

Mounting kit For TZID-C Kit # 614C190U15

This kit is suitable for use on any US Style rising stem actuator that does not have a split block for stem coupling.

Valve Stroke range up to 3"

Valve Stem diameter 0.375" – 1"



PN25091

1. Remove the existing positioner, mounting plate, and link.
2. Install the stem clamp bracket (shown in Fig.1) to the valve stem (refer to Fig.2). Fasten the clamp below the stem coupling nut close to the lock nut, ensure that the valve stem can move to the fully extended position with the clamp in position.

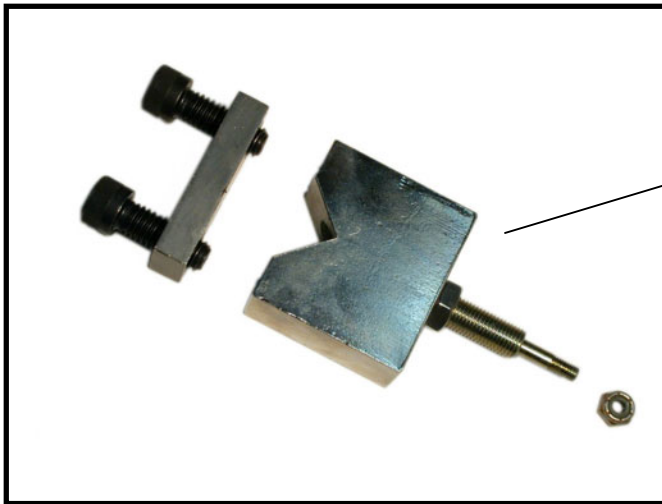


Fig.1

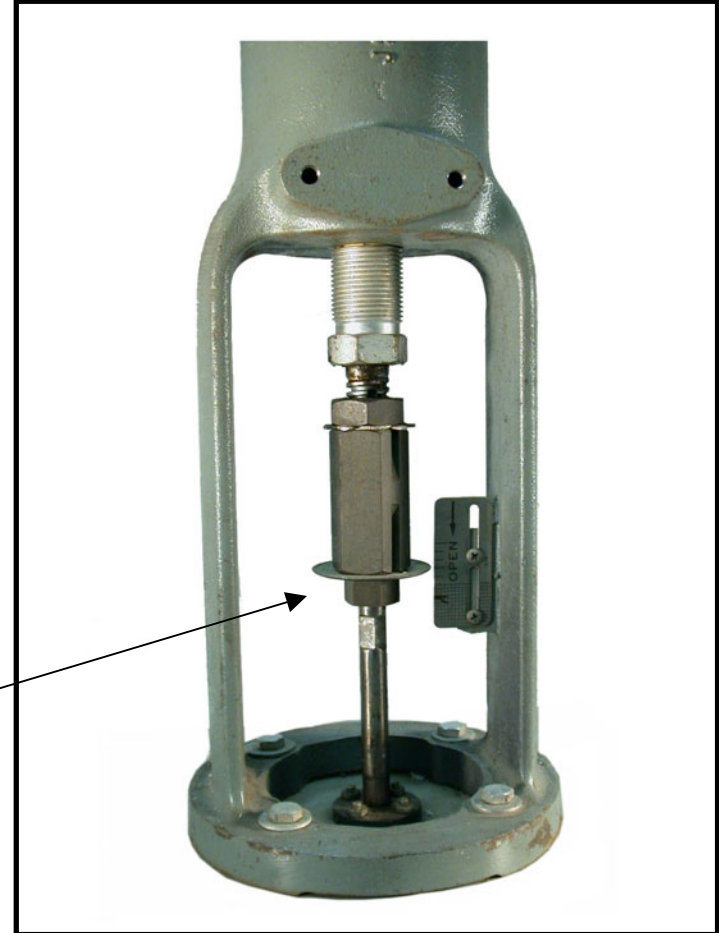


Fig.2



Fig.3



Fig. 4

3. Mount “L” bracket (Fig.3) to the valve yoke as shown in Fig.4. Leave bolts finger tight.

4. Find the long bolts, washers and positioner spacer block shown in Figures 5 & 6 to prepare for mounting the positioner to the right leg of the “L” bracket.

