

MONOXIVENT®

Source Capture Systems

Operation and Maintenance Manual

Pivoting Articulated Crane Arm

PAC -10-15-20,

w/ Series 15000 Fume Arm - 7', 10', or 14'



MONOXIVENT - SOURCE CAPTURE SYSTEMS

1306 Mill St., Rock Island, IL 61201
877-608-4383 - info@monoxivent.com
monoxivent.com

Read and Study All Information Before Installation of PAC Assembly

1. GENERAL INFORMATION: PAC-10/PAC-15/PAC-20

A. Check all packages for shipping damage. If damage is found, then you as receiver must note and contact the truck/UPS/etc and file a claim. **THIS IS YOUR RESPONSIBILITY TO NOTE AND REPORT ANY DAMAGED GOODS.**

2. Assembly of the crane and accessories will be required. The following will assist in preparation for the assembly.

3. Layout the components for the PAC and verify all the components have been received (REFER TO PAGE 4)

A. Front crane beam and rear crane beam with mounting bracket.

B. (2) Flex hoses. (1) @ 4' for center and (1) @ 4' at wall.

C. (3) duct cradles for hard pipe.

D. Clamps

E. Front beam bumper stop mounted on end of rear beam.

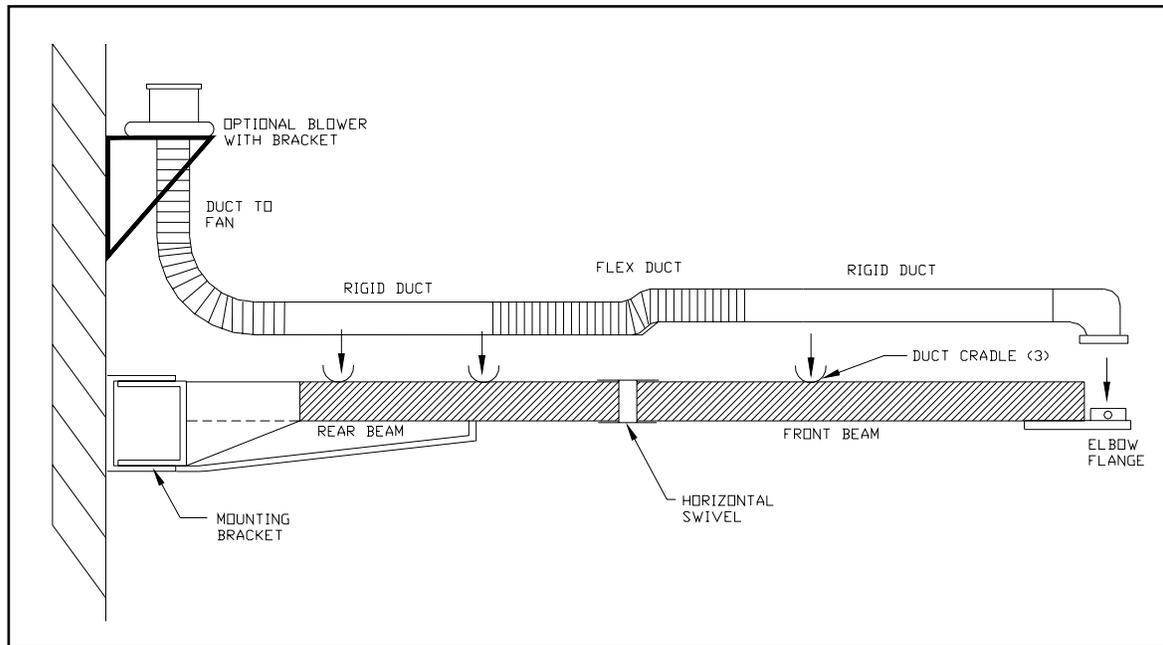
F. 90-degree elbow mounted to hard duct for front beam.

G. Individual blower with bracket if ordered. (Optional)

4. The accessories for the end of the PAC can vary from hoods, arms, hose with balancer or just hose. Please see the added accessory sheets that pertain to the accessory that was ordered for your PAC. This will provide assembly tips and further technical information.

