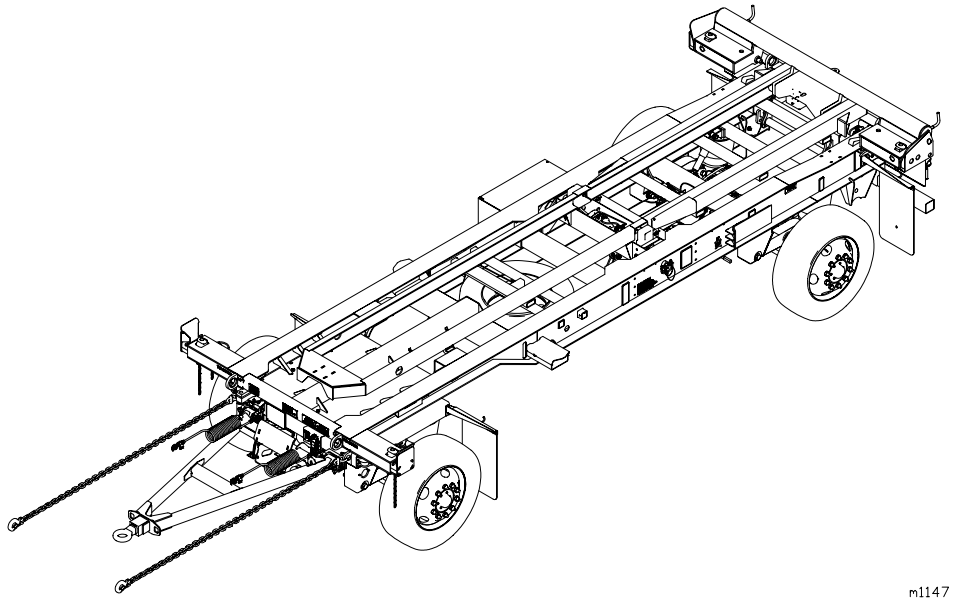
OPERATOR AND FIELD LEVEL MAINTENANCE MANUAL INCLUDING

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) FOR FAMILY OF MEDIUM TACTICAL VEHICLES (FMTV) LOAD HANDLING SYSTEM TRAILER (LHST)

MODEL	NSN	UOC
TRAILER, FMTV LOAD HANDLING SYSTEM, M1147	2330-01-508-7887	MTB



HEADQUARTERS, DEPARTMENTS OF THE ARMY

FEBRUARY 2007

WARNING SUMMARY

FIRST AID

First aid is the emergency care given to the sick, injured, or wounded before being treated by medical personnel. First aid data can be found in FM 4-25.11. This manual contains procedures for all types of casualties and the measures described are for use by both male and female service members. Service members may be able to save a life, prevent permanent disability, or reduce long periods of hospitalization by knowing WHAT to do, WHAT NOT to do, and WHEN to seek medical assistance.

HAZARDOUS MATERIALS

WARNING

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

MAINTENANCE

WARNING

Remove rings, bracelets, watches, necklaces, and any other jewelry before working around vehicle. Jewelry can catch on equipment and cause injury or short across electrical circuit and cause severe burns or electrical shock. Failure to comply may result in injury to personnel.

WARNING

Do not touch extremely cold metal (below -26° F (-32° C)). Bare skin may freeze to cold metal. Failure to comply may result in injury to personnel.

WARNING

All cleaning procedures must be accomplished in well-ventilated areas. Failure to comply may result in injury to personnel or damage to equipment.

WARNING

Protective gloves, clothing, and/or respiratory equipment must be worn whenever caustic, toxic, or flammable cleaning solutions are used. Failure to comply may result in injury to personnel or damage to equipment.

WARNING SUMMARY - Continued

MAINTENANCE - Continued

WARNING

Diesel fuel or gasoline must never be used for cleaning. Failure to comply may result in injury to personnel or damage to equipment.

WARNING

A fire extinguisher must be available and ready during all cleaning operations involving Dry Cleaning Solvent. Failure to comply may result in injury to personnel or damage to equipment.

WARNING

Dry Cleaning Solvent (P-D-680) is TOXIC and flammable. Wear protective goggles and gloves; use only in well-ventilated area; avoid contact with skin, eyes, and clothes, and do not breath vapors. Keep away from heat or flame. Never smoke when using Dry Cleaning Solvent; the flashpoint for Type I Dry Cleaning Solvent is 100°F (38°C) and for Type II is 138°F (50°C). Failure to comply may result in serious injury or death to personnel.

WARNING

Wear appropriate eye protection when working under vehicle due to the possibility of falling debris. Failure to comply may result in injury to personnel.

WARNING

Some residual compressed air may remain in pneumatic hoses. Use goggles when disconnecting hoses. Failure to comply may result in injury to personnel.

WARNING

If personnel become dizzy while using Dry Cleaning Solvent, immediately get fresh air and medical help. If Dry Cleaning Solvent contacts skin or clothes, flush with cold water. If Dry Cleaning Solvent contacts eyes, immediately flush eyes with water and get medical attention. Failure to comply may result in serious injury or death to personnel.

INSET LATEST UPDATED PAGES/WORK PACKAGES, DESTROY SUPERSEDED DATA

LIST OF EFFECTIVE PAGES / WORK PACKAGES

NOTE: The portion of text affected by updates are indicated by a vertical line in the outer margins of the page.

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

Original 0……14 February 2007

TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS XX AND TOTAL NUMBER OF WORK PACKAGES IS 169 CONSISTING OF THE FOLLOWING

Page / WP	*Change No.
Cover (Back Blank)	0
A to c (d Blank)	0
A (B Blank)	0
Title (Back Blank)	0
i to iii (iv Blank)	0
WP 0001 00	0
Chapter 1 Cover (Back Blank)	0
WP 0002 00 – WP 0003 00	0
Chapter 2 Cover (Back Blank)	0
WP 0004 00 – WP0012 00	0
Chapter 3 Cover (Back Blank)	0
WP0013 00 – WP0051 00	0
Chapter 4 Cover (Back Blank)	0
WP0052 00 – WP0110 00	0
Chapter 5 Cover (Back Blank)	0
WP0111 00 – WP0169 00	0
2028 SAMPLE Front	0
2028 SAMPLE Back	0
2028 Front	0
2028 Back	0
Authentication (Back Blank)	0
Back Cover	0

*Zero in this column indicates an original page or work package.

TM 9-2330-334-13&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 14 February 2007

TECHNICAL MANUAL

OPERATOR AND FIELD LEVEL MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) FOR
FAMILY OF MEDIUM TACTICAL VEHICLES (FMTV)
LOAD HANDLING SYSTEM TRAILER
(LHST)

MODEL	NSN	UOC
Trailer, FMTV, Load Handling System (LHST)	2330-01-508-7887	MTB

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

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

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

WP Sequence No.

CHAPTER 3 - TROUBLESHOOTING PROCEDURES-Continued

Field Level Work Packages-Continued

CHAPTER 4 - MAINTENANCE INSTRUCTIONS

Operator Level Work Packages

Field Level Work Packages

CHAPTER 4 - MAINTENANCE INSTRUCTIONS-Continued

Field Level Work Packages-Continued

CHAPTER 5 - SUPPORTING INFORMATION

CHAPTER 5 - SUPPORTING INFORMATION – Continued

HOW TO USE THIS MANUAL

OVERVIEW

This Technical Manual (TM) is provided to assist you in operating and maintaining the Load Handling System Trailer (LHST)

Front Cover. Provides information about the type of manual and equipment covered by the TM.

Table of Contents. Lists the Chapters, Work Packages, and Alphabetical Index in order of appearance.

General Information/WARRANTY. Provides information on Scope, Maintenance Forms, Records and Reports, Reporting Equipment Improvement Recommendations, Corrosion Prevention and Control, Destruction of Army Materiel to Prevent Enemy Use, Preparation for Stowage or Shipment, and Warranty.

Chapter 1, Description and Theory of Operation. Describes the trailer and provides installed equipment data.

Chapter 2, Operator Instructions. Describes operator's trailer controls and indicators, and operating instructions.

Chapter 3, Troubleshooting Procedures. Provides Operator and Field Level Maintenance instructions for troubleshooting problems with the trailer.

Chapter 4, Maintenance Instructions. Provides instructions for Field Level maintenance of the trailer components.

Chapter 5, Supporting Information. Contains information about references, Components of End Items (COEI) and Basic Issue Items (BII) lists, Additional Authorization List (AAL), Expendable and Durable Items List, and Stowage and Decal/Data Plate Guide.

Subject Index. Lists important subjects contained in this TM in alphabetical order. It also gives the work package and page numbers where each subject is located.

FINDING INFORMATION

There are several ways to find the information you need in this manual. They are as follows:

Table of Contents. Lists Chapters, Sections, and Indexes with Work Package Numbers in order of appearance.

TROUBLESHOOTING

Troubleshooting is contained in Chapter 3. When you have a problem with the operation of your equipment, look at Troubleshooting Table of Contents in Chapter 3. Find the malfunction in the listing. Turn to the Work Package listed for the malfunction. Perform the steps required to correct the malfunction. If you cannot find the malfunction, or the malfunction is not corrected, notify your supervisor.

HOW TO USE THIS MANUAL - Continued

Troubleshooting Instructions:

1) Operational Checkout and Troubleshooting Procedures Work Package.
   This work package covers the operational checkout of the trailer. Step-by-step instructions for checking the proper operation of the trailer are provided. Follow the steps from the beginning to the end of the work package to determine if a malfunction exists.
   a) Steps.
      The procedural steps will determine if a malfunction exists. Once a malfunction has been determined, go to the Indication/Condition next to the procedural step.
   b) Indication/Condition.
      This column may contain one or more malfunctions found from the procedural steps. Select the appropriate Indication/Condition and proceed to the following Corrective Action for that malfunction.
   c) Corrective Action.
      This column may contain troubleshooting procedures or a reference to the corrective action to be taken.
2) Troubleshooting Table of Contents
   All malfunctions may not be detected at the time Operational Checkout is being performed. Use this listing to find the troubleshooting for the malfunction detected.
3) Troubleshooting Work Packages.
   This work package contains step-by-step procedures for identifying, locating, isolating, and repairing equipment malfunctions. The work package title block will match the troubleshooting index.
   a) This Work Package Covers.
      This section indicates the Functional Group Code (FGC) for that system. An effectivity notice will be stated if applicable.
   b) Initial Setup.
      Provides the maintenance technician with general information, equipment, parts, material, and authorized personnel required to perform and complete all the operating tasks included in the work package.
   c) Procedure.
      Warnings, Cautions, and Notes that appear at the beginning of a work package will be effective throughout the whole procedure.
      - Indication/Condition**.** This usually comes in the form of a question requiring a yes or no response.
      - Decision No/Yes. The no and yes decision column is the response from the question. Attached to the response will be a guide to take the technician to either the next step or a series of steps, or to a malfunction and corrective action.
      - Procedural Step. This column provides a step-by-step procedure that will guide the technician to the YES or No conclusion.

HOW TO USE THIS MANUAL - Continued

Troubleshooting Instructions - Continued

OPERATION AND MAINTENANCE

Operation. Before you operate the trailer, familiarize yourself with the controls and indicators (Chapter 2). Perform your BEFORE preventive maintenance. Read the operating instructions contained in Chapter 2. Always follow WARNINGS and CAUTIONS.

Maintenance. When you perform maintenance, look over the entire procedure before starting. Make sure you have the necessary tools and materials at hand. Always observe WARNINGS and CAUTIONS.

REPAIR PARTS AND SPECIAL TOOLS LIST

SCOPE
This Repair Parts and Special Tools Listing (RPSTL) and authorizes spares and repair parts; special tools; Test, Measurement, and Diagnostic Equipment (TMDE); and other special support equipment required for performance of field level maintenance of the LHST. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the Source, Maintenance and Recoverability (SMR) codes. Refer to Introduction to RPSTL work package.

GENERAL INFORMATION/WARRANTY 0001 00

SCOPE

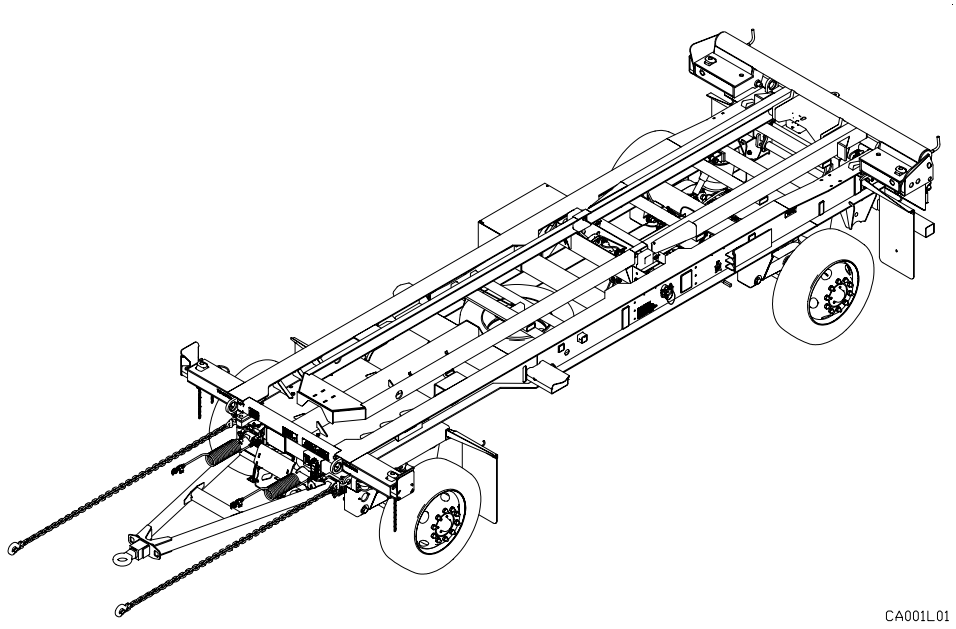
Type of Manual. This manual provides instructions for operation and maintenance of the Family of Medium Tactical Vehicle Load Handling System Trailers (LHST). Maintenance procedures are given at operational, and field levels. In addition, this manual contains a list of repair parts and special tools required for trailer maintenance. The LHST will herein be referred to as the trailer.

Name and Model.

NAME	MODEL
Trailer, FMTV Load Handling System (LHST)	M1147

Purpose of Equipment. The trailer is designed for tactical use. The purpose of the trailer is as follows:

M1147 is a four-wheeled trailer capable of carrying up to 17,600 lb (7,983 kg).



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SCOPE - Continued

MAINTENANCE FORMS, RECORDS, AND REPORTS

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

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your trailer needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368. Mail it to us at: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-QRT, Warren, MI 48397-5000. We'll send you a reply.

CORROSION PREVENTION AND CONTROL (CPC)

The trailer has a total service life of 20 years which allows for extended periods of operation in a corrosive environment. A corrosive environment includes exposure to high humidity, salt spray, road-deicing chemicals, gravel damage, and atmospheric contamination. No action beyond normal washing and repair of damaged areas is needed to control corrosion.

Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problem with the trailer be reported so that the problem can be corrected and improvements can be made to prevent the problem in the future.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using form SF 368 (Product Quality Deficiency Report). Using keywords such as "corrosion," "rust," "cracking," or "deterioration" will ensure that the information is identified as a CPC problem.

Form SF 368 should be submitted to the address specified in DA PAM 738-750 The Army Maintenance Management System (TAMMS).

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Command decision, according to the tactical situation, will determine when the using organization is to destroy a trailer. A destruction plan will be prepared by the using organization, unless one was prepared by a higher authority. For general trailer destruction procedures, refer to TM 750-224-6, Procedures for Destruction of Tank-Automotive Equipment to Prevent Enemy Use (U.S. Army Tank-automotive and Armaments Command).

SCOPE - Continued

PREPARATION FOR SHIPMENT

Land, Sea, and Air Shipment.

Instructions for shipment of the trailer by land, sea, and air are contained in the following publications:

MTMCTEA Pam 56-1	Marine Terminal Lifting Guidance
MTMCTEA Pam 55-19	Tiedown Handbook for Rail Movements
TB 55-46-1	Standard Characteristics (Dimensions, Weight, and Cube) for Transportability of Military Vehicles and Other Outsize/Overweight Equipment (in TOE Line Item Number Sequence)

WARRANTY

1. General. This Section provides implementation instructions for the Warranty on the LHST. It contains instructions for obtaining services and/or supplies covered under warranty. This Section also describes methods of processing warranty claims. For additional information on the LHST or any U.S. Army Tank-automotive and Armaments Command (TACOM) equipment, contact your local Warranty Control Office/Officer (WARCO) or TACOM Logistics Assistance Representative (LAR). If your WARCO or TACOM LAR is not available or if additional information is required, contact TACOM. The number to call is DSN 786-8081, COMMERCIAL (810) 574-8081. The caller should be prepared to provide: (1) name, (2) DSN and commercial telephone numbers, (3) complete unit designation, (4) identification of the equipment, to include the serial number(s), (5) a brief description of the problem, and (6) the contract number (see paragraph 3).

2. Explanation of Terms.

Abuse. The improper use, maintenance, repair, or handling of warranted items that may cause the warranty of those items to become void, for example, not following service intervals, using the equipment for other than what is intended.

Acceptance. The execution of the Acceptance Block and signing of DD Form 250, by the authorized Government representative.

Acceptance Date. The date an item of equipment is accepted into the Army's inventory by the execution of the Acceptance Block and signing of a DD Form 250 or, in case of Material and Workmanship Warranty, date of hand off as evidenced by the user's hand receipt or property book.

Contractor. The supplier of equipment who enters into an agreement directly with the Government to furnish supplies.

Correction. The elimination of a defect.

Defect. Any condition or characteristic in supplies furnished by the Contractor that does not function as intended.

WARRANTY - Continued

Pass-Through Warranty. A vendor's (Michelin) commercial warranty that provides warranty coverage.

Failure. A part, component, or end item that fails to perform its intended use.

Owning Unit. The Army Unit authorized to operate, maintain, and use the equipment.

Reimbursement. A written provision in this warranty in which the Using/Support Unit requests replacement parts from the Contractor to make the necessary repairs, and the Government will be reimbursed for the labor required to correct or repair the end item.

Repair. A maintenance action required to restore an item to serviceable condition without affecting the warranty.

Supplies. All assemblies, subassemblies, and down parts to the lowest level that comprise an end item.

WARCO. Serves as the intermediary between the troops owning the equipment and the local dealer, Contractor, or manufacturer. All warranty claim actions will be processed through the WARCO.

Warranty. A written agreement between the Contractor and the Government which outlines the rights and obligations of both parties for defective supplies.

Warranty Claim. Action started by the equipment user for authorized warranty repair or reimbursement.

Warranty Expiration Date. The date the warranty is no longer valid. The Pass-Through warranty expiration date and the Material and Workmanship warranty expiration date are not the same. The Material and Workmanship Warranty expires 24 months after the Government Acceptance Date.

Warranty Period. Time during which the warranty is in effect. Normally measured as the maximum number of years, months, days, miles, or hours used.

Warranty Start Date. The date the warranty is put into effect.

3. Coverages-Specific. The LHST has a Material and Workmanship and a Pass-Through Warranty which is a Vendor's (Michelin) Commercial Warranty, that are administered by Armor Holdings Tactical Vehicle Systems (TVS). The item identified in Table 1. Supplier Summary Section has a Pass-Through Warranty available. Regardless of the Pass-Through Warranty, all items may be warranted by TVS under the 24 month Material and Workmanship Warranty which covers parts and labor for claims having a total value of $300.00 or more, parts and labor combined, calculated at Contractor cost of parts plus labor. The LHST is manufactured by Armor Holdings Tactical Vehicle Systems (TVS) under contract number DAAE07-03-C-S023. To find out if the Pass-Through Warranty for the item listed in Table 1. Supplier Summary Section, the Material and Workmanship Warranty are still in effect, simply contact your local WARCO. Your local WARCO can inquiry TVS's website (www.tvsonlinesupport.com) or contact TVS at 1-800-221-3688, and ask for the Warranty Department. The Warranty Department will need the information in paragraph 3.b. to determine if the warranty is still in effect.

WARRANTY - Continued

a. Defects. If a defect/failure is caused by (or falls within) any of the following categories, it is not considered warrantable and a claim should not be initiated:

a. Misuse or negligence
b. Accidents
c. Improper operation
d. Improper storage
e. Improper transport
f. Improper or insufficient maintenance service
g. Improper alterations or repair
h. Defect/failure discovered or occurring after warranty expiration date
i. Fair wear and tear items (brake shoes, etc)
j. Foreign object damage
k. Improper packing or handling
l. Combat damage
m. Consequential damages resulting from a defect or failure
n. Failure of parts/components resulting in less than $300.00 combined, labor and Contractor cost of parts (Not applicable to Pass-Through Warranties)

b. Pass-Through, Material and Workmanship Warranty. The Pass-Through Warranty is provided by the vendor in Table 1. Supplier Summary Section, but will be administered by TVS through your local WARCO. Material and Workmanship Warranty are supplied by TVS through your local WARCO. To obtain services for Pass-Through, Material and Workmanship Warranty, your local WARCO contacts TVS through their website (www.tvsonlinesupport.com) or calls 1-800-221-3688, asks for the Warranty Department, and provides the following information:

- Customer work order number
- Customer complete address
- Equipment serial number
- Defective component part number
- Manufacturer cage code
- Defective component National Stock Number
- Description of the defect including codes from the electronic boxes
- Component serial number or date code, if available
- Quantity
- Person to contact on the request for warranty, to include: telephone, fax number and shipping address. This information can be sent by your local WARCO to TVS's website (www.tvsonlinesupport.com) or electronic mail (warranty@armorholdings.com).

c. Warranty Start Dates.

- Information to determine the Pass-Through Warranty start date for Michelin is listed later in this Bulletin. Material and Workmanship Warranty start at hand off as evidenced by the user's hand receipt or property book and expire 24 months later.

WARRANTY - Continued

c. Warranty Start Dates (Cont).

- For Pass-Through, Material and Workmanship Warranty, your local WARCO contacts TVS through their website (www.tvsonlinesupport.com) or calls 1-800-221-3688, asks for the Warranty Department, and provides the information in paragraph 3.b. TVS will obtain the warranty start date and notify the Government if the warranty period has expired.

4. Material and Workmanship Warranties.

a. Warranty Period. The warranty period for the Material and Workmanship Warranty is 24 months and begins with hand off to the unit as evidenced by the unit's hand receipt or property book.

b. Coverage. The Material and Workmanship Warranty covers the complete equipment, parts and labor, excluding those items identified in paragraph 3.a. No warranty claims will be submitted for less than $300.00 total value, Contractor cost of parts and labor.

c. Procedure. The unit will submit a DA Form 2407 or DA Form 5504 to their local WARCO for submittal to TVS for warranty consideration. Upon claim approval, TVS will begin appropriate repair action as identified by the warranty claim.

5. Pass-Through Warranties.

Table 1. Supplier Summary Section

VENDOR	VENDOR PART NO	NSN	DESCRIPTION
Michelin	42407	2610-01-518-5292	Tire, Pneumatic

Michelin

1. Warranty Period. The warranty is 5 years from the date of tire manufacture, or the life of the original usable tread down to 2/32nds of an inch of tread remaining. The date of manufacture is determined from the "DOT" number on the lower side above the bead. It will end in "X" and 4 numerics. The numerics represent the week and year of manufacture (i.e., "4804" = 48th week of 2004)

1. Coverage. The user must pay for the cost of a new tire on a pro-rata basis calculated by multiplying the current negotiated TACOM replacement price or the Government Open Market price, whichever is applicable, by the percentage of usable tread. This warranty does not include any mounting, balancing or other charges.

2. Procedure. Unit will submit a DA Form 2407 or DA Form 5504 to their WARCO for warranty consideration. During the first 2 years of vehicle warranty, the WARCO will address all claims to TVS under the Material and Workmanship Warranty. Upon expiration of the Material and Workmanship Warranty, the WARCO will address all claims to the Michelin Government Sales Department at webtruck@us.michelin.com.

WARRANTY - Continued

6. Contractor Responsibilities.

a. Government Correction. When the owning unit has elected to perform corrective action, the Contractor will ship all replacement parts required to affect correction within 3 calendar days of notification. If the Contractor is unable to meet the 3 calendar days, the repair site will be notified of any delay and the anticipated ship date. CONUS requirements, including Alaska and Hawaii, will be shipped to the repair location. OCONUS requirements will be shipped to a Government provided APO or CONUS Port of Embarkation. The Contractor shall reimburse the Government for the cost of labor involved in Government correction. Labor will be calculated at the current fiscal years labor rate for the maintenance level identified in the Maintenance Allocation Chart (MAC) multiplied by the actual number of labor hours incurred, not to exceed the labor hours in the MAC. The Government will notify the Contractor in writing via DA Form 2407 for the reimbursement required.

b. Contractor Correction. When the owning unit has directed the Contractor to correct the Supplies, the Contractor will furnish all material required to correct the defective supplies. The Contractor will complete repairs on site or at an approved repair facility, and will maintain an overall repair time equal to 5 calendar days or less from the notification date.

c. Defective Parts. The Contractor has the right to inspect parts found to be defective and will be allowed to take possession of failed parts following their replacement. All freight charges for the return of defective/failed parts are the responsibility of the Contractor.

7. Government Responsibilities. The Major Subordinate Command for the M1147 LHST is the U.S. Army Tank-automotive and Armaments Command (TACOM), Warren, MI 48397-5000. TACOM is responsible for managing and implementing the warranty. Warranty claims will be reported to:

WARRANTY - Continued

Technical Publication Information Office
TACOM-RI
1 Rock Island Arsenal
Rock Island, IL 61299-7630
Email: tacom-tech-pubs@ria.army.mil
Fax: DSN 793-0726
Commercial: (309) 782-0726

a. TACOM will:

- Verify, review, process and if valid and complete, submit claims (reimbursable and /or disputes) to the Contractor.
- Reject claims that are not valid and send them back to the local WARCO with a short explanation of why the claim is rejected.
- Request additional information for incomplete claims.
- Provide warranty claim acknowledgement/closeout letters and/or parts/assemblies disposition instructions to the local WARCO.
- Ensure the Contractor performs in accordance with the terms of the contract.

b. Equipment owning unit will:

- Identify defects/failures and verify that the defects/failures are warrantable.
- Submit warranty claims, using DA Form 2407 and DA Form 2407-1 or DA Form 5504 Maintenance Request through channels to the supporting repair facility.
- Tag and retain, pieces of parts and/or assemblies removed at the owning unit level and as a result of a warrantable defect/failure and/or correction, in accordance with DA PAM 738-750 The Army Maintenance Management System (TAMMS) and this Technical Bulletin.

c. Supporting repair facility will:

- Identify defects/failures as warrantable (if owning unit has not already identified them). Verify defects/failures are warrantable.
- Review, process, and submit valid warranty claims to the local WARCO if the Maintenance Request is complete and correctly filled out.
- Reject invalid warranty claims or request additional information for incomplete and incorrect claims.
- Coordinate with the owning unit and decide which option for repair is desired to correct the warrantable defect/failure.

WARRANTY - Continued

- Depending upon which repair option was selected (Government or Contractor repair), provide labor and Contractor furnished parts to accomplish the warrantable repairs.

- Tag and retain (in accordance with DA PAM 738-750 The Army Maintenance Management System (TAMMS) and this Technical Bulletin) all parts, pieces or parts and/or assemblies removed as a result of warrantable defect/failure and/or correction.

d. Local WARCO will:

- Verify, administer, and process warranty claims to the TACOM WARCO (in accordance with DA PAM 738-750 The Army Maintenance Management System (TAMMS) and this Technical Bulletin).

- Act as a liaison with the owning unit, the Contractor, supporting repair facility, and TACOM.

- Notify the owning units of all warranty claim acknowledgements/closeouts, information and/or instructions received from TACOM or the Contractor.

- Act as a liaison between local dealers and the Army.

e. Alterations/Modifications. Alterations/modifications shall not be applied unless authorized by TACOM.

8. Claim Procedures.

a. The procedures for reporting warranty claims are found in DA PAM 738-750 The Army Maintenance Management System (TAMMS) and this Work Package. Responsibilities of the Major Army Command (MACOM) are found in AR 700-139 Army Warranty Program, Concepts and Policies. Units should use DA Form 2407 or DA Form 5504 for making warranty claims. It is very important to fill in the blocks on the forms as accurately as possible.

b. The Contractor may be notified in writing via their website, (www.tvsonlinesupport.com), electronic mail (warranty@armorholdings.com), or telephonically (1-800-221-3688), followed up in writing by DA Form 2407 or DA Form 5504 from the local WARCO following the discovery of a defect in supplies which requires Contractor/Vendor repair and/or replacement parts. This shall constitute formal notification of a warranty claim. The notification shall include all items identified in paragraph 3.b of this Technical Bulletin. At this time, the Contractor will further be informed whether the owning unit has elected: (1) to correct the defect themselves or; (2) to direct the Contractor to correct the defect. Upon completion of Contractor/Vendor repair, forward completed warranty claims (Information Only) to TACOM. Additionally, the local WARCO will forward claims to TACOM utilizing DA Form 2407 or DA Form 5504 for any warrantable repairs accomplished by the owning unit which requires Contractor reimbursement to the Government.

c. The Contractor shall reimburse the Government for the cost of labor involved in the Government correction of a defect. The cost of labor involved will be computed at the current Fiscal Years labor rate for the maintenance level identified in the Maintenance Allocation Chart (MAC) multiplied by the number of actual hours incurred, not to exceed the labor hours in the MAC. The Contractor shall ship replacement parts for Government correction in accordance with paragraph 6.a.

