

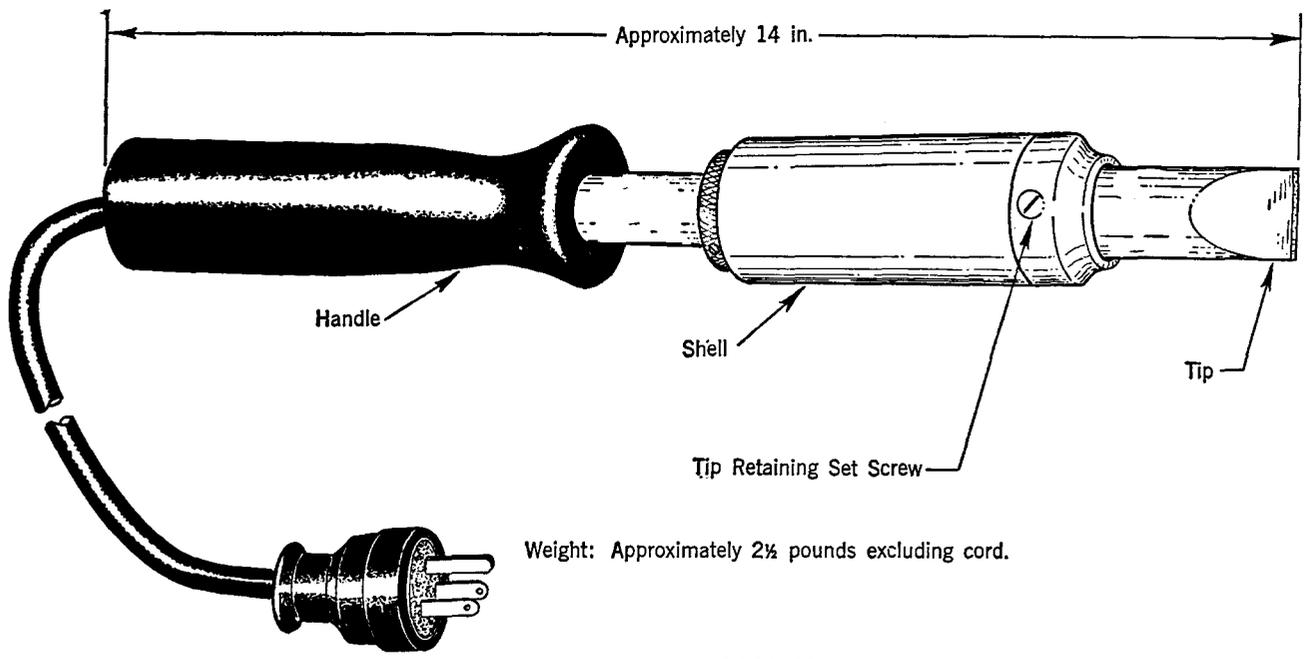
*B.S.M. # 775 B*  
**B SOLDERING COPPER**

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- 2. DESCRIPTION**
- 2.01** Fig. 1 is an illustration of the B soldering copper.
- 2.02** The following is a description of the B soldering copper:
- (1) The B soldering copper is electrically heated, rated at 300 watts, and operates on 115-volt AC or DC current.
  - (2) The tip is a plug type, with a 7/8-inch diameter, and a full chisel point.
  - (3) The cord is 25 feet long and equipped with a grounding-type plug cap. The handle is made of wood.
- 2.03** Fig. 2 is an illustration of the B soldering copper holder.

