

Proper operation of the Rinnai R/C53e (2020W) water heater at high altitudes may require changing the manifold pressure settings. Refer to Table 1 to determine the high fire and low fire manifold pressures. If the pressure required is different than the factory setting then follow the procedure below.

Changing Manifold Pressure Settings

1. Remove the front panel by removing four screws.
2. Turn off the gas and the 120 V power supply.
3. Remove the allen head plug and attach the manometer to the burner test point located on the gas control. Ensure manometer is properly calibrated.
4. Turn on the gas and 120 V power supply.
5. Flow water through the water heater at the maximum flow rate obtainable. (At least 3 gallons per minute is recommended.)
6. Move No. 7 dip switch of the SW1 bank to the ON position to calibrate "Forced Low" combustion.
7. Check the burner test point pressure. Remove the rubber access plug and adjust the regulator screw on the modulating valve to obtain the low fire pressure in Table 1. Install rubber access plug.
8. Move No. 7 and No. 8 dip switches of the SW1 bank to the ON position to calibrate "Forced High" combustion.
9. Check the burner test point pressure. Adjust the high pressure Potentiometer (POT) on the PC Board to obtain the high fire pressure in Table 1.
10. Move No. 7 and No. 8 back to the OFF position to return the appliance to "Normal" combustion.
11. Close hot water taps.
12. Turn off gas supply and 120 V power supply. Remove manometer and re-install allen head plug.
13. Turn on the gas supply and 120 V power supply. Operate the unit and check for gas leaks at the test point. Install front panel.

Table 1 Manifold Pressure Setting

Altitude (feet)	High Fire	Low Fire
less than 2000	3.7 *	0.74 *
3000	3.5	0.71
4000	3.4	0.68
5000-10000	3.2	0.64
* Factory setting		

