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D4P120 & D4S SMOKE DETECTOR KIT

INSTALLATION INSTRUCTIONS FOR SMOKE DETECTOR KIT USED WITH SC/SG036, 060 UNITS

Shipping and Packing List

10B40 single sensor kits contents

- 1 – Smoke detector sensor
- 1 – Smoke detector power board
- 1 – Supply bracket
- 1 – Grommet
- 1 – Foil tape
- 1 – Transformer
- 1 – Transformer harness
- 2 – Sensor harnesses
- 1 – Jumper harness
- 1 – Metal sampling tube
- 1 – Plastic sampling tube
- 1 – Magnet
- 1 – Sensor manufacturer's instructions
 - #10-16 x 3/4" sheet metal screws
 - #8-32 x 1" thread-forming screw

10B41 dual sensor kits contents

- 2 – Smoke detector sensor
- 1 – Smoke detector power board
- 1 – Supply bracket
- 1 – Grommet
- 1 – Foil tape
- 1 – Transformer
- 1 – Transformer harness
- 2 – Sensor harnesses
- 2 – Metal sampling tubes
- 2 – Plastic sampling tubes
- 2 – Magnets
- 1 – Sensor manufacturer's instructions
 - #10-16 x 3/4" sheet metal screws
 - #8-32 x 1" thread-forming screw

Application

Smoke detector will send a 24VAC signal to the unit controller when smoke is sensed. Unit controller default mode will de-energize unit.

Installation

WARNING

Risk of loss of life, personal injury, or property damage!

Improper installation, adjustment, alteration, service or maintenance can cause loss of life, personal injury, or property damage.

Installation and service must be performed by a qualified installer, service agency or the gas supplier.

CAUTION

Before attempting to perform any service or maintenance, turn the electrical power to unit OFF at dis- connect switch.

CAUTION

Risk of personal injury due to sharp metal edges!

Sharp metallic edges can cause injury. Take care when servicing unit to avoid accidental contact with sharp edges.

Smoke detector power board installation

Use manufacturer's instructions provided with smoke detector to install sensor(s) and power board. Refer to FIGURE 1 for location of power board. Secure control board to control panel with #8-32 screws provided.

