

# ELECTRONIC AIR FLOW SENSOR KIT

TRION PART NO. 144501-004

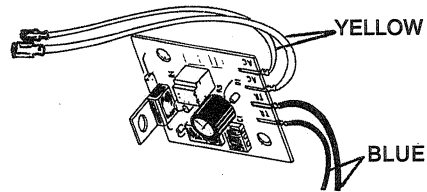


FIGURE 1

## Parts Kit Includes:

Qty.	Description	Trion Part No.
1	Air Flow Sensor Assembly	244500-003
2	PC Supports	143574-002
2	17" long blue wires	238887-007
2	4½" long yellow wires	242477-023
2	20" long yellow wires	242477-024
2	Wire Nuts (Orange)	120093-003
1	Installation Procedure	148545-001
4	Wire Ties	220711-002

**Tools Required:** Phillips screwdriver, diagonal cutters, wire stripper

— EXERCISE SPECIAL CAUTION WHEN WORKING  
ON ELECTRICAL PARTS —

## REPLACEMENT PROCEDURE

1. Turn off power at circuit breaker panel to Electronic Air Cleaner.
2. Turn off power supply on/off switch located on front panel.
3. Remove cell access door.
4. Check parts kit to assure all necessary parts are available.
5. Remove front cell.

6. Remove two screws at the front of the air cleaner (see Figure 2). Put these screws in a safe place. They will be used to reinstall power pack after installation of the electronic air flow sensor.

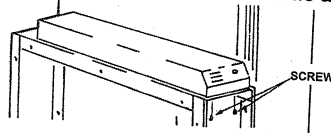


FIGURE 2

7. Remove power pack cover and put it aside for reinstallation after installation of air flow sensor assembly.
8. Insert the two plastic PC Supports into holes in rear flange of safety switch bracket as shown in Figure #3. Then snap the air flow sensor onto the two PC Supports so that the orientation of the blue and yellow wires are in the direction of wiring hole plug. The thermistor must be located approximately in the center of the 5/16" diameter hole on the side of the power pack assembly.

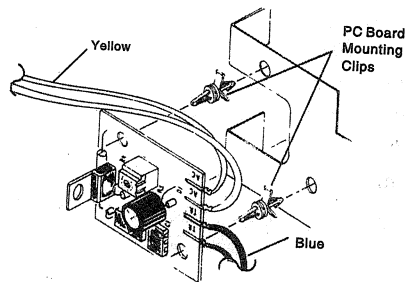


FIGURE 3

9. Disconnect the two yellow wires that connect the 24 volt output of the transformer to the printed circuit board.
10. Carefully cut the edge connectors from these transformer wires as close to the edge connector as possible leaving the full length of yellow wire supplied as part of the transformer.

11. Strip each yellow wire 1/2".
12. Using one of the orange wire nuts, connect one 20" long yellow wire and one 4 1/2" long yellow wire to one of the yellow transformer wires modified in steps 10 & 11. Repeat process to make connection to the remaining yellow lead on transformer.

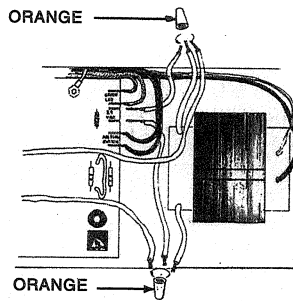


FIGURE 4

13. Connect the two 4 1/2" yellow wires with edge connectors to the power supply printed circuit board to the slots labeled 24 VAC.
14. Connect the two 17" blue wires with edge connectors supplied as part of the air flow sensor assembly, to the power supply printed circuit board to the slots labeled air flow switch.
15. Route the added yellow and blue wires alongside the existing black input power wire and secure with wire ties.
16. Review Figures 3 & 4 to assure correct mechanical installation and that all electrical connections are made in accordance with these instructions.

17. Replace front cell.
18. Replace air cleaner access door.
19. Turn on air cleaner circuit breaker at the installation circuit breaker panel.
20. Turn on air cleaner on/off switch on front of panel.
21. Turn off furnace/air conditioner blower at furnace control.
22. After completing installation, turn furnace to normal control.

**ATTENTION:** On continuous blower applications, after servicing the air cleaner, cleaning the cells or power outages by the utility company, the air flow switch must be reset. This reset requires that the air handler in the furnace/air conditioner be stopped a minimum of 2 minutes to allow the airflow switch to reset. To stop the air handler, turn the fan switch on the thermostat to the off position. Reset the thermostat to heating/cooling as required. The air cleaner is now energized even when the blower in the furnace/air conditioner is not running. The power supply will remain energized until the thermistor reaches operating temperature (130°C). This should take 1 to 1½ minutes. If the air cleaner is installed in an unusually warm environment (attic installation) the air flow switch will operate sooner. If it is installed in an unusually cool environment (crawl space or attic in the winter) the switch may remain energized for a slightly longer time.

**CAUTION:** The electronic air flow switch is factory set and tested to operate with normal air flow through the electronic air cleaner.

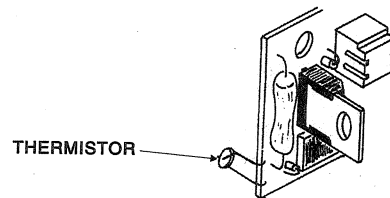


FIGURE 5

**CAUTION: DO NOT ATTEMPT TO ADJUST.** Tampering with the switch voids the warranty.