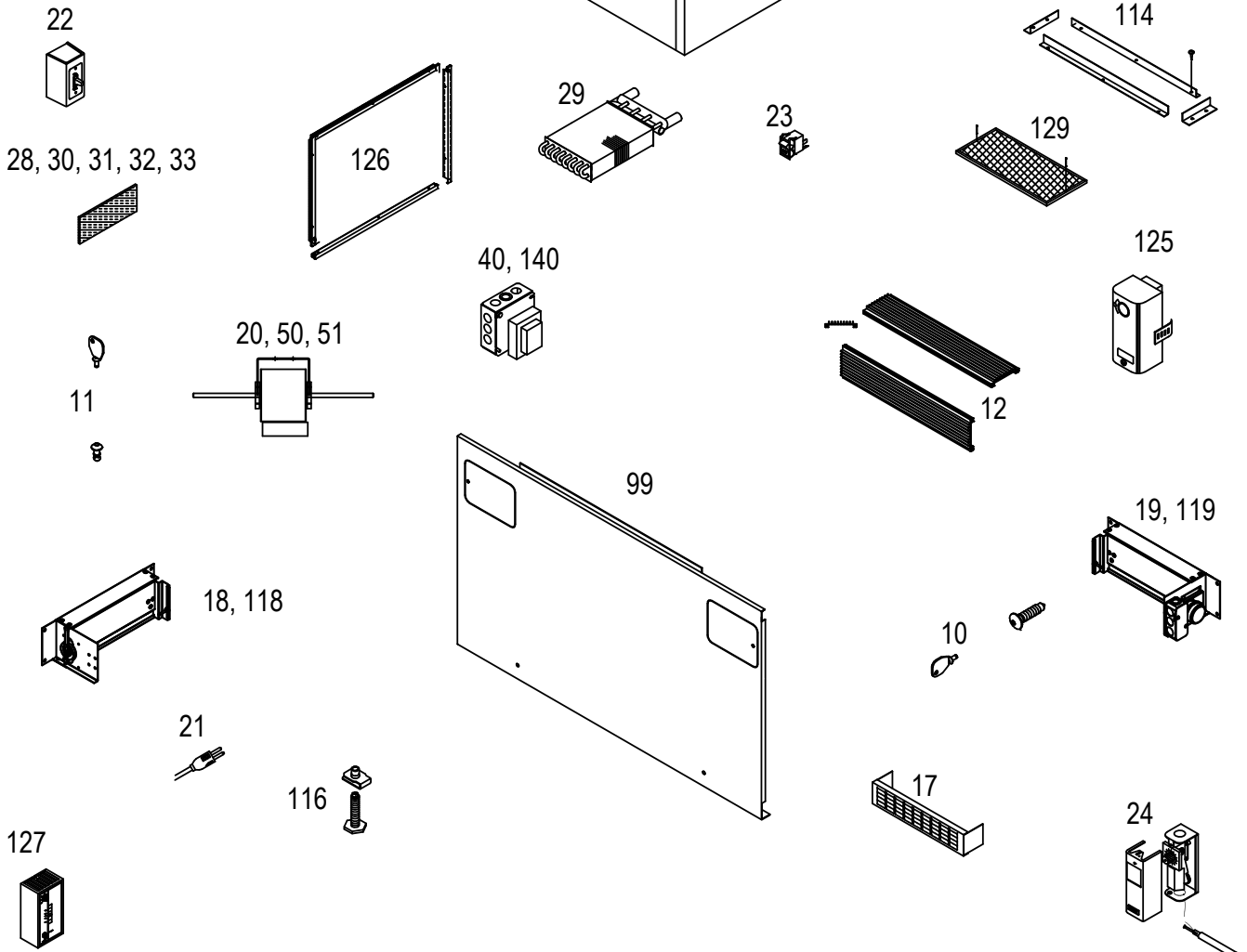
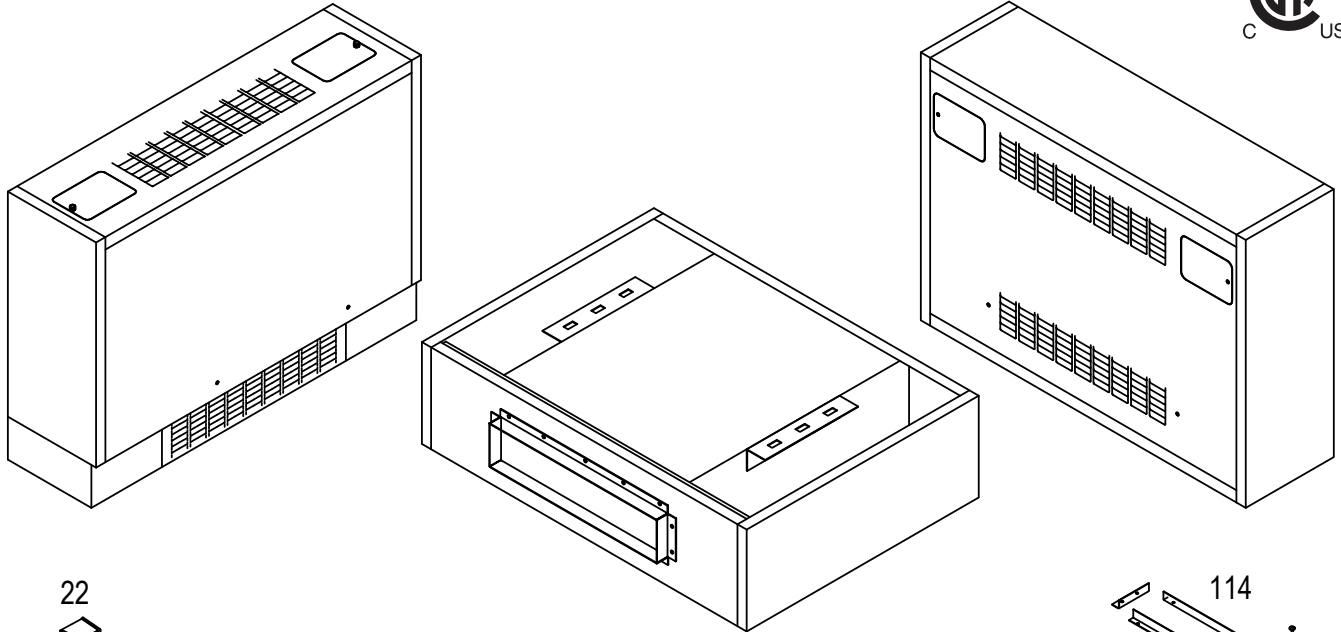


# Cabinet Unit Heater Options Booklet



# Cabinet Unit Heater Options



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**MODELS, ARRANGEMENTS AND SIZES ARE DESIGNATED AS FOLLOWS:**

*EXAMPLE*

**RC - 1190 - 08**

*MODEL    ARRANGEMENT    SIZE*

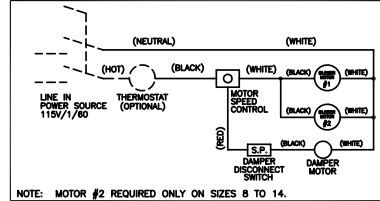
Cabinet Unit Heater  
Label Placement

**CAUTION**

Fittings must be held securely from turning when connecting to the system. Otherwise damage to the heating element may result, and will void warranty.

(PA1088)

Located on Piping Connection Side



Wiring diagram is located on blower housing accessed through the front panel, not shown.

**Name Plate**

(PA1115, PA1116, PA1117, PA1803)

"USE OF A PLUG IN MOTOR CONNECTION VOIDS CSA CERTIFICATION"

(PA1312)

When "Option 21" is used

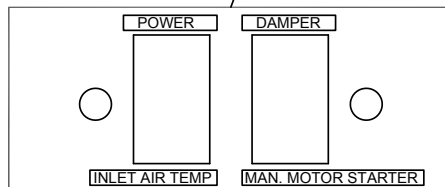
REPLACE ONLY WITH FILTER MODEL #PC1287 AND SECURE WITH COTTER PINS OR EQUIVALENT.

(PA1245)

WARNING: RISK OF ELECTRIC SHOCK. CAN CAUSE INJURY OR DEATH. DISCONNECT ALL REMOTE ELECTRIC POWER SUPPLIES BEFORE SERVICING; USE COPPER SUPPLY WIRES.

AVERTISSEMENT, RISQUE DE CHOCS ÉLECTRIQUES. PEUT CAUSER DES BLESSURES ET MÊME ENTRAÎNER LA MORT. COUPER LES SOURCES D'ALIMENTATION À DISTANCE AVANT LE DÉPANNAGE; UTILISER DES FILS D'ALIMENTATION EN CUIVRE.

(PA1114)



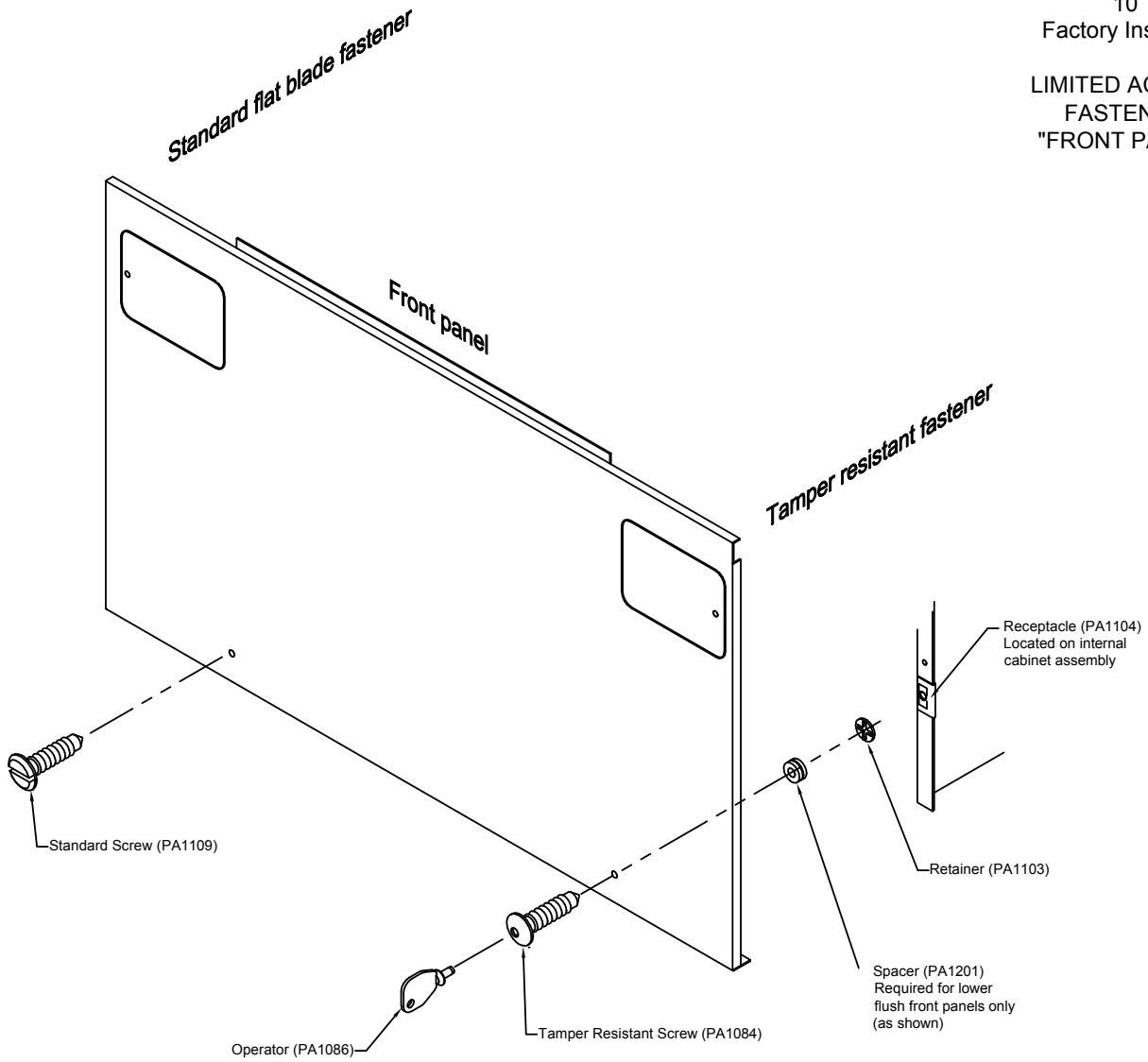
(PA1147)

CABINET UNIT HEATER	
MOD. NO. <input type="text"/>	SERIAL NO. <input type="text"/>
OUTPUT BTU/HR	ELECTRICAL
HOTWATER <input type="text"/>	115V/60 <input type="text"/> AMPS
STEAM <input type="text"/>	MOTOR A: <input type="text"/> HP <input type="text"/> FLA
CFM <input type="text"/>	MOTOR B: <input type="text"/> HP <input type="text"/> FLA
MIN. CIRCUIT AMPACITY: <input type="text"/> AMPS	
MAX. FUSE AND CIRCUIT BREAKER SIZE: 15 AMPS	
MAX. 50 PSI STEAM.	
CSA LR85613	MESTEK, INC.
260 NORTH ELM STREET, WESTFIELD, MA 01085	

(PA1244)

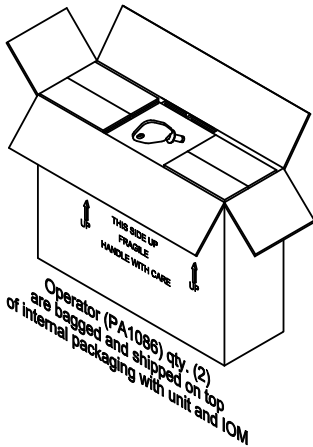
Cabinet Unit Heater  
 Option  
 10  
 Factory Installed

LIMITED ACCESS  
 FASTENER  
 "FRONT PANEL"



Standard Front Panel Fastener				
Screw	Retainer	Receptacle	Spacer	Operator
PA1109	PA1103	PA1104	PA1201	Flat Blade

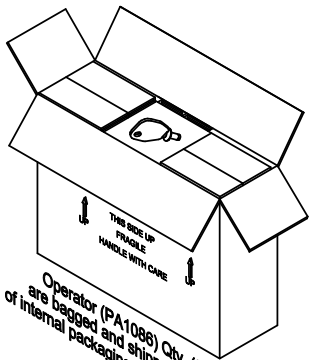
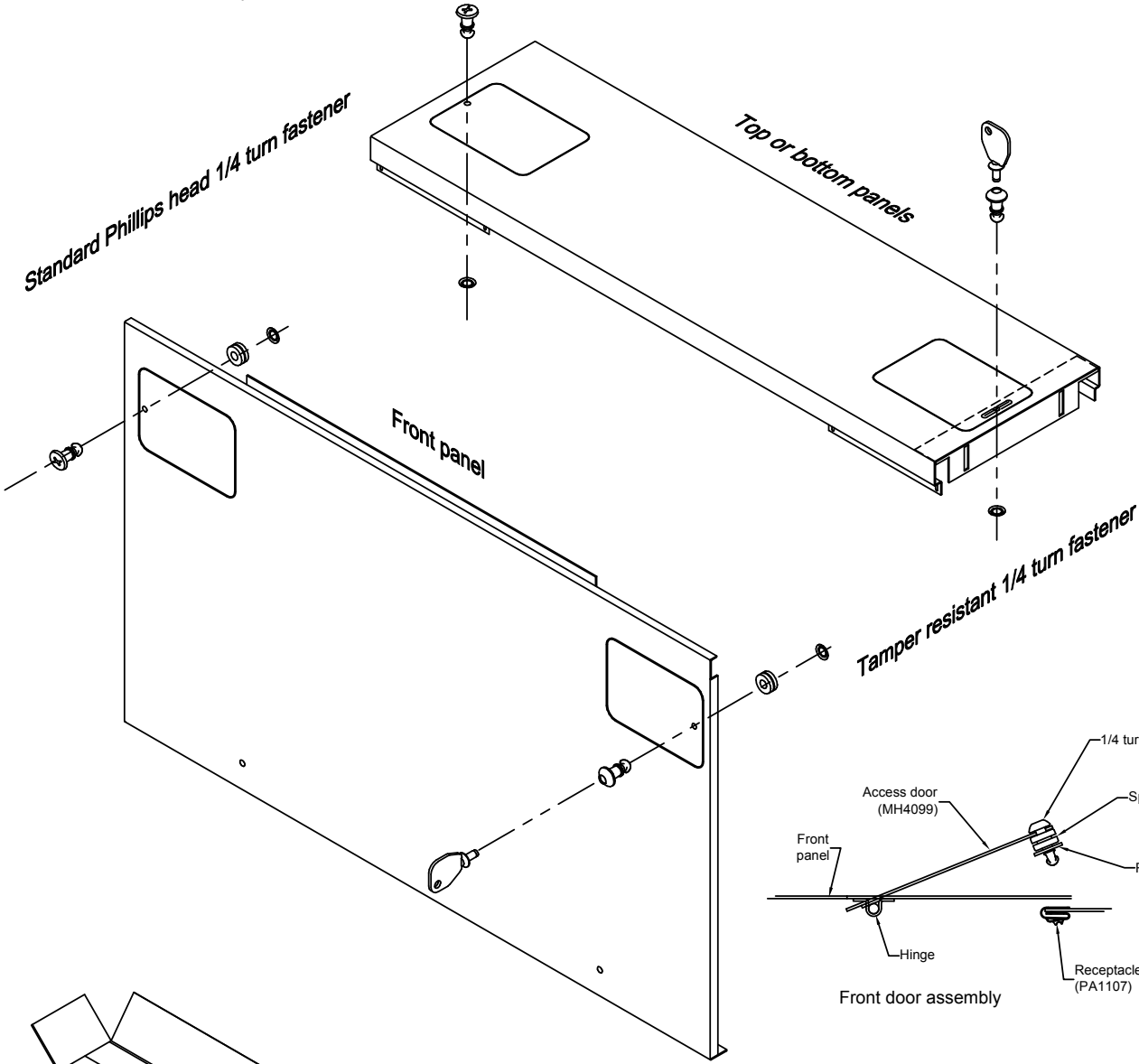
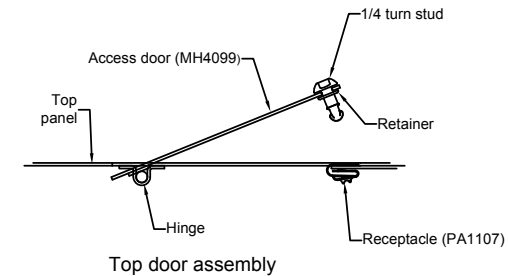
Option 10 Front Panel Fastener				
Screw	Retainer	Receptacle	Spacer	Operator
PA1084	PA1103	PA1104	PA1201	PA1086



AVAILABLE ON ALL MODELS

Cabinet Unit Heater  
 Option  
 11  
 Factory Installed

LIMITED ACCESS  
 FASTENER  
 "ACCESS DOORS"



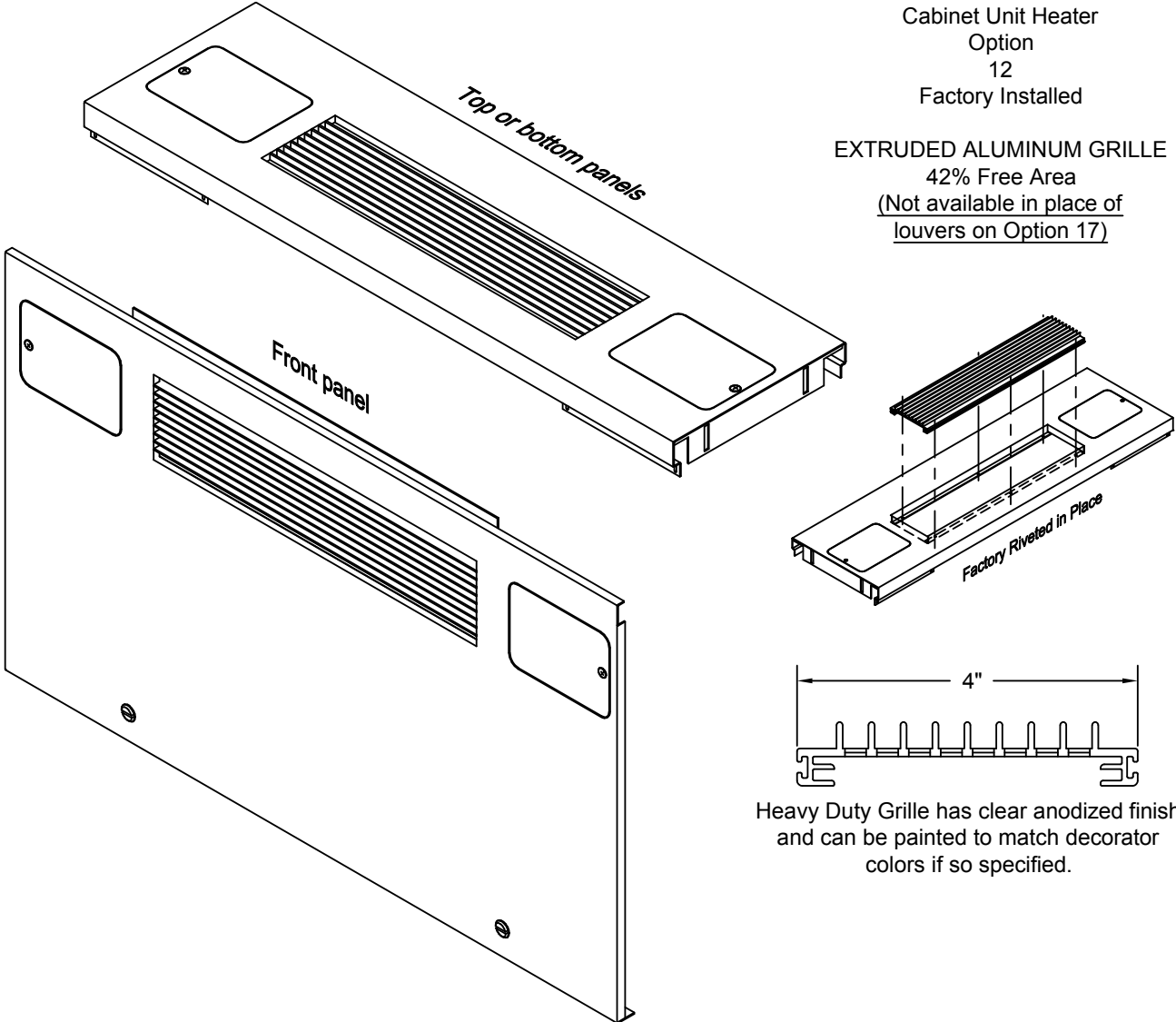
Standard Access Door Fastener				
Panel	Stud	Retainer	Spacer	Operator
Front	PA2037	PA1103	PA2038	Phillips
Top	PA2036	PA1108	None	Phillips

Option 11 Access Door Fastener				
Panel	Stud	Retainer	Spacer	Operator
Front	PA2042	PA1103	PA2038	PA1086
Top	PA1085	PA1108	None	PA1086

NOT AVAILABLE ON CEILING OR  
 RECESSED CEILING MODELS

Cabinet Unit Heater  
 Option  
 12  
 Factory Installed

EXTRUDED ALUMINUM GRILLE  
 42% Free Area  
 (Not available in place of  
 louvers on Option 17)



Heavy Duty Grille has clear anodized finish  
 and can be painted to match decorator  
 colors if so specified.