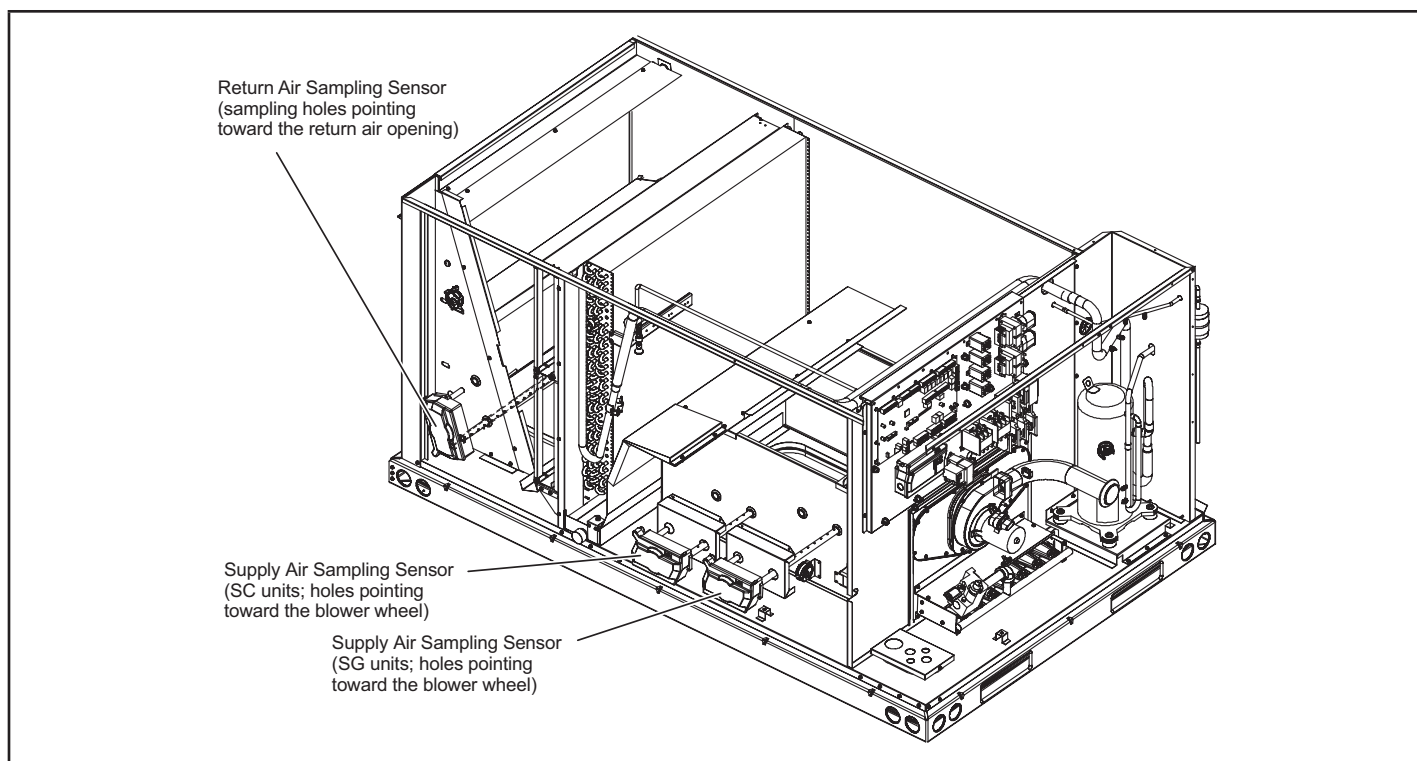


FIGURE 1 Smoke detector sensor locations

Sampling tube, foil tape, & sensor installation

- 1 - Slide metal sampling tube and plastic exhaust tube onto back side of the sensor (see FIGURE 2).

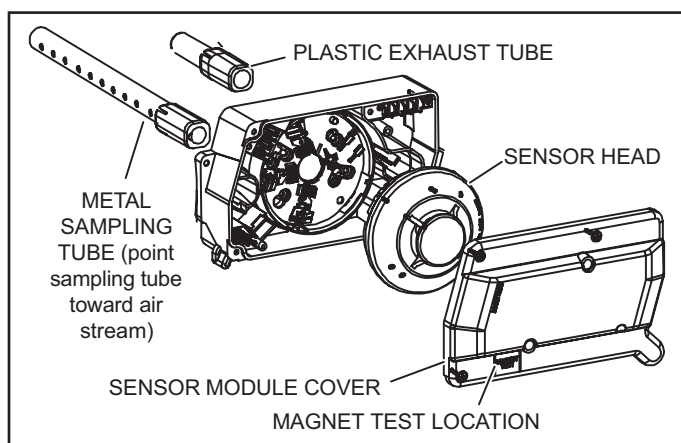


FIGURE 2 Smoke detector

- 2 - Orient sampling tube so that holes point toward the air stream.
- 3 - Apply foil tape to cover first two holes closest to the sensor of supply air sampling tube (see FIGURE 3).

NOTE - Foil tape is not applied to the return air sampling tube.

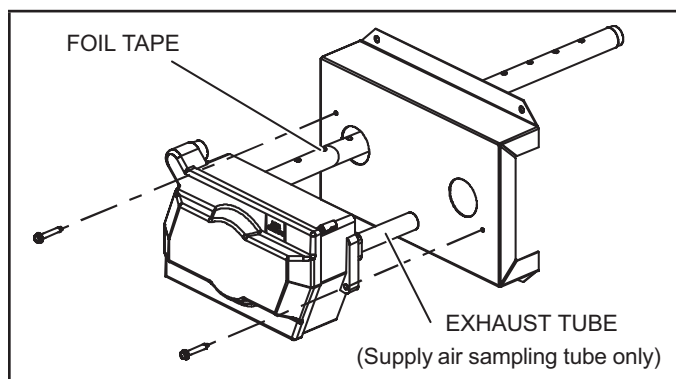


FIGURE 3 Foil tape installation

Transformer installation

Mount transformer to control board panel next to the smoke detector power board as shown in FIGURE 4.

