ADDENDUM

Addendum to Installation Instructions For ML180UHE, ML180DFE, ML193UHE, ML193DFE, ML196UHE & ML196DFE

This document supersedes any similar/conflicting instructions found in this bag assembly.

Application

This furnace is designed for single stage heating and single stage cooling/heat pump application only. Although equipped with two stage ignition control, wiring on this unit is strictly configured for single stage application. Unless allowed by this document, do not change wiring connections and never cut 2 stage compressor jumper W915 on the ignition control.

Indoor Blower Speeds (Diagram Figure 1)

For heating operation, control uses indoor blower motor speed tap connected to “Low Heat” terminal on the ignition control. See table 2 for allowable heating speed taps to meet DOE requirements for Fan Energy Rating and OEM recommended temperature rise range.

Speed tap connected to “high heat” terminal is used for heating operation only if control finds indoor blower motor already running when heat is called upon. Therefore, there must always be an allowable heating motor speed tap connected to the “High Heat” terminal of the ignition control.

For Cooling/Heat Pump operation, control uses indoor blower motor speed tap connected to the “High Cool” terminal.

Indoor blower motor speed tap connected to “Low Cool” terminal is used only for continuous air. Control energizes “Low Cool” terminal for continuous air only when dip switches are appropriately set to do so (6 “OFF”, & 7 “ON”).

In order to meet DOE issued July 2019 indoor blower requirements to meet Fan Energy Ratings, following motor speed taps must be connected to "Low Cool" terminal located on Ignition Control. Additionally, per table 7, Dip Switch 6 located on Ignition Control must be in "OFF" and Dip Switch 7 must be in "ON" position. See table 1 for speed tap allowed for continuous air.

TABLE 1

Units	Model	Allowed Continuous Air Speed Tap
ML180UHE	All	Red
ML180DFE	All	Red
ML193UHE	All	Red
ML193DFE	All	Red
ML196UHE	All	Red
ML196DFE	All	Red

On-Board Links and Diagnostic Push Button (Figure 2)

On-Board Link W914 Dehum - DO NOT CUT

On-board link W914, the connection between R & DS, must NOT be cut, as this furnace is strictly designed for 1 stage compressor application only and is NOT designed to operate in dehumidification mode.

On-Board Link W951 Heat Pump (R to O)

On-board link W951 is a clippable connection between terminals R and O on the integrated control. W951 must be cut when the furnace is installed in applications which include a heat pump unit and a thermostat which features dual fuel use. If the link is left intact, terminal “O” will remain energized eliminating the HEAT MODE in the heat pump.

On-Board Link W915 2 Stage Compr (Y1 to Y2)

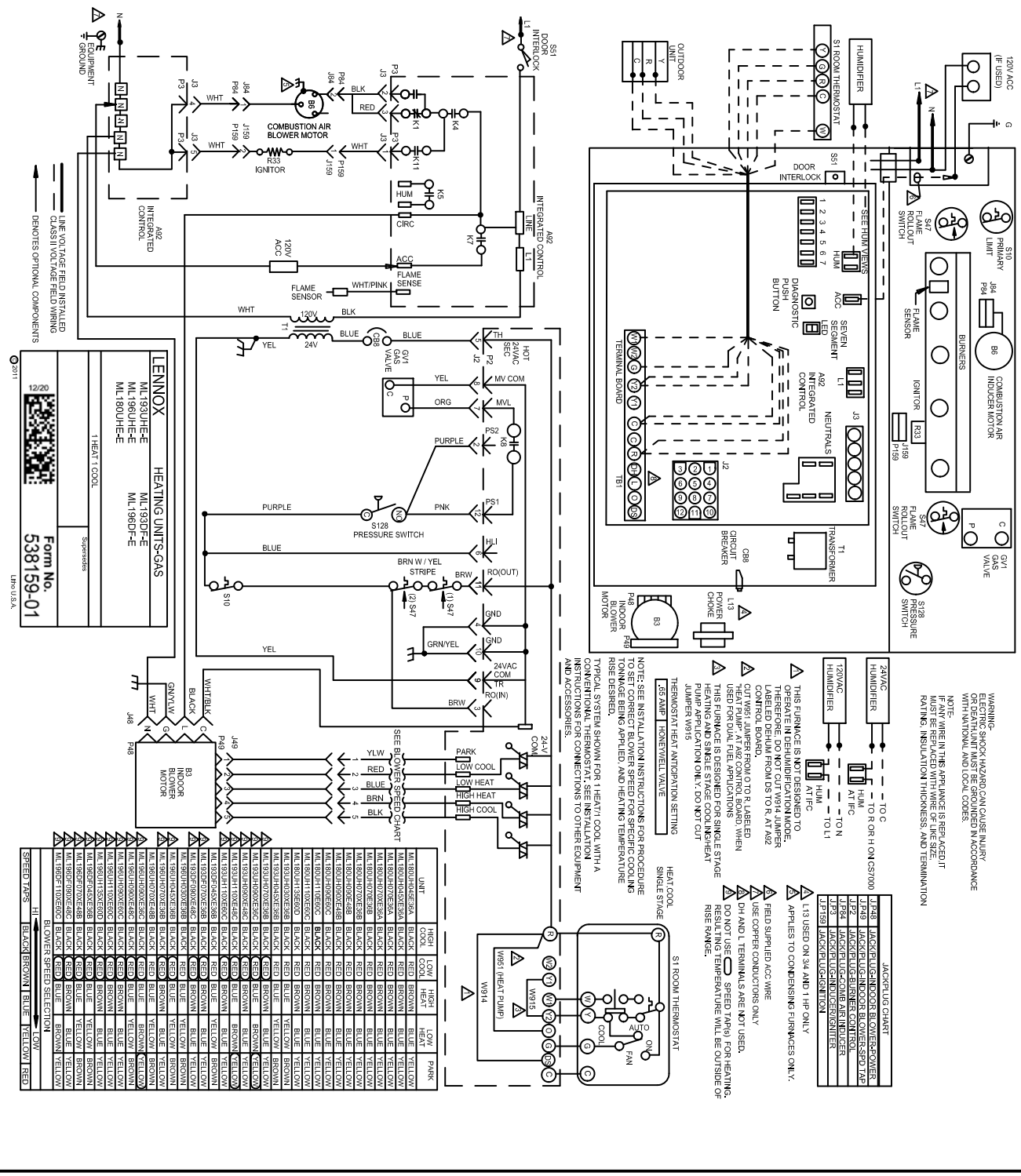
[DO NOT CUT]

