



R96VA

Parts List
27-September-2014



*This parts list is current as of the above revision date.
See <http://www.rheempartslists.net/92-42800-R96VA.pdf> for the current revision.*

95% Gas Furnaces - 2 Stage

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MODEL EXPLANATION

R	9	6	V	A	0	4	0	2	3	1	7	M	S	A
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)				

- | | |
|---|---|
| <p>(1) TRADEBRAND IDENTIFICATION</p> <p>(2) SERIES
96 % Efficient</p> <p>(3) MOTOR TYPE

V = Variable Speed</p> <p>(4) MAJOR REVISION

A = 1st Design Series</p> <p>(5) HEATING INPUT DESIGNATION
040 = 42,000 BTU/HR
060 = 56,000 BTU/HR
070 = 70,000 BTU/HR
085 = 84,000 BTU/HR
100 = 98,000 BTU/HR
115 = 112,000 BTU/HR</p> <p>(6) STAGE - TWO (2)</p> | <p>(7) AIRFLOW
3 = Up to 3 tons
5 = Up to 5 tons</p> <p>(8) CABINET WIDTH
14 = 14.0 inch
17 = 17.5 inch
21 = 21.0 inch
24 = 24.5 inch</p> <p>(9) CONFIGURATION
M = Multi-Position</p> <p>(10) STANDARD/NOx

S = Standard

N = NOx</p> <p>(11) MINOR REVISION
A = First Time Release
B = First Revision</p> |
|---|---|

SERIAL NUMBER EXPLANATION

W	0	8	1	3	9	9	9	9
(1)	(2)	(3)	(4)					

- (1) PLANT CODE**
- (2) WEEK (DATE CODE)**
- (3) YEAR**
- (4) PRODUCTION NUMBER**

Note: For Gas Code, see Control System Gas Code on Rating Plate

No.	Notes	MODEL	R96VA	R96VA	R96VA	R96VA
		INPUT	060	070	085	100
		STAGE	2	2	2	2
		AIRFLOW	3	3	5	5
		CABINET WIDTH	17	17	21	21
		CONFIGURATION	MSA	MSA	MSA/MSB	MSA
PANELS, SHEET METAL, AND MISCELLANEOUS						
1		Jacket Assembly	See Note 1			
1a		Round Flush Mount Plug - 7/8 in. (6)	45-103596-06	45-103596-06	45-103596-06	45-103596-06
1b		Rectangular Flush Mount Plug - 1-27/32 x 2-1/2 in. (3)	45-104315-01	45-104315-01	45-104315-01	45-104315-01
1c		Round Flush Mount Plug - 2 in.	45-103596-03	45-103596-03	45-103596-03	45-103596-03
1d		Round Flush Mount Plug - 2-3/8 in.	45-103596-04	45-103596-04	45-103596-04	45-103596-04
1e		Round Flush Mount Plug - 3-7/16 in.	45-103596-01	45-103596-01	45-103596-01	45-103596-01
1f		Star Bushing	45-18515-01	45-18515-01	45-18515-01	45-18515-01
1g		Vinyl Grommet - 7/8 in.	56-22114-06	56-22114-06	56-22114-06	56-22114-06
1h		Insulation - Foil Back	68-103536-01	68-103536-01	68-103536-02	68-103536-02
1i		Insulation - Sound	68-103537-01	68-103537-01	68-103537-02	68-103537-02
1j		Insulation Retainer (2)	AE-67925-01	AE-67925-01	AE-67925-01	AE-67925-01
2a		Top Plate Assembly	AS-104134-01	AS-104134-01	AS-104134-02	AS-104134-02
2b		Left Jacket Baffle	AE-104192-03	AE-104192-01	AE-104192-04	AE-104192-01
2c		Right Jacket Baffle	AE-104191-03	AE-104191-01	AE-104191-04	AE-104191-01
2d		Rear Jacket Baffle	AE-104190-01	AE-104190-01	AE-104190-02	AE-104190-02
3		Burner Compartment Door - Upper Door	AS-104040-01	AS-104040-01	AS-104040-02	AS-104040-02
4		Blower/Filter Door - Lower Door	AS-104041-01	AS-104041-01	AS-104041-02	AS-104041-02
		Door Latch Kit (includes two of each: Latch Cam, Latch Handle, O-Ring, Retainer Screw)	PD644035	PD644035	PD644035	PD644035
		Sight Glass - Door	68-21893-04	68-21893-04	68-21893-04	68-21893-04
5		Control Board Mounting Plate	AE-103589-01	AE-103589-01	AE-103589-01	AE-103589-01
6a		Junction Box	AE-61475-03	AE-61475-03	AE-61475-03	AE-61475-03
6b		Junction Box Cover	AE-61476-03	AE-61476-03	AE-61476-03	AE-61476-03
7		Transition - Outlet Air	68-104133-02	68-104133-02	68-104133-02	68-104133-02
8		Transition - Gasket	68-24022-03	68-24022-03	68-24022-03	68-24022-03
9		Transition - Outlet Air Elbow	68-104145-03	68-104145-03	68-104145-03	68-104145-03
9a		Exhaust Coupling	68-104146-02	68-104146-02	68-104146-02	68-104146-02
9b		Rubber Plug	56-104377-01	56-104377-01	56-104377-01	56-104377-01
9c		Bushing - Inducer Coupling Insert (2)	68-104520-01	68-104520-01	68-104520-01	68-104520-01
9d		Coupling - IDB	PD703024	PD703024	PD703024	PD703024
10	Stk	Water Trap - Condensate Drain	68-104346-01	68-104346-01	68-104346-01	68-104346-01
11a		Drain Tube (from Collector Box)	AE-61737-06	AE-61737-06	AE-61737-06	AE-61737-06
11b		Drain Tube D (from Outlet Air Elbow)	79-104393-01	79-104393-01	79-104393-01	79-104393-01
11c		Drain Tube A (from Condensate Trap)	79-104394-01	79-104394-01	79-104394-01	79-104394-01
11d		Hose Clamp (5/8 in. for Drain Tube A)	64-104619-01	64-104619-01	64-104619-01	64-104619-01
11e		Water Trap Mounting Bracket	AE-104385-01	AE-104385-01	AE-104385-01	AE-104385-01
11f		Rubber Plug	56-104377-01	56-104377-01	56-104377-01	56-104377-01
12a		Bottom Plate Assembly	AS-104314-01	AS-104314-01	AS-104314-02	AS-104314-02
12b		Solid Bottom Assembly	AS-104772-01	AS-104772-01	AS-104772-02	AS-104772-02
12c		Blower Shelf Assembly (includes items 12d, 12e, 12f)	AS-104135-01	AS-104135-01	AS-104135-02	AS-104135-02
12d		Bracket Door Mounting	AE-104332-01	AE-104332-01	AE-104332-02	AE-104332-02
12e		Round Flush Mount Plug - 2-3/8 in. (2)	45-103596-04	45-103596-04	45-103596-04	45-103596-04
12f		Support - Heat Exchanger	AE-104127-01	AE-104127-01	AE-104127-02	AE-104127-02
12g		Gasket - Blower Shelf	68-104382-01	68-104382-01	68-104382-02	68-104382-02
12h		Gasket - Door	AE-61951-54	AE-61951-54	AE-61951-55	AE-61951-55
20		Pressure Switches	See Electrical Group			
a,b		Door Switch - Push Button	See Electrical Group			
21		Limit - Main Limit (Heat Exchanger Panel)	See Electrical Group			
22		Limit - Manual Reset (Burner Compartment)	See Electrical Group			
23		Transformer	See Electrical Group			
24		Induced Draft Blower (IDB)	See Electrical Group			
25a		Wiring Harness Assembly (Twist-Lock)	See Electrical Group			
29a		Blower Assembly	See Blower Group			
30		Housing w/Blower Wheel	See Blower Group			
31a		Heat Exchanger Assembly	See Heat Exchanger/Burner/Manifold Group			
40		O-Ring (fits over tap and seats on Collector Box)	See Heat Exchanger/Burner/Manifold Group			
41f		Burner Assembly	See Heat Exchanger/Burner/Manifold Group			
42		Manifold (w/o Orifices)	See Heat Exchanger/Burner/Manifold Group			
47		Gas Valve	See Gas Controls			
50		Integrated Furnace Control Board (IFC)	See Gas Controls			
51		Touch-up Paint - Granite/Steel Gray (Aerosol)	PD523018	PD523018	PD523018	PD523018
		Touch-up Paint - Granite/Steel Gray (Paint Pens)	PD523019	PD523019	PD523019	PD523019

