

D PROPANE FURNACE

DESCRIPTION AND USE

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1. GENERAL

1.01 This section is reissued to cover the description and use of the D Propane Furnace. The B and C Propane Furnaces are retained as superseded types.

1.02 To permit proper seating of the paraffin pot on the furnace, the D Propane Furnace is constructed with 1-inch diameter trunnions instead of the 1-1/2 inch diameter trunnions found on the older furnaces. In all other respects, the D and C Propane Furnaces are identical.

1.03 Information pertaining to the B and C Propane Cylinders and the C Manhole Heater is found in Sections 081-330-116 and 081-315-101 respectively. The workman should be familiar with these sections prior to using the furnace.

1.04 The E Pressure Hose, Solder Pot Shield, and hood are not parts of the furnace and must be ordered separately.

1.05 Since this reissue covers a general revision, marginal arrows ordinarily used to indicate changes have been omitted.

2. DESCRIPTION

2.01 The D Propane Furnace consists of a burner, furnace unit (includes handle, top, body, and base), regulator (includes regulator, gauge, and dust cap), and a control valve. The entire unit weighs about 15 pounds. Fig. 1 illustrates the D Propane Furnace.

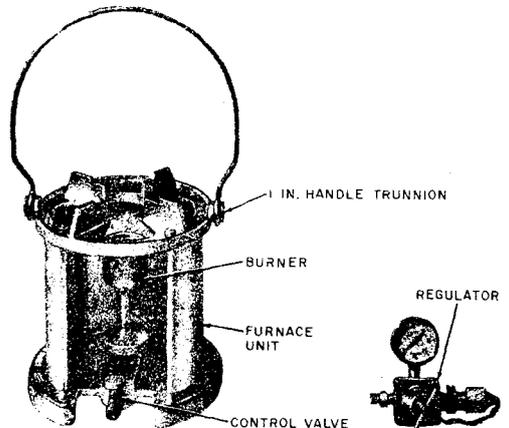


Fig. 1 — D Propane Furnace

2.02 The hood is placed on the furnace as shown in Fig. 2 when the furnace is used as a tent heater.

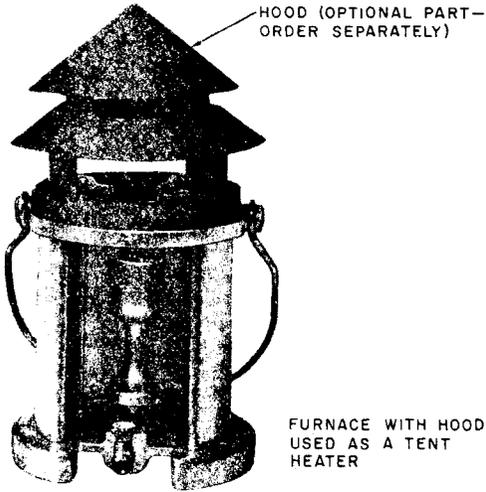


Fig. 2 — Hood in Place on Furnace

2.03 A shield is available that may be placed on the furnace as shown in Fig. 3 when the furnace is used to heat solder.

2.04 Fig. 4 illustrates a typical setup of the D Propane Furnace.

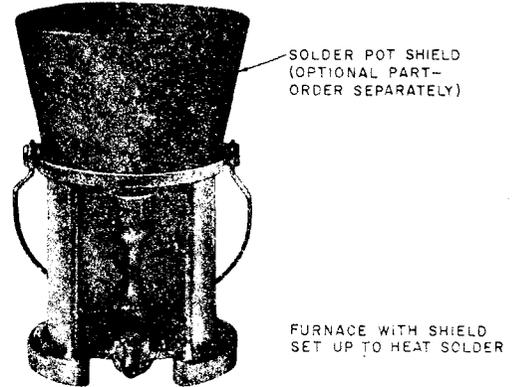


Fig. 3 — Solder Pot Shield in Place on Furnace

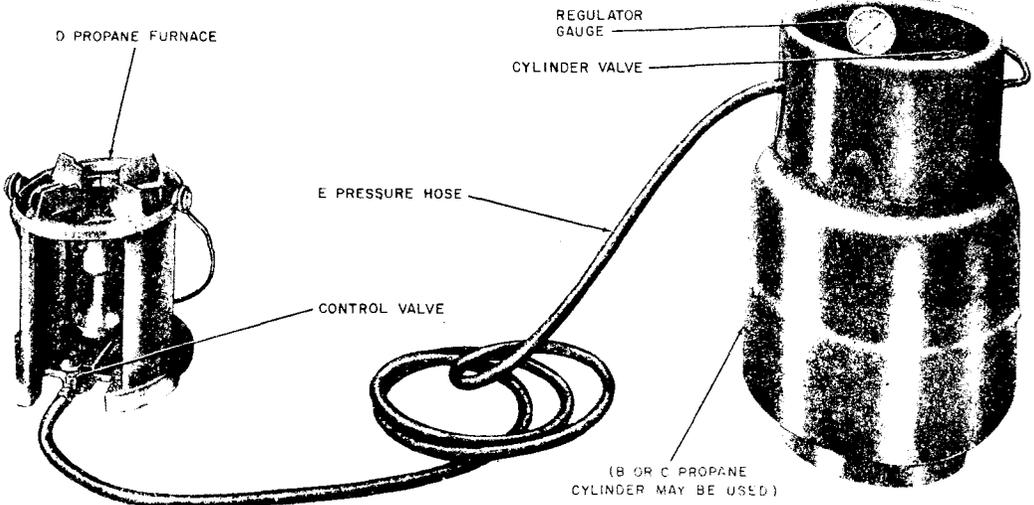


Fig. 4 — Typical Setup

3. PRECAUTIONS

- 3.01** Provide adequate ventilation when the furnace is used with the hood as a tent heater. There is a danger of oxygen deficiency when the furnace is operated in any tightly closed area.
- 3.02** *Never test for leaks with an open flame.*
Follow procedures outline in 4.03 of this practice.
- 3.03** *Do not use a furnace in a manhole.* When the furnace is used in the vicinity of a manhole and a tent is in place over the manhole, the furnace must be operated outside the tent.
- 3.04** Do not use the furnace in a tent when hot paraffin is present. After any boiling-out operation, ventilate the tent before using the furnace as a tent heater.
- 3.05** Do not touch or allow tools, equipment, or articles of personal clothing to come in contact with the upper portion of the furnace when the furnace is hot.
- 3.06** Do not store the furnace until it has cooled sufficiently.
- 3.07** Keep the cylinder valve closed when the furnace is not in operation.
- 3.08** Keep all connections free from dirt or obstructions to avoid clogging the regulator valve or furnace orifice. Keep the dust cap in place on the regulator when the regulator is not connected to the cylinder.
- 3.09** Do not attempt to make any repairs on the regulator.
