

*Advanced Water Filters*

# Value Line Filter Installation & Service Manual

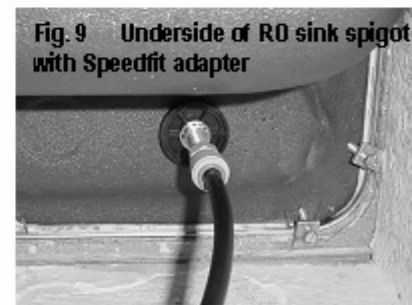
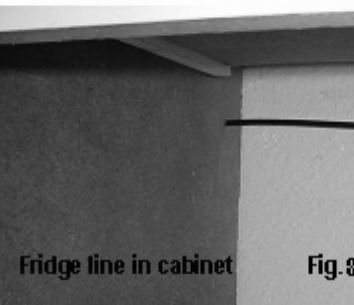
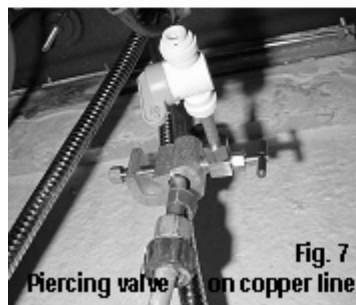
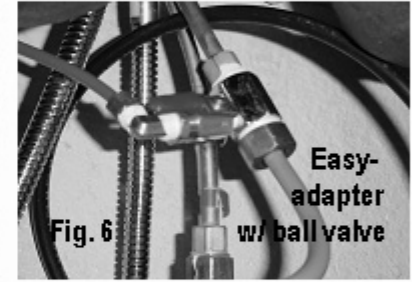
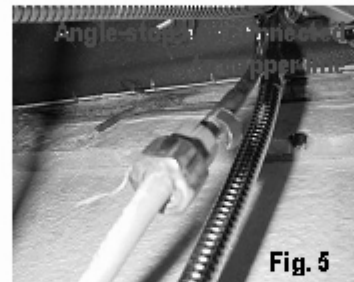
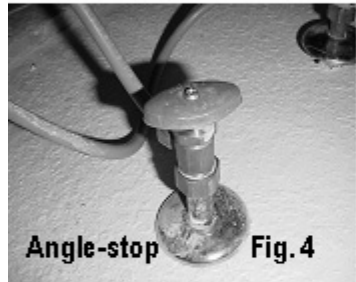
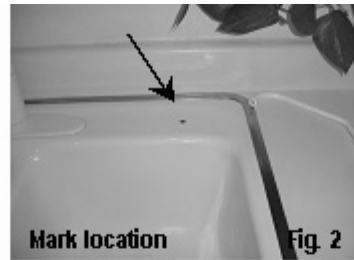
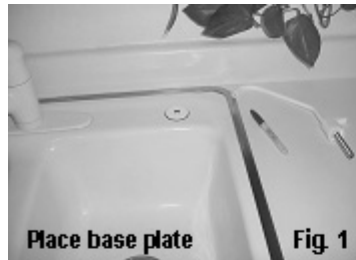
**Model: Value Line 3 Stage Water Filter # VL3SB1G**

**Model: Value Line 2 Stage Water Filter #VL2SB1**

**Model: Value Line 2 Stage Water Filter #VL2SG55**

**Model: Value Line Single Stage Water Filter #VL1SB1**

**Model: Value Line Single Stage Water Filter #VL1SG55**



Value Line Filter Contents:

- 1 Instruction book: detailed descriptions, photos and troubleshooting guide.
- 2 10" Sediment pre-filters: 5 micron bonded spun poly with high holding depth, 6 months - 1 year service life.
- 1 10" Carbon filter: 1 micron carbon block (coconut shell carbon), 6 months - 1 year or 2500 gallon service life. (VLF3SB1G, VLF3SB1, VLF1B1 only)
- 1 10" Carbon filter: 10 micron granular activated carbon (coconut shell carbon), 1-year or 2500 gallon service life. (VLF3SB1G only)
- 1 10" Carbon filter: 5 micron granular activated carbon (coconut shell carbon), w/ KDF with bacteriostatic effect to prevent bacteria, algae, and scale build-up. 1-year or 4000 gallon service life. (VLF2SG55 VLF1G55 only)
- 1 Chrome long reach sink faucet (or upgraded faucet); quick connect fittings and hardware.
- 1 Self-piercing valve; all fittings and connection hardware.

