

IMPORTANT

1. Always include complete heater model and serial number so that any specification change can be considered for parts replacement. It can save time and expense.
2. In keeping with our policy of continuous product improvement, we reserve the right to alter any information shown here. Specifications are subject to change without notice.
3. We reserve the right to substitute functional replacements
4. Order by P/N; not Heater Option Designation.

Replacement Parts

**Applies to: Model UEAS,
 High-Efficiency,
 Low-Static Unit Heater**



Index

- B**
 Burner and Components 5
- C**
 Cabinet Parts 6
 Capacitor 3
 Combustion Air Inlet 7
 Concentric Adapter Box 6
 Condensate Drain Kit P/N 235368 7
- D**
 Date of Manufacture 2
 Disconnect Switch 3
 Door Assembly 6
 Door Switch 3
 DSI Integrated Control Module 3
- E**
 Electrical Components - Location 3
 Electrode 5
- F**
 Fan and Motor Components 5
 Fan Blade 5
 Fan Guard 5
 Flue Wrapper 4
- G**
 Collection Box Gasket 6
 Header Gaskets 6
 Bird Guard 7
- H**
 Hanger Kit 7
 Primary Heat Exchanger Assembly 6
 Secondary Heat Exchanger Assembly 6
 High Temperature Limit Switch 3
- K**
 Horizontal Vent/Combustion Air Terminal Kit 7
 Vertical Vent/Combustion Air Kit 7
- L**
 High Temperature Limit Control 3
 Vent Temperature Limit Switch 3
 Logo 6
 Louvers 6
 Vertical Louvers 8
- M**
 Fan Motor 5
- N**
 Downturn Nozzles 8
- O**
 Orifice 5
 Orifice Adapter 5
- P**
 Paint 6
 Panels 6
 Pressure Switch 3
 4" PVC Cap 7
- R**
 Rain Collar 7
 Rating Plate 2
 Time Delay Relay 3
 Replacement Heat Exchangers 6
- Ring Guard 7
- S**
 Bird Screen 7
 Silicone Sealing Ring 6
 Flame Sensor 5
 Serial No. 2
 Shaft Protector 4
 Spacers 7
 Swivel Connector 7
- T**
 Thermostat 8
 Top Panel 6
 Transformer 3
- V**
 Manual Shutoff Valve 5
 Natural Gas Valve 5
 Vent / Combustion Air Component 6
 Venter Components 4
 Venter Housing 4
 Venter Motor and Wheel Assembly 4
 Vent Temperature Limit Switch 3
- W**
 Blower Wheel and Housing 4
 Wiring Harness 3

References

Printed Forms	Form	P/N
Installation/Operation/Maintenance Manual	I-UEAS	221232
Replacement Valves & Ignition Controls by Serial No. Code.....	P-VALVES	263995

Rating Plate and Serial No.

Serial No. Decoding
Serial No. Sample: BLK 79 6E N 00000
Elements of No.: 1 | 2 | 3 | 4 | 5
Key: 1 = Date of Manufacture Code (See table below.) | 4 = Type of Gas (N = Natural; L = Propane)
 2 = Ignition Code (See Form P-Valves.) | 5 = Consecutive number
 3 = Valve Code (See Form P-Valves.)

Prefix to Serial No.
Prefix Key: E = E3 (409) Stainless Steel Heat Exchanger

Serial No. Decoding - ALL Models AFTER June, 2015
Serial No. Sample: BOF 3060 000000
Element Key No.: 1 | 2 | 3
Key: 1 = Date of Manufacture (See table below.)
 2 = Plant of Manufacture (3060 = Mercer; 3062 = Monterrey)
 3 = Consecutive number

Serial No. Date of Manufacture

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2007	BGA	BGB	BGC	BGD	BGE	BGF	BGG	BGH	BGI	BGJ	BGK	BGL
2008	BHA	BHB	BHC	BHD	BHE	BHF	BHG	BHH	BHI	BHJ	BHK	BHL
2009	BIA	BIB	BIC	BID	BIE	BIF	BIG	BIH	BII	BIJ	BIK	BIL
2010	BJA	BJB	BJC	BJD	BJE	BJF	BJG	BJH	BJI	BJJ	BJK	BJL
2011	BKA	BKB	BKC	BKD	BKE	BKF	BKG	BKH	BKI	BKJ	BKK	BKL
2012	BLA	BLB	BLC	BLD	BLE	BLF	BLG	BLH	BLI	BLJ	BLK	BLL
2013	BMA	BMB	BMC	BMD	BME	BMF	BMG	BMH	BMI	BMJ	BMK	BML
2014	BNA	BNB	BNC	BND	BNE	BNF	BNG	BNH	BNI	BNJ	BNK	BNL
2015	BOA	BOB	BOC	BOD	BOE	BOF	BOG	BOH	BOI	BOJ	BOK	BOL
2016	BPA	BPB	BPC	BPD	BPE	BPF	BPG	BPH	BPI	BPJ	BPK	BPL
2017	BQA	BQB	BQC	BQD	BQE	BQF	BQG	BQH	BQI	BQJ	BQK	BQL
2018	BRA	BRB	BRC	BRD	BRE	BRF	BRG	BRH	BRI	BRJ	BRK	BRL
2019	BSA	BSB	BSC	BSD	BSE	BSF	BSG	BSH	BSI	BSJ	BSK	BSL
2020	BTA	BTB	BTC	BTD	BTE	BTF	BTG	BTH	BTI	BTJ	BTK	BTL

