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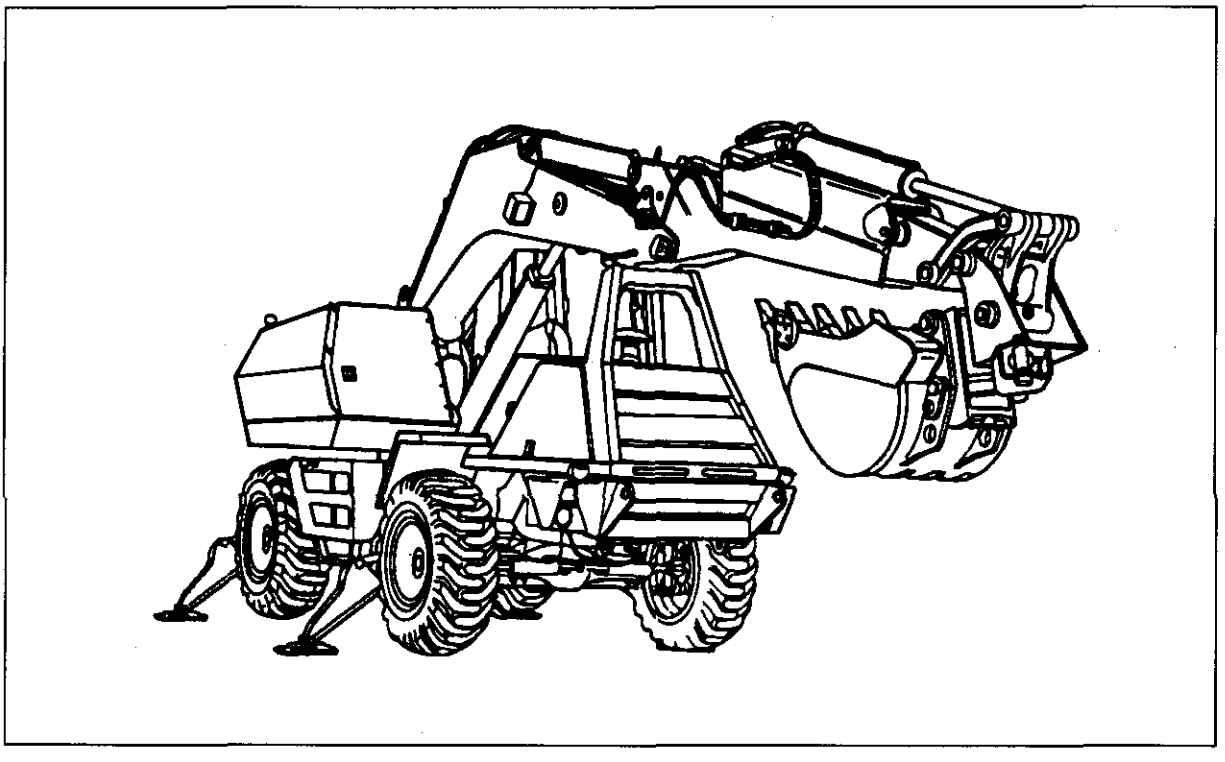
Draft
Maintenance Concept Remains Consistent with Prior Fiscal Year

STATEMENT OF WORK

FOR THE IROAN OF THE

EXCAVATOR, RUBBER TIRED
MC 1085C



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STATEMENT OF WORK FOR THE EXCAVATOR, RUBBER TIRED, MODEL MC1085C
Inspect Repair Only As necessary (IROAN)

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 IROAN effort of the Excavator, Rubber Tired, Model MC1085C, hereafter referred to as the Excavator. This document contains requirements to restore the Excavator 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 six months shelf-life remaining.

