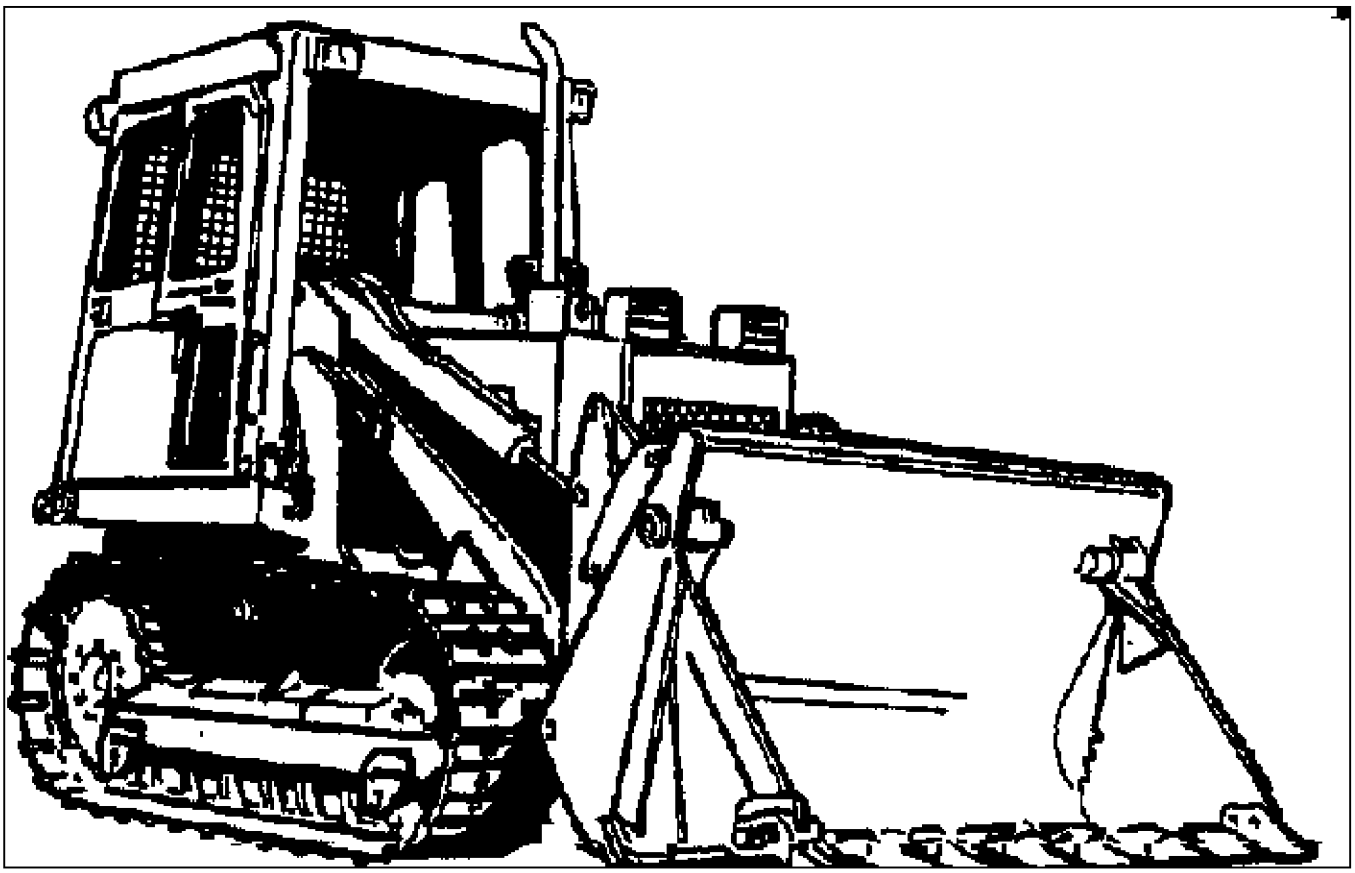
STATEMENT OF WORK (SOW)

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 and sets forth tasks and identifies the work efforts that shall be performed by the Contractor. This document contains the minimum requirements to assemble, integrate, make fully operational, calibrate, install, test and inspect the Tractor, Full Tracked, Multi-Purpose Bucket, NSN 3805-01-315-1091, Weapon System Code LD, to a serviceable condition (Condition Code "A"). Condition Code A is defined as serviceable/issuable without qualification, new, used, repaired or reconditioned material which is serviceable and issuable to all customers without limitation or restriction. This includes material with more than six months shelf life remaining. The National Stock Number (NSN) listed here shall be known as the TRACTOR, MULTI-PURPOSE BUCKET. This SOW along with the TRACTOR, MULTI-PURPOSE BUCKET Technical Manuals covers the minimum requirements applicable to the restoration of the TRACTOR, MULTI-PURPOSE BUCKET. Additionally, the TRACTOR, MULTI-PURPOSE BUCKET Technical Manuals sets forth guidelines within which the TRACTOR, MULTI-PURPOSE BUCKET shall be refurbished, repaired and restored. The basic configuration of the TRACTOR, MULTI-PURPOSE BUCKET is established by the TRACTOR, MULTI-PURPOSE BUCKET Technical Manuals that are currently in the Marine Corps inventory. All materiel (including repair parts) shall be provided by the Contractor. Installation and testing shall be performed by the Contractor. All special tools and test equipment required to perform any task on the TRACTOR, MULTI-PURPOSE BUCKET is listed in the TRACTOR, MULTI-PURPOSE BUCKET Technical Manuals, and shall be provided by the Contractor.

Questions related to this SOW should be addressed to the TRACTOR, MULTI-PURPOSE BUCKET Weapon System Manager, Life Cycle Management Center, Code 837-2, MARCORLOGBASES, Albany GA, commercial Phone (229) 639-6533 or DSN 567-6533.

1.1 **BACKGROUND.** IROAN is defined as: The maintenance technique which determines the minimum repairs necessary to restore equipment components or 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***, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto which is 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 requirements.

2.1 **MILITARY SPECIFICATIONS**.

MIL-C-81309	Preventive Compounds, Water Displacing. Ultra-Thin Film

2.2 **MILITARY STANDARDS.**

MIL-STD-129	DoD Standard Practice for Military Marking
MIL-STD-130	***DoD Standard Practice*** U.S. Military Property, Identification Marking of
MIL-STD-642	DoD ***Standard Practice*** Identification Marking of Combat and Tactical Transport Vehicle

2.3 **OTHER GOVERNMENT DOCUMENTS AND PUBLICATIONS**. The issues of those documents cited below shall be used.

