BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G96.110.2
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AC-DC BLOWER
(AT-C172X)

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1. GENERAL

1.01 The AC-DC Blower is a lightweight unit for ventilating manholes. This unit can be used in conjunction with any of the following sources of power:

(a) 125-Volt, 825- or 1350-Watt DC Generator (G96.310.1)
(b) 115-Volt, 1250-Watt AC Generator (G96.310.1)
(c) 115-Volt, AC Commercial Power

1.02 Detailed Instructions about the use of the Manhole Blower Hose to be used with this tool are covered in G96.130.1.

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 vibration will not move it toward the manhole opening.

2.03 **Never lower a blower hose in a manhole or leave it in a manhole unless the blower is operating.** Failure to follow this procedure may contribute to an explosion.

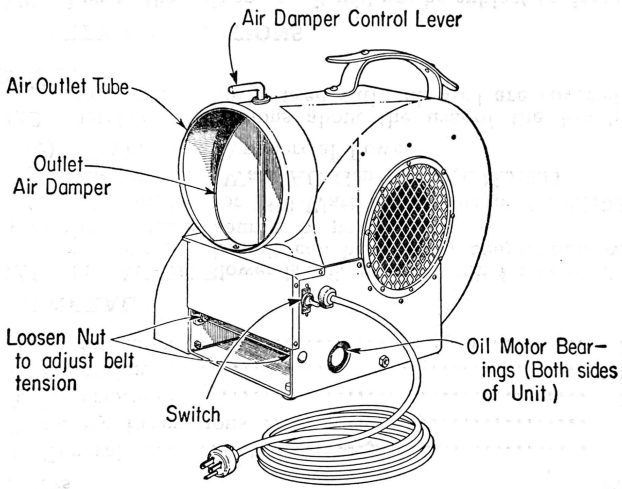
2.04 **Do not operate or store this unit in a manhole.**

3. DESCRIPTION

3.01 The unit weighs 28-1/2 pounds and is driven by a 1/4 h.p. universal motor. The over-all dimensions are: Length—16-3/4 in., Width—9-1/4 in., Height 17-3/8 in.

3.02 The unit is weatherproof, quiet in operation and capable of delivering 300 to 800 cubic feet of air per minute.

3.03 The general appearance of the United States Motors AC-DC Blower and the various parts referred to in this section are shown in the following sketch.



4. OPERATION

4.01 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.

4.02 Attach the blower hose to the air outlet tube of the blower by slipping the end of the hose, which is equipped with a strap type clamp, over the air outlet tube and pulling the strap tight to hold the hose in place. **(Caution: Do not drop the end of the blower hose into the manhole until Paragraph 4.07 is reached.)**

4.03 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."

4.04 Connect the electric supply cord from the blower unit to a source of power.

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

4.06 **Let the blower run for a moment with the Outlet Air Damper open and with the hose out of the manhole.** Check the end of the hose to see that the blower unit is operating properly and that the hose is securely attached to the Air Outlet Tube.

4.07 After the blower has operated for at least a minute, lower the blower hose into the manhole. 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.

4.08 The volumn of air delivered by the blower depends on the position of the Outlet Air Damper in the Air Outlet Tube of the blower. When the Outlet Air Damper is in the fully opened position the blower delivers about 800 cubic feet of air per minute. When the Air Outlet Damper is fully closed the blower delivers about 300 cubic feet of air per minute.

4.09 Remove the blower hose from the manhole **before** the blower is turned off.

5. MAINTENANCE

5.01 OIL MOTOR BEARINGS—At intervals of six months or 1000 hours of operation whichever interval is shorter, two or three drops of lightweight motor oil should be placed on the motor bearings as shown in the Figure in Part 3. On the belt side of the unit the oil must be placed through the wire guard.

5.02 BELT TENSION—The tension of the belt between the motor and the fan may occasionally require adjustment. This can be accomplished by loosening the bolts securing the motor (refer to Figure) and adjusting the motor as required. Secure motor by tightening bolts.