_____ * INCH-POUND * *_____*

FEDERAL SPECIFICATION

SAW, RADIAL OVERARM, WOODWORKING, MOBILE, WHEEL-MOUNTED

This specification is approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE

1.1 Scope. This specification covers two types of wheel-mounted, woodworking radial overarm circular saws referred to herein as the mobile saw assembly.

1.2 Classification. The mobile saw assembly shall be of the following types, as specified (see 6.2.1).

Type I - Self-contained with diesel engine driven power supply Type II - Non self-contained without engine driven power supply

1.2.1 Type to code designator. The type to code designator is a one position alpha field used to designate mobile saw assemblies with or without a diesel engine driven power supply. The type to code designator shall be as shown in table I.

 TABLE I. Type to code designator.

 *

 * Type
 Code

 Definition
 *

 * I * A * With diesel engine driven power supply
 *

 * I * B * Without diesel engine driven power supply
 *

 * II * B * Without diesel engine driven power supply
 *

FSC 3220

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

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

Federal Specifications

 W-B-131 - Battery, Storage (Vehicular, Ignition, Lighting, and Starting)
 W-C-596 - Connector, Plug, Receptacle and Cable Outlet, Electrical Power, General Specification for

Federal Standard

FED-STD-123 - Marking for Shipment (Civil Agencies)

Military Specifications

MIL-M-18058 - Machinery, Metal and Woodworking; Packaging of MIL-G-28554 - Generator Sets, Mobile Electric Power and Supplemental Equipment; Packaging of MIL-V-62038 - Vehicles, Wheeled Preparation for Shipment and Storage

Military Standard

MIL-STD-129 - Marking for Shipment and Storage

2.1.2 Other Government documents and publications. The following other Government documents and publications form a part of this specification to the extent specified herein. Unless otherwise specified, the issues shall be those in effect on the date of the solicitation.

DEPARTMENT OF LABOR (DoL) OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

Occupational Safety and Health Standards

(Application for copies should be addressed to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

DEPARTMENT OF TRANSPORTATION (DOT)

Federal Motor Vehicle Safety Standards and Regulations Motor Carrier Safety Regulations

(Application for copies should be addressed to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.)

(Copies of specifications, standards, publications and other Government documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

2.2 Other publications. The following document(s) form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted shall be those listed in the issue of the DODISS specified in the solicitation. Unless otherwise specified, the issues of the documents not listed in the DODISS shall be the issue of the non-Government documents which is current on the date of the solicitation.

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)

NEMA WD 1 - General Requirements for Wiring Devices NEMA WD 6 - Wiring Devices Dimensional Requirements

(Application for copies should be addressed to the National Electrical Manufacturers Association, 2101 L Street N.W., Washington, DC 20037.)

SOCIETY OF AUTOMOTIVE ENGINEERS, INC. (SAE)

SAE J534 - Lubrication and Fittings

(Application for copies should be addressed to the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.)

TIRE AND RIM ASSOCIATION, INC. (TRA)

TRA Yearbook

(Application for copies should be addressed to the Tire and Rim Association, Inc., 175 Montrose West Avenue, Suite 150, Copley, OH 44321.)

UNDERWRITERS LABORATORIES, INC. (UL)

UL 62 - Flexible Cord and Fixture Wire UL 498 - Safety Attachment Plugs and Receptacles

(Application for copies should be addressed to the Underwriters Laboratories, Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.)

(Non-Government standards and other publications are normally available from the organizations which prepare or which distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specifications, specification sheets or MS standards), the text of this specification shall take precedence. Nothing in this specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Description. The mobile saw assembly shall be either of two types consisting of an electric motor driven, 16-inch (406.4 millimeter (mm)) diameter saw blade 1-inch (25.4 mm) diameter arbor, radial overarm, woodworking saw and other accessories specified herein; type I shall be furnished with a diesel engine driven power supply; type II shall be the same as type I but without the diesel engine driven power supply. The equipment shall be mounted on a two-wheeled, pneumatic tired, single axle, fully suspended undercarriage.

