Mounting Instructions
D103467X012
September 2010

DVC6200 Digital Valve Controller on Fisher 585C Size 68 with 0.56 to 2.00 Inch Travel (Linear Roller Cam)

Use these instructions to mount a Fisher® FIELDVUE™ DVC6200 digital valve controller on Fisher 585C size 68 actuator with 0.56 to 2.00 inch travel.

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 control valve.**
- **Use bypass valves or completely shut off the process to isolate the control valve from process pressure. Relieve process pressure from both sides of the control 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 3 and the parts list for mounting parts identification. Refer to the DVC6200 digital valve controller instruction manual for digital valve controller parts identification. Refer to the appropriate actuator instruction manual for actuator installation, operation, maintenance, and parts identification. Figure 1 shows the arced feedback assembly (RShaft Window #1).

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 actuator. Use lock-out procedures to be sure that the above measures stay in effect while you work on the equipment.

2. During the attachment of the cam bracket (key 3) to the valve stem connector it will be necessary to remove the stem connector cap screws. Consult the appropriate actuator instruction manual for proper actuator disassembly and reassembly.

3. Attach the cam bracket (key 3) to the stem connector using two stud bolts (key 1), two plain washers (key 4) and four hex nuts (key 5) and two spacers (key 2), as shown in figure 3.

4. Attach the cam (key 6) to the cam bracket using two plain washers (key 7), and two hex head screws (key 8) as shown in figure 3. Ensure that the cam is oriented as per the mounting assembly drawing.

5. Attach the mounting plate (key 9) to the actuator yoke top mounting face using two lock washers (key 10) and two hex head screws (key 11), as shown in figure 3. Similarly, attach the mounting plate to the bottom yoke mounting by using a spacer (key 12), stud (key 13), plain washer (key 14), and hex nut (key 15).

6. Attach the digital valve controller to the arced feedback assembly (key16) using the four metric hex socket cap screws (key 18).

7. Attach the arced feedback assembly along with the digital valve controller to the mounting plate using the four imperial hex socket cap screws (key 17) as shown in figure 3. Ensure that the roller of the arced feedback assembly is centered and resting on the cam surface as shown in figure 2.

8. Ensure that the cam is positioned so that when the actuator stem is fully extended, the roller lines up with the mark on the cam.

9. Make pneumatic and electrical connections to the digital valve controller as described in the digital valve controller instruction manual.

10. It may be necessary to fine tune the placement of the cam so that the digital valve controller receives the proper feedback.

11. Setup and calibrate the digital valve controller as described in instruction manual or quick start guide.

For additional information concerning mounting, setup, calibration, and maintenance of the DVC6200 digital valve controller, refer to the appropriate instruction manual.

PART LIST		
KEY	QTY	DESCRIPTION
1	2	STUD BOLTS ,CONT THD
2	2	SPACER
3	1	CAM BRACKET
4	2	PLAIN WASHER
5	4	HEX NUT
6	1	CAM
7	2	PLAIN WASHER
8	2	HEX HD SCREWS
9	1	MOUNTING PLATE
10	2	LOCK WASHER
11	2	HEX HD SCREWS
12	1	SPACER
13	1	STUD BOLTS ,CONT THD
14	1	PLAIN WASHER
15	1	HEX HD SCREWS
16	1	ARCED FEEDBACK ASSEMBLY
17	4	SOCKET SCREWS (IMPERIAL)1
18	4	SOCKET SCREWS (METRIC)2

1. IMPERIAL SOCKET SCREWS CAN BE IDENTIFIED BY THE COARSER THREADS.
2. METRIC SOCKET SCREWS HAVE A SLIGHTLY LARGER HEAD THAN IMPERIAL SOCKET SCREWS.

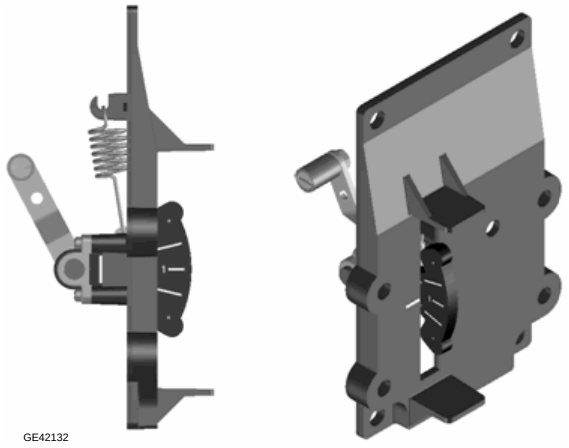

Figure 1. Arced Feedback Assembly (RShaft Window #1)

