



# 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	Std Power Vent Unit Heater	30	45	60	75	100	125	150	175	200	225	250	300	350	400	
a Std. Power Vented Fan	Pkg P/N	197	197117		197118			197117			201162				201163	
Type Unit	High Altitude Switch P/N	197	031	197032			197031			201160				201161		
Heater. (UDAP & APD)	Negative Pressure OFF Setpoint "w.c."	0.0	35		0.45		0.35 1.00		0.35		1.00				1	.30
	Label Color	Pur	ple		Pink		Purple		Brown				White			

Option DJ21 Installed as a Std. Power	Std Power Vent Unit Heater w/ Opt AV6	30	45	60	75	100	
Vented Fan	Pkg P/N	197119	197118	19	7120	197121	
Type Unit Heater with	High Altitude Switch P/N	197029	197032	19	196388		
Option AV6 for Common Venting.	Negative Pressure OFF Setpoint "w.c."	0.60	0.45	C	.55	0.50	
(UDAP)	Label Color	Lt Blue	Pink	V	Orange		

Option DJ20 Installed as a Separated	Separated Combus- tion Unit Heater	30	45	60	100	125	150	175	200	225	250	300	350	400	
Combustion						197121	197205	197	117	201162				201163	
Fan Type Unit Heater.	High Altitude Switch P/N	197029				196388	197030	197031		201160				201161	
(UDAS)	Negative Pressure OFF Setpoint "w.c."		0.6	60		0.50	0.40	0.3	35	1.00				1.30	
	Label Color Lt Blue C		Orange	Green	Pur	ple	Brown				White				

Option DJ20 Installed as a Std.	Std Power Vent Unit Heater	30	45	60	75	100	125	150	175	200	225	250	300	350	400
Power Vented	Pkg P/N	197	197117		197118		197117			201162				201163	201162
Blower (Model UDAP)	High Altitude Switch P/N	197031		197032		197031			201160				201161	201160	
Type Unit Heater.	Negative Pressure OFF Setpoint "w.c."	0.35		0.45		0.35				1.00				1.30	1.00
	Label Color	bel Color Purple		Р	ink Purple			:		Brown				White	Brown

Option DJ20 Installed as a Separated	Separated Combus- tion Unit Heater	30	45	60	75	100	125	150	175	200	225	250	300	350	400
Combus-	Pkg P/N	197117	197118	202103	197118	197117	197205	197	118	201162			201163	201162	
tion Blower (Model UDBS)	High Altitude Switch P/N	197031	197032	196362	197203	197031	197030	1970	031	201160		201161	201160		
Type Unit Heater.	Negative Pressure OFF Setpoint "w.c."	0.35	0.45	0.55	0.45	0.35	0.40	0.3	35	1.00		1.30	1.00		
	Label Color	Purple	Pink	White	Pink	Purple	Green	Pur	ple		Bro	wn		White	Brown

## Installation Instructions



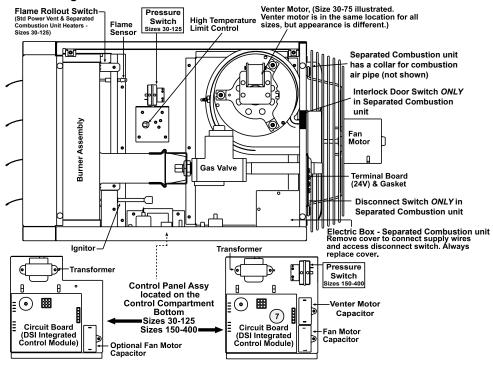
Figure 1
Pressure Switch

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

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 justification. 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.
- Using the same screws, install the high altitude pressure switch. Attach the sensing tube and wires.



Manifold Pressure Settings by Altitude above 6,000 ft (1,830 M)											
Altitude Natural Gas (inches w.c.) Propane Gas (Inches w											
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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