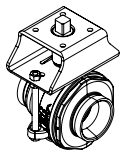
Ball Valve Actuator Bracket Kit Instructions

SERIES 727



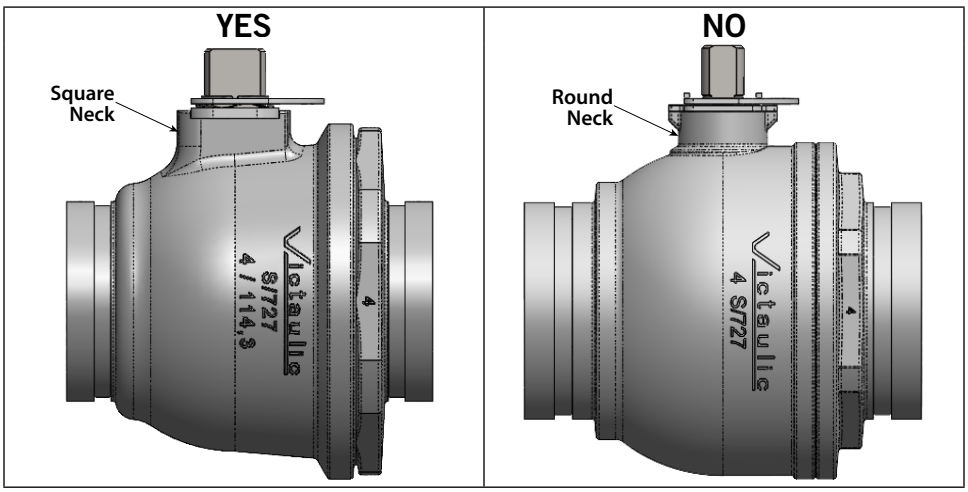
⚠ WARNING

- **Read and understand all instructions before attempting to install any Victaulic products.**
- **Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.**
- **Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.**
- **Wear safety glasses, hardhat, and foot protection.**

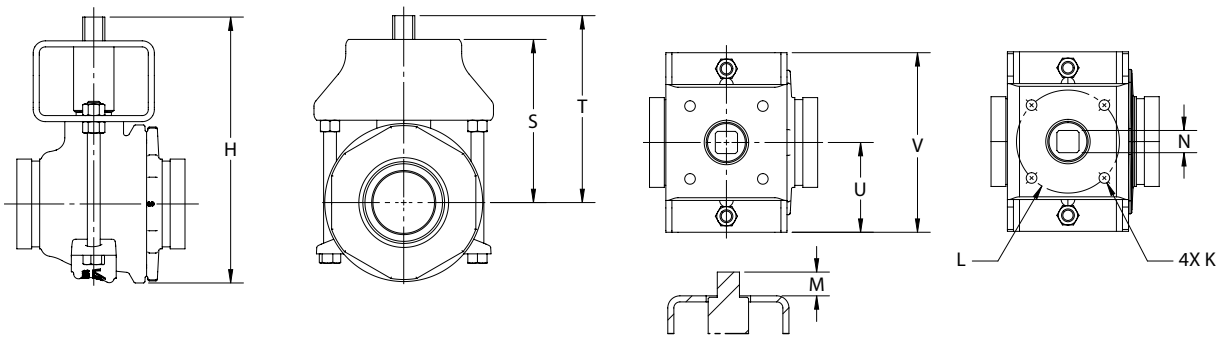
Failure to follow these instructions could result in death or serious personal injury and property damage.

The following instructions cover the required steps for installation of a Series 727 Ball Valve Actuator Bracket Kit. Always read all instructions and labels for proper installation and operation of this valve.

This actuator bracket kit is designed for use only with Series 727 Ball Valves that have a square neck, as shown in the "YES" column to the right.



DIMENSIONS OF BALL VALVE WITH ACTUATOR BRACKET KIT INSTALLED



Size		Dimensions									
Nominal inches DN	**Actual Outside Diameter** inches mm	**H** inches mm	**K** inches mm	**L** inches mm	**M** inches mm	**N** inches mm	**S** inches mm	**T** inches mm	**U** inches mm	**V** inches mm	**ISO 5211/ MSS SP-101 Flange Designation**
2 DN50	2.375 60.3	9.13 232	0.44 11	4.02 102	1.06 27	0.88 22	5.75 146	6.75 171	3.50 89	7.00 178	F10/FA10
3 DN80	3.500 88.9	10.50 267	0.44 11	4.02 102	1.06 27	0.88 22	6.50 165	7.38 187	3.50 89	7.00 178	F10/FA10
4 DN100	4.500 114.3	12.38 314	0.56 14	4.92 125	1.19 30	1.06 27	7.13 181	8.38 213	4.50 114	9.00 228	F12/FA12
6 DN150	6.625 168.3	15.75 400	0.69 17	5.51 140	1.56 40	1.44 36	9.00 229	10.50 267	6.00 150	11.88 300	F14/FA14

