



OPERATING & MAINTENANCE INSTRUCTIONS

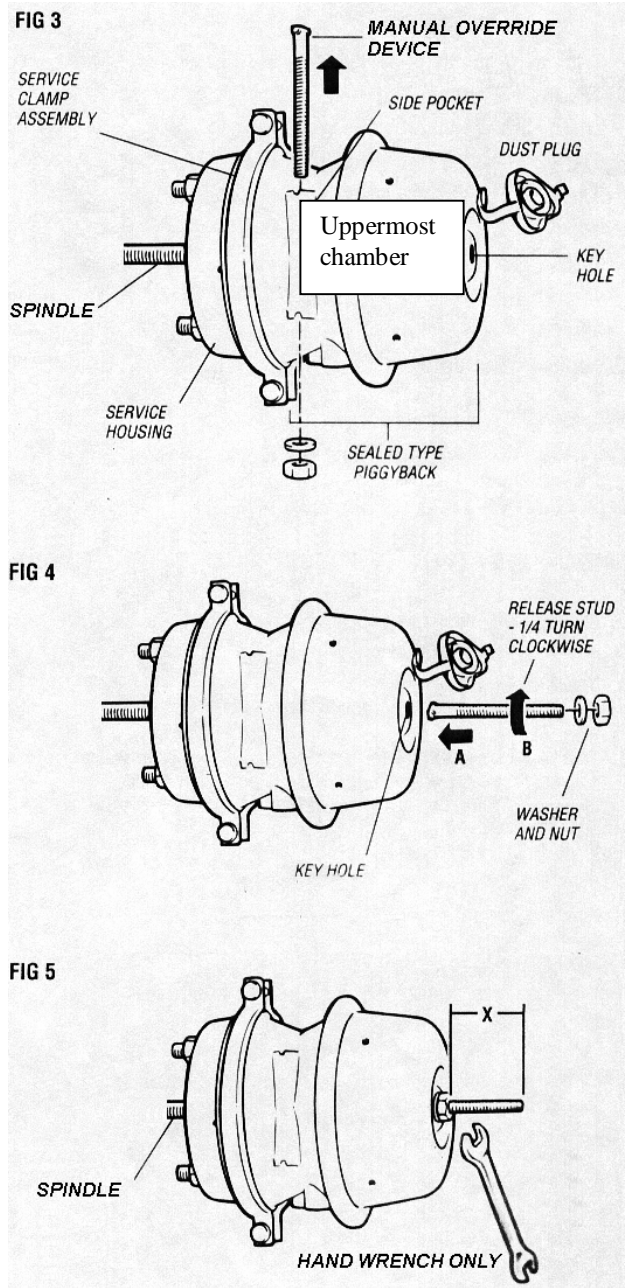
DOUBLE DIAPHRAGM TYPE PNEUMATIC ACTUATOR

BUDGET SERIES

OPERATION

1. The actuator is factory tested using air supply and working pressure specified on the order.
2. The actuator is arranged spring to close, air to open, the actuator is sometimes shipped in the open position using the manual override. If this is the case, Prior to using the actuator the manual override device should be removed.
3. To fit the manual override:
(Comprises: 1 x Threaded 'T' bar and nut).
Remove from stowage position on the side of the actuator. Remove the protective cap from the top of the actuator. Locate the 'T' bar into the slotted end of the upper part of the actuator spindle inside the top of the actuator. Attach the nut to the 'T' bar and screw down to bear against the washers. Continue turning the nut to open the valve. To remove the manual override – reverse the foregoing procedure and stow the assembly in on the side of the actuator. Replace the protective cap in the top of the actuator.
Do not leave the manual override attached to the actuator spindle when in normal use.

4. **This Actuator is spring loaded DO NOT attempt to disassemble the uppermost chamber there are no serviceable components inside, risk of serious injury or even death may occur as a result.**





MAINTENANCE

TO REPLACE SERVICE DIAPHRAGM

1. Follow manual opening operation of actuator in item 3 of Operation above and remove actuator from the valve.
Always compress spring with manual override device, do not rely on air pressure to keep the spring compressed.
2. To prevent sudden release of the piggy back or spindle assembly and to facilitate the installation of the new diaphragm, the spindle should be prevented from retracting by clamping the spindle in place with vice grip pliers as shown (*fig. 1*).
3. Remove service clamp assembly and discard the old diaphragm.
4. Inspect the service clamp assembly, the adaptor wall and lip, the housing, the service return spring and the spindle. If any structural damage is noted, replace with a new part.
5. Wipe the spindle plate clean of any oil, grease or dirt. Check to see that weep holes in housing are not plugged.
6. Place the new service diaphragm in the adaptor and centre the housing over the diaphragm and adaptor. (*fig 2*).
7. Ensure the diaphragm is properly seated between the adaptor and housing lip and reassemble the service clamp assembly. Torque carriage bolts and clamp assembly for proper seating around the adaptor and housing lip and remove vice grip pliers from spindle.
8. Apply a maximum 120 psi air pressure to the service port and check diaphragm seal for leakage by applying a water and soap solution to the service clamp area (no leakage allowed).
9. Reassemble the actuator to the valve and release the manual override device, returning it to its stowage position on the side of the adaptor.
10. Replace dust plug in the keyhole in centre of the chamber.

This Actuator is spring loaded DO NOT attempt to disassemble the uppermost chamber there are no serviceable components inside, risk of serious injury or even death may occur as a result.