Installation Tips

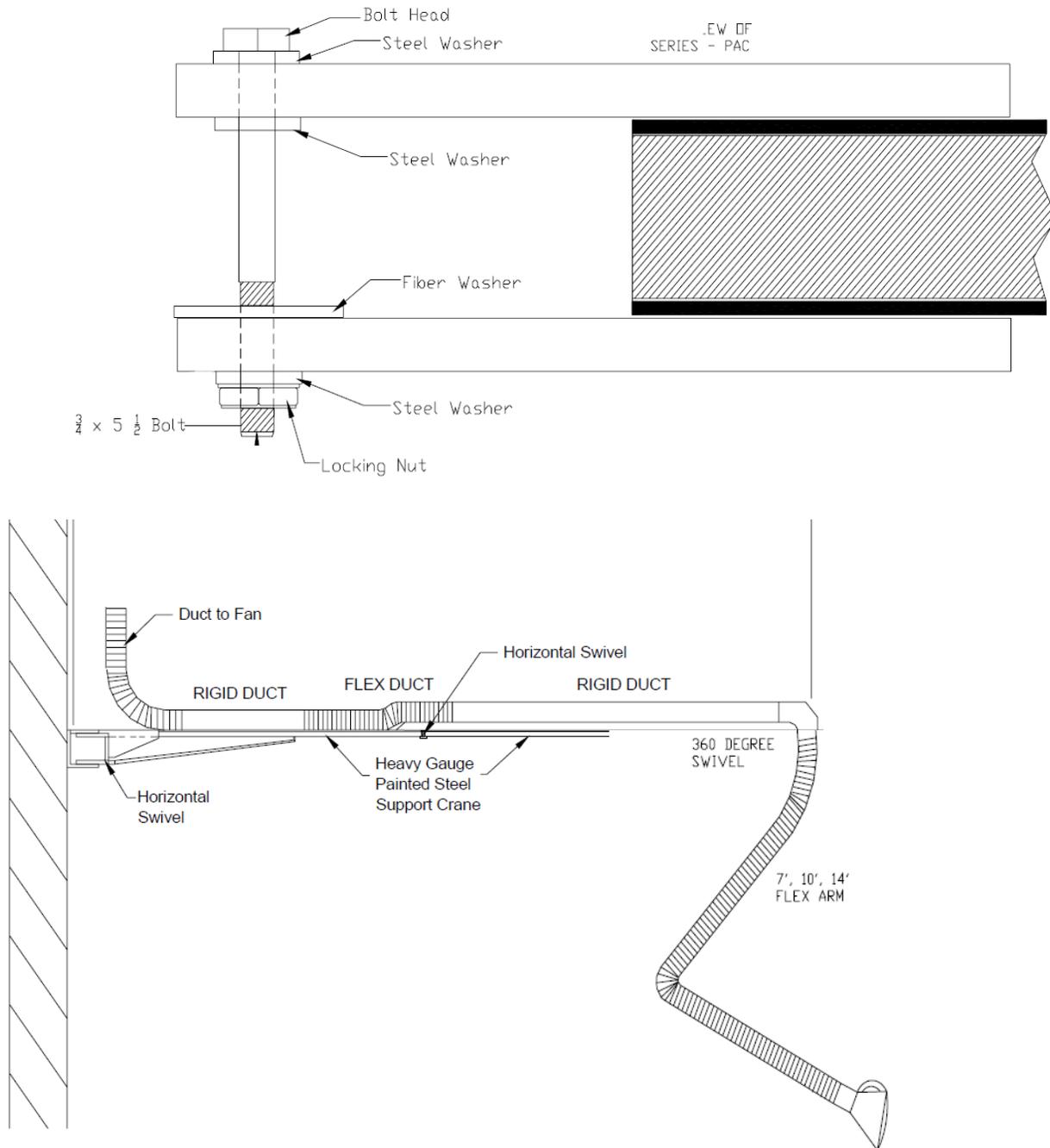
- 1.** Support structure for the PAC must be solid and secure. The structure to which the PAC will be mounted should be carefully reviewed for its strength. If there is any question or doubt about the structure, a structural engineer or other experienced person should be consulted. **RESPONSIBILITY AND LIABILITY OF SUCH SUPPORT STRUCTURE IS SOLELY UPON THE PERSON() SELECTING SUCH SUPPORT STRUCTURE.**
- 2.** After selection of the support structure, a decision on how the main support bracket of the PAC should be installed. The mounting bracket must be installed perfectly vertical to prevent drifting of the PAC. Depending upon installation equipment, it may be determined that the bracket should be removed from the PAC and installed to ensure the vertical accuracy of the bracket. Bracket can then be attached back onto the PAC. All hardware must be reinstalled exactly as original (see drawing of bracket, page 6). Tighten hardware sufficiently enough so PAC swings firmly yet freely.
- 3.** Refer to drawing on page 3 for further installation tips and guidelines.
- 4.** See page 4 for center pivot hardware assembly.
- 5.** Determine if PAC needs to be installed in sections or as an assembly is based upon what type of equipment is available at installation site.



Installation of Duct & Hose

- 1.** Install hard spiral with elbow onto front beam. Put elbow into the elbow flange and set hard duct onto cradle. Using the pre-drilled holes in the cradle and elbow flange as guides. Secure with the supplied self-tapping screws.
- 2.** Install the 4' flex hose in the center pivot point and secure with clamps. Install the 4' flex hose to the hard duct at wall mount bracket.
- 3.** Hose at the wall mount bracket will either clamp to a vertical duct branch or to an optional blower and bracket if so supplied.

Pivoting Articulated Crane Arm
Series - PAC, Assembly of Center Section: PAC -10, 15, 20



The series PAC (pivoting articulated crane) arm can be supplied with a source capture flex arm, which is self supported. The flex arm can be supplied in lengths of 7', 10', or 14'. The flex arm diameter is either 6" or 8". Combining the unique range of movement with the PAC and the flex arm will give total coverage within the radius of the PAC and flex arm length.