No.	Notes	MODEL INPUT STAGE AIRFLOW CABINET WIDTH CONFIGURATION	R96VA All All All All All			
PARTS BAG						
	Stk	Complete Parts Bag (includes items 1 - 8)	68-104446-01			
1		Intake Coupling / Locknut Assy with O-Ring (2 in.)	68-24114-02			
2		Air Diffuser	68-104515-01			
3		Bulkhead Coupling	68-104005-01			
4		Hose Clamp (5/8 in.) (3)	64-103686-03			
5		Shorty Plug (1/4 in.)	45-24125-01			
6		Screw (2)	63-24368-03			
7		PVC Vane	68-23473-01			
8		Tube C	79-105213-01			
9		Hose - Double Elbow	79-105212-01			

No.	Notes	MODEL INPUT STAGE AIRFLOW CABINET WIDTH CONFIGURATION	R96VA All All All All All			
CONVERSION KIT						
	Stk	Conversion Kit (includes items 1 - 11)	RXGY-CK			
1		Pipe Grommet (2-3/8 in.)	56-22114-08			
2		Screw (#8 x 1/2 in.) (4)	63-24368-03			
3		EPDM Trap Plug (.559 in.)	56-104377-02			
4		Vinyl Cap (1/2 in.)	56-103685-02			
5		Flush Mount Plug - (2-5/8 in.)	45-103596-05			
6		Drain Hose (Hose B - 5/8 in.)	79-104394-02			
7		Drain Hose (Hose E - 1/2 in.)	79-104393-02			
8		Vent Tube (1/4 in.)	AE-61737-36			
9		Condensate Trap Bracket (Down Flow)	AE-104363-01			
10		Condensate Trap Gasket	68-104151-01			
11		Drain Hose (Hose F - 1/2 in.)	79-104393-03			

No.	Notes	MODEL INPUT STAGE AIRFLOW CABINET WIDTH CONFIGURATION	R96VA All All All All All			
ZERO CLEARANCE DOWNFLOW KIT						
	Stk	Zero Clearance Downflow Kit (includes items 1 - 5)	RXGY-ZK			
1		Screw (#8 x 1/2 in.) (10)	63-24368-03			
2		Pipe Collar Gasket Assembly	68-103580-03			
3		Drain Hose (Hose G - 1/2 in.)	79-104393-04			
4		Air Intake Pipe	68-104074-01			
5		Flue Pipe Assembly w/O-ring	68-104193-01			

No.	Notes	MODEL INPUT STAGE AIRFLOW CABINET WIDTH CONFIGURATION	R96VA	R96VA	R96VA	R96VA
			060 2 3 17 MSA	070 2 3 17 MSA	085 2 5 21 MSA/MSB	100 2 5 21 MSA
ELECTRIC GROUP						
20a	Stk	Pressure Switch Assembly (High Fire)	42-102070-05	42-102070-05	42-102070-18	42-102070-14
20b	Stk	Pressure Switch Assembly (Low Fire)	42-102069-06	42-102069-06	42-102069-06	42-102069-06
20c		Silicon Tubing - Pressure Switch	AE-61737-20	AE-61737-20	AE-61737-20	AE-61737-20
20d		Tee	79-22461-02	79-22461-02	79-22461-02	79-22461-02
20e		Silicon Tubing - Pressure Switch	AE-61737-06	AE-61737-06	AE-61737-06	AE-61737-06
20f		Silicon Tubing - Pressure Switch	AE-61737-23	AE-61737-23	AE-61737-23	AE-61737-23
21		Door Switch - Push Button	42-22692-09	42-22692-09	42-22692-09	42-22692-09
22	Stk	Limit - Main Limit (Heat Exchanger Panel)	47-104465-01	47-104465-01	47-104465-01	47-104465-01
23	Stk	Limit - Manual Reset (Burner Compartment)	47-22861-04 (2)	47-22861-04 (2)	47-22861-04 (2)	47-22861-04 (2)
		Bracket (Limit - Manual Reset)	See Heat Exchanger/Burner Manifold Group			
24	Stk	Transformer	46-102856-02	46-102856-02	46-102856-02	46-102856-02
25a	Stk	IDB - Induced Draft Blower (with Gasket)	70-104157-03	70-104157-03	70-104157-03	70-104157-03
25b		Gasket - Induced Draft Blower	68-104152-01	68-104152-01	68-104152-01	68-104152-01
25c		Capacitor - Induced Draft Blower	43-25134-35	43-25134-35	43-25134-35	43-25134-35
26		Power Factor Choke (PFC)	N/A	N/A	46-24256-05	46-24256-05
		Memory Module for IFC	47-104778-01	47-104778-02	47-104778-03	47-104778-04
		Wiring Assembly (2 pin jumper for PFC)	45-104318-01	45-104318-01	N/A	N/A
		Wiring Harness Assembly (5 pin from motor to 2 pin on PFC)	45-104317-01	45-104317-01	45-104317-01	45-104317-01
29a		Wiring Harness Assembly (Twist-Lock)	45-104202-01	45-104202-01	45-104202-01	45-104202-01
29b		Wire Assembly (Junction Box to Twist Lock)	45-24371-58	45-24371-58	45-24371-58	45-24371-58
52		Flame Sensor	See Gas Controls			
		Water Sensor (2)	See Heat Exchanger/Burner Manifold Group			
53		Spark Ignitor	See Gas Controls			

No.	Notes	MODEL INPUT STAGE AIRFLOW CABINET WIDTH CONFIGURATION	R96VA	R96VA	R96VA	R96VA
			060 2 3 17 MSA	070 2 3 17 MSA	085 2 5 21 MSA/MSB	100 2 5 21 MSA
BLOWER GROUP						
30	Stk	Blower Assembly (Includes items listed below):	AS-104532-01	AS-104532-01	AS-104532-02	AS-104532-02
31a		Housing w/Blower Wheel	70-104182-05	70-104182-05	70-104182-07	70-104182-07
31b	Stk	Blower Wheel	PD703027	PD703027	PD703028	PD703028
32	Stk	Blower Motor	51-102602-01	51-102602-01	51-102603-01	51-102603-01
	Stk	Belly Band Motor Mount Kit (includes Motor Mount Arms, Belly Band and Mounting Hardware)	AS-53148-91	AS-53148-91	AS-53148-91	AS-53148-91
33		ECM Motor Mount (Belly Band)	70-19927-04	70-19927-04	70-19927-04	70-19927-04
34		Motor Mount Arm (4)	70-19929-10	70-19929-10	70-19929-10	70-19929-10
35		Screw - Motor Mount Arm (4)	63-101978-01	63-101978-01	63-101978-01	63-101978-01