WARRANTY - Continued

d. Identification of Failed Items. Failed warranty items shall be tagged/identified to prevent improper repair or use and must identify the trailer serial number from the trailer which they were removed. Documents that describe the use of DA Form 2402 Exchange Tag and DA Form 2407 Maintenance Request shall be referenced. Items requiring special handling, storage or shipment during the processing of claims shall be identified.

e. Disposition. The repair activity shall return defective supplies to the Contractor's representative or ship them back at the Contractor's expense using the replacement part carton/container.

f. Invalid Warranty Claims. When supplies are inspected by the Contractor/Vendor and found to be non-warrantable, or the supplies are found to be serviceable, the repair activity submitting the claim will be required to make reimbursement for Contractor/Vendor services. Additionally, regarding Contractor/Vendor repair, the local WARCO must stipulate at the time of request for services that either non-warranty work be stopped at the time it is determined non-warrantable or be prepared to pay for completion of such work. In either case, the WARCO must be prepared to pay for diagnosis and trip charges for non-warranty service.

g. Air Force Warranty Claims. Air Force warranty claims shall be submitted as follows:

(1) For letter warranty claims:

WR-ALC/LVR
225 Ocmulgee Ct
Robbins AFB, GA 31098-1647
DSN 468-7161
COML (912) 926-7126

(2) For teletype warranty claims:

WR-ALC ROBBINS AFB GS/LVR

9. Reimbursement for Army Repair. The Contractor shall remit payment by the fifteenth (15) day of the month for all warrantable claims by the Government for reimbursement which were received by the Contractor in the previous month. Payment shall be sent to the PM, MTV, Attn: Business Management Office, with checks made payable to "The Treasurer of the United States". In the event that the repair activity should receive any reimbursement from the Contractor, the monies must be forwarded to the PM, MTV.

10. Claim Denials/Disputes. TACOM will handle all denials or disputes.

11. Reporting. Reporting or recording action on a failed item shall be as specified in DA PAM 738-750 The Army Maintenance Management System (TAMMS). Forms that are unique to the Contractor or Repair Activity shall not be used.

12. Storage/Shipment/Handling.

a. Storage. See paragraphs 2, 3.a, 3.c, 5.a and TM Care and Storage Requirements for the Trailer.
b. Shipment. See paragraphs 3.a, 7.a, 7.c, 8.b, 8.c, 9.d, and 9.e.
c. Handling. See paragraphs 3.a, 7.a, 7.c, 8.b, 8.c, 9.d, and 9.e.

CHAPTER 1
DESCRIPTION and THEORY OF OPERATION

EQUIPMENT DESCRIPTION AND DATA 0002 00

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

Characteristics

The Load Handling System Trailer (LHST) is towed by an FMTV Loading Handling System (LHS) vehicle. The trailers is designed for use over all types of roads, cross-country terrain, and in all weather conditions.

Capabilities

1. The trailers can ford water up to 30 in. (76 cm) deep.
2. The trailers may be transported by highway, rail, and sea.
3. The LHST carries loads up to 17,600 lbs (7,983 kgs).

Features

1. Air-operated, cam-actuated drum brakes that incorporate Anti-lock Braking System (ABS) on all wheels. Spring-applied (air-actuated) parking/emergency brakes are provided for all wheels.
2. Service and emergency gladhands at the front of the trailer to allow towing.
3. Pneumatically actuated drawbar assembly for attachment to an LHS towing vehicle pintle hook.
4. Pneumatically actuated pressure gauge for testing maximum load capacity (52 psi).

EQUIPMENT DESCRIPTION AND DATA - Continued 0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

Major External Components Common to all LHSTs

Table 1 describes the common external components found on LHSTs.

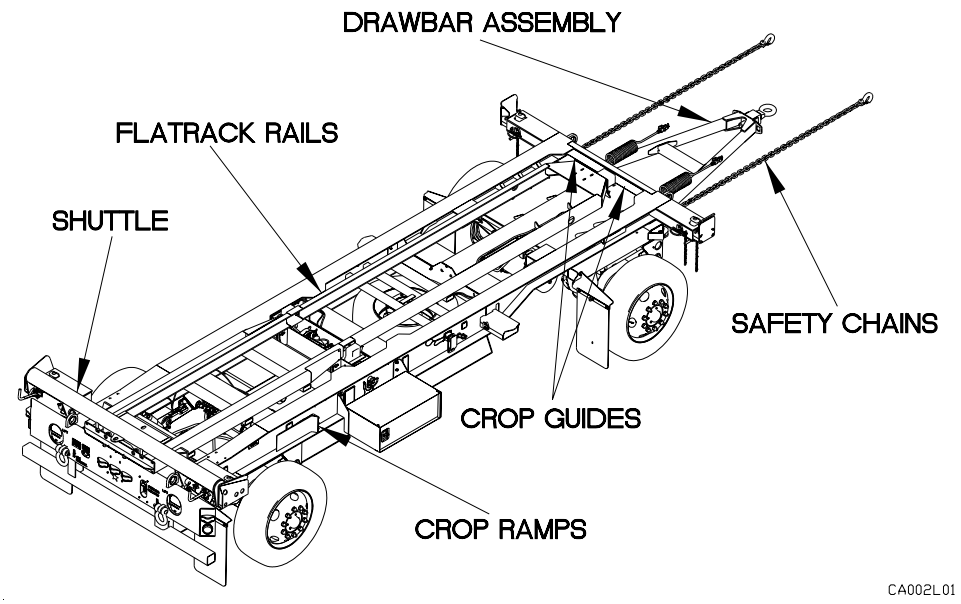


Table 1. Common External Components of LHSTs.

COMPONENT	DESCRIPTION
Drawbar Assembly	Towing vehicle pintle hook attaches to drawbar assembly for towing operations.
Safety Chains	Attached to towing vehicle during towing operations to prevent trailer breakaway in event of drawbar assembly or pintle hook failure.
Shuttle	Used when loading and unloading an ISO container.
Flatrack Rails	Used when loading and unloading a flatrack.
Crop ramps	Used when loading and unloading a crop.
Crop guides	Used to restrain crop at front of trailer.

EQUIPMENT DESCRIPTION AND DATA - Continued 0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued

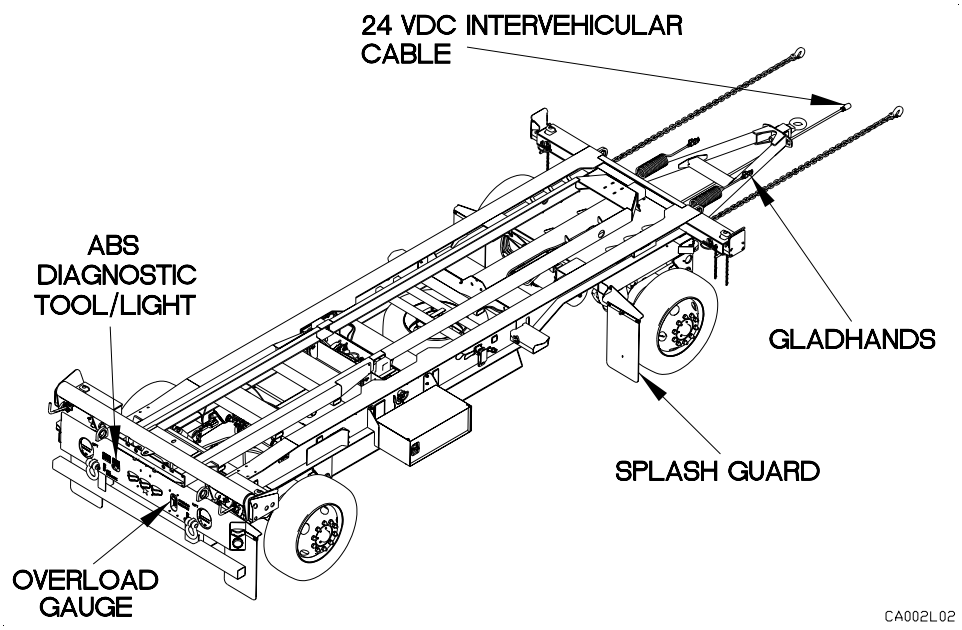


Table 1. Common External Components of LHSTs - Continued.

COMPONENT	DESCRIPTION
Gladhands	Allows connection of brake air supply from towing vehicle to trailer during towing operations.
24 VDC Intervehicular cable	The 24 VDC intervehicular cable is plugged into the appropriate connector to supply electrical power from LHS towing vehicle to trailer. When a 24 VDC intervehicular cable is used, the converter reduces voltage to 12 volts to properly operate the trailer lights and Anti-lock Braking System (ABS).
Splash Guards	Keep road debris, mud, and water from being thrown from tires while trailer is being towed.
Overload Gauge	When actuated, measures pressure of load being carried on trailer. Load pressure should not exceed 52 psi.
ABS Diagnostic Tool/Light	Allows reading of ABS Diagnostic Codes.

EQUIPMENT DESCRIPTION AND DATA - Continued 0002 00

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued

Major Internal Components Common to all LHSTs.

Table 2 describes the common internal components found on LHSTs.

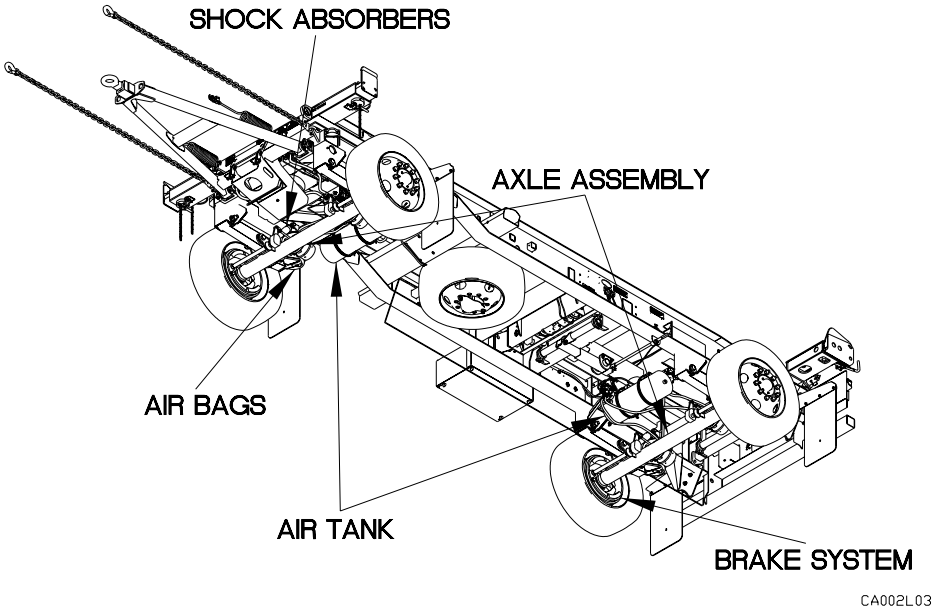


Table 2. Common Internal Components of LHSTs.

COMPONENT	DESCRIPTION
Shock Absorbers	Dual-acting hydraulic shocks used to improve trailer stability by dampening vertical wheel motion and keeping wheels in firmer contact with ground.
Air Tank	Stores compressed air transferred from towing vehicle to operate trailer brakes.
Brake System	Uses air-operated, s-cam-actuated drum brakes that incorporate ABS on all wheels. Spring-applied (air-actuated) parking/emergency brakes are provided for all wheels on LMTVT and rear MTVT wheels.
Axle Assembly	The shaft on which the wheels revolve. The axles support shock absorbers and brakes. The LMTVT has a single axle and the MTVT has dual axles.
Air Bags	Axle suspension that supports the load, transmits brake action to the chassis, and cushions cargo.

EQUIPMENT DATA

Table 3. Features shows various features and operating parameters unique to the LHST.

Table 3. Features

FEATURE	LHST
Body Feature	
Overall Width (For Transport)	96 in. (244 cm)
Overall Width W/ISO Container or Shelter	101.5 in. (258 cm)
Weight	9480 lbs (4300 kgs)
Trailer Length	335 in. (851 cm)
Deck Height	47.5 in. (121 cm)
Operating Function	
Cargo transport of loads	17,600 lbs (7,983 kgs)
Gross Vehicle Weight (GVW)	27,080 lbs (12,283 kgs)

EQUIPMENT DESCRIPTION AND DATA - Continued 0002 00

EQUIPMENT DATA - Continued

WARNING

Do not exceed maximum speed and grade limitations during normal operations. Do not exceed maximum side slope or departure angles or ford water greater than maximum depth. Failure to comply may result in serious injury or death to personnel.

Table 4. Trailer Performance Data provides information for the LHST.

Table 4. Trailer Performance Data.

Maximum Speed (primary roads, 2% grade)	Maximum Speed (primary roads, 3% grade)	Maximum Grade Ability	Maximum Side Slope Ability	Maximum Departure Angle	Maximum Fording Depth (without preparation)	Minimum Ground Clearance
35 mph (72 km/h)	25 mph (64 km/h).	30%	30%	30 degrees	30 in.(76 cm)	22 in. (56 cm)

Table 5. System Data provides detailed information for the major components of the LHST.

Table 5. System Data.

VOLTAGE REGULATOR

Make ..... Dantronics, Inc.

Model DT324B

Type ..... Solid State, 12/24 VDC negative ground

AXLES

Make ..... Dexter

Type ..... Non-driving

SUSPENSION SYSTEM

Make ..... Dexter

Type ..... Air Bags

OVERLOAD GAUGE

Make ..... Haldex Brake Products, Corp.

Type ..... Silicone filled, sealed face

Pressure Range ..... 100 psi (689.5 kPa)

Max Pressure of Load Carried ..... 52 psi (358.5 kPa)

EQUIPMENT DATA - Continued

Table 5. System Data - Continued.

