



When a new Clearflow pump is built it is flow and pressure tested to ensure that it performs to a high standard. However, with time and use, parts may have been physically damaged, worn out, or partially blocked by non-soluble matter.

If you are concerned that your pump may not be producing the same performance as when it left our factory there are a number of steps that you can take to test, and repair, your unit. These are listed below, they are not time consuming, do not require a high level of expertise and will not invalidate the warranty.



We have a service and repair facility at our works in St Albans, and can either undertake full repairs or supply replacement parts to engineers as required.

We have all spares in stock, and can service any pump that we've supplied since 1986.

If you need spare parts, it is important that you advise the exact pump model and the serial number (to be found on a label on the switch or on your original guarantee card).



If you would like a Kamco pump serviced, please mark it clearly with your full name and address and contact telephone number, and either send it to the service department at the address below, or pack the pump and then call us to arrange collection, if preferred.

Trouble shooting / problem solving.

A flow chart is included on the following page to assist in diagnosing common problems that can be experienced on site. The chart and illustrated test are a useful guide in determining if a problem is related to the Clearflow pump or if it is a problem related to the heating system.

How to check your Clearflow's performance.

We suggest these checks be conducted outside and not within a clients premises.

Test 1 - Pressure test

What you need: Pressure gauge 0-30 psi adapted to 3/4 BSP male.

Is your pump a Kamco machine?

If your pump is not a Kamco machine, and you need parts or service, then we strongly advise that you contact the manufacturer of your machine to ensure compatibility of parts.

Not all power flushing pumps are the same, and we service and stock parts only for our own Kamco brand pumps.

We do not guarantee that our parts, valves, and hoses sets will fit or be suitable for any other make of power flushing pump.

1. Fill the tank 1/2 full of water.
 2. Point the flow reverser lever to the left.
 3. Position the left hand valve to "Circulate".
 4. Position the right hand valve to "Dump".
 5. Attach one supply/return hose to the 3/4" BSP nipples. (short circuiting the flow).
 6. Attach the dump hose as normal.
 7. Holding the end of the dump hose away from you to a suitable discharge point, briefly switch on the motor to fill the dump hose and switch off.
 8. Screw the pressure gauge into the dump hose end and switch on the motor for 30 seconds.
- While the motor is running you should see a reading of 23-25psi for the CF40 Evolution and 26-28psi for the CF90 Quantum.

Test 2 - Flow rate test

What you need: Empty clean 5 litre container (e.g. a blue Powerflush FX2 container)

1. Repeat steps 1-7 of test above.
 2. Hold the dump hose so that it will discharge water into the empty container.
 3. When ready, switch on and use an assistant to time how long it takes to fill the container.
- You should get a reading of between 9 - 11 seconds for the CF40 Evolution and 7 - 8 seconds for the CF90 Quantum.

Inspection

1. Remove the 4 bolts that connect the flange to the tank.
2. Lift and withdraw the pump assembly from the tank.
3. Inspect the rotor cover at the bottom of the unit to ensure that it is flat, there are no bolts damaged or missing, and the O-ring is still in place and has not been pushed out.
4. Inspect the inside of the impeller to make sure that there is no debris inside.
5. Check all hose connection to ensure they are secure.

