STATEMENT

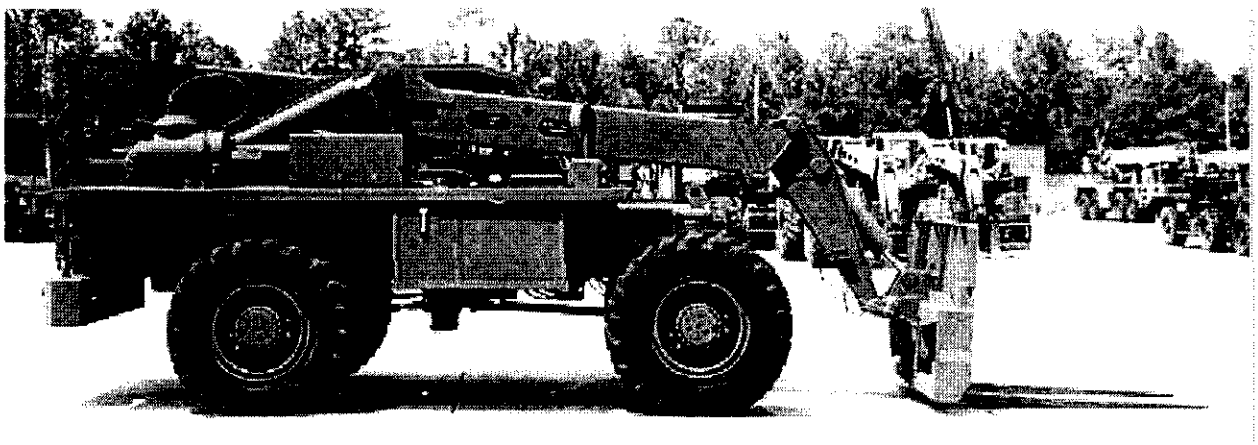
OF

WORK (SOW)

FOR THE

TRUCK, FORKLIFT, VARIABLE REACH

Selective Overhaul and Repair (SOAR)



NSN 3930-01-305-2111

EFFECTIVE DATE: 01October 2000

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STATEMENT OF WORK
TRUCK, FORKLIFT VARIABLE REACH, NSN 3930-01-305-2111, MODEL MLULL10K SELECTIVE OVERHAUL AND REPAIR (SOAR)

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 in the SOAR effort of the Truck Forklift Variable Reach. This document contains requirements to restore the Truck Forklift Variable Reach to condition code "A." Condition code A is defined as "serviceable/issuable without qualification. Equipment defined as such should be new, used, repaired or reconditioned material which is serviceable/issuable to all customers without limitation or restriction. This includes material with more than 6 months shelf-life remaining". National Stock Number (NSN) 3930-01-305-2111 shall be known as Forklift Variable Reach.

1.1 **BACKGROUND.** SOAR is defined as "That maintenance technique which incorporates both the advantages of our current Repair Only as Necessary (IROAN) process and those specified Rebuild processes as defined within applicable Repair Manuals." The SOAR allows management to apply practicality to equipment maintenance by virtue of not incurring "Total Rebuild" cost, yet extending a system's service life beyond that which would have been derived if the system had only undergone an IROAN maintenance service program. The SOAR concept will also place the burden of responsibility for enduring those system components or assemblies that were specified within the SOAR as having to be rebuilt back into the Contractors Arena. Rebuilt is technically defined as being of "Like New" condition, whereas IROAN is a process that employs the repair as necessary concept thus moving the burden to the User. IROAN can be defined as a limited conditional repair process which places "NO" liability upon the Contractor.

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 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 for Military Marking.
MIL-STD-130	U.S. Military Property, Identification Marking of

MILITARY STANDARDS-GUIDANCE ONLY.

MIL-STD-973	Configuration Management.

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

ATPD 2241	Vehicles, Wheeled: Preparation For Shipment and Storage of

MCO P11262.2	Inspection, Testing, and Certification of Tactical Ground Load Lifting Equipment
MI-09276A-25/1	Truck, Lift Fork MLULL10K Installing a safety pin and wire rope assembly on extendible boom. date 95174
MI-09276A-25/2	Installation of additional upper door latch, dated 26 Feb. 1997
MI-09276A-25/3	Provide access for fuel sending unit and fuel pickup tube, dated 01 May 1997
MI-09276A-25/4	Installation of alarm system for emergency steer pump, dated 24 Nov. 1998
MI-09276A-45/5	Installation of Field Kit, Outer Boom
TI-09276A-35/1	Adjust Brake Ped/Valve Fork Lift date 93246
TI-09276A-35/2	Truck Forklift MLULL10K Repair procedures for engine mount flange date 96034
TI-09276A-35/3	Shim Procedures for Boom Assembly dated 19 Dec. 1997
TM-09276A-24P/3	Truck Forklift MDL MLULL10K Parts Manual
TM-09276A-24P/3	USMC Supplement, Truck Forklift MDL MLULL10K PM
TM-09276A-24/2	Truck Forklift, Variable Reach Service Manual
TM-4750-15/-1	Painting and Registration Marking for Marine Corps Combat and Tactical Equipment
SL-3-09276A	Truck, Lift, Fork MLULL10K Components List
DoD 4000.25-1-M	MILSTRIP Manual
NAVICPINST 4491.2A	Requisitioning of Contractor Furnished Material From The Federal Supply System
TM 3080-34	Corrosion Prevention and Control

