cylinder.

			o ,	
5.	Quarterly or 250 hrs.	Hydraulic lines (Figure 5, Item 1), fitting (Figure 5, Item 2), and hoses (Figure 5, Item 3).	 Inspect all hydraulic lines for leadamage, such as cracks and abra. Check fitting for leaks and dama threads. Check hoses for leaks, wear, or Tighten or replace fittings or hos required. Refer to WP 0040. 	sions. iged damage.

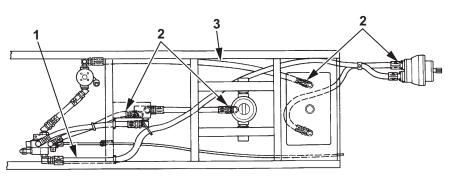


Figure 5. Hydraulic Lines, Fittings, and Hoses.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
6.	Quarterly or 250 hrs.	Filter (Figure 6, Item 1).	Inspect filter service indication gauge. With engine running and PTO engaged, set engine at 1200 rpm. Check the restriction indicator gauge. If needle is in or close to the red, service the filter. Refer to WP 0042.	
		1		

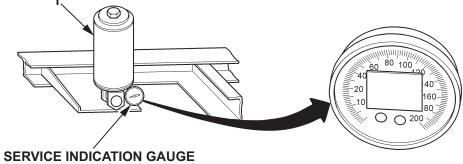


Figure 6. Filter.

7.	Quarterly or 250 hrs.	(Figure 7, Item 1).	Inspect for broken weld joints, loose supports, rust, dents, and similar damage. Check for clean lines. Clean thoroughly if required. Repair as required. Refer to WP 0048.
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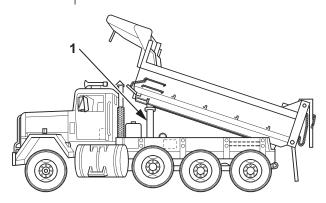


Figure 7. Dump Body.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
8.	Quarterly or 250 hrs.	Wiring (Figure 8, Item 1) and connectors (Figure 8, Item 2).	Inspect wiring for fraying, breaks, loose connection, and loose or missing mounting clamps. Repair or replace as required. Refer to WP 0026.	
	l	1 7		ı
		Fi	gure 8. Wiring and Connectors.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:			
9.	Quarterly or 250 hrs.						
	Figure 9. Tarpaulin Cover, Tie Straps, and Eyelets.						

250 hrs. (Subframe (Figure 10, Item 1) and hinge support brackets (Figure 10, Item 2).	Inspect for broken weld joints around hinge support brackets and check for loose or missing hardware.	Weld joints are broken or hardware missing.				

MANDATORY REPLACEMENT PARTS

There are no replacement parts required for these PMCS procedures.

FIELD MAINTENANCE UPPER REAR MARKER LAMP ASSEMBLY REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Blind rivet (WP 0054, Item 7) Splice conductor (WP 0054, Item 2) Two blind rivets (WP 0053, Item 11)

Equipment Condition

REMOVAL

NOTE

Right and left upper rear marker lamps are removed and installed the same way. Only one upper rear marker lamp is shown.

- 1. Turn lens/lamp (Figure 1, Item 8) one-quarter turn to left and remove lens/lamp (Figure 1, Item 8) from mount plate (Figure 1, Item 6).
- 2. Disconnect lamp plug (Figure 1, Item 7) from lens/lamp (Figure 1, Item 8).
- 3. Cut splice conductor (Figure 1 Item 11) from black positive (+) wires (Figure 1, Item 12). Discard splice conductor (Figure 1 Item 11).
- 4. Remove blind rivet (Figure 1, Item 1) and two collars (Figure 1, Items 2 and 3) from frame (Figure 1, Item 4). Side white ground (-) wire (Figure 1, Item 5) stays in frame (Figure 1, Item 4). Discard blind rivet (Figure 1, Item 1).
- 5. Remove two blind rivets (Figure 1, Item 9) and mount plate (Figure 1, Item 6) from mounting surface (Figure 1, Item 10). Discard blind rivets (Figure 1, Item 9).

END OF TASK

INSTALLATION

- 1. Install mount plate (Figure 1, Item 6) on mounting surface (Figure 1, Item 10) with two new blind rivets (Figure 1, Item 9).
- 2. Route white ground (-) wire (Figure 1, Item 5) through hole in mounting surface (Figure 1, Item 10) and connect collars (Figure 1, Items 2 and 3) to frame (Figure 1, Item 4) with new blind rivet (Figure 1, Item 1).
- 3. Connect black positive (+) wires (Figure 1, Item 12) with new splice conductor (Figure 1 Item 11).
- 4. Connect lamp plug (Figure 1, Item 7) into back of lens/lamp (Figure 1, Item 8).
- 5. Install lens/lamp (Figure 1, Item 8) over mount plate (Figure 1, Item 6) and turn lens/lamp (Figure 1, Item 8) one-quarter turn to right.

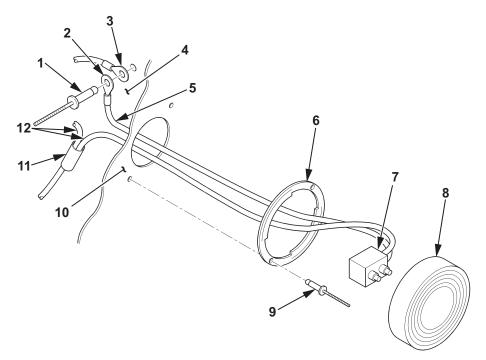


Figure 1. Upper Rear Marker Lamp Assembly Removal and Installation.

END OF TASK

FIELD MAINTENANCE SIDE MARKER LAMP ASSEMBLY REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Blind rivet (WP 0054, Item 7) Splice conductor (WP 0054, Item 2)

Equipment Condition

NOTE

Right and left side marker lamps are removed and installed the same way, only one side marker lamp is shown.

REMOVAL

- 1. Using small screwdriver, pry lens/lamp (Figure 1, Item 5) from grommet (Figure 1, Item 3).
- 2. Remove grommet (Figure 1, Item 3) from mounting surface (Figure 1, Item 9).
- 3. Disconnect lamp plug (Figure 1, Item 4) from lens/lamp (Figure 1, Item 5).
- 4. Cut splice conductor (Figure 1 Item 6) from black positive (+) wire (Figure 1, Item 7). Discard splice conductor (Figure 1 Item 6).
- 5. Remove white ground (-) wire (Figure 1, Item 8) from blind rivet (Figure 1, Item 2) and collar (Figure 1, Item 1), discard collar (Figure 1, Item 1), and pull white ground (-) wire (Figure 1, Item 8) through hole in mounting surface (Figure 1, Item 9). Side marker ground (-) wire will stay in frame. Discard blind rivet (Figure 1, Item 2).

END OF TASK

INSTALLATION

- 1. Route white ground (-) wire (Figure 1, Item 8) through hole in mounting surface (Figure 1 Item 9) and connect both white ground (-) wires (Figure 1, Item 8) to mounting surface (Figure 1 Item 9) with collar (Figure 1, Item 1) and new blind rivet (Figure 1, Item 2).
- 2. Connect black positive (+) wires (Figure 1, Item 7) with new splice conductor (Figure 1 Item 6).
- 3. Install grommet (Figure 1, Item 3) on mounting surface (Figure 1 Item 9).
- 4. Connect lamp plug (Figure 1, Item 4) into back of lens/lamp (Figure 1, Item 5).
- 5. Install lens/lamp (Figure 1, Item 5) in grommet (Figure 1, Item 3).

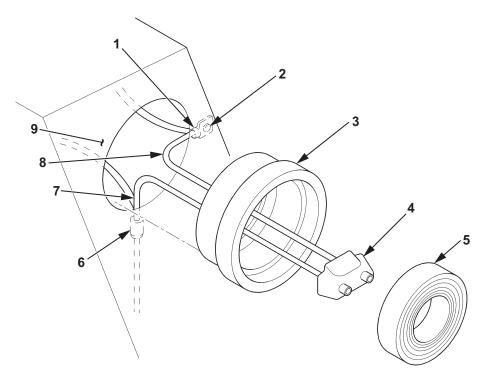


Figure 1. Side Marker Lamp Assembly Removal and Installation.

END OF TASK

FIELD MAINTENANCE LOWER REAR MARKER LAMP ASSEMBLY REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Six blind rivets (WP 0054, Item 7) Splice conductor (WP 0054, Item 2) Three lockwashers (WP 0054, Item 10)

Equipment Condition

REMOVAL

- 1. Turn three lens/lamps (Figure 1, Item 10) one-quarter turn to left and remove three lens/lamps (Figure 1, Item 10) from three mounts (Figure 1, Item 8).
- 2. Disconnect three lamp plugs (Figure 1, Item 7) from three lens/lamps (Figure 1, Item 10).
- 3. Cut black positive (+) wires (Figure 1, Item 4) from splice conductors (Figure 1, Items 5 and 6) near lamp plugs (Figure 1, Item 7). Discard splice conductors (Figure 1, Items 5 and 6).
- 4. Remove three blind rivets (Figure 1, Item 9), white ground (-) wires (Figure 1, Item 3), washers (Figure 1, Item 2), and lockwashers (Figure 1, Item 1). Discard lockwashers (Figure 1, Item 1) and blind rivets (Figure 1, Item 9).
- 5. Remove three blind rivets (Figure 1, Item 9), mounts (Figure 1, Item 8), and lamp plugs (Figure 1, Item 7) from mounting surface (Figure 1, Item 11). Discard blind rivets (Figure 1, Item 9).

END OF TASK

INSTALLATION

- 1. Install three mounts (Figure 1, Item 8) and lamp plugs (Figure 1, Item 7) on mounting surface (Figure 1, Item 11) with three new blind rivets (Figure 1, Item 9).
- 2. Install three new blind rivets (Figure 1, Item 9) and three white ground (-) wires (Figure 1, Item 3) on mounting surface (Figure 1, Item 11) with three new lockwashers (Figure 1, Item 1) and washers (Figure 1, Item 2).
- 3. Install black positive (+) wires (Figure 1, Item 4) from three lamp plugs (Figure 1, Item 7) on black positive (+) wire (Figure 1, Item 4) with new splice conductors (Figure 1, Items 5 and 6).
- 4. Connect three lamp plugs (Figure 1, Item 7) to three lens/lamps (Figure 1, Item 10).
- 5. Install three lens/lamps (Figure 1, Item 10) on three mounts (Figure 1, Item 8) and turn lens/lamps (Figure 1, Item 10) one-quarter turn to right.

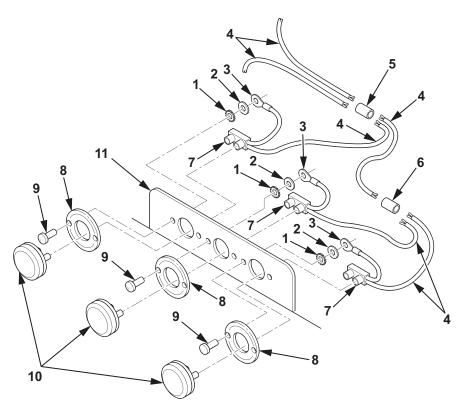


Figure 1. Lower Rear Marker Lamp Assembly Removal and Installation.

END OF TASK

FIELD MAINTENANCE REFLECTOR REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Four blind rivets (WP 0058, Item 2)

Equipment Condition

REMOVAL

- 1. Remove blind rivet (Figure 1, Item 2) and reflector light (Figure 1, Item 3) from right or left steel plate (Figure 1, Item 4) above mud flap. Discard blind rivet (Figure 1, Item 2).
- 2. Remove blind rivet (Figure 1, Item 2) and reflector light (Figure 1, Item 3) from upper right or left sides of dump body bed (Figure 1, Item 1). Discard blind rivet (Figure 1, Item 2).

END OF TASK

INSTALLATION

- 1. Install reflector light (Figure 1, Item 3) on upper right or left sides of dump body bed (Figure 1, Item 1) with new blind rivet (Figure 1, Item 2).
- 2. Install reflector light (Figure 1, Item 3) on right or left steel plate (Figure 1, Item 4) above mud flap with new blind rivet (Figure 1, Item 2).

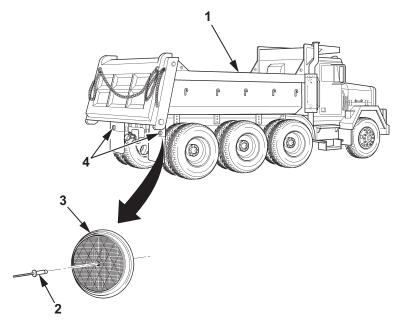


Figure 1. Reflector Light Removal and Installation.

END OF TASK

FIELD MAINTENANCE WIRING HARNESS AND CONNECTORS REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)
Standard Automotive Tool Set (SATS)
(WP 0074, Table 2, Item 2)

Materials/Parts

Lockwasher (WP 0054, Item 10) Two blind rivets (WP 0054, Item 7) Seven splice conductors (WP 0054, Item 2)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

WARNING

Do not perform any maintenance with dump body bed raised until safety strut is installed in locked position. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

REMOVAL

- 1. Start engine and engage PTO (TM 9-2320-273-10). Raise dump body bed, raise safety strut to locked position, lower dump body bed, and shut down engine.
- 2. Cut wire (Figure 1, Item 1) at splice conductor (Figure 1, Item 2). Discard splice conductor (Figure 1, Item 2).
- 3. Remove wire (Figure 1, Item 1) from grommet (Figure 1, Item 3) and crossmember.
- 4. Remove two blind rivets (Figure 1, Item 7), retainer clips (Figure 1, Item 6), conduit (Figure 1, Item 4), and wire (Figure 1, Item 5) from frame rail.
- 5. Cut wires (Figure 1, Items 8, 12, and 14) at splice conductor (Figure 1, Item 2). Discard splice conductor (Figure 1, Item 2). If necessary, remove blind rivet (Figure 1, Item 7), lockwashers (Figure 1, Item 10), and washer (Figure 1 Item 11). Discard rivet (Figure 1, Item 7) and lockwashers (Figure 1, Item 10).
- 6. Cut wires (Figure 1, Items 1 and 5) at splice conductor (Figure 1, Item 2). Discard splice conductor (Figure 1, Item 2).
- 7. Remove wires (Figure 1, Items 1, 5, 8, 12, and 14), terminal lug (Figure 1, Item 9), and conduit (Figure 1, Items 4 and 13) from dump body bed (Figure 1, Item 15) and frame rail.

END OF TASK

INSTALLATION

- 1. Instal terminal lug (Figure 1, Item 9), wires (Figure 1, Items 1, 5, 8, 12, and 14), and conduit (Figure 1, Items 4 and 13) on dump body bed (Figure 1, Item 15) and frame rail.
- 2. Connect new splice conductor (Figure 1, Item 2) to wires (Figure 1, Items 1 and 5).
- 3. Connect new splice conductor (Figure 1, Item 2) to wires (Figure 1, Items 8, 12, and 14). If removed, install terminal lug (Figure 1, Item 9), new blind rivet (Figure 1, Item 7), new lockwasher (Figure 1, Item 10), and washer (Figure 1, Item 11).
- 4. Install conduit (Figure 1, Item 4) and wire (Figure 1, Item 5) on frame rail with two retainer clips (Figure 1, Item 6) and new blind rivets (Figure 1, Item 7).
- 5. Install grommet (Figure 1, Item 3) and wire (Figure 1, Item 1) on crossmember.
- 6. Install new splice conductor (Figure 1, Item 2) on wire (Figure 1, Item 1).
- 7. Start engine and engage PTO (TM 9-2320-273-10). Raise dump body bed (Figure 1, Item 15), lower safety strut to stowed position, lower dump body bed, and shut down engine.

INSTALLATION - CONTINUED

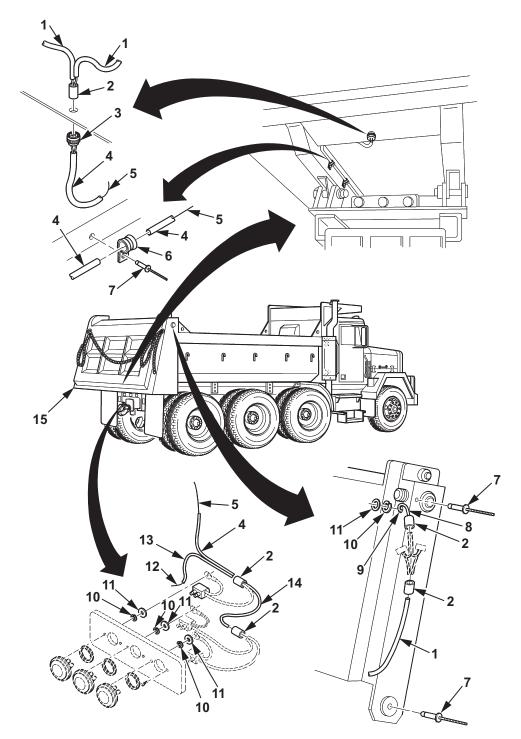


Figure 1. Wiring Harness and Connectors Removal and Installation.

END OF TASK

FIELD MAINTENANCE MUD FLAP, PLATE, AND REINFORCEMENTS REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Four locknuts (WP 0057, Item 3) Eight locknuts (WP 0057, Item 5) Blind rivet (WP 0058, Item 2)

Equipment Condition

NOTE

Right and left side mud flaps are removed and installed the same way, only one mud flap is shown.

REMOVAL

- 1. Remove four locknuts (Figure 1, Item 1), washers (Figure 1, Item 2), bolts (Figure 1, Item 4), washers (Figure 1, Item 3), and plate (Figure 1, Item 14) with mud flap (Figure 1, Item 8) from mounting bracket (Figure 1, Item 17). Discard locknuts (Figure 1, Item 1).
- 2. Remove four locknuts (Figure 1, Item 16), washers (Figure 1, Item 15), bolts (Figure 1, Item 7), washers (Figure 1, Item 6), backup bar (Figure 1, Item 5), and mud flap (Figure 1, Item 8) from plate (Figure 1, Item 14). Discard locknuts (Figure 1, Item 16).
- 3. Remove four locknuts (Figure 1, Item 13), washers (Figure 1, Item 12), bolts (Figure 1, Item 9), washers (Figure 1, Item 10), and two backup bars (Figure 1, Item 11) from mud flap (Figure 1, Item 8). Discard locknuts (Figure 1, Item 13).
- 4. Remove blind rivet (Figure 1, Item 19) and reflector (Figure 1, Item 18) from plate (Figure 1, Item 14). Discard blind rivet (Figure 1, Item 19).

END OF TASK

INSTALLATION

- 1. Install reflector (Figure 1, Item 18) on plate (Figure 1, Item 14) with new blind rivet (Figure 1, Item 19).
- 2. Install two backup bars (Figure 1, Item 11) on bottom of mud flap (Figure 1, Item 8) with four bolts (Figure 1, Item 9), washers (Figure 1, Item 10), washers (Figure 1, Item 12), and new locknuts (Figure 1, Item 13).
- 3. Install mud flap (Figure 1, Item 8) on plate (Figure 1, Item 14) with four bolts (Figure 1, Item 7), washers (Figure 1, Item 6), backup bar (Figure 1, Item 5), washers (Figure 1, Item 15), and new locknuts (Figure 1, Item 16).
- 4. Install plate (Figure 1, Item 14) with mud flap (Figure 1, Item 8) to mounting bracket (Figure 1, Item 17) with four bolts (Figure 1, Item 4), washers (Figure 1, Item 3), washers (Figure 1, Item 2), and new locknuts (Figure 1, Item 1).

INSTALLATION - CONTINUED

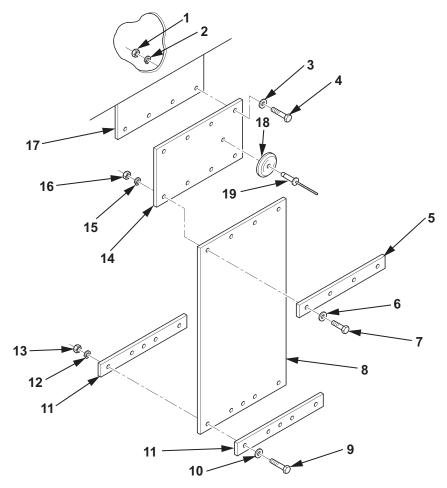


Figure 1. Mud Flap Removal and Installation.

END OF TASK

FIELD MAINTENANCE DUMP BED REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Standard Automotive Tool Set (SATS) (WP 0074, Table 2, Item 2)

Two 12 ft sling cables (WP 0074, Table 2, Item 3)

Two 10 ft sling cables (WP 0074, Table 2, Item 4)

Four clevises (WP 0074, Table 2, Item 5)

Lifting device

Dunnage

Chains

Materials/Parts

Blind rivet (WP 0054, Item 7)

Splice conductor (WP 0054, Item 2)

Two locknuts (WP 0055, Item 10)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

Remove mud flaps (WP 0027).

WARNING

Dump bed weighs 5000 lb (2268 kg). Attach suitable lifting device prior to removal or installation. Failure to comply may result in injury to personnel and damage to equipment. Seek medical attention in the event of an injury.

All nonessential personnel must stand clear during lifting operations. Use taglines during removal and installation. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

REMOVAL

- 1. Remove six screws (Figure 1, Item 1) and access covers (Figure 1, Items 2, 3, and 4) from dog house (Figure 1, Item 5).
- 2. Remove screw (Figure 2, Items 1 or 3), nut (Figure 2, Items 5 or 7), and collar (Figure 2, Items 4 or 6) on one side and upper hoist cylinder pin (Figure 2, Item 2).

NOTE

Wedge board between hoist cylinder and oil tank to prevent chafing.

- 3. Remove blind rivet (Figure 3, Item 3) and clip (Figure 3, Item 4) at subframe (Figure 3, Item 1). Discard blind rivet (Figure 3, Item 3).
- 4. Cut wire (Figure 3, Item 5) on dump body side of splice conductor and insulation (Figure 3, Item 2). Discard splice conductor.
- 5. Remove two screws (Figure 4, Item 3), nuts (Figure 4, Item 1), and collars (Figure 4, Item 4) on lower rear dump body hinge pins (Figure 4, Item 2).
- 6. Attach lifting slings and suitable lifting device to dump body bed (Figure 5, Item 1). Take up tension and drive out upper hoist cylinder pin (Figure 5, Item 2) and two lower rear dump body hinge pins (Figure 4, Item 3).
- 7. Lift and remove dump body bed (Figure 5, Item 1) from vehicle and place on dunnage.
- 8. Remove two bolts (Figure 5, Item 4), locknuts (Figure 5, Item 2) and body target (Figure 5, Item 3) from dump body bed (Figure 5, Item 1). Discard locknuts (Figure 5, Item 2).

END OF TASK

INSTALLATION

- 1. Install body target (Figure 5, Item 4) on dump bed body (Figure 5, Item 1) with two bolts (Figure 5, Item 4) and new locknuts (Figure 5, Item 2).
- 2. Attach lifting slings and suitable lifting device to dump body bed (Figure 5, Item 1). Lift dump body bed (Figure 5, Item 1) from dunnage and position on vehicle.
- 3. Install upper hoist cylinder pin (Figure 2, Item 2) and two lower rear dump body hinge pins (Figure 5, Item 3), release tension on lifting slings and suitable lifting device, and remove lifting slings and suitable lifting device from dump body bed (Figure 5, Item 1).
- 4. Install two collars (Figure 4, Item 4) on lower rear dump body hinge pins (Figure 4, Item 2) with two screws (Figure 4, Item 3) and nuts (Figure 4, Item 1).
- 5. Install insulation (Figure 3, Item 2) and wire (Figure 3, Item 5) on dump body side of conductor with new splice conductor.
- 6. Install clip (Figure 3, Item 4) on subframe (Figure 3, Item 1) with new blind rivet (Figure 3, Item 3).
- 7. Remove board from between hoist cylinder (Figure 5, Item 2) and oil tank.
- 8. Install collar (Figure 2, Items 4 or 6) on upper hoist cylinder pin (Figure 2, Item 2) with screw (Figure 2, Items 1 and 3) and nut (Figure 2, Items 5 and 7).
- 9. Install access covers (Figure 1, Items 2, 3, and 4) on dog house (Figure 1, Item 5) with six screws (Figure 1, Item 1).
- 10. Install mud flaps (WP 0027).

INSTALLATION - CONTINUED

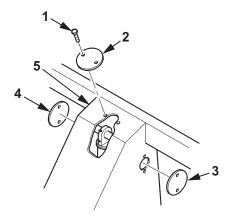


Figure 1. Access Covers Removal and Installation.

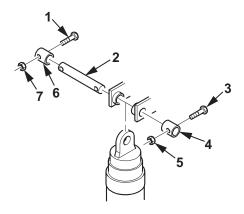


Figure 2. Hoist Cylinder Pin Removal and Installation.

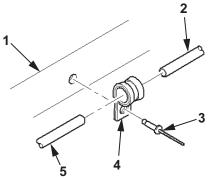


Figure 3. Rivet and Clamp Removal and Installation.

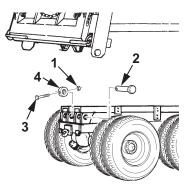


Figure 4. Rear Hinge Pins Removal and Installation.

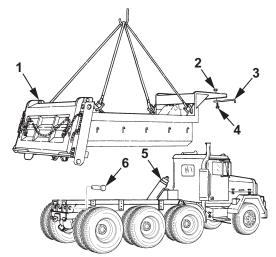


Figure 5. Dump Body Bed Removal and Installation.

END OF TASK

FIELD MAINTENANCE SUBFRAME REPLACEMENT

INITIAL SETUP:

Tools and Special Tools	References		
Tool kit, general mechanic's: automotive	WP 0028		
(WP 0074, Table 2, Item 1)	WP 0031		
Standard Automotive Tool Set (SATS) (WP 0074, Table 2, Item 2)	WP 0033		
Two 12 ft sling cables (WP 0074, Table 2, Item 3)	WP 0035		
	WP 0039 TM 9-2320-273-20 Equipment Condition Dump body bed removed (WP 0028). Hydraulic pump hoses removed (WP 0033).		
Two 10 ft sling cables (WP 0074, Table 2, Item 4)			
Four clevises (WP 0074, Table 2, Item 5)			
Lifting device			
Dunnage			
Chains	Tarpaulin storage tube removed (WP 0031).		
Materials/Parts Two cotter pins (WP 0055, Item 30)	Control cable disconnected (WP 0039).		

WARNING

Subframe weighs 1500 lb (680 kg). Use caution when handling heavy parts. Provide adequate support and use assistance during procedure. Do not attempt to lift tailgate. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

All nonessential personnel must stand clear during lifting operations. Use taglines during removal and installation. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

REMOVAL

- 1. Remove 16 bolts (Figure 1, Item 7) and nuts (Figure 1, Item 4) from subframe brackets (Figure 1, Item 6) and subframe (Figure 1, Item 16).
- 2. Loosen 16 bolts (Figure 1, Item 8) and nuts (Figure 1, Item 4) on subframe brackets (Figure 1, Item 6), but do not remove subframe brackets (Figure 1, Item 6) from vehicle frame rails (Figure 1, Item 14).
- 3. Remove hydraulic hoses from clamps at transfer case if not removed (TM 9-2320-273-20).
- 4. Check that control valve cable at crossmember guide bracket and control valve is disconnected (WP 0039).
- 5. Allow control valve cable to hang loose.
- 6. Remove two cotter pins (Figure 1, Item 10) and washers (Figure 1, Item 11) from pins (Figure 1, Item 12). Discard cotter pins (Figure 1, Item 10).
- 7. Drive pin (Figure 1, Item 12) out of subframe (Figure 1, Item 16) and remove safety strut (Figure 1, Item 9).
- 8. Remove two lube fittings (Figure 1, Item 13) from safety strut (Figure 1, Item 9) if damaged.
- 9. Attach four clevises (Figure 1, Item 5), two small front chains (Figure 1, Item 15), 10-ft lifting slings (Figure 1, Item 1), and 12-ft lifting slings (Figure 1, Item 3) to subframe (Figure 1, Item 16), lifting device (Figure 1, Item 2) and lift subframe (Figure 1, Item 16) off vehicle frame rail (Figure 1, Item 14). Place subframe (Figure 1, Item 16) on dunnage.

END OF TASK

INSTALLATION

- 1. Attach four clevises (Figure 1, Item 5), two small front chains (Figure 1, Item 15), 10-ft lifting slings (Figure 1, Items 1), 12-ft lifting slings (Figure 1, Items 3), and lifting device (Figure 1, Item 2) to subframe (Figure 1, Item 16). Lift subframe (Figure 1, Item 16) off dunnage and place subframe (Figure 1, Item 16) on vehicle frame rails (Figure 1, Item 14).
- 2. If removed, install two lube fittings (Figure 1, Item 13) on safety strut (Figure 1, Item 9).
- 3. Drive pin (Figure 1, Item 12) through subframe (Figure 1, Item 16) and safety strut (Figure 1, Item 9).
- 4. Install washers (Figure 1, Item 11) on pins (Figure 1, Item 12) with two new cotter pins (Figure 1, Item 10).
- 5. Position control valve cable on subframe (Figure 1, Item 16) (WP 0035).
- 6. Check that control valve cable is at crossmember guide bracket and control valve lever (WP 0039).
- 7. Install hydraulic hoses on clamps at transfer case (TM 9-2320-273-20).
- 8. Install eight subframe brackets (Figure 1, Item 6) on subframe (Figure 1, Item 16) with 16 bolts (Figure 1, Item 8) and nuts (Figure 1, Item 4). Tighten 5/8-in. bolts to 150 lb-ft (203.4 N•m) and ¾-in. bolts to 250 lb-ft (339 N•m).
- 9. Install 16 bolts (Figure 1, Item 7) and nuts (Figure 1, Item 4) on subframe brackets (Figure 1, Item 6) and subframe (Figure 1, Item 16). Tighten bolts (Figure 1, Item 7) and nuts (Figure 1, Item 4).
- 10. Connect control cable (WP 0039).
- 11. Install tarpaulin storage tube (WP 0031).
- 12. Install hydraulic pump hoses (WP 0033).
- 13. Install dump body bed (WP 0028).

INSTALLATION - CONTINUED

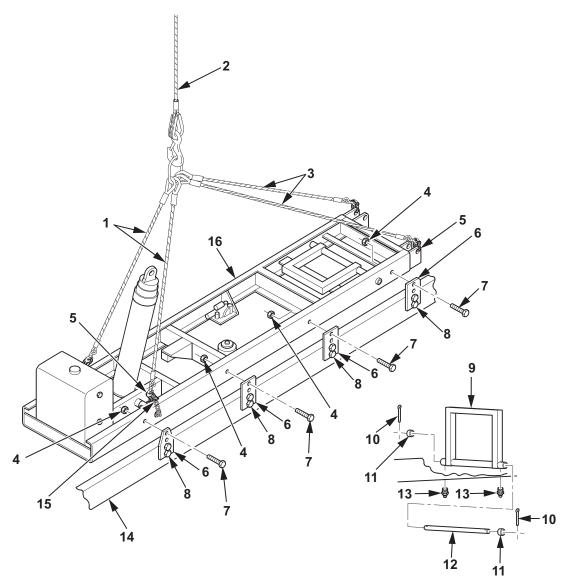


Figure 1. Subframe Removal and Installation.

END OF TASK

FIELD MAINTENANCE DUMP BED TAILGATE REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Lifting device

Materials/Parts

Grease (GAA) (WP 0077, Item 3)

Equipment Condition

REMOVAL

WARNING

Ensure a ground guide is used to assist in removal and installation of the dump bed tailgate. Failure to comply may result in death or injury to personnel and damage to equipment. Seek medical attention in the event of an injury.

- 1. Remove adjustment chain (Figure 1, Item 4) from tailgate (Figure 1, Item 3).
- 2. Position front end loader or fork lift behind dump truck bed frame (Figure 1, Item 2) with bucket facing tailgate (Figure 1, Item 3).
- 3. Raise bucket so flat side is positioned near center of tailgate (Figure 1, Item 3), both vertically and horizontally, and about eight in. away from tailgate (Figure 1, Item 3).
- 4. Remove two cotter pins (Figure 1, Item 9) and upper hinge pins (Figure 1, Item 8) from hinge brackets (Figure 1, Item 7) and tailgate (Figure 1, Item 3).
- 5. From inside dump bed, push out on tailgate (Figure 1, Item 3) until it rests on front end loader bucket.
- 6. Slowly lower bucket until tailgate (Figure 1, Item 3) is straight out from dump truck bed frame (Figure 1, Item 2).
- 7. Pull tailgate release lever (Figure 1, Item 1) forward and pull down. Tailgate locking jaws (Figure 1, Item 6) should release lower hinge pins (Figure 1, Item 5).
- 8. Lower or raise bucket and slowly back front end loader or fork lift away from dump truck bed frame (Figure 1, Item 2). When clear of dump truck bed frame (Figure 1, Item 2), lower bucket and tailgate (Figure 1, Item 3) to ground.

