





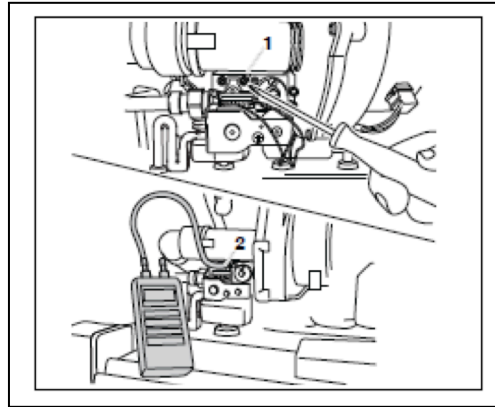
GB142 Startup

- Remove the cover of the boiler and set the cover aside
- Shut the incoming gas cock off so that no gas is supplied to the unit
- On the GB142's gas valve, located to the left of the Fan Assembly, find the inlet tapping, and slacken brass flat head screw approximately 2 full turns.
- Hook up a manometer so that it is reading Positive Gas Pressure onto this tapping and turn on the incoming gas
- Check the gas pressure, making sure that it falls within the appropriate range 3.5 to 10.5 inch W.C. Natural Gas and 8.0 to 13.0 inch W.C. LPG
- Turn on the gas valve.
- Power up the unit by turning on the On/Off switch On the BC10 control.
- Press and hold the “Chimney Sweep” button until a decimal point can be seen in the bottom right of the display
- Once the decimal point is visible, press and hold both the Chimney Sweep and the Service buttons at the same time until “L - -” is visible on the display. This is telling you that the boiler is going to fire off and modulate to 100% of its capability.
- Check the gas pressure with the manometer once the unit has reached High Fire. Confirm that it does not drop below 3.5” W.C. If it does, check gas pipe sizing per the relevant gas pipe sizing chart.
- Turn off of the boiler using the On/Off button on the BC10 boiler control.
- Shut off the external boiler gas valve, remove the manometer, and tighten the slackened brass screw.
- To the right of the inlet tapping on the gas valve is the manifold tapping. Slacken this screw and hook up the manometer so that it is reading Negative Gas Pressure.
- Open the external gas valve
- Turn the boiler on again with the On/Off button found on the BC10
- Locate the “Service Button” and confirm the operating pressure of the heating system is at minimum 15psi

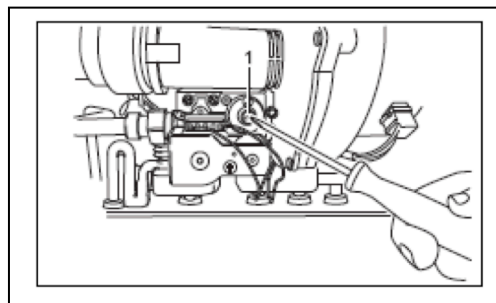
	P21	> P15	Current system pressure (in psi)
	-H		
	P12 <small>¹⁾ (changing)</small>	P3 ... P12	Warning: System pressure is too low (between 3 and 12 psi = 0.2 and 0.8 bar)
	7		

- Cycle through back to the temperature readout on the BC10 by pressing the Service Button again
- Press and hold the “Chimney Sweep” button until a decimal point can be seen in the bottom right of the display

- Press the “Wrench” and “Chimney Sweep” button at the same time until “L—“ appears on the display
- Press and hold the “Reset” button to lower the percentage to “L30” which is indicating that it is firing at 30% of its Load.
- Check the air/gas ratio on the manometer. It should be $-.04 - 0$ inch W.C. ($\pm .02$ inch W.C.)



- If ratio is out of range, adjust it with the adjustment screw on the gas valve, located just to the lower right of the manifold pressure port.
- Unscrew the brass plug found on the adjustment screw.
- Using a 4mm Alan key, adjust the ratio as necessary.
- Once in range, turn off the boiler, remove the manometer, tighten the screw, and reinstall the brass plug on the adjustment screw.



- Put the cover back onto the boiler
- Unscrew the plug for the flue gas test ports on the two pipe flue adapter
- Insert your combustion analyzer's adapter into the flue gas test port
- Insert your combustion analyzer's probe into the adapter making sure to locate it in the center of the exhaust pipe (This can be done by fully inserting it until it hits the back of the pipe. Mark the spot on the outside of the adapter, and

remove the probe. This will give you a depth marking. Find the halfway spot on the probe and reinsert into the flue only up to that mark).

- Power up the unit by turning on the On/Off switch
- Using the BC10 control, press and hold the “Chimney Sweep” button until a decimal point can be seen in the bottom right of the display
- Once the decimal point is visible, press and hold both the Chimney Sweep and the Service buttons at the same time until “L - -” is visible on the display.
- Once on High Fire, confirm that your CO₂, O₂, and CO content to ensure that they are all within a .02 +/- range from the prescribed specifications. If the range is not met, remove the cover and adjust as necessary. Check the venting and air intake piping to confirm that they are installed according to Buderus’s specifications.
- Press the Service Button until the temperature is visible on the BC10 display
- Once viewing the temperature, press and hold the “Chimney Sweep” button until the decimal point is removed from the display.

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