### Maintenance Schedule

Sediment filter	6 month - annual replacement
Carbon filters	annual replacement
Canister housings	5 year replacement

### General System Specifications

- Feed water: PSI 20 - 125 PSI
- Feed water Temperature: 40° - 100° (F)
- pH limits: 4 - 10

### System Location

The Value Line Filter may be installed under a sink, or in a basement as long as it is not subjected to freezing temperatures. The Value Line Filter should be mounted horizontally, or allowed to stand.

### Installing The Value Line Filter System

#### Tools Required

Safety glasses

Towels

Phillips screwdriver

Scissors

Medium Crescent wrench

Medium pliers (not required if using Speedfit® faucet connector)

Teflon tape

Felt tip pen or marker

Variable speed corded power drill (3/8" for the sink hole, 1/4" for the remainder)

1/4" metal drill bit w/ cobalt tip

1/2" metal drill bit w/ cobalt tip (not required if sink has a pre-drilled hole)

1/2" masonry drill bit (not required if sink has a pre-drilled hole, or if sink is not porcelain)

NOTE: SYSTEM MUST BE FLUSHED PRIOR TO USE - ALLOW THE VALUE LINE FILTER TO RUN UNTIL WATER RUNS CLEAR AND AIR IS PURGED.

**READ ALL INSTRUCTIONS THOROUGHLY PRIOR TO INSTALLATION**

- **Drilling hole for RO sink spigot - porcelain sinks (drilling time - up to ¾ hour)**

**WARNING:** Serious cracking and damage may occur to your sink even if instructions are followed exactly due to age and the imperfections inherent in natural materials. Instructions may not apply exactly to your sink. Use caution - sink may be slippery.

Remove base cover plate from RO sink spigot packaging. Line-up base cover plate with other sink faucets. See Fig 1. Check underside of sink for spacing from trim, curvatures, and other obstacles. See Fig. 12. Don't place spigot too close to obstacles - leave yourself enough room under the sink to use hand tools. Either right or left side of the sink is OK provided previous conditions are met. Mark center of base cover plate with marker. See Fig 2. Place towel underneath sink, below drilling site, to collect fillings. Always wear protective eyewear and gear while drilling, and while under sink.

Using ½" masonry bit and variable speed corded power drill, slowly begin drilling through the porcelain. Drill bit should be perpendicular to sink. Failure to do so may cause the drill bit to slip and cause bodily injury, and/or property damage. Rinse & dry drill bit tip and sink area with cool water for every 20 seconds of drilling to prevent drill bit overheating and sink damage. Small localized flaking or chipping may occur. **Use caution - drill bit may be very hot. DO NOT touch drill bit. Electrical hazard! DO NOT allow power drill electrical components to come into contact with water. Use caution - sink may be slippery.**

When metal is struck, switch to ¼" metal bit with cobalt tip. Drill bit should be perpendicular to sink. Failure to do so may cause the drill bit to slip and cause bodily injury, and/or property damage. Begin drilling to drill a hole all the way through the sink. Rinse & dry drill bit tip and sink area with cool water for every 20 seconds of drilling to prevent drill bit overheating and sink damage. Small localized flaking or chipping may occur.

When ¼" hole is completely drilled through, switch to ½" metal drill bit w/ cobalt tip. Drill bit should be perpendicular to sink. Failure to do so may cause the drill bit to slip and cause bodily injury, and/or property damage. Begin drilling to enlarge the ¼" hole to ½" all the way through the sink. Use caution when hole is near completion to avoid damaging sink surface. Rinse & dry drill bit tip and sink area with cool water for every 20 seconds of drilling to prevent drill bit overheating and sink damage. Small localized flaking or chipping may occur.

When ½" hole is completely drilled through, install RO sink spigot with provided mounting hardware. For more details, see mounting instructions enclosed with hardware. See Fig. 3. Connect Value Line Filter™ to RO sink spigot using Speedfit® adapter as outlined later.

- **Drilling hole for RO sink spigot - stainless steel sinks**

**WARNING:** Read all instruction before attempting install. User assumes all liability.

Use caution - sink may be slippery.

Remove base cover plate from RO sink spigot packaging. Line-up base cover plate with other faucets. See Fig 1. Check underside of sink for spacing from trim, curvatures, and other obstacles. See Fig. 12. Don't place spigot too close to obstacles - leave yourself enough room under the sink to use hand tools. Either right or left side of the sink is OK provided previous conditions are met. Mark

center of base cover plate with marker. See Fig 2. Place paper towel underneath sink, below drilling site, to collect fillings. Wear protective eyewear and gear while drilling and while under sink.