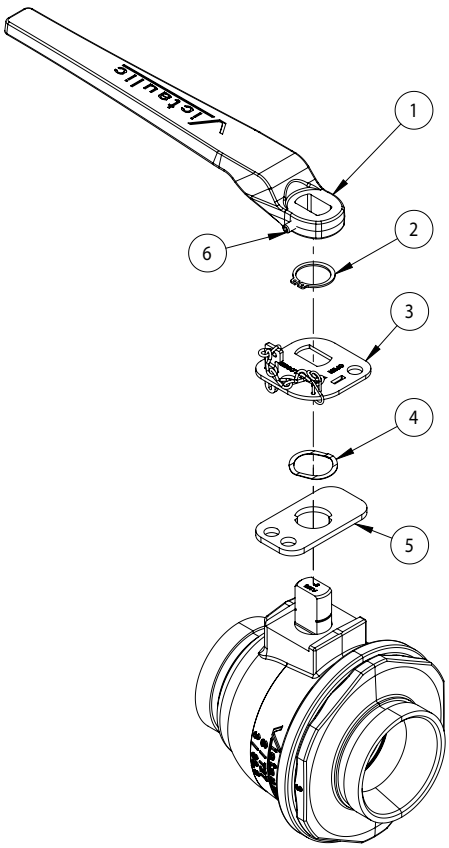
⚠ WARNING

- **Read and understand all instructions before attempting to install any Victaulic accessory kits.**
- **THE PUMP SHALL BE SHUT OFF TO PREVENT FLOW FROM PASSING THROUGH THE VALVE DURING THE FOLLOWING PROCEDURES.**

Failure to follow these instructions could result in death or serious personal injury and property damage.

The following instructions cover removal of a handle in preparation for installation of a Series 727 Ball Valve Actuator Bracket Kit. Removal of the handle assembly can be performed without removing the valve from the piping system. **THE PUMP SHALL BE SHUT OFF** to prevent flow from passing through the valve during the following procedures.

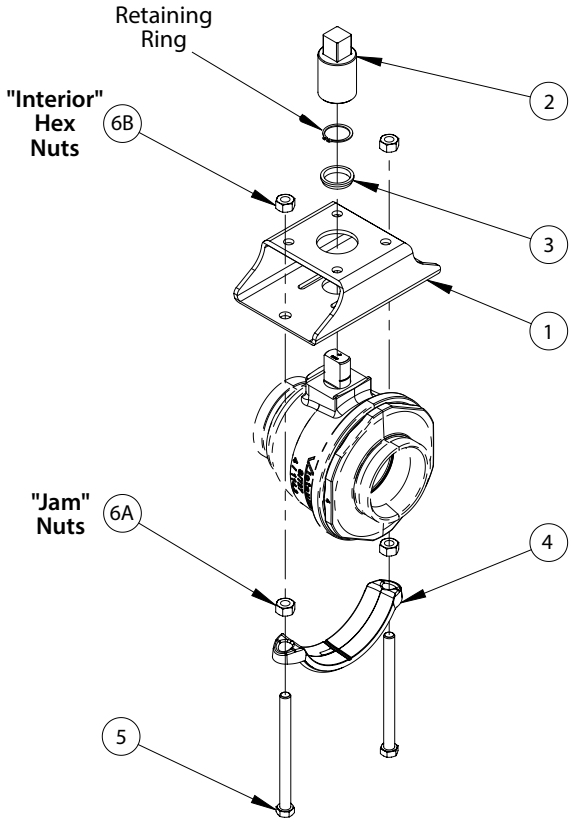
EXPLODED VIEW OF HANDLE ASSEMBLY



3-inch/DN80
Valve Size Shown

Item	Qty.	Description
1	1	Handle
2	1	Retaining Ring
3	1	Handle Plate
4	1	Single-Turn Wave Spring
5	2	Lock Plate
6	1	Handle Set Screw