Wiring

- 1 - Make jack/plug connections as shown in FIGURE 7 when installing return air smoke detector only, FIGURE 8 when installing supply air smoke detector only, and FIGURE 9 when installing both supply and return air smoke detectors.
- 2 - Route return air sensor harness to the top of the unit and secure to existing bundle of wires. Route supply air sensor harness through hole provided near the bottom of the indoor/controls divider panel (see FIGURE 5). Make sure wires are secured away from other components.

NOTE - It may be necessary to disassemble plugs in order to route harness through unit divider panels. To disassemble plugs, depress tabs on each side and slide end of plug out in the direction shown. Pull each wire out of the plug housing making sure to note correct pin location for reassembly. See FIGURE 4 (M3 Board) and FIGURE 6 (M4 Board).

- 3 - Route T31 transformer harness from line side of transformer to TB39 located on back of main disconnect box (see FIGURE 5). Connect load side of transformer to smoke detector control board power harness. See FIGURE 4 (M3 Board) and FIGURE 6 (M4 Board).

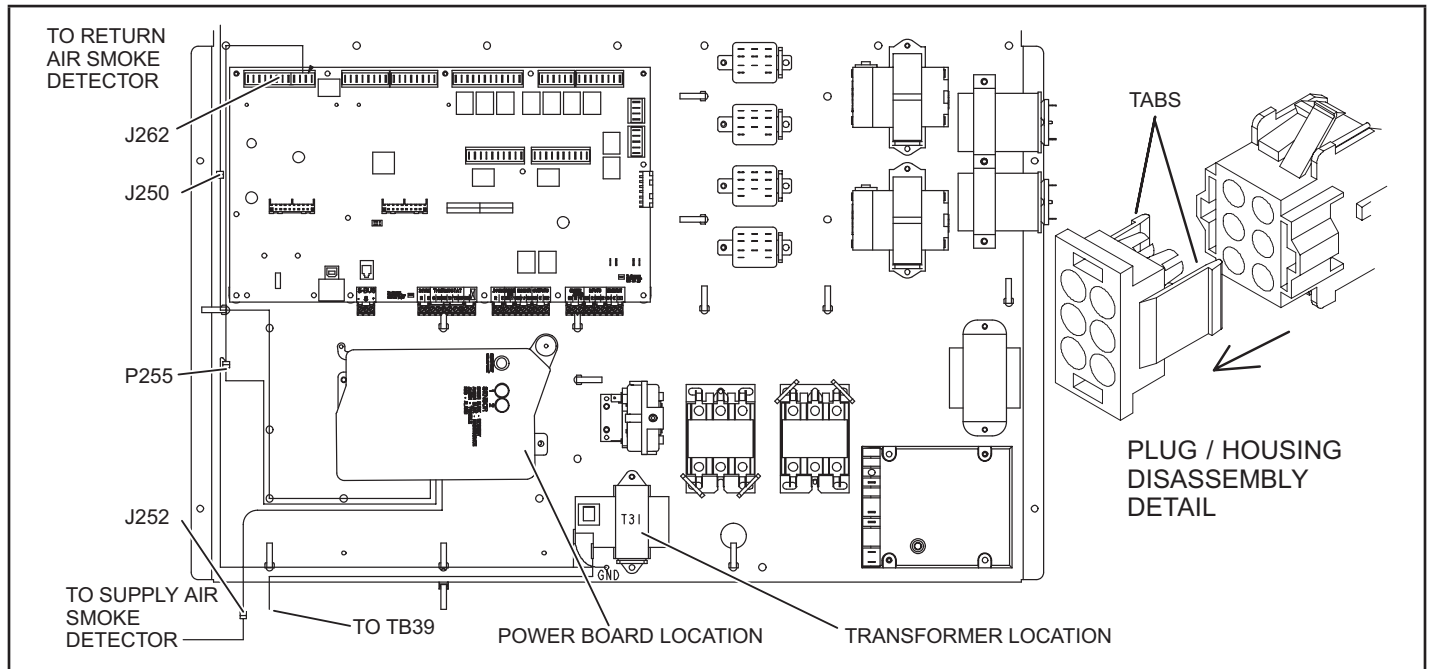


FIGURE 4 Power board / transformer location (M3 Board)