Place ¼” metal bit with cobalt tip on the marked spot. Drill bit should be perpendicular to sink. Failure to do so may cause the drill bit to slip and cause bodily injury, and/or property damage. Begin drilling a hole all the way through the sink. Rinse & dry drill bit tip and sink area with cool water for every 30 seconds of drilling to prevent drill bit overheating. **Use caution - drill bit may be very hot. DO NOT touch drill bit. Electrical hazard! DO NOT allow power drill electrical components to come into contact with water. Use caution - sink may be slippery.**

When ¼” hole is completely drilled through, switch to ½” metal drill bit w/ cobalt tip. Begin drilling to enlarge the ¼” hole to ½” all the way through the sink. Use caution when hole is near completion, because drill may lock-up and cause injury. Drill bit should be perpendicular to sink. Failure to do so may cause the drill bit to slip and cause bodily injury, and/or property damage. Rinse & dry drill bit tip and sink area with cool water for every 30 seconds of drilling to prevent drill bit overheating and damage.

When ½” hole is completely drilled through, install RO sink spigot with provided mounting hardware. See Fig. 3. For more details, see mounting instructions enclosed with hardware. Connect Value Line Filter to RO sink spigot using Speedfit® adapter as outlined later.

- **Installing The Value Line Filter System under the sink**

**1a. Install easy adapter with ball valve for main water line** - Always wear protective eyewear while under sink. Locate the cold water angle-stop (the main water lines under the sink - one hot water, one cold water), and turn clock-wise to shut off the water. See Fig. 4. Locate ½” fitting, typically found on the line out of the angle-stop. See Fig(s).4-6. Easy adapter with ball valve may be fitted to either angle-stop, or line out - as shown in Fig. 6. If angle-stop is damaged and cannot be shut off, or does not exist, use piercing valve (see piercing valve instructions below). Connect easy adapter with ball valve to cold ½” female line. See Fig. 6. Use Teflon tape on **ALL** metal male threads. Check for water pressure & leaks on ball valve. Turn ON water by rotating angle-stop counter clockwise. Close ball valve, by turning the handle perpendicular to the ball valve body. (Valve is open in Fig. 6) Have a bowl or cup nearby to catch water. Dry all parts, check for leaks, and snugness.

**NOTE: Use piercing valve OR easy adapter with ball valve, but not both.**

**1b. Install piercing valve for main water** - Clamp piercing valve to soft cold copper line (see Fig. 5 & Fig. 7) by tightening screw snugly around copper line and piercing valve insert. Lightly wiggle and tighten piercing valve to ensure snugness. **NOTE: Piercing valve operates by puncturing a small hole in the copper line. Once the hole is made, the piercing valve must remain in place or the copper line must be replaced to avoid leaks.** Place brass nut with collar over tubing marked “LINE IN” then insert brass insert into tubing end. Apply Teflon tape to piercing valve ¼” threaded fitting. Connect brass nut onto piercing valve ¼” threaded fitting and tighten snugly. Screw down the red “T” handle on top of the piercing valve until copper line is punctured, then unscrew until water begins to flow at a fast rate. Have a bowl or cup nearby to catch water. Dry all parts, check for leaks, and snugness.

**2. Mount the Value Line Filter** - Identify location for installing the Value Line Filter unit. Location

should allow for connecting and disconnecting the unit, and enough room for performing general service on the unit. Typical locations are on either right or left side, near the back wall. Use attached mounting bracket as a template to mark mounting screw locations. Value Line Filter should be mounted horizontally. **brass nut with collar over tubing marked "LINE IN" then insert brass insert into tubing end. Apply Teflon tape to piercing valve ¼" threaded fitting. Connect brass nut onto piercing valve ¼" threaded fitting and tighten snugly. Screw down the red "T" handle on top of the piercing valve until copper line is punctured, then unscrew until water begins to flow at a fast rate. Have a bowl or cup nearby to catch water. Dry all parts, check for leaks, and snugness.**