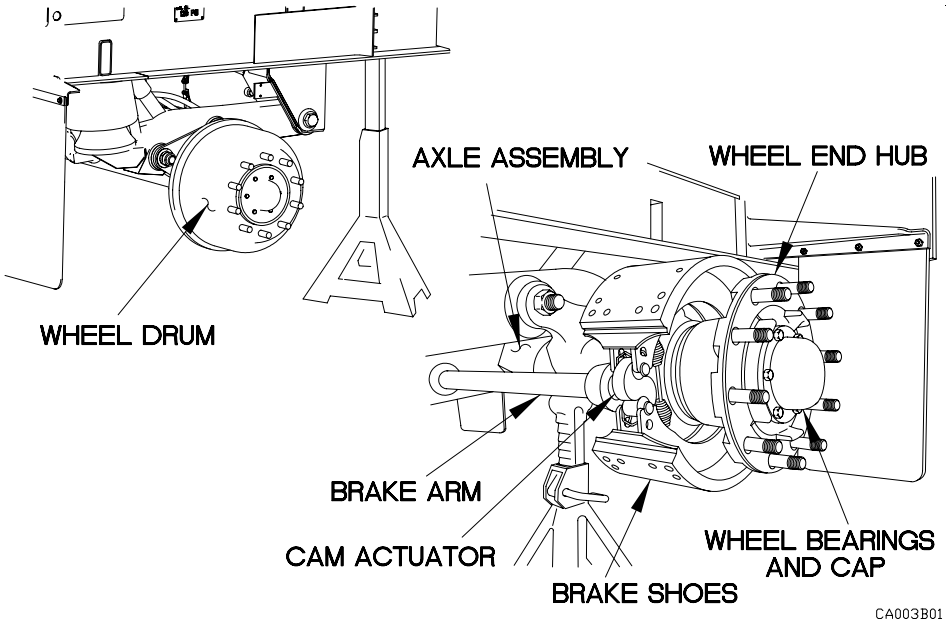
BRAKE SYSTEM	
Make	Dexter
Model	Dexter Brakes 16 ½" X 7"
Type	Full air, cam -type, self-adjusting
Drum Size	16.62 in. (42 cm) diameter
Number of Brake Air Chambers	2 per axle
Pressure Range	100 psi (689.5 kPa)
DRAWBAR ASSEMBLY	
Make	Landoll
Maximum Load Capacity, pulling (maximum gross trailer weight)	45,000 lbs (20,412 kgs)
Maximum Load Capacity, vertical	9,000 lbs (4,082 kgs)
WHEELS	
Make	Accuride
Rim Size and Type	22.5 x 8.25, one-piece
Quantity	4
Studs Per Wheel	10
Maximum Wheel, Pneumatic Tire Rate Load Capacity	8,000 lbs (3,629 kgs) at 120 psi (830 kPa)
TIRES	
Make	Michelin North America
Size	275/70 R22.5 XML
Tread Design	Non-directional, on-off road
Tube or Tubeless	Tubeless
Load Range	J
Maximum Load, Single Tire, Highway Conditions:	
55 mph (89 km/h), Cold Inflation Pressure of 120 psi (830 kPa)	6,940 lbs (3,148 kgs)

THEORY OF OPERATION 0003 00

The trailer suspension assembly includes the axle and air bag assemblies. The suspension assembly supports the trailer and its cargo and provides an efficient, safe ride by transmitting shock and torque from the wheels to the frame.

AXLE ASSEMBLY

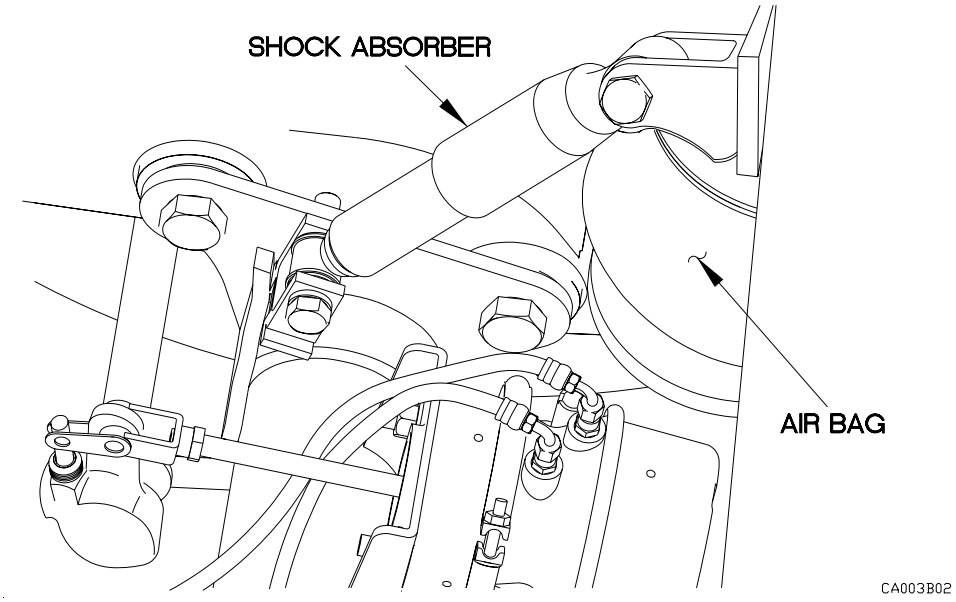
The trailer axle is a non-powered axle, able to support the trailer but not transmit power (the axle does not have gears to transmit power from a vehicle's engine and transmission). The axle assembly includes a tubular axle beam, cam-actuated service brakes, spring-actuated emergency brakes, wheel-end components such as bearings and hubs.



THEORY OF OPERATION - Continued 0003 00

SUSPENSION ASSEMBLY

The shock absorbers attach to the axle and frame to cushion the load. In addition there are air bags that assist in absorbing road shock and torque from the brakes and transmitting these to the frame.



THEORY OF OPERATION - Continued 0003 00

ELECTRICAL SYSTEM

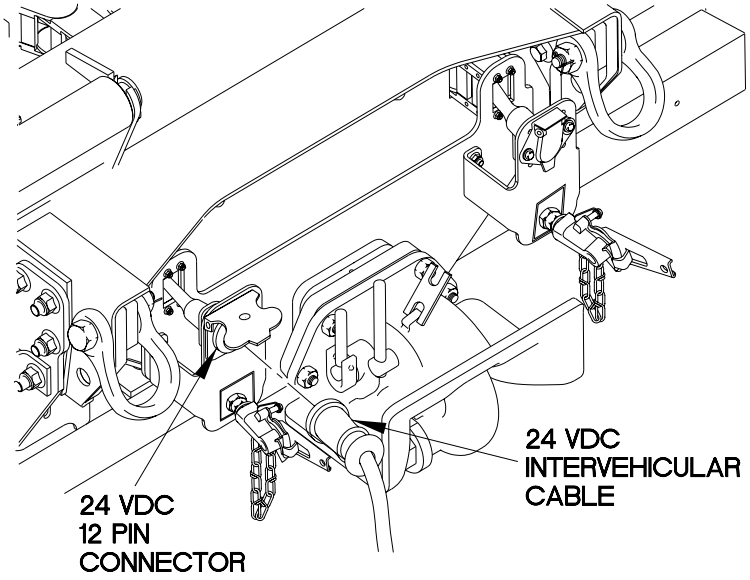
The towing vehicle electrical system supplies all electrical power to the trailer by way of a 24 vdc (12-pin) connector at the rear of the towing vehicle.

In order for the towing vehicle to supply electrical power to the trailer lights, the main light switch of the towing vehicle must be on.

The master power switch of the towing vehicle must be positioned to on in order for electrical power to be supplied to the trailer Anti-lock Braking System (ABS) Electronic Control Unit (ECU).

The trailer electrical system is dependent on the towing vehicle electrical system. The towing vehicle electrical system must be operational in order for the trailer electrical system to be operational. The trailer lights and ABS ECU operate on 12 vdc.

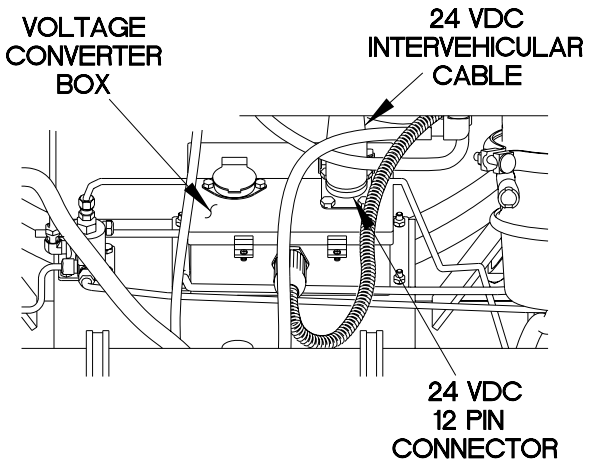
All power to the trailer lights and ABS ECU is routed from a a 24 vdc (12-pin) intervehicular cable to a voltage converter box before allowing power to flow to the lights or ABS ECU.



THEORY OF OPERATION - Continued 0003 00

VOLTAGE CONVERTER BOX

The voltage converter box, mounted underneath the trailer towards the front, is where the 24 vdc (12-pin) intervehicular cable routes to. The voltage converter box is equipped with five solid state switches that convert 24 vdc to 12 vdc when the 24 vdc (12-pin) intervehicular cable is used. Circuit breakers located in the voltage converter box prevent excessive voltage or amperage from being supplied to the trailer electrical system and causing damage to the circuits.



CA003B04

THEORY OF OPERATION - Continued 0003 00

TRAILER LIGHTS

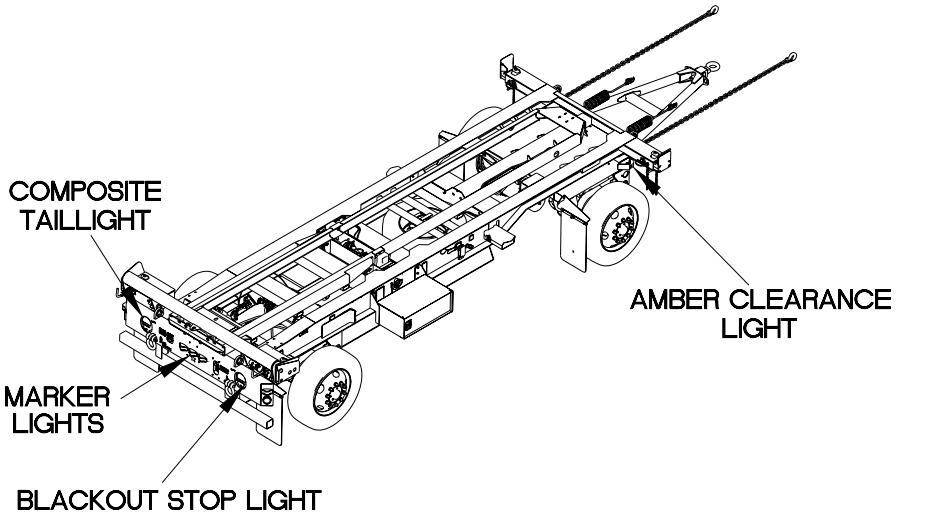
The trailer lights consist of clearance and marker lights and rear composite taillights. The front clearance lights are located on the left and right side of the trailer frame rail. The rear clearance lights are located on the left and right of the trailer frame rail. The marker lights are located on the rear marker light bracket. The rear composite taillights are located on the rear bumper.

After electrical power is routed through the voltage converter box, 12 vdc is then supplied to the trailer lights through an electrical harness.

Service Lighting.
The Service Lighting System includes the rear composite taillights and clearance and marker lights. They are energized by positioning the main light switch of the towing vehicle to the appropriate position.

Blackout Lighting.
The Blackout Lighting System includes the rear blackout marker lights and blackout stop lights. These lights are energized by positioning the main light switch of the towing vehicle to the appropriate position.

Blackout lights operate only with 24 vdc intervehicular cable.



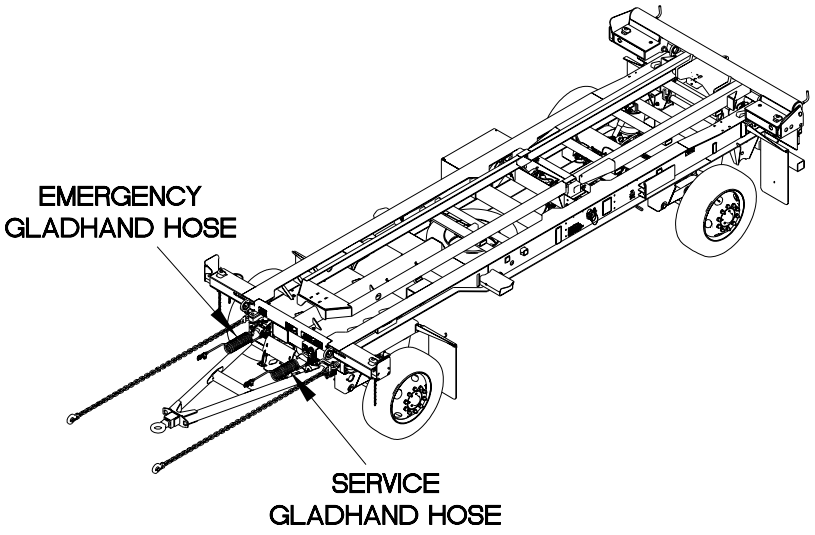
THEORY OF OPERATION - Continued 0003 00

GENERAL

The trailer is equipped with an air brake system which complies with the Federal Motor Vehicle Safety Standard (FMVSS) 121, S5.5. The trailer brake system operates in tandem with the towing vehicle brake system. The trailer brake system is made up of a number of components including EMERGENCY and SERVICE gladhand hoses, an air tank, an Anti-lock Braking System (ABS) Electronic Control Unit (ECU), ABS external diagnostic capability, and several valves which control the application and release of the brakes.

EMERGENCY AND SERVICE GLADHAND HOSES

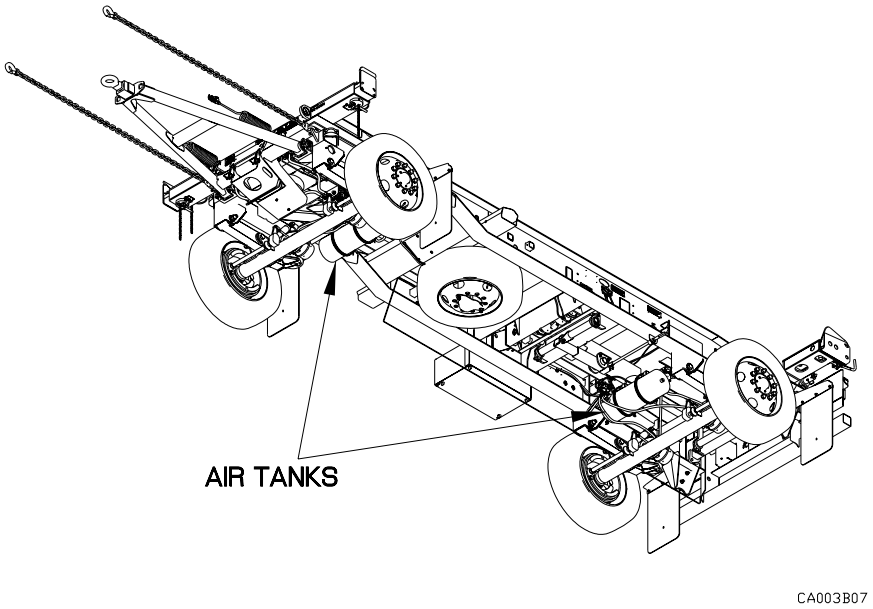
The EMERGENCY and SERVICE gladhand hoses provide air for operation of the trailer brakes from the towing vehicle. One hose is for SERVICE brake operation; the other hose is for EMERGENCY brake operation. Both hoses have gladhand couplings.