In place of standard Louvers

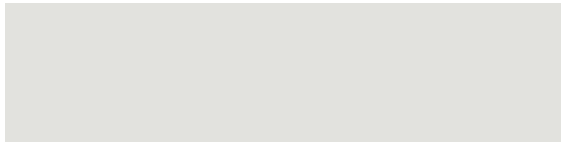
Standard panel table			
Model	Front panel	Top panel	Bottom panel
F-1000	MH-5500	MH-3500	-
F-1010	MH-5500	MH-3500	-
F-1020	MH-5502	MH-3014	-
F-1030	MH-5502	MH-3014	-
FI-1040	MH-5500	MH-3500	-
FI-1050	MH-5502	MH-3014	-
FS-1005	MH-5500	MH-3102	-
FS-1015	MH-5500	MH-3102	-
FS-1025	MH-5502	MH-3101	-
FS-1035	MH-5502	MH-3101	-
FSI-1045	MH-5500	MH-3102	-
FSI-1055	MH-5502	MH-3101	-
W-1060	MH-5506	MH-3500	MH-3534
W-1070	MH-5509	MH-3014	MH-3534
W-1080	MH-5513	MH-3014	MH-3014
WI-1090	MH-5506	MH-3500	MH-3534
WI-1100	MH-5509	MH-3014	MH-3534
WI-1110	MH-5513	MH-3014	MH-3014
RW-1120	MH-5513	MH-3014	MH-3014
RWI-1130	MH-5513	MH-3014	MH-3014
C-1140	MH-5153	MH-3534	MH-3534
C-1150	MH-5153	MH-3050	MH-3534
C-1160	MH-5151	MH-3014	MH-3534
C-1170	MH-5150	MH-3014	MH-3014
C-1180	MH-5152	MH-3534	MH-3014
RC-1190	MH-5152	MH-3014	MH-3050
RC-1200	MH-5150	MH-3014	MH-3014
RC-1210	MH-5153	MH-3050	MH-3050

Option 12 table				
Qty	Model	Front panel	Top panel	Bottom panel
1	F-1000	-	MH-3700	-
1	F-1010	-	MH-3700	-
1	F-1020	MH-5521	-	-
1	F-1030	MH-5521	-	-
1	FI-1040	-	MH-3700	-
1	FI-1050	MH-5521	-	-
1	FS-1005	-	MH-3103	-
1	FS-1015	-	MH-3103	-
1	FS-1025	MH-5521	-	-
1	FS-1035	MH-5521	-	-
1	FSI-1045	-	MH-3103	-
1	FSI-1055	MH-5521	-	-
2	W-1060	-	MH-3700	MH-3702
2	W-1070	MH-5522	-	MH-3702
2	W-1080	MH-5523	-	-
2	WI-1090	-	MH-3700	MH-3702
2	WI-1100	MH-5522	-	MH-3702
2	WI-1110	MH-5523	-	-
2	RW-1120	MH-5523	-	-
2	RWI-1130	MH-5523	-	-
2	C-1140	-	MH-3702	MH-3702
1	C-1150	-	-	MH-3702
2	C-1160	MH-5159	-	MH-3702
2	C-1170	MH-5155	-	-
2	C-1180	MH-5157	MH-3702	-
1	RC-1190	MH-5157	-	-
2	RC-1200	MH-5155	-	-
0	RC-1210	-	-	-

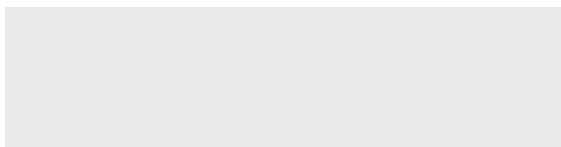
DECORATOR COLOR

A Decorator Color may be selected from our optional Color Chart. A prime coat of neutral eggshell baked powder is standard unless otherwise specified. This may be the final finish or it may be painted in the field if necessary.

STANDARD ENAMEL COLORS



P-1 / White



VP-1 / Bright White



VP-2 / Egg Shell (Cabinet Unit Heater Prime)



WB-2 / Almond



SB-7 / Soft Dove



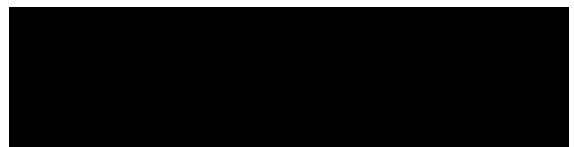
SB-6 / Prime



SB-1 / Light Grey



DB-1 / Dark Bronze

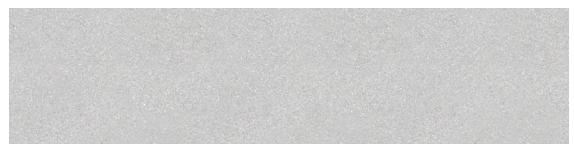


DB-5 / Flat Black

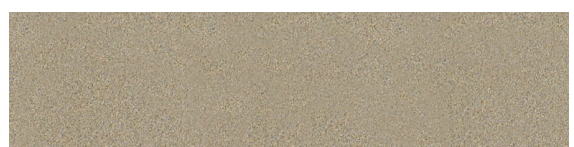
METALLIC COLORS

Available at additional cost.

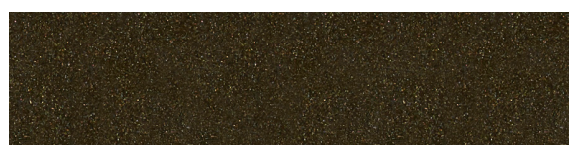
Not available on Panel Radiators or Radiant Ceiling Panels.



SA-1 / Silver Aluminum



MC-2 / Champagne



MC-3 / Bronze Mica

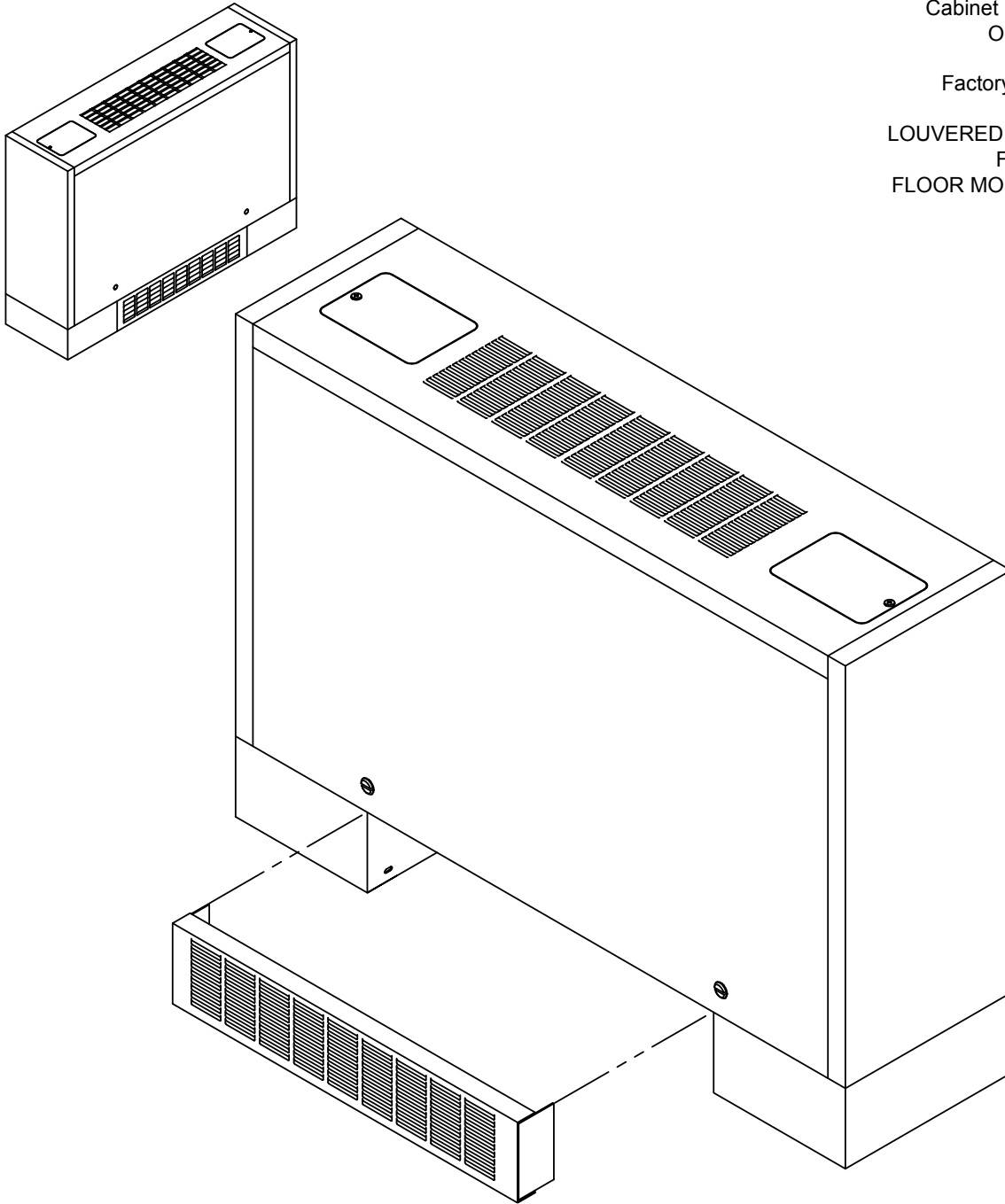
These are color reproductions and approximate the actual colors as closely as possible. Although perfect color uniformity is practically impossible, you should expect only minor color variations.

Special colors can be provided. Please consult the factory for price and samples.



Cabinet Unit Heater  
 Option  
 17  
 Factory Installed

LOUVERED INLET GRILLE  
 FOR  
 FLOOR MOUNTED UNITS



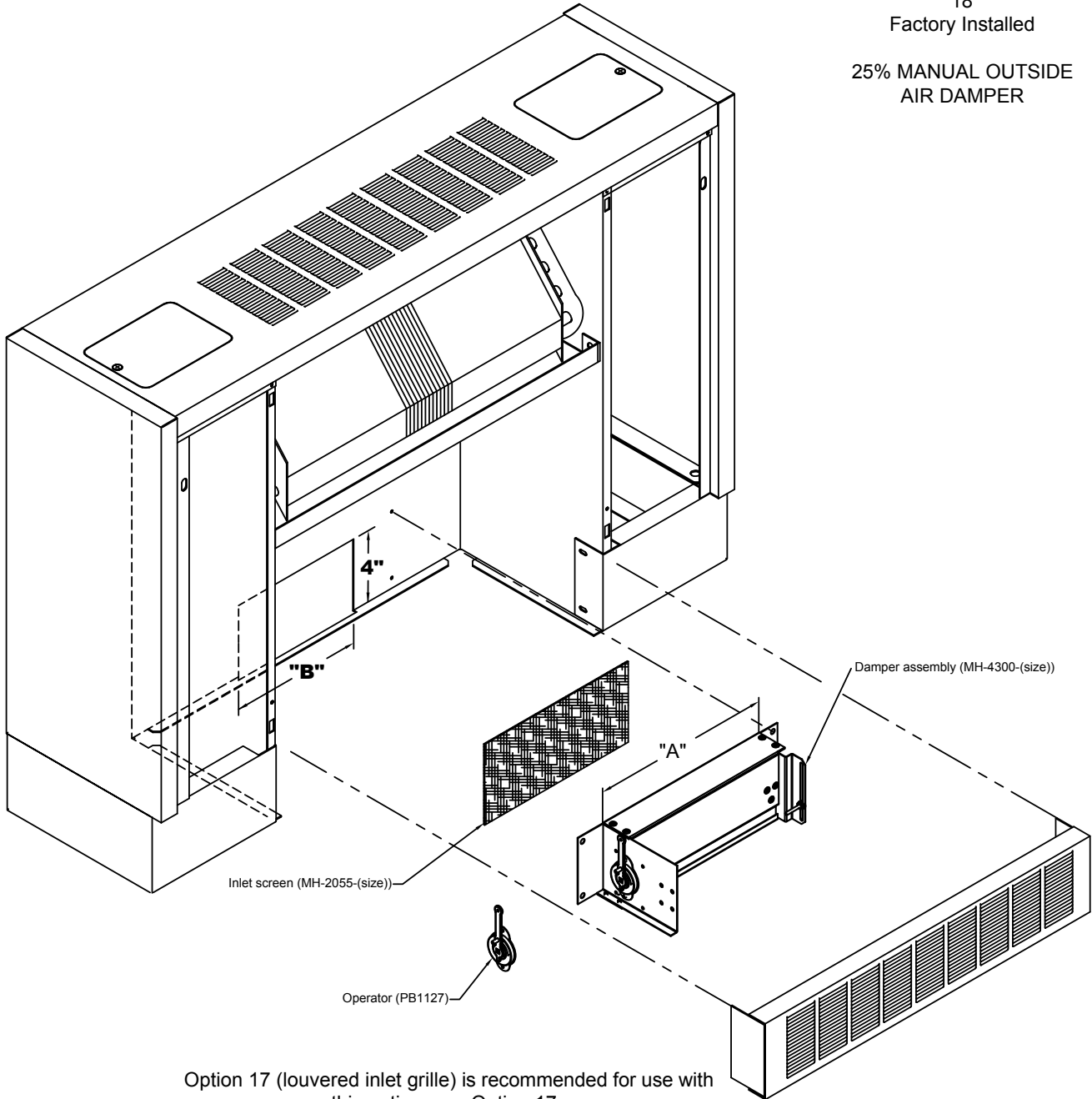
Recommended for use with Options 18, 19, 118, and 119 if used with F or FS units.  
 18 gauge steel, baked powder finish.

Option 17		
Size	Part Number	Dimensions
02	MH-4140-02	4" H x 19-51/64" Long
03	MH-4140-03	4" H x 27-51/64" Long
04	MH-4140-04	4" H x 31-51/64" Long
06	MH-4140-06	4" H x 43-51/64" Long
08	MH-4140-08	4" H x 45-51/64" Long
10	MH-4140-10	4" H x 50-51/64" Long
12	MH-4140-12	4" H x 57-51/64" Long
14	MH-4140-14	4" H x 69-51/64" Long

Standard on "FI" & FSI Models  
Optional on "F" & FS Models

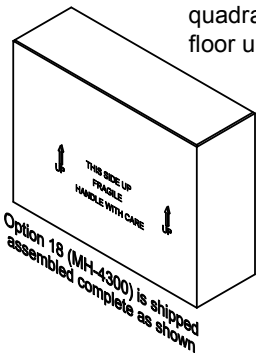
Cabinet Unit Heater  
Option  
18  
Factory Installed

25% MANUAL OUTSIDE  
AIR DAMPER



Option 17 (louvered inlet grille) is recommended for use with this option, see Option 17 .

25% manual outside air damper - Outside air intake can be adjusted from 0 to 25%. Control is by manual quadrant. Option 18 or 19 must be ordered with models F-1010, F-1030, FS-1015 and FS-1035. For floor units only.



Installed on unit(s) at the factory.

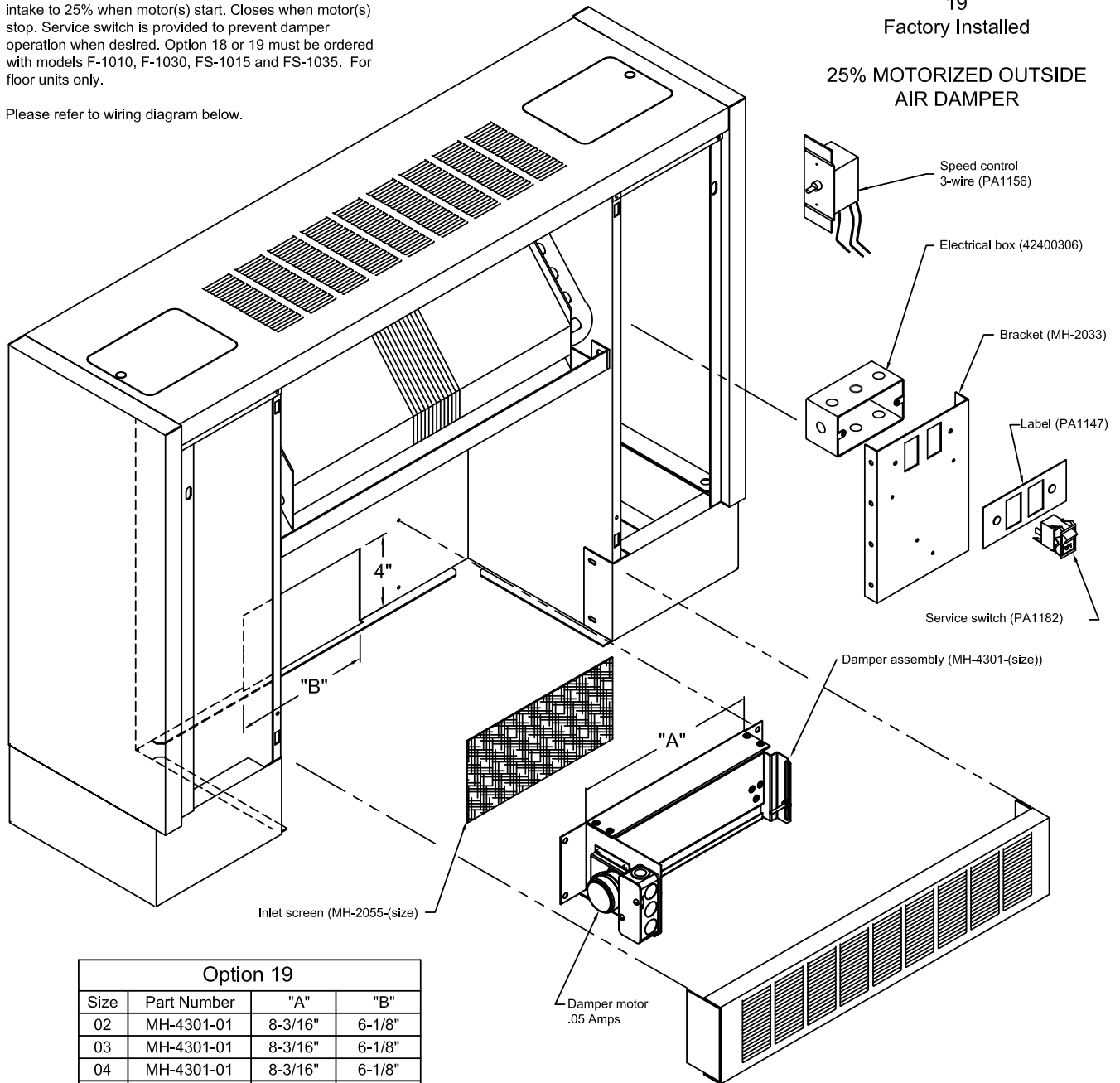
Option 18			
Size	Part No.	"A"	"B"
02	MH-4300-01	8-3/16"	6-1/8"
03	MH-4300-01	8-3/16"	6-1/8"
04	MH-4300-01	8-3/16"	6-1/8"
06	MH-4300-02	12-11/16"	10-5/8"
08	MH-4300-02	12-11/16"	10-5/8"
10	MH-4300-02	12-11/16"	10-5/8"
12	MH-4300-03	18-11/16"	16-5/8"
14	MH-4300-03	18-11/16"	16-5/8"

Cabinet Unit Heater  
Option  
19  
Factory Installed

25% motorized outside air damper - Opens outside air intake to 25% when motor(s) start. Closes when motor(s) stop. Service switch is provided to prevent damper operation when desired. Option 18 or 19 must be ordered with models F-1010, F-1030, FS-1015 and FS-1035. For floor units only.