3.2 Standard commercial product. The mobile saw offered shall be in accordance with the requirements of the specification and shall be the standard product of the contractor and shall have been marketed and in commercial field use for at least one year prior to the date of bid opening. Product improvements are acceptable. When specific requirements are not stated herein, all items listed as standard equipment in the contractor's published specification brochures and catalogs, or normally furnished to commercial customers as standard equipment, shall be furnished. The item shall be equipment with optional equipment as specified herein. Optional equipment is defined as equipment not standard with the item but which has been furnished to the commercial customer, for the purpose intended such as special features or allied equipment. The item shall be equipped with all components necessary to enable it to function reliably and efficiently in sustained operation. The item shall conform to all federal laws and regulations applicable to the manufacturer governing safety and pollution which are in effect for this type of equipment at the time of manufacture. Upon the request of the contracting officer, the offerer/contractor shall provide sales data verifying that the basic configuration offered under this solicitation has been sold on the commercial market and meets the definition set forth in FAR 11.001 for a "commercial product" or "commercial-type product." In addition, the contracting officer may require submission of published specifications in order to verify conformance of equipment to the specification requirements of this solicitation.

3.3 First article. When specified in the contract or purchase order, a sample shall be subjected to first article inspection (see 4.2.1 and 6.3).

3.4 Materials. Materials used shall be free from defects which would adversely affect the performance or maintainability of individual components or of the overall assembly. Materials not specified herein shall be of the same quality used for the intended purpose in commercial practice. Unless otherwise specified herein, all equipment, material, and articles incorporated in the work covered by this specification are to be new and fabricated using materials produced from recovered materials to the maximum extent possible without jeopardizing the intended use. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. None of the above shall be interpreted to mean that the use of used or rebuilt products are allowed under this specification unless otherwise specified.

3.5 Interchangeability. All mobile saw assemblies of the same classification furnished with similar options under a specific contract shall be identical to the extent necessary to insure interchangeability of component parts, assemblies, accessories, and spare parts.

3.6 Design. The mobile saw assembly shall be designed to withstand the strains, jars, and vibrations incident to shipping, storage, and the conditions of mobile operation specified herein. Design of components and accessories covered by referenced specifications, and OSHA standards in effect at time of manufacture shall be as specified therein. The detailed design of such components as the storage box, control panel, and sawdust shield shall be the responsibility of the contractor, subject to the applicable requirements of this specification and approval by the contracting officer of the first article sample, when required. Installation and location of components and accessories shall be such as to permit normal maintenance and servicing of equipment. Safety requirements for the saw shall be in accordance with provisions of the applicable referenced specification. No portion of the equipment shall extend beyond the bumper in transit. The specified components and accessories shall be so located and installed on the chassis by the contractor so that the resultant weight distribution shall impose a static loading of not greater than 500 pounds (lb) (226.8 kilograms (kg)) on the lunette to assure proper handling of the saw while being towed. A weather resistant caution sign shall be placed on the front of the saw table. The sign shall read: CAUTION - EYE AND EAR PROTECTION IS REQUIRED WHILE OPERATING. The word "CAUTION" shall be the heading in 3/4-inch (19.1 mm) or larger letters. The balance of the sign shall be in letters of not less than 1/2-inch (12.7 mm). Color of the lettering shall be black on yellow background.

