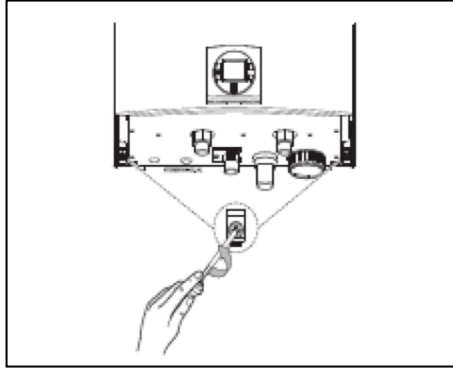
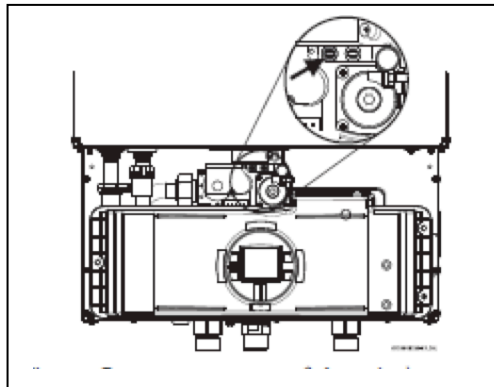


Bosch Tankless Startup

- Remove front cover from the tankless heater by unscrewing the two screws, one on the lower back left of the unit and the other on the lower back right of the unit

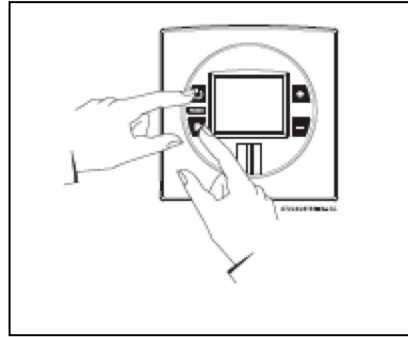


- Tilt the cover forward and then lift it up and off, set it aside
- Shut the gas cock entering the water heater. Locate the gas valve internal of the unit and find the “inlet gas pressure test port” which is the left tapping on the gas valve.
- Slacken the brass screw on the gas valve approximately two turns. Hook a manometer onto this tapping, making sure that it is first zeroed out.

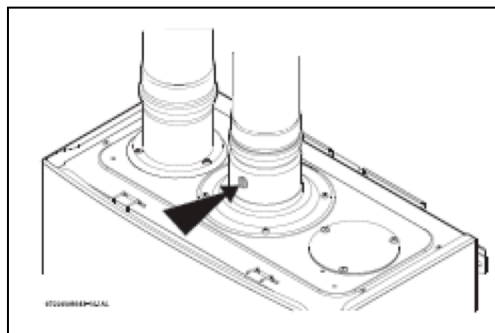


- With the manometer securely hooked up and ready to take readings, turn the external gas cock that you previously shut off, into the “on” position, allowing gas into the water heater.
- Take your “lock up” gas pressure
- Ensure that the unit has at least 6 gallons per minute of water flow running through it. This can be achieved by opening several water taps such as a shower, tub filler, and faucet, etc...

- Press the “Power On” button in, locking it in the on position. Once this is pressed, press and hold the “P” button located underneath the “Reset” button on the control as it cycles through. Once the display reads “188,” release the “P” button – this opens the diagnostic menu.



- Cycle through the options (P1, P2, etc...) until P1 is showing. This will force the unit into high fire.
- Unscrew, at the top of the unit on the flue collar, the brass screw (flat blade screw).

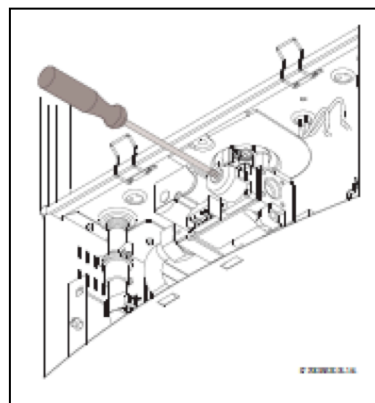


- Fit your combustion analyzer’s adapter into this test port.
- Insert your combustion analyzer’s probe into the adapter, centering it in the middle of the exhaust pipe (This can be accomplished by inserting the probe until you reach the back of the exhaust pipe. Mark, with your fingers, the insertion depth on the outlet side of the adapter and remove the probe. With this marking, find the approximate halfway point from your fingers to the end of the probe and mark this new point. Reinsert the analyzer’s probe up to this mark.)
- Observe your readings on high fire and find the coinciding “High-Fire Target Readings”. When the unit is firing at full capacity, check the

manometer and make sure that your gas pressures are within range, as specified by Bosch.

Gas type	NG	LPG
minimum pressure	3.5" WC	8" WC

- If your readings are not to spec, locate the High Fire adjustment screw on the gas valve (a yellow painted Phillips head screw on the outlet side of the gas valve).
- Slacken the Phillips head screw to lower the cover plate. With the cover loosened, you will find a brass flat head screw. Use this to adjust the high fire readings turning it clockwise to lower CO₂ P1 values and counter-clockwise to raise CO₂ P1 values.
- Once the values are to spec, recover the adjustment screw and tighten the yellow Phillips screw.
- On the control, press the “up” button which will bring you into P2 test fire. This will reduce the flow and modulate the heater into low fire.
- Check the combustion readings with your analyzer and compare them to the specified low fire numbers.
- If your readings are not to spec, locate the Low Fire adjustment screw on the gas valve (a 40 Torx cover that once removed will reveal the 40 Torx adjustment screw). Turn the Torx adjustment clockwise to raise P2 CO₂ and counter-clockwise to lower CO₂.



- Once the values are to spec, recover the adjustment screw with the 40 Torx cover screw.
- Turn the unit off and turn the external gas cock to the “off” position. Remove the manometer and tighten the brass screw for that inlet tapping.
- Remove the combustion analyzer probe and reinstall the brass screw into the exhaust collar.

- Turn the external gas valve back into the operating position and restart the water heater.

	Model	P1 / P2 CO	NG CO₂ P1 / P2	LP CO₂ P1 / P2
CONDENSING	C1210ES(C)	<290 / <60 PPM	8.3 - 8.9 % / 2.1 - 2.4 %	9.9 - 10.5 % / 2.5 - 2.8 %
	C1050ES	<250 / <60 PPM	7.8 - 8.4 % / 1.5 - 1.8 %	9.5 - 10.1 % / 1.9 - 2.2 %
	C950ES	<250 / <60 PPM	7.2 - 7.8 % / 1.5 - 1.8 %	8.8 - 9.4 % / 1.9 - 2.2 %
NON COND.	940ES	<250 / 60 PPM	7.2 - 7.8 % / 2.3 - 2.6 %	8.3 - 8.9 % / 2.6 - 2.9 %
	830ES	<250 / 60 PPM	7.5 - 8.1 % / 2.3 - 2.6 %	8.7 - 9.3 % / 2.7 - 3.0 %

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