

[METRIC]
A-A-52533
November 2, 1995
SUPERSEDING
MIL-T-43218D
11 April 1986

COMMERCIAL ITEM DESCRIPTION

TRUCKS, HAND, PLATFORM, FOUR WHEELED, TILT AND NON-TILT, SOLID RUBBER TIRES OR PLASTIC TIRES (METRIC)

The General Services Administration has authorized the use of this commercial item description (CID) for all federal agencies.

1. SCOPE. This CID covers requirements for platform hand trucks, with solid rubber tire or plastic tire wheels. The trucks are intended for carrying light items over short distances.

2. SALIENT CHARACTERISTICS

2.1 Materials. Unless otherwise specified herein, materials shall be in accordance with the manufacturer's material specifications. The use of recovered material made in compliance with regulatory requirements is acceptable providing that all requirements of this CID are met (see 5.4). Asbestos, cadmium, and radioactive material will not be used in this item. Radioactive material is defined by 1) Title 10, Code of Federal Regulations, Part 40, and 2) Other radioactive material in which the radioactivity is greater than 0.002 microcuries per gram or 0.01 microcuries total activity for the item.

2.2 Design and construction. Platform hand trucks (hereinafter called "trucks"), shall consist of a metal frame, a metal or wood deck, four push bar or rack sockets, one or two push bars or racks, two swivel casters, two rigid casters, caster supports or axles and axle brackets, and plastic or rubber tired wheels. In addition, rubber bumpers may be required. Truck sizes and rated capacities shall be as shown in table I.

Beneficial comments, recommendations, additions, deletions clarifications, etc. and any other data which may improve this document should be sent by letter to: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/BLUE, Warren, MI 48397-5000.
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ASMC N/A

FSC 3920

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2.2.1 Frame and deck.

2.2.1.1 Class 1 - Steel Platform. The frame and deck may be fabricated from one steel sheet; cut, formed and welded at the corners to form a one piece construction deck and channel frame; or, the frame and deck may consist of a one piece steel sheet welded atop a welded frame assembly. The frame and deck shall be a level rigid unit. The frame corners shall not have sharp corners.

2.2.1.2 Class 2 - Wood Platform (Steel Bound). The frame assembly, consisting of an outer frame and reinforcing members, shall be of welded steel construction to form a level rigid unit. The frame corners shall not have sharp corners. The deck shall be fabricated from boards of hardwood which have been sanded, sealed and finished on all wood surfaces in accordance with best commercial practices. Joint spacings between boards shall not exceed 3 mm (0.125 inch). Where required, boards shall be cut and shaped to accommodate push bar/rack legs. The deck boards shall be removable for replacement. The top surface of the deck boards shall be flush with top of outer frame or top surface of steel deck band if used. The board ends shall be fully protected by the outer frame.

2.2.1.3 Class 3 - Aluminum Platform. The frame and deck, consisting of an outer frame, reinforcing members, and a tread pattern deck, shall be fabricated from aluminum material. The frame and deck shall be of welded construction to form a level rigid unit. The frame corners shall be rounded.

2.2.1.4 Sockets. Sockets for push bar/rack legs shall be permanently affixed, one each, at or near each corner of the deck. The sockets may be located outside or inside of the channel frame. The sockets shall be designed to provide a stop and support for the push bar/rack legs. The socket hole shall provide for a snug fit for the push bar/rack legs and a set screw to secure the legs may be provided.

2.2.1.5 Caster supports and axle brackets. Caster supports and axle brackets shall be rigidly attached to the underside of the frame assembly.

2.2.1.6 Running gear. Running gear shall consist of two swivel casters, and two rigid casters or two axle-mounted load wheels. Swivel and rigid casters shall be bolted to the caster supports. Load wheels shall be mounted on the axle near the ends. Casters and load wheels shall be manufacturer's standard components unless otherwise specified in contract or order (see 5.1).

2.2.1.7 Type I - Non-tilt trucks. Non-tilt style trucks shall have running gear assembled to the underside of the frame assembly such that the load wheels or rigid casters will carry two-thirds of the rated load plus or minus 11.3 kg (25 pounds).