END OF TASK INSTALLATION

WARNING

Ensure a ground guide is used to assist in removal and installation of the dump bed tailgate. Failure to comply may result in death or injury to personnel and damage to equipment. Seek medical attention in the event of an injury.

Tailgate weighs 750 lb (340 kg). Use caution when handling heavy parts. Provide adequate support and use assistance during procedure. Do not attempt to lift tailgate. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

- 1. Position tailgate (Figure 1, Item 3) on flat side of front end loader bucket or fork lift so it is approximately centered.
- 2. Keeping bucket and tailgate (Figure 1, Item 3) level, raise bucket until tailgate (Figure 1, Item 3) lower hinge pins (Figure 1, Item 5) are slightly lower than tailgate locking jaws (Figure 1, Item 6).
- 3. Move front end loader or fork lift toward dump truck bed frame (Figure 1, Item 2) until lower hinge pins (Figure 1, Item 5) are under tailgate locking jaws (Figure 1, Item 6).
- 4. Push tailgate release lever (Figure 1, Item 1) back and full up. Raise or lower bucket as needed for tailgate locking jaws (Figure 1, Item 6) to close over lower hinge pins (Figure 1, Item 5).
- 5. Raise bucket until tailgate (Figure 1, Item 3) is in vertical position and resting against dump truck bed frame (Figure 1, Item 2).

INSTALLATION - CONTINUED

WARNING

Leaking or spilled GAA may cause a slip and fall hazard. Clean any leaking or spilled GAA immediately, using suitable fluid absorbent materials. Dispose of contaminated cloths, rags, or cleaning materials in accordance with local procedures and plans. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

- 6. Apply grease (GAA) to upper hinge pins (Figure 1, Item 8) and install two upper hinge pins (Figure 1, Item 8) on hinge brackets (Figure 1, Item 7), and top brackets of tailgate (Figure 1, Item 3). Install two cotter pins (Figure 1, Item 9) on upper hinge pins (Figure 1, Item 8).
- 7. Install adjustment chain (Figure 1, Item 4) on tailgate (Figure 1, Item 3).

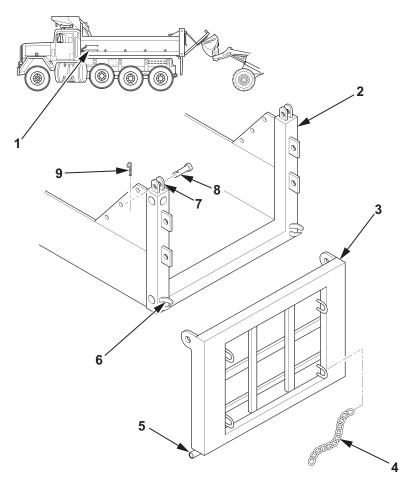


Figure 1. Dump Bed Tailgate Removal and Installation.

END OF TASK

FIELD MAINTENANCE TARPAULIN TUBE, DOOR, HINGE, AND SPRING FASTENER REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Four locknuts (WP 0057, Item 19) Eight locknuts (WP 0057, Item 13)

Equipment Condition

TARPAULIN TUBE REMOVAL

- 1. Remove four locknuts (Figure 1, Item 14) and screws (Figure 1, Item 2) from two mounting bands (Figure 1, Item 3). Discard locknuts (Figure 1, Item 14).
- 2. Remove tarpaulin tube (Figure 1, Item 4) from dump truck bed frame (Figure 1, Item 1) and slide two mounting bands (Figure 1, Item 3) off tarpaulin tube (Figure 1, Item 4).

END OF TASK

DOOR REMOVAL

- 1. Remove three locknuts (Figure 1, Item 10) and screws (Figure 1, Item 12) from door (Figure 1, Item 9) and hinge (Figure 1, Item 8). Discard locknuts (Figure 1, Item 10).
- 2. Remove door (Figure 1, Item 9) from hinge (Figure 1, Item 8).

END OF TASK

HINGE REMOVAL

- 1. Remove three locknuts (Figure 1, Item 13) and screws (Figure 1, Item 11) from hinge (Figure 1, Item 8) and tarpaulin tube (Figure 1, Item 4). Discard locknuts (Figure 1, Item 13).
- 2. Remove hinge (Figure 1, Item 8) from tarpaulin tube (Figure 1, Item 4).

END OF TASK

SPRING FASTENER REMOVAL

- 1. Remove two locknuts (Figure 1, Item 5) and screws (Figure 1, Item 7) from spring fastener (Figure 1, Item 6) and tarpaulin tube (Figure 1, Item 4). Discard locknuts (Figure 1, Item 5).
- 2. Slide spring fastener (Figure 1, Item 6) out from under bracket on tarpaulin tube (Figure 1, Item 4).

SPRING FASTENER REMOVAL - CONTINUED

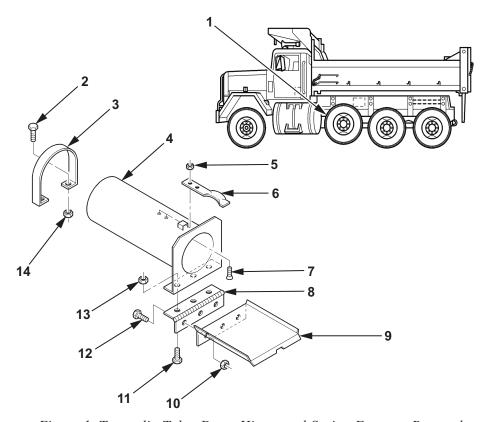


Figure 1. Tarpaulin Tube, Door, Hinge, and Spring Fastener Removal.

END OF TASK

SPRING FASTENER INSTALLATION

- 1. Slide spring fastener (Figure 2, Item 6) under bracket on tarpaulin tube (Figure 2, Item 4).
- 2. Install spring fastener (Figure 2, Item 6) on tarpaulin tube (Figure 2, Item 4) with two screws (Figure 2, Item 7) and new locknuts (Figure 2, Item 5.

END OF TASK

HINGE INSTALLATION

Install hinge (Figure 2, Item 8) on tarpaulin tube (Figure 2, Item 4) with three screws (Figure 2, Item 11) and new locknuts (Figure 2, Item 13).

END OF TASK

DOOR INSTALLATION

Install door (Figure 2, Item 9) on hinge (Figure 2, Item 8) with three screws (Figure 2, Item 12) and new locknuts (Figure 2, Item 10.

END OF TASK

TARPAULIN TUBE INSTALLATION

- 1. Slide two mounting bands (Figure 2, Item 3) on tarpaulin tube (Figure 2, Item 4) and position tarpaulin tube (Figure 2, Item 4) on dump truck bed frame (Figure 2, Item 1).
- 2. Install two mounting bands (Figure 2, Item 3) and tarpaulin tube (Figure 2, Item 4) on dump truck bed frame (Figure 2, Item 1) with four screws (Figure 2, Item 2) and new locknuts (Figure 2, Item 14).

TARPAULIN TUBE INSTALLATION - CONTINUED

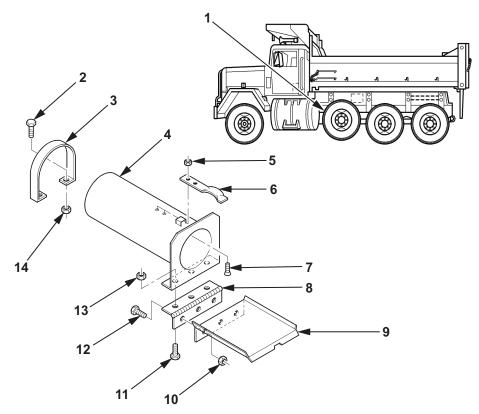


Figure 2. Tarpaulin Tube, Door, Hinge, and Spring Fastener Installation.

END OF TASK

FIELD MAINTENANCE TESTING HYDRAULIC PUMP, CONTROL VALVE, AND PILOT RELIEF VALVE

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

High pressure hose 5 ft (1.52 m) (WP 0074, Table 2, Item 6)

High pressure hose 10 in. (25.4 cm) (WP 0074, Table 2, Item 7)

High pressure hose 16 in. (40.6 cm) (WP 0074, Table 2, Item 8)

Tee fitting (WP 0074, Table 2, Item 9)

High pressure gauge 3000 psi (20,685 kPa) (WP 0074, Table 2, Item 10)

Materials/Parts

Oil, lubricating OE/HDO 10 (WP 0077, Item 5)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

TEST HYDRAULIC PUMP

- 1. Remove plug (Figure 1, Item 3) from test block (Figure 1, Item 2) mounted on rear of hydraulic pump (Figure 1, Item 1).
- 2. Install 5 ft pressure hose and 3000 psi (20685 kPa) gauge (Figure 1, Item 4) on test block (Figure 1, Item 2).
- 3. Start engine and engage PTO (TM 9-2320-273-10). Bring engine to 2000 rpm and read gauge.
- 4. Gauge must read 2000 psi (13790 kPa) or greater. If pressure is less than 2000 psi (13790 kPa), perform control valve pressure adjustment. If pressure cannot be reached by adjusting control valve, replace or rebuild hydraulic pump.
- 5. Shut down engine and disengage PTO (TM 9-2320-273-10).
- 6. Remove test hose and gauge (Figure 1, Item 4). Install plug (Figure 1, Item 3).

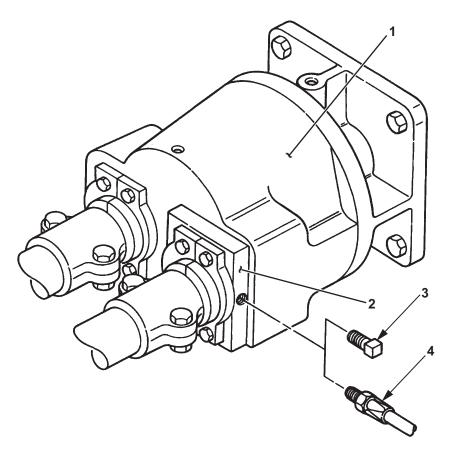


Figure 1. Test Hydraulic Pump.

END OF TASK

TEST AND ADJUST CONTROL VALVE

- 1. Start engine and engage PTO (TM 9-2320-273-10). Raise dump bed, set up safety strut, and lower dump bed
- 2. Shut down system (TM 9-2320-273-10).
- 3. Remove hydraulic hose from control valve to pilot relief valve.
- 4. Install 3000 psi (20685 kPa) test gauge, tee fitting, 10 in. (25.4 cm) hose, and 16 in. (40.6 cm) hose between control valve and pilot valve in place of hydraulic hose.
- 5. Start engine and engage PTO (TM 9-2320-273-10). Raise dump bed and lower safety strut and dump bed.
- 6. Raise dump bed and set safety strut.
- 7. Remove acorn cap nut and gasket from relief valve on control valve.
- 8. Set engine speed at 2000 rpm (TM 9-2320-273-10).
- 9. Place control valve lever in cab in up position and hold.
- 10. Observe reading on test gauge. Gauge should indicate 2000 psi (13790 kPa). If not, adjust control valve by loosening locknut on relief valve and turning adjustment screw clockwise to increase pressure or counterclockwise to decrease pressure.
- 11. Tighten locknut and install gasket and acorn cap nut on relief valve.
- 12. Install safety strut and shut down system.
- 13. Remove test gauge, hoses, and tee fitting from control valve. Install hydraulic hose.
- 14. Start system, lower safety strut, lower and raise dump bed, and check for leaks.
- 15. Raise and lower dump bed and observe operation.

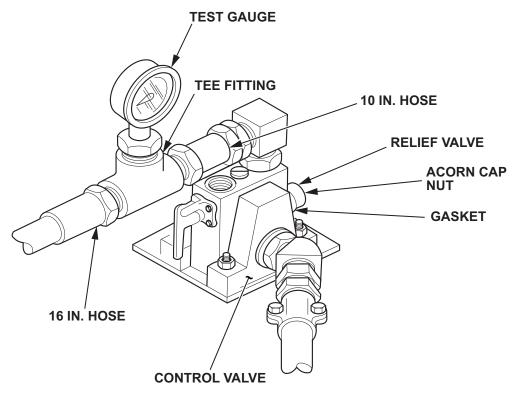


Figure 2. Control Valve Test Gauge Setup.

END OF TASK

TEST AND ADJUST RELIEF VALVE

- 1. Start engine and engage PTO (TM 9-2320-273-10). Raise dump bed, set up safety strut, and lower dump bed.
- 2. Shut down system (TM 9-2320-273-10).
- 3. Remove cap from relief valve body.
- 4. Insert hex key in adjusting screw located in relief valve body and turn clockwise as far as possible with moderate force.
- 5. Install cap on relief valve body.
- 6. Start system, lower safety strut, lower and raise dump bed, and check for leaks.
- 7. Raise and lower dump bed and observe operation.
- 8. Shut down system (TM 9-2320-273-10).

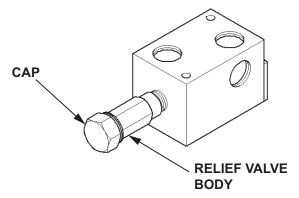


Figure 3. Pilot Valve Adjustment.

END OF TASK

FIELD MAINTENANCE HYDRAULIC PUMP REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Eight lockwashers (WP 0064, Item 40)

O-ring (WP 0064, Item 13)

O-ring (WP 0064, Item 38)

O-ring (WP 0064, Item 46)

Four lockwashers (WP 0060, Item 27)

Oil, lubricating OE/HDO 10 (WP 0077, Item 5)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

REMOVAL

NOTE

Have a suitable container that holds up to 27 gal. (102 L) ready to catch oil.

- 1. Remove four screws (Figure 1, Item 13), lockwashers (Figure 1, Item 14), two split flanges (Figure 1, Item 15), hydraulic hose (Figure 1, Item 11), and O-ring (Figure 1, Item 12) from suction port (Figure 1, Item 16) on hydraulic pump (Figure 1, Item 2) and drain hydraulic oil from reservoir. Discard lockwashers (Figure 1, Item 14) and O-ring (Figure 1, Item 12).
- 2. Remove four screws (Figure 1, Item 9), lockwashers (Figure 1, Item 10), two split flanges (Figure 1, Item 6), hydraulic hose (Figure 1, Item 8), O-ring (Figure 1, Item 7), test block (Figure 1, Item 5), and O-ring (Figure 1, Item 4) from pressure port (Figure 1, Item 3) on hydraulic pump (Figure 1, Item 2). Discard lockwashers (Figure 1, Item 10) and O-rings (Figure 1, Items 4 and 7).

NOTE

It may be necessary to use a 3/4-in. crowfoot attachment and extension to remove the top two screws and lockwashers.

3. Support hydraulic pump (Figure 1, Item 2) and remove four screws (Figure 1, Item 17), lockwashers (Figure 1, Item 18), and hydraulic pump (Figure 1, Item 2) from PTO drive (Figure 1, Item 1). Discard lockwashers (Figure 1, Item 18).

END OF TASK INSTALLATION

NOTE

It may be necessary to use a 3/4-in. crowfoot attachment and extension to tighten the top two screws.

- 1. Install hydraulic pump (Figure 1, Item 2) on PTO drive (Figure 1, Item 1) with four new lockwashers (Figure 1, Item 18) and screws (Figure 1, Item 17). Tighten screws (Figure 1, Item 17).
- 2. Install new O-ring (Figure 1, Item 4) and test block (Figure 1, Item 5) on pressure port (Figure 1, Item 3) of hydraulic pump (Figure 1, Item 2) with new O-ring (Figure 1, Item 7), hydraulic hose (Figure 1, Item 8), two split flanges (Figure 1, Item 6), four new lockwashers (Figure 1, Item 10), and screws (Figure 1, Item 9). Tighten screws (Figure 1, Item 9).
- 3. Install new O-ring (Figure 1, Item 12) and hydraulic hose (Figure 1, Item 11) on suction port (Figure 1, Item 16) of hydraulic pump (Figure 1, Item 2) with two split flanges (Figure 1, Item 15), four new lockwashers (Figure 1, Item 14), and screws (Figure 1, Item 13). Tighten screws (Figure 1, Item 13).
- 4. Fill hydraulic reservoir, start engine, and engage PTO (TM 9-2320-273-10), check system for oil leaks, and shut down engine.

INSTALLATION - CONTINUED

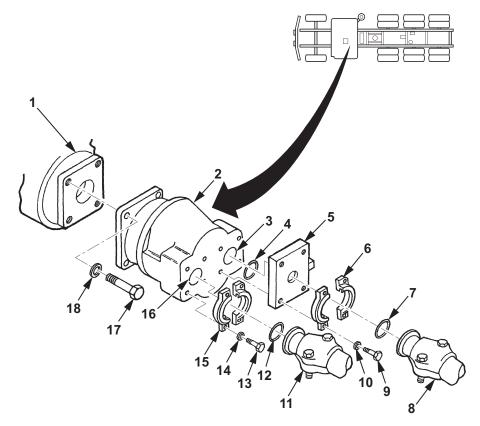


Figure 1. Hydraulic Pump Removal and Installation.

END OF TASK

FIELD MAINTENANCE HYDRAULIC PUMP REPAIR

INITIAL SETUP:

Tools and Special Tools

Standard Automotive Tool Set (SATS) (WP 0074, Table 2, Item 2)

Materials/Parts

Hydraulic pump seal kit (WP 0068, Item 14) Cleaning compound, solvent (WP 0077, Item 1) Materials/Parts - Continued

Wood blocks

Equipment Condition

Hydraulic pump removed (WP 0033).

NOTE

Clean outside of hydraulic pump thoroughly before disassembling pump.

DISASSEMBLY

CAUTION

Use two wood blocks between hydraulic pump and jaws of vise. Failure to comply may result in damage to equipment.

- 1. Place hydraulic pump assembly securely in machinist vise, shaft side up.
- 2. Remove eight screws (Figure 1, Item 30) and washers (Figure 1, Item 31) from hydraulic pump flange (Figure 1, Item 4).
- 3. Lift hydraulic pump flange (Figure 1, Item 4) off pump body (Figure 1, Item 22), keeping hydraulic pump flange (Figure 1, Item 4) straight during removal. If flange is stuck, use wooden mallet or plastic hammer to tap around edge and loosen. It is not necessary to remove two dowel pins (Figure 1, Item 5).
- 4. Lay hydraulic pump flange (Figure 1, Item 4) on smooth, clean surface and remove snap ring (Figure 1, Item 29) and seal press ring (Figure 1, Item 28). Turn hydraulic pump flange (Figure 1, Item 4) over and tap old seal (Figure 1, Item 27) from bore.
- 5. Remove O-ring (Figure 1, Item 6) from hydraulic pump flange (Figure 1, Item 4). Discard (Figure 1, Item 6).
- 6. Remove two back-up rings (Figure 1, Item 8) and O-rings (Figure 1, Item 9). Remove two isolation plates (Figure 1, Item 12), sealing strips (Figure 1, Item 11), end separators (Figure 1, Item 10), and center separator (Figure 1, Item 26). Discard back-up rings (Figure 1, Item 8), O-rings (Figure 1, Item 9), isolation plates (Figure 1, Item 12), sealing strips (Figure 1, Item 11), end separators (Figure 1, Item 10), and center separator (Figure 1, Item 26).
- 7. Mark side of pump body (Figure 1, Item 22) near drive gear (Figure 1, Item 25).
- 8. Grasp drive gear extension and lift drive gear (Figure 1, Item 25) slightly with quick, upward motion to dislodge top pressure plate (Figure 1, Item 13) from inside bore of pump body (Figure 1, Item 22). Using thumb and forefinger of other hand in slots of top pressure plate (Figure 1, Item 13) and releasing hold on drive gear (Figure 1, Item 25), lift top pressure plate (Figure 1, Item 13) from pump body (Figure 1, Item 22).
- 9. Lift idler gear (Figure 1, Item 14) and drive gear (Figure 1, Item 25) straight up from pump body (Figure 1, Item 22).
- 10. Remove bottom pressure plate (Figure 1, Item 15) from pump body (Figure 1, Item 22) by inserting offset screwdriver in holes and lifting up.

CAUTION

Use caution during removal of pressure plate. Do not pry or force it out. Failure to comply may result in damage to equipment.

- 11. Remove bottom pressure plate (Figure 1, Item 15) using thumb of each hand in holes in bottom.
- 12. Remove isolation plates (Figure 1, Item 18) sealing strips (Figure 1, Item 17), end separators (Figure 1, Item 16), center separator (Figure 1, Item 24), back-up ring (Figure 1, Item 20), and O-ring (Figure 1, Item 19). Discard isolation plates (Figure 1, Item 18), sealing strips (Figure 1, Item 17), end separators (Figure 1, Item 16), center separator (Figure 1, Item 24), back-up ring (Figure 1, Item 20), and O-ring (Figure 1, Item 19).
- 13. If damaged or worn, remove two bearings (Figure 1, Item 21) from pump body (Figure 1, Item 22) and two bearings (Figure 1, Item 7) from hydraulic pump flange (Figure 1, Item 4).

CAUTION

Never remove balls or plug as service procedure. These items provide a vent in case of pressure buildup in pump. Failure to comply may result in damage to equipment.

14. If balls (Figure 1, Items 2, 3, and 23) are blown out, press new balls (Figure 1, Items 2, 3, and 23) in with new retainers (Figure 1, Item 1).

DISASSEMBLY - CONTINUED

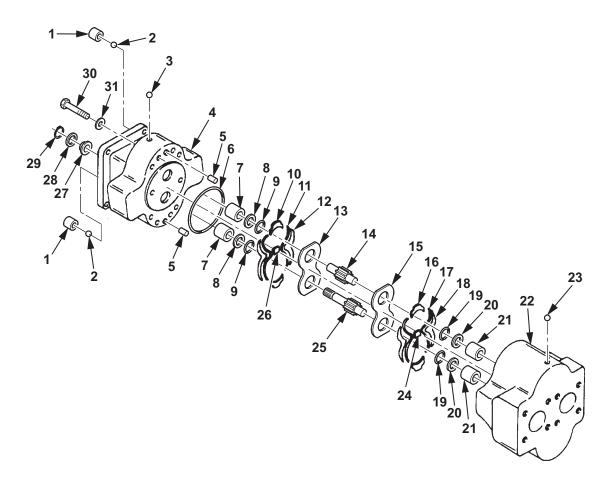


Figure 1. Hydraulic Pump Disassembly.

END OF TASK CLEANING AND INSPECTION

WARNING

Compressed air used for cleaning must not exceed 30 psi (207 kPa). Use only with effective chip guarding and personal protective equipment (goggles/faceshield, gloves, etc.). Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

NOTE

Wash all parts thoroughly with clean solvent and blow dry. This should remove any foreign matter trapped in the pump.

- 1. Visually inspect all parts. Gear track is inside pump body (Figure 1, Item 22). Measure depth of gear track. If groove is deeper than 0.0050 in. (0.013 cm), body should be rejected. If track is less than 0.005 in. (0.013 cm), body may be reassembled provided it is not cracked or damaged.
- 2. Examine top pressure plate (Figure 1, Item 13) and bottom pressure plate (Figure 1, Item 15). If gear track or groove is deeper than 0.005 in. (0.013 cm), replace plate.
- 3. Gear journals should be measured within 0.38 in. (0.96 cm) of gear. Measure diameter of journals where shaft has run in bearings. Gears should be rejected if there is more than 0.001 in. (0.0025 cm) variation in two measurements.

CLEANING AND INSPECTION - CONTINUED

4. If any internal parts show excessive wear, replace parts.

END OF TASK

ASSEMBLY

CAUTION

Never remove balls or plug as service procedure. These items provide a vent in case of pressure buildup in pump. Failure to comply may result in damage to equipment.

- 1. If balls (Figure 2, Items 2, 3, and 23) are blown out, press new balls (Figure 2, Items 2, 3, and 23) in with new retainers (Figure 2, Item 1).
- 2. Place pump body (Figure 2, Item 22) so mark made during disassembly is facing you.
- 3. Liberally coat inside of pump body (Figure 2, Item 22) with clean hydraulic oil to ensure easy assembly.
- 4. Assemble two new O-rings (Figure 2, Item 19) and new back-up rings (Figure 2, Item 20) on bearings (Figure 2, Item 21) on bottom of pump body (Figure 2, Item 22).
- 5. Examine four new isolation plates (Figure 2, Items 12 and 18). They are slightly different. Choose two having rounded edges. Install one in bottom of pump body (Figure 2, Item 22) with rounded edges in proper location.
- 6. Install new center separator (Figure 2, Item 24), two new end separators (Figure 2, Item 16), and new sealing strips (Figure 2, Item 17).
- 7. Install other new isolation plate (Figure 2, Item 26) with rounded edge down and snap in place.
- 8. Keep bottom pressure plate (Figure 2, Item 15) level with bronze side facing up. Slide in place in bottom of pump body (Figure 2, Item 22). Do not force plate.

CAUTION

Do not drop drive gear into place. Slide drive gear in gently. Dropping drive gear will damage bronze bottom pressure plate. Failure to comply may result in damage to equipment.

- 9. Slide drive gear (Figure 2, Item 25) gently into place in bore nearest you.
- 10. Install idler gear (Figure 2, Item 14) in opposite bore of pump body (Figure 2, Item 22). Numbered end of idler gear (Figure 2, Item 14) should be facing up.
- 11. Install top pressure plate (Figure 2, Item 13) with bronze side facing down.
- 12. Assemble two new O-rings (Figure 2, Item 9) and new back-up rings (Figure 2, Item 8) on bearings (Figure 2, Item 7) sticking out of hydraulic pump flange (Figure 2, Item 4).
- 13. Install two new isolation plates (Figure 2, Item 12), new center separator (Figure 2, Item 26), two new end separators (Figure 2, Item 10), and new sealing strips (Figure 2, Item 11).
- 14. Install new seal (Figure 2, Item 27), new seal press ring (Figure 2, Item 28), and snap ring (Figure 2, Item 29).
- 15. Install new body O-ring (Figure 2, Item 6) in groove in hydraulic pump flange (Figure 2, Item 4).
- 16. Coat drive gear (Figure 2, Item 25) extension with heavy grease to protect lips of seal (Figure 2, Item 27).
- 17. Slide hydraulic pump flange (Figure 2, Item 4) over drive gear (Figure 2, Item 25) extension and seat against pump body (Figure 2, Item 22). Ensure two dowel pins (Figure 2, Item 5) are in body.

WARNING

Compressed air used for cleaning must not exceed 30 psi (207 kPa). Use only with effective chip guarding and personal protective equipment (goggles/faceshield, gloves, etc.). Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

ASSEMBLY - CONTINUED

CAUTION

Do not oil screws. Screws and screw holes must be dry for proper torque reading. Failure to comply may result in damage to equipment.

- 18. Wash eight screws (Figure 2, Item 30) and washers (Figure 2, Item 31) in cleaning solvent and dry.
- 19. Install two washers (Figure 2, Item 31) and screws (Figure 2, Item 30) in opposite holes. Torque screws (Figure 2, Item 30) to 80 lb-ft (108 N•m).
- 20. Using 10 in. wrench, check if drive gear (Figure 2, Item 25) turns. Shaft will be tight, but should turn freely with maximum of 5–10 lb pull.
- 21. If drive gear (Figure 2, Item 25) will not turn, disassemble hydraulic pump and examine for burrs or foreign material causing buildup or interference in parts.
- 22. Remove foreign material and reassemble.
- 23. When drive gear (Figure 2, Item 25) turns properly, install washers (Figure 2, Item 31) and screws (Figure 2, Item 30). Torque to 80 lb-ft (108 N•m).
- 24. Install hydraulic pump WP 0033.

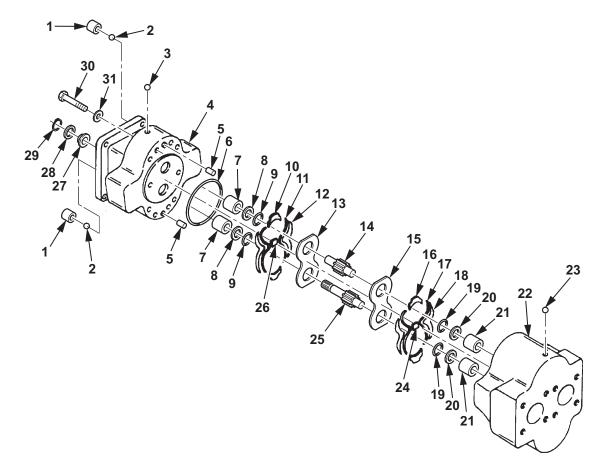


Figure 2. Hydraulic Pump Assembly.

END OF TASK

FIELD MAINTENANCE HYDRAULIC CONTROL VALVE REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Three cotter pins (WP 0061, Items 3 and 39) Three O-rings (WP 0064, Item 15) O-ring (WP 0064, Item 20)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

WARNING

Do not perform any maintenance with dump body bed raised until the safety strut is installed in locked position. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

REMOVAL

1. Start engine, engage PTO, and raise dump body bed. Raise safety strut to locked position, lower dump body bed, and shut down engine (TM 9-2320-273-10).

NOTE

Have a suitable container that will hold up to 27 gal. (102 L) ready to catch oil.

- 2. Disconnect hydraulic hoses (Figure 1, Items 1, 2, and 4) from fittings on hydraulic control valve (Figure 1, Item 5).
- 3. Remove two cotter pins (Figure 2, Item 6), clevis pins (Figure 2, Items 4, 8, and 9), and control link (Figure 2, Item 7) from two links (Figure 2, Item 10) and hydraulic control valve (Figure 2, Item 1).
- 4. Remove three nuts (Figure 2, Item 2), screws (Figure 2, Item 3), and hydraulic control valve (Figure 2, Item 1) from mounting bracket (Figure 2, Item 5).
- 5. Disconnect hydraulic hose (Figure 1, Item 3) from fitting on hydraulic control valve (Figure 1, Item 5).
- 6. Remove hydraulic control valve (Figure 1, Item 5) from vehicle.
- 7. If replacing hydraulic control valve (Figure 1, Item 5), remove four fittings (Figure 1, Item 6) and O-rings (Figure 1, Item 7). Discard O-rings (Figure 1, Item 7).

END OF TASK

INSTALLATION

- 1. If replacing hydraulic control valve (Figure 1, Item 5), install four new O-rings (Figure 1, Item 7) and fittings (Figure 1, Item 6) on hydraulic control valve (Figure 1, Item 5).
- 2. Position hydraulic control valve (Figure 1, Item 5) on vehicle.
- 3. Connect hydraulic hose (Figure 1, Item 3) to fitting on hydraulic control valve (Figure 1, Item 5).
- 4. Install hydraulic control valve (Figure 2, Item 1) on mounting bracket (Figure 2, Item 5) with three screws (Figure 2, Item 3) and nuts (Figure 2, Item 2).
- 5. Install control link (Figure 2, Item 7) and two links (Figure 2, Item 10) on hydraulic control valve (Figure 2, Item 1) with clevis pins (Figure 2, Items 4, 8, and 9) and two new cotter pins (Figure 2, Item 6).
- 6. Connect hydraulic hoses (Figure 1, Items 1, 2, and 4) to fittings on hydraulic control valve (Figure 1, Item 5).
- 7. Start engine and engage PTO. Check system for oil leaks, raise dump body bed, lower safety strut to stowed position, lower dump body bed, and shut down engine (TM 9-2320-273-10).

INSTALLATION - CONTINUED

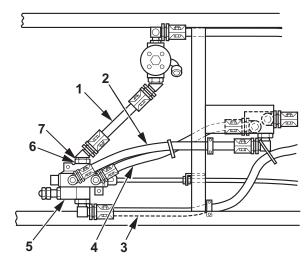


Figure 1. Hydraulic Hoses and Fittings Removal and Installation.

