

Mounting Instructions

D103455X012

February 2011

DVC62000 or DVC2000 Digital Valve Controller on 2052 Size 1, 2 or 3 Actuator (Window Mount)

Use these instructions to mount a Fisher® FIELDVUE™ DVC6200 or DVC2000 digital valve controller on Fisher 2052, size 1, 2, or 3 actuators.

WARNING

Avoid personal injury or property damage from sudden release of process pressure or bursting of parts. Before performing any installation 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 1 to select the appropriate arced feedback assembly per the actuator requirement. Refer to figure 2 for mounting parts identification for 2052 size 1 and figure 3 for 2052 size 2 and 3. Refer to the DVC6200 or DVC2000 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.

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. Remove the cover plate screws and cover plate from the actuator, if present.

3. Refer to figure 4 and 5 to confirm that the 2052 actuator has the updated lever arm.

4. Install the cam (key 1) on to the lever of actuator. It will be necessary for use of arced feedback mechanism. Consult with the appropriate actuator instruction manual for proper actuator disassembly and reassembly.

5. For 2052 size 1, 2, and 3 actuators attach the cam (key 1) to the lever arm of actuator using hex head cap screws (key 2). Ensure that the cam is oriented as shown in figure 2 or 3.

6. For 2052 size 1 actuators attach the mounting adapter (key 3) to the yoke using the hex socket cap screws (key 4). For actuator size 2 and 3 mounting adapter (key 3) is not required.

7. Attach the digital valve controller to the appropriate arced feedback assembly (short stroke or long stroke, key 5) as per the actuator requirement using hex socket cap screws (key 7).

8. Attach the arced feedback assembly (key 5), along with the digital valve controller to the mounting adapter (key 3) for actuator size 1 using hex socket cap screws (key 6) as shown in figure 2 and to the yoke of actuator size 2 and 3 using hex socket cap screws (key 6) as shown in figure 3.

9. Ensure that the roller of arced feedback assembly is centered and resting on the cam surface.

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

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

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

For additional information concerning mounting, setup, calibration, and maintenance of the DVC6200 or DVC2000 digital valve controller, refer to the appropriate instruction manual.

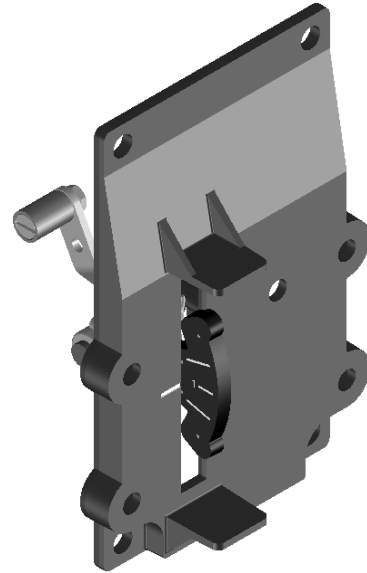


DVC6200 or DVC2000
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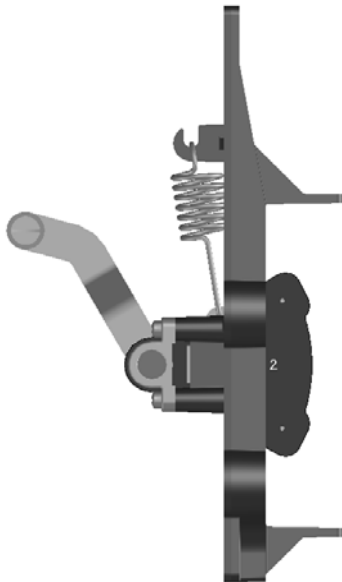
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Note

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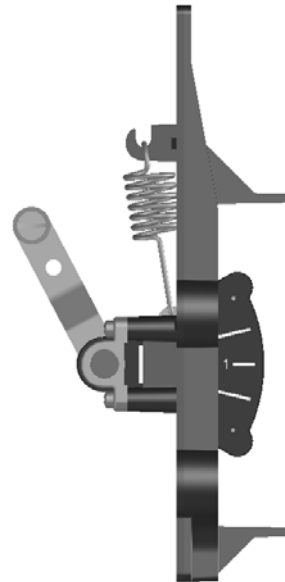