EXPLODED VIEW OF ACTUATOR BRACKET KIT



3-inch/DN80
Valve Size Shown

Item	Qty.	Description
1	1	Gear Operator Mounting Bracket
2	1	Actuation Socket
3	1	Alignment Bushing
4	1	Saddle Strap
5	2	Hex-Head Bolt (M12)
6	4	Hex Nut (M12)

Items 1-6 are provided with the actuator bracket kit

HANDLE ASSEMBLY REMOVAL

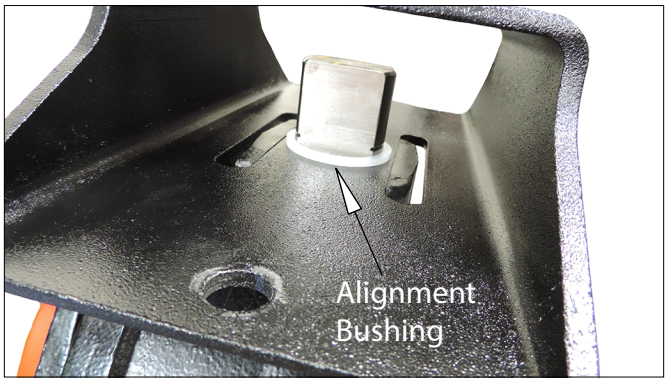
VERIFY THAT THE PUMP IS SHUT OFF TO PREVENT FLOW FROM PASSING THROUGH THE VALVE.

1. Note the current position of the valve (open or closed). This position is required for mounting the gear operator to the bracket.
2. Loosen the handle set screw (Item 6).
3. Remove items 1-5 from the ball valve as shown. Keep the retaining ring (Item 2) for assembly of actuator bracket kit on the following page.

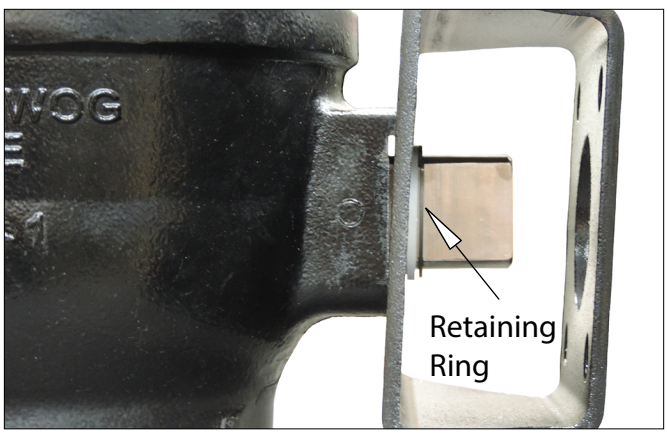
ACTUATOR BRACKET KIT INSTALLATION

1. Place the gear operator mounting bracket (Item 1) onto the valve body.

2. Place the alignment bushing (Item 3) into the gear operator mounting bracket and over the stem of the ball valve.



3. Place the retaining ring (Item 2) retained during “Handle Assembly Removal” on the previous page over the stem of the ball valve.



4a. Insert a hex-head bolt (Item 5) into each hole in the saddle strap (Item 4).

4b. Thread a hex nut (Item 6A) all the way down onto each hex head bolt (Item 5). These hex nuts are considered the “jam” nuts.

5. Place the saddle strap on the side opposite the stem and insert a hex head bolt (Item 5) into each hole in the gear operator mounting bracket (Item 1). **Note:** Saddle strap orientation must be as shown with the valve seam, saddle strap groove, and the Victaulic logo positioned as shown.

6. Place a hex nut (Item 6B) onto each of the hex head bolts (Item 5). These hex nuts are considered the “interior” nuts.

Continued on the following page

Ball Valve Actuator Bracket Kit Instructions

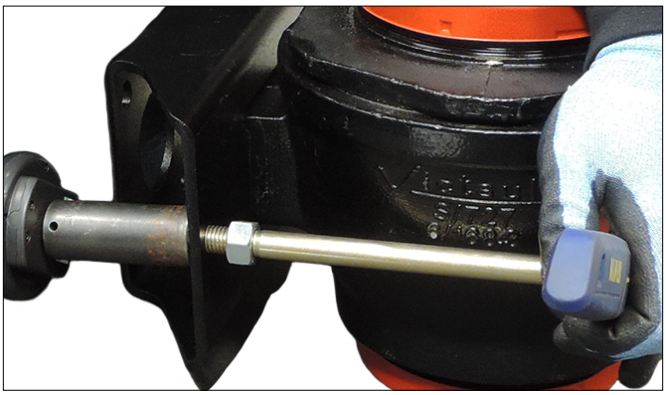
SERIES 727

⚠ CAUTION

- **DO NOT use impact tools for tightening hardware.**
- **Tighten hardware evenly by alternating sides.**
- **DO NOT exceed the torque values specified in the table below for the applicable hardware size.**

Failure to follow these instructions could cause deformation of the bracket.

