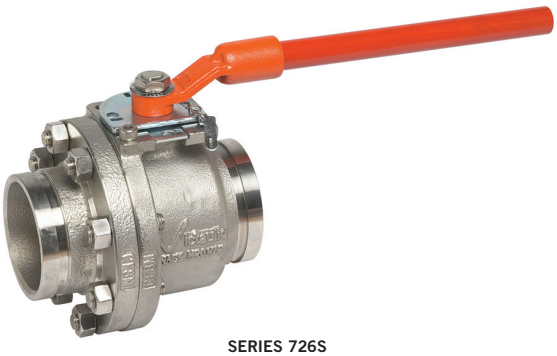
Victaulic® Ball Valves

Series 726 Ball Valve
Series 726S Stainless Steel Ball Valve

SERIES 726



SERIES 726S

⚠WARNING

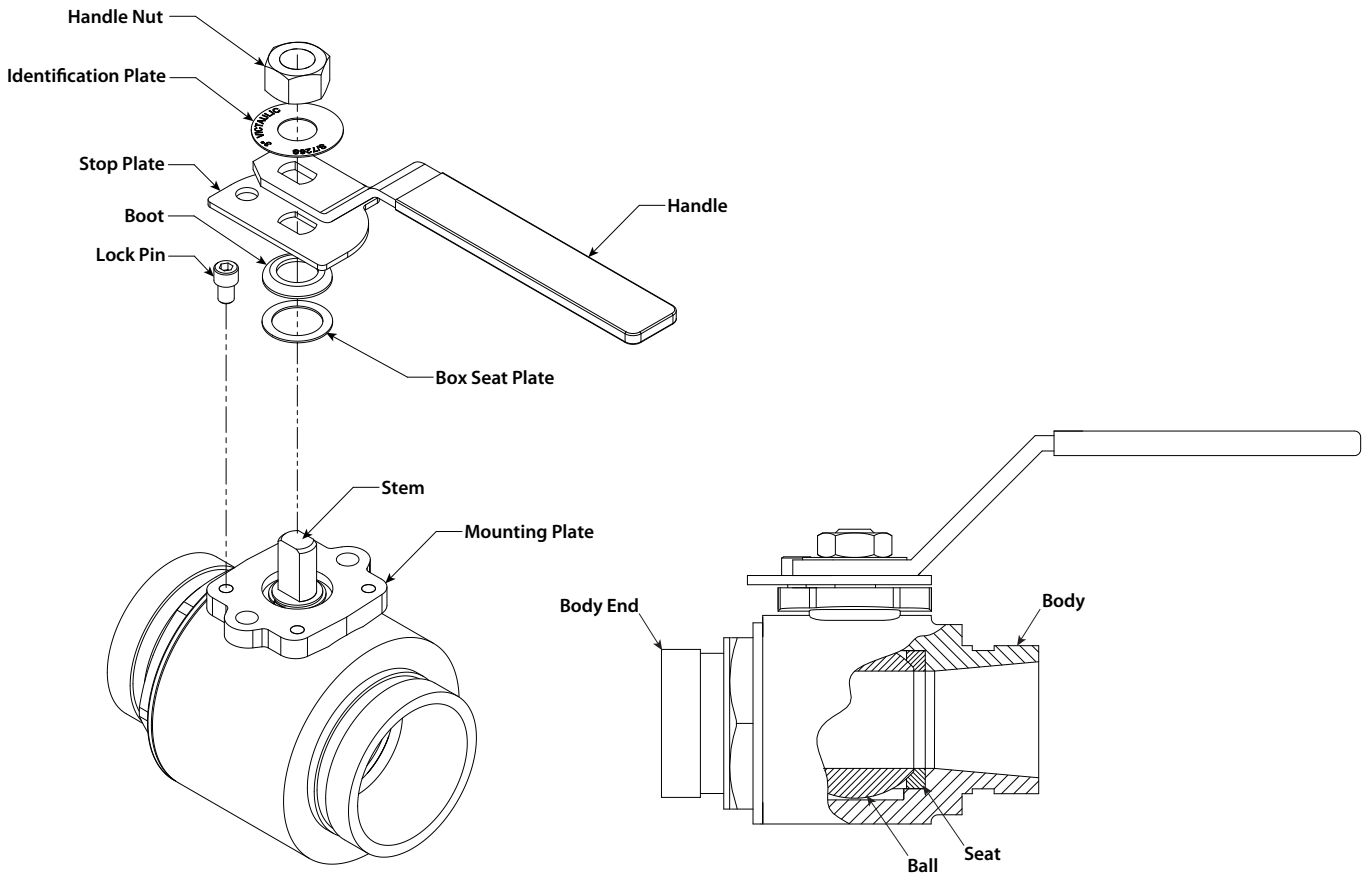
- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Confirm that any equipment, 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.