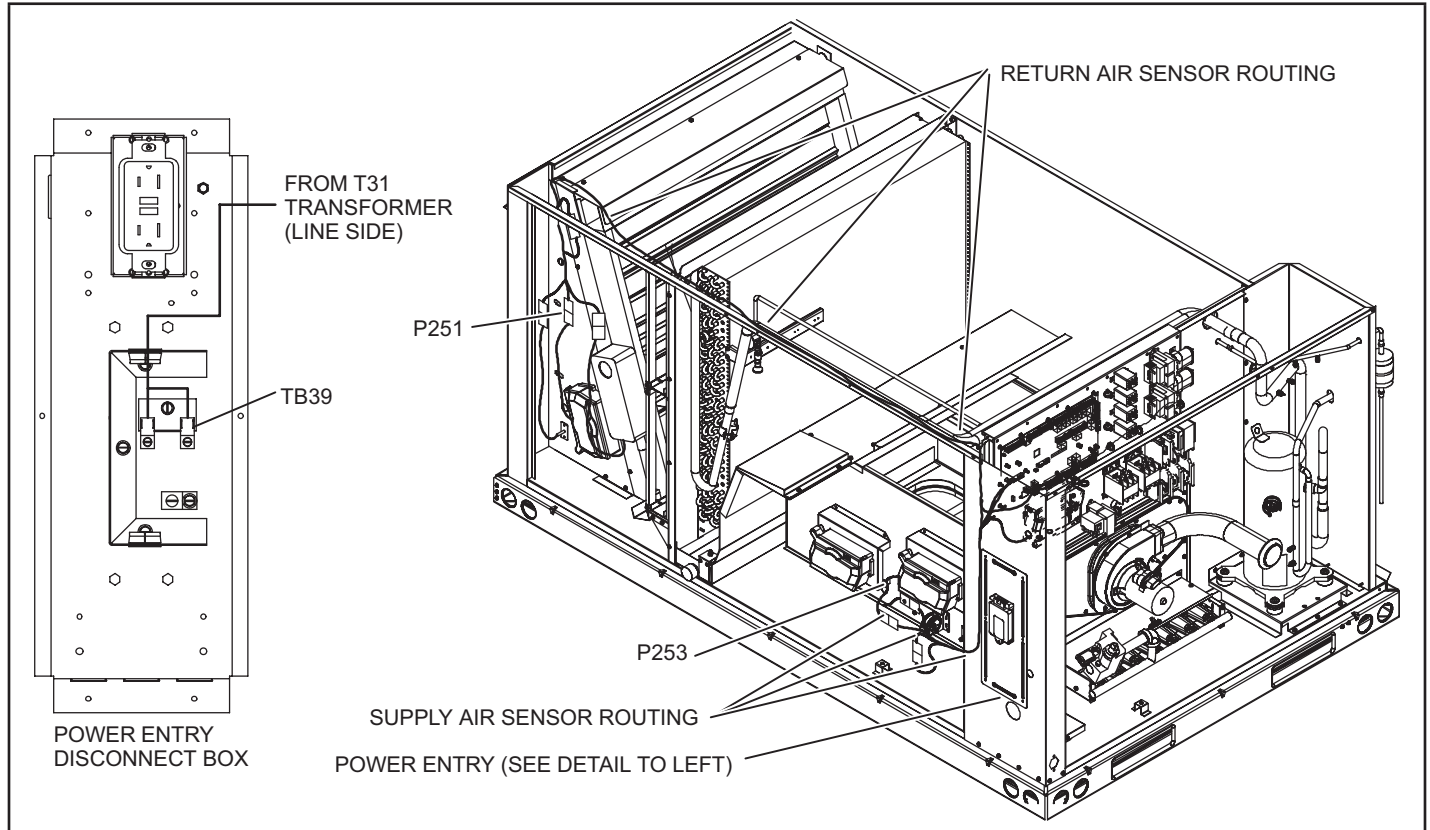


FIGURE 5 Wiring harness routing