3.6.1 Chassis. The wheelmounted undercarriage shall be of the two-wheel, pneumatic tired type designed to support the complete saw assembly, and all accessories. Suspension, axles, and tires shall have rated capacities not less than the actual load imposed by the components. The tongue shall be designed to permit the chassis to turn about the lunette not less than 60 degrees (o) from either side of the longitudinal centerline of the chassis. The undercarriage shall be furnished complete with springs, wheels, tires, landing leg, leveling jacks, drawbar ring, and safety chains. The dry weight of the saw, with all components and accessories mounted thereon, shall be not greater than 6,000 lb (2721.6 kg). Unless otherwise specified (see 6.2.1), the overall dimensions of the assembled saw shall be not greater than 96 inches (243.8 mm) in height by 96 inches (243.8 mm) in width by 180 inches (45.7 mm) in length. The undercarriage shall be furnished with fenders covering both wheels. The fenders shall be flat on the top and shall be capable of withstanding a 150-lb (6.8 kg) load placed on the fender. When a breakaway brake system is incorporated as a part of the manufacturer's standard package, a positive mechanical lockout shall be provided to prevent the brakes from locking when the saw is pushed rearward. The towing tongue shall be adjustable +/-2 inches (50.8 mm) from centerline of the tongue.

3.6.1.1 Mobility. The saw, components, and accessories installed and in place shall be capable of being towed at speeds up to 50 miles per hour (mph) (80.5 kilometers per hour (km/h)) on smooth, hard-surfaced highways and at speeds up to 20 mph (32.2 km/h) over unimproved roads and open, rolling, and hilly terrain.

3.6.1.2 Wheels. Wheels shall be demountable at the hub and shall be equipped with standard ball or roller bearings. The components shall be mounted on the undercarriage in a manner to insure that each wheel supports, to the maximum practicable extent, an equal load. A lug wrench shall be provided for the removal of wheels.

3.6.1.3 Tires and rims. Tires and rims shall be selected on the basis of the size and load range recommended in the latest issue of the TRA yearbook for the imposed tire loads and the travel speeds specified in 3.6.1.1. The size of the tires and rims shall be such that, unless otherwise specified (see 6.2.1), the clearance between the ground and the lowest part of the chassis, including the axle assembly, shall be not less than 14 inches (355.6 mm) and the angle of departure shall be not less than 200.

3.6.1.4 Landing leg. A hinged landing leg shall be provided to support the front of the saw, when uncoupled, from the towing vehicle. The landing leg shall be adjustable to permit leveling of the chassis. A positive locking device shall be provided to hold the leg in the retracted position in transit.

3.6.1.5 Leveling jacks. Two rear leveling jacks shall be furnished to permit supporting and leveling of the chassis during sawing operations. The jacks shall be designed with an adjustable locking mechanism. Each jack shall be equipped with a base having a bearing surface of not less than 30 square inches (19354.8 mm2). Space shall be provided on the chassis for stowing the jacks (if detachable type) during travel.

3.6.1.6 Drawbar towing ring. Unless otherwise specified (see 6.2.1), the lunette type, drawbar towing ring shall be fabricated of 1 5/8-inch (41.3 mm) round steel stock and shall form a ring with a 3-inch (76.2 mm) +/- 1/16-inch (1.6 mm) inside diameter. The mounting shall include two safety chains with links formed of stock not less than 5/16-inch (7.9 mm) in diameter. The safety chains shall be anchored to the chassis and shall extend 24 inches (609.6 mm) beyond the towing ring. The loose end of each chain shall be fitted with a safety type hook or a pin-type clevis. The safety chains shall meet the requirements of DOT Federal Motor Carrier Safety Regulations.

3.6.1.7 Safety. For personnel protection, all rotating or moving parts and parts subject to high operating temperature, shall be insulated, enclosed or guarded.

3.6.2 Type I saw. The diesel engine and generator shall be capable of operating for not less than eight hours without overheating, or other detrimental effects.

3.6.2.1 Type I power supply. The power supply for the type I mobile saw shall be an integral diesel engine driven generator. Unless otherwise specified (see 6.2.1), the overall rating of the generator shall be not less than 10 kilowatts (kW). The generator shall be capable of providing 220 volts (V), 60 hertz (Hz), 3-phase power to the saw motor specified in 3.6.4, and 120V 60 Hz, single-phase power to the receptacles specified in 3.6.5.

