



21V51U-843

- Includes:
- Module
 - Ignitor Kit
 - Wiring Harness



21V51U-843 KIT REPLACES:

White-Rodgers 50V51-XXX's and 50V61-XXX's Two-Stage HSI Systems with 80V or 120V Ignitors.

FEATURES

- 16-pin variable speed circulator output for ECM (Electronically Commutated Motor), dipswitch selectable for OEM applications two-speed inducer output, 2-stage gas valve output
- Pushbutton fault history retrieval.
- Furnace status LED – tri-color (green, red and amber).
- Heat fan off delay (dipswitch selectable), fan on delay for cooling.
- Auto second stage delay (dipswitch selectable).
- 120 VAC humidifier output/120 VAC electronic air cleaner output.

SPECIFICATIONS

Electrical Rating:
 Input Voltage 24 VAC, 60 Hz (Class II transformer required)
 Nom. Input Current @ 24 VAC 595 mA + MV
 Relay Load Ratings:
 Gas Valve Relays 1.5 amps @ 24 VAC, 60 Hz
 Inducer Relays 2.2 FLA – 3.5 LRA @ 120 VAC
 Humidifier Load 1.0 amp max. @ 120 VAC
 Electronic Air Cleaner Load 1.0 amp max. @ 120 VAC
 Ignitor Relay 4.0 amps max. @ 132 VAC, 60 Hz
 Flame Current Requirements:
 Minimum current to insure flame detection 0.3 µA DC*
 Maximum current for non-detection . . 0.1 µA DC*
 Maximum allowable leakage resistance 100 M ohms
 *Measured with a DC microammeter in the flame probe lead
 Operating Temperature Range -40° to 175°F (-40 to 80°C)
 Humidity Range 5% to 93% relative humidity (non-condensing)
 Flame Failure Response Time 2.0 sec. max. @ 60Hz

TECHNICAL HELP

Wiring Diagram/Operation See pages 178-188

Model Number	Pre-Purge	Ignitor Warm-Up	Retries	Heat Delay to Fan ON	Heat Delay to Fan OFF	Cool Delay to Fan ON	Cool Delay to Fan OFF	Automatic Reset Time
21V51U-843	15	17	2	45	90/120/150/180	5	60	60 minutes

21V51U-843 Cross Reference Application Data							
Module Model Number	Furnace Model	Harness	Ignitor	Furnace OEM			
18M9901	G60DFV (X) or G60UHV	None required	21D64-2*	Lennox			
20300002	N/A			Amana/Goodman			
20300004	N/A						
20300006	Same as 50V61-289						
49M5901	G60UHV or G61MPV			Lennox			
50V51-243	FC8V, FC9V, FL8V, FL9V, GM8V, GM9V, LC8V, LL8V, LM8V, PV8A, PV9A or PV9B	None required	Use existing or 21D64-2	Coleman/Evcon/Luxaire/York			
50V51-243	FL9V			Coleman/Evcon/Luxaire/York			
50V51-243	PV9B	None required		Coleman/Evcon/Luxaire/York			
50V51-243	GM9V	None required	Use existing or 21D64-2	Coleman/Evcon/Luxaire/York			
50V51-243	PV9B	None required		Coleman/Evcon/Luxaire/York			
50V51-243	GM8V	None required		Coleman/Evcon/Luxaire/York			
50V51-243	LM8V	None required	Use existing or 21D64-2	Coleman/Evcon/Luxaire/York			
50V51-243	FC8V	None required		Coleman/Evcon/Luxaire/York			
50V51-243	FL8V	None required		Coleman/Evcon/Luxaire/York			
50V51-243	LC8V	None required	Use existing or 21D64-2	Coleman/Evcon/Luxaire/York			
50V51-243	LL8V	None required		Coleman/Evcon/Luxaire/York			
50V51-243	PV8A	None required		Coleman/Evcon/Luxaire/York			
50V51-288	N/A	A, B	Use existing or 21D64-2	Amana/Goodman			
50V51-289	N/A						
50V51-290	N/A						
50V51-507	XV80 or XV80i						
50V61-120	G60DFV (X) or G60UHV or G61MPV	None required	21D64-2*	American Standard/Trane			
50V61-143	CDX1-75N, CDX1-100N, CDX1-125N, CHX1-75N, CHX1-100N or CHX1-125N			Lennox			
50V61-288	N/A			Thermo Pride			
50V61-289	AMV91155DXA			Amana/Goodman			
50V61-289	AMV81155CXA						
50V61-289	ADV80703BXA						
50V61-289	ADV80905CXA						
50V61-289	AMV90453BXA						
50V61-289	AMV90704CXA						
50V61-289	AMV90905DXA						
50V61-289	AMV80703BXA						
50V61-289	AMV80905CXA						
50V61-289	AMV80704BXA						
50V61-289	ADV81155CXA						
50V61-289	AMV80704CXA						
2030006S	Same as 50V61-289				Amana/Goodman		
50V61-507	XV80 or XV80i				American Standard/Trane		
50V61-480	50V61-480				21V51U-843	Trane	American Standard/Trane
50V61-486	50V61-486				21V51U-843	Trane	American Standard/Trane
B1809925	N/A			A, B	Use existing or 21D64-2	Amana/Goodman	
B1809927	N/A						
B1809927S	N/A						
CNT03078	XV80 or XV80i	None required	21D64-2*	American Standard/Trane			
D156245P01							
D34142P01							
PCB00106	N/A	A, B	Use existing or 21D64-2	Amana/Goodman			
PCB00106S	N/A						
PCBBF106	N/A						
PCBBF106S	N/A						
PCBBF107S	N/A						
X13650840010	XV80 or XV80i				None required	21D64-2*	American Standard/Trane

Note: Installer may have to modify existing ignitor hole to accommodate the new 21D64-2, with ceramic diameter (.394”).

***21D64-2 Ignitor Note:** In these applications, the existing 80V ignitor must be replaced by the 120V 21D64-2 ignitor.