ATPD 2241	Vehicles, Wheeled: Preparation For Shipment and Storage of
DoD 4000.25-1-M	MILSTRIP Manual
NAVICPINST 4491.2A	Requisitioning of Contractor Furnished Material From The Federal Supply System
MI-09062A-25/1	Procedures for Installing Retrofit Kits
MI-09062A-25/3	Installation of Fan Disconnect Switch Guard
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-25/2 Supplement 1.	Operating Procedures Manual, Simplified Test Equipment for Internal Combustion Engines Programmable.
TM 3080-34	Corrosion Prevention.

MCO P11262.2A	Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment

Military Handbooks (For Guidance Only)

MIL-HDBK-61	***Configuration Management Guidance***

2.4 **INDUSTRY DOCUMENTS**.

ANSI/ISO/ASQC Q9002-1994	Quality Systems-Model for Quality Assurance in Production, Installation, and Servicing.

Industry Standards (For Guidance Only)

ANSI/EIA-649	***National Consensus Standard for Configuration Management***

Copies of Military Specifications and Standards are available from the DOD Single Stock Point, Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (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: Commander, Attn: Contracting Officer (Code 891) Marine Corps Logistics Bases, 814 Radford Blvd., Albany, Georgia 31704-1128, commercial telephone number (229) 639-6761 or DSN 567- 6761. Copies of engineering drawings, if applicable, shall be obtained from Life Cycle Management Center, Attn: Code 851-3, 814 Radford Blvd. Suite 20320, Albany, Georgia 31704-0320, commercial telephone number (229) 639-6410 or DSN 567-6410.

3.0 **REQUIREMENTS.**

3.1 **GENERAL TASKS** In fulfilling the specified requirements, the Contractor shall render, yet shall not be limited to the following tasks:

a. Provide materials, labor, facilities, repair parts and services necessary to troubleshoot, test, diagnose, engineer, integrate, install, repair and calibrate as required to make fully operational, the TRACTOR, MULTI-PURPOSE BUCKET.

b. Conduct final-on-site testing for witness by the Weapon System Manager and/or their Representatives, (Code 837-2).

c. The Contractor shall be responsible for all structural, electrical and mechanical requirements associated with the repair and restoration of the TRACTOR, MULTI-PURPOSE BUCKET.

3.2 **IROAN OBJECTIVE AND FUNCTIONS** After IROAN, the TRACTOR, MULTI-PURPOSE BUCKET shall have as a minimum the following characteristics:

a. Reliable as per system specifications. System specifications for the TRACTOR, MULTI-PURPOSE BUCKET can be found throughout the Technical Manual (TM), and Modification Instructions listed below. Specifications are not always expressed in numbers but in some cases, specifications are expressed as an inspection. Specifications are listed with each assembly/***subassembly's, removal***, inspect, and repair procedures found in the ***Technical Manuals listed below.***

MI-09062A-25/1
MI 09062A-25/3
TM 09426A-25/2

b. Maintainable

c. Serviceable (Condition Code "A")

d. Latest Marine Corps Configuration

e. All TRACTOR, MULTI-PURPOSE BUCKET systems and components shall operate as design intended.

3.3 **SPECIFIC TASKS** The following tasks describe the different phases for the IROAN of the TRACTOR, MULTI-PURPOSE BUCKET.

Phase I	Pre-Induction (Initial Inspection)
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. The Contractor shall inspect in detail TRACTOR, MULTI-PURPOSE BUCKET transported to the Contractor for IROAN under provisions of this SOW. The Contractor shall ensure that the inspection is sufficient to determine the condition of the inspected TRACTOR, MULTI-PURPOSE BUCKET and the extent of work and repair parts required. Inspection shall include the use of test procedures identified in TM 09426A-25/2 Supplement 1. The findings of this inspection shall be annotated on the TRACTOR, MULTI-PURPOSE BUCKET Pre-Induction Inspection Checklist (Appendix A of this IROAN SOW) and shall be maintained and made available upon request by the Weapon System Manager and/or their representatives, (Code 837-2). The TRACTOR, MULTI-PURPOSE BUCKET Pre-Induction Inspection Checklist may be duplicated in ***an*** electronic database and maintained in that database. If data is selected to be provided electronically to the Weapon System Manager and/or their representatives (Code 837-2), the Data base program must be agreed to by both the Contractor and the Weapon System Manager and/or their representatives (Code 837-2).

b. Test equipment shall be used to determine that assemblies and subassemblies meet prescribed reliability, performance, and work requirements. In those 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 and repaired to the degree necessary to assure full conformance with this SOW. TRACTOR, MULTI-PURPOSE BUCKET will be operational tested 100 percent in accordance with Sections 4.1 and 4.2 of this SOW.

d. Oil seals and gaskets leakage. Evidence of lubricating or hydraulic oils passing through or around a seal is in itself not a defect; however, consideration must be given to the fluid capacity in the item being checked/inspected. Inspection shall normally be performed during and immediately following an operational test, but not sufficient duration to allow the fluids to return to ambient temperatures. The following shall be used as a guide in determine degree of oil loss:

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

A CLASS I OR II LEAK, EXCEPT FUEL SYSTEM, BRAKE SYSTEM, AND POWER STEERING SYSTEMS IS AN ACCEPTABLE CONDITION AT ANY TIME AND DO NOT REQUIRE CORRECTIVE ACTION.

3.3.2 **PHASE II - IROAN**. After pre-induction tests and inspections have been completed, repair of the TRACTOR, MULTI-PURPOSE BUCKET shall be accomplished in accordance with this SOW and the TRACTOR, MULTI-PURPOSE BUCKET TM 09426A-25/2. Deficiencies noted on the Pre-Induction Inspection Checklist during Phase I shall be repaired/replaced. Components or assemblies shall not be disassembled for replacement of mandatory parts unless that part has failed, or the component assembly wherein the part is located is disassembled for repair.

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 are to be used along with the Inspection Reports 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 Inspection Report.

TM 09426A-25/2	Service Manual, Tractor Full Tracked, Model MC1155E
SL-4-09426A	Repair Parts List for Loader, Scoop Type, Full Tracked

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 Inspection Checklist shall be repaired/replaced.

TM 09426A-25/2 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.

c. HARDWARE

(1) Replace broken, unserviceable and/or missing hardware, including nuts, bolts, screws, washers, turnlock fasteners, safety, and one time use items, etc., in accordance with the IROAN ***procedures in this SOW***. 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 ***SL-4-09426A***.

d. ENGINE ASSEMBLY.