3.6.2.2 Diesel engine. The diesel engine shall be of sufficient horsepower and rating to drive the generator specified in 3.6.2.1. The diesel engine shall start in any temperature from -200 Fahrenheit (F) (-28.90 Celsius (C)) to 1200F (48.90C). Starting aids may be either electric glow plug or ether primer. When an ether priming system is provided, it shall be of the measured shot type with storage capacity of not less than 12 fluid ounces (354.9 milliliters (mL).

3.6.2.3 Engine accessories. The diesel engine shall be equipped with batteries, exhaust muffler, air cleaner, oil filter, engine hour meter, and fuel tank. The capacity of the fuel tank shall be sufficient to run the engine for not less than 4 hours under full rated load. All other engine accessories supplied in commercial practice shall be provided.

3.6.2.3.1 Battery(s). Unless otherwise specified (see 6.2.1), the battery(s) furnished shall be dry charged and shall be in accordance with W-B-131, without electrolyte. The battery(s) shall be provided with sealed caps to prevent the intrusion of atmospheric moisture.

3.6.2.3.2 Engine instrument panel. As a minimum the panel shall include the following:

- a. Engine hour meter (capacity of 9999 hours).
- b. Keyed ignition/starting switch.
- c. Volt meter or charging indicator.
- d. Fuel gauge.
- e. Oil pressure gauge.
- f. Engine coolant temperature gauge.

3.6.3 Type II saw. All operational components and associated electrical controls shall operate smoothly without overheating, or other detrimental effects.

3.6.4 Saw. The saw shall be a radial overarm, woodworking saw, retractable head, 16-inch (406.4 mm), 1-inch arbor (25.4 mm), and a depth cut of not less than 4 3/4 inches (44.5 mm). The saw shall be driven by not less than a 5-horsepower 220V, 60 Hz, 3-phase, continuous duty, totally enclosed, fan cooled motor. The saw shall be mounted so that the saw can be operated from the rear of the chassis. No part of the machine shall extend beyond the bumper when the saw is locked in the travel position. Levers, handwheels, cranks, and locks shall be located to the maximum practicable extent near the front of the saw within the safe access of the operator. The saw shall be equipped with an elevating screw or handwheel and means for preventing movement of the cutting head relative to the elevating mast. Unless otherwise specified (see 6.2.1), the overall dimensions of the saw shall not be greater than 52 inches (1320.8 mm) in length by 36 inches (914.4 mm) in width and the weight shall be not greater than 750 lb (340.2 kg). Relative to the chassis, the table length shall be measured from side to side and the width shall be measured from the extreme rear toward the front. A weather resistant caution sign shall be placed on the front of the saw table. The sign shall read: CAUTION - EYE AND EAR PROTECTION REQUIRED WHILE OPERATING. The word caution shall be the heading and shall be in letters not less than 3/4-inch (19.1 mm) in height. The balance of the sign shall be in letters not less than 1/2-inch (12.7 mm) in height. The color of the lettering shall be black on a yellow background.

3.6.4.1 Cover. The saw shall be furnished with a canvas cover complete with sash cords and nonferrous eyelets for securing the cover on the unit. The cover shall enclose the complete saw unit, including the work table, and shall be fabricated of not less than No. 6, hard texture, cotton duck. The cotton duck shall be treated to resist fire, water, weather, and mildew. All sharp metal corners or edges shall be protected or eliminated to prevent damage to the cover, caused by wind turbulence while in transit.

3.6.4.2 Saw blade compartment. A lockable, weatherproof compartment shall be provided and designed for holding the saw blades, dado heads and tools furnished with the unit. Each blade shall be individually removable without disturbing the other blades. The blade storage section shall be constructed so the blade teeth will not contact other blades. Nonmetallic materials shall be used to prevent contact of saw teeth with metal parts of the storage cabinet.