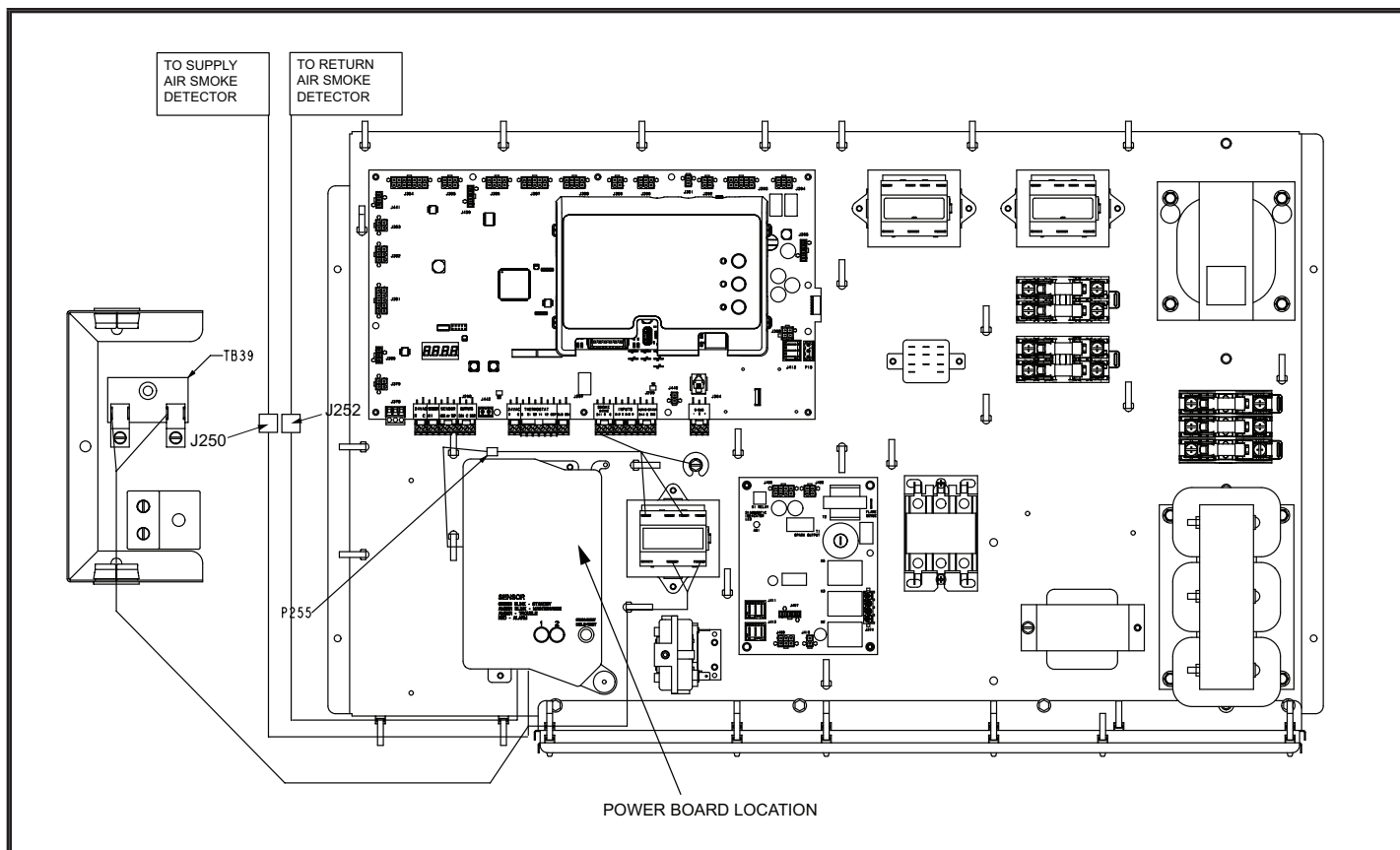


FIGURE 6 Power board / transformer location (M4 Board)

