



# Whole House Water Filter Installation Instructions

Before you do anything, make sure all the parts have arrived and collect the tools you'll need.

## Main System Parts (included with purchase of system):

- (1) Pre-Sediment Filter
- (1) Post Sediment Filter
- (1) White Wrench for Opening Pre & Post Filter Housings for Cartridge Replacement
- (1) 10"D x 44"H Water Filter Tank (blue)

## Universal Installation Kit Parts (included with purchase of system):

- (8) 3/4" x 3/4" Nipple Fittings
- (2) 3/4" MPT x 3/4" CTS (push fit fittings)
- (2) 3/4" MPT x 1" CTS (push fit fittings)
- (2) Ball Valves
- (2) 48" Stainless Steel Compression Hoses
- (2) 24" Stainless Steel Compression Hoses
- Industrial Grade Teflon Thread Tape (plumbers tape)

## Tools you'll need for installation (not included with purchase)

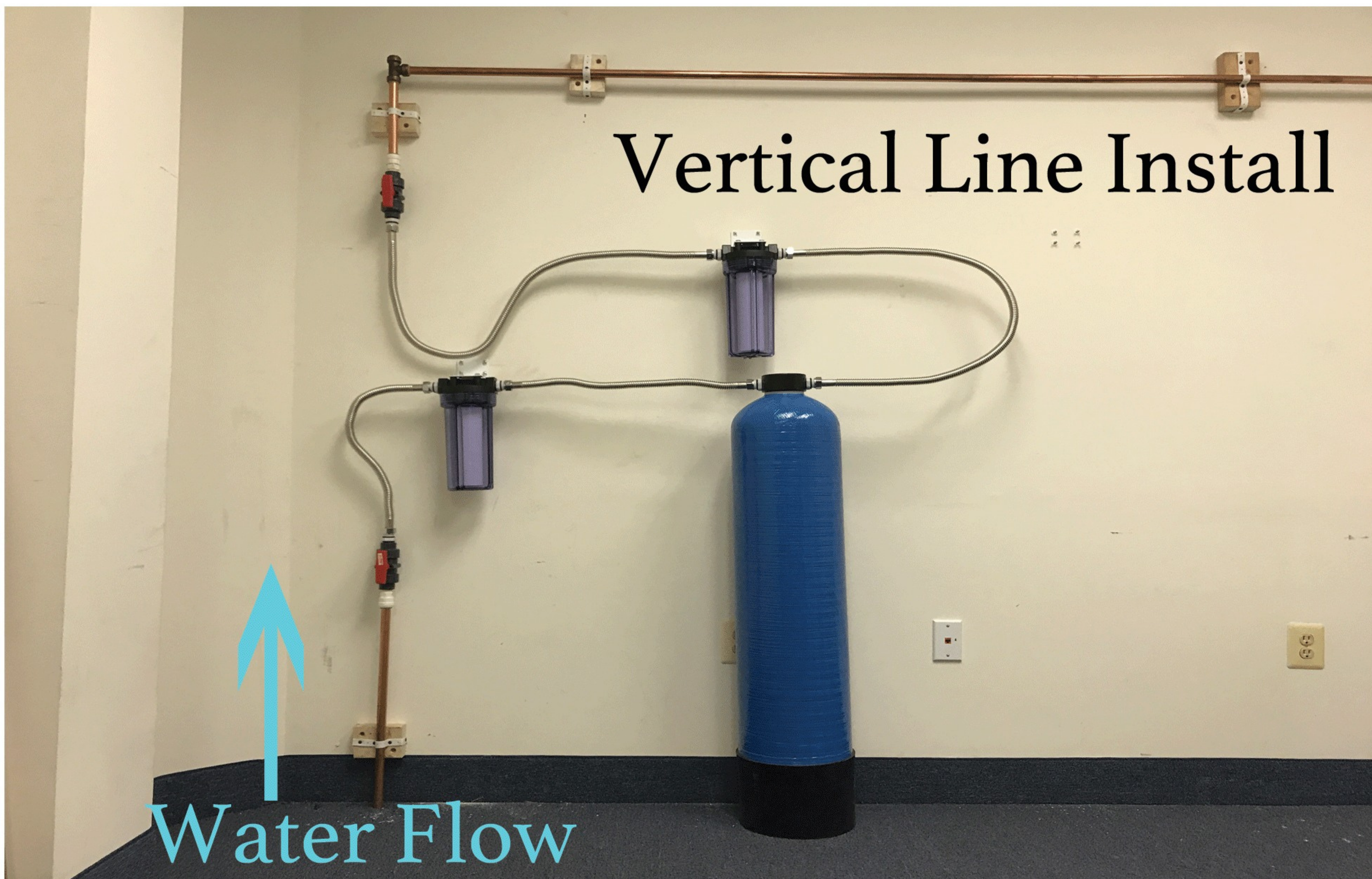
- (1) Pipe Cutter (if home is plumbed with PVC or Copper water lines)
- (1) Utility Knife (if home is plumbed with PEX water lines)
- (1) Adjustable Wrench
- (8) Screws to Mount Pre & Post Filters (Make sure screws are compatible w/type of material wall is made with - example Dry Wall Screws, Wood Screws, Concrete, etc...)
- Screw Driver or Power Drill to install screws for mounting pre & post filter
- Empty 5 Gallon Bucket & a Couple Towels Just in Case