3.6.4.3 Saw accessories. Unless otherwise specified (see 6.2.1), the saw accessories listed in table II shall be furnished with each saw machine in the quantities and sizes indicated. The size of arbor holes shall be 1-inch (25.4 mm). Spacer collars shall be cadmium plated, cold rolled steel.

TABLE II. Saw accessories.

*.				*
*	Quantity	*	Accessory	*
.		..		*
*	2-each	*	Wrench, saw blade removal/replacement	*
*	3-each	*	Saw blades, combination cross cut and rip, 16-inch (406.4 m	nm)*
*		*	diameter	*
*	3-each	*	Saw blades, rip, 16-inch (406.4 mm), diameter	*
*	3-each	*	Saw blades, hollow ground, combination 16-inch (406.4 mm)	*
*		*	diameter	*
*	1-set	*	Dado heads, No. 3, 10-inch (254 mm) diameter	*
*	1-each	*	Filler blade, 1/16-inch (1.6 mm) thick	*
*	4-each	*	Filler blades, 1/8-inch (3.2 mm) thick	*
*	2-each	*	Outside blades, 1/8-inch (3.2 mm) thick	*
*	2-each	*	Spacer collars, 1/16-inch (1.6 mm) thick	*
*	2-each	*	Spacer collar, 1/4-inch (6.35 mm) thick	*
*.		_ * _		*

3.6.4.4 Sawdust shield. A sawdust shield shall be installed between the generator set and the saw on the type I mobile saw assembly. The shield shall extend between the undercarriage frame side rails and shall be equivalent in height to the generator housing. The shield shall be of all metal construction. A sawdust shield for the type II mobile saw is not required.

3.6.5 Connectors, plugs, and receptacles. Cord receptacles, cord plugs, and outlet receptacles shall be of the grounding type and shall be in accordance with UL 498, W-C-596, NEMA WD 1 and NEMA WD 6, as applicable. The cord receptacles and cord plugs shall employ cord grip construction and shall be weatherproof. Receptacles for type I shall be of the grounding type, 2-pole, 3-wire, 125V, 15 amperes, general purpose duplex.

3.6.6 Flexible power cords. Unless otherwise specified (see 6.2.1), all power cords shall be in accordance with UL 62.

3.7 Lubrication. Means for lubrication shall be in accordance with the manufacturer's standard practice. The lubricating points shall be easily visible and accessible. Hydraulic lubrication fittings shall be in accordance with SAE J534. Where use of high pressure lubricating equipment, 1,000 pound force per square inch (psi) or higher, will damage grease seals or other parts, a suitable warning shall be affixed to the equipment in a conspicuous location. The unit shall be lubricated prior to delivery with lubricants designated for use in the -20 (-28.9oC) to 1200F (48.9oC) range. The unit shall be conspicuously tagged to identify the lubricants and their temperature range.

3.8 Servicing and adjusting. Prior to acceptance of the mobile saw assembly by the Government, the contractor shall service and adjust the mobile saw assembly for immediate operational use as required in the operator's manual. The servicing and adjusting shall include at least the following:

- a. Inflation of all tires.
- b. Proper functioning of all electrical systems.
- c. Wheel balancing.
- d. Adjustment of engine to include tune up (type I).
- e. Complete lubrication with grades of lubricants in compliance with requirements of paragraph 3.7.
- f. Cooling system filled to capacity with clean solution 50/50 water and antifreeze.

3.8.1 Instruction plates. The equipment shall be equipped with instruction plates or decals suitably located, describing any special or important procedures to be followed in operating and servicing the equipment. Plates shall be securely affixed to the equipment with nonferrous screws or bolts.