(1) TEST PROCEDURES. Prior to initial inspection, always make visual checks to assure normal operating conditions exist (fluid levels are correct, belt tension, etc.). Engine will not be removed from the TRACTOR, MULTI-PURPOSE BUCKET unless major defects are found during the initial inspection, oil analysis and road testing. If repair is required, remove and repair per technical references in TM 09426A-25/2. Each engine assembly will be IROANed of all reported deficiencies. The engine will be detail cleaned and inspected for loose, ***damaged***, or missing parts. Special emphasis will be in place on mechanical noises which may identify internal engine damage. No unusual vibrations, excessive oil consumption, excessive exhaust smoke, leakage of exhaust gases, exhaust restrictions, loss of coolant, low engine oil pressure or engine overheating are permitted. Engine shall be tested using the Simplified Test Equipment for Internal Combustion Engines Programmable (STE/ICE-R) as applicable to TRACTOR, MULI-PURPOSE BUCKET. If engine repair/***overhaul*** is required, remove and repair per technical references shown in TM 09426A-25/2.

(2) PASS/FAIL. The engine shall be complete and contain no loose, damaged, or missing parts. Engine shall function as intended. Repaired***/Overhauled*** engines shall meet requirements identified in TM 09426A-25/2.

e. FUEL SYSTEM

(1) TEST PROCEDURES. Test the following in accordance with TM 09426A-25/2.

(a) Inspect fuel injectors' lines and injectors to assure proper operations. Injector lines shall be securely mounted in their proper place. Leakage is not permitted. Lines shall contain no damage that may restrict fuel flow to the injectors or that may result in leakage after short use. Fuel injectors shall be tested as per TM 09426A-25/2, Section 3413.

(b) Inspect fuel lift pump and pump to fuel injector pump fuel lines for proper operation. Fuel lift pump shall be securely mounted in its proper place without fuel/oil leakage. Fuel lines shall be securely mounted in their proper place without leakage. Fuel lines shall be free of damage that may restrict fuel flow or may result in leakage after short use.

(c) Inspect fuel injection pump and shutoff solenoid for proper operation. Check and adjust (if required) fuel injection pump timing in accordance with TM 09426A-25/2, Section 3412.

(d) Inspect fuel tank for cracks or leakage. Repair as necessary. Inspect fuel tank screen for damage. Repair/replace as necessary. Inspect fuel tank relief and air inlet valves for proper operation. Repair/replace as necessary. Replace/repair procedures can be found in TM 09426A-25/2, Section 3001.

(e) Inspect fuel supply lines, both metallic and nonmetallic, for cracks or damage that may restrict fuel flow or may result in leakage after short use. Repair/replace as necessary. Repair/replace procedures can be found in TM 09426A-25/2, Section 3001.

(f) Replace fuel filters 100 percent.

(g) Inspect and test operation of the throttle control linkage. Linkage contains the means to control throttle by foot or hand. Inspect all linkage for damage. Repair/replace linkage as necessary. Inspect and test throttle adjustment. Adjust as necessary. Repair, replacement, and adjustment procedures are found in TM 09426A-25/2, Section 3001.

f. COOLING SYSTEM

(1) TEST PROCEDURES.

(a) 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.

(b) Inspect radiator for cracks, leaks, bent fins, and clogging that will prevent air flow through radiator.

(c) Inspect water inlet manifold for leaks.

(d) Inspect thermostat housing for leaks.

(e) Inspect fan assembly for breaks, bends, and missing rivets. Inspect fan assembly for missing bolts and washers.

(f) Inspect water pump for leaks, cracks, and unusual noise.

(g) Inspect fan shroud for breaks or cracks. Inspect fan shroud for missing mounting hardware (nuts, bolts, washers, and brackets).

(h) Inspect water pump drive assembly for damage, looseness, worn bearings, and correct function. Inspect mounting hardware for looseness, missing, or ***damaged*** parts.

(2) PASS/FAIL

(a) Replace any hose clamps that shall not remain tight or cannot be ***tightened***.

(b) Replace gasket on water inlet manifold if leaking. If manifold is corroded to the extent that the manifold leaks even with a new gasket, replace manifold.

(c) Cooling system shall retain a pressure reading of 5 PSI above pressure marked on radiator pressure cap for at least five minutes. Loss of coolant is not permitted under the provisions of this SOW.

(d) Replace thermostat and thermostat housing gasket 100 percent. Replace all cracked and badly corroded housings.

(e) Replace fan assembly if broken or bent. Replace fan assembly if blades are missing rivets. Replace all ***missing*** nuts, bolts, and washers.

(f) Replace fan shroud if broken or shroud contains crack that, in the Contractor opinion, weakens the shroud to an extent that it may fail. Replace all missing or ***damaged*** mounting brackets, nuts, bolt, and washers.

(g) Replace water pump gasket if leaking. Replace water pump if leaks.

(h) Reverse flush, clean, and inspect radiator core 100 percent. Straighten bent fins that can be straightened. Test radiator/cooling system for pressuration. Radiator shall hold 5 PSI above pressure marked on radiator cap for five minutes without evidence of leakage or structural failure.

(i) Replace coolant. Antifreeze protection shall be to a temperature of -20 degrees Fahrenheit.

Repair/replace procedures are found in TM 09426A-25/2, Section 2455.

g. ENGINE ACCESSORIES.

(1) COLD START KIT

(a) TEST PROCEDURES. Inspect and test the cold start kit. Clean all components with suitable cleaning solvent. Inspect all tubes, electrical wires, and components for damage and wear. Repair/replace as necessary. Repair/replace procedures can be found in TM 09426A-25/2, Section 2001.

(b) PASS/FAIL. Cold Start Kit shall function as intended. Cold Start Kit shall be IROANed of all deficiencies annotated on the Initial Inspection Checklist.

Repair/***replacement*** procedures are found in TM 09426A-25/2, Section 2001.

(2) AIR CLEANER.

(a) TEST PROCEDURES. Inspect air cleaner assembly for corrosion, damage and leakage. Inspect the air cleaner indicator for proper function.

(b) PASS/FAIL. Repair/replace air cleaner assembly/components as required. Replace air filters 100 percent. Repair/replace procedures are found in TM 09426A-25/2, Section 2001.

(3) MUFFLER.

(a) TEST PROCEDURES. Inspect exhaust system pipes and muffler for corrosion, leaks, holes, and proper operation. Inspect exhaust mounting system for missing brackets, clamps, U bolts, and spacers.

