

# INSTALLATION INSTRUCTIONS

SMOKE DETECTOR KIT, UNIT MOUNT  
MODEL# 2SD04700624  
FOR 6.5 THRU 12.5 TON ROOFTOP UNITS

## WARNING: BEFORE INSTALLING READ ALL OF THE MANUFACTURERS INSTALLATION AND MAINTENANCE INSTRUCTIONS

The 2SD04700624 Smoke Detector Kit contains the parts and hardware to mount the smoke detector in the following applications:

Determine which application is to be installed.

- A. Supply Air Stream (Blower Compartment)
- B. Return Air Stream (Return Compartment)
- C. Return Air Stream (with Economizer)
- D. Supply or Return Duct (use Factory Installation Instruction)

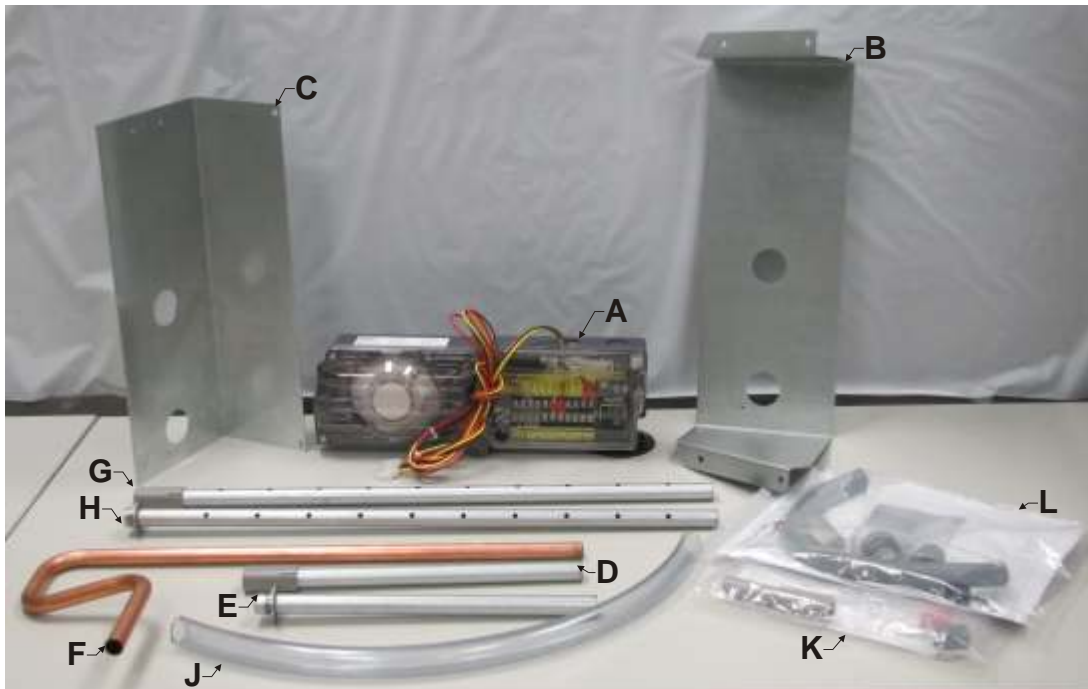


Figure 1

Check for the correct number of parts. See list below:

- 1 ea. Smoke Detector with Wire Harness (A)
- 1 ea. Smoke Detector Return Bracket (B)
- 1 ea. Smoke Detector Supply Bracket (C)
- 1 ea. Tube Extension w/ Plastic Quick Connect Fitting - 12" (D)
- 1 ea. Tube Extension - 12" (E)
- 1 ea. Sampling Tube - Copper (F)
- 1 ea. Sampling Tube w/ Plastic Quick Connect Fitting - 22"(G)
- 1 ea. Sampling Tube - 23" (H)
- 1 ea. Clear Tube - 3/4" ID x 22" (J)
- 1 ea. Factory Installation and Maintenance (IM) Instructions (K)
- 1 ea. Hardware Bag (L)