CA003B06

AIR TANKS

The air tanks store pressurized air from the towing vehicle for use in the trailer brake system.



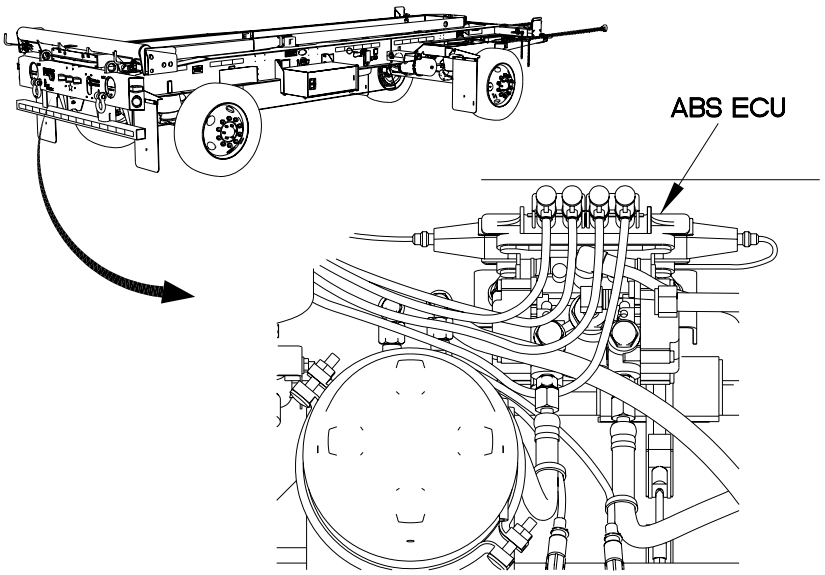
THEORY OF OPERATION - Continued 0003 00

ABS ECU

The ABS ECU is mounted towards the rear of the trailer right behind the rear air tank. The ABS ECU monitors and regulates release of air to the service brake air chambers using two relay valves that are triggered when speed sensors (one on each wheel) detect trailer wheel lock-up. The relay valves modulate the air supply by sending pulses of air. In between air pulses, the service brakes release, thereby preventing wheel lock-up.

ABS ECU Valve Assembly.

The ABS ECU valve assembly contains the two relay valves.

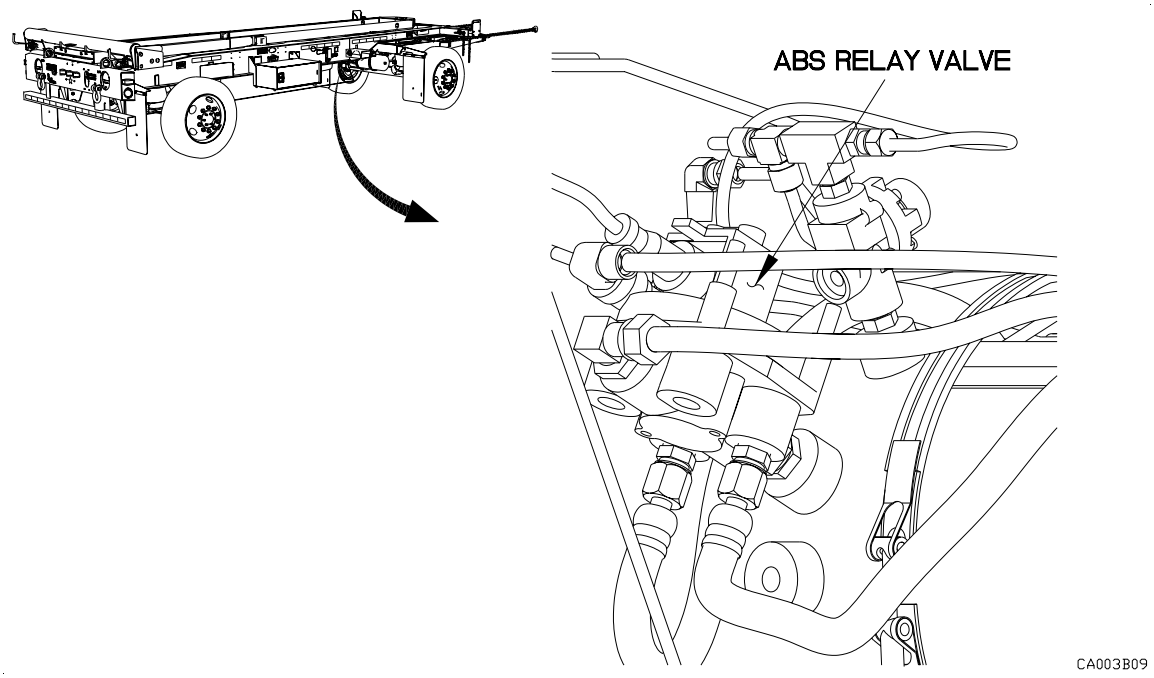


THEORY OF OPERATION - Continued 0003 00

ABS ECU - Continued

ABS Relay Valve.

The external ABS relay valve is the third relay valve. The ECU valve assembly services rear brake air chambers. The external ABS relay valve services front brake air chambers.

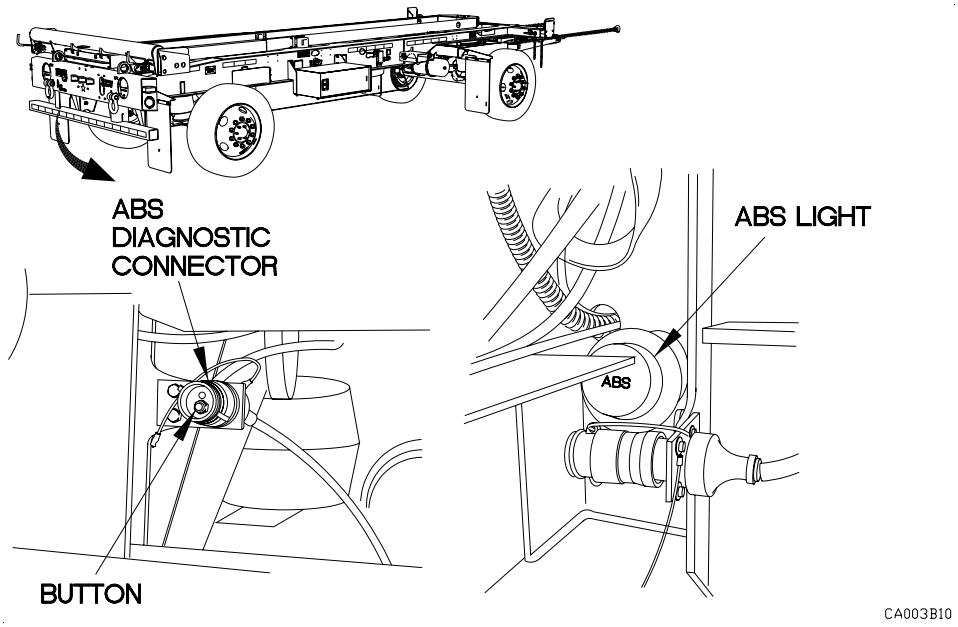


THEORY OF OPERATION - Continued 0003 00

ABS ECU - Continued

ABS Diagnostic.

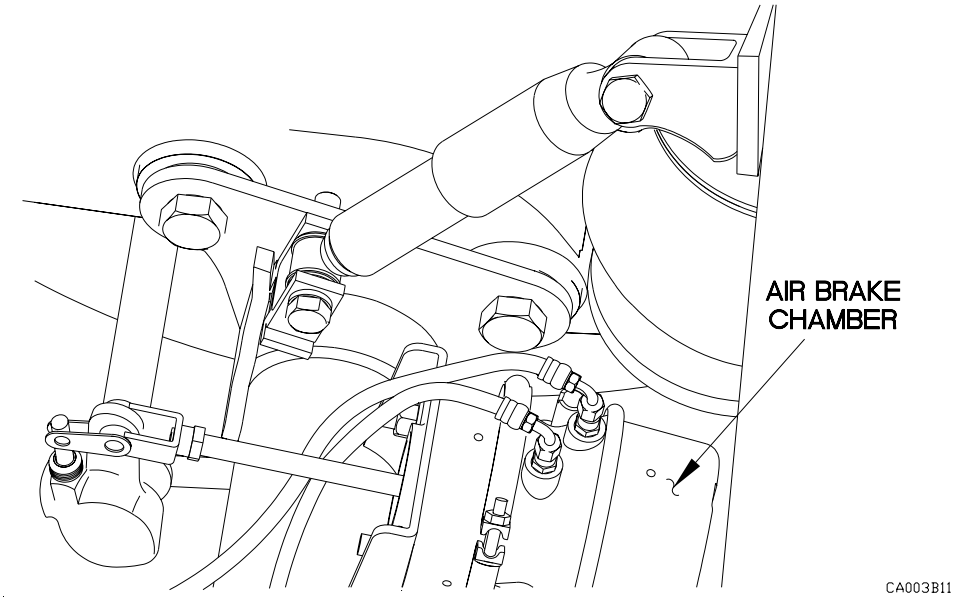
The trailer brake system has a connector on the ECU valve assembly for external ABS DIAGNOSTIC capability.



THEORY OF OPERATION - Continued 0003 00

BRAKE AIR CHAMBERS

After exiting either the ABS front relay valve or the ABS ECU, the hose assembly is plumbed directly to the brake air chambers. The cam-actuated type brake design uses singe brake air chambers per brake. Within the brake air chambers, air pressure is converted to mechanical force to create braking action.



CHAPTER 2
OPERATOR INSTRUCTIONS

TRAILER CONTROLS 0004 00

GENERAL

The following paragraphs contain illustrations that show the location of each control for the Load Handling System Trailer. Each control is clearly labeled as it appears on the trailers. Find numbers on the illustration are keyed to the tabular listing which contains the name and the functional description of each control. Operator must become thoroughly familiar with this section before attempting to operate trailer.

CONTROLS/MISC.

Table 1 describes all controls on the exterior of the trailer.

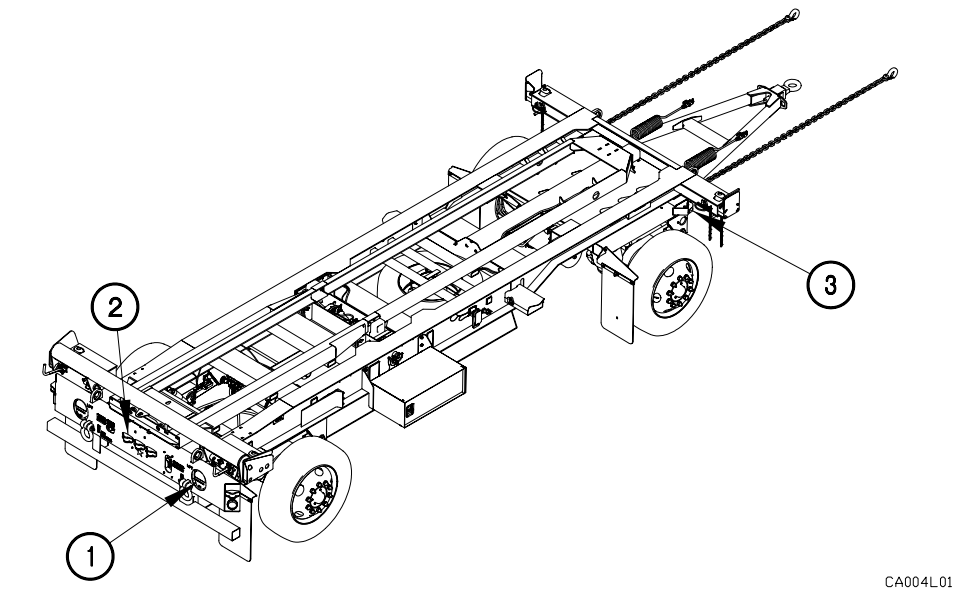


Table 1. Controls/MISC.

KEY	CONTROL	FUNCTION
1	Rear composite taillights	Two composite taillights located on the rear trailer bumper. Each contains tail, stop, and turn lights plus blackout tail and blackout stop lights. Towing vehicle controls each light.
2	Marker lights	Three red identification lights centered at the trailer rear on the crossmember. Illuminate when towing vehicle drive lights or parking lights are on.
3	Amber clearance lights	Two lights located on the front trailer corners. They illuminate when towing vehicle drive lights or parking lights are on.

TRAILER CONTROLS - Continued 0004 00

CONTROLS/MISC. - Continued

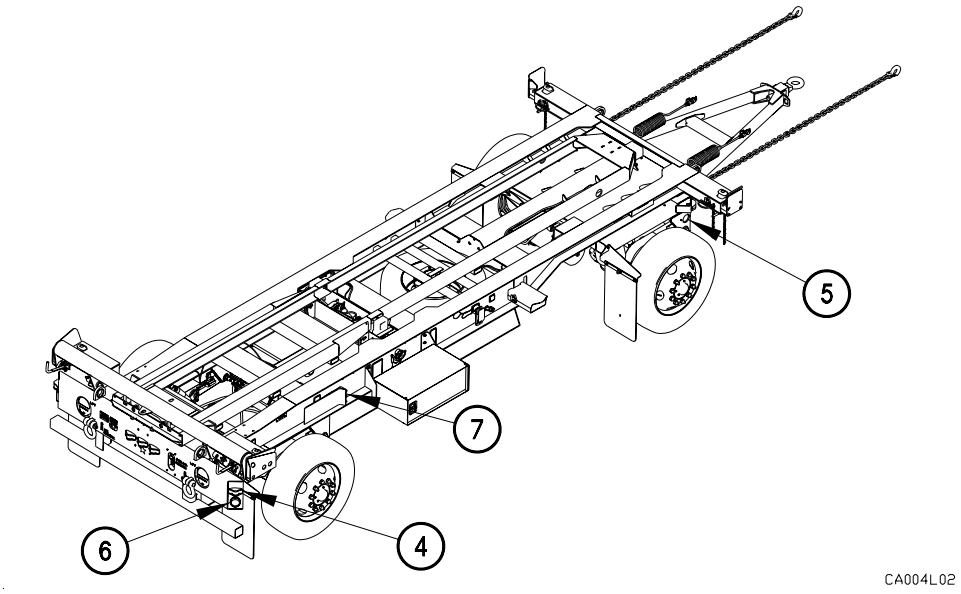


Table 1. Controls/MISC. - Continued.

KEY	CONTROL	FUNCTION
4	Red clearance lights	Two lights located on the corners of the rear trailer bumper. They illuminate when towing vehicle drive lights or parking lights are on.
5	Amber front reflectors	Two reflectors located on the trailer sides, at the front left and front right.
6	Red rear reflectors	Two reflectors located on the corners of the rear trailer bumper, beneath red clearance lights.
7	Crop ramps	Used in conjunction while loading a crop on LHST.