On-board link W915 is a connection between terminals Y1 and Y2 on the integrated control. W915 must NOT be cut, as this furnace is strictly designed for 1 stage compressor application.

TABLE 2

Model No.	Allowable Heating Speed Taps (For "Low Heat" terminal at Ignition Control)				
	Black	Brown	Blue	Yellow	Red
ML180UH045E36A	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH045XE36A	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH070E36A	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH070XE36A	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH070E36B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH070XE36B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH090E48B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH090XE48B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH090E60C	Not Allowed	Allowed	Allowed	Allowed	Allowed
ML180UH110E60C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH110XE60C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180UH135E60D	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML193UH030XE36B	Not Allowed	Allowed	Allowed	Allowed	Allowed
ML193UH045XE36B	Not Allowed	Allowed	Allowed	Allowed	Allowed
ML193UH070XE36B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML193UH090XE36C	Not Allowed	Allowed	Allowed	Not Allowed	Not Allowed
ML193UH090XE48C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML193UH110XE48C	Allowed	Allowed	Allowed	Not Allowed	Not Allowed
ML193UH110XE60C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML193DF045XE36B	Not Allowed	Allowed	Allowed	Allowed	Allowed
ML193DF070XE36B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML193DF090XE48C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML196UH030XE36B	Allowed	Allowed	Allowed	Allowed	Allowed
ML196UH045XE36B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML196UH070XE36B	Not Allowed	Not Allowed	Allowed	Allowed	Not Allowed
ML196UH070XE48B	Not Allowed	Not Allowed	Not Allowed	Allowed	Allowed
ML196UH090XE36C	Not Allowed	Allowed	Allowed	Not Allowed	Not Allowed
ML196UH090XE48C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML196UH090XE60C	Not Allowed	Not Allowed	Allowed	Allowed	Not Allowed
ML196UH110XE60C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML196UH135XE60D	Not Allowed	Not Allowed	Allowed	Allowed	Not Allowed
ML196DF045XE36B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML196DF070XE48B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML196DF090XE48C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML196DF110XE60C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180DF045E36A	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180DF070E36A	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180DF070E36B	Not Allowed	Allowed	Allowed	Allowed	Not Allowed
ML180DF090E48B	Not Allowed	Allowed	Allowed	Allowed	Allowed
ML180DF110E60C	Not Allowed	Allowed	Allowed	Allowed	Not Allowed

Wiring Diagram ML180UHE, ML193UHE, ML193DFE, ML196UHE, ML196DFE



UNIT	HEAT/COOL	LOW COOL	HIGH COOL	LOW HEAT	HIGH HEAT	PARK
ML180UH042XE36A	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH060XE36A	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH042XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH060XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH070XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH090E48B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH090E60C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH110E60C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH135E60D	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH030XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH042XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH048XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH060XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH070XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH090E48B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH090E60C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH110E60C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML180UH135E60D	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH030XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH042XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH048XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH060XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH070XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH090XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH090XE48C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH110XE48C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193UH135XE48C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193DF042XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193DF048XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193DF060XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193DF070XE36B	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193DF090XE48C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193DF110XE48C	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML193DF135XE60D	BLACK	RED	BROWN	BLUE	YELLOW	BROWN
ML196UH042XE36B	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196UH060XE36B	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196UH070XE36B	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196UH090XE36C	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196UH090XE48C	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196UH110XE60C	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196UH135XE60D	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196DF042XE36B	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196DF048XE36B	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196DF070XE48B	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196DF090XE48C	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW
ML196DF110XE60C	BLACK	RED	BLUE	YELLOW	BROWN	YELLOW

