## **D-D RO Booster pump fitting instructions**



## **Booster benefits:**

RO units produce RO water when mains pressure is between 35-70 psi, if mains water pressure is below 35 psi there will not be adequate pressure on the membrane for the efficient production of Reverse Osmosis water.

If your mains water pressure is low an RO booster pump will increase water pressure allowing the RO unit to deliver or even exceed its stated gallon per hour rating (dependant on water temperature).

As RO membranes become more efficient at their maximum working pressures the use of a booster pump can result in a marked reduction of TDS (Total dissolved solids) of the RO product water.

As the efficiency of the membrane increases less waste water will go to drain. A membrane reaches its maximum efficiency at around 70 psi. If your mains pressure is between 35-60 psi a booster pump will insure your membrane will be running at peak efficiency, a worthy investment.

## Assembly:

The D-D RO booster pumps are low voltage and require the use of a transformer which is included.

Screw the two pipe connectors to the main pump using plumbers tape (PTFE) on the threads if necessary to give a good seal.



Connect the pipe work up to the Jaco fittings (image above) and ensure that the pipe work is pushed fully home and that the nut is tightened securely.

There is an inlet and an outlet side to the pump and the correct direction of flow is indicated by an arrow moulded into the head of the pump.

Remember that there will be more back pressure on the outlet side of the pump and that this side should be the most secure to prevent the pipe from being blown off if the flow is restricted down stream.

The outlet connects directly to the RO unit and will increase the boost pressure on the system to force water through the membrane. This is particularly useful in the winter as lower water temperatures normally reduce flow and production.

Switch the water supply on to the pump and then plug in the transformer to start the operation. Do not operate dry for any length of time.

## Important:

If the system is fitted with any kind of solenoid or float switch that cuts off the flow to the RO unit, it is important that as this is initiated that the pump is wired so that it switches off at the same time. If this is not done then the pump will continue to push against the stop and will either burn out the motor or more likely damage the diaphragms on the pump.

If the unit is intended to be used continuously it is recommended that the pump is allowed to cool for 15 minutes every 4 hours by the use of a simple timer.



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