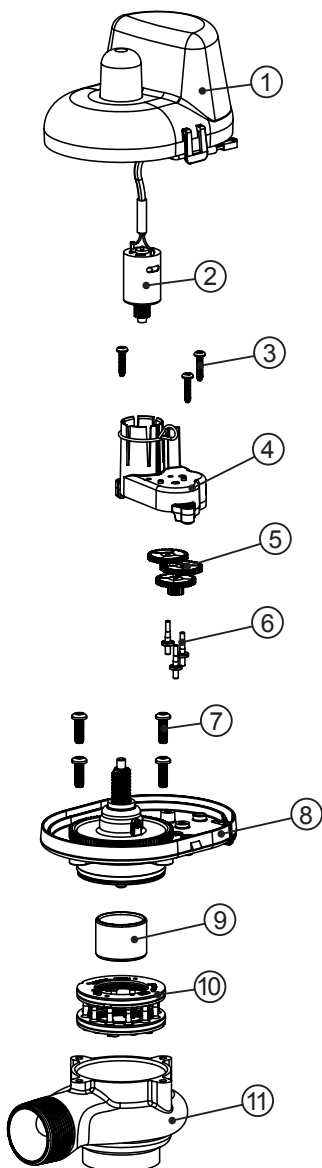
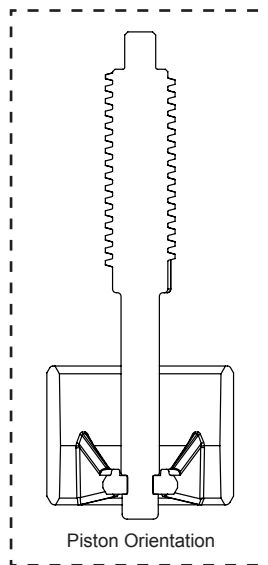


**Order No. V3097 • Description: NO HARDWATERBYPASS 15INMXF NPT or  
Order No. V3097BSPT • Description: NOHARDWATERBYPASS 15INMXF BSPT**

| Drawing No. | Order No.    | Description                                                      | Quantity |           |
|-------------|--------------|------------------------------------------------------------------|----------|-----------|
|             |              |                                                                  | V3097    | V3097BSPT |
| 1           | V3073        | MAV/NOHWBY COVER ASY                                             | 1        | 1         |
| 2           | V3476        | WS MOTOR ASY 8 FT                                                | 1        | 1         |
| 3           | V3592        | SCREW #8-1 PHPN T-25 SS                                          | 3        | 3         |
| 4           | V3262-01     | WS1.5&2ALT/2BY REDUCGEARCVASY                                    | 1        | 1         |
| 5           | V3110-01     | WS1 DRIVE REDUCING GEAR PLAIN                                    | 3        | 3         |
| 6           | V3264        | WS2 BYPASS REDUCTION GEAR AXLE                                   | 3        | 3         |
| 7           | V3527        | SCREW 1/4-20 X 3/4 BHSCS SS<br>(5/32" HEX ALLEN WRENCH REQUIRED) | 4        | 4         |
| 8           | V3072        | MAV/NOHWBY 1/125/15 DRIVE ASY                                    | 1        | 1         |
| 9           | V3506-01     | MAV/NOHRD 1/125/15 PISTON                                        | 1        | 1         |
| 10          | V3886        | WS15 NHWBY STACK ASY                                             | 1        | 1         |
| 11          | V3832-01     | WS15 NHWBY BODY M X F NPT                                        | 1        | N/A       |
|             | V3832BSPT-01 | WS15 NHWBY BODY M X F BSPT                                       | N/A      | 1         |
| Not Shown   | V3805        | STRAIN RELIEF COVER KIT                                          | 1        | 1         |



•Operating Pressures:  
20 PSI Minimum / 125 PSI Maximum  
•Operating Temperatures:  
40°F Minimum / 110°F Maximum



**Order No. V3097 • Description: NO HARDWATERBYPASS 15INMXF NPT or  
Order No. V3097BSPT • Description: NO HARDWATERBYPASS 15INMXF BSPT**

| Clack Item Number | Software Minimum Rev Level | Before using V3097 or V3097BSPT with EE, EI, or CI valves, press and hold NEXT and REGEN to verify that the software has the minimum rev level shown in the table. |
|-------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| V3408EE-01BOARD   | 513.7                      |                                                                                                                                                                    |
| V3408EI-01BOARD   | 613.5                      |                                                                                                                                                                    |
| V3108CI-02BOARD   | 316.9                      |                                                                                                                                                                    |