Please refer to wiring diagram below.

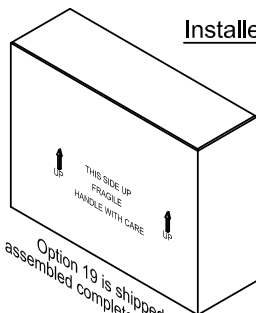
25% MOTORIZED OUTSIDE AIR DAMPER



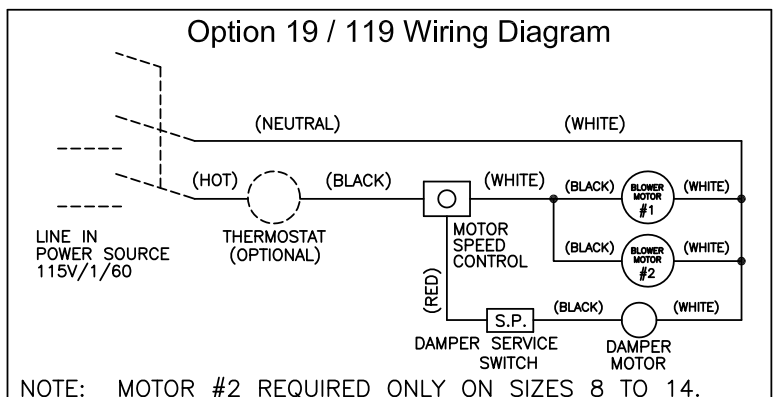
Option 19			
Size	Part Number	"A"	"B"
02	MH-4301-01	8-3/16"	6-1/8"
03	MH-4301-01	8-3/16"	6-1/8"
04	MH-4301-01	8-3/16"	6-1/8"
06	MH-4301-02	12-11/16"	10-5/8"
08	MH-4301-02	12-11/16"	10-5/8"
10	MH-4301-02	12-11/16"	10-5/8"
12	MH-4301-03	18-11/16"	16-5/8"
14	MH-4301-03	18-11/16"	16-5/8"

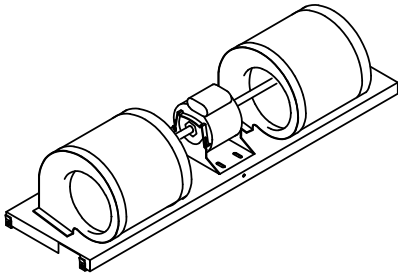
Option 17 (louvered inlet grille) is recommended for use with this option, see option 17.

Installed on unit(s) at the factory.



Option 19 / 119 Wiring Diagram

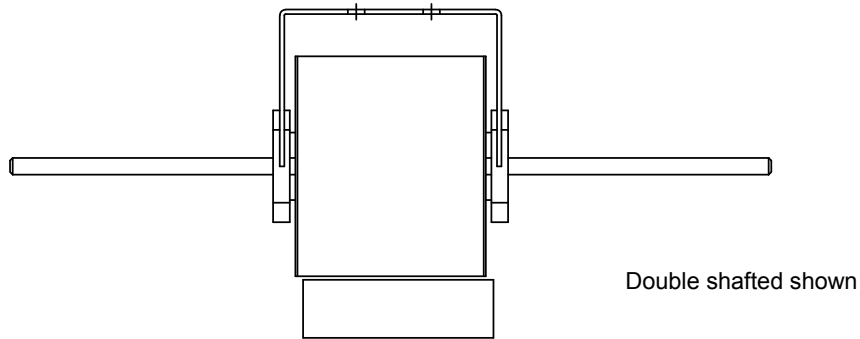




Cabinet Unit Heater  
 Option  
 20  
 Factory Installed

HIGH STATIC MOTOR  
 1/11 HP, 1550 RPM 115/1/60 PSC

Maintains standard CFM  
 against 0.4" W.C. max.



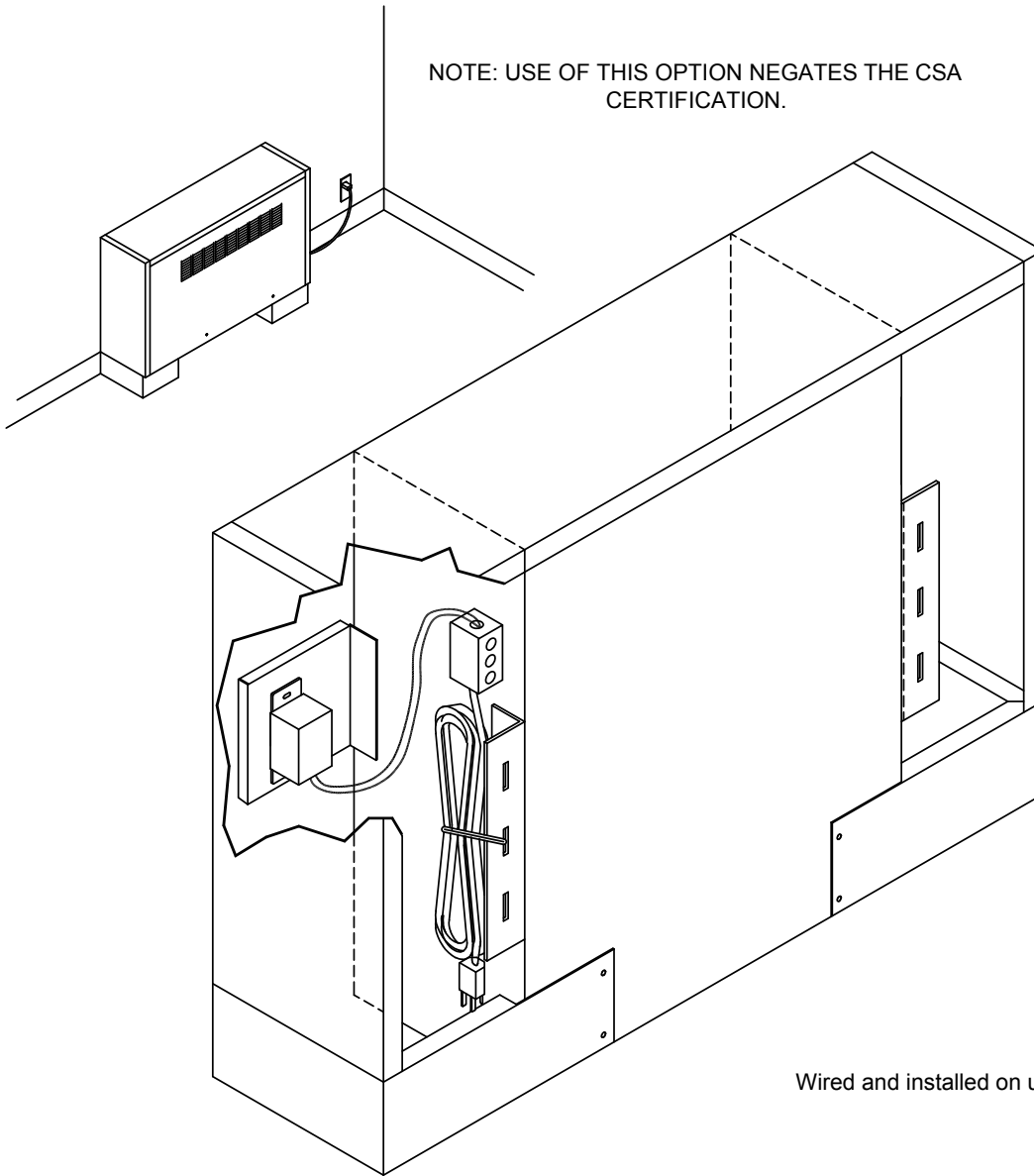
This option consists of a motor specified to overcome the external static pressure when duct work is attached to the inlet or outlet of the Cabinet Unit Heater. This motor is approximately the same physical size and configuration as the standard one; therefore, they are physically interchangeable. In terms of performance it is rated at 1/11 HP at 1550 RPM.

With this high static motor installed, the Cabinet Unit Heaters are able to maintain standard airflow with external static pressure up to 0.4" water column.

Standard motors			Option 20 motors		
Size	Part No.	Qty.	Part No.	Qty.	Amps
02	PA1620	1	PC1320 Single	1	1.24
03	PA1620	1	PC1320 Single	1	1.24
04	PA1621	1	PC1320 Double	1	1.24
06	PA1621	1	PC1320 Double	1	1.24
08	PA1620, PA1621	1 EA	PC1320 Single/Double	1 EA	2.48
10	PA1620, PA1621	1 EA	PC1320 Single/Double	1 EA	2.48
12	PA1621	2	PC1320 Double	2	2.48
14	PA1621	2	PC1320 Double	2	2.48

NOTE: USE OF THIS OPTION NEGATES THE CSA CERTIFICATION.

Cabinet Unit Heater  
Option  
21  
Factory Installed  
PLUG-IN MOTOR

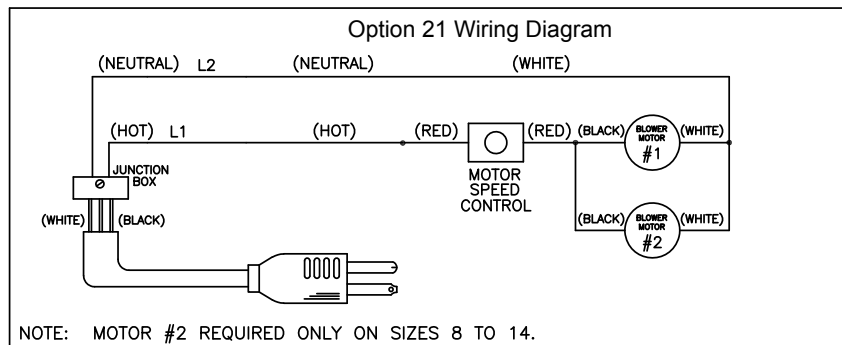
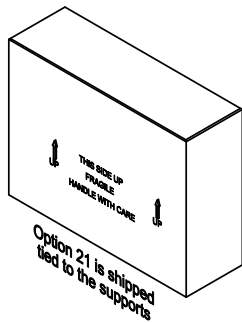


Wired and installed on unit(s) at the factory

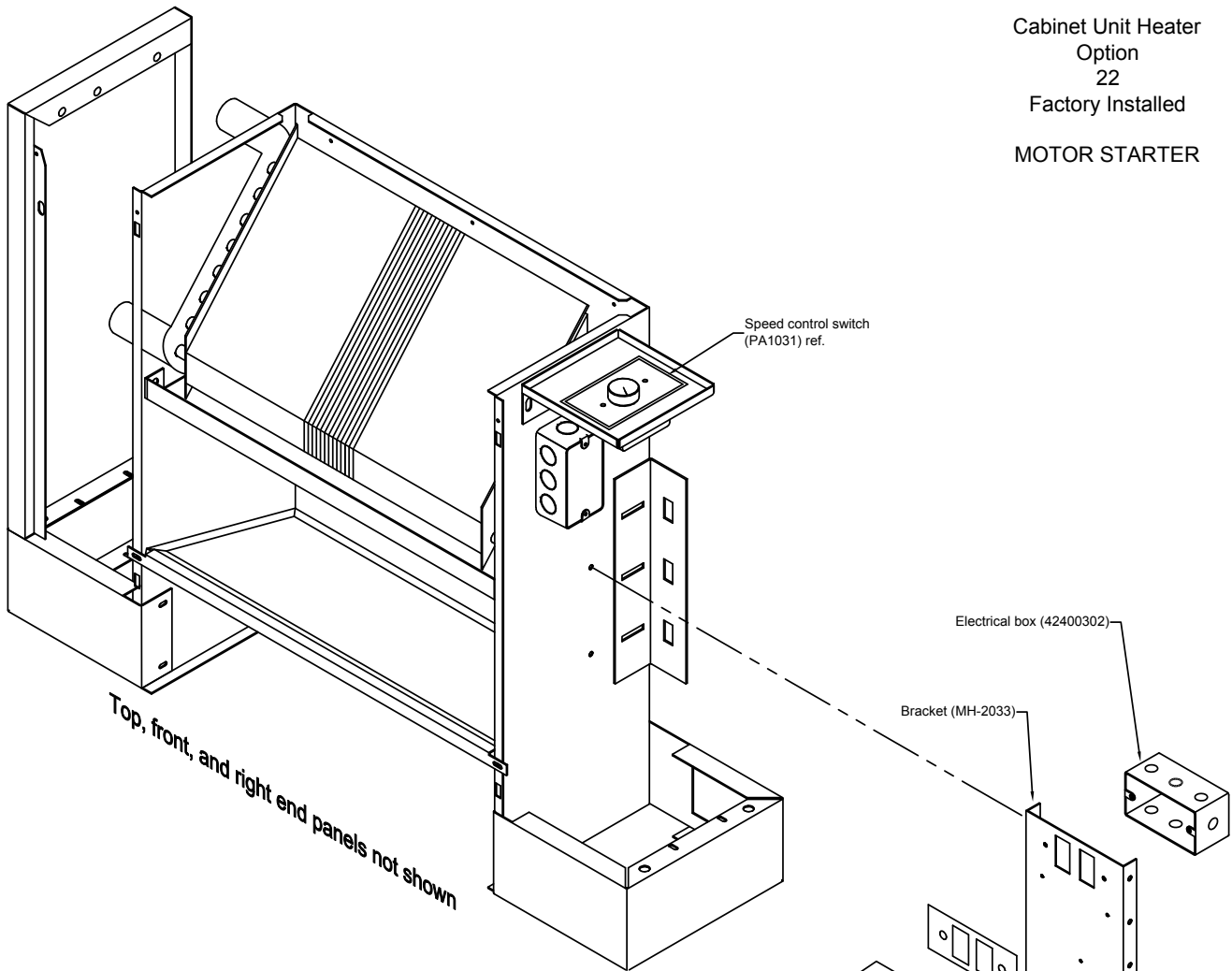
The cord (PA1130) is (UL) / CSA water resistant heavy duty grounded plug 90°C (-40°C) 18/3. It is approx. 8'-0" long exiting the electrical box.

This is a plug-in cord for connection to a convenience outlet.

Shown with our floor model here, however, can be applied to all models.



Cabinet Unit Heater  
 Option  
 22  
 Factory Installed  
 MOTOR STARTER

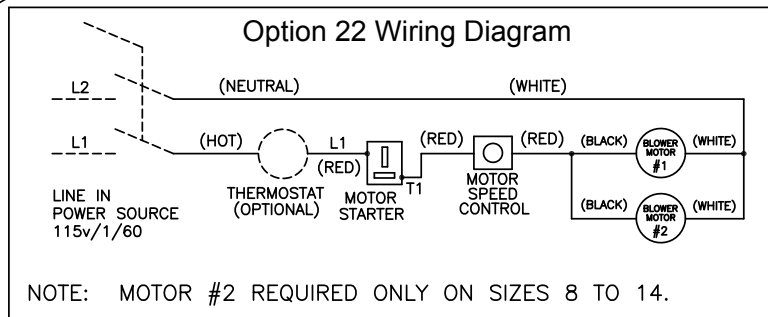
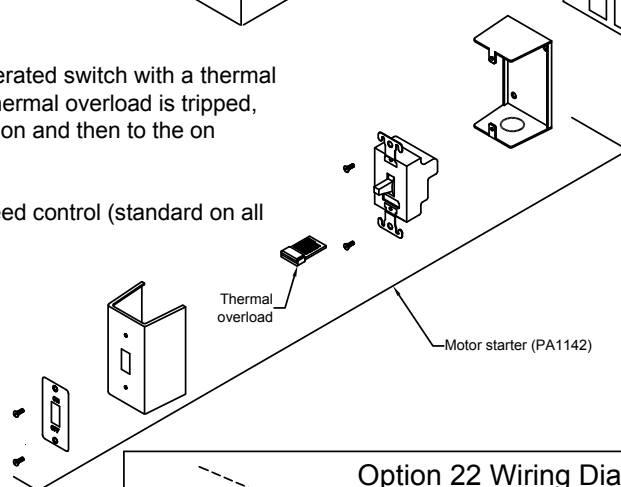
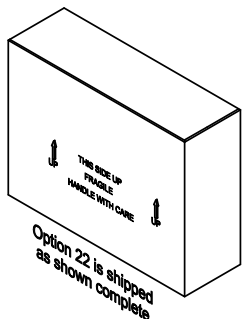


The motor starter consists of a toggle operated switch with a thermal overload and an off position. When the thermal overload is tripped, the switch must be turned to the off position and then to the on position to restart the unit.

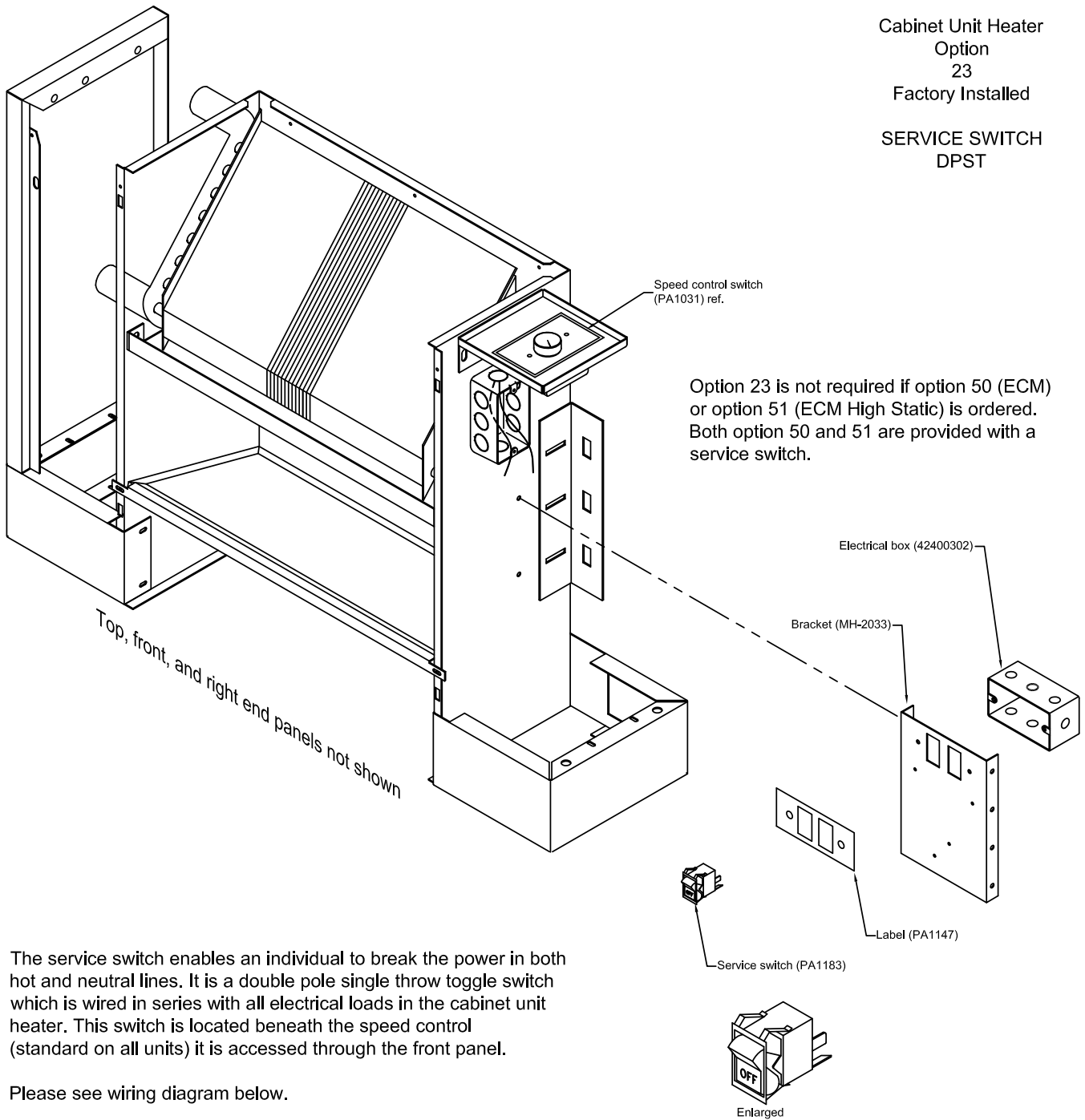
This option is wired in series with the speed control (standard on all units) and blower motor(s). Please see wiring diagram, below.

