

## Installation and Maintenance for

# Stainless Steel and Galvanized Ductwork Model

### **WARNING!**

These installation instructions are for qualified and experienced technicians in the H.V.A.C. and Fire Protection field only. Failure to follow these specific instructions may cause personal injury. Installation or maintenance technicians must read the entire manual prior to attempting installation or maintenance of product.

Installation should take approximately 10-20 minutes per head. (Not Including cure time.)

**Retain these instructions for future use.**

### **Tools Required**

Right Angle Drill  
2" Metal Holesaw  
3/8" Drill  
3/16" Metal Drill Bit  
Torque Wrench (1-50 inch-lbs.)  
Safety Glasses  
Particle Mask  
Vinyl Gloves  
Duct Tape  
Clean Rags  
Safety Face Shield  
Permanent Magic Marker  
Large Rivet Gun (3/16" Capability)

### **Materials Required**

Duct Sealant  
3/16" Stainless Steel Pop Rivets (4 per each FlexHead unit)

### **CAUTION!**

Safety glasses, vinyl gloves and particle mask must be worn by installing technician during FLEXHEAD Stainless Steel and Galvanized Ductwork Model installation.

## **PART I – INSTALLATION OF BOTTOM MOUNTING BLOCK**

### **1 FlexHead Location**

Determine desirable location for FLEXHEAD unit in ductwork. FLEXHEAD unit must be accessible for periodic inspection. For recommended guidelines and standards for protection systems in industrial exhaust systems see Factory Mutual loss prevention data sheets 7-78, article 2-4. Once desired location is determined drill a two (2) inch hole in duct with holesaw (Fig. 1s).

Fig. 1s



### **2 Mounting Bottom Block**

**A.** Place Flexhead bottom mounting block on duct. Align 2" hole in ductwork with 1 7/8" hole on FLEXHEAD bottom block. Place a permanent marker in the (4) four pre-punched holes and mark (Fig. 2s). Make sure that the 2" hole in ductwork with 2" hole on FLEXHEAD bottom block are aligned exactly and that the bottom flange of mounting block fits securely to the duct with out gaps.

Fig. 2s



**B.** Remove bottom mounting block from ductwork. Using a 3/16" drill bit, carefully drill out the (4) four holes marked out in step 2A.

**C.** Apply a 1/4" bead of duct sealant around 2" hole in duct. Apply a 1/4" bead of sealant around the 2" hole in bottom mounting block (Figs. 3s and 4s).

Fig. 3s



**D.** Place Flexhead bottom mounting block onto ductwork. Make sure that the 2" hole in ductwork with 2" hole on FLEXHEAD bottom block are aligned exactly and that the bottom flange of mounting block fits securely to the

duct with out gaps. Next, make sure that the (4) four pre-punched holes in the bottom mounting block and the (4) holes drilled in step 2A align perfectly. Insert a 3/16" stainless steel pop rivet into each of the (4) four holes and rivet into place with the pop rivet gun.

**E.** Apply a duct sealant around the entire outer edge of the bottom mounting block and on each of the (4) rivets (Fig. 5s). The installation of the bottom mounting block is complete.

**F.** Insert bag/gasket assembly over bolt holes making sure dual polybags protrude through 2 inch hole in bottom mounting block.

Fig. 4s



Fig. 5s



## PART II – INSTALLATION OF TOP MOUNTING BLOCK

### 1 Connect FlexHead to Sprinkler System

Connect one (1) inch stainless steel flexible hose of FLEXHEAD to one (1) inch black iron pipe union of fire protection system in accordance to NFPA standards, state and local codes (Fig. 6s).

### 2 Connect to Top Mounting Block

**A.** Place top FLEXHEAD mounting block onto previously installed bottom mounting block with gasket making sure that sprinkler head section of the FLEXHEAD unit is inserted into two (2) inch hole in duct, and that the four (4) stainless steel bolts of bottom mounting block align with corresponding bolt holes in top mounting block. Angle of flexible hose should not exceed 90°.

**B.** Place one (1) stainless steel washer and one (1) stainless steel nut onto each of the four (4) stainless steel bolts (Fig. 7s). Tighten each of the nuts hand tight onto the block. Tightening process of nuts onto the mounting block should be done in a diagonal process to ensure equal distribution of pressure throughout the mounting block. Nuts should be tightened to 15 in. -lb. using a torque wrench. **DO NOT OVER TIGHTEN NUTS ONTO BLOCK.** Installation of FLEXHEAD is complete.

