

SOW CHANGE PROPOSAL

SOW-04-CSLE-09426A-2/1

Change 2

20 February 2004

STATEMENT OF WORK (SOW)
for the
Inspection and Repair Only As Necessary (IROAN) of the
Tractor, Full Tracked with Multi-Purpose Bucket
NSN 3805-01-315-1091

SOW Control Number SOW-04-CSLE-09426A-2/1 Change 2

Replace SOW-04-CSLE-09426A-2/1 Change 1, with SOW-04-CSLE-09426A-2/1 Change 2.

If approved, does this proposed change have the potential to have an impact on the cost or schedule?

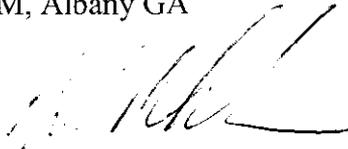
* Yes /_/ or No /X/ (Place and X in the appropriate block)

*Changes that have the potential to impact cost or schedule will be reviewed by Maintenance Directorate (MD) and an impact statement provided to SCMC. Changes that do not have the potential to impact cost or schedule may not be reviewed by MD.

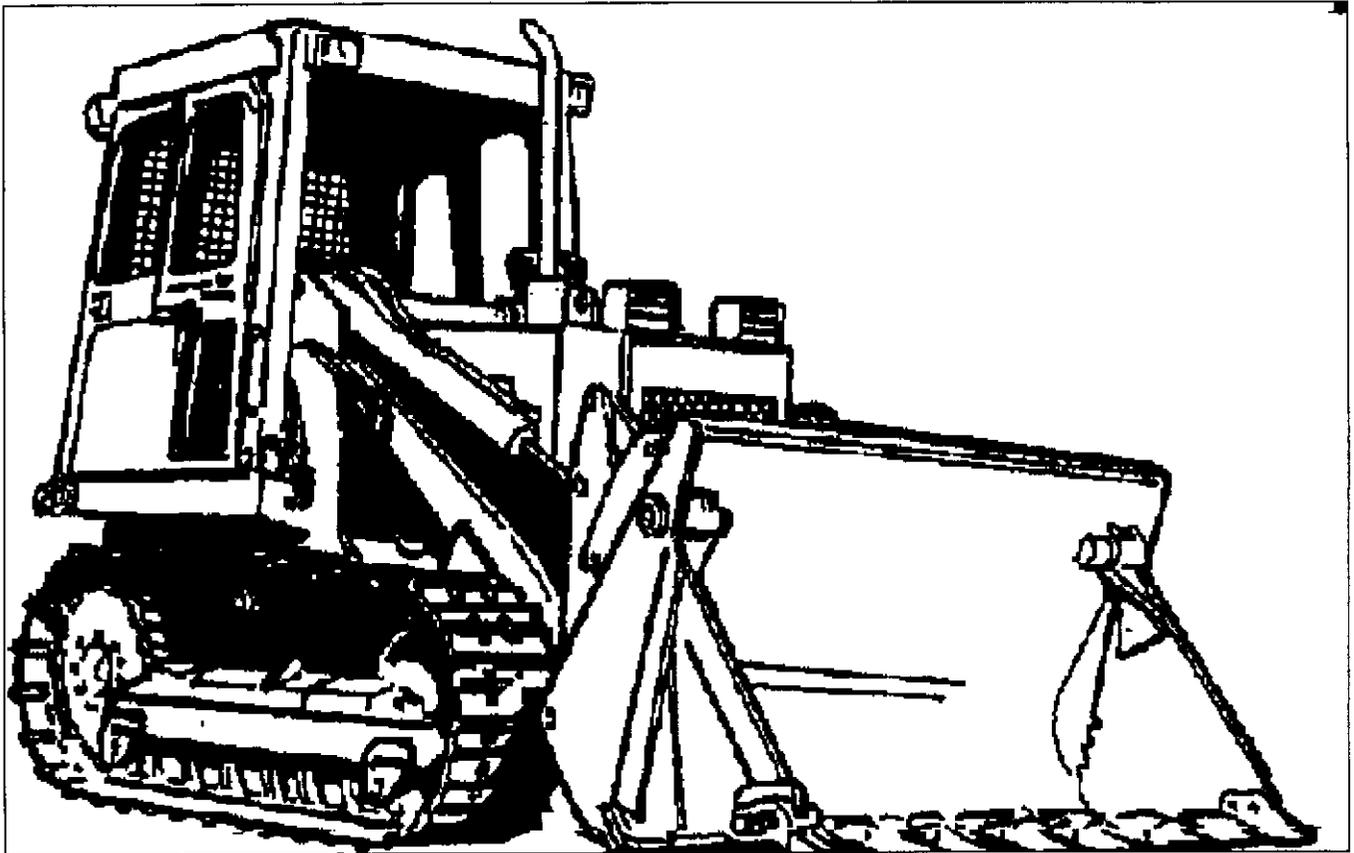
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STATEMENT OF WORK (SOW)
FOR THE
TRACTOR, FULL TRACKED
WITH MULTI-PURPOSE BUCKET
INSPECT AND REPAIR ONLY AS NECESSARY (IROAN)



NSN 3805-01-315-1091

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**STATEMENT OF WORK FOR THE IROAN
OF THE TRACTOR, FULL TRACKED
WITH MULTI-PURPOSE BUCKET
NSN 3805-01-315-1091**

1.0 SCOPE. This Statement of work (SOW), establishes, sets forth tasks, and identifies the work efforts that shall be performed by the contractor (for purpose of this SOW, Contractor is defined as the commercial or government entity performing the rebuild) in the IROAN effort of the Tractor, Full Tracked with Multi-Purpose Bucket, NSN 3805-01-315-1091 hereafter known as the Tractor, Multi-Purpose Bucket. This document contains requirements to restore the Tractor, Multi-Purpose Bucket to Condition Code "A." Condition Code A is defined as *serviceable/issuable without qualification, new, used, repaired or reconditioned material which is serviceable/issuable to all customers without limitation or restriction, including material with more than six months shelf life remaining.*

Questions related to this SOW should be addressed to Marine Corps Systems Command, Code PMM152, Bldg. 3700 Rm 310W, 814 Radford Blvd, Suite 20343, Albany Ga. 31704-0343, commercial telephone number (229) 639-6983, DSN 567-6983.

Reports required by this SOW may be duplicated and provided by the Contractor by electronic means. Microsoft Software is preferred but Contractor format may be accepted if agreed to prior to submission.

1.1 Background. IROAN is defined as "That maintenance technique which determines the minimum repairs necessary to restore equipment components and assemblies to prescribed maintenance serviceability standards by utilizing all available diagnostic equipment and test procedures in order to minimize disassembly and parts replacement."

1.2 Item Identification. The Tractor, Multi-Purpose Bucket is a diesel engine driven, full tracked tractor equipped with a hydraulically operated multi-purpose bucket and rear mounted winch.

2.0 APPLICABLE DOCUMENTS. The following documents form a part of this SOW to the extent specified. Unless otherwise specified, issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DODISS) and DoD Technical Publication System and supplement thereto which are in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be the superseding requirement.

