

## Servicing requirements - Warmflow diesel boilers

To ensure safe and efficient operation this boiler <u>must</u> be serviced annually. It is essential to ensure that any parts replaced are genuine parts. Use of non-genuine parts may void the warranty on the appliances. Servicing is a requirement of the warranty and must be carried out annually.

## Service requirements (in recommended sequence)

- Turn the power to the system OFF.
- visually inspect the system connections including the boiler interior etc.
- Remove and clean all inline diesel tank filters checking for bio sludge and water ingress.
- Refit and purge any air out of the fuel filters and fuel line
- Gain access to primary and secondary heat exchangers by removing access doors etc.
   Remove and clean all primary and secondary heat exchanger baffles noting the order and orientation and the condensing HX springs. Clean all interior surfaces of primary combustion chamber.
  - Clean and brush through fully all condensing HX spring tubes. Be sure to push a flexible brush or pull through fully through and down into primary heat exchanger area. Replace the springs with longer tips facing rearwards. \*Always use a new door Seal on the condensing HX Replace the primary HX baffles in correct order and orientation. Refit the door replacing the seal rope if required.
- Disassemble and clean the condensate trap and re fit it
- Remove diesel burner from boiler, inspect flexible fuel line for damage. In any case we
  recommend the flexible fuel line to be replaced every 2 years; (diesel fuel will slowly degrade
  flexible fuel lines.)
- Partially strip down burner air intake exposing the fan impellors. The fan should be brushed with a small paintbrush whilst vacuuming away debris. Reassemble the fan housing,
- Remove the burner blast tube, and remove/discard old burner nozzle. (Atomising nozzles should be replaced every 12 months. To prevent excessive fuel use and promote efficient operation.)
- Fit a new, correctly sized atomising nozzle. With reference to the install manual Clean and check ignition electrode gap and its position. Clean and refit the blast tube.
- Refit the burner into boiler with a fuel pressure gauge attached for checking the diesel pressure.
- Turn the system power back on, and select heating on a thermostat to bring the boiler burner and pump on. Give the boiler a few mins to warm up, checking the diesel pressure on your gauge is correct for the boiler size and nozzle. See Settings data PDF for the correct nozzle, pressure and CO2.
- Take a reading of the smoke from the test point with a smoke pump. Reduce smoke by
  adjusting the air flow damper if required, until you get clean burn with very little or no
  smoke. Once you have a good smoke reading use your flue gas analyser to fine tune the CO2
  via the air damper setting. referring to the Settings Data PDF for these settings.

Now

- check all heating/hot water functions of the attached system.
- Check system water pressure and top up if required. *Continual water pressure drops may indicate a leak and must be investigated.*
- Remove and clean the magnetic filter if fitted. Purgeing air out of filter assembly as you re install it, don't let it back into the system!
- Test the system water Inhibitor levels using the relevant test kit adding inhibitor as required.

## To carry out this service you will require the following-:

- A calibrated flue gas analyser.
- Diesel fuel pressure gauge kit.
- Smoke pump and papers. (recommended)
- A system water/inhibitor test kit.
- Vacuum cleaner with good filter system.
- Dust sheets if required.
- PPE.
- Metric allen key set.
- Metric spanner set.
- 1 x 5/8" spanner for nozzle removal.
- Your basic tool kit.

The appliance warranty requires that service be completed as prescribed at an interval of 12 months. It is essential to the safe and efficient operation of the appliance.

Our Technician's are on hand. we can provide remote Technical to assist with fault diagnosis and answer questions that engineers may wish to raise during servicing of the appliance. For safety reasons we are not able to extend technical guidance through to end users.

We offer Boiler commissioning and Service Training at our Whanganui centre please enquire