ARCED FEEDBACK ASSEMBLY



GE42130

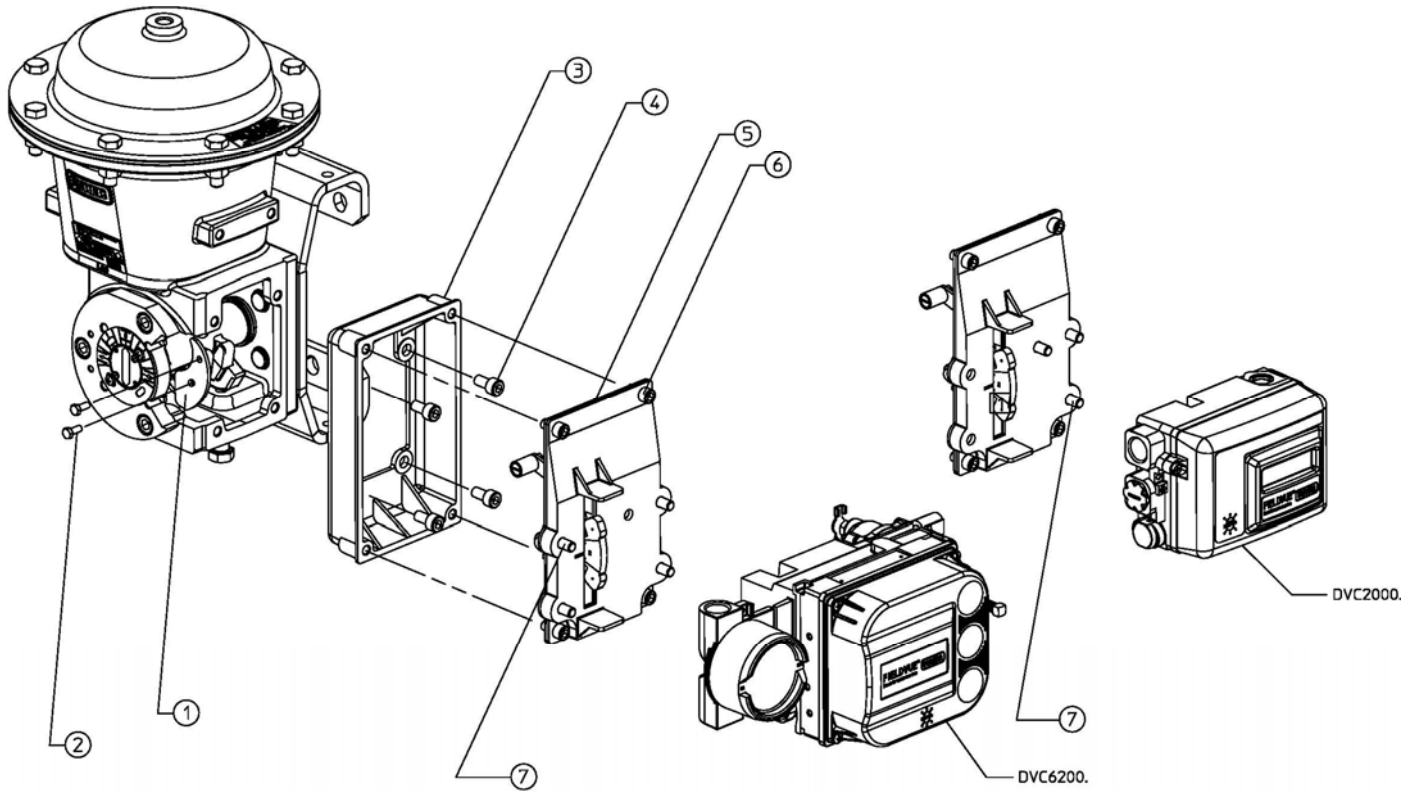
**ARCED FEEDBACK ASSEMBLY
FOR 2052 SZ 1**



GE42132

**ARCED FEEDBACK ASSEMBLY
FOR 2052 SZ 2 & 3**

Figure 1. Arced Feedback Assemblies



GG07246

2052 Size1 Actuator with DVC6200 or DVC2000 Digital Valve Controller

DVC6200 or DVC2000 Mounting Kit on 2052 Size 1 Actuator		
PARTS LIST		
KEY	QTY	DESCRIPTION
1	1	CAM
2	2	M5X0.8X12 HEX HD SCREWS
3	1	ADAPTOR,MTG
4	4	M8X1.25X16 SOCKET SCREWS
5	1	ARCED FEEDBACK ASSEMBLY
6	4	M8X1.25X16 SOCKET SCREWS
7	4	M8X1.25X16 SOCKET SCREWS