BALL VALVE COMPONENTS (HANDLE-OPERATED VERSION SHOWN)

NOTICE

- **Drawings and/or pictures in this manual may be exaggerated for clarity.**
- **The product, along with these installation and maintenance instructions, contains trademarks, copyrights, and/or patented features that are the exclusive property of Victaulic.**



IMPORTANT INFORMATION

⚠WARNING

- **Always verify that mating components are prepared to Victaulic Original Groove System (OGS) specifications before installation of a Victaulic Series 726 or 726S.**
- **DO NOT loosen or tighten hardware when the Series 726 or 726S is pressurized.**

Failure to follow these instructions will cause improper assembly and joint failure, which may result in death or serious personal injury and property damage

Original Groove System (OGS) Groove Profile

Series 726 and 726S Ball Valves are designed with grooved ends for use with Victaulic grooved pipe couplings, and they are designed for use **ONLY** with mating components that are prepared to Victaulic Original Groove System (OGS) specifications. Refer to the I-100 Field Installation Handbook for instructions on how to properly install the Series 726 and 726S with the applicable coupling or flange adapter. Victaulic publication 25.01 (OGS Groove Specifications) and the I-100 Field Installation Handbook can be downloaded at victaulic.com.

NOTICE

- **To prevent Victaulic Ball Valves from rotating in the system, Victaulic recommends installing the valve with at least one Victaulic Rigid Coupling. If two Victaulic Flexible Couplings are used, additional support may be required to eliminate joint deflection or valve rotation at the coupling connection to the piping system.**

- **Series 726 and 726S Ball Valves are designed for use in full-open or shut-off service. VICTAULIC SERIES 726 AND 726S BALL VALVES ARE NOT DESIGNED FOR THROTTLING SERVICES.**
- **Series 726 and 726S Ball Valves can be installed in either the horizontal or vertical orientations.**
- Series 726 and 726S Ball Valves and connected piping shall be supported properly to prevent the joints from being overloaded. Hanger spacing shall comply with the applicable "Rigid System Hanger Spacing" section of the I-100 Field Installation Handbook.
- DO NOT use a Series 726 or 726S Ball Valve as a support for the piping system.
- Welding to Series 726 or 726S Ball Valves is not permitted and will void the Victaulic warranty.
- When directly connecting a Victaulic End Cap to a Victaulic Ball Valve, use only a tapped end cap with a relief valve that can be opened to verify if the system is depressurized. If the Victaulic Ball Valve is opened and then closed unknowingly while the end cap is attached, the space between the ball and end cap will be filled and pressurized. A sudden release of energy can occur if the end cap is removed while the space behind it is pressurized. **PRESSURE SHALL BE VENTED THROUGH THE END CAP'S RELIEF VALVE BEFORE ATTEMPTING TO REMOVE THE CAP. Always reference the I-ENDCAP instructions, which can be downloaded at victaulic.com.**

⚠DANGER

- **When directly connecting a Victaulic End Cap to a Victaulic Ball Valve, use only a tapped end cap with a relief valve that can be opened to verify if the system is depressurized.**
- **Pressure shall be vented through the end cap's relief valve before attempting to remove the cap.**

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

Handling

- The valve shall remain in the "OPEN" position during handling.
- Verify that proper lifting equipment is available for handling larger, heavier valve sizes. Lift the valve by placing straps around the body. DO NOT lift or suspend the valve by the handle plate, lock plate, or handle.

Storage

- Victaulic strongly recommends indoor storage of the valve. If outdoor storage is required, the valve shall be stored in the original shipping container and then covered completely with a weatherproof tarp.
- The valve shall remain in the "OPEN" position during storage. The valve shall not be stored in a partially-open position.
- The valve shall be stored with the stem in the vertical "UP" position (handwheel or top of handle pointing upward).

Maintenance

- Regular maintenance is not required for Series 726 or 726S Ball Valves. However, the valve shall be cycled at least once per month or in accordance with jobsite requirements.

SHIPPING, HANDLING, AND STORAGE OF STAINLESS STEEL PRODUCTS

⚠WARNING

- **The system designer is responsible for verifying suitability of mating component materials with the intended fluid media and system materials.**
- **Valve bodies and other wetted components shall be compatible with the material flowing through the piping system. Refer to the current Victaulic product publication 08.23 (for Series 726) or 17.22 (for Series 726S), or contact Victaulic for details.**
- **The effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on mating component materials shall be evaluated to confirm system life will be acceptable for the intended service.**

Failure to follow these instructions could cause product failure, resulting in death or serious personal injury and property damage.

These recommendations are provided as a general guideline to help prevent surface contamination of stainless steel products during shipping, handling, and storage.

