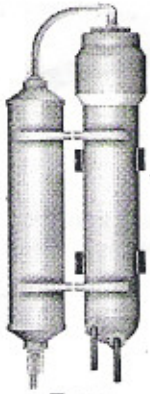
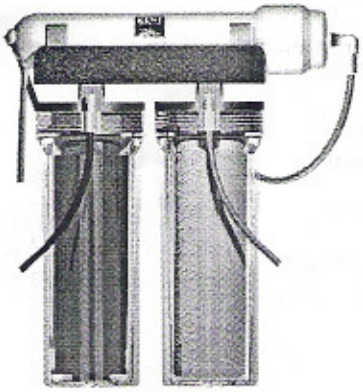
Kent Marine®

FVKITKENT

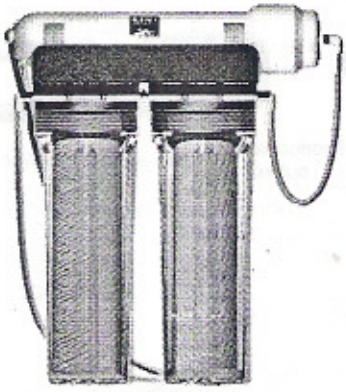
Automatic shut off system for 10 to 60 gpd reverse osmosis filtration systems



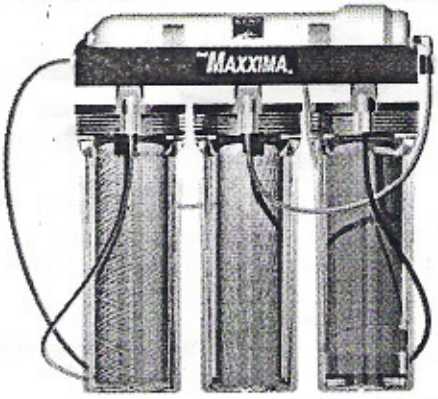
Bare Bones



Full Size CTA



Full Size TFC & HiS



Maxxima & Maxxima HiS

Parts List

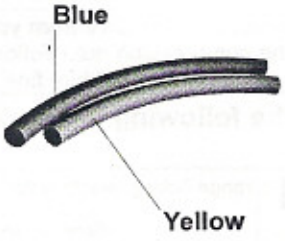
Pressure activated solenoid

Solenoid: Qnty: **1**

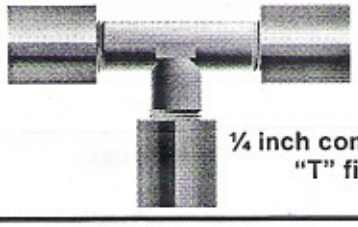
CheckV: Qnty: **1**

1/8 inch male connector

Jaco18NIP: Qnty: **1**

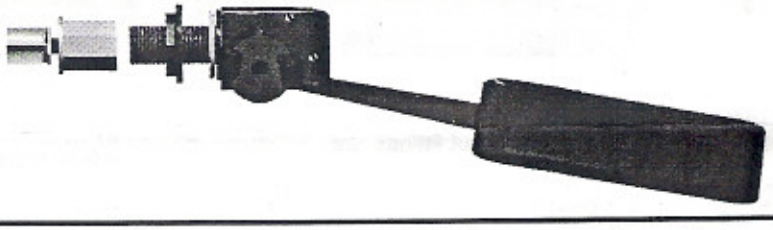


Tubing Blue 1 ft: Qnty: 2
Tubing Yellow 1 ft: Qnty: 2



¼ inch compression "T" fitting

JacoTEE: Qnty: **1**



FVKENT: Qnty: **1**

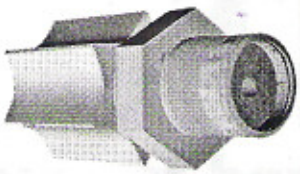
Thank you for purchasing our Kent Marine float valve kit. Above lists the contents of the FVKITKENT. Please sort and count the shown pieces to make sure you have what you need to complete this kit. If any parts are missing, please contact technical support at (770) 966-5200. Please read through these instructions prior to assembly.