SPEED TAPS	HI				LOW
BLOWER SPEED SELECTION	BLACK	BROWN	BLUE	YELLOW	RED

FIGURE 1

Wiring Diagram ML180DFE

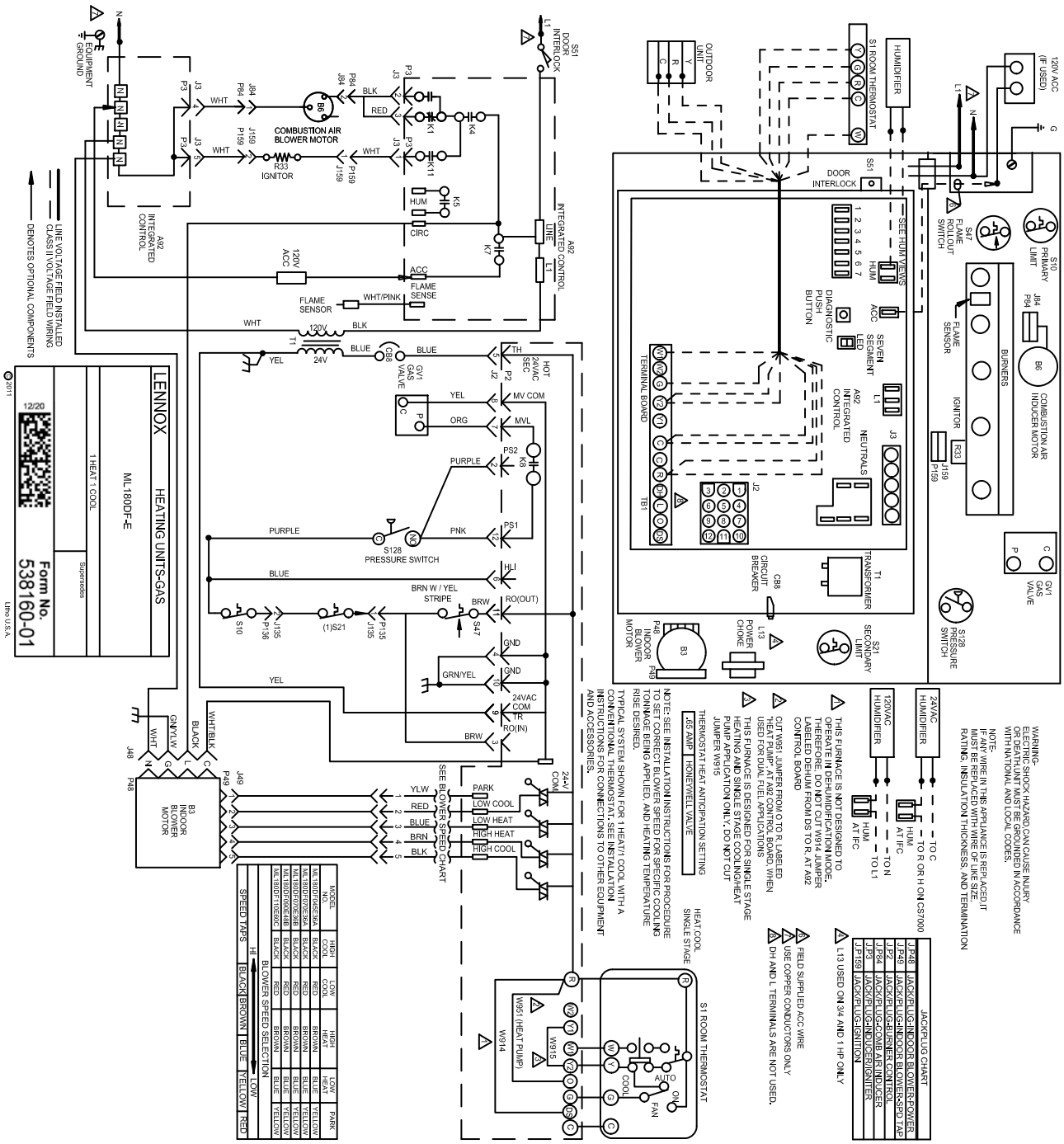
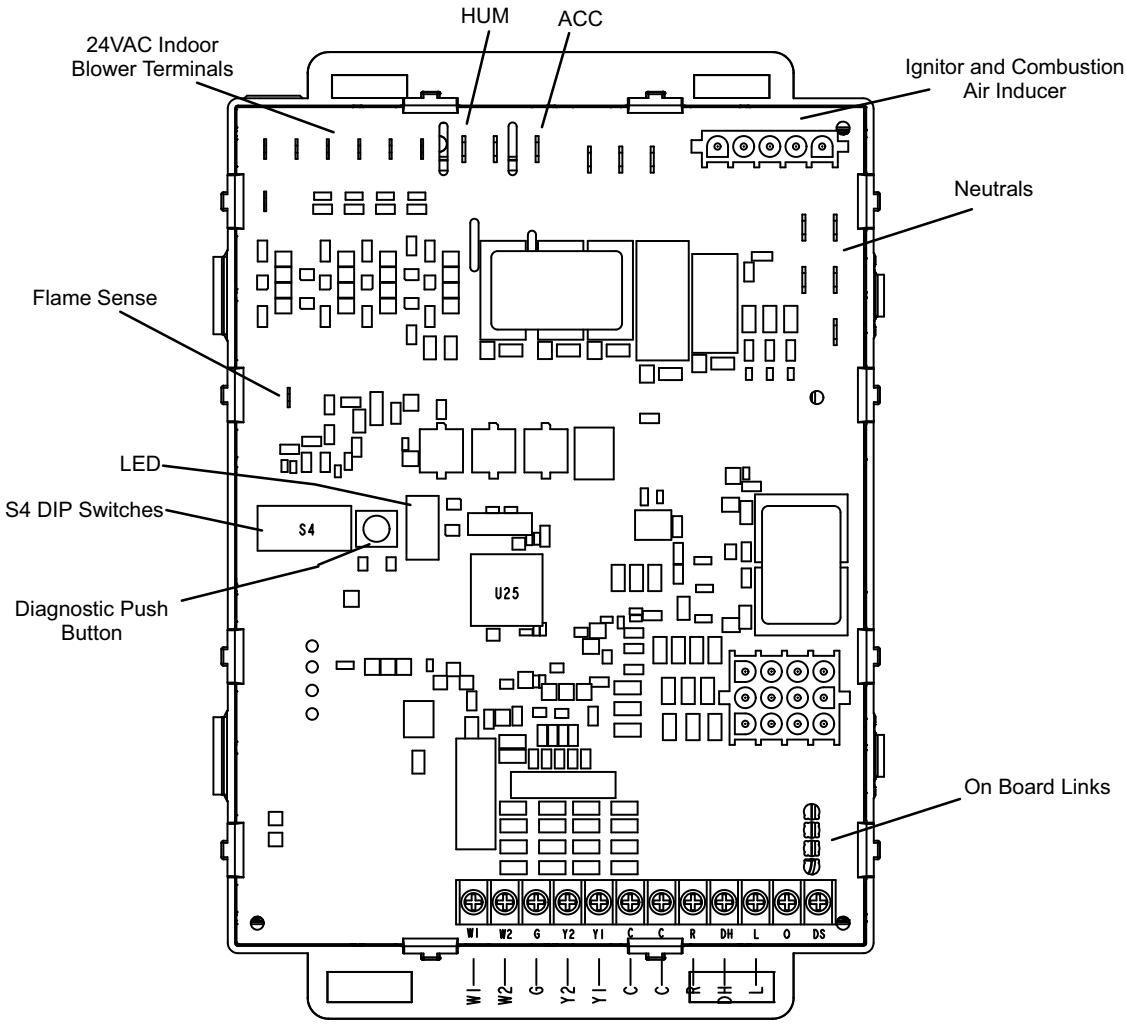