Shipping

1. Stainless steel products shall be shipped with new, non-contaminating and non-damaging packing materials.
2. If markings are required directly on stainless steel products, the marking shall have a water-soluble chloride content less than 50 parts per million (ppm). The chloride content shall be measured upon drying of the marking.
3. Identification plates and connectors, if required, shall be constructed from non-contaminating materials.
4. Stainless steel products shall be shipped separately from iron or carbon steel products. If stainless steel and/or iron or carbon steel products shall be shipped together, care shall be taken to separate the dissimilar materials completely by using a non-contaminating buffer.

Handling and Storage

1. Stainless steel products shall be handled only with non-contaminating apparatus (i.e. nylon straps or apparatus protected with a non-contaminating buffer material).
2. If carbon steel straps are used, a buffer material shall be placed between the strap and the stainless steel product. Common non-contaminating buffer materials include wood, cardboard, paper, canvas, and other stainless steel material.
3. Stainless steel products shall be stocked on non-contaminating racks or skids.
4. Stainless steel products shall be stocked in an area separate from iron or carbon steel products.
5. Do no climb on or stand on stainless steel products.
6. In storage areas where salt is present in the air, stainless steel products shall be covered with a plastic tarp.

HANDLE TO GEAR OPERATOR CONVERSION INSTRUCTIONS

Items Required for Handle to Gear Operator Conversion

Qty.	Description	Valve Size – inches/DN					
		1½ DN40	2 DN50	2½ DN65	3 DN80	4 DN100	6 DN150
		Size of Hardware (Metric)					
1	Gear Operator	–	–	–	–	–	–
1	Drive Hub	–	–	–	–	–	–
1	Stem Adapter	–	–	–	–	–	–
1	Bracket	–	–	–	–	–	–
1	Flat Washer	M6	M6	M8	M8	M10	M10
3	Lock Washer‡	M6	M6	M8	M8	M10	M10
4	Lock Washer§	M8	M8	M8	M8	M8	M8
4	Hex-Head Screw (for mounting bracket to valve)	M6 x 1.00 (16 mm Long)	M6 x 1.00 (16 mm Long)	M8 x 1.25 (16 mm Long)	M8 x 1.25 (16 mm Long)	M10 x 1.50 (16 mm Long)	M10 x 1.50 (16 mm Long)
4	Hex-Head Screw (for mounting gear operator to bracket)	M8 x 1.25 (16 mm Long)	M8 x 1.25 (16 mm Long)	M8 x 1.25 (16 mm Long)	M8 x 1.25 (16 mm Long)	M8 x 1.25 (16 mm Long)	M8 x 1.25 (16 mm Long)

‡ Lock washers required for installing the bracket to the mounting plate of the valve.
§ Lock washers required for installing the gear operator to the bracket.

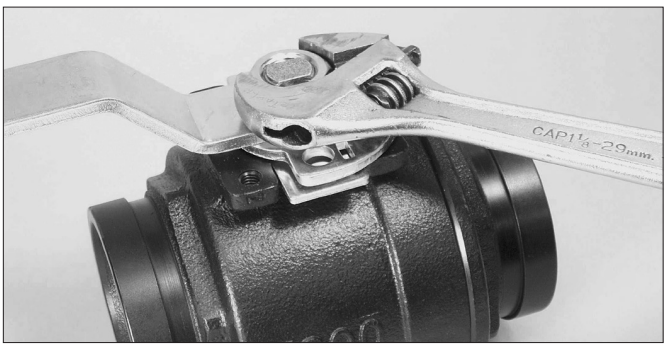
Handle Removal

⚠WARNING

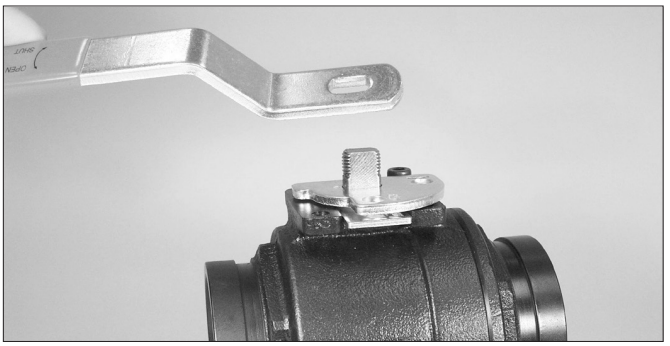
- **Read and understand all instructions before attempting to remove the handle.**
- **Place the valve in the fully "SHUT" position to prevent flow from passing through the valve during removal of the handle.**

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

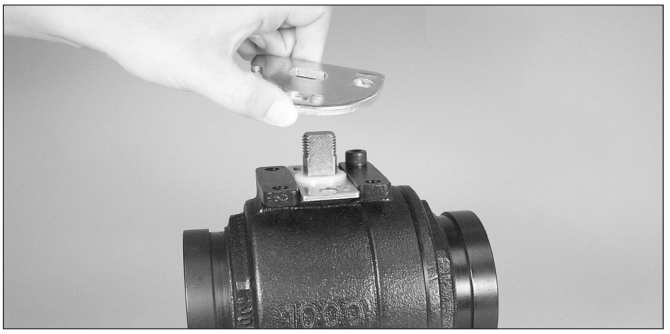
Removal of the handle can be performed without removing the valve from the piping system. Place the valve in the fully "SHUT" position to prevent flow from passing through the valve during removal of the handle.