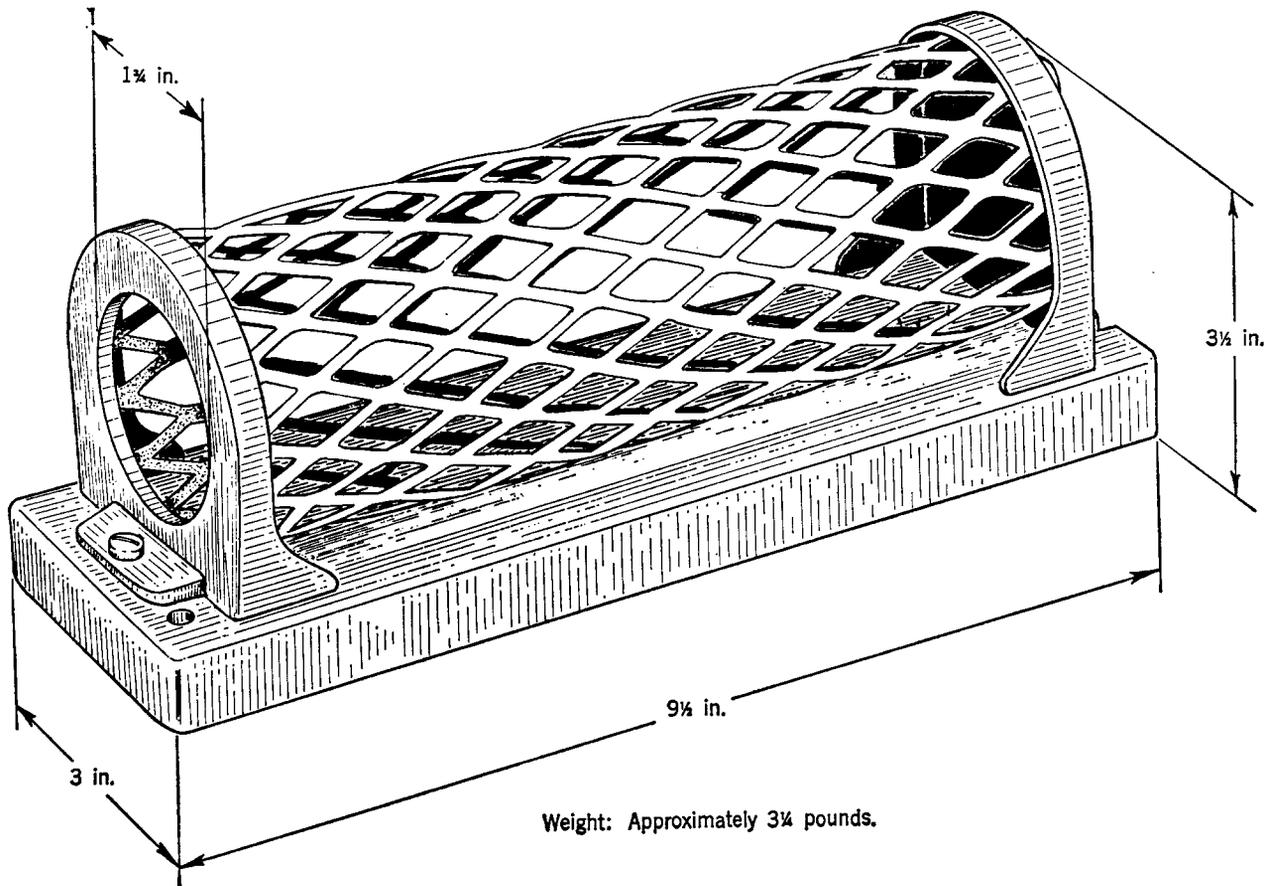
**1. GENERAL**

- 1.01** This section describes the B Soldering Copper and B Soldering Copper Holder as well as the use and maintenance of this soldering copper in general soldering operations.
- 1.02** The B soldering copper is designed for use as a heavy duty soldering copper. The B soldering copper holder is provided as a receptacle for the B soldering copper.



**B SOLDERING COPPER**

**Fig. 1**



B SOLDERING COPPER HOLDER

Fig. 2

**2.04** The following is a description of the B soldering copper holder:

- (1) The holder consists of a metal base and cage which is open at one end and closed at the other.
- (2) This holder can be used as a protecting stand or as a holder for the B soldering copper.
- (3) A mounting bracket has not been provided on the holder. The holder can be secured at a work location in a temporary manner (with lashing wire, etc).

### 3. PRECAUTIONS

**3.01** Safety glasses should be worn when using a soldering copper.

**3.02** Do not use a soldering copper that has a frayed cord or a broken plug.

**3.03** Do not place a soldering copper in a tool kit or storage compartment before it has cooled thoroughly.

**3.04** Remove excess solder from the tip by wiping it on a 6 by 5-inch flat wiping cloth or on a reasonable substitute. *Never flip excess solder from a soldering copper.*

**3.05** Do not hold a soldering copper near the hands or face to test its temperature as burns may result; use a piece of solder to test the temperature of the tip.

