

SECTION E – TROUBLE SHOOTING, SERVICE + REPAIR

Kamco have a full "Service and Repair" facility at our premises in St Albans, and can either undertake full repairs or just supply replacement parts as required.

When your new Clearflow pump was first supplied it was flow and pressure tested after assembly to ensure that it would perform to a high standard. However, over 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.

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 the appropriate BSP male.

1. Fill the tank ½ 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 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, switch on the motor for five seconds. You should see a strong jet of water.
8. Attach the pressure gauge into the hose end and turn the motor on for 30 seconds.
While the motor is running you should get a reading of 23-25psi for the CF40 Evolution and 26-28psi for the CF90 Quantum², and 28psi for the CF210 Titan.

Test 2 - Flow rate test

What you need: Empty clean 5 litre container (eg a blue Power flush 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, use an assistant to time how long it takes to fill the 5 litre container.
You should get a reading of between 9 - 11 seconds for the CF40 Evolution and 7 - 8 seconds for the CF90 Quantum.
4. When testing the CF210 Titan use a 25 ltr container, which should take approx 25 seconds.

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:
It is flat.
There are no bolts damaged or missing
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.