2.1 Military Standards

MIL-STD-129

DoD Standard Practice: Military Marking For Shipment and Storage

MIL-STD-130

U.S. Military Property, Identification Marking of

MIL-STD-642	DoD Standard Practice for Identification Marking of Combat and Tactical Transport Vehicles.
MIL-STD-3003	Vehicles, Wheeled; Preparation for Shipment and Storage of

2.2 Other Government Documents And Publications

DoD 4000.25-1-M	Military Standard Requisitioning and Issue Procedures (MILSTRIP)
SL-3-09085A	Tool Kit, Special Purpose, T5 Tractor
TM-4750-15/1	Painting and Registration Marking for Marine Corps Combat and Tactical Equipment
SL-4-09426A	Repair Parts List for Loader, Scoop Type, Full Tracked
TM 09426A-25/2	Service Manual, Tractor, Full Tracked, Model MC1155E
TM 09426A-10	Operators Manual
MCO P11262.2A	Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
TM 3080-50	Corrosion Prevention and Control

Military Handbooks (For Guidance)

MIL-HDBK-61	Configuration Management Guidance
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2.3 Industry Standards

ANSI/ISO/ASQC Q9001-2000	Quality Management Systems – Requirements
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Industry Standards (For Guidance)

ANSI/EIA-649	National Consensus Standards for Configuration Management
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Copies of Military Standards and Specifications are available from the DoD Single Stock Point, Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, commercial telephone number (215) 697-2179 or DSN 442-2179, or <http://www.dodssp.daps.mil>. Copies of other government documents and publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracting Officer: Commanding General, Attn: Contracts Department (Code 891), P.O.

Drawer 43019, 814 Radford Blvd., Marine Corps Logistics Command, Albany, GA 31704-3019, commercial telephone number (229) 639-6761 or DSN 567- 6761. Copies of engineering drawings, if applicable, shall be obtained from Supply Chain Management Center, Attn: Code 566-1A, 814 Radford Blvd., Suite 20320, Albany, GA 31704-0320, commercial telephone number (229) 639-6476 or DSN 567-6476.

3.0 REQUIREMENTS

3.1 General Tasks. In fulfilling the specified requirements, the contractor shall:

- a. Provide materials, labor, facilities, missing parts, and repair parts necessary to inspect, diagnose, restore, and test the Tractor, Multi-Purpose Bucket. Upon completion of IROAN, repaired equipment shall be Condition Code "A".
- b. Provide all tools and test equipment required to test, inspect, and calibrate the Tractor, Multi-Purpose Bucket. SL-3-09085A contains a list of special purpose tools that may be required in this work effort.
- c. In-process and final on-site testing shall be witnessed by Marine Corps Systems Command (MCSC), Code PMM 152, Albany, GA representative.
- d. The contractor shall be responsible for all structural, electrical and mechanical requirements associated with the restoration of the Tractor, Multi-Purpose Bucket.

3.2 IROAN Objective and Functions. After IROAN, the Tractor, Multi-Purpose Bucket, shall have the following minimum characteristics:

- a. Reliable as per system specifications.
- b. Maintainable as per system specifications.
- c. Serviceable (Condition Code "A").
- d. All vehicle systems and components shall operate as intended.
- e. All Tractor, Multi-Purpose Bucket shall have a like new appearance.

3.3 Specific Tasks. The following tasks describe the different phases for IROAN of the Tractor, Multi-Purpose Bucket:

- Phase I Pre-Induction
- Phase II IROAN
- Phase III Inspection, Testing and Acceptance
- Phase IV Packaging, Handling, Storage and Transportation (PHS&T)

3.3.1. Phase I-Pre-Induction.

a. A pre-induction inspection analysis shall be performed for the Tractor, Multi-Purpose Bucket using the contractor diagnosis, inspection and testing techniques to determine extent of work and parts required. These findings shall be annotated on contractor owned Pre-Induction Checklist, and shall be maintained and be made available upon request to Marine Corps Systems Command, Code PMM 152, Albany, Georgia representative.

b. Test equipment shall be used to determine that assemblies and subassemblies meet prescribed reliability, performance, and work requirements. The vehicle engine shall be tested using JP-5/8 fuels. In cases when conformance to the SOW cannot be certified through existing inspection and testing procedures and by use of diagnostic equipment, the assembly shall be removed, disassembled, inspected, tested or repaired to the degree necessary to assure full conformance with this SOW.

c. Oil seal and gasket leakage. Inspection shall normally be performed during and immediately following an operational test, but not sufficient duration to allow the fluids to return to ambient temperature. The following shall be used as a guide in determining degree of oil loss:

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

Class II – Leakage of fluid great enough to form drops, but not enough to cause drops to fall from the item being checked/inspected.

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

NOTE: A Class I Leak, except Fuel System and Brake System, is an acceptable condition at any time and does not require corrective action.

NOTE: Since the Tractor, Multi-Purpose Bucket Engine and Transmission shall be totally overhauled, a Pre-Induction Analysis is not required for these assemblies.

3.3.2 Phase II – IROAN.

After pre-induction tests and inspections have been completed, IROAN of the Tractor, Multi-Purpose Bucket shall be accomplished in accordance with this SOW and the Tractor, Multi-Purpose Bucket Technical Manuals.

The following efforts shall be performed as part of the IROAN:

TM 09426A-25/2

Service Manual, Tractor, Full Tracked, Model MC1155E

a. Service and Parts Manual: The Service and Parts Manuals listed below contain repair procedures and repair parts for the complete Tractor, Multi-Purpose Bucket. The Trouble Shooting Guide contained in these manuals is to be used along with the Pre-Induction Checklist in helping identify deficiencies with the Tractor, Multi-Purpose Bucket. Repair procedures

contained in these manuals are to be used to repair deficiencies identified on the Pre-Induction Checklist.

TM 09426A-25/2 Service Manual, Tractor, Full Tracked, Model MC1155E

SL-4-09426A Repair Parts List for Loader, Scoop Type, Full Tracked

The Service and Parts Manuals listed may contain provision for corrosion control, painting, and packaging. Provisions for corrosion control, painting, and packaging is provided within this SOW and shall be the superseding requirement.

b. Detailed Mechanical Work: Tractor, Multi-Purpose Bucket received for IROAN shall be worked in accordance with the following paragraphs. All discrepancies noted on the IROAN Pre-Induction Checklist shall be repaired/replaced.

c. Hardware.

(1) Replace broken, unserviceable and/or missing hardware, including nuts, bolts, screws, washers, turn lock fasteners, safety, and one-time use items, etc., in accordance with the IROAN. Unserviceable would include any of the above that failed to function properly.

(2) Ensure proper hardware locking devices are present on all moving mechanical assemblies.

(3) Hardware normally supplied with commercial parts shall be used unless specifically prohibited.