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

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 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 Specifications

MIL-C-81309	Corrosion Preventive Compounds, Water Displacing, Utra-Thin Film Inhibitor

2.2 Military Standard

MIL-STD-130	DoD Identification Marking of U.S. Military Marking
MIL-STD-129	DoD Standard Practice For Military Marking
MIL-STD-642	DoD Identification Marking of Combat and Tactical Transport Vehicles

2.3 Other Government Documents And Publications. The issues of these documents cited below shall be used.

TM-09445A-25/2	Service Manual
SL-4-09445A	Repair Parts for Excavator, Hydraulic MC1085C

SL-3-09445A	Excavator, Multipurpose, Wheel Mounted, MC1085C
ATPD-2241	Vehicles, Wheeled: Preparation for Shipment and Storage of
TM-9-2610-200-14	Care, Maintenance, Repair & Inspection of Pneumatic Tires and Inner Tubes
TM-4750-15/2	Painting and Registration Marketing for Marine Corps Combat and Tactical Equipment
DoD 4000.25-1-M	MILSTRIP Manual

Military Handbooks (For Guidance)

MIL-HDBK-61	Configuration Management Guidance

2.4 Industry Standards

ANSI/ISO/ ASQC9002-1994	Quality Systems-Model for Quality Assurance in Production, Installation and Servicing

Industry Standards (For Guidance)

ANSI/EIA-649	National Consensus Standard for Configuration Management

Copies of Military Standards and Specifications are available from the DOD Single Stock Point, Defense Automation and Production Service Philadelphia, Building 4/D, 700 Robbins Ave, Philadelphia, PA 19111-5094, commercial telephone number (215) 697-2179 or DSN 442-2179, or http://www.dodssp.daps.mil. Copies of other government documents and publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracts Department (Code 891), P. O. Drawer 43019, 814 Radford Blvd., Albany, Georgia 31704-3019, commercial telephone number (912) 439-6761 or DSN 567- 6761. Copies of engineering drawings, if applicable, shall be obtained from Supply Chain Management Center, (Code 583-1), 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:

a. Provide materials, labor, facilities, missing parts and repair parts necessary to inspect, diagnose, restore and test the Excavator. Upon completion of IROAN, repaired equipment shall be Condition Code "A".

b. Provide all tools and test equipment required to test, inspect and calibrate the Excavator.

c. In-process and final on-site testing must be witnessed by Marine Corps Systems Command (MCSC), (Code CSLE), Albany, Georgia representative.

d. The contractor shall be responsible for all structural, electrical and mechanical requirements associated with the restoration of the Excavator.

3.2 IROAN Objective And Functions. After IROAN, the Excavator, will have the following minimum characteristics:

a. Reliable as per system specifications.

b. Maintainable as per system specifications.

c. Serviceable (Condition Code "A").

d. All vehicle systems and components shall operate as intended.

3.3. Detail Tasks. The following tasks describe the different phases for IROAN of the Excavator.

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

3.3.1. Phase I-Pre-Induction.

a. A Pre-Induction Inspection Analysis shall be performed for the Excavator using the contractor facility's diagnosis, inspection and testing techniques to determine extent of work and parts required. These findings shall be annotated on the Pre- Induction Check Sheets located in Appendix A and shall be maintained and be made available upon request to the MCSC (Code CSLE), Albany, Georgia representative.

b. Test equipment shall be used to determine that assemblies and subassemblies meet prescribed reliability, performance and work requirements. 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 DOES NOT REQUIRE CORRECTIVE ACTION.

3.3.2 Phase II - IROAN. IROAN shall be performed at the contractor facility. Information recorded on the IROAN Pre-Induction Check Sheets during pre-inspection phase shall be used as a guide by the contractor to achieve the mechanical baseline of production. After the pre-induction check and inspections have been completed, repair of the Excavator shall be accomplished in accordance with this SOW. Deficiencies noted on the Pre-Induction Check Sheets 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. Mandatory replacement parts are contained in SL-4-09445A. The Final Road Test Check Sheet (Appendix B) shall be completed for each Excavator IROANed. Boxed items required to be shipped with the Excavator are contained in SL-3-09445A.

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

Detailed Mechanical Work. The Excavator received for IROAN shall be reworked in accordance with the following paragraphs. All discrepancies noted on the IROAN Pre-Induction Check Sheets shall be repaired/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 IROAN. Unserviceable includes 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-4-09445A.

b. Engine Assembly/Transmission.

(1) Test Procedures. After Pre-Induction Test and Inspection has been completed, the power pack shall be steam cleaned, inspected for loose or missing items and painted. All warnings and procedures should be followed to ensure safe and working conditions.

If engine requires removal for repair, the engine run-in test shall be performed. Refer to paragraph 3.3.2.cfor test procedures on the fuel system which shall be tested in conjunction with the engine.