1 ea.	Metal Px - Conduit Strap 3/4"	2 ea.	Wire Ties - 9"
1 ea.	Liquid Tight Flex 1/2" x 16"	3 ea.	Screw 6-32 x 1/2"
5 ea.	Screw "AB" Hex 10-16 x 1/2"	2 ea.	Snap Bushing UB 875
2 ea.	Screw Hextec 10-16 x 1"	1 ea.	2" Tube Adaptor
2 ea.	1/2" Liquid Tight Fittings		

# INSTALLATION INSTRUCTIONS

## SMOKE DETECTOR KIT, UNIT MOUNT MODEL# 2SD04700624 FOR 6.5 THRU 12.5 TON ROOFTOP UNITS

### Supply Air Application

#### Step 1:

Attach smoke detector to supply bracket with two #10-16 x 1" Hextec screws. Insert 2" tube adaptor found in hardware bag (L) in the inlet tube in back of smoke detector. Insert the 4" gray plastic tube found in (IM) hardware bag (K) in the exhaust tube in back of the smoke detector. See Figure 2.

#### Step 2:

Open blower access panel and remove the two screws shown in Figure 3.

#### Step 3:

Slide out blower assembly and insert two (2) .875" snap bushings, one of each side of the blower. Insert the copper extension tube through the snap bushings as shown in Figure 4.

#### Step 4:

Then, insert the copper extension tube into the 2" tube adapter in back of the smoke detector, inserted in Step 1.

#### Step 5:

Slide blower assembly back into unit. Align holes in the smoke detector bracket with the holes where screws were removed in Step 2, and secure. See Figure 3.

#### Step 6:

Remove jumper plug from unit socket (S14). Insert plug (P14) of the smoke detector into unit socket (S14). See Figure 5.

#### Step 7:

Test per smoke detector manufacturer spec. See (IM) instructions.

#### Step 8:

Close blower access panel.



Figure 2



Figure 3

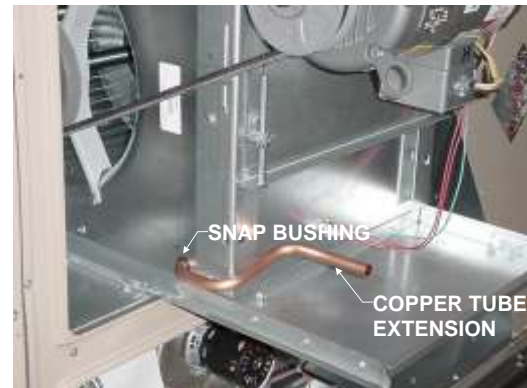


Figure 4



Figure 5

# INSTALLATION INSTRUCTIONS

## SMOKE DETECTOR KIT, UNIT MOUNT MODEL# 2SD04700624 FOR 6.5 THRU 12.5 TON ROOFTOP UNITS

### Return Air Application With Economizer

#### Step 1:

Insert 12" extension tube in the inlet tube of the back of smoke detector. Insert the 4" gray plastic tube found in (IM) hardware bag (K) in the exhaust tube in back of the smoke detector. See Figure 6.

#### Step 2:

Attach  $\frac{1}{2}$ " liquid tight fittings to both ends of the liquid tight flex. Slide "A" over flex and then insert "B" by screwing it into flex. Place "C" over "B" then tighten "A" on to "C" until fitting is secure. See Figure 7.

#### Step 3:

Remove return air damper from unit.

#### Step 4:

Insert 23" sampling tube into side of return air damper. See Figure 8.

#### Step 5:

Secure sampling tube with four 10-16 x  $\frac{1}{2}$ " screws provided. Make sure the air holes of the sampling tube face into the airflow. See Figure 9.



