

INCH-POUND

A-A-55544
24 May 1999
SUPERSEDING
MIL-S-18141J
26 September 1991

COMMERCIAL ITEM DESCRIPTION SWEEPER, ROTARY, 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 the general requirements for a towed type, rotary sweeper, equipped with a diesel or gasoline engine driven brush for use in cleaning debris and snow from roads and other similar smooth surfaces.
2. **CLASSIFICATION.** This CID uses a classification system that is included in the Part or Identifying Number (PIN). The PIN consists of the CID number and a dash number to indicate (a) the type engine, (b) inclusion of a spray system, and (c) the attachment of an apron. (See 6.1)

The sweeper shall, as a minimum, be in accordance with the requirements of this CID, and shall be the manufacturer's standard commercial product. Any additional or better features, not prohibited by the contract or order, that are a part of the manufacturer's standard product may be included in the sweeper being offered. A standard product is a product that has been sold or is being currently offered for sale in the commercial market through advertisements or manufacturer's catalogs or brochures, and represents the latest production model.

3. SALIENT CHARACTERISTICS.

3.1 **Design and Construction.** The sweeper shall have a welded steel frame, a diesel or gasoline engine, an adjustable brush, a steering tow bar, and other parts and accessories to make a complete and serviceable unit. The sweeper shall be mounted on three (3) or four (4) wheels of the manufacturer's current standard design and size. The front wheel or wheels shall be steerable. The minimum turning radius of the sweeper should be not more than 130 inches. The tow bar shall be at least five (5) feet long, and be designed for towing by a vehicle having a pintle height between ten (10) and thirty-six (36) inches above ground level. Safety chains shall be provided for securing the tow bar to the towing vehicle. The brush shall be cylindrical, not less than thirty (30) inches in diameter, and not less than ninety-five (95) inches long. The brush shall be reversible and refillable. A full-length hood, with ends, may be mounted over the brush, covering at least 40 percent of the brush's circumference. The brush drive engine may be a diesel or a gasoline engine. The engine shall have the horsepower, torque, and speed characteristics to satisfactorily meet all the performance requirements of this CID and the manufacturer's specifications for the sweeper. The sweeper shall have lights and/or reflectors which are mounted on the rear and sides of the sweeper and which conform to the requirements of DOT Federal Motor Carrier Safety Regulations, Section 393.26.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any other data which may improve this document should be sent to: Defense Supply Center Columbus, ATTN: DSCC-VAI, 3990 East Broad Street, Columbus, OH 43216-5000.

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3.2 Brush Operation. The brush shall be driven by a diesel or gasoline engine and operation may be mechanical or hydraulic. If mechanical operation, the brush drive may be by chain and sprockets or gears. If used, drive chains shall have provisions for tension adjustment. If hydraulic operation, the hydraulic system shall consist of a hydraulic pump driven by engine power takeoff, a hydraulic motor for brush drive, an oil reservoir, connecting lines and a control valve for raising, lowering, and operating the brush. A manually operated clutch shall be provided between the engine and the brush drive. Brush lifting shall be by a hand operated hydraulic pump and connecting lines. The brush vertical height shall remain at the pre-selected height during operation. A separate safety locking device shall be provided to hold the brush in the raised, travel position. The sweeper shall be constructed to permit angle sweeping to either side. Brush movement shall allow an angle of not less than 30° right or left.

3.3 Performance. The sweeper shall sweep at least 90 percent of dirt, debris, and gravel from a rectangular paved area, 6-1/2 feet wide and 100 feet long, in a single pass. The sweeper, with the brush set for ground contact, angled at 30°, and rotated at the producer's recommended speed, shall be towed at a speed of five (5) miles per hour to sweep dirt, debris, and gravel from the area surface.

3.4 Water Spray System. When specified by the contract or order, a horizontal leg or skid-mounted water tank shall be provided and securely fastened to the sweeper. The total capacity of the tank shall be not less than 150 gallons. The tank shall be connected to an atomizing spray bar or nozzle arranged to cover the sweeping path ahead of the brush. Pressure shall be obtained by a pump powered by a power take-off from the diesel or gasoline engine. The pump shall be equipped with a pressure control valve. A shutoff valve shall also be provided. The water spray system shall have a line filter (strainer) installed ahead of the pump. The entire water spray system shall be provided with a means to completely drain and disconnect the system when not in use.

3.5 Apron. When specified by the contract or order, an apron of heavy rubberized material shall be furnished and mounted in front of the brush to prevent excessive dirt and debris from being thrown at the front wheel(s) of the sweeper and at the towing vehicle. The apron shall be mounted to suit the manufacturer's hood construction, but shall not interfere with any spray system.