Record all results of the Pre-Induction Check Sheets in Appendix A. Pre-Induction Check Sheets shall be maintained and be available to MCSC (Code CSLE), Albany, Georgia representative.

(a) Cylinder Block.

(b) Crankshaft and Main Bearing.

(c) Flywheel Assembly and Housing.

(d) Pistons and Connecting Rods.

(e) Cover, Valve.

(f) Engine Lubrication System.

(g) Lube Oil Cooler.

(h) Lube Oil Pump.

(i) Valve Cover.

(j) Air Cleaner.

(k) Air Intake Manifold.

The Transmission shall be processed in accordance with paragraph 3.3.2.h.

Test the following in accordance with TM-09445A-25/2 to conform with inspection and testing procedures to assure full conformance with this SOW.

(2) Pass/Fail. After the engine run test has been completed. The engine assembly shall meet or exceed the minimum specifications in TM-09445A-25/2.

c. Fuel System.

(1) Test Procedures. Test the following in accordance with TM-09445A-25/2 to conform with inspection and testing procedures to assure full conformance with this SOW.

(a) Test all fuel injectors in accordance with TM-09445A-25/2.

(b) Inspect the fuel pump assembly for loose or broken items and housing cracks.

(c) Inspect Injector Nozzles.

(d) Inspect Turbocharger.

(e) Inspect fuel tank and line group for rusting and leakage.

(f) Inspect Primer Pump.

(g) Inspect accelerator pedal and linkage for binding and proper function.

(h) Inspect Injection Pump.

(2) Pass/Fail. Repair/Replace injectors and all of the above that are not functioning properly.

NOTE: Replace all fuel filters and air filters 100 percent. Test Injectors for opening pressure.

Procedures for repair/replacement can be found in TM-09445A-25/2.

d. Hydraulic System.

(1) Test Procedures. Test the entire hydraulic system along with the following components listed below in accordance with TM-09445A-25/2 to conform with inspection and testing procedures to assure full conformance with this SOW.

(a) Hydraulic and Fluid system.

(b) Main Hydraulic Pump.

(c) Lower Steering Hydraulics Group.

(d) Hydraulic Controls.

(e) Filter Lines and Fittings.

(f) Hydraulic Cylinders.

(g) Tank, Hydraulic.

(h) Hydraulic Swivel.

(i) Auxiliary Pilot Operated Hydraulic Group.

(j) Hydraulic Reservoir.

(k) Hydraulic System Valve Bank.

(l) Outrigger Solenoid Valve.

(m) Steering Pump Assembly.

(n) Outrigger Hydraulics.

NOTE: Inspect all upper Hydraulic lines, clamps and fittings.

(2) Pass/Fail. Repair/Replace any of the above if fail in accordance with TM-09445A-25/2. Replace tube lines that are pinched or dented. Replace hose if any of the following conditions exist.

(a) Replace if any evidence of hydraulic oil leakage at the surface of the hose or its junction with the metal end couplings.

(b) Replace if any blistering or abnormal deformation to the outer covering of the hose.

(c) Replace if hydraulic oil leak at any threaded or clamped joint that cannot be eliminated by normal tightening.

(d) Replace if evidence of excessive abrasion or scrubbing on the outer surface of hose or hoses.

Procedures for repair/replacement can be found in TM-09445A-25/2.

e. Cooling System.

(1) Test Procedures. Inspect the following in accordance with TM-09445A-25/2 to conform with inspection and testing procedures to assure full conformance with this SOW.

(a) Inspect Hose Clamps for tightness.

(b) Check Cooling System for leaks.

(c) Check Radiator Cap.

(d) Inspect Thermostat and Housing for leaks.

(e) Inspect Fan Belt(s).

(f) Inspect Fan Blades for breaks, bends, and missing rivets.

(g) Inspect Water Pump for leaks and cracks.

(h) Inspect Radiator and Oil Cooler for cracks and leaks.

(2) Pass/Fail. Replace coolant, coolant belts, heater and radiator hoses. Replace anti-freeze protection. Antifreeze protection shall be to a temperature of –20 degrees Fahrenheit. Replace any hose or above equipment that fails the test procedures in accordance with TM-09445A-25/2. Radiator fins that cannot be straighten shall not exceed 25% of the radiator coil surface.

f. Electrical System. The Electrical System is a 24 volt charging 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 tested/inspected.