(b) PASS/FAIL. Exhaust pipes and muffler shall contain no excessive corrosion, leaks, or holes. Exhaust system shall operate as designed. Missing or loose mounting brackets, clamps, U bolts, or spacers are not permitted. All exhaust mounting hardware shall be in place and functional. Replacement procedures are found in TM 09426A-25/2, Section 2001.

(4) MECHANICAL INDICATORS AND GAUGES.

Inspect and test indicators and gauges in accordance with procedures in TM 09426A-25/2, Section 4004. Replace indicators and gauges that do not meet requirements. Replace indicators and gauges that are broken or cannot be read.

h. ALTERNATOR.

(1) Test alternator using specification provided in TM 09426A-25/2, Section 4002. Repair/replace alternators that do not meet or cannot be adjusted to these specifications.

(2) Replace alternator drive belt 100 percent. Assure belt tension is set at 50 lbs maximum using a belt tension gauge.

(3) Replace alternator drive pulley if damaged.

Adjustments, Repair, and ***replacement*** procedures are founded in TM 09426A-25/2, Section 4002.

i. ENGINE STARTER.

(1) Test engine starter and solenoid using the Starter and Starter Solenoid Test provided in TM 09426A-25/2, Section 4002 to determine operational condition. Test Delco-Remy Starter and Starter Solenoid operation performance using test procedures in TM 09426A-25/2, Section 4009. Repair/replace engine starter and starter solenoids as required.

j. ELECTRICAL SYSTEM.

(1) TEST PROCEDURES. Inspect all wiring harnesses, battery cables for corrosion, bent or missing pins, and ripped or torn insulation and tie wraps. The following electrical systems should be inspected and tested for proper operation.

(a) Electrical Panel Gauges and hour meter.

(b) Instrument Panel Warning Lights.

(c) Instrument Panel Light Mode Selection Switch.

(d) Slave Receptacle.

(e) All switches, fuses and circuit breakers.

(f) All wiring harnesses.

(g) Front and Rear wiper assemblies.

(h) Air Conditioner assembly.

(i) Inspect the headlights, blackout lights, turn signals, rear composite lights, flood lights, reflectors, and instrument panel lights for cracks, corrosion, moisture, broken and blown bulbs.

(2) PASS/FAIL. Repair/Replace all missing and bent pins. Repair of insulation less than four inches in length may be accomplished using electrical tape. Tears or rips in excess of four inches shall require installation of new conduit. Corrosion shall be removed from components. Upon removal of corrosion, if component does not function properly, replace component. Replace all damaged battery cables. Replace any missing or damaged tie wraps.

(a) Replace any electrical gauge or switch that does not function properly after assuring that the sending unit is not defective. Replace hour meter if nonfunctional.

(b) Replace any wiring that is frayed or broken. Correct moisture in the lighting system by replacing the light cover gasket.

(c) Replace any electrical switch that isn't working properly.

(d) Replace all relays and circuit breakers that are not functioning properly.

(e) Replace any headlights, blackout lights, turn signals, flood lights, side marker lights reflectors, and instrument panel lights that are blown out or broken.

(f) Repair/Replace front/rear wiper assemblies if they do not operate as intended.

(g) Repair/Replace nonfunctional air conditioner and air conditioner components as required.

k. TRACK. The track system consists of the following assemblies. These assemblies are to be inspected and repaired under the provisions of this SOW.

(1) Lubricated Track. Replace track shoes or links only if excessively worn, cracked or bolt holes or seal areas that are excessively worn or 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 track shoes. Repair/replace procedures are ***found*** in TM 09426A-25/2, Section 5504. When to turn bushings information is provided on pages 5504-11 through 5504-15.

(2) Track Frame and Suspension. Inspect frame for cracks, wear and bent condition. Repair/replace as required. Repair/replace procedures are found in TM 09426A-25/2, Section 5506.

(3) Track Adjuster. Inspect and test track adjuster for proper operation. Track adjuster shall operate as intended. Repair/replace as required. Repair/replace procedures are found in TM 09426A-25/2, Section 5507.

(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. Repair, replace, and adjustment procedures can be found in TM 09426A-25/2, Section 5508.

(5) Sprocket. Inspect sprocket wear using wear gauge CAS-1864. Inspect sprocket for cracks and bent conditions. Repair/replace as required. Inspect sprocket alignment to assure sprocket is correctly centered. Center sprocket as required. Repair, replace, and centering procedures are found in TM 09426A-25/2, Section 5509.

(6) Carrier/Track Rollers. Inspect rollers for worn bushing, rollers, and roller assemblies. Inspect rollers for leakage. Inspect roller end caps for damage and foreign material. Rollers shall operate as intended. Repair/replace rollers as required. Repair/replace procedures are found in TM 09426A-25/2, Sections 5510 for Carrier Rollers and Section 5511 for Track Rollers.

(7) Recoil Housing. Inspect cover and brackets for cracks. Inspect recoil for damage or cracks. Weld all cracks found in the housing cover and brackets. If damage is found in the recoil spring, do not attempt repair. Replace recoil housing assembly. Repair/replace procedures are found in TM 09426A-25/2, Section 5500.

(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.

l. POWER TRAIN. The power train system consists of the following assemblies. These assemblies are to be inspected and repaired under the provisions of this SOW. The Transmission/Powertrain shall be tested using the flow meter test contained in Section 6002 of TM

09426A-25/2. Test results will be annotated on the check sheet found in Section 6002-14 of TM 09426A-25/2. A copy of the check sheet will be provided for each TRACTOR, MULI-PURPOSE BUCKET inducted for IROAN under this SOW.

(1) Charging Pump. Charging pump output should be greater than 19 GPM 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 resist flow or may result in rupture. Repair/replace as required. Replace suction filters 100 percent. 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. Repair/replace procedures are found in TM 09426A-25/2, Section 6005.

(2) Transmission Control Valve. Required flow rates are identified in Section 6002-11 of ***TM 09462A-25/2***. 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, Section 6007.

(3) Torque Converter. Remove and inspect torque converter housing and torque converter. Inspect, repair/replace in accordance with TM 09426A-25/2, Section 6010.
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. Inspect transmission housing for cracks. Repair as required. Repair/replace transmission using the results of the transmission flow test as guidance. Track Speed and Direction Clutches and Range Clutches readings will determine requirement for transmission removal. Understanding results of test can be found in Section 6002-11 through 6002-12 of TM 09426A-25/2. If flow test readings require transmission to be ***removed*** for repair, inspect in accordance with the inspection procedures identified in Section 6012-14 of TM 09426A-25/2. Repair/replace as needed. 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. Repair/replace procedures are found in TM 09462A-25/2, Section 6016.

