



# High Altitude Kits for Elevations above 6000Ft / 1830M Options DJ20 & DJ21

**FORM I-UD&APD Series-HA (1-16)**  
Obsoletes Form I-UD-APD Series-HA (11-14)

*APPLIES TO:*

**Standard Power Vent Unit Heaters:  
Models UDAP, UDBP and ADP**

**Separated Combustion Unit Heaters:  
Models UDAS and UDBS**

## Application

If a Standard Power Vent or Separated Combustion Unit Heater is being installed above 2,000 ft (610 M), 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 altitude above 6,000 ft (1,830 M), the pressure switch must be changed.

The high altitude pressure switch ordered as Option DJ20 or DJ21, High Altitude Kit, varies by Model, Size and type of application. Option DJ20 or DJ21 is **REQUIRED** above 6,000 ft (1,830 M)

**Be sure your kit matches your installation.**

## Kit Components

Option DJ20 Installed as a Std. Power Vented Fan Type Unit Heater. (UDAP & APD)	Std Power Vent Unit Heater	30	45	60	75	100	125	150	175	200	225	250	300	350	400	
	Pkg P/N	197117			197118			197117			201162			201163		
	High Altitude Switch P/N	197031			197032			197031			201160			201161		
	Negative Pressure OFF Setpoint "w.c."	0.35			0.45			0.35			1.00			1.30		
	Label Color	Purple			Pink			Purple			Brown			White		

Option DJ21 Installed as a Std. Power Vented Fan Type Unit Heater with Option AV6 for Common Venting. (UDAP)	Std Power Vent Unit Heater w/ Opt AV6	30	45	60	75	100
	Pkg P/N	197119	197118	197120	197121	
	High Altitude Switch P/N	197029	197032	196362	196388	
	Negative Pressure OFF Setpoint "w.c."	0.60	0.45	0.55	0.50	
	Label Color	Lt Blue	Pink	White	Orange	

Option DJ20 Installed as a Separated Combustion Fan Type Unit Heater. (UDAS)	Separated Combustion Unit Heater	30	45	60	75	100	125	150	175	200	225	250	300	350	400	
	Pkg P/N	197119			197121			197205	197117		201162			201163		
	High Altitude Switch P/N	197029			196388			197030	197031		201160			201161		
	Negative Pressure OFF Setpoint "w.c."	0.60			0.50			0.40	0.35		1.00			1.30		
	Label Color	Lt Blue			Orange			Green	Purple		Brown			White		

Option DJ20 Installed as a Std. Power Vented Blower (Model UDAP) Type Unit Heater.	Std Power Vent Unit Heater	30	45	60	75	100	125	150	175	200	225	250	300	350	400
	Pkg P/N	197117			197118			197117			201162			201163	201162
	High Altitude Switch P/N	197031			197032			197031			201160			201161	201160
	Negative Pressure OFF Setpoint "w.c."	0.35			0.45			0.35			1.00			1.30	1.00
	Label Color	Purple			Pink			Purple			Brown			White	Brown

Option DJ20 Installed as a Separated Combustion Blower (Model UDBS) Type Unit Heater.	Separated Combustion Unit Heater	30	45	60	75	100	125	150	175	200	225	250	300	350	400
	Pkg P/N	197117	197118	202103	197118	197117	197205	197118		201162			201163	201162	
	High Altitude Switch P/N	197031	197032	196362	197203	197031	197030	197031		201160			201161	201160	
	Negative Pressure OFF Setpoint "w.c."	0.35	0.45	0.55	0.45	0.35	0.40	0.35		1.00			1.30	1.00	
	Label Color	Purple	Pink	White	Pink	Purple	Green	Purple		Brown			White	Brown	

