Direct Vent Pipe

Important Installation Tips

The ease of use and versatility of your Woodstock Soapstone gas stove is due in large part to the way the stove is vented. Unlike a wood stove, which requires substantial, and sometimes complicated, chimney systems, your gas stove can be vented in a variety of different configurations, which makes it possible to place a gas stove just about anywhere in your home, and at a relatively low cost. All our gas stoves use Direct Vent pipe, a coaxial venting system in which an outer pipe brings combustion air to the appliance and an inner pipe exhausts flue gases to the outside. This allows for a sealed combustion chamber with no exchange of room air.

It is critical that the vent pipe be installed correctly for the stove to operate properly. Whether you install the venting yourself or hire a contractor, make sure that the vent pipe connections are secure and connected according to the instructions.

Vent pipe that isn’t properly connected can result in performance problems with the stove, including low heat output, inability to operate flame adjustment from low to high, tall, stringy flames, and carbon build-up (oily soot) in the firebox, flame or on the window glass.

Operational problems can also include flashback in the venturi tube (which feeds the gas/oxygen mixture to the main burner), and extinguished pilot flame due to wind. Most of these issues can be summed up in one word – blowback. And blowback is almost always caused by poor connections in the vent pipe. Loose connections allow exhaust to flow back into the stove with the incoming air.

Begin by installing the female end of the first piece of pipe onto the flue collar of the stove. The male end points up, or away from the stove. Line up the locking lugs on the male and female ends and insert the male end into the female end until the locking lugs are covered. Then twist the female end one-eighth turn clockwise to lock.

Double check every connection to be sure it is fully locked in. No gaskets or sealants are required. The pipe is most easily installed when two people can work together, with each pair of hands holding one of the pieces of pipe and turning against each other. Good gripping gloves are highly recommended. Strap wrenches also work very well, especially if you have to work by yourself.

The weak link in the pipe system is often where the last piece of pipe meets the horizontal termination at the exterior vent cap or snorkel. This connection will need to be screwed together. Once it’s covered up by the wall thimble you won’t be inclined to take it apart if things go awry in the firebox, so the bit of extra time to get it right at first will be well worth it. If this means supervising the installer yourself, do it! A large percentage of faulty connections are found at this location.

When you are connecting to a Horizontal Vent Cap, the pipe is pushed into the cap receptor a minimum of 1.25” and fastened together with the two supplied sheet metal screws.

In a Snorkel installation, the snorkel has two sheet metal straps that attach to the last piece of pipe with a sheet metal screw, one on each side. Cut off excess strap material and install the wall thimble section over the connection, tight to the finished wall.