



Valves, Automation & Controls

IM-SRH-1

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Spring Return Handle IOM Manual

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INSTALLATION, OPERATIONS AND MAINTENANCE FOR SHARPE® SPRING RETURN HANDLE



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It is the responsibility of the customer to determine the suitability of Sharpe® Valves products in their particular application.

INSTALLATION

Sharpe[®] Spring Return Handles have been designed and engineered to provide long lasting and trouble-free service when used in accordance with the instructions and specifications herein.

The angle of rotation is set to 90 degrees and is not adjustable.

• Safety Precautions

It is suggested that the following safety precautions should be taken when handling valves:

1. Always wear safety glasses
2. Always wear gloves

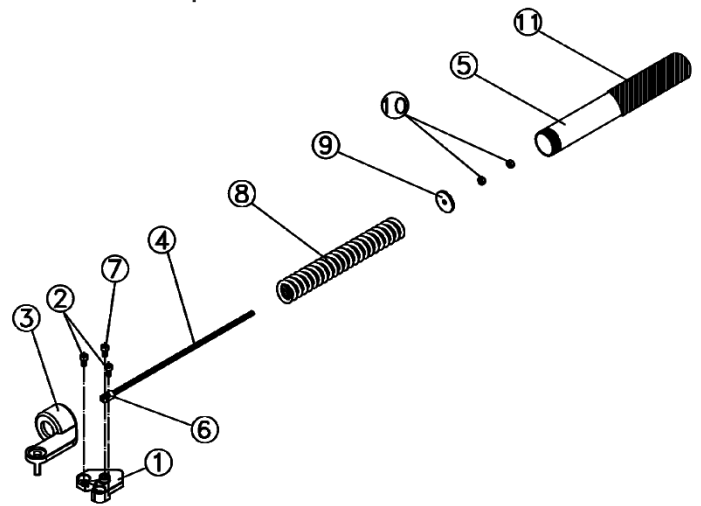
Ensure that all applicable industry specifications and standards for safe installation are followed. Failure to correctly install this product may result in injuries or property damage.

For any questions please contact Sharpe[®] Valves.

• Components

- Note: Some valve series require additional brackets and couplers that are not shown below. For further information contact Sharpe[®] Valves.

NO.	PART NAME	QUANTITY
1	HANDLE GLAND	1
2	SOCKET SCREWS	2
3	HANDLE	1
4	THREADED ROD	1
5	HANDLE TUBE	1
6	BINDER NUT	1
7	MACHINE SCREW	1
8	SPRING COIL	1
9	FLAT WASHER	1
10	HEX NUTS	2
11	HANDLE SLEEVE	1



• Installation and Assembly Procedure

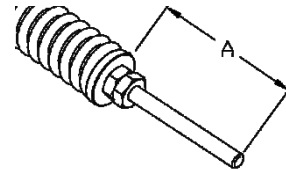
It is important to first determine if the Spring Return Handle (SRH) is required to spring open or closed.

1. Remove the factory standard handle (where applicable) by loosening and removing the handle nut on the top side of the handle and remove any additional lock washers under the nut.
 - a. Be sure to set the nut and any washers aside as they may be required for later installation of the Spring Return Handle.
 - b. It is important to ensure that none of the other components on the stem under the handle get removed or fall off. This includes any stem nut securing devices. Failure to ensure these components do not come off can result in the stem nut coming loose and the valve leaking.
2. Firmly attach handle gland (Item 1) to the valve using the two socket head cap screws provided (Item 2).
 - a. For some valve series a separate adaptor bracket is required to be attached to the valve mounting pad between the mounting pad and handle gland interface.
3. Attach handle (Item 3) over the stem and secure it using the handle nut. If no additional handle nut is provided you will use the handle nut and lock washers removed in step one.
 - a. Make sure the stop tabs are correctly positioned for the require spring back position (open or closed).
 - b. For some valve series a separate coupler is required between the valve stem and handle interface.
4. Insert the threaded rod (Item 4) binder nut (Item 6) end first through the handle opening and secure it to the handle glad (Item 1) using the machine screw (Item 7) through the binder nut (Item 6) into the center threaded hole in the handle gland (Item 1).
5. Apply a high quality anti seize lubricant to the threaded rod (Item 4).
6. Slide the spring coil (Item 8) over the threaded rod (Item 4).
7. Slide the flat washer (Item 9) onto the threaded rod (Item 4).

8. Thread one of the hex nuts (Item 10) onto the threaded rod (Item 4) and thread it down to the specified distance for the valve size the handle is being attached to in the table below.

a.

Valve Size (in)	A (mm)	Torque (in/lbs)
¼ - ½	25-30	130
¾ - 1	30-35	250
1¼ - 2	40-45	400



- *Notes: 1) The values above are a guideline only; additional adjusting may be required to ensure proper operation of the Spring Return Handle.
2) Use caution when tightening the hex nut as the spring coil (Item 8) is under increasing pressure.

9. Thread the second hex nut (Item 10) up to the first hex nut and tighten the two together to prevent any accidental loosening of the nuts.
10. Slide the handle tube (Item 5) over the threaded rod (Item 4) and spring coil (Item 8) and fully thread it into the handle (Item 3).
11. Verify the handle operates freely and correctly by rotating it several times and making any adjustments required.

• Increasing the Spring Return Force

- With the handle still assembled to the valve remove the handle tube (Item 5) by fully unthreading it from the handle (Item 3).
- Slightly loosen the hex nut (Item 10) closest to the free end of the threaded rod (Item 4) to release any force that is on the first hex nut (Item 10).
- Tighten down the first hex nut (Item 10) 5mm and then thread the second hex nut (Item 10) down up to the first hex nut and tighten the two together to prevent any accidental loosening of the nuts.
 - Use caution when tightening the hex nuts as the spring coil (Item 8) is under increasing pressure.
- Slide the handle tube (Item 5) over the threaded rod (Item 4) and spring coil (Item 8) and fully thread it into the handle (Item 3).
- Check to see that the handle operates freely and correctly by rotating it several times making sure the handle rotates the complete 90 degrees to fully spring open or closed, depending on how it is set up, while on the valve.

6. If the handle still does not fully spring open or closed, depending on how it is set up, repeat steps 1-5 of the Increasing the Spring Return Force section until the valve can fully spring open or closed freely on its own.

MAINTENANCE

• General

After the Spring Return Handle and valve assembly is installed it is recommended that the operation of the Spring Return Handle be checked periodically to ensure it continues to operate correctly.

Parts from different suppliers should **NOT** be interchanged. Use only Sharpe[®] replacement parts.

IF THE SPRING RETURN HANDLE IS ALTERED IN ANY WAY, NO LIABILITY CAN BE ACCEPTED BY SHARPE[®] VALVES.

• Tools

No special tools are required for the maintenance and installation of Sharpe[®] Valves Spring Return Handle.