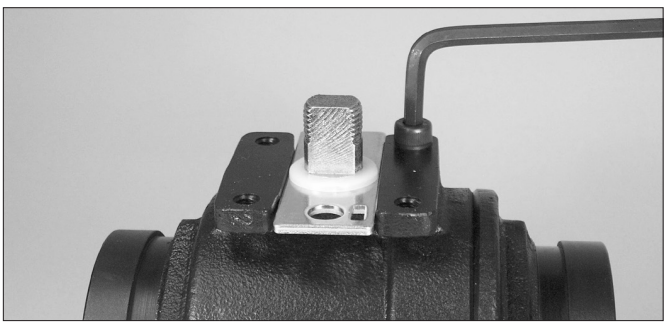
1. Remove the handle nut from the handle.



2. Remove the identification plate and the handle. **NOTE:** Keep the identification plate for assembly onto the gear operator.



3. Remove the stop plate from the valve.



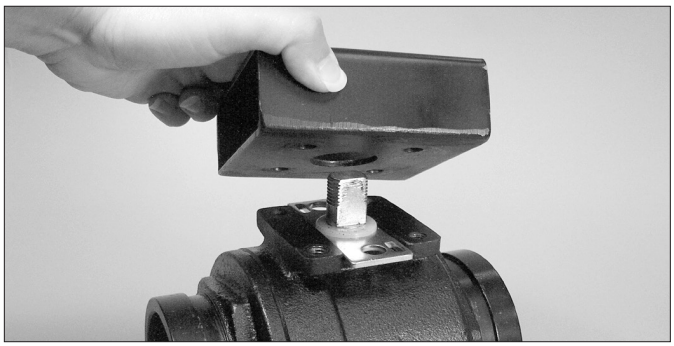
4. Using a hex key wrench, remove the lock pin from the mounting plate of the valve.

⚠ CAUTION

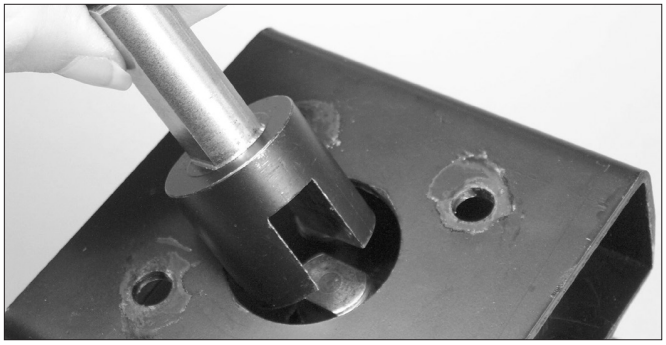
- **DO NOT attempt to operate a Series 726 or 726S without a handle or gear operator installed.**

Failure to follow this instruction will cause improper valve operation and damage to the stem.

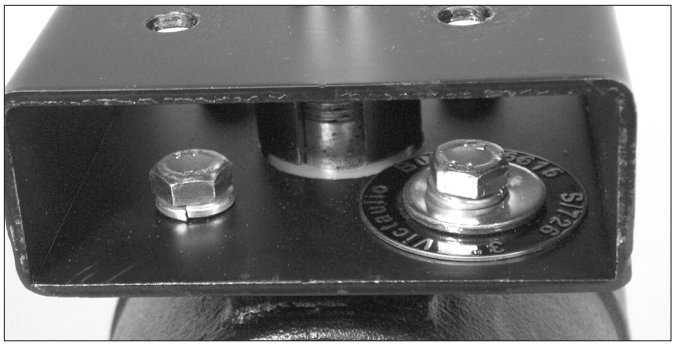
Installation of the Gear Operator Assembly



1. Install the bracket onto the valve body by aligning the holes of the bracket with the holes in the mounting plate of the valve.

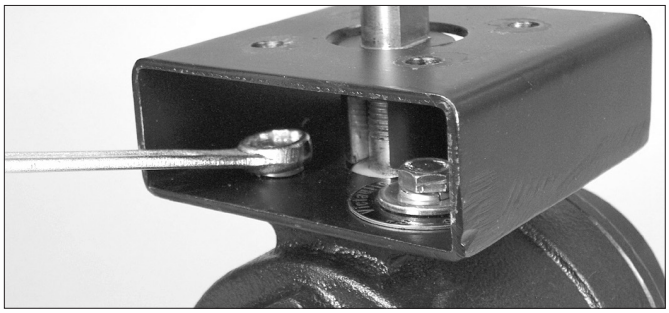


2. Install the stem adapter by positioning the flats of the stem adapter over the flats of the valve stem, as shown above.



