

Kit PNs TGX:16152-585 and TGX:16152-590

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Rev 1
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**SIPART® PS2 MOUNTING BRACKET FOR
TYCO ROVALVE S20 VALVE ACTUATOR, 8" AND 12" SIZES**

This publication provides installation instructions to mount a Siemens SIPART PS2 valve positioner to a Tyco Rovalve S20 valve actuator, 8" and 12" sizes, and to install the mechanical feedback linkage. An installation drawing for each actuator size is provided below. Following the drawings are kit parts lists and photographs of an installation. The kit installation procedure and product support information complete this publication.

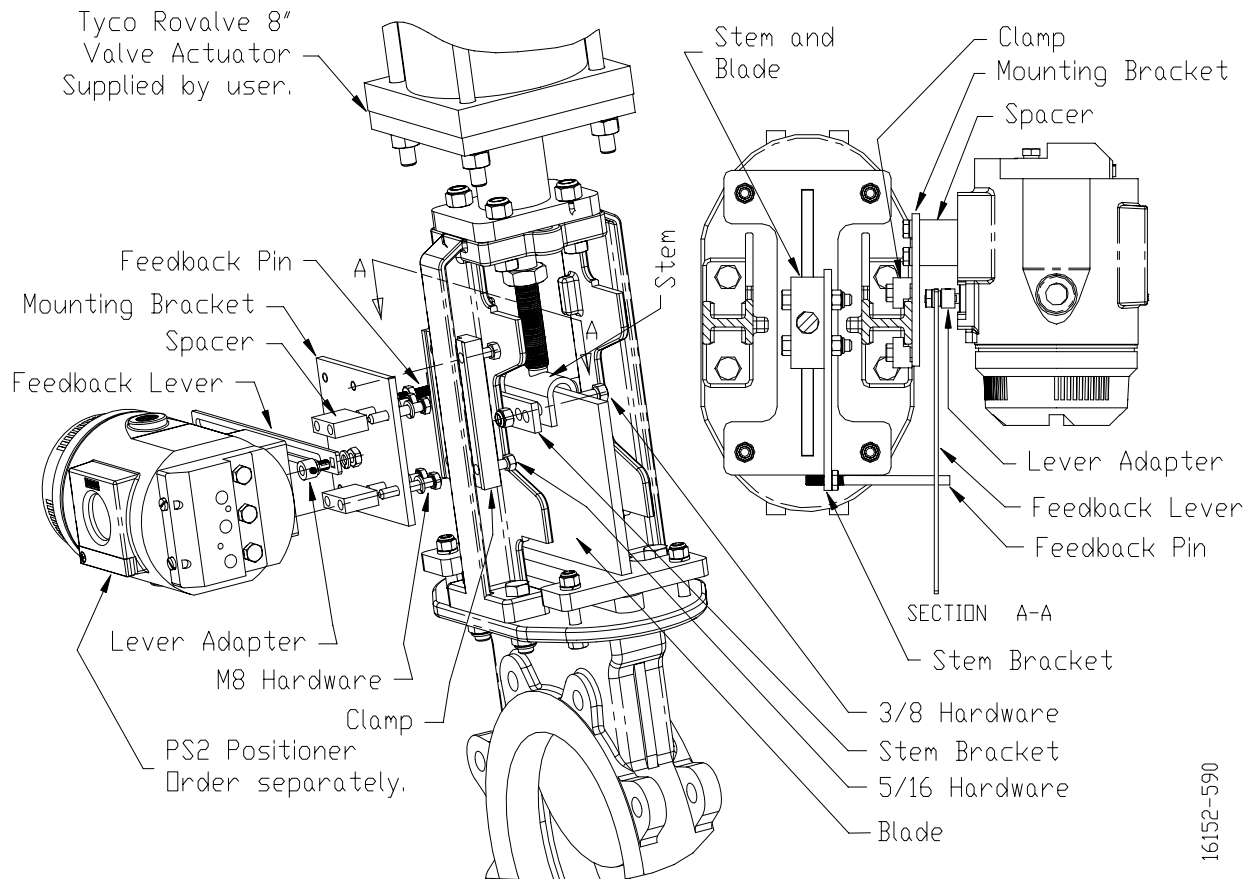
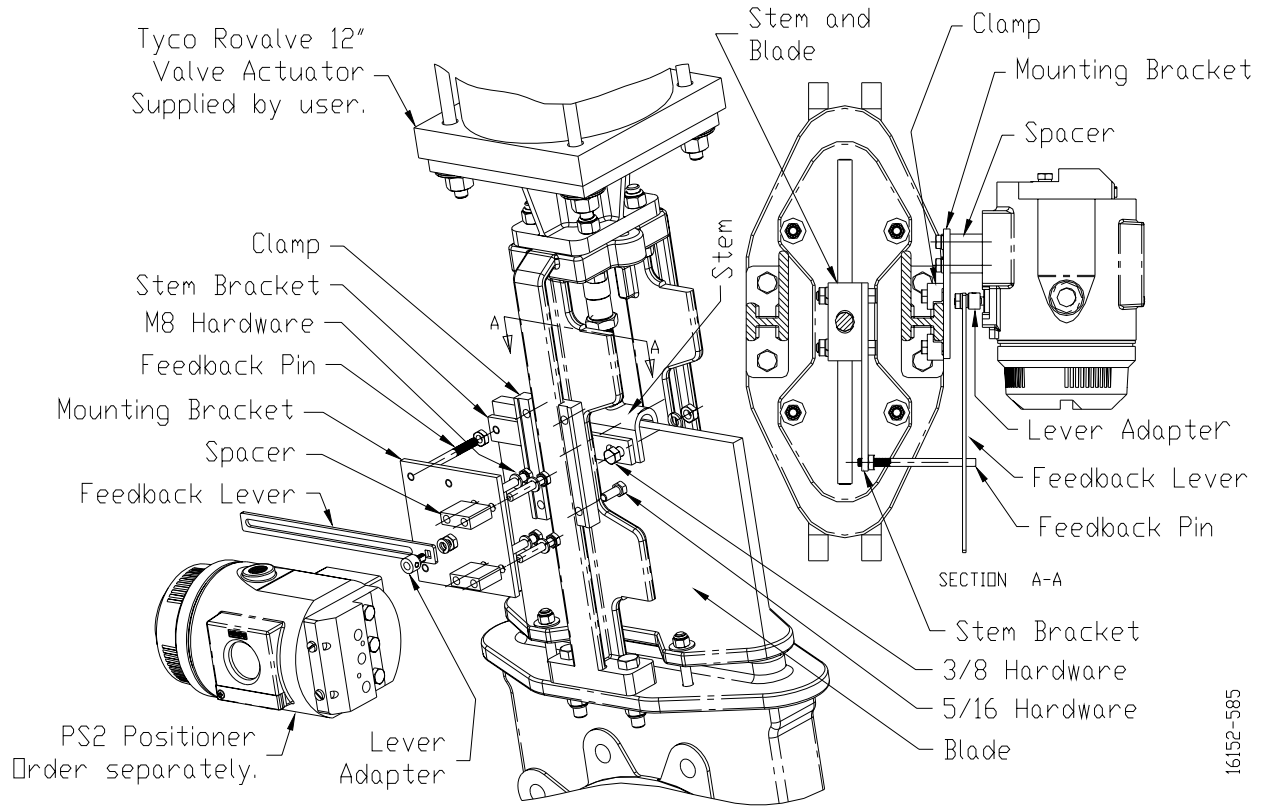


