INCH-POUND
A-A-58067B
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SUPERSEDING
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#### COMMERCIAL ITEM DESCRIPTION

# TRUCK, LIFT, FORK, DIESEL-ENGINE-DRIVEN, PNEUMATIC-TIRED, 15,000 POUNDS CAPACITY AT 24 INCH LOAD CENTER

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 diesel engine driven, front wheel drive, rear wheel steer, pneumatic tired 15,000 pound at 24 inch load-center capacity, forklift truck. The truck is used for handling cargo in and around warehouses, loading platforms, and docks; on paved or other hard surfaces.

## 2. SALIENT CHARACTERISTICS:

- 2.1 <u>Safety</u>. The forklift shall comply with ANSI/ITSDF B56.1, UL 558 Type DS, and OSHA standards in effect at the time of manufacture. A seatbelt conforming to SAE J386, and restraint devices designed to ensure the operator's upper body remains entirely within the protection of the overhead guard in the event of tip-over shall be provided.
- 2.2 Environmental requirements. The engine shall start without preheating within 5 minutes and the truck shall operate as specified herein within 15 minutes after engine start, in any ambient temperature from 0 to 120 degrees F. The forklift shall be capable of continuous operation as specified herein at any ambient temperature up to 120 degrees F. When specified (see 6.2), the truck with type C winterization shall be capable of operating in temperatures ranging from -25 to +125 degrees F.

Beneficial comments, recommendations, additions, deletions, clarifications, etc., and any data which may improve this document should be sent to: WR-ALC AFMC AFLCMC/WNZ, 235 Byron Street, Suite 19A, Robins AFB GA 31098-1813. Since contact information can change, you may want to verify the currency of this address information using the ASSIST database at <a href="https://assist.dla.mil.">https://assist.dla.mil.</a>

AMSC N/A FSC 3930

<u>DISTRIBUTION STATEMENT A</u>: Approved for public release; distribution is unlimited.

- 2.3 Engine and exhaust. The forklift shall be powered by a standard, commercial, diesel engine. The engine shall operate on diesel fuel in accordance with ASTM D975 without detrimental effects on the engine or its performance. The truck shall contain all of the standard commercial components composing an exhaust system. The exhaust system shall include a commercially available spark arrestor muffler. The spark arrestor muffler shall be sized to meet requirements for engine exhaust flow at rated engine speed.
- 2.3.1 <u>Emissions</u>. The vehicle emissions shall comply with the EPA regulations in effect at the time of vehicle manufacture. When there is a change in EPA regulations during a contract, EPA provisions shall be consulted to determine which regulations apply. The vehicle shall comply with the emissions requirements of the destination state at the time of vehicle manufacture.
- 2.4 <u>Fuel system</u>. The forklift shall have all necessary filters, water separators, and other necessary components required for diesel fuel operation. It shall have a fuel tank of sufficient capacity to allow at least 8 hours of continuous operation.
- 2.5 <u>Starting system</u>. The starter motor shall not be capable of energizing while the engine is running.
- 2.6 <u>Transmission</u>. When specified (see 6.2), a transmission oil cooler shall be furnished. A torque converter and a power shift type of transmission shall be furnished, with at least two speeds forward and two speeds reverse. The transmission shall provide for positive inching control, or declutch control, that permits lifting of rated load at maximum lifting speed while the transmission control is in either forward or reverse direction, without vehicle movement. This control shall also apply the service brakes.
- 2.7 <u>Hydraulic system</u>. A pressure relief protection device is required along with pump(s), cylinders, control valves, filter(s), reservoir, hoses, and all other components necessary to make a complete hydraulic system.
- 2.8 <u>Uprights and carriage</u>. With no load on the forks, the seated operator shall be able to see at least one fork tip at all lift heights and fork positions.
- 2.9 Forks. When specified (see 6.2), the forks shall be one of the following,
  - a. Fork dimensions shall be 2.56 inches maximum thickness, 8.06 inch maximum width, and  $72.0 (\pm 0.5 \text{ inch}) \log_{10}$ .
  - b. Fork dimensions shall be 2.56 inches maximum thickness, 8.06 inch maximum width, and 96 inch ( $\pm$  0.5 inch) long.
  - c. Forks dimension shall be 3.0 inches maximum thickness, 10 inches maximum width, and 27 inches ( $\pm 0.5$  inches) long.
- 2.10 <u>Fork positioner</u>. A hydraulically powered fork positioner shall be furnished. It shall be controlled by the seated operator, with spacing of 18.0 inches (or less), to 60.0 inches (or more). These dimensions shall be measured to the outside edges of the forks.