CONTROLS/MISC. - Continued

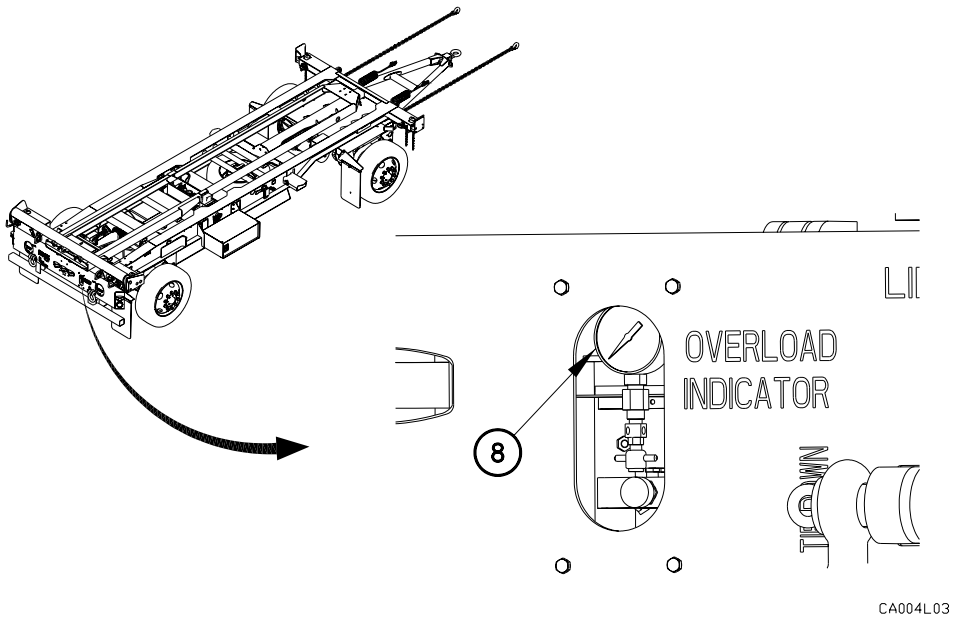


Table 1. Controls/MISC. - Continued.

KEY	CONTROL	FUNCTION
8	Overload Indicator	Gage used to indicate if trailer is overloaded or not. Located on RH rear of LHST.

DRAWBAR

Table 2 describes the drawbar controls.

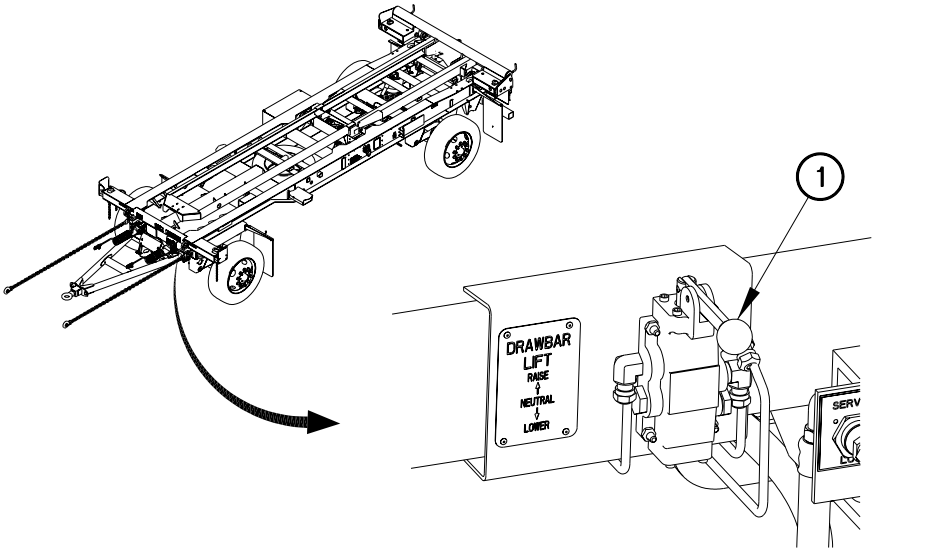


Table 2. Drawbar.

KEY	CONTROL	FUNCTION
1	Drawbar lift handle	Pneumatically raises or lowers drawbar for coupling and uncoupling. Located on upper left front of LHST.

TRAILER CONTROLS - Continued 0004 00

SPARE TIRE

Table 3 describes the spare tire controls.

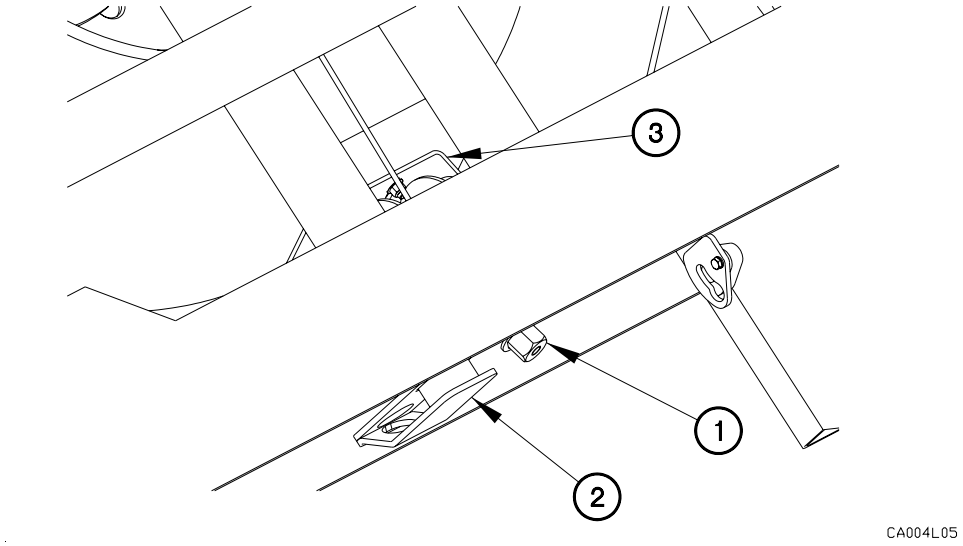


Table 3. Spare Tire.

KEY	CONTROL	FUNCTION
1	Spare tire rod	Attach the winch crank from the tool box to this to lower and raise the spare tire. Located on RH side middle of LHST.
2	Spare tire outrigger	Extends out so the snatch block from the tool box can be attached. Aids in removal of spare tire from underneath LHST.
3	Spare tire winch	Used to raise and lower spare tire.

AIR BAG/SUSPENSION CONTROLS

Table 4 describes the air bag/suspension controls.

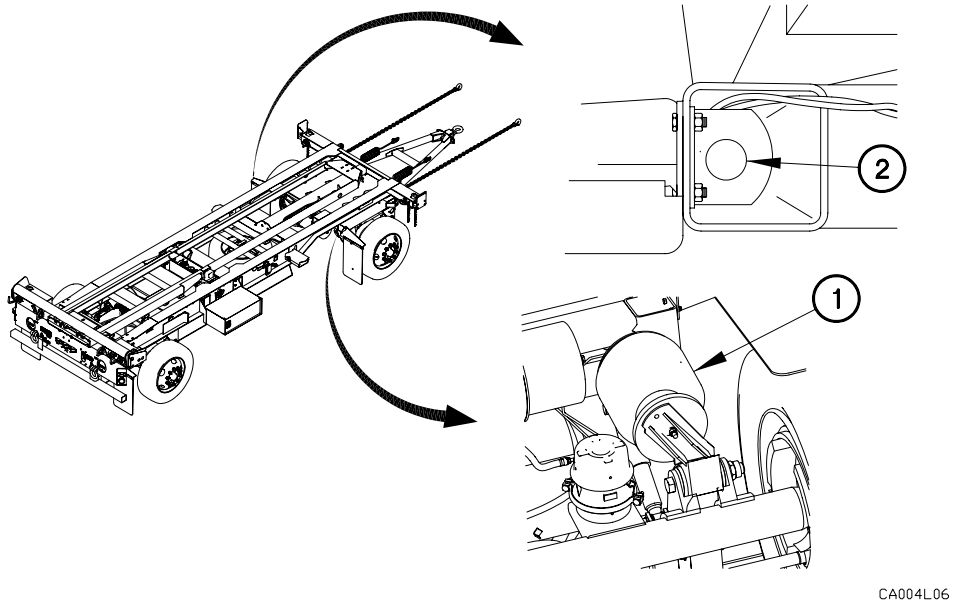


Table 4. Air Bag/Suspension.

KEY	CONTROL	FUNCTION
1	Air bags	Aids in ride control of LHST in conjunction with shock absorbers. Also lowering of air bags allows for ease of loading flatracks and crops.
2	Height Actuation Control Valve	Allows for lowering of front and rear air bags to aid in ease of loading flatracks and crops.

FLATRACK RAIL LOCK SYSTEM

Table 5 describes the flatrack rail lock system controls.

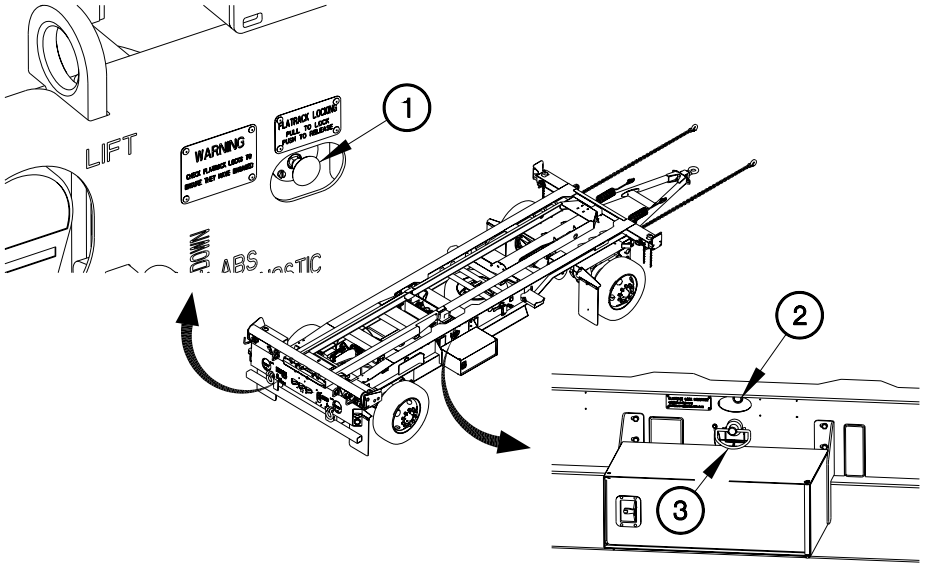


Table 5. Flatrack Rail Lock System Controls.

KEY	CONTROL	FUNCTION
1	Flatrack Locking knob	Locks and releases flatrack rail locking system. Pull to lock, push to release. Located on LH rear of LHST.
2	Flatrack Lock Indicator	Indicates what position the locks are in. Pin through the plate; locked. Pin pulled back from plate, unlocked. Located on both middle sides of LHST.
3	Flatrack Locking Pin	Pins Flatrack locks in position, regardless of locked or unlocked position. Located on both middle sides of LHST.

FLATRACK RAIL LOCK SYSTEM - Continued

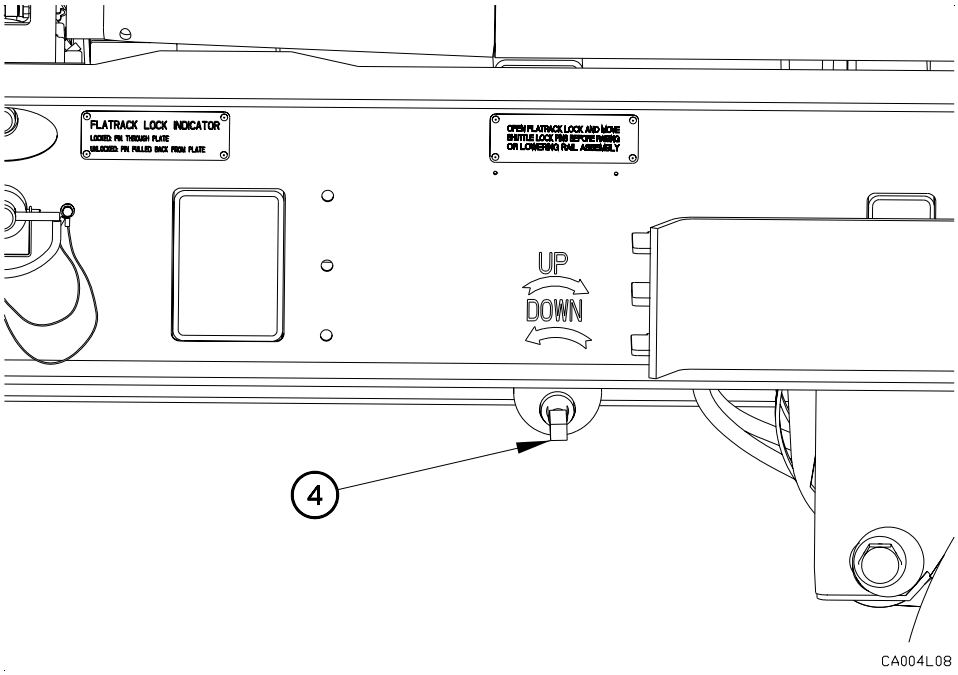


Table 5. Flatrack Rail Lock System Controls – Continued.

KEY	CONTROL	FUNCTION
4	Flatrack gear lug	Attach the winch crank from the tool box to this to raise and lower the flatrack rails. Located on LH side middle of LHST.

TRAILER CONTROLS 0004 00

AIR SYSTEM

Table 6 describes the air system controls.

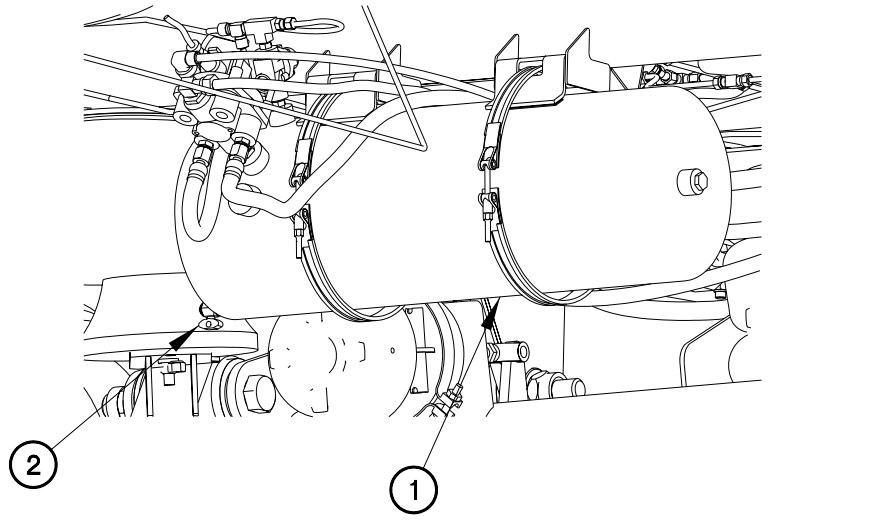


Table 6. Air System Controls.