IMPORTANT: This kit is made to automatically shut off an RO unit when used to fill an isolated reservoir. It is recommended that the reservoir have some kind of lid to keep environmental contaminates from entering the water. **This kit is not designed to fill and maintain water levels in a sump of an aquarium.**

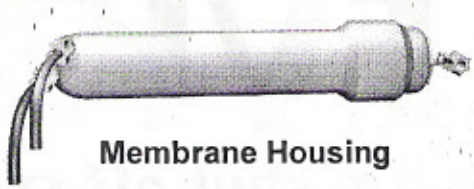
REV. 1

Check Valve Installation

The check valve installation involves only working with the membrane housing of the RO unit. When installing this kit, the RO must be off. If the unit has been in operation, installing this kit may require temporarily relocating the unit to a work area where spilled water can be easily cleaned up.



Part # **CHECKV**
Straight fitting with internal stainless steel check valve.



Membrane Housing

The following 6 diagrams are the check valve installation for Bare Bones, Full Size: TFC, CTA, and HiS reverse osmosis filtration systems.

1

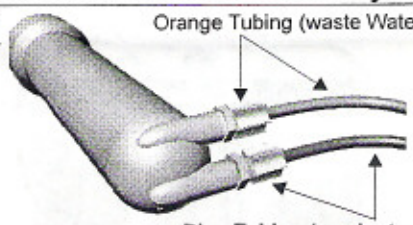
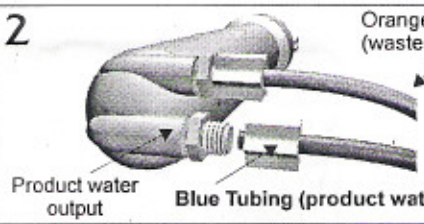


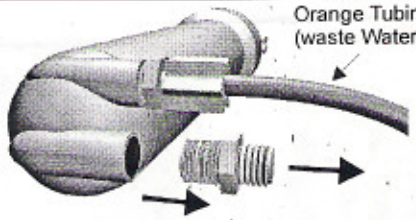
Diagram above shows where the waste water and product water output fittings are located.

2



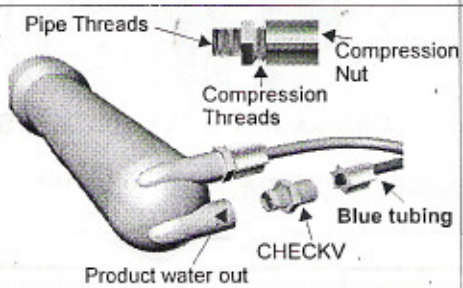
Remove compression nut from **product waters** Jaco fitting. This may require use of a wrench. Do not try to remove the compression nut from the tube.

3



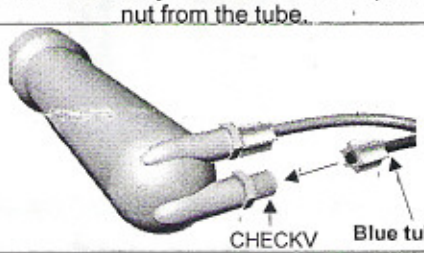
Remove the rest of the fitting from the membrane housing with a wrench. **Keep this fitting for later use**.

4



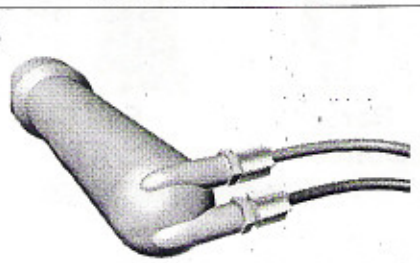
Locate the CHECKV from your kit. Remove the compression nut. Teflon tape the pipe threads only(thin, fine threads).

5



Screw the CHECKV into the product water port of the membrane housing. Do not over tighten, this could strip the nylon threads. Screw the compression nut and blue tube onto the CHECKV, finger tight.

6



Once the blue tube is installed, give the compression nut a 1 ¼ turn with a wrench. Check valve installation is complete.

The following 6 diagrams are the check valve installation for the Maxxima series RO / DI filtration systems.

