LP Pressure Low

My furnace and hot water heater work individually but one goes out if the other is operating.

Question: I have a 1975 Airstream. The furnace and the hot water heater have been recently serviced and both had been working great when using one appliance at a time, but now if the furnace is running the hot water heater appears to be starving for propane and goes out. If the hot water heater is running, the furnace doesn't light. The tanks have been inspected recently and they are full. The valve is fully open.

What should I check next?

Below is a list of some things that you can check to help narrow down the cause of your pressure drop.

- You did not mention anything about your refrigerator and if it was operating properly. Check to see if is working; if it is you may have started narrowing down the problem.
- A couple of easy things to check would be damage to the LP supply lines. Check the gas line under the tongue. It could have been crushed or damaged, restricting the flow. You might also want to inspect the copper gas lines on the underbelly which are the supply lines to those specific devices (furnace or HWH).
- How old is the regulator? Depending on the manufacturer of the regulator, it is recommended to change your regulator every 15 to 20 years. Regulators have internal moving parts that are subject to wear and tear and after some time, the regulator may need be replaced.
- Are the rubber gas lines coming from the regulator original? Rubber gas lines can swell over time and reduce the inside diameter of the hose, thus reducing the flow of LP.
- Have the flow pressure tested. Your regulator may need adjusted or replaced. (One very important fact to point out is that although propane regulators may be adjusted by licensed propane professionals). This can be a simple and inexpensive to fix if you have the knowledge (you must do a leak test after any work on LP system) and the proper equipment. You will need a test instrument called a manometer; attach it to any propane outlet that is located after the propane regulator. (ManometerDefnition:Amanometer is an instrument used to measure gas pressures in inches of water column.) (WC is the amount of pressure required to push a column of water up 11 inches in a manometer.)



1973 Fisher LP regulator

- The operating pressure of your regulator should be between 11 and 14 inches of water column. Most appliances require 11 inches of water column and the regulator compensates for these pressure differences in the tank pressure to supply a steady flow of propane to the appliances. The pressure should be tested when the gas is flowing to the appliance. The regulator should maintain a steady 11" WC as appliances are turned on and off, if it doesn't you may be able to adjust the regulator or it may have to be replaced.
- The pressure will always read the tank pressure if there is no flow. The pressure drops when the flow through the (probable) restriction limits the downstream pressure. The restriction could also be a plugged or faulty regulator or diverter valve at the tanks.

Oil is common in propane systems, it can come through with the propane from the production process used to manufacture LP and into your system when you have your tanks filled. If your propane system suffers from low pressure you may have an oil build up in a dipping (low point) a line, an elbow or it even may have partially plugged the regulator and is restricting the gas flow. You should have a pressure test done at each appliance to check for restrictions in the gas lines.

A quick check to see if the regulator is operating properly:

Turn on a gas stove burner at its highest setting, the flame should be blue and not being pushed out of the burner pilot holes. You should always follow propane safety procedures and it is best to have your RV serviced by a certified technician.