

3/4 Inch Lead Free* Remote Water Control Valve

With Filter: 53020 (24 volt) & 53020-1 (115 volt)
No Filter: 53021 (24 volt) & 53021-1 (115 volt)

* All applicable components that are used in this device are certified and/or compliant with NSF 61 Annex G and/or NSF/ANSI 372, as required by the Safe Drinking Water Act, section 1417

Installation Instructions

General.

The Remote Control Valve assembly mounts in a horizontal run of 3/4 inch water pipes readily accessible to the installer. Inlet and outlet connections are 3/4 inch FNPT thread type unions. Two 3/4 inch MNPT X 3/4 inch sweat adapters are supplied. If the available inlet or outlet pipes be other than 3/4 inch, the installer is to provide suitable reducer fittings. Water pressure must not exceed 100 psi. Water temperature must not exceed 100°F. Install the assembly in an area protected from freezing and direct sunlight.

Valve Position & Flow Direction

Inlet is on left and discharge is on right, which may be reversed as follows:

1. Disconnect the solenoid valve assembly (U) from the valves (S) at the two unions (T).
2. Rotate 180 degrees.
3. Retighten the two unions (T) to (U).
4. Be sure that water flow direction is into "IN" side of solenoid valve assembly (U).

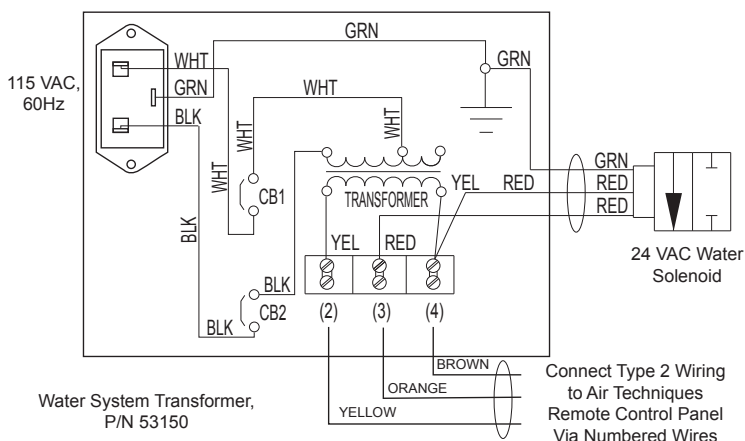
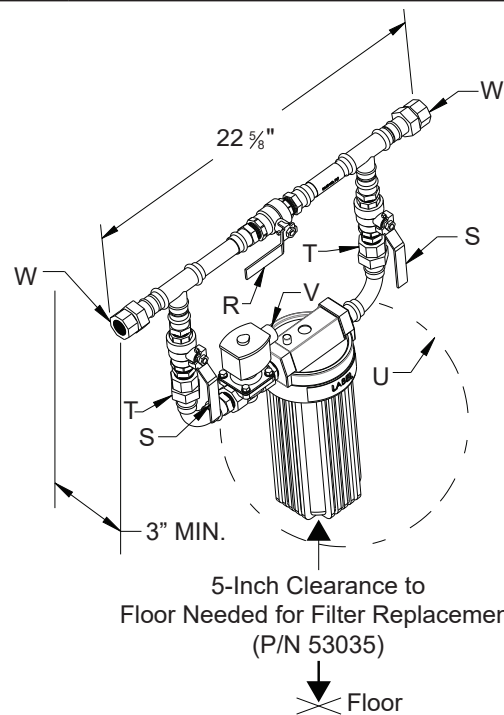
Electrical Connections

24-Volt System. All models ship from the factory operating from 24 volts via the water system transformer (P/N 53150). Make appropriate electrical connections as shown below.

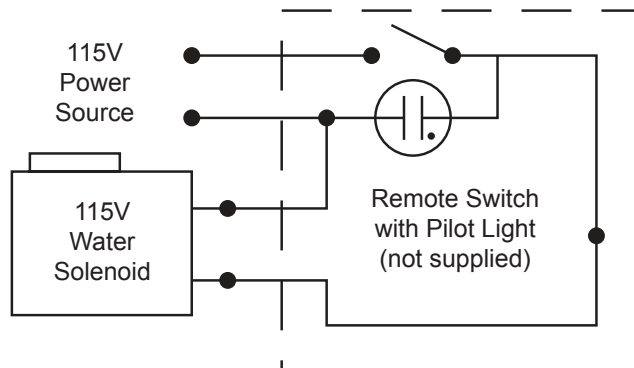
115-Volt System. To allow Model P/Ns 53020-1 and 53021-1 to operate via 115 volts, the 24 V water solenoid coil must be replaced with a supplied 115V coil (P/N 53309). Change the solenoid coil and then make connections as shown. Instructions to change the coil are provided on back page.

