

# TL3 Ultrafiltration System

# 3-Stage Twist-Lock Ultrafiltration - Model TL3-A502

#### **Package Contents:**

- (A) Triple Stage Head
- (B) Twist-Lock Cartridges
  - (B1) Chloramines, Carbon Block with Lead, Cyst and Pharmaceutical Reduction Model: TLR-A3502
  - (B2) One Hollow Fiber Membrane Model: TLR-A5HF12
- (C1) Faucet
- (C2) 1/4" Tubing 6 ft.
- (C3) Angle Stop Valve Adapter (ASVA)
- (C4) Faucet Connector
  - (C4) Insert
  - (C5) Ferrule
  - (C6) Compression Nut

#### **Required Tools And Materials:**

- Two Phillips screws at least 7/8" to 1" long
- · Phillips Screwdriver
- 1/8" Drill Bit
- Center Punch
- · Adjustable Wrench
- Utility Knife
- File
- Tape Measure
- · Safety Glasses
- Masking Tape
- · Newspaper or Towels
- Pencil
- · Bucket or Pan

# **Optional Materials:**

- Plumber's Tape
- Drill with 1/4" & 9/16", or 5/8" Drill Bits
- Hacksaw
- · Hollow-Wall Anchor Bolts or Toggle Bolts









# STEP 1:

#### **Mount Auxiliary Faucet**

**Note:** This faucet is designed to fit a 5/8" clearance hole and should clear a 9/16" hole. Most standard sinks come with 1-3/8" or 1-1/2" diameter water sprayer holes that can be used to mount this faucet. If the pre-drilled holes cannot be used or are not in the desired position, a new hole must be drilled using either a 9/16" or 5/8" drill bit. The faucet should be positioned securely on a flat surface with adequate space for proper function.

# If you need to drill a hole, go to (1). If you will be using a pre-drilled hole, go to (5).

- **1**. Line sink with newspaper or towel to prevent parts and materials from falling down the drain.
- To help prevent scratching the sink surface or countertop should the drill bit slip, apply masking tape to the area to be drilled.

- 3. Mark the drill hole using a center punch.
- 4. Make a pilot hole using the 1/4" drill bit. Use the 9/16" or 5/8" drill bit to drill the final hole. Drill through the sink or countertop completely and smooth rough edges with a file.
- 5. Unscrew the faucet stem nut from the faucet stem, and remove the metal lock washer. Slip the threaded faucet stem into the sink or countertop hole ensuring faucet sits flat on top of the sink or countertop.
- 6. Under the sink, slide the metal lock washer up the faucet stem and secure with the faucet stem nut.
  Tighten until slightly snug and check to ensure the faucet spout is in the correct position. Using fingers, tighten the nut to secure the faucet to the sink.

#### **STEP 2:**

#### **Install The Angle Stop Valve Adapter**

Note: This adaptor is designed to fit 1/2" NPTF supply threads.

- **1.** Locate the cold water shut-off valve under the sink. Turn off the cold water supply.
- **2.** Turn on the kitchen faucet. This will release pressure and allow water to completely drain from the line.
- 3. Disconnect the cold water faucet line from the ½" threaded stem on the bottom of the kitchen faucet.
- **4.** Holding the Angle Stop Valve Adapter in an upright position, thread the female side of the faucet adapter on to the cold water supply valve.
- **5.** Attach the cold water supply line for the faucet to the male top side of the adapter.

## STEP 3:

- **1.** Select easily accessible area under the sink to mount the filter system.
- Mount system to a solid cabinet wall or wall. If this is not an option, use toggle bolts or hollow-wall anchor bolts (not included) to secure the system to the surface.
- 3. Allow a minimum clearance of 4-6" below the filter cartridges to allow ample space for cartridge changes. The filter system must be mounted in a vertical position.
- 4. After removing the cap from the manifold, use the back panel as your mounting template marking the holes for the mounting screws on the wall surface.
- 5. Drill two pilot holes for the mounting screws using a 1/8" drill bit. Insert mounting screws into the wall with a Phillips screwdriver leaving approximately 3/8" of each mounting screw exposed.
- **6.** Position the system head on the eyes of the bracket and replace the system head cap.

## **STEP 4:**

#### Install Plastic Tubing For Water Supply Line From Angle Stop Valve Adapter To System Head Inlet

- 1. Determine the length of tubing necessary to connect the system head inlet to the Angle Stop Valve Adapter making sure to allow enough tubing to prevent kinking in the line.
- 2. Check the tubing to be square on both ends ensuring no jagged edges. If necessary, cut ends of tubing to be square with no jagged edges, as this can cause inappropriate seal of tubing in collet inlet/outlet ports.