**3. Install refrigerator kit (optional)** - Installation may vary according to make, model, age, and equipment level of your refrigerator. Make sure refrigerator icemaker and water center are turned OFF. Clean area below and around refrigerator thoroughly. Use care when rolling out refrigerator. Flooring may become scratched, gouged or damaged from moving refrigerator. Consult your local licensed contractor or plumber for trimmed-in refrigerators, or refrigerators without rollers. Roll out refrigerator. Unplug refrigerator electric plug. Locate water line in for refrigerator. (Yours may already be connected to a water line from wall. If so use local angle-stop to shut off water. Disconnect female fitting.) Plan the route for the water line from the Value Line Filter. Drill ¼" holes through the lower cabinetry, high along the back wall just below the drawers. See Fig. 8. Make sure cabinet contents are removed, prior to drilling, and ¼" tubing does not come into contact with drawers, doors, or sharp objects. Smooth the holes free from splinters and sharp edges. [Alternate route for refrigerator line -- run ¼" refrigerator tubing along the baseboard, and enter the kitchen sink cabinet by drilling a ¼" opening in the bottom board of your kitchen sink cabinet, towards the front baseboard.]

Connect the female metal fitting from the refrigerator kit to the male metal fitting on the refrigerator. Make sure all male metal fittings are thoroughly Teflon taped to prevent leaks. Push tubing through the cabinetry holes from the refrigerator to the Value Line Filter. Allow 2-4' of extra tubing at the refrigerator, and tie it up so that it cannot be crushed or otherwise damaged. Make sure the cut is straight, the edge is completely smooth, and the tube is rounded. A scratched, gouged, damaged, or oblong end will leak. Insert the line marked "to refrigerator" into the blue and white shut-off valve connected to the Value Line Filter. Push tubing all the way in, then pull back gently, to check fit. Most push-pull fittings take about a ½" of tubing inserted into them. Do not roll back refrigerator until the Value Line Filter is fully installed and operational. Make sure shut off valve is in the OFF position, where the blue handle will be perpendicular to the body.

**4. Install water out line to RO sink spigot** - Screw Speedfit® spigot adapter onto the bottom of the RO sink spigot located under the sink until it is snug. See Fig. 9. Over tightening may cause damage. Insert tubing labeled "to RO spigot" into Speedfit® spigot adapter. Push tubing all the way in, then pull back gently to check fit. Most push-pull fittings take about a ¼" of tubing inserted into them.

**5. Pressurize the Value Line Filter** - Double check to make sure all valves are in the OFF position, except for the main angle-stop valve or piercing valve, which should be ON. Make sure unit is dry. Water should flow normally from your sink's cold and hot faucets. Turn the easy adapter ball valve, or the shut off valve from the piercing valve to the ON position. You should hear water rushing through the system. Check for leaks at all fittings. Allow 5-10 minutes for system pressure to build. Turn valve on RO sink spigot to ON position by depressing and holding the lever down, or by flipping the lever up, where it will lock open. Some blackening of the water may present due to loose carbon being flushed out. Run until the water becomes clear and free from any trapped air. System must be

flushed prior to use. Plug in refrigerator electric plug; turn ON refrigerator line shut off valve so that the blue handle is parallel with the white body. Make sure refrigerator icemaker and water center are turned ON. Check for leaks. Check for pressure at the refrigerator's water center if applicable. Use caution when rolling refrigerator back into place. DO NOT crimp or crush water line, as a leak will likely develop. **Enjoy!**

## Value Line Filter - Filter Change Instructions

### Tools Required

Brush

Bleach

Towel

Housing wrench

1. Clear away a workspace under the sink near the location of the Value Line Filter.
2. Turn off the water feeding the Value Line Filter, by closing the ball valve located on the water line, or by closing angle-stop feed water valve clockwise. To close the angle-stop, turn clockwise. If present, the angle-stop will be located on the wall under the kitchen sink in close proximity to the Value Line Filter. Either method will work. See Figures 4 & 6.
3. Depressurize the system. Flip up the handle on the RO sink spigot so that it locks into place, and dispenses water until it no longer flows. See Figure 3. If you have successfully shut off the water this should occur within a few seconds. If water still continues to flow, repeat step 2. The system is now depressurized; continue to leave to RO sink spigot handle in the open position.
4. Unscrew housing using spanner wrench. NOTE: When opening filter housing to change cartridge, it is common for O-ring/gasket to lift out of housing and stick to cap.
5. Remove used cartridge and discard. Make note of filter type and alignment. Rinse out housing and fill about 1/3 full with water. Add about 2 to 3 tablespoons of bleach and scrub thoroughly with brush or sponge. Rinse thoroughly.
6. Remove O-ring/gasket from sump and wipe groove and O-ring/gasket clean. Lubricate O-ring/gasket with a coating of clean silicone grease. DO NOT use Vaseline or petroleum based lubricant. Place O-ring/gasket back in place and press O-ring down into the groove with two fingers (or place gasket on rim of sump). NOTE: This step is important to ensure proper filter seal. Make sure the O-ring is seated level in the groove (or gasket is on rim of sump). CAUTION: If O-ring/gasket appears damaged or crimped it should be replaced at this time.
7. Insert a new cartridge of the same type and alignment into the sump making sure that it slips down over the sump standpipe.
8. Screw the sump onto the cap and tighten with canister wrench. Make sure cartridge slips over the cap standpipe.
9. Repeat for each filter.