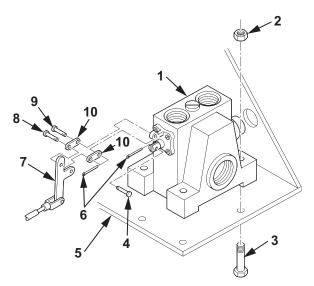


Figure 2. Hydraulic Control Valve Removal and Installation.

END OF TASK

FIELD MAINTENANCE HYDRAULIC CONTROL VALVE REPAIR

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

O-ring and seal kit (WP 0061, Item 45) Eight lockwashers (WP 0061, Item 29) Four lockwashers (WP 0061, Item 41)

Materials/Parts - Continued

Grease, Automotive Artillery (GAA) (WP 0077, Item 3)

Equipment Condition

Hydraulic control valve removed (WP 0035).

DISASSEMBLY

NOTE

Repair of the control valve is limited to replacement of component parts of the spool and relief valve assemblies. The spool U-cup seals are to be replaced if the spool is removed for any reason. Generally U-cup seals are the cause when there is evidence of valve leakage. Any damage such as grooving, wear, breakage, scoring, or discoloration is cause for replacing the component part.

- 1. Remove four screws (Figure 1, Item 19), lockwashers (Figure 1, Item 20), and bonnet cap (Figure 1, Item 21), and diaphragm (Figure 1, Item 18) from valve body (Figure 1, Item 30). Discard lockwashers (Figure 1, Item 20) and diaphragm (Figure 1, Item 18).
- 2. Remove screw (Figure 1, Item 22) and spring assembly consisting of lockwasher (Figure 1, Item 23), spool collar (Figure 1, Item 24), stop collar (Figure 1, Item 25), centering spring (Figure 1, Item 26), and stop collar (Figure 1, Item 27). Discard lockwasher (Figure 1, Item 23).
- 3. Remove four screws (Figure 1, Item 38), lockwashers (Figure 1, Item 37), and lift-off bracket (Figure 1, Item 41) from valve body (Figure 1, Item 30). Discard lockwashers (Figure 21, Item 37).
- 4. Pull spool (Figure 1, Item 29) from front of valve body (Figure 1, Item 30) enough to expose back O-ring seal (Figure 1, Item 28) in valve body (Figure 1, Item 30).
- 5. Remove back O-ring seal (Figure 1, Item 28). Discard O-ring seal (Figure 1, Item 28).
- 6. Push spool (Figure 1, Item 29) toward back of valve body (Figure 1, Item 30) and remove.
- 7. Remove front O-ring seal (Figure 1, Item 42). Discard O-ring seal (Figure 1, Item 42).
- 8. Inspect and thoroughly clean both seal grooves in valve body (Figure 1, Item 30).
- 9. If leaking, remove plugs (Figure 1, Items 2 and 4) and seals (Figure 1, Items 1 and 3). Discard seals (Figure 1, Items 1 and 3).
- 10. If leaking, remove four bolt assemblies (Figure 1, Item 35), lockwashers (Figure 1, Item 36), cover (Figure 1, Item 34), and seals (Figure 1, Item 31, 32, and 33) from valve body (Figure 1, Item 30). Discard lockwashers (Figure 1, Item 36) and seals (Figure 1, Items 31, 32, and 33).
- 11. If replacement of relief valve is necessary, remove cap cover (Figure 1, Item 17) and washer (Figure 1, Item 16).
- 12. Remove jam nut (Figure 1, Item 15) and washer (Figure 1, Item 14).
- 13. Remove adjustment screw (Figure 1, Item 13) and spring (Figure 1, Item 12).
- 14. Remove valve housing (Figure 1, Item 8), seal (Figure 1, Item 7), washer (Figure 1, Item 6), seal (Figure 1, Item 5), and seal (Figure 1, Item 11) from valve body (Figure 1, Item 30).
- 15. Remove guide ball (Figure 1, Item 10), seal (Figure 1, Item 11), and ball (Figure 1, Item 9) from valve housing (Figure 1, Item 8). Discard seal (Figure 1, Item 11).
- 16. If replacement is necessary, remove adapter (Figure 1, Item 40) and washer (Figure 1, Item 39) from end of spool (Figure 1, Item 29).

DISASSEMBLY - CONTINUED

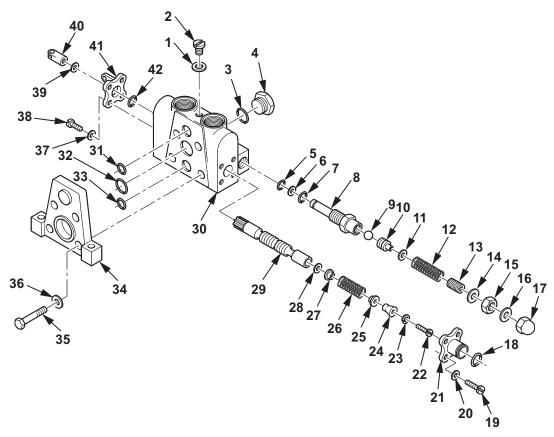


Figure 1. Control Valve Disassembly.

END OF TASK

ASSEMBLY

NOTE

Pinch one side of the front O-ring seal into a smaller diameter than the groove, then insert the front O-ring seal. When the front O-ring seal is in place, straighten it by running a smooth rod around the inside perimeter until sealed. After installation is complete, check it by running your finger around the exposed edge. It should have a smooth ridge with no kinks.

- 1. If removed, install adapter (Figure 2, Item 40) and washer (Figure 2, Item 39) on end of spool (Figure 2, Item 29).
- 2. Install guide ball (Figure 2, Item 10), new seal (Figure 2, Item 11), and ball (Figure 2, Item 9) on valve housing (Figure 2, Item 8).
- 3. Install valve housing (Figure 2, Item 8), new seal (Figure 2, Item 7), washer (Figure 2, Item 6), new seal (Figure 2, Item 5), and new seal (Figure 2, Item 11) on valve body (Figure 2, Item 30).
- 4. Install adjustment screw (Figure 2, Item 13) and spring (Figure 2, Item 12) on valve housing (Figure 2, Item 8).
- 5. Install jam nut (Figure 2, Item 15) and washer (Figure 2, Item 14) on valve housing (Figure 2, Item 8).
- 6. Install washer (Figure 2, Item 16) and cap cover (Figure 2, Item 17) on valve housing (Figure 2, Item 8).

NOTE

Apply small amount of grease on front O-ring seal to prevent it from tearing during assembly.

- 7. Install new front O-ring seal (Figure 2, Item 42) in front groove of valve body (Figure 2, Item 30).
- 8. Push spool (Figure 2, Item 29) forward through front O-ring seal (Figure 2, Item 42). Push spool (Figure 2, Item 29) until rear spool groove is completely exposed, but no further.
- 9. Repeat steps 1 and 2 to install new back O-ring seal (Figure 2, Item 28).
- 10. From front side, push spool (Figure 1, Item 29) back approximately 1/2-in. (1.27 cm).
- 11. Assemble spring assembly stop collar (Figure 2, Item 27), centering spring (Figure 2, Item 26), stop collar (Figure 2, Item 25), spool collar (Figure 2, Item 24), and new lockwasher (Figure 2, Item 23).
- 12. From front of valve body (Figure 1, Item 30), hold spool (Figure 2, Item 29) and install spring assembly with screw (Figure 2, Item 22).
- 13. Install bonnet cap assembly (Figure 1, Item 21).
- 14. Install new diaphragm (Figure 2, Item 18) in bonnet cap assembly (Figure 2, Item 21). Install bonnet cap assembly (Figure 2, Item 21) on valve body (Figure 2, Item 30) with four new lockwashers (Figure 2, Item 20) and screws (Figure 2, Item 19). Tighten screws (Figure 2, Item 19).
- 15. Install bracket (Figure 2, Item 41) on valve body (Figure 2, Item 30) with four new lockwashers (Figure 2, Item 37) and screws (Figure 2, Item 38).
- 16. If removed, install new O-ring seals (Figure 2, Items 1 and 3) and plugs (Figure 2, Items 2 and 4) on valve body (Figure 2, Item 30).
- 17. Install new O-ring seals (Figure 1, Items 31, 32, and 33) and cover (Figure 2, Item 34) on valve body (Figure 2, Item 30) with four new lockwashers (Figure 2, Item 36) and bolt assemblies (Figure 2, Item 35).
- 18. Install hydraulic control valve (WP 0035).

ASSEMBLY - CONTINUED

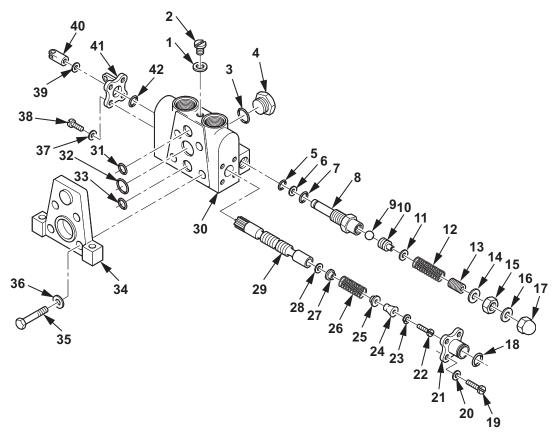


Figure 2. Control Valve Assembly.

END OF TASK

FIELD MAINTENANCE PILOT RELIEF VALVE REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Three O-rings (WP 0064, Items 2, 15, and 30)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

WARNING

Do not perform any maintenance with dump body bed raised until the safety strut is installed in locked position. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

REMOVAL

WARNING

Accidental or intentional introduction of liquid contaminants into the environment is a violation of state, federal, and military regulations. Use a drain pan to capture any draining or leaking fluid. Refer to Army POL (WP 0001) for information concerning storage, use, and disposal of these liquids. Failure to comply may result in damage to environment and health of personnel. Seek medical attention in the event of an injury.

Wipe up any spilled hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Prolonged contact with hydraulic fluid may cause a skin rash. Skin and clothing that comes in contact with hydraulic fluid should be thoroughly washed immediately. Saturated clothing should be removed immediately. Areas in which hydraulic fluid is used should be well ventilated to keep fumes to a minimum. Failure to comply may result in injury to personnel. In the event of injury, seek medical attention immediately.

1. Start engine and engage PTO (TM 9-2320-273-10). Raise dump body bed, raise safety strut to locked position, lower dump body bed on safety strut, and shut down engine.

NOTE

Have a suitable container that holds up to 27 gal. (102 L) ready to catch oil.

- 2. Disconnect hydraulic hoses (Figure 1, Items 1, 2, and 6) from fittings on pilot relief valve (Figure 1, Item 3).
- 3. Remove two nuts (Figure 2, Item 1), cap screws (Figure 2, Item 3), and pilot relief valve (Figure 2, Item 2) from mounting plate (Figure 2, Item 4).
- 4. If replacing pilot relief valve (Figure 1, Item 3), remove three fittings (Figure 1, Item 4) and O-rings (Figure 1, Item 5) from pilot relief valve (Figure 1, Item 3). Discard O-rings (Figure 1, Item 5).

END OF TASK

INSTALLATION

- 1. If replacing pilot relief valve (Figure 1, Item 3), install three new O-rings (Figure 1, Item 5) and fittings (Figure 1, Item 4) on pilot relief valve (Figure 1, Item 3).
- 2. Install pilot relief valve (Figure 2, Item 2) under mounting plate (Figure 2, Item 4) with two cap screws (Figure 2, Item 3) and nuts (Figure 2, Item 1).
- 3. Connect hydraulic hoses (Figure 1, Items 1, 2, and 6) to fittings on pilot relief valve (Figure 1, Item 3).
- 4. Start engine and engage PTO (TM 9-2320-273-10). Check system for oil leaks, raise dump body bed, lower safety strut to stowed position, lower dump body bed, and shut down engine.

INSTALLATION - CONTINUED

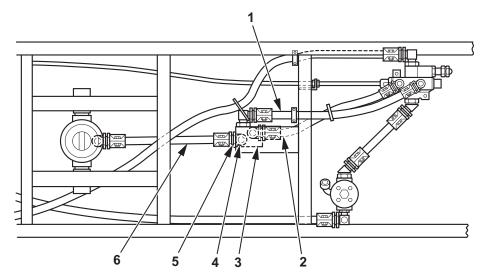


Figure 1. Pilot Relief Valve Hoses and Fittings Removal and Installation.

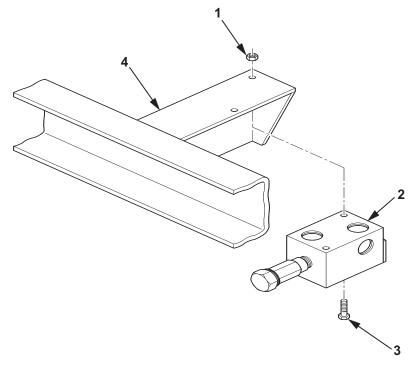


Figure 2. Pilot Relief Valve Removal and Installation.

END OF TASK

FIELD MAINTENANCE PILOT RELIEF VALVE MAINTENANCE

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Seal and O-ring kit (WP 0068, Item 15)

Equipment Condition

Pilot relief valve removed (WP 0037).

NOTE

Pilot valve repair is limited to replacement of the pilot relief valve, plunger seals, and O-rings.

DISASSEMBLY

- 1. Remove cap (Figure 1, Item 5) and metal gasket (Figure 1, Item 4) from relief valve body (Figure 1, Item 3).
- 2. Remove relief valve body (Figure 1, Item 3) from pilot relief valve housing (Figure 1, Item 7).
- 3. Remove two backup rings (Figure 1, Item 1) and two O-rings (Figure 1, Items 2 and 6) from relief valve body (Figure 1, Item 3). Discard backup rings (Figure 1, Item 1) and O-rings (Figure 1, Items 2 and 6).

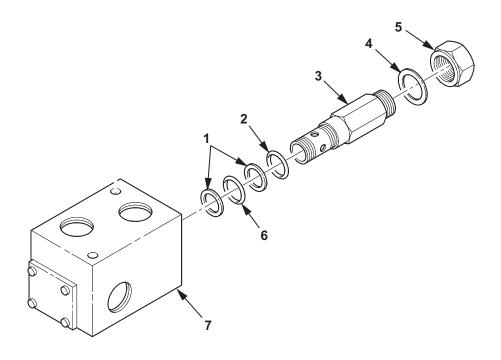


Figure 1. Pilot Relief Valve Disassembly and Assembly.

END OF TASK

ASSEMBLY

- 1. Install two new O-rings (Figure 1, Items 2 and 6) and two new backup rings (Figure 1, Item 1) on internal side of relief valve body (Figure 1, Item 3).
- 2. Install relief valve body (Figure 1, Item 3) in pilot relief valve housing (Figure 1, Item 7).
- 3. Install metal gasket (Figure 1, Item 4) on cap threads.
- 4. Install cap (Figure 1, Item 5) on relief valve body (Figure 1, Item 3).
- 5. Install pilot relief valve (WP 0037).

END OF TASK

FIELD MAINTENANCE CONTROL LEVER ASSEMBLY AND CABLE REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Four lockwashers (WP 0063, Item 10) Cotter pin (WP 0063, Item 8)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

CONTROL LEVER ASSEMBLY REMOVAL

- 1. Remove four screws (Figure 1, Item 7) and lockwashers (Figure 1, Item 6) from control lever assembly (Figure 1, Item 1) and pusher axle/PTO control panel (Figure 1, Item 5). Discard lockwashers (Figure 1, Item 6).
- 2. Lift control lever assembly (Figure 1, Item 1) out of pusher axle/PTO control panel (Figure 1, Item 5).
- 3. Remove two nuts (Figure 1, Item 3), bolts (Figure 1, Item 16), washers (Figure 1, Item 17), clamp (Figure 1, Item 18), control cable (Figure 1, Item 8), and spacer (Figure 1, Item 4) from control lever assembly (Figure 1, Item 1).
- 4. Pull cotter pin (Figure 1, Item 21) out of retainer (Figure 1, Item 20) and remove retainer (Figure 1, Item 20) from control lever assembly (Figure 1, Item 1). Discard cotter pin (Figure 1, Item 21).
- 5. Loosen nut (Figure 1, Item 19) and remove retainer (Figure 1, Item 20) from end of control cable (Figure 1, Item 8).
- 6. Disconnect wire (Figure 1, Item 2).
- 7. Remove control lever assembly (Figure 1, Item 1) from pusher axle/PTO control panel (Figure 1, Item 5).

END OF TASK

CONTROL CABLE REMOVAL

- 1. Remove cotter pin (Figure 1, Item 14), clevis pin (Figure 1, Item 10), and clevis (Figure 1, Item 11) from control valve lever (Figure 1, Item 9).
- 2. Loosen nut (Figure 1, Item 12) and remove clevis (Figure 1, Item 11) from end of control cable (Figure 1, Item 8).
- 3. Loosen two nuts (Figure 1, Item 13) and remove control cable (Figure 1, Item 8) from support bracket (Figure 1, Item 15).
- 4. Pull control cable (Figure 1, Item 8) from pusher axle/PTO control panel (Figure 1, Item 5) and cab floor.

CONTROL CABLE REMOVAL - CONTINUED

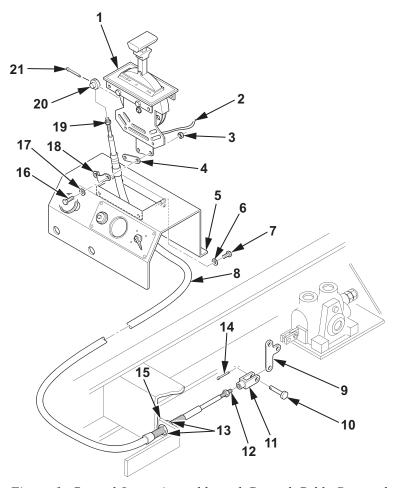


Figure 1. Control Lever Assembly and Control Cable Removal.

END OF TASK

CONTROL CABLE INSTALLATION

- 1. Route control cable (Figure 2, Item 8) from pusher axle/PTO control panel (Figure 2, Item 5) through cab floor.
- 2. Install control cable (Figure 2, Item 8) on support bracket (Figure 1, Item 15) and tighten two nuts (Figure 2, Item 13).
- 3. Install clevis (Figure 2, Item 11) on end of control cable (Figure 2, Item 8) and tighten nut (Figure 2, Item 12).
- 4. Install clevis (Figure 2, Item 11) on control valve lever (Figure 2, Item 9) with clevis pin (Figure 2, Item 10) and cotter pin (Figure 2, Item 14).

END OF TASK

CONTROL LEVER ASSEMBLY INSTALLATION

- 1. Position control lever assembly (Figure 2, Item 1) over pusher axle/PTO control panel (Figure 2, Item 5).
- 2. Install control cable (Figure 2, Item 8) and spacer (Figure 2, Item 4) on control lever assembly (Figure 2, Item 1) with two bolts (Figure 2, Item 16), washers (Figure 2, Item 17), clamp (Figure 2, Item 18), and nuts (Figure 2, Item 3).
- 3. Connect wire (Figure 2, Item 2).
- 4. Install retainer (Figure 2, Item 20) on end of control cable (Figure 2, Item 8) and tighten nut (Figure 2, Item 19).
- 5. Install retainer (Figure 2, Item 20) on control lever assembly (Figure 2, Item 1) with cotter pin (Figure 2, Item 21).
- 6. Install control lever assembly (Figure 2, Item 1) on pusher axle/PTO control panel (Figure 2, Item 5) with four new lockwashers (Figure 2, Item 6) and screws (Figure 2, Item 7).

CONTROL LEVER ASSEMBLY INSTALLATION - CONTINUED

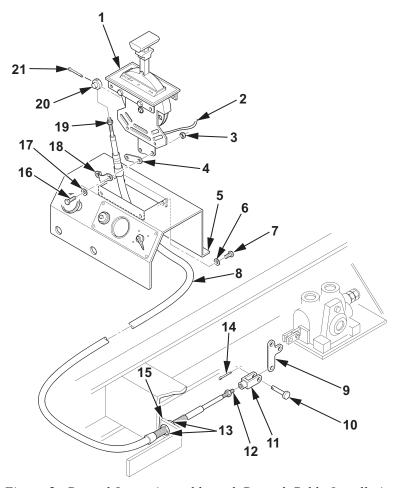


Figure 2. Control Lever Assembly and Control Cable Installation.

END OF TASK

FIELD MAINTENANCE HYDRAULIC LINES, FITTINGS, AND HOSES REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

O-ring (WP 0064, Item 13)

O-ring (WP 0064, Item 38)

O-ring (WP 0064, Item 46)

Four O-rings (WP 0064, Item 15)

Three O-rings (WP 0064, Item 25)

Two O-rings (WP 0064, Item 30)

Two O-rings (WP 0064, Item 20)

Four lockwashers (WP 0064, Item 40)

References

WP 0001

Equipment Condition

Parking brake set (TM 9-2320-273-10).

Dump bed raised and safety strut installed (WP 0008).

WARNING

Do not perform any maintenance with dump body bed raised until the safety strut is installed in locked position. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Accidental or intentional introduction of liquid contaminants into the environment is a violation of state, federal, and military regulations. Use a drain pan to capture any draining or leaking fluid. Refer to Army POL (WP 0001) for information concerning storage, use, and disposal of these liquids. Failure to comply may result in damage to environment and health of personnel. Seek medical attention in the event of an injury.

Wipe up any spilled hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Prolonged contact with hydraulic fluid may cause a skin rash. Skin and clothing that comes in contact with hydraulic fluid should be thoroughly washed immediately. Saturated clothing should be removed immediately. Areas in which hydraulic fluid is used should be well ventilated to keep fumes to a minimum. Failure to comply may result in injury to personnel. Seek medical attention immediately in the event of injury.

NOTE

All hydraulic lines, fittings, and hoses are removed and installed the same way. Only the type of fittings and O-rings will change. This work package shows two types of fittings and O-rings.

Refer to Figure 2 for the routing of all hydraulic line and hoses.

Have a suitable container that will hold up to 27 gal. (102 L) ready to catch oil.

REMOVAL

1. Start engine and engage PTO (TM 9-2320-273-10). Raise dump body bed, raise safety strut to locked up position, lower dump body bed down on safety strut, and shut down engine.

NOTE

All fittings except for fittings used at hydraulic pump are type II fittings as shown in Figure 1.

- 2. To remove type II fitting, unscrew swivel nut (Figure 1, Item 8) on hose connector (Figure 1, Item 9) and remove hose connector (Figure 1, Item 9) from elbow fitting (Figure 1, Item 7).
- 3. If necessary, loosen nut (Figure 1, Item 6). and remove elbow fitting (Figure 1, Item 7) and O-ring (Figure 1, Item 5). Discard O-ring (Figure 1, Item 5) if elbow fitting (Figure 1, Item 7) is removed.
- 4. To remove type I fitting, remove four screws (Figure 1, Item 4), lockwashers (Figure 1, Item 10), two split flanges (Figure 1, Item 1), fitting (Figure 1, Item 3), and O-ring (Figure 1, Item 2) from hydraulic pump. Discard lockwashers (Figure 1, Item 10) and O-ring (Figure 1, Item 2).

END OF TASK

INSTALLATION

1. To install type I fitting, install new O-ring (Figure 1, Item 2) and fitting (Figure 1, Item 3) on hydraulic pump with four new lockwashers (Figure 1, Item 10) and screws (Figure 1, Item 4).

INSTALLATION - CONTINUED

NOTE

All fittings except for type I fittings used on hydraulic pump are type II fittings as shown in Figure 1.

- 2. If elbow fitting (Figure 1, Item 7) is removed, install new O-ring (Figure 1, Item 5) and elbow fitting (Figure 1, Item 7) and tighten nut (Figure 1, Item 6).
- 3. Install hose connector (Figure 1, Item 9) on elbow fitting (Figure 1, Item 7) and tighten swivel nut (Figure 1, Item 8).
- 4. Start engine and engage PTO (TM 9-2320-273-10). Check system for oil leaks, raise dump body bed and lower safety strut to stowed position, lower dump body bed (WP 0008). Shut down engine (TM 9-2320-273-10).

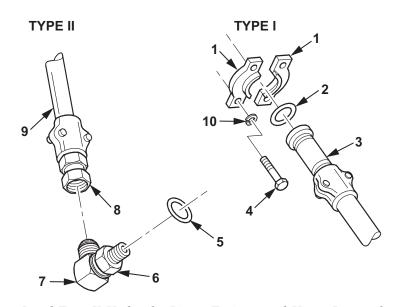


Figure 1. Type I and Type II Hydraulic Lines, Fittings, and Hoses Removal and Installation.

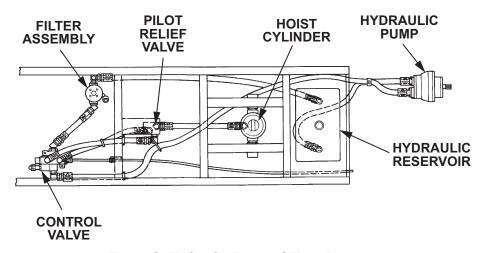


Figure 2. Hydraulic Line and Hose Routing.

END OF TASK

FIELD MAINTENANCE HYDRAULIC LINES AND FITTINGS REPAIR

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)
Standard Automotive Tool Set (SATS)
(WP 0074, Table 2, Item 2)

Materials/Parts

Hose bulk (high pressure) (WP 0069, Item 3) Hose bulk (medium pressure) (WP 0069, Item 2)

Equipment Condition

Hydraulic hose removed (WP 0040).

WARNING

Accidental or intentional introduction of liquid contaminants into the environment is a violation of state, federal, and military regulations. Use a drain pan to capture any draining or leaking fluid. Refer to Army POL (WP 0001) for information concerning storage, use, and disposal of these liquids. Failure to comply may result in damage to environment and health of personnel. Seek medical attention in the event of an injury.

Wipe up any spilled hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Prolonged contact with hydraulic fluid may cause a skin rash. Skin and clothing that comes in contact with hydraulic fluid should be thoroughly washed immediately. Saturated clothing should be removed immediately. Areas in which hydraulic fluid is used should be well ventilated to keep fumes to a minimum. Failure to comply may result in injury to personnel. Seek medical attention in the event of injury.

NOTE

Hydraulic lines vary in hose and fitting size, otherwise the following procedure is applicable to all hydraulic lines. Repair of lines consists of replacing hose or fitting. Figure 1, View A shows a typical hydraulic line and connectors assembled. Figure 1, View B shows a disassembled connector.

DISASSEMBLY

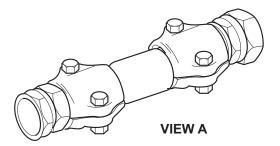
- 1. Remove two nuts (Figure 1, Item 4) and bolts (Figure 1, Item 1) from hose clamps (Figure 1, Item 3).
- 2. Separate hose clamps (Figure 1, Item 3) and remove both hose clamp sections (Figure 1, Item 3) from hose (Figure 1, Item 5) and fitting (Figure 1, Item 2).
- 3. Remove fitting (Figure 1, Item 2) from hose (Figure 1, Item 5).

END OF TASK

ASSEMBLY

- 1. If replacing hose, match hose (Figure 1, Item 5) to hose (Figure 1, Item 5) that was removed.
- 2. Insert conical end of fitting (Figure 1, Item 2) into hose (Figure 1, Item 5).
- 3. Place two halves of hose clamp (Figure 1, Item 3) over hose (Figure 1, Item 5) so end of hose clamp (Figure 1, Item 3) is against shoulder of fitting nut. Ensure retaining edge of hose clamp (Figure 1, Item 3) is seated in groove between cone and shoulder of fitting (Figure 1, Item 2).
- 4. Install two bolts (Figure 1, Item 1) and nuts (Figure 1, Item 4) on hose clamp (Figure 1, Item 3). Tighten 7/16 in. bolts (Figure 1, Item 1) to 40 lb-ft (54.2 N•m) and 1/2 in. bolts to 60 lb-ft (81.4 N•m).
- 5. Install hydraulic hose (WP 0040).

ASSEMBLY - CONTINUED



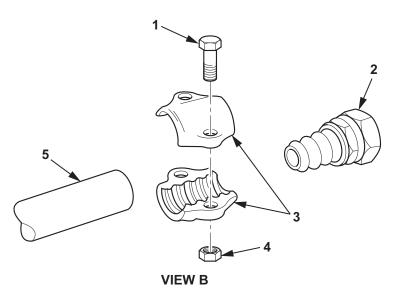


Figure 1. Hydraulic Hose Disassembly and Assembly.

END OF TASK

FIELD MAINTENANCE FILTER SERVICE INDICATION GAUGE, RELIEF VALVE, AND FILTER ELEMENT SERVICE

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Filter element kit (WP 0068, Item 5)

Equipment Condition

Parking brake set (TM 9-2320-273-10). Dump bed raised and safety strut installed

(WP 0008).

REMOVAL

WARNING

Accidental or intentional introduction of liquid contaminants into the environment is a violation of state, federal, and military regulations. Use a drain pan to capture any draining or leaking fluid. Refer to Army POL (WP 0001) for information concerning storage, use, and disposal of these liquids. Failure to comply may result in damage to environment and health of personnel. Seek medical attention in the event of an injury.

Wipe up any spilled hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Prolonged contact with hydraulic fluid may cause a skin rash. Skin and clothing that comes in contact with hydraulic fluid should be thoroughly washed immediately. Saturated clothing should be removed immediately. Areas in which hydraulic fluid is used should be well ventilated to keep fumes to a minimum. Failure to comply may result in injury to personnel. Seek medical attention in the event of injury.

NOTE

Have a suitable container that holds up to 27 gal. (102 L) ready to catch oil.

- 1. Loosen fluid passage bolt (Figure 1, Item 2), leave it inserted through filter element (Figure 1, Item 16) and filter housing (Figure 1, Item 4).
- 2. Remove filter housing (Figure 1, Item 4) by tipping it to side so parts inside will not fall out.
- 3. Remove seal (Figure 1, Item 15) and O-ring (Figure 1, Item 14).
- 4. Remove filter element (Figure 1, Item 16) from filter housing (Figure 1, Item 4). Discard filter element (Figure 1, Item 16).
- 5. Remove filter element top seal (Figure 1, Item 17), backup washer (Figure 1, Item 18), and conical spring (Figure 1, Item 1).
- 6. Remove fluid passage bolt (Figure 1, Item 2) and filter gasket (Figure 1, Item 3) from filter housing (Figure 1, Item 4). Discard filter gasket (Figure 1, Item 3).
- 7. Remove spring (Figure 1, Item 10) and relief valve (Figure 1, Item 13) from head casting (Figure 1, Item 12).
- 8. If necessary, remove pipe plug (Figure 1, Item 11) from head casting (Figure 1, Item 12).

NOTE

When replacing a service indication gauge, replace the filter element first

- 9. Remove service indication gauge (Figure 1, Item 8) with red decal (Figure 1, Item 9) from pipe fitting (Figure 1, Item 7).
- 10. If broken or leaking, remove pipe fittings (Figure 1, Items 5, 6, or 7) from head casting (Figure 1, Item 12).

REMOVAL - CONTINUED

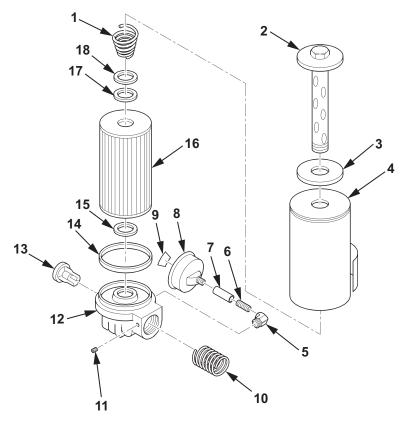


Figure 1. Filter Service Indication Gauge, Relief Valve, and Filter Element Removal.

END OF TASK

INSTALLATION

- 1. If removed, install pipe fittings (Figure 2, Items 5, 6, or 7) on head casting (Figure 2, Item 12).
- 2. Install service indication gauge (Figure 2, Item 8) on pipe fitting (Figure 2, Item 7).
- 3. If removed, install pipe plug (Figure 2, Item 11) on head casting (Figure 2, Item 12).
- 4. Install spring (Figure 2, Item 10) and relief valve (Figure 2, Item 13) on head casting (Figure 2, Item 12).
- 5. Install new filter gasket (Figure 2, Item 3) on filter housing (Figure 2, Item 4) with fluid passage bolt (Figure 2, Item 2).
- 6. Install conical spring (Figure 2, Item 1) with large coil down, backup washer (Figure 2, Item 18), and filter element top seal (Figure 2, Item 17) on fluid passage bolt (Figure 2, Item 2).
- 7. Install new filter element (Figure 2, Item 16) in filter housing (Figure 2, Item 4) over fluid passage bolt (Figure 2, Item 2).
- 8. Install seal (Figure 2, Item 15) on fluid passage bolt (Figure 2, Item 2) against filter element (Figure 2, Item 16) and install O-ring (Figure 2, Item 14) in groove on head casting (Figure 2, Item 12).
- 9. Install filter housing (Figure 2, Item 4) by tipping it to side so parts inside will not fall out. Place filter housing (Figure 2, Item 4) on head casting (Figure 2, Item 12).