2.3 **INDUSTRY STANDARDS.**

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

Copies of Military Specifications and Standards are available from DoD Single Stock Point, Defense Automation Production Service Philadeiphia, Building 4D, 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 (912) 439-6761 or DSN 567- 6761. Copies of engineering drawings, if applicable, shall be obtained from Life Cycle Management Center, Attn: Code 825-3, 814 Radford Blvd. Suite 20320, Albany, Georgia 31704-0320, commercial telephone number (912) 439-6410 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, missing parts, and repair parts necessary to inspect, diagnose, restore, and test the Forklift, Variable Reach. SL-3-09276A components provided by the Marine Corps shall be repaired under the provision of this SOW. Upon completion of SOAR, repaired equipment shall be Condition Code "A".

b. Provide all tools and test equipment required to test, inspect, and calibrate the Forklift Variable Reach.

c. Conduct final-on-site testing for witness by the Weapon System Manager MARCORLOGBASES Albany, Code 837-2 and/or their Representatives.

d. The Contractor shall be responsible for all structural, electrical and mechanical requirements associated with the restoration of the Forklift, Variable Reach.

3.2 **SOAR OBJECTIVE AND FUNCTIONS**. After SOAR, the Forklift, Variable Reach shall have the following minimum characteristics:

a. Reliable as per system specifications.

b. Maintainable as per system specifications.

c. Serviceable (Condition Code "A").

d. Latest Marine Corps Configuration.

e. All equipment systems and components shall operate as intended.

f. All Forklift, Variable Reach shall have a Like New appearance.

3.3. **DETAIL TASKS.** The following tasks describe the different phases for SOAR of the Forklift, Variable Reach.

Phase I	Pre-Induction
Phase II	SOAR
Phase III	Inspection, testing and acceptance
Phase IV	Packaging, Handling, Storage and Transporation (PHS&T)

3.3.1. **PHASE I-PRE-INDUCTION.**

a. A pre-induction inspection analysis shall be performed for the Forklift, Variable Reach using the Contractor's diagnosis, inspection and testing techniques to determine extent of work and parts required. These findings shall be annotated on the Pre- Induction Checklist located in Appendix A and shall be maintained and be made available upon request to the MARCORLOGBASES Albany, representatives.

b. Test equipment shall be used to determine that assemblies and subassemblies meet prescribed reliability, performance, and work requirements. 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. Evidence of lubricating or hydraulic oils passing through or around a seal is 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 temperature. The following shall be used as a guide in determining 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.

NOTE

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

NOTE: Since the Engine shall be totally overhauled, a Pre-Induction Analysis is not required.

NOTE: Since the Transmission shall be totally overhauled, a Pre-Induction Analysis is not required.

NOTE: Forklift, Variable Reach hydraulic system shall be tested in accordance with procedures in TM 09276A-24/2, Section 3. After testing and during Phase II of this SOAR,

the vehicles' main hydraulic pump shall be overhauled or replaced as a requirement of this SOW.

3.3.2 **PHASE II - SOAR.** SOAR shall be performed at the Contractor's facility. Information recorded on the SOAR Pre-Induction Checklist (Appendix A) during pre-inspection phase shall be used as a guide by the contractor to achieve the mechanical baseline of production. After pre-induction tests and inspections have been completed, repair of the Forklift, Variable Reach shall be accomplished in accordance with this SOW and TM 09276A-24/2. Deficiencies noted on the Pre-Induction Checklist during Phase I shall be repaired/replaced.

The engine and transmission shall be totally overhauled in compliance with TM 09276A-24/2.

Dynamometer Run Sheet for engine and transmission (Appendix D and E) shall be completed for each Forklift, Variable Reach repaired under this SOW.

After engine and transmission separation, inspect engine mounting flange to assure TI-09276A-35/2 has been applied. If not applied, application of TI-09276A-35/2 is required under the provisions of this SOW.