FIGURE 2

Integrated Ignition Control



3/16" QUICK CONNECT TERMINALS

FLAME SENSE SIGNAL
HI COOL 24VAC - Used for normal cooling operation
HI HEAT 24VAC - Used for 60 second heating operation if indoor blower is running during heat demand
LO COOL 24VAC - Continuous fan see table 7
LO HEAT 24VAC - Used for normal heat operation
PARK
PARK
COMMON 24VAC

1/4" QUICK CONNECT TERMINALS

NEUTRALS = 120 VAC NEUTRAL
HUM = UNPOWERED NORMALLY OPEN (DRY) CONTACTS
LI = 120 VAC INPUT TO CONTROL
ACC = 120 VAC OUTPUT TO OPTIONAL ACCESSORY

THERMOSTAT CONNECTIONS (TB1)

W1 = Heat Signal From Single Stage T-Stat
W2 = Not Used
Y1 = Not Used
Y2 = Cool Signal From Single Stage T-Stat
G = Manual Fan From T-Stat
C = T-Stat Signal Ground Connected To Transformer Ground (TR) And Chasis Ground (GRD)
R = Class 2 Voltage To T-Stat
L = Not Used
DH = Not Used
DS = Not Used

FIGURE 3

Diagnostic LED (Figure 3)

The seven-segment diagnostic LED displays operating status, error codes and other information. Table 4 lists diagnostic LED codes.