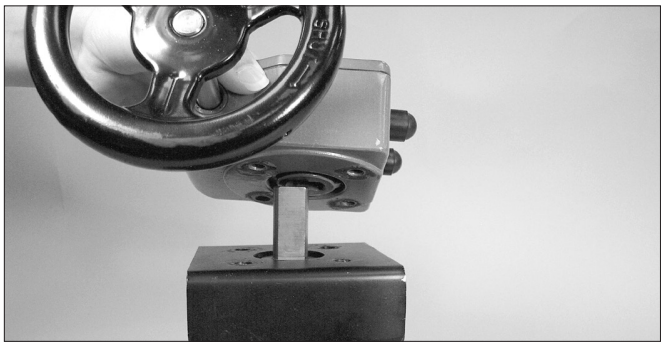
3a. Place a lock washer onto a hex-head screw, and hand-tighten the screw into one of the holes in the bracket and the mounting plate of the valve. Repeat this procedure two more times. **NOTE:** Refer to the "Items Required for Handle to Gear Operator Conversion" table on the previous page for the proper hex-head screw size and lock washer size.

3b. On the fourth hex-head screw, install a flat washer, then the identification plate (with lettering facing toward the hex head of the screw). Hand-tighten this hex-head screw into the final hole in the bracket and mounting plate of the valve. Refer to the above photo.

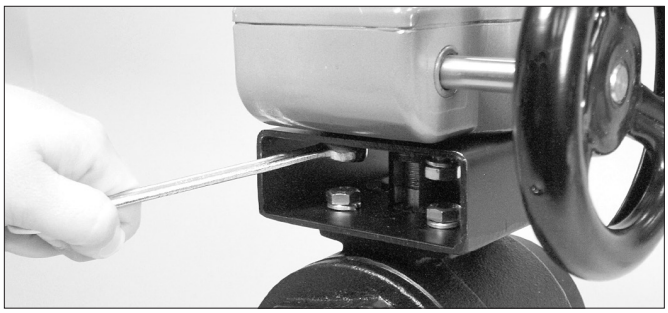


3c. Tighten the four hex-head screws until the lock washers are flattened.

4. Insert the drive hub into the gear operator by aligning the key of the drive hub with the keyway in the gear operator, as shown above.



5. While supporting the drive hub, install the gear operator onto the stem adapter by positioning the flats of the drive hub over the flats of the stem adapter. Verify that the indicating arrow on top of the gear operator indicates the correct valve position.



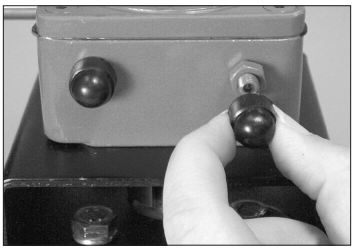
6a. Place a lock washer onto each of the four hex-head screws and hand-tighten the screws into the holes in the bracket and the gear operator. **NOTE:** Refer to the "Items Required for Handle to Gear Operator Conversion" table on the previous page for the proper hex-head screw size and lock washer size.

6b. Tighten the four hex-head screws until the lock washers are flattened.

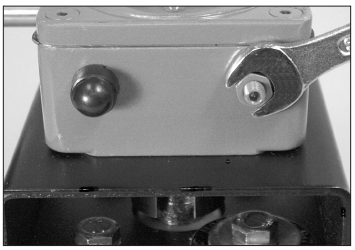
7. Verify proper operation of the gear operator by turning the handwheel to fully "OPEN" and fully "SHUT" the valve.

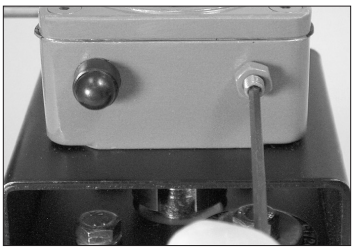
Adjusting and Setting the "SHUT" Travel Limit Stops of the Gear Operator

- Adjustment of the travel limit stops can be performed while the system is operational. **NOTE:** Cycling of the valve to test travel limit stop adjustments may affect downstream equipment. Refer to the instructions on this and the following page for detailed instructions on how to adjust the travel limit stops.



1. Remove the dust cap from the right side of the gear operator.



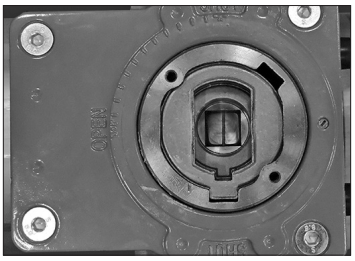


2a. Loosen the hex lock nut (counterclockwise) located on the right side of the gear operator.

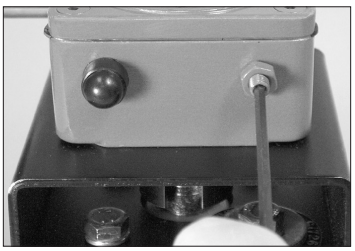
2b. Using a hex key wrench, loosen the internal set screw approximately three turns (counterclockwise).