## Horizontal Line Install



## Vertical Line Install





# Preparing for Installation

## First - Shut Off Water & Drain the Homes Plumbing:

- Turn Whole House Water Shutoff Valve to the Off Position
- Open the hot and cold water taps on the highest sink in the home
- Open the hot and cold water taps on the lowest sink in the home, this will drain the water from the pipes
- Wait until the water stops running completely to confirm that the whole house water shutoff valve has completely cut off water entering the home.
- Once water flow has completely stopped and plumbing drained, turn the hot and cold water taps on the highest skin in the home and lowest sink in the home used to drain the home's plumbing back to the Closed/Off position.

## Prepare the Installation Kit Fittings:

- Apply Teflon Tape to the (8) 3/4" x 3/4" Nipple Fittings' threads
- Apply Teflon Tape to the (2) 3/4" MPT x 3/4" CTS Fittings' Threads
- Apply Teflon Tape to the (2) 3/4" MPT x 1" CTS Fittings' Threads
- Check the (4) Stainless steel hoses to confirm Black O-Ring is seated in each end of the hoses.



## Assemble the Ball Valve Components:

- Insert (1) Nipple Fitting into each of the (2) Ball Valves. Tighten until the black o-ring is flush and further tighten 1/4 turn with wrench
- *If installing on a 3/4" incoming water line, insert (1) 3/4" MPT x 3/4" CTS Fitting in Each of the (2) Ball Valves. Install until hand tight and then further tighten an additional 1/4-1/2 turn with wrench*
- *If installing on a 1" incoming water line, insert (1) 3/4" MPT x 1" CTS Fitting in Each of the (2) Ball Valves Install until hand tight and then further tighten an additional 1/4-1/2 turn with wrench*

## Complete Ball Valve Assembled (photo on the left):

- The black inserts shown in these photos are only needed if the home's incoming water line is PEX
- The black inserts are not required if the home's incoming water line is PVC or Copper.

## If Home's Water Line is PEX, use Black Ferrule Inserts:

- The Black Ferrule inserts are only needed when locking the push fitting onto flexible PEX piping.
- Insert the Black Ferrule into the opening of the pipe as shown in the on the left prior to locking on the Push Fittings. The black ferrule insert prevents the walls of the flexible PEX pipe from buckling inward when the push fit locks on.
- Photo example on the left.