CAUTION

When tightening fluid passage bolt, hold filter housing from turning, otherwise housing seal O-ring may stretch out of shape causing leakage.

- 10. Tighten fluid passage bolt (Figure 2, Item 2) to 20 lb-ft (27.1 N•m) on filter housing (Figure 2, Item 4).
- 11. Check that service indication gauge (Figure 2, Item 8) indicates 0 psi.
- 12. Start engine and engage PTO (TM 9-2320-273-10). Pressurize system and check for fluid leaks.
- 13. Check indicator gauge and log pressure with new filter. Add 10 psi to logged pressure to determine pressure reading at which next service should be performed.
- 14. Affix red decal (Figure 2, Item 9) on face of service indication gauge (Figure 2, Item 8) so decal left edge corresponds to 10 psi greater than pressure reading. Red decal (Figure 2, Item 9) indicates danger zone. When indicator needle enters danger zone, filter element (Figure 2, Item 16) should be changed.
- 15. Raise dump bed, lower safety strut, and lower dump bed (WP 0008).

INSTALLATION - CONTINUED

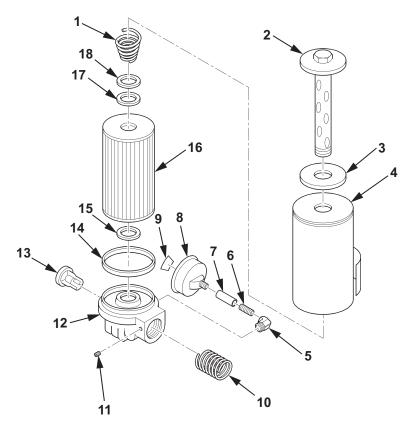


Figure 2. Filter Service Indication Gauge, Relief Valve, and Filter Element Installation.

END OF TASK

FIELD MAINTENANCE FILTER ASSEMBLY REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Four lockwashers (WP 0065, Item 15)

References

WP 0040

Equipment Condition

Parking brake set (TM 9-2320-273-10).

Dump bed raised and safety strut installed (WP 0008).

REMOVAL

NOTE

Have a suitable container that holds up to 27 gal. (102 L) ready to catch oil.

- 1. Remove hydraulic lines and fittings from filter assembly (Figure 1, Item 1), refer to WP 0040.
- 2. Remove four bolts (Figure 1, Item 4), lockwashers (Figure 1, Item 3), and filter assembly (Figure 1, Item 1) from support brace (Figure 1, Item 2). Discard lockwashers (Figure 1, Item 3).

END OF TASK

INSTALLATION

- 1. Install filter assembly (Figure 1, Item 1) on support brace (Figure 1, Item 2) with four new lockwashers (Figure 1, Item 3) and bolts (Figure 1, Item 4).
- 2. Install hydraulic lines and fittings on filter assembly (Figure 1, Item 1), refer to WP 0040.
- 3. Remove filler cap from hydraulic reservoir tank and fill hydraulic reservoir tank to center of bottom sight glass indicators.
- 4. Start engine and engage PTO (TM 9-2320-273-10). Check for oil leaks, raise dump body bed, lower safety strut from locked position to stowed position on subframe, lower dump body bed (WP 0008), recheck oil level at top sight glass indicators, and shut down engine.

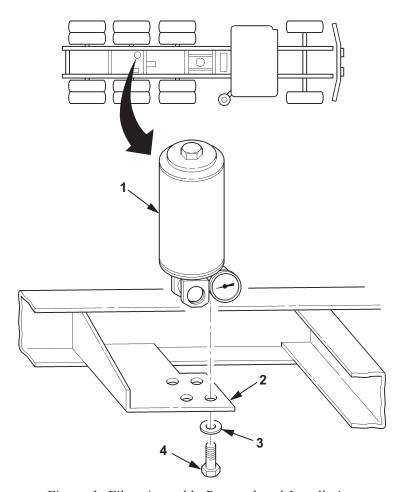


Figure 1. Filter Assembly Removal and Installation.

END OF TASK

FIELD MAINTENANCE HOIST CYLINDER AUTOMATIC BLEEDER VALVE REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

O-ring (WP 0066, Item 9) Back-up ring (WP 0066, Item 8)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

WARNING

Before attempting replacement of the hoist cylinder bleeder valve, ensure hydraulic cylinder is not pressurized. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

REMOVAL

- 1. Start engine and engage PTO (TM 9-2320-273-10). Lower dump bed completely and shut down engine.
- 2. Remove two screws (Figure 1, Item 2) and cover (Figure 1, Item 3) from dog house (Figure 1, Item 5).
- 3. Remove hoist cylinder automatic bleeder valve (Figure 1, Item 4) from hoist cylinder (Figure 1, Item 8).
- 4. Remove O-ring (Figure 1, Item 6) and back-up ring (Figure 1, Item 7) from hoist cylinder automatic bleeder valve (Figure 1, Item 4). Discard back-up ring (Figure 1, Item 7) and O-ring (Figure 1, Item 6).

END OF TASK

INSTALLATION

- 1. Install new back-up ring (Figure 1, Item 7) and O-ring (Figure 1, Item 6) on hoist cylinder automatic bleeder valve (Figure 1, Item 4).
- 2. Install hoist cylinder automatic bleeder valve (Figure 1, Item 4) on hoist cylinder (Figure 1, Item 8).
- 3. Install cover (Figure 1, Item 3) on dog house (Figure 1, Item 5) with two screws (Figure 1, Item 2).
- 4. Start engine and engage PTO (TM 9-2320-273-10). Raise dump bed to pressurize hydraulic system. Check system for leaks.

END OF TASK

CLOSING BLEEDER VALVE

NOTE

Manual operation of the automatic bleeder valve is to be used only when a new valve is not available for replacement.

- 1. Remove two screws (Figure 1, Item 2) and cover (Figure 1, Item 3) from dog house (Figure 1, Item 5).
- 2. Install suitable hex key and turn hex screw (Figure 1, Item 1) clockwise until seated.
- 3. Reinstall cover (Figure 1, Item 3) with two screws (Figure 1, Item 2).

END OF TASK

MANUAL BLEEDING PROCEDURE

- 1. Start engine and engage PTO (TM 9-2320-273-10).
- 2. Raise dump bed approximately six in. and shut down engine.
- 3. Remove two screws (Figure 1, Item 2) and cover (Figure 1, Item 3) from dog house (Figure 1, Item 5).
- 4. Using suitable hex key, turn hex screw (Figure 1, Item 1) counterclockwise until steady stream of oil runs out.
- 5. Close hoist cylinder automatic bleeder valve (Figure 1, Item 4) by turning hex screw (Figure 1, Item 1) clockwise until tight.

MANUAL BLEEDING PROCEDURE - CONTINUED

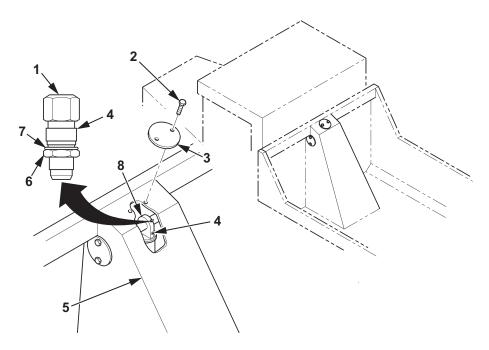


Figure 1. Hoist Cylinder Automatic Bleeder Valve Removal and Installation.

END OF TASK

FIELD MAINTENANCE HOIST CYLINDER REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)
Standard Automotive Tool Set (SATS) (WP 0074, Table 2, Item 2)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

WARNING

Before attempting replacement of the hoist cylinder, ensure hydraulic cylinder is not pressurized. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

All nonessential personnel must stand clear during lifting operations. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

REMOVAL

- 1. Remove six screws (Figure 1, Item 1) and access covers (Figure 1, Items 2, 3, and 4) from dog house (Figure 1, Item 5).
- 2. Remove screws (Figure 1, Items 8 and 11), nuts (Figure 1, Items 6 and 13), and collars (Figure 1, Items 7 and 12) and slide collars (Figure 1, Items 7 and 12) off upper hoist cylinder pin (Figure 1, Item 9).
- 3. Using suitable drift and hammer, drive upper hoist cylinder pin (Figure 1, Item 9) out of mounting bushings (Figure 1, Item 10).
- 4. Attach suitable lifting device to lifting eyes on dump body bed.
- 5. Raise dump body bed (Figure 2, Item 1) and set safety strut (Figure 2, Item 2) in support position.
- 6. Allow hoist cylinder (Figure 3, Item 1) to rest against hydraulic reservoir tank until removal of bottom mount is complete.

NOTE

Have a suitable container that will hold up to 27 gal. (102 L) ready to catch oil.

- 7. Remove hydraulic hose (Figure 3, Item 7) from fitting (Figure 3, Item 8) on bottom of hoist cylinder (Figure 3, Item 1).
- 8. Remove nuts (Figure 3, Items 4 and 10) and screws (Figure 3, Items 6 and 12) from collars (Figure 3, Items 5 and 11).
- 9. Slide collars (Figure 3, Items 5 and 11) off ends of lower hoist pin (Figure 3, Item 3).

WARNING

Hoist cylinder must be supported before removal of hoist pin. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

- 10. Attach lifting sling around hoist cylinder (Figure 3, Item 1).
- 11. Using fork lift or other lifting device, support hoist cylinder (Figure 3, Item 1) so it does not fall when lower hoist pin (Figure 3, Item 3) is removed.
- 12. Using suitable drift and hammer, drive lower hoist pin (Figure 3, Item 3) out of mounting bushings(Figure 3, Item 2). Access hole is provided in subframe (Figure 3, Item 9) to insert drift.
- 13. Lift and remove hoist cylinder (Figure 3, Item 1) from subframe (Figure 3, Item 9).

REMOVAL - CONTINUED

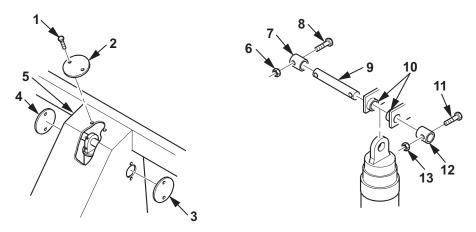


Figure 1. Access Covers and Hoist Cylinder Pin Removal.

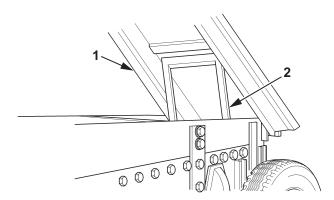


Figure 2. Dump Body Bed and Safety Strut Raised.

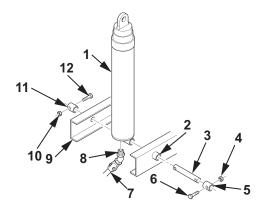


Figure 3. Hoist Cylinder Removal.

END OF TASK

INSTALLATION

- 1. Lift and install hoist cylinder (Figure 4, Item 1) on subframe (Figure 4, Item 9).
- 2. Attach lifting sling around hoist cylinder (Figure 4, Item 1).
- 3. Using fork lift or other lifting device, support hoist cylinder (Figure 4, Item 1).
- 4. Allow hoist cylinder (Figure 4, Item 1) to rest against hydraulic reservoir tank until installation of bottom mount is complete.
- 5. Using suitable drift and hammer, install lower hoist pin (Figure 4, Item 3) in mounting bushings (Figure 4, Item 2). Access hole is provided in subframe (Figure 4, Item 9) to insert lower hoist pin (Figure 4, Item 3) and drift.
- 6. Slide collars (Figure 4, Items 5 and 11) on lower hoist pin (Figure 4, Item 3).
- 7. Install screws (Figure 4, Items 6 and 12) and nuts (Figure 4, Items 4 and 10) on collars (Figure 4, Items 5 and 11).
- 8. Install hydraulic hose (Figure 4, Item 7) on fitting (Figure 4, Item 8) at bottom of hoist cylinder (Figure 4, Item 1).
- 9. Raise dump body bed (Figure 5, Item 1) and lower safety strut (Figure 5, Item 2) to stowed position.
- 10. Remove suitable lifting device from lifting eyes on dump body bed (Figure 5, Item 1).
- 11. Using suitable drift and hammer, install upper hoist cylinder pin (Figure 6, Item 9) in mounting bushings (Figure 6, Item 10).
- 12. Install collars (Figure 6, Items 7 and 12) on ends of upper hoist cylinder pin (Figure 6, Item 9) with screws (Figure 6, Items 8 and 11) and nuts (Figure 6, Items 6 and 13).
- 13. Install access covers (Figure 6, Items 2, 3, and 4) on dog house (Figure 6, Item 5) with six screws (Figure 6, Item 1).
- 14. Remove filler cap from hydraulic reservoir tank and fill hydraulic reservoir tank to center of bottom sight glass indicators.
- 15. Start engine and engage PTO (TM 9-2320-273-10). Check for oil leaks, recheck oil level at top sight glass indicators, and shut down engine.

INSTALLATION - CONTINUED

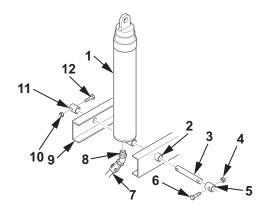


Figure 4. Hoist Cylinder Installation.

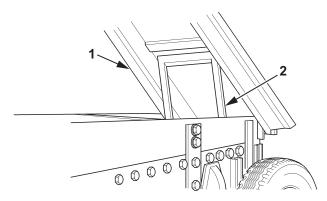


Figure 5. Dump Body Bed and Safety Strut Lowered.

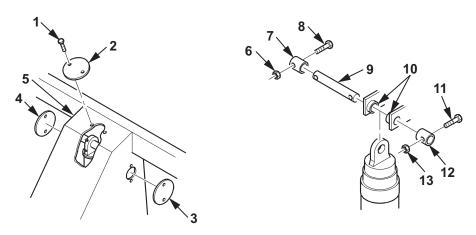


Figure 6. Access Covers and Hoist Cylinder Pin Installation.

END OF TASK

FIELD MAINTENANCE HYDRAULIC/TELESCOPIC PACKING NUT ADJUSTMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Standard Automotive Tool Set (SATS)

(WP 0074, Table 2, Item 2)

Chain wrench (32-in. chain)

(WP 0074, Table 2, Item 11)

Heavy-duty strap wrench

(WP 0074, Table 2, Item 12)

Inverted socket wrench 5/32 in.

(WP 0074, Table 2, Item 13)

References

TM 9-2320-273-10

PACKING NUT ADJUSTMENT

NOTE

If leak cannot be stopped using this adjustment procedure, the packing must be replaced. Replace hydraulic/telescopic cylinder, refer to WP 0045.

- 1. Start engine and engage PTO, TM 9-2320-273-10. Raise bed to point where pump bypasses and check for leaks.
- 2. If leakage is observed, proceed to step 2.
- 3. Remove two setscrews (Figure 1, Item 2) from packing nut (Figure 1, Item 2).
- 4. Install strap wrench (Figure 2, Item 5) on hydraulic cylinder (Figure 2, Item 2) below packing nut (Figure 2, Item 4) and install chain wrench (Figure 2, Item 1) on packing nut (Figure 2, Item 4).
- 5. Slowly loosen packing nut (Figure 2, Item 4). When leaking quits, stop loosening.
- 6. If loosening does not stop leak, slowly tighten packing nut (Figure 2, Item 4). Tighten packing nut (Figure 2, Item 4) until leak stops.
- 7. Install two setscrews (Figure 1, Item 4) on packing nut (Figure 1, Item 2).

PACKING NUT ADJUSTMENT - CONTINUED

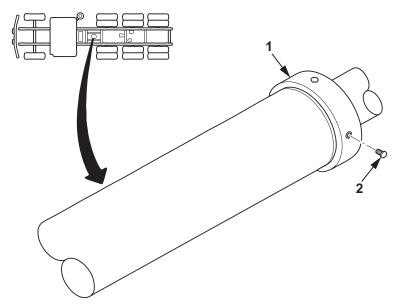


Figure 1. Packing Nut Setscrew.

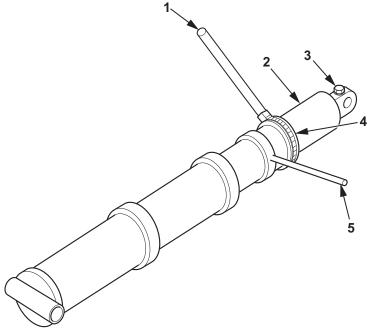


Figure 2. Packing Nut Adjustment.

END OF TASK

FIELD MAINTENANCE HYDRAULIC RESERVOIR REPLACEMENT

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)

Materials/Parts

Two O-rings (WP 0067, Item 4)
Two O-rings (WP 0064, Item 25)
Oil, lubricating OE/HDO 10 (WP 0077, Item 5)

References

WP 0001

Equipment Condition

Parking brake set (TM 9-2320-273-10).

WARNING

Do not perform any maintenance with dump body bed raised until the safety strut is installed in locked position. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

Have a suitable container that holds up to 27 gal. (120 L) ready to catch oil. Wipe up any spilled hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

REMOVAL

1. Start engine and engage PTO (TM 9-2320-273-10). Raise dump body bed, raise safety strut to locked position, lower dump body bed, and shut down engine.

WARNING

Accidental or intentional introduction of liquid contaminants into the environment is a violation of state, federal, and military regulations. Refer to Army POL (WP 0001) for information concerning storage, use, and disposal of these liquids. Failure to comply may result in damage to environment and health of personnel. Seek medical attention in the event of an injury.

Have a suitable container that holds up to 27 gal. (120 L) ready to catch oil. Wipe up any spilled hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Prolonged contact with hydraulic fluid may cause a skin rash. Skin and clothing that comes in contact with hydraulic fluid should be thoroughly washed immediately. Saturated clothing should be removed immediately. Areas in which hydraulic fluid is used should be well ventilated to keep fumes to a minimum. Failure to comply may result in injury to personnel. In the event of injury, seek medical attention immediately.

- 2. Position container under oil pump (Figure 1, Item 4) and disconnect hydraulic supply hose (Figure 1, Item 5) from oil pump (Figure 1, Item 4) and drain oil from hydraulic reservoir tank (Figure 1, Item 7).
- 3. Reconnect hydraulic supply hose (Figure 1, Item 5) to oil pump (Figure 1, Item 4).
- 4. Remove four nuts (Figure 2, Item 3), washers (Figure 2, Item 6), bolts (Figure 2, Item 7), and washers (Figure 2, Item 6) from hydraulic reservoir tank (Figure 2, Item 2) and subframe rails (Figure 2, Item 8).
- 5. Tilt hydraulic reservoir tank (Figure 1, Item 7) and disconnect hydraulic supply and return hoses (Figure 1, Items 1 and 6) from elbow fittings (Figure 1, Items 3 and 8) on hydraulic reservoir tank (Figure 1, Item 7).
- 6. Lift hydraulic reservoir tank (Figure 1, Item 7) over subframe (Figure 1, Item 10) and remove hydraulic reservoir tank (Figure 1, Item 7) from vehicle.
- 7. If replacing hydraulic reservoir tank (Figure 2, Item 2), remove filler cap (Figure 2, Item 1), two sight glass indicators (Figure 2, Item 5) and O-rings (Figure 2, Item 4) from hydraulic reservoir tank (Figure 2, Item 2). Discard O-rings (Figure 2, Item 4).
- 8. If replacing hydraulic reservoir tank (Figure 2, Item 2), remove elbow fittings (Figure 1, Items 3 and 8) and O-rings (Figure 1, Items 2 and 9) from hydraulic reservoir tank (Figure 1, Item 7). Discard O-rings (Figure 1, Items 2 and 9).

END OF TASK

INSTALLATION

- 1. If replacing hydraulic reservoir tank (Figure 2, Item 2), install new O-rings (Figure 1, Items 2 and 9) and elbow fittings (Figure 1, Items 3 and 8) on hydraulic reservoir tank (Figure 1, Item 7).
- 2. If replacing hydraulic reservoir tank (Figure 2, Item 2), install two new O-rings (Figure 2, Item 4), sight glass indicators (Figure 2, Item 5), and filler cap (Figure 2, Item 1) on hydraulic reservoir tank (Figure 2, Item 2).
- 3. Lift hydraulic reservoir tank (Figure 1, Item 7) over subframe (Figure 1, Item 10) and position hydraulic reservoir tank (Figure 1, Item 7) on vehicle.
- 4. Tilt hydraulic reservoir tank (Figure 1, Item 7) and connect hydraulic supply and return hoses (Figure 1, Items 1 and 6) to elbow fittings (Figure 1, Items 3 and 8) on hydraulic reservoir tank (Figure 1, Item 7).

INSTALLATION - CONTINUED

- 5. Install hydraulic reservoir tank (Figure 2, Item 2) on subframe rails (Figure 2, Item 8) with four washers (Figure 2, Item 6), bolts (Figure 2, Item 7), washers (Figure 2, Item 6), and nuts (Figure 2, Item 3).
- 6. Remove filler cap (Figure 2, Item 1) from hydraulic reservoir tank (Figure 2, Item 2) and fill hydraulic reservoir tank (Figure 2, Item 2) to center of bottom sight glass indicator (Figure 2, Item 5).
- 7. Start engine and engage PTO (TM 9-2320-273-10). Check for oil leaks, raise dump body bed, lower safety strut from locked position to stowed position on subframe, lower dump body bed, recheck oil level at top sight glass indicator (Figure 2, Item 5), and shut down engine.

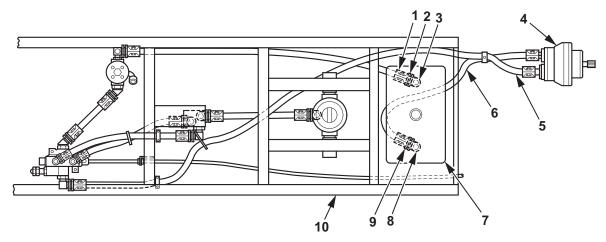


Figure 1. Hydraulic Hose Removal and Installation.

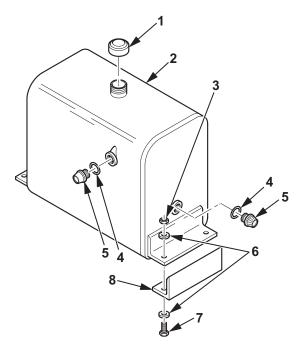


Figure 2. Hydraulic Reservoir Removal and Installation.

END OF TASK

FIELD MAINTENANCE DUMP BODY REPAIR

INITIAL SETUP:

Tools and Special Tools

Tool kit, general mechanic's: automotive (WP 0074, Table 2, Item 1)
Standard Automotive Tool Set (SATS) (WP 0074, Table 2, Item 2)
Hydraulic jack (WP 0074, Table 2, Item 14)

Equipment Condition

Parking brake set (TM 9-2320-273-10).

WARNING

Faceshield must be worn when removing rust or surface scale using a wire brush, sandblast, grit blast, or other effective methods. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

NOTE

If paint or welding repairs are found necessary, notify supervisor.

REPAIR

1. Straighten small dents using hammer of appropriate weight.

CAUTION

Use caution and ensure braced area is stronger than area requiring straightening. Failure to comply may result in damage to equipment.

2. Hydraulic jack or clamp may be useful in straightening large dents.

END OF TASK

FIELD MAINTENANCE LUBRICATION INSTRUCTIONS FOR M917 DUMP TRUCK BODY

INITIAL SETUP:

Materials/Parts References

Cleaning compound, solvent (WP 0077, Item 1) WP 0001

Cloth, cleaning (WP 0077, Item 2)

Grease (GAA) (WP 0077, Item 3)

Oil, lubricating, OEA (WP 0077, Item 4)

Oil, lubricating, OE/HDO 10 (WP 0077, Item 5)

Oil, lubricating, OE/HDO 30 (WP 0077, Item 6)

GENERAL

WARNING

Cleaning solvent is combustible. DO NOT use or store near heat, sparks, flame, or other ignition sources. Use mechanical ventilation whenever product is used in a confined space, heated above ambient temperatures, or agitated. Keep container sealed when not in use. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Hard time intervals and related man-hour times are based on normal operation. The man-hour time specified is the time you need to do all the services prescribed for a particular interval. Charge the hard time interval if your lubricants are contaminated or if you are operating the equipment under adverse operating conditions, including longer-than-usual operating hours. The hard time interval may be extended during periods of low activity. If extended, adequate preservation precautions must be taken.

Clean parts or fittings with cleaning compound solvent Type II or equivalent. Dry before lubricating. Dotted arrow shaft indicates lubrication on both sides of equipment. A dotted circle indicates a drain below. Relubricate: all items found contaminated after fording or washing.

The lowest level of maintenance authorized to lubricate a point is indicated by one of the following symbols as appropriate: Operator/Crew (C) and Field Maintenance (F).

LUBRICATION CHART

USAGE	FLUID/LUBRICANT	CAPACITIES	EXPECTED TEMPERATURE
HINGES, LATCHES, A	ACCESS DOOR, CONTROL LI	NKAGE	
(MIL-PRF-2104) (81349)	OE/HDO	As required	Above +15° F (-9° C)
(MIL-PRF-46167) (81349)	OEA	As required	+40° to -65° F (-4° to -45° C)
HYDRAULIC RESERY	VOIR OIL		
(MIL-PRF-2104) (81349)	OE/HDO	Reservoir 20 gal. (75.68 L) Fill to center mark on sight glass	Above +15° F (-9° C)
(MIL-PRF-46167) (81349)	OEA	Reservoir 20 gal. (75.68 L) Fill to center mark on sight glass	+40° to -65° F (-4° to -45° C)
PIVOT PINS LUBE FI	TTINGS		
(MIL-PRF-10924) (81349)	Grease (GAA)	As required	All temperatures

OPERATOR LUBRICATION INSTRUCTIONS FOR M917 DUMP TRUCK BODY FOR OPERATION OF EQUIPMENT IN PROTRACTED COLD TEMPERATURES BELOW -15 F (-26 C)

Remove lubricants prescribed in key for temperatures above -15 F (-26 C). Relubricate with lubricants specified in key for temperatures below -15 F (-26 C). If OEA lubricant is required to meet the temperature ranges prescribed in the key, OEA lubricant is to be used in place of OE/HDO -10 lubricant for all temperature ranges where OE/HDO -10 is specified in key.

EQUIPMENT CONDITION

WARNING

When working around, near, or under dump body in the raised position, ensure safety strut is engaged. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

All lubrication tasks can be performed with the dump body DOWN except lubrication of the safety strut and bottom pin eye.

CLEANING BEFORE LUBRICATION

Before removing reservoir fill cap or access cover to top pin eye of hoist cylinder, wipe off area to remove accumulated dirt.

ACCESS TO HYDRAULIC LIFT CYLINDER COMPONENTS

To reach the lubrication point for the top pin eye, remove the access cover on top of the dog house at front of the dump body.

CHECKING AND MAINTAINING OIL LEVEL

Ensure dump body is down before starting hydraulic oil reservoir check. Visually inspect top sight glass. If oil is visible, do not add any oil. If not visible, add lubrication oil (OE/HDO) until oil level is visible in upper sight glass. Do not over fill. Drain and refill anytime oil becomes contaminated.

LUBRICANTS

WARNING

Accidental or intentional introduction of liquid contaminants into the environment is a violation of state, federal, and military regulations. Use a drain pan to capture any draining or leaking fluid. Refer to Army POL (WP 0001) for information concerning storage, use, and disposal of these liquids. Failure to comply may result in damage to environment and health of personnel. Seek medical attention in the event of an injury.

Wipe up any spilled lubricating oil, GAA, or hydraulic fluid immediately. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

Prolonged contact with lubricating oil, GAA, or hydraulic fluid may cause a skin rash. Skin and clothing that comes in contact with lubricating oil, GAA, or hydraulic fluid should be thoroughly washed immediately. Saturated clothing should be removed immediately. Areas in which lubricating oil, GAA, or hydraulic fluid is used should be well ventilated to keep fumes to a minimum. Failure to comply may result in injury to personnel. Seek medical attention in the event of an injury.

The following is a list of lubricants with military symbols and applicable specification numbers.

OE/HDO	MIL-L-2104	(MIL-PRF-2104)
OEA	MIL-L-46167	(MIL-PRF-46167)
GAA	MIL-G-10924	(MIL-PRF-10924)
Cleaning Compound Solvent TYPE II	P-D-680	(MIL-PRF-680)

LOCATOR VIEWS

WARNING

When pusher axle is up, do not step on tire to climb into dump body. Wheel and tire can turn and cause you to slip and fall. Be sure of your footing before climbing on vehicle. Failure to comply may result in death or injury to personnel. Seek medical attention in the event of an injury.

To assist the user, figures show locator views.

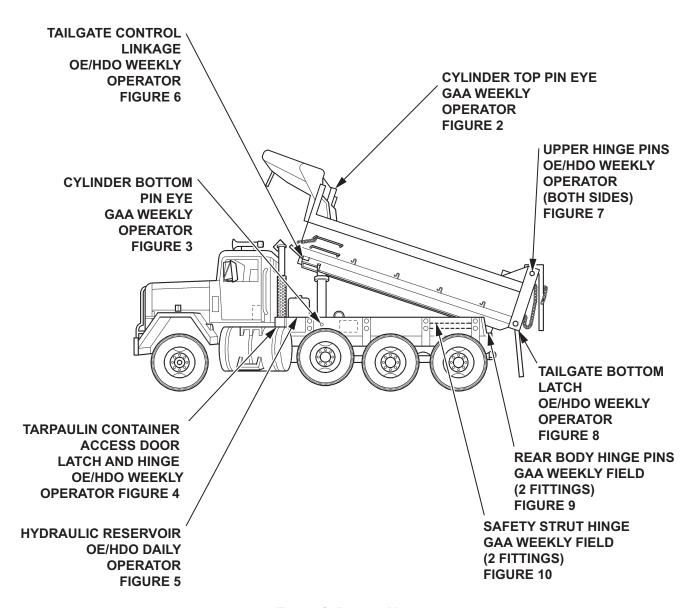


Figure 1. Locator View.

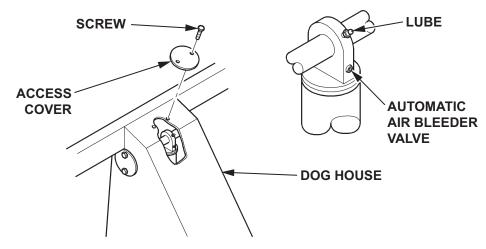


Figure 2. Cylinder Top Pin Eye.

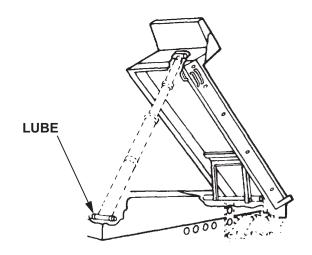


Figure 3. Cylinder Bottom Pin Eye.

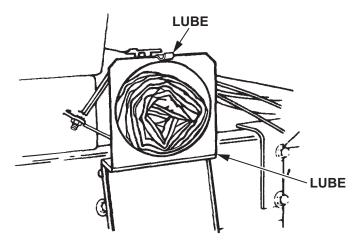


Figure 4. Tarpaulin Container Access Door Latch and Hinge.

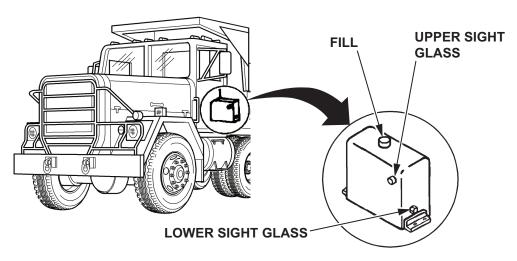


Figure 5. Hydraulic Reservoir.