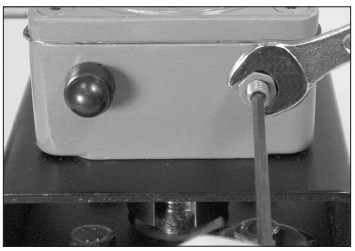
NOTICE

- **System pressure upstream of the valve may increase while the valve is in the fully "SHUT" position.**
- **Flow downstream of the valve will be interrupted while the valve is in the fully "SHUT" position.**



3. Verify that the valve is in the fully "SHUT" position. The fully "SHUT" position can be verified by removing the indicator cap from the top of the gear operator and checking the position indicator on top of the stem, as shown to the left.





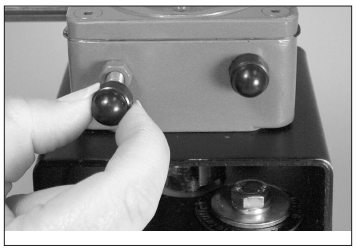
4a. Using a hex key wrench, tighten the internal set screw (clockwise) until it contacts the internal quadrant gear.

4b. While holding the internal set screw in position with the hex key wrench, tighten the hex lock nut (clockwise).

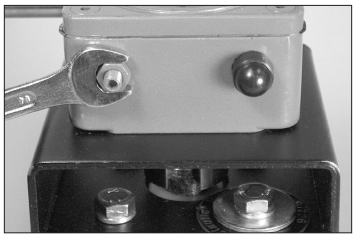
5. Verify proper operation of the gear operator by turning the handwheel. Repeat the prior steps of this procedure, if necessary.

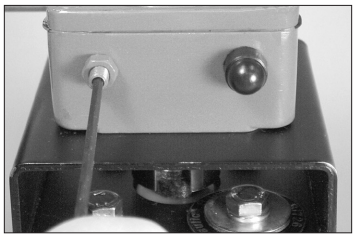
6. Replace the dust cap, and follow the "OPEN" travel limit stop adjustment procedure on the following page.

Adjusting and Setting the "OPEN" Travel Limit Stops of the Gear Operator



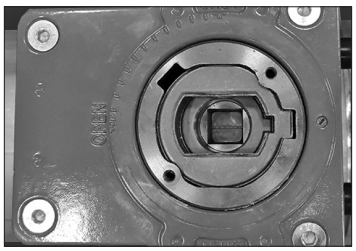
1. Remove the dust cap from the left side of the gear operator.



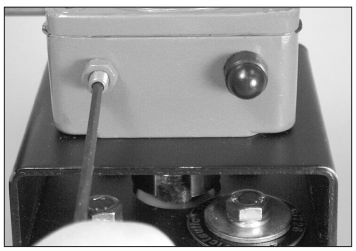


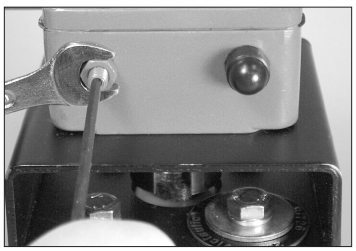
2a. Loosen the hex lock nut (counterclockwise) located on the left side of the gear operator.

2b. Using a hex key wrench, loosen the internal set screw approximately three turns (counterclockwise).



3. Turn the handwheel counter-clockwise. Verify that the valve is in the fully "OPEN" position by checking the position indicator on top of the stem, as shown to the left. The position indicator on top of the stem should be 90° from the correctly adjusted "SHUT" position.





4a. Using a hex key wrench, tighten the internal set screw (clockwise) until it contacts the internal quadrant gear.

4b. While holding the internal set screw in position with the hex key wrench, tighten the hex lock nut (clockwise).

5. Verify proper operation of the gear operator by turning the handwheel. Repeat the prior steps of this procedure, if necessary.

6. Replace the dust cap and indicator cap.

MEMORY STOP KIT INSTALLATION FOR GEAR-OPERATED VALVES

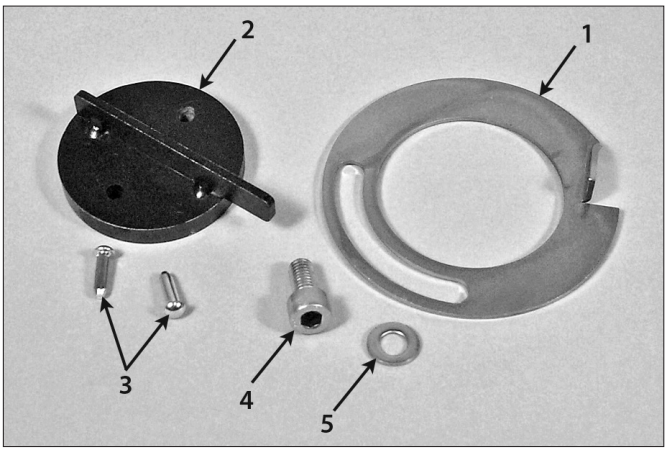
⚠WARNING

- **Read and understand all instructions before attempting to install the memory stop kit.**
- **Place the valve in the fully "SHUT" position to prevent flow from passing through the valve during kit installation.**