- 3.10** Observe all precautions in Section 081-330-116 on B and C Propane Cylinders.

4. USE

- 4.01** The D Propane Furnace is used to (1) heat materials used in splicing operations, (2) heat tents when the hood is properly placed on the furnace and the proper gas pressure is main-

tained, and (3) provide warm air for ventilating manholes when the furnace is used in conjunction with the C Manhole Heater and a blower.

OPERATION

- 4.02** To operate the furnace connect the regulator to the propane cylinder and the E Pressure Hose to the regulator and furnace, as shown in Fig. 4, using a B or C Regulator Wrench to tighten the connections.
- 4.03** The strong odorant which is added to propane gas can, under normal circumstances, readily be detected if a leak should be present. If a leak is suspected, test all connections using pressure testing solution or a suitable soap solution, taking care to prevent the solution from coming in contact with the face of the regulator gauge. If the pressure hose is suspected of leaking, test by immersing the hose in water. No attempt should be made to repair leaks other than to assure that the connections are properly tightened. Return defective parts for exchange in accordance with local routines.
- 4.04** Light the furnace in the following manner:
- (1) Close the control valve on the furnace.
 - (2) Open the propane cylinder valve.
 - (3) Set the regulator to deliver gas at a pressure of 45 pounds per square inch when the furnace is to be used with the manhole heater or to heat paraffin or solder. When the furnace is to be used as a tent heater with the hood in place, set the pressure at 4 pounds per square inch.
 - (4) Open the control valve 1/4-turn and ignite the gas with a lighted match or the *Shoot-A-Lite* held near the burner. To control the flame use the control valve on the furnace.
 - (5) When the gas is ignited, open the control valve fully.
- 4.05** Extinguish the flame on the furnace by closing the cylinder valve on the propane cylinder.

4.06 If the flame should go out, close the control valve and, after a short wait to allow excess gas to dissipate, relight the furnace using the method outlined in 4.04. If the furnace was being used in a tent, thoroughly ventilate the tent before relighting the furnace.

MAINTENANCE

4.07 If the regulator does not function properly, examine the regulator vent to ensure that it is free of foreign material. If no obstructions are found, exchange the regulator in accordance with local instructions. Do not attempt to make any repairs on the regulator.

4.08 To keep the burner free of dirt or other obstructions, clean it with a wire brush.

4.09 Furnace replacement and associated parts are:

- Hood
- Burner
- Valve, Control
- Regulator (includes gauge and dust cap)
- Unit, Furnace (includes handle, top, body and base)
- Shield

5. SUPERSEDED TYPES

5.01 The superseded B and C Propane Furnaces are basically the same as the D Propane Furnace and are used for the same operations.

5.02 Procedures in this practice covering precautions and use of the D Propane Furnace apply to the superseded types.