- 2.11 <u>Side shift</u>. Hydraulically powered side shifting shall be furnished. It shall be controlled by the seated operator, with at least 6.0 inches side shift on each side of center (12.0 inches minimum total travel).
- 2.12 <u>Load backrest</u>. The load backrest, in conjunction with the forks and carriage, shall provide a vertical rear load guard of at least 48 inches high, measured from the load horizontal carrying surfaces of the forks
- 2.13 <u>Steering</u>. Power steering with emergency steering in the event of power failure shall be furnished.
- 2.14 <u>Service brakes</u>. Power brakes conforming to ANSI/ITSDF B56.1 shall be furnished. The maximum brake pedal force during stopping shall not exceed 80 pounds.
- 2.15 Parking brake. Parking brake shall conform to ANSI/ITSDF B56.1.
- 2.16 <u>Electrical system</u>. A 12 volt direct current (VDC) electrical system shall be furnished. The electrical system shall consist of all electrical components necessary for operation of the forklift. The forklift shall have sufficient electrical grounding to prevent static discharge.
- 2.17 <u>Instruments</u>. In addition to the instruments supplied on the standard commercial forklift, an hour meter and tachometer shall be installed in the instrument panel. All instruments shall illuminate, except for the hour meter. All load motion controls shall be right hand operation controls and of the self-centering type, i.e. controls shall return to the neutral position when released.
- 2.18 <u>Lighting</u>. Minimum four sealed beam floodlights, two in front facing forward and two mounted in the rear facing rearward, shall be furnished. Tail light(s) and brake stop light(s) shall be installed. All lights shall be protected by location or guards. Individual operator controlled switches shall be provided for front floodlights, rear floodlights, and adjustable lights.
- 2.19 Horn. Horn shall be mounted in the center of the steering wheel.
- 2.20 Operator's overhead guard. The guard shall be in accordance with ANSI/ITSDF B56.1. It shall also be a falling-object-protective-structure (FOPS) conforming to ANSI/ITSDF B56.1. The overhead guard height from ground to top of guard shall be 120 inches maximum.
- 2.21 <u>Cab</u>. When specified (see 6.2), the forklift shall be equipped with an enclosed cab that shall incorporate overhead protection requirements of ANSI/ITSDF B56.1. The cab shall have a door on each side of the vehicle with at least one window per door which can be opened for ventilation; the windows shall be capable of being locked in either the open or closed positions. The doors shall be provided with hinges that can be serviced without door removal and shall allow adjustments for door fit. The doors shall be capable of being locked in either the opened or closed positions. In addition to the door windows, the cab shall be furnished with a front windshield, rear window, and roof window. The windshield and all windows shall be safety glass. The cab interior shall be furnished with water-resistant non-absorbent thermal insulation.
- 2.22 Heater and defroster. The manufacturer's heaviest duty heater and defroster shall be furnished.

