

#### CHECKLIST FOR INSTALLING AND COMMISSIONING A FIREBIRD BOILER

### **Pre-installation check:**

- Is the following documentation included with the boiler, Installation Manual, Boiler Passport, Burner Book?
- Is the base on which the boiler is to be installed solid?
- Allow sufficient room for future servicing of the boiler.

### Where does the flue terminate:

- Make sure there is no window, door or fence within 1 metre of the flue-terminal.
- If the flue terminates in a corner or into an allyway, re-circulation of the combustion gases in the air intake could occur. A plume dispersal may be required or an alternative flue arrangement might be available. Contact the Firebird technical department for advise.
- The appropriate class 1 flue must be used with a conventional flue installation. Contact Firebird if unsure.

# **Power supply:**

Is a timed and permanent power supply available, via a fused spur with a 5amp fuse.

# Oil supply:

- The burner is set for 35 second gas oil.
- Check that there is a good quality filter on the line with an isolating valve.
- There should be a remote sensing fire valve.
- If a tiger loop is required, fit the bypass screw in the oil pump. Check that the second flexible oil line is approved by the manufacturer.
- Verify that the oil tank has been installed correctly as per building standards?



#### COMMISSIONING A FIREBIRD BOILER

The commissioning of a Firebird boiler must be carried out by a competent person trained on the commissioning of our boilers.

#### **Boiler check:**

- All baffles should be installed correctly.
- Check that the condensate trap is fitted securely, primed with water and piped out into a suitable drain. *It is easier to check the trap when the boiler door is removed.*
- The boiler door should be refitted, complete with graphite seal and then tightened.

#### Flue check:

- The flue must be fitted correctly, with a fall back to the boiler. *Note: internal fall of 2.5% within the flue.*
- For concentric balanced flue:
  - A cone should be installed on the end of the flue:
  - the wall plate should be fitted with an opening for air under the flue;
  - check that the flue guard is fitted.
- When installing a Heatpac or a Slimline Heatpac, the 90° bend should be fitted pointing up.

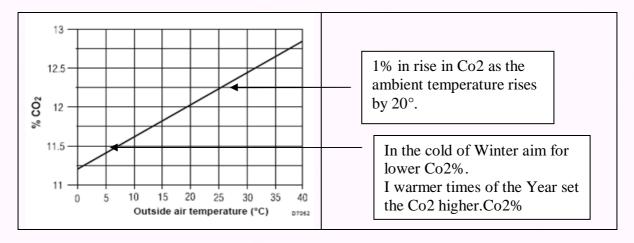
## **Burner set-up:**

- Check that the nozzle is the right size for the type of boiler and for the system heat demand.
- Set the air to what is required for the nozzle size +.5 on the dial example: the factory setting for a Firebird C26 has a Danfoss .55 80° S nozzle with a pump pressure of 11 bar and air at 3.5. Set the air to 4 for the first start up. The final air setting to suit the boiler set up will be determined by using a flue gas analyser.
- Check all connections for possible leaks.
- Turn on the oil supply and switch on power to the boiler.
- Set the thermostat at minimum.
- Use a smoke gun to check clean combustion.

## Flue gas analysis and fine tuning of burner:

- Allow the boiler to run for a period of time before fine tuning to the Firebird settings.
- This fine tuning should be done with the boiler in the condition it is going to be operating at, that is, if a balanced flue is installed, the air hose is fixed on the burner. In the case of a Heatpac or a Popular, ensure that the front door is closed for a period of time before setting the analyser on the system.

*Note:* When fine tuning the burner with the flue gas analyser, adjustments in both the air and pump pressure may be required to achieve the desired C02 %.



- Print off a copy of the flue analysis and attach to the boiler passport.
- Make sure the flue gas analysis plug is replaced correctly into the flue when finished the flue analysis.

### **Finally:**

- Give the m8 nuts on the boiler door a final tightening.
- Fill out the Boiler Passport and return to Firebird in the pre-paid envelope provided.
- Explain the operation of the boiler to the householder.
- Advise the householder as to the terms and conditions of the warranty set out in the manual and inform them that all documentation should be kept in a safe place.

Please refer to the technical manual for further details.



#### CLEANING A FIREBIRD CONDENSING BOILER HEAT EXCHANGER

- 1. Remove all baffles, including the tubular baffles in the condensing section and clean them.
- 2. Remove the condense trap and clean it, place a tray under the connection for the trap. Vacuum out any lose debris from the chamber.
- 3. Wash out the boiler, using a small sprayer similar to a garden sprayer with dish washing detergent and water mix. Using the nozzle of the sprayer, spray the washing detergent in to the pipes of the condensing section, this will wash any debris out of that section into the tray.
- 4. Replace all the baffles, and refit the condense trap securely.