Remote Control Valve Key Components

| Item | Description |
|------|--|
| R | Upper Valve Control |
| S | Lower Valve Controls |
| T | 3/4 inch Unions |
| U | Solenoid and Filter assembly #53020 or #53020-1 Solenoid assembly only #53021 or #53021-1 |
| V | 18-3 AWG cable to Remote Panel or Switch |
| W | 3/4 inch FNPT Thread Type Union |
| X | Filter housing wrench (for 53020 & 53020-1) |



24-Volt Electrical Connection Drawing



115-Volt Electrical Connection Drawing

Solenoid Coil Replacement - Change from 24V to 115 VAC

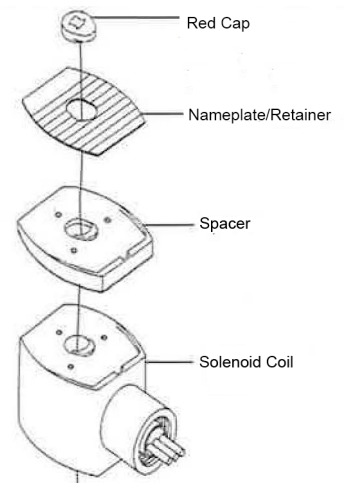
(Only for P/Ns 53020-1 & 53021-1 models.)

When operating the system from 115 VAC power, the 24 V water solenoid coil must be replaced with a 115V coil (P/N 53309) .

1. Disconnect conduit, coil leads, and grounding wire.

Note: Any optional parts attached to the old solenoid must be reinstalled on the new solenoid.

2. Snap off red cap from top of solenoid base sub-assembly.
3. Push down on solenoid. Then using a suitable screwdriver, insert blade between solenoid spacer and nameplate/retainer. Pry up slightly and push to remove.
4. Remove solenoid spacer and solenoid from solenoid base subassembly.
5. Install the 115 VAC coil. Reassemble in reverse order of disassembly.



Filter Cartridge Replacement (Only for P/Ns 53020 (24 volt) & 53020-1 (115 volt) models with a filter:)

When the water flow at the tap is noticeably reduced, it is time to change the cartridge. An activated carbon cartridge should also be changed when bad taste or odor comes back.

WARNING: The filter must be protected against freezing. Failure to do so may result in cracking of the filter and water leakage.

1. Filter Housing Removal

Perform the following procedure to remove the filter housing.

- a. Turn off both control valves.
- b. Release housing pressure by depressing the red pressure release button. Make sure all air escapes.
- c. Using the Filter Housing Wrench if needed, unscrew and remove the filter housing from the cap.
- d. Discard used cartridge.

IMPORTANT: When opening the filter housing to install or change the filter cartridge (element) it is common for the O-ring seal to lift out of the groove and at times, it may even stick to the cap. Make sure that the O-ring is properly seated each time the unit is reassembled or a water leak could occur.

2. O-ring Seal Reseating

The rubber (Buna-N) O-ring is pressed into the groove at bottom of threads. It fits into the groove in the sump (lower housing) providing a water-tight seal between the cap and the sump. Reseat the O-ring by performing the following procedure.

- a. Wipe the O-ring clean with a clean rag.
- b. Lubricate the O-ring with a very light coating of white petroleum jelly (Vaseline, for example).

IMPORTANT: Do not wipe the O-ring clean of lubricant after it has been properly seated in the groove. The lubricant prevents "crawling" of the O-ring when tightening the cap. A not properly lubricated O-ring could cause a leakage condition.

- c. Place in the groove of the filter housing and with two fingers wipe the O-ring down into the groove. The O-ring is a full fit type and the wiping down operation assures it is properly seated.

3. Filter Housing Installation

Perform the following procedure to install the filter housing with new filter cartridge.

- a. Insert new filter cartridge into housing.
- b. Screw the housing onto the cap and hand tighten.
- c. Open the inlet valve one-quarter turn and depress the red pressure release button.
- d. When all air has escaped from the system, fully open both control valves.

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