- 2.23 <u>Windshield wipers</u>. There shall be at least three wipers furnished, one on the front windshield, one on the rear window, and one on the roof window.
- 2.24 Backup alarm. The truck shall be equipped with a back up alarm.
- 2.25 <u>Fire extinguisher</u>. A commercial fire extinguisher shall be mounted on the truck in an easily accessible location. The fire extinguisher shall be a minimum 2-1/2 pound capacity ABC type, or equivalent. The fire extinguisher shall be UL listed.
- 2.26 <u>Performance requirements</u>. The truck shall be capable of meeting the following performance requirements:
  - a. Capability to safely handle a 15,000 pound, 48 inch per side cube load with the center of gravity at the center of the cube. The truck shall be able to handle this load at all lift heights and fork side shift positions.
  - b. Load lifting speed: At least 55 feet per minute.
  - c. Load lowering speed: Not more then 80 feet per minute and not less then 40 feet per minute with rated load on the forks and with engine at idle speed.
  - d. Right angle turn: With rated load on the forks, forklift located perpendicular to a wall, and with the front of the load against the wall, the truck shall be able to back up and make a complete right angle turn (ending up parallel to the wall) within 270 inches.
  - e. Travel speed: 12 miles per hour minimum in both forward and reverse, with rated load on the forks.
  - f. Slope ascension: The fully loaded truck facing up the slope shall be able to accelerate up a 20% slope from a dead stop.
  - g. Upright tilt: With no load on the forks the mast shall have at least 3.0 degrees forward tilt and at least 6.0 degrees of rear tilt.
  - h. Collapsed mast height: The collapsed mast height shall be 120 inches maximum with no load on the forks. When specified (see 6.2) the collapsed mast height shall be 150 inches maximum and a 2-stage mast shall be required.
  - i. Maximum fork lift height: At least 210 inches with rated load on forks. Measured to the top of the horizontal forks.
  - j. Drift of load: With hydraulic fluid at ambient temperature, lift assembly shall hold rated load at maximum lift height for at least 10.0 minutes with not more then 1 3/4 inch of vertical drift and not more then 1.0 degree of rotational drift.
  - k. Stability. The forklift shall meet the ANSI/ITSDF B56.1 "forward stacking," "forward travel," "lateral stacking," and "lateral travel" stability requirements.
  - l. Noise limits. Maximum allowable noise level shall not exceed 84 dB(A) at the operator's ear. If the noise level at the operator's ear exceeds 84 dB(A) (85 to 92 dB(A)), a permanent warning decal or placard shall be installed inside the cab clearly visible to the operator. Noise level limits that exceed 92 dB(A) are not acceptable.
- 2.27 <u>Painting</u>. Unless otherwise specified (see 6.2) the forklift final color shall be commercial yellow. The forklift shall be primed and painted using standard commercial practices.
- 2.28 <u>Walkway coating</u>. Steps shall be covered or coated with a non-slip coating or shall be furnished with a non-slip metal surface.

- 2.29 <u>Slinging and tie-down provisions</u>. There shall be permanently installed slinging devices that enable the truck to be lifted in its normal travel position and tie-downs that enable the truck to be tied down to the floor of the transportation media. All devices shall be capable of accepting a chain and hook with an outside diameter of 3.0 inches and shall have a structural safety factor of at least 2.3 to 1, based on static load. The notation "LIFT HERE" or "TIE DOWN" shall be stenciled in black or white letters near each lifting and tie-down device.
- 2.30 <u>Electromagnetic interference (EMI)</u>. The forklift shall comply with EMI requirements of MIL-STD-461, RE101 and RE102.
- 2.31 <u>Highway transportability</u>. The truck shall be capable of being transported on a semi-trailer in all states.
- 2.32 <u>Identification plate</u>. An identification plate made of a corrosion resistive material shall be permanently installed at an easily accessible place on the truck. It shall contain the following information:

Nomenclature
Make and model
Manufacturer's serial number (VIN)
Registration number
Asset NSN number
Vehicle curbs weight (lbs)
Capacity, maximum (lbs)
Gross weight, max (lbs)
Date of delivery
Warranty month
Contract number
US Property

- 2.33 <u>Winterization</u>. When specified (see 6.2), the truck shall be furnished with Type C winterization that shall protect to -25 degrees F and shall consist of the following:
  - a. Starting aid. Glow plug(s), grid heater, or engine heater coolant heater shall be furnished.
  - b. <u>Cab</u>. The cab shall meet the requirements of 2.21, and shall also contain thermal insulation, if necessary, to meet the heating requirements of 2.33(c).
  - c. <u>Cab heater and defroster</u>. The heater shall have sufficient capacity to maintain a temperature of at least +40 degrees F at cab floor level in an ambient temperature of -20 degrees F.
  - d. Antifreeze. Engine coolant shall be protected to -25 degrees F with antifreeze.

