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KITS AND ACCESSORIES

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D4P120 & D4S SMOKE DETECTOR KITS

INSTALLATION INSTRUCTIONS FOR SMOKE DETECTOR KIT USED WITH SC/SG120, 240 UNITS

Shipping and Packing List

10B42 single-sensor kit contents

- 1 - Smoke detector sensor
- 1 - Smoke detector power board
- 1 - Supply bracket
- 1 - Grommet
- 1 - Transformer
- 1 - Transformer Harness
- 1 - Jumper Harness
- 1 - 36” metal sampling tube (used on return air D-box only)
- 1 - 30” metal sampling tube (used on supply air D-box, supply or return air B-box)
- 1 - Magnet
- 1 - Sensor manufacturer’s instructions
  - #10 - 16 X 5/8” sheet metal screws
  - #8 - 32 X 1” thread-forming screws
  - #8 - 32 X 1/2” thread-forming screws
  - Insertion-type wire ties

10B43 dual-sensor kit contents

- 2 - Smoke detector sensor
- 1 - Smoke detector power board
- 1 - Supply bracket
- 2 - Grommets
- 1 - Transformer
- 1 - Transformer Harness
- 1 - Jumper Harness
- 1 - 36” metal sampling tube (used on return air D-box only)
- 2 - 30” metal sampling tubes (used on supply air D-box, supply and return air B-box)
- 2 - Magnets
- 1 - Sensor manufacturer’s instructions
  - #10 - 16 X 5/8” sheet metal screws
  - #8 - 32 X 1” thread-forming screws
  - #8 - 32 X 1/2” thread-forming screws
  - Insertion-type wire ties

Application

Smoke detector will send a 24VAC signal to the M2 controller when smoke is sensed. The M2 will then affect unit operation according to the ECTO settings.

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 disconnect switch.

⚠ CAUTION

Risk of personal injure 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 3 for B-box power board location and figure 4 for D-box power board location. Secure control board to control panel with #8-32 screws provided.