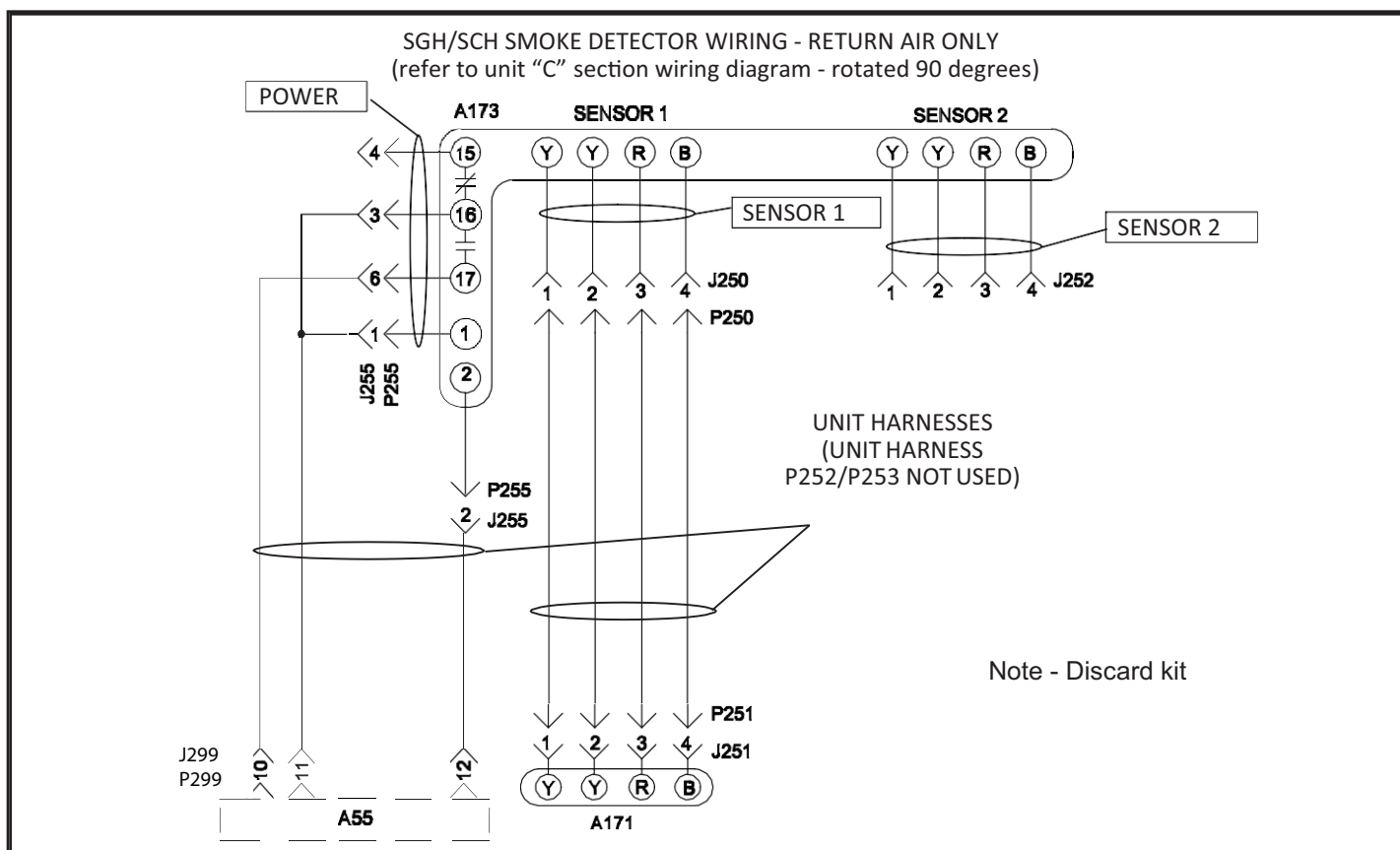


FIGURE 7

SGH/SCH SMOKE DETECTOR WIRING - SUPPLY AIR ONLY
(refer to unit "C" section wiring diagram - rotated 90 degrees)
Note - Discard power and return air harness.