After testing and during Phase II of this SOAR, the vehicles' main hydraulic pump shall be overhauled or replaced.

a. **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 SOAR. 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 SOAR SOW shall be in accordance with TM-09276A-24P/3 and TM-09276A-24P/3 Supplement.

b. **VEHICLE HYDRAULIC SYSTEM**. Components not identified as overhaul items shall be cleaned, inspected, tested, and repaired/rebuilt/replaced in accordance with procedures identified in TM 09276A-24/2, Section 3 through Section 6. After SOAR, hydraulic system components shall function as intended. Vehicle hydraulic system shall operate free of any and all deficiencies identified in the vehicle hydraulic troubleshooting guide. Hydraulic Filters shall be replaced 100 percent.

c. **VEHICLE AXLES**.

(1) Components shall be cleaned, inspected, tested, and repaired/rebuilt/replaced in accordance with procedures identified in TM 09276A-24/2, Section 7. Axle Planetary gear hubs shall be disassembled for visual inspection of disc brake components. Brake disc shall be replaced 100 percent. After SOAR, axle components shall function as intended. Vehicle axles shall operate free of any and all deficiencies identified in the vehicle axle troubleshooting guide.

(2) Inspect tire inflation. Inspect tire for cupping, chunking, cuts, and cracks. Inspect wheels for cracks, breaks, and damaged mounting holes. Each tire must have 4/32 inch or more of tread remaining and be in good serviceable condition. All tires on a vehicle shall be matched to provide proper performance and approximately equal life. Tires shall not show evidence of chunking. Tires shall not have cuts or cracks greater than one inch in length, 1/8 inch width. Tires shall not have cuts or breaks, regardless of length or width, which extend to the fabric, rubber separation or bulges on tire side walls are not acceptable.
Check TM 09276A-24/2 for the appropriate tire size.

d. **VEHICLE BRAKES**. Components shall be cleaned, inspected, tested, and repaired /replaced in accordance with procedures identified in TM 09276A-24/2, Section 10. Park brake lining shall be replaced 100 percent. After SOAR, brake components shall function as intend. Vehicle brakes shall operate free of any and all deficiencies identified in the vehicle brake troubleshooting guide.

e. **VEHICLE STEERING**. Components shall be cleaned, inspected, tested, and repaired/replaced in accordance with procedures identified in TM 09276A-24/2, Section 11. After SOAR, steering components shall function as intend. Vehicle steering systems shall operate free of any and all deficiencies identified in the vehicle steering troubleshooting guide.

f. **VEHICLE ELECTRICAL SYSTEM**. Electrical components shall be cleaned, inspected, tested, and repair/replaced in accordance wit procedures identified in TM 09276A-24/2, Section 12. After SOAR, electrical components shall function as intend. Vehicle electrical systems shall operate free of any and all deficiencies identified in the vehicle electrical troubleshooting guide.

g. **VEHICLE CHASSIS AND CAB COMPONENTS**.

(1) Repair or replace damaged sheet metal panels, covers, skirts, fenders, floor panels, inspection panels, and other metal items as needed. Replace sheet metal components where corrosion has penetrated component. Repair/replace as needed. Replace/repair all broken brackets and braces. Repairs shall be in accordance with best commercial practices.

(2) Inspect operator's seat and tracks for damage, sagging, broken springs, deteriorated frames and proper function. Replace cushion/seat pads as required. Cushions/seat pads are to be replaced if they contain tears/rips greater than one inch in length and a cushion or seat pad contains more than two tears/rips. Repair/Replace seat/backs, frames and tracks that have damaged, worn, broken springs, deteriorated frames, and tracks that do not operate properly.

(3) Inspect cab assembly, battery box, tool box, gas can bracket, cargo storage box, and ventilation/heater for breaks, cracks, and proper function. Door, hood, and hardware shall function as intended. Inspect hood and cab for damage.

h. **RUST PROOFING AND PAINTING (Exterior/Interior).** Inspect vehicle for body damage, cleanliness, and rust.

NOTE

Rust proofing does not apply to processing of fuel tanks, radiator, engine, transmission, vehicle suspension, transfer, and axles. Repair all body and rust damage before rust proofing vehicle. All vehicles shall be rust proofed 100 percent.

Procedures for Corrosion Prevention and Control are in accordance with TM 3080-34.

All exterior surfaces of the Forklift, Variable Reach shall be painted with Chemical Agent Coating (CARC) paint. Paint color shall be Desert Sand or Green 383. Color of individual Forklift, Variable Reach will be identified by the Weapon System Manager and/or their representative(s) upon induction into the SOAR cycle.