1

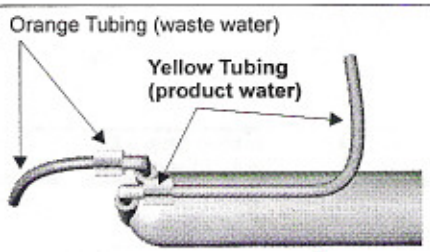
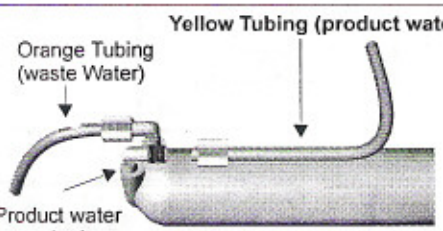


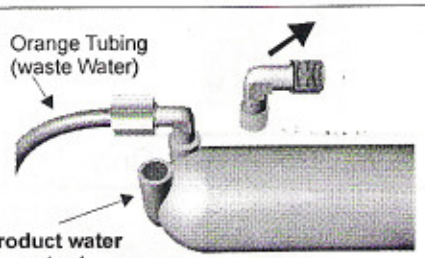
Diagram above shows where the waste water and product water output fittings are

2



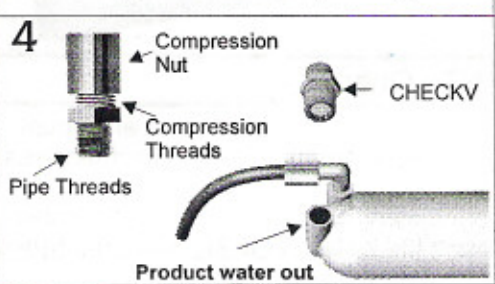
Remove compression nut from **product waters** Jaco fitting. This may require use of a wrench. Do not try to remove the compression nut from the tube.

3



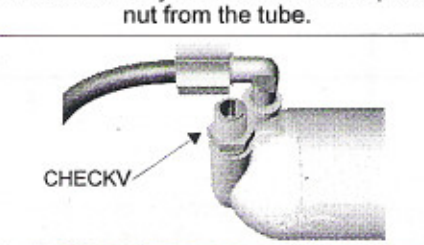
Remove the rest of the fitting from the membrane housing. **Keep this fitting for later use**.

4



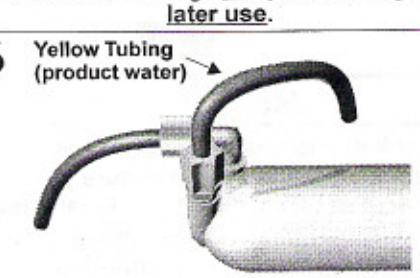
Locate the CHECKV from your kit. Remove the compression nut. Teflon tape the pipe threads only(thin, fine threads).

5



Screw the CHECKV into the product water port of the membrane housing. Do not over tighten, this could strip the nylon threads. Screw the compression nut and yellow tube onto the CHECKV, finger tight.

6



Once the yellow tube is installed, give the compression nut a 1 ¼ turn with a wrench. Check valve installation is complete.

Solenoid Installation

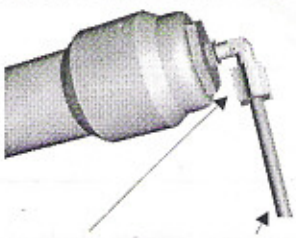
The solenoid installation involves only working with the membrane housing of the RO unit. When installing this kit, the RO must be off. If the unit has been in operation, installing this kit may require temporarily relocating the unit to a work area where spilled water can be easily cleaned up.

Part #: **SOLENOID**
Pressure actuated solenoid

Membrane Housing

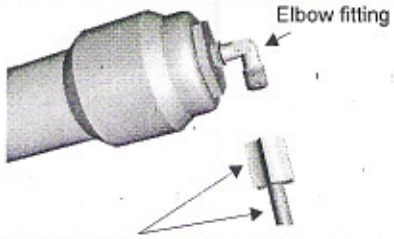
The following 6 diagrams are for ALL single membrane RO and RO/DI filtration units.