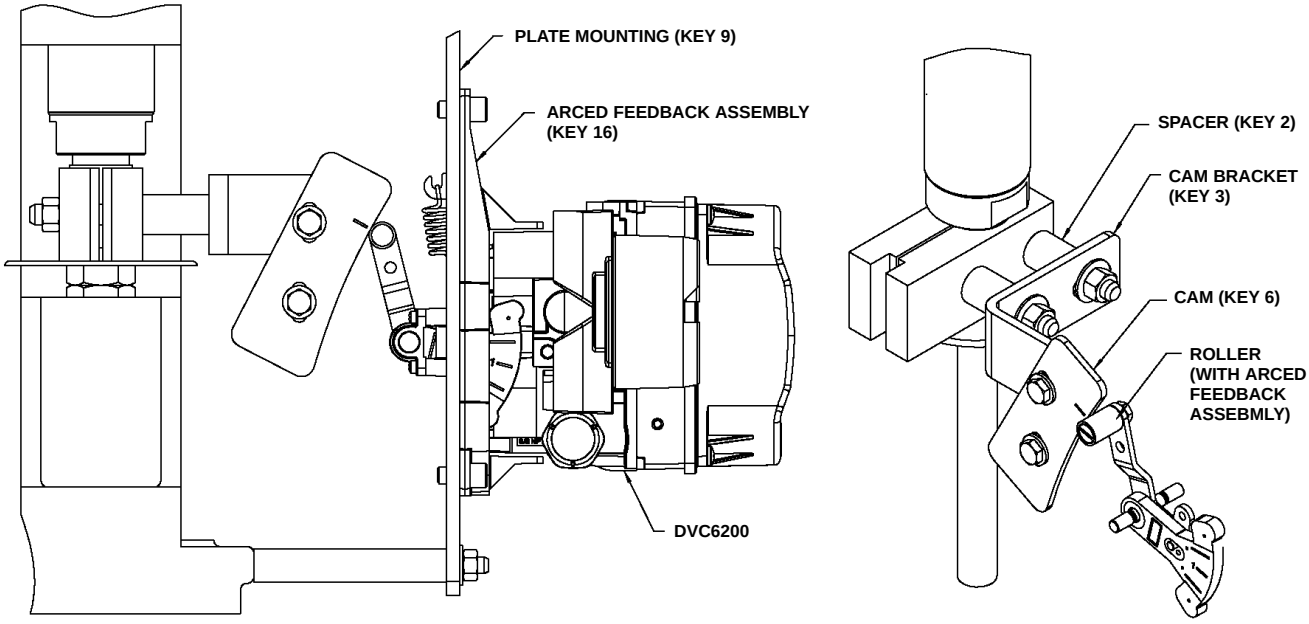

Figure 2. Installing CAM and Roller Feedback Assembly

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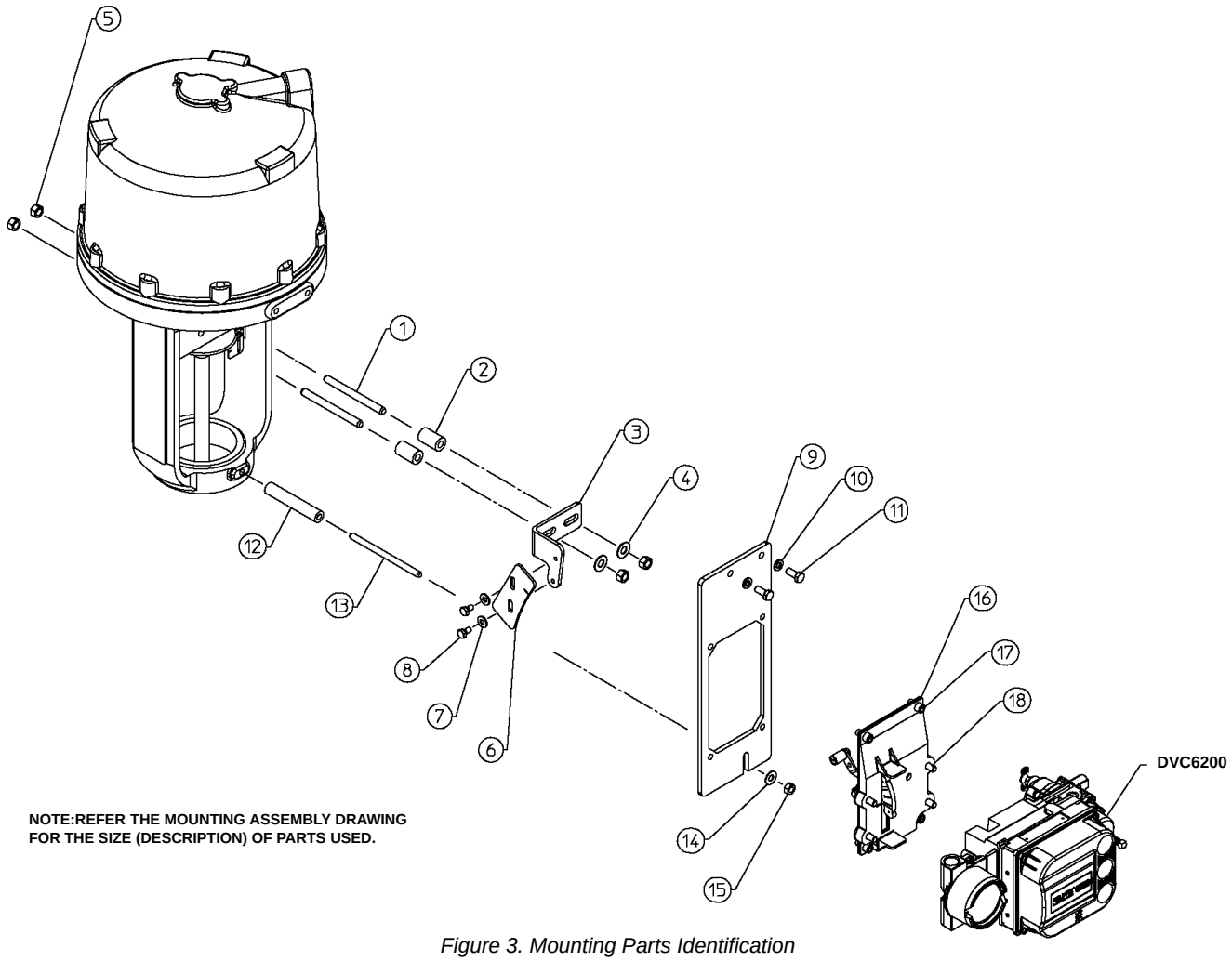

Figure 3. Mounting Parts Identification

Note

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