**BELL SYSTEM PRACTICES**
**Outside Plant Construction and Maintenance**

**SECTION G96.110.1**
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**AT&T Co Standard**

# PORTABLE ELECTRIC MANHOLE BLOWER

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## 1. GENERAL

1.01 The Portable Electric Manhole Blower is a lightweight unit for ventilating manholes, intended for use in conjunction with the Portable Gasoline Engine Electric Generator.

1.02 The unit weighs about 43 pounds and is driven by a 1/4 hp direct current motor having a rated speed of 1725 rpm and requiring from 225 to 350 watts of d-c electric power.

1.03 The unit is weatherproof, quiet in operation, and capable of delivering 300 to 600 cubic feet of air per minute.

## 2. SAFETY PRECAUTIONS

2.01 Locate the unit so that it will not be subject to damage, obstruct traffic or be hazardous to pedestrians.

2.02 On sloping ground, avoid placing the unit on the upgrade side of the manhole opening. If it is necessary to place the unit on the upgrade side, block the unit so that it will not vibrate toward the manhole opening.

2.03 Display proper warning signs at all times.

2.04 Do not leave the unit on an unattended job unless it can be properly secured from theft or tampering.

## 3. OPERATION

3.01 Place the unit on a firm level base at least three feet from the manhole opening and in accordance with the safety precautions indicated in Part 2 of this Practice.

3.02 Attach the blower hose to the discharge tube of the blower by slipping the end of the hose, which is equipped with a strap type clamp, over the discharge tube and pulling the strap tight to hold the hose in place.

3.03 Adjust the position of the blower so that the hose will run directly into the manhole without any unnecessary bends and so that the end of the hose will hang at the desired level above the manhole floor.

3.04 A section of blower hose is 15 feet long; if one section is not long enough for the particular conditions, two sections may be connected together. For detailed information on the handling of blower hose, refer to the section of these Practices entitled "Manhole Blower Hose."

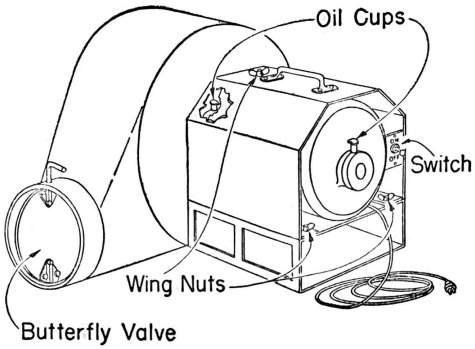
3.05 Connect the electric supply cord from the blower unit to one of the "twist-tite" receptacles on the load connection panel of the gasoline electric generator unit. Do not connect the blower to any other source of electric power except one known to be 110-volt (plus or minus 15 volts) direct current.

3.06 Turn the "off-on" switch on the blower unit to the "on" position to start the blower.

3.07 The volume of air delivered by the blower depends on the position of the butterfly valve in the discharge tube of the blower. When the valve is in the fully opened position the blower delivers about 600 cubic feet of air per minute and requires about 350 watts of power from the engine generator set. When the butterfly valve is fully closed the blower delivers about 300 cubic feet of air per minute and requires about 225 watts of power.

## 4. MAINTENANCE

4.01 At intervals of four months or 400 hours of operation, whichever interval is shorter, insert four or five drops of lightweight engine oil in the oil cup on each end of the electric motor. The oil cup on the end of the motor next to the blower is under the motor cover and it is necessary to remove three wing nuts and the motor cover in order to gain access to this oil cup. Do not over oil as too much oil may foul the motor brushes.




4.02 If the blower is in need of repair, it should be returned in accordance with local instructions.