# Install Steps for Horizontal Water Line Example



## Find a suitable location for install:

- Install the whole house filter on the incoming water line. After the whole house water shutoff valve and before hot water heater.
- Mount the Pre & Post Sediment Filter on the wall. Make sure the components are close enough to the water line and each other to reach with the (4) Stainless Steel Hoses included with the purchase of your system.

## Insert Nipple Fittings into all 3 Filter Heads:

- Install (2) Nipple Fittings into the Inlet & Outlet of the pre-sediment filter, post sediment filter and main tank filter. Tighten nipples until black o-ring is flush with filter head, further tighten 1/4 turn with wrench.



## Mark location for Cutting Pipe:

- Prior to making a cut in the pipe, connect (1) stainless steel compression hose to each of the (2) Ball Valves.
- Connect (1) of the stainless steel compression hoses to the inlet of the pre-filter and carefully bend (without kinking, smooth curve bends are best) the stainless steel hose over to the location where you would like to connect the ball valve to the waterline.
- Mark that location with a pencil, the pipe will insert about 1" deep into the push fitting, allow room for that when marking the cut location. Repeat these steps from the outlet of the post-filter to the incoming water line.

## Check the connection length between filters:

- Carefully bend the remaining (2) stainless compression hoses into the shape needed to make connections between the filters and confirm they are mounted close enough.

## Cut out the section of Pipe:

- Now that the location of housings and distance from water line have been checked and confirmed suitable to reach with the (4) Included Stainless Steel Hoses. You may cut and remove the section of Pipe.
- For PVC & Copper, use a Pipe Cutter
- For PEX, use a Utility Knife





# Install Steps for Horizontal Water Line Example



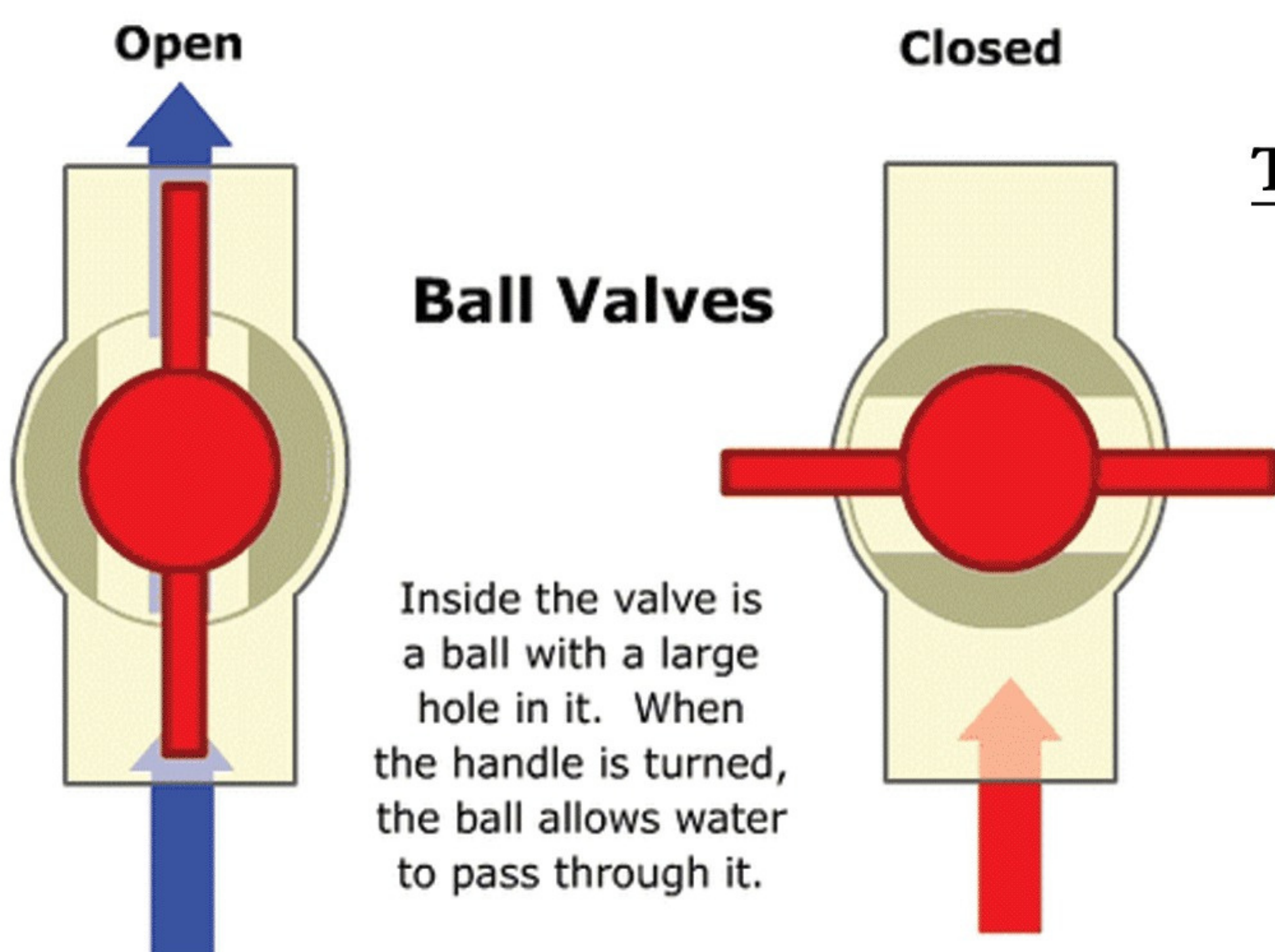
## Connect Ball Valve to the Home Water Line & Pre-Filter Inlet