(5) Final Drive. Inspect final drive housings for cracks and leakage. Inspect final drives for damage that will prevent proper operation and may result in failure of the final drive assembly. Repair as needed. If transmission is removed for repairs, remove final drives also. Inspect final drives after removal by using the inspection procedures identified in TM 09426A-25/2, Section 6017-6. Repair/replace as needed. Repair/replace procedures can be found in TM 09426A-25/2, Section 6017.

(6) Transmission Controls. Inspect control rods, handles, 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, Section 6018.

(7) Drive Shafts. Inspect universal joints for excessive wear or damage. 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, Section 6021.

m. BRAKES. Inspect brakes in accordance with the inspection procedures identified in Section 7001-16 of 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 Section 7001-17 of TM 09426A-25/2. Inspect parking brake assembly for proper operation and adjustment. Adjust parking brake assembly in accordance with procedures located in Section 7001-20 of TM 09426A-25/2. Repair/Replace assembly as required.

n. 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, Section 8002 will assist in identifying corrective actions to repair/replace hydraulic system components. The Pump Flow meter Test will 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, Section 8002-23.

(1) Reservoir. Service reservoir in accordance with instructions provided in Section 8002-6 of TM 09426A-25/2. Replace filters 100 percent.

(2) Pump. Pump Specifications are ***found*** in TM 09426A-25/2, Section 8005-2. Test pump using the flow meter test provided in TM 09426A-25/2, Section 8002-18 through 8002-20. Using the results of the test and the Understanding of the Results of the Test information (TM 9426A-25/2, Section 8002-20), repair/replace pump as required. If test results require pump removal for repairs, inspect pump using the inspection procedures in TM 09426A-25/2, Section 8005-5. Repair/replace as required. Repair/replace procedures are found in TM 09426A-25/2, Section 8005.

(3) Equipment Control Valve(s). Valve Specifications are ***found*** in Section 8007-2 of TM 09426A-25/2. Inspect valve assembly in accordance with procedures identified in Section 8007-2 of TM 09426A-25/2. Repair/replace as required. Repair/replace procedures are found in TM 09426A-25/2, Section 8007-7 through 8007-68. Test the circuit relief valve and main relief valve using procedures identified in Section 8002-21 and 8021-22 of TM 09426A-25/2. Repair/replace as required.

(4) Selector Valve. Inspect selector valve in accordance with procedures identified in Section 8021-4 of TM 09426A-25/2. Repair/replace as required. Repair/replace procedures are ***found*** in TM 09426A-25/2, Section 8021-4 through 8021-8.

(5) Cylinders. Specifications are found in Section 8090-3 of TM 09426A-25/2. Inspect the lift cylinder, bucket cylinder, and clam cylinder for damage and proper operation. Wiper rings shall not be replaced for cosmetic purposes only. Hairline cracks, common weather surface cracks, slight abrasions on the wiper rings are not justification for the rings to be replaced and the cylinders rebuilt under the IROAN concept and the provisions of this SOW. Wiper rings shall not be broken or loose. During the Tractor, Multi-Purpose Bucket Pre-induction inspection and final acceptance

inspection, wiper rings must demonstrate correct functionality or be considered as failed. Wiper rings will be replaced 100% during hydraulic cylinder rebuild. If cylinders are removed for repair, inspect and repair cylinders using the inspection procedures identified in Section 8090-40 of TM 09426A-25/2.

(6) Hydraulic Hoses and Lines. 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.

o. Mounted Equipment. The mounted equipment consists of the following assemblies. These assemblies are to be inspected and repaired under the provisions of this SOW.

(1) Loader. The TRACTOR, MULTI-PURPOSE BUCKET is equipped with the clam bucket. The following assemblies are to be inspected and repaired or adjusted as required under the provision of this SOW.

(a) 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.

(b) Bucket Hydraulic System. Inspect and operational test the bucket hydraulic system. Repair/replace defective components. Inspect bucket hydraulic cylinders, line, and hoses. Hydraulic cylinders shall function as designed. 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.***

(c) Return to Dig System. Inspect and operational test the Return to Dig System. Adjust, repair, and replace system components as required. Adjustment procedures are located in TM 09426A-25/2, Section 9010-5.

(d) Loader Frame. Inspect loader frame for structural damage that will prevent proper operation. Repair/replace as required. Inspect all bushings and pins for excessive wear. Replace as required. Inspect and operational test the loader assembly hydraulic system. Repair/replace defective components. Inspect loader hydraulic cylinders, line, and hoses. Hydraulic cylinders and control valves shall function as designed. 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.***

(e) Control Lever Installation. Inspect and operational test the control level assembly. Repair/replace defective components as required. Replace missing, cracked, broken, or loose control handle knobs. Replace bushings, ball joints, and control links that are excessively worn.

(f) Counterweights. Inspect counterweight to assure counter is securely fastened to the vehicle.

(2) 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.
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.

(3) 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.

(4) Winch.

Inspect and operational test the winch assembly. The Winch Troubleshooting Guide is located in TM 09426A-25/2, Section 9300-15. The Winch assembly shall operate free of any trouble identified in the Troubling Shooting Guide. 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.

(5) 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. RUST PROOFING AND PAINTING (Exterior/Interior).

All vehicles shall be rust proofed as required. Rust proofing shall be in accordance with the following procedures.

(1) Clean area with either steam or high-pressure water to remove dirt and loosen corrosion.

(2) Treat affected (corroded) areas with phosphoric fog.

(3) Re-clean in accordance to procedures in paragraph (1) above.

(4) Apply MIL-C-81309 TYPE I, a water displacing corrosion inhibitor, to the affected areas.

(5) Prime and paint per latest edition of TM 4750-15/1.

Procedures for corrosion prevention and control are in accordance with TM 3080-34.

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 TRACTOR, MULTI-PURPOSE BUCKET will be identified by the Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 and/or their representatives upon induction into the IROAN cycle.

q. DATA PLATES AND DECALS. Each IROANed TRACTOR, MULTI-PURPOSE BUCKET shall have an IROAN data plate affixed next to the existing vehicle data plate after vehicle has completed the repair cycle. The data plate shall meet the requirements of MIL-STD-130 and TM 4750-15/1. The IROAN data plate shall contain the following information:

VEHICLE SERIAL NO._____
REPAIRED IN ACCORDANCE WITH SOW-03-837-2-09426A-2/1.
CONTRACTOR FACILITY_____
DATE_____.
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 provisions of 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 tests shall be held at the Contractor's facility. The Weapon System Manager, MARCORLOGBASES, Albany, Code 837-2 and/or their representatives shall be given a minimum of two weeks notice prior to beginning acceptance testing. The test area shall be set up with all safety consideration incorporated (test area clearly defined, limit access to unauthorized vehicle and foot traffic, etc.).