Not available with ECM motors.

Wired and installed on unit(s) at factory.



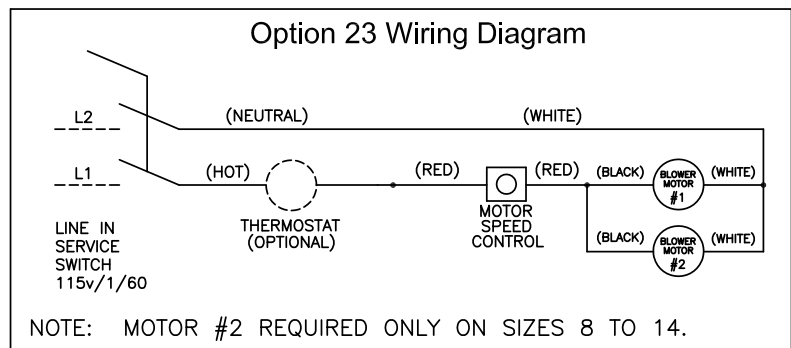
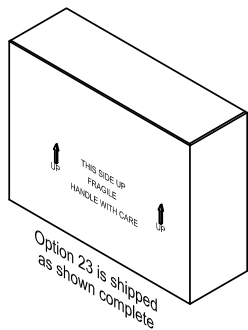
Cabinet Unit Heater  
 Option  
 23  
 Factory Installed  
 SERVICE SWITCH  
 DPST



The service switch enables an individual to break the power in both hot and neutral lines. It is a double pole single throw toggle switch which is wired in series with all electrical loads in the cabinet unit heater. This switch is located beneath the speed control (standard on all units) it is accessed through the front panel.

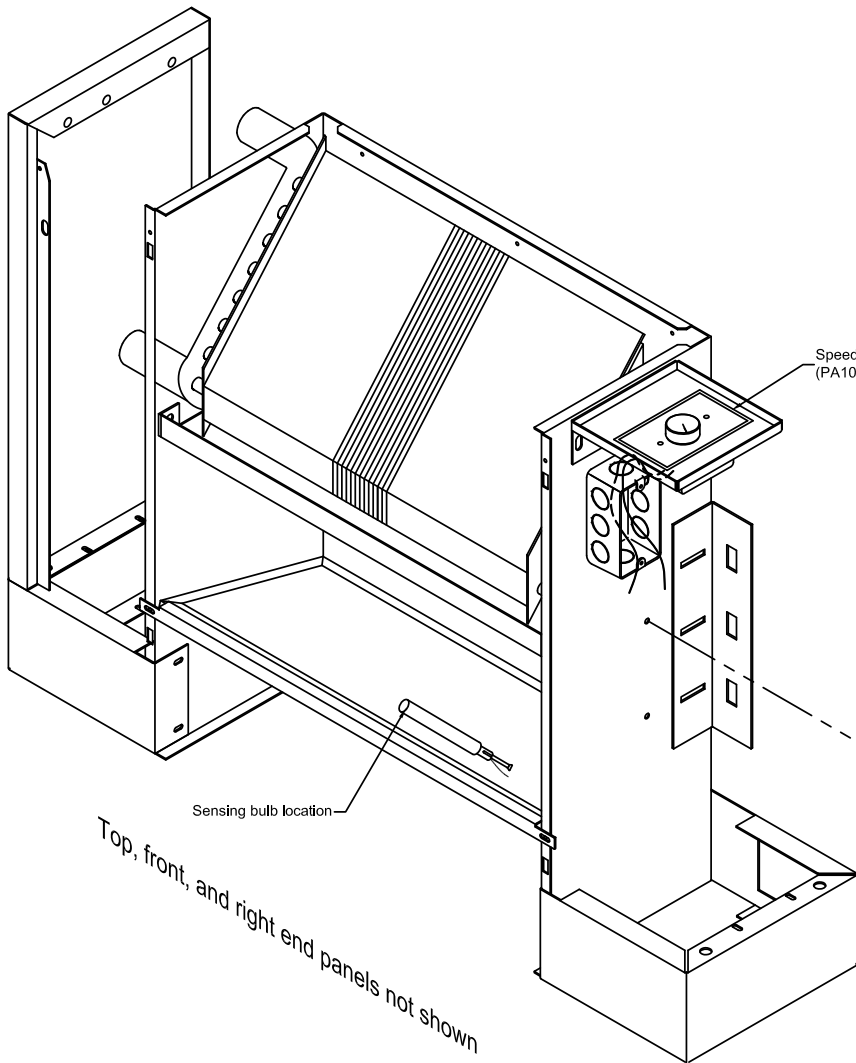
Please see wiring diagram below.

Wired and installed on unit(s) at factory.



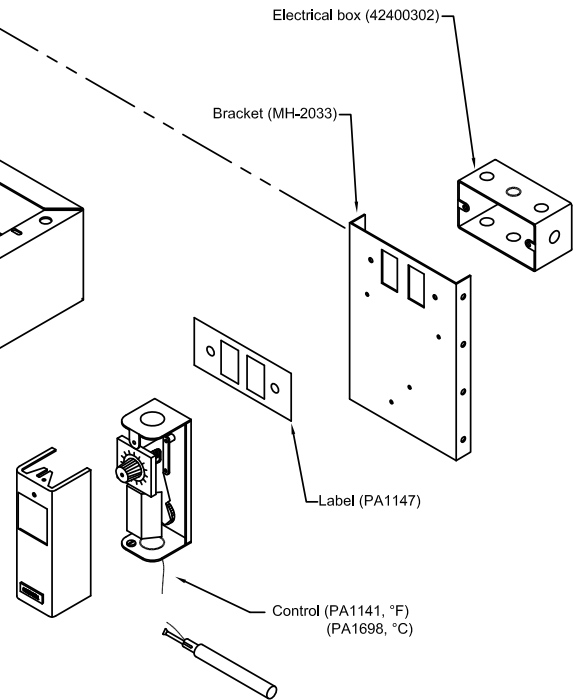
Cabinet Unit Heater  
 Option  
 24F  
 24C  
 Factory Installed

RETURN AIR TEMPERATURE  
 CONTROL



Control Temperature Range	
Fahrenheit	55°F - 175°F
Celsius	-15°C - 35°C

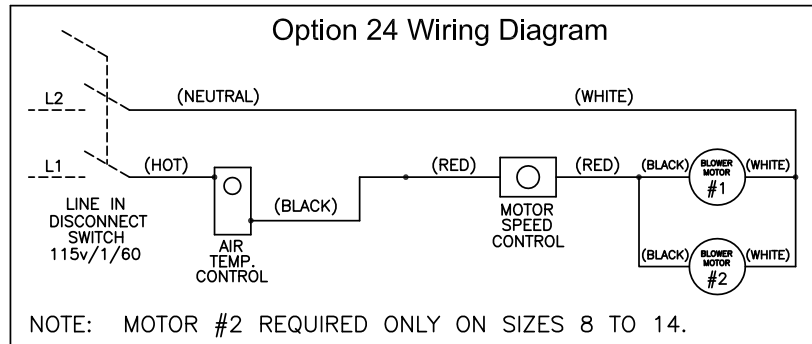
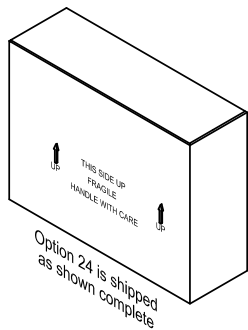
8.0 Amps. @ 120 Volts



The return air stat monitors the incoming air into the cabinet unit heater. If the supply air is too cool, the stat will turn the blower(s) on. When the return air stat is satisfied with the room temperature, it turns off the blower(s). This option is wired in series with the speed control (standard on all units) and blower motor(s). The control is located beneath the speed control and is accessed through the front panel. Not recommended for inverted flow or ceiling units.

Please see wiring diagram below.

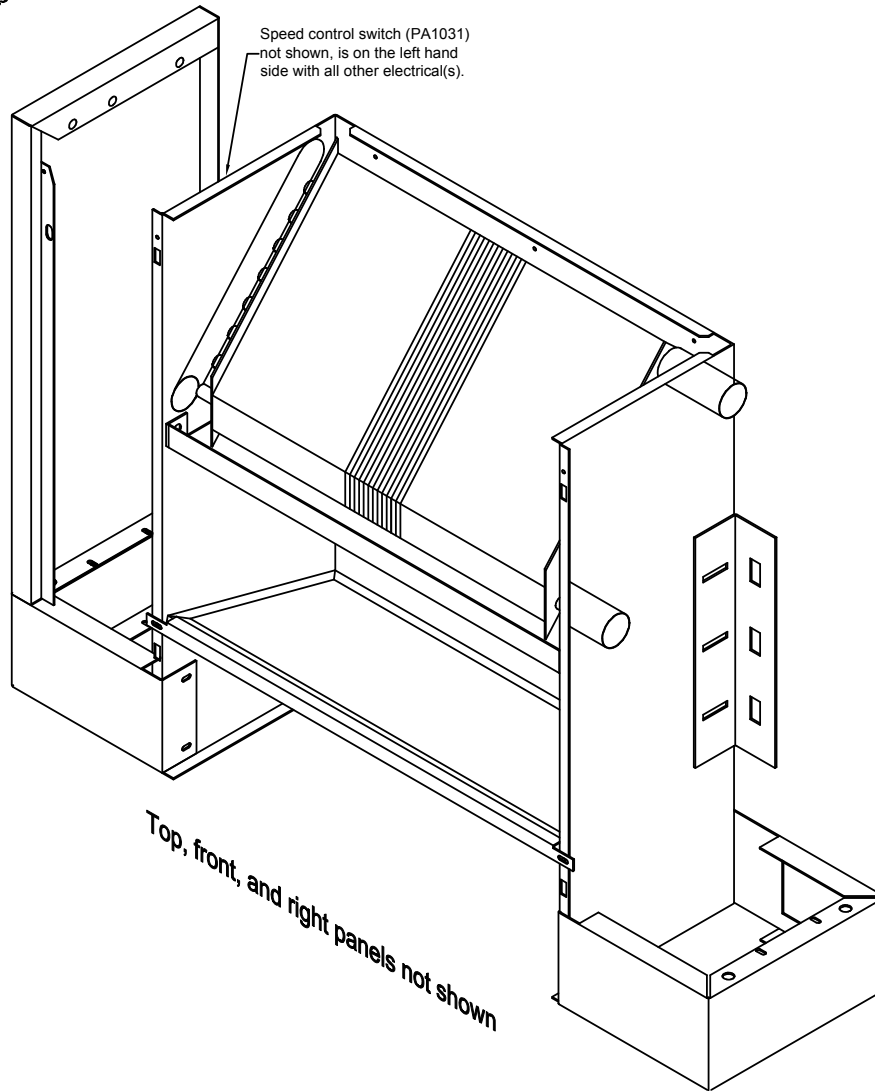
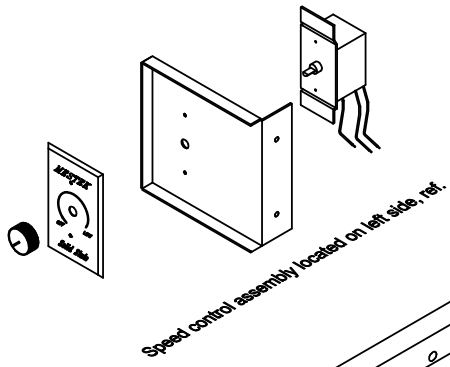
Wired and installed on unit(s) at factory



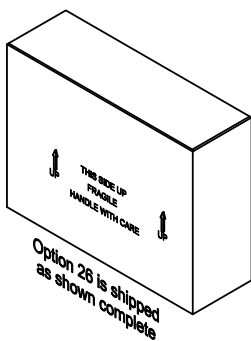


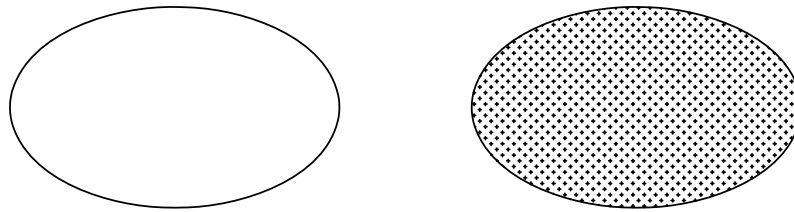
Cabinet Unit Heater  
Option  
26  
Factory Installed

RIGHT HAND COIL  
CONNECTION



Coil will be factory mounted with piping connection on right hand side of unit. Electrical connection and speed control device will be factory wired and installed on left hand side of unit(s).





Alternatives to the standard color offerings.

A Special Color Selection can be added to the job specification by either the architect or the owner. Due to the large number of colors and paint products available today, it is necessary to go through a submittal and approval process prior to a commitment.

Please contact our sales staff for your inquiries.

### Option 27 Special Color Procedure

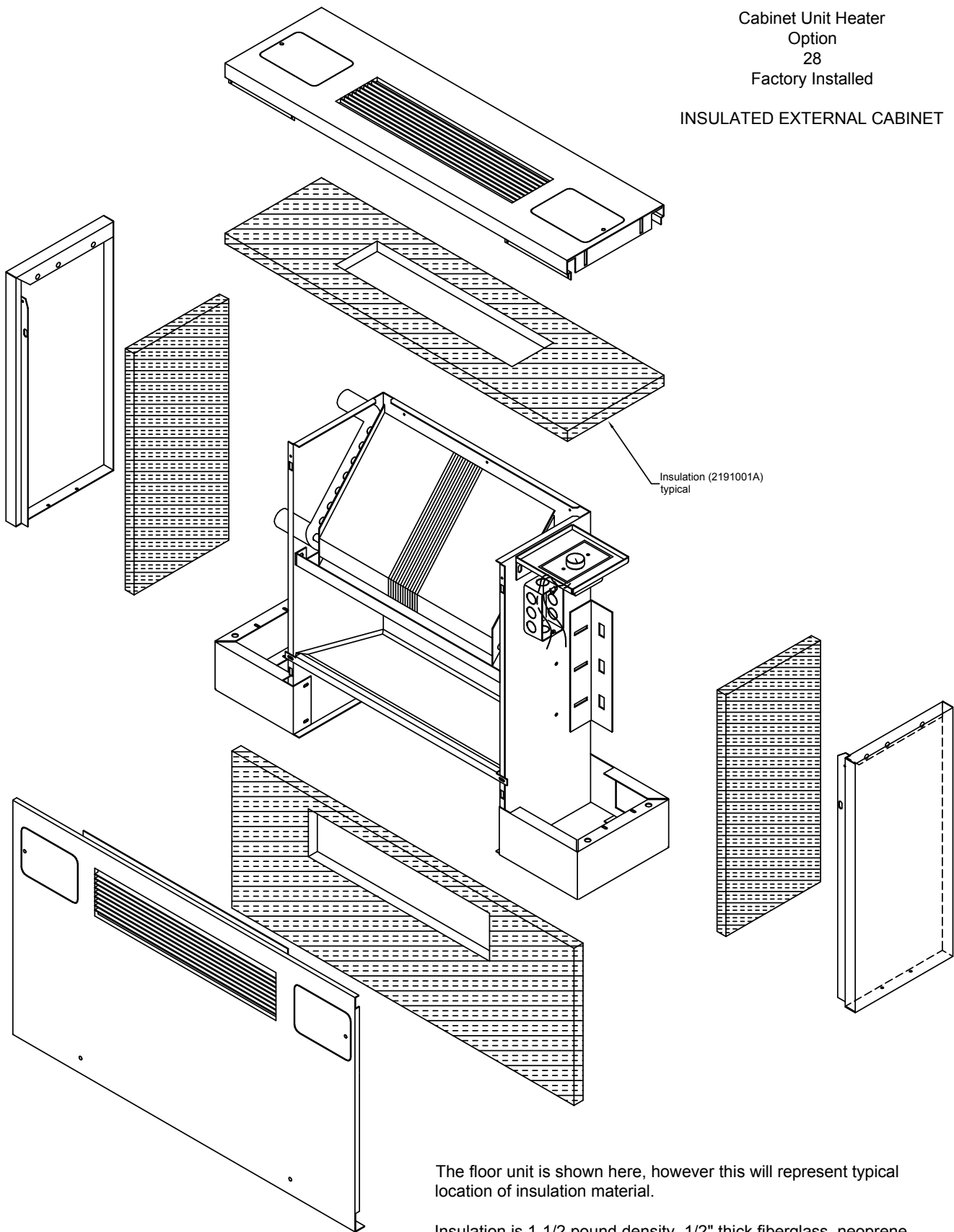
A minimum of two (2) or more samples, preferably on the material to be used by the factory (steel, aluminum, etc.) must be provided (submitted in advance of an order) to the factory. If possible, the paint manufacturer and manufacturers part number should also accompany the samples. If this is not possible, a chip from a color chart may be provided.

The factory will then select a paint manufacturer to formulate the match. Two (2) matched samples will be returned, for approval.

The factory will not produce product until one of the color samples is returned with a written approval.

Cabinet Unit Heater  
Option  
28  
Factory Installed

INSULATED EXTERNAL CABINET



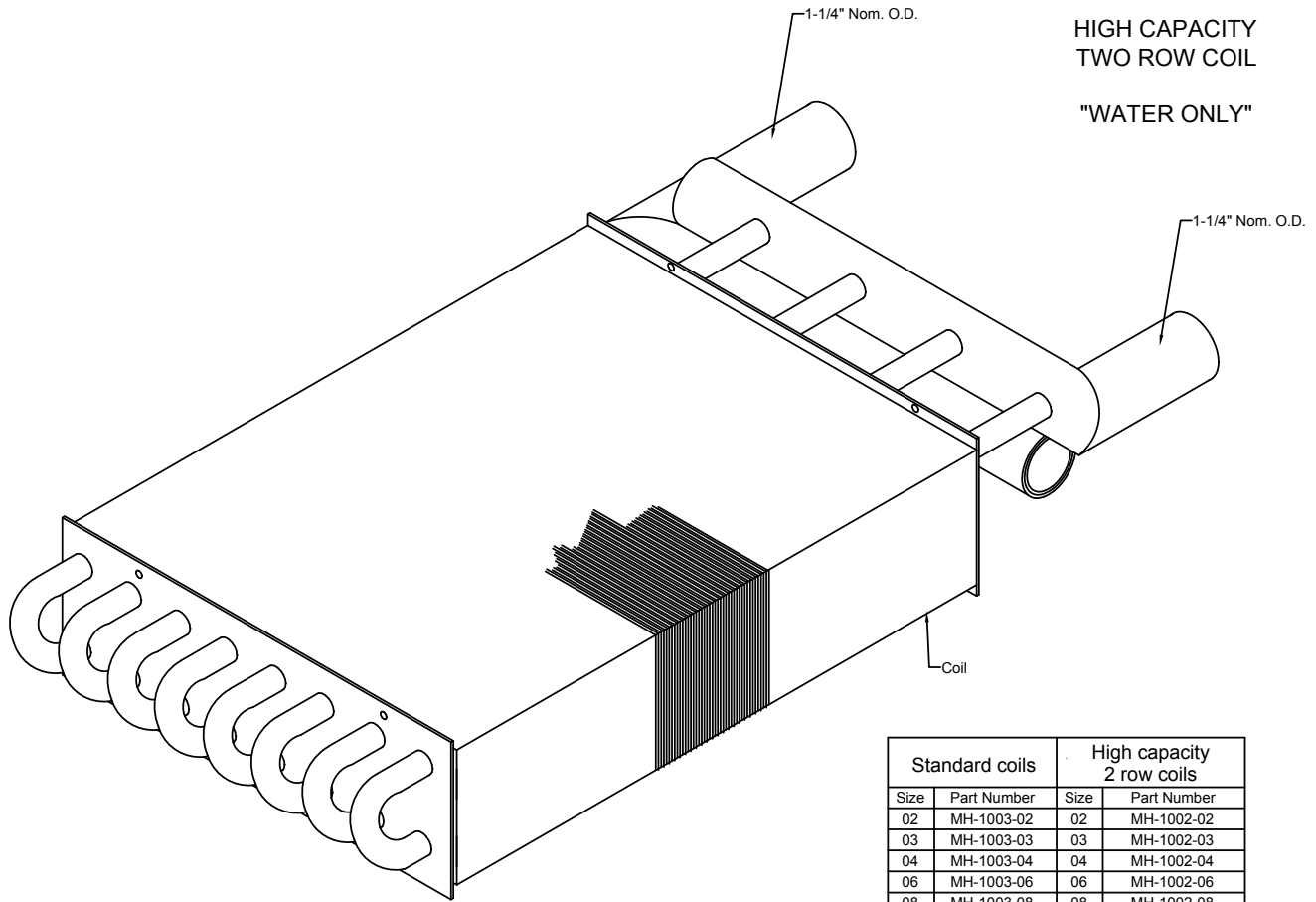
The floor unit is shown here, however this will represent typical location of insulation material.

