Revision: I-LDAP-HA (11-18) PN208081R3

Supersedes: I-LDAP-HA (01-16) PN208081R2

# HIGH-ALTITUDE PRESSURE SWITCH REPLACEMENT KIT

### OPTION DJ20 FOR MODEL LDAP AT ELEVATIONS ABOVE 6000 FEET (1830 METERS)

#### **APPLICATION**

If a model LDAP heater is being installed at an elevation above 2000 feet (610 meters), the input rate must be derated. This is done by adjusting the valve outlet pressure as explained in the heater installation manual. In addition, if the heater is being installed at an elevation above 6000 feet (1830 meters), option DJ20 is required and the pressure switch (see **Figure 1**) must be replaced.



Figure 1. Pressure Switch

#### KIT COMPONENTS

Table 1. Option DJ20 High-Altitude Pressure Switch Replacement Kit Components										
Unit Size		Pressure Switch PN (Quantity)	Label Color	Differential Pressure (IN WC)						
	Kit PN			Startup Cold	Equilibrium Hot	OFF Setpoint	ON Setpoint			
400	208078	197029 (1)		1.75 to 1.45	1.00 to 0.80					
800	208892	197029 (2)	Light blue	1.85 to 1.55	1.05 to 0.85	0.60	0.78			
1200	208893	197029 (3)		2.35 to 1.85	1.50 to 0.95					

#### PRESSURE SWITCH REPLACEMENT

# **⚠ WARNING ⚠**

These instructions are designed to prepare a heater for high-altitude operation prior to installation. If the heater has already been installed, turn off the gas and electric for your safety before servicing.

## **⚠** CAUTION **⚠**

The high-altitude pressure switch replacement kit is to be selected and installed by a qualified service person in accordance with these instructions and in compliance with all codes and requirements of authorities having jurisdiction. The qualified agency performing this work assumes responsibility for this installation.

NOTE: Do not change the main pressure switch located on the top of unit sizes 800 and 1200. The main pressure switch is the same for all elevations.

Refer to Figure 1 and Figure 2 and replace the pressure switch as follows:

- 1. Remove control compartment door from first unit and locate pressure switch.
- Mark (for correct reconnection) two wires and sensing tubes attached to pressure switch. Disconnect wires and sensing tubes from pressure switch.
- 3. Locate two screws that secure switch mounting bracket. Remove screws (save screws) and pressure switch.
- 4. Using screws removed in step 3, install replacement pressure switch.

#### PRESSURE SWITCH REPLACEMENT—CONTINUED

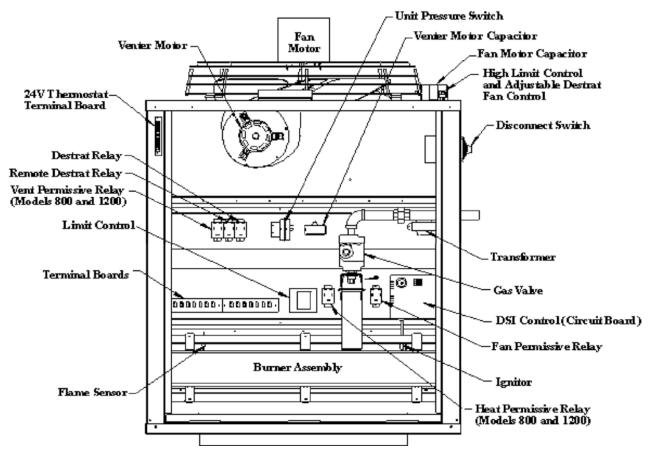


Figure 2. Model LDAP Components

- 5. Reconnect sensing tubes and wires disconnected in step 2 and replace control compartment door.
- 6. If replacing pressure switch on unit size 400, proceed to step 7. If replacing pressure switch on unit size 800, repeat steps 1 through 5 for second unit. If replacing pressure switch on unit size 1200, repeat steps 1 through 5 for second unit and again for third unit.
- 7. When heater has been installed, as part of startup procedure, adjust outlet pressure (refer to **Table 2**) of valve(s) and attach high-altitude adjustment label that is shipped with heater. Refer to heater installation manual for adjustment instructions and derated input rates and capacities.

Table 2. Manifold Pressure Settings by Altitude Above 6000 Feet (1830 Meters)										
Alti	tude	Natural Gas	s (IN WC)	Propane Gas (IN WC)						
Feet	Meters	Single-Stage and Two-Stage High Fire	Two-Stage High Fire	Single-Stage and Two-Stage High Fire	Two-Stage High Fire					
6001-7000	1831–2135	2.6	1.5	7.4	4.2					
7001-8000	2136–2440	2.5	1.4	7.1	4.0					
8001-9000	2441–2745	2.4	1.3	6.7	3.8					
9001-10000	2746-3045	2.4	1.3	6.7	3.6					



Specifications and illustrations subject to change without notice or incurring obligations.

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