

## CP2 pump head adapter power flushing accessory



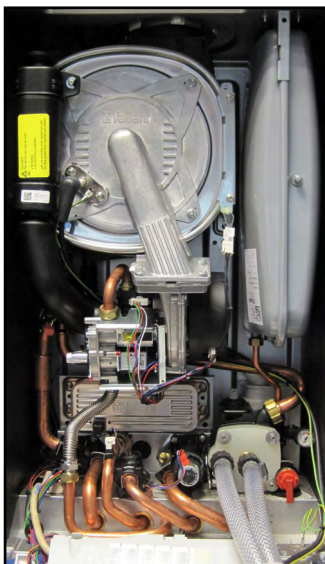
The CP2 pump head adapter:

- Replaces the circulator pump motor for quick and easy connection onto 22mm diameter pipe work.
- Enables the primary water side of combi plate heat exchangers to be cleaned without removal from the boiler.
- Connects directly onto most combination boiler pump bodies.
- Avoids the need to undo corroded pump nuts.
- Achieves more effective flushing than connecting to system via radiator valves.
- Includes the pump body in the cleaning process.

## CP2 pump head adapter | fast and effective connection in to heating systems

The CP2™ adapter has been developed for use with heating system power flushing pumps, to enable them to be connected directly onto the body of many heating system circulator pumps, after removal of the motor head.

The compact dimensions allow easy connection of a power flushing pump



even in boilers which contain the circulator pump within the casing, such as combination and system boilers, where pump access is often difficult, or which have non-standard connections.

When used to connect on to pumps that are external to the boiler there is no need to disconnect the circulator pump 1.1/2" unions, which are often seized and difficult to remove.

During power flushing, the circulator pump body (volute), which often contains corrosion debris, is included in the cleaning process.

Use of the CP2 adapter is the preferred method of flushing combination boiler systems, and is superior to the alternative method of connecting the power flushing pump onto the tails of a radiator.

It allows the central heating (primary)

water side of the secondary heat exchanger of combination boilers to be efficiently flushed with the heat exchanger in place in the boiler casing, giving useful time savings.

### Which pumps will the CP2 fit?

The CP2™ has been designed primarily for Grundfos and combination boiler pumps, but will fit a number of other units, including some Myson, Terrier, Circulator Pumps Ltd and Wilo Gold models.

### What you get with the CP2 kit?

- Adapter body
- 2 x 0.5m adapter hoses
- 4 x M5 + 2 x M6 socket head bolts
- Hexagon key to adjust centre connector
- Large O ring to seal body to pump
- Small O ring to seal chambers of pump
- Plastic carry container for kit



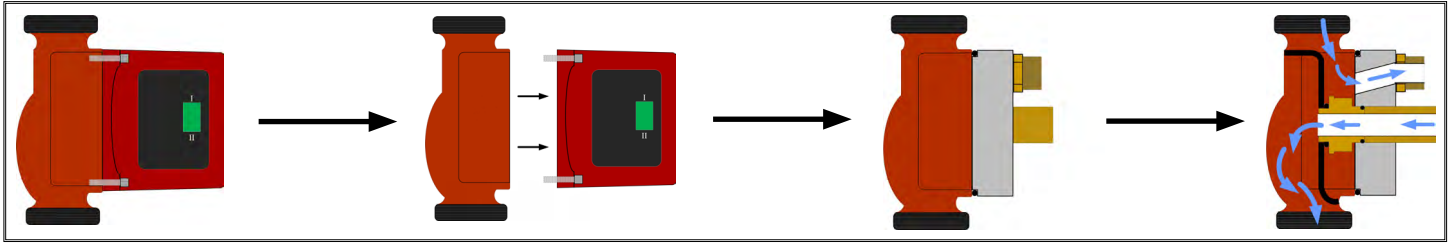
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**TEL: 01727 875020 | WWW.KAMCO.CO.UK | INFO@KAMCO.CO.UK**  
Kamco, Unit 9, Curo Park, Frogmore, St Albans, Herts, AL2 2DD, UK  
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## CP2 pump head adapter | Operating Instructions



### Before you start:

Switch off or electrically isolate the existing circulation pump and make safe the cable and connectors. Protect the area around the pump from water leakage.

Close the circulator pump isolation valves (where fitted), remembering that it is not unusual for valves not to seal completely even though they are apparently fully closed.

### Procedure:

1. Unscrew the Allen bolts and carefully remove the circulator pump head and motor assembly, leaving the circulator pump body installed as normal.

2. As you withdraw the pump head, a small volume of water (the capacity of the pump itself and a short length of pipe work) should be collected in a drip tray, and disposed of safely.

3. Clean the loose rust off the inside of the pump body with a cloth. Ensure there is a clean surface area for both supplied O rings to seat on. Use a flat bladed screwdriver if necessary.

4. A small quantity of silicon sealant can be used to hold the central 'O' ring in place on the brass centre boss whilst securing the CP2™.

5. Offer up the adapter and attach with the hexagon socket (Allen) screws provided. Use an Allen key to tighten the bolts firmly and evenly, but without using extra mechanical leverage.

6. Using the supplied hexagonal centre boss key, gently tighten the brass centre boss until it seals on the inner 'O' ring. Only medium pressure is necessary.

NOTE: Do not overtighten, as this may damage the large 'O' ring, or the main body of the CP2 adapter.

7. Connect the hoses to the adapter and to the supply and return hoses of your power flush pump.

8. Open the isolation valves on the power flush pump (located each side of the flow reverser on Clearflow pumps).

9. Slowly open the circulator pump isolation valves, and check the CP2™ adapter and all hoses for leaks.

10. Switch on the power flushing pump for approx. 5 seconds, and recheck the system for leaks. Carry out the power flushing procedure as normal.

Particular care must be taken to avoid water leaks and splashes when using the CP2™ within the casing of a combination boiler, because of the close proximity of sensitive electronics and PCBs.

Use only chemical resistant O-rings. Never add chemicals until you have checked the system for leaks.

### Cleaning procedure for plate heat exchanger when flushing a combination boiler system

When the radiator circuit power flush is complete, set the boiler to hot water demand, and turn on a hot tap, so that the diverter valve directs the flow through the plate heat exchanger.

Note: Some boilers will only allow flow in one direction when in hot water mode.

Add a further 1/2 litre of Powerflush FX2 to the Clearflow tank, and flush for 10 minutes, reversing the flow regularly. Set the Clearflow into dump mode, and dump (in both directions if possible) until the dump water is clear.

Whilst this procedure of power flushing the plate heat exchanger may be carried out as a stand-alone procedure, without power flushing the rest of the heating system, we would always recommend a total system power flush when a heat exchanger has been blocked.

If this is not carried out, there is a high probability that the heat exchanger will again block in future, as system debris is carried into the heat exchanger with the normal flow and operation of the boiler.

Note 1: To achieve the maximum flow rate around a system when power flushing, the number of bends and restrictions should be kept to a minimum, and the pipe sizes should be as large a diameter as possible.

Note 2: Take care when using on combination boilers such as the Worcester Bosch Heatslave and others which have valves allowing flow in one direction only.

Always refer to manufacturer instructions before use.

### Engineers tip

On certain pumps it can be difficult to get a seal on the large outer 'O' ring. In such cases the addition of a standard Grundfos flat 'O' ring attached to the CP2 body can enable a seal to be made.

The flat 'O' rings can easily be removed from any new or used Grundfos pump head.

Kamco have available a thicker, 7mm large O ring which enables better sealing on the pumps used in Vaillant Eco-Tec boilers.