Insulation is 1-1/2 pound density, 1/2" thick fiberglass, neoprene coated one (1) side and adhered to each panel prior to assembly.

Cabinet Unit Heater  
Option  
29  
Factory Installed

HIGH CAPACITY  
TWO ROW COIL

"WATER ONLY"



Standard coils		High capacity 2 row coils	
Size	Part Number	Size	Part Number
02	MH-1003-02	02	MH-1002-02
03	MH-1003-03	03	MH-1002-03
04	MH-1003-04	04	MH-1002-04
06	MH-1003-06	06	MH-1002-06
08	MH-1003-08	08	MH-1002-08
10	MH-1003-10	10	MH-1002-10
12	MH-1003-12	12	MH-1002-12
14	MH-1003-14	14	MH-1002-14

This is a Hot Water coil designed to provide increased capacity when the required load exceeds that of the standard coil for a given size. Fins are double depth and there are two rows of tubes.

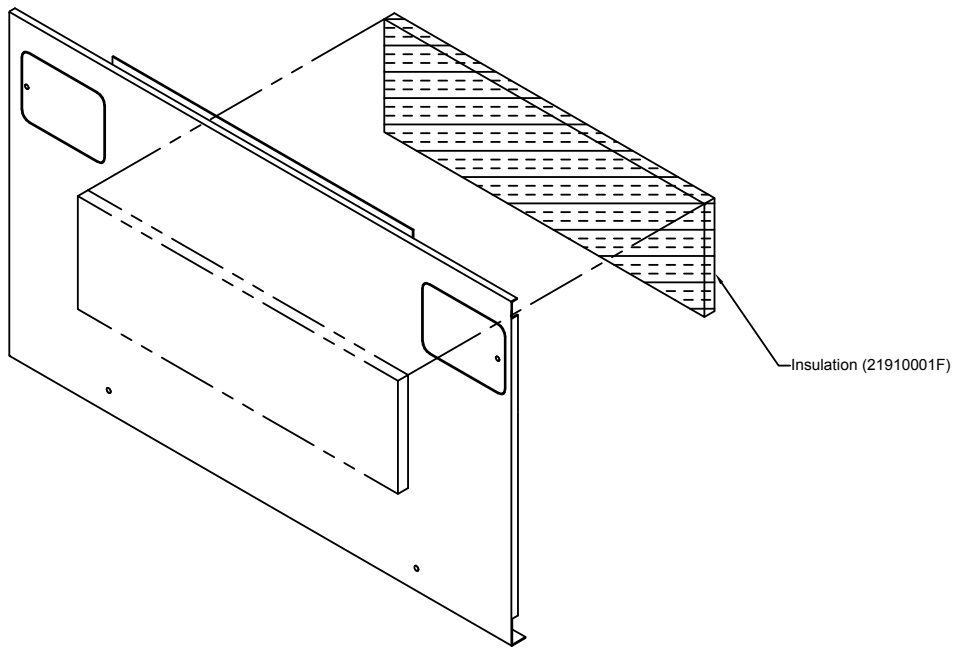
The durable mechanically bonded copper/aluminum coil presents the best of today's hydronic technology. Providing 12 fins per inch with 1/2" nominal diameter tubes, the ultimate in BTU capacity is provided without sacrificing noise, vibration or amp draw.

All units are designed so that field modifications can be made to reverse the coil position if required.

Cabinet Unit Heater  
Option  
30  
Factory Installed

FOIL FACED INSULATION  
FRONT PANEL

(COIL AREA ONLY)

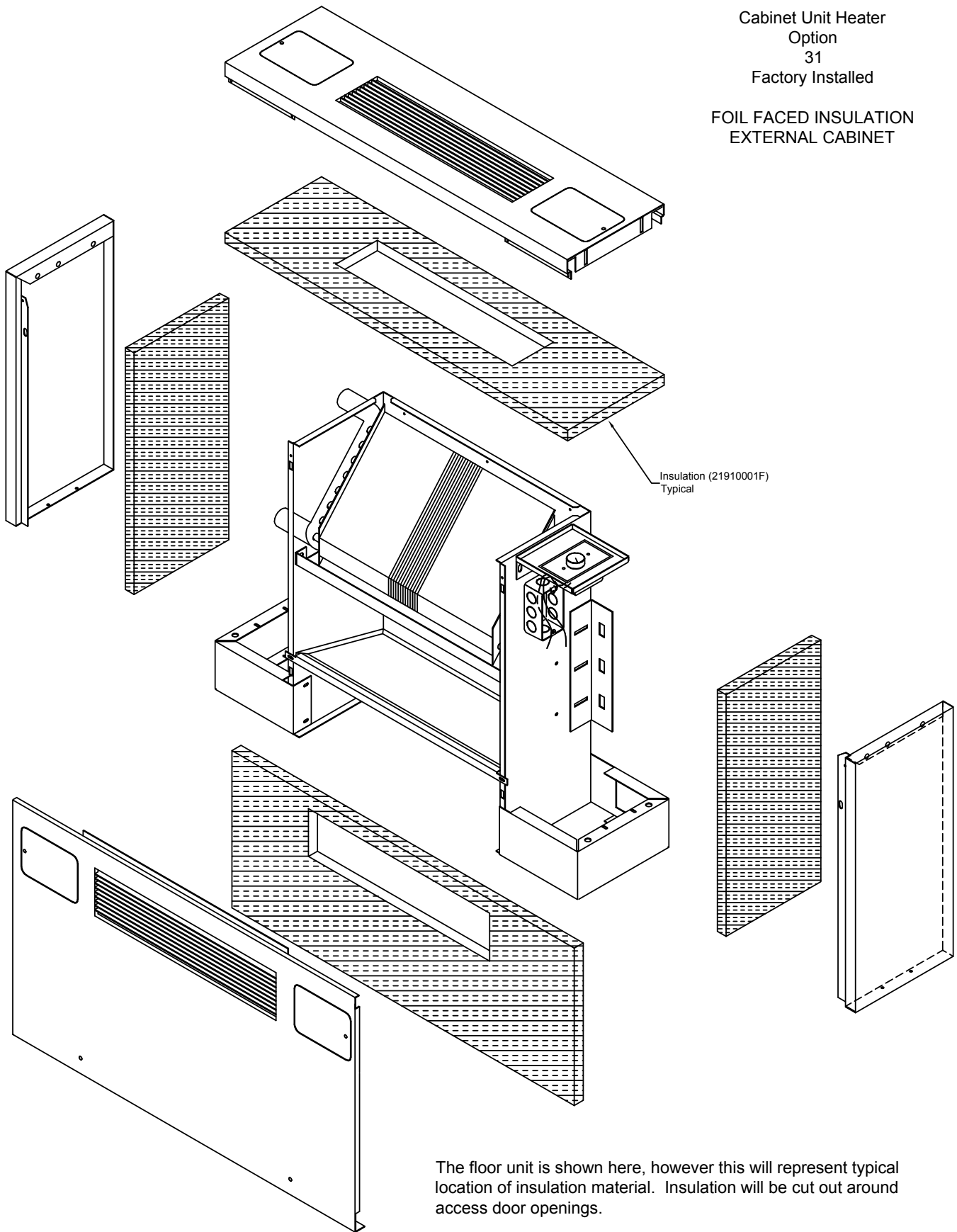


The floor unit front panel is shown here, however this will represent typical location of insulation material. Insulation will replace standard insulation around coil area only.

Insulation is 1/2" thick foil faced and adhered to front panel prior to assembly.

Cabinet Unit Heater  
Option  
31  
Factory Installed

FOIL FACED INSULATION  
EXTERNAL CABINET



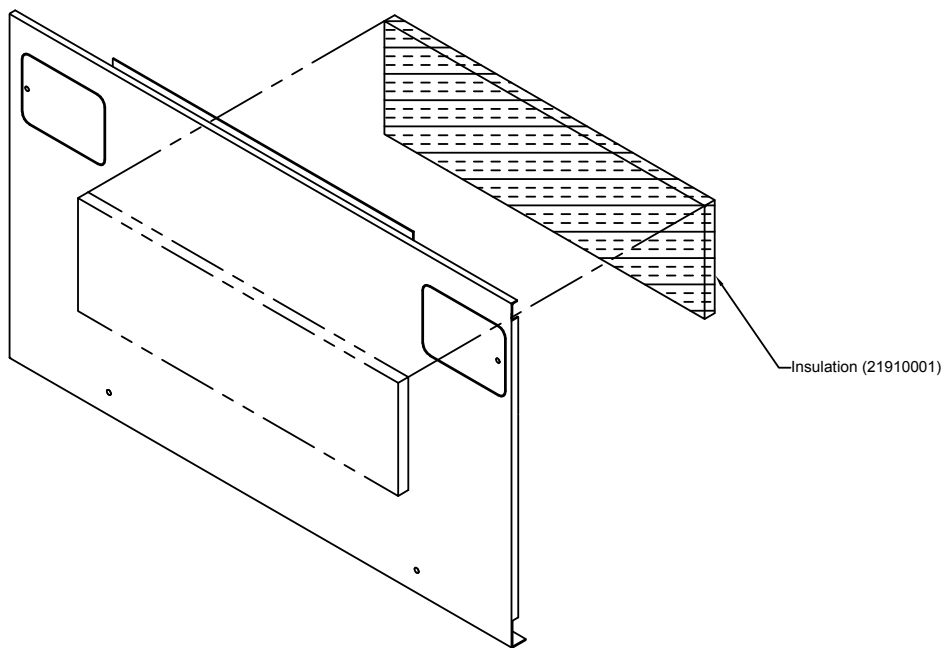
The floor unit is shown here, however this will represent typical location of insulation material. Insulation will be cut out around access door openings.

Insulation is 1/2" thick fiberglass, foil coated one (1) side and adhered to each panel prior to assembly.

Cabinet Unit Heater  
Option  
32  
Factory Installed

CLOSED CELL INSULATION  
FRONT PANEL

(COIL AREA ONLY)

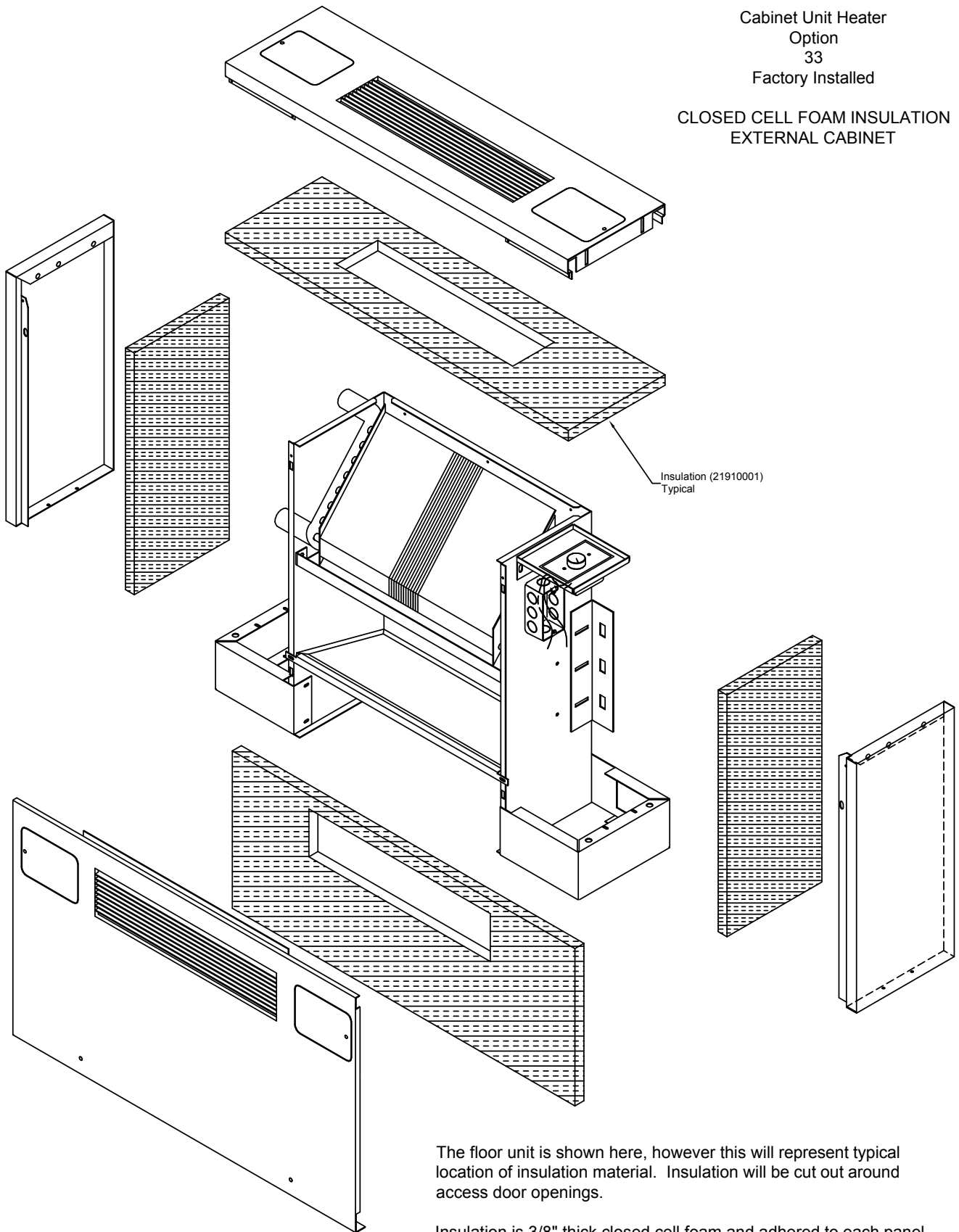


The floor unit front panel is shown here, however this will represent typical location of insulation material. Insulation will replace standard insulation around coil area only.

Insulation is 3/8" thick closed cell foam and adhered to front panel prior to assembly.

Cabinet Unit Heater  
Option  
33  
Factory Installed

CLOSED CELL FOAM INSULATION  
EXTERNAL CABINET



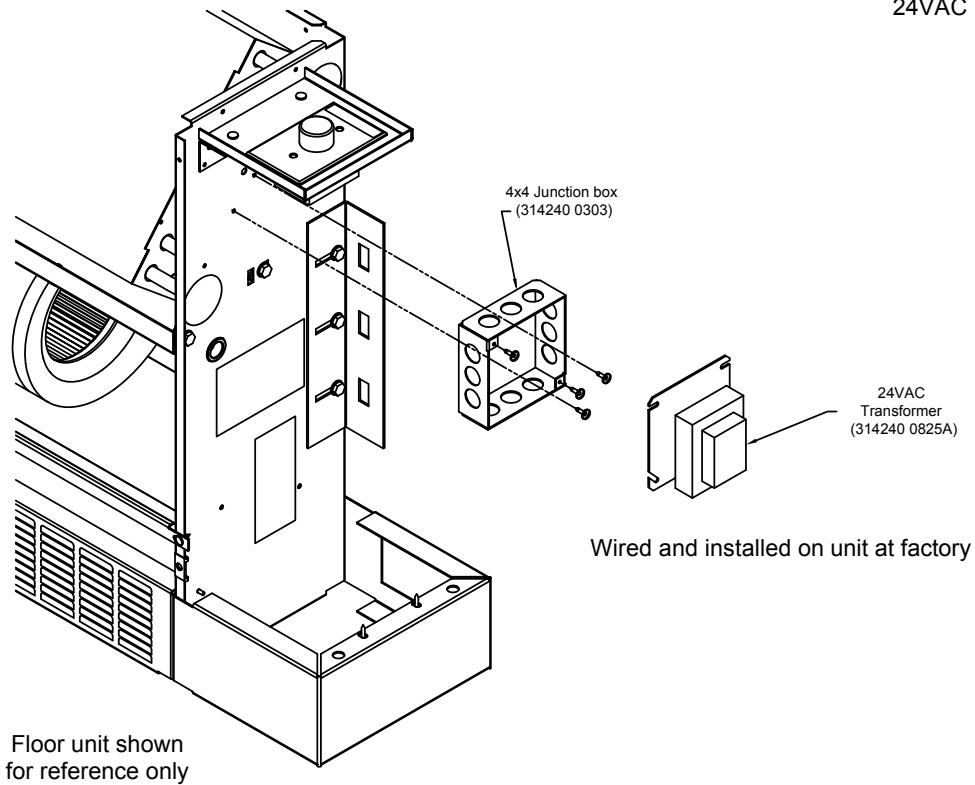
The floor unit is shown here, however this will represent typical location of insulation material. Insulation will be cut out around access door openings.

Insulation is 3/8" thick closed cell foam and adhered to each panel prior to assembly.



Cabinet Unit Heater  
 Option  
 40  
 Factory Installed

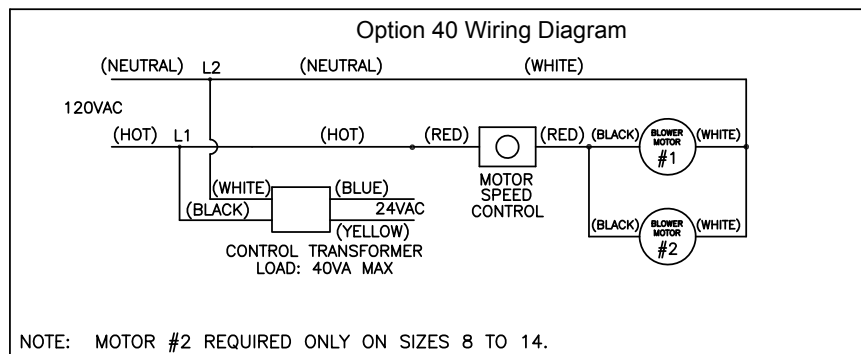
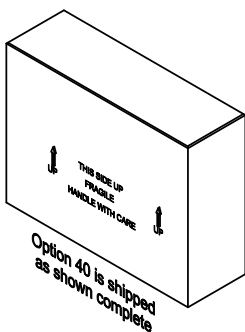
24VAC TRANSFORMER

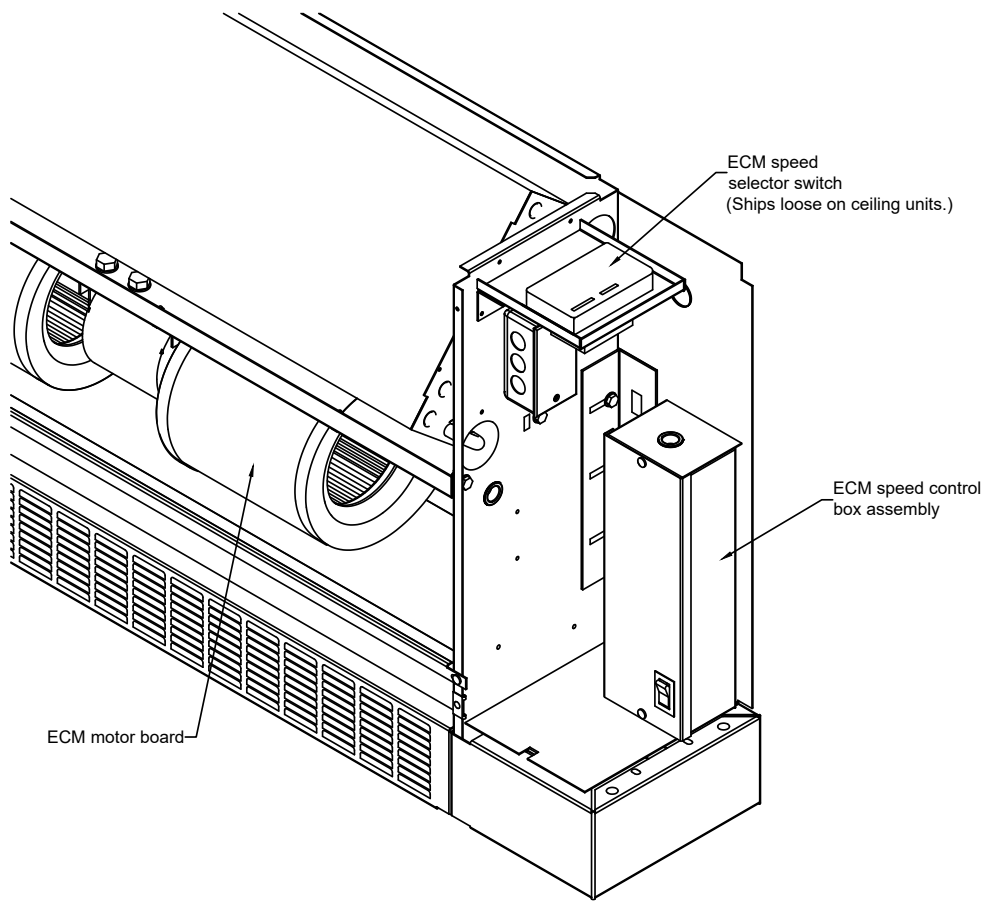


This option consists of a plate mounted 24VAC 40VA transformer and a 4x4 junction box. The 120VAC primary and 24VAC secondary connections are housed in the junction box.