3.9 Cleaning, treatment, and painting. Surfaces normally painted in good commercial practice shall be cleaned, treated, and painted as specified herein. The color of the finish coat shall be as specified (see 6.2.1). Surfaces to be painted shall be cleaned and dried to insure that they are free from contaminants such as oil, grease, welding slag and spatter, loose mill scale, water, dirt, corrosion product, or any other contaminating substances. As soon as practicable after cleaning, and before any corrosion product or other contamination can result, the surfaces shall be prepared or treated to insure the adhesion of the coating system. The painting shall consist of at least one coat of primer and one finish coat. The primer shall be applied to a clean, dry surface as soon as practicable after cleaning and treating. Painting shall be with manufacturer's current materials according to manufacturer's current processes and the total dry film thickness shall be not less than 2.5 mils over the entire surface. The paint shall be free from runs, sags, orange peel, or other defects.

3.10 Workmanship.

3.10.1 Steel fabrication. The steel used in fabrication shall be free from kinks, sharp bends, and other conditions which would be deleterious to the finished product. Manufacturing processes shall be done neatly and accurately. All bends shall be made by controlled means to insure uniformity of size and shape.

3.10.2 Castings. All castings shall be sound and free from patching, misplaced coring, warping, or any other defect which reduces the casting's ability to perform its intended function.

3.10.3 Bolted connections. Boltholes shall be accurately punched or drilled and shall have the burrs removed. Washers or lockwashers shall be provided in accordance with good commercial practice, and all bolts, nuts, and screws shall be tight.

3.10.4 Riveted connections. Rivet holes shall be accurately punched or drilled and shall have the burrs removed. Rivets shall be driven with pressure tools and shall completely fill the holes. Rivet heads, when not countersunk or flattened, shall be of approved shape and of uniform size for the same diameter of rivet. Rivet heads shall be full, neatly made, concentric with the rivet holes, and in full contact with surface of the member.

3.10.5 Welding. Welding procedures shall be in accordance with a nationally recognized welding code. The surface of parts to be welded shall be free from rust, scale, paint, grease, or other foreign matter. Welds shall be of sufficient size and shape to develop the full strength of the parts connected by the welds. Welds shall transmit stress without permanent deformation or failure when the parts connected by the weld are subjected to proof and service loading.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items must meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material.

4.1.2 Component and material inspection. Components and materials shall be inspected in accordance with all the requirements specified herein and in applicable referenced documents.

4.2 Classification of inspection. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.2.1).b. Quality conformance inspection (see 4.2.2).

4.2.1 First article inspection. The first article inspection shall be performed on one mobile saw assembly when a first article is required (see 3.3 and 6.2.1). This inspection shall include the examination of 4.3, the tests of 4.4, and when specified, the preproduction pack inspection of 4.6 (see 4.6 and 6.2.1). The first article may be a first production item or a standard production item from the supplier's current inventory provided the item meets the requirements of the specification and is representative of the design, construction, and manufacturing technique applicable to the remaining items to

be furnished under the contract. When a first article test is specified by this contract and the contractor desires to deliver the test unit as a contract item, it shall be delivered, only after the contractor, at his own expense, has completely cleaned, devoid of foreign material, reconditioned, and/or overhauled, making such replacements and modifications as are required to make the unit acceptable as a contract item.

4.2.2 Quality conformance inspection. The quality conformance inspection shall include the examination of 4.3, the tests of 4.4, and the packaging inspection of 4.6.

4.3 Examination. Each mobile saw assembly shall be examined for compliance with requirements specified in section 3 of this specification. Any redesign or modification of the contractor's standard product to comply with specified requirements, or any necessary redesign or modification following failure to meet specified requirements shall receive particular attention for adequacy and suitability. This element of inspection shall encompass all visual examinations and dimensional measurements. Noncompliance with any specified requirements or presence of one or more defects preventing or lessening maximum efficiency shall constitute cause for rejection.

4.4 Tests. The first article shall receive the tests of 4.5. Each production unit shall receive the functional test of 4.5.1. Failure to pass any test shall constitute cause for rejection.

4.5. Test methods.

4.5.1 Functional test. The first article, when furnished, and each production unit shall be operated for not less than one hour to verify the functional adequacy of operational components and associated electrical controls. The power supply for the type I shall be the diesel engine driven generator. The power supply for the type II shall be standard commercial 220V, 60 Hz, 3-phase. Actual sawing operations will not be required under this element of inspection.