1



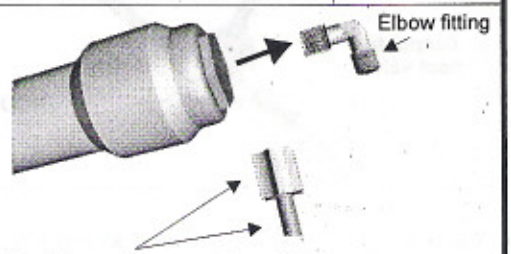
Locate the input end of the membrane housing. This will always have an elbow fitting, and has an attached yellow tube coming from the pre filter.

2



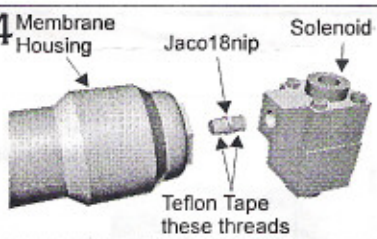
Remove the compression nut from the input elbow fitting. This may require use of a wrench. Do not try to remove the compression nut from the yellow tubing.

3



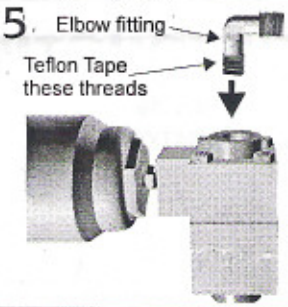
Remove the rest of the elbow fitting from the membrane housing. This elbow will be need in step 5.

4



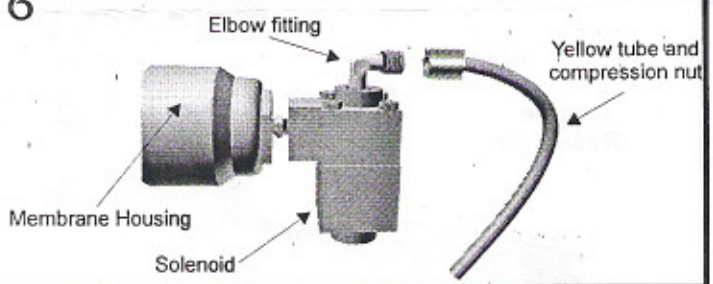
Locate the Solenoid and the Jaco18nip from the kit. Teflon tape both threaded ends of the Jaco18nip. On the solenoid, there are 3 ports, one is on top where the nuts that hold the solenoid together are located, a port on the side, and a port on the bottom. Screw the Jaco18nip into the **SIDE** port of the solenoid. Screw the solenoid/Jaco18nip into the input port of the

5



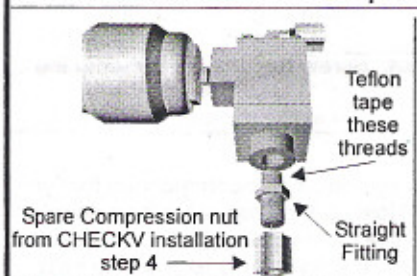
Take the elbow you removed from the membrane housing in step 3, re Teflon tape the pipe threads (small fine threads), and screw this into the **TOP** port of the solenoid.

6

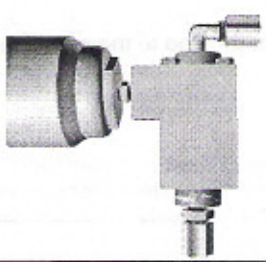


Screw the yellow tubing that is coming from the pre filter, back onto the elbow fitting that is located on top of the solenoid. Tighten the compression nut to finger tight and then give it a 1 ¼ turn with a wrench. The next steps are dependant on the type of filtration unit you have. You will either have a Bare Bones or Full Size RO unit, or a Maxxima RO/DI system.

Final Solenoid installation step for Bare Bones and Full Size RO

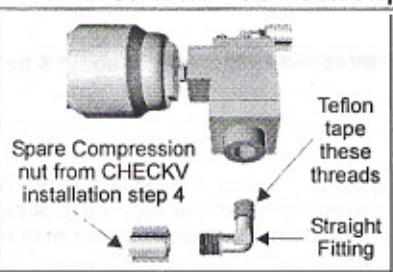


Locate the straight fitting that was removed from the membrane housing in step 3 of the Check Valve Installation. Re Teflon tape the pipe threads (thin, fine threads). Locate the compression nut that was

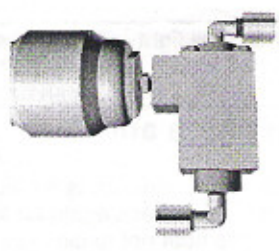


Screw the compression nut onto the straight fitting, but not tight. Screw the straight fitting into the **BOTTOM** port of the solenoid. This completes the

Final Solenoid installation step for Maxxima RO/DI units.