This can be used for powering 24VAC devices such as control boards, low voltage thermostats, relays, valves, etc. Transformer is rated for 40VA maximum load.

Please see wiring diagram below.





Cabinet Unit Heater  
Option  
50  
Factory Installed

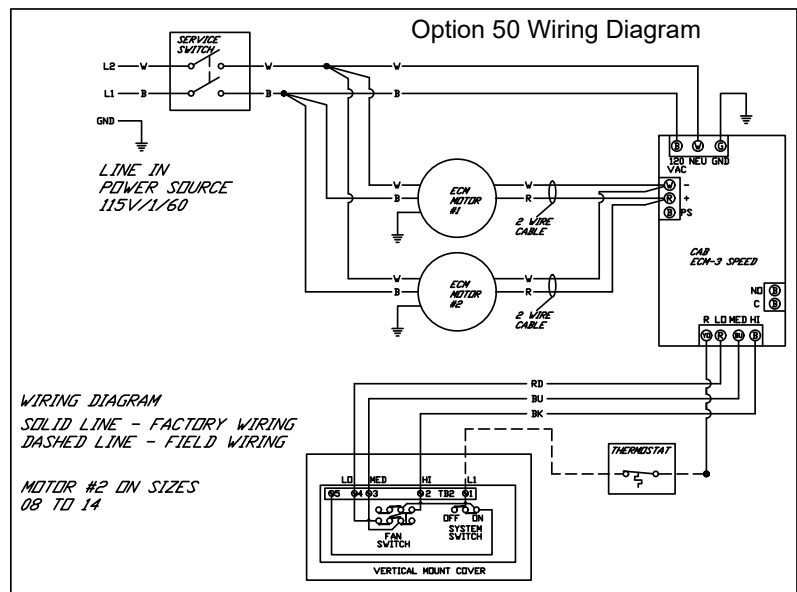
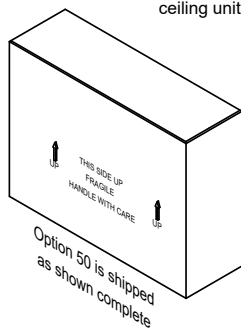
ECM MOTOR WITH  
INTERFACE CONTROL  
BOARD AND  
3 SPEED SWITCH

High efficiency Electronically Commutated Motors (ECM) utilize brushless DC motors which are coupled with an interface control board that provides speed control of the motors. When the thermostatic control calls for heat, the interface board will ramp the motor speed up to the RPM appropriate for the speed selector switch setting. The speed selector switch has four positions, Off-High-Medium-Low. The ramping up feature eliminates the need for an additional motor starter (Option 22 motor starter is not available with ECM). Thermostats with contacts rated for low voltage power will integrate easily with the variable speed capabilities to satisfy existing conditions.

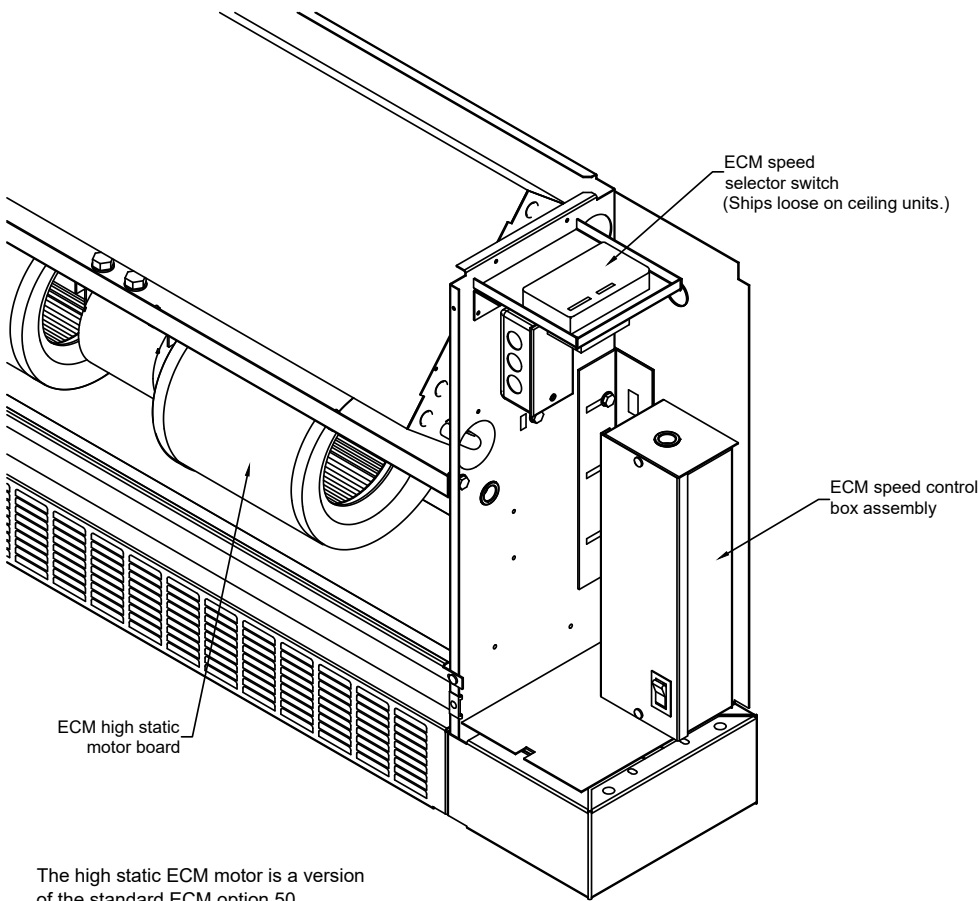
Note: Thermostat option 127 can also be used in low voltage applications and is suitable for use with the ECM motors option.

Option 50 is provided with a service switch. Option 23 is not required.

Wired and installed on unit(s) at factory.  
(Speed Switch Ships loose on ceiling units.)



CAT84361H.dwg



Cabinet Unit Heater  
Option  
51  
Factory Installed

ECM HIGH STATIC  
MOTOR WITH  
INTERFACE CONTROL  
BOARD AND  
3 SPEED SWITCH

Maintains standard CFM  
against 0.4 W.C. max.

The high static ECM motor is a version of the standard ECM option 50.

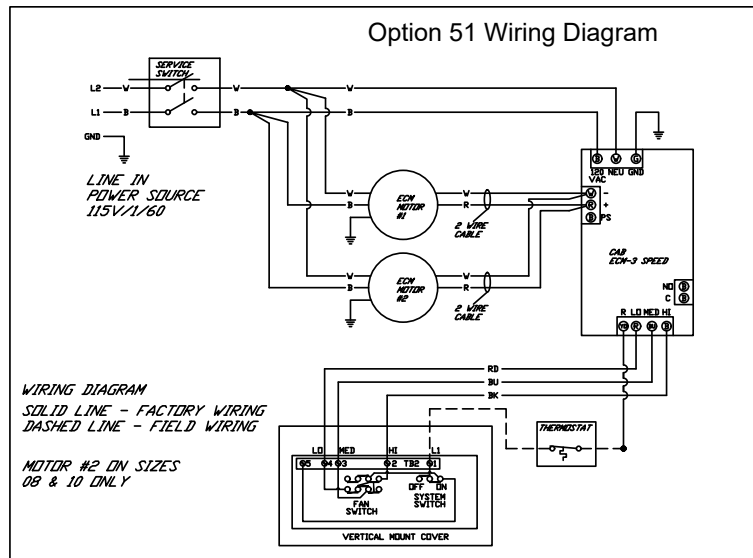
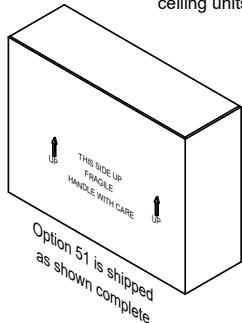
This option consists of an ECM motor specifically designed to overcome the external static pressure when duct work is attached to the inlet, outlet or both of the cabinet unit heater. This motor is approximately the same physical size and configuration as the standard ECM motor. In terms of performance, the RPM is 1550 whereas the standard ECM motor operates at 1050 RPM. With this factory installed high static motor option, the cabinet unit heater will operate to maintain standard air flow (CFM) with external static pressures up to .4" water column. (Not available on sizes 12 or 14)

The high efficiency electronically commutated motors (ECM) utilize brushless DC motors which are coupled with an interface control board that provides speed control of the motors. When the thermostatic control calls for heat, the interface board will ramp the motor speed up to the RPM appropriate for the speed selector switch setting. The speed selector switch has four positions, Off-High-Medium-Low. The ramping up feature eliminates the need for an additional motor starter (Option 22 motor starter is not available with ECM). Thermostats with contacts rated for low voltage power will integrate easily with the variable speed capabilities to satisfy existing conditions.

Note: Thermostat Option 127 can also be used in low voltage applications and is suitable for use with the ECM motors option.

Option 51 is provided with a service switch. Option 23 is not required.

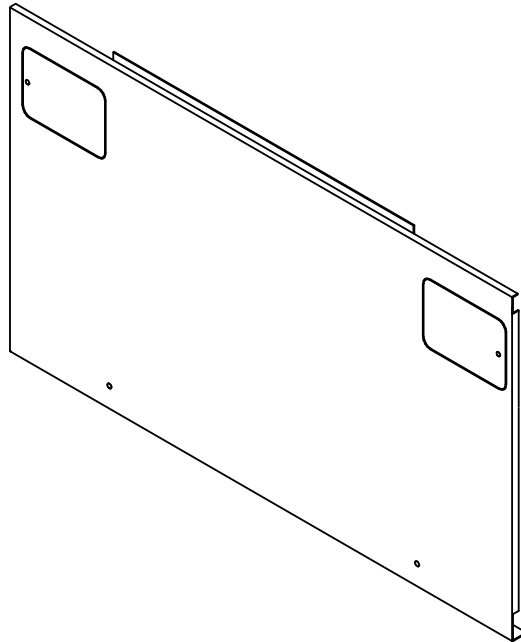
Wired and installed on unit(s) at factory.  
(Speed Switch Ships loose on ceiling units.)



CAT87185F.dwg

Cabinet Unit Heater  
Option  
99  
Factory Installed

14 GAUGE FRONT PANEL

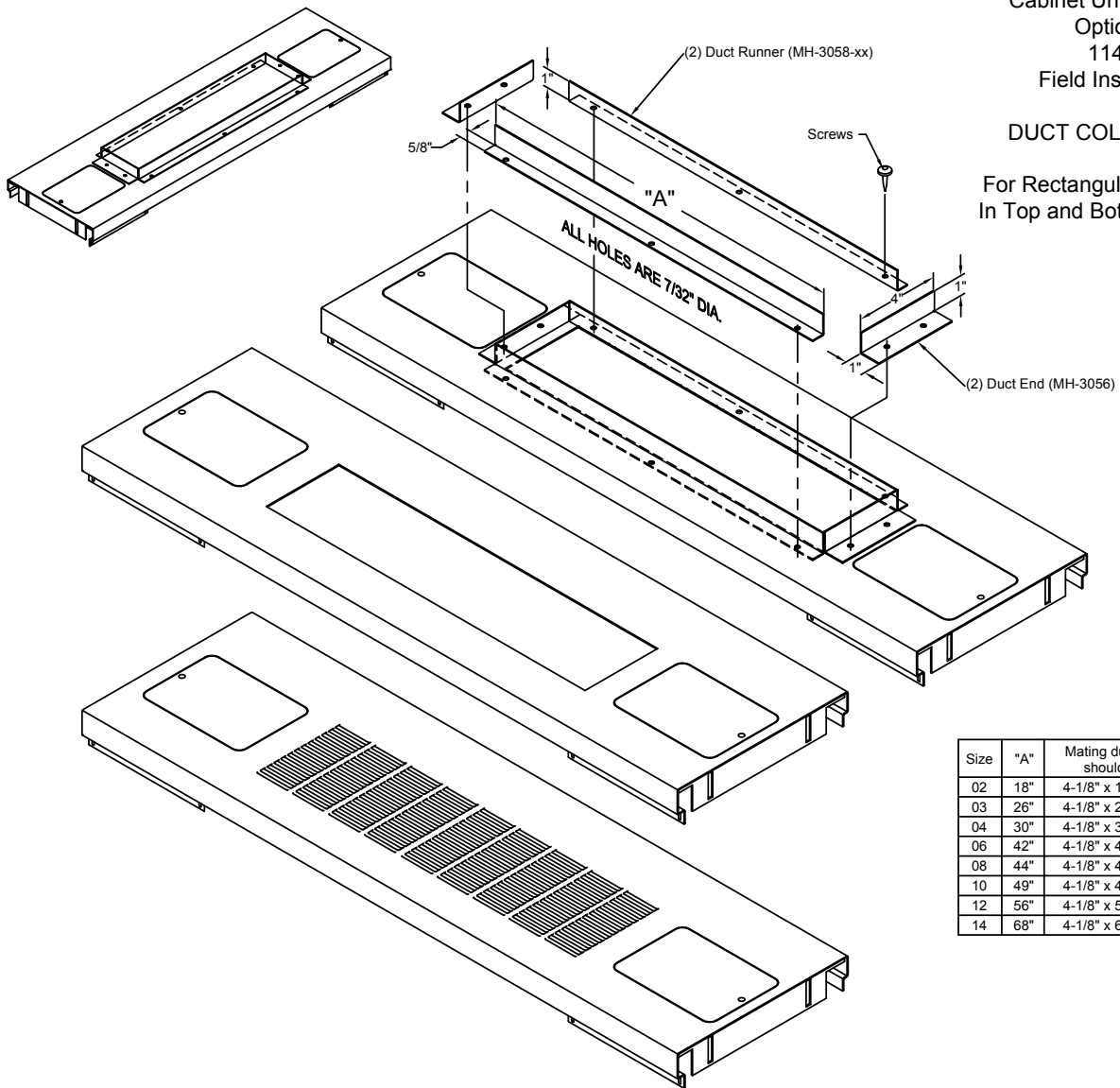


The floor unit front panel is shown for reference. Access doors and inlet/outlet locations will vary by model.

Cabinet Unit Heater  
Option  
114  
Field Installed

DUCT COLLAR KIT

For Rectangular Opening  
In Top and Bottom Panels



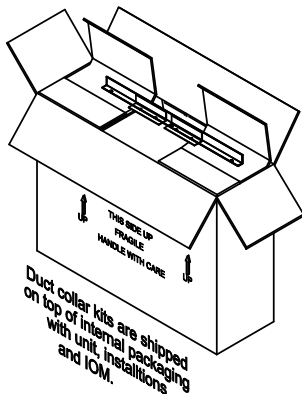
Size	"A"	Mating duct I.D. should be
02	18"	4-1/8" x 18-1/8"
03	26"	4-1/8" x 26-1/8"
04	30"	4-1/8" x 30-1/8"
06	42"	4-1/8" x 42-1/8"
08	44"	4-1/8" x 44-1/8"
10	49"	4-1/8" x 49-1/8"
12	56"	4-1/8" x 56-1/8"
14	68"	4-1/8" x 68-1/8"

It is recommended that the louver area is cut out prior to duct collar installation.

Duct collars are intended to be used with louvers cut away as shown.

To install:

Unpack cabinet unit heater. Place unit upright, align duct end/runners in place, drill and secure.



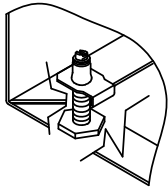
Kit contents		
Unit Size	Runner (2 each)	End (2 each)
02	MH-3058.02	MH-3056
03	MH-3058.03	MH-3056
04	MH-3058.04	MH-3056
06	MH-3058.06	MH-3056
08	MH-3058.08	MH-3056
10	MH-3058.10	MH-3056
12	MH-3058.12	MH-3056
14	MH-3058.14	MH-3056

Note:

Duct collar kits are standard on models C-1150, RC-1190 and RC-1210.

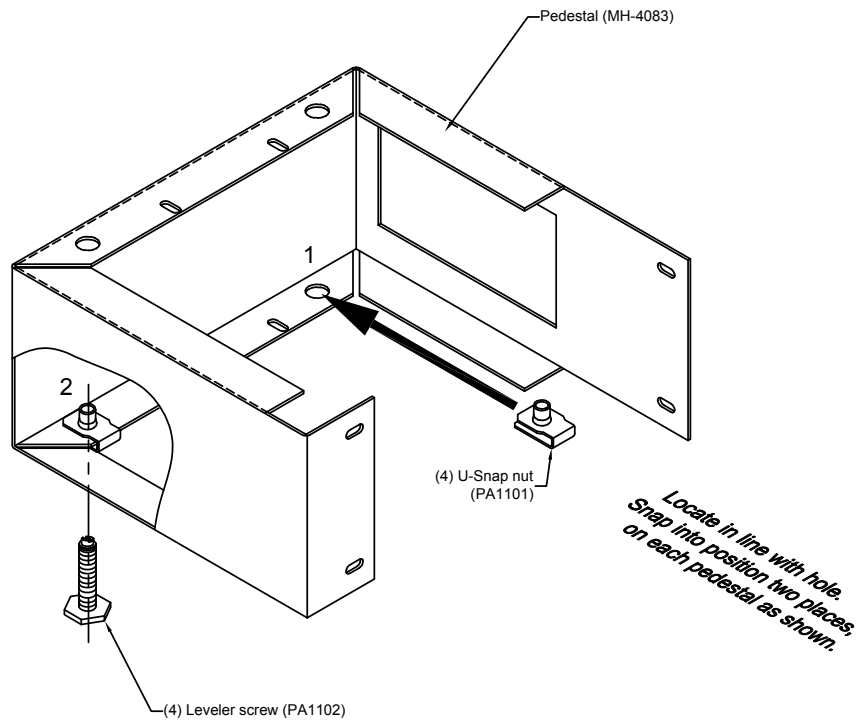
Cabinet Unit Heater  
Option  
116  
Field Installed

LEVELING LEGS  
FOR  
FLOOR MOUNTED UNITS

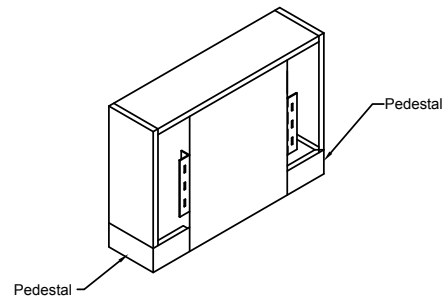


Insert and adjust to suit leveling conditions

**View shown with pedestal removed from unit**

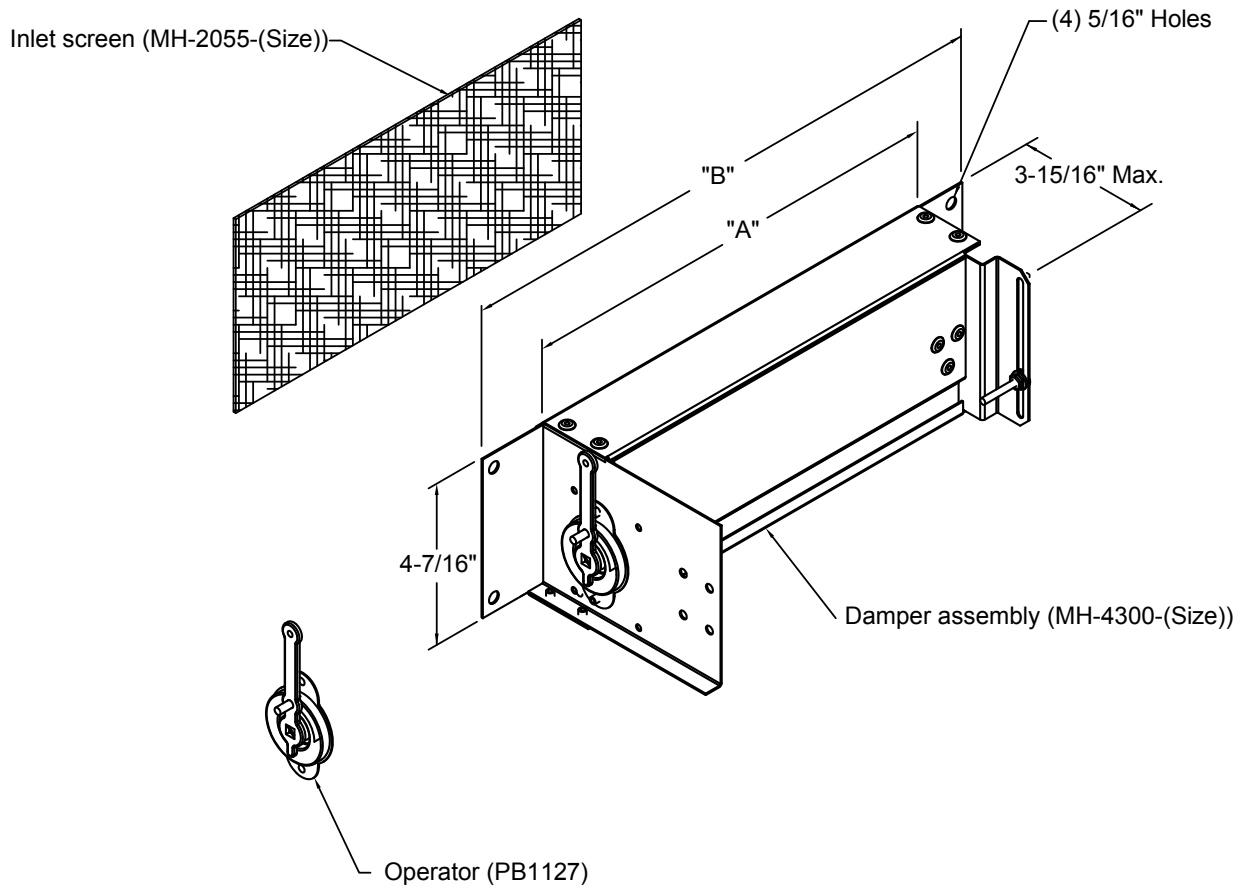


To install:  
Unpack cabinet unit heater. Lay unit flat on its back, and follow the above instructions.

