Air Flow Switch Operation

The air flow switch (AFS) senses differential pressure across its inputs. The AFS signals the air cleaner ON when a vacuum is present at the unit. Removing the tubing and using a straw to apply a vacuum near the orifice will turn the AFS ON. Also blowing air into the unconnected input will activate the AFS.

This test will bypass the airflow switch allowing the power supply to operate. If the indicator light does not turn on with the airflow switch bypassed, then this indicates a problem with the power supply. Note the collector cells should be removed to insure the output is not being shorted.

Honeywell manufactured two AFS versions. The new version has a smaller circuit board. Zoom in to the photos to determine your version.

Air Flow Switch Bypass Procedure

1. Bypass the AFS:
   • (2012 - Present) Unplug the AFS then connect the two pins marked “bypass AFS” using a jumper wire.
   • (Prior - 2012) Short the resistor to ground with a jumper wire, see photo for your model
2. The door interlock switch must be ON
3. Turn ON the On-Off switch

F300 F50 F52 Models ................................................................................................................. 2012 - Present
On the power supply, connect the two pins labeled "Bypass AFS" located on J3 with a jumper. To permanently bypass the AFS cut the R16 jumper/resistor.
F300 F52F Models ................................................................. 2006 - 2012
Ground the power supply resistor J8, a paint coating may need to be cleaned.

Permanently disabling the AFS is outlined the Honeywell F300 Product Data Manual, see page 13.

F300 F50F F50E F52 Models ................................................................. 1990 - 2006
**Honeywell Air Flow Switch (AFS)**

**Note:**
The last bypass procedure (1990 -2006) will light the neon indicator and bring the power supply to full power but it does not fool the optional W8600F remote indicator. The LCD indicator will remain off indicating the air cleaner is not running.

Permanently disabling the AFS is outlined the Honeywell F50F Product Data Manual, see page 11.

**Air Flow Switch Voltages**
We measured these voltages:

<table>
<thead>
<tr>
<th>WIRE</th>
<th>OFF</th>
<th>ON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>gnd</td>
<td>gnd</td>
</tr>
<tr>
<td>Gray</td>
<td>13.7 vdc</td>
<td>13.2 vdc</td>
</tr>
<tr>
<td>Orange</td>
<td>0.7 vdc</td>
<td>13.2 vdc</td>
</tr>
<tr>
<td>Violet</td>
<td>5 vdc</td>
<td>0 vdc</td>
</tr>
</tbody>
</table>

**Dimensions**
We measured the 4074ETH:
Four 5/32” dia holes on 2-23/32” center.
Overall size 3-5/16” square. Height 15/16”