No.	Notes	MODEL INPUT STAGE AIRFLOW CABINET WIDTH CONFIGURATION	R96VA	R96VA	R96VA	R96VA
			060 2 3 17 MSA	070 2 3 17 MSA	085 2 5 21 MSA/MSB	100 2 5 21 MSA
HEAT EXCHANGER, BURNER / MANIFOLD GROUP						
40	Stk	Heat Exchanger Assembly	AS-104120-10	AS-104120-31	AS-104120-18	AS-104120-19
40	Stk	Heat Exchanger Assembly - Option 321 Models (Stainless Steel Primary Burner Tubes)	AS-104900-01	AS-104900-02	AS-104900-03	AS-104900-04
41a	Stk	Collector Box Kit (includes Collector Box Gasket, Rubber Plugs, Water Sensors, O-Ring, Vinyl Cap, IDB Gasket and Mounting Screws)	68-104111-95	68-104111-96	68-104111-97	68-104111-98
41b	Stk	Collector Box Gasket	68-103546-03	68-103546-03	68-103546-02	68-103546-02
41c		Rubber Plug (2)	56-104377-01	56-104377-01	56-104377-01	56-104377-01
41d		Vinyl Cap	56-103685-01	56-103685-01	56-103685-01	56-103685-01
41e	Stk	Water Sensor (2)	47-104184-01	47-104184-01	47-104184-01	47-104184-01
41f		O-Ring (fits over tap and seats on Collector Box)	68-104386-02	68-104386-02	68-104386-02	68-104386-02
42		Burner Assembly (Rack, Cover, Burner Halves, Ignitor Bracket)	AS-104123-02	AS-104123-03	AS-104123-04	AS-104123-05
43		Burner Rack (One Piece Assembly)	AE-104121-02	AE-104121-03	AE-104121-04	AE-104121-05
44		Burner Rack Cover	AE-104122-02	AE-104122-03	AE-104122-04	AE-104122-05
44a		Screw - Burner Cover (2)	63-22153-01	63-22153-01	63-22153-01	63-22153-01
45		Igniter Bracket	AE-61885-02	AE-61885-02	AE-61885-02	AE-61885-02
45a		Bracket (Limit - Manual Reset)	N/A	N/A	N/A	N/A
46	Stk	Burner	AS-61984-04	AS-61984-05	AS-61984-06	AS-61984-07
46a		Screw - Burner to Burner Rack	63-22153-05 (6)	63-22153-05 (7)	63-22153-05 (8)	63-22153-05 (9)
47		Manifold (w/o Orifices)	81-104526-02	81-104526-03	81-104526-04	81-104526-05
		Burner Orifice - Natural Gas	See Orifice Selection Chart			
		Burner Orifice - LP	See Orifice Selection Chart			
		Number of Orifices	(4)	(5)	(6)	(7)

No.	Notes	MODEL GAS CODE	RFQA			
			JE			
GAS CONTROLS						
50	Stk	Gas Valve - Natural Gas	60-101921-05			
	Stk,2	Gas Valve - LP	See Note 2			
51	Stk	Integrated Furnace Control Board (IFC)	62-104061-01			
		Memory Module for IFC	See Electrical Group			
52	Stk	Flame Sensor	62-23543-08			
53	Stk	Spark Ignitor	62-24141-05			
	Stk	LP Conversion Kit - U.S./Canadian Models	FP-34			

90% GAS FURNACE - ORIFICE SELECTION CHART - NATURAL GAS

CAUTION: Selection of the correct Natural Gas Orifice requires the following information for the specific installation:

1) Altitude in of the installation (ft.).

2) Average sea level energy content of the Natural Gas fuel from the local supplier (BTU/cu. ft.).

For detailed information and instructions for Orifice selection, see the Gas Furnace LP Conversion Kit Index 92-21519-69 and the latest edition of the National Fuel Gas Code Handbook, or the National Standard of Canada, Natural Gas and Propane Installation Code, CAN B149.1.

CAUTION: This information is provided for replacement purposes and altitude adjustment of rates other than 0 - 2000 feet only.

NOTE: This Orifice sizing chart is based on 14,000 BTU/HR per burner at sea level and conforms to a 4% degradaton per thousand feet in elevation.

NOTE: Factory installed orifices are calculated and sized based on a Natural Gas heating value of 1100 BTU/cu. ft. and an elevation of 0 - 2000 ft.

Energy Value (BTU/cu. ft.)	Elevation (ft.)							
	0 - 1999	2000 - 2999	3000 - 3999	4000 - 4999	5000 - 5999	6000 - 6999	7000 - 7999	8000 - 8999
850	62-22175-48	62-22175-49	62-22175-49	62-22175-49	62-22175-50	62-22175-50	62-22175-50	62-22175-51
900	62-22175-49	62-22175-50	62-22175-50	62-22175-51	62-22175-51	62-22175-51	62-22175-52	62-22175-52
975	62-22175-50	62-22175-51	62-22175-52	62-22175-52	62-22175-52	62-22175-52	62-22175-53	62-22175-53
1075	62-22175-51	62-22175-51	62-22175-52	62-22175-52	62-22175-52	62-22175-52	62-22175-53	62-22175-53
1170	62-22175-52	62-22175-52	62-22175-53	62-22175-53	62-22175-53	62-22175-53	62-22175-53	62-22175-54

90% GAS FURNACE - ORIFICE SELECTION CHART - LP

CAUTION: Selection of the correct LP Orifice requires the altitude of the specific installation (ft.).

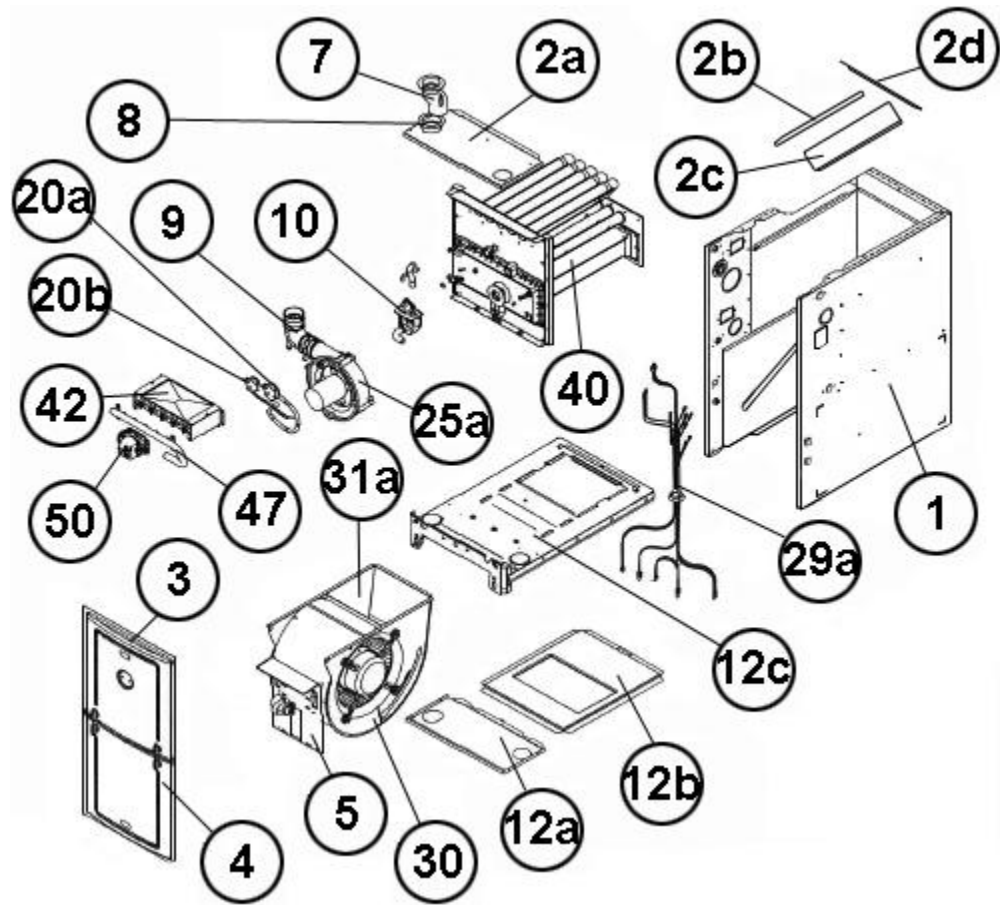
For detailed information and instructions for Orifice selection, see the Gas Furnace LP Conversion Kit Index 92-21519-69 and the latest edition of the National Fuel Gas Code Handbook (NFG), or the National Standard of Canada, Natural Gas and Propane Installation Code, CAN B149.1.