Diagnostic Push Button (Figure 3)

The diagnostic push button is located adjacent to the seven-segment diagnostic LED. This button is used to enable the Error Code Recall "E" mode and the Flame Signal "F" mode. Press the button and hold it to cycle through a menu of options. Every five seconds a new menu item will be displayed. When the button is released, the displayed item will be selected. Once all items in the menu have been displayed, the menu resumes from the beginning until the button is released.

Error Code Recall Mode

Select "E" from the menu to access the most recent 10 error codes. Select "c" from the Error Code Recall menu to clear all error codes. Button must be pressed a second time while "c" is flashing to confirm command to delete codes. Press the button until a solid "≡" is displayed to exit the Error Code Recall mode.

Flame Signal Mode

Select "F" from the menu to access the flame signal mode. The integrated control will display the flame current on seven-segment LED in in micro amps (uA).

Flame signal mode is exited after any of the following:

- Power is reset
- Pressing and holding push button until 3 horizontal lines "≡" are displayed
- 10 minutes after entering the flame sense mode.

TABLE 3
Integrated Control Diagnostic Modes

Display	Action (when button released)
No change (idle)*	Remain in idle mode
Solid "E"	Enter diagnostic recall mode
Solid "F"	Enter flame signal mode

TABLE 4
Integrated Diagnostic Codes / Status of Equipment

Code	Diagnostic Codes/Status of Equipment	Action Required to Clear and Recover
.	Idle mode (Decimal blinks at 1 Hertz -- 0.5 second ON, 0.5 second OFF).	
C	Cooling stage (1 second ON, 0.5 second OFF) 1 or 2 displayed / Pause / Repeat codes.	
d	Dehumidification mode (1 second ON, 1 second OFF) / Pause / Repeat Codes).	
H	Gas Heat Stage (1 second ON, 0.5 second OFF) 1 or 2 displayed / Pause / Repeat codes. Blinking during ignition.	
h	Heat pump stage.	
E 110	Low line voltage.	Line Voltage Low (Voltage lower than nameplate rating). Check power line voltage and correct. Alarm clears 5 seconds after fault recovered.
E 111	Line voltage polarity reversed.	Reverse line power voltage wiring. System resumes normal operation 5 seconds after fault recovered.
E 112	Ground not detected	System shuts down. Provide proper earth ground. System resumes normal operation 5 seconds after fault recovered.
E 113	High line voltage.	Line Voltage High (Voltage higher than nameplate rating). Provide power voltage within proper range. System resumes normal operation 5 seconds after fault recovered.
E 114	Line voltage frequency out-of-range.	No 60 Hertz Power. Check voltage and line power frequency. Correct voltage and frequency problems. System resumes normal operation 5 seconds after fault recovered.
E 115	Low 24V - Control will restart if the error recovers.	24-Volt Power Low (Range is 18 to 30 volts). Check and correct voltage. Check for additional power-robbing equipment connected to system. May require installation of larger VA transformer to be installed in furnace / air handler. Clears after fault recovered.
E 117	Poor ground detected (Warning only)	Provide proper grounding for unit. Check for proper earth ground to the system. Warning only will clear 30 seconds after fault recovered.

* No change implies the display will continue to show whatever is currently being displayed for normal operation (blinking decimal, active error code, heat state, etc..)

TABLE 4 Continued

E 125	Control failed self-check, internal error, failed hardware. Will restart if error recovers. Integrated control not communicating. Covers hardware errors (flame sense circuit faults, pin shorts, etc.).	Hardware problem on the control. Cycle power on control. Replace if problem prevents service and is persistent. Critical alert. Cleared 300 seconds after fault recovered.
E 200	Hard lockout - Rollout circuit open or previously open.	Correct cause of rollout trip, or replace flame rollout switch. Test furnace operation. Cleared after fault recovered.
E 204	Gas valve mis-wired.	Check gas valve operation and wiring. Clears when repaired.
E 205	Gas valve control relay contact shorted.	Check wiring on control and gas valve. If wiring is correct, replace control.
E 207	Hot surface ignitor sensed open	Measure resistance of hot surface ignitor. Replace if open or not within specified range found in IOM. Resumes normal operation after fault is cleared.
E 223	Pressure switch failed open.	Check pressure (inches w.c.) of low pressure switch closing on heat call. Measure operating pressure (inches w.c.). Inspect vent and combustion air inducer for correct operation and restriction. Resumes normal operation after fault is cleared
E 224	Pressure switch failed closed.	Check operation of low pressure switch to see if it is stuck closed on heat call longer than 150 seconds. Measure operating pressure (inches w.c.). Inspect vent and combustion air inducer for correct operation and restriction. Resumes normal operation after fault is cleared.
E 227	Pressure switch open during trial for ignition or run mode.	Check pressure (inches w.c.) of low pressure switch closing on heat call. Measure operating pressure (inches w.c.). Inspect vent and combustion air inducer for correct operation and restriction. Resumes normal operation after fault is cleared.
E 229	Ignition occurred with indoor blower operating	This code is information only
E 240	Low flame current - Run mode.	Check micro-amperes of flame sensor using control diagnostics or field-installed mode. Clean or replace sensor. Measure voltage of neutral to ground to ensure good unit ground. Alert clears after current heat call has been completed.
E 241	Flame sensed out of sequence - Flame still present.	Shut off gas. Check for gas valve leak. Replace, if necessary. Alert clears when fault is recovered.
E 250	Limit switch circuit open.	Check for proper firing rate on furnace. Ensure there is no blockage in heater. Check for proper air flow. If limit not closed within 3 minutes, unit will go into 1-hour soft lockout. Resumes normal operation after fault is cleared.