(a) Alternator.

(b) Cab Main Harness, Main Engine Wiring Harness.

(c) Starter Motor & Solenoid.

(d) Instrument Control Panel.

(e) Switches/Circuit Breakers, Panel Electrical Gauges.

(f) Front Lights, Rear Lights and Work Lights.

(g) Sending Units & Warning Switches.

(h) Horn & Alarm.

(i) Batteries, Storage/Batteries.

(j) Relay Panel Group.

(k) Cold Start Group.

(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.

g. Axles.

(1) Test Procedures. Inspect the following in accordance with TM-09445A-25/2 to assure full conformance with this SOW.

(a) Front and Rear Axle Assembly.

(b) Axle Housing Group.

(c) Steering Axle Group.

(d) Planetary Group.

(e) Wheel End Group.

(2) Pass/Fail. Repair the above equipment in accordance with TM-09445A-25/2 to conform with inspection and testing procedures to assure full conformance with this SOW.

h. Transmission.

(1) Test Procedures. Inspect in accordance with TM-09445A-25/2 to conform with inspection procedures to assure full conformance with this SOW.

(a) Transmission Controls.

(b) Transmission Case and Cover Group.

(c) Transmission Linkage.

(2). Pass/Fail. Repair/Replace the transmission linkage assembly if it does not operate smoothly. Replace all broken cables.

On completion of inspection, the transmission shall meet or exceed the minimum specifications. In the event the transmission fails inspection, it shall be repaired or replaced. The transmission oil, filter and oil pan gasket shall be replaced.

i. Brake System.

(1) Test Procedures. Inspect in accordance with TM-09445A-25/2 to conform with inspection procedures to assure full conformance with this SOW.

(a) Inspect Brake Linkage, Hand Brake and pedal.

(b) Inspect Parking Brake for proper functioning.

(c) Inspect Service Brake.

(d) Inspect all Brake lines for cracks and leaks.

(e) Inspect Brake Pads.

(f) Inspect Hydraulic Brake assembly system.

(g) Inspect mechanical Brake System.

(h) Inspect Swing Brake Control group.

(2). Pass/Fail. Repair/Replace any or all of the above components that do not meet operational standards of TM-09445A-25/2.

j. Tires, Wheels.

(1) Test Procedures. The tire inspection checklist contained in TM-9-2610-200-14 shall be used to document the tire inspection and shall be provided as part of the Pre-Inspection Report. Inspect tires for correct inflation, cupping, chunking, cuts and cracks using TM-9-2610-200-14, Section 2-37, Visual Guide for Technical Inspection and Classification of Tires: This technical inspection shall be the guide used to distinguish between repairable and nonrepairable defects and the serviceability of tires.

(2) Pass/Fail. All tires shall meet classification Code "B" as identified in TM-9-2610-200-14. Recapped tires are not permitted. Each tire shall have at least 25% or more of thread 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 cupping or chucking. Tires shall not have cuts or cracks greater than one inch in length, 1/8 inch wide. Tires shall not have cuts or breaks, regardless of length or width that extend to the fabric. Rubber separation or bulges on tire sidewalls and thread area are not acceptable. Any damage to the tire bead is not acceptable. Tire inspection procedures are found in TM-9-2610-200-14.

k. Steering Section.

(1) Test Procedures. Inspect steering pump, steer mode selector valve, control unit, emergency steer motor and pump, reservoir and cap for leaks and proper function.

(a) Inspect all Steering Cylinder Hoses for leaks.

(b) Inspect Steering Control Unit.

(c) Inspect all Steering Tubing for leaks, cracks, kinks, or flat section.

(d) Inspect Steering Hydraulic Tank.

(e) Inspect Steering Wheel for cracks.

(f) Inspect Steering Selector Valve.

(g) Inspect Steering Pump.

(h) Inspect Lower Steering Hydraulic Group.

(i) Inspect Upper Steering Group.

NOTE: All steering cylinders shall be removed and new seal kits and springs installed 100 percent.

(2) Pass/Fail. Repair/Replace the steering pump reservoir and cap if leaking and not functioning properly. Replace steering fluid 100 percent.

No welding or straightening (hot or cold) shall be permitted on steering gear controls. Steering wheels with minor cracks 1/8 inch wide or less which do not extend to the steering wheel core may be repaired by filling with a non-shrinking epoxy and sanded smooth.