CAUTION: This information is provided for replacement purposes only. Conversion to LP or for operation at High Altitude should be done using the kit(s) specified on the product specification sheet for the unit.

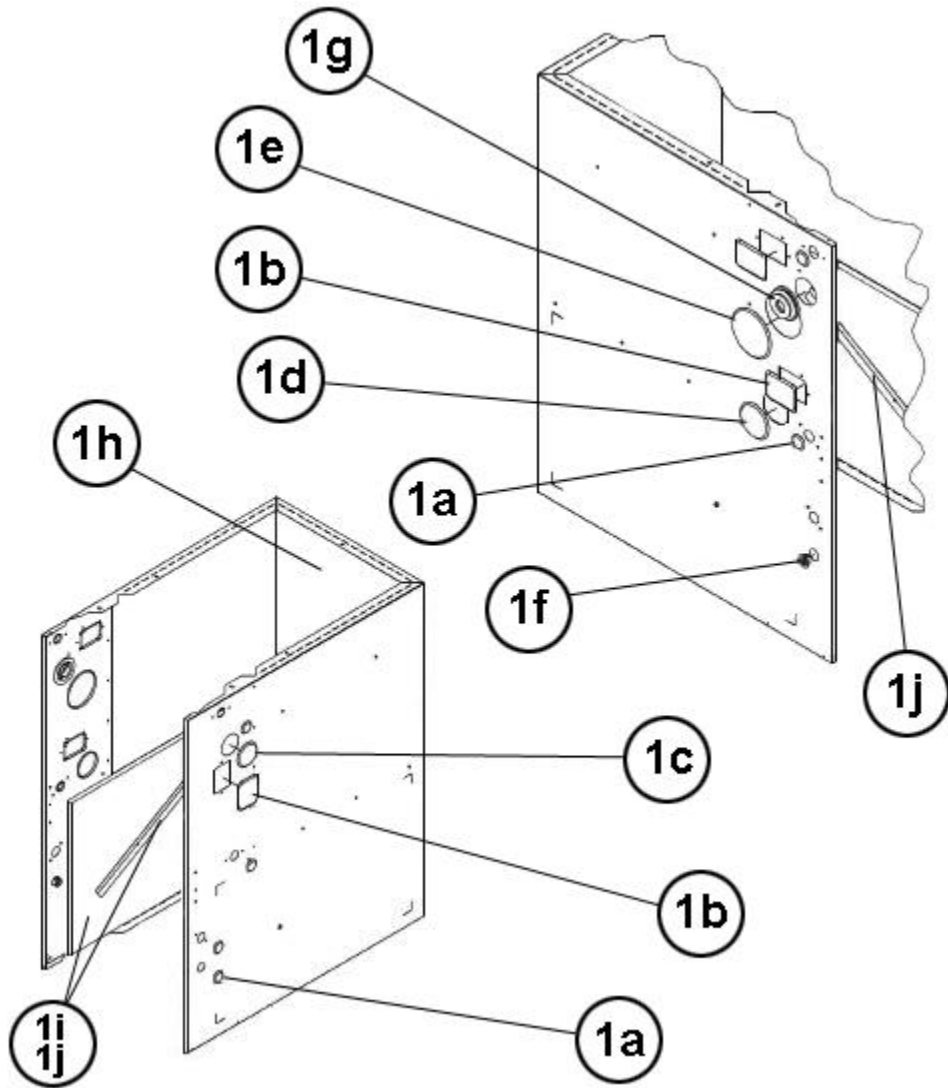
NOTE: This Orifice sizing chart is based on 14,000 BTU/HR per burner. Also, the chart is developed using the specified pressure setting of 10 in. water column instead of the 11.0 in water column used by the NFG and CANB149.1.

NOTE: Orifices supplied in the LP Conversion Kit are calculated and sized based on an altitude of 0 - 2000 ft.

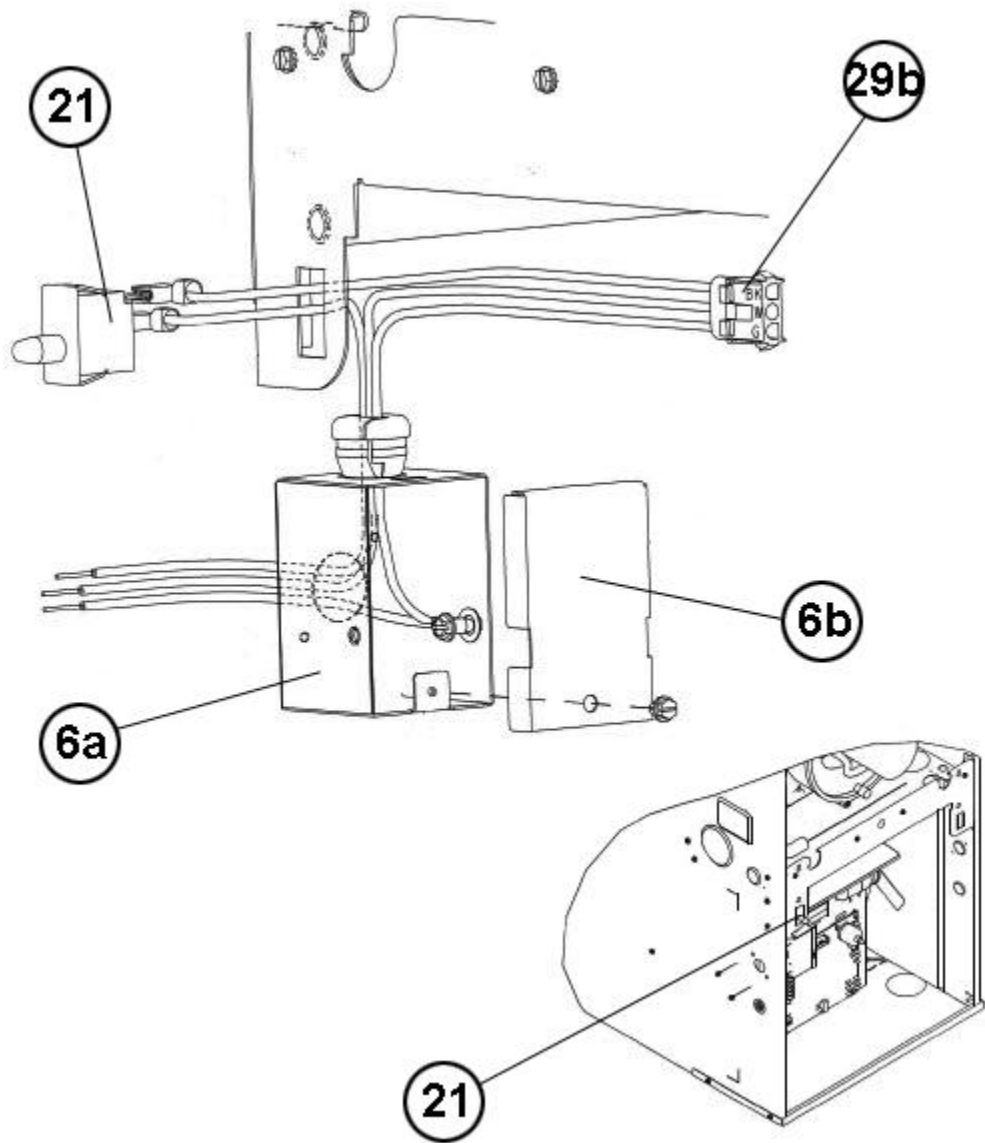
Elevation (ft.)	Orifice							
0 to 2000 ft.	62-22175-90							
2001 to 3000	62-22175-58							
3001 to 4000	62-22175-59							
4001 to 5000	62-22175-59							
5001 to 6000	62-22175-60							
6001 to 7000	62-22175-60							
7001 to 8000	62-22175-61							
8001 to 9000	62-22175-62							
9001 to 10000	62-22175-63							