TABLE 4 Continued

Code	Diagnostic Codes/Status of Equipment	Action Required to Clear and Recover
E 270	Soft lockout - Exceeded maximum number of retries. No flame current sensed.	Check for proper gas flow. Ensure that ignitor is lighting burner. Check flame sensor current. Clears when heat call finishes successfully.
E 271	Soft lockout - Exceeded maximum number of retries. Last retry failed due to the pressure switch opening.	Check pressure (inches w.c.) of low pressure switch closing on heat call. Measure operating pressure (inches w.c.). Inspect vent and combustion air inducer for correct operation and restriction. Clears when heat call finishes successfully.
E 272	Soft lockout - Exceeded maximum number of recycles. Last recycle due to the pressure switch opening.	Check operation of low pressure switch to see if it is stuck closed on heat call. Check pressure (inches w.c.) of high pressure switch closing on heat call. Measure operating pressure (inches w.c.). Inspect vent and combustion air inducer for correct operation and restriction. Clears when heat call finishes successfully.
E 273	Soft lockout - Exceeded maximum number of recycles. Last recycle due to flame failure.	Check micro-amperes of flame sensor using control diagnostics or field-installed mode. Clean or replace sensor. Measure voltage of neutral to ground to ensure good unit ground. Clears when heat call finishes successfully.
E 274	Soft lockout - Exceeded maximum number of recycles. Last recycle failed due to the limit circuit opening or limit remained open longer than 3 minutes.	Shut down system. 1-hour soft lockout. Check firing rate and air flow. Check for blockage. Clears when heat call finishes successfully.
E 275	Soft lockout - Flame sensed out of sequence. Flame signal is gone.	Shut off gas. Check for gas valve leak. 1-hour soft lockout. Clears when flame has been proven stable.
E 290	Ignitor circuit fault - Failed ignitor or triggering circuitry.	Measure resistance of hot surface ignitor. Replace if open or not within specifications. 1-hour soft lockout. Clears when flame has been proven stable.

Integrated Control DIP Switch Settings

This special edition of ML196E, ML193Eand ML180E units are equipped with a two-stage integrated control. This control manages ignition timing, heating mode fan off delays and indoor blower speeds based on selections made using the control dip switches and jumpers. The control includes an internal watchguard feature which automatically resets the ignition control when it has been locked out. After one hour of continuous thermostat demand for heat, the watchguard will break and remake thermostat demand to the furnace and automatically reset the control to relight the furnace.

Heating Operation DIP Switch Settings

Switch 1 -- Thermostat Selection --

This unit must be used with a single -stage thermostat only. Ignition control is factory set with DIP switch 1 in the "OFF" position, and must be left in "OFF" position. This allows unit to use motor speed tap connected to "Low Heat" terminal of ignition control for heating application.

Switch 2 -- Second Stage Delay

This furnace is designed for single stage heating and cooling only in a heat pump. The second stage delay DIP switch SW2 must be in the "OFF"' position.

Indoor Blower Operation DIP Switch Settings

Switches 3 and 4 -- Heating Mode Blower-Off Delay -- The blower-on delay of 30 seconds is not adjustable. The blower-off delay (time that the blower operates after the heating demand has been satisfied) can be adjusted by moving switches 3 and 4 on the integrated control. The unit is shipped from the factory with a blower-off delay of 90 seconds. The blower off delay affects comfort and is adjustable to satisfy individual applications. Adjust the blower off delay to achieve a supply air temperature between 90° and 110°F at the exact moment that the blower is de-energized. Longer off delay settings provide lower supply air temperatures; shorter settings provide higher supply air temperatures.Table 5 provides the blower off timings that will result from different switch settings.

TABLE 5
Blower Off Heating Mode Delay Switch Settings

Blower Off Delay (Seconds)	Switch 3	Switch 4
60	On	Off
90 (Factory)	Off	Off
120	Off	On
180	On	On

Switch 5 -- Cooling Mode Blower-Off Delay-- The unit is shipped from the factory with the dip switch positioned *OFF* for a 45 second delay. Table 6 provides the cooling mode off delay settings.