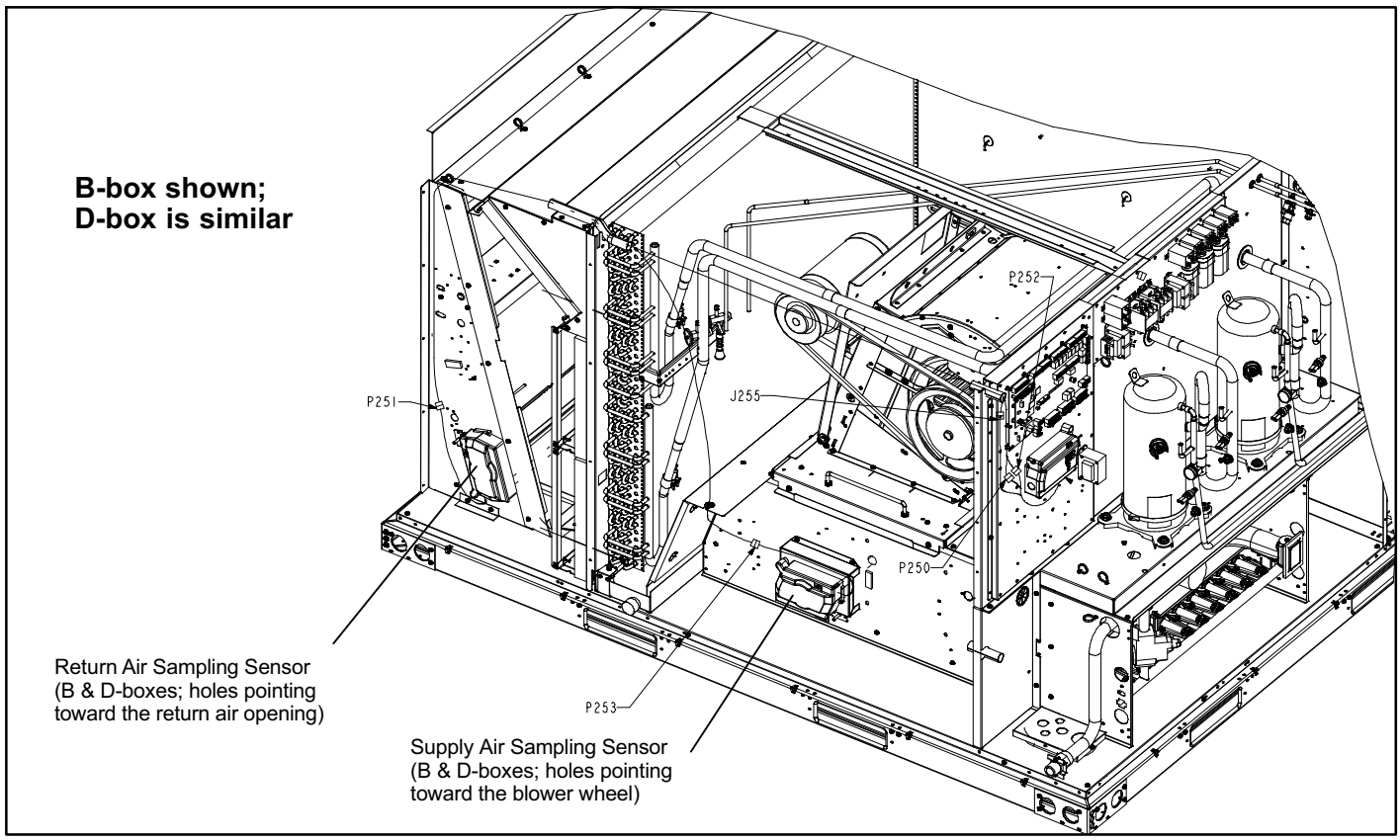

Figure 1. Smoke detector sensor locations

Sampling tube and sensor installation

1. Select the appropriate sampling tube:
   Supply air sensor B & D-box—30
   Return air sensor B-box—30”
   Return air sensor D-box—36”
2. Slide metal sampling tube and plastic exhaust tube onto back side of the sensor (see figure 2).

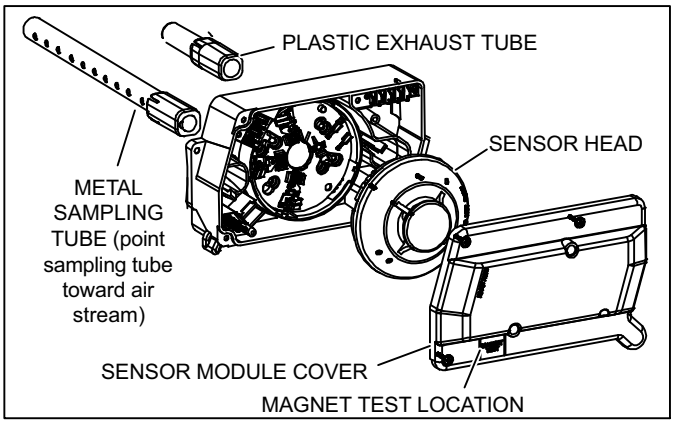

Figure 2. Smoke detector

3. Orient sampling tube so that holes point toward the air stream.
4. Secure sensor heads in proper location with #10-16 screws provided (see figure 1).

Transformer installation

Mount transformer to control board panel next to the smoke detector power board. See figure 3 (B-box) or figure 4 (D-box).

Wiring

1. Make jack/plug connections as shown in figure 6 when installing return air smoke detector only, figure 7 when installing supply air smoke detector only, and figure 8 when installing both supply and return air smoke detectors.
2. 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 3 for B-box and figure 4 for D-box).