4.5.2 Mobility tests. The first article, when furnished, shall be road-tested for a distance of not less than 25 miles (40.2 kilometers (km)) at speeds up to 50 mph (80.5 km) on a smooth, hard-surfaced road. The test shall be performed with the full complement of tools and accessories. The unit shall satisfactorily meet this phase of the road-ability test without damage or adverse effect on the mounted equipment. The unit shall then be towed a distance of not less than 25 miles (40.2 km) over rough terrain at a speed of 20 mph (32.2 km).

4.5.2.1 Ground clearance test. In lieu of this test, the contractor may submit calculations with the fat report to show the ability to meet the requirements of paragraph 3.6.1.3. The report shall include, but not be limited to blueprint type drawings.

4.6 Preparation for delivery inspection. Inspection of the preservation, packaging, packing, and marking shall be in accordance with the requirements of section 4 of MIL-M-18058. The inspection shall consist of the quality conformance inspection; and, when specified, a preproduction pack shall be furnished for examination and test within the timeframe required (see 6.2.1).

- a. Radial overarm saw. The inspection of the preservation, packing, and marking of the radial overarm saw shall be in accordance with the requirements of section 4 of MIL-M-18058.
- b. Diesel engine driven generator. The inspection of the preservation, packing, and marking of the diesel engine driven generator unit shall be in accordance with the requirements of section 4 of MIL-G-28554.

5. PREPARATION FOR DELIVERY

5.1 Preservation, packaging, and packing. Preservation, packaging, and packing shall be in accordance with the requirements of MIL-V-62038 with the level of preservation, packaging, and the level of packing as specified (see 6.2.1).

5.2 Marking.

5.2.1 Military agencies. Shipments to military agencies shall be marked in accordance with MIL-STD-129.

5.2.2 Civil agencies. Shipments to civil agencies shall be marked in accordance with FED-STD-123.

6. NOTES

6.1 Intended use. The saw is intended for woodcutting operations at advanced base construction sites.

6.2 Ordering data.

6.2.1 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number, and date of this specification.
- b. Type of mobile saw assembly required (see 1.2).
- c. Overall dimensions of the saw, if other than as specified (see 3.6.1).
- d. Clearance between the ground and lowest part of the chassis, if other than as specified (see 3.6.1.3).
- e. Dimensions of drawbar towing ring, if other than as specified (see 3.6.1.6).
- f. Overall rating (in kW) of the diesel engine driven generator, if other than as specified (see 3.6.2.1).
- g. When batteries are to be other than as specified (see 3.6.2.3.1).
- h. Overall dimensions of the radial overarm saw, if other than as specified (see 3.6.4).
- i. Saw accessories, if other than as specified (see 3.6.4.3 and Table II).
- j. When flexible power cords are to conform to other than UL 62 (see 3.6.6).
- k. Color of finish coat (see 3.9).

- 1. When a first article sample and inspection is required. When a preproduction pack inspection is required and the timeframe required (see 4.2.1 and 4.6).
- m. Level of preservation packaging and level of packing (see 5.1).

6.3 First article. When a first article inspection is required, the mobile saw assembly will be tested and should be a first article sample or it may be a standard production item from the contractor's current inventory in accordance with 4.2.1. The first article should consist of one unit. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examination, test, and approval of the first article.

6.4 Supersession data. This specification replaces military specification MIL-S-17717E(YD) dated 30 July 1987.

MILITARY INTERESTS:	CIVIL AGENCY COORDINATING ACTIVITY:		
Custodians	GSA - FSS		
Navy - YD1	PREPARING ACTIVITY		
AIr Force - 99	Navy - YD1		
Review activity	(Drestort 2000 0172)		
Air Force - 84	(FI0Ject 3220-01/3)		