(4) Hardware used in this IROAN shall be in accordance with existing technical publications.

d. Engine Assembly

The engine shall be rebuilt in compliance with TM-09426A-25/2. Engine oil filters, fuel/water separators are to be replaced 100 percent.

e. Fuel System

(1) Replace fuel filters 100 percent. Inspect water separators for damage, leakage, and proper operation. Clean, repair, replace separators as needed. Inspect filter and water separator, fuel lines for damage that may restrict fuel flow or that may result in leakage after short use. Fuel line fittings shall not be rounded off or be in such a condition that will prevent them from being tightened to correct torque specifications. Repair/replace procedures are found in TM 09426A-25/2.

(2) Inspect fuel tank for cracks or leakage. Repair as necessary. Inspect fuel tank screen for damage. Repair/replace as necessary. Inspect fuel sender unit for correct operation. Fuel level gauge must register equivalent to tank level. Repair/Replace as needed.

(3) Inspect metallic fuel supply lines for cracks or damage that may restrict fuel flow or may result in leakage after short use. Fuel line fittings shall not be rounded off or be in such a condition that will prevent them from being tightened to correct torque specifications. Repair/replace as necessary. Repair/replace procedures can be found in TM 09426A-25/2.

(4) Inspect and test operation of the throttle linkage both foot and hand operated. Both throttle controls shall operate as intended without binding. Foot throttle shall return to the idle position when foot is removed from accelerator pedal. Hand operated throttle control shall maintain engine throttle setting when set by operator. If either the hand or foot operated throttle system does not operate as per requirements identified in this paragraph, throttle control system is considered inoperable and requires repair or replacement. Throttle linkage adjustment shall be checked in accordance with the Throttle Linkage Adjustment procedures identified in TM 09426A-25/2.

(5) Replace fuel lift pump and pump to fuel injector fuel lines 100 percent.

f. Engine Cooling System

(1) Inspect and test cooling system by pressurizing the system 5 PSI above the pressure marked on the radiator pressure cap. Check all connections and hoses for the cooling system for leakage. Cooling System shall retain a pressure reading of 5 PSI above pressure marked on radiator cap for at least five minutes. Loss of coolant is not permitted under the provisions of this SOW.

(2) Inspect radiator for cracks, leaks, bent fins, and clogging that will prevent airflow through radiator. Clean, repair or replace radiator as required. Reverse flush, clean, and inspect radiator core 100 percent. Radiator shall be cleaned internally 100 percent by "roding out" the radiator core or by ultrasonic cleaning. Straighten bent fins that can be straightened.

(3) Inspect fan assembly for breaks, bends, and missing rivets. Inspect fan assembly for missing bolts and washers. Repair/replace fan assemblies that contains any of these deficiencies.

(4) Inspect fan shroud for breaks or cracks. Inspect fan shroud and guard for missing mounting hardware (nuts, bolts, washers, and brackets). Replace all fan shrouds that contain any of these deficiencies. Replace missing hardware.

(5) Replace hose clamps 100 percent. Replace coolant hoses 100 percent.

(6) Replace coolant. Antifreeze protection shall be to a temperature of -35 degrees Fahrenheit.

g. Engine Accessories

(1) Cold Start Assembly. Inspect and test the cold start assembly. Clean all components with suitable cleaning solvent. Inspect all tubes, electrical wires, and components for damage and wear. Cold Start Kit shall function as intended. Cold Start Kit shall be repaired of all deficiencies annotated on the Pre-Induction Checklist.

(2) Air Cleaner Assembly. Inspect air cleaner assembly for corrosion, damage and leakage. Replace the air cleaner indicator 100 percent. Repair/replace air cleaner assembly/components that contains any of the deficiencies identified in this paragraph. Replace air filters 100 percent.

(3) Alternator. Alternator shall be rebuilt 100 percent. Replace alternator drive belts 100 percent. Replace alternator drive pulley if damaged.

(4) Engine Starter. Engine Starter shall be rebuilt 100 percent.

(5) Muffler and Exhaust System. Inspect exhaust system pipes and muffler for corrosion, leaks, holes, and proper operation. Inspect exhaust mounting system for missing or broken clamps, U bolts and spacers.

h. Vehicle Electrical System. Inspect all wiring harnesses, battery cables for corrosion, bent or missing pins, and ripped or torn insulation and tie wraps. The following electrical systems shall be inspected and tested for proper operation. Components of these systems that fail to function properly shall be repaired or replaced as required.

(1) Electrical panel gauges.

(2) Instrument Panel warning lights.

(3) Instrument panel light mode select switch.

(4) Slave receptacle.

(5) All fuses, switches and circuit breakers.

(6) All wiring harness.

(7) Front and rear wiper assemblies.

(8) Inspect all vehicle lighting to include work lights, blackout lights, turn signals and reflectors. Replace light fixtures and/or lamps as required.

i. Track. The track system consists of the following assemblies. These assemblies are to be inspected and repaired/replaced under the provisions of this SOW. Inspection standards are identified in Appendix B. Repair/Replace procedures are found in TM 09426A-25/2.

(1) Track Shoes and Links. Replace track shoes or links only if excessively worn. Track shoes and links shall be replaced if they contain cracked boltholes or seals areas that are excessively worn and elongated. A wet turn can be made when pins, bushings and seals are in condition to be used again to make a seal and lubricated joint. Dry turn is not permitted under the provisions of this Sow. Replace missing tracks shoes.

(2) Track Carrier. Inspect carrier for cracks, wear and bent conditions. Repair/replace as required.

(3) Track Adjuster. Inspect and test track adjuster for proper operation. Track adjuster shall operate as intended.

(4) Idler Assembly. Inspect idler for leakage, wear, and cracks. Inspect idler to assure idler is correctly centered and adjusted. Repair, replace, or adjust as required.

(5) Sprocket. Inspect sprocket wear using wear gauge CAS-1864. Inspect sprocket for cracks and bent conditions. Inspect sprocket alignment to assure sprocket is correctly centered. Center sprocket as required.

(6) Track Rollers. Inspect roller for worn bushings, rollers, and roller assemblies. Inspect rollers for leakage. Inspect roller end caps for damage and foreign material. Rollers shall operate as intended.

(7) Recoil Housing. Inspect cover and brackets for cracks. Inspect recoil for damage or cracks. Weld cracks found in the housing cover and brackets. If damage is found in the recoil spring, do not attempt repair. Replace recoil housing assembly.

(8) Guards. Repair roller guards that are bent, broken or cracked. Replace missing guards. All guards shall be securely installed in their mounting place and shall contain no damage that will prevent their proper operation.

j. Power Train. The power train system consists of the following assemblies. These assemblies are to be inspected, repaired or rebuilt under the provisions of this SOW. The power train shall be tested using the flow meter test contained in TM 09426A-25/2. Test results shall be annotated on the checklist provided in TM 09426A-25/2. A copy of this checklist shall be provided for each Tractor, Multi-Purpose Bucket inducted for IROAN under this SOW.

(1) Charging Pump. Charging pump output should be greater than 19GPM at 275 PSI at 2000 RPM. If output is less than 19 GPM, repair/replace the charging pump. Inspect metallic and nonmetallic hydraulic lines and hoses for damage that may restrict flow or may result in rupture. Replace as required. Replace filters 100 percent. Repair/Replace procedures are found in TM 09426A-25/2.