- Prior to pushing the “Push Fit” Fitting onto the pipe, make sure the cut is straight and that the pipe itself is clean. If corrosion is on the outside of the pipe, lightly sand it so that it is clean and smooth.
- Simply push the fitting firmly onto the home’s pipe to lock in place.
- If the Home has PEX Piping, Don’t forget to insert the black ferrule inserts into the open end of the pipe prior to locking on the Push Fit Fitting. See preparing for install page for details.
- Connect (1) stainless steel hose between the ball valve and inlet of the pre-filter.
- Make sure there is a black o-ring is seated inside each end of the stainless steel hose when connecting. Thread on the hose connections until hand tight, then further tighten 1/4 - 1/2 turn with a wrench.



## Connect Outlet of Pre-filter to Inlet of Main Tank Filter

- Using (1) Stainless Steel Hose, connect the outlet of the pre-filter to the inlet of the main tank filter
- Carefully bend curves into the stainless steel line as needed to make connection (avoid kinking the stainless steel hose).
- Thread on hose connections until hand tight, than further tighten with adjustable wrench 1/4 - 1/2 turn.



## Turn the Ball Valve You Have Installed to the CLOSED Position:

- It is critical that the Ball Valve you have just installed be turned to the completely closed position.
- The next step involves turning the home’s whole house water shutoff valve back on.



# Install Steps for Horizontal Water Line Example



## Slowly Flush Water Through the Main Tank Filter Until it Runs Clear:

- After turning the Ball Valve you installed to the closed (off) position. SLOWLY turn Whole Home Water Shut Off Valve PARTIALLY back to the open position
- Connect (1) of the Stainless Hoses to the outlet of the main tank. Thread on the connection hand tight, then further tighten 1/4 to 1/2 Turn.
- Place the other end of the stainless steel hose over a 5 gallon bucket
- Turn the Ball Valve you've installed PARTIALLY open, allow water to run through the filtration system SLOWLY until it runs clear. Turn the Ball Valve back to the completely Closed Position.