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2.2.1.8 Type II - Tilt trucks. Tilt style trucks shall have the rigid casters or load wheels located widthwise across the center of the truck, and the two swivel casters to be located one at or near each end of the longitudinal centerline of the truck.

2.2.1.9 Axle. The axle shall be one piece and shall be fabricated from steel. The axle with load wheels shall be assembled to the axle brackets. The load wheels shall not extend beyond the width of the deck. The axle shall not rotate with the wheel.

2.2.2 Push bars and racks.

2.2.2.1 Push bars. As specified in contract or order, the truck shall be supplied with one or two push bars. The push bar shall be fabricated from iron or steel pipe or tubing. The push bar shall be U-shaped. The top portion or handle end of the push bar shall be bent outward from the vertical. Aluminum push bars may be supplied for Class 3 trucks provided they meet the strength requirements in 2.2.3.4.

2.2.2.2 Racks. As specified in contract or order, the truck shall be supplied with one or two end racks. The racks shall be fabricated from iron or steel pipe or tubing and shall be reinforced by at least three equally spaced crossmembers. The outer frame of the racks shall be U-shaped. The top portion or handle end of the rack shall be bent outward from the vertical. Aluminum racks may be supplied for Class 3 trucks provided they meet the strength requirements in 2.2.3.4.

2.2.2.3 Bumper assembly. When specified in contract or order (see 5.1), the truck shall be supplied with a non-marking rubber bumper assembly. The bumper assembly shall consist of strip and corner bumpers with a reinforcing steel insert. The bumper assembly shall completely encircle the truck frame, including the sockets. The uppermost surface of the bumper assembly shall be below the top surface of the deck. The bumper assembly may be rigidly fastened directly to the outside of the truck frame or indirectly by means of steel brackets using bolts, self-locking nuts and flat washers. When protection from the handle is needed, donut bumpers shall be specified for each leg (see 5.1).

2.2.2.4 Bearings. Bearing load capacity shall be sufficient to withstand the maximum design loadings and performance requirements without exceeding the bearing manufacturer's recommended rating. Bearings shall be provided with seals and shields to retain grease in bearing, but to allow purging of used grease under pressure.

2.2.2.5 Lubrication fittings. Grease lube fittings shall conform to SAE J534 and shall be of the threaded types. The casters and load wheels shall be grease packed with a lubricant containing a rust inhibitor.

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2.2.2.6 Repair and maintenance. Provisions shall be made in the design of the truck to provide for replacement of wood decks or boards, racks, push bars, axles, casters and load wheels.

2.2.3 Performance.

2.2.3.1 Static load. The completely assembled truck (including casters, wheels, and axles) shall withstand a uniformly distributed static load of 300 percent of rated capacity for a period of one hour without evidence of damage, weld failure, distortion, or permanent deformation.

2.2.3.2 Rolling resistance. The truck, uniformly loaded to rated capacity (see table I), shall be capable of being towed on a dry, smooth, level surface with a force not exceeding 18 kg (40 pounds) for trucks up to 453 kg (1000 pounds) capacity and 2 percent of the gross weight (rated load and truck weight) of the truck for 1133 kg (2500 pounds) capacity trucks.

2.2.3.3 Dynamic load. The truck, uniformly loaded to 150 percent of rated capacity (see table I), shall be capable of being pushed off a 76 mm (3-inch) step, to a 25 mm (one-inch) step, to the ground without any evidence of failure or damage to any part of the truck. The truck shall be capable of withstanding being pushed at a minimum speed of 3 km/hr (2 mph) ten times perpendicular to the platform and ten times at a 45-degree angle to the platform.

2.2.3.4 Push bar and rack strength. The truck, with push bars or racks assembled to the sockets and wheels blocked, shall be capable of withstanding a minimum horizontal (with the floor surface) force of 778 Newtons (force) (175 pounds) for the push-bars and 1112 N (250 pounds) for the end-racks. The rack or push bar shall show no signs of failure or permanent deformation after the force has been applied for a period of five minutes at the midpoint of the handle end of the rack or push bar.

2.2.3.5 Treatment and painting. All bare metallic surfaces shall be cleaned, treated and painted in accordance with the best commercial practices. When a color choice is standard practice, gloss yellow is preferred.