Procedures for repair/replacement can be found in TM-09445A-25/2.

l. Frame Fender And Cab.

(1) Test Procedures. Check frame fender and decks and under body supports for deteriorated bushings, broken bolts, cracks, broken welds and rust. Remove all insulation from cab/floor and inspect for corrosion. Inspect the following:

(a) Frame, Fender and Cab Group.

(b) Upper structure.

(c) Doors.

(d) Doors and Window Seals.

(e) Upholstery and Seats.

(f) Mirrors.

(g) Engine Housing.

(h) Data plate and instruction holder.

(i) Inspect Glass for brakes and cracks.

(j) Inspect Windshield Wiper for proper function.

(k) Inspect Mirror bracket.

(2) Pass/Fail. Repair/Replace the above items that are corrododed and contians dents that exceed 7/16 of an inch.

Procedures for repair/replacement can be found in TM-09445A-25/2.

m. Attachments.

(1) Inspection Procedures. As a requirement of this SOW, all attachments listed below shall be inspected, tested, repaired/replaced and painted.

(a) Ditch Cleanout Bucket, Part Number S619451.

(b) Excavator Bucket, Part Number L302688.

(c) Light Material Bucket, Part Number L302663.

(d) Earth Auger, Part Number L302691.

(e) Impact Hammer, Part Number L302659 to include: 1 chisel, 1 in-line cutter, 3 moil points, 1 spade and 1 tamper plate assembly.

(f) Vibratory Compactor, Part Number L302651.

(g) Attaching pins shall be servicable and free of rust. The body of the pin that passes through mounting bushing on the attachments and the boom shall not be painted.

(2) Pass/Fail. All attachments shall be in a "Near Like New Condition". All cutting edges and bucket teeth shall be in an operational condition with no missing or broken parts.

n. Data Plates And Decals.

DATA PLATE. Each repaired Excavator shall have an IROAN data plate affixed next to the existing data plate. The data plate shall meet the requirements of MIL-STD-130.

(1) Test Procedures. Inspect vehicle for missing, damaged and illegible data plates and decals.

(2) Pass/Fail. Replace all data plates and decals that are missing and illegible. IROAN data plates shall be prepared by the DMA or contractor and contain the following information:

VEHICLE SERIAL NO_____
REPAIRED IN ACCORDANCE WITH SOW-04-CSLE-09455A-2/1.
CONTRACTOR FACILITY_____
DATE_____
VEHICLE ODOMETER OR HOUR READING AT TIME OF IROAN_____

NOTE: Odometers and hour meters on vehicles IROAN under provisions of this SOW shall not be turned back to zero.

Record Jacket: All major equipment or components serial numbers that are replaced during IROAN are to be identified by the Contractor to be recorded in the record jacket of the Excavator (This include engines, transmissions, etc.). Information shall list the Excavator 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.

3.3.3. Phase III - Inspection, Testing And Acceptance.

a. Inspection, testing and acceptance of the Excavator shall be conducted in accordance with TM-09445A-25/2 and the provisions of this SOW.

b. The contractor shall be responsible for conducting required tests and shall ensure MCSC (Code CSLE, Albany, Georgia representatives are available to complete the final acceptance. Acceptance test shall be held at the contractor facility. MCSC (Code CSLE), Albany, Georgia representative shall be given a minimum of two weeks notice prior to beginning acceptance testing. The test area shall be cleared of all equipment parts and components, ect., not required for the test.

c. The contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCSC (Code CSLE), Albany, Georgia representative 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 equipment repaired under the provisions of this SOW shall be accomplished in accordance with TM-09445A-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." TM-4750-15/2 Painting and Registration Marketing for Marine Corps Combat and Tactical Equipment.

f. For prevention of corrosion refer to MIL-C-81309.

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 for immediate use or overseas shipment with exception of Maritime Prepositioned Forces (MPF), shall be preserved to 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 shall be hot and disconnected from vehicle electrical system. Terminals and leads shall 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) MPS Modified Drive Away: Batteries shall be hot and connected to the vehicle electrical system. Fuel tank shall be filled ¾ full of JP5/8. The air intake system, exhaust and brake systems, drive-train and gauges are to be de-preserved. Fire extinguisher bracket and seats (all) shall be installed.