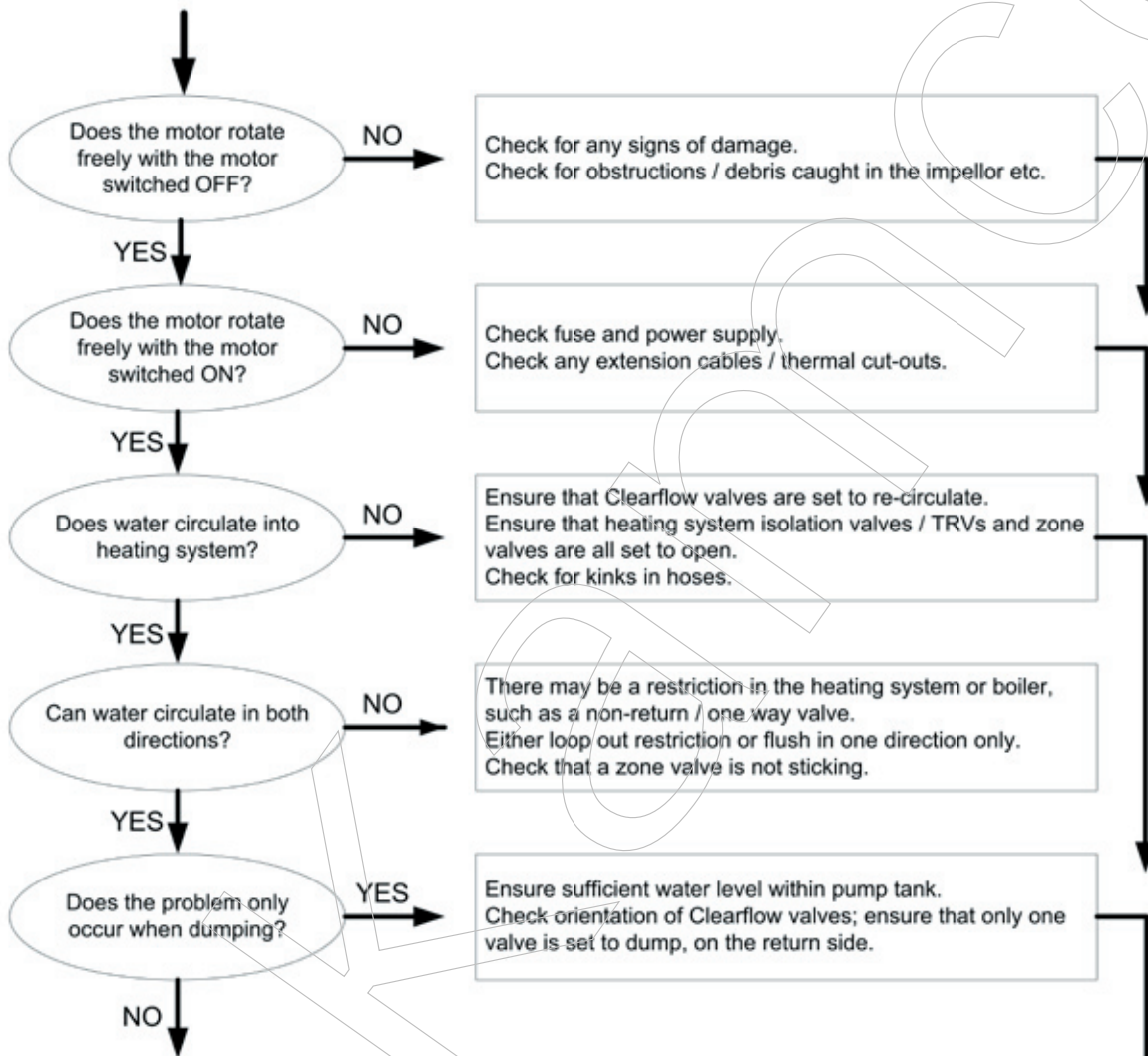
If none of the above faults are apparent please call the Kamco Technical Help line on 01727 875020



TROUBLE SHOOTING / PROBLEM SOLVING

Use the flow chart to determine any likely problem and then if necessary undertake the simple flow test to establish if the Clearflow pump is functioning. If the pump is circulating and dumping with a good flow rate then any problem must be related to the heating system.

Clearflow CF40 Evolution & CF90 Quantum2 fault finder flow chart

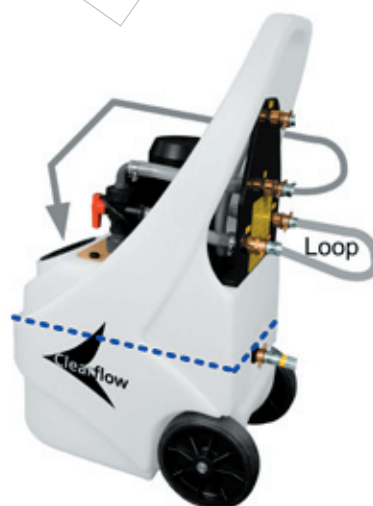


Carry out the following test to establish if it is a Clearflow problem or a heating system problem.

Fill the tank to half height.

Loop the flow and return connections together as in the diagram.

Place the dump hose end back through the filler cap aperture.



Set both valves to re-circulate. Switch on and check flow, then use flow reverser to check flow in reverse direction. Set valve on return side to 'dump' and check flow from end of dump hose back into tank. Return valve to 'circulation', change direction and set other valve to 'dump', and check flow.

1. If the pump is working, then the problem is within the heating system.

2. If this test fails, contact Kamco for further assistance.