2.3 Identification and markings. Identification and markings of the trucks shall be permanent and legible and shall include, as a minimum, the manufacturer's identification code (CAGE), the contract number, the part identification number (PIN) (see 5.2), and the national stock number (NSN).

3. QUALITY ASSURANCE PROVISIONS

3.1 Responsibility for inspection. The contractor is responsible for the performance of all inspections (examinations and tests).

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3.2 Contractor certification. 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, workmanship standards, and quality assurance practices. Items with known defects shall not be submitted for Government acceptance. The Government reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

4. PRESERVATION, PACKAGING, PACKING, LABELING, AND MARKING.

Preservation, packaging, packing, labeling, and marking shall be as specified in the contract (see 5.1).

5. NOTES

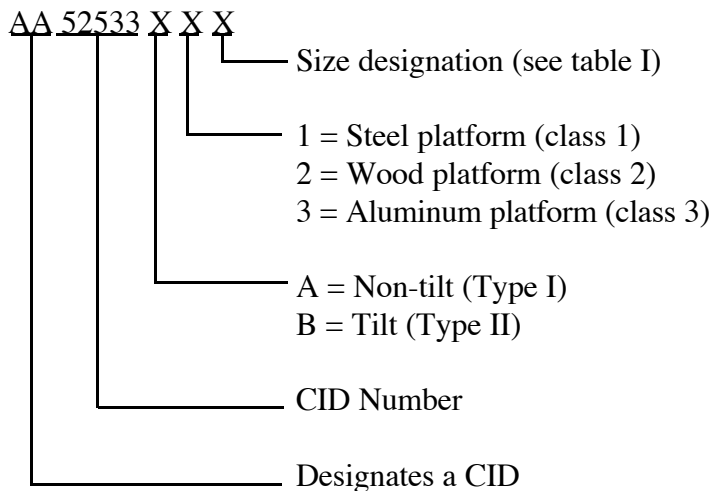
(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

5.1 Ordering data. Acquisition documents should specify the following:

- a. Title, number, and date of this CID.
- b. Issue of DoDISS to be cited in the solicitation.
- c. PIN and quantity of trucks required.
- d. Selection of applicable level and packaging requirements.
- e. Type, class, capacity and size.
- f. When other than standard casters and/or load wheels are required.
- g. Either push bar or rack and quantity of either one or two.
- h. When rubber bumpers are required.

5.2 Part or identification number (PIN). The PINs to be used for trucks acquired to this CID are created as follows:

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Table I. Size of truck.

Size Designation	Type	Class	Size	Description
A	I	1	1	1066 mm (42 inch) long by 610 mm (24 inch) wide by 203 mm (8 inch) high; 272 kg (600 pound) capacity
B			2	991 mm (39 inch) long by 483 mm (19 inch) wide by 127 mm (5 inch) high; 363 kg (800 pound) capacity
C			3	1219 mm (48 inch) long by 610 mm (24 inch) wide by 356 mm (14 inch) high; 453 kg (1000 pound) capacity
D		2	1	1524 mm (60 inch) long by 762 mm (30 inch) wide by 356 mm (14 inch) high; 1134 kg (2500 pound) capacity
E			2	1829 mm (72 inch) long by 914 mm (36 inch) wide by 356 mm (14 inch) high; 1134 kg (2500 pound) capacity
E			3	1829 mm (72 inch) long by 914 mm (36 inch) wide by 356 mm (14 inch) high; 1134 kg (2500 pound) capacity
E	II	2	1	1829 mm (72 inch) long by 914 mm (36 inch) wide by 356 mm (14 inch) high; 1134 kg (2500 pound) capacity

5.3 Cross-reference data. Trucks conforming to this CID are interchangeable/substitutable with trucks conforming to MIL-T-43218D.

5.4 Regulatory requirements. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

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MILITARY INTERESTS:

Custodians:

Army - AT

Navy - SA

Air Force - 99

Review Activities:

Navy - MC, SH, YD1

Air Force - 84

DLA - GS

CIVIL AGENCY COORDINATING ACTIVITY:

GSA - FSS

Preparing Activity:

Army - AT

(Project 3920-0008)