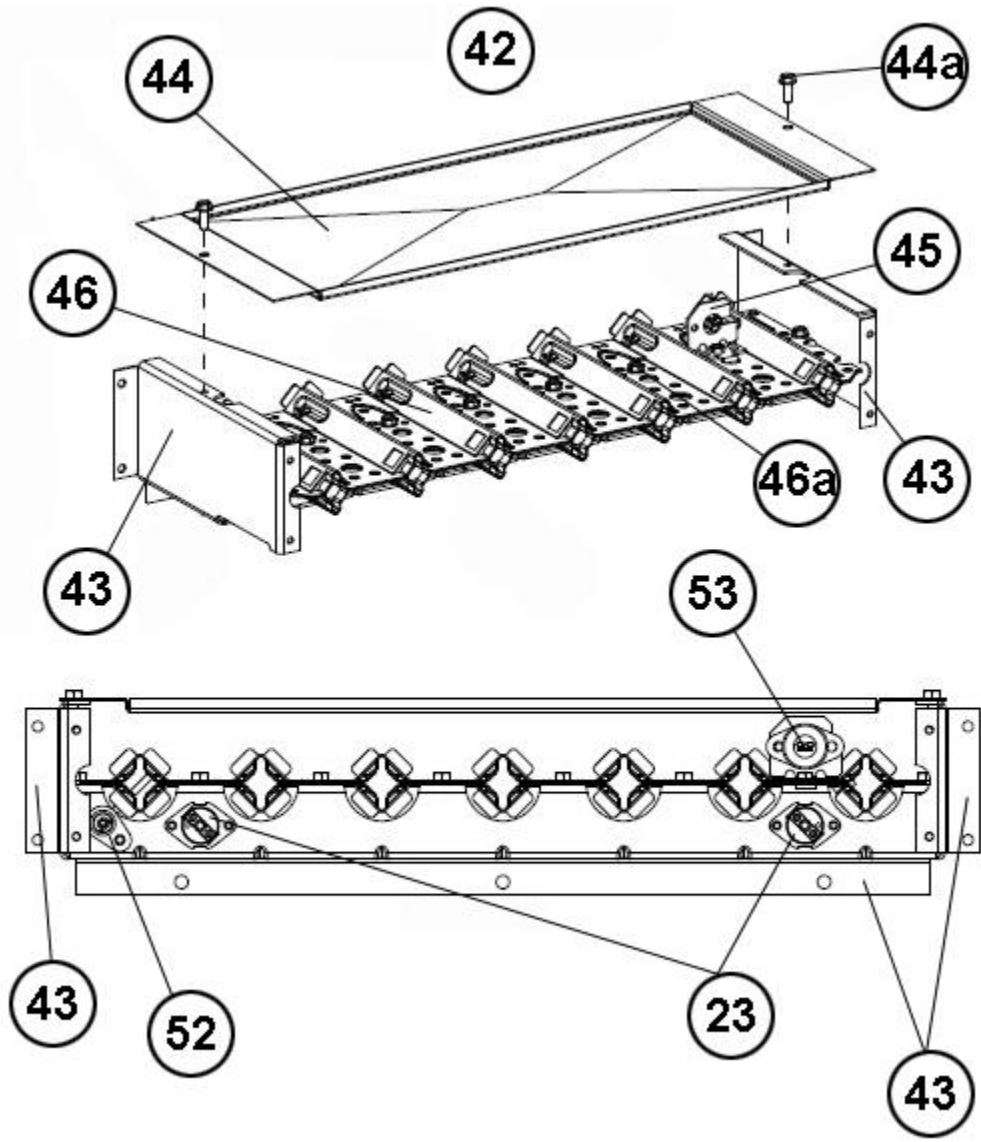
Exploded View



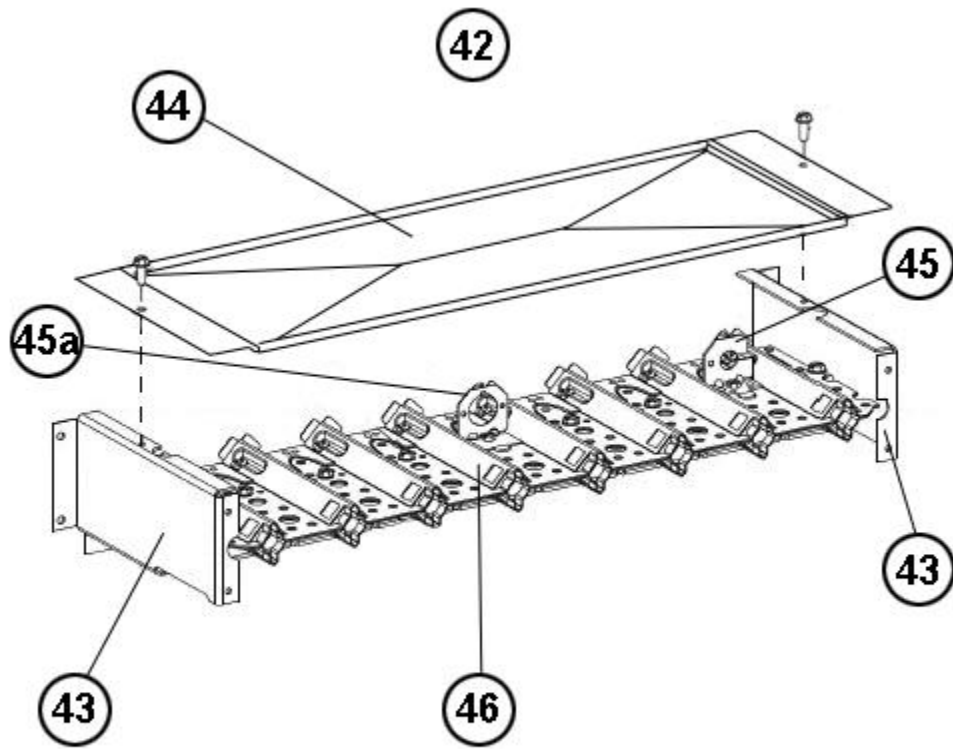
Cabinet Insulation and Plugs



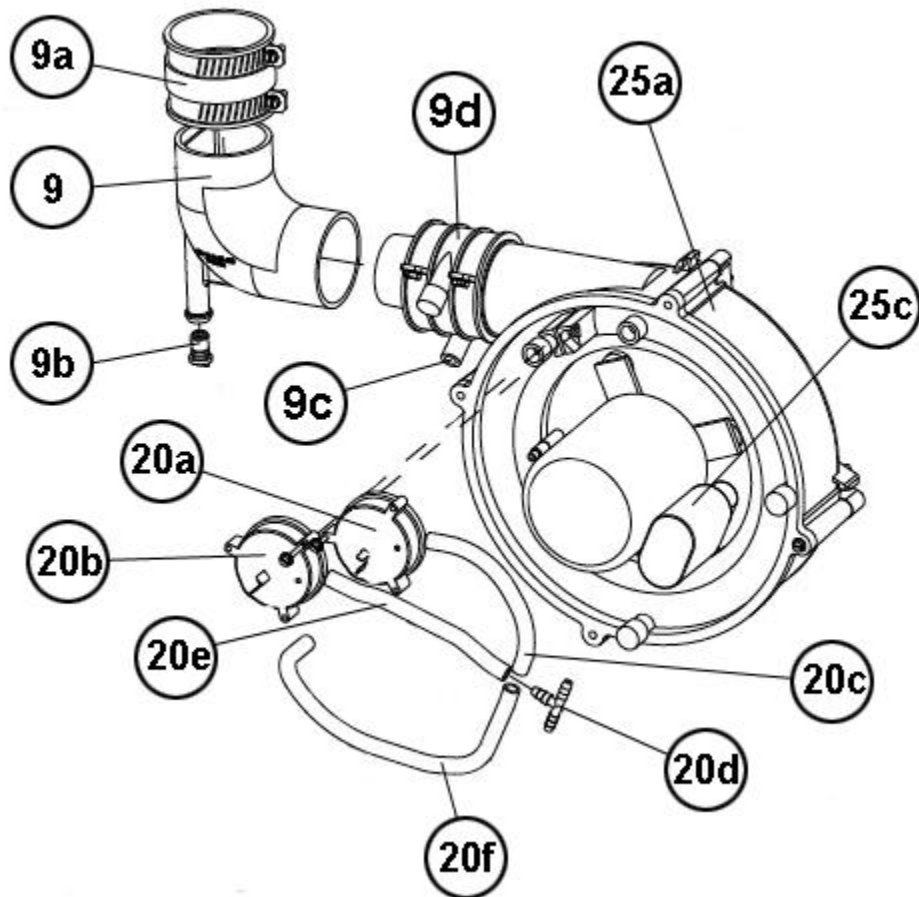
