INCH-POUND

A-A-52479
October 21, 1993
SUPERSEDING
MS53037E
19 December 1978

COMMERCIAL ITEM DESCRIPTION

KINGPIN, FIFTH WHEEL, 3 1/2 INCH

The General Services Administration has authorized the use of this commercial item description (CID) as a replacement for MS53037E, which is canceled.

ABSTRACT

This CID covers requirements for a 3 1/2 inch (in.) fifth wheel kingpin used in coupling heavy duty military trailers and semitrailers to tractor fifth wheels. It also includes the requirements for trailers transported on flat car.

SALIENT CHARACTERISTICS

a. Materials. Unless otherwise specified herein, the materials used shall be in accordance with manufacturer's specifications/drawings. The use of recovered materials made in compliance with regulatory requirements is acceptable provided that all requirements of this CID are met (see note e).

1. Steel forging. The kingpins shall be made of steel forgings of carbon content 0.35% max. with sufficient alloy content to be oil quenched and tempered to 302-363 BHN at the surface.

b. Design and construction. Unless otherwise specified herein (see figure 1), the kingpin shall be designed and constructed in accordance with SAE J848.

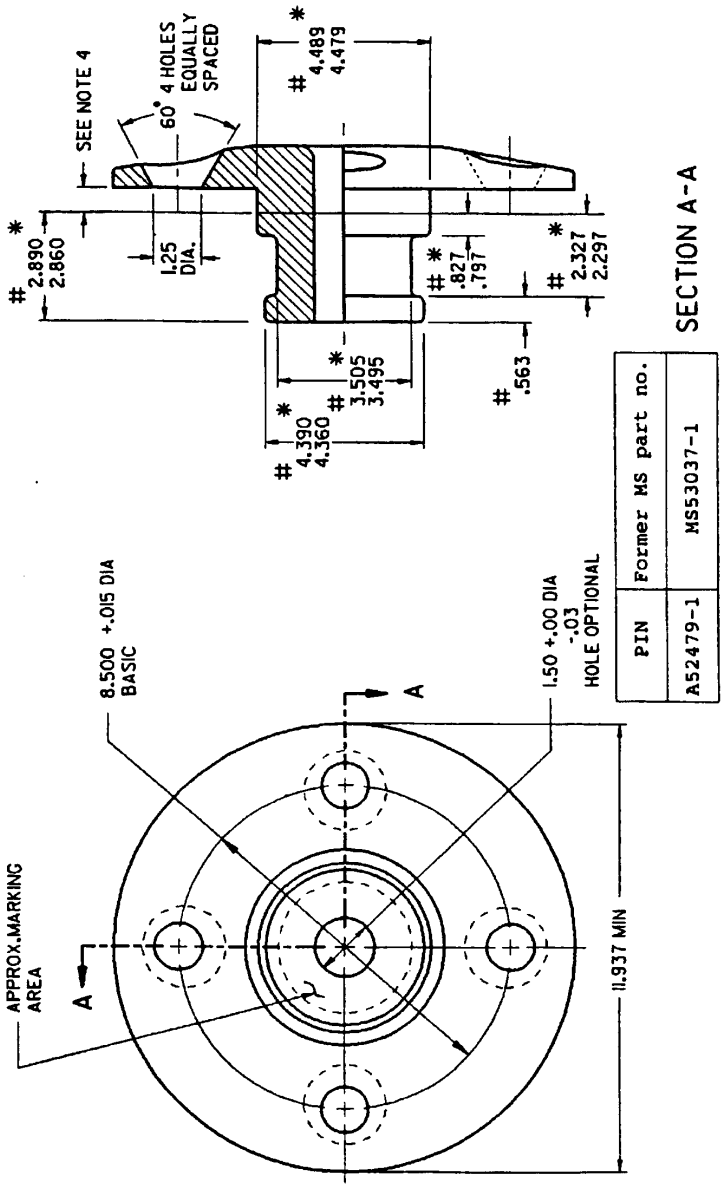
c. Performance. When properly installed, the kingpin shall meet the performance requirements in accordance with SAE J133. When transported on a flat car, the kingpin shall withstand force of 3.5 GVW and shall be in accordance with other requirements specified in Association of American Railroads specification M931.

