

Presto-Tap® Leak Detection System (LDS)

Model # LDS 2000/RV Installation & Operating Instructions

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NOTE: When installing the LDS 2000/RV (Regulator Valve), relocate the UL tag over the M.NPT 1/8" threads below the hex nut, apply LP approved pipe tape or dope, tighten securely, and test for leaks.

High Pressure Regulator Tap Pressure Test:

The 1/8" NPT end of the LDS 2000/RV may be screwed into the plugged tap in the downstream side of the high pressure regulator and remain a permanent part of the regulator, using the brass cap to keep the opening capped until readings need to be taken. To take a reading; the cap is removed by hand (without tools) and a 30# gauge attached to a PRESTO-TAP® Quick Adapter (RV/QA) screwed onto the LDS 2000/RV. A leak test can be performed at this point by turning off the tank valve, dropping the pressure in the system slightly (a pound, or so) by loosening the PRESTO-TAP® Quick Adapter, re-tightening the Adapter, and observing the low pressure gauge for upward or downward movement for three minutes. If the gauge rises, the tank service valve is leaking through; and, if the gauge needle falls, the system is leaking. If the system is determined to be leaking, the system must be turned off, the customer and service personnel informed, and the leak corrected. **NOTE:** Testing from this position does not provide tank pressure readings and does not indicate "Out-Of-Gas" situations.

Low Pressure Regulator Tap Pressure Test:

The 1/8" NPT end of the LDS 2000/RV may be screwed into the plugged tap in the downstream side of the low pressure regulator and remain a permanent part of the regulator, using the brass cap to keep the opening capped until readings need to be taken. To take needed readings, the cap is removed. At this time, the hose barb of a water manometer or an ounce gauge is inserted onto the iron pipe thread end of the PRESTO-TAP® Quick Adapter (RV/QA) and the assembly screwed onto the LDS 2000/RV. With the upstream valve turned off, and determined to not be leaking through, all of the appliances turned off, and the pressure bled off of the system, the valve then turned back on until the motion of the manometer or gauge stops at its highest point, a lock-up pressure test can be made and recorded. A leak test can be performed at this point by turning off the service valve and observing the test equipment for a drop in pressure for a period of not less than three minutes, after dropping the system pressure to 9 in. (\pm 1/2 in.) water column (WC) to unlock all regulators. If a leak is proven, the system must be turned off and the customer and service personnel informed. If no leak is found, an operating pressure may be determined and recorded by lighting all of the appliances and turning them on.

Downstream Installation (Appliance) Pressure Testing:

The 1/8" NPT end of the LDS 2000/RV may be screwed into the pressure tap on appliance control valves and left as a permanent part of the system. Tests of the operation of the system or appliance can be made by turning off the upstream valve to the appliance, removing the PRESTO-TAP® brass cap, inserting an ounce gauge or water manometer hose with a hose barb onto the PRESTO-TAP® Low Pressure Adapter, and screwing the adapter onto the PRESTO-TAP® LDS 2000/RV, and turning the upstream valve back on. Using the aforementioned methods described in step NO.2, appliance operating pressures and regulator lockup pressures may be made and recorded. A leak test may be performed at this point by determining that the tank service valve is not leaking, turning it off, observing all appliances to be sure that pilots are out and the equipment is not operating, turning the tank service valve back on until the system fully pressurizes, then turning it back off. Then, release pressure by loosening the PRESTO-TAP® Low Pressure Adapter nut slightly to drop the pressure to 9 in. WC (\pm 1/2 in.) to unlock regulators, re-tightening the nut, and observing the gauging device for no loss or gain of pressure for a period of 3 minutes. If a leak is found, the system must be turned off, the customer and service personnel informed, and the leak corrected. As with any pressure valve located inside a structure, use a "Wrench" Cap tightened with a wrench to help prevent possible tampering with the valve stem by a child or someone not knowledgeable of propane safety.

External Service Line Shut-Off Valve:

The PRESTO-TAP® LDS 2000/RV is also designed for insertion into service line shut-off valves (with a 1/8" pressure tap) located at or near the structure and downstream from the regulator. If a downstream leak has been detected at the LP tank (high pressure) or the regulator pressure tap located at the tank, the source of the leak can be isolated and determined to be either inside or outside the structure. Also see the LPV product.

Additional Pressure Testing Applications:

The PRESTO-TAP® LDS 2000/RV is also designed for insertion into the tank service valve (downstream from the seat) and in the tank pressure side of regulator openings, when such openings are available. These insertions will eliminate the need for changing out the tank-to-regulator connector or "breaking into the system" to install other types of testing systems. Readings can be made at these points of tank pressures to determine out-of-gas situations, by installing and observing the tank pressure-ambient temperature readings on the patented PRESTO-TAP® gauge; and, also to determine if the system is leaking by turning the tank service valve on, then back off, dropping the system pressure by loosening the PRESTO-TAP® gauge nut to drop the pressure in the system 10 pounds or so, re-tightening the nut, and observing the gauge for a period of 3 minutes. If the gauge rises, the service valve is leaking through. If the gauge falls, the system is leaking. If found to be leaking, the tank service valve must be turned off, the customer and service personnel informed of your findings, and steps taken to correct the leak. **NOTE:** Until these pressure tap locations are available, other PRESTO-TAP® LDS products are available that provide "Out-of-Gas" AND leak testing capability.

Note: Always document the test readings on the work order or service ticket.

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