## Connect Outlet of Main Tank Filter to Inlet of the Post Filter:

- After flushing, connect the outlet of the Stainless Steel Hose used to flush the system to the inlet of the Post Sediment Filter.
- Carefully bend curves into the stainless steel line as needed to make connection (avoid kinking the stainless steel hose).
- Thread on hose connections until hand tight, than further tighten with adjustable wrench 1/4 - 1/2 turn.

## Connect outlet of the Post Filter to the Home's Water Line:

- Connect the last Stainless Steel Hose to the remaining Ball Valve. Tighten connections until hand tight, then further tighten hose 1/4 - 1/2 turn with a wrench.
- Connect one end of the stainless steel hose to the outlet of the post filter. Tighten connections until hand tight, further tighten 1/4 - 1/2 turn with a wrench.
- Connect the remaining Ball Valve to the home's water line using the "Push Fit Fitting". It is very important that the cut be straight and the pipe clean. Some light sanding may be required if pipe is corroded or dirty. Simply push the fitting onto the pipe to lock it in place.
- If the Home has PEX Piping, Don't forget to insert the black ferrule inserts into the open end of the pipe prior to locking on the Push Fit Fitting. See preparing for install page for details.
- SLOWLY Turn the Whole Home Water Shut Off Valve to the completely open position. Open the Ball Valve on the OUTLET side of the filtration system. SLOWLY open the Ball Valve on the INLET Side of the filtration System to the open position.
- Check all connections for leaks. If leaking, Turn Inlet & Outlet Ball Valves to the closed position. Tighten leaking connections 1/4 Turn only at a time with wrench to avoid over tightening.





# Install Steps for Vertical Water Line Example



## Find a suitable location for install:

- Install the whole house filter anywhere in between the whole house water shutoff valve and the hot water heater.
- Mount the Pre & Post Sediment Filter on the wall. Make sure the components are close enough to the water line and each other to reach with the Stainless Steel Hoses.

## Insert Nipple Fittings into all 3 Filter Heads:

- Install (2) Nipple Fittings into the Inlet & Outlet of the pre-sediment filter, post sediment filter and main tank filter. Tighten nipples until black o-ring is flush with filter head, further tighten 1/4 turn with wrench.



## Mark location for Cutting Pipe:

- Prior to making a cut in the pipe, connect (1) stainless steel compression hose to each of the (2) Ball Valves.
- Connect (1) of the stainless steel compression hoses to the inlet of the pre-filter and carefully bend (without kinking, smooth curve bends are best) the stainless steel hose over to the location where you would like to connect the ball valve to the waterline.
- Mark that location with a pencil, the pipe will insert about 1" deep into the push fitting, allow room for that when marking the cut location. Repeat these steps from the outlet of the post-filter to the incoming water line.



## Check the connection length between filters:

- Carefully bend the remaining (2) stainless compression hoses into the shape needed to make connections between the filters and confirm they are mounted close enough.

## Cut out the section of Pipe:

- Now that the location of housings and distance from water line have been checked and confirmed suitable to reach with the (4) Included Stainless Steel Hoses. You may cut and remove the section of Pipe.
- For PVC & Copper, use a Pipe Cutter
- For PEX, use a Utility Knife