All Forklifts, Variable Reach cabs interiors shall be painted in the existing color. This paint shall be lead and chromate free based paint.

i. **DATA PLATES AND DECALS**

DATA PLATE. Each Forklift, Variable Reach shall have a SOAR data plate affixed next to the original vehicle data plate. The data plate shall meet the requirements of MIL-STD-130 and TM 09276A-24/2. Replace all data plates and decals that are missing and illegible. SOAR data plates shall be prepared by the Contractor and contain the following information:

VEHICLE SERIAL NO_____
REPAIRED IN ACCORDANCE WITH SOW 01-837-2-09276A-1/1.
CONTRACTOR_____
DATE_____
HOUR METER READING AT TIME OF SOAR_____

NOTE: Hour meters on vehicles repaired under provisions of this SOW shall not be turned back to zero.

3.3.3. **PHASE III - INSPECTION, TESTING AND ACCEPTANCE.**

a. Inspection, testing and acceptance of the Forklift, Variable Reach shall be conducted in accordance with Final Inspection Checklist (Appendix B), TM 09276A-24/2 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. Weapon System Manager and/or their 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 part, components, ect, not required for the test.

RECORD JACKET: All major equipment or components serial numbers that are replaced during SOAR are to be identified by the Contractor to be recorded in the record jacket of the Forklift, Variable Reach (This include engines, transmissions, etc.). Information will list the Forklift, Variable Reach 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.

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. Weapon System Manager and/or their representative(s) may require the Contractor to report tests or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

d. Forklift, Variable Reach shall be lubricated and greased in accordance with the vehicle lubrication chart contained within TM 09276A-24/2. All coolant and oil levels shall be full to proper levels.

e. Vehicle Markings. Registration numbers and other markings shall be applied in accordance with TM 4750-15/1. 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 Contactor shall be responsible for preservation and packaging of items being repaired under the terms of this statement of work. Items being prepared for long term storage shall be in accordance with the level A requirements of ATPD 2241. Items scheduled for domestic shipment, immediate use or overseas shipment with 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, 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 will be filled ¼ full. The air intake system, exhaust and brake systems, drive-train and gauges are to be depreserved.

(2). MPS Modified Drive Away: Batteries shall be hot and connected to vehicle electrical system. Fuel tank shall filled ¾ full of JP5. 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 shipping address(es) for delivery of the repaired equipment. The Contractor shall be responsible for arranging for shippment to the pre-

designed 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. The government will identify the configuration changes to be inspected by furnishing a Configuration Checklist (Appendix C) to the Contractor. The Contractor shall use one checklist for each Forklift, Variable Reach 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.

c. The following approved Modification Instructions (MIs) and Technical Instructions (TIs) shall be applied during Phase II of the SOAR process:

MI-09276A-25/1	Truck, Lift Fork MLULL10K Installing a safety pin and wire rope assembly on extendible boom. date 95174
MI-09276A-25/2	Installation of additional upper door latch, dated 26 Feb. 1997
MI-09276A-25/3	Provide access for fuel sending unit and fuel pickup tube, dated 01 May 1997
MI-09276A-25/4	Installation of alarm system for emergency steer pump, dated 24 Nov. 1998
MI-09276A-45/5	Installation of Field Kit, Outer Boom
TI-09276A-35/1	Adjust Brake Ped/Valve Fork Lift date 93246
TI-09276A-35/2	Truck Forklift MLULL10K Repair procedures for engine mount flange date 96034
TI-09276A-35/3	Shim Procedures for Boom Assembly dated 19 Dec. 1997

3.4.2 **CONFIGURATION CONTROL.** The Contractor shall apply configuration control to established baseline configuration item. Deviations from the established baseline configuration will not be allowed without written approval by the Weapon System Manager (Code 837-2). If it is necessary to depart from the authorized configuration, the Contractor shall prepare and submit a Request for Deviation or Request for Waiver using MIL-STD-973, paragraphs 5.4.3 and 5.4.4., subparagraphs and appendix E as guidance.

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

GFE is government owned equipment authorized by contract for use by a commercial/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 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. The Contractor shall report receipt of all GFM and report consumption of GFM to the MCA.

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 and/or their representative(s) during contract performance. Inspection may be accomplished at any work location. Authorized Weapon System Manager representative(s) 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 and/or their 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 Q9002-1994 Quality System 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 and/or their 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 Weapon System Manager 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 Forklift, Varible Reach
TM 09276A-24/2 and this SOW.

Quality assurance operations performed by the Contractor shall be subject to the Weapon System Manager and/or their representative(s) verification at any time. The Weapon System Manager and/or their 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 Forklift, Varible Reach, this SOW, and applicable documents used herein.