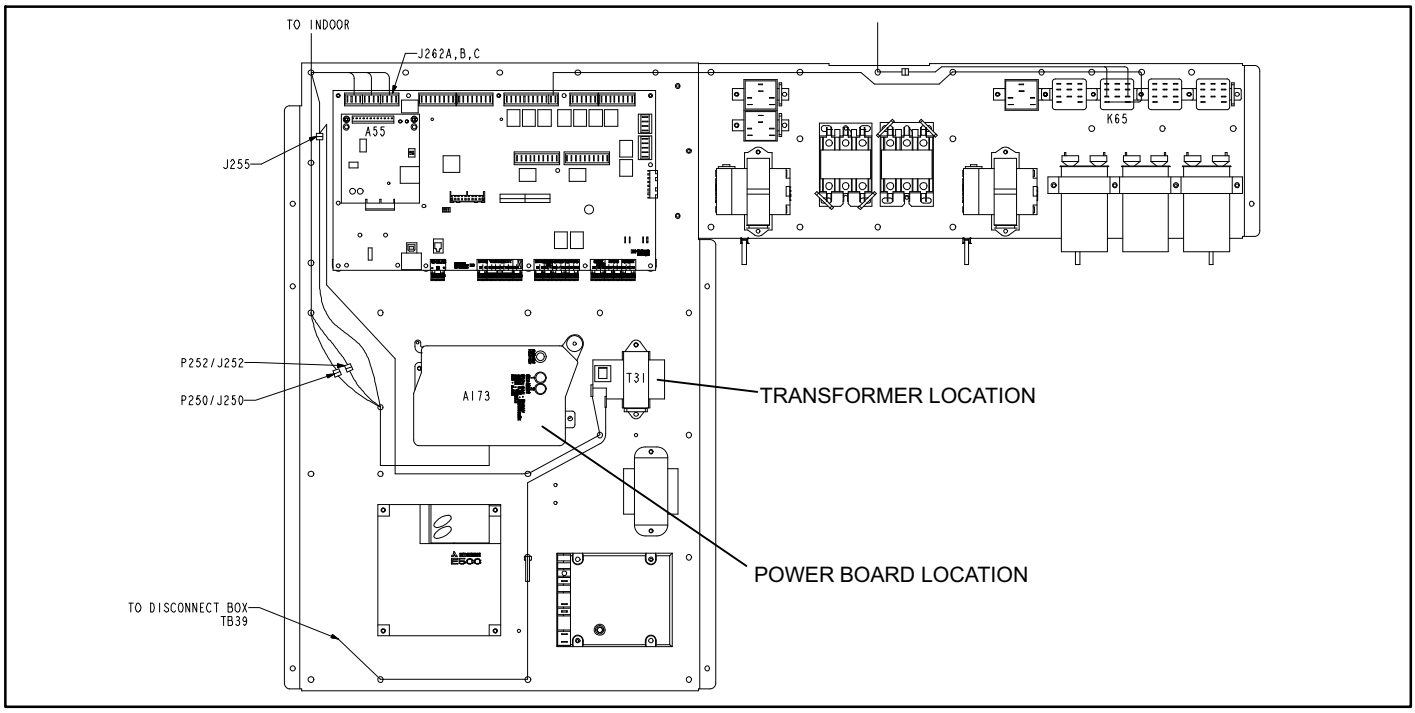

Figure 3. Power board / transformer location (B-box)