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

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

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. MCSC (Code CSLE), Albany, Georgia representative 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 Excavator to record the inspection findings along with other required data.

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

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

3.5 Government Furnished Equipment (GFE) Accountability/ Government Furnished Materiel (GFM). The Management Control Activity (MCA/Code 573-2) will coordinate Government Furnished Equipment/Government Furnished Materiel (GFE)/(GFM) requests and maintain a central control system on all government owned assets in the contractor's possession. The MCA will forward a GFE Accountability Agreement to the contractor for signature on an annual basis to establish a chain of custody and identify property responsibilities for Marine Corps assets. The contractor is to acknowledge receipt of GFM to the MCA within 15 days of receipt. (This can be done by mailing (Materiel Management Department, Management Control Activity (Code 573-2), 814 Radford Blvd., STE 20320, Albany, GA 31704-0320) or faxing (commercial telephone number 229-639-5498 or DSN 567-5498) a copy of the DD1348).

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

3.7 Quality Assurance Provisions.

The 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 MCSC (Code CSLE), Albany, GA., and/or their representative during contract performance. Inspection may be accomplished at any work location. An authorized MCSC (Code CSLE), Albany, Georgia representative will be permitted to observe the work/task accomplishment or to conduct inspections at all reasonable hours within contractor normal working hours. Acceptance test shall be held in-plant. Inspection by MCSC (Code CSLE), Albany, Georgia representative 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 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 MCSC (Code CSLE), Albany, Georgia representative. Noncompliance with procedures resulting in degraded quality of work may result in a stop-work order requiring action by the Contractor to correct the work performed and to enforce compliance with quality assurance procedures or face contract termination. Notwithstanding such MCSC (Code CSLE), Albany, Georgia representative inspection, it shall be the Contractors' responsibility to ensure that the entire system meets the performance requirements delineated and addressed in the Excavator TM-09445A-25/2 and this SOW.

Quality assurance operations performed by the Contractor shall be subject to the MCSC (Code CSLE), Albany, Georgia representative verification at any time. MCSC (Code CSLE), Albany, Georgia representative 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 Excavator, 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. MCSC (Code CSLE), Albany, Georgia representative will 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 facility. Final acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements.

Acceptance testing. The Excavator IROANED under the provisions of this SOW shall be accomplished in accordance with TM-09445A-25/2.

3.9 Rejection. Failure to comply with any of the specified requirements listed herein will be reason for rejection by MCSC (Code CSLE), Albany, Georgia representative. The contractor shall at no additional cost to MCSC (Code CSLE), 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 Marine Corps Systems Command, (Code CSLE), 814 Radford Blvd., Suite 20320, Albany, GA 31704-0320.

4.1 Pre-Induction Check Sheets. The contractor shall complete the Pre-Induction Check Sheets (Appendix A) for each Excavator repaired. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCSC (Code CSLE), Albany, Georgia representative after final acceptance of the Excavator.

4.2 Final Road Test Checklist. The contractor shall provide one copy per vehicle of the Final Road Test Results (Appendix B) performed on Excavator. These sheets must be available for review during the final acceptance testing and shall be sent to MCSC (Code CSLE), Albany, Georgia representative upon acceptance of the Excavator.

4.3 Configuration Checklist. The Contractor shall complete the Configuration Checklist (Appendix C) for each Excavator IROANed. This document shall be available during final acceptance testing. One copy of each document shall be provided to MCSC (Code CSLE), Albany, Georgia representative after final acceptance of the Excavator, or upon request.

PRE-INDUCTION CHECK SHEETS
FOR
EXCAVATOR, RUBBER TIRED
MC 1085C

DATE: REFERENCES: ID 09445A

U.S. M.C. NO. _____ MILES _____

JOB ORDER NO. _____ HOURS _____

PRODUCTION NO. _____ SERIAL NO. _____

ENGINE NO. _____

TRANSMISSION NO. _____

INSPECTORS' NAME BADGE NUMBER SHIP NUMBER

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NOTE: The following inspection sheets are divided into columns. The inspector shall place a check in the column which best describes the condition of the item being inspected. Those items that cannot be inspected for any reason, the inspector shall make an appropriate annotation in the remarks column. If the inspector finds a defect that could cause injury to the operator or damage to the end item, testing shall cease until the defect is corrected or the decision is made to induct the Crane into the shop.