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

3.8 **ACCEPTANCE**

a. 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 representatives shall be permitted to observe the work or to conduct inspection at all reasonable hours. Final inspection and acceptance testing shall be conducted at the Contractor's facility. Finally acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements. Forklifts, Variable Reach SOARed under the provisions of this SOW shall be accomplished in accordance with TM 09276A-24/2 and this SOW.

b. As required by MCO P11262.2. Contractor shall provide Condition Inspection Record for each Forklift, Variable Reach that is repaired under the provisions of this SOW. The Forklift, Variable Reach shall be stenciled, in a position on the boom that is clearly visible to the operator, with certification data indicating the test status (Example: CAP 10,000 lb certified 15 June 1998). Condition Inspection Record is found in MCO P11262.2, Table 4-2.

3.9 **REJECTION**

Failure to comply with any of the specified requirements listed herein shall be reason for rejection by the Weapon System Manager and/or their representative(s). The Contractor at no additional cost to the Marine Corps 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 **Pre-Induction Checklist**. The Contractor shall complete the Pre-Induction Checklist (Appendix A) for each Forklift, Variable Reach repair under this SOW. This document shall be available during final acceptance testing. One copy of each document shall be provided to the Weapon System Manager and/or their representative(s) after final acceptance of the Forklift, Variable Reach, or upon request.

4.2 **Final Inspection Checklist**. The Contractor shall complete the Final Inspection Checklist (Appendix B) for each Forklift, Variable Reach repaired under this SOW. This document shall be available during final acceptance testing. One copy of each document shall be provided to the Weapon System Manager/or their representative(s) after final acceptance of the Forklift, Variable Reach, or upon request.

4.**3 Configuration Checklist**. The Contractor shall complete the Configuration Checklist (Appendix C) for each Forklift, Variable Reach repair under this SOW. This document shall be available during final acceptance testing. One copy of each document shall be provided to The Weapon System Manager and/or their representative(s) after final acceptance of the Forklift, Variable Reach, or upon request.

4.4 **Engine Dynamometer Run Sheet**. The Contractor shall complete the Engine Dynamometer Run Sheet (Appendix D) for each Forklift, Variable Reach repair under this SOW. This document shall be available during final acceptance testing. One copy of each document shall be provided to The Weapon System Manager and/or their representative(s) after final acceptance of the Forklift, Variable Reach, or upon request.

4.5 **Transmission Dynamometer Run Sheet**. The Contractor shall complete the Transmission Dynamometer Run Sheet (Appendix E) for each Forklift, Variable Reach repair under this SOW. This document shall be available during final acceptance testing. One copy of each document shall be provided to The Weapon System Manager and/or their representative(s) after final acceptance of the Forklift, Variable Reach, or upon request.

SELECTIVE OVERHAUL AND REPAIR (SOAR)
PRE-INDUCTION CHECKLIST
TRUCK, FORKLIFT, VARIABLE REACH, MODEL MLULL10K

Vehicle Serial Number: _____
Vehicle Hours: _____

TRUCK, FORKLIFT VARIABLE REACH **MODEL MLULL10K**	**SAT**	**MISSING**	**SERVICE**	**ADJUST**	**REPAIR**	**REPLACED**	**MODIFIED**	**REMARKS**
1. **Vehicle Hydraulic System** a. Carriage Tilt Cylinder b. Manifold Valve c. Knuckle Tilt Cylinder d. Steer Priority Valve e. Boom directional Control Valve f. Emergency Steer Motor g. Hydraulic Pump h. Hydraulic Reservoir i. Boom Extension Cylinder j. Transfer Carriage Cylinder k. Boom Hoist Cylinders l. Carriage Tilt Cylinders m. Auxiliary Control Joy-Stick n. Boom Control Joy-Stick o. Steer Control Unit p. Parking Brake Control Valve q. Steer Mode Selector r. Service Brake Accumulator s. Auxiliary Directional Control Valve t. Service Brake Valve u. Pump Unloading & Heat Circuit Block v. Pressure Filter w. Fork Side Shift Valve x. Steer Cylinders y. Frame Tilt Cylinder z. Hydraulic Line and Hoses								
2. **Vehicle Axles Assemblies** a. Ring and Pinion Carrier Assy								

b. Differential c. Planetary Gear Hubs d. Wet Disc Brakes e. Steer Universals f. Steer Spindles g. Dual Steer Cylinders h. Tie Rods i. Disc Brake Assy j. Tires and Wheels								
3. **Vehicle Brake System** a. Power Brake Valve b. Accumulator c. Disc Brakes d. Brake Pressure Switch e. Brake Line Pressure Switch f. Check Valve g. Low Brake Pressure Indicator Light h. Brake Line and Hoses								
4. **Vehicle Steering System** Condition Operation								
5. **Vehicle Electrical System** a. Batteries b. Instrument Panel Gauges c. Instruments Panel Warning Lights d. Light Mode Selector Switch e. Instrument Panel Switches f. Electrical Relays g. Hydraulic Pump Unloading Circuit h. Emergency Steer Motor Circuit i. Engine Start Circuit j. Electrical Circuit Breakers k. Alternator l. Fuel Filter Heater and Shut Off m. Cold Start Assembly n. Main Disconnect Connectors o. Auxiliary Air Compressor p. Diagnostic Coupler Assembly Shunt q. Slave Receptacle r. Vehicle Blackout lights, work light, Running light and Reflectors s. Electrical Wiring Harnesses								
6. **Vehicle Chassis and Cab Components**								