Sample of Model UEAS Rating Plate

MERCER, PA. USA 16137

MADE IN MEXICO

SEPARATED COMBUSTION SYSTEM UNIT HEATER

CATEGORY IV

ANSI Z83.8 CSA 2.6 UNIT HEATER

MODEL [B] [C]

SERIAL NO.

[D] VOLTS [D] PH [D] HZ MAXIMUM TOTAL INPUT [D] AMPS

TYPE OF GAS: [E]

FOR USE AT 0-2000 FEET, 0-610 METERS OF ALTITUDE.

ORIFICE SIZE [F] DRILL

SEA LEVEL

NORMAL INPUT [J] BTU/HR

THERMAL OUTPUT CAPACITY [L] BTU/HR

MINIMUM INPUT [M] BTU/HR

NORMAL MANIFOLD PRESSURE [G] IN.W.C.

MIN. PERMISSIBLE GAS SUPPLY PRESSURE FOR PURPOSE OF INPUT ADJUSTMENT. [H] IN.W.C.

CLEARANCES TO COMBUSTIBLE CONSTRUCTION: TOP-4", FLUE CONNECTION-0", CONTROL SIDE-18", OPP. SIDE-2", BOTTOM-1", FRONT-36"

FOR ALTERNATE INSTALLATIONS USE THE LATEST EDITIONS OF THE APPROPRIATE STANDARD LISTED BELOW:

FOR AIRCRAFT HANGARS USE STANDARD ANSI/NFPA 409

FOR PARKING STRUCTURES USE STANDARD ANSI/NFPA 88A

FOR REPAIR GARAGES USE STANDARD ANSI/NFPA 88B

THIS UNIT IS NOT FOR USE WITH DUCTS.

THIS UNIT IS NOT FOR USE WITH FILTERS.

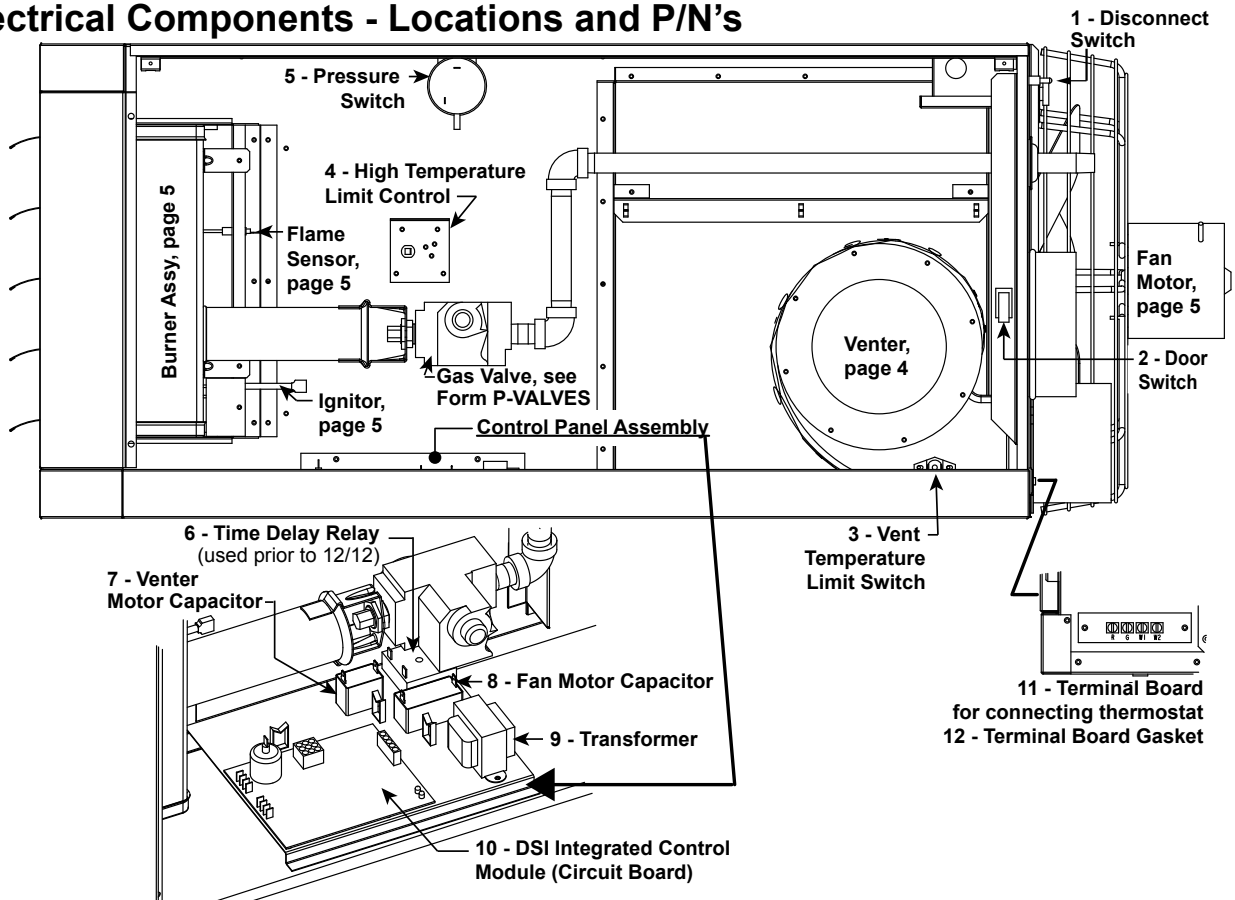
CONSTRUCTION WALL THICKNESS FOR PURPOSE OF VENTING: 1" MIN., 48" MAX.

