

## **Series WX Exhaust Arm**

### **Exhaust Arm Components**

Check to make sure all components are complete before installation

Components Include:

- Arm Swivel Assembly
- Aluminum Structural Supports with Attached Gas Shocks
- Aluminum Duct Sections with Flex Hose Attached
- Aluminum Receptor
- Hardware

**Optional Equipment:** Light Kit/Fan Kit  
Wall or Ceiling Bracket  
Duct Swivel



Review all procedures in manual before installation is started. Refer to full arm assembly illustration above.

### **Installation of Arm Swivel**

1. Mount Wall or Ceiling Platform to a load bearing surface, in which the area can support the stress and weight of the arm assembly. It is critical for the platform to be level and plumb.
2. Attach arm swivel to wall/ceiling platform by lining up 5/16-18 studs prepressed into arm swivel with matching flange pattern in platform plate. Secure and tighten using 5/16-18 Whiz-lock nuts provided in packaging.
3. If Car-Mon Series CMW exhaust fan is supplied, attach fan to top of platform, lining up flange pattern with platform hole pattern, use the arm swivel 5/16-18 studs as common bolts. Secure and tighten with 5/16-18 nuts provided.



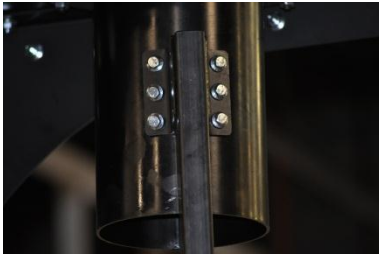
**Top of Swivel**



**Swivel connection to platform**

**Installation of Arm and Tubular Duct**

1. After securing the arm swivel, attach L bracket to swivel pipe by using (6) ¼-20 bolts and ¼-20 Whiz-lock nuts provided in packaging. Align holes, place bolts thru the bracket and then swivel pipe; nuts will be secured in the airstream side of the pipe. Refer to illustration A.
2. Once L bracket is secure to swivel, attach aluminum support structure to L bracket by lining up the holes from gas shock bracket to L bracket. Use (2) 3/8-16 x 2.25” Hex bolts with 3/8-16 whiz-lock nuts for securing; tighten for proper union. Refer to illustration B.



**Illustration A: L Bracket to Swivel pipe for connection; place (6) ¼-20 x ¾” Whiz-lock thru bracket and pipe Secure with (6) ¼-20 whiz-lock nuts**



**Illustration B: L Bracket Connection to Support structure; place (2) 3/8-16 x 2.25” bolts thru matching holes secure and tighten with 3/8-16 Whiz-lock nuts**

3. After the aluminum structure is firmly in place, the aluminum duct and flex hose will get secured. For a 7’ and 10’ arm (2) sets of thru holes are located on top of the aluminum support structure. For 12’ and 15’ there will be (3) sets of holes located on top. The duct sections will have corresponding brackets with pressed studs for fastening to structure. (Note: duct section with damper is always located in the front section of the arm, near receptor. Also, flex hose, which is factory attached, is secured at the swivel side section of the duct). Locate the hole sets on top of the structure and place bolt studs from the duct thru the structure; tighten with ¼-20 Whiz-Lock nuts. Refer to illustration C.