a. Panel, Covers, and Plates b. Fenders c. Cab Assembly d. Door Assembly e. Vehicle Glass f. Operators' Seat g. Battery and Tool Boxes h. Air Compressor Storage Box i. Fuel Can Bracket								
7. **Vehicle Data Plate and Decals** Condition Mounting								
8. **Vehicle Paint** Spec Conformance Coverage								

ADDITIONAL REMARKS:

SELECTIVE OVERHAUL AND REPAIR
FINAL INSPECTION CHECKLIST
TRUCK, FORKLIFT, VARIABLE REACH, MODEL MLULL10K

Vehicle Serial Number: _____

Vehicle Hours: _____

TRUCK, FORKLIFT VARIABLE REACH MODEL MLULL10K	SAT	SERVICED	TESTED	LUBRICATED	UNSAT	REMARKS
1. **Vehicle Engine Assembly** Condition Operation Leakage Mounting Cooling System Engine Starter Air Intake System Oil Cooler **Engine Overhauled or Replaced as per SOW Requirements?** **YES: _____ NO: _____** **Oil Filter(s) Replaced 100 Percent?** **YES: _____ NO: _____** **Air Filters Replaced 100 Percent?** **YES: _____ NO: _____**						
2. **Vehicle Transmission Assembly** Condition Operation Leakage Mounting Hoses and Lines **Transmission Overhauled or Replaced as per SOW Requirements?** **YES: _____ NO: _____** **Transmission Filter Replaced 100 Percent?** **YES: _____ NO: _____**						
3. **Vehicle Hydraulic System** a. Carriage Tilt Cylinder						

b. Manifold Valve c. Knuckle Tilt Cylinder d. Steer Priority Valve e. Boom Directional Control Valve f. Emergency Steer Motor g. Hydraulic Pump h. Hydraulic Reservoir i. Boom Extension Cylinder j. Transfer Carriage Cylinder k. Boom Hoist Cylinders l. Carriage Tilt Cylinders m. Auxiliary Control Joy-Stick n. Boom Control Joy-Stick o. Steer Control Unit p. Parking Brake Control Valve q. Steer Mode Selector r. Service Brake Accumulator s. Auxiliary Directional Control Valve t. Service Brake Valve u. Pump Unloading & Heat Circuit Block v. Pressure Filter w. Fork Side Shift Valve x. Steer Cylinders y. Frame Tilt Cylinder z. Hydraulic Lines and Hoses **Main Hydraulic Pump Overhauled or Replaced as per SOW Requirements?** **YES :_____ NO: _____** **Return Filter Replaced 100 Percent?** **YES: _____ NO: _____** **Breather Filter Replaced 100 Percent?** **YES: _____ NO: _____**						
4. **Vehicle Axle Assemblies** a. Ring and Pinion Carrier Assembly b. Differential c. Planetary Gear Hubs e. Wet Disc Brakes f. Steer Spindles g. Dual Steer Cylinders h. Tie Rods i. Disc Brake Assembly j. Tires and Wheels k. Lines and Hoses **Wet Disc Brake Disc Replaced 100 percent?** **YES: _____ NO: _____**						

5. **Vehicle Brake System** a. Power Brake Valve b. Accumulator c. Brake Pressure Switch d. Disc Brake (Parking) e. Brake Line Pressure Switch f. Check Valve g. Low Brake Pressure Indicator Light h. Brake Line and Hoses **Parking Brake Disc Replaced 100 Percent?** **YES: _____ NO: _____**						
6. **Vehicle Steer System** Condition Operation						
7. **Vehicle Electrical System** a. Batteries b. Instrument Panel Gauges c. Instrument Panel Warning Lights d. Light Mode Selector Switch e. Instrument Panel Switches f. Electric Relays g. Hydraulic Pump Unloading Circuit h. Emergency Steer Motor Circuit i. Engine Start Circuit j. Electrical Circuit Breakers k. Alternator l. Fuel Filter Heater and Shut Off m. Cold Start Assembly n. Main Disconnect Connectors o. Auxiliary Air Compressor p. Diagnostic Coupler Assembly Shunt q. Slave Receptacle r. Vehicle Blackout Lights, Work Lights, Running Lights and Reflectors. s. Electrical Wiring Harnesses						
8. **Vehicle Chassis and Cab Components** a. Panels, Covers, and Plates b. Fenders c. Cab Assembly d. Door Assembly e. Vehicle Glass f. Operators Seat g. Battery and Tool Box h. Air Compressor Storage Box i. Fuel Can Bracket						

