

[METRIC]
A-A-59245
June 16, 1998
SUPERSEDING
OO-S-2797
November 13, 1992

COMMERCIAL ITEM DESCRIPTION

SWEEPER, PERMANENT MAGNET, ROAD, TOWED

The General Services Administration has authorized the use of this commercial item description for all Federal agencies.

1. **SCOPE.** This commercial item description (CID) covers towed, permanent magnet type, two-wheel mounted, road sweeper with not less than 2.4 metre (m) effective sweeping width. Permanent magnet road sweepers are used for picking up ferrous metal objects from runways, roads, and maintenance areas.

2. SALIENT CHARACTERISTICS.

2.1 Description. The sweeper shall be a self-contained unit complete with magnet assembly, retainer pans, tow bar with parking stand, wheels, and tires.

2.2 Standard commercial product. The sweeper shall, as a minimum, be in accordance with the requirements of this CID and shall be the manufacturer's standard commercial product. Additional or better features which are not specifically prohibited by this CID but which are a part of the manufacturer's standard commercial product, shall be included in the sweeper being furnished. A standard commercial product is a product which has been sold or is being currently offered for sale on the commercial market through advertisements or manufacturer's catalogs, or brochures, and represents the latest production model.

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

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: Officer In Charge (Code 15E2), Seabee Logistics Center, 4111 San Pedro St., Port Hueneme, CA 93043-4410, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

A-A-59245

2.4 Design and construction.

2.4.1 Environmental conditions. The sweeper shall be capable of satisfactory performance when operated in any ambient temperature from - 31 degrees Celsius (°C) to 51 °C.

2.4.2 Dissimilar metals. The use of dissimilar metals in intimate contact with each other shall be avoided in order to minimize galvanic corrosion between these metals.

2.4.3 Wheels, rims, and tires. The sweeper shall be mounted on two pneumatic-tired wheels. Rim and tire ratings shall conform to TRA recommendations for the type and size tires furnished. Tires shall be of the tubeless type, with highway tread. When specified (see 6.2), tires shall be filled with urethane foam.

2.4.4 Dimensions. The overall dimensions shall be not greater than 2.14 m in length, 3.3 m in width, and 1.17 m in height.

2.4.5 Tow bar. The tow bar shall have a lunette type towing ring with a 76 millimetre (mm) inside diameter eye. Provisions shall be made for adjusting the height of the tow bar from 50 centimetre (cm) to 76 cm to match the height of the towing vehicle hitch.

2.4.6 Safety chain(s). The sweeper shall be coupled with a safety chain(s) to the towing vehicle. The end of the chain(s) shall be furnished with grabhooks, S-hooks, or anchor shackles. The chain(s) shall be of such length so that if the hitch fails, the tow bar shall not hit the ground. Each chain shall have an ultimate strength not less than equal to the gross weight of the load being towed.

2.4.7 Safety reflectors. The sweeper shall be provided with not less than four red colored circular light reflectors, conforming to SAE J 594. Each reflector shall have a reflecting surface of not less than 76 mm in diameter. The reflectors shall be mounted one on each side of the front, and one on each side of the rear portion of the sweeper. The reflectors shall be visible at night between 30 and 180 m when illuminated by the low beam headlights of an oncoming motor vehicle. The reflectors shall be securely fastened to the sweeper.

2.4.8 Magnet assembly. The magnet assembly shall consist of one or more permanent magnets rigidly fastened within an enclosed metal housing with a cover plate used as the sweeper face. The effective sweeping width, from front to back, shall be not less than 230 mm. The metal housing shall be so designed to prevent the entrance of water and dust inside the assembly. When in the sweeping position, the magnet's operating height shall be set to 75 mm, measured from level flat ground to the horizontal face of the magnet's cover plate. Throughout the life of the sweeper, the magnet shall not show evidence of loss of magnetic strength. The ground clearance, while in the travel position, shall be not less than 125 mm.

2.4.9 Retainer pan(s). The onboard retainer pan(s) shall be furnished with handles that would enable one person to easily lift and remove pan(s) from their mountings for emptying purposes. The pan(s) shall be mounted such that the metal debris collected on the magnet cover plate shall

A-A-59245

be readily discharged into the retainer pan(s). The retainer pan(s) shall be provided with means to drain any accumulated rainwater when the sweeper is stored outside.

2.4.10 Shock and vibration. The magnet assembly shall not release the attracted metals due to mechanical shock or vibration encountered over rough, unpaved ground containing rocks, bumps, potholes, debris, or other obstructions.