**Illustration C: Duct connection aluminum support structure; secure with ¼-20 whiz-lock nuts**

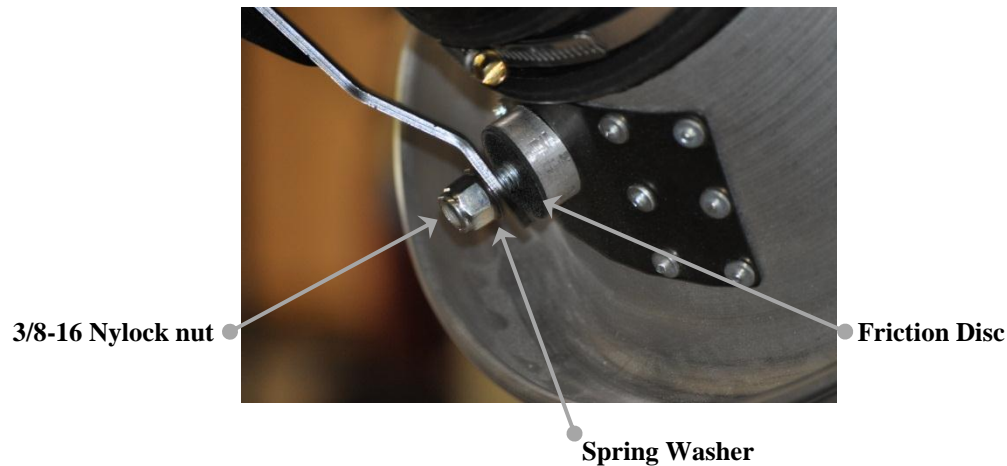
4. There are two gas springs per arm, one located at the back section nearest the swivel, and the other in the middle of the arm. The larger diameter end of the gas spring comes locked into position by the factory. The thinner end of the gas spring is wire tied to the structure for shipping purposes. Attach middle section first by removing the wire tie and placing rounded aluminum head in between brackets on aluminum support structure. You may need to move structure up to better align holes. Align holes on bracket with the larger hole on the gas spring and push ¼” shoulder bolt thru. To secure tighten 10-32 Nylock nut. To attach the gas spring at rear section repeat the before mentioned procedure. Refer to illustration D.



**Illustration D: Shoulder bolt placed thru holes in bracket; secured with nylock nut. Use 5/32 Allen wrench to hold shoulder bolt in place while tightening with 3/8 wrench**

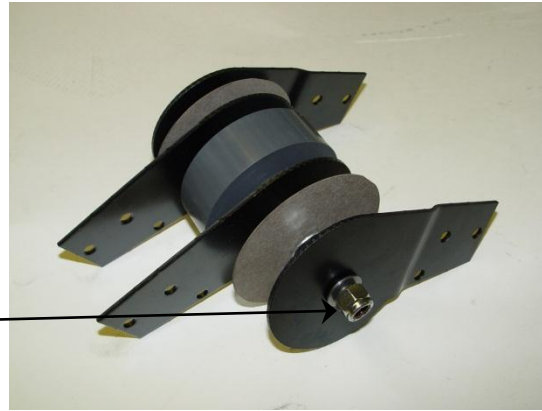
5. Lastly connect aluminum receptor to the twisted bracket at the front section of arm. A 3/8-16 x 1” bolt is secured in receptor from the factory. The friction disc, spring washer, and 3/8-16 nut is attached. Remove nut and spring washer and place bolt thru the twisted bracket; the friction disc should rest between aluminum disc on receptor and twisted bracket. Use the spring washer that was removed and place on bolt then secure with the 3/8-16 nut. Refer to Illustration E.

**Illustration E: Receptor mounting to twisted bracket. The Friction disc is located on receptor side of bracket and spring washer and nut on the other side of bracket. Use a 9/16 wrench to tighten nut to the optimum tension needed.**



**Operation**

The WX series arms provide excellent mobility at each joint. The arms come preset at factory with the proper tension and should hold position when mounted. If any adjustment is needed loosen or tighten at each joint by using a 9/16 wrench on the bolt and nut side. Move wrench in small increments, any adjustment should be minimal. Refer to illustration F.



**Illustration F: WX arm joint assembly; to tighten or loosen use a 9/16 wrench on the nut and bolt**

3/8-16 Nylock nut

For best results, position the collection hood approximately 12” or closer from flash point where smoke is being generated.

Make sure the fan, (either directly connected or duct connected), is running when the arm is in operation.

The hand damper, which is located in the duct at the front section of the arm, closest to the receptor, is a quadrant style damper. When the handle is parallel to the duct, the damper is in an open position. When damper is perpendicular to the duct, it is closed.

To operate, loosen wing nut and move damper handle in 90° positions. Tighten wing nut to secure in proper position. Refer to illustration G.



**Illustration G: Hand Damper Assembly**

● Damper Handle

● Wing Nut

**Maintenance**

No regular maintenance is required, but we recommend checking flex hose and interiors for any build-up of grime. If there is any damage to flex hose, sections can be replaced. Contact Car-Mon customer service for any questions regarding maintenance or operation.