(2) Transmission Control Valve. Repair/replace control valves that do not function as intended or does not meet required flow rate readings. Repair/replace procedures are found in TM 09426A-25/2.

(3) Torque Converter. Remove and inspect torque converter housing and torque converter. Inspect, repair/replace in accordance with TM 09426A-25/2. Replace filters 100 percent. Inspect metallic and nonmetallic hydraulic lines and hoses for damage that may resist flow or may result in rupture. Check hose and line fittings to assure they are tight and do not leak. Replace lines, hoses and fittings that are rounded off and cannot be tightened.

(4) Transmission. Transmission shall be rebuilt 100 percent. Rebuild procedures are found in TM 09426A-25/2.

(5) Final Drive. Final drives are to be removed from vehicle and perform all inspections and measurements as identified in TM 09426A-25/2. All gaskets and seals are to be replaced 100 percent. Replace any component that does not meet specifications list in TM 09426A-25/2.

(6) Transmission Controls. Inspect control rods, handles, and clevis for damage and missing components. Replace missing or broken knobs. Replace rods, handles, and clevis as required. Check control levers for proper adjustment. Adjust control levers in accordance with procedures in TM 09426A-25/2.

(7) Drive Shafts. Replace universal joints and yoke seals and retainers 100 percent. Replace as needed. Inspect slip joint and drive shaft for cracks or damage. Repair/replace as required. Repair/replace procedures are found in TM 09426A-25/2.

k. Brakes. Inspect brakes in accordance with the inspection procedures identified in TM 09426A-25/2. Repair/replace as needed. Inspect brake pedal and modulator pedal assemblies for damage and proper operation and adjustment. Adjust linkage in accordance with procedures identified in TM 09426A-25/2. Inspect parking brake assembly for proper operation and adjustment. Adjust parking brake assembly in accordance with procedures located in TM 09426A-25/2. Repair/Replace assembly as required. Replace seals 100 percent.

1. Hydraulic System. The hydraulic system consists of the following assemblies. These assemblies are to be inspected and repaired under the provisions of this SOW. The Trouble Shooting Charts contained in TM 09426A-25/2 shall assist in identifying corrective actions to repair/replace hydraulic system components. The Pump Flow Meter Test shall be conducted on each Tractor, Multi-Purpose Bucket inducted into the repair cycle under the provision of this SOW. Results of the flow meter test will be annotated on the Pump Test Sheet contained in TM 09426A-25/2.

(1) Reservoir. Service reservoir in accordance with instructions provided in TM 09426A-25/2. Replace filters 100 percent.

(2) Pump. Pump Specifications are found in TM 09426A-25/2. Test pump using the flow meter test provided in TM 09426A-25/2. Using the results of the test and the Understanding of the Results of the Test information (TM 9426A-25/2), repair/replace pump as required. If test results require pump removal for repairs, inspect pump using the inspection procedures in TM

09426A-25/2. Repair/replace as required. Repair/replace procedures are found in TM 09426A-25/2.

(3) Equipment Control Valve(s). Valve Specifications are found in TM 09426A-25/2. Inspect valve assembly in accordance with procedures identified in TM 09426A-25/2. Repair/replace as required. Repair/replace procedures are found in TM 09426A-25/2. Test the circuit relief valve and main relief valve using procedures identified in TM 09426A-25/2. Repair/replace as required.

(4) Hydraulic Cylinders. Rebuild the tilt cylinders, lift cylinders and the bucket cylinders 100 percent. Specifications are found in TM 09426A-25/2.

(5) Hydraulic Hoses and Lines. Inspect metallic and nonmetallic hydraulic lines and hoses for damage that may restrict flow or may result in rupture. Check hose and line fittings to assure they are tight and do not leak. Replace lines, hoses and fittings that are rounded off and cannot be tightened.

(6) Clam Bucket. The clam bucket shall be operational tested. Defects noted during operation shall be corrected, repaired, or replaced. The clam assembly shall contain no structural damage that will prevent proper operation of the assembly. Clam Assembly hinge bushings and pins are to be inspected for excessive wear. Replace bushings and pins as required. Replace Bucket and clam assembly cutting edges that are bent, damaged, or worn. Replace bucket teeth shanks and points (teeth) that are missing, loose, or excessively worn. Specifications are found in TM 09426A-25/2.

m. ROPS Cab. If the vehicle shows signs of a rolled over, or the ROPS cab has been in some type of accident (such as hitting an overhead object during operation or transport), inspect for damage to the ROPS cab, operators seat and seat belt, and all accessories, wiring, etc. in the ROPS cab. If damage is found to the ROPS cab, replacement of the ROPS cab is mandatory. Do not weld or try to make the ROPS cab straight. Repair or replace damaged sheet metal panels, doors, covers, and other metal items as needed. Replace sheet metal panels where corrosion has penetrated panel. Repair or replace all worn or unserviceable door hardware including hinges, door strikes, handles, and cab door window release. Replace all glass damaged from staining, cracks, breakage, and pitting. Replace missing glass panels. Replace all headliners that are damaged or not installed in its correct position. Inspect and operational test windshield wiper and washer assembly for proper operation. System shall operate as intended. Adjust blade park to specifications. Replace wiper blades 100 percent. Inspect, clean, and operational test defroster fan assembly. Defroster fan assembly shall operate as intended. Replace air filter 100 percent. Specifications for the ROPS Cab are found in TM 09426A-25/2.

n. Operator Seat. Replace cushion/seat pads if torn or contains holes larger than 3/8 inch diameter. Repair/replace seat/backs, frames and tracks that have damaged, sagging, broken springs, deteriorated frames, and tracks that do not operate properly. Replace seat belts that are torn or will not latch as intended.

o. Body Panels and Assemblies. Clean and inspect the panel and assemblies for damage, corrosion, and missing parts. Repair or replace damage sheet metal panels, doors, cover, and other metal items as needed. Replace sheet metal panels where corrosion has penetrated panel. Repair or replace all worn or unserviceable maintenance door hardware including hinges, door strikes, springs, and handles. Replace/repair all broken brackets and braces. Repairs shall be in accordance with best commercial practices.

p. Winch. The winch shall be rebuilt 100 percent. The winch wire rope assembly shall be inspected in accordance with procedures identified in MCO P11262.2A, Section 2003. Replace wire rope assemblies that do not meet these requirements. Inspect, test, and repair winch in accordance with procedures identified in TM 09426A-25/2.

q. Rust Proofing and Painting (Exterior/Interior).

(1) All vehicles shall be rust proofed in accordance with TM 3080-50.

(2) All exterior surfaces of the Tractor, Multi-Purpose Bucket shall be painted with Chemical Agent Coating (CARC) paint. Paint color shall be Desert Sand or Green 383. Color of individual vehicles will be identified by vehicle Item Manager, Supply Chain Management (Code 583-1). Albany, Georgia upon induction into the IROAN cycle.