In the event the vent temperature limit switch causes the heater to shut off. Determine and correct the cause. Failure to do so could result in personal injury or death. To reset, depress the button on the sensor located on the side of the venter housing.

Rating Plate Key:

- B = Model No.**
- C = Date of Manufacture (Month & Year)**
- D = Volts; Phase; Hertz; Input Amps**
- E = Fuel Type (natural gas or propane)**
- F = Orifice Size**
- G = Normal Manifold Pressure (inches w.c.)**
- H = Minimum Gas Supply Pressure (inches w.c.)**
- J = Normal BTUH Input (sea level)**
- L = Thermal Output BTUH (sea level)**
- M = Minimum BTUH Input (sea level)**

Electrical Components - Locations and P/N's



CODE	Description	130	180	260	310
1	Disconnect Switch	101902			
2	Door Switch	217262			
3	Vent Temperature Limit Switch	221158, Opens 145°F, manual reset			
4	High Temperature Limit Switch	45602, 180°	85449, 200°, Yellow	45602, 180°	
5	Pressure Switch (0 to 6,000 ft Altitude)	221251, Yellow	221228, Blue		
	Pressure Switch (6,001 to 10,000 ft Altitude)	235954, Green	235953, Orange		
6	Time Delay Relay (NOTE: Time delay relay is not used with DSI board P/N 269867, Serial No. Ignition Code A1 - See CODE 10 below and Serial No. Codes on page 2.)	221388			
7	Venter Motor Capacitor	195643			
8	Fan Motor Capacitor	195643			
9	Transformer	175265			
10	DSI Integrated Control Module - Circuit Board (Select by Serial No. Ignition Code)	195265 (Serial No. Ignition Code 79 - see page 2)			
		269867 (Serial No. Ignition Code A1 - see page 2)			
11	Wiring Harness	234021			

CODE 1 - On/Off Disconnect Switch, P/N 101902



CODE 3 - Vent Temperature Limit Switch, Thermodisc 36T26 73DD, P/N 221158



CODE 2 - Safety Door Switch, Carling #TA22B-TLB-B, P/N 217262



CODE 4 - High Temperature Limit Switch, See P/N by Size



CODE 5 - Pressure Switch, Honeywell, See P/N by Size



CODE 6 - Time Delay Relay, Airotronics, 24VAC, P/N 221388



See NOTE in list above.