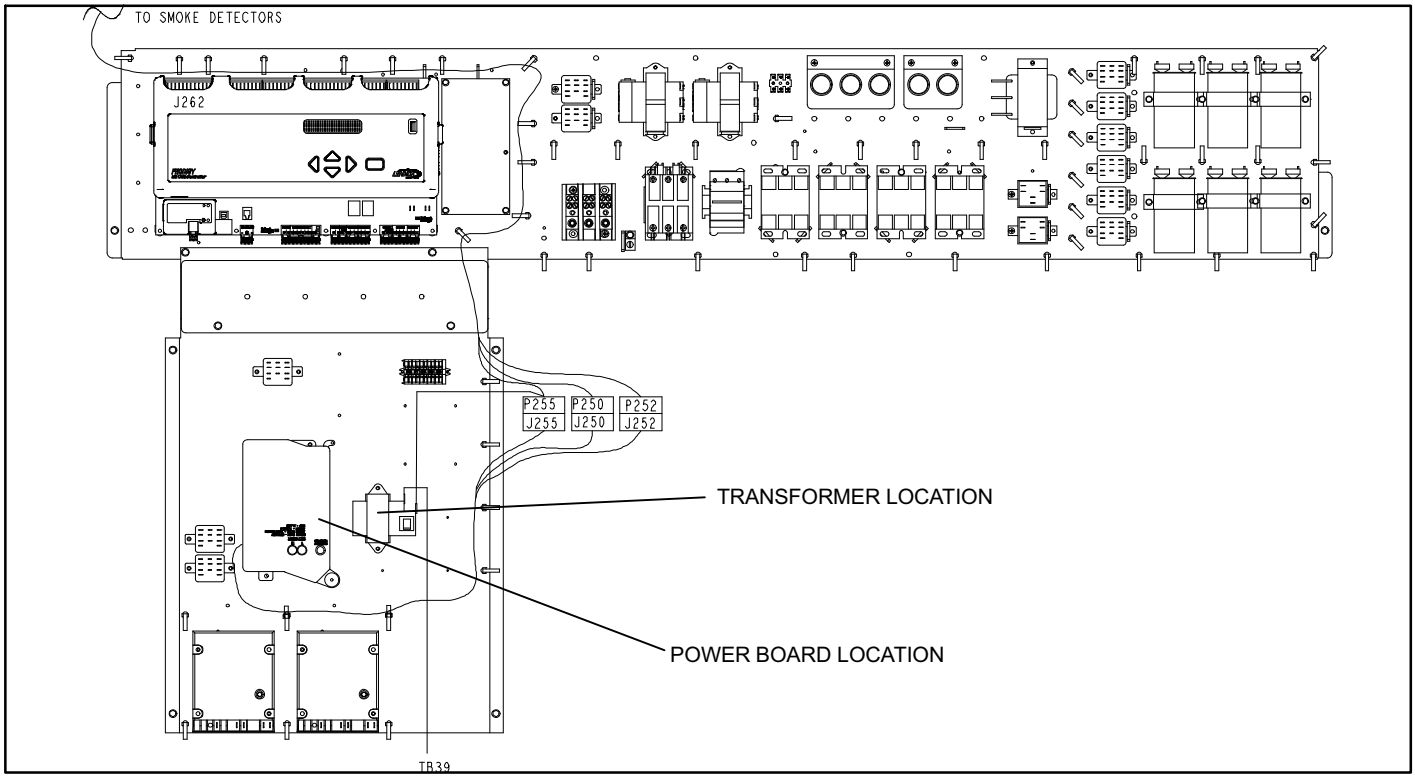

Figure 4. Power board / transformer location (D-box)