3.6 Transportation. When specified by the contract or order, the sweeper shall be equipped with lifting and tie down attachments. Tie down markings shall clearly indicate that the attachments are intended for tying down the sweeper during shipment. These markings shall identify the attachments by stenciling or other suitable marking. The gross weight and location of the center of gravity shall be stenciled, or by other suitable marking, on the sweeper in a manner easily discernible to personnel handling the equipment.

3.6.1 Road Transport. The sweeper, with the brush raised to the travel position, shall be capable of being towed over highway and secondary roads without damage or permanent deformation to the sweeper. The sweeper shall be capable of being towed at 25 miles per hour without interference with or failure to track the towing vehicle. The sweeper shall be fully transportable on a low-bed trailer.

3.6.2 Rail Transport. The overall dimensions of the sweeper, with the exhaust and air cleaner stacks removed, shall meet the Passe-Partout International (PPI) Gauge dimension requirements for rail shipment (see Figure 1).

3.6.3 Air Transport. The sweeper measurements shall conform to the dimensional and loading ramp requirements of a military C-130 aircraft (see Figure 2) without disassembly, except that disconnecting and subsequent reconnecting that can be performed by one man in one hour.

3.6.4 Toxic Chemicals/Hazardous Substances. The use of toxic chemicals, hazardous substances, or ozone depleting chemicals (ODC) should be avoided, when feasible.

4. REGULATORY REQUIREMENTS.

4.1 Recycled/Recovered Materials. The offerer/supplier is encouraged to use recovered materials to the maximum extent practical, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

5. QUALITY ASSURANCE PROVISIONS.

5.1 Product conformance. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this CID, and that the product conforms to the producer's own drawings, specifications, standards, and quality assurance practices, and is the same product offered for sale in the commercial market. The Government reserves the right to require proof of such conformance prior to first delivery and thereafter as may be otherwise provided for under provisions of the contract.

5.2 Market acceptance. The following market acceptance criteria are necessary to document the quality of the product to be provided under this CID.

- a. The producer producing the item must have been producing similar commercial grade items meeting the requirements of this CID for at least two (2) years, and,
- b. The producer must have sold thirty (30) similar commercial units which meet or exceed the requirements of this CID.

6. PACKAGING.

6.1 Preservation, packing, and marking. Preservation, packing, and marking shall be specified in the contract or order.

6.2 Winterization. When specified, the sweeper shall be winterized to satisfy the requirements provided by the procuring agency.

6.3 Marking. When specified by the contract or order, the sweeper shall have a shipping data plate attached as near as possible to the manufacturer's name plate. The shipping plate shall be permanently attached and marked with the following information:

- (a) Length - inches
- (b) Height - inches
- (c) Width - inches
- (d) Cube - cubic feet
- (e) Gross equipment weight - pounds
- (f) Center of gravity - location, inches

7. NOTES.

7.1 PIN. The PIN should be used for Government purposes to buy commercial products described by this CID. The following part identification numbering procedure is for government purposes and does not constitute a requirement for the contractor.

PIN Construction

CID Number + Select (a) + Select (b) + Select (c)

AA55544 - (a) - (b) - (c)

- | | | |
|--------------------------|------------|--------------|
| (a) = Type of Engine | A = Diesel | B = Gasoline |
| (b) = Water Spray System | 1 = Yes | 2 = No |
| (c) = Apron Attachment | A = Yes | B = No |

7.2 Ordering data. The contract or order should specify the following:

- a. CID document number, revision, and CID PIN.
- b. Quality assurance provisions.
- c. Packaging requirements.
- d. Transportation and marking requirements.
- e. Winterization requirements.

7.3 National Stock Numbers (NSNs). The following is a list of identified NSNs assigned which correspond to this CID. This list may not be indicative of all possible NSNs associated with the CID.

<u>NSN</u>	<u>ENGINE TYPE</u>	<u>WATER SPRAY SYSTEM</u>	<u>APRON ATTACHMENT</u>
3825-00-087-5019	GASOLINE	NO	NO
3825-00-190-3291	DIESEL	YES	NO
3825-00-230-9690	GASOLINE	YES	NO
3825-00-349-8062	GASOLINE	YES	YES
3825-00-377-4327	GASOLINE	NO	NO
3825-00-555-0185	GASOLINE	NO	NO
3825-00-633-9962	GASOLINE	NO	NO
3825-00-641-6398	GASOLINE	NO	NO
3825-00-641-6401	GASOLINE	NO	NO
3825-00-806-8184	GASOLINE	NO	NO
3825-00-816-5732	GASOLINE	YES	NO
3825-00-832-5269	GASOLINE	NO	NO
3825-00-859-7926	GASOLINE	YES	NO
3825-00-956-8636	GASOLINE	NO	NO
3825-01-314-2926	DIESEL	YES	NO
3825-01-423-2608	GASOLINE	NO	YES

7.4. Source of Documents.

7.4.1 The Federal Acquisition Regulation (FAR) 23.403 may be obtained from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.