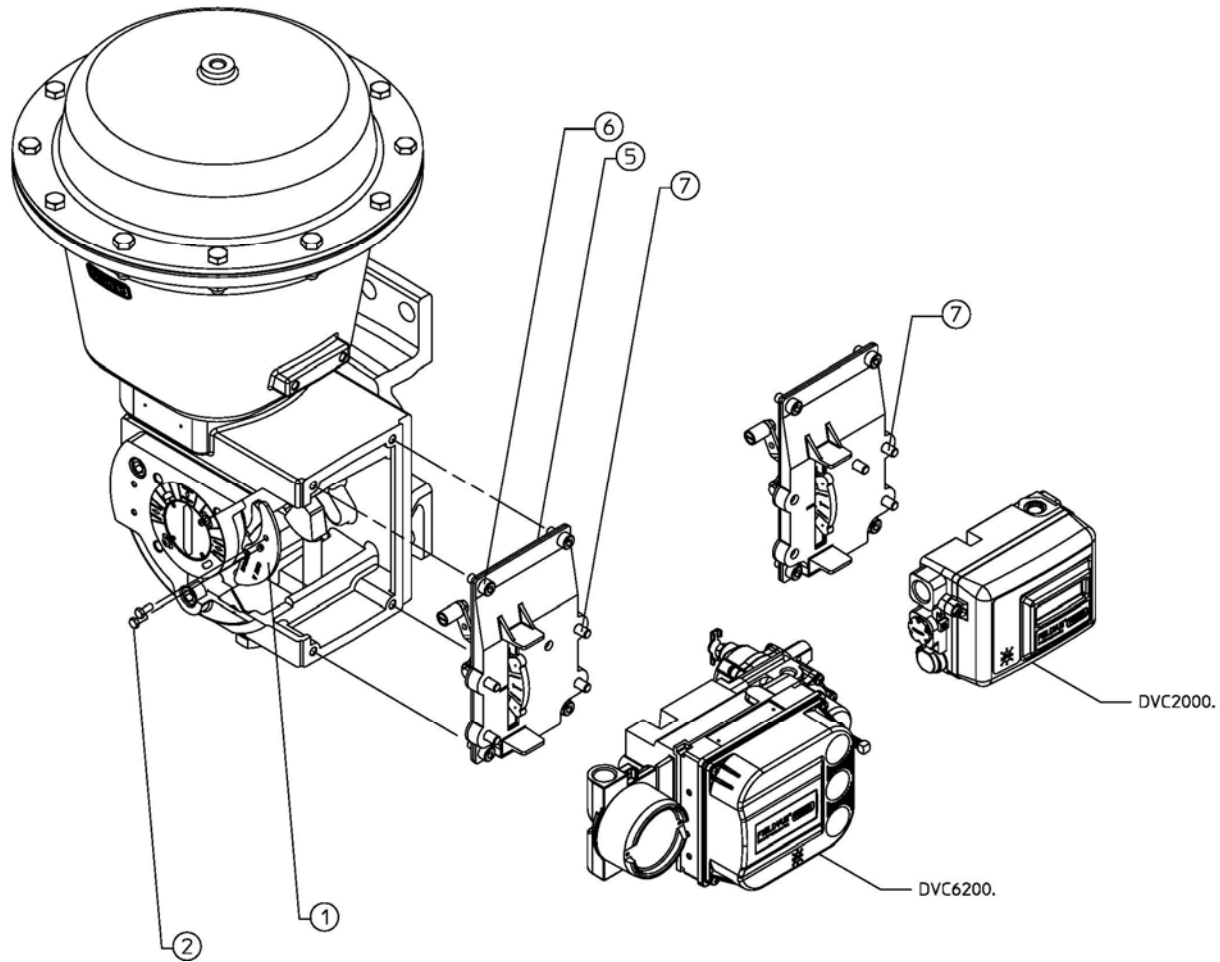
NOTES:

DVC6200 uses 4 M8 socket screws (key 7) for mounting onto arced feedback assembly.
DVC2000 uses 3 M8 socket screws (key 7) for mounting onto arced feedback assembly.

