

Mounting Instructions

D103991X012 Rev. B

June 2014

Valvetop D-Series Standard Shaft Discrete Valve Controller on 685/ATI Sliding Actuators

Use these instructions to mount a Topworx™ Valvetop D-Series Standard shaft discrete valve controller on 685/ATI Sliding actuator.

⚠ WARNING

Avoid personal injury or property damage from sudden release of process pressure or bursting of parts. Before performing any maintenance operations:

- **Always wear protective clothing, gloves, and eyewear.**
- **Do not remove the actuator from the valve while the valve is still pressurized.**
- **Disconnect any operating lines providing air pressure, electric power, or a control signal to the actuator. Be sure the actuator cannot suddenly open or close the valve.**
- **Use bypass valves or completely shut off the process to isolate the valve from process pressure. Relieve process pressure from both sides of the valve.**
- **Vent the pneumatic actuator loading pressure and relieve any actuator spring precompression.**
- **Use lock-out procedures to be sure that the above measures stay in effect while you work on the equipment.**
- **Check with your process or safety engineer for any additional measures that must be taken to protect against process media.**

Refer to figure 1 and the parts list for mounting parts identification. Refer to the appropriate actuator instruction manual for actuator installation, operation, maintenance, and parts identification.

1. Isolate the control valve from the process line pressure and release pressure from both sides of the valve body. Shut off all pressure lines to the actuator, releasing all pressure from the actuator. Use lock-out procedures to be sure that the above measures stay in effect while you work on the equipment.
2. Attach the connector arm assembly (key 1) to the actuator stem block using the stud cont thd (key 2), hex nut (key 3), plain washer (key 4), lock spring washer (key 5) & hex nut (key 6) and tighten the fasteners.
3. Attach and set the extension arm (key 7) as per the travel of actuator to the connector arm assembly (key 1) using the plain washer (key 8) & socket head cap screws (key 9), and tighten the fasteners.
4. Attach the bracket assembly (key 10) to the actuator using the plain washer (key 11), lock spring washer (key 12) & hex head cap screws (key 13) and tighten the fasteners.
5. Attach the coupler shaft (key 18) to the bracket assembly (key 15) using the retainer ring.
6. Attach the bracket assembly (key 15) using the flat head screws (key 16) & hex nut (key 17) and tighten the fasteners.
7. Attach the instrument to the mounting bracket using the hex head cap screws (key 14).
Visually adjust the instrument so that the instrument shaft centred and engage with coupler shaft (key 18).
8. Attach the lever arm (key 20) to the coupler shaft using the plain washer (key 21), socket head cap screw (key 22) & square nut (key 23) and tighten the fasteners.
9. Attach the rotary pin arm (key 24) to the extension arm (key 7) using the hex jam nut (key 25), external tooth lock washer (key 27) & hex nut (key 28) and tighten the fasteners.
10. Insert the rotary pin arm (key 24) to the lever arm (key 20) using the external retaining ring (key 26).
11. Setup and calibrate the Valvetop D-Series discrete valve controller described in the Valvetop D-Series discrete valve controller instruction manual or quick start guide.

For additional information concerning mounting, setup, calibration, and maintenance of the Valvetop D-Series discrete valve controller, refer to appropriate instruction manual.