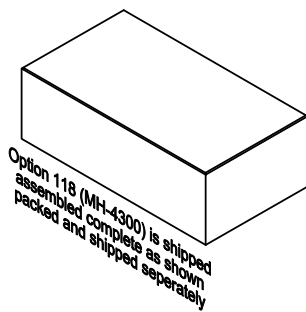


Cabinet Unit Heater  
 Option  
 118  
 Field Installed

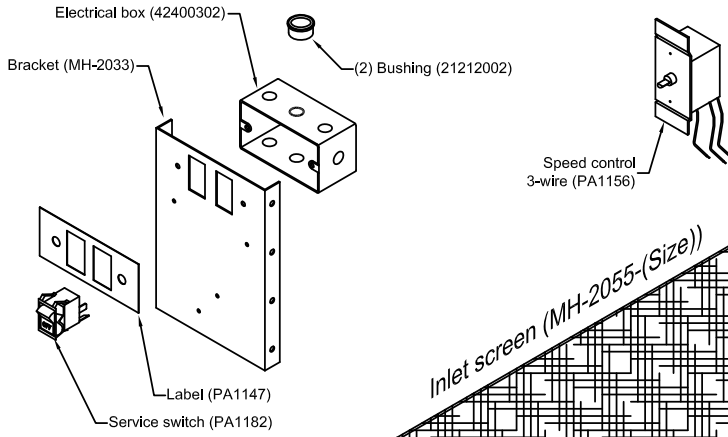
25% MANUAL OUTSIDE  
 AIR DAMPER



25% manual outside air damper - outside air intake can be adjusted from 0 to 25%.  
 Control is by manual quadrant. For use on floor units only.



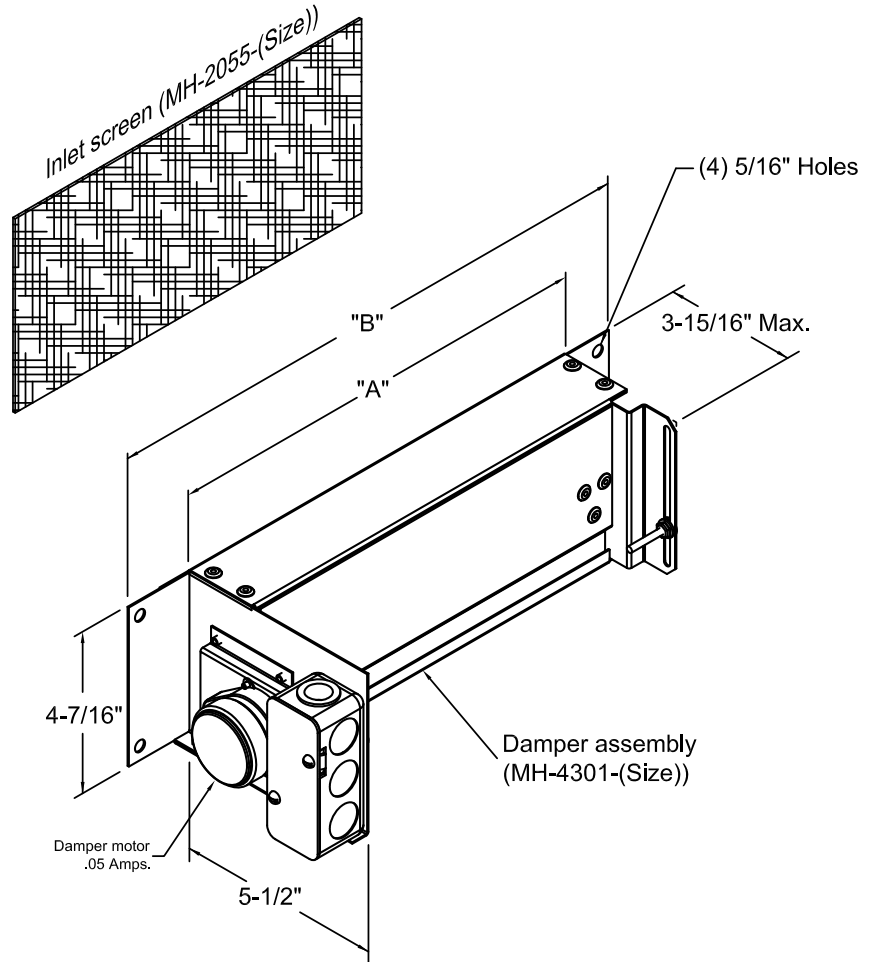
Option 118			
Size	Part Number	"A"	"B"
02	MH-4300-01	8-3/16"	11-7/16"
03	MH-4300-01	8-3/16"	11-7/16"
04	MH-4300-01	8-3/16"	11-7/16"
06	MH-4300-02	12-11/16"	15-15/16"
08	MH-4300-02	12-11/16"	15-15/16"
10	MH-4300-02	12-11/16"	15-15/16"
12	MH-4300-03	18-11/16"	21-15/16"
14	MH-4300-03	18-11/16"	21-15/16"



Cabinet Unit Heater  
Option  
119  
Field Installed

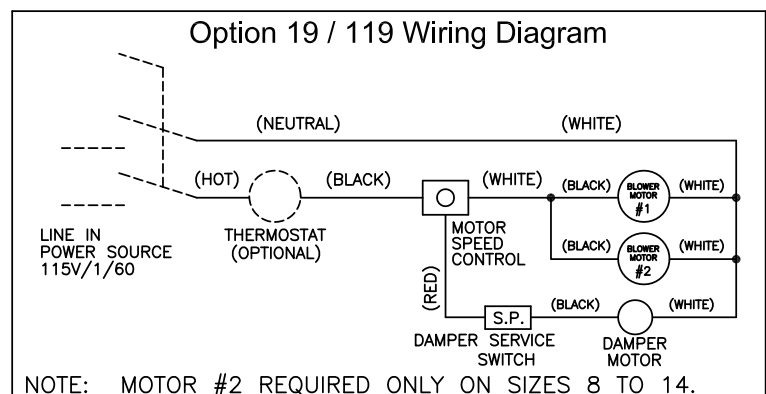
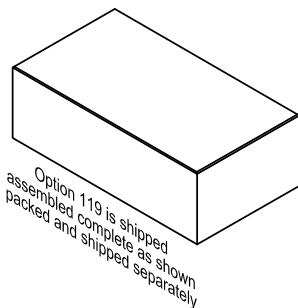
25% MOTORIZED OUTSIDE  
AIR DAMPER

Option 119			
Size	Part Number	"A"	"B"
02	MH-4301-01	8-3/16"	11-7/16"
03	MH-4301-01	8-3/16"	11-7/16"
04	MH-4301-01	8-3/16"	11-7/16"
06	MH-4301-02	12-11/16"	15-15/16"
08	MH-4301-02	12-11/16"	15-15/16"
10	MH-4301-02	12-11/16"	15-15/16"
12	MH-4301-03	18-11/16"	21-15/16"
14	MH-4301-03	18-11/16"	21-15/16"



25% motorized outside air damper kit for field installation. - opens outside air intake to 25% when motor(s) start. Closes when motor(s) stop. Service switch is provided to prevent damper operation when desired. For use on floor units only. See Option 17, available for field installation.

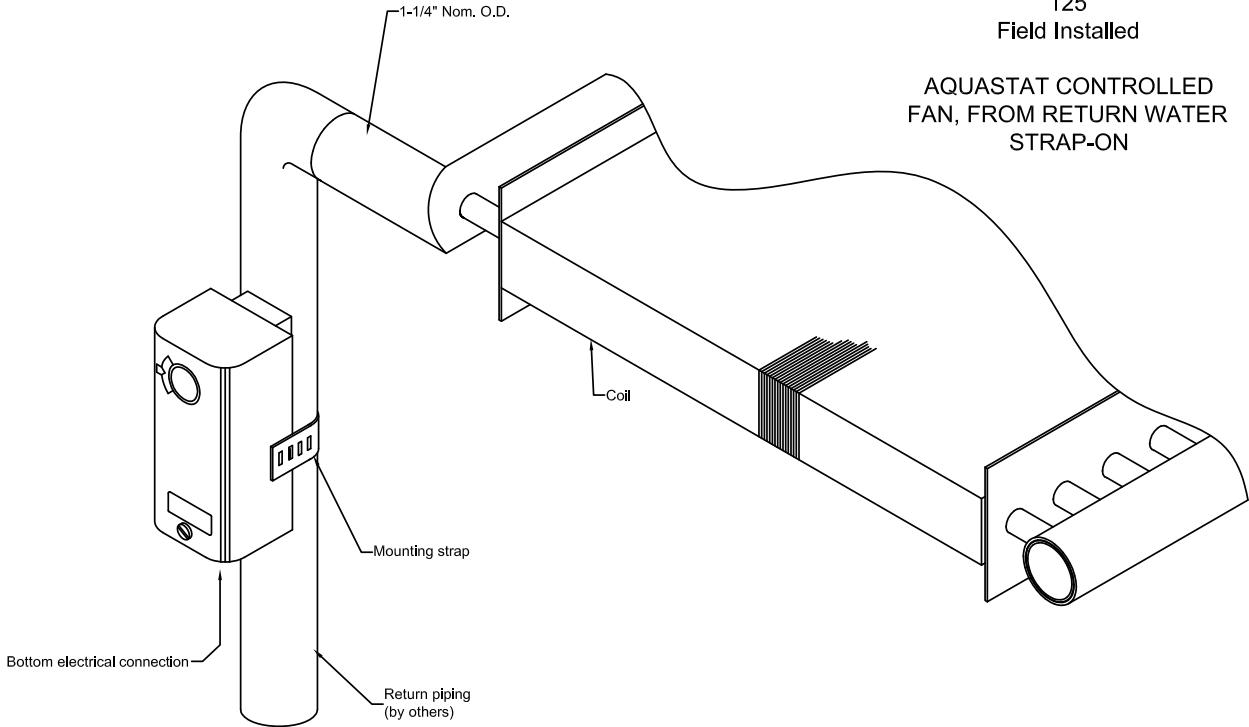
Please refer to wiring diagram below.





Cabinet Unit Heater  
Option  
125  
Field Installed

AQUASTAT CONTROLLED  
FAN, FROM RETURN WATER  
STRAP-ON



Approx. Size: 4-3/8"H x 2-1/8"W x 2-1/2"D

Temperature range: 100°F - 240°F

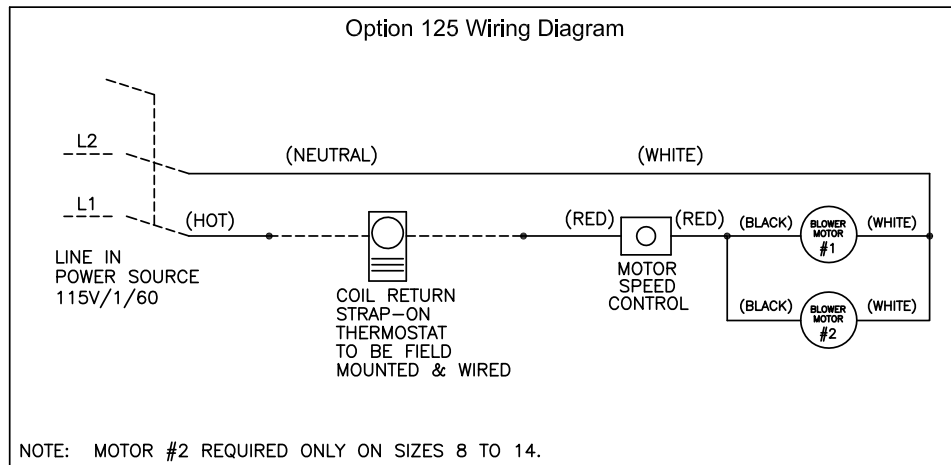
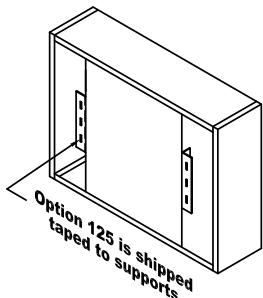
10 Amps @ 120 Volts

6 Amps @ 240 Volts

This option consists of a return stat. The coil return stat is a strap-on type control which is located on the return piping line of the coil. The return line on a hot water heating system is the top piping outlet. The supply line of a system is the bottom piping inlet.

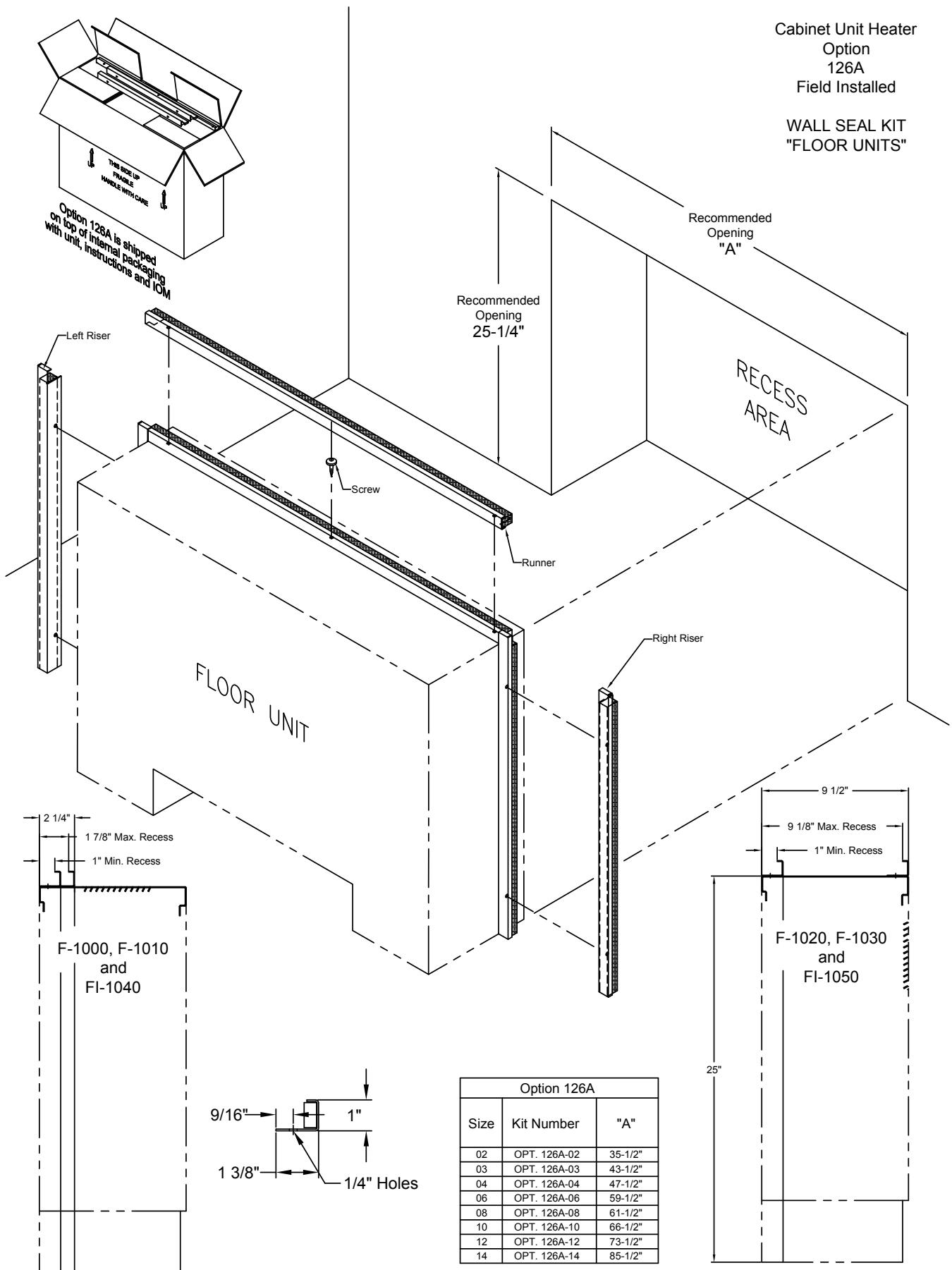
When the heating system is turned on and hot water (or steam) is circulated, the coil return stat will not turn on the motor(s) until the temperature of the return line arrives at the temperature set on the coil return stat. Once that temperature has been reached, the coil return stat enables the motor(s) to start.

The coil return stat is to be wired in series with the speed control (standard on all units) and the motor(s). Please see wiring diagram.



