

November 27, 2019

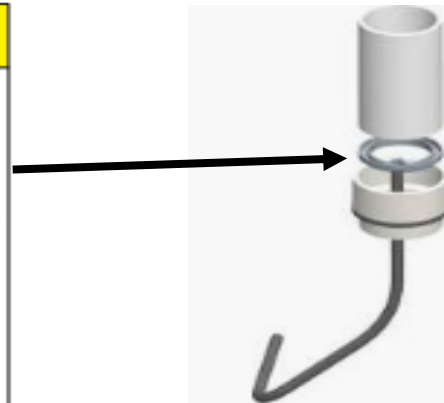
RE: Gas Valve Water Damage in Condensing Gas Furnaces

We get calls about water damage to gas valves caused by condensation that forms in the intake air pipe when installed into the top of the furnace. This condensation can form inside the intake pipe during the summer months (see verbiage in the caution box below); if not addressed the water can fall onto the gas valve.

In the installation manual it is mentioned that if the intake piping passes through the conditioned space, condensation can form inside the piping and drip into the furnace, see below.

▲ CAUTION

It is possible for condensation to form inside the combustion air (intake) pipe in the summer months if significant length of combustion air pipe passes through conditioned space. This problem can be averted by installing the supplied vent drain and drain hose located in the loose parts bag. The intake drain hose is to be installed by connecting it to the inlet pipe coupling and to the collector box as shown in Figures 17, 19, and 20. The drain hose must not sag or droop after it is installed. If glue is used when connecting the intake pipe to the intake coupling, the drain opening in the vent drain must not be plugged. If the intake drain is used, the bird screen **cannot** be installed. This is only approved for upflow and horizontal applications when the intake pipe is located on the top of the furnace. This is true for all long horizontal venting in any furnace configuration. This will keep condensate from entering the furnace.



The information above mentions the use of the supplied vent drain and hose but often times these parts are thrown away because the instructions are not read by the installer. If this is the case the vent drain is available for purchase from York, the part number is S1-37327981001. Another option is to cut a Tee into the intake pipe and reduce the tee down to a size that a hose can be connected to and run to a drain or a condensate pump, see below.

