

202121A Solid State Air Flow Switch

Application

The 202121A Solid State Airflow Switch turns on the Electronic Air Cleaner each time the fan runs. This kit is the identical replacement for the airflow switch in the F50E since 1990. The switch reacts to 0.03 in. wc change in airflow to start the F50E.

Installation

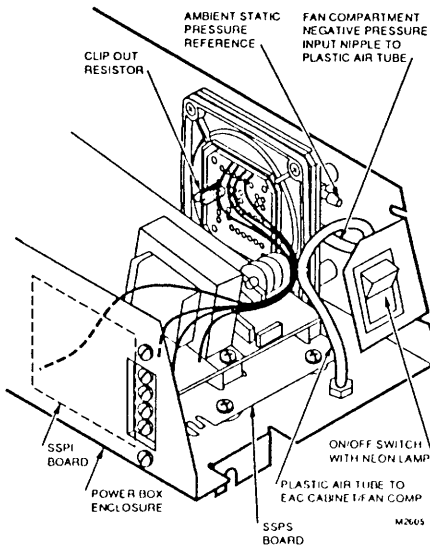
WHEN INSTALLING THIS PRODUCT...

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.

REPLACING EXISTING AIRFLOW SWITCH

1. Turn off the power to the Electronic Air Cleaner.
2. Note routing of the four colored wires from the air flow switch before disassembly. Use a needle nose pliers to take the three air flow switch mini-socket wires off the pin connectors on Solid State Power Supply (SSPS) board and the one wire off the Solid State Performance Indicator (SSPI) board. See Fig. 1.

Fig. 1—Airflow switch hookup.



3. Loosen the four screws holding the current airflow switch to the power box enclosure and remove the switch.

4. Gently twist off the plastic air tube from the airflow switch.

5. Replace the plastic air tube.

6. Place the replacement switch on the power box enclosure and tighten the four screws.

7. Use a needle nose pliers to connect the new airflow switch wires to the pin connectors:

- Gray wire to P14 on SSPS.
- Black wire to P7 on SSPS.
- Purple wire to P18 on SSPS.
- Orange wire to P14 on SSPI. Route this wire through existing wire clamp.

8. Secure four wires from replacement air flow switch to plastic air tubing with wire tie or similar method. Do not pinch off flow in air tubing.

Checkout

Test Procedure



CAUTION

Electric shock hazard.

Can cause personal injury or equipment damage. Installer must be a trained, experienced service technician.

1. Ground the power box.
2. Energize the power box with a two pronged extension cord.
3. Using one end of jumper lead, ground the power box enclosure.
4. Take the other end of the jumper lead and ground yourself to get rid of static electricity.
5. Take the jumper lead and attach it to the white resistor on the airflow switch.



CAUTION

Do not arc with the cover off.

6. Move the power switch to the ON position. The neon light should come on. If the light does not come on, replace the power supply.
7. Unplug extension cord, take off jumper leads and reassemble.

Turn the power on. Place the fan switch at the thermostat in the ON position. If there is not a fan switch, set the thermostat 10° F [6° C] above the room temperature so the heat will turn on. Check that the Electronic Air Cleaner is running. Reset the thermostat.

If there is a problem, refer to the troubleshooting chart inside the Electronic Air Cleaner door.