Fig. 6s

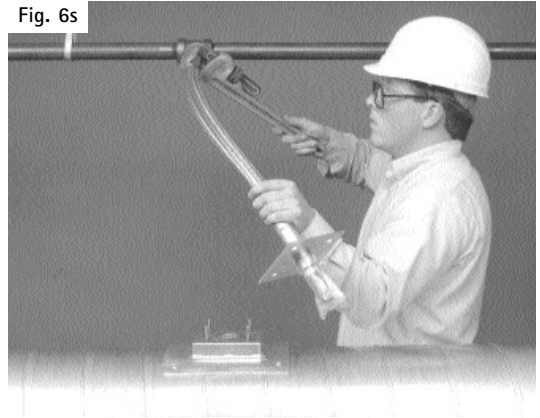
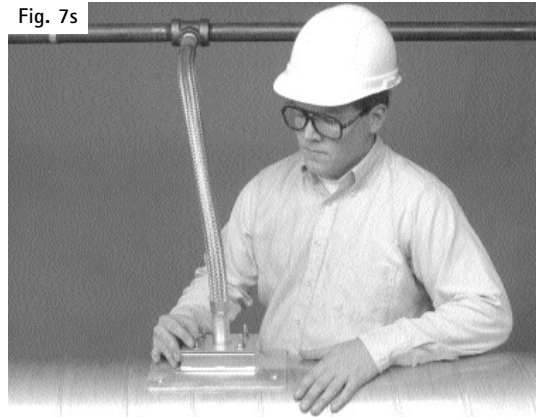


Fig. 7s



**CAUTION!**

Safety face shield, vinyl gloves and particle mask must be worn by maintenance technicians during FLEXHEAD maintenance.

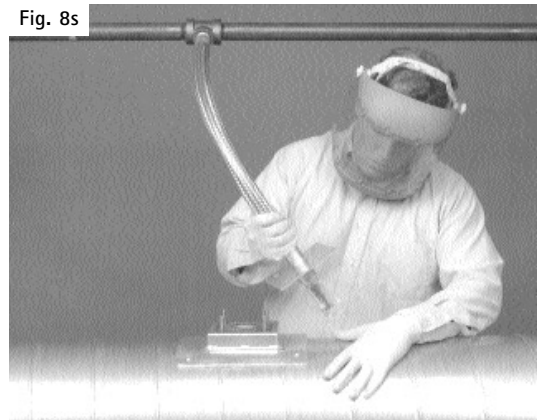
**CAUTION!**

During installation of FLEXHEAD product fire protection system must be fully drained and the exhaust system shut down. Do not attempt FLEXHEAD installation when either system is operational. Consult NFPA Guidelines for details.

## MAINTENANCE AND INSPECTION OF STAINLESS STEEL AND GALVANIZED DUCTWORK MODEL SPRINKLER HEAD

- 1 Once fire protection and exhaust system are inactive, proceed with inspection of FLEXHEAD unit.
- 2 Remove the four (4) stainless steel nuts and washers from top mounting block.
- 3 Now lift top mounting block from bottom mounting block and bolts, by holding onto base area of stainless steel hose (Fig. 8s).
- 4 Inspect sprinkler head and poly bag section of FLEXHEAD. If damage exists in outer poly bag only, replace bag/gasket assembly at this time. If damage exists through both poly bags remove remainders of bag/gasket assembly and inspect wax coated sprinkler head. IF ANY DAMAGE EXISTS IN SPRINKLER HEAD REPLACE HEAD AND BOTH POLY BAGS AT THIS TIME in accordance to NFPA regulations and guidelines.
- 5 Once inspection and maintenance of FLEXHEAD has been completed, reinsert top mounting block onto bottom block aligning corresponding sprinkler head and bolt holes.

Fig. 8s



**6** Replace the four (4) stainless steel washers and nuts onto the four (4) stainless steel bolts accordingly. Hand tighten each of the (4) nuts onto the block. The tightening sequence of nuts onto the mounting block should be done in a diagonal manner to ensure equal distribution of pressure throughout the mounting block. Nuts should be tightened to 15 in. -lb. using a torque wrench. **DO NOT OVER TIGHTEN NUTS ONTO BLOCK. MAINTENANCE OF FLEX-HEAD IS COMPLETE.** (Same tightening process as in Installation section).