KEY	CONTROL	FUNCTION
1	Air tank	Reservoir that maintains air reserve for the LHST. There are two on the LHST, located behind the front axle and in front of the rear axle.
2	Air tank drain petcocks	Allows for the manual release of air from LHST air system. Located on each air tank.

RAIL ASSEMBLY OPERATION 0005 00

INITIAL SETUP:

Maintenance Level:
Operator

Equipment Conditions:
Trailer air system charged

GENERAL

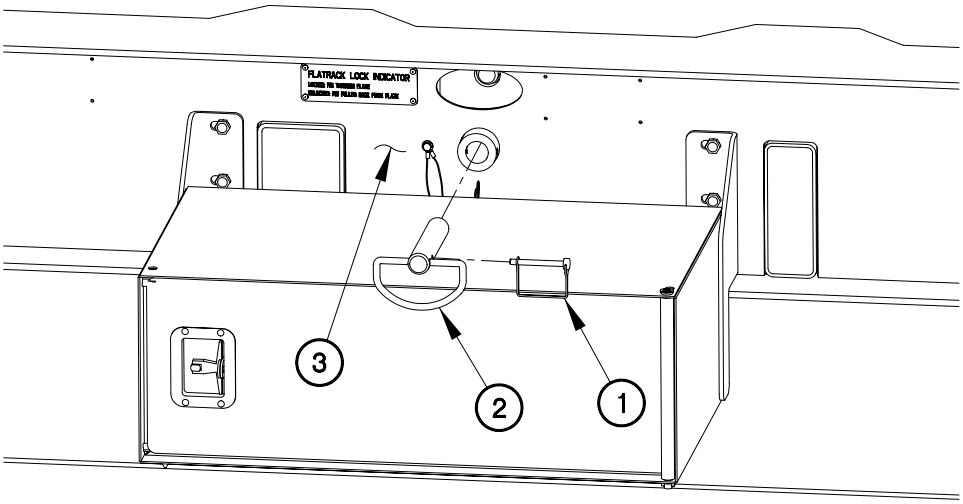
The paragraphs in this work package provide the data and procedures to raise and lower the rail assembly.

RAISING RAIL OPERATION

NOTE

LH and RH flatrack locking pins, outer stowage pins, and DIN blocking plates are removed the same way. LH side shown.

1. Remove retaining pin (1) from flatrack locking pin (2).
2. Remove flatrack locking pin (2) from trailer (3).



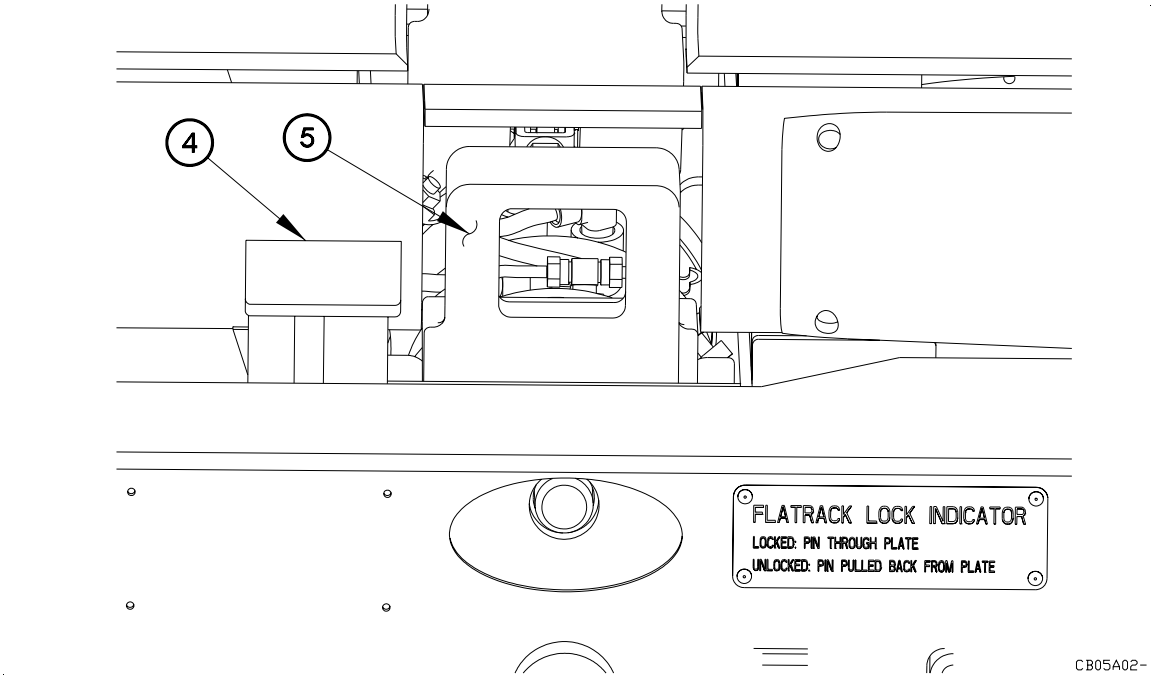
CB05A01-

RAIL ASSEMBLY OPERATION - CONTINUED 0005 00

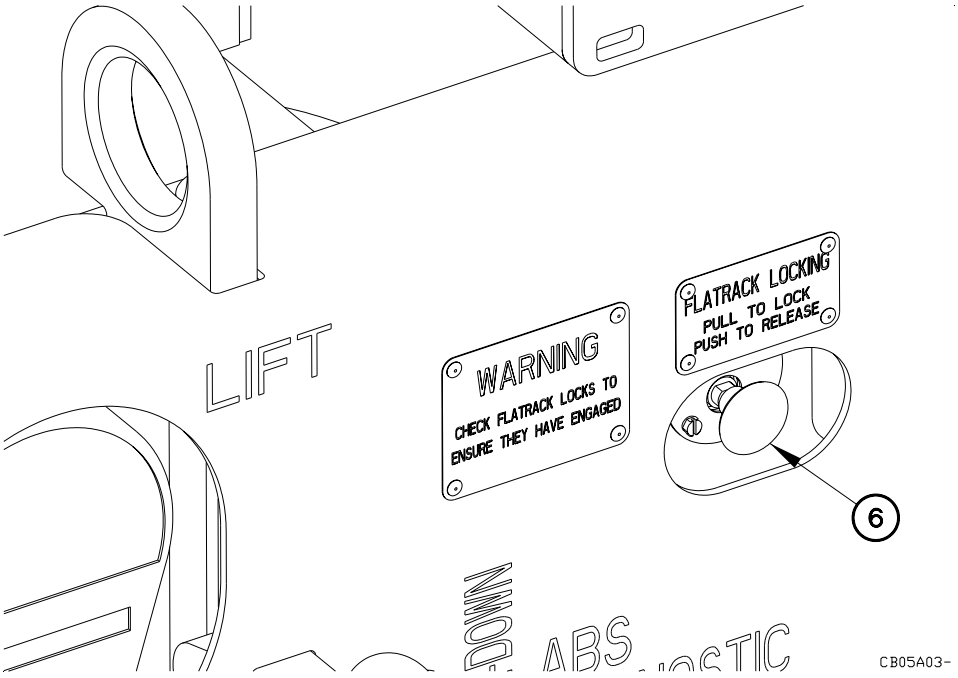
RAISING RAIL OPERATION - Continued

3. Move DIN blocking plate (4) up and lower down, clear of DIN lock (5).

4. Perform previous three steps on RH flatrack locking pin, outer stowage pin and DIN locking plate.



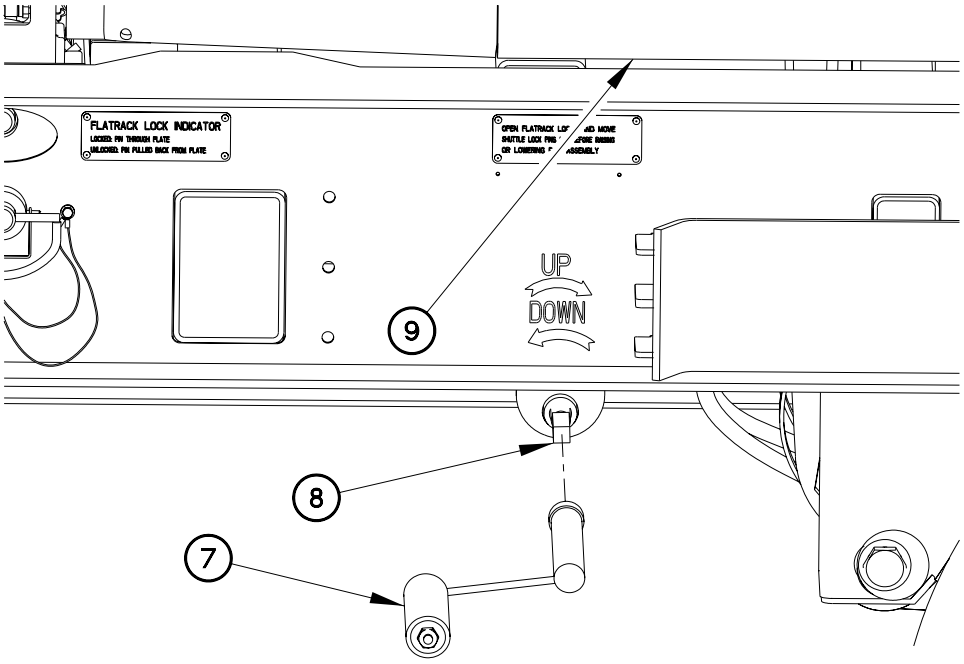
5. Press flatrack locking knob (6) to RELEASE.



RAIL ASSEMBLY OPERATION - CONTINUED 0005 00

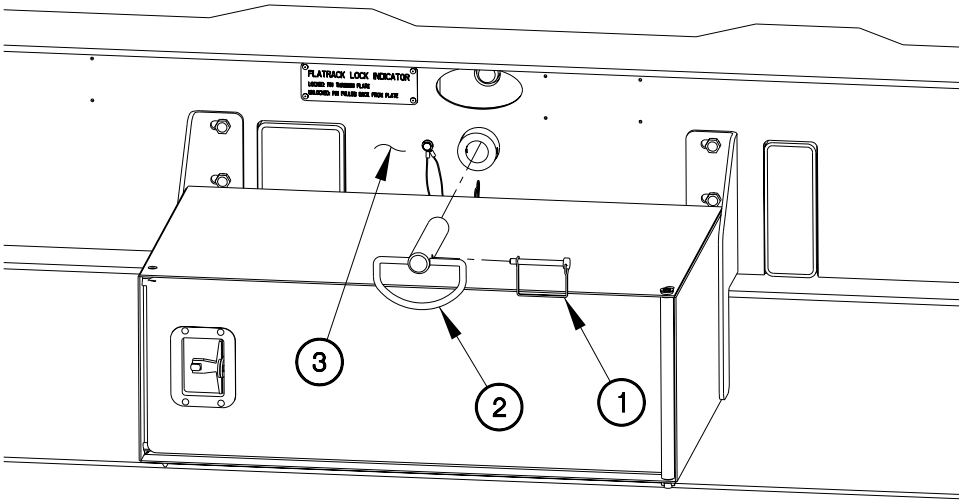
RAISING RAIL OPERATION - Continued

6. Install crank handle (7) on gear lug (8).
7. Rotate crank handle (7) clockwise until flatrack guide (9) is completely raised.



CB05A04-

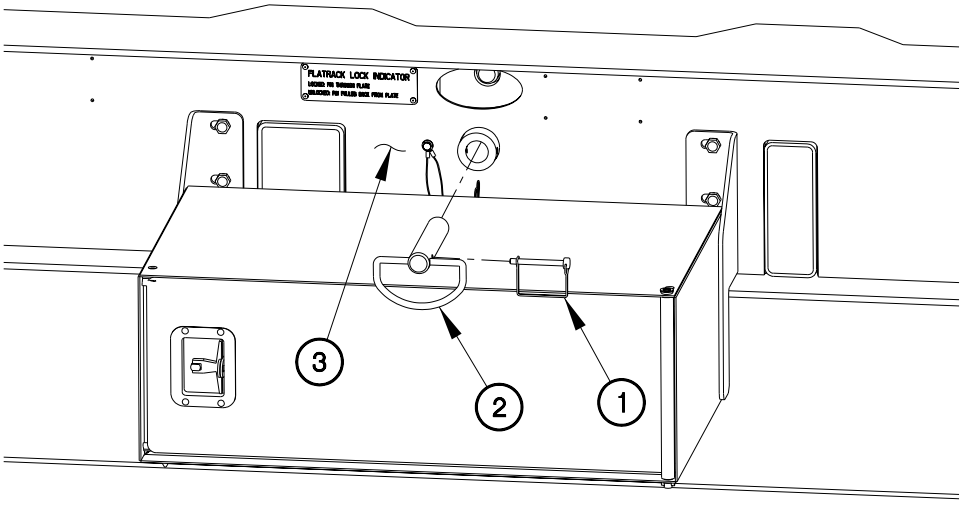
8. Install flatrack locking pin (2) in trailer (3).
9. Install retaining pin (1) in flatrack locking pin (2).



