

Kit Part Number TGX:16152-545

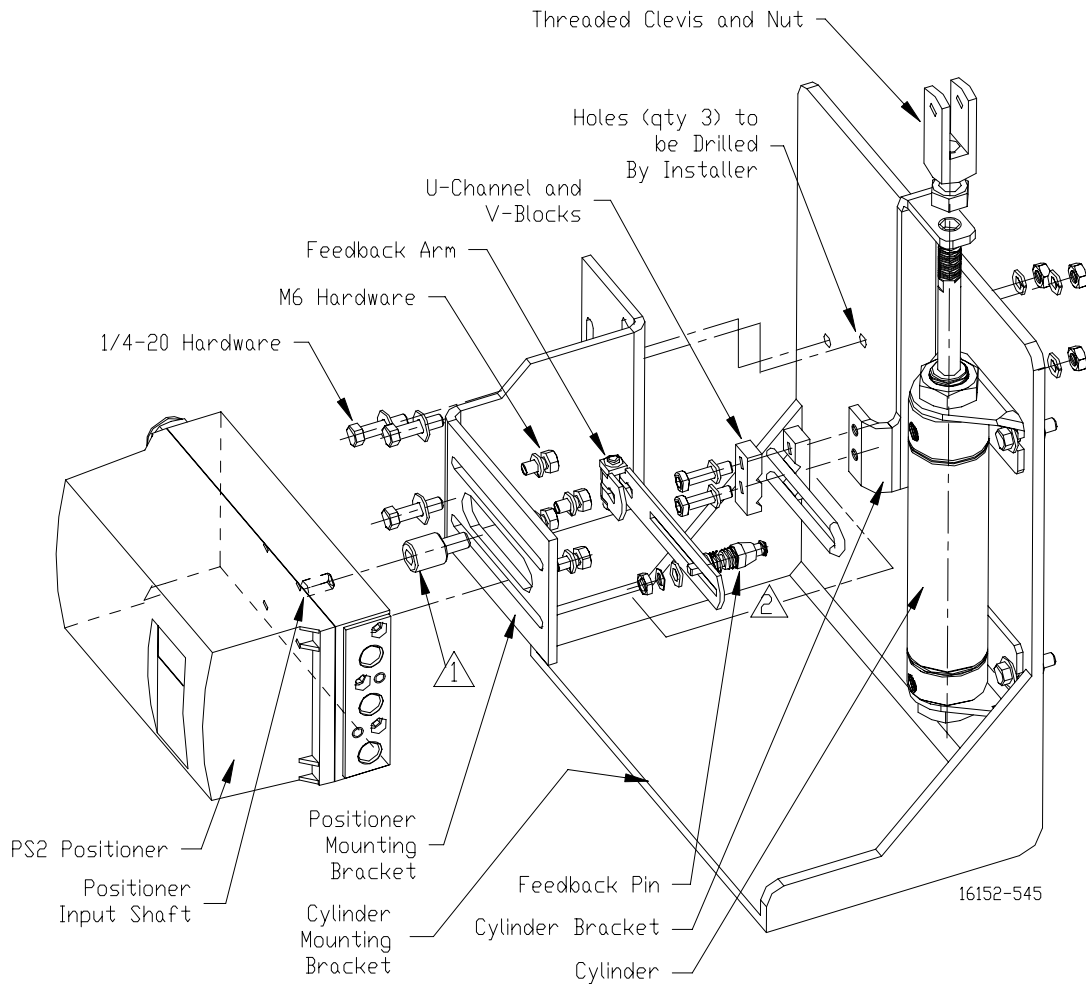
15900-732

Rev 1

July 2006

Mounting a Siemens SIPART PS2 Valve Positioner on the Bimba Cylinder, 170-D, 2" to 4" Strokes

This instruction describes using the TGX:16152-545 kit to mount a Siemens SIPART PS2 Valve Positioner to the above Bimba cylinder model. A typical installation is shown below.



△ SHAFT ADAPTER PART NUMBER 16152-3028, SUPPLIED SEPARATELY.

