

## FIELD SERVICING OF QUALITY CONTROLS 2-WAY ROTOR VALVES

**IMPORTANT:** To assemble the same type of valve that is being serviced, it is necessary **before disassembly to:**

1. Record the position marks on the end of the rotor shaft.
2. Record the positions of the handle stops, if furnished on the cap.

**DISASSEMBLY:** Refer to the drawing for item description.

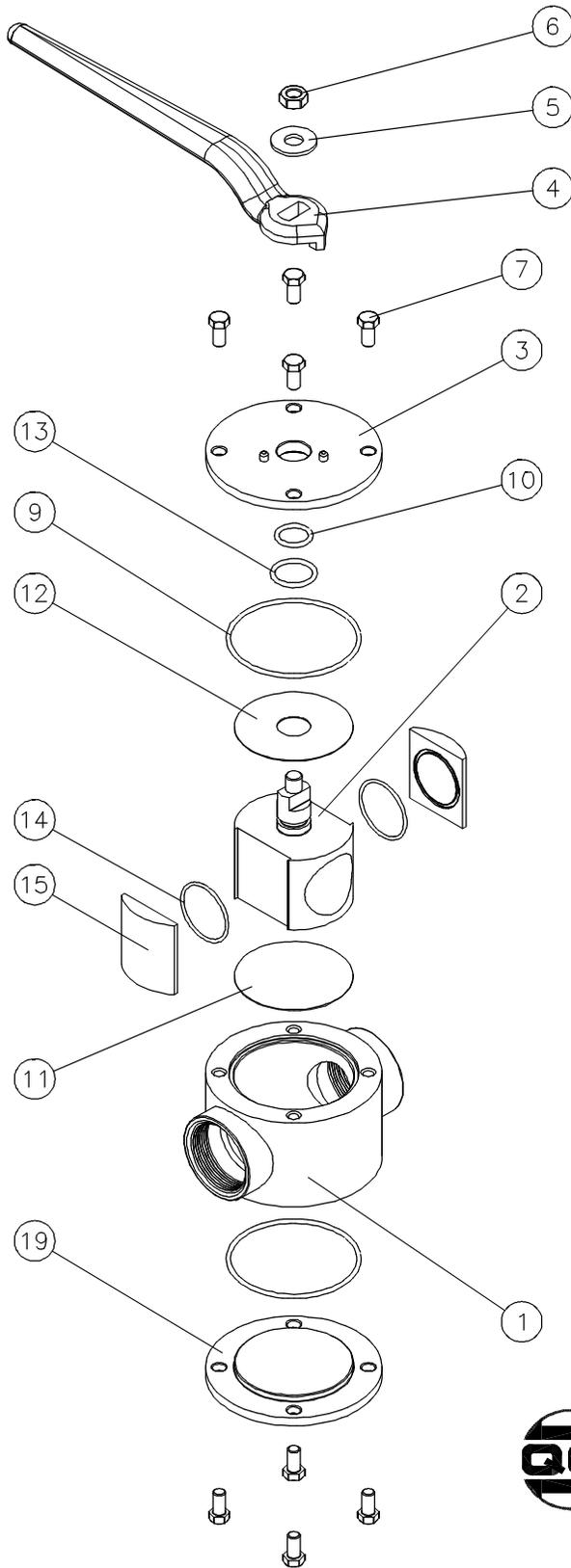
1. Remove the hex nut, handle washer and handle from the rotor shaft (Items 6, 5 and 4 from 2). Set aside for reassembly.
2. Remove the hex head bolts and the cap from the body (Items 7 and 3 from 1). The body o-ring (Item 9) may retard removal of the cap which should be rotated until free, **Do Not Pry**. Inspect cap for wear and damage and set aside for reassembly.
3. Remove the body o-ring, stem o-ring, cover o-ring and top rotor washer and discard (Items 9, 10, 13 and 12).
4. Remove the rotor and seals as a unit from the body (Items 2 and 15 from 1). **Important:** Because of the close tolerance, care must be taken to remove the rotor on its axis to prevent damage to the rotor and body. Rotating the handle with a lifting action will disassemble the valve.
5. Discard the seals (item 15) and inspect the rotor for wear and damage. Set aside for reassembly.
6. Remove the bottom rotor washer from the body (Item 11 from 1) and discard the washer (Item 11). Inspect the body for wear and damage.

**REASSEMBLY:** Refer to drawing for item description and have appropriate Repair Kit laid out.

**Note:** A small amount of silicone grease applied to each part before assembly facilitates assembly if allowed.

1. Assemble the bottom rotor washer from the repair kit into the body (Item 11 into 1)
2. Insert seal o-rings into seal groove (Items 14 into 15) and assemble the seals (Item 15) onto the appropriate surfaces of the rotor (Item 2). The solid seal(s) will assemble onto the unported flats of the rotor.
3. Assemble this rotor and seal assembly into the body (Item 15 on 2 into 1). **Important:** Because of the close tolerance, care must be taken to press the rotor on its axis to prevent damage to the rotor and body. Be sure that the rotor is bottomed in the body. **Rotate the rotor so that the position marks on the end of the rotor shaft are the same as recorded before disassembly.**
4. Assemble from the repair kit the top rotor washer and cover o-ring onto the shoulder of the rotor (Items 12 and 13 onto 2).
5. Assemble from the repair kit the stem o-ring and the body o-ring into their grooves into the rotor and body (Item 10 into 2 and 9 into 1).
6. Place the cap over the rotor shaft (Item 3 over 2). **Rotate the cover so that the positions of the handle stops, if furnished on the cap, are the same as recorded before disassembly.**
7. Assemble the hex head bolts through the cap and into the body (Items 7 into 1). Be sure that the body o-ring (Item 9) is in the proper position and tighten the hex head bolts.
8. Reassemble the handle, handle washer and the hex nut (Items 4, 5 and 6). Be sure that the handle is assembled so that the stop on the handle mates with the stops on the cap, if furnished.





1/4" THRU 2" THREADED VALVE  
2-WAY, ST STL, S-ROTOR

NO.	QTY.	DESCRIPTION
1	1	BODY
2	1	ROTOR
3	1	TOP COVER
4	1	HANDLE
5	1	HANDLE WASHER
6	1	HEX NUT
7	8	HEX HEAD BOLT
8	N/A	N/A
* 9	2	O-RING, BODY
* 10	1	O-RING, STEM
* 11	1	BOTTOM ROTOR WASHER
* 12	1	TOP ROTOR WASHER
* 13	1	O-RING, COVER
* 14	2	O-RING, SEAL
* 15	2	SEAL, SOLID
16	N/A	N/A
17	N/A	N/A
18	N/A	N/A
19	1	BOTTOM COVER

\* RECOMMENDED SPARE PARTS  
(VALVE REPAIR KIT)



**QUALITY CONTROLS, INC.**

200 TILTON ROAD  
NORTHFIELD, NEW HAMPSHIRE 03276  
[www.qcivalves.com](http://www.qcivalves.com)