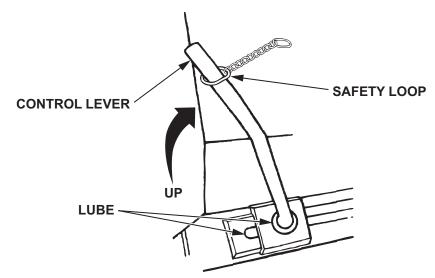


Figure 6. Tailgate Control Linkage.

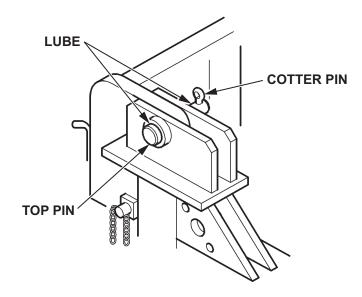


Figure 7. Upper Hinge Pins.

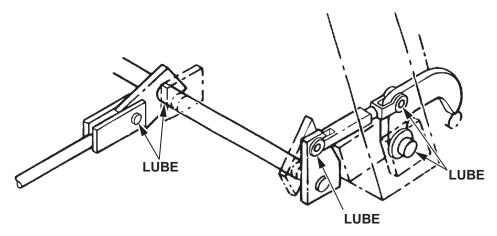


Figure 8. Tailgate Bottom Latch.

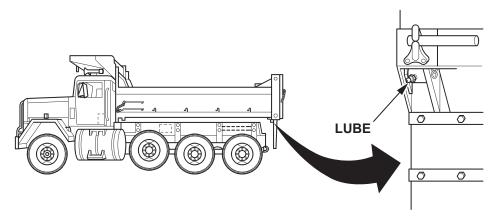


Figure 9. Rear Body Hinge Pins.

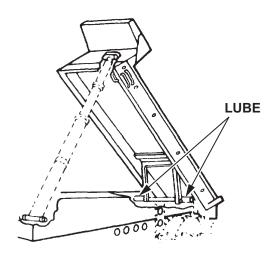


Figure 10. Safety Strut Hinges.

FIELD MAINTENANCE ILLUSTRATED LIST OF MANUFACTURED ITEMS

INITIAL SETUP: NOT APPLICABLE

SCOPE

This work package (WP) includes complete instructions for making items authorized to be manufactured or fabricated at the 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. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list on the illustration.

PART NUMBER **FIGURE** PART NUMBER **FIGURE PART NUMBER FIGURE** NO. NO. NO. CB16-16NJ 1. 2 1 MA145-21043 1 EWB7633-09-6 CB16-20PA 1. 2 EWB7633-09-7 1 MA207-22631 3 CB20-20NJ 1, 2 1 MA207-22632 4 MA145-21032 EWB7633-09-1 1, 2 MA145-21033 1 MA207-22922 3 1 1 3 EWB7633-09-2 MA145-21035 MA207-22923 EWB7633-09-3 1 MA145-21037 1 MA207-22924 3 1 1 3 EWB7633-09-4 MA145-21039 MA207-22925 1 1 EWB7633-09-5 MA145-21041 MA207-22926 4

PART NUMBER INDEX.

ASSEMBLING HOSES

Hydraulic hose assemblies used on M917 Dump Truck Body are composed of properly cut lengths of specified hose and one coupling for each end. To fabricate a hose assembly, perform the following:

- 1. Choose specified bulk stock for hose. Refer to Table 5 for bulk stock.
- 2. Cut bulk hose cleanly to specified length. Refer to Table 1 for hose lengths and hose specifications.
- 3. Install couplings onto ends of hose. Refer to Figure 1 for coupling and Figure 2 for specifications. The following steps refer to exploded views of Figure 2 and apply to couplings at either end of hose.
 - a. Insert end piece (Figure 2, Item 6) into hose end (Figure 2, Item 3) as far as possible.
 - b. Position coupling halves (Figure 2, Items 2 and 4) around hose end (Figure 2, Item 3) so edges are flush with end of hose.
 - c. Insert two bolts (Figure 2, Item 1) into coupling half (Figure 2, Item 2). Bolts (Figure 2, Item 1) will come out of coupling half (Figure 2, Item 4) if pieces are properly aligned.
 - d. Install nuts (Figure 2, Item 5) and torque.
 - (1) Torque 7/16 in. diameter bolts for couplings on 1-in. hose to 40 lb-ft (54 N•m).
 - (2) Torque 1/2 in. diameter bolts for couplings on 1-1/4-in. hose to 60 lb-ft (81 N•m).
 - (3) Recheck torque on first bolt after torquing second bolt.

HOSE ASSEMBLIES

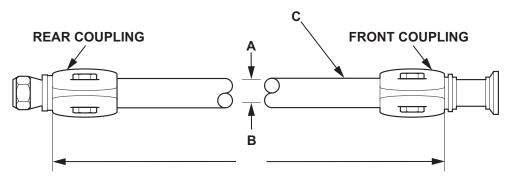


Figure 1. Hose Assemblies.

Table 1. Hose Assemblies.

PART NUMBER	A	В	FRONT COUPLING	PART NUMBER, CUT	*PART NUMBER, BULK	REAR COUPLING
EWB7633-09-1	1-1/4 in.	77 in.	CB20-20PA	MA145-21032	D-720	CB20-20NJ
EWB7633-09-2	1 in.	136 in.	CB16-20PA	MA145-21033	H-116	CB16-16NJ
EWB7633-09-3	1-1/4 in.	68 in.	CB20-20NJ	MA145-21035	D-720	CB20-20NJ
EWB7633-09-4	1-1/4 in.	10 in.	CB20-20NJ	MA145-21037	D-720	CB20-20NJ
EWB7633-09-5	1 in.	23 in.	CB16-16NJ	MA145-21039	H-116	CB16-16NJ
EWB7633-09-6	1 in.	29 in.	CB16-16NJ	MA145-21041	H-116	CB16-16NJ
EWB7633-09-7	1 in.	31-1/2 in.	CB16-16NJ	MA145-21043	H-116	CB16-16NJ

 $[*]D720 is\ Imperial\ Eastman\ number\ for\ medium-\ to\ high-pressure\ hose\ conforming\ to\ SAE\ 100R1\ Type\ A.$

H116 is Imperial Eastman number for high-pressure hose conforming to SAE 100R2 Type A.

HOSE COUPLINGS

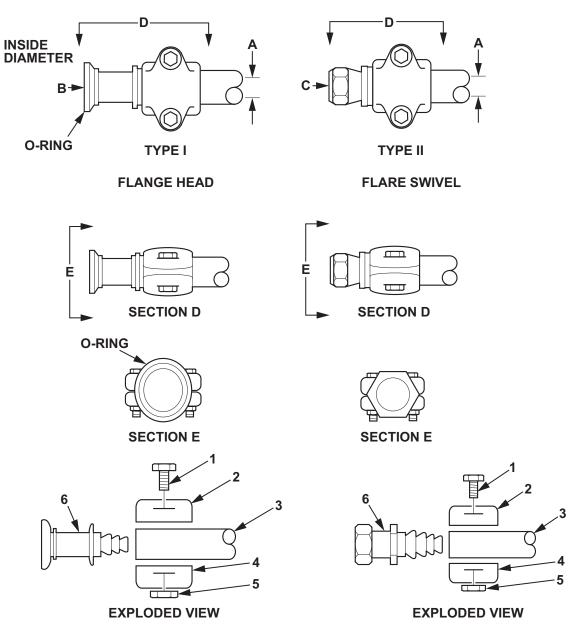


Figure 2. Hose Couplings.

Table 2. Hose Couplings.

PART NUMBER	TYPE	HOSE ID A	FLANGE ID B	THREAD SIZE C	KEY	DESCRIPTION
CB16-16NJ	II	1 in.	_	1-5/16 in12	1	Bolt
CB16-20PA	I	1 in.	1-1/4 in.	_	2	Coupling Half
CB20-20NJ	II	1-1/4 in.	_	1-5/16 in12	3	Hose End
CB20-20PA	I	1-1/4 in.	1-1/4 in.	_	4	Coupling Half
					5	Nut
					6	Coupling End Splice

FABRICATING ELECTRICAL WIRES AND CONDUITS

Manufactured parts of electrical wiring for dump body of M917 are properly measured and cut lengths of specified wire and conduit. Refer to Table 5 for bulk item specifications, Figure 3 for wire lengths, and Figure 4 for conduit lengths.

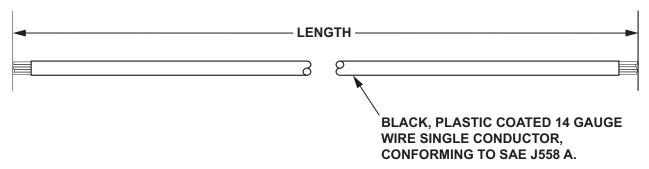


Figure 3. Electrical Wires Fabricated from Fruehauf Stk 14372.

Table 3. Electrical Wires Fabricated from Fruehauf Stk 14372.

ELECTRICAL WIRES Cut From Fruehauf Stk 14372						
PART NUMBER	LENGTH					
MA207-22631	42 in.					
MA207-22922	84 in.					
MA207-22923	78 in.					
MA207-22924	10 in.					
MA207-22925	3 in.					

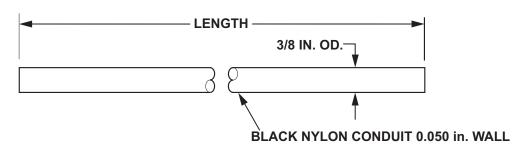


Figure 4. Electrical Conduits Fabricated from Fruehauf VWA 8929.

Table 4. Electrical Conduits Fabricated from Fruehauf VWA 8929.

CONDUITS						
PART NUMBER	LENGTH					
MA207-22632	78 in.					
MA207-22926	42 in.					

FABRICATING ELECTRICAL WIRES AND CONDUITS - CONTINUED

Table 5. Bulk Items.

ITEM	SIZE	DESCRIPTION	SPECIFICATION
Hydraulic Hose	1 in. ID	High Pressure, Wire-Reinforced Rubber	SAE 100R1, Type A
Hydraulic Hose	1 in. ID	Medium-High Pressure, Wire-Reinforced Rubber	SAE 100R2, Type A
Electrical Wire	14 Gauge	Black Plastic Coated, Single Conductor	SAE J558A
Electrical Conduit	0.050 in. Wall	Black Nylon	_

OPERATOR AND FIELD MAINTENANCE TORQUE LIMITS

GENERAL

This work package provides general torque limits for screws used on the M917 Dump Truck 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

Table 1 lists dry torque limits. Dry torque limits are used on screws that do not have lubricants applied to the threads. Table 2 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 table 3, and for metric fasteners wet torque, refer to table 4 for torque limit requirements.

HOW TO USE TORQUE LIMITS

1. Measure the diameter of the screw you are installing (Figure 1).

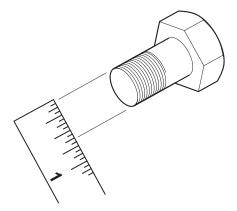


Figure 1. Measuring Screw Diameter.

NOTE

Perform step 2 for standard screws only. To determine if screw is standard or metric, check capscrew head and refer to the following illustration.

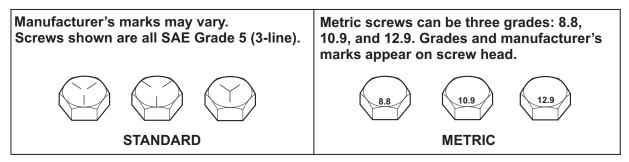


Figure 2. Capscrew Head Markings.

HOW TO USE TORQUE LIMITS - CONTINUED

2. Count the number of threads per inch (Figure 3).

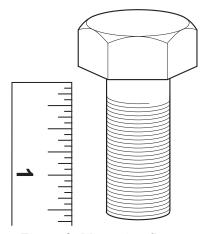


Figure 3. Measuring Screw.

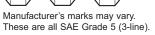
- 3. Under the heading SIZE, look down the left hand column until you find the diameter of the screw you are installing. (There will usually be two lines beginning with the same size.)
- 4. In the second column under SIZE, find the number of threads per inch that matches the number of threads you counted in step 2. (Not required for metric screws.)
- 5. To find the grade screw you are installing, match the markings on the head to the correct picture of Capscrew Head Markings in the illustration preceding the torque tables.
- 6. 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.

Table 1. Torque Limits for Dry Fasteners.

















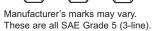
			TORQUE							
	SIZE		SAE GRADE SAE GRADE SAE GRADE NO. 1 OR 2 NO. 5 NO. 6 OR 7					SAE GRADE NO. 8		
DIA. INCHES	THREADS PER INCH	DIA. MILLIMETERS	POUND FEET	NEWTON METERS	POUND FEET	NEWTON METERS	POUND FEET	NEWTON METERS	POUND FEET	NEWTON METERS
1/4	20	6.35	5	7	8	11	10	14	10	16
1/4	28	6.35	6	8	10	14	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	1085	900	1220
1	12		240	325	640	868	860	1166	1000	1356
1-1/8	7	25.58	300	407	800	1085	1120	1519	1280	1735
1-1/8	12		340	461	880	1193	1260	1708	1440	1952
1-1/4	7	31.75	420	569	1120	1519	1580	2142	1820	2468
1-1/4	12		460	624	1240	1681	1760	2386	2000	2712
1-3/8	6	34.93	560	759	1460	1979	2080	2820	2380	3227
1-3/8	12		640	868	1690	2291	2380	3227	2720	3688
1-1/2	6	38.10	740	1003	1940	2630	2780	3769	3160	4284
1-1/2	12		840	1139	2200	2983	3100	4203	3560	4827

Table 2. Torque Limits for Wet Fasteners.











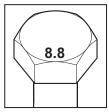


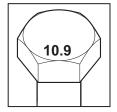


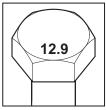


111636 8	are all SAE Grad	ac o (o iiric).								
			TORQUE							
	SIZE		SAE GRADE NO. 1 OR 2		SAE GRADE NO. 5		SAE GRADE NO. 6 OR 7		SAE GRADE NO. 8	
DIA. INCHES	THREADS PER INCH	DIA. MILLIMETERS	POUND FEET	NEWTON METERS	POUND FEET	NEWTON METERS	POUND FEET	NEWTON METERS	POUND FEET	NEWTON METERS
1/4	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	1003
1-1/8	7	25.58	220	298	600	813	840	1139	960	1302
1-1/8	12		260	353	660	895	940	1274	1080	1464
1-1/4	7	31.75	320	434	840	1139	1100	1491	1360	1844
1-1/4	12		360	488	920	1247	1320	1790	1500	2034
1-3/8	6	34.93	420	569	1100	1491	1560	2115	1780	2413
1-3/8	12		460	624	1260	1708	1780	2413	2040	2766
1-1/2	6	38.10	560	759	1460	1979	2080	2820	2360	3200
1-1/2	12		620	841	1640	2224	2320	3145	2660	3606

Table 3. Torque Limits for Dry Metric Fasteners.

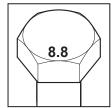


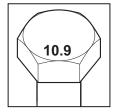


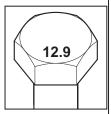


		TORQUE								
s	SIZE		C GRADE .8		C GRADE 0.9		METRIC GRADE 12.9			
DIA. INCHES	THREADS PER INCH	POUND FEET	NEWTON METERS	POUND FEET	NEWTON METERS	POUND FEET	NEWTON METERS			
0.157	4	2	3	3	4	4	5			
0.197	5	4	5	6	8	7	9			
0.237	6	7	9	10	14	11	15			
0.276	7	11	15	16	22	20	27			
0.315	8	18	24	25	34	29	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	1077			
1.064	27	707	959	996	1350	1235	1674			
1.182	30	967	13 11	1357	1840	1630	2210			

Table 4. Torque Limits for Wet Metric Fasteners.







		TORQUE						
SIZE		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	1157	998	1353	
1.182	30	809	1097	1158	1570	1353	1834	

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 over torquing and damage to equipment, calculate correct dial or scale reading using the conversion formula on the following page.

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

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.

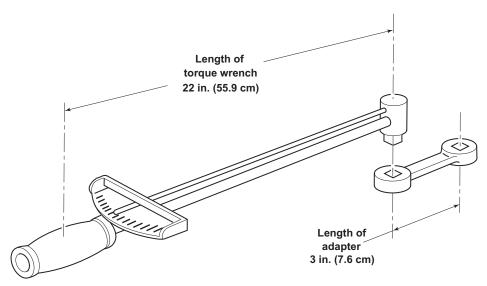


Figure 4. Measurement of Torque Wrench.

NOTE

In this example, torque wrench measures 22 in. (55.9 cm) an 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

CHAPTER 6

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) FOR

M917 DUMP TRUCK BODY

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) INTRODUCTION

SCOPE

This RPSTL lists the authorized spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of sustainment maintenance of the M917 Dump Truck 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 spare and repair parts authorized for use in the performance of maintenance at the levels determined by the MAC/SMR code. 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 the Bulk Items work package which follows the Special Tools Repair Parts work package. Repair parts kits are listed separately in their own functional group and work package. Repair parts 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 indexes work packages in this RPSTL: the National Stock Number (NSN) Index work package, and the Part Number (P/N) Index work package. The National Stock Number Index work package refers you to the figure and item number. The Part Number 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 containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout. This entry may be subdivided into 4 subentries, one for each service.

Source	Main	<u>Maintenance</u>		
Code	<u>C</u>	Code		
<u>XX</u>	<u></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 you get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

Source Code	Application/Explanation
PA	Stock items; use the applicable NSN to requisition/request items with these source codes.
PB	They are authorized to the level indicated by the code entered in the third position of the SMR code.
PC	NOTE Itams and ad PC are subject to deterioration
PD	Items coded PC are subject to deterioration.
PE	
PF	
PG	
PH	
PR	
PZ	
KD	Items with these codes are not to be requisitioned/requested individually. They are part of a
KF	kit that is authorized to the maintenance level indicated in the third position of the SMR code. The complete kit must be requisitioned and applied.
KB	
MF-Made at field	Items with these codes are not to be requisitioned/requested individually. They must be made from bulk material which is identified by the P/N in the DESCRIPTION AND
MH-Made at below depot/sustainment level	USABLE ON CODE (UOC) entry and listed in the bulk material group work package of the RPSTL. If the item is authorized to you by the third position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.
ML-Made at SRA	
MD-Made at depot	
MG-Navy only	
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
AH-Assembled by below depot sustainment 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.
AL-Assembled by SRA	
AD-Assembled by depot	
AG-Navy only	
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 CAGEC and P/N.
XC	Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's P/N.

Source Code	Application/Explanation
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 class authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to the following classes of maintenance:

Maintenance Code	Application/Explanation
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 can remove, replace, and use the item.
G-	Afloat and ashore intermediate maintenance can remove, replace, and use the item (Navy only).
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.
	NOTE
	Army will use C in the third position. However, for joint service publications, other services may use O.

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 class 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.

Maintenance Code	Application/Explanation
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 -	Specialized repair activity (Sustainment Repair Facility) 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.
G-	Both afloat and ashore intermediate levels are capable of complete repair of item. (Navy only)
K-	Complete repair is done at contractor facility.
Z -	Nonreparable. No repair is authorized.
В -	No repair is authorized. No parts or special tools are authorized for maintenance of a "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:

Recoverability	
Code	Application/Explanation
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 reparable, condemn and dispose of the item at the field level.
Н -	Reparable item. When uneconomically reparable, 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 not authorized below depot level.
L -	Reparable item. Condemnation and disposal not authorized below Specialized Repair Activity (SRA).
A -	Item requires special handling or condemnation procedures because of specific reasons (such as precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.
G -	Filed level reparable item. Condemn and dispose at either afloat or ashore intermediate levels. (Navy only)
K -	Reparable item. Condemnation and disposal to be performed at contractor facility
NSN (Column (3)). The NSN(s) for the item is listed in this column.

CAGEC (Column (4)). The Commercial and Government Entity Code (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 part number 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. Part numbers of any bulk materials required if the item is to be locally 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. This column 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.

2. Part Number (P/N) Index Work Package. Part numbers in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combinations 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. This column indicates the part number 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 the number assigned to the item as it appears in the figure referenced in the adjacent figure number 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. Examples of the UOCs used in the RPSTL are:

 Code	Used On
 Component Specific	Not Applicable

Fabrication Instructions. Bulk materials required to manufacture items are listed in the bulk material functional group of this RPSTL. Part numbers 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 (enter applicable TM number)

Index Numbers. Items which have the word BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the NSN / Part Number (P/N) Index work packages and the bulk material list in the repair parts list work package.

HOW TO LOCATE REPAIR PARTS

1. When NSNs or Part Numbers Are Not Known.

First. Using the table of contents, 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 the sub functional 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 part numbers 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 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 for which you are looking.

3. When Part Number Is Known.

First. If you have the part number and not the NSN, look in the PART NUMBER column of the part number 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.

FIELD MAINTENANCE LAMPS

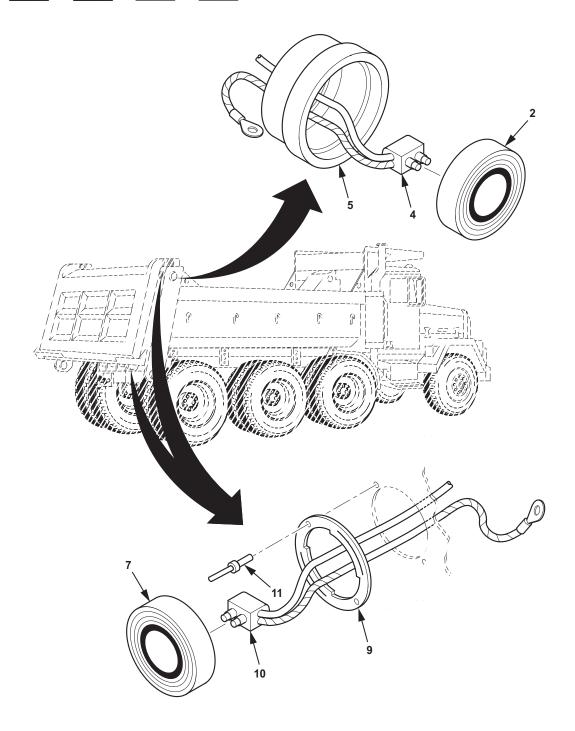


Figure 1. Lamps.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 0609 LIGHTS	
					FIG. 1 LAMPS	
1	PFFZZ	6220-01-234-5085	13548	30503R	LIGHT,MARKER,CLEARA GROMMET MT.	2
2	PAFZZ	6220-01-085-3391	13548	30200R	.LAMP UNIT, VEHICULAR 12-VOLT	1
3	PAFZA	4935-01-032-9586	13548	30401	.INSTRUMENT KIT	1
4	PAFZZ	6220-01-067-5264	13548	94902	PLUG ASSEMBLY	1
5	PAFZZ	5325-01-067-5438	13548	30700	GROMMET,NONMETALLIC	1
6	PAFZZ	6220-01-095-0011	98255	SW14344P	LIGHT,MARKER,CLEARA SURFACE MT.	5
7	PAFZZ	6220-01-085-3391	13548	30200R	.LAMP UNIT,VEHICULAR	1
8	XAFZZ		13548	30400	.MOUNT ASSY,SURFACE	1
9	XAFZZ		13548	30720	MOUNT PLATE	1
10	PAFZZ	6220-01-067-5264	13548	94902	PLUG ASSEMBLY	1
11	PAFZZ		23705	ZWA6128	RIVET	10
					END OF FIGURE	

FIELD MAINTENANCE WIRING HARNESS

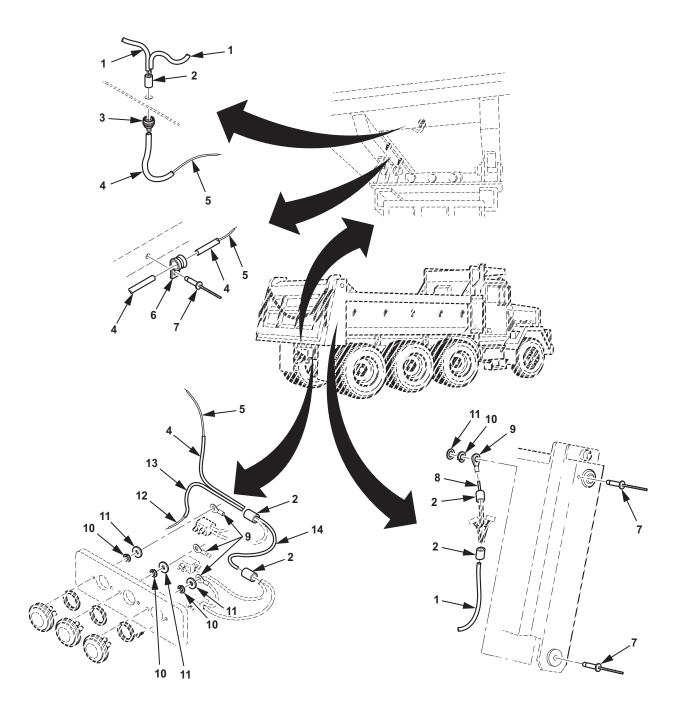


Figure 2. Wiring Harness.

			1 141	0 0000 214 100	A1	000-1
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 0613 HULL OR CHASSIS WIRING HARNESS	
					FIG. 2 WIRING HARNESS	
1	MFFZZ		34623	MA207-2292 2	WIRE,BLACK PLASTIC MAKE FROM WIRE,P/N M22759/11-14-0,9.5 FEET LONG,CONNECTOR TO TAIL/STOP LAMP	2
2	PAFZZ	5940-01-109-1829	23705	230379	SPLICE,CONDUCTOR	7
3	PAFZZ	5325-01-086-4841	23705	FSP 011-01 PK3	GROMMET,NONMETALLIC	1
4	MFFZZ		34623	MA207-2292 6	CONDUIT,BLACK NYLON MAKE FROM CONDUIT,P/N VWA8929,6.5 FEET LONG,CONNECTOR TO CEN- TER OF DUMP BODY	1
5	MFFZZ		34623	MA207-2292 3	WIRE,BLACK PLASTIC GAUGE- ,MAKE FROM WIRE P/N M22759/11- 14-0,6.5 FEET LONG,CONNECTOR TO CENTER OF DUMP BODY	1
6	PAFZZ	5340-01-106-7861	34623	MA207-2263 3	CLIP,RETAINING	4
7	PAFZZ	5320-00-850-3246	81349	M24243/1-D 608	RIVET,BLIND	4
8	MFFZZ		34623	MA207-2292 5	WIRE,BLACK PLASTIC MAKE FROM WIRE,P/N M22759/11-14-0,3 INCHES LONG,LH AND RH SIDE AND REAR MARKER GROUND WIRES	2
9	PAFZZ	5940-00-107-1481	96906	MS20659-10 4	TERMINAL,LUG	5
10	PAFZZ	5310-00-209-0786	96906	MS35335-33	WASHER,LOCK	5
11	PAFZZ	5310-00-014-5850	96906	MS27183-42	WASHER,FLAT	5
12	MFFZZ		34623	MA207-2263 1	WIRE,BLACK PLASTIC MAKE FROM WIRE,P/N M22759/11-14-0,6.5 FEET LONG	1
13	MFFZZ		34623	MA207-2263 2	CONDUIT,BLACK NYLON MAKE FROM CONDUIT,P/N VWA8929,6.5 FEET LONG,CONNECTOR TO TAIL/ STOP LAMP	1
14	MFFZZ		34623	MA207-2292 4	WIRE 14 GAUGE MAKE FROM WIRE,P/N M22759/11-14-0,10 INCHES LONG	1
					END OF FIGURE	

FIELD MAINTENANCE DUMP BODY

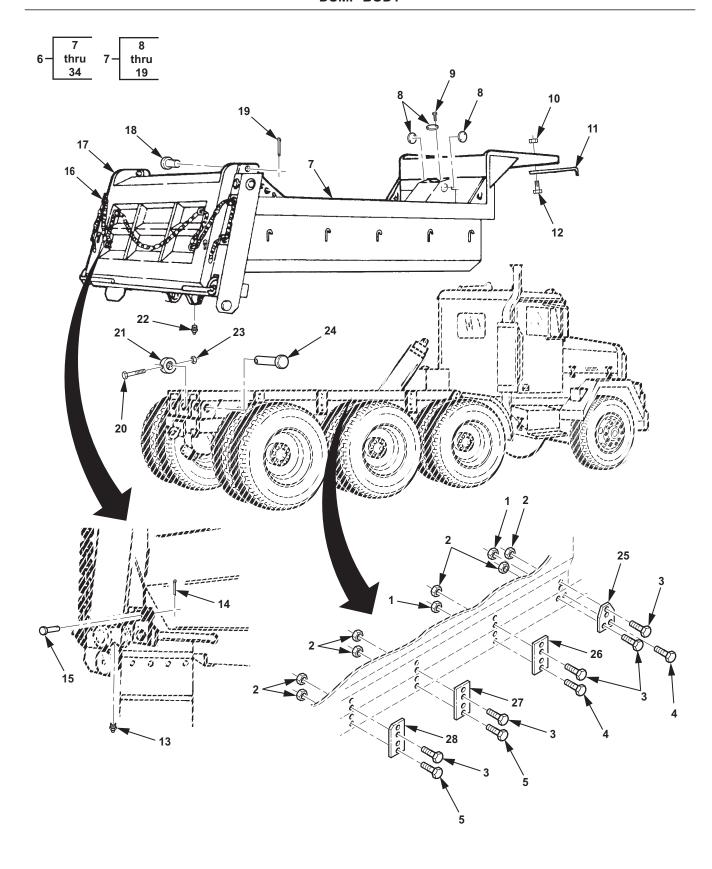


Figure 3. Dump Body (Sheet 1 of 2).

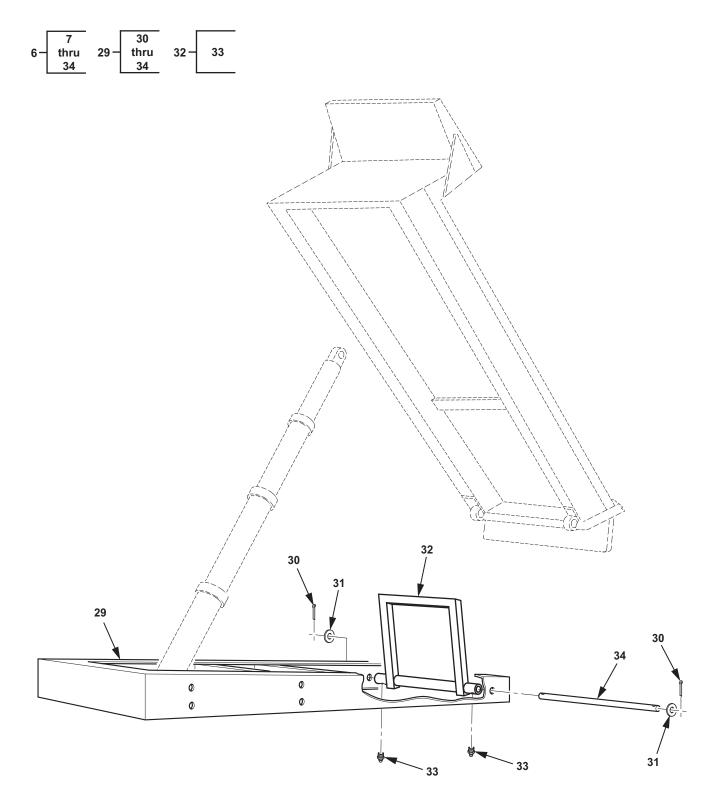


Figure 3. Dump Body (Sheet 2 of 2).

