

740 Series VERTICAL LOUVERS

Standard Instructions for Conversion from Manual to Automatic operation

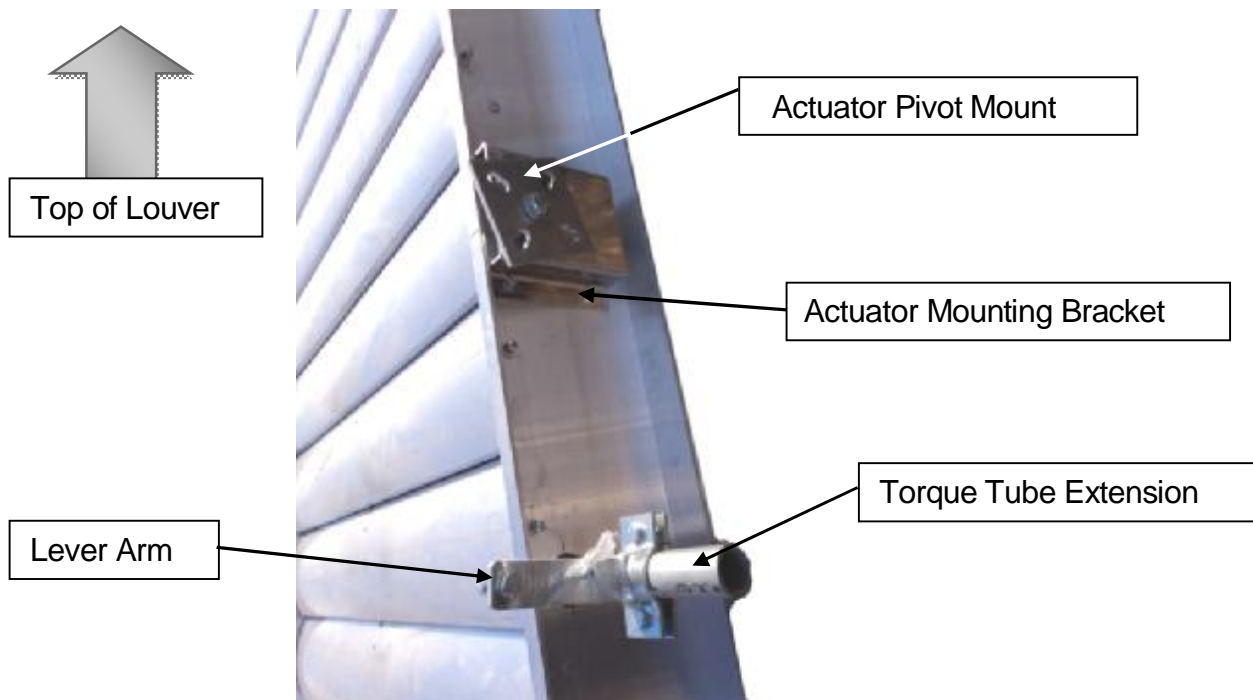
Conversion of manually operated Vertical louvers to automatic operation shall be accomplished by removal of the existing hardware and pieces used for manual operation and installing the parts supplied by Airtech Products in this "Conversion Kit".

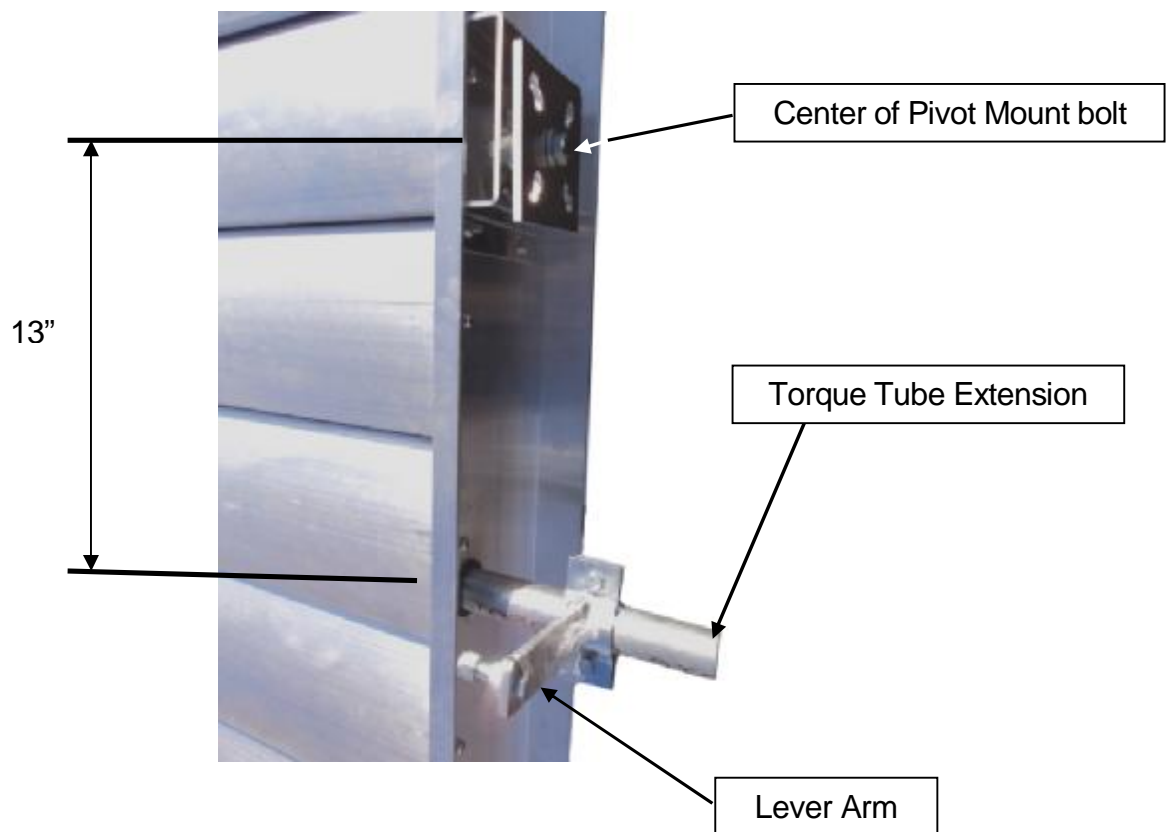
REMOVAL OF EXISTING HARDWARE:

1. Unbolt, remove and discard the existing manual handle w/bracket and index plate.

INSTALLATION OF AUTOMATIC OPERATION PARTS:

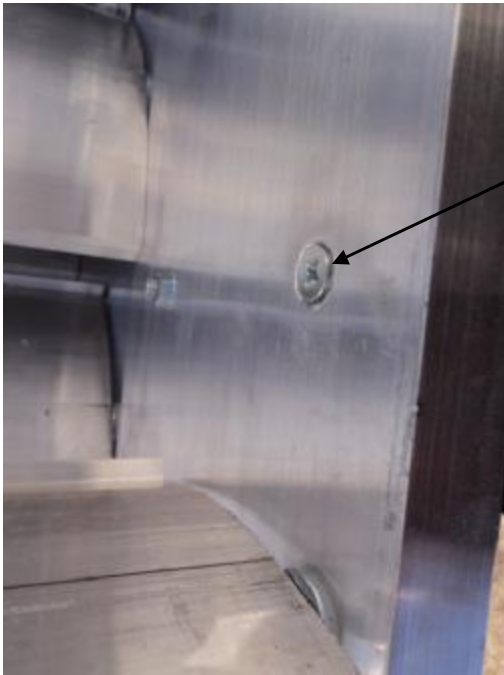
1. Identify the following parts and pieces
 - a. Durastroke Pneumatic actuator (1 / kit)
 - b. Actuator Mounting Bracket (1 / kit)
 - c. Actuator Pivot Mount (1 / kit)
 - d. Lever Arm for connection of actuator clevis to torque tube (1 / louver)
 - e. Actuator Clevis (factory mounted on actuator stem (1/ louver)
 - f. Torque Tube Extension (1 / kit)
 - g. Assembly Hardware (Misc. Nuts/bolts/washers)





1. Install Torque Tube Extension
 - a. Once you've determined which side of the louver you want the actuator mounted, insert the torque tube extension into the end of the existing torque tube as far as it will go.
 - b. Using a **.25" diameter bit**, drill a hole through the torque tube/insert and completely through the other side of the torque tube. Insert the supplied .25" x 1.5" long cap screw and tighten it firmly w/the esna nut. It is important to use a .25" drill bit to ensure the fit between bolt and bolt hole is very snug.

2. Install the actuator mounting bracket
 - a. Position the actuator mounting bracket so the center of the .5" diameter hole in the face of the bracket is 13" (+/- .125") above the center line of the torque tube.
 - b. Locate the bracket against the top side frame flange and using the holes in the bracket as a template, field drill four (4) 9/32" diameter holes through the side frame.
 - c. Install the two supplied .25" bolts and nuts in the bottom two holes.
 - d. As shown in the following photograph, be sure to countersink the bevel head screws used in the top/upper holes. This is essential to allow the blades to open and close.



Counter sunk bevel head
screw in upper holes

3. Attach the actuator and pivot mount assembly to the mounting bracket using the .5" diameter bolt in the pivot mount and firmly tighten.



FINAL SET UP, TESTING AND OPERATION:

1. Install a .25" NPT fitting in the top of the actuator cap and attach the air line which will provide adequate pressure and volume to operate actuator
 - a. 35 psi pressure
 - b. actuator consumption is .03 scfm (full stroke)

2. Finalize mechanical connections
 - a. Fail Open Configuration (louvers go to full open upon loss of air pressure)**
 1. Apply Air pressure to actuator till stem is fully extended.
 2. Manually position the louver blades to the fully closed position.
 3. Rotate the lever arm to the appropriate side of the torque tube and attach to the actuator clevis using the supplied 3/8" diameter bolt and Nylock nuts. Be sure to leave the 3/8" nut on the bolt to serve as a spacer between the lever arm and the clevis.
 4. Tighten and finalize all bolted connections.

3. Slowly cycle opening and shutting of the louver blades to ensure all connections are working freely and the lever arms are properly positioned.
4. Recheck all connections and cycle the louver again for a final check of operation.

NOTE: For standard instructions on installation of actuators, refer to the attached "Durastroke Pneumatic Actuator" Installation and Maintenance Instructions.