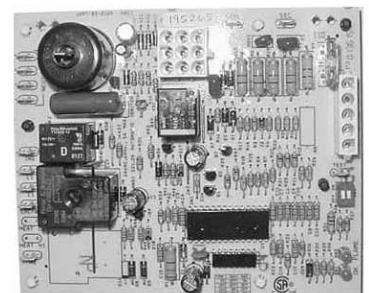
CODES 7 & 8 - Capacitor, 7.5mfd, 400VAC, P/N 195643



CODE 9 - Transformer, 120/24 volts, P/N 175265

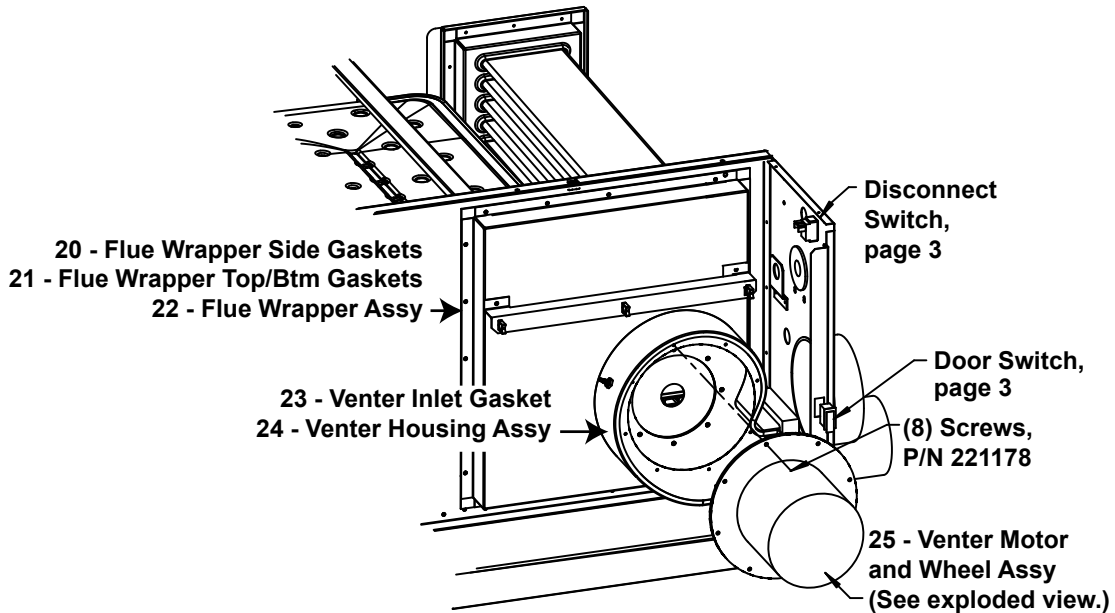


CODE 10 - DSI Control Module, P/N 195265, Serial No. Code 79 or P/N 269867, Serial No. Code A1

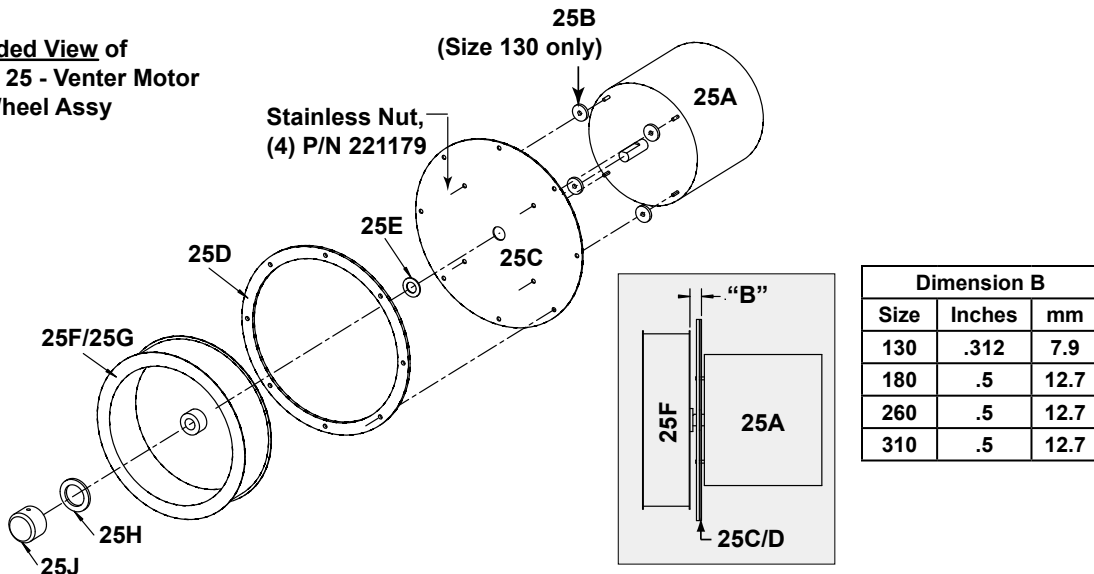


Flue Wrapper and Venter Components

CODE	Description	130	180	260	310
20	Flue Wrapper Side Gaskets	(2) 221198		(2) 221199	
21	Flue Wrapper Top/Bottom Gaskets		(2) 221200		
22	Flue Wrapper	220823		220824	
23	Venter Housing Gasket		221164		
24	Venter Housing Assembly (includes CODE 24A and CODE 3, Vent Temperature Limit)		221520		
24A	Static Pressure Tap		116043		
25	Venter Motor and Wheel Assembly	222648		221240	
25A	Venter Motor, A.O. Smith F48Y67A13		221159		
25B	Flat Washer		(4) 204323		
25C	Motor Plate		221162		
25D	Motor Plate Gasket		221163		
25E	Slinger (smooth side must be flush against the motor plate)		221861		
25F	Venter Wheel		221172		
25G	Venter Wheel Housing		221173		
25H	Shaft Protector Gasket		221161		
25J	Shaft Protector		221160		
25K	Setscrew		222077		