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. The Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 and/or their representatives may require the Contractor to report tests or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

d. Acceptance testing on all TRACTOR, MULTI-PURPOSE BUCKET repaired under the provisions of this SOW shall be accomplished in accordance with TM 09426A-25/2

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

f. Instruction Plates. The TRACTOR, MULTI-PURPOSE BUCKET shall be equipped with instruction plates suitably located, describing any special or important procedures to be followed in operating and servicing the equipment. Plates shall be of a material which will last and remain legible for the life of the equipment, and shall be securely affixed thereto with nonferrous screws, rivets or bolts of not less than 1/8 inch diameter.

NOTE

Reading of hour meters that require replacement during the IROAN are to be recorded as information to be included in the record jacket of that vehicle. The vehicle record jacket is also to be annotated that these components were replaced during the IROAN and the reading annotated on the IROAN data plate is that of the hour meter that required replacement.

g. RECORD JACKET: All major equipment or components serial numbers that are replaced during the IROAN are to be identified by the Contractor for entry in the record jacket of the TRACTOR, MULTI-PURPOSE BUCKET (This include engines, transmissions, etc.). Information will list the TRACTOR, MULTI-PURPOSE BUCKET serial number, Name of equipment/component(s) replaced, serial number of deficiency equipment/component(s), serial number of replacement equipment/component(s), and if the equipment/component(s) is new or rebuilt.

3.3.4 PHASE IV – PACKAGING, HANDLING, STORAGE, AND TRANSPORTATION (PHS&T).

a. The Contactor shall be responsible for preservation and packaging of items 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 ***ATPD 2241***. Items scheduled for domestic shipment, immediate use, or shipment or 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." Items scheduled for shipment to ***MPF*** shall be Level B, MPF 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 ¼ full ***of JP5/8***. 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 filled ¾ full ***of JP5/8***. 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 shall be in accordance with MIL-STD-129.

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

3.4 CONFIGURATION MANAGEMENT

3.4.1 CONFIGURATION STATUS ACCOUNTING (CSA).

a. The following approved Modification Instructions shall be applied during Phase II of the IROAN process:

MI-09062A-25/1 Procedures for Installing Retrofit Kits

MI-09062A-25/3 Installation of Fan Disconnect Switch Guard

b. The Contractor shall determine the application status of approved configuration changes by visual inspections to the extent possible. The Weapon System Manager MARCORLOGBASES Albany, Code 837-2 will identify the configuration changes to be inspected by furnishing a Configuration Inspection Checklist (Appendix C) to the Contractor. The Contractor shall use one Configuration Inspection Checklist for each TRACTOR, MULTI-PURPOSE BUCKET inducted in the IROAN cycle to record inspection findings along with other required data.

c. The Contractor shall record serial numbers of the assemblies listed on the Configuration Inspection 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 (paragraph 4.3 and Table 4-9) and ANSI/EIA-649 (paragraph 5.3.4) provide guidance for preparing this configuration control document.

3.5 GOVERNMENT FURNISHED EQUIPMENT (GFE)/GOVERNMENT FURNISHED MATERIEL (GFM).

GFE is government owned equipment authorized by contract for use by a commercial or Government contractor. It is neither consumed during production ***nor*** incorporated into any product. GFM is materiel furnished to a contractor that will be consumed during the course of production or incorporated into the product being manufactured/remanufactured under a contract/statement of work. In the event the Marine Corps does have GFE/GFM requirements the Management Control Activity (MCA/Code 827-2), Marine Corps Logistics Bases, Albany, Georgia, will coordinate required GFE and will maintain a central control on Marine Corps assets in the Contractor's possession. The MCA will forward a GFE Accountability agreement to the Contractor Facility for signature to establish a chain of custody and property responsibilities for Marine Corps assets.

3.6 CONTRACTOR FURNISHED MATERIEL (CFM).

The Marine Corps has adopted the Navy's procedures regarding Contractor Furnished Materiel (NAVICPINST 4491.2A). In the event that Contractor Furnished Materiel is required for repair parts, the contractor shall requisition through the DOD Supply System. DOD 4000.25-1-M, (MILSTRIP) Chapter 11 authorizes contractors to requisition through the DOD Supply System.

3.7 QUALITY ASSURANCE PROVISIONS.

The performances of the Contractor and the quality of work delivered, material provided and documents written shall be subject to in-process review and inspection by the Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 and/or their representatives during contract performance. Inspection may be accomplished at any work location. Authorized Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 representatives shall be permitted to observe the work/task accomplishment or to conduct inspections at all reasonable hours within contractor normal working hours. Acceptance tests shall be held in-plant. Inspection by Weapon System Manager MARCORLOGBASES Albany, Code 837-2 and/or their representatives 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 government/government contractor will not be subject to surveillance if they hold a 2nd or 3rd party certification that they are either qualified or certified as ISO-9002 compliant. The discovery of non-conforming product or service shall lead to the government/government oversight listed above until they are requalified or re-certified by a 2nd or 3rd party auditing service.

The Contractor shall provide and maintain a Quality System that as a minimum, adheres to the requirements of ANSI/ISO/ASQC Q9002-1994 Quality Systems - Model for Quality Assurance in Production, Installation, and Servicing. The Contractors work shall be subject to in-process reviews and inspections for compliance with Quality Systems by Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 and/or their representatives. 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 Weapon System Manager,

MARCORLOGBASES Albany, Code 837-2 and/or their 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.

Quality assurance operations performed by the Contractor shall be subject to the Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 and/or their representatives' verification at any time. The Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 and/or their representatives' 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, this SOW, and applicable documents used herein.

d. Failure of the Contractor to promptly correct deficiencies discovered, shall be a reason for suspension of acceptance until corrective action has been made.

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 Marine Corps Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 and/or their representatives shall be permitted to observe the work or to conduct inspection at all reasonable hours within the contractor facilities normal working hours. Final inspection and acceptance testing shall be conducted at the Contractor Facility. Finally acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements.

The TRACTOR, MULTI-PURPOSE BUCKET IROANED under the provisions of this SOW shall be accomplished in accordance with TM 09426A-25/2, TRACTOR, MULTI-PURPOSE BUCKET Final Inspection Checklist (Appendix B), and provisions of this SOW.