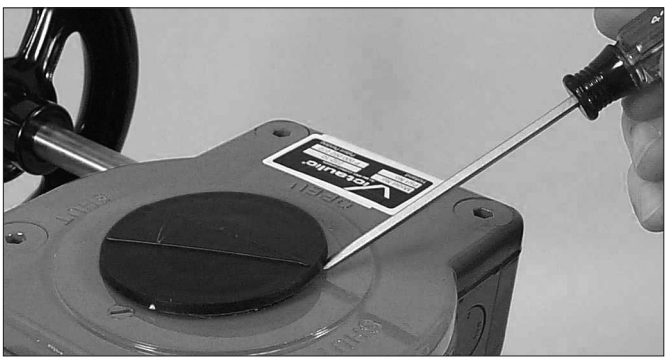
Failure to follow these instructions could result in death or serious personal injury and property damage.

The memory stop kit can be installed without removing the valve from the piping system. Place the valve in the fully "SHUT" position to prevent flow from passing through the valve during installation of the kit.

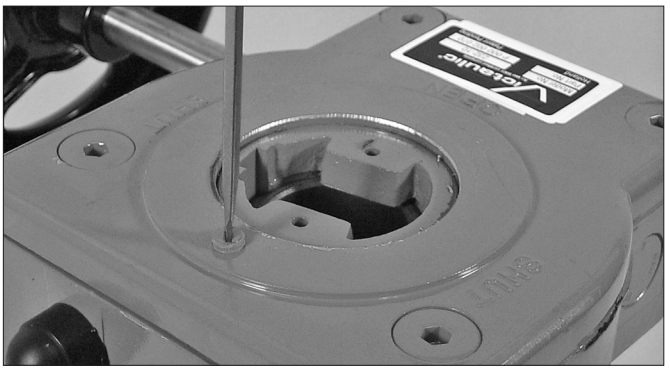
Contents of Memory Stop Kit



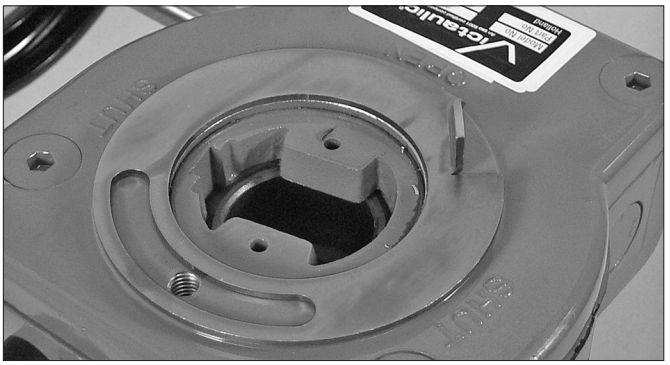
Item	Qty.	Description
1	1	Memory Stop
2	1	Position Indicator
3	2	Drive Pin
4	1	Bolt
5	1	Flat Washer



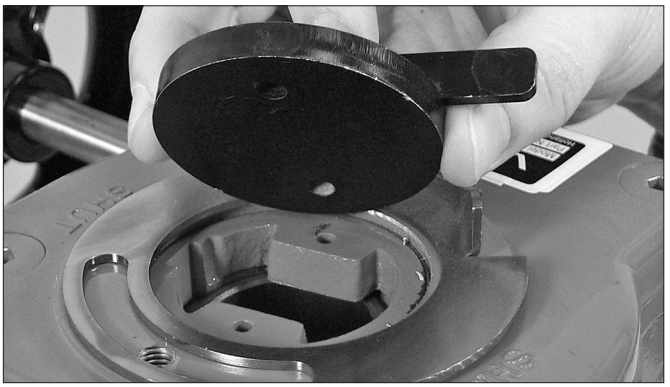
1. Pry off the plastic position-indicator cap.



2. Remove the set screw from the top of the gear operator, as shown above.



3. Install the memory stop onto the gear operator. Verify that the tapped hole is centered in the slot of the memory stop, as shown above.