**HYDROCARBONS SUCH AS KEROSENE, BENZENE, GASOLINE, ETC., MAY DAMAGE PRODUCTS THAT CONTAIN O-RINGS OR PLASTIC COMPONENTS. EXPOSURE TO SUCH HYDROCARBONS MAY CAUSE THE PRODUCTS TO LEAK. DO NOT USE THE PRODUCT(S) CONTAINED IN THIS DOCUMENT ON WATER SUPPLIES THAT CONTAIN HYDROCARBONS SUCH AS KEROSENE, BENZENE, GASOLINE, ETC.**

**OPERATING PRESSURES: 20 PSI MINIMUM / 125 PSI MAXIMUM  
OPERATING TEMPERATURES: 40°F MINIMUM / 110°F MAXIMUM**

**Service or Installation of Motor:** Do not lubricate the motor or the gears. To install the motor, move the spring clip loop to the right and hold. Gently turn the motor while inserting so that the gear on the motor meshes with the gears under the drive gear cover. Release the spring clip loop and continue to rotate the motor until the wires are horizontal and the motor housing engages the small plastic bulge inside the drive bracket motor retainer. Reconnect the motor plug to the two-pronged jack on the lower left side of the PC board. If the motor will not easily engage with the drive gears when reinstalling, lift and slightly rotate the motor before reinserting.

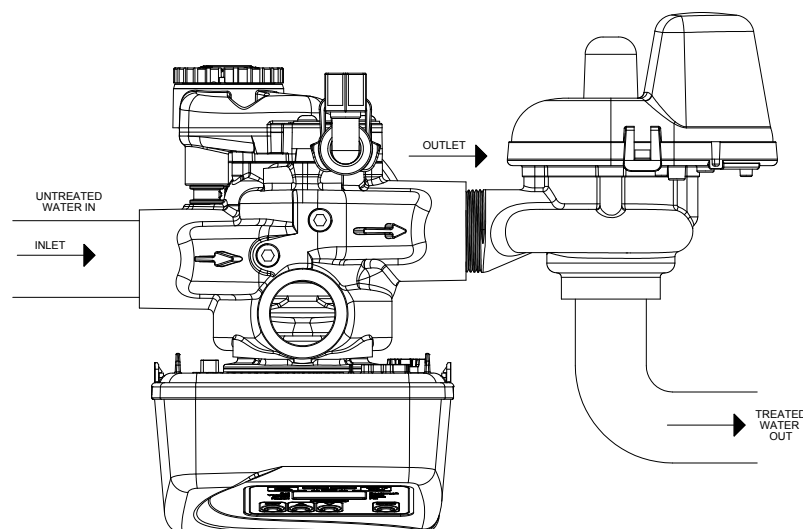
If the control valve manual does not include instructions for setting up the software for No Hard Water Bypasses (NHWB), Separate Source (SEPS), or Twin Tank Operation (ALT A and ALT b) please contact your local equipment supplier for current copies of the instructions.

Approximately 1' of cable length should be allowed for weaving a cable through a back plate. Try to allow sufficient slack in cables so cables may be zip tied to plumbing lines to prevent the cables from being accidentally pulled. See V3805 instruction sheet that is packaged with NHWBY. To help prevent damage to cables, allow solder joints to cool or solvent cement joints to cure after completing the various service, drain and regenerant plumbing connections. Thread the various cables through the appropriate back plate(s) and connect as described in the bullet points below.

- The 8' No Hard Water Bypass motor cable must be threaded through the back plate and connected to the two pin connector labeled DRIVE on the control valve board.
- The 15' water meter cable must be threaded through the back plate and connected to the three pin connection labeled METER on the control valve board.
- The 15' AC Adapter or power cable must be threaded through the back plate of all control valves. The AC adapter should be installed to a properly grounded (not switched) outlet.

**No Hard Water Bypass:**

The NHWBY will be driven closed before the first regeneration cycle that is not FILL, SOFTENING or FILTERING, and be driven open after the last regeneration cycle that is not FILL. If the control valve enters into an error state during regeneration mode, the NHWBY will remain in its current state until the error is corrected and reset.



**Caution:**

No Hard Water Bypass installation prevents water from entering the downstream plumbing. If a downstream plumbing device or local code requires an uninterrupted water supply, design the installation to accommodate.