△ THESE PARTS SUPPLIED IN KIT 6DR4004-8VL.

PARTS, KIT TGX:16152-545

Description	Quantity
Positioner Mounting Bracket	1
Cylinder Bracket	1
1/4-20 x 1.00" Long Hex Hd. Screw	3
1/4-20 Hex Nut	3
1/4 Medium Split Lockwasher	3
1/4 Flat Washer	3
M6 x 12 Hex Hd Screw, DIN933-A2	4
M6 Split Lockwasher, DIN127B-A2	4

Other Kits and Parts:

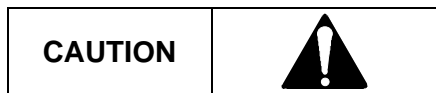
Shaft Adapter part number 16152-3028

Linear Feedback Kit part number 6DR4004-8VL

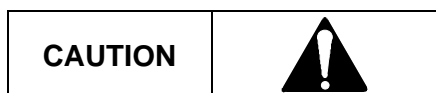
INSTALLATION

Refer to the following procedure and to the installation instructions for the positioner, cylinder, and actuator while performing the installation. The current revision of the 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, cylinder or 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, cylinder, and valve positioner air pressures stated in the manufacturer's literature. Exceeding these ratings could cause personal injury or equipment damage.

1. Refer to the figure on page 4 and drill three clearance holes for 1/4-20 screws in the cylinder mounting bracket.
2. With the cylinder mounted on the cylinder mounting bracket, remove the threaded clevis and nut from the air cylinder shaft. See the figure on page 1.
3. From the TGX:16152-545 kit, get the cylinder bracket. Thread the cylinder bracket onto the air cylinder shaft. Lock the bracket in place using the nut. Thread the clevis onto the shaft.
4. From the 6DR4004-8VL kit, get the U-channel, V-blocks, and their mounting hardware. Mount the U-channel and V-blocks to the cylinder bracket. Set the assembly aside.
5. Refer to the figure on page 1 and fasten the shaft adapter to the positioner input shaft. Tighten the setscrew securely.
6. From the TGX:16152-545 kit, get four M6 screws and lockwashers. Fasten the positioner mounting bracket to the positioner using the M6 hardware. Do not tighten the hardware at this time.

7. From the 6DR4004-8VL kit, get the feedback arm, feedback pin and pin mounting hardware. Loosely secure the feedback pin to the feedback arm.
8. Fasten the feedback arm to the shaft adapter. Tighten the mounting hardware.
9. Calculate initial feedback pin position by multiplying the cylinder stroke by 0.7. Measure the calculated distance from the center of the positioner input shaft (i.e. shaft adapter) along the feedback arm and secure the pin to the arm at this location. In this position, the pin will swing through an angle of 90 degrees.
10. From the TGX:16152-545 kit, get 3 sets of 1/4-20 hardware. Fasten the positioner mounting bracket to the cylinder mounting bracket using the 1/4-20 hardware.

IMPORTANT

While attaching the positioner mounting bracket, be sure the feedback pin is inserted into the U-channel. The spring in the feedback pin should be compressed approximately 3/16" to 1/4" (4.5mm to 6.5mm). Also, the U-channel and feedback arm must be parallel; adjust the cylinder bracket position as needed.

IMPORTANT

The clevis must be attached to the driven apparatus to prevent the cylinder shaft from rotating. It may be necessary to reposition the cylinder bracket after connecting the clevis.

11. Loosen the M6 positioner mounting hardware and adjust the location of the positioner to place the feedback pin near the vertical centerline of the cylinder throughout the stroke.
12. Tighten all hardware.
13. Make the pneumatic connections needed to fully stroke the valve.
14. Read the "Cautions" above and then apply the appropriate air pressures. Exercise the positioner/cylinder/actuator assembly to ensure that the valve fully strokes. It may be necessary to adjust the location of the positioner and feedback pin.