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 1810 CARGO BODY	
					FIG. 3 DUMP BODY	
1	PAFZZ	5310-01-085-8176	19207	12448437-5	NUT,PLAIN,EXTENDED 5/8- 11,MOUNTING BRACKET TO TRUCK FRAME	6
2	PAFZZ	5310-01-079-4646	19207	12448437-6	NUT,PLAIN,EXTENDED 3/4- 10,MOUNTING BRACKET TO TRUCK FRAME,SIXTEEN USED TO ATTACH BRKT TO TRUCK FRAME	26
3	PAFZZ	5306-01-129-9694	34623	M/25-20035	BOLT,MACHINE 3/4- 10X2.25,MOUNTING BRACKET TO TRUCK FRAME,TWO USED,AND SIXTEEN USED SUBFRAME TO MTG BRKT	18
4	PAFZZ	5306-01-129-9628	34623	M/25-20034	BOLT,MACHINE 5/8- 11X2.75,MOUNTING BRACKET TO TRUCK FRAME	6
5	PAFZZ	5306-01-101-4765	34623	M/25-20019	BOLT,MACHINE 3/4- 10X2.50,MOUNTING BRACKET TO TRUCK FRAME	8
6	AFFFF		23705	UNZ9529-1	BODY,DUMP	1
7	XBFFF		23705	EWB7633-01 THRU 05	.BED ASSY,DUMP	1
8	XBFZZ		23705	EWB7633-02	PLATE,BODY	3
9	XDFZZ		23705	ZKA6969	SCREW	6
10	PAFZZ	5310-01-090-7187	74841	FSP-6-2-4	NUT,SELF-LOCKING,HE 3/8-16	2
11	XBFZZ		23705	EWB8298-4	TARGET,BODY	1
12	PAFZZ	5306-01-097-7736	74841	FSP5-3-24	BOLT 3/8-16X1.250	2
13	XBFZZ		23705	EWB7633-05 -09	FITTING,LUBRICATION	2
14	PAFZZ	5315-00-839-5822	80205	MS24665-35 3	PIN,COTTER	3
15	PAFZZ	5315-01-097-8784	23705	EWB7633-04 -09	PIN CLEVIS LINKAGE	3
16	PAFZZ	4010-01-097-5967	1VN02	5001-40801 ADX	CHAIN,WELDED	1
17	XBFFF		23705	EWB7633-03	TAIL GATE DUMP BODY	1
18	PAFZZ	5315-01-090-2111	74841	EWB7633-01 -25	PIN	2
19	PAFZZ	5315-00-209-7273	80205	MS24665-62 5	PIN,COTTER 1/4IN.DIAX2.00,TAILGATE HINGE PINS TO DUMP BODY	2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
20	PAFZZ	5305-00-071-2077	80204	B1821BH050 C350N	.SCREW,CAP,HEXAGON H 1/2- 13X3.50,DUMP HINGE PINS TO SUBFRAME	2
21	PAFZZ		23705	ECE6879-1	.COLLAR,SHAFT 2-1/ 16IDX2.50ODX1.00,DUMP HINGE PINS TO SUBFRAME	2
22	PAFZZ	4730-00-279-0353	10001	12Z8000-5	.FITTING,LUBRICATION 3/16,DUMP BODY	2
23	XDFZZ		23705	ZWA7643	.NUT,PLAIN,HEXAGON	2
24	PAFZZ	5315-01-114-0029	1VNK1	CE7694	.PIN,STRAIGHT,HEADED 1-15/ 16DIAX6.250,DUMP BODY	2
25	XBFZZ		23705	EWB7633-11 -1	.BRACKET,FORWARD MTG	2
26	XBFZZ		23705	EWB7633-11 -2	.BRACKET,FRONT MIDDLE MTG	2
27	XBFZZ		23705	EWB7633-11 -3	.BRACKET,REAR MIDDLE MTG	2
28	XBFZZ		23705	EWB7633-11 -4	.BRACKET,REAR MTG	2
29	XBFFF		23705	EWB7633-06	.SUBFRAME HOIST AND BODY MOUNTING,DUMP BODY	1
30	PAFZZ	5315-00-849-9854	80205	MS24665-49 8	PIN,COTTER 3/16ODX2.00,SAFETY STRUT HINGE PIN TO SUBFRAME	2
31	PAFZZ		23705	EWB7633-06 -16	WASHER,FLAT 1-3/ 16IDX2.00OD,SAFETY STRUT HINGE PIN TO SUBFRAME	2
32	PAFFF		23705	EWB7633-06 -11-13AND 27	SUPPORT,STRUT	1
33	PAFZZ	4730-00-279-0353	10001	12Z8000-5	FITTING,LUBRICATION	2
34	XBFZZ		23705	EWB7633-06 -15	PIN,HINGE 1-1/8DIAX36.50	1

END OF FIGURE

FIELD MAINTENANCE TARPAULIN COVER

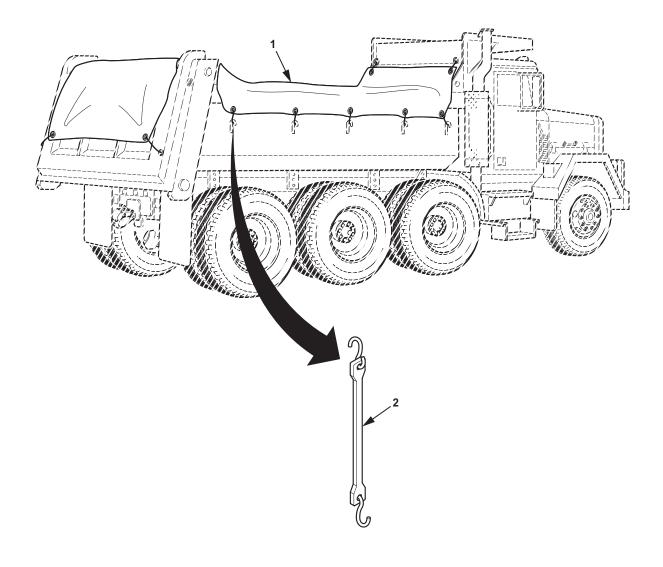


Figure 4. Tarpaulin Cover.

TM 5-3805-274-13&P						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2201 CANVAS, RUBBER, OR PLASTIC ITEMS	
					FIG. 4 TARPAULIN COVER	
1	PAFFF	3805-01-094-2787	9J595	WL-21K98	TARPAULIN	1
2	PAFZZ	5342-01-091-5168	34623	MA294-2100 3	.STRAP ASSEMBLY CONTINENTAL RUBBER WORKS,TARPAULIN COVER	12
					END OF FIGURE	

FIELD MAINTENANCE MUD FLAP AND TARPAULIN STORAGE

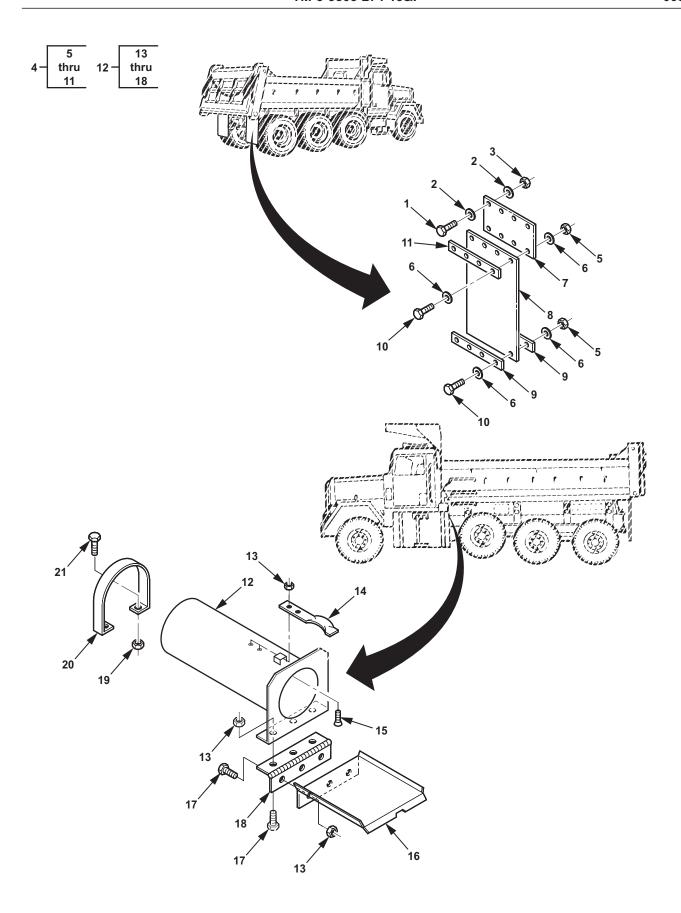


Figure 5. Mud Flap and Tarpaulin Storage.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2201 CANVAS, RUBBER, OR PLASTIC ITEMS	
					FIG. 5 MUD FLAP AND TARPAULIN STORAGE	
1	PAFZZ	5306-01-097-7736	74841	FSP5-3-24	BOLT 3/8-16X1.250,STEEL PLATE TO DUMP BODY	8
2	PAFZZ	5310-01-102-2715	24617	9416095	WASHER,FLAT 3/8	16
3	PAFZZ	5310-01-090-7187	74841	FSP-6-2-4	NUT,SELF-LOCKING,HE 3/8- 16,STEEL PLATE TO DUMP BODY	8
4	PAFZZ	2540-01-195-0565	0BFC3	EWB7633-13	GUARD,SPLASH,VEHICU DUMP BODY	2
5	PAFZZ	5310-01-090-7187	74841	FSP-6-2-4	.NUT,SELF-LOCKING,HE 3/8-16	8
6	PAFZZ	5310-01-102-2715	24617	9416095	.WASHER,FLAT 3/8	16
7	XBFZZ		23705	EWB7633-13 -2	.PLATE,STEEL 10GAUGE,14X24 INCHES,DUMP BODY	1
8	PAFZZ	2540-01-086-8888	74841	SP-94	.GUARD,SPLASH,VEHICU DUMP BODY MUD FLAP	1
9	XBFZZ		23705	EWB7633-13 -6	.BAR,BACK-UP 1.250X24.00	2
10	PAFZZ	5306-01-097-7736	74841	FSP5-3-24	.BOLT 3/8-16X1.250	8
11	XBFZZ		23705	EWB7633-13 -5	.BAR,BACK-UP 1.250X24.00	1
12	XBFZZ		23705	EWB7633-12	TUBE ASSEMBLY,TARP TARPULIN STOWAGE,DUMP	1
13	PAFZZ	5310-01-085-9933	74841	FSP6-2-2	.NUT,PLAIN,HEXAGON SELF LOCKING,HEXAGON,1/4-20,HINGE TO DOOR AND STORAGE TUBE AS- SEMBLY,DUMP BODY	8
14	XBFZZ		23705	DWA54-4-6	.SPRING,FASTENER DUMP BODY	1
15	PAFZZ	5305-00-022-7807	7X677	133043	.SCREW,CAP,HEXAGON H 1/4- 20X0.750,SPRING FASTENER TO STORAGE TUBE ASSEMBLY,DUMP BODY	2
16	PAFFF	5342-01-109-4019	23705	EWB7633-12 -4	.DOOR TUBE	1
17	PAFZZ	5305-00-988-1723	80205	MS35206-27 9	.SCREW,MACHINE 1/4- 20X0.50,HINGE TO DOOR AND STORAGE TUBE ASSEMBLY,DUMP BODY	6
18	PAFZZ	5342-01-102-8323	23705	TWA6285	.HINGE DUMP BODY	1
19	PAFZZ	5310-01-090-7187	74841	FSP-6-2-4	NUT,SELF-LOCKING,HE 3/8- 16,STEEL BAND TO FRAME,DUMP BODY	4

TM 5-3805-274-13&P 0						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
20	XBFZZ		23705	EWB7633-12 -11	BAND,STEEL DUMP BODY	2
21	PAFZZ	5305-00-543-4372	80204	B1821BH038 C075N	SCREW,CAP,HEXAGON H 3/8- 16X0.750,STEEL BAND TO FRAME- ,DUMP BODY	4
					END OF FIGURE	

FIELD MAINTENANCE REFLECTORS

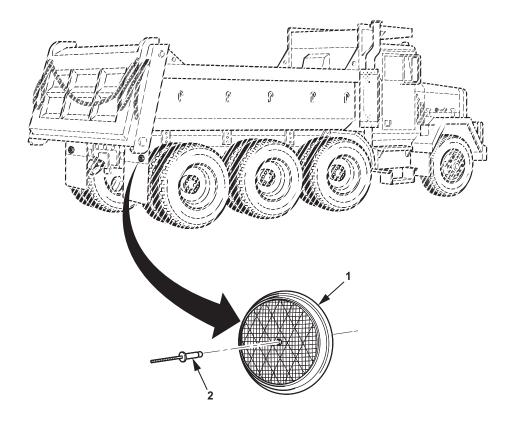


Figure 6. Reflectors.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2202 ACCESSORY ITEMS	
					FIG. 6 REFLECTORS	
1	PAFZZ	6220-01-110-4063	34623	MA207- 22640	REFLECTOR,LIGHT	4
2	PAFZZ	5320-01-102-7402	23705	ZKA8366	RIVET,BLIND	4
					END OF FIGURE	

FIELD MAINTENANCE DECALS

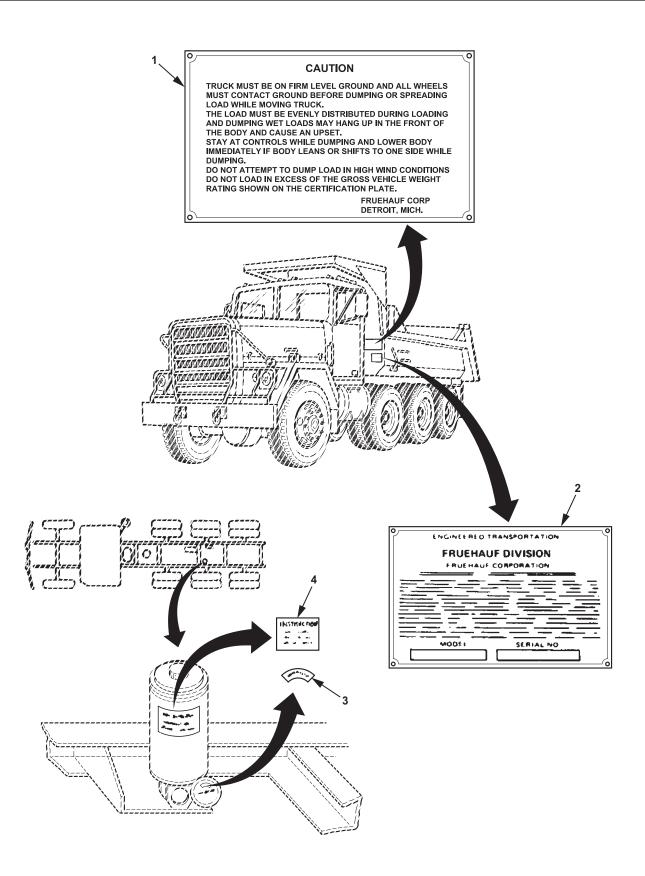
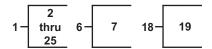


Figure 7. Decals.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2210 DATA PLATES AND INSTRUCTION HOLDERS	
					FIG. 7 DECALS	
1	XBFZZ		23705	EWB-7633-1 7	PLATE,INSTRUCTION	1
2	XBFZZ		23705	XCB-0279	PLATE, IDENTIFICATIO	1
3	PCFZZ	7690-01-087-3849	09990	6673-001	MARKER,IDENTIFICATI PART OF KIT P/N MA184-21006	1
4	PAFZZ	9905-01-092-9245	34623	MA207-2189 7	PLATE,INSTRUCTION	1
					END OF FIGURE	

FIELD MAINTENANCE HYDRAULIC PUMP



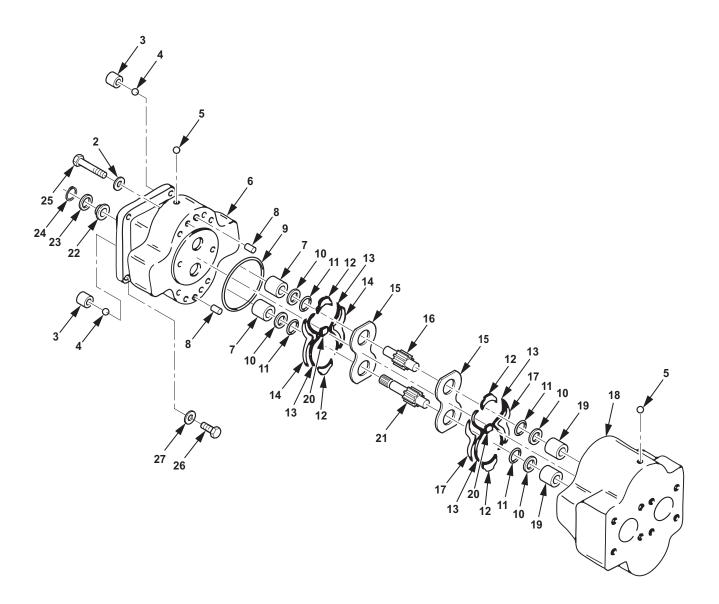


Figure 8. Hydraulic Pump.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2401 PUMP AND MOTOR	
					FIG. 8 HYDRAULIC PUMP	
1	PAFFF	4320-01-093-0573	11671	R20250- DKU	PUMP,HYDRAULIC	1
2	PAFZZ	5310-00-332-5036	11671	11146	.WASHER,FLAT FLANGE TO BODY	8
3	XBFZZ		11671	13049	.RETAINER,CHK VALVE PUMP,HY- DRAULIC	2
4	PAFZZ	3110-00-887-5524	96906	MS19061-20 015	.BALL,BEARING 1/2IN.DIA	2
5	PAFZZ	3110-01-058-3730	11671	74-250	.BALL,BEARING 1/4IN.DIA	2
6	XBFZZ		11671	45939	.FLANGE PUMP,HYDRAULIC	1
7	PFFZZ	3120-00-338-5897	11671	11669	BEARING,SLEEVE	2
8	XBFZZ		11671	20-16KH339 0	.DOWEL,PIN	2
9	KFFZZ		11671	55-156-830 9	.PACKING,PREFORMED O-RING PART OF KIT P/N 0014304	1
10	KFFZZ		11671	14022	.RING,BACKUP PART OF KIT P/N 0014304	4
11	KFFZZ		11671	55-028-830 9	.PACKING,PREFORMED O-RING PART OF KIT P/N 0014304	4
12	KFFZZ		11671	14023	.SEPARATOR,END PART OF KIT P/N 0014304	4
13	KFFZZ		11671	22088	.STRIP,SEALING PART OF KIT P/N 0014304	4
14	PFFZZ	5340-01-288-7014	11083	774643	.ESCUTCHEON PLATE TOP	2
15	PFFZZ	5342-01-288-1632	11083	9T1277	.PLATE,PRESSURE	2
16	PAFZA	3020-01-085-3737	11671	23987	.GEAR,SPUR	1
17	PFFZZ	5340-01-288-7013	11671	22091	.ESCUTCHEON PLATE BOTTOM	2
18	XBFZZ		11671	48622	.BODY,PUMP	1
19	PFFZZ	3120-00-338-5897	11671	11669	BEARING,SLEEVE	2
20	KFFZZ		11671	14021	.SEPARATOR,CENTER PART OF KIT P/N 0014304	2
21	PAFZA	3040-01-085-2620	11671	24179	.GEARSHAFT,SPUR	1
22	KFFZZ		11671	57-087-200 -14L	.SEAL PART OF KIT P/N 0014304	1
23	PAFZA	5330-01-085-7733	11671	14176	.RETAINER,PACKING PRESS RING	1
24	XBFZZ		11671	58-5000-20 0	.RING,RETAINING RETAINER AND SEAL TO FLANGE	1

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
25	XBFZZ		11671	62D-8-12HG 8	.SCREW FLANGE TO BODY	8
26	PAFZZ	5305-00-915-8087	81348	FF-S-85TY2 STY10P(.50 -13NC1.25)	SCREW,CAP,HEXAGON H 1/2- 13X1.250,GR 8	4
27	PAFZZ	5310-00-011-6121	96906	MS35338-67	WASHER,LOCK 1/2	4
					END OF FIGURE	

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FIELD MAINTENANCE HYDRAULIC CONTROL VALVE

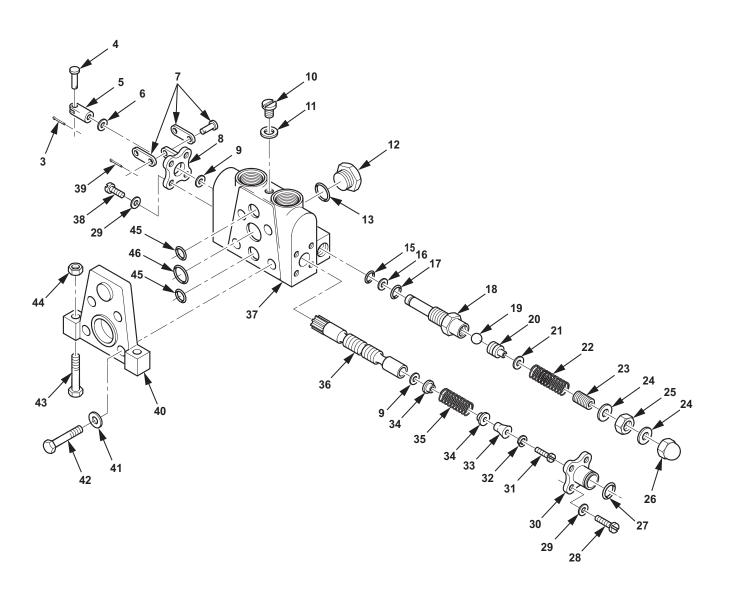


Figure 9. Hydraulic Control Valve.

			1 141	J-3003-27 4 -13	· · · · · · · · · · · · · · · · · · ·	0001
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2402 MANIFOLD AND/OR CONTROL VALVES	
					FIG. 9 HYDRAULIC CONTROL VALVE	
1	PAFFF	4820-01-113-0814	09990	07101097	VALVE,LINEAR,DIRECT CONTROL	1
2	PBFZZ	4820-01-093-8264	09990	1062-6174- 333	.BODY,VALVE LEFT END	1
3	PAFZZ	5315-01-242-5797	09990	0086-001	PIN,COTTER	1
4	PAFZZ	5315-00-317-2196	02249	0085-001	PIN,STRAIGHT,HEADED	1
5	PAFZZ	5340-01-054-1870	02249	1478-001	CLEVIS ADAPTER VALVE,CONTROL-HYDRAULIC	1
6	XBFZZ		02249	1039-001	WASHER,LOCK VALVE,CONTROL- HYDRAULIC	1
7	XBFZZ		02249	0928-001	LINK ASSEMBLY	1
8	PAFZZ	5340-01-054-1871	09990	1601-001	HANDLE BRACKET PART OF KIT P/N K28021	1
9	KFFZZ		02249	8017-001	SEAL PART OF KIT P/N K-28046	2
10	KFFZZ		02249	1728-001	PLUG,CHECK PART OF KIT P/N K7018	1
11	PAFZZ	5330-01-219-4178	09990	2709-001	PACKING,PREFORMED SEAL PART OF KIT P/N K7018	1
12	XBFZZ		02249	1629-001	PLUG,PORT SAE16,VALVE,CONTROL- HYDRAULIC	1
13	XBFZZ	5331-01-371-2423	09990	2710-001	O-RING SEAL VALVE,CONTROL- HYDRAULIC	1
14	XBFZZ		02249	5012-3550	RELIEF,SUB ASSY KC MAIN	1
15	KFFZZ		02249	1698-001	PACKING,PREFORMED SEAL PART OF KIT P/N K-21002	1
16	KFFZZ		02249	1783-001	WASHER,BACK-UP PART OF KIT P/N K7004 PART OF KIT P/N K-21002	1
17	KFFZZ		02249	2709-001	PACKING,PREFORMED SEAL PART OF KIT P/N K-7001A PART OF KIT P/N K7004 PART OF KIT P/N K-21002	1
18	XBFFF		02249	1798-001	BODY,RELIEF VALVE,RELIEF- HYDRAULIC	1
19	KFFZZ		02249	1268-001	BALL PART OF KIT P/N K-21002	1
20	KFFZZ		02249	1269-001	GUIDE,BALL PART OF KIT P/N K-21002	1

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
21	KFFZZ		02249	1136-001	SEAL,BALL GUIDE PART OF KIT P/N K7004 PART OF KIT P/N K-21002	1
22	KFFZZ		02249	1233-001	SPRING,HELICAL,COMP PART OF KIT P/N K-21002	1
23	XBFZZ		02249	1271-001	SCREW,ADJUSTING VALVE,CONTROL-HYDRAULIC	1
24	KFFZZ		02249	1295-001	WASHER TWO APPEAR IN KIT K7004 PART OF KIT P/N K-21002 PART OF KIT P/N K7004	2
25	XBFZZ		02249	1273-001	NUT,JAM VALVE,CONTROL- HYDRAULIC	1
26	XBFZZ		02249	1274-001	NUT,ACORN VALVE,CONTROL- HYDRAULIC	1
27	KFFZZ		02249	1612-001	DIAPHRAGM,BONNET VALVE,CONTROL-HYDRAULIC PART OF KIT P/N K-7007	1
28	KFFZZ		02249	2673-001	SCREW,MACHINE 1/4- 20X1.00,BONNET TO VALVE HOUSING PART OF KIT P/N K-7007	4
29	PAFZZ	5310-00-582-5965	80205	MS35338-44	WASHER,LOCK BRACKET TO VALVE HOUSING	8
30	KFFZZ		02249	1611-001	BONNET PART OF KIT P/N K-7007	1
31	PAFZZ	5305-01-054-1867	09990	3731-196	SCREW PART OF KIT P/N K-7007	1
32	KFFZZ		02249	1291-001	WASHER,LOCK PART OF KIT P/N K-7007	1
33	PAFZZ	3820-01-054-1868	02249	050941	COLLAR,SPOOL PART OF KIT P/N K-7007	1
34	PAFZZ	3820-01-054-1869	02249	050940	COLLAR,STOP PART OF KIT P/N K-7007	2
35	KFFZZ		02249	2913-001	SPRING PART OF KIT P/N K-7007 PART OF KIT P/N K7004	1
36	XAFZZ		02249	1606-001	SPOOL,FREE FLOW VALVE HOUS- ING AND SPOOL ARE MATCHED COMPONENTS,NOT SOLD SEPA- RATELY	1
37	XAFZZ		02249	3000-006	HOUSING,LEFT END VALVE- ,VALVE HOUSING AND SPOOL ARE MATCHED COMPONENTS,NOT SOLD SEPARATELY	1

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
38	PAFZZ	5305-01-054-1872	09990	1620-001	SCREW,MACHINE BRACKET TO VALVE HOUSING PART OF KIT P/N K28021	4
39	PAFZZ	5315-01-204-6655	09990	0929-001	PIN,COTTER	1
40	XBFZZ		02249	25P-1644-0 30	.COVER,OUTLET RIGHT VALVE,CONTROL-HYDRAULIC	1
41	KFFZZ		02249	1039-001	.WASHER,LOCK PART OF KIT P/N K-28046	4
42	KFFZZ		02249	3732-123	.BOLT ASSEMBLY PART OF KIT P/N K-28046	4
43	PAFZZ	5305-00-071-2072	80204	B1821BH050 C225N	.SCREW,CAP,HEXAGON H 1/2- 13X2.250	3
44	PAFZZ	5310-01-113-4042	24617	9415963	.NUT,PLAIN,HEXAGON 1/2-13	3
45	KFFZZ		02249	1621-001	.PACKING,PREFORMED SEAL PART OF KIT P/N K-7001A	2
46	KFFZZ		02249	1627-001	.HOLDER,DETENT SEAL PART OF KIT P/N K-7001A	1

FIELD MAINTENANCE PILOT VALVE

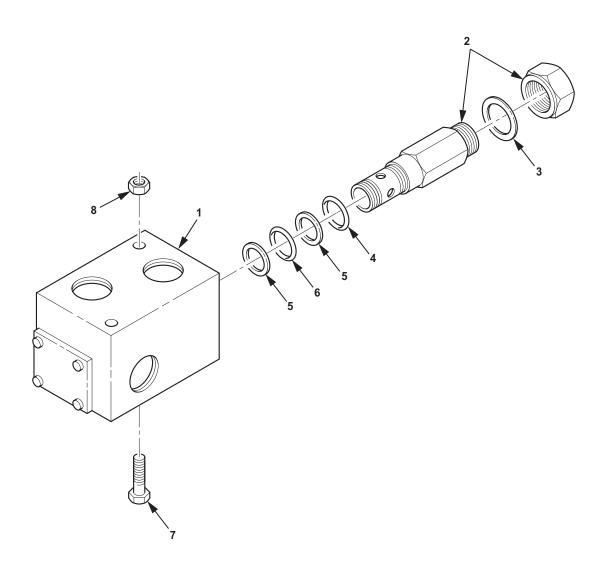


Figure 10. Pilot Valve.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2403 HYDRAULIC CONTROLS AND/OR MANUAL CONTROLS	
					FIG. 10 PILOT VALVE	
1	XBFFF		80293	1LKXP4202- 003	VALVE,SAFETY RELIEF	1
2	PAFZZ	4820-01-093-0575	58163	1L10-F-25	.VALVE,SAFETY RELIEF BODY	1
3	KFFZZ		80293	2021028	GASKET PART OF KIT P/N 800010	1
4	KFFZZ		80293	132113	PACKING,PREFORMED O-RING PART OF KIT P/N 800010	1
5	KFFZZ		80293	142917	RING,TEFLON BACK-UP PART OF KIT P/N 800010	2
6	KFFZZ		80293	134104	PACKING,PREFORMED O-RING PART OF KIT P/N 800010	1
7	PAFZZ	5305-01-105-9265	34623	MA25-21256	SCREW,CAP,HEXAGON H 3/8- 16X4.00	2
8	PAFZZ	5310-01-090-7187	74841	FSP-6-2-4	NUT,SELF-LOCKING,HE 3/8-16	2
					END OF FIGURE	

FIELD MAINTENANCE CONTROL ASSEMBLY

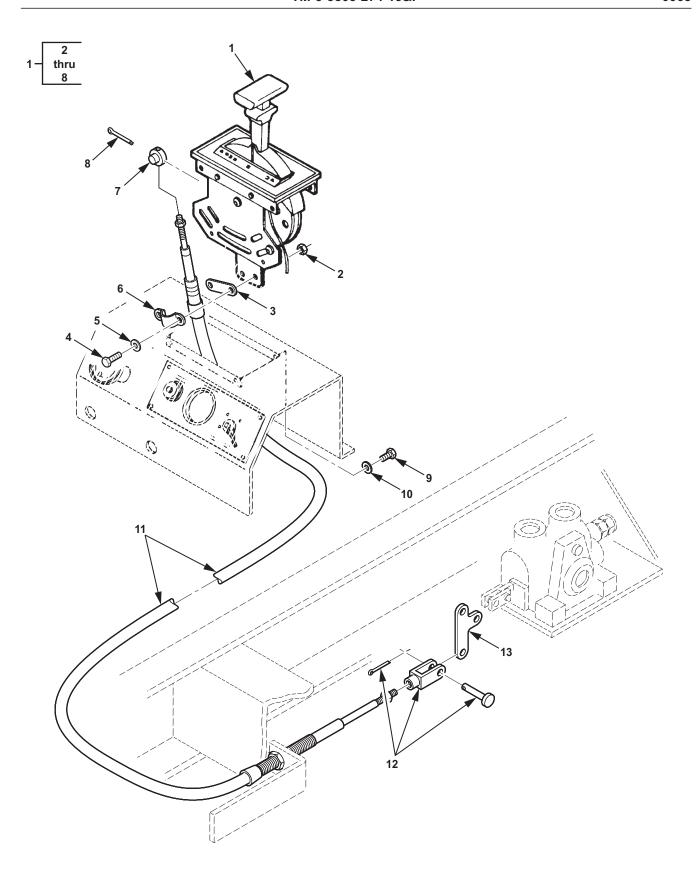


Figure 11. Control Assembly.