**3.06** Do not solder working circuits with the B soldering copper until the ground has been removed from the soldering copper. This is

accomplished by inserting an adapter in the receptacle and leaving the pigtail grounding wire unconnected. Refer to 620-103-010 for information on grounding adapters.

**3.07** The B soldering copper holder was specifically selected for use with the B soldering copper and the ventilating holes in the cage are quite large. If the B soldering copper holder is used as a holder for any other soldering copper, care should be exercised to avoid burns as a result of the tip of a small soldering copper protruding through the cage.

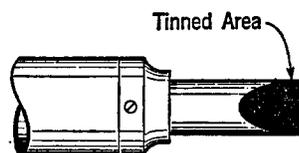
#### 4. USE

**4.01** The B soldering copper is intended for use in joining cable conductors, closing seams on lead sleeves, and other general soldering operations where applicable.

**4.02** Before using the B soldering copper, wait until it has reached the proper operating temperature.

**4.03** Do not use the B soldering copper until it has been properly tinned. The following describes the method of tinning a soldering copper:

- (1) File the surface of the tip to be tinned until it is bright and clean using a standard mill smooth H file.
- (2) Heat the soldering copper to soldering temperature, quickly file the face of the tip which was previously cleaned, and apply solder. Remove any excess solder by wiping the tip on a flat wiping cloth or on a reasonable substitute.
- (3) Repeat this operation until the tip is properly tinned. Tin only one side of a tip. A properly tinned soldering copper is illustrated in Fig. 3.



PROPERLY TINNED COPPER

Fig. 3

(4) Before placing the soldering copper in the holder wipe any excess solder from the tip. This will prevent pitting when the soldering copper is reheated.

**4.04** In the interest of safety, economy, and preserving the tinned surface of the tip, do not keep a soldering copper hot when not in use over extended periods.

**4.05** To avoid excessive wear on the cord, keep it free of knots or kinks, and do not suspend the soldering copper by the cord.

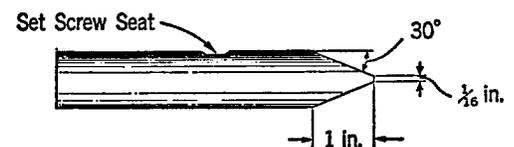
**4.06** If the tip works loose, secure it by tightening the retaining set screw with a screwdriver.

#### 5. MAINTENANCE

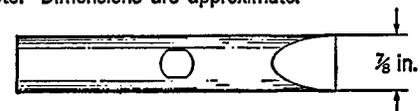
**5.01** Maintain the shape of the tip by occasionally dressing it with a standard mill smooth H file.

**5.02** If the tip becomes excessively warped or worn proceed as follows:

- (1) When the soldering copper is cool enough to handle, remove the tip. The tip is removed by loosening the retaining set screw and extracting the tip from the shell.
- (2) Place the tip in a vise and shape it with a file to conform with the illustration in Fig. 4.



Note: Dimensions are approximate.



PICTURE OF ENTIRE TIP

Fig. 4

(3) Do not attempt to shape the tip by striking it with a hammer.

**SECTION 081-330-103**

(4) Replace the tip in the shell, being careful to properly seat the tip in the shell, and rotate the tip so that the set screw seat is under the set screw. The set screw seat is illustrated in Fig. 4. Tighten the retaining set screw with a screwdriver.

(5) After reshaping, a tip must be tinned prior to use. Refer to Par. 4.03 for instructions on tinning a soldering copper.

**5.03** When the cord or plug of the B soldering copper is no longer serviceable, return it for repair in accordance with local instructions.

**5.04** If the B soldering copper fails to heat in a reasonable length of time (within five

minutes after inserting the plug in an electrical outlet) proceed as follows:

(1) Check the power source for current (using a lamp or similar safe equipment).

(2) Remove the cord from the power source and check the cord and plug for loose connections or broken conductors.

(3) Check the tip for looseness or improper assembly (not properly seated in shell).

(4) If the above do not disclose the nature of the difficulty the heating element is defective. In case of a faulty heating element, return the soldering copper for repair in accordance with local instructions.