

## ELECTRICAL INSTALLATION INSTRUCTIONS continued

This unit is equipped with a junction box for hard wire connection. Bring power to the right side of junction box so as not to interfere with ionizer installation. See Figure 4.

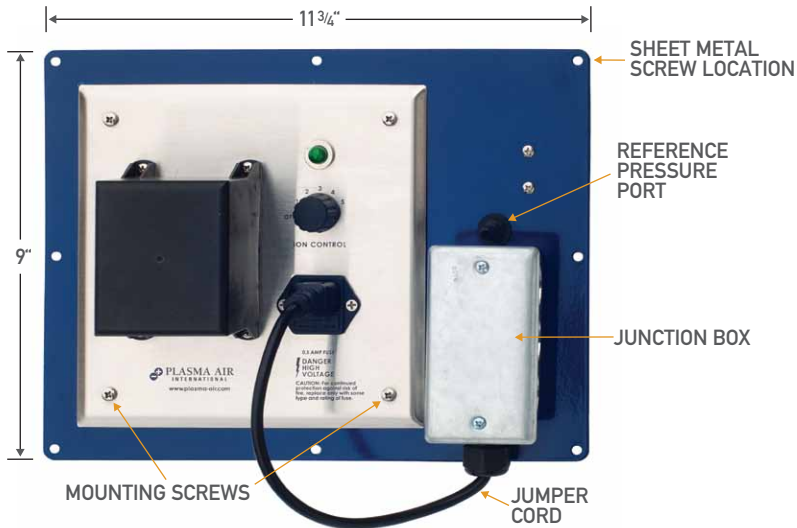


FIGURE 4

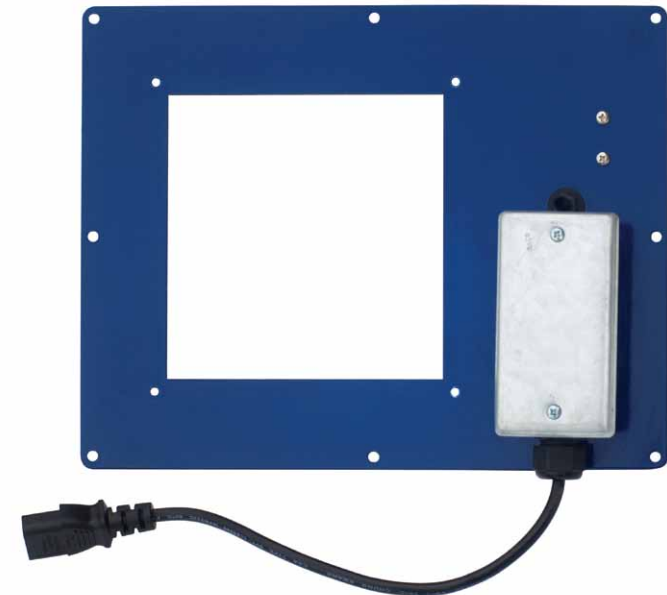
## OPERATION

When the system fan is operating, the pressure switch closes, completing the electrical circuit.

## INSTALLATION, OPERATION & MAINTENANCE MANUAL

### PLASMA AIR MODEL AFS-MF-JB

REV 11/10



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## INTRODUCTION

Ionization units should be powered when there is air flow in the system. The Plasma Air Model AFS-MF-JB provides a convenient method for powering Series 100 and 200 Ionization Units. The AFS-MF-JB is equipped with a pressure switch which closes at 0.05 inches WG.

The unit is shipped complete with four 4mm mounting screws.

## MECHANICAL INSTALLATION INSTRUCTIONS

The unit is shipped from the factory to cause switch actuation when installed on the positive or supply side of air conditioning duct systems.

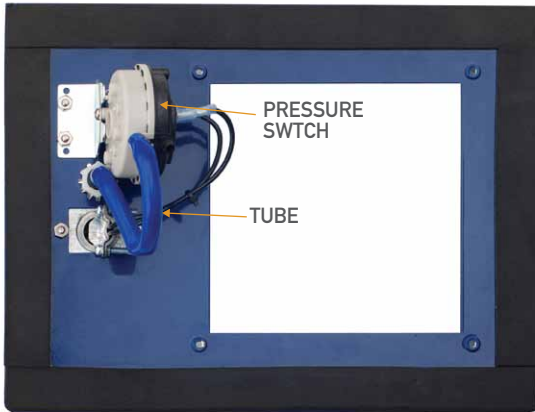


FIGURE 1

1. The AFS-MF-JB must be mounted horizontally, even in vertical ducts. This will ensure accurate operation of the pressure switch.