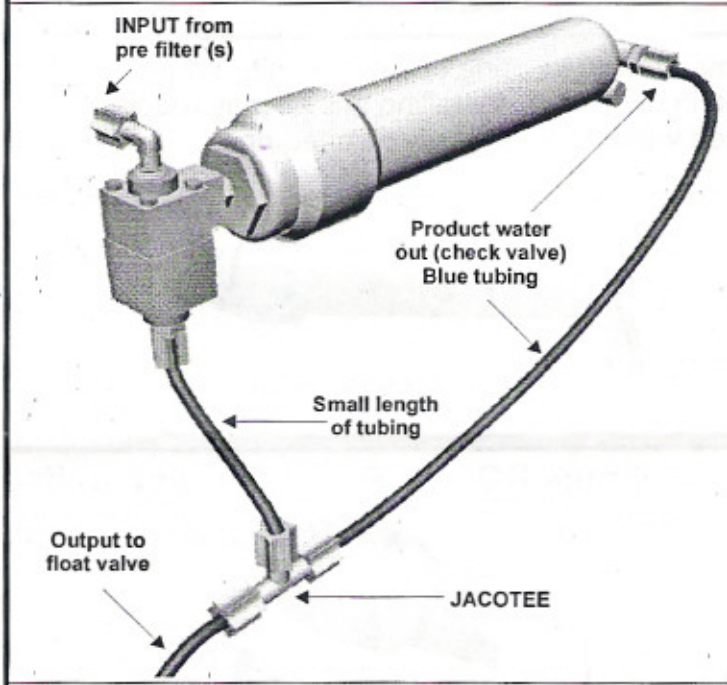


Locate the elbow fitting that was removed from the membrane housing in step 3 of the Check Valve Installation. Re Teflon tape the pipe threads (thin, fine threads). Locate the compression nut that was removed from the **CHECKV**.



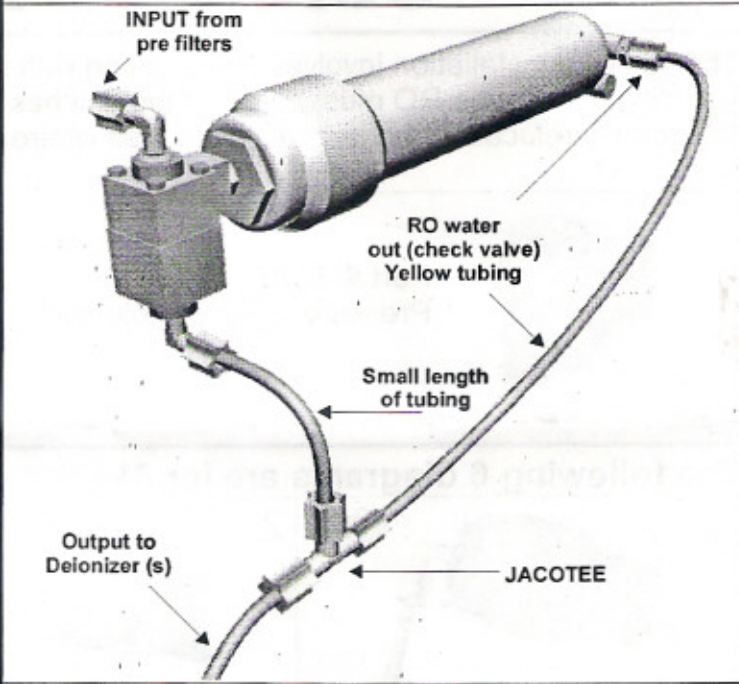
Screw the compression nut onto the elbow fitting, but not tight. Screw the elbow fitting into the **BOTTOM** port of the solenoid. This completes the solenoid