3.9 **REJECTION**

Failure to comply with any of the specified requirements listed herein shall be reason for rejection by Marine Corps Weapon System Manager, MARCORLOGBASES Albany, Code 837-2 and/or their representative. The Contractor shall, at no additional cost to MARCORLOGBASES Albany Georgia, 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 the Weapon System Manager and/or their representative. Reports shall be forward to: ATTN: Weapon System Manager (Code 837-2), 814 Radford Blvd, Marine Corps Logistic Bases, Albany Ga., 31704-1128.

4.1 Initial Inspection Checklist. The Contractor shall provide one copy, per vehicle of the Initial Inspection Checklist for each TRACTOR, MULTI-PURPOSE BUCKET IROANed. These documents shall be available during final acceptance testing or upon request. One copy of each document shall be provided to MARCORLOGBASES, Albany, Georgia, Code 837-2 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 IROANed. The report shall be available for review during the final acceptance testing or upon request. One copy of each document shall be provided to MARCORLOGBASES, Albany, Georgia, Code 837-2 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 for each TRACTOR, MULTI-PURPOSE BUCKET IROANed. The report shall be available for review during the final acceptance testing or upon request. One copy of each document shall be provided to MARCORLOGBASES, Albany, Georgia, Code 837-2 after final acceptance of the TRACTOR, MULTI-PURPOSE BUCKET.

INITIAL INSPECTION CHECKLIST
FOR TRACTOR, FULL TRACKED WITH MULTI-PURPOSE BUCKET

Vehicle Serial Number _____.
Vehicle Hours _____.

TRACTOR, FULL TRACKED, WITH MULTI-PURPOSE BUCKET. If not applicable, mark N/A in Remarks Section.	SAT	MISSING	SERVICE	ADJUST	REPAIR	REPLACE	MODIFY	REMARKS
1. **Engine Assembly** Condition Operation Leakage **Mounting** Screws Washers Nuts **Paint** Spec. Conformance Coverage **Lubrication** Application and Type								
2. **Fan and Alternator Belts** Condition								
3. **Engine Coolant Lines** Condition Leakage **Mounting** Clamps								
4. **Fuel System** Condition Leakage Fittings **Mounting** Clamps and Bolts **Components** Injector and Injector Lines Fuel Lift Pump Injector Pump Fuel Tank Supply Lines								
5. **Engine Cooling System** Condition								

Leakage Clamps and Fittings **Components** Radiator Water Inlet Manifolds Thermostat Housing Fan Assembly Water Pump Fan Shroud and Guards								
6. **Engine Accessories** **a. Cold Start Kit** Condition Lines and Hoses Mounting **b. Air Cleaner Assembly** Condition Mounting Hoses **c. Muffler** Condition Mounting **d. Mechanical Indicators and Gauges.** Condition Operational Inspected and Test as per TM 09426A-25/2, Section 4004								
7. **Alternator** Condition Operation Mounting Tested as per TM 09426-25/2 Section 4002								
8. **Engine Starter** Condition Operation Mounting Tested as per TM 09426-25/2 Section 4002 □								
9. **Electrical System** Condition Operation Mounting **Components**								

Panel Gauges Warning Lights Light Mode Select Switch Slave Receptacle Switches Fuses Circuit Breakers Wiring Harnesses Windshield Wiper Assembly Vehicle lights/work lights								
10. **Track** Condition Operation **Major Components** **a. Lubricated Track** Condition Operation **b. Frame and Suspension** Condition Operation **c. Track Adjuster** Condition Operation **d. Idler Assembly** Condition Operation Correctly Centered **e. Sprocket** Condition Operation Correctly Centered **f. Carrier/Track Rollers** Condition Operation Mounting Leakage **g. Recoil Housing** Condition Operation **h. Guards** Condition Mounting								
11. **Power Train** Operation Condition Tested as per TM 09426A-25/2, Section 6002								

Major Components **a. Charging Pump** Condition Operation Hoses and Lines Leakage **b. Transmission Control** Valve Condition Operation Leakage **c. Torque Converter** Operation Condition Hose and lines Leakage **d. Transmission** Condition Operation Hoses and Lines Leakage Tested as per TM 09426A-25/2 Section 6002 **e. Final Drives** Condition Operation Leakage **f. Transmission Controls** Operation Condition Adjustment **g. Drive Shafts** Condition Operation Mounting								
12 **Brakes** **a. Service Brakes** Operation Condition Linkage Adjustment Tested as per TM 09426A-25/2 Section 7001 **b. Parking Brake** Operation Condition Linkage Adjustment								

13 **Vehicle Hydraulic System** Condition Operation Leakage Hoses and Lines **Major Components** **a. Reservoir** Condition Leakage **b. Pump** Condition Operation Leakage Test as per TM 09426A-25/2, Section 8002 **c. Equipment Control** Valves Condition Operation Leakage Inspected as per TM 09426A-25/2, Section 8007. Relief valves tested as per TM 09426A-25/2, Sec 8002-21 and 8021-22 **d. Selector Valve** Condition Operation Leakage Inspected as per TM 09426A-25/2, Section 8021-4 **e. Hydraulic Cylinders** Condition Operation Leakage bushings **f. Hydraulic Hoses and Lines** Condition Leakage clamps								
14 Mounted Equipment **a. Loader** Condition Operation								

Mounting **Loader Major Components** **1. Clam Bucket** Condition Operation Mounting **2. Bucket Hydraulic Sys** Condition Operation Leakage Hose & Lines Cylinders **3. Return To Dig Assy.** Condition Operation Adjustment **4. Loader Frame** Condition Mounting Hydraulic Hoses &Lines Leakage **5. Control Lever Installation** Condition Mounting **6. Counterweights** Mounting **b. ROPS Cab** Condition **c. Operator Seat** Condition Operation **d. Winch** Operation Condition **e. Body Panel & Assemblies** Condition								
15 Vehicle Paint Condition Coverage								
16 Vehicle Data Plates Condition Mounting								

FINAL INSPECTION CHECKLIST
FOR TRACTOR, FULL TRACKED WITH MULTI-PURPOSE BUCKET

Vehicle Serial Number _____.
Vehicle Hours _____.