10. Remount the Value Line Filter, and SLOWLY open the main water line to the Value Line Filter.

NOTE: An activated carbon filter may contain a small amount of carbon fines (very fine black powder) and a new cartridge, after installation, should be flushed with sufficient water to remove the fines before using the water.

IMPORTANT NOTICE: To prevent costly repairs or possible water damage we strongly recommend that the bowl or sump of all plastic housings be replaced every five years. If your sump has been in use for more than the recommended period, it should be replaced immediately. Be sure to date any new or replacement sump for future reference and indicate the next recommended replacement date

### Troubleshooting

IMPORTANT NOTE: Before performing service on the Value Line Filter at any time, and for any reason: first switch to the OFF position all under-sink water valves, except for the RO sink spigot which you should switch ON to relieve system pressure and drain away excess water from the lines. Push-pull and Speedfit® fittings are nearly impossible to remove when under pressure.

Leaks from metal fittings Unscrew fittings and re-tape male fitting. Tape should be wound 5-7 times around male thread. Tape should not cover opening. Use only Teflon tape. Re-tighten fitting securely. Over tightening can crush the tubing insert and cause a **water blockage**.

Leaks from push-pull or Speedfit® fittings Disconnect fitting by pushing in the tubing with one hand and depressing the collet ring on the fitting with the other hand. Then pull out tubing while the ring is still depressed. Tubing cannot be pulled out without depressing the fitting ring, and relieving system pressure. Make sure the tubing is cut is straight, the edge is completely smooth, and the tube is rounded. Scratched, gouged, damaged, or oblong tubing end will leak. Re-insert the tubing into the push-pull fitting. Push tubing all the way in, then pull back gently, to check fit. Most push-pull fittings take about a ¼" of tubing inserted into them.

Leaks from plastic fittings Plastic fittings should be firmly finger tightened. Under tightening can result in leaks, over tightening can crush the tubing and result in a **water blockage**. For plastic fittings only; make sure the plastic tubing has an insert in the tube end, and a feral (o-ring which compresses the tubing around the insert) in the plastic female fitting.

No water from Value Line Filter System Make sure all valves are on the ON position. Check for over tightening of fittings. Eliminate possible blockage points by disconnecting each system component and checking for pressure. Have a bowl and towel at hand.

No water or ice from refrigerator water center Make sure line from Value Line Filter™ RO to refrigerator has pressure. Make sure refrigerator water center and/or icemaker are turned ON, and refrigerator is plugged in. If water center works, but icemaker does not, then defrost the freezer as the line in may have frozen.

Weak pressure at RO sink faucet

1. Make sure the angle-stop is wide open. (see Fig.4 on the instructions enclosed with your Value Line Filter.)



2. Check all tubing for kinks or sharp bends - this can impede the flow of water.
3. Check the water flow to the filter from the EZ adapter or piercing valve. Turn off the water at the EZ adapter or piercing valve and tank, and briefly turn on the RO faucet at the sink to relieve any system pressure. Disconnect the tube from the sediment filter fitting after the EZ adapter or piercing valve. Point the tube you have just disconnected into a pitcher and turn on the EZ adapter valve. The flow should be strong.
4. If the flow from the EZ adapter to the sediment filter is strong, but the flow to RO sink spigot is weak, it indicates a clogged filter, and a filter change is needed.
5. If the flow to the sediment filter is weak (#7), then disconnect the EZ adapter and check the rubber grommets and o-ring for proper seating and to ensure the flow is unimpeded.

For more information please visit [www.AdvancedWaterFilters.com](http://www.AdvancedWaterFilters.com) or contact customer service at 1-800-453-4206. We will be happy to assist.

*Thank You!*



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