FIGURE 1 8" Valve Actuator with Siemens PS2 Valve Positioner

16152-590



16152-585

FIGURE 2 12" Valve Actuator with Siemens PS2 Valve Positioner

KIT PARTS

Description	Kit TGX:16152-585, 12"	Kit TGX:16152-590, 8"
Feedback Pin	1	1
Feedback Lever, 9"	1	1
Lever Adapter	1	1
Mounting Bracket	1	1
Stem Bracket	1	1
Standoff	2	2
Clamp, 8" Actuator	---	2
Clamp, 12" Actuator	2	---
3/8-16 x 2.00" Hex Hd. Screw	2	2
3/8-16 Hex Nut	2	2
3/8 Medium Lockwasher	2	2
M8 x 50 Hex Hd. Screw, DIN931-A2	4	4
M8 Split Lockwasher, DIN127B-A2	4	4
5/16-18 x 7/8" Hex Hd. Screw	4	4
5/16-18 Hex Nut	1	1

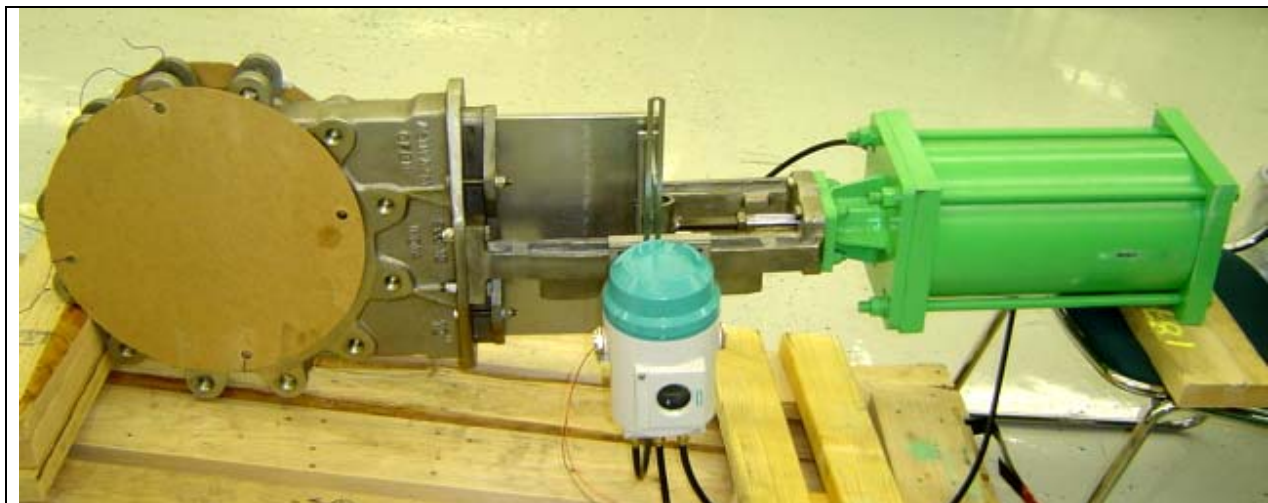


PHOTO 1 Assembled View



PHOTO 2 Feedback Pin and Lever



PHOTO 3 Stem Bracket



PHOTO 4 Clamps and Mounting Bracket

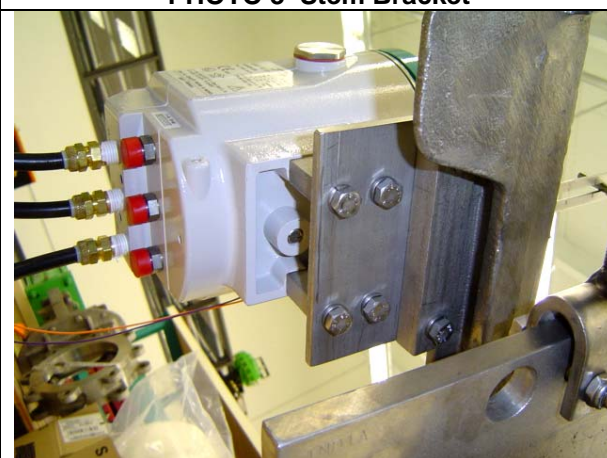
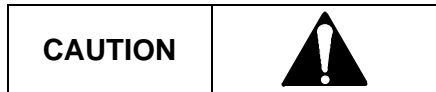


PHOTO 5 Positioner Mounting

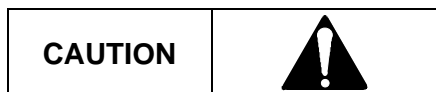
INSTALLATION

Refer to the following procedure and to the positioner and actuator installation instructions while performing the installation. The current revision of the SIPART PS2 positioner instruction is available at the Siemens Internet site. See Contact Information later in this Instruction for the URL.

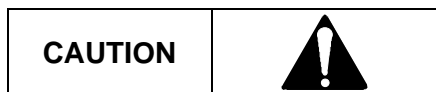
Before beginning the installation, note the following cautions.



Do not apply supply pressure to the actuator or the valve positioner during the installation process. Applying supply pressure before the equipment is properly mounted could cause unexpected movement that could lead to personal injury or equipment damage.