Flex Arm Assembly Information

Receiving:

Check all packages for shipping damage. If damage is found then you, as the receiver, must note the damage at time of receipt or contact the carrier and file a damage receipt claim. **As the receiver, this is your responsibility.**

General Information for the 15000-D Duct Mount Arm:

There will be some assembly required for the arm. Please check for all components before starting.

1. Check components for duct mount arms.

- 1.** Arm with internal support structure
- 2.** Base bracket mounted to arm
- 3.** Hose installed on arm
- 4.** 90 degree elbow with black nylon swivel collar
- 5.** Steel 360 degree clamp with rubber seal
- 6.** 8 hole steel flange assembly

2. Slide hose away from the base bracket. Please note there is a bolt with a red painted head. This bolt is in a hole marked "2". Remove this bolt and pivot the bracket 90 degrees so the hole marked "1" will line up with the hole in the bracket. Now replace the red bolt and nut and bring to a snug fit. *(see attached drawing)*

3. Attach the 90 degree elbow to the arm bracket. Note the elbow and the bracket have small mating flange. There is a rubber gasket that seals the flanges of flanges. **Be sure that the elbow and arm are in a perfect vertical position before tightening the clamp.** Arm and elbow should be vertical. *(see attached drawing)*

Flex Arm Assembly Information

4. With assistance, mount the assembled arm and elbow to the mounted 8 hole flange. The elbow has a mounted 8 hole black nylon swivel collar. Bolt the elbow/arm assembly to the 8 hole flange on the 6" vertical duct. Snug bolts to hold the elbow/arm to the flange. **Do not over tighten bolts.** Be sure elbow/arm swivel freely at the flange.

5. The arm will need final adjustment/tuning for easiest movement and to stay in place upon positioning. You will find friction pads and adjustment pivot joints in four places:

1. Pivot point at the bracket
2. Pivot point in the center of the arm
- 3-4. Pivot points at hood location.

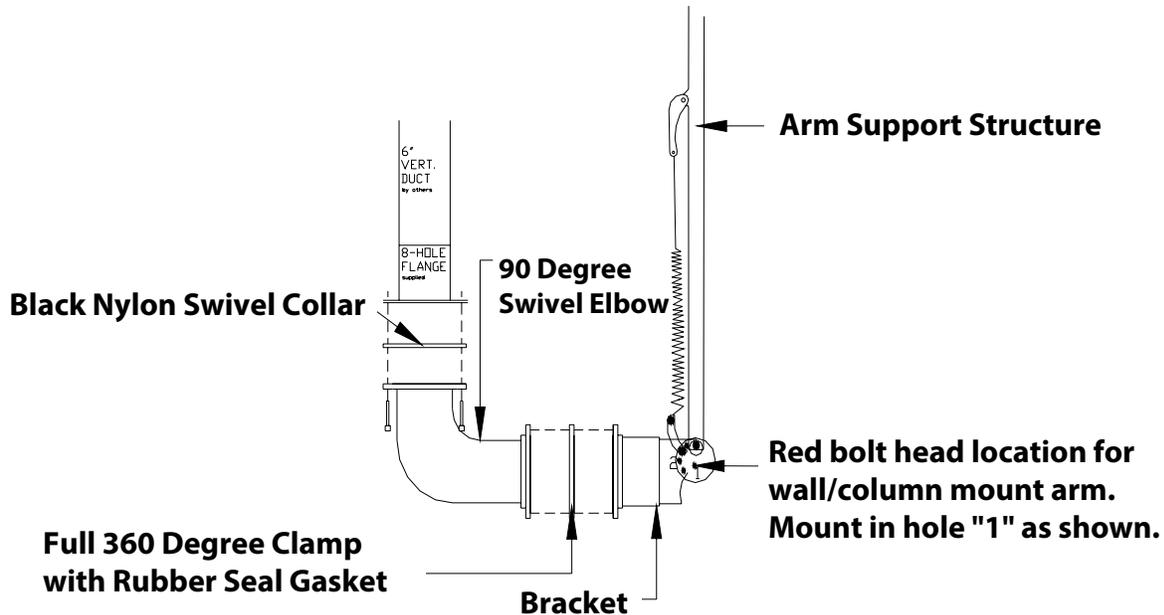
Only put enough tension on these pivot joints to hold the arm in any position it is placed. The arm final adjustment is key to the arm being user friendly. **Do not over tighten the pivot joint friction disks.** Depending on arm usage and movement, occasional adjustments may be required. Based upon the arms application, cleaning of the internal support structure may require scheduled cleaning.

Please contact the factory for any questions or further assistance.

Flex Arm Assembly Information

The drawing shows the 90 degree elbow clamped to the white base bracket of the arm. Drawing also shows how the white base bracket has been re-positioned so the bracket is 90 degrees to the arm support.

Note the drawing shows correct positioning of the red head bolt and its' location in hole "1".



**This is the new location for the red bolt.
This is how the joint should look when
it is ready to be mounted.**



Wall Mount Hardware Orientation