Figure 2. Mounting Parts Identification

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GG07247

2052 Size 2/3 Actuator with DVC6200 or DVC2000 Digital Valve Controller

DVC6200 or DVC2000 Mounting Kit on 2052 Size 2/3 Actuator		
PARTS LIST		
KEY	QTY	DESCRIPTION
1	1	CAM
2	2	M5X0.8X12 HEX HD SCREWS
5	1	ARCED FEEDBACK ASSEMBLY
6	4	M8X1.25X16 SOCKET SCREWS
7	4	M8X1.25X16 SOCKET SCREWS

NOTES:

DVC6200 uses 4 M8 socket screws (key 7) for mounting onto arced feedback assembly.
 DVC2000 uses 3 M8 socket screws (key 7) for mounting onto arced feedback assembly.

Figure 3. Mounting Parts Identification

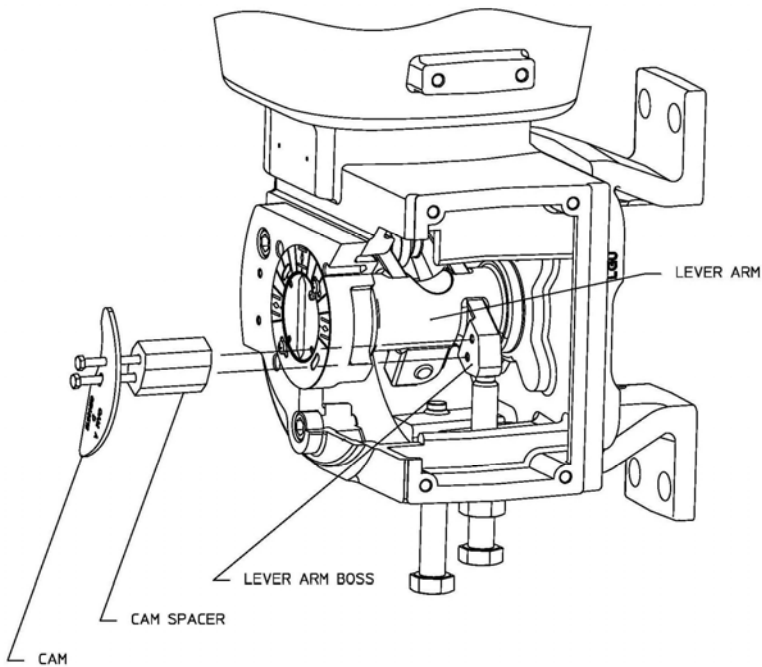


Figure 4. 2052 Actuators with CAM Spacer

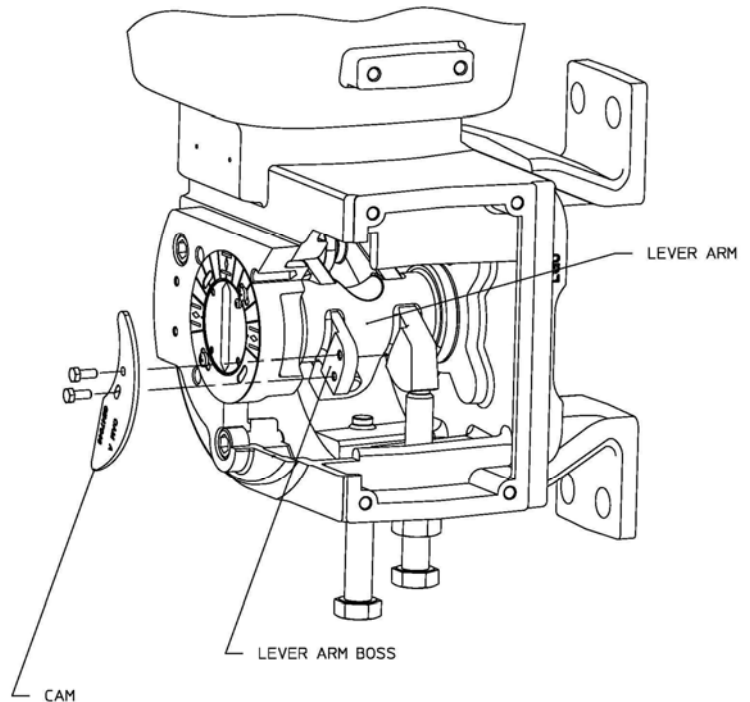


Figure 5. 2052 Actuators with Modified Lever

NOTE:

**FOR SET UP AS SHOWN IN FIGURE 4,
SIZE 1, CHANGE THE LEVER ARM FOR IMPROVED PERFORMANCE.
SIZE 2 & 3, CHANGE THE LEVER ARM.**

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