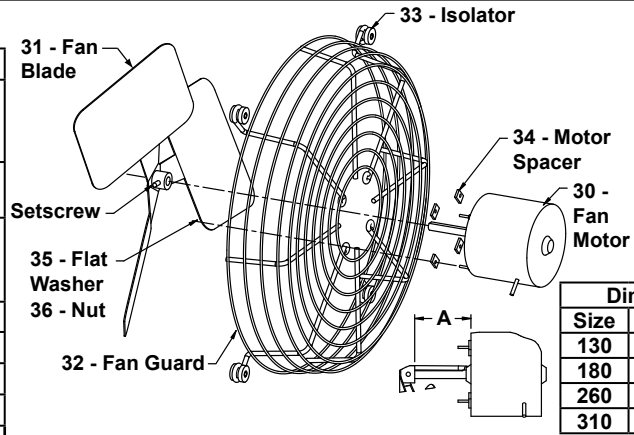


**Exploded View of
CODE 25 - Venter Motor
and Wheel Assy**



Fan and Motor Components

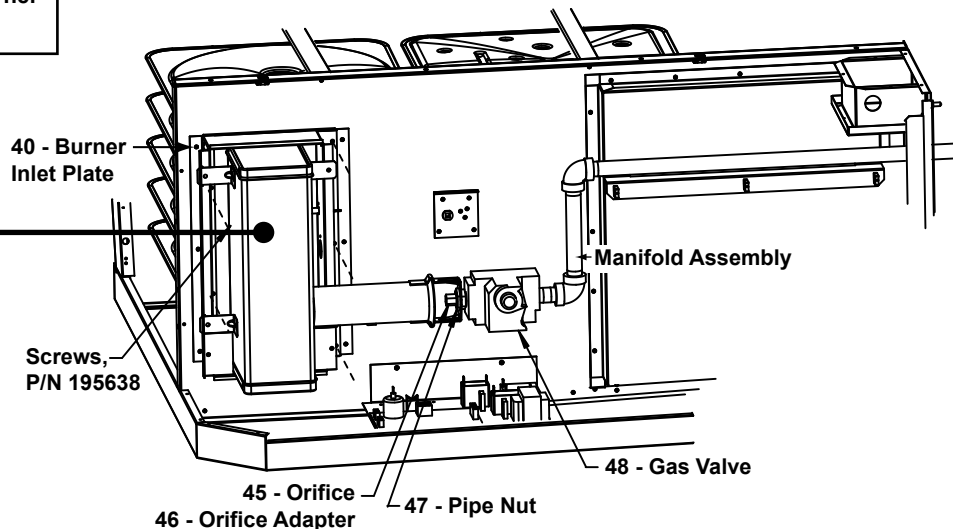
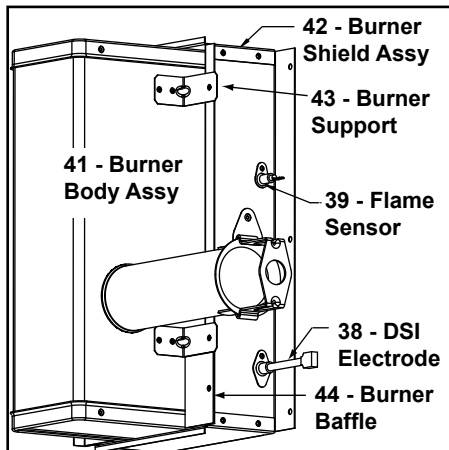
CODE	Description	130	180	260	310
30	Fan Motor	115V	271461 (replaces 196246)	196247	
		115V, AL14 (enclosed)	196824	196825	
31	Fan Blade (Setscrew torque 130±10 in/lbs)	195680	195683	209121	
32	Fan Guard	170084	170086		
33	Isolator	(4) 196348			
34	Motor Spacer	N/A	204321		
35	Flat Washer	(4) 204323			
36	Lock Nut	(4) 271462	(4) 216942		