TRACTOR, FULL TRACKED WITH MULTI-PURPOSE BUCKET. If not applicable, mark N/A in Remarks Section.	**SAT**	**SERVICE**	**TESTED**	**LUBRICATED**	**UNSAT**	**REMARKS**
1. **Engine Assembly** Condition Operation Leakage **Mounting** Screws Washers Nuts **Paint** Spec. Conformance Coverage **Lubrication** Application and Type Level **Oil Filters Replaced 100 Per Cent _____ Y _____ N**	☐					
2. **Fan and Alternator Belts** Replaced 100 percent __ Y ___N						
3. **Engine Coolant Lines** Condition Leakage **Mounting** Clamps						
4. **Fuel System** Condition Leakage Fittings **Mounting** Clamps and Bolts **Components** Injector and Injector Lines						

Fuel Lift Pump Injector Pump Fuel Tank Supply Lines **Fuel Filters Replaced 100 Per cent. ____ Y _____ N**						
5. **Engine Cooling System** Condition Leakage Clamps and Fittings **Components** Radiator Water Inlet Manifolds Thermostat Housing Fan Assembly Water Pump Fan Shroud and Guards						
6. **Engine Accessories** **a. Cold Start Kit** Condition Lines and Hoses Mounting **b. Air Cleaner Assembly** Condition Mounting Hoses **Air Filters Replaced 100 Per Cent. ____ Y _____ N** **c. Muffler** Condition Mounting **d. Mechanical Indicators and Gauges.** Condition Operational **Inspected and Test as per TM 09426A-25/2, Section 4004**						
7. **Alternator** Condition Operation Mounting **Tested as per TM 09426-25/2 Section 4002**						
8. **Engine Starter** Condition Operation						

Mounting **Tested as per TM 09426-25/2 Section 4002**						
9. **Electrical System** Condition Operation Mounting **Components** Panel Gauges Warning Lights Light Mode Select Switch Slave Receptacle Switches Fuses Circuit Breakers Wiring Harnesses Windshield Wiper Assembly Vehicle lights/work lights						
10. **Track** Condition Operation **Major Components** **a. Lubricated Track** Condition Operation **b. Frame and Suspension** Condition Operation **c. Track Adjuster** Condition Operation **d. Idler Assembly** Condition Operation Correctly Centered **e. Sprocket** Condition Operation Correctly Centered **f. Carrier/Track Rollers** Condition Operation Mounting Leakage **g. Recoil Housing** Condition Operation						

h. Guards Condition Mounting						
11. **Power Train** Operation Condition **Tested as per TM 09426A-25/2, Section 6002** **Major Components** **a. Charging Pump** Condition Operation Hoses and Lines Leakage **b. Transmission Control** Valve Condition Operation Leakage **c. Torque Converter** Operation Condition Hose and lines Leakage **d. Transmission** Condition Operation Hoses and Lines Leakage **Tested as per TM 09426A-25/2 Section 6002** **e. Final Drives** Condition Operation Leakage **f. Transmission Controls** Operation Condition Adjustment **g. Drive Shafts** Condition Operation						

Mounting						
12 **Brakes** **a. Service Brakes** Operation Condition Linkage Adjustment **Tested as per TM 09426A-25/2 Section 7001** **b. Parking Brake** Operation Condition Linkage Adjustment						
13 **Vehicle Hydraulic System** Condition Operation Leakage Hoses and Lines **Replaced Hydraulic Filters 100 Per Cent _____ Y _____N** **Major Components** **a. Reservoir** Condition Leakage **b. Pump** Condition Operation Leakage **Test as per TM 09426A-25/2, Section 8002** **c. Equipment Control** Valves Condition Operation Leakage **Inspected as per TM 09426A-25/2, Section 8007.** **Relief valves tested as per TM 09426A-25/2, Sec 8002-21 and 8021-22** **d. Selector Valve** Condition Operation						

Leakage **Inspected as per TM 09426A-25/2, Section 8021-4** **e. Hydraulic Cylinders** Condition Operation Leakage bushings **f. Hydraulic Hoses and Lines** Condition Leakage clamps						
14 Mounted Equipment **a. Loader** Condition Operation Mounting **Loader Major Components** **1. Clam Bucket** Condition Operation Mounting **2. Bucket Hydraulic Sys** Condition Operation Leakage Hose & Lines Cylinders **3. Return To Dig Assy.** Condition Operation Adjustment **4. Loader Frame** Condition Mounting Hydraulic Hoses &Lines Leakage **5. Control Lever Installation** Condition Mounting **6. Counterweights** Mounting **b. ROPS Cab** Condition						

c. Operator Seat Condition Operation **d. Winch** Operation Condition **e. Body Panel & Assemblies** Condition						
15 Vehicle Paint Condition Coverage						
16 Vehicle Data Plates Condition Mounting						
17 **Vehicle Lubrication** Lubricated in accordance with TM 09426-25/2, Section 1212.						

CONFIGURATION CHECKLIST
TRACTOR, FULL TRACKED
WITH MULTI-PURPOSE BUCKET
MODEL MC1155E, NSN 3805-01-315-1091

Vehicle Serial Number _____.

Engine Serial Number:	Original	Replacement
	_____	_____

Transmission Serial Number	Original	Replacement
	_____	_____

Modification Instruction:	Applied Prior to IROAN	Applied During IROAN
MI 09062A-25/1	_____	_____
MI 09062A-25/3	_____	_____

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 1704-0188

The Public reporting burden for this collection of information is authorized to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503 Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contract Officer for the contract/PR No. listed in block E.

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP ____ TM ____ Other XXX

D. SYSTEM/ITEM	E. CONTRACT/PR No	F. CONTRACTOR
Tractor, Full Tracked with Multi-Purpose Bucket		

1. DATA ITEM No.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A001	Request for Deviation (RFD)	Configuration Management	

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE	18. ESTIMATED TOTAL PRICE
DI-CMAN-80640C	SOW 3.4.2	MARCORLOGBASES (851)	

7. DD 250 REQ	9. DIST STATEMENT REQUIRED	10. FREQUENCY	12. DATE OF FIRST SUBMISSION
LT	A	AS REQ	See Blk 16

8. APP CODE	11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION
A		

14. DISTRIBUTION

a. ADDRESSEE	b. COPIES Draft	FINAL Reg	FINAL Repro
MCLBA (851-2)	0	1	0
15. TOTAL	0	1	0

16. REMARKS

Block 4 – Contractor format is authorized and shall be submitted in .doc or .pdf format.

Block 12 - RFDs will be reviewed and disposition determined within 20 working days upon receipt by the government.

RFDs shall be transmitted via e-mail to the following address: mbmatcomconfigmngmnt@matcom.usmc.mil

Distribution Statement A: Approved for public release, distribution is unlimited.

G. PREPARED BY:	H. DATE	I. APPROVED BY:	J. DATE
James C Clark	7/20/00	James A. Coleman	00335

DD FORM 1423-1, AUG 96 (EG) PREVIOUS EDITION MAY BE USED

Designed using Perform Pro, WHS/D/or, Aug 96