

Plate heat exchanger adapters for descaling and de-sludging



- Enables both primary and secondary water side of combi boiler plate heat exchangers to be effectively flushed and descaled.
- 3/4" BSP fittings for rapid connection to most power flushing and descaling pumps.
- Enables blocked heat exchangers to be re-cycled.



Plate heat exchangers, are extremely efficient and compact, allowing ever smaller boilers to be produced.

However, relatively small quantities of iron oxide (rust) can block the waterways. As little as 12 gm of rust can cause a heat exchanger to fail. A central heating system may contain several kg of loose rust, and therefore failures are common.

Once this situation arises, it is necessary to flush the primary water (central heating) side of the heat exchanger to remove the sludge and iron oxides. The internal design of many boilers means that it is not possible to do so without first removing it from the boiler.

If a plate heat exchanger has BSP threaded connections, it is easy to attach the flow and return hoses of a power flushing pump, once removed from the boiler

However, many plate heat exchangers have plain punched hole water inlet / outlets, with no BSP threaded connections, and in these cases, special adapters are needed to connect a power flushing pump.

Purpose made manifolds are available from Kamco to connect hoses of a power flushing pump onto most heat exchangers of this type.***

Instructions for use:

Many combination boiler plate heat exchangers without BSP threaded connections conform to a general pattern whereby they have four holes 15 to 18mm diameter, located at 155 x 40mm centres.

There is generally a 5mm female threaded pillar at each end so that the boiler connection manifolds may be located and secured with a 5mm bolt when in normal use.

Kamco plate heat exchanger adapter blocks should be attached as shown in the pictures, using the M5 allen bolts supplied.

A further 8mm hole may need to be drilled in the body of one adapter block, if the connection threaded pillar is more offset than usual.

In this situation, 'G' type clamps may be used to ensure a tight connection of the adapter blocks onto the heat exchanger.

Each adapter block has two 3/4" BSP male connections, and the power flushing pump hoses should be connected onto these fittings, one at either end.

Both should be fitted on the same side of the heat exchanger (see picture above). The choice of side will depend on whether the primary water side, or the domestic water side is to be flushed. ###

Whilst the plate heat exchanger adapters are generally water tight, always place the heat exchanger in a water proof tray or open container prior to switching on the pump.

Circulate water only at first, and check for leaks prior to adding any chemical to the power flushing pump.

In cases where the heat exchanger is seriously blocked, neat Hyper-Flush can be poured into the exchanger and left to soak for 24 hours before flushing with the pump.

Note: The domestic water side of these heat exchangers may generally be descaled without removing the heat exchanger from the boiler casing.

Access to the domestic water circuit may be gained by breaking into the cold water inlet pipe, and the hot water pipe leading to the taps, underneath the boiler, and connecting the CF40 flow and return hoses onto suitable BSP fittings / threads.

*** There are many different proprietary designs of plate heat exchangers and it is not possible for the Kamco to be aware of every variation currently on the market, hence the adapters supplied by Kamco will fit most plate heat exchangers, but cannot be guaranteed to fit all.

For use with Kamco power flushing and descaling pumps