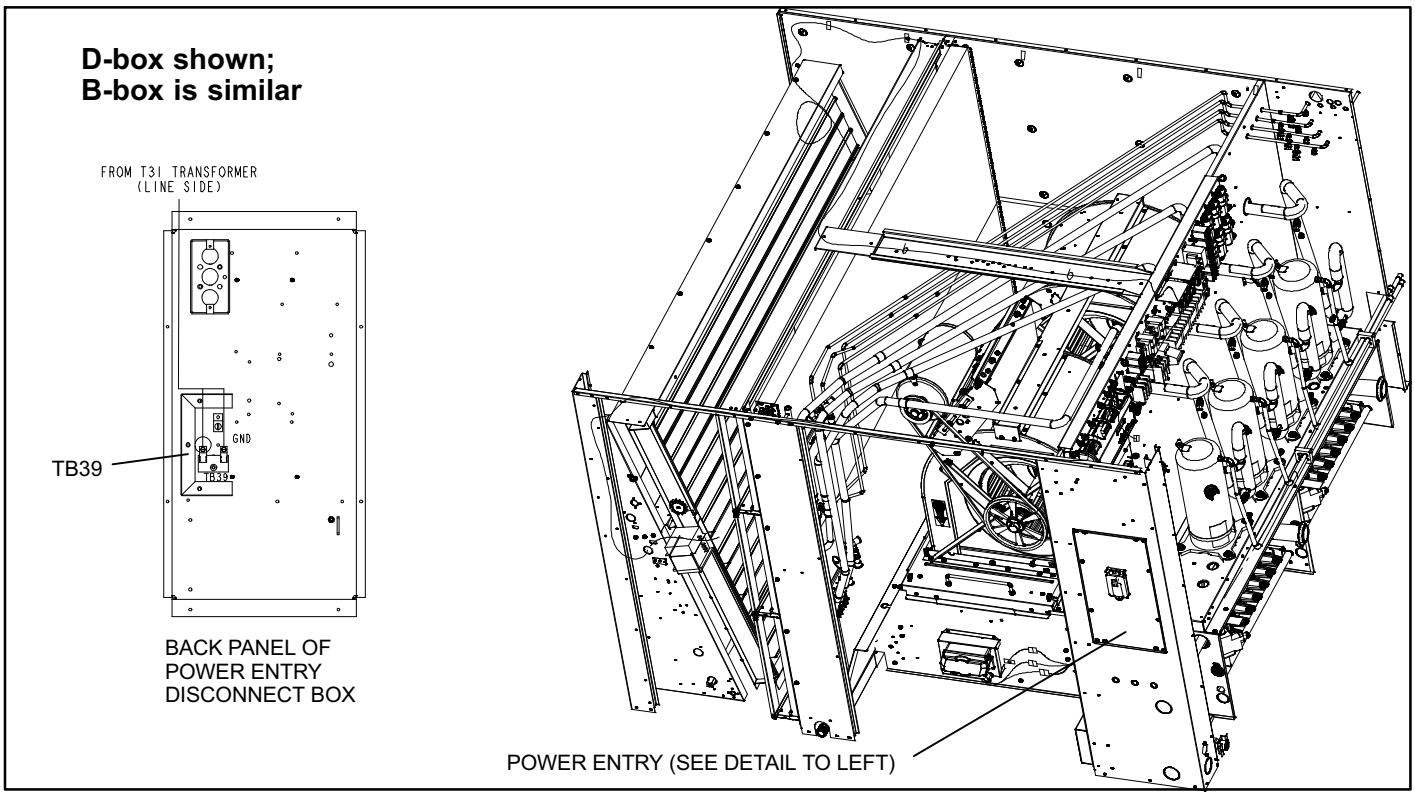

Figure 5. Transformer harness routing

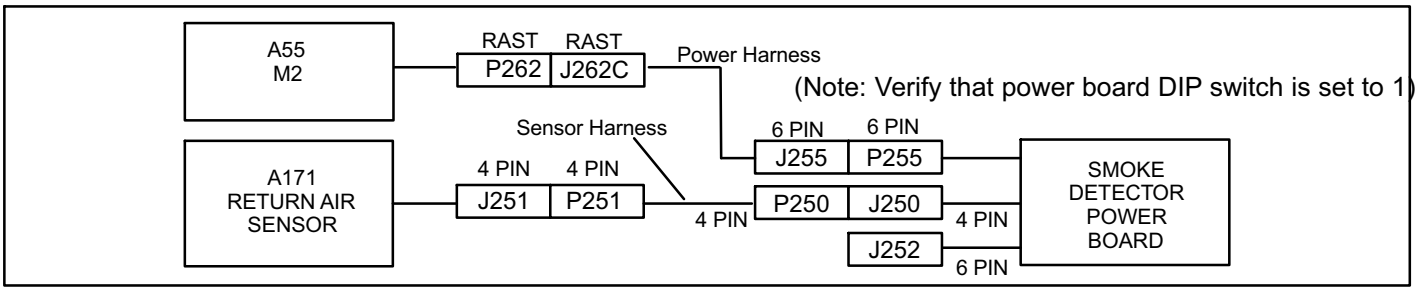

Figure 6. Unit application with Return Air Smoke Detector only

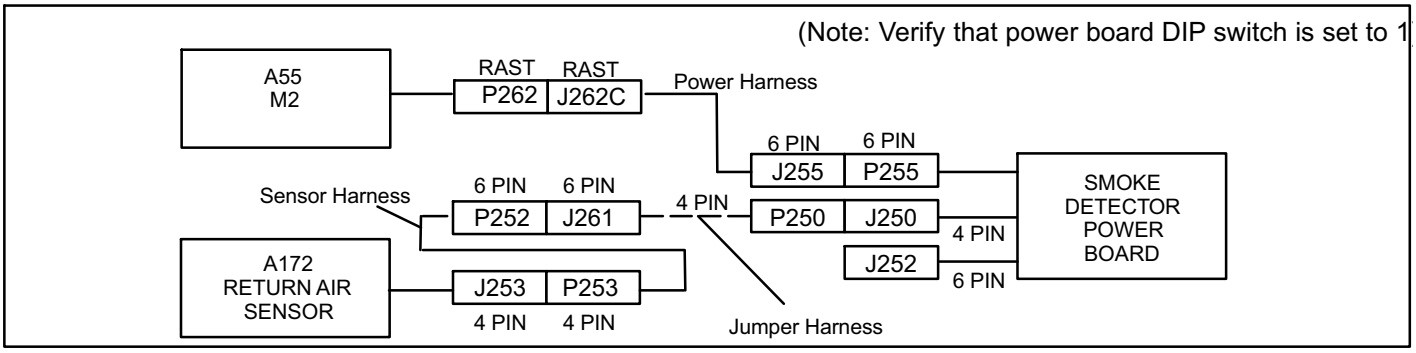