Cabinet Unit Heater  
Option  
126A  
Field Installed

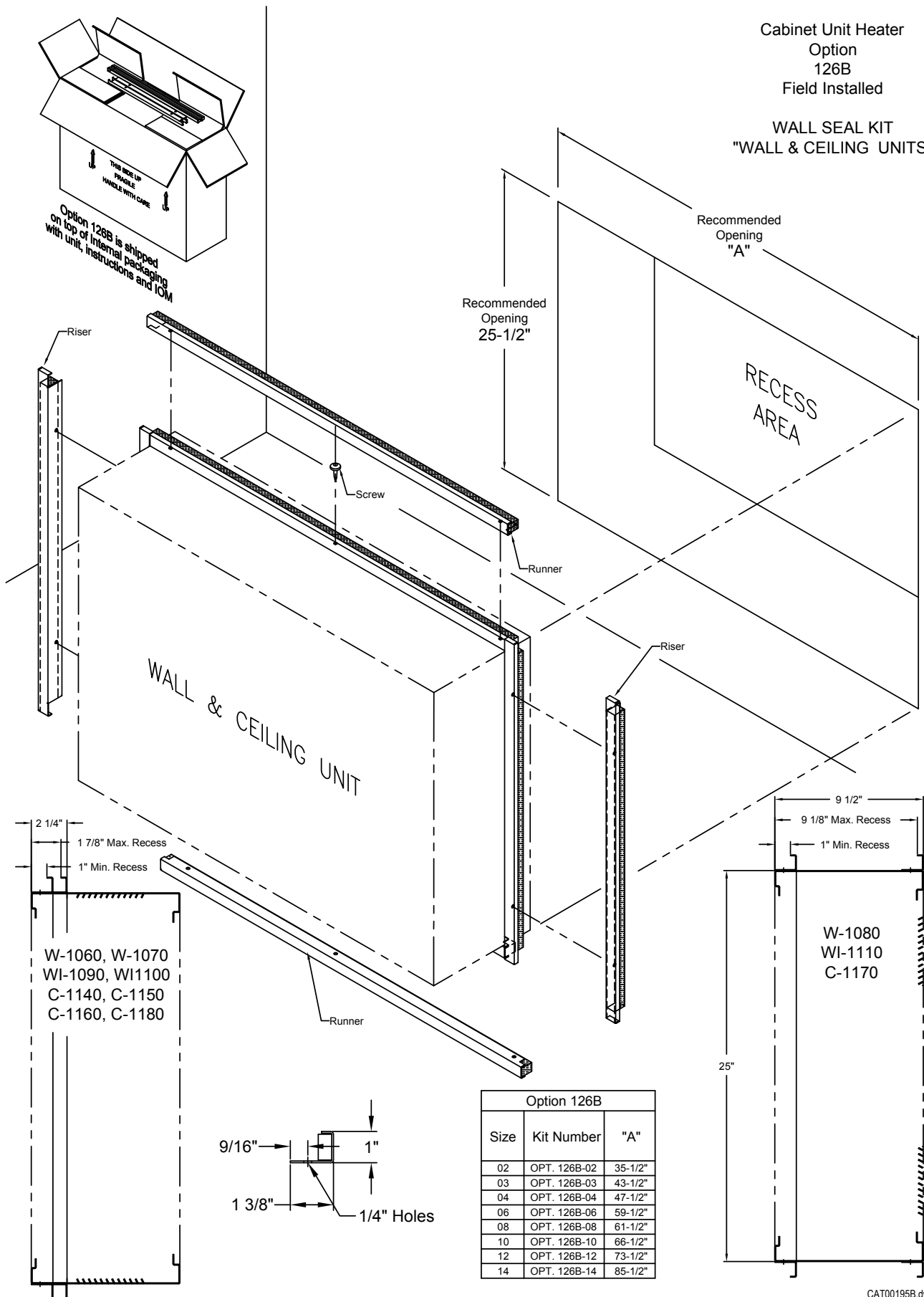
WALL SEAL KIT  
"FLOOR UNITS"



CAT00194B.dwg

Cabinet Unit Heater  
Option  
126B  
Field Installed

WALL SEAL KIT  
"WALL & CEILING UNITS"



CAT00195B.dwg

# WALL SEAL INSTRUCTIONS

## CABINET UNIT HEATERS

7/16" Projection by 1" Wide Wall Seal Kit

### INSTALLATION INSTRUCTIONS

**PREPARATION:** The design of these cabinets and wall seal frames allows recessing of all models per the Wall Seal schedule (Fig. 1) shown below:

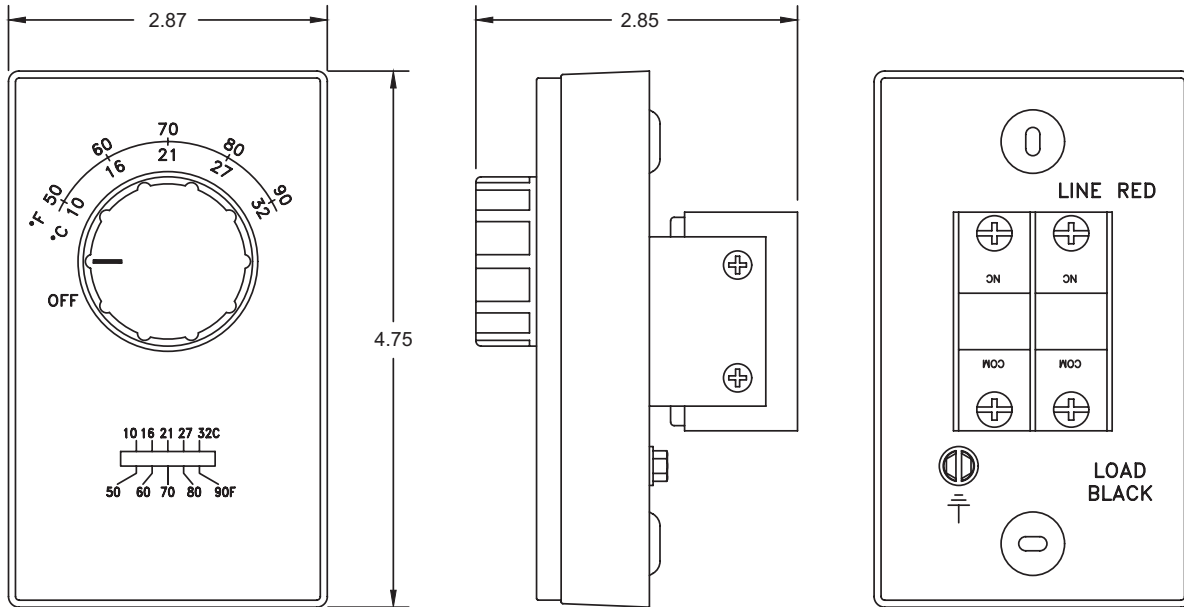
**Fig. 1**

MODEL	These Models may be Partially or Fully Recessed	These Models may be Partially Recessed only (2 1/4" Max.)
F	F-1020, F-1030	F-1000, F-1010
FI	FI-1050	FI-1040
W	W-1080	W-1060, W-1070
WI	WI-1110	WI-1090, WI-1100
C	C-1170	C-1140, C-1150 C-1160, C-1180

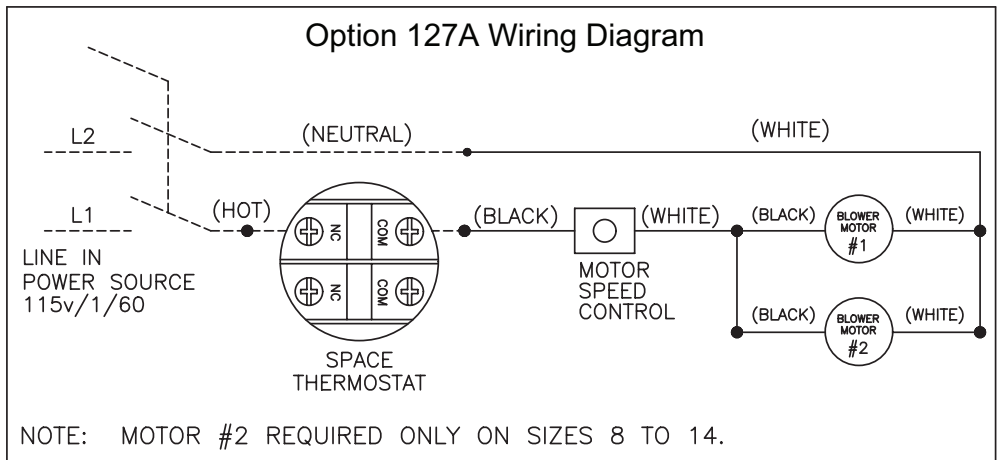
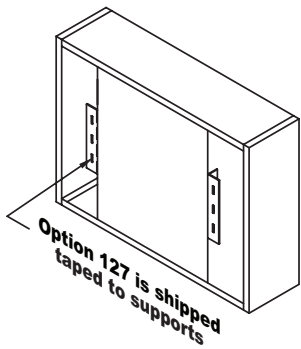
- STEP 1:** Measure depth unit is to be recessed (usually this is the distance from face of finished wall to back of recess). Add 7/16". Measure this distance from the back of the cabinet and mark the top and side of the cabinet. This will be the location of the exposed face of the wall seal.
- STEP 2:** Position the wall seal top section (and bottom section for wall and ceiling application) with mounting holes against cabinet (overlap edge 1/4" each end). Mark through the pre-punched holes. Using a short 9/64 or 5/32" drill, drill into the cabinet at those marks. DO NOT DRILL INTO THE COIL. Attach using 5/8" long sheet metal screws (furnished).
- STEP 3:** Position the wall seal side sections with mounting holes against the cabinet side with the face of section at line marked in Step 1. Slide section over top (and bottom if applicable) section and attached as in Step 2.

Cabinet Unit Heater  
 Option  
 127A  
 Field Installed

LINE VOLTAGE  
 ROOM (WALL) THERMOSTAT



Line voltage room (wall) thermostat - Heating only  
 Temperature range 50°F - 90°F. Rated 22.0 Amps @ 120 VA.



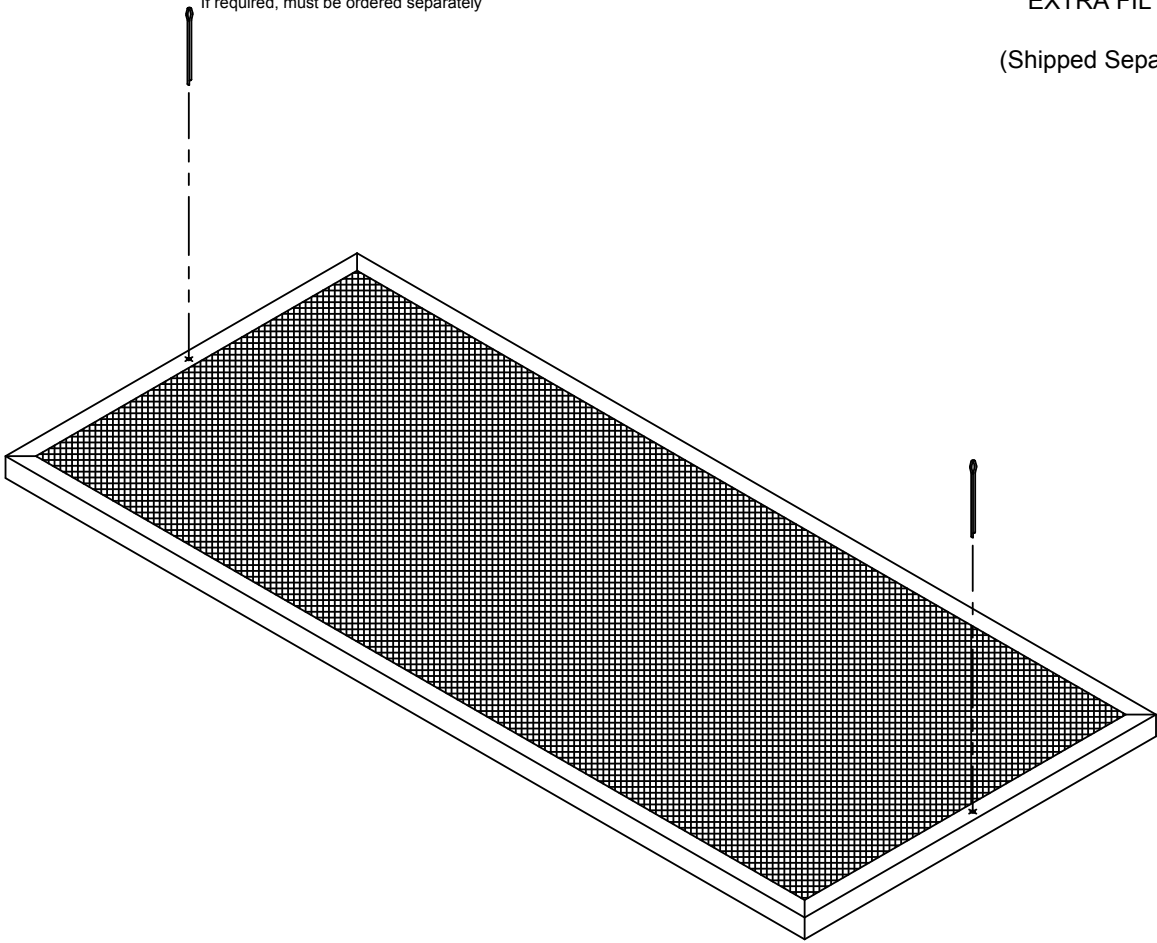
CAT00197D.dwg

Cabinet Unit Heater  
 Option  
 129  
 Field Installed

EXTRA FILTER

(Shipped Separately)

PA1089 (2) 3/32" Cotter pins  
 Holds filter in place  
 If required, must be ordered separately

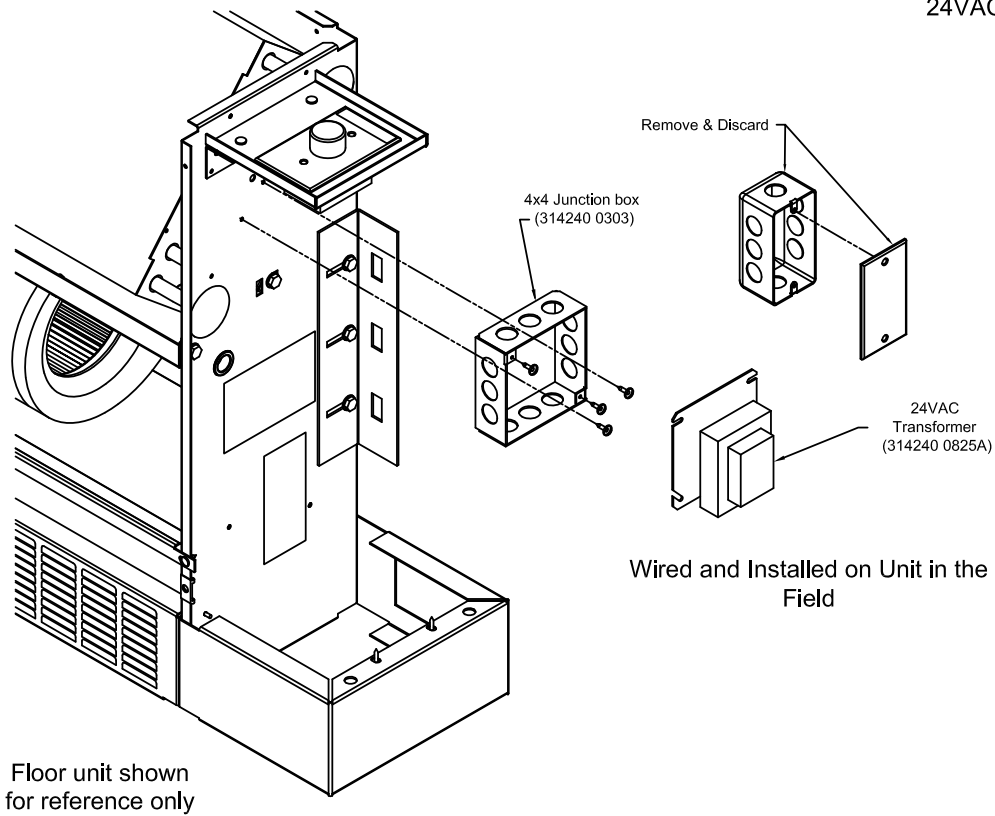


Permanent washable "EVK" type filter  
 Aluminum frame, expanded aluminum pad, UL CLASS 2  
 .06 SP @ 350 FPM

Standard Filters			
OPTION	SIZE	Part Number	Filter Dimensions
129	02	PC1297-02	15/32"H x 8-11/16"D x 19-3/4"L
129	03	PC1297-03	15/32"H x 8-11/16"D x 27-3/4"L
129	04	PC1297-04	15/32"H x 8-11/16"D x 31-3/4"L
129	06	PC1297-06	15/32"H x 8-11/16"D x 43-3/4"L
129	08	PC1297-08	15/32"H x 8-11/16"D x 45-3/4"L
129	10	PC1297-10	15/32"H x 8-11/16"D x 50-3/4"L
129	12	PC1297-12	15/32"H x 8-11/16"D x 57-3/4"L
129	14	PC1297-14	15/32"H x 8-11/16"D x 69-3/4"L

Cabinet Unit Heater  
Option  
140  
Field Installed

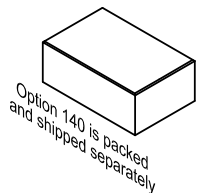
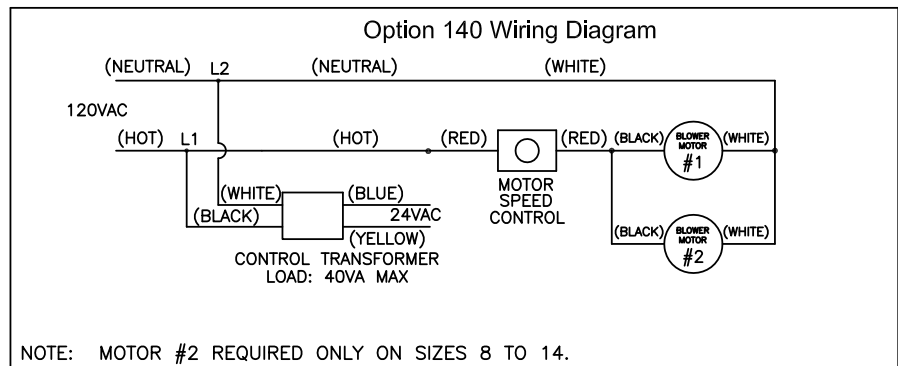
24VAC TRANSFORMER



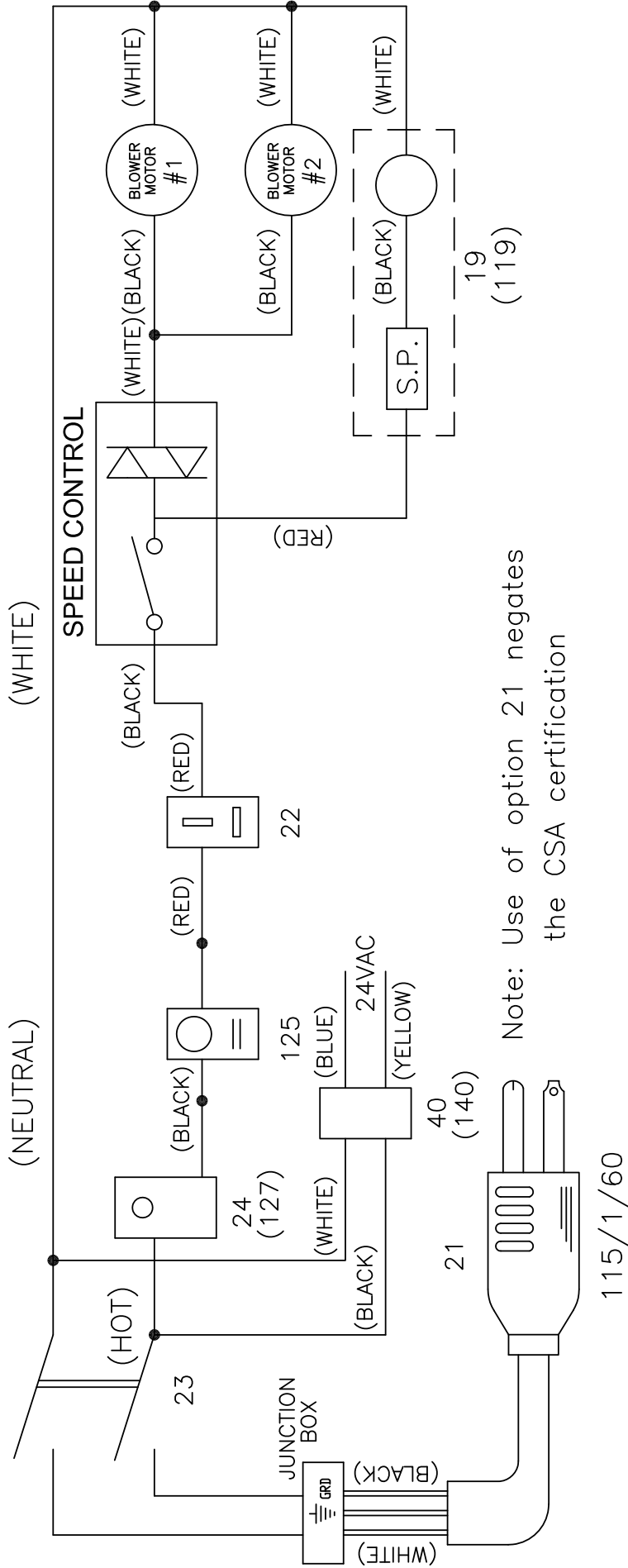
This option consists of a plate mounted 24VAC 40VA transformer and a 4x4 junction box. This replaces the standard 2x4 junction box and cover when field installed. The 120VAC primary and 24VAC secondary connections are housed in the junction box.

This can be used for powering 24VAC devices such as control boards, low voltage thermostats, relays, valves, etc. Transformer is rated for 40VA maximum load.

Please see wiring diagram below. Note: when used with a service switch, wire the transformer primary to the output of the service switch.



# STANDARD CABINET UNIT HEATER WIRING DIAGRAM 115 VOLT



Note: Use of option 21 negates the CSA certification

OPTION	DESCRIPTION	PART NUMBER	CSA	UL
19/119	MOTORIZED DAMPER	PB1121, PA1182	Y	Y
21	POWER CORD	PA1130	N	N
22	MOTOR STARTER W/ HTR	PA1142	Y	Y
23	SERVICE SWITCH	PA1183	Y	Y
24	RETURN AIR T'STAT (°F)	PA1141	Y	Y
24C	RETURN AIR T'STAT (°C)	PA1698	Y	Y
40/140	24VAC TRANSFORMER	314240 0825A	Y	Y
125	AQUASTAT	PA1131	Y	Y
127	WALL T'STAT	PA1143	Y	Y
	SPEED CONTROL 2 WIRE	PA1031	Y	Y
19/119	SPEED CONTROL 3 WIRE	PA1156	Y	Y

Options: 19, 21, 22, 23, 24, 40, 125, 127

On all ceiling/recessed units the speed control is shipped packed with unit for wall mounting and wiring.