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 Command, ATTN: AMSTA-GDS, Warren, MI 48397-5000.

AMSC N/A FSC 2510

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NOTES:

1. UNLESS OTHERWISE SPECIFIED, ALL RADII SHALL BE .12 INCH.
2. DIMENSIONS ARE IN INCHES. DIMENSIONS INDICATED BY POUND SIGN (#) SHALL BE IN ACCORDANCE WITH SAE J848.
3. HEAT TREAT: OIL QUENCH AND TEMPER TO A SURFACE HARDNESS OF 302-363 BHN OVER ALL AREAS OF KINGPIN.
4. A .5 INCH THICK PLATE (MAXIMUM) MAY BE WELDED TO THE KINGPIN ON THE BOTTOM SIDE OF THE UPPER FIFTH WHEEL PLATE.
5. THE USE OF ASTERISKS (*) INDICATES THAT DIMENSIONS ARE COVERED BY INTERNATIONAL AGREEMENT (see note f).

FIGURE 1. Kingpin, fifth wheel, 3 1/2 inch.

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d. Identification markings. Identification markings shall be permanent and legible and shall include, as a minimum, the manufacturer's CAGE code, manufacturer's part number, and the part identification number (PIN), A52479-1. The upper coupler plate thickness shall be specified on the kingpin and heat code or lot control (traceability) shall be specified (see figure 1 and note b).

QUALITY ASSURANCE PROVISIONS

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

b. 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.

c. Hardness testing. The kingpin shall receive 100% Brinell Hardness and 100% Magnetic Particle Inspection.

PRESERVATION, PACKAGING, PACKING, LABELING, AND MARKING

Preservation, packaging, packing, labeling, and marking shall be as specified in the contract or order (see note b).

NOTES

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

a. Addresses for obtaining copies of referenced documents.

1. Non-Government publications. SAE J133 "Fifth Wheel Kingpin Performance-Commercial Trailers and Semitrailers", and SAE J848-91 "Fifth Wheel Kingpin, Heavy Duty-Commercial Trailers and Semitrailers" are available from the Society of Automotive Engineers, 400 Commonwealth Drive, Warrendale, PA 15096. Association of American Railroads document M931-88 "Highway Trailers, All Types, for TOFC Service" is available from the Association of American Railroads, 50 F Street, N.W., Washington, DC 20001.

b. Ordering data. Acquisition documents must specify the following:

1. Title, number, and date of this CID.
2. Issue of Department of Defense Index of Specifications and Standards (DODISS) to be cited in the solicitation, and if required, the specific issue of individual documents referenced.
3. PIN.
4. Selection of applicable level and packaging requirements.

c. Associated fifth wheel. See MS53034 for associated fifth wheel used with this kingpin.

d. Cross-reference data. Kingpins conforming to this CID are interchangeable/substitutable with kingpins conforming to MS53037E.

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

f. International standardization agreement. Certain provisions of this specification (see figure 1) are the subject of international standardization agreement QSTAG 284 and NATO-STANAG 4009. When amendment, revision, or cancellation of this specification is proposed that will modify the international agreement concerned, the preparing activity will take appropriate action through international standardization channels, including departmental standardization offices, to change the agreement or make other appropriate accommodations.

MILITARY INTERESTS:

Custodians
Army – AT
Navy - YD
Air Force – 99

Review Activity
Navy - MC

User Activity:
Army - ME

CIVIL AGENCY COORDINATING ACTIVITY:
GSA-FSS

PREPARING ACTIVITY:
Army - AT

(Project 2510-0123)

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