Dimension A		
Size	inches	mm
130	2-3/8	60
180	2-3/8	60
260	2	51
310	1-3/8	35

Burner and Components and Conversion Kits

CODE	Description	130	180	260	310	
38	DSI Electrode	175272				
39	Flame Sensor	195292				
40	Burner Inlet Plate	221165	221166	221167	221168	
41	Burner Body Assembly	221476	195238	195241	195243	
42	Burner Shield Assembly	195528	195529	195532	195534	
43	Burner Supports	(4) 196598				
44	Burner Baffle	(2) 197238			N/A	
45	Natural Gas Orifice	P/N	211851	221263	196894	221264
		Marking	#3	6.2MM	7.6MM	0
	Propane Orifice	P/N	120415	221265	196902	196903
		Marking	3.3MM	25	14	8
46	Orifice Adapter	165701		194809		
47	Pipe Nut, 1/2"	165702				
48	Natural Gas Valve	260603		196981		
49	Natural to Propane Conversion Kit	Select Kit by Size & Valve Code - See page 2.				
		Valve Code	Y2 or Z7		Y3 or Z8	
		Kit P/N	221442	221443	221444	221445
		Valve Code	6E			
	Kit P/N	261647	261648			



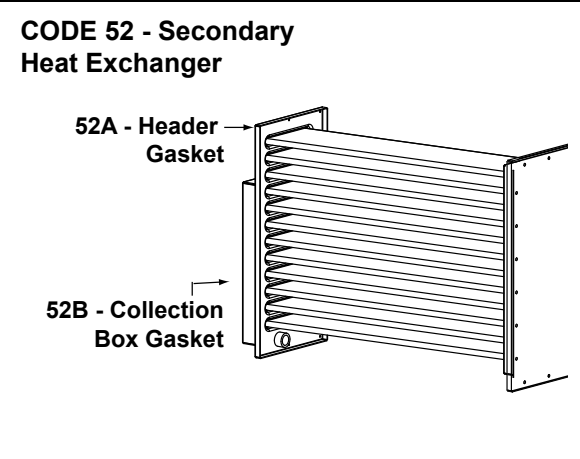
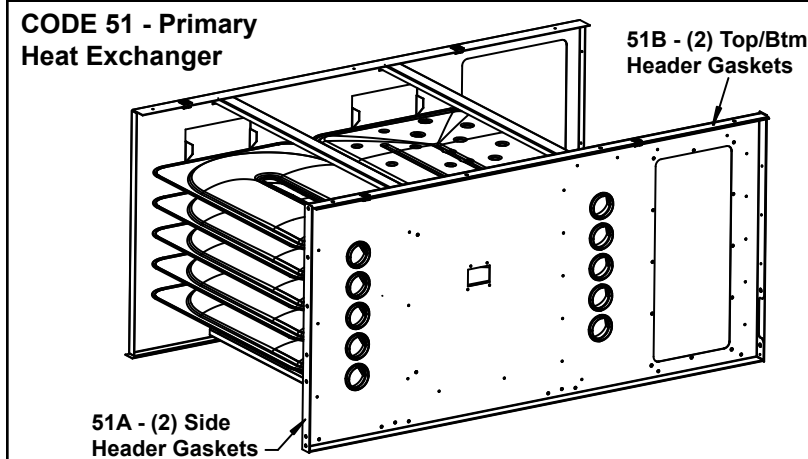
CODE 50 - Manual Shutoff Valve (Same as Option CE1)



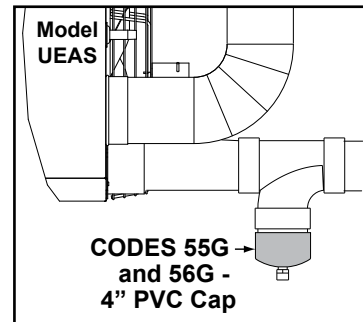
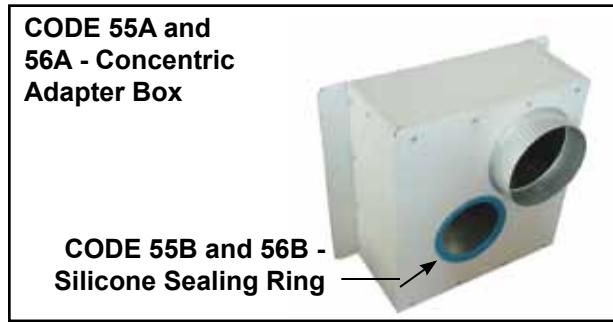
Size	130, 180	260, 310
Option Pkg	15971	15972
Manual Shutoff Valve	196910, 1/2"	196911, 3/4"
Union	1224, 1/2"	1101, 3/4"