# Install Steps for Vertical Water Line Example



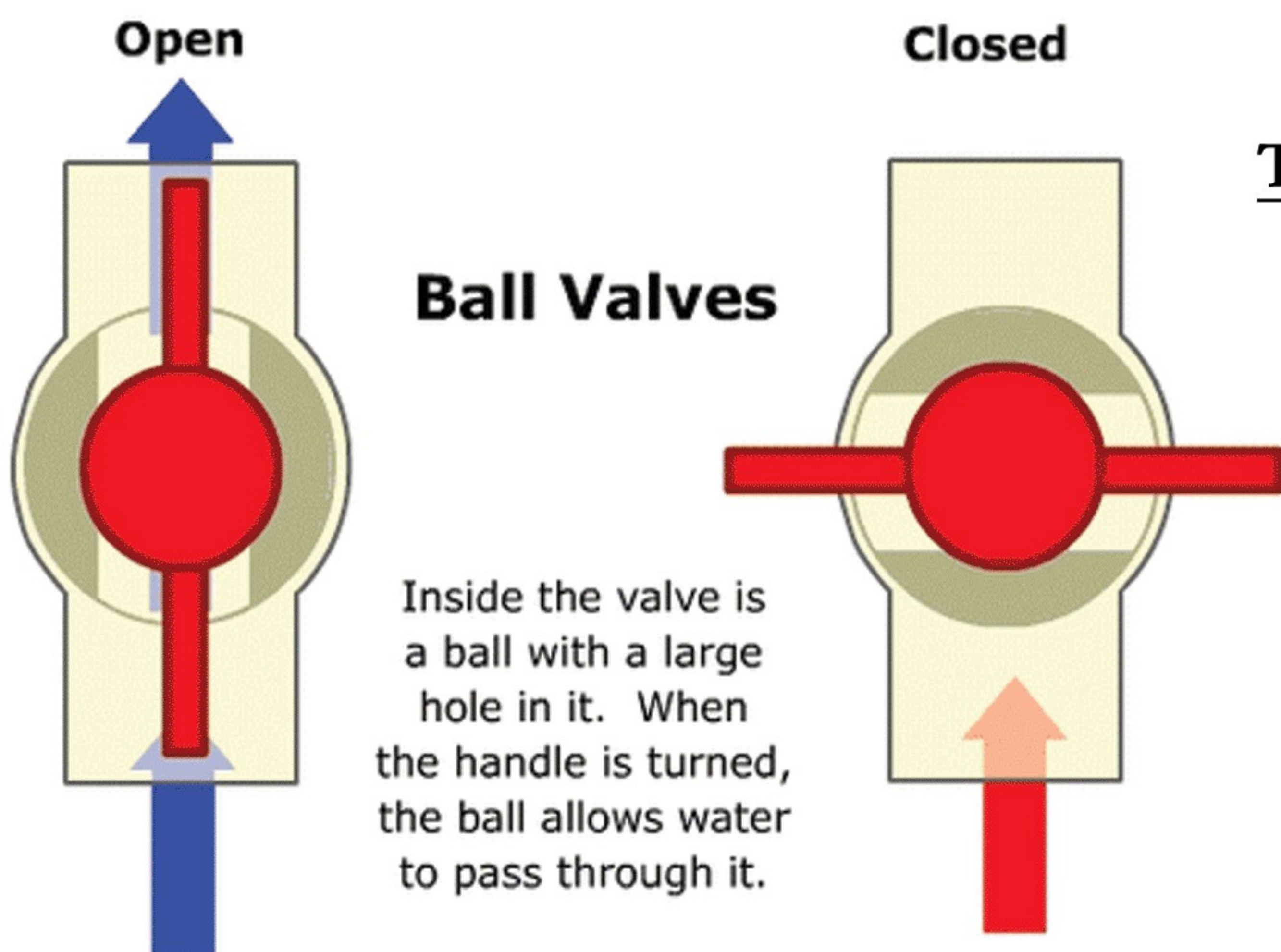
## Connect Ball Valve to the Home Water Line & Pre-Filter Inlet

- Prior to pushing the “Push Fit” Fitting onto the pipe, make sure the cut is straight and that the pipe itself is clean. If corrosion is on the outside of the pipe, lightly sand it so that it is clean and smooth.
- Simply push the fitting firmly onto the home’s pipe to lock in place.
- If the Home has PEX Piping, Don’t forget to insert the black ferrule inserts into the open end of the pipe prior to locking on the Push Fit Fitting. See preparing for install page for details.
- Connect (1) stainless steel hose between the ball valve and inlet of the pre-filter.
- Make sure there is a black o-ring is seated inside each end of the stainless steel hose when connecting. Thread on the hose connections until hand tight, then further tighten 1/4 - 1/2 turn with a wrench.