Do not exceed the maximum actuator and valve positioner air pressures stated in the manufacturer's literature. Exceeding these ratings could cause personal injury or equipment damage.



The actuator stem clamp must be loosened to install the kit. Always set valve and actuator stems to their relaxed positions before loosening the stem clamp to prevent possible injury to personnel or damage to equipment.

1. Open kit and check the contents against the Kit Parts list above. Refer to the drawings on pages 1 and 2 for part identification. See photographs 1-5 for views of an installation.
2. At the actuator, remove the installed screws connecting the stem to the blade.
3. Get the stem bracket and 3/8 hardware from the kit. Using the 3/8 screws, lockwashers and nuts, fasten the stem bracket to the stem and blade. See close-up in Photo 3.

Note

The stem bracket has two adjacent holes at one end. The hole nearest the end of the bracket is used with the 12" actuator. The inner hole is used with an 8" actuator. The hole toward the bracket center must be used in all installations.

4. Get the feedback pin and 5/16-18 nut. Thread the nut onto the pin as far as it will go and thread the pin into the threaded hole in the stem bracket as far as it will go. Do not tighten the lock nut at this time.
5. Get the mounting bracket and 5/16 hardware from the kit. Using two 5/16-18 screws from the kit, loosely attach one clamp to the mounting bracket. See close-up in Photo 4.
6. Position the mounting bracket and clamp such that the yoke is between them as shown in Photo 4. Fasten the second clamp using two more 5/16-18 screws from the kit. Do not tighten the screws at this time.
7. Slide the mounting bracket assembly to the mid-stroke position (align the middle of the plate with the mid-stroke location of the stem bracket) and tighten the four screws to secure the mounting bracket to the yoke. See close-up in Photo 4. If the yoke is too thin for a tight fit, add shims between it and the clamps.

8. Get the lever adapter and feedback lever. Fasten the adapter to the lever with the supplied lockwasher and nut. Tighten the nut securely.
9. Place the lever adapter on the PS2 input shaft and securely tighten the supplied setscrew.
10. Get two standoffs, four M8 hex screws, and four M8 lockwashers. Fasten the PS2 to the mounting bracket. Tighten the four screws. See close-ups in Photo 2 and Photo 5.
11. Determine the needed feedback pin length. The pin must be long enough to extend beyond the feedback lever by at least 1/8" but must not contact the body of the PS2. Hold the PS2 and spacers tightly against the mounting bracket and rotate the feedback lever to place it against the pin. Mark the pin at the desired length with a piece of tape.
12. Remove the feedback pin and cut it to the needed length. Remove any burrs. *Do not scar the pin where it will ride in the feedback lever slot.*
13. Rotate the feedback lever until it lines up with the threaded hole in the stem bracket. Insert the cut end of the feedback pin into the lever slot. Thread the feedback pin as far as it will go into the threaded hole in the stem bracket. Tighten the locking nut.
14. Read the "Cautions" on page 3 and then apply the appropriate air pressures to fully stroke the valve. Inspect the positioner/actuator assembly to ensure that:
 - The feedback linkage does not prevent the valve from fully stroking.
 - The feedback pin moves freely within the feedback lever for the entire valve stroke.
 - The feedback lever is perpendicular to the stem at mid-stroke.
 - All linkage hardware is secure.
15. Once the feedback lever moves freely for the entire stroke, make necessary electrical and pneumatic connections and then proceed to the PS2 setup instruction found within the PS2 manual.

CONTACT INFORMATION

For Product Support in the U.S.A.

Technical Support	
Telephone	1 800 333 7421
E-mail	TechSupport.sea@siemens.com
Hours of Operation	8 a.m. to 4:45 p.m. eastern time, Monday through Friday (except holidays)
Technical Publications in PDF	http://www.sea.siemens.com/ia ; under Customer Support Process Instrumentation, click on Documentation & Support Links
Public Internet Site	http://www.sea.siemens.com/ia
Repair Service	1 215 646 7400 extension 3187

For Product Support Outside of the U.S.A.

Visit the Siemens public Internet site (see the above table for the URL), locate "Customer Support Process Instrumentation," and click on the Contact Tech Support link to access the Global Support link

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