TABLE 6
Blower Off Cooling Mode Delay Switch Settings

Blower Off Delay (Seconds)	Switch 5
45 (Factory)	Off
2	On

Switches 6 and 7 -- Continuous Fan Mode -- Continuous fan speed can be controlled by changing DIP switch positions. Table 7 below provides DIP switch settings for continuous fan mode. See page 1 "Indoor Blower Speeds" for speed tap selection for optimum continuous fan performance.

TABLE 7
Continuous Fan Mode

Selection For Continuous Fan	Switch 6	Switch 7
Low Heat Speed	OFF	OFF
Low Cool Speed	OFF	ON
High Heat Speed	ON	OFF
High Cool Speed	ON	ON

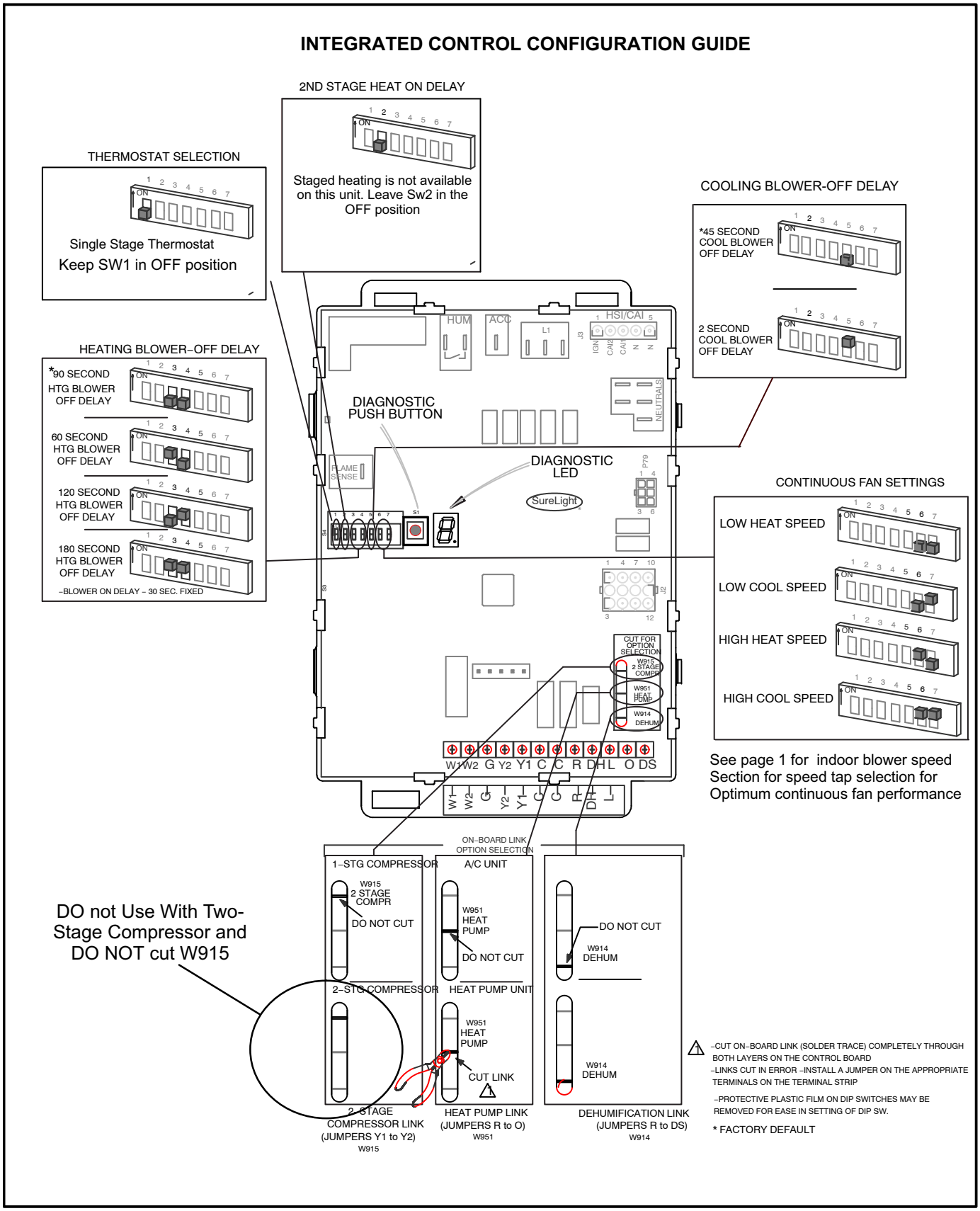
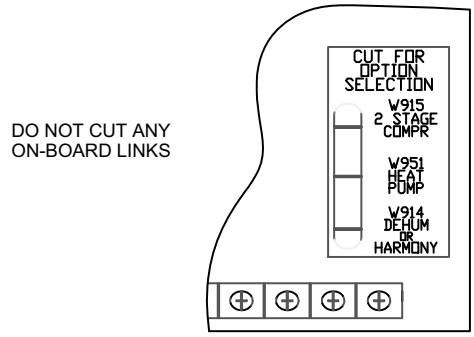
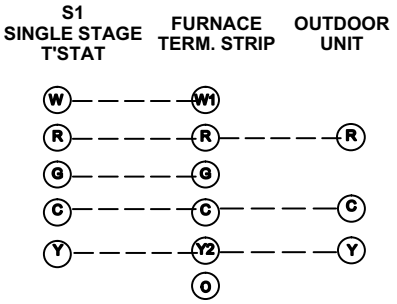
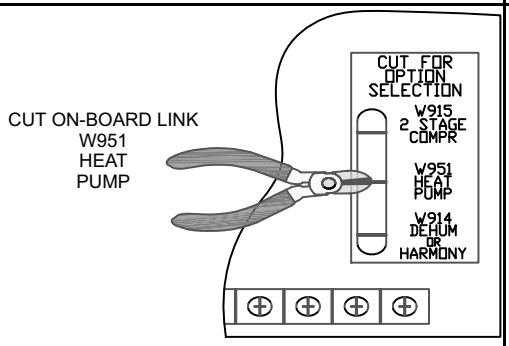
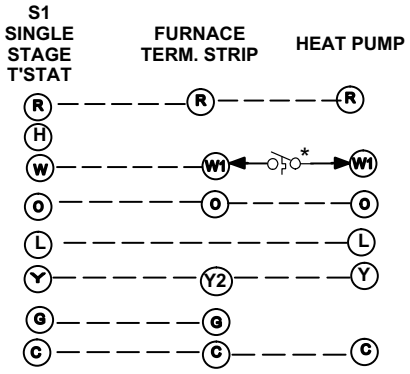