(3) All Tractors, Multi-Purpose Bucket cabs interiors shall be painted in the existing color. This paint shall be a lead and chromate free-based paint.

r. Data Plates and Decals.

Data Plate. Each repaired Tractor, Multi-Purpose Bucket shall have an IROAN data plate affixed next to the existing data plate. The data plate shall meet the requirements of MIL-STD - 130. Replace all data plates and decals that are missing and illegible. IROAN data plates shall be prepared by the Contractor and contain the following information:

VEHICLE SERIAL NO. _____
REPAIRED IN ACCORDANCE WITH SOW-04-CLSE-09426A-2/1.
CONTRACTOR _____
DATE _____
VEHICLE HOUR METER READING AT TIME OF IROAN _____

3.3.3 Phase III - Inspection, Testing And Acceptance.

a. Inspection, testing and acceptance of the Tractor, Multi-Purpose Bucket shall be conducted in accordance with, TM09426A-25/2, MCO P11262.2A and this SOW.

b. The Contractor shall be responsible for conducting required tests and shall ensure all necessary personnel are available to complete the final acceptance. Acceptance test shall be held at the Contractor's facility. MCSC, Code PMM 152, representative(s) shall be given a minimum

of two weeks notice prior to beginning acceptance testing. The test area shall be cleared of all equipment, parts, components, etc., not required for the test.

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCSC, Code PMM 152, representative(s) may require the Contractor to repeat tests or portions thereof, if the original tests fail to demonstrate compliance with this SOW. Tractor, Multi-Purpose Bucket shall be lubricated and greased in accordance with the vehicle lubrication instruction contained within TM 09426A-10.

d. Vehicle Markings. Registration numbers and other markings shall be applied in accordance with TM 4750-15/1 and MIL-STD-642. Lifting and tie down attachments shall be identified with one-inch letters indicating "SLING POINT" or "TIE DOWN."

3.3.4 Phase IV - Packaging Handling Storage and Transportation (PHS&T)

a. The Contractor shall be responsible for preservation and packaging of item(s) being repaired under the terms of this statement of work. Items scheduled for long-term storage shall be in accordance with the Level "A" requirements of MIL-STD 3003. Items scheduled for domestic shipment, immediate use, or shipment to overseas destinations with the exception of Maritime Prepositioned Forces (MPF), shall be Level "B", Drive-on/ Drive-off. Items being prepared for overseas shipment shall have a label affixed which reads, "NOT FOR WEATHER DECK STOWAGE." Cranes scheduled for shipment to MPS shall be Level "B", MPS Modified Drive Away.

b. The Terms Drive-on/Drive-off and MPF Modified Drive Away are defined as follows:

(1) Drive-on/Drive-off: Batteries will be hot and disconnected from vehicle electrical system. Terminals and leads will be taped. Fuel tank shall be filled $\frac{1}{4}$ full of JP-5/8. The air intake system, exhaust and brake systems, drive train and gauges are to be depreserved.

(2) MPF Modified Drive Away: Batteries shall be hot and connected to vehicle electrical system. Fuel tank shall be filled $\frac{3}{4}$ full of JP-5/8. The air intake system, exhaust and brake systems, drive train and gauges are to be depreserved. Fire extinguisher bracket and seats (all) shall be installed.

c. Marking for shipment and storage shall be in accordance with MIL-STD-129.

d. The Marine Corps will provide the contractor with shipping addresses for delivery of repaired equipment. The Contractor shall be responsible for arranging for shipment of the equipment to the pre-designated site(s). The Marine Corps will be responsible for transportation costs associated with shipping the subject equipment to and from the contractor.

3.4 Configuration Management.

3.4.1 Configuration Status Accounting (CSA)

a. The Contractor shall determine the application status of approved configuration changes by visual inspections to the extent possible. Marine Corps Systems Command, Code PMM 152, Albany GA will identify the configuration changes to be inspected by furnishing a Configuration Checklist (Appendix A) to the Contractor. The Contractor shall use one checklist for each Tractor, Multi Purpose Bucket to record the inspection findings along with other required data.

b. The Contractor shall record serial numbers of the assemblies listed on the Configuration Checklist. The Contractor shall record the information on the same form that was used to record the application status of configuration changes.

3.4.2 Configuration Control. The Contractor shall apply configuration control procedures to established configuration items. The contractor shall not implement configuration changes to an item's documented performance or design characteristics without prior written authorization. If it is necessary to temporarily depart from the authorized configuration, the contractor shall prepare and submit a Request For Deviation. MIL-HDBK-61 and ANSI/EIA-649 provide guidance for preparing this configuration control document.

3.5 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM). The Management Control Activity (MCA)(Code 581-1B) will coordinate GFE/GFM requests and maintain a central control system on all government owned assets in the contractor's possession. The MCA will forward a GFE Accountability Agreement to the contractor for signature on an annual basis to establish a chain of custody and identify property responsibilities for Marine Corps assets. The contractor is to acknowledge receipt of GFM to the MCA within 15 days of receipt. This can be done by mailing a copy of the DD1348 to Materiel & Distribution Management Department, Distribution Management Branch, Management Control Activity (Code 581-1B), 814 Radford Blvd., STE 20320, Albany, GA 31704-0320, or faxing a copy to commercial telephone number (229) 639-5498 or DSN 567-5498.

3.6 Contractor Furnished Materiel (CFM). The Contractor may requisition materiel as required in the performance of the SOW through the DoD Supply System. DoD 4000.25-1-M (MILSTRIP) Chapter 11 provides guidance to contractors on the requisitioning process. The contractor's decision to utilize CFM procured from the DoD Supply System shall be based upon cost effectiveness, availability of materiel and the required completion/delivery date.

3.7 Quality Assurance Provisions. The performance of the Contractor and the quality of work delivered, material provided and documents written shall be subject to in-process review and inspection by MCSC, Code PMM 152, representative(s) during contract performance. Inspection may be accomplished at any work location. Authorized MCSC, Code PMM 152, representative(s) shall be permitted to observe the work/task accomplishment or to conduct inspections at all reasonable hours within the Contractor's normal working hours. Acceptance tests shall be held in-plant. Inspection by MCSC, Code PMM 152, representative(s) of all acceptance tests plans, materials and associated lists furnished hereunder does not relieve the contractor from any responsibility regarding defects or other failures to meet contract requirements which may be disclosed prior to final acceptance.

The contractor shall provide and maintain a Quality System that as a minimum adheres to the requirements of ANSI/ISO/ASQC Q9001-2000 Quality Management Systems – Requirements. The contractor work shall be subject to in-process reviews and inspections for compliance with Quality Systems by MCSC, Code PMM 152 representative(s). Noncompliance with procedures resulting in degraded quality of work may result in a stop-work order requiring action by the contractor to correct the work performed and to enforce compliance with quality assurance procedures or face contract termination. Notwithstanding such, MCSC, Code PMM 152, representative's inspection, it shall be the contractor responsibility to ensure that the entire system meets the performance requirements delineated and addressed in the Tractor, Multi-Purpose Bucket TM 09426A-25/2 and this SOW.

