How to..... Boiler service



Tempest Range

This guide will show you how to carry out a boiler service on a Tempest.

Recommended spare parts required:

Inline filter – DB002500 Fuel gasket – DB000300 Fuel nozzle (1.5 US gallons) – DB000010

Optional – Electrodes – DB000110

All spare parts can be ordered from Demon call 01752 690690 or Online at www.demon-pressure-washers.co.uk

Ensure the machine is switched off and unplugged and that any pressure is released from the trigger.

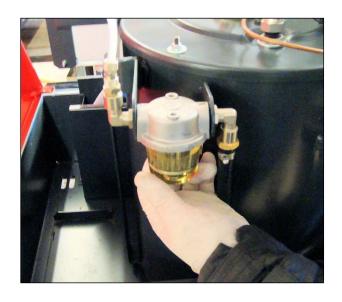


1. First disconnect the fuel tank from the fuel line using a 10mm spanner.

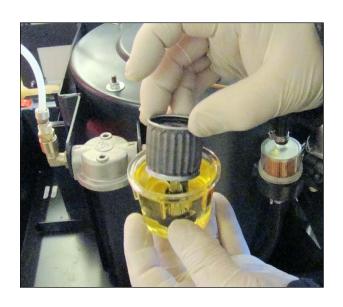


2. Remove the tank and dispose of the dirty fuel in a safe method. Clean the fuel tank using hot soapy water to ensure all residue is removed.

Make sure all traces of water are removed before replacing.



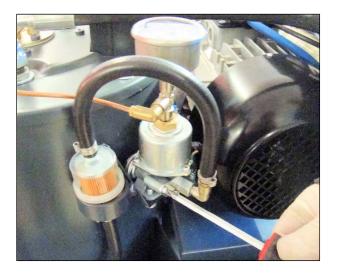
3. Moving to the fuel filter bowl, unscrew the filter bowl and remove aluminium filter.



4. Clean the filter and bowl using hot water and screw back into position ensuring that the filter and bowl are dried or blown away with a compressed air supply.



5. Moving to the inline filter, break top and bottom one-eared clamps and remove inline filter replacing with a new one. Ensure that the arrow is pointing upwards towards pump when replacing filter. Replace with one-ear clamps ensuring a good seal.



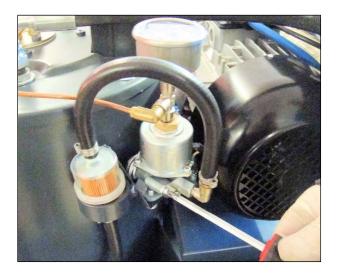
6. Moving on to the fuel pump, unscrew the 2 screws which hold the fuel pump plate-where fuel pump sits behind.



7. Pull plate away and check filter.



8. If the filter is dirty remove it with a small screwdriver and clean with hot soapy water and replace, making sure it is dried completely first.



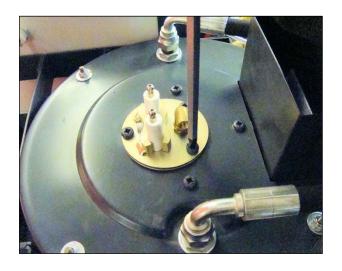
9. Screw the plate back on with the 2 screws holding it in place.



10. Moving to the top of the boiler. Disconnect HT leads from electrodes and move to one side.



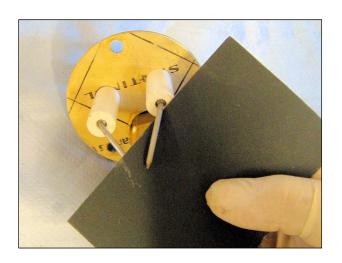
11. Disconnect copper fuel pipe with an 8mm spanner and move to one side.



12. Unscrew the 3 x M6 screws holding burner head in place and remove.



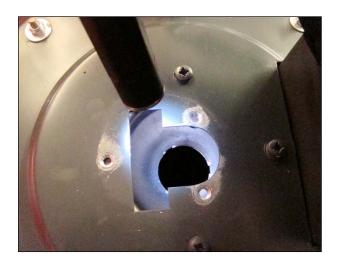
13. Remove nozzle with a 16mm spanner and remove gasket and replace with new ones.



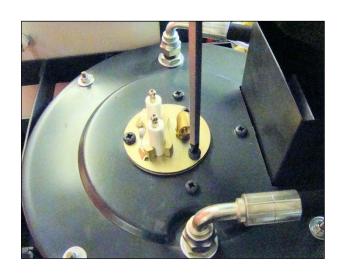
14. Clean electrodes with a small piece of sandpaper. If electrodes are damaged or show sign of movement then replace with new ones.

Electrodes should be set 5 -6mm apart and 5-6mm from the nozzle.

NB – carbon build up on electrodes insulates the tips causing the spark to jump across somewhere else leading to ignition problems.



15. Whilst burner head is removed check the inner lid and cone with a torch for damage. If damage has occurred to inner lid and cone, stainless steel pan or inner boiler these items will need replacing as they effect the burning of the boiler. (See How to replace a boiler)



16. Replace burner head back into boiler and fix with 3 x M6 screws.



17. Reconnect copper pipe with 8mm spanner ensuring it is tight.



18. Replace HT leads back onto electrodes.



19. You will then need to run the machine up to bleed the pump and obtain pressure on the gauge between 100-110 psi to ensure the correct burn.

You can adjust the pressure up and down using the centre screw which is screwed into a nut on the front of the fuel pump

The boiler service is complete.