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PRE-INDUCTION CHECKSHEETS
EXCAVATOR RUBBER TIRED MC 1085C

ITEMS	PASS	FAIL	COMMENTS
1. Monitor Indicator and Gauge Checks			
Key Switch Check	____	____	_____
Fuel Gauge Check	____	____	_____
Hour Meter Check	____	____	_____
Tachometer	____	____	_____
Engine Temperature Gauge Check	____	____	_____
Engine Oil Pressure Gauge	____	____	_____
Transmission Temperature Gauge	____	____	_____
2. Body & Cab			
Hood	____	____	_____
Doors	____	____	_____
Fenders	____	____	_____
Windshield	____	____	_____
Upholstery, Seat	____	____	_____
Seat Belts	____	____	_____
Mirrors	____	____	_____
Wiper Motor	____	____	_____
Wiper Blades	____	____	_____
Fuel Tank	____	____	_____

ITEM	PASS	FAIL	COMMENTS
3. Cooling System			
Air Cleaner	____	____	_____
Inspect for Loose or Broken welds and rusted conditions	____	____	_____
Check all Hoses and Connections	____	____	_____
Radiator and Oil Cooler Group	____	____	_____
Fan Group	____	____	_____
Water Pump	____	____	_____
Thermostat	____	____	_____
Water Lines	____	____	_____
Protection Cover Group	____	____	_____
Oil Cooler Group	____	____	_____
Fan Belts	____	____	_____
4. Intake and Exhaust System			
Exhaust Manifold Group	____	____	_____
Exhaust Connections	____	____	_____
Exhaust Assembly	____	____	_____
Muffler Group	____	____	_____
Dust Ejector Group	____	____	_____
5. Fuel System			
Fuel Injection Lines Group	____	____	_____
Fuel Filter and Head Assembly	____	____	_____

ITEM	PASS	FAIL	COMMENTS
Fuel Filter Lines Group	____	____	_____
Fuel Injector Nozzles	____	____	_____
Fuel Pump	____	____	_____
Cold Start Device	____	____	_____
Primer Pump	____	____	_____
6. Hydraulic System			
Hydraulic Lines	____	____	_____
Axle Lockout Cylinder	____	____	_____
Outrigger Cylinder	____	____	_____
Hydraulic Swivel	____	____	_____
Main Hydraulic Pump	____	____	_____
Hydraulic Reservoir and Filter Group	____	____	_____
Hydraulic System Valve Bank	____	____	_____
Hydraulic Controls	____	____	_____
Steering Pump	____	____	_____
Outrigger Hydraulics	____	____	_____
Hydraulic Tank	____	____	_____
Hydraulic Brakes	____	____	_____
7. Transmission Unit			
Front Cover and Main Case for cracks, and Leaks.	____	____	_____

ITEM	PASS	FAIL	COMMENTS
Control Linkage Check	____	____	_____
Transmission Controls	____	____	_____
Transmission Hoses, Lines, Filter and Fittings	____	____	_____
Drive shaft	____	____	_____
8. Steering and Braking System			
Steering Cylinder & Hoses	____	____	_____
Steering Gear Box	____	____	_____
Steering Wheel	____	____	_____
Steering Hydraulic Tank	____	____	_____
Steering Pump Belt	____	____	_____
9. Brake System			
Brake Linkage	____	____	_____
Brake Pedal	____	____	_____
Parking Brake	____	____	_____
Brake Lines	____	____	_____
Brake Pads	____	____	_____
Brake Reservoir	____	____	_____
Swing Brake Control	____	____	_____
10. Electrical System			
Alternator	____	____	_____
Solenoid Switch Assembly	____	____	_____

ITEM	PASS	FAIL	COMMENTS
Starting Motor Group	____	____	_____
Instrument Panel	____	____	_____
Fuse/Holder	____	____	_____
Lights	____	____	_____
Batteries, Storage/Batteries	____	____	_____
Tail Light	____	____	_____
Work Lighting Group	____	____	_____
Harness Assembly	____	____	_____
11. Tires, Wheels			
Wheels	____	____	_____
Tires	____	____	_____