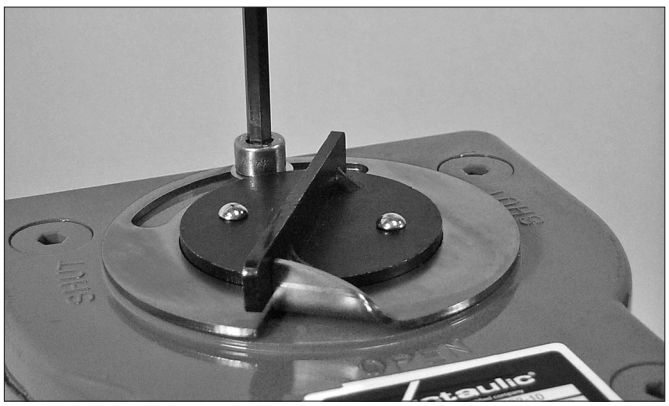


4. Install the position indicator onto the gear operator. Verify that the holes in the memory stop align with the holes in the gear operator.

5. Insert the drive pins into the holes in the position indicator and gear operator. Tap the drive pins into the gear operator.

6. Install the bolt with the flat washer into the tapped hole in the gear operator. Do not tighten the bolt completely at this time. Turn the handwheel to place the valve in the desired position (clockwise to shut and counterclockwise to open).

7. Slide the flat, raised portion of the memory stop toward the position indicator until they contact.



8. Tighten the bolt completely to maintain the position of the memory stop.

NOTE: To re-adjust the memory stop, loosen the bolt for the memory stop. Turn the handwheel to place the valve in the desired position (clockwise to shut and counterclockwise to open). Follow steps 7 and 8 on this page.

EXTENSION KIT FOR HANDLE-OPERATED VALVES

⚠WARNING

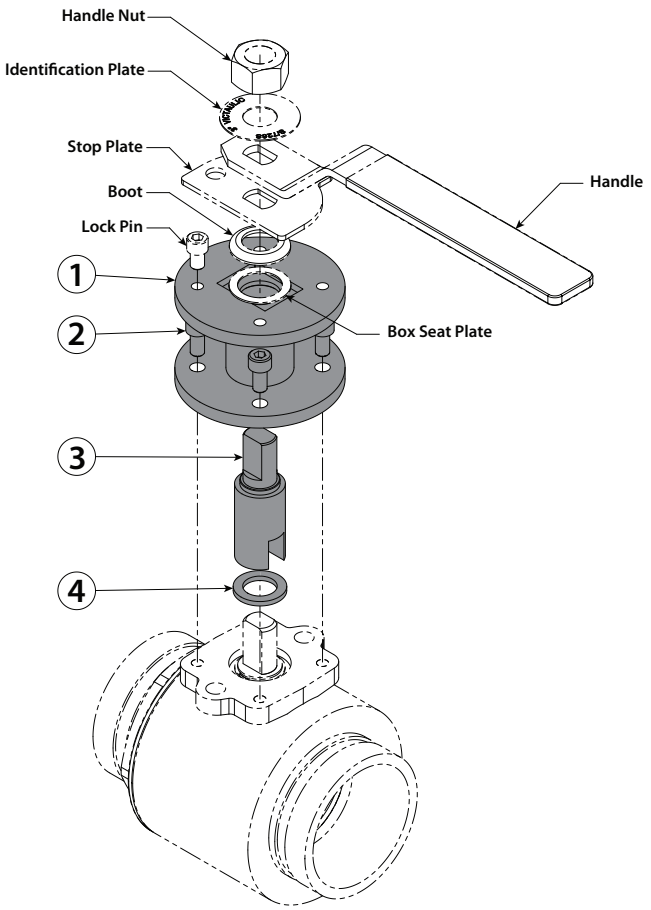
- **Read and understand all instructions before attempting to install the extension kit.**
- **Place the valve in the fully "SHUT" position to prevent flow from passing through the valve during kit installation.**

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

Removal of the handle can be performed without removing the valve from the piping system. Place the valve in the fully "SHUT" position to prevent flow from passing through the valve during removal of the handle.

Contents of Extension Kit for Handle-Operated Valves

Item	Qty.	Description
1	1	Extension Sleeve
2	4	Hex Socket Head Cap Screw
3	1	Stem Extension
4	1	Stem Spacer



*Shaded areas identify components that are provided with the kit.

1. Remove the handle nut, identification plate, handle, stop plate, lock pin, boot, and box seat plate from the mounting plate of the valve, as indicated in the drawing above.
2. Install the stem spacer (Item 4) over the stem of the valve.
3. Install the stem extension (Item 3) over the stem of the valve.
4. Install the extension sleeve (Item 1) over the stem extension (Item 3). Align the holes of the extension sleeve with the holes in the mounting plate of the valve.
5. Insert a hex socket head cap screw (Item 2) into each lower hole in the extension sleeve (Item 1) and into the mounting plate of the valve.
6. Install the items that were removed in Step 1 in the orientation indicated in the drawing above. Tighten the handle nut completely to secure the handle to the stem extension.

Victaulic® Ball Valves

Series 726 Ball Valve
Series 726S Stainless Steel Ball Valve

I-726/726S 19478 REV A UPDATED 12/2022 Z000726MNT