Replacement Heat Exchangers

CODE	Description	130	180	260	310
51	Primary Heat Exchanger Assembly with drain assembly	221318	221319	221320	221321
51A	Top/Bottom Header Gaskets	(2) 221201		(2) 221202	
51B	Side Header Gaskets	(2) 221203		(2) 221204	
51C	Replacement HTEX Drain Kit	235368			
52	Secondary Heat Exchanger Assembly	221256	221257	221258	221259
52A	Secondary Heat Exchanger Header Gasket	220804		220805	
52B	Collection Box Gasket	221187			

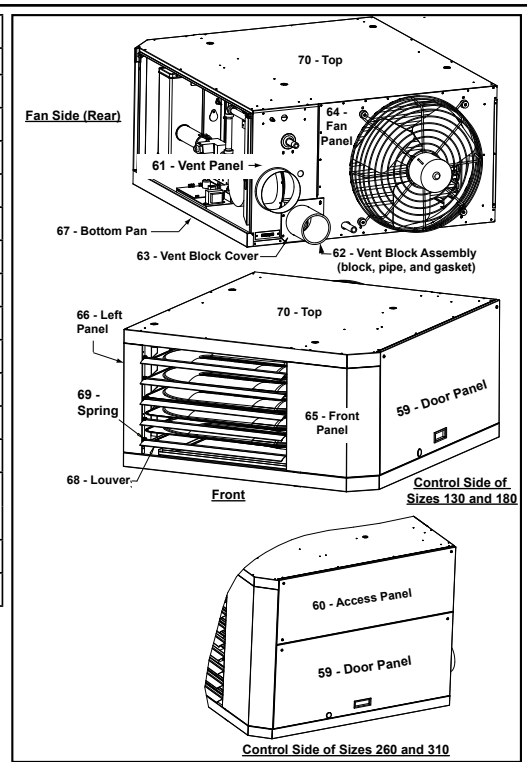


Vent / Combustion Air Components for Separated Combustion



Cabinet Parts

CODE	Description	130	180	260	310
59	Door Assembly	220833		220834	
60	Access Panel (above the door)	N/A		220822	
61	Vent Panel Assy	220825		220826	
62	Vent Block Assembly	221518			
62A	Vent Block Gasket	221516 (part of Code 62)			
63	Vent Block Cover Assembly	221519			
64	Fan Panel	220759		220760	
65	Front Panel	201692		201694	
66	Left Panel	220753		220754	
67	Bottom Pan	220827		220828	
68	Louvers	(5) 195578		(10) 195578	
69	Louver Spring	(5) 195046		(10) 195046	
70	Top Panel	220755		220756	
71	T-CORE ³ Logo (see illustration on front cover)	221183			
73	Cabinet Touchup Paint	201805, 11 oz spray can, White			
74	Horizontal Louver Paint	207432, 12 oz aerosol can, Maroon			

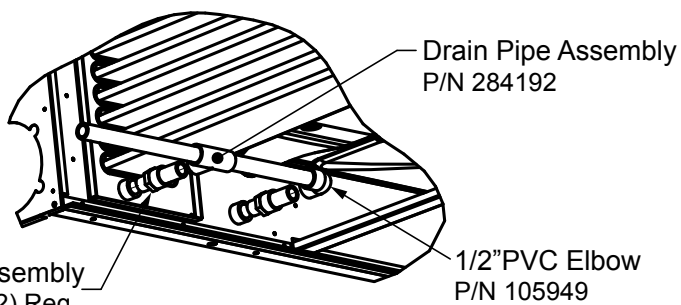


Replacement Heat Exchangers Condensate Drain Kit P/N 235368

INSTALLATION INSTRUCTIONS:



1. Turn off the gas and power.
2. Remove the old primary heat exchanger.
3. Remove the drain assembly from the secondary heat exchanger.
4. Install the new primary heat exchanger.
5. Thread one drain stub assembly into the half coupling on the new primary heat exchanger.
6. Thread the other drain stub assembly into the half coupling on the secondary heat exchanger.
7. Install the 1/2" PVC elbow and drain pipe assembly using PVC cleaner and solvent.
8. Turn on the gas and power and check for operation according to the Installation manual.