INTEGRATED CONTROL CONFIGURATION GUIDE
2ND STAGE HEAT ON DELAY
Staged heating is not available on this unit. Leave Sw2 in the OFF position
THERMOSTAT SELECTION
Single Stage Thermostat
Keep SW1 in OFF position
COOLING BLOWER-OFF DELAY
*45 SECOND COOL BLOWER OFF DELAY
2 SECOND COOL BLOWER OFF DELAY
HEATING BLOWER-OFF DELAY
*90 SECOND HTG BLOWER OFF DELAY
60 SECOND HTG BLOWER OFF DELAY
120 SECOND HTG BLOWER OFF DELAY
180 SECOND HTG BLOWER OFF DELAY
-BLOWER ON DELAY - 30 SEC. FIXED
DIAGNOSTIC PUSH BUTTON
DIAGNOSTIC LED
SureLight
CONTINUOUS FAN SETTINGS
LOW HEAT SPEED
LOW COOL SPEED
HIGH HEAT SPEED
HIGH COOL SPEED
See page 1 for indoor blower speed Section for speed tap selection for Optimum continuous fan performance
W1 W2 G Y2 Y1 C C R DHL O DS
ON-BOARD LINK OPTION SELECTION
1-STG COMPRESSOR
A/C UNIT
W915 2 STAGE COMPR
DO NOT CUT
W951 HEAT PUMP
DO NOT CUT
W914 DEHUM
DO NOT CUT
2-STG COMPRESSOR
HEAT PUMP UNIT
W951 HEAT PUMP
CUT LINK
W914 DEHUM
DO NOT Use With Two-Stage Compressor and DO NOT cut W915
2-STAGE COMPRESSOR LINK (JUMPERS Y1 to Y2)
W915
HEAT PUMP LINK (JUMPERS R to O)
W951
DEHUMIFICATION LINK (JUMPERS R to DS)
W914
-CUT ON-BOARD LINK (SOLDER TRACE) COMPLETELY THROUGH BOTH LAYERS ON THE CONTROL BOARD
-LINKS CUT IN ERROR -INSTALL A JUMPER ON THE APPROPRIATE TERMINALS ON THE TERMINAL STRIP
-PROTECTIVE PLASTIC FILM ON DIP SWITCHES MAY BE REMOVED FOR EASE IN SETTING OF DIP SW.
* FACTORY DEFAULT

FIGURE 4

TABLE 8
Field Wiring Applications With Conventional Single Stage Thermostat

Thermostat	DIP Switch Settings and On-Board Links		Wiring Connections
	DIP Switch 1 Thermostat Heating Stages	On Board Links	
1 Heat / 1 Cool	OFF		

Thermostat	DIP Switch Settings and On-Board Links		Wiring Connections
	DIP Switch 1 Thermostat Heating Stages	On Board Links Must Be Cut To Select System Options	
Dual Fuel Single Stage Heat Pump	OFF		

** Connect W1 to W1 ONLY if using defrost tempering kit 67M41*

*NOTE - **Do NOT** make a wire connection between the room thermostat L terminal and the L terminal of the integrated control.*