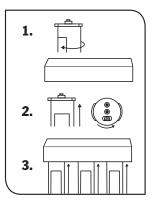
# 3. Without bending or crimping the tubing, wet one end of the tubing with water and push it into the Angle Stop Valve Adapter approximately 5/8" until it stops.

- **4.** Wet the other end of the tubing with water and push it into the system head inlet on the left side of the manifold approximately 5/8" until it stops.
- 5. The tubing does not have to be disconnected for cartridge replacement or routine maintenance, however, it may be easily disconnected if desired. To disconnect, turn off the water supply to the filter system and press the grey collar around the fitting while pulling the tubing out with the other hand.

#### Install Plastic Tubing for Water Supply Line From System Head Outlet to Faucet

- 1. Determine the length of tubing necessary to connect the system head outlet to the threaded faucet stem making sure to allow enough tubing to prevent kinking in the line.
- 2. Check the tubing to be square on both ends ensuring no jagged edges. If necessary, cut ends of tubing to be square with no jagged edges, as this can cause inappropriate seal of tubing in collet inlet/outlet ports.
- 3. Without bending or crimping the tubing, wet one end of the tubing with water and push it into the system head outlet until it stops.
- 4. Gently slide the compression nut down (thread side up) over the tubing. Making sure the ferrule is in the proper position with the larger opening on the bottom (going into the nut), install ferrule over the tubing. Place the plastic insert into the end of the tubing.
- 5. Firmly push the tubing into the end of the threaded faucet stem hand-tightening the plastic compression nut onto the threads. Tighten approximately ½ turn with an adjustable wrench.

#### STEP 6:



#### Twist-Lock Carbon Block Cartridges (TLR-A3502) Flushing And Installation Instructions

Prior to installing each TLR-A3502 cartridge in its position, we need to perform a flushing step in order for the filter system to flush out any air and carbon fines (fine black powder from each cartridge).

#### To Install A Cartridge:

- 1. Hold each cartridge with the front label facing a quarter turn to the left.
- 2. Lift each cartridge straight up into the system head until the two nozzles seat into the ports and the two extended flanges on top of cartridge are fully engaged into the system head. Turn the cartridge a quarter turn right until it stops into the locked position.

#### To Flush The Cartridges:

- 1. Turn on the cold water shut-off valve under the sink.
- 2. Install TLR-A3502 cartridge 2 in Stage 2.
- 3. Install TLR-A3502 cartridge 1 in Stage 3.
- 4. Flush the TLR-A3502 cartridges for (5) minutes, with Stage 1 empty, by running the new faucet for filtered water. Flushing configuration shown on right.
- **5.** Remove TLR-A3502 cartridge 1 from Stage 3 and install it in Stage 1.
- **6.** Install Hollow Fiber Membrane cartridge (TLR-A5HF12) in Stage 3. All labels should be facing front when completed.





Note: When viewing the system from the front, the Carbon Block cartridges should be positioned on the left and in the center. The Hollow Fiber Membrane should be positioned on the right.

# STEP 7:

#### Full System Flush And Operational Test

- 1. Turn on the new faucet for filtered water. Allow the water to run for approximately 10 minutes.
- 2. Check for any leaks between the system head assembly and filters, on kitchen faucet adaptor connection, around all fittings and on faucet/tubing connection.

#### If there are leaks between the system head assembly and the cartridge(s):

- Turn off the cold water shut-off valve to the filter system and turn on the faucet for filtered water to release
  pressure and drain the water.
- Remove each cartridge and inspect the o-rings around the nozzles ensuring they are in place and free from dirt and particles.
- · Turn off the faucet for filtered water.
- Replace each cartridge as indicated in Step 6.
- · Turn the cold water supply valve back on and turn on the faucet for filtered water.

#### If there are leaks around the fittings:

- To release pressure, turn off the cold water shut-off valve to the filter system.
- Press on the grey collar around the inlet and/or outlet fitting while pulling the tubing
  with one hand. Ensure the tubing is cut squarely and is not scratched. If the tubing is
  unevenly cut or scratched, trim 1/2" to 5/8" and reinstall per Step 5.
- Turn the cold water shut-off valve back on and turn on the faucet for filtered water.

#### If there are leaks on the Angle Stop Valve Adapter connection:

- To release pressure, turn off the cold water shut-off valve to the filter system.
- Identify the Angle Stop Valve Adapter:
  - If the tubing is leaking, follow "If there are leaks around the fittings" instructions above.
  - If the thread between the Angle Stop Valve Adapter and the kitchen faucet stem is leaking, tighten further.
  - If leaking continues, disconnect the tubing and remove the Angle Stop Valve Adapter. Wrap the Angle Stop Valve Adapter and the threaded faucet stem with plumber's tape and re-install (see Step 2).
  - If the thread between the Angle Stop Valve Adapter and the cold water supply line is leaking, tighten further. If leaking continues, disconnect the tubing and remove the kitchen faucet adaptor. Wrap the Angle Stop Valve Adapter and the cold water supply line with plumber's tape and re-install (see Step 2).
- Turn the cold water shut-off valve back on and turn on the faucet for filtered water.