2.5 Performance.

2.5.1 Travel speed. The sweeper shall be capable of being towed safely at any speed to 88 kilometre per hour (km/h) on asphalt or concrete public highway. The sweeper shall not shift or sway more than 76 mm to left or right. The sweeper shall not show evidence of binding or cramping when the towing vehicle makes varying turns down to not less than 7 m turning radius.

2.5.2 Sweeper pickup capability. The sweeper, traveling at 8 km/h, on a paved road, with the magnet cover plate positioned at 75 mm from the ground, shall in one pass, pick up and retain not less than 28 carbon steel machine bolts. Each bolt shall be 12.7 mm diameter by 75 mm long and scattered at random inside a 2 m by 6 m area.

2.6 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 J 534. Where use of high-pressure lubricating equipment, 6 895 kPa 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 type of lubricant specified in the operator's manual and grade of lubricant recommended for ambient temperature at the delivery point. The unit shall be conspicuously tagged to identify the lubricants and their temperature range.

2.7 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). Surfaces to be painted shall be cleaned and dried to ensure 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 ensure 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 process and the total dry film thickness shall be not less than 0.06 mm over the entire surface. The paint shall be free from runs, sags, orange peel, or other defects.

2.8 Instruction plates. The sweeper shall be equipped with instruction plates suitably located, describing any special or important procedures to be followed in operating and servicing the equipment. Plates shall be of a material which will last and remain legible for the life of the

A-A-59245

equipment. Plates shall be securely affixed to the equipment with nonferrous screws, bolts, or rivets.

2.9 Identification plate. An identification plate will be furnished by the contracting officer for each sweeper. The contractor shall stamp all necessary data in the blank spaces of the plate provided for that purpose, and securely affix a plate to each sweeper in a conspicuous place with nonferrous screws, bolts, or rivets. The applicable nomenclature contained in the contract item description shall be placed in the top blank.

2.10 Lifting and tiedown attachments. When specified (see 6.2), the sweeper shall be equipped with manufacturer's standard lifting and tiedown attachments.

2.11 Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest version of IEEE SI-10 and all other requirements of this commercial item description including form, fit and function are met. If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch-pound units, a request should be made to the contracting officer to determine if the product is acceptable. The contracting officer has the option of accepting or rejecting the product.

3. REGULATORY REQUIREMENTS.

3.1 Recovered materials. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

4. QUALITY ASSURANCE PROVISIONS.

4.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

5. PACKAGING. The preservation, packing, and marking shall be as specified in the contract or order.

6. NOTES.

6.1 Source of documents.

6.1.1 The Federal Acquisition Regulation (FAR) may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

A-A-59245

6.1.2 IEEE Standards are available from the Institute of Electrical and Electronic Engineers, Inc., IEEE Service Center, 445 Hoes Lane P.O. Box 1331, Piscataway, NJ 08855-1331.

6.1.3 SAE Standards and Recommended Practices is available from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.

6.1.4 TRA Yearbook is available from the Tire and Rim Association, Inc., 175 Montrose West Avenue, Suite 150, Copley, OH 44321.

6.2 Ordering data. Acquisition documents should specify the following:

- a. Title, number, and date of this CID.
- b. When tires are filled with urethane foam (see 2.4.3).
- c. Color of finish coat (see 2.7).
- d. When lifting and tiedown attachments are required (see 2.10).

6.3 Supersession data. This commercial item description replaces Federal Specification OO-S-2797, dated November 13, 1992.

MILITARY INTERESTS:

Custodians:

Army - AT
Navy - YD1
Air Force - 99

Review Activities:

Navy - MC
Air Force - 84
DLA - CC

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

Preparing Activity:

Navy - YD1

(Project 3830-0006)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:

1. DOCUMENT NUMBER
A-A-59245

2. DOCUMENT DATE (YYMMDD)
980616

3. DOCUMENT TITLE

SWEEPER, PERMANENT MAGNET, ROAD, TOWED

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle Initial)

b. ORGANIZATION

c. ADDRESS (Include Zip Code)

d. TELEPHONE (Include Area Code)
(1) Commercial
(2) AUTOVON
(if applicable)

7. DATE SUBMITTED
(YYMMDD)

8. PREPARING ACTIVITY

a. NAME

R. E. PAMPLONA

b. TELEPHONE (Include Area Code)

(1) Commercial 805-982-5843 (2) AUTOVON 551-5843

c. ADDRESS (Include Zip Code)

OFFICER IN CHARGE, SEABEE LOGISTICS CENTER
CODE 15E2, 4111 SAN PEDRO ST.
PORT HUENEME, CA 93043-4410

IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:

DEFENSE QUALITY AND STANDARDIZATION OFFICE
5203 Leesburg Pike, Suite 1403, Falls Church, VA 22401-3466
Telephone (703) 756-2340 AUTOVON 289-2340