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MANUAL ACTUATOR ASSEMBLY TWO POSITION W AND UW TYPE VALVE

Technical Note 401

Manually actuated VICI Valco W and UW type valves are shipped from the factory fully assembled. W and UW type valves are designed to allow rotor replacement from the preload end, without removing the knob from the valve or the valve from the bracket. These instructions are provided primarily for mounting the valve through an instrument panel.

FIGURE 1: Exploded view of 3-8 port valves



DISASSEMBLY - 3, 4, 6, AND 8 PORT VALVES

- 1. Loosen the set screw within the knob and slip the knob off the end of the manual drive shaft.
- 2. Holding the valve and knob assembly together in one hand, unscrew the HWSC-SC8-16/screws until the valve comes loose from the knob assembly.
- 3. The rest of the assembly will easily slide apart. Note which holes in the mounting bracket are used.

ASSEMBLY - 3, 4, 6, AND 8 PORT VALVES

The standard positioning of the valve on the bracket locates Port 1 at the top and the cutout down, toward the bracket base. The following instructions orient the valve in this standard position, although the valve and knob assembly may be oriented differently by using other positioning holes in the bracket.

- 1. Insert the HWSC-SC8-16/screws into the countersunk holes of the shaft bearing plate. The screw heads will be completely sunk in the plate.
- 2. Slide the screws through the holes in the standard angle bracket noted in Step 3 on the previous page, or as desired for your installation.
- 3. Slide the shaft housing onto the screws with the flat side of the housing toward the bracket and the recessed side away from the bracket. Set aside this portion of the assembly to work on the valve.
- 4. Slide the driver into the collar of the valve body, with the long end of the driver pin extending into the cutout and the slot of the driver engaging the tab of the valve rotor. The outer face of the driver will be flush with the collar.
- 5. Slip the manual drive shaft over the driver, engaging the driver pin in the slots of the shaft. Orient the manual drive shaft so that the flat side is toward the cutout.
- 6. Slide the valve and manual drive shaft into the bracket/housing assembly with the cutout oriented down, toward the bracket base. Hold the parts carefully as you join them so that no parts are dislodged or dropped. Tighten the HWSC-SC8-16/ screws into the valve body. The screw heads will be flush with the face of the shaft bearing plate.
- 7. Slide the knob over the protruding end of the manual drive shaft. Orient the knob so that the set screw will tighten onto the flat of the shaft, and tighten the set screw.

DISASSEMBLY - 10 PORT VALVES

- 1. To remove the valve only: loosen the HWSC-SC6-10NT/screws and slide the valve away from the shaft housing.
- 2. To disassemble further: loosen the set screw within the knob and slip the knob off the end of the manual drive shaft.
- 3. Unscrew the HWSC-SC8-8/screws and the rest of the assembly will slide apart.

FIGURE 2: Exploded view of 10 port valve



ASSEMBLY - 10 PORT VALVES

The standard positioning of the valve on the bracket locates Port 1 at the top and the cutout down, toward the bracket base. The following instructions orient the valve in this standard position, although the valve and knob assembly may be oriented differently by using other positioning holes in the bracket.

1. Insert the HWSC-SC8-8/screws into the countersunk holes of the shaft bearing plate. The screw heads will be completely sunk in the plate.

- 2. Slide the screws through the holes in the standard angle bracket shown in Figure 2 or as desired for your installation.
- 3. Screw the HWSC-SC8-8/screws firmly into the shaft housing with the flat side of the housing toward the bracket and the recessed side away from the bracket. Set aside this portion of the assembly to work on the valve.
- 4. Slide the driver into the collar of the valve body, with the long end of the driver pin extending into the cutout and the slot of the driver engaging the tab of the valve rotor. The outer face of the driver will be flush with the collar.
- 5. Slip the manual drive shaft over the driver, engaging the driver pin in the slots of the shaft. Orient the manual drive shaft so that the flat side is toward the cutout.
- 6. Slide the valve and manual drive shaft into the bracket/housing assembly with the cutout oriented down, toward the the bracket base. Insert the HWSC-SC6-10NT/screws through the valve body and tighten them into the shaft housing.
- 7. Slide the knob over the protruding end of the manual drive shaft. Orient the knob so that the set screw will tighten onto the flat of the shaft, and tighten the set screw.