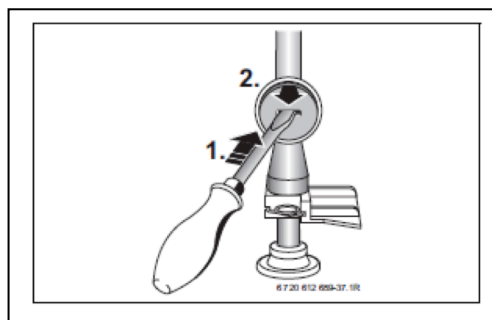


Greenstar Startup

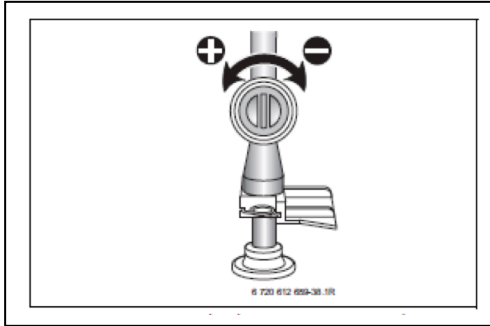
- Before powering the unit on, take the cover off of it by loosening the two screws on the bottom of the jacket and unclipping the clip at the top
- Flip down the control board, granting access to the circulator pump internal to the Greenstar
- Unscrew the chrome cap on the front of the circulator and remove it.
- Underneath the chrome cap, you will see a square screw head that is attached to the impeller. Insert a driver into this head (a small flat head works just fine) and spin the impeller, confirming that it is moving freely. This is to exercise it to ensure that it will work upon start up.
- Reinstall the chrome cap on the circulator and fold the control board back up in the operating position. Leave the cover off of the boiler so that we can have access to the High and Low fire adjustments for the combustion test
- Press the “On” button, powering up the unit
- The unit will begin to cycle
- The unit will begin to fire off
- On the smaller 1” x 1” display on the front of the unit, an inverted “H” will appear [=| =]
- This display will be flashing as the unit does the following
 - For the first 15 minutes, it will be filling its condensate trap
 - For the next 8 minutes, it will be purging itself of air
 - It is important to remember that for these twenty three minutes, the unit is doing this so that it can work properly. During this time, leave the unit alone and let it cycle as it should.
- Once the cycling has completed, you can do a combustion set up.
- 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).
- Press and hold the “Chimney Sweep” button on the lower left side of the control panel until it glows red.
- The unit’s smaller display will now be flashing four bars [==] indicating that it is firing in mid-range. By pressing the Chimney Sweep button once more, you will raise it into High Fire, which would change the flashing display to six bars [≡ ≡]
- On High Fire, locate the gas throttle in the sealed combustion upper portion of the boiler. This is located just to the left of the Heat Exchanger
- Remove its gray cap



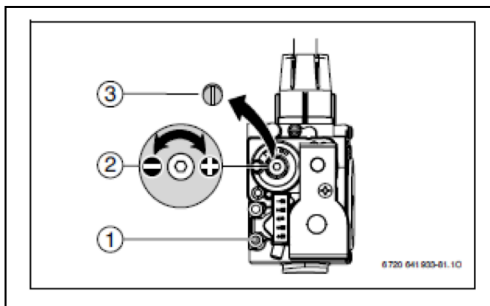
- Check your CO₂, O₂, and CO content of the flue gas on High Fire

Gas type	Maximum nominal output		Minimum nominal output	
	CO ₂	O ₂	CO ₂	O ₂
NG	9.4 %	4.0 %	8.6 %	5.5 %
LPG (propane)	11.0 %	4.2 %	10.4 %	5.1 %

- Make your adjustments on the gas throttle if necessary to bring your combustion readings within tolerance set forth by Bosch's specifications.



- Once High Fire is established, reinstall the gray cap and press the Chimney Sweep button again, dropping the modulation into Low Fire where only two bars [_ _] on the small display.
- Locate the gas valve which is in the Hydraulic Assembly of the Greenstar on the bottom far-left. On the gas valve there is a 4mm brass plug that covers the Low Fire adjustment point.
- Check your CO₂, O₂, and CO content of the flue gas on Low Fire
- Make adjustments on the 4mm screw if necessary to bring your combustion readings within tolerance set forth by Bosch's specifications.



- Once Low Fire is established, reinstall the brass plug and press the Chimney Sweep button once more, taking you out of test fire mode.
- Put the cover back on the boiler, ensuring that the unit is working as a sealed combustion boiler, as intended
- Again, press and hold the “Chimney Sweep” button on the lower left side of the control panel until it glows red.
- The unit's smaller display will now be flashing four bars [==] indicating that it is firing in mid-range. By pressing the Chimney Sweep button once more, you will raise it into High Fire, which would change the flashing display to six bars [≡ ≡]

- Take combustion readings once more to 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 Bosch's specifications.
- Press the Chimney Sweep button twice, exited from the test fire function.
- Remove your combustion analyzer from the flue adapter and plug the flue gas port.

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