					^-	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2403 HYDRAULIC CONTROLS AND/OR MANUAL CONTROLS	
					FIG. 11 CONTROL ASSEMBLY	
1	PAFZZ	2590-01-258-6965	60602	55012	CONTROL ASSEMBLY,PU	1
2	PAFZZ	5310-01-088-7344	34623	MA217-2106 8	.NUT,PLAIN,HEXAGON TO ATTACH CLAMP AND SHIM TO CONTROL ASSY	2
3	XBFZZ		85757	69002	.SHIM ,SPACER	1
4	XBFZZ		34623	MA25-21175	.BOLT,MACHINE TO ATTACH CLAMP AND SHIM TO CONTROL ASSY	2
5	PAFZZ	5310-01-088-7290	34623	MA362-2112 7	.WASHER,FLAT TO ATTACH CLAMP AND SHIM TO CONTROL ASSY	2
6	XBFZZ		85757	69001	.CLAMP	1
7	PFFZZ	5315-01-190-4813	60602	39042	.PIN,SHOULDER,HEADLE RE- TAINER	1
8	PAFZZ	5315-00-234-1854	80205	MS24665-15 3	.PIN,COTTER TO ATTACH PIVOT TO CONTROL ASSY	1
9	PAFZZ	5305-00-068-0500	57498	95423653	SCREW,CAP,HEXAGON H 1/4X0.50,TO CONTROL ASSEMBLY TO PANEL,CONTROL ASSY	4
10	PAFZZ	5310-00-682-5930	96906	MS35340-44	WASHER,LOCK 1/4INCH,TO CONTROL ASSEMBLY TO PANEL,CONTROL ASSY	4
11	PAFZZ	3040-01-087-0076	60602	6323-132	CONTROL ASSEMBLY,PU	1
12	PAFZZ	5340-01-114-5723	34623	MA207-2302 8	CLEVIS,ROD END	1
13	PFFZZ	3040-01-286-9465	23705	EWB8298-1	CONNECTING LINK,RIG CONTROL ASSEMBLY	1
					END OF FIGURE	

END OF FIGURE

FIELD MAINTENANCE HYDRAULIC LINES AND FITTINGS

$$1 - 2 \quad 3 - 4 \quad \text{and} \quad 9 - 10 \quad \text{thru} \quad 12 - 13 \quad 14 - 15$$

$$16 - 17 \quad \text{and} \quad 19 - 20 \quad 21 - 22 \quad \text{and} \quad 23$$

$$24 - 25 \quad 26 - 27 \quad \text{and} \quad 28$$

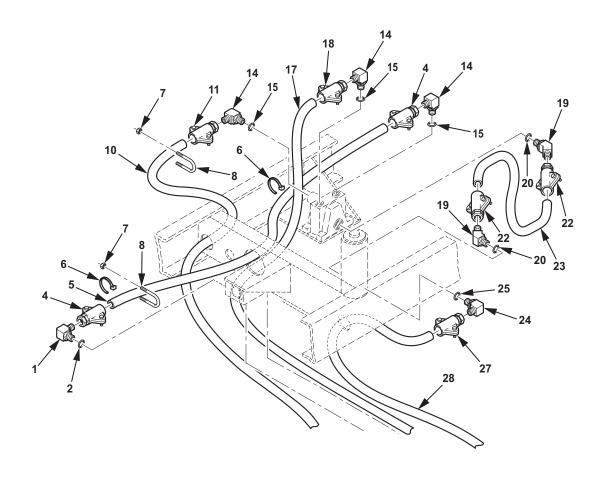


Figure 12. Hydraulic Lines and Fittings (Sheet 1 of 2).

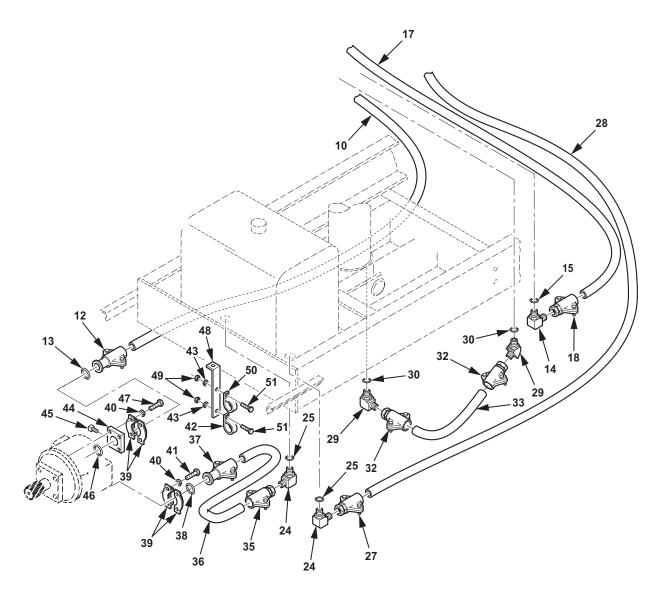


Figure 12. Hydraulic Lines and Fittings (Sheet 2 of 2).

					····	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2406 STRAINERS, FIL- TERS, LINES AND FITTINGS, ETC.	
					FIG. 12 HYDRAULIC LINES AND FITTINGS	
1	PAFZZ	4730-01-055-6091	97403	13211E9018 -9	ELBOW,TUBE TO BOSS 90 DEG,	1
2	PCFZZ	5331-01-109-5318	58499	7033	.O-RING	1
3	MFFFF		23705	EWB7633-09 -6	HOSE ASSEMBLY CONTROL VALVE TO PILOT VALVE, MANUFACTURED IN ACCORDANCE WITH SAE100R2 TYPE A, FROM B PORT OF CON- TROL VALVE TO V PORT OF PILOT VALVE	1
4	PAFZZ	4730-01-566-0631	87373	10343-16-1 6	.ADAPTER,STRAIGHT,TU CLAMP TYPE,	2
5	MFFZZ		34623	MA145-2104 1	.HOSE,HIGH PRESSURE MAKE FROM HOSE,P/N M52471/5-16,29 INCHES LONG	1
6	PAFZZ	5975-01-101-5348	06383	PLT4H-C30	STRAP,TIEDOWN,ELECT	2
7	PAFZZ	5310-01-090-7187	74841	FSP-6-2-4	NUT,SELF-LOCKING,HE 3/8-16	4
8	PAFZZ	5306-01-106-1057	34623	MA25-21254	BOLT,U 3/8-16X1.50	2
9	MFFFF		09505	EWB7633-09 -2	HOSE ASSEMBLY SUPPLY LINE, MAKE FROM HOSE,P/N M52471/5-16 AND ADAPTER,P/N CB16-16NJ	1
10	MFFZZ		34623	MA145-2103 3	.HOSE,HIGH PRESSURE MAKE FROM HOSE,P/N M52471/5-16,136 INCHES LONG	1
11	PAFZZ	4730-01-566-0631	87373	10343-16-1 6	.ADAPTER,STRAIGHT,TU CLAMP TYPE	4
12	XBFZZ		81349	M525/19-16 -16	.ADAPTER,STRAIGHT,FL FOR 1 INCH HOSE	1
13	PAFZZ	5330-01-105-7046	09505	20PA-77	PACKING,PREFORMED O-RING	1
14	PAFZZ	4730-00-840-7236	96906	MS51527A16	ELBOW,TUBE TO BOSS 90 DEG,1 5/16-12	4
15	PCFZZ	5331-01-109-6605	09505	710-FSO-16	.O-RING	4
16	MFFFF		23705	EWB7633-09 -5	HOSE ASSEMBLY	1
17	MFFZZ		34623	MA145-2103 9	.HOSE,HIGH PRESSURE MAKE FROM HOSE,P/N M52471/5-16	1
18	PAFZZ	4730-01-566-0631	87373	10343-16-1 6	.ADAPTER,STRAIGHT,TU CLAMP TYPE	2
19	PAFZZ	4730-00-420-4441	30780	20V50XS	ELBOW,TUBE TO BOSS 45 DEG	2
20	PCFZZ	5331-01-109-5318	58499	7033	.O-RING	2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
21	MFFFF		23705	EWB7633-09 -4	HOSE ASSEMBLY	1
22	PAFZZ	4730-01-438-6622	87373	10643-20-2 0	.ADAPTER,STRAIGHT,TU CLAMP TYPE	2
23	MFFZZ		34623	MA145-2103 7	.HOSE,MED-HIGH PRESS MAKE FROM HOSE,P/N 245-20,10 INCHES LONG.	1
24	PAFZZ	4730-00-019-1489	96906	MS51527A20	ELBOW,TUBE TO BOSS 90 DE- G,COMES WITH PREFORMED PACKING	3
25	PCFZZ	5331-01-109-5318	58499	7033	.O-RING	3
26	MFFFF		23705	EWB7633-09 -3	HOSE ASSEMBLY	1
27	PAFZZ	4730-01-438-6622	87373	10643-20-2 0	.ADAPTER,STRAIGHT,TU CLAMP TYPE	2
28	MFFZZ		34623	MA145-2103 5	.HOSE,MED HIGH PRESS MAKE FROM HOSE,P/N 245-20,68 INCHES LONG	1
29	PAFZZ	4730-00-935-5355	96906	MS51528A16	ELBOW,TUBE TO BOSS 45 DEG,1 5/16-12 THD	2
30	PCFZZ	5331-01-109-6605	09505	710-FSO-16	.O-RING	2
31	MFFFF		23705	EWB7633-09 -7	HOSE ASSEMBLY FROM CYLINDER PILOT VALVE TO HYDRAULIC CYLINDER, MANUFACTURED IN ACCORDANCE WITH SAE 100R2, TYPE A	1
32	PAFZZ	4730-01-566-0631	87373	10343-16-1 6	.ADAPTER,STRAIGHT,TU CLAMP TYPE	2
33	MFFZZ		34623	MA145-2104 3	.HOSE,HIGH PRESSURE MAKE FROM HOSE,P/N M52471/5-16,31.5 INCHES LONG	1
34	XBFFF		23705	EWB7633-09 -1	HOSE ASSEMBLY SUCTION LINE- ,MANUFACTURED IN ACCOR- DANCE WITH SAE 100R1,TYPE A FROM CURBSIDE,RH PORT OF RESERVOIR TO OUTBOARD,LH PORT OF PUMP	1
35	PAFZZ	4730-01-438-6622	87373	10643-20-2 0	.ADAPTER,STRAIGHT,TU SWIVEL- ,CLAMP TYPE	1
36	MFFZZ		34623	MA145-2106 3	.HOSE,MED-HIGH PRESS MAKE FROM HOSE,P/N 245-20,77 INCHES LONG	1
37	XBFZZ		96906	MS39282-20 A	.ADAPTER,STRAIGHT,FL FOR 1-1/ 4INCH HOSE	1
38	PAFZZ	5330-01-105-7046	09505	20PA-77	PACKING,PREFORMED O-RING	1

(2)	(3)	(4)	(5)	(6)	(7)
SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
PAFZZ	4730-01-026-8720	81349	M52525/17- 20	FLANGE,PIPE,SWIVEL	2
PAFZZ	5310-00-209-0965	80205	MS35338-47	WASHER,LOCK 7/16	8
PAFZZ	5305-00-071-2055	80204	B1821BH044 C150N	SCREW,CAP,HEXAGON H 7/16- 14X1.50	4
PAFZZ	5340-01-111-1509	75272	COV-2909	CLAMP,LOOP 1.750OD	1
PAFZZ	5310-00-584-5272	80205	MS35338-48	WASHER,LOCK 1/4	2
XBFZZ		74841	SP-97	ADAPTER FLANGE,GAGE SPLIT FLANGE	1
PAFZA	4730-01-097-0414	23705	VKA2521	.PLUG,PIPE	1
PAFZZ	5330-01-105-7046	09505	20PA-77	PACKING,PREFORMED O-RING	1
PAFZZ	5305-01-105-9312	34623	MA310-2118 8	SCREW,CAP,HEXAGON H	4
PFFZZ	5340-01-288-5070	34623	MB10-20118	BRACKET,ANGLE	1
PAFZZ	5310-00-761-6882	96906	MS51967-2	NUT,PLAIN,HEXAGON 1/4-20	2
PAFZZ	5340-01-111-1510	75272	COV-2509	CLAMP,LOOP 1.5 OD	1
PAFZZ	5305-00-071-2505	80204	B1821BH025 C088N	SCREW,CAP,HEXAGON H 1/4- 20X0.88	2
	SMR CODE PAFZZ PAFZZ	SMR CODENSNPAFZZ4730-01-026-8720PAFZZ5310-00-209-0965PAFZZ5305-00-071-2055PAFZZ5340-01-111-1509PAFZZ5310-00-584-5272XBFZZXBFZZPAFZA4730-01-097-0414PAFZZ5330-01-105-7046PAFZZ5305-01-105-9312PFFZZ5340-01-288-5070PAFZZ5310-00-761-6882PAFZZ5340-01-111-1510	SMR CODENSNCAGECPAFZZ4730-01-026-872081349PAFZZ5310-00-209-096580205PAFZZ5305-00-071-205580204PAFZZ5340-01-111-150975272PAFZZ5310-00-584-527280205XBFZZ74841PAFZA4730-01-097-041423705PAFZZ5330-01-105-704609505PAFZZ5340-01-288-507034623PAFZZ5340-01-688296906PAFZZ5340-01-111-151075272	SMR CODENSNCAGECPART NUMBERPAFZZ4730-01-026-872081349M52525/17- 20PAFZZ5310-00-209-096580205MS35338-47PAFZZ5305-00-071-205580204B1821BH044 C150NPAFZZ5340-01-111-150975272COV-2909PAFZZ5310-00-584-527280205MS35338-48XBFZZ74841SP-97PAFZA4730-01-097-041423705VKA2521PAFZZ5330-01-105-70460950520PA-77PAFZZ5305-01-105-931234623MA310-2118PAFZZ5340-01-288-507034623MB10-20118PAFZZ5340-01-111-151075272COV-2509PAFZZ5340-01-111-151075272COV-2509PAFZZ5305-00-071-250580204B1821BH025	SMR CODE NSN CAGEC PART NUMBER DESCRIPTION AND USABLE ON CODE (UOC) PAFZZ 4730-01-026-8720 81349 M52525/17-20 FLANGE,PIPE,SWIVEL PAFZZ 5310-00-209-0965 80205 MS35338-47 WASHER,LOCK 7/16 PAFZZ 5305-00-071-2055 80204 B1821BH044 C150N SCREW,CAP,HEXAGON H 7/16-14X1.50 PAFZZ 5340-01-111-1509 75272 COV-2909 CLAMP,LOOP 1.750OD PAFZZ 5310-00-584-5272 80205 MS35338-48 WASHER,LOCK 1/4 XBFZZ 74841 SP-97 ADAPTER FLANGE,GAGE SPLIT FLANGE PAFZA 4730-01-097-0414 23705 VKA2521 .PLUG,PIPE PAFZZ 5330-01-105-7046 09505 20PA-77 PACKING,PREFORMED O-RING PAFZZ 5305-01-105-9312 34623 MA310-2118 SCREW,CAP,HEXAGON H PAFZZ 5340-01-288-5070 34623 MB10-20118 BRACKET,ANGLE PAFZZ 5340-01-111-1510 75272 COV-2509 CLAMP,LOOP 1.5 OD PAFZZ 5340-001-21505 80204 B1821

END OF FIGURE

FIELD MAINTENANCE HYDRAULIC OIL FILTER

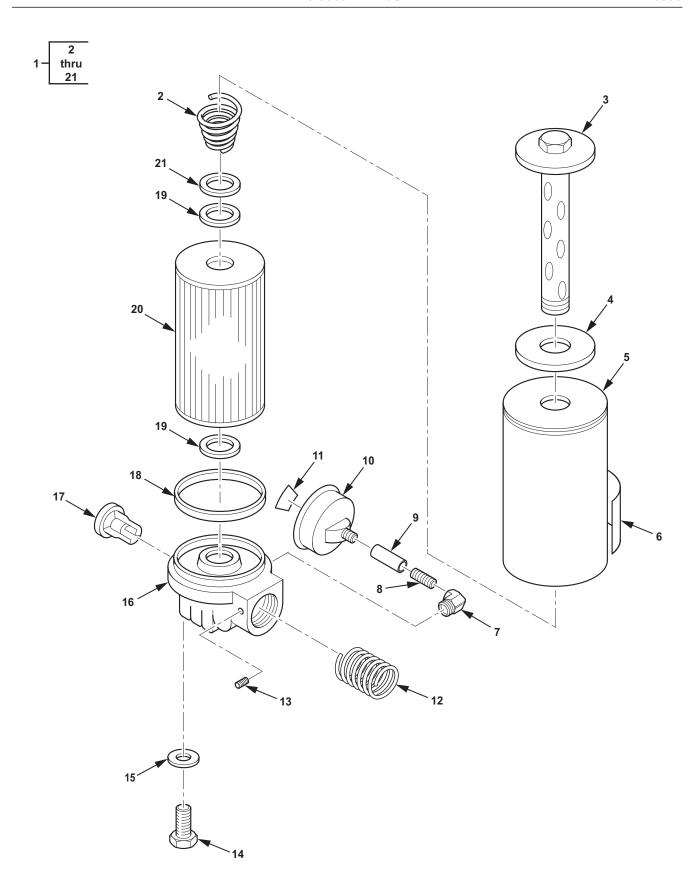


Figure 13. Hydraulic Oil Filter.

			1 141	3-3003-274-130	XI	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2406 STRAINERS, FIL- TERS, LINES AND FITTINGS, ETC.	
					FIG. 13 HYDRAULIC OIL FILTER	
1	PAFZZ	2940-01-086-8925	34623	FR251-2A1E	FILTER,FLUID FILTER,HYDRAULIC OIL	1
2	PAFZZ	5360-01-083-1421	80195	7420046	.SPRING COMPRESSION	1
3	PAFZZ	4730-00-137-0526	05779	01561001	.BOLT,FLUID PASSAGE FILTER,HY- DRAULIC OIL	1
4	KFFZZ	5330-01-082-8138	80195	7420008	.GASKET FILTER,HYDRAULIC OIL PART OF KIT P/N K23015	1
5	PAFZZ	4330-01-432-4433	02249	1557-001	.HOUSING,FILTER FILTER,HYDRAU-LIC OIL	1
6	PAFZZ	9905-01-092-9245	34623	MA207-2189 7	.PLATE,INSTRUCTION FILTER,HY- DRAULIC OIL	1
7	PAFZZ	4730-00-231-5605	88044	AN914-1	.ELBOW,PIPE	1
8	PAFZZ	4730-00-196-2080	81346	A733S- 9CFB	.NIPPLE,PIPE	1
9	PAFZZ	4730-00-187-7594	96906	MS39233-1B	.COUPLING,PIPE	1
10	PAFZZ	6685-00-068-2699	02249	6671-001	.INDICATOR PART OF KIT P/N MA184-21006	1
11	PCFZZ	7690-01-087-3849	09990	6673-001	.MARKER,IDENTIFICATI FILTER,HY- DRAULIC OIL PART OF KIT P/N MA184-21006	1
12	KFFZZ		02249	7514-001	.SPRING,RELIEF VALVE FILTER,HY- DRAULIC OIL PART OF KIT P/N K-23022	1
13	PFFZZ	4730-01-101-1759	02249	015-001	.PLUG,PIPE 18IN.PIPE	1
14	PAFZZ	5306-01-096-6161	23705	FSP5-1-2	.BOLT,MACHINE	4
15	PAFZZ	5310-01-097-8190	23705	FSP7-3-2	.WASHER,LOCK	4
16	XAFZZ		02249	7506-013	.HEAD	1
17	KFFZZ	4820-01-104-0949	02249	7510-001	.PARTS KIT,SAFETY RE FILTER,HY- DRAULIC OIL PART OF KIT P/N K-23022	1
18	PFFZZ	5331-01-073-1219	09990	1576-001	.O-RING FILTER,HYDRAULIC OIL PART OF KIT P/N K23015	1
19	PAFZZ	5330-00-762-6018	09990	3274-001	.SEAL,RUBBER FILTER,HYDRAULIC OIL PART OF KIT P/N K23015	2
20	KFFZZ		02249	3293-001	.ELEMENT,FILTER FILTER,HYDRAU- LIC OIL PART OF KIT P/N K23015	1

	TM 5-3805-274-13&P						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	
21	PAFZZ	5310-00-843-3496	14775	3277-001	.WASHER,FLAT FILTER,HYDRAULIC OIL	1	

END OF FIGURE

FIELD MAINTENANCE TELESCOPIC CYLINDER

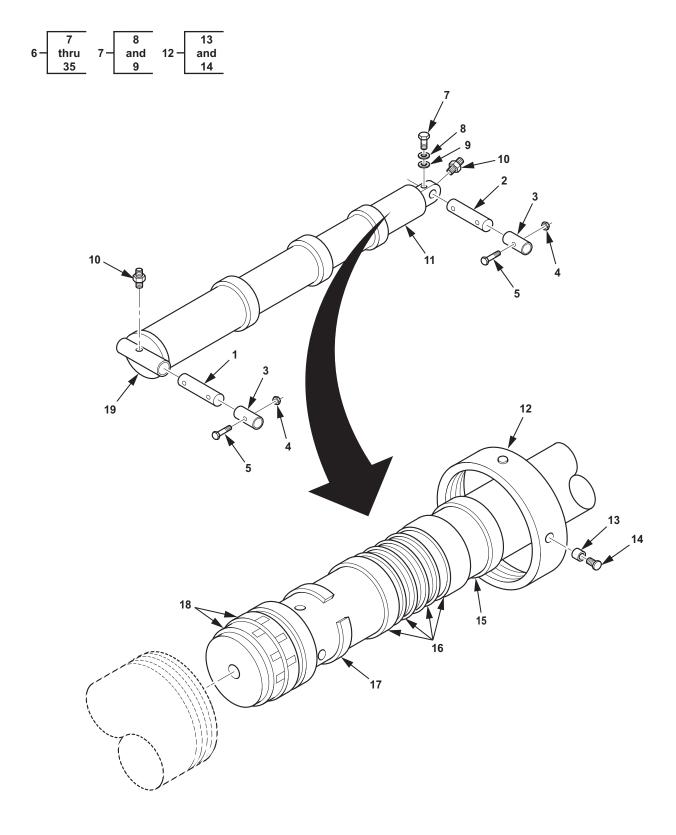
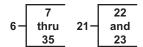


Figure 14. Telescopic Cylinder (Sheet 1 of 3).



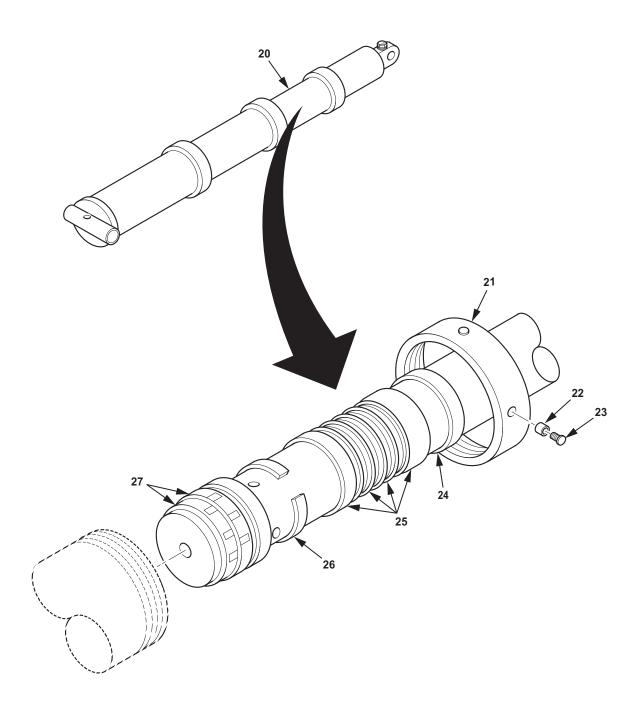


Figure 14. Telescopic Cylinder (Sheet 2 of 3).

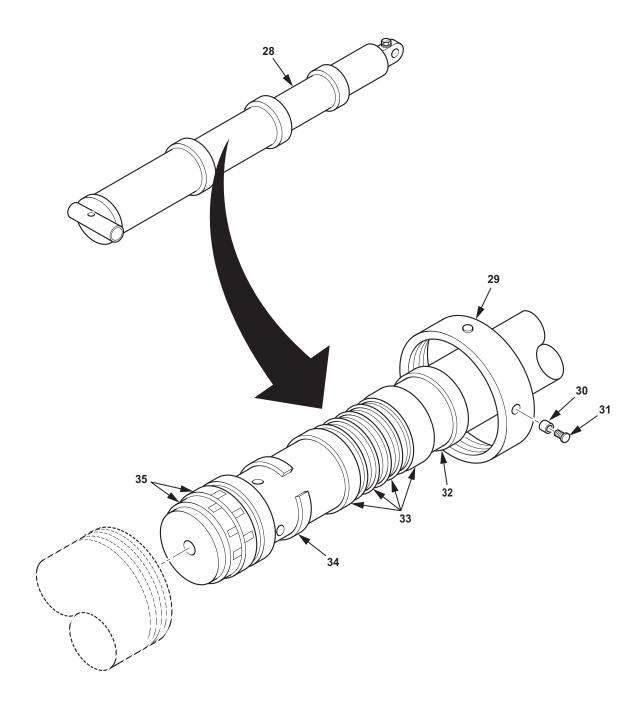


Figure 14. Telescopic Cylinder (Sheet 3 of 3).

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2407 HYDRAULIC CYLIN- DERS	
					FIG. 14 TELESCOPIC CYLINDER	
1	PAFZZ	5340-01-110-7818	23705	ECE7696-2	ROD,STRAIGHT,HEADLE 1-15/ 16X21.250	1
2	XBFZZ		23705	ECE7696-1	PIN,STRAIGHT,HEADLE 1-15/ 16X10.50	1
3	PAFZZ		74841	ECE6879-1	COLLAR,SHAFT 2-1/8X2.50X1.00	4
4	XDFZZ		23705	ZWA7643	NUT,PLAIN,HEXAGON 1/2-13	4
5	PAFZZ	5305-00-071-2077	80204	B1821BH050 C350N	SCREW,CAP,HEXAGON H 1/2- 13X3.50	4
6	PAFFF	3805-01-092-9223	95953	C30175-73- 129H	CYLINDER,TELESCOPIC	1
7	PAFZZ	4820-01-095-2085	95953	ABV100	.VALVE,BLEEDER,HYDRA	1
8	XBFZZ		95953	A21301	RING,BACK-UP	1
9	PAFZZ	5331-01-105-9286	95953	A21300	O-RING	1
10	PAFZZ	4730-00-218-5825	0FKM1	1630-B1	.FITTING,LUBRICATION	2
11	XBFZZ		95953	B11346-44. 25	.PLUNGER ASSEMBLY 5 INCH	1
12	PAFZZ	5310-00-240-1191	95953	A2216	.NUT,STFD BOX 5 INCH	1
13	XBFZZ		95953	A20420	PLUG,NYLON	2
14	PAFZZ	5305-01-102-6985	26278	A20419	SETSCREW	2
15	PAFZZ	5330-00-460-0015	95953	A2922	.WIPER,RUBBER 5 INCH PART OF KIT P/N A20861	1
16	KFFZZ		95953	B10841-5	.SET,PACKING 5 INCH,PACKING SETS CONSIST OF AN INNER RING,TWO V RINGS AND ANOTHER RING,PARTS AVAILABLE ONLY IN SETS PART OF KIT P/N A20861	1
17	PAFZZ	5325-01-102-9710	26278	B9971-5.5	.RING,RETAINING 5 INCH	1
18	PAFZZ	5365-01-104-8937	34623	MA207-2190 8	.RING,GUIDE 5 INCH,RING GUIDES ARE MATCHED PAIRS,NOT SOLD INDIVIDUALLY	2
19	XBFZZ		95953	B11503-41. 75	.TUBE ASSY,OUTSIDE CYLINDER	1
20	XBFZZ		95953	B11345-43	.PLUNGER ASSEMBLY 6 INCH	1
21	PAFZZ	5310-00-240-1193	95953	A2215	.NUT,STFD BOX 6 INCH	1
22	XBFZZ		95953	A20420	PLUG,NYLON	2
23	PAFZZ	5305-01-102-6985	26278	A20419	SETSCREW	2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
24	XBFZZ		95953	A2923	.WIPER 7 INCH PART OF KIT P/N A20860	1
25	KFFZZ		95953	B10841-6	.SET,PACKING 6 INCH,PACKING SETS CONSIST OF AN INNER RING,TWO V RINGS AND ANOTHER RING,PARTS AVAILABLE ONLY IN SETS PART OF KIT P/N A20860	1
26	PAFZZ	5325-01-102-4357	26278	B9971-6.5	.RING,RETAINING 6 INCH	1
27	XBFZZ		95953	B10723-6	.RING,GUIDE 6 INCH,RING GUIDES ARE MATCHED PAIRS,NOT SOLD INDIVIDUALLY	2
28	XBFZZ		95953	B11093-41. 75	.PLUNGER ASSEMBLY 7 INCH	1
29	XBFZZ		95953	A2406	.NUT,HEAD,OUTSIDE 7 INCH	1
30	XBFZZ		95953	A20420	PLUG,NYLON	2
31	PAFZZ	5305-01-102-6985	26278	A20419	SETSCREW	2
32	KFFZZ		95953	A2924	.RING,WIPER 7 INCH PART OF KIT P/N A20859	1
33	KFFZZ		95953	B10841-7	.SET,PACKING 7 INCH,PACKING SETS CONSIST OF AN INNER RING,TWO V RINGS AND ANOTHER RING,PARTS AVAILABLE ONLY IN SETS PART OF KIT P/N A20859	1
34	PAFZZ	5325-01-273-6955	26278	B9971-7.5	.RING,RETAINING 7 INCH	1
35	PAFZZ	5365-01-104-8938	34623	MA207-2190 2	.RING,GUIDE 7 INCH,RING GUIDES ARE MATCHED PAIRS,NOT SOLD INDIVIDUALLY	2

FIELD MAINTENANCE HYDRAULIC RESERVOIR

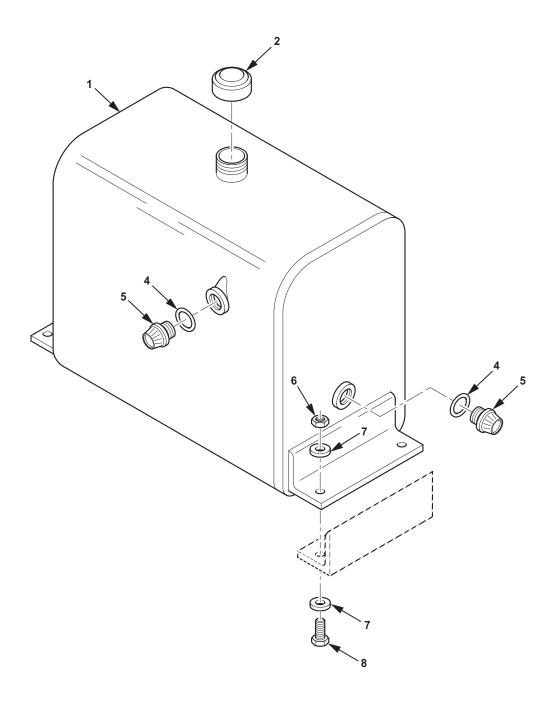


Figure 15. Hydraulic Reservoir.