Quality assurance operations performed by the contractor shall be subject to the MCSC, Code PMM 152 representative (s) verification at any time. MCSC, Code PMM 152, representative(s) verifications can include, but shall not be limited in any matter, to the following:

a. Inspection of materials, products, assemblies, and documentation to assess compliance with quality standards.

b. Surveillance of operations to determine that quality assurance, practices, methods, and procedures are being properly applied.

c. Inspections of deliverable products to assure compliance with all requirements of the Tractor, Multi-Purpose Bucket TM 09426A-25/2, this SOW, and applicable documents used herein.

3.8 Acceptance. The performance of the contractor and the quality of work delivered, including all equipment furnished and documentation written or compiled shall be subject to in process review and inspection during performance. Inspection may be accomplished in plant or at any work site or location, and MCSC, Code PMM 152, representative(s) shall be permitted to observe the work or to conduct inspection at all reasonable hours within contractor's normal working hours. Final inspection and acceptance testing shall be conducted at the contractor facility. Final acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements. Acceptance testing for the Tractor, Multi-Purpose Bucket IROAN under the provisions of this SOW shall be accomplished in accordance with TM 09426A-25/2, MCO P11262.2A, and this SOW. Failure of the contractor to promptly correct deficiencies discovered shall be a reason for suspension of acceptance until corrective action has been made.

3.9 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by MCSC, Code PMM 152, representative(s). The contractor at no additional cost to the Marine Corps shall provide the following:

a. Develop an approach for modification or correction of all deficiencies.

b. On approval of a documented approach, the contractor shall correct the deficiencies and repeat verification until acceptable compliance with acceptance test procedures is demonstrated.

4.0 REPORTS. The following reports shall be provided to MCSC, (Code PMM 152), 814 Radford Blvd., Suite 20343, Albany, Georgia, 31704-0343.

4.1 Pre Induction Checklist. The Contractor shall provide one copy, per vehicle of the Initial Inspection Checklist for each Tractor, Multi-Purpose Bucket repaired. Contractor may use contractor owned reports however, these reports shall be modified, if necessary by MCSC, Code PMM152. The Pre-Induction Checklist shall contain, as a minimum, the vehicle National Stock Number (NSN), vehicle serial number, and address each element in paragraph 3.3.2 of this SOW. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCSC, Code PMM 152 after final acceptance of the Tractor, Multi-Purpose Bucket.

4.2 Final Inspection Checklist. The Contractor shall provide one copy, per vehicle of the Final Inspection Checklist for each Tractor, Multi-Purpose Bucket repaired. Contractor may use contractor owned reports however, these reports shall be modified, if necessary by MCSC, Code PMM152. The Final Inspection Checklist shall contain, as a minimum, the vehicle National Stock Number (NSN), vehicle serial number, and address each element in paragraph 3.3.2 of this SOW. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCSC, Code PMM 152 after final acceptance of the Tractor, Multi-Purpose Bucket.

4.3 Configuration Checklist. The Contractor shall provide one copy, per vehicle of the Configuration Checklist (Appendix A) for each Tractor, Multi-Purpose Bucket repaired. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCSC, Code PMM152, Albany, GA after final acceptance of the Tractor, Multi-Purpose Bucket.

CONFIGURATION CHECKLIST
TRACTOR, MULTI-PURPOSE BUCKET
NSN 3805-01-315-1091

Vehicle Serial Number _____

Engine Serial Number: Original Replacement

Transmission Serial Number Original Replacement

TRACK COMPONENT APPRAISAL FORM

TRACK COMPONENT APPRAISAL FORM

Reported By:			Date:
Dealer: Name and Address			
Owner: Name and Address			
Machine Information	Location of Unit:		Date Machine Delivered:
	Model:	Serial Number:	Track Component Hours:
	Hourmeter:	Actual Unit Hours:	
Mounted Equipment	Front:	Rear:	
Track Shoes	Width: <input type="checkbox"/> Open <input type="checkbox"/> Closed <input type="checkbox"/> 1 Bar Heavy Duty	<input type="checkbox"/> 2 Bar	<input type="checkbox"/> 3 Bar <input type="checkbox"/> Cast Self-Cleaning
Guides/Guards	<input type="checkbox"/> Front track guides	<input type="checkbox"/> Rear track guides	<input type="checkbox"/> Center Rockguards
Track Chain	<input type="checkbox"/> Sealed Track <input type="checkbox"/> Case Lubricated Track	<input type="checkbox"/> Case Extended Life Track	
Track Components	Does Unit Have Other Than Case Undercarriage? <input type="checkbox"/> No <input type="checkbox"/> Yes. If Yes, mark the components in the next row.		
	<input type="checkbox"/> Chains <input type="checkbox"/> Idlers <input type="checkbox"/> Sprockets	<input type="checkbox"/> Track Shoes	<input type="checkbox"/> Bottom Rollers <input type="checkbox"/> Carriers Rollers
Track Deflection	Left-Hand Side:	Right-Hand Side:	Measurement: <input type="checkbox"/> U.S. Standard <input type="checkbox"/> Metric

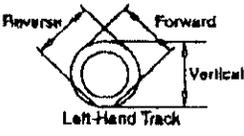
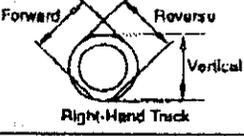
	MATERIAL CONTENT <input type="checkbox"/> Wet <input type="checkbox"/> Dry				APPLICATION TIME			
	Sand	Rock	Clay	Loam	Doze	Rip	Push	Draw
25%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
50%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
75%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
100%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CHAIN PITCH ACROSS 5 PINS



Measurement	
Left-Hand Chain	
Left-Hand Chain	
Left-Hand Chain	
Average	
Right-Hand Chain	
Right-Hand Chain	
Right-Hand Chain	
Average	

	New Dimension	Present Dimension		Recommended Wear Limit	Percent Wear Remaining	
		Left	Right		Left	Right
Grousers Height						
Link Height						
Idler Flange Height						
Track Roller	Front					
	Rail Diameter					
Carrier Roller	Front					
	Rail Diameter					

BUSHING OUTSIDE DIAMETER (O.D.) WEAR						
	New Dimension	Present Dimension			Recommended Wear Limit	Percent Remaining
		Forward	Vertical	Reverse		
 Left-Hand Track	Left-Hand Bushing #1					
	Left-Hand Bushing #2					
	Left-Hand Bushing #3					
	Average					
 Right-Hand Track	Right-Hand Bushing #1					
	Right-Hand Bushing #2					
	Right-Hand Bushing #3					
	Average					
Case Extended Life Track	Rotating Bushing		Average Outside Diameter Wear (O.D.)		Recommended Wear Limit	Percent Remaining

Recommendations:

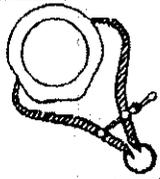


1150E AND 1150G DOZER AND 1155E LOADER WEAR CHARTS

Case Lubricated Track (C.L.T.)