If mounted vertically, the pressure switch may remain actuated after the system fan stops.

Be sure there is sufficient duct depth to accommodate the ionization tubes.

2. Cut a rectangular hole in the duct 10 inches by 7 inches. See Figure 2.

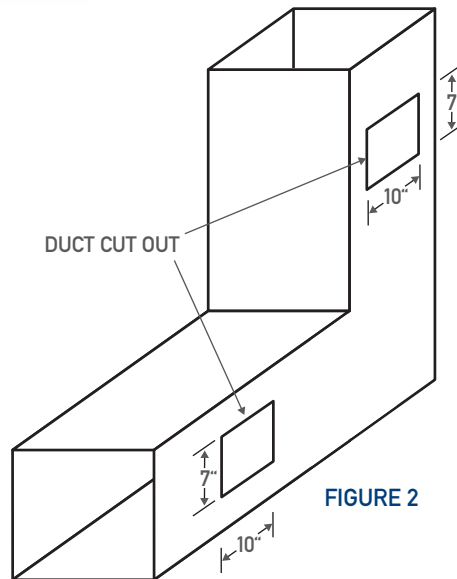


FIGURE 2

If the unit is to be mounted on the negative or return side of a system, the plastic tube must be moved from the P2 (white) to the P1 (black) position on the pressure switch. See Figure 1.

The AFS-MF-JB will not operate properly if installed inside an air handling unit.

3. Center the AFS-MF-JB over the cut out and secure to the duct using 8 sheet metal screws (not provided).
4. The ionization unit is then secured to the AFS-MF-JB using the four 4mm mounting screws provided.
5. In duct systems where 0.05 inches WG is not consistently present, it may be necessary to:
  - a. run a length of 1/4" ID plastic tube from the Reference Pressure Port located on the front of the unit to the opposite side of the fan; or
  - b. mount the supplied AIRFLOW PICK-UP FITTING on to the Duct Pressure Port on the pressure switch located on the back of the plate. Ensure that the airflow pick-up fitting is installed so that the air flows into the fitting opening. See figure 3 below.

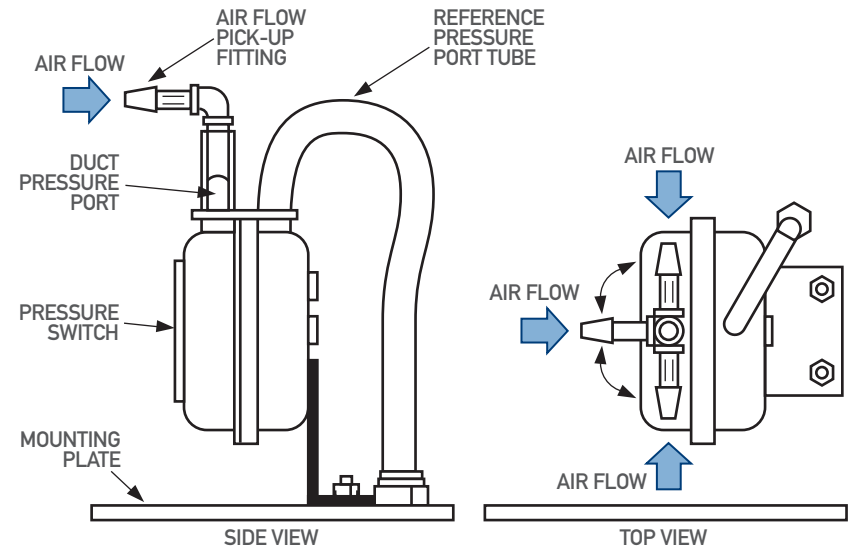


FIGURE 3

## ELECTRICAL INSTALLATION INSTRUCTIONS

The AFS-MF-JB can be used for both 120 and 230 volt systems. The typical Series 100 and 200 Ionization Units draw about 10 watts. The power source should not be protected by a breaker exceeding 20 amps.