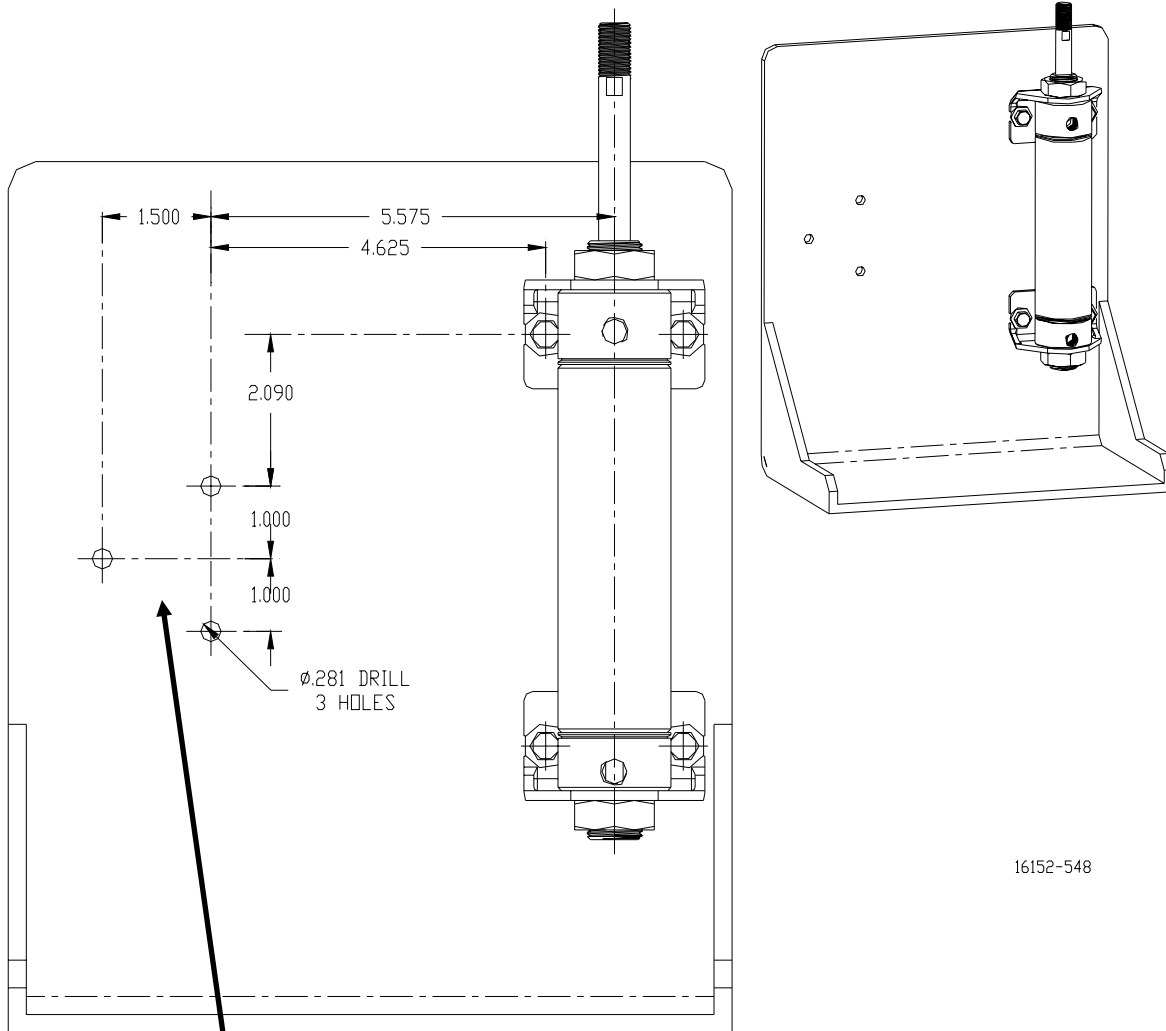
CONTACT INFORMATION

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Public Internet Site	http://www.sea.siemens.com/ia
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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.



Three clearance holes for 1/4-20 screws, to be drilled by installer; holes will be used to mount the positioner mounting bracket

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