## Connect Outlet of Pre-filter to Inlet of Main Tank Filter

- Using (1) Stainless Steel Hose, connect the outlet of the pre-filter to the inlet of the main tank filter
- Carefully bend curves into the stainless steel line as needed to make connection (avoid kinking the stainless steel hose).
- Thread on hose connections until hand tight, than further tighten with adjustable wrench 1/4 - 1/2 turn.



## Turn the Ball Valve You Have Installed to the CLOSED Position:

- It is critical that the Ball Valve you have just installed be turned to the completely closed position.
- The next step involves turning the home’s whole house water shutoff valve back on.



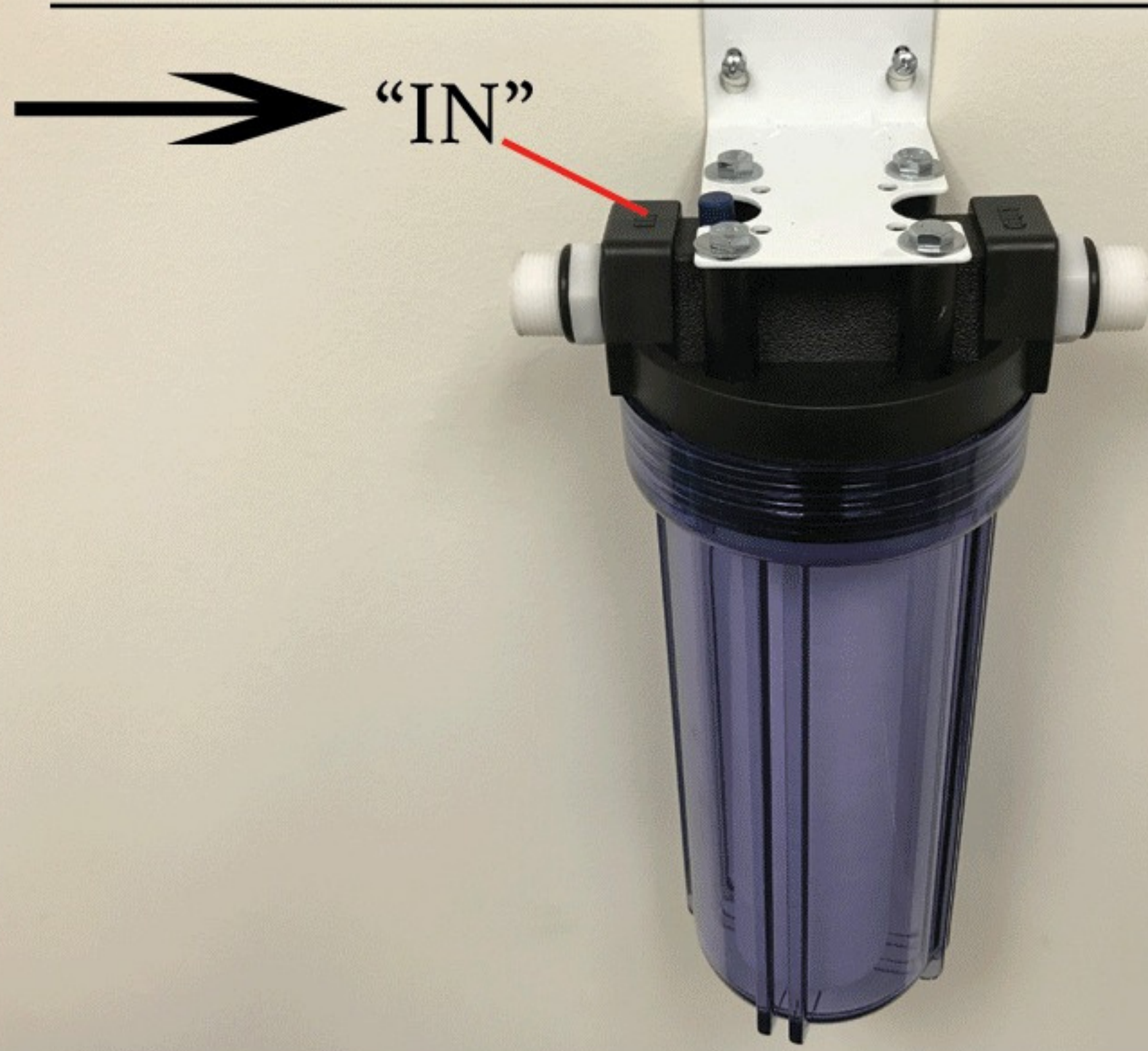
# Install Steps for Vertical Water Line Example