7.4.2 Department of Transportation (DOT) Federal Motor Carrier Safety Regulations may be obtained from the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.

7.5 Sources of Supply. The following is a list of suppliers that have provided sweepers meeting the requirements of this CID to the Government in the past. This is not intended to be an all-inclusive list nor an endorsement of any of the listed suppliers and should not be used to restrict procurement from other qualified vendors.

<u>CAGE</u>	<u>COMPANY NAME</u>	<u>LOCATION</u>
32157	SWEEPSTER, INC.	2800 North Zeeb Road, Dexter, MI 48130
66234	M-B COMPANIES	1615 Wisconsin Avenue, New Holstein, WI 53061

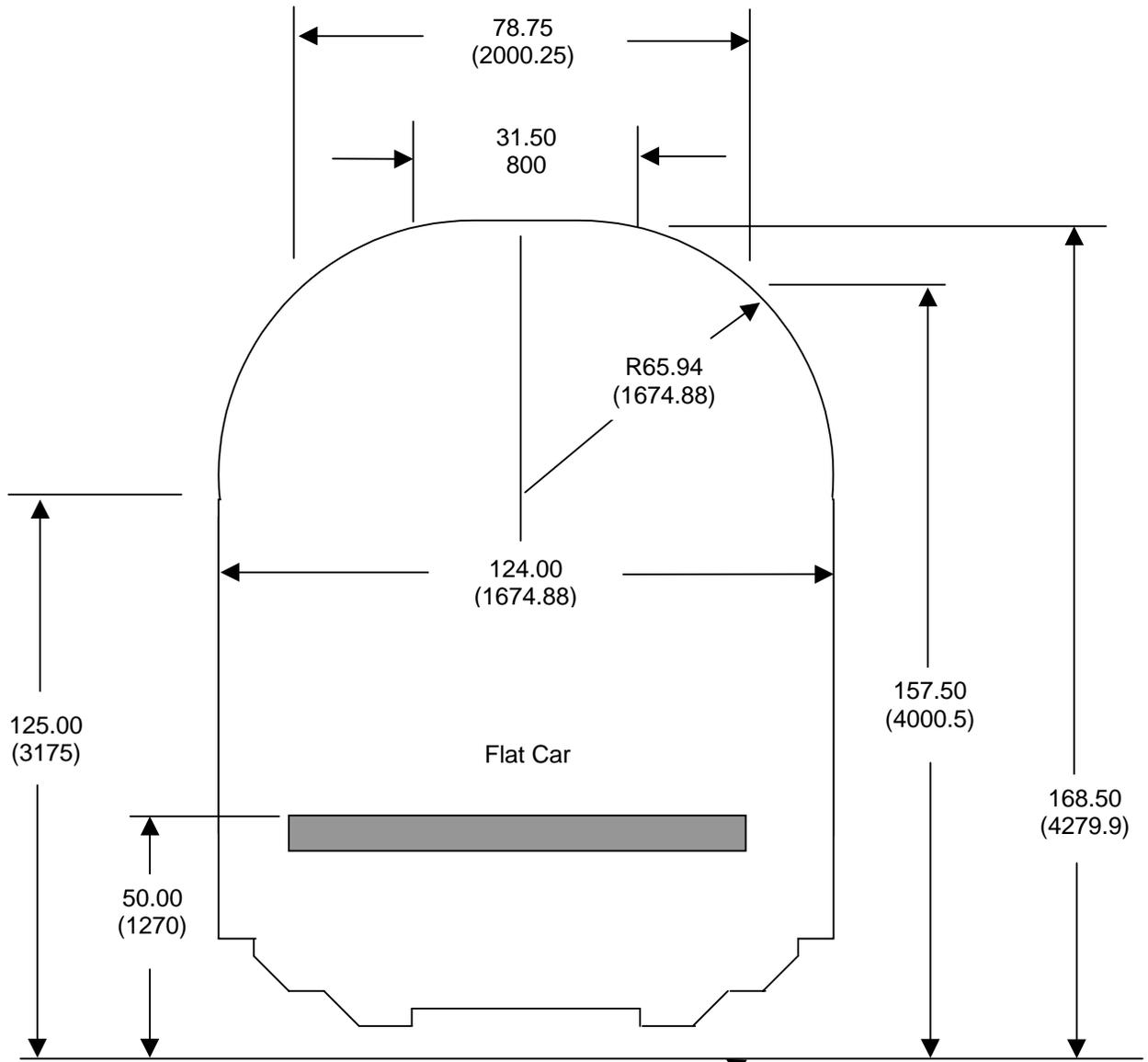
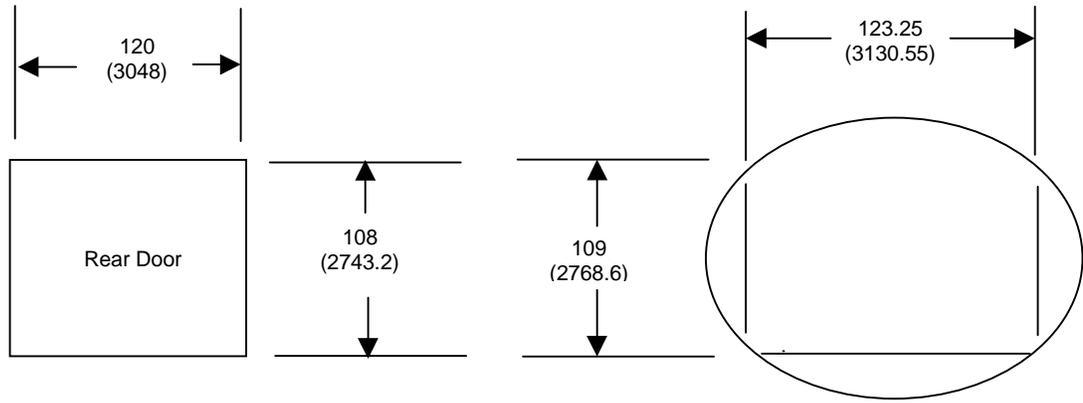
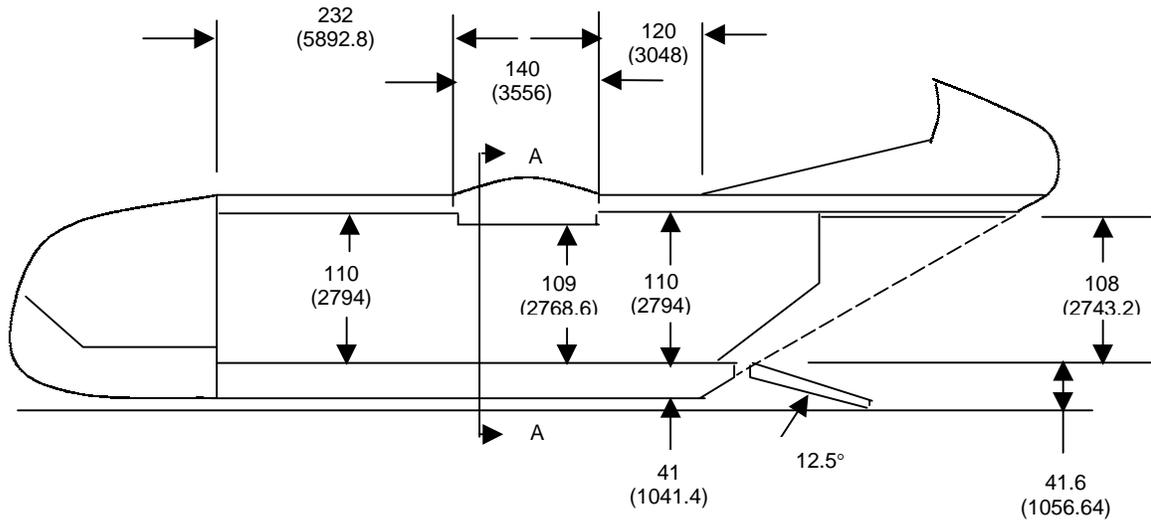


FIGURE 1. Passe-Partout International (PPI) Gauge. Rail Level



Section A-A

FIGURE 2. Cargo Compartment Profile (C-130).

MILITARY INTEREST:

Custodians:
Air Force – 99
DLA-CC

Review activity:
Air Force - 84

CIVIL AGENCY COORDINATION ACTIVITY:

GSA-FSS

Preparing activity:
DLA-CC

(Project 3825-0251)