Kit Contents		
P/N	Description	Qty
105949	1/2" PVC Elbow	1
221245	Drain Stub Assembly	2
284192	Drain Pipe Assembly	1





Drain Stub Assembly
P/N 221245 - (2) Req

CODE 55 - Complete Horizontal Vent/Combustion Air Terminal Kit (Same as Option CC6), P/N 221247

CODE	Qty	P/N	Description
55A/B	1	221069	Concentric Adapter Box with Silicone Sealing Ring (above)
55C	1	221089	Bird Screen for Exhaust Outlet 
55D	1	124940	Ring Guard for Air Inlet 
55E	4	37661	#10-16x1/2" lg Screws to attach the inlet air guard
55F	4	221186	Spacers for inlet air guard
55G	1	221091	4" PVC Cap for Vent Condensate Drain Connection (above)

CODE 56 - Complete Vertical Vent/Combustion Air Kit (Same as Option CC2), P/N 221248

CODE	Qty	P/N	Description
56A/B	1	221069	Concentric Adapter Box with Silicone Sealing Ring (above)
56C	1	221215	Bird Guard 
56D	2	37661	Screws for Bird Guard. #10x1/2" self-drilling
56E	1	221250	Combustion Air Inlet 
56F	1	221185	Rain Collar 
56G	1	221091	4" PVC Cap for Vent Condensate Drain Connection (above)

CODE 80 - Hanger Kit (Same as Option CK10)

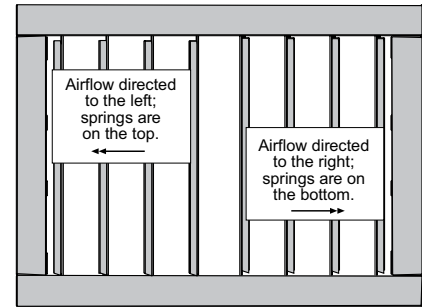
Option CK10 - Four-point Suspension



Size	All
Option CK10 Pkg P/N	98511
Swivel Connector Assembly	(4) 17627
3/8" Lock Washer	(8) 5197
3/8" Hex Nuts	(4) 1438

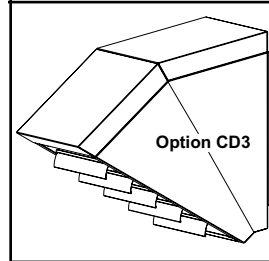
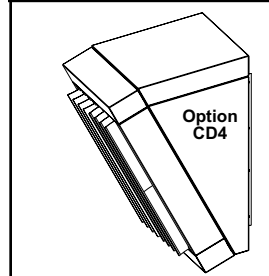
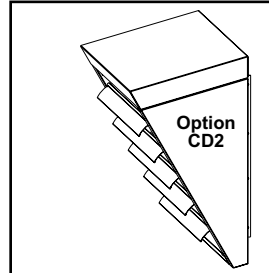
CODE 90 - Vertical Louvers (Same as Option CD1)

Size	130, 180	260, 310
Option Pkg P/N	201199	201201
<i>Components</i>		
Louver Frame Top & Bottom	(2) 197189	(2) 197190
Louver Frame Sides	(2) 197186	(2) 197188
Screws, #8-18 x 3/8" long, AB point, slotted indented serrated hex washer head	(20) 195638	
Louvers	(8) 196572	(8) 195315
Compression Springs	(8) 195046	





CODE 91 - Downturn Nozzles (Same as Option CD2, CD3, and CD4)

Size	130, 180	260,310
Option CD2 Pkg P/N	201202	201204
Nozzle Section Right Side	(1) 197173	(1) 197175
Nozzle Section Left Side	(1) 197176	(1) 197178
Nozzle Section Top	(1) 197170	(1) 197172
Nozzle Bracket	(2) 201708	(2) 201709
Nozzle Section Bottom	(1) 196997	(1) 197179
Screws, #8-18 x 3/8" long AB point, slotted indented serrated hex washer head	(16) 195638	
Option CD4 Pkg P/N	201208	201210
Same components as Option CD2 above PLUS		
Vertical Louver	(8) 196572	(8) 195315
Compression Spring	(8) 195046	
Louver Top and Bottom Support	(2) 197189	(2) 197190
Louver Frame Side	(2) 197186	(2) 197188
Screws, #8-18 x 3/8" long AB point, slotted indented serrated hex washer head	(28) 195638	
Option CD3 Pkg P/N	201205	201207
Nozzle Section Right Side	(2) 197173	(2) 197175
Nozzle Section Left Side	(2) 197176	(2) 197178
Nozzle Section Top	(2) 197170	(2) 197172
Nozzle Bracket	(2) 201708	(2) 201709
Nozzle Section Bottom	(2) 196997	(2) 197179
Screws, #8-18 x 3/8" long AB point, slotted indented serrated hex washer head	(30) 195638	



CODE 92 - Thermostat and Cover (Same as Option CL1 and CM1)

1-stage Thermostat, 24 volt, with fan switch, P/N 255350 (Same as Option CL1)	
P/N 257464, Clear Plastic, Locking, Thermostat Cover, 6x5x2-1/2 (inside) (Same as Option CM1)	

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

© Nortek Global HVAC, LLC 2015. All rights reserved.

All marks are the property of their respective organizations.

O'Fallon, MO I Printed in U.S.A. (11/15)

Form P-UEAS (11-15), P/N 269865R6