9. **Vehicle Data Plates and Decals** Condition Mounting						
10. **Vehicle Paint** Spec. Conformance Coverage						
11. **Vehicle Lubricated in accordance with Lubrication Chart contained in TM 09276A-24/2?** **YES: _____ NO: _____**						
12. **Vehicle Passed Vehicle Condition Test Contained in MCO P11262.2?** **YES: _____ NO: ____** **Vehicle Marked as per SOW Requirements?** **YES: _____ NO: _____**						

ADDITIONAL REMARKS:

CONFIGURATION CHECKLIST
TRUCK, FORKLIFT, VARIABLE REACH, MODEL MLULL10K

VEHICLE:

Vehicle Serial Number: _____

Marine Corp Registration Number: _____

Vehicle Hours: _____

VEHICLE ENGINE:

Original Vehicle Engine Number: _____

Engine Overhauled as per SOW: YES: ____, NO: ____

Replacement Engine Serial Number: _____

VEHICLE TRANSMISSION:

Original Vehicle Transmission Serial Number: _____

Transmission Overhauled as per SOW: YES: ____, NO: ____

Replacement Transmission Serial Number: _____

APPROVED CONFIGURATION CHANGES:

Modification/Technical Instructions:

MI 09276A-25/1	Applied Prior SOAR _____.	During SOAR _____.
MI 09276A-25/2	Applied Prior SOAR _____.	During SOAR _____.
MI 09276A-25/3	Applied Prior SOAR _____.	During SOAR _____.
MI 09276A-25/4	Applied Prior SOAR _____.	During SOAR _____.
MI 09276A-45/5	Applied Prior SOAR _____.	During SOAR _____.
TI 09276A-35/1	Applied Prior SOAR _____.	During SOAR _____.
TI 09276A-35/2	Applied Prior SOAR _____.	During SOAR _____.
TI 09276A-35/3	Applied Prior SOAR _____.	During SOAR _____.

NOTE: MI 09276A-45/5 is a "As Required" Modification. Application of this modification during the Selective Overhaul and Repair (SOAR) will depend on the repair requirements of the vehicle boom assembly.

Approved Waivers/Deviations Applied During SOAR:

Waivers: _____.

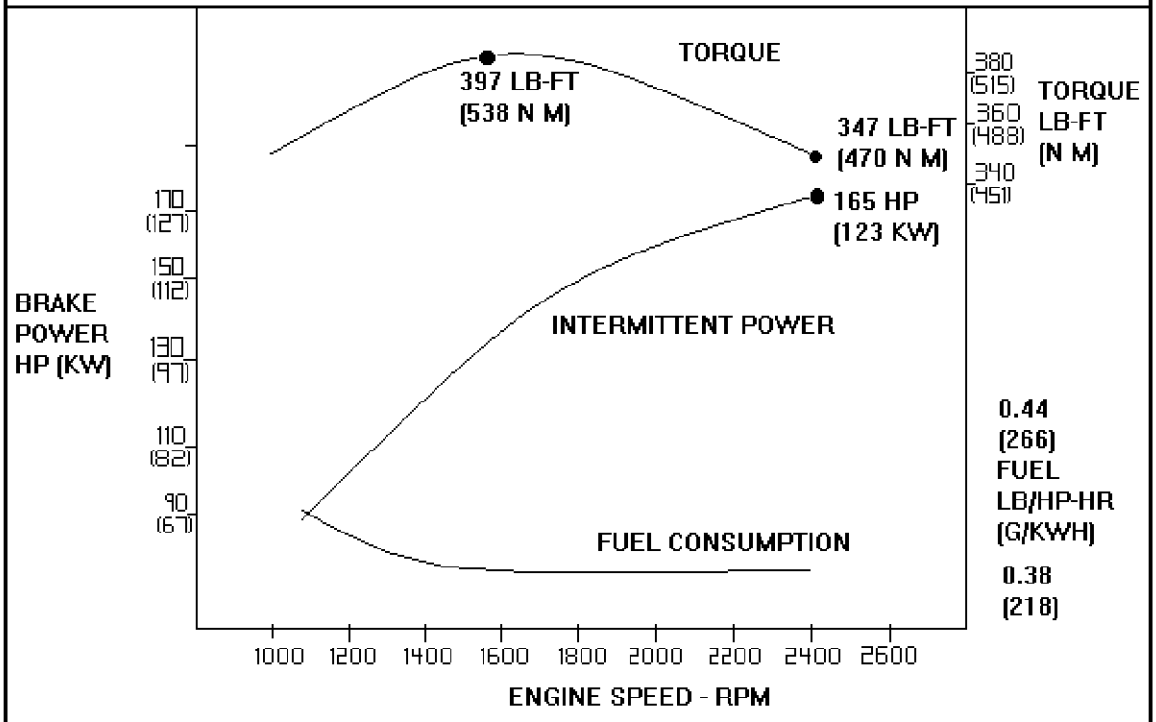
Deviations: _____.