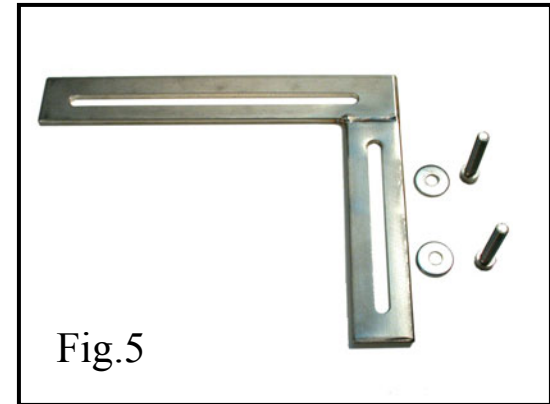


Fig.5

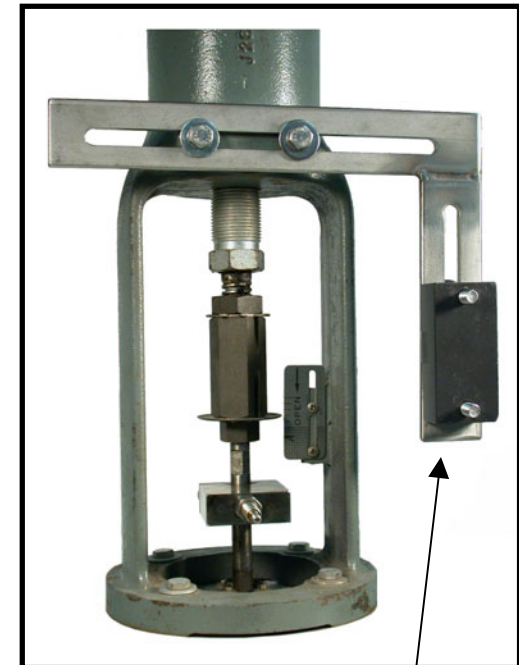


Fig.6

Spacer block



Fig.7

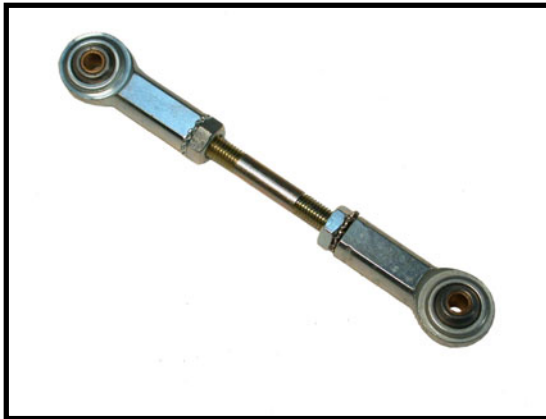


Fig.8

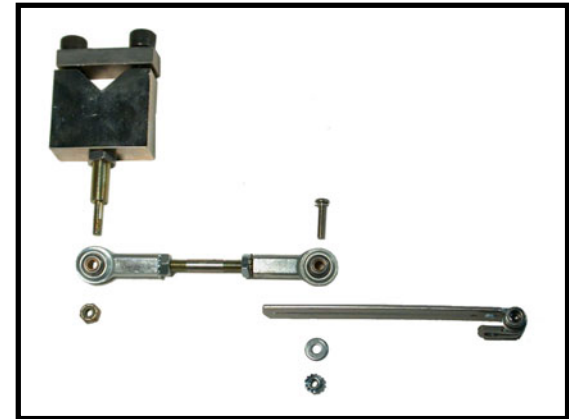


Fig. 9

5. Find the slotted lever arm and mount it on the positioner shaft as shown in Fig.7.

6. With a permanent marker, make a mark on the lever at **0.707 x the valve stroke**. This is the radius at which the ball end linkage will be connected for +/- 45° lever rotation for full stroke of the valve. (Measure from the center of the positioner shaft).

7. Unscrew the ball end with the left hand thread from the link (Fig.8) and bolt it to the positioner lever arm at the radius marked using bolt, washer and nut shown in Fig.9. The ball end should be on the side of the lever away from the positioner. Tighten.



Fig. 10

8. Mount the positioner to the “L” bracket as shown in Fig.10 using the long bolts, washers and the spacer. Use the mounting holes on the back of the positioner that are farthest from the input shaft.

9. Locate the bolting of the positioner on the “L” bracket and the “L” bracket on the yoke such that when the positioner lever is horizontal, the ball end on the lever is directly above the link connecting pin of the stem clamp.

10. Now the connecting link must be cut to the proper length. With the valve at the 50% position, the lever on the positioner should be horizontal and perpendicular to the link connecting pin of the stem clamp.

Hold the loose ball end in position on the connecting pin of the stem clamp and measure how long the link should be, allowing for +/- adjustment.

Cut the link to this length, making sure to cut the end with the right hand thread. Clean up the thread and assemble the link. (see Fig.11)



Fig. 11

11. Assemble the link connecting the valve stem to the positioner lever, making the fine adjustments to the link length and bracket locations so that the the positioner lever is at 50% when the valve is at 50%.

If the valve cannot be moved to the 50% position, the link length and the alignment can be done at the 0% or 100% position, with the positioner lever at the corresponding $+45^\circ$ or -45° rotation.

12. Option: Pressure gage option is also available as a compact mount to the side of positioner as shown in Fig.12 Please refer to positioner accessory list for this option. (Gage Block option not included in this kit)

13. This completes the mechanical installation of the TZID-C positioner.

14. Refer to the TZID-C Instruction Manual 42/18-64 Section 4.5 for commissioning of the positioner. Select the Rotary option (+/- 45deg range) for the AUTOSTROKE of positioner.



Fig.12



Take suitable measures to ensure that even in case of malfunctions the positioner's max. admissible operating pressure of 6 bar (90 psi) is not exceeded.

Otherwise, the positioner and/or the actuator can be damaged.

Do not exceed the maximum operating pressure of the actuator.

The positioner must be supplied with instrument air that is free of oil, water and dust according to DIN/ISO 8573-1, Class 3

Purity

max. particle size: 5 μm

max. particle density: 5 mg/m^3

Oil contents

max. concentration: 1 mg/m^3

Pressure dew point

Maximum value: 10 K below operating temperature

Before connecting the air pipes, remove dust, splinters and other particles by blowing them out.



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