CB05A01-

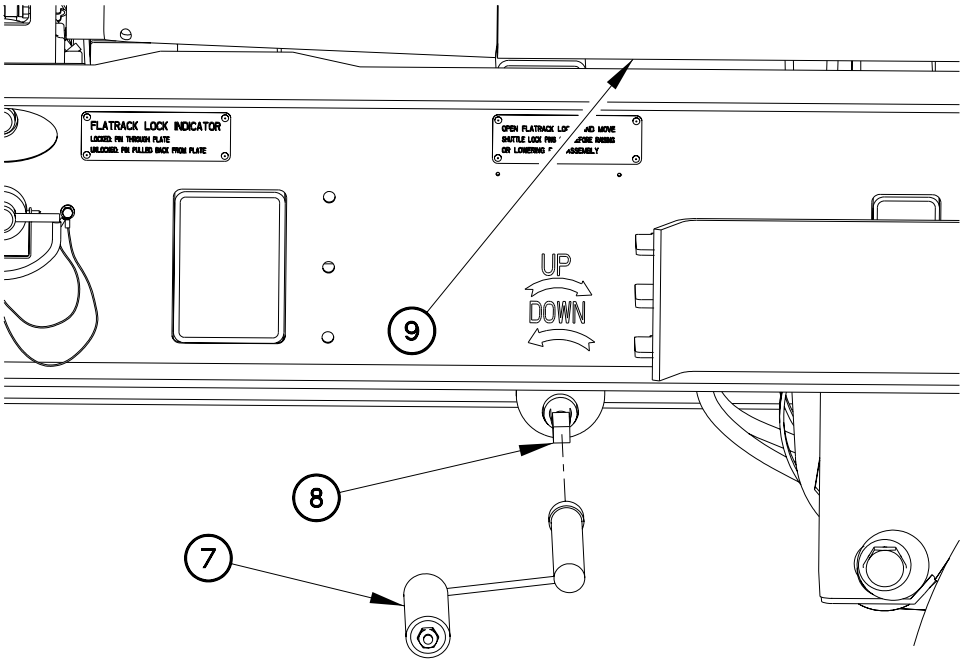
LOWERING RAIL OPERATION

1. Remove retaining pin (1) from flatrack locking pin (2).
2. Remove flatrack locking pin (2) from trailer (3).



CB05A01-

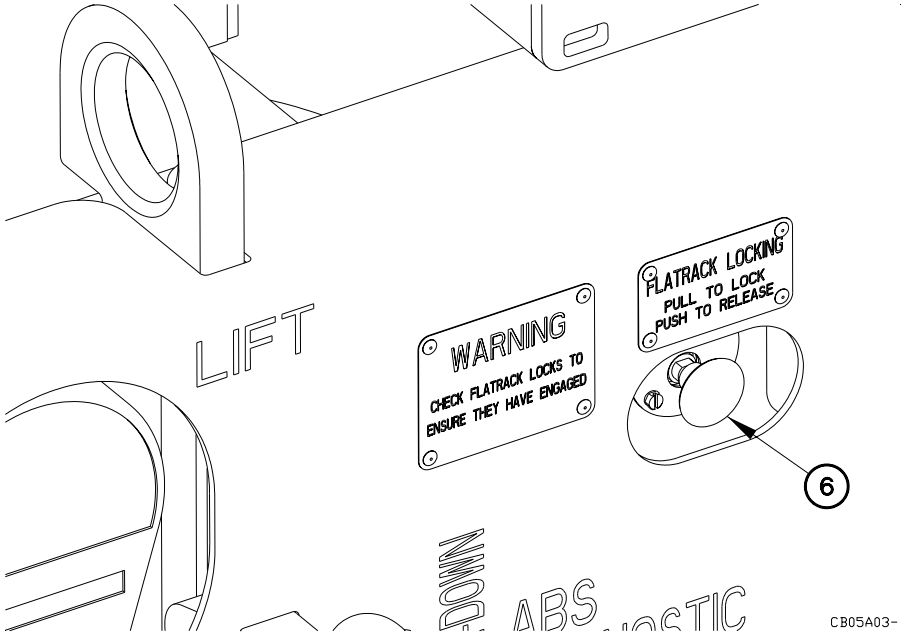
3. Install crank handle (7) on gear lug (8).
4. Rotate crank handle (7) counter-clockwise until flatrack guide (9) is completely lowered.



CB05A04-

LOWERING RAIL OPERATION - Continued

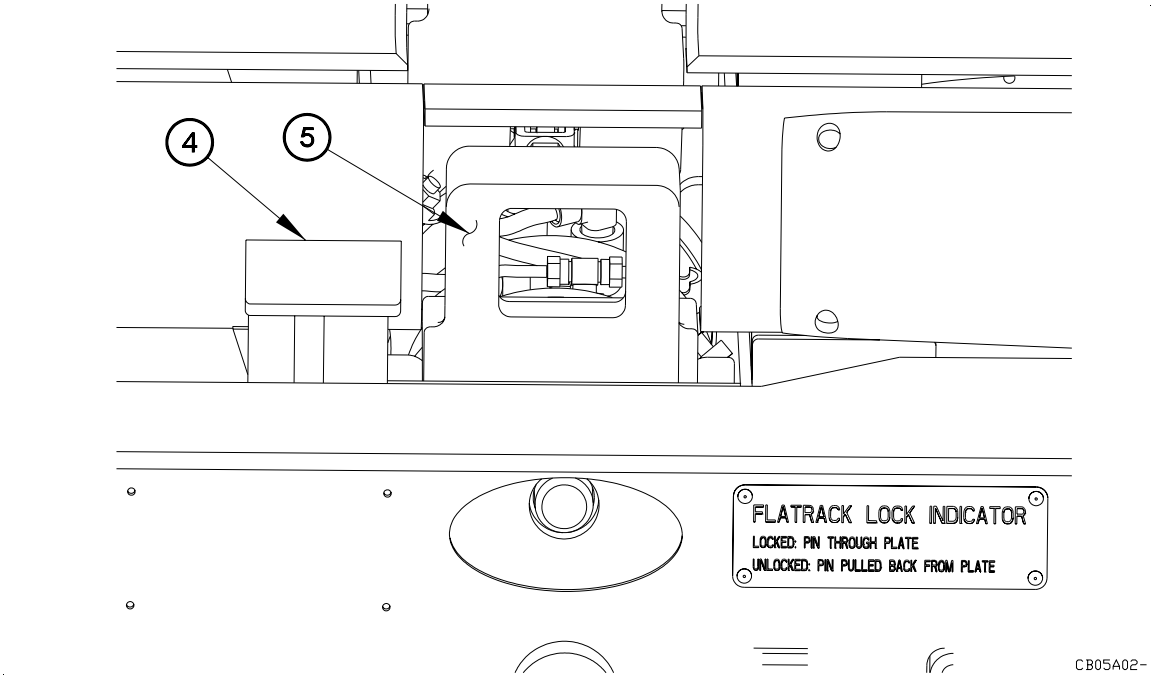
5. Pull flatrack locking knob (6) to LOCK.



NOTE

LH and RH flatrack locking pins, outer stowage pins, and DIN blocking plates are installed the same way. LH side shown.

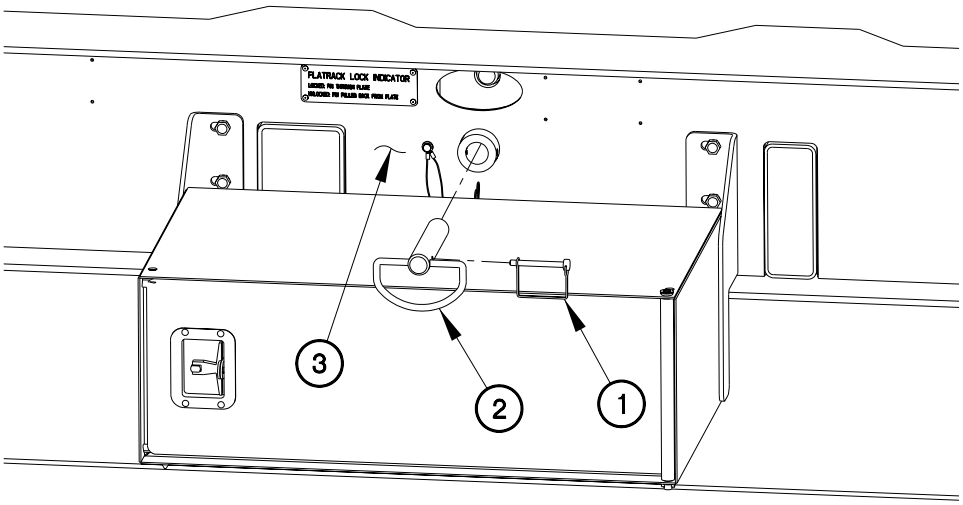
6. Pull DIN blocking plate (4) up and lower down over DIN lock (5).



RAIL ASSEMBLY OPERATION - CONTINUED 0005 00

LOWERING RAIL OPERATION - Continued

7. Install flatrack locking pin (2) in trailer (3).
8. Install retaining pin (1) in flatrack locking pin (2).
9. Perform previous three steps on RH flatrack locking pin, outer stowage pin and DIN locking plate.



CB05A01-

END OF WORK PACKAGE

OPERATION IN EXTREME COLD, -26° F TO -65° F (-32° C TO -54° C)

0006 00

INITIAL SETUP:

Maintenance Level:
Operator

References:
FM 9-207
FM 31-70
FM 31-71
FM 21-305

GENERAL

The LHST is designed for use in a wide range of conditions. The paragraphs in this work package provide the data and procedures to be used by the Operator when operating the LHST in extreme cold. Items covered include operation in extreme cold and at-halt parking.

OPERATION IN EXTREME COLD

WARNING

Do not touch extremely cold metal (below -26° F (-32° C)). Bare skin may freeze to cold metal. Failure to comply may result in injury to personnel.

CAUTION

Before operating ensure the LHST has been prepared for cold weather environment in accordance with FM 9-207. Refer to FM 31-70, FM 31-71, and FM 21-305 for additional information on operation in cold environment. Failure to comply may result in damage to equipment.

Park in shelter when possible. If shelter is not available, park so LHST does not face into wind. Follow procedures in FM 9-207 to prevent LHST from freezing in place. Failure to comply may result in damage to equipment.

All snow and ice should be removed from LHST as soon as possible. Snow and ice may slow or prevent movement of equipment. Failure to comply may result in damage to equipment.

1. Caution must be taken when placing LHST in operation after a shutdown. Hardened lubricants can cause part failure.

2. Check that tires have not frozen to ground or have a flat spot if they are under inflated.

3. Test braking to ensure that brake shoes are not frozen to brake drums.

4. Refer to FM 9-207 and FM 21-305 for special instructions on driving hazards in snow and ice that may be encountered during extremely cold weather conditions.

OPERATION IN EXTREME COLD (-26° F, (-32° C) TO -65° F, (-54° C)) - Continued

AT-HALT PARKING

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

END OF WORK PACKAGE

OPERATION IN EXTREME HEAT 0007 00

INITIAL SETUP:

Maintenance Level
Operator

GENERAL

The LHST is designed for use in a wide range of conditions. The paragraphs in this work package provide the data and procedures to be used by the Operator when operating the LHST in extreme heat.

OPERATION IN EXTREME HEAT

NOTE

Extreme temperature is defined as temperatures in excess of 100° F (38° C).

1. Do not park LHST in sun for long periods of time as heat and sunlight will shorten life of tires and will cause paint to pit and/or blister.

2. During extended shutdown periods, cover LHST with canvas (if available) to protect it from heat, sun, and dust.

END OF WORK PACKAGE

OPERATION IN RAINY OR HUMID CONDITIONS 0008 00

0INITIAL SETUP:

Maintenance Level	References
Operator	TM 9-247

GENERAL

The LHST is designed for use in a wide range of conditions. The paragraphs in this work package provide the data and procedures to be used by the Operator when operating the LHST in rainy or humid conditions.

OPERATION IN RAINY OR HUMID CONDITIONS

Frequently inspect, clean, and lubricate inactive equipment to prevent the accumulation of corrosion and fungus. Notify Field Level Maintenance if corrosion is found. Clean fungus with appropriate solution. Refer to TM 9-247 for cleaning instructions.

END OF WORK PACKAGE

OPERATION IN SALT WATER AREAS 0009 00

INITIAL SETUP:

Maintenance Level
Operator

GENERAL

The LHST is designed for use in a wide range of conditions. The paragraph in this work package provide the data and procedures to be used by the Operator when operating the LHST in salt water areas.

OPERATION IN SALT WATER AREAS

1. The LHST can ford water to a depth of 30 in. (76 cm).

2. Salt water will cause metal parts to rust and corrode. LHST must be cleaned (WP 0054 00, Cleaning Trailer) and lubricated immediately after salt water fording, or as soon as tactical situation permits. Notify Field Level Maintenance if corrosion is found.

END OF WORK PACKAGE

OPERATION IN SNOW OR ICE 0010 00

INITIAL SETUP:

Maintenance Level	References
Operator	FM 9-207
	FM 21-305
	FM 31-70
	FM 31-71
	WP 0006 00

GENERAL

The trailer is designed for use in a wide range of conditions. The paragraph in this work package provide the data and procedures to be used by the Operator when operating the trailer in snow or ice.

OPERATION IN SNOW OR ICE

CAUTION

Before operating ensure the trailer has been prepared for cold weather environment in accordance with FM 9-207. Refer to FM 31-70, FM 31-71, and FM 21-305 for additional information on operation in a cold environment with snow or ice. Failure to comply may result in damage to equipment.

NOTE

Refer to WP 0006 00, Operation in Extreme Cold, -26° F TO -65° F (-32° C TO -54° C) when operating in extremely cold environment.

Do not push trailer from rear if it becomes stuck in snow or ice. Damage to trailer could result.

1. If one or more wheels sink into snow, it may be necessary to jack up the stuck wheel(s) and insert planking or matting beneath wheel(s).

CAUTION

All snow and ice should be removed from trailer as soon as possible. Snow and ice may slow or prevent movement of equipment. Failure to comply may result in damage to equipment.

2. Remove all snow and ice build-up from trailer as soon as tactical situation permits.

3. Park in shelter when possible. If shelter is not available, park so trailer does not face into wind. Follow procedures in FM 9-207 to prevent trailer from freezing in place.

END OF WORK PACKAGE

OPERATION IN MUD 0011 00

INITIAL SETUP:

Maintenance Level	References
Operator	WP 0054 00

GENERAL

The trailer is designed for use in a wide range of conditions. The paragraphs in this work package provide the data and procedures to be used by the Operator when operating the trailer in mud.

OPERATION IN MUD

WARNING

Operating in mud causes brake linings to get covered with mud and can impair trailer braking. Dry brakes by towing trailer about 500 ft (153 m) while applying service brakes often. If adequate braking is not restored by drying brakes, notify Field Level Maintenance. Failure to comply may result in injury to personnel or damage to equipment.

CAUTION

Do not push trailer from rear if it becomes stuck in mud. Damage to trailer could result.

1. If one or more wheels is stuck in mud, it may necessary to jack up stuck wheel(s) and insert planking or matting under wheel(s).

2. Frequently clean (WP 0054 00, Cleaning Trailer), inspect, and lubricate trailer after operation in mud or as soon as tactical operation permits.

END OF WORK PACKAGE

OPERATION IN DUSTY OR SANDY AREAS 0012 00

INITIAL SETUP:

Maintenance Level	References
Operator	WP 0054 00

GENERAL

The trailer is designed for use in a wide range of conditions. The paragraphs in this work package provide the data and procedures to be used by the Operator when operating the trailer in dusty or sandy areas.

OPERATION IN DUSTY OR SANDY AREAS

WARNING

Do not straddle or drive on sides of sand mounds. Loose sand will not support trailer on steep slopes. Trailer may roll over. Failure to comply may result in serious injury or death to personnel or damage to equipment.

CAUTION

Do not push trailer from the rear if it becomes stuck in sand. Damage to trailer may result.

1. If one or more wheels sink into sand, it may be necessary to jack up the stuck wheel(s) and insert planking or matting beneath wheel(s).

2. Frequently clean (WP 0054 00, Cleaning Trailer), inspect, and lubricate trailer after operation in dusty or sandy areas or as soon as tactical operation permits.

3. If possible, park trailer out of blowing dust or sand during extended shutdown periods. If sheltered area is not available, cover and shield trailer with canvas covers (if available).

END OF WORK PACKAGE