					**	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 2408 LIQUID TANKS OR RESERVOIRS	
					FIG. 15 HYDRAULIC RESERVOIR	
1	PAFFF	2590-01-084-9542	0RRC7	SMR25S	TANK,OIL,HYDRAULIC	1
2	PAFZZ	5430-01-096-2006	34623	MA63-21085	.CAP,FILLER OPENING FILTER	1
3	PAFZZ	6680-01-103-9924	34623	MA139-2100 8	.INDICATOR,SIGHT,LIQ CLEAR PLASTIC	2
4	PAFZZ	5331-01-088-8910	74841	241-04	O-RING	1
5	XAFZZ		23705	241-06RTD	COCK,PLUG SIGHT GLASS	1
6	PAFZZ	5310-01-098-3812	23705	ZWA7624	NUT,PLAIN,HEXAGON 5/8- 18,RESERVOIR TO SUB-FRAME	4
7	PAFZZ	5310-01-089-2562	74841	FSP7-Z-7	WASHER,FLAT 5/8IN,RESERVOIR TO SUB-FRAME	8
8	PAFZZ	5306-01-109-5291	23705	ZKA6057	BOLT,MACHINE 5/8-18X1.50,GRADE 5,TO ATTACH RESERVOIR TO SUBFRAME	4

FIELD MAINTENANCE KITS

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 9401 FIGURE KITS	
					FIG. KITS	
1	XBFZZ		95953	A20859	PACKING KIT RING,WIPER (1) 14 - 32 SET,PACKING (1) 14 - 33	1
2	XBFZZ		95953	A20860	PACKING KIT SET,PACKING (1) 14 - 25 WIPER (1) 14 - 24	1
3	PAFZZ	5330-01-088-8871	95953	A20861	PACKING KIT SET,PACKING (1) 14 - 16 WIPER,RUBBER (1) 14 - 15	1
4	PAFZZ	4320-01-093-8266	02249	K-21002	PARTS KIT, VALUE HYD BALL (1) 9 - 19 GUIDE, BALL (1) 9 - 20 PACKING, PREFORMED (1) 9 - 15 PACKING, PREFORMED (1) 9 - 17 SEAL, BALL GUIDE (1) 9 - 21 WASHER (2) 9 - 24 WASHER, BACK-UP (1) 9 - 16	1
5	PAFZZ	4330-00-355-7750	02249	K23015	FILTER ELEMENT,FLUI ELEMENT,FILTER (1) 13 - 20 GASKET (1) 13 - 4 O-RING (1) 13 - 18 SEAL,RUBBER (2) 13 - 19	1
6	PAFZZ	4820-01-087-7111	02249	K-23022	PARTS KIT,SAFETY RE PARTS KIT,SAFETY RE (1) 13 - 17 SPRING,RELIEF VALVE (1) 13 - 12	1
7	PAFZZ	6685-01-101-8366	34623	MA184-2100 6	PARTS KIT,INDICATOR INDICATOR (1) 13 - 10 MARKER,IDENTIFICATI (1) 13 - 11 MARKER,IDENTIFICATI (1) 7 - 3	1
8	PAFZZ	4810-01-087-4990	02249	K28021	HANDLE BRACKET ASSE HANDLE BRACKET (1) 9 - 8 SCREW,MACHINE (4) 9 - 38	1
9	XBFZZ		02249	K-28046	KIT,VALVE CONTROL BOLT ASSEMBLY (4) 9 - 42 SEAL (2) 9 - 9 WASHER,LOCK (4) 9 - 41	1
10	PAFZZ	5330-01-090-6935	09990	K-7001A	SEAL,KIT HOLDER,DETENT (1) 9 - 46 PACKING,PREFORMED (1) 9 - 17 PACKING,PREFORMED (2) 9 - 45	1
11	PAFZZ	4820-01-086-9983	02249	K7004	PARTS KIT,SAFETY RE PACKING,PREFORMED (1) 9 - 17 SEAL,BALL GUIDE (1) 9 - 21 SPRING (1) 9 - 35 WASHER (2) 9 - 24 WASHER,BACK-UP (1) 9 - 16	1

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
12	PAFZZ	4910-01-117-3683	09990	K-7007	PARTS KIT,CONTROL V BONNET (1) 9 - 30 COLLAR,SPOOL (1) 9 - 33 COLLAR,STOP (2) 9 - 34 DIAPHRAGM,BONNET (1) 9 - 27 SCREW (1) 9 - 31 SCREW,MACHINE (4) 9 - 28 SPRING (1) 9 - 35 WASHER,LOCK (1) 9 - 32	1
13	PAFZZ	4810-01-090-5966	02249	K7018	PARTS KIT,LINEAR DI PACKING,PREFORMED (1) 9 - 11 PLUG,CHECK (1) 9 - 10	1
14	PAFZZ	2520-01-099-1099	13829	0014304	PARTS KIT,HYDRAULIC PACKING,PREFORMED (1) 8 - 9 PACKING,PREFORMED (4) 8 - 11 RING,BACKUP (4) 8 - 10 SEAL (1) 8 - 22 SEPARATOR,CENTER (2) 8 - 20 SEPARATOR,END (4) 8 - 12 STRIP,SEALING (4) 8 - 13	1
15	XBFZZ		80293	800010	PARTS KIT, VALVE GASKET (1) 10 - 3 PACKING, PREFORMED (1) 10 - 6 PACKING, PREFORMED (1) 10 - 4 RING, TEFLON BACK-UP (2) 10 - 5	1
					END OF FIGURE	

FIELD MAINTENANCE BULK

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM SMR NO. CODE		NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 9501 HARDWARE SUP- PLIES AND BULK MATERIEL, COM- MON	
					FIG. BULK	
1	XBFZZ		23705	VWA8929	CONDUIT,NONMETALLIC	1
2	PAFZZ	4720-01-163-0195	81349	M52471/5-1 6	HOSE,NONMETALLIC	1
3	PAFZZ	4720-00-930-4511	98441	245-20	HOSE,NONMETALLIC	1
4	PAFZZ	6145-01-160-2260	81349	M22759/11- 14-0	WIRE,ELECTRICAL	1
					END OF FIGURE	

FIELD MAINTENANCE NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5310-00-003-4094	12	43	5310-00-582-5965	9	29
5310-00-011-6121	8	27	5310-00-682-5930	11	10
5310-00-014-5850	2	11	5310-00-761-6882	12	49
4730-00-019-1489	12	24	5330-00-762-6018	13	19
5305-00-022-7807	5	15	5315-00-839-5822	3	14
5305-00-068-0500	11	9	4730-00-840-7236	12	14
6685-00-068-2699	13	10	5310-00-843-3496	13	21
5305-00-071-2055	12	41	5315-00-849-9854	3	30
5305-00-071-2072	9	43	5320-00-850-3246	2	7
5305-00-071-2077	3	20	3110-00-887-5524	8	4
	14	5	5305-00-915-8087	8	26
5305-00-071-2505	12	51	4720-00-930-4511	BULK	3
5940-00-107-1481	2	9	4730-00-935-5355	12	29
4730-00-137-0526	13	3	5305-00-988-1723	5	17
4730-00-187-7594	13	9	4730-01-026-8720	12	39
4730-00-196-2080	13	8	4935-01-032-9586	1	3
5310-00-209-0786	2	10	5305-01-054-1867	9	31
5310-00-209-0965	12	40	3820-01-054-1868	9	33
5315-00-209-7273	3	19	3820-01-054-1869	9	34
4730-00-218-5825	14	10	5340-01-054-1870	9	5
4730-00-231-5605	13	7	5340-01-054-1871	9	8
5315-00-234-1854	11	8	5305-01-054-1872	9	38
5310-00-240-1191	14	12	4730-01-055-6091	12	1
5310-00-240-1193	14	21	3110-01-058-3730	8	5
4730-00-279-0353	3	22	6220-01-067-5264	1	4
	3	33		1	10
5315-00-317-2196	9	3	5325-01-067-5438	1	5
5310-00-332-5036	8	2	5331-01-073-1219	13	18
3120-00-338-5897	8	7	5310-01-079-4646	3	2
	8	19	5330-01-082-8138	13	4
4330-00-355-7750	KITS	5	5360-01-083-1421	13	2
4730-00-420-4441	12	19	2590-01-084-9542	15	1
5330-00-460-0015	14	15	3040-01-085-2620	8	21
5305-00-543-4372	5	21	6220-01-085-3391	1	2

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
6220-01-085-3391	1	7	3805-01-094-2787	4	1
3020-01-085-3737	8	16	6220-01-095-0011	1	6
5330-01-085-7733	8	23	4820-01-095-2085	14	7
5310-01-085-8176	3	1	5430-01-096-2006	15	2
5310-01-085-9933	5	13	5306-01-096-6161	13	14
5325-01-086-4841	2	3	4730-01-097-0414	12	45
2540-01-086-8888	5	8	4010-01-097-5967	3	16
2940-01-086-8925	13	1	5306-01-097-7736	3	12
4820-01-086-9983	KITS	11		5	1
3040-01-087-0076	11	11		5	10
7690-01-087-3849	7	3	5310-01-097-8190	13	15
	13	11	5315-01-097-8784	3	15
4810-01-087-4990	KITS	8	5310-01-098-3812	15	6
4820-01-087-7111	KITS	6	2520-01-099-1099	KITS	14
5310-01-088-7290	11	5	4730-01-101-1759	13	13
5310-01-088-7344	11	2	5306-01-101-4765	3	5
5330-01-088-8871	KITS	3	5975-01-101-5348	12	6
5331-01-088-8910	15	4	6685-01-101-8366	KITS	7
5310-01-089-2562	15	7	5310-01-102-2715	5	2
5315-01-090-2111	3	18		5	6
4810-01-090-5966	KITS	13	5325-01-102-4357	14	26
5330-01-090-6935	KITS	10	5305-01-102-6985	14	14
5310-01-090-7187	3	10		14	23
	5	3		14	31
	5	5	5320-01-102-7402	6	2
	5	19	5342-01-102-8323	5	18
	10	8	5325-01-102-9710	14	17
	12	7	6680-01-103-9924	15	3
5342-01-091-5168	4	2	4820-01-104-0949	13	17
3805-01-092-9223	14	6	5365-01-104-8937	14	18
9905-01-092-9245	7	4	5365-01-104-8938	14	35
	13	6	5330-01-105-7046	12	13
4320-01-093-0573	8	1		12	38
4820-01-093-0575	10	2		12	46
4820-01-093-8264	9	2	5305-01-105-9265	10	7
4320-01-093-8266	KITS	4	5331-01-105-9286	14	9

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5305-01-105-9312	12	47	4720-01-163-0195	BULK	2
5306-01-106-1057	12	8	5315-01-190-4813	11	7
5340-01-106-7861	2	6	2540-01-195-0565	5	4
5940-01-109-1829	2	2	5315-01-204-6655	9	39
5342-01-109-4019	5	16	5330-01-219-4178	9	11
5306-01-109-5291	15	8	6220-01-234-5085	1	1
5331-01-109-5318	12	2	5315-01-242-5797	9	4
	12	20	2590-01-258-6965	11	1
	12	25	5325-01-273-6955	14	34
5331-01-109-6605	12	15	3040-01-286-9465	11	13
	12	30	5342-01-288-1632	8	15
6220-01-110-4063	6	1	5340-01-288-5070	12	48
5340-01-110-7818	14	1	5340-01-288-7013	8	17
5340-01-111-1509	12	42	5340-01-288-7014	8	14
5340-01-111-1510	12	50	5331-01-371-2423	9	13
4820-01-113-0814	9	1	4330-01-432-4433	13	5
5310-01-113-4042	9	44	4730-01-438-6622	12	22
5315-01-114-0029	3	24		12	27
5340-01-114-5723	11	12		12	35
4910-01-117-3683	KITS	12	4730-01-566-0631	12	4
5306-01-129-9628	3	4		12	11
5306-01-129-9694	3	3		12	18
6145-01-160-2260	BULK	4		12	32

FIELD MAINTENANCE PART NUMBER INDEX

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
0014304	KITS	14	12Z8000-5	3	22
0085-001	9	3		3	33
0086-001	9	4	13049	8	3
015-001	13	13	132113	10	4
01561001	13	3	13211E9018-9	12	1
050940	9	34	133043	5	15
050941	9	33	134104	10	6
07101097	9	1	14021	8	20
0928-001	9	7	14022	8	10
0929-001	9	39	14023	8	12
10343-16-16	12	4	14176	8	23
	12	11	142917	10	5
	12	18	1478-001	9	5
	12	32	1557-001	13	5
1039-001	9	6	1576-001	13	18
	9	41	1601-001	9	8
1062-6174-333	9	2	1606-001	9	36
10643-20-20	12	22	1611-001	9	30
	12	27	1612-001	9	27
	12	35	1620-001	9	38
11146	8	2	1621-001	9	45
1136-001	9	21	1627-001	9	46
11669	8	7	1629-001	9	12
	8	19	1630-B1	14	10
1233-001	9	22	1698-001	9	15
12448437-5	3	1	1728-001	9	10
12448437-6	3	2	1783-001	9	16
1268-001	9	19	1798-001	9	18
1269-001	9	20	1L10-F-25	10	2
1271-001	9	23	1LKXP4202-003	10	1
1273-001	9	25	20-16KH3390	8	8
1274-001	9	26	2021028	10	3
1291-001	9	32	20PA-77	12	13
1295-001	9	24		12	38

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
20PA-77	12	46	55012	11	1
20V50XS	12	19	57-087-200-14L	8	22
22088	8	13	57R	6	1
22091	8	17	58-5000-200	8	24
230379	2	2	62D-8-12HG8	8	25
23987	8	16	6323-132	11	11
241-04	15	4	6671-001	13	10
241-06RTD	15	5	6673-001	7	3
24179	8	21		13	11
245-20	BULK	3	69001	11	6
25P-1644-030	9	40	69002	11	3
2673-001	9	28	7033	12	2
2709-001	9	11		12	20
	9	17		12	25
2710-001	9	13	710-FSO-16	12	15
2913-001	9	35		12	30
3000-006	9	37	74-250	8	5
30200R	1	2	7420008	13	4
	1	7	7420046	13	2
30400	1	8	7506-013	13	16
30401	1	3	7510-001	13	17
30503R	1	1	7514-001	13	12
30700	1	5	774643	8	14
30720	1	9	800010	KITS	15
3274-001	13	19	8017-001	9	9
3277-001	13	21	9415963	9	44
3293-001	13	20	9416095	5	2
3731-196	9	31		5	6
3732-123	9	42	94902	1	4
39042	11	7		1	10
45939	8	6	95423653	11	9
48622	8	18	9T1277	8	15
5001-40801ADX	3	16	A20419	14	14
5012-3550	9	14		14	23
55-028-8309	8	11		14	31
55-156-8309	8	9	A20420	14	13

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
A20420	14	22	COV-2909	12	42
	14	30	DWA54-4-6	5	14
A20859	KITS	1	ECE6879-1	3	21
A20860	KITS	2		14	3
A20861	KITS	3	ECE7696-1	14	2
A21300	14	9	ECE7696-2	14	1
A21301	14	8	EWB-7633-17	7	1
A2215	14	21	EWB7633-01 THRU 05	3	7
A2216	14	12	EWB7633-01-25	3	18
A2406	14	29	EWB7633-02	3	8
A2922	14	15	EWB7633-03	3	17
A2923	14	24	EWB7633-04-09	3	15
A2924	14	32	EWB7633-05-09	3	13
A733S-9CFB	13	8	EWB7633-06	3	29
ABV100	14	7	EWB7633-06-11-13AND	3	32
AN914-1	13	7	27 EMP7622 06 15	2	2.4
B10723-6	14	27	EWB7633-06-15	3	34
B10841-5	14	16	EWB7633-06-16	3	31
B10841-6	14	25	EWB7633-09-1 EWB7633-09-2	12 12	34 9
B10841-7	14	33	EWB7633-09-2	12	26
B11093-41.75	14	28	EWB7633-09-4	12	20
B11345-43	14	20	EWB7633-09-5	12	16
B11346-44.25	14	11	EWB7633-09-5	12	3
B11503-41.75	14	19		12	
B1821BH025C088N	12	51	EWB7633-09-7	3	31
B1821BH038C075N	5	21	EWB7633-11-1 EWB7633-11-2	3	25 26
B1821BH044C150N	12	41	EWB7633-11-3	3	20 27
B1821BH050C225N	9	43	EWB7633-11-4	3	28
B1821BH050C350N	3	20	EWB7633-12	5	12
	14	5	EWB7633-12	5	20
B9971-5.5	14	17	EWB7633-12-11	5	16
B9971-6.5	14	26	EWB7633-12-4	5	4
B9971-7.5	14	34	EWB7633-13-2	5	
C30175-73-129H	14	6	EWB7633-13-2 EWB7633-13-5	5 5	7 11
CE7694	3	24		5 5	9
COV-2509	12	50	EWB7633-13-6	ວ	Э

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
EWB8298-1	11	13	MA139-21008	15	3
EWB8298-4	3	11	MA145-21033	12	10
FF-S-85TY2STY10P(.50-	8	26	MA145-21035	12	28
13NC1.25) FR251-2A1E	13	1	MA145-21037	12	23
FSP 011-01 PK3	2	3	MA145-21039	12	17
FSP-6-2-4	3	10	MA145-21041	12	5
F3P-0-2-4	5 5		MA145-21043	12	33
		3	MA145-21063	12	36
	5	5	MA184-21006	KITS	7
	5	19	MA207-21897	7	4
	10	8		13	6
F0D5 4 0	12	7	MA207-21902	14	35
FSP5-1-2	13	14	MA207-21908	14	18
FSP5-3-24	3	12	MA207-22631	2	12
	5	1	MA207-22632	2	13
	5	10	MA207-22633	2	6
FSP6-2-2	5	13	MA207-22922	2	1
FSP7-3-2	13	15	MA207-22923	2	5
FSP7-Z-7	15	7	MA207-22924	2	14
K-21002	KITS	4	MA207-22925	2	8
K-23022	KITS	6	MA207-22926	2	4
K-28046	KITS	9	MA207-23028	11	12
K-7001A	KITS	10	MA217-21068	11	2
K-7007	KITS	12	MA25-21175	11	4
K23015	KITS	5	MA25-21254	12	8
K28021	KITS	8	MA25-21256	10	7
K7004	KITS	11	MA294-21003	4	2
K7018	KITS	13	MA310-21188	12	47
M/25-20019	3	5	MA362-21127	11	5
M/25-20034	3	4	MA63-21085	15	2
M/25-20035	3	3	MB10-20118	12	48
M22759/11-14-0	BULK	4	MS19061-20015	8	4
M24243/1-D608	2	7	MS20659-104	2	9
M52471/5-16	BULK	2	MS24665-153	11	8
M525/19-16-16	12	12	MS24665-353	3	14
M52525/17-20	12	39	MS24665-498	3	30

PART NUMBER	FIG. ITEM PART NUMBER		FIG.	ITEM	
MS24665-625	3	19	SMR25S	15	1
MS27183-42	2	11	SP-94	5	8
MS35206-279	5	17	SP-97	12	44
NS35335-33	2	10	SW14344P	1	6
MS35338-44	9	29	TWA6285	5	18
MS35338-47	12	40	UNZ9529-1	3	6
/IS35338-48	12	43	VKA2521	12	45
MS35338-67	8	27	VWA8929	BULK	1
/IS35340-44	11	10	WL-21K98	4	1
//S39233-1B	13	9	XCB-0279	7	2
MS39282-20A	12	37	ZKA6057	15	8
MS51527A16	12	14	ZKA6969	3	9
MS51527A20	12	24	ZKA8366	6	2
MS51528A16	12	29	ZWA6128	1	11
MS51967-2	12	49	ZWA7624	15	6
PLT4H-C30	12	6	ZWA7643	3	23
R20250-DKU	8	1		14	4

CHAPTER 7

SUPPORTING INFORMATION
FOR
M917 DUMP TRUCK BODY

FIELD MAINTENANCE REFERENCES

SCOPE

This Work Package (WP) lists all field manuals, forms, technical manuals, and miscellaneous publications referenced in this manual.

PUBLICATIONS INDEX

The following index should be consulted frequently for latest changes or revisions and for new publications relating to material covered in this manual.

FORMS

The following forms pertain to this manual. See DA PAM 25-30 for index of blank forms. See DA PAM 750-8, The Army Maintenance Management System (TAMMS), for instructions on the use of maintenance forms pertaining to this manual.

CTA 8-100 Army Medical Department Expendable/Durable Items

CTA 50-909 Field and Garrison Furnishings and Equipment

CTA 50-970 Expendable/Durable Items

DA Form 2028 Recommended Changes to Publications and Blank Forms

DA Form 2402 Exchange Tag

FM 4-25.11 U.S. Military First Aid Manual

DA Form 5504 Maintenance Request

DD Form 361 Transportation Discrepancy Report

SF 368 Product Quality Deficiency Report (Category 11)

TECHNICAL MANUALS

AR 700-138 Army Logistics Readiness and Sustainability

AR 750-1 Army Materiel Maintenance Policy

DA PAM 738-751 Functional Users Manual for The Army Maintenance Management System-Aviation

(TAMMS-A)

TM 5-3805-274-10-HR Hand Receipt Manual Covering Contents of Components of End Item (COEI), Basic

Issue Items (BII), and Additional Authorization List (AAL) for Dump Truck Body

M917

TM 743-200-1 Storage and Materials Handling

TM 746-10 Marking, Packing, and Shipment of Supplies and Equipment

TM 750-244-3 Destruction of Army Materiel to Prevent Enemy Use

TM 9-2320-273-10 Operator's Manual

TM 9-2320-273-20 Organizational Maintenance

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 sub columns, Crew (C) and Maintainer (F)

Sustainment - includes two sub columns, 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, plugin 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 systems 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, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.
- 3. Service. Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:
 - a. Unpack. To remove from packing box for service or when required for the performance of maintenance operations.
 - b. Repack. To return item to packing box after service and other maintenance operations.
 - c. Clean. To rid the item of contamination.
 - d. Touch up. To spot paint scratched or blistered surfaces.
 - e. Mark. To restore obliterated identification.
- 4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper 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 - CONTINUED

Field:

- 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.

FIELD MAINTENANCE MAINTENANCE ALLOCATION CHART (MAC)

Table 1. Maintenance Allocation Chart.

(1)	(2)	(3)		(4)			(5)	(6)
				MAINTENANCE LEVEL				, ,
				FIELD	SUSTA	INMENT		
GROUP	COMPONENT/	MAINTENANCE	CREW	MAINTAINER	BELOW DEPOT	DEPOT	TOOLS AND EQUIPMENT	REMARKS
NUMBER	ASSEMBLY	FUNCTION	С	F	Н	D	REF CODE	CODE
0600	ELECTRICAL S	YSTEM						
0609	Marker Lamps	Inspect	0.1					
		Test		0.3				
		Replace		0.2			1, 2	
0613	Wiring Harness	Inspect		0.2				
		Replace		1.0			1, 2	
18	BODY							
1801	Mud Flap	Inspect	0.1					
		Replace		1.0			1, 2	
1810	Dump Bed	Inspect	0.1					
		Replace		8.0			1, 2, 3, 4, 5	
		Repair		1.5			1, 2, 16	
	Subframe	Inspect		0.1				
		Replace		5.0			1, 2	
		Repair		1.5			1, 2	
	Hinges, Pins,	Inspect	0.1					
	Locks	Replace		2.0			1, 2	
		Repair		0.5			1, 2	
	Tailgate	Inspect	0.1					
		Replace		2.5			1, 2	
		Repair		1.0			1, 2	
22	BODY CHASSIS	& HULL ASSEMB	LY ITEMS					
2201	Tarpaulin Cover	Inspect	0.1					
		Replace		0.5			1, 2	
		Repair		1.5			1, 2	
	Tarpaulin	Inspect	0.1					
	Storage Tube Assembly	Replace		0.5			1, 2	
	_	Repair		1.5			1, 2	

Table 1. Maintenance Allocation Chart - Continued.

(1)	(2)	(3)	iteriarioe 7	(4)		ilucu.	(5)	(6)
				MAINTENANCE LEVEL				, ,
				FIELD SUSTAINMENT			-	
ODOUD.	OOMBONENT!	MAINTENANOE	CREW	MAINTAINER	BELOW DEPOT	DEPOT	TOOLS AND	DEMA DICO
GROUP NUMBER	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	С	F	н	D	REF CODE	REMARKS CODE
24		FT COMPONENTS			l			
2401	Hydraulic Pump	Test		0.2			1, 2, 6, 7, 8,	
							9, 10	
		Replace		1.0			1, 2	
		Repair			1.5		1, 2	
2402	Hydraulic Control Valve	Test		0.2			1, 2, 6, 7, 8, 9, 10	
		Replace		1.0			1, 2	
		Repair		1.5			1, 2	
	Pilot Valve	Test		0.2			1, 2, 6, 7, 8, 9, 10	
		Replace		1.0			1, 2	
		Repair			1.5		1, 2	
2403	Control	Inspect	0.1					
	Levers/Linkage	Replace		0.5			1, 2	
2406	Hydraulic	Inspect	0.1					
	Lines/Fittings	Replace		0.5			1, 2	
		Repair			0.3		1, 2	
	Filter	Inspect	0.1					
		Service		0.5			1, 2	
		Replace		0.5			1, 2	
2407	Hydraulic	Inspect	0.1					
	Cylinder	Service		0.5			1, 2	
		Replace		4.0			1, 2	
		Repair			4.0		1, 2	
2408	Reservoir,	Inspect	0.1					
	Hydraulic	Service	0.2				1, 2	
		Replace		2.0			1, 2	
		Repair			3.0		1, 2	
	Reservoir Filter Cap	Inspect	0.1					
		Service	0.1				1, 2	
		Replace	0.1				1, 2	

TOOLS AND TEST EQUIPMENT FOR M917 DUMP TRUCK BODY

Table 2. Tools and Test Equipment.

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE LEVEL	NOMENCLATURE	NATIONAL STOCK NUMBER (NSN)	TOOL NUMBER
1	F, C, H	Tool Kit, General Mechanic's: Automotive	5120-01-548-7634	PD484
2	F, C, H	Standard Automotive Tool Set (SATS)	4910-01-490-6453	KTC-S2000
3	F	Two 12 ft Sling Cables		
4	F	Two 10 ft Sling Cables		
5	F	Four Clevises		
6	F	Hose High Pressure 5 ft		
7	F	Hose High Pressure 10 in.		
8	F	Hose High Pressure 16 in.		
9	F	Tee Fitting		
10	F	High Pressure Gauge 3000 psi (20,685 kPa)		
11	F	Chain Wrench (32-in. Chain)		
12	F	Heavy-Duty Strap Wrench		
13	F	Inverted Socket Wrench 5/32 in.		
14	F	Hydraulic Jack		

OPERATOR AND FIELD MAINTENANCE COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS

INTRODUCTION

Scope

This work package lists COEI and BII for the M917 Dump Truck Body to help you inventory items for safe and efficient operation of the equipment.

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 vehicle. 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 vehicle in operation, operate it, and do emergency repairs. Although shipped separately packaged, BII must be with the vehicle 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) Item Number. Gives you the reference number of the item listed.

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:

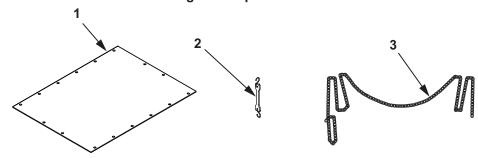
Code	Used On			
U23	Model M917			

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.

EXPLANATION OF COLUMNS IN THE COEI LIST AND BII LIST - CONTINUED

Table 1. Integral Components of End Item.



(1) Item Number	(2) National Stock Number (NSN)	(3) Description, Part Number/(CAGEC)	(4) Usable On Code	(5) U/I	(6) Qty Rqr.
1	2540-01-094-2787	TARPAULIN WL-21K98 (9J595)		EA	1
2	5342-01-091-5168	STRAP ASSEMBLY MA294-21003 (34623)		EA	12
3	4010-01-097-5967	CHAIN, WELDED 5001-40801ADX (1VN02)		EA	1

OPERATOR AND FIELD MAINTENANCE ADDITIONAL AUTHORIZATION LIST (AAL)

INTRODUCTION

Scope

This work package lists additional items authorized for the support of the M917 Dump truck.

General

This list identifies items that do not have to accompany M917 dump truck.

Explanation of Columns in the AAL

Column (1) National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (2) Description, Part Number/(CAGEC). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (3) 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:

Code	Used On			
U23	Model M917			

Column (4) 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 (1).

Column (5) Qty Recm. Indicates the quantity recommended.

Table 1. Additional Authorization List (AAL).

(1) National Stock Number (NSN)	(2) Description, Part Number/(CAGEC)	(3) Usable On Code	(4) U/I	(5) Qty Recm.
5120-00-224-1389	BAR, PRY B107.410 (05047)		EA	1
5120-00-061-8546	HAMMER, HAND (B107.53) (05047)		EA	1

OPERATOR AND FIELD MAINTENANCE EXPENDABLE AND DURABLE ITEMS LIST

SCOPE

This work package lists expendable and durable items that you will need to operate and maintain the M917 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 grease (WP 0077, Item 3)).

Column (2) Level. Identifies the lowest level of maintenance that requires the listed item (C = Crew).

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). 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.

(1) Item No.	(2) Level	(3) National Stock Number (NSN)	(4) Item Name, Description, Part Number/(CAGEC)	(5) U/I
1	С	6850-01-472-2717 6850-01-474-2317	CLEANING COMPOUND, SOLVENT; MIL-PRF-680 (81349) Type II, 5 gal. can Type IV, 5 gal. can	CN CO
2	С	7920-00-044-9281	CLOTH, CLEANING, GENERAL PURPOSE 10 LB BOX; MIRACLEWIPEL001 (51200)	BX
3	С	9150-01-197-7688 9150-01-197-7693 9150-01-197-7690 9150-01-197-7689 9150-01-197-7692 9150-01-197-7691	GREASE, AUTOMOTIVE AND ARTILLERY; 2-1/2 oz tube M-10924-A (81349) 14 oz cartridge M-10924-B (81349) 1-3/4 lb can M-10924-C (81349) 6-1/2 lb can M-10924-D (81349) 35 lb can M-10924-E (81349) 120 lb drum M-10924-F (81349)	TU CA CN CN CN DR
4	С	9150-00-402-2372	OIL, LUBRICATING, OEA ARCTIC; 5 gal. can MIL-PRF-46167 (81349)	CN
5	С	9150-00-189-6727 9150-00-186-6668 9150-00-191-2772	OIL, LUBRICATING, OE/HDO 10; 1 qt bottle M2104-1-10W (81349) 5 gal. can M2104-3-10W (81349) 55 gal. drum M2104-4-10W (81349)	QT CN DR
6	С	9150-00-186-6681 9150-00-188-9858 9150-00-189-6729	OIL, LUBRICATING, OE/HDO 30; 1 qt can M2104-1-30W (81349) 5 gal. can M2104-3-30W (81349) 55 gal. drum M2104-4-30W (81349)	QT CN DR

Table 1. Expendable and Durable Items List.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS

For use of this form, see AR 25-30; the proponent agency is ODISC4. $\label{eq:continuous}$

Use Part II (reverse) for Repair Parts and Special Tools Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM)

DATE:

30 JANUARY 2014

TO: (Forward to proponent of publication or form) (include ZIP code)

AMSTA-LCL-MPP/Tech Pubs 6501 E. 11 Mile Road

FROM: (Activity and location) (include ZIP code)

Co. B, 1st BN, 2nd Brigade Ft. Hood, TX 76445

6501 E. 11 Mile Road						Ft. Hood, TX 76445			
Warren, MI 48397-5000						Ft. 6000, 1X	. / 0445		
	PART 1 - ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS								
	TION/FORM I		.P	DATE: 12 AUG	UST 2013	REPAIR PARTS AND	MAINTENANCE MANUAL, INCLUDING D SPECIAL TOOLS LIST (RPSTL) 7 DUMP TRUCK BODY		
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		TM 5-	3805-274-13&P		12 A	AUGUS	ST 2013	MANU	OPERATOR AND FIELD MAINTENANCE MANUAL, INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) FOR M917 DUMP TRUCK BODY		
PAGE NO.	COLM NO.		NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.		TOTAL NO. OF MAJOR ITEMS SUPPORTED			DMMENDED ACTION	
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By Order of the Secretary of the Army:

RAYMOND T. ODIERNO General, United States Army Chief of Staff

Official:

GERALD B. O'KEEFE V
Administrative Assistant to the
Secretary of the Army

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Distribution:

To be distributed in accordance with the initial distribution number (IDN) 386984, requirements for TM 5-3805-274-13&P.

THE METRIC SYSTEM AND EQUIVALENTS

Linear Measure

- 1 Centimeter = 10 Millimeters = 0.01 Meters = 0.3937 Inches
- 1 Meter = 100 Centimeters = 1000 Millimeters = 39.37 Inches
- 1 Kilometer = 1000 Meters = 0.621 Miles

Weights

- 1 Gram = 0.001 Kilograms = 1000 Milligrams = 0.035 Ounces
- 1 Kilogram = 1000 Grams = 2.2 Pounds
- 1 Metric Ton = 1000 Kilograms = 1 Megagram = 1.1 Short Tons

Liquid Measure

- 1 Milliliter = 0.001 Liters = 0.0338 Fluid Ounces
- 1 Liter = 1000 Milliliters = 33.82 Fluid Ounces

Square Measure

- 1 Sq Centimeter = 100 Sq Millimeters = 0.155 Sq Inches
- 1 Sq Meter = 10,000 Sq Centimeters = 10.76 Sq Feet
- 1 Sq Kilometer = 1,000,000 Sq Meters = 0.0386 Sq Miles

Cubic Measure

- 1 Cu Centimeter = 1,000 Cu Millimeters = 0.06 Cu Inches
- 1 Cu Meter = 1,000,000 Cu Centimeters = 35.31 Cu Feet

Temperature

9/5 °C +32 = °F 5/9 (°F - 32) = °C

212° Fahrenheit is equivalent to 100° Celsius 90° Fahrenheit is equivalent to 32.2° Celsius

32° Fahrenheit is equivalent to 0° Celsius

APPROXIMATE CONVERSION FACTORS

To Change	То	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	То	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		

PIN: 087505-000