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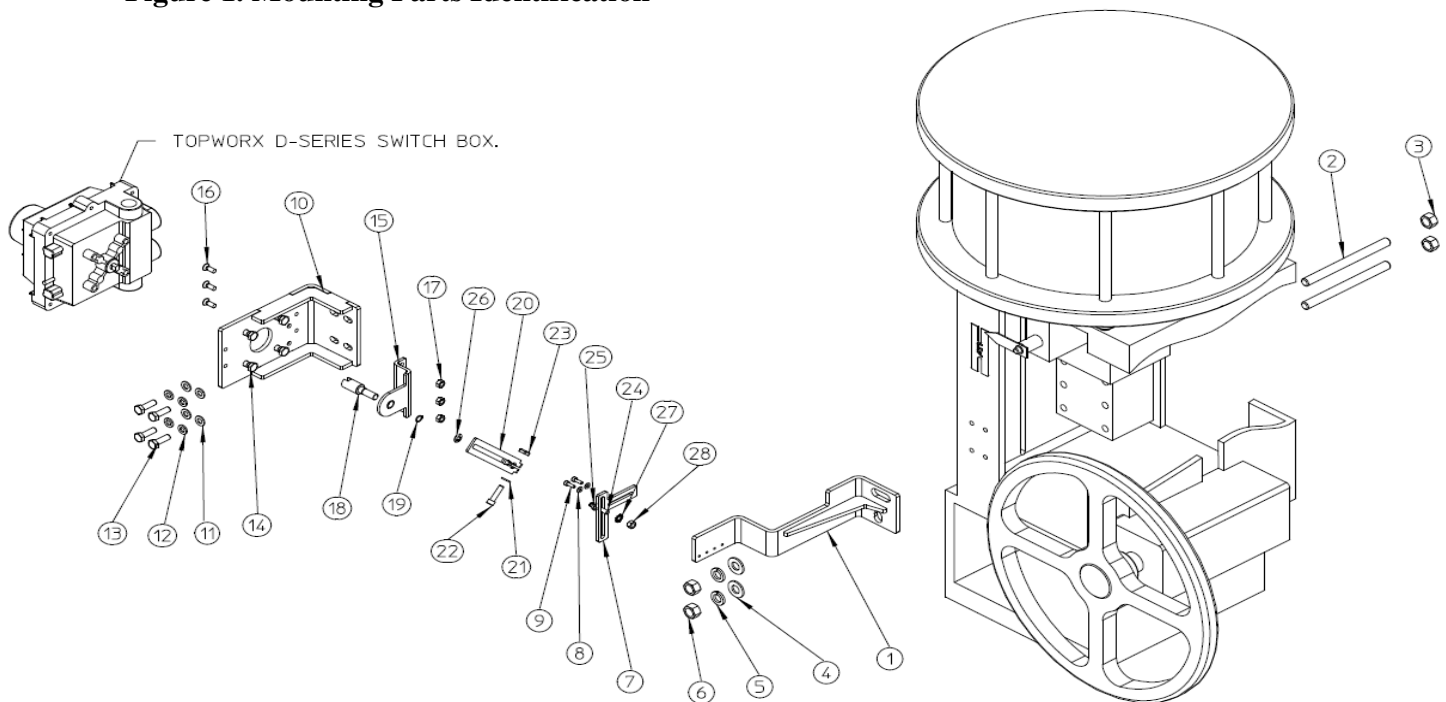
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Figure 1. Mounting Parts Identification



GG29705

PARTS LIST		
KEY	QTY	DESCRIPTION
1	1	ARM, CONNECTOR ASSY
2	2	STUD,CONT THD 1/2-13X6.00
3	2	NUT,HEX 1/2"
4	2	WASHER,PLAIN,TYPE A 1/2"
5	2	WASHER,LOCK,SPRING 1/2"
6	2	NUT,HEX 1/2"
7	1	ARM, EXTENSION
8	2	WASHER,PLAIN M4
9	2	SCREW,CAP,HEX SOCKET M4X0.7X12
10	1	BRACKET ASSEMBLY
11	4	WASHER,PLAIN M8
12	4	WASHER,LOCK,SPRING M8
13	4	SCREW,CAP,HEX HD M8X1.25X25
14	4	SCREW,CAP,HEX HD 5/16-18X0.62
15	1	BRACKET,ASSEMBLY
16	3	SCREW,MACH,FLAT HD M6X1X16 CROSS-REC
17	3	NUT,HEX M6
18	1	COUPLER, SHAFT
19	1	RETAINER, RING 3/8"
20	1	LEVER, ARM
21	1	WASHER,PLAIN 1/4"
22	1	SCREW,CAP,HEX SOCKET 1/4-20X1.00
23	1	NUT,SQUARE 1/4"
24	1	PIN, ROTARY, ARM M6X1X30 PART THD
25	1	NUT,HEX,JAM M6
26	1	RING, RETAINING, EXT 6.35MM SHAFT, E STYLE
27	1	WASHER,LOCK,EX.TEETH 1/4"
28	1	NUT,HEX M6

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