Figure 7. Unit application with Supply Air Smoke Detector only

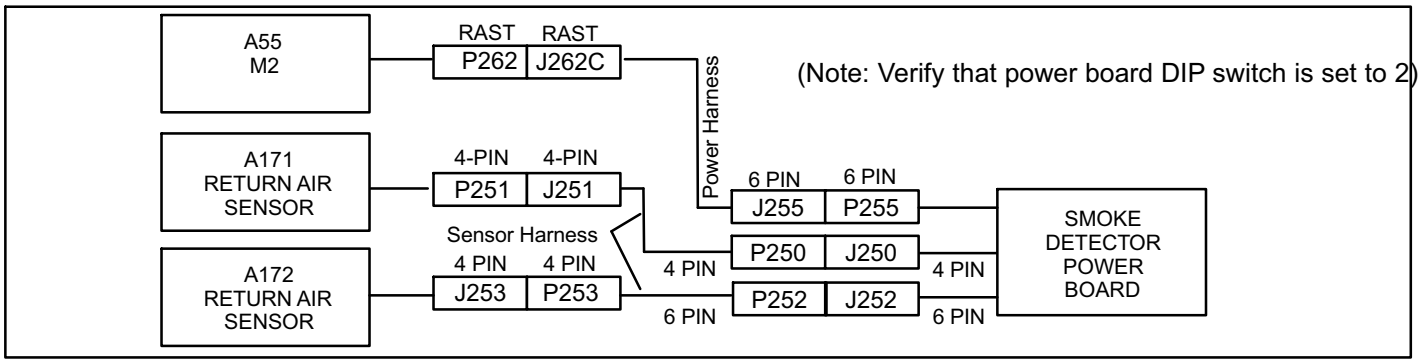

Figure 8. Unit application with Return and Supply Air Smoke Detectors

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 & 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.