## Flush Water Through the Main Tank Filter Until it Runs Clear:

- After turning the Ball Valve you installed to the closed (off) position. SLOWLY turn Whole Home Water Shut Off Valve PARTIALLY back to the open position
- Connect (1) of the Stainless Hoses to the outlet of the main tank. Thread on the connection hand tight, then further tighten 1/4 to 1/2 Turn.
- Place the other end of the stainless steel hose over a 5 gallon bucket
- Turn the Ball Valve you've installed PARTIALLY open, allow water to run through the filtration system SLOWLY until it runs clear. Turn the Ball Valve back to the completely Closed Position

## Standard Post Filter Flow Direction



## Reverse Flow Direction of the Post Filter

- Since we're installing the filtration system on a vertical line, the inlet and outlet direction of the post filter should be changed.
- To reverse flow direction remove the bracket from the post filter and spin around so that the Inlet is now on the opposite side of the standard flow direction.
- This will allow you to maintain smooth bends in the stainless steel hoses for cleaner installation.
- Depending on your install location and which side of the filtration system the vertical line is on, performing this on the pre-filter instead can also achieve a cleaner installation.

## Vertical Post Filter Flow Direction



## Connect Outlet of Main Tank Filter to Inlet of Post Filter

- Now that the flow direction of the post filter has been reversed its time to connect the outlet of the main tank to the inlet of the post filter (photo on the left).
- Connect the outlet of the Stainless Steel Hose used to flush the system to the inlet of the Post Sediment Filter.
- Carefully bend curves into the stainless steel line as needed to make connection (avoid kinking the stainless steel hose).
- Thread on hose connections until hand tight, than further tighten with adjustable wrench 1/4 - 1/2 turn.



# Install Steps for Vertical Water Line Example



## Connect outlet of the Post Filter to the Home's Water Line:

- Connect the last Stainless Steel Hose to the remaining Ball Valve. Tighten connections until hand tight, then further tighten hose 1/4 - 1/2 turn with a wrench.
- Connect one end of the stainless steel hose to the outlet of the post filter. Tighten connections until hand tight, further tighten 1/4 - 1/2 turn with a wrench.
- Connect the remaining Ball Valve to the home's water line using the "Push Fit Fitting". It is very important that the cut be straight and the pipe clean. Some light sanding may be required if pipe is corroded or dirty. Simply push the fitting onto the pipe to lock it in place.
- If the Home has PEX Piping, Don't forget to insert the black ferrule inserts into the open end of the pipe prior to locking on the Push Fit Fitting. See preparing for install page for details.
- SLOWLY Turn the Whole Home Water Shut Off Valve to the completely open position.
- Open the Ball Valve on the OUTLET side of the filtration system.
- SLOWLY open the Ball Valve on the INLET Side of the filtration System to the open position.
- Check all connections for leaks. If leaking, Turn Inlet & Outlet Ball Valves to the closed position. Tighten leaking connections 1/4 Turn only at a time with wrench to avoid over tightening.