FINAL ROAD TEST CHECK SHEET

ITEMS	PASS	FAIL	COMMENTS
1. Monitor Indicator and Gauge Checks			
Key Switch Check	___	___	_____
Fuel Gauge Check	___	___	_____
Hour Meter Check	___	___	_____
Tachometer	___	___	_____
Engine Temperature Gauge Check	___	___	_____
Engine Oil Pressure Gauge	___	___	_____
Transmission Temperature Gauge	___	___	_____
2. Body & Cab			
Hood	___	___	_____
Doors	___	___	_____
Fenders	___	___	_____
Windshield	___	___	_____
Upholstery, Seat	___	___	_____
Seat Belts	___	___	_____
Mirrors	___	___	_____
Wiper Motor	___	___	_____
Wiper Blades	___	___	_____
Fuel Tank	___	___	_____
3. Cooling System			
Air Cleaner	___	___	_____

Inspect for Loose or Broken welds and rusted conditions	____	____	_____
Check all Hoses and Connections	____	____	_____
Radiator and Oil Cooler Group	____	____	_____
Fan Group	____	____	_____
Water Pump	____	____	_____
Thermostat	____	____	_____
Water Lines	____	____	_____
Protection Cover Group	____	____	_____
Oil Cooler Group	____	____	_____
Fan Belts	____	____	_____
4. Intake and Exhaust System			
Exhaust Manifold Group	____	____	_____
Exhaust Connections	____	____	_____
Exhaust Assembly	____	____	_____
Muffler Group	____	____	_____
Dust Ejector Group	____	____	_____
5. Fuel System			
Fuel Injection Lines Group	____	____	_____
Fuel Filter and Head Assembly	____	____	_____
Fuel Filter Lines Group	____	____	_____
Fuel Injector Nozzles	____	____	_____
Fuel Pump	____	____	_____

Cold Start Device	___	___	_____
Primer Pump	___	___	_____
6. Hydraulic System			
Hydraulic Lines	___	___	_____
Axle Lockout Cylinder	___	___	_____
Outrigger Cylinder	___	___	_____
Hydraulic Swivel	___	___	_____
Main Hydraulic Pump	___	___	_____
Hydraulic Reservoir and Filter Group	___	___	_____
Hydraulic System Valve Bank	___	___	_____
Hydraulic Controls	___	___	_____
Steering Pump	___	___	_____
Outrigger Hydraulics	___	___	_____
Hydraulic Tank	___	___	_____
Hydraulic Brakes	___	___	_____
7. Transmission Unit			
Front Cover and Main Case for cracks, and Leaks.	___	___	_____
Control Linkage Check	___	___	_____
Transmission Controls	___	___	_____
Transmission Hoses, Lines, Filter and Fittings	___	___	_____
Drive shaft	___	___	_____

8. Steering and Braking System

Steering Cylinder & Hoses	____	____	_____
Steering Gear Box	____	____	_____
Steering Wheel	____	____	_____
Steering Hydraulic Tank	____	____	_____
Steering Pump Belt	____	____	_____

9. Brake System

Brake Linkage	____	____	_____
Brake Pedal	____	____	_____
Parking Brake	____	____	_____
Brake Lines	____	____	_____
Brake Pads	____	____	_____
Brake Reservoir	____	____	_____
Swing Brake Control	____	____	_____

10. Electrical System

Alternator	____	____	_____
Solenoid Switch Assembly	____	____	_____
Starting Motor Group	____	____	_____
Instrument Panel	____	____	_____
Fuse/Holder	____	____	_____
Lights	____	____	_____
Batteries, Storage/Batteries	____	____	_____
Tail Light	____	____	_____

Work Lighting Group	___	___	_____
Harness Assembly	___	___	_____
11. Tires, Wheels			
Wheels	___	___	_____
Tires	___	___	_____

CONFIGURATION INSPECTION CHECK SHEET
EXCAVATOR RUBBER TIRED
MC 1085C

IDENTIFICATION NUMBER	TAM NUMBER
Vehicle registration Number	
Vehicle Serial Number	
Hours at Inspection	
Miles at Inspection	
IROAN Date	
Hours at IROAN	
Miles at IROAN	
Engineering Change Plans (ECP)	
SL-4	
Technical Manuals (TM)	

SECONDARY REPAIRABLE DATA

ITEM	SERIAL NUMBER
Engine	
Transmission	
Drive Axles	