16-149

Forward and Reverse Bushing Wear



Case Lubricated Track (C.L.T.)
169.6 mm (6.68 inch) pitch

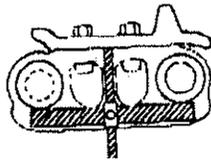
Caliper Measurement		Percent Worn	
mm	Inches	High Impact*	Low Impact*
58.67	2.31	0	0
58.42	2.30	6	5
58.17	2.29	12	10
57.91	2.28	18	15
57.66	2.27	24	20
57.40	2.26	30	24
57.15	2.25	35	28
56.90	2.24	40	32
56.64	2.23	45	36
56.39	2.22	50	40
56.13	2.21	55	44
55.88	2.20	60	48
55.63	2.19	65	52
55.37	2.18	70	56
55.12	2.17	75	60
54.86	2.16	80	64
54.61	2.15	84	68
54.36	2.14	88	71
54.10	2.13	92	74
53.85	2.12	96	77
53.59	2.11	100	80
53.34	2.10	103	82
53.09	2.09	106	84
52.83	2.08	108	86
52.58	2.07	110	88
52.32	2.06	112	90
52.07	2.05	114	92
51.82	2.04	116	94
51.56	2.03	118	96
51.31	2.02	120	98
51.05	2.01	122	100
50.80	2.00	124	102
50.55	1.99	126	104
50.29	1.98	128	106

IMPORTANT: It is recommended the pins and bushings be replaced if the wear measurement is in the shaded area. Turn pins and bushings before this point.

- * A **Low Impact** condition is when the grousers on the track shoe completely engage the ground and the ground is free of bumps.
- * A **High Impact** condition is when the grousers on the track shoe do not completely engage the ground and there is constant contact with bumps 150 mm (6 inches) or higher.

BS97N001

Vertical Bushing Wear



Case Lubricated Track (C.L.T.)
169.6 mm (6.68 inch) pitch

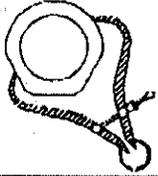
Depth Gauge Measurement		Percent Worn	
mm	Inches	High Impact*	Low Impact*
73.91	2.91	0	0
73.66	2.90	6	5
73.41	2.89	12	10
73.15	2.88	18	15
72.90	2.87	24	20
72.64	2.86	30	24
72.39	2.85	35	28
72.14	2.84	40	32
71.88	2.83	45	36
71.63	2.82	50	40
71.37	2.81	55	44
71.12	2.80	60	48
70.87	2.79	65	52
70.61	2.78	70	56
70.36	2.77	75	60
70.10	2.76	80	64
69.85	2.75	84	68
69.60	2.74	88	71
69.34	2.73	92	74
69.09	2.72	96	77
68.83	2.71	100	80
68.58	2.70	103	82
68.33	2.69	106	84
68.07	2.68	108	86
67.82	2.67	110	88
67.56	2.66	112	90
67.31	2.65	114	92
67.06	2.64	116	94
66.80	2.63	118	96
66.55	2.62	120	98
66.29	2.61	122	100
66.04	2.60	124	102
65.79	2.59	126	104
65.53	2.58	128	106

IMPORTANT: It is recommended the pins and bushings be replaced if the wear measurement is in the shaded area. Turn pins and bushings before this point.

- * A **Low Impact** condition is when the grousers on the track shoe completely engage the ground and the ground is free of bumps.
- * A **High Impact** condition is when the grousers on the track shoe do not completely engage the ground and there is constant contact with bumps 150 mm (6 inches) or higher.

BS97N002

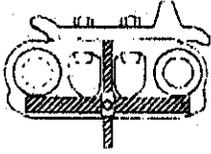
Non-Lubricated Track

Forward and Reverse Bushing Wear			
		Non-lubricated track 169.6 mm (6.68 inch) pitch	
Caliper Measurement		Percent Worn	
mm	Inches	High Impact*	Low Impact*
58.67	2.31	0	0
58.42	2.30	11	7
58.17	2.29	22	14
57.91	2.28	33	20
57.66	2.27	44	26
57.40	2.26	55	32
57.15	2.25	66	38
56.90	2.24	76	44
56.64	2.23	80	50
56.39	2.22	84	56
56.13	2.21	88	62
55.88	2.20	92	68
55.63	2.19	96	72
55.37	2.18	100	76
55.12	2.17	103	80
54.86	2.16	106	84
54.61	2.15	109	88
54.36	2.14	112	92
54.10	2.13	115	96
53.85	2.12	118	100
53.59	2.11	121	103
53.34	2.10	124	106
53.09	2.09	127	109

IMPORTANT: It is recommended the pins and bushings be replaced if the wear measurement is in the shaded area. Turn pins and bushings before this point.

* A **Low Impact** condition is when the grousers on the track shoe completely engage the ground and the ground is free of bumps.
 * A **High Impact** condition is when the grousers on the track shoe do not completely engage the ground and there is constant contact with bumps 150 mm (6 inches) or higher.

BS97N001

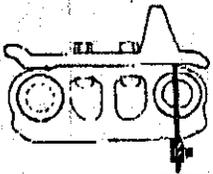
Vertical Bushing Wear			
		Non-lubricated track 169.6 mm (6.68 inch) pitch	
Depth Gauge Measurement		Percent Worn	
mm	Inches	High Impact*	Low Impact*
73.91	2.91	0	0
73.66	2.90	11	7
73.41	2.89	22	14
73.15	2.88	33	20
72.90	2.87	44	26
72.64	2.86	55	32
73.39	2.85	66	38
72.14	2.84	76	44
71.88	2.83	80	50
71.63	2.82	84	56
71.37	2.81	88	62
71.12	2.80	92	68
70.87	2.79	96	72
70.61	2.78	100	76
70.36	2.77	103	80
70.10	2.76	106	84
69.85	2.75	109	88
69.60	2.74	112	92
69.34	2.73	115	96
69.09	2.72	118	100
68.83	2.71	121	103
68.58	2.70	124	106
68.33	2.69	127	109

IMPORTANT: It is recommended the pins and bushings be replaced if the wear measurement is in the shaded area. Turn pins and bushings before this point.

* A **Low Impact** condition is when the grousers on the track shoe completely engage the ground and the ground is free of bumps.
 * A **High Impact** condition is when the grousers on the track shoe do not completely engage the ground and there is constant contact with bumps 150 mm (6 inches) or higher.