Junction Box



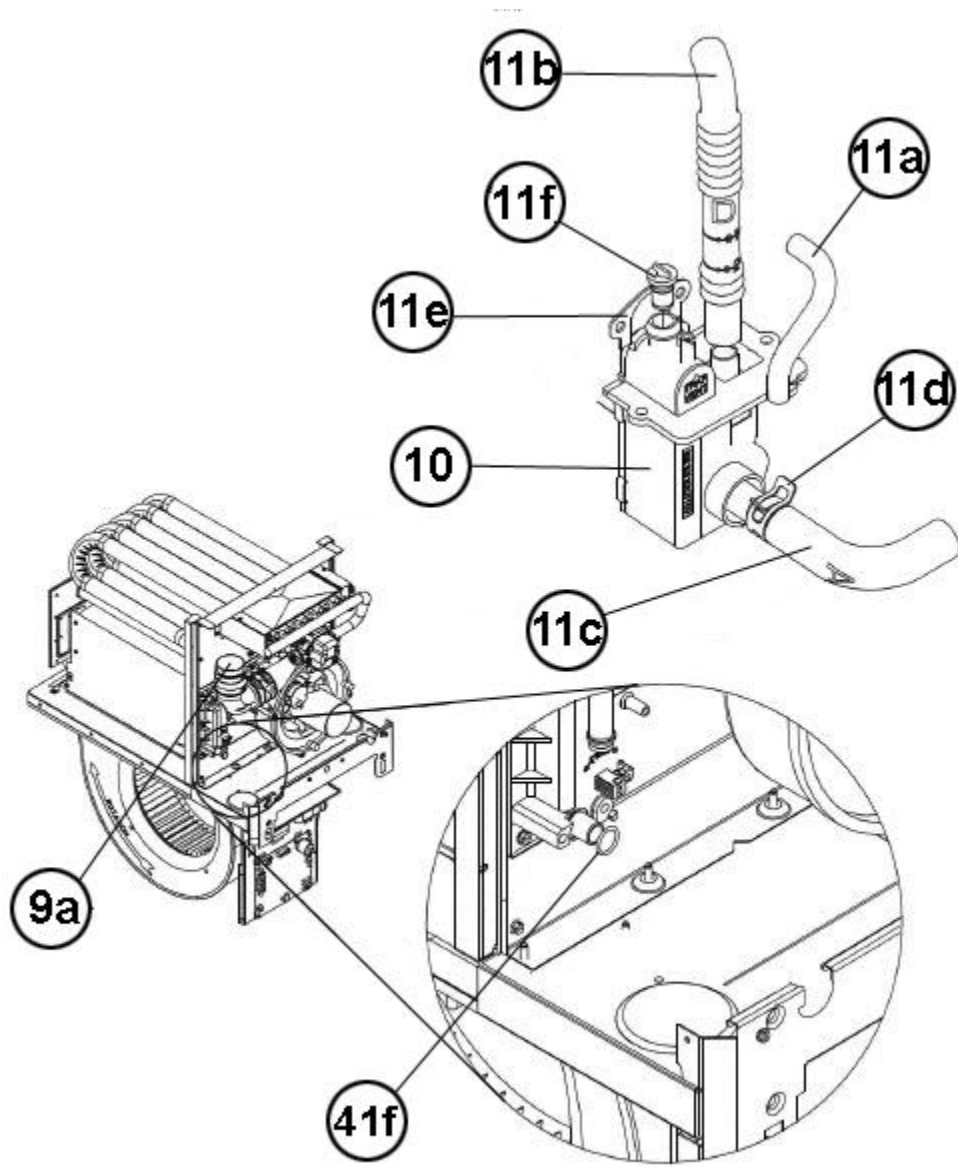
Burner Assembly (1)



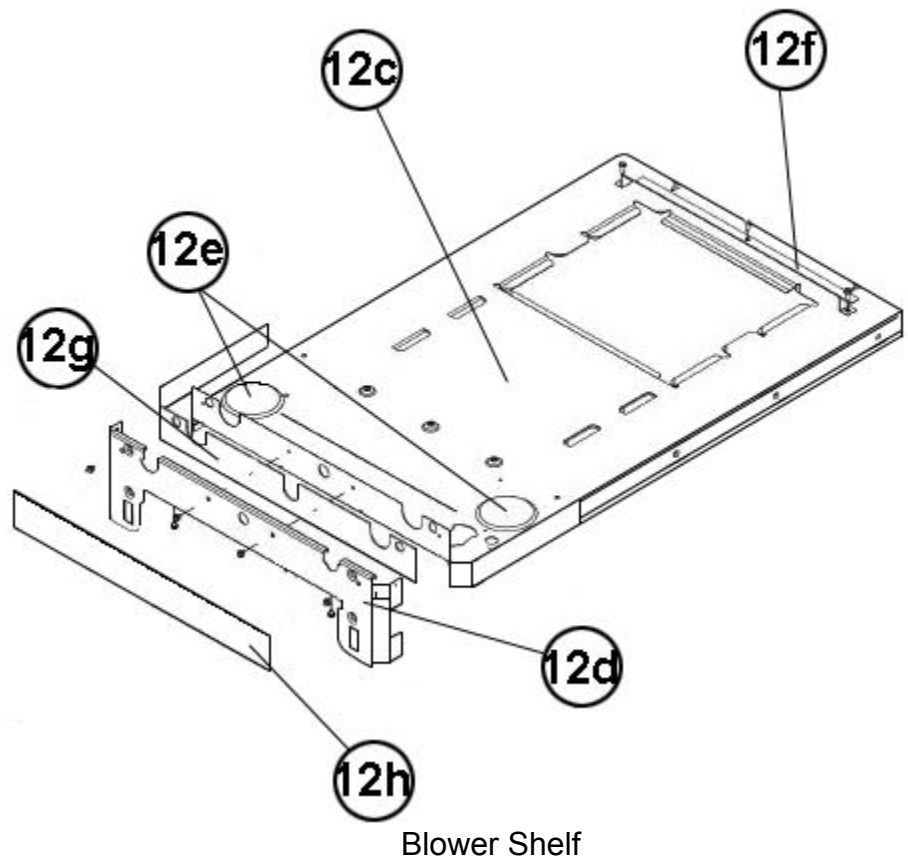
Burner Assembly (2)