# Installation Instructions



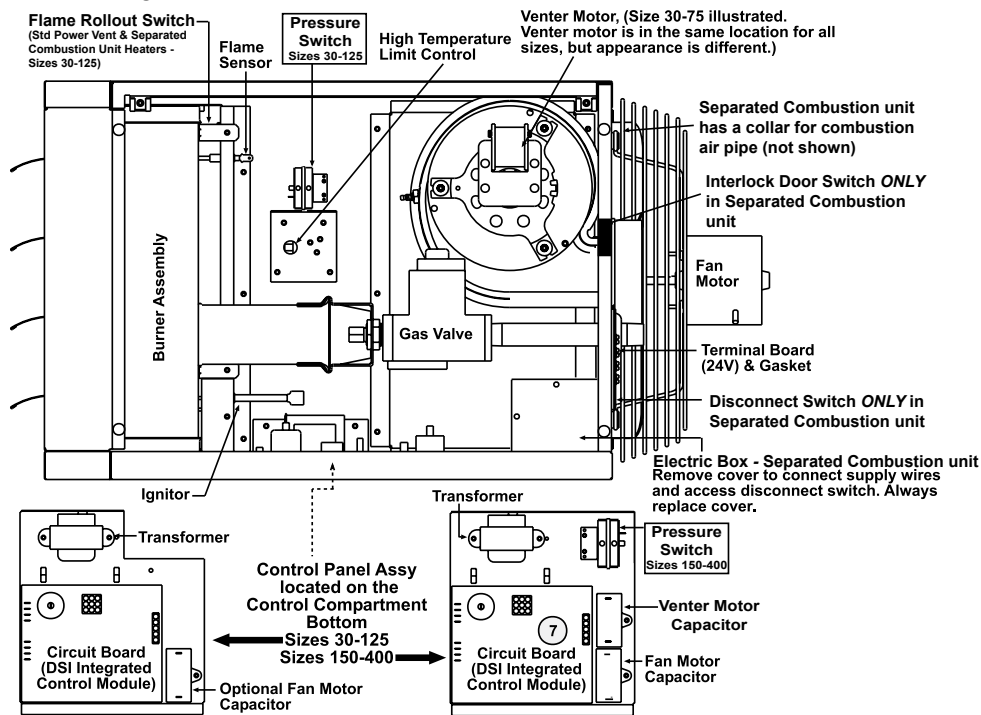
**Figure 1**  
Pressure Switch

**WARNING:** The instructions in this sheet are designed to prepare a heater for high altitude operation prior to installation. If your heater is installed, for your safety, turn off the gas and electric before servicing.

The high altitude 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.

1. In the control compartment, locate the pressure switch (See **FIGURES 1 & 2**).
2. **Sizes 30 - 125:** On the back wall of the control compartment.  
**Sizes 150 - 400:** On the bracket on the bottom of the control compartment.
3. Mark & disconnect the two wires attached to the pressure switch.
4. Locate the two screws holding the switch mounting bracket. Remove the screws (save screws) and the pressure switch.
5. Using the same screws, install the high altitude pressure switch. Attach the sensing tube and wires.

**Figure 2**  
Pressure Switch Location  
(UDAP unit is illustrated)  
Pressure switch is in the same location for all models



Manifold Pressure Settings by Altitude above 6,000 ft (1,830 M)					
Altitude		Natural Gas (inches w.c.)		Propane Gas (Inches w.c.)	
Feet	Meters	Single & Two Stage High Fire	Two Stage Low Fire	Single & Two Stage High Fire	Two Stage Low Fire
6,001 - 7,000	1,831 - 2,135	2.6	1.3	7.4	3.7
7,001 - 8,000	2,136 - 2,440	2.5	1.3	7.1	3.5
8,001 - 9,000	2,441 - 2,745	2.4	1.2	6.7	3.4
9,001 - 10,000	2,746 - 3,045	2.3	1.2	6.7	3.4

**IMPORTANT:** When the heater is installed, as part of startup, **be certain to adjust the valve outlet pressure and to attach the high altitude adjustment label** that is shipped with the heater. Adjustment instructions and derated input rates and capacities are in the heater installation manual.

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

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