

[INCH-POUND]
A-A-59404
17 FEBRUARY 1999

COMMERCIAL ITEM DESCRIPTION

DISPENSER UNIT, HYDRAULIC FLUID, PORTABLE

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 a portable, self-contained hydraulic oil dispenser unit that supplies clean filtered fluid to an aircraft reservoir or to related ground support equipment.

2. SALIENT CHARACTERISTICS.

2.1 General. This servicing unit shall be portable, self-contained and designed for use with MIL-H-5606, MIL-PRF-87257 or MIL-PRF-83282, Hydraulic Fluid. All components shall be housed within a weatherproof cabinet. The user shall have access to the reservoir fill and all components of the unit for maintenance and inspection. The unit shall come with pneumatic tires and a parking brake and a tow bar assembly for the front wheels. The control panel shall be housed inside the cabinet. The control panel shall display all necessary readings for the unit to include readings for the nitrogen bottles, regulator, pump drive, filter inlet, filter outlet and pressure by-pass. A charging port to allow the storage tanks to be recharged shall be provided as well as flexible hoses to provide for filling the cart reservoir and the aircraft reservoir. The reservoir shall be not less than 50 gallon capacity.

2.2 Performance. Inert storage tanks shall supply power to the drive for the pump. The pump shall be capable of developing maximum pressure of 100 pounds per square inch (psi) and a maximum fluid flow of 5 gallons per minute (gpm). The storage tanks shall be able to completely drain the oil dispenser reservoir. The capability of the filter unit shall be 3 microns absolute. The unit shall be capable of manual movement and being towed over improved surfaces without damage to the unit and without working loose of the components.

2.3 Environmental requirements. The unit's performance and appearance shall not be affected or damaged by ambient temperature ranges of - 65° F to 130° F, relative humidity of 5 to 99%, and salt, fog, and dust particles during use and storage. It shall not be damaged nor it's contents contaminated by operation and storage in an atmosphere containing airborne sand and dust particles during use and storage.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document should be sent to: The Technology and Industrial Services Division, SA-ALC/TILDD, 485 Quentin Roosevelt Rd, Bldg. 171, Kelly AFB, TX 78241-6524.
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2.4 Maintainability. The unit shall be capable of being maintained and operated with no special tools and with commonly sized wrenches and tools.

2.5 Finish. The unit outer surfaces shall be corrosion resistant, primed, and painted. Finish color and paint shall be forest green (Federal Standard 595, Color No. 24052) using a polyurethane coating, MIL-PRF-85285.

3. REGULATORY REQUIREMENTS.

3.1 Recycled, recovered, or environmentally preferable 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).

3.2 Safety. The units shall comply with the Federal OSHA requirements that are in effect as of the date the proposal is issued. In the event that state and local OSHA regulations are also in effect, the Federal OSHA regulation shall take precedence.

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 is the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

4.2 Examination of unit. One bid sample shall be examined in detail to conform adherence with specified requirements of paragraph 2.1 not otherwise tested for. This examination shall be accomplished using a contractor-developed checklist that shall certify unit attributes for which examination is made and results obtained.

4.3 Performance test.

4.3.1 Pressure and flow rate. The unit shall be tested to demonstrate compliance with a maximum 100 PSI pressure requirement and a maximum 5 GPM flow rate. The pressure requirement shall be measured at three intervals of five minutes each and the flow rate shall be measured at three intervals of five minutes each. The test shall be conducted using calibrated gages and flowmeters.

4.3.2 Filter test. The filter capability may be demonstrated with certifications for the filter or by actual running the unit for 3 cycles of 30 minutes each and evaluation of the filtered fluid after each cycle. The fluid shall not exhibit contaminants larger than 3 microns.

4.3.3 Mobility test. With the unit at capacity, the horizontal breakaway force required to manually move the unit forward from rest on a smooth, dry level paved surface shall not exceed 120 pounds. The force required to redirect (move) the unit tow bar steering mechanism-front wheel assemblies shall not exceed 65 pounds. The unit shall be capable of attaining the speed of 10 mph over improved surfaces without damage to the unit and without working loose of the components. The mobility tests shall include the unit being towed for two sequences of 30 minutes each. The unit shall be inspected for damage and worked free components after each test.

4.4 Environments test.

4.4.1 Criteria. The unit shall have demonstrated capability to withstand the requirements of paragraph 2.3. This capability shall have been demonstrated by previous usage of the unit with no damage to the contents or components. If the unit has no previous record of being utilized in these environments then an environmental test is required to the specified cycle and duration.

a. Ambient temperature – 65 ° F. The unit shall be subjected to –65 ° F for three one-hour cycles. The Unit will be at room temperature, then lowered to – 65 ° F. Once the temperature is at – 65 ° F, this shall be the start for each one hour cycle.

b. Ambient temperature 130 ° F. The unit shall be subjected to 130 ° F for three cycles for one hour each. The unit will be at room temperature, then raised to 130 ° F. Once the Temperature is at 130 ° F, this shall be the start for each one-hour cycle.

c. Relative humidity 99%. The unit shall be subjected to three cycles of high humidity for one hour each. The humidity shall be maintained at 99% for each cycle.

d. Airborne sand and dust particles. The unit shall be subjected to windblown sand and dust particles that are at least 95% by weight of silicon dioxide. The sand shall be subangular structure with a mean Krumbien number (roundness factor) equal to 0.2 and a hardness factor of 7 mohs. The dust concentration for the blowing dust shall be maintained at 10.6 g/m. The sand concentration shall be 0.177 g/m. The configuration of the test must reproduce, as closely as possibly, the configuration that would assume during storage or use during deployment. The test shall be conducted for 90 minutes per face for the blowing sand test at 73 ° F.

4.5 Evaluation. The Bid Sample Unit shall be examined (see 4.2) and performance tested (see 4.3) after each environmental test. Any evidence of leakage, damage, degradation, failure, or impeding failure of any portion of the unit as a result of environmental testing, shall be cause for rejection.

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

6. **NOTES.**

6.1 Source of Documents. Copies of the Federal Standard and Military Specification may be obtained from Defense Automated Printing Service, Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.

6.2 Ordering data. Acquisition documents must specify the following:

- a. CID Title, Number, and Date of this CID
- b. Reservoir dimensions and size (gallons)
- c. Packaging requirements, if different (see 5.)
- d. Identify type of hydraulic fluid or fluids

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6.3 Data plate requirements:

- a. Manufacturer's Name
- b. Manufacturer's Commercial and Government Entity (CAGE) Code.
- b. Manufacturer's Unit Serial Number
- c. Manufacturer's Unit Part Number
- d. Manufacturer's Unit Model Number
- e. National Stock Number
- f. Contract Number

6.4 Suggested Source.

- a. CAGE Code 59603, TRONAIR, South 1740 Eber Road, Holland, Ohio 43525-9794
- b. CAGE Code 86768, Teledyne Industries Inc, Teledyne Fluid Systems, Republic Business Unit, 10367 Brecksville Road, Brecksville, Ohio 44141-3335

MILITARY INTERESTS:

Custodian:
Army - AT
Air force - 99

CIVIL AGENCIES and
COORDINATING ACTIVITY

GSA – FSS
Preparing Activity
Air Force - 82

Agent:
Air Force - 99

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