Tubing Installation for Standard RO



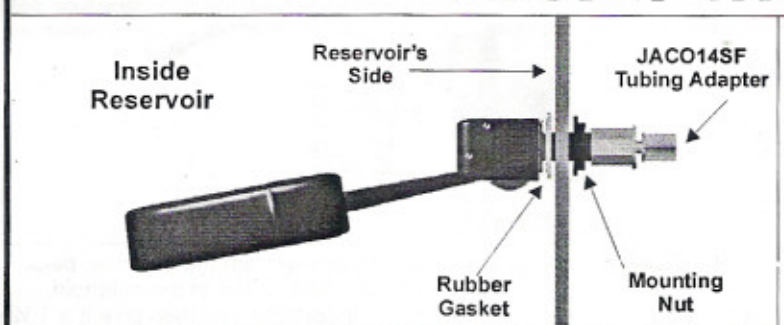
You will be working with the product water line (blue). Taking the blue line run it horizontally toward the solenoid. Cut the blue tube at the solenoid. Install the JACOTEE as shown in diagram. Take a small length of tubing and install one end into the bottom of the solenoid and the other into the top of the TEE. Make sure all fittings are tight. Installation complete.

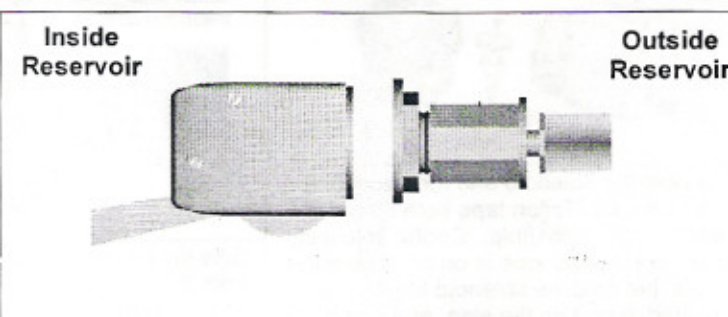
Tubing Installation for Maxxima



You will be working with the RO water line (yellow). Taking the yellow line that runs to the third canister, cut it half way from where the tube comes out of the bottom of the bracket to the fitting on the third canister. Install the JACOTEE as shown in diagram. Take a small length of tubing and install one end into the bottom of the solenoid and the other into the top of the TEE. Make sure all fittings are tight. Installation complete.

FLOAT Installation





The float valve instillation involves working with the FLOAT and a suitable reservoir in which to store water. The reservoir should be dry and easily accessible during this installation. It is recommended that the reservoir be made of a material that can be easily drilled such as plastic or acrylic.

Drill a 5/8" hole in the side of the reservoir about 1" above where you want the water level to be. Remove the JACO14SF, and the Mounting Nut from the threaded stem of the float valve. Slide the threaded stem from the inside of the reservoir through the 5/8" hole. **NOTE:** the rubber gasket has to be on the inside of the reservoir. Install the Mounting Nut onto the threaded stem. Tighten the mounting nut with a wrench until tight. Teflon tape the threaded stem. Wrap it about 4 times from the end to the mounting nut. Screw the JACO14SF onto the threaded stem. This may butt up against the Mounting Nut. Take the product water output tube from the unit and install this into the JACO14SF. The float can be adjusted for water level, however, it performs best when the adjustment dial is set in the middle. Float Valve

Operation and maintenance:

Once all installation has been completed, the system is ready for use. When first operating this system, it is recommended that you check **ALL** connections for leaks, especially when the float valve is closed and the system pressurizes. Hold up the float valve for a couple of minutes and check again for leaks. Avoid any obstructions that may hinder the float valves performance like tubing, pumps, etc. This can cause the float not to close completely and can over flow the reservoir. Periodically, you may have to clean the float if it is exposed to salty

Troubleshooting:

The most common problem is the system will not shut down when the float is closed. This problem may be fixed by: making sure the check valve is installed properly and it is in working order, the float is completely closed, look for leaks (even small ones). This can also be caused by air trapped in the tubing that goes to the bottom of the solenoid. You can remedy this by shutting off the unit, place a bucket under the solenoid, remove the tube from the bottom of the solenoid, point the tube into the bucket, make sure the float valve is closed, and turn the water on. This will force the air out of that tube. While it is running, re install the tube on the solenoid.

Depending on water pressure, it can take 5 to 10 minutes to completely shut of once the float is closed.