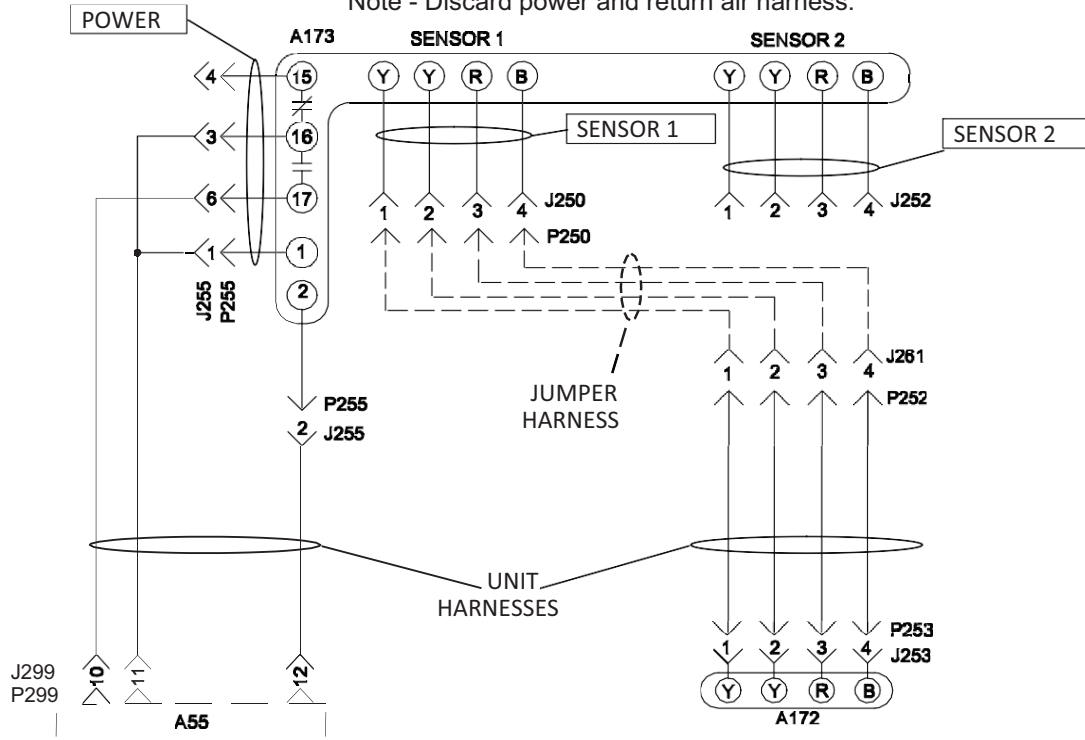


FIGURE 8

SGH/SCH SMOKE DETECTOR WIRING - SUPPLY AND RETURN AIR
(refer to unit "C" section wiring diagram - rotated 90 degrees)