#### If leaks continue, please contact Customer Support Team at 888-859-1188.

#### **Cartridge Replacement**

- **1.** Turn off the cold water shut-off valve to the filter system.
- Place a bucket or pan under the filter system to catch any water drips.
- Turn each cartridge a quarter turn left, until it releases.Gently pull each cartridge down to remove from the system head.
- 4. Follow steps 6 and 7 in the Flushing and Installation Instructions.

#### **Installation Instructions:**

Please read all instructions and precautions prior to installation and use.

# **CAUTION**



Before working in the cabinet area, be sure all electrical appliances and outlets are turned off at the circuit breaker. It is recommended you wear safety glasses to protect eyes when drilling. Protect the filter system from freezing which can cause cracking and water leakage. It is recommended the manifold be replaced every ten years to prevent possible water damage. Date the top of any new head to indicate the next recommended replacement date.

#### **Precautions:**

- This filter system is for cold water use only and has a rated service life of 778 gallons.
- After prolonged periods of non-use (i.e., vacation), it is recommended the filter system be flushed thoroughly (let water run for 10 minutes before using).
- The cartridges have a limited service life and should be replaced after 778 gallons or once every 6 months.
   Changes in taste, odor and/or water flow indicate the filters should be replaced.

#### **Before You Begin:**

- · Install according to local plumbing codes.
- Locate a solid wall surface under your sink. The filter system must be mounted vertically.
- Locate the cold water pipe under your sink. Rigid pipes may require cutting in order to make adequate space to install the Kitchen Faucet Adaptor. System should be supplied with only cold water.
- Ensure you have all appropriate fasteners and adaptors to fit your plumbing.

# **SAFETY & HAZARD WARNINGS**



- Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before
  or after the system. Systems certified for cyst reduction may be used on disinfected waters that may contain
  filterable cysts.
- This unit is not designed to filter hydrogen sulfide (rotten egg odor).
- · Please comply with all state and local regulations regarding the installation of water treatment devices.
- The contaminants or other substances reduced by the water filter may not be present in your water.
- System must be maintained according to manufacturer's instructions including filter cartridge replacement.
- This system is not intended to convert waste water or raw sewage into drinking water.
- Systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

# **OPERATION & MAINTENANCE DATA**

These units are intended for non-commercial use. They should be used only in ambient air temperature of between 35°F/2°C and 100°F/38°C. The rated service flow is 1 gpm with a minimum and maximum operating pressure of 30-100 psi. Avoid placement of these units in direct sunlight or use of electrical equipment on these units. Cartridges can last up to 12 months depending on water quality and usage. Cartridges should be changed when water pressure decreases or chlorine odor intensifies.

#### **Your Home For Replacement Parts:**

- Please visit NeoLogicSolutions.com or call 888.859.1188 to order replacement parts.
   Our WQA Certified Water Specialist are always happy to help determine the best solutions.
- Stage 1 Replacement:
  Part# TLR-A3502, Chloramines, Carbon Block with Lead, Cyst and Pharmaceutical Reduction
- Stage 2 Replacement:
   Part# TLR-A3502, Chloramines, Carbon Block with Lead, Cyst and Pharmaceutical Reduction
- Stage 3 Replacement:
   Part# TLR-A5HF12, Hollow Fiber Membrane





TL3-A502 system tested and certified by IAPMO R&T Lab and IAPMO R&T against NSF/ANSI Standard 42 for the aesthetic reduction of chlorine taste and odor, aesthetic chloramines, and particulate class I. NSF/ANSI Standard 53 for the reduction of asbestos, cyst, lead, mercury, MTBE, turbidity, and VOC. NSF/ANSI Standard 401 for the reduction of Bisphenol A, Estrone, Ibuprofen, Naproxen, Nonyl phenol, and Phenytoin. Conforms to NSF Protocol P231 for the reduction of bacteria, virus, and cysts.

System conforms to NSF/ANSI Standards 42, 53, 401, and NSF Protocol P231 for specific performance claims as verified and substantiated by test data. See Performance Data Sheet for reduction performance.

Compounds certified under NSF/ANSI Standard 401 have been deemed as incidental contaminants.

This system is not intended to convert waste water or raw sewage into drinking water.

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