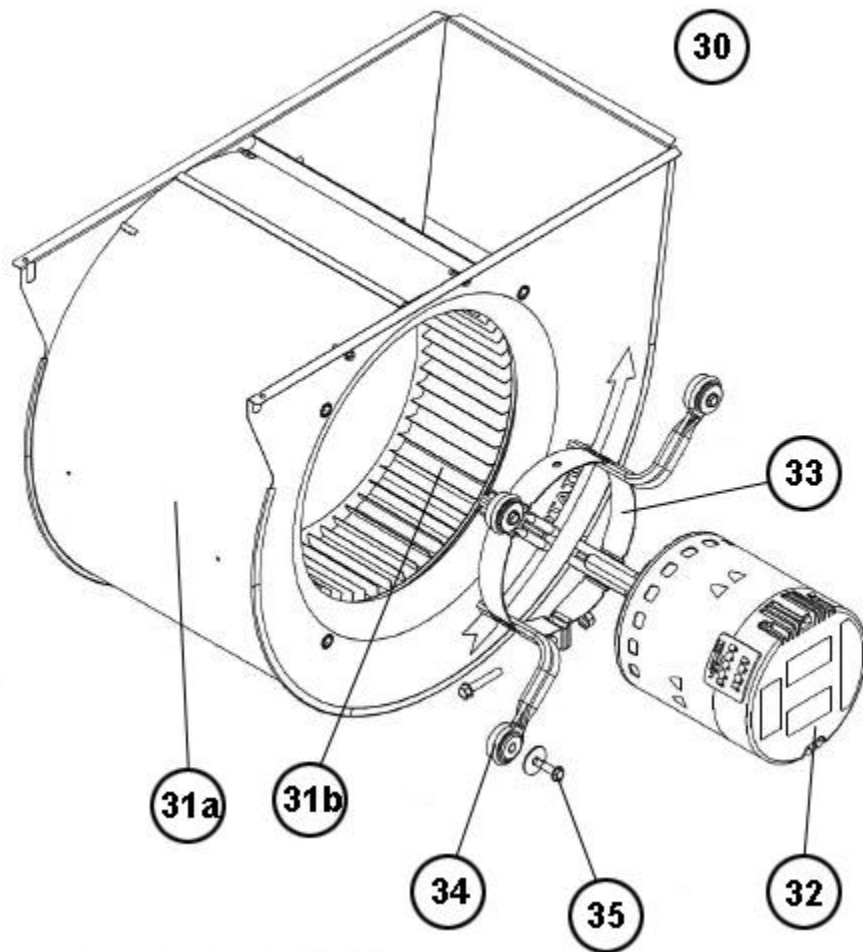


Pressure Switch - Tubing

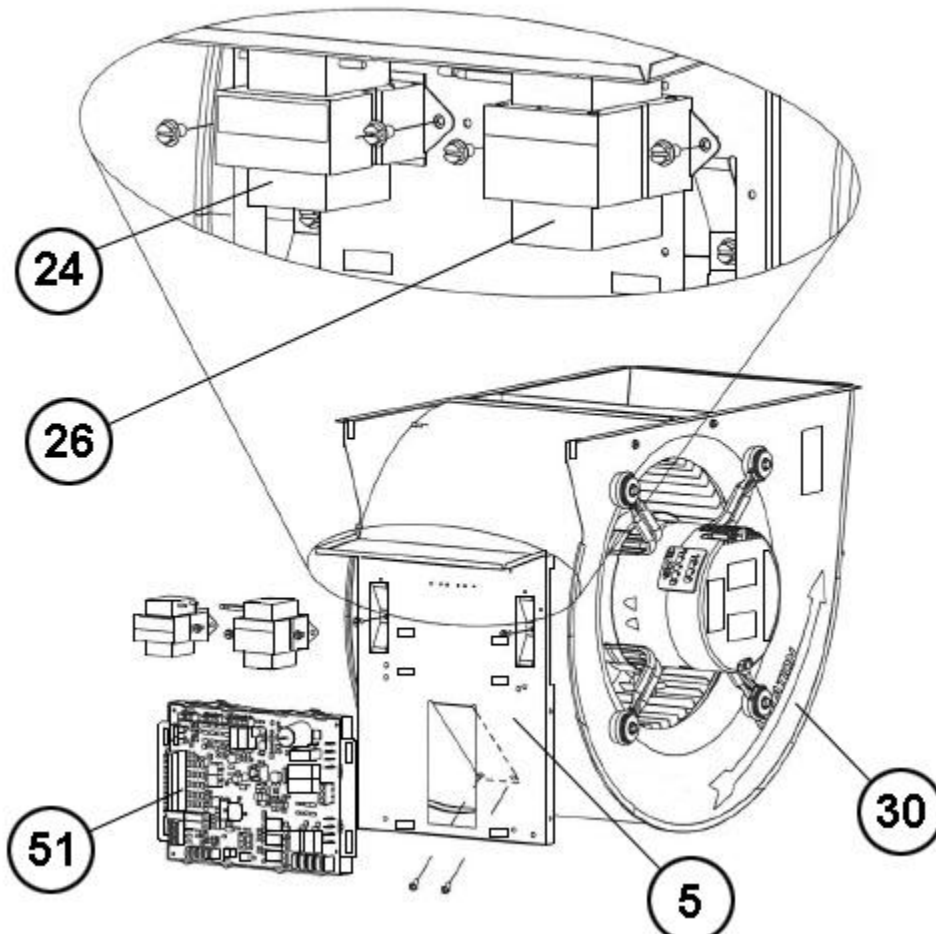


Trap - Hose Assembly

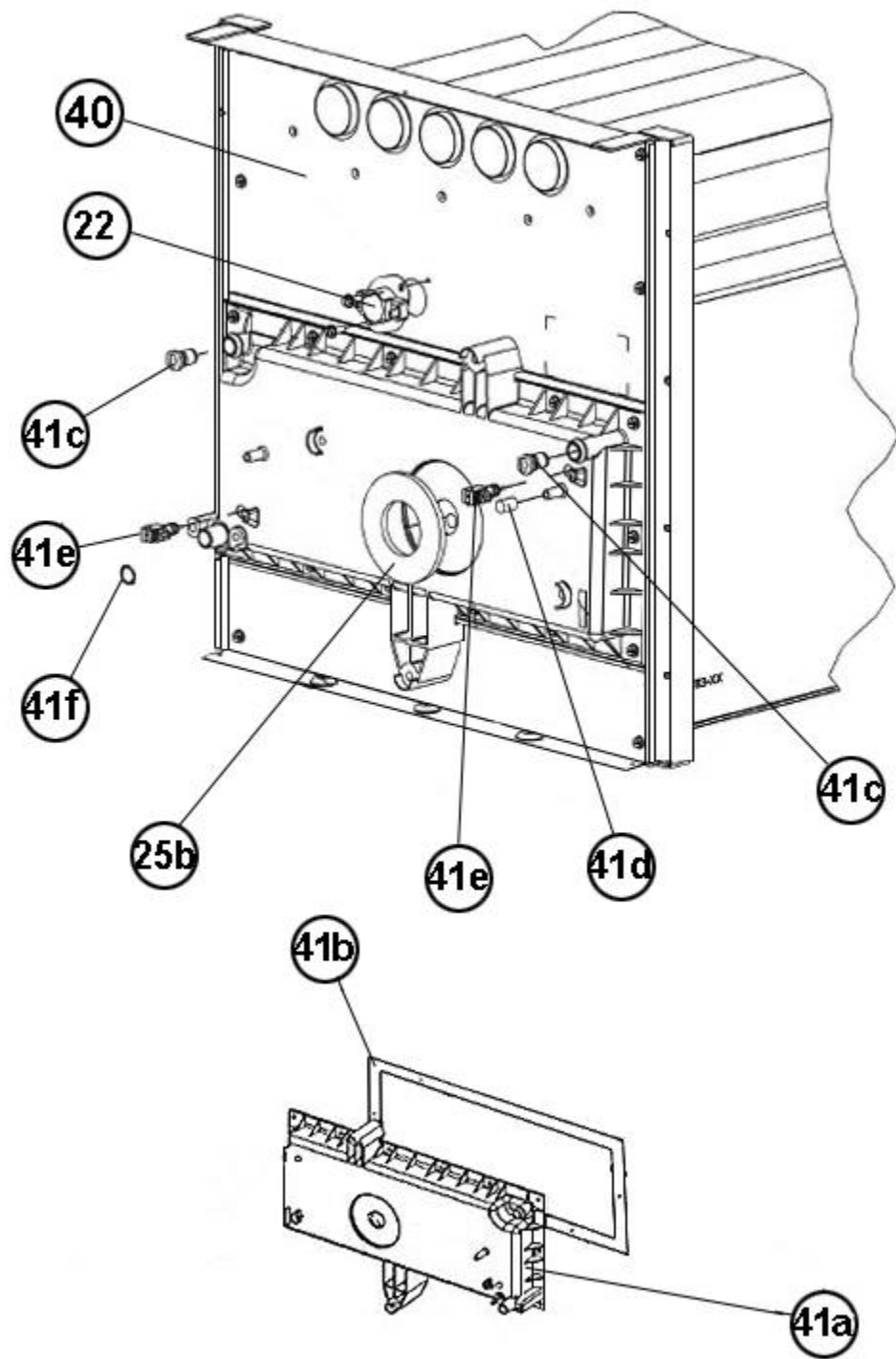




Blower Assembly

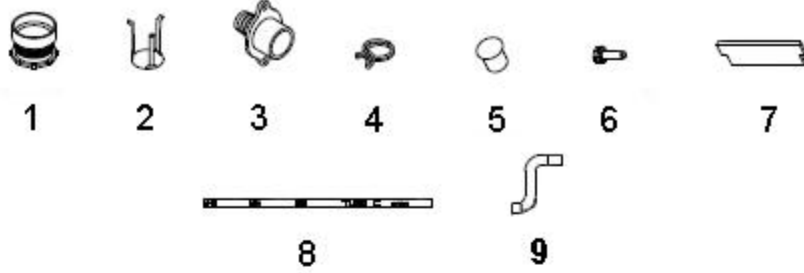


Control Board Mounting w PFC

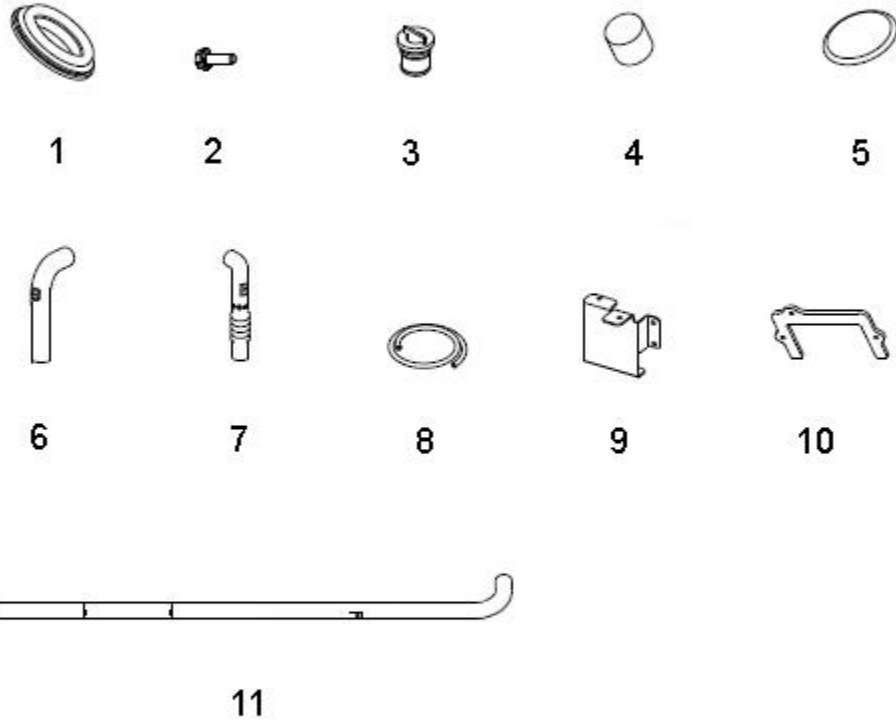


Heat Exchanger - Collector Box

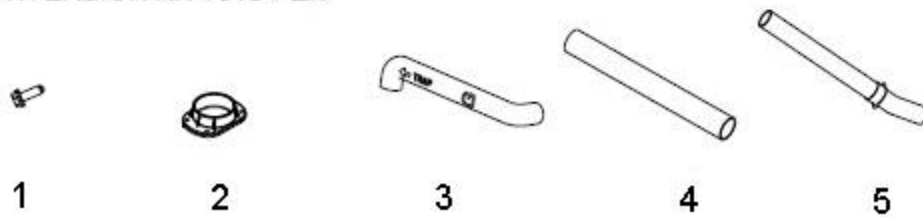
PARTS BAG(PROVIDED WITH UNIT)



CONVERSION KIT RXGY-CK



CONVERSION KIT RXGY-ZK



Field Conversion Kits

NOTES

- Stk It is recommended that stock be maintained for this part.
N/A Not Applicable
- 1 Jacket is not available for replacement.
 - 2 Order Gas Valve for Natural Gas along with LP Conversion Kit.

DISCLAIMER: This document is intended to provide general replacement parts information to aid qualified service personnel in the repair of these models. The complete Model and Serial Number of the unit under repair should be specified when selecting and ordering replacement parts. Specifications and illustrations are subject to change without notice. Document 92-42800-R96VA supersedes all previous parts lists for these models. See <http://www.rheempartslists.net/92-42800-R96VA> for the latest revision of this document. The manufacturer assumes no obligation for errors or omissions. Service personnel must verify the proper and safe operation of equipment after the replacement of any original components.