ECPs generated by approved Waivers/Deviations:

ECP Number	Waiver Number	Deviation Number

ENGINE DYNAMOMETER RUN SHEET

ENGINE PERFORMANCE CURVE — 300 SERIES ENGINE
MODEL 6059T
RATING GROSS POWER — 165 HP @ 2500 RPM
123 KW @ 2500 RPM
APPLICATION INDUSTRIAL - INTERMITTENT



AIR INTAKE RESTRICTION - - 12 IN, H_2O (3 kPa) EXHAUST BACK PRESSURE - -H_2O (7.5kPa)

TRANSMISSION DYNAMOMETER RUN SHEET
1724-M TRANSMISSION

SERIAL NO._____ **DATE**_____

OPERATOR_____

A. Fill transmission to operating level with type C-3 or C-3 Grade 30 (above 32 degrees f) (0 degrees C).

B. Start engine and run at idle speed for two minutes.

C. With the engine at idle speed, add quantity necessary to bring oil level to FULL mark on dipstick.

D. Keep controls properly lubricated.

E. Run Dynamometer Run Test.

Test	RPM	Throttle	Output	Specified Reading: Actual
				Main Pressure_____
				Reverse Signal Pressure_____
Reverse		Full	Unloaded	Coverter Flow_____
				Lube Pressure_____

Test	RPM	Throttle		Range Output Torque ( ) Minimum at input speed ( )
Stall		Full	Stall	Actual_____Required_____psi Actual_____

Test	RPM	Throttle	Range	Main Pressure
Idle		Closed	Minium psi_____	Actual_____

Test	Rnge	Throttle	Output	Shift Point	Req	Actual
Full Throttle Upshift		Full	LoadedL-1		_____	
				1c-1L		_____
				1-2		_____
				2-3		_____
				3-4		_____

Test	Range	Throttle	Output	Shift Point		Req	Actual
Closed Throttle Downshift		Closed	Loaded	4-3	rpm	_____	
					3-2		_____
					2-1		_____
					1L-1C		_____
					1-L		

Note Increase load until downshift occurs.

Test	Range	Throttle	Output	Shift Point	Req rmp	Actual
Downshift				4-3		_____
Inhibitor		Full	Loaded	3-2		_____
				2-1		_____
				1-L		_____

Note: Reduce input speed with each gear downshift.

ADDITIONAL REMARKS:

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 1704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP ____ TM ____ Other XXX
D. SYSTEM/ITEM: Truck, Forklift, Variable Reach	E. CONTRACT/PR No.	F. CONTRACTOR

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

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE	18. ESTIMATED TOTAL PRICE
DI-CMAN-80641B	SOW 3.3	MARCORLOGBASESALB 825	

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**

16. REMARKS

Block 4: Contractor format using .doc or .pdf software is authorized.

Blocks 10 & 12: RFWs shall be submitted to obtain authorization to deliver nonconforming material which does not meet the prescribed configuration documentation.

RFWs will be reviewed and disposition determined within 30 calendar days upon receipt by the government.

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

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

14. DISTRIBUTION			
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	Draft	FINAL Reg	FINAL Repro
MCLBA 825-2	0	1	0
15. TOTAL	0	1	0

G. PREPARED BY:	H. DATE	I. APPROVED BY:	J. DATE
Cobb Pitts	2-10-00		

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 1704-0188

A. CONTRACT LINE ITEM NO.	B. EXHIBIT	C. CATEGORY: TDP ____ TM ____ Other XXX
D. SYSTEM/ITEM: Truck, Forklift, Variable Reach	E. CONTRACT/PR No.	F. CONTRACTOR

1. DATA ITEM No.	2. TITLE OF DATA ITEM	3. SUBTITLE	17. PRICE GROUP
A002	Request for Deviation (RFD)	Configuration Management	

4. AUTHORITY *(Data Acquisition Document No.)*	5. CONTRACT REFERENCE	6. REQUIRING OFFICE	18. ESTIMATED TOTAL PRICE
DI-CMAN-80640B	SOW 3.3	MARCORLOGBASESALB 825	

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**

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MCLBA 825-2	0	1	0
15. TOTAL	0	1	0

G. PREPARED BY:	H. DATE	I. APPROVED BY:	J. DATE
Cobb Patton	8-10-00		

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

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