Figure 6

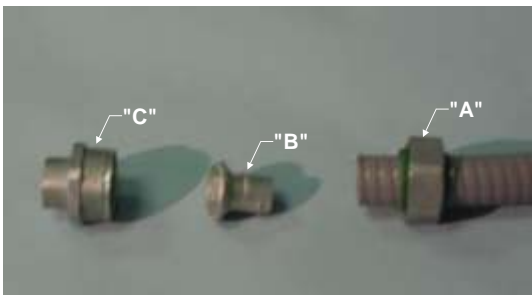


Figure 7

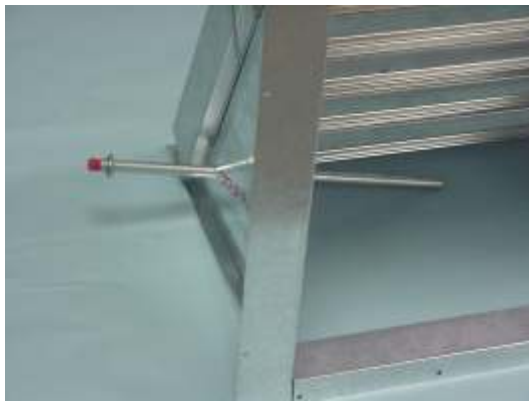


Figure 8



Figure 9

#### Step 6:

Insert red tube plug into the end of sampling tube where it was secured to the return air damper. See Figure 9.

#### Step 7:

On top of the return air damper cut the aluminum tape that covers the holes for mounting the smoke detector. Insert smoke detector sampling tubes into the holes secure with two #10-16 x 1" Hextex screws provided. See Figure 10.



Figure 10

# INSTALLATION INSTRUCTIONS

## SMOKE DETECTOR KIT, UNIT MOUNT MODEL# 2SD04700624 FOR 6.5 THRU 12.5 TON ROOFTOP UNITS

### Return Air Application With Economizer (con't)

#### Step 9:

Attach the Liquid tight flex with fittings to the 23" sampling tube mounted in the return air damper and the 12" extension tube mounted in the smoke detector. See Figure 11.



Figure 11

#### Step 10:

Slide nut and compression ring from the flex fitting upon the sample tube. Put the end of the flex fitting over the end of the sample tube and then tighten nut down on to fitting. Secure flex to the sample tube. Repeat for extension tube. See Figure 12.



Figure 12

#### Step 11:

Slide return damper back into the unit. See Figure 13.



Figure 13

#### Step 12:

Remove jumper plug from unit socket (S13). Insert plug (P13) of the smoke detector into unit socket (S13). See Figure 14.

#### Step 13:

Test per smoke detector manufacturer spec. See (IM) Instructions.

#### Step 14:

Replace all panels removed during installation.



Figure 14

# INSTALLATION INSTRUCTIONS

## SMOKE DETECTOR KIT, UNIT MOUNT MODEL# 2SD04700624 FOR 6.5 THRU 12.5 TON ROOFTOP UNITS

### Return Air Application Without Economizer (Downflow Applications Only)

**Step 1:**

Insert 22" sampling tube in the inlet tube of the back of smoke detector. Make sure the air holes of the sampling tube face into the airflow. Insert 4" gray plastic tube found in (IM) hardware bag (K) into the inlet tube of the back of smoke detector. See Figure 15.



Figure 15

**Step 2:**

Insert red tube plug into the end of 22" sampling tube.

**Step 3:**

Attach smoke detector to return bracket with the two #10-16 x 1" Hextec screws. See Figure 16.



Figure 16

**Step 4:**

Open return split panels.

**Step 5:**

Drill holes through the smoke detector bracket into unit divider wall. Secure with four #10-16 x 1/2" screws provided. See Figure 17.



Figure 17

**Step 6:**

Insert 12" extension tube in hole above filter rack. Secure with two #10-16- x 1/2" screws provided.

**Step 7:**

Take clear tubing and place ends over the 12" and 4" gray plastic tube. Secure with two 9" wire ties. See Figure 18.



Figure 18

**Step 8:**

Remove jumper plug from unit socket (S13). Insert plug (P13) of the smoke detector into unit socket (S13).

**Step 9:**

Test per smoke detector manufacturer spec. See (IM) instructions.

**Step 10:**

Replace all panels removed during installation.





Supersedes:  
Subject to change without notice. Printed in U.S.A.  
Copyright © by Unitary Products Group 2005. All rights reserved.

559740-UAI-A-0110  
YKISMK03B

---

**Unitary  
Products  
Group**

**5005  
York  
Drive**

**Norman  
OK  
73069**