The natural gas and liquefied petroleum (LP) gas water heaters are equipped with a cast iron burner that requires a primary air adjustment at the time of installation. An air shutter is located at the air-opening end of the burner. You should be able to see the silver butterfly or bowtie shaped air shutter when you remove the inner and outer combustion chamber doors (or open the control panel on 75 gallon PowerVents).

To adjust the burner, loosen air shutter screw and close shutter to soften flame or open shutter to sharpen the flame. The proper flame should be soft blue, not yellow or with a hard blue center. Final air adjustment should be made after 5 minutes of continuous burning. Tighten screw to lock air shutter in place.

Typical look of 75 gallon PowerVent

Notice the small horseshoe shaped flange under the screw head? Notice the way it is received by the screw. That tells you if you have the shutter installed properly!