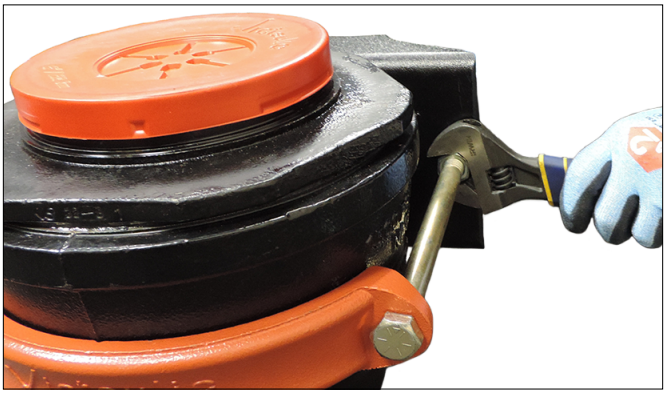
7. Using a wrench, tighten the two "interior" hex nuts evenly by alternating sides just until contact with the gear operator mounting bracket (Item 1) occurs, then apply torque to these "interior" hex nuts in accordance with the "Torque Requirements" table below.



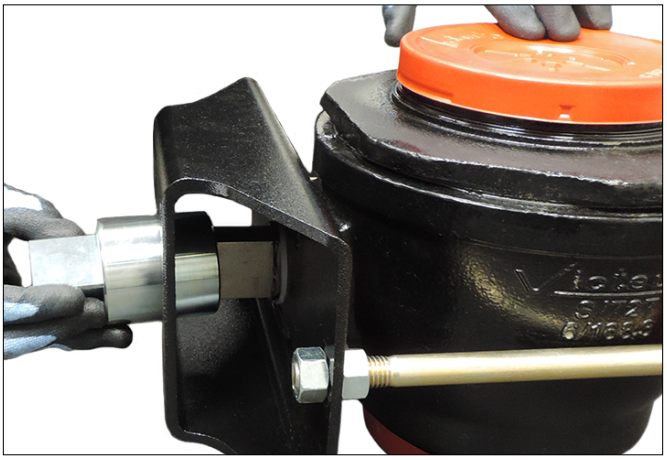
TORQUE REQUIREMENTS FOR "INTERIOR" HEX NUTS

Valve Size inches/DN	Maximum Torque
2 DN50	40 ft-lbs 54 N•m
3 DN80	40 ft-lbs 54 N•m
4 DN100	50 ft-lbs 68 N•m
6 DN150	20 ft-lbs 27 N•m

8. Tighten the two "jam" nuts finger tight until contact with the channel occurs. Then tighten the two "jam" nuts with a wrench until resistance is felt (approximately ¼ to ½ turn). Once the "jam" nuts are secure, verify that the torque of the "interior" hex nuts has not been affected. If torque has been affected, repeat step 7.



9. Place the actuation socket (Item 2) over the stem of the ball valve.



MOUNTING THE GEAR OPERATOR TO THE BRACKET

This procedure applies to a Victaulic-supplied gear operator. For other gear operators, refer to the manufacturer's instructions for mounting requirements.

⚠ WARNING

- **Read and understand the manufacturer's instructions for mounting requirements.**
- **DO NOT USE THE GEAR OPERATOR MOUNTING BRACKET AS A LIFTING POINT.**

Failure to follow these instructions could result in death or serious personal injury and property damage.

1. Place the gear operator in the same open or closed position noted in Step 1 of the "Handle Assembly Removal" section.
2. Place the gear operator assembly onto the gear operator mounting bracket. Insert four hex-head screws with lock washers into the holes in the gear operator mounting bracket and into the gear operator assembly.
3. Using a wrench, tighten the four hex-head screws evenly until the lock washers become flattened.
4. Turn the handle of the gear operator to verify proper valve operation.