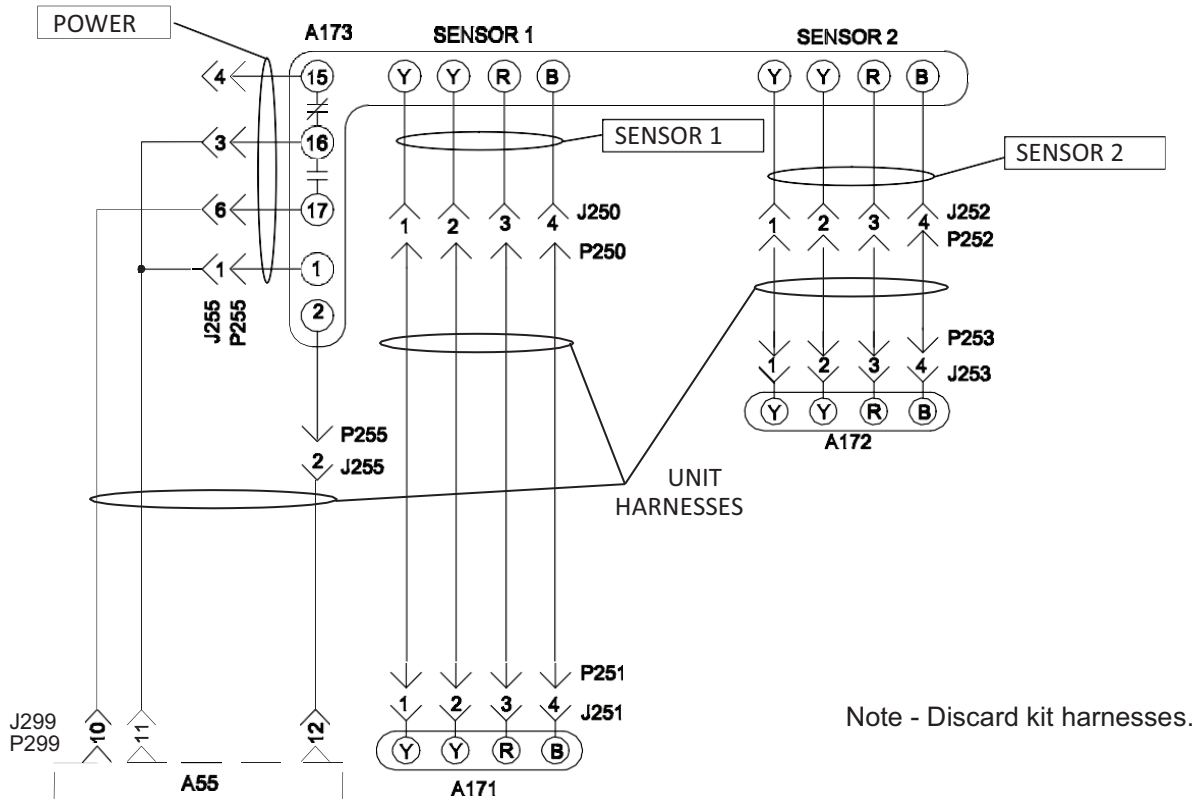


FIGURE 9

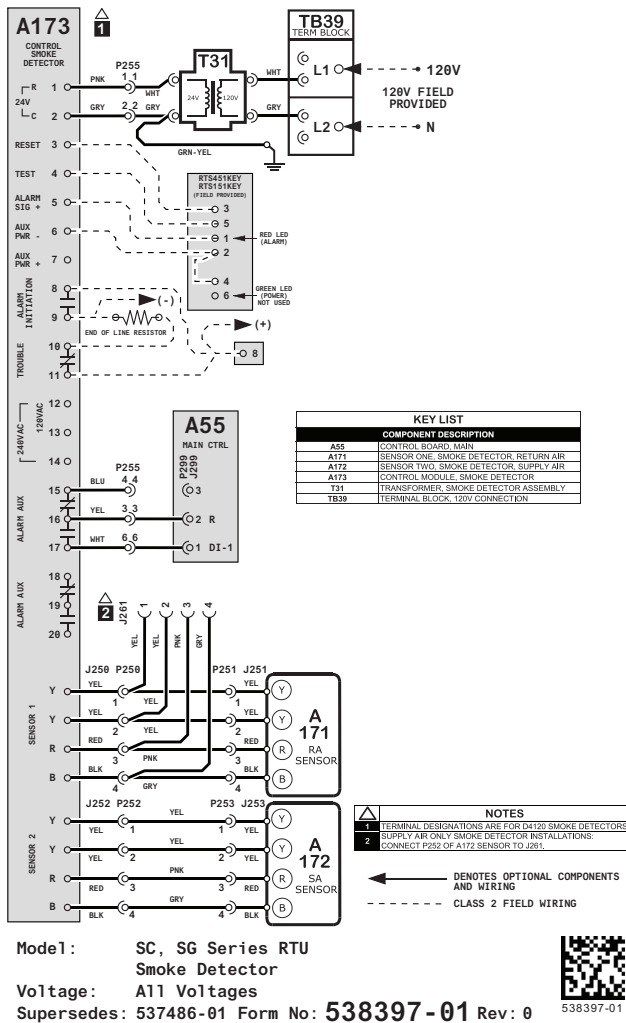


FIGURE 10

Test Magnets

A test magnet is provided in a bag assembly with each sensor. Remove the magnet from the bag assembly and place it on a metal surface near the sensor. The magnet is used during test procedures.

Maintenance and Test Procedures

The sensor manufacturer's instructions, which are provided with each sensor, outline information on maintenance and test procedures. Place these instructions in the literature pouch for future reference.