- 2.34 <u>Tropical rust proofing</u>. When specified (see 6.2), tropical rust proofing shall be provided. This should be considered a premium rust proofing package usually consisting of an additional coating. The truck shall be treated with a corrosion preventative compound complying with A-A-59295. Many of these vehicles are used in tropical/coastal environments and experience high humidity and salt spray. Areas such as those listed below, usually exhibit high levels of corrosion and should be considered for coating
  - a. Cab, interior
  - b. Cab, exterior
  - c. Seams
  - d. Welds
  - e. Hidden recessed areas
  - f. Locations where dissimilar metals come in contact
  - g. Area above fuel tank(s)
  - h. Engine oil pan & transmission oil pan
  - i. Radiator support structure
  - j. Battery box

## 3. REGULATORY REQUIREMENTS

3.1 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). However, used, rebuilt or remanufactured components, pieces, and parts shall not be incorporated in the forklift. The forklift shall comply with applicable Environmental Protection Agency (EPA) regulations.

## 4. PRODUCT CONFORMANCE

4.1 <u>Product Conformance</u>. The products provide shall meet the salient characteristics of this CID, conform to the producer's own drawings, specifications, standards and quality assurance practices, and shall be 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 the provisions of the contract.

## 5. PACKAGING

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

- 6. NOTES
- 6.1 Sources of referenced documents.
- 6.1.1 Department of Defense and Federal documents referenced herein may be obtained from the Document Automation and Production Service, Bldg 4D, 700 Robbins Avenue, Philadelphia PA 19111-5094, or online at https://assist.dla.mil or http://quicksearch.dla.mil.
- 6.1.2 The Society of Automotive Engineers (SAE) documents may be obtained online at <a href="http://www.sae.org/">http://www.sae.org/</a> or from SAE, 400 Commonwealth Drive, Warrendale, PA 15096.
- 6.1.3 ITSDF documents may be obtained from the Industrial Truck Standards Development Foundation, Suite 460, 1750 K Street NW, Washington, DC 20006 or online at <a href="http://www.itsdf.org/">http://www.itsdf.org/</a>.
- 6.1.4 OCCUPATIONAL SAFETY AND HEALTH ASSOCIATION (OSHA) OSHA Standards Occupational Safety and Health Standards for Industry (Applications for copies should be sent to the U. S. Department of Labor, 200 Avenue NW, Room 423, Washington DC 20210), or online at <a href="http://www.osha.gov">http://www.osha.gov</a>.
- 6.1.5 U.S. Environmental Protection Agency (EPA) (Applications for copies should be sent to the U.S Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460) or online at <a href="http://www.epa.gov/">http://www.epa.gov/</a>.
- 6.1.6 Federal Acquisition Regulation (FAR) documents may be obtained at <a href="http://www.acqnet.gov/far">http://www.acqnet.gov/far</a> or at the Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250.
- 6.1.7 Underwriters Laboratories (UL) Industrial Trucks, Internal-Combustion Engine Powered (Applications for copies should be sent to the Underwriters Laboratories INC., 333 Pfingsten Road Northbrook, IL 60062), or online at <a href="http://www.ul.com">http://www.ul.com</a>.
- 6.1.8 ASTM documents may be obtained at <a href="http://www.astm.org">http://www.astm.org</a> or at ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959.
- 6.2 Ordering data. Acquisition documents must specify the following:
  - a. Title, number, and date of this document.
  - b. Transmission oil cooler (2.6).
  - c. 2-stage mast (150 inch maximum collapsed mast height) (2.26).
  - d. Fork dimensions (see 2.9).
  - e. Color Forest Green 24052 FED-STD-595 (see 2.27).
  - f. Winterization C (see 2.33).
  - g. Enclosed cab (see 2.21).
  - h. Tropical rust proofing (see 2.34).

## 6.3 Subject term (key word) listing.

Forklift Compressed air-tired Front Wheel Drive Rear Wheel Steering

Custodians: Air Force - 84 Army - AT Navy-SA Preparing Activity: Air Force - 84

Reviewer: Air Force - 99 Agent: Air Force - 99

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