BS97N002

Track Link Wear



169.6 mm (6.68 inch) pitch

Depth Gauge Measurement		Percent Worn
mm	Inches	
104.40	4.11	0
103.89	4.09	7
103.38	4.07	14
102.87	4.05	21
102.36	4.03	27
101.85	4.01	33
101.35	3.99	39
100.84	3.97	45
100.33	3.95	50
99.82	3.93	55
99.31	3.91	60
98.81	3.89	65
98.30	3.87	70
97.79	3.85	75
97.28	3.83	79
96.77	3.81	83
96.27	3.79	87
95.76	3.77	91
95.25	3.75	94
94.74	3.73	97
94.23	3.71	100

BS97N003

Pin and Bushing Wear (Pitch Extension)

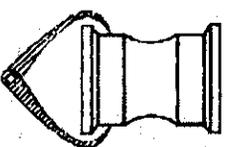
1150D Prior to P.I.N. 7310051
 1155D Prior to P.I.N. 7311001
 Non-lubricated track
 169.6 mm (6.68 inch) pitch



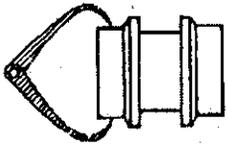
Measurement		Percent Worn
mm	Inches	
679.20	26.74	0
679.70	26.76	5
680.21	26.78	10
680.72	26.80	15
681.23	26.82	20
681.74	26.84	25
682.24	26.86	30
682.75	26.88	35
683.26	26.90	40
683.77	26.92	45
684.28	26.94	50
684.78	26.96	54
685.29	26.98	58
685.80	27.00	62
686.31	27.02	66
686.82	27.04	70
687.32	27.06	73
687.83	27.08	76
688.34	27.10	79
688.85	27.12	82
689.36	27.14	85
689.86	27.16	88
690.37	27.18	91
690.88	27.20	94
691.39	27.22	97
691.90	27.24	100
692.40	27.26	103
692.91	27.28	106
693.42	27.30	109
693.93	27.32	112
694.44	27.34	115
694.94	27.36	118
695.45	27.38	121
695.96	27.40	124

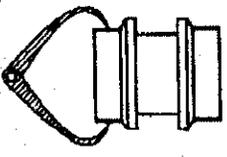
IMPORTANT: It is recommended the pins and bushings be replaced if the wear measurement is in the shaded area. Turn pins and bushings before this point.

BS97N004

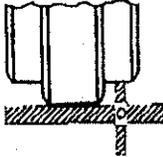
Track Roller Wear		
		169.6 mm (6.68 inch) pitch
Caliper Measurement		Percent Worn
mm	Inches	
190.00	7.48	0
189.23	7.45	6
188.47	7.42	12
187.71	7.39	18
186.94	7.36	24
186.18	7.33	29
185.42	7.30	34
184.66	7.27	39
183.90	7.24	44
183.13	7.21	49
182.37	7.18	54
181.61	7.15	59
180.85	7.12	63
180.09	7.09	67
179.32	7.06	71
178.56	7.03	75
177.80	7.00	79
177.04	6.97	83
176.28	6.94	87
175.51	6.91	91
174.75	6.88	94
173.99	6.85	97
173.23	6.82	100

H59/N005

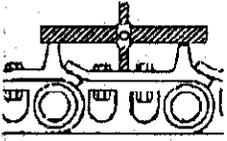
Carrier Roller Wear		
		1150G carrier rollers with flange outside diameter of 183.0 mm (7.20 inch)
Caliper Measurement		Percent Worn
mm	Inches	
150.00	5.91	0
149.61	5.89	6
149.10	5.87	12
148.59	5.85	18
148.08	5.83	23
147.57	5.81	28
147.07	5.79	33
146.56	5.77	38
146.05	5.75	43
145.54	5.73	47
145.03	5.71	51
144.53	5.69	55
144.02	5.67	59
143.51	5.65	63
143.00	5.63	67
142.49	5.61	71
141.99	5.59	75
141.48	5.57	79
140.97	5.55	82
140.46	5.53	85
139.95	5.51	88
139.45	5.49	91
138.94	5.47	94
138.43	5.45	96
137.92	5.43	98
137.41	5.41	100

Carrier Roller Wear		
		Carrier roller with flange outside diameter of 150 mm (5.90 inch) pitch
Caliper Measurement		Percent Worn
mm	Inches	
140.00	5.51	0
139.45	5.49	6
138.94	5.47	12
138.43	5.45	18
137.92	5.43	23
137.41	5.41	28
136.91	5.39	33
136.40	5.37	38
135.89	5.35	43
135.38	5.33	47
134.87	5.31	51
134.37	5.29	55
133.86	5.27	59
133.35	5.25	63
132.84	5.23	67
132.33	5.21	71
131.83	5.19	75
131.32	5.17	79
130.81	5.15	82
130.30	5.13	85
129.79	5.11	88
129.29	5.09	91
128.78	5.07	94
128.27	5.05	96
127.76	5.03	98
127.25	5.01	100

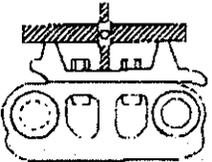
DS97N008

Idler Wear		
		
Depth Gauge Measurement		Percent Worn
mm	Inch	
19.50	0.77	0
20.07	0.79	8
20.57	0.81	16
21.08	0.83	23
21.59	0.85	30
22.10	0.87	37
22.61	0.89	44
23.11	0.91	50
23.62	0.93	56
24.13	0.95	62
24.64	0.97	68
25.15	0.99	74
25.65	1.01	80
26.16	1.03	85
26.67	1.05	90
27.18	1.07	95
27.69	1.09	100

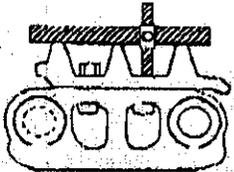
DS97N007

Grouser Wear - One Bar Track Shoe		
		
Depth Gauge Measurement		Percent Worn
mm	Inch	
52.32	2.06	0
51.31	2.02	4
50.29	1.98	8
49.02	1.93	12
48.01	1.89	16
46.99	1.85	20
45.97	1.81	24
44.70	1.76	28
43.69	1.72	32
42.67	1.68	36
41.66	1.64	40
40.39	1.59	44
39.37	1.55	48
38.35	1.51	52
37.34	1.47	56
36.07	1.42	60
35.05	1.38	64
34.04	1.34	68
33.02	1.30	72
31.75	1.25	76
30.73	1.21	80
29.72	1.17	84
28.70	1.13	88
27.43	1.08	92
26.42	1.04	96
25.40	1.00	100

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Grouser Wear - Two Bar Track Shoe		
		169.6 mm (6.68 inch) pitch
Depth Gauge Measurement		Percent Worn
mm	Inch	
29.72	1.17	0
28.70	1.13	8
27.69	1.09	16
26.67	1.05	24
25.65	1.01	30
24.64	0.97	36
23.62	0.93	48
22.61	0.89	56
21.59	0.85	64
20.57	0.81	72
19.56	0.77	80
18.54	0.73	88
17.53	0.69	100
16.51	0.65	110
15.49	0.61	120

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Grouser Wear - Three Bar Track Shoe		
		169.6 mm (6.68 inch) pitch
Depth Gauge Measurement		Percent Worn
mm	Inch	
20.57	0.81	0
19.56	0.77	10
18.54	0.73	20
17.53	0.69	30
16.51	0.65	40
15.49	0.61	50
14.48	0.57	60
13.46	0.53	70
12.45	0.49	80
11.43	0.45	90
10.41	0.41	100
9.14	0.36	110
7.62	0.30	120

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