

# FF\_TS80M(X)

Parts List  
29-October-2019



*This parts list is current as of the above revision date.*  
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Form Number: 92-42814-FF\_TS80M(X)

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**MODEL EXPLANATION**

<b>F</b>	<b>F</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>T</b>	<b>S</b>	<b>8</b>	<b>0</b>	<b>M</b>
(1)		(2)		(3)		(4)	(5)	(6)	(7)		(8)

**(1) TRADEBRAND IDENTIFICATION**  
FF = Fujitsu Furnace

**(2) HEATING INPUT DESIGNATION**  
050 = 50,000 BTU/HR  
075 = 75,000 BTU/HR  
100 = 98,000 BTU/HR  
125 = 125,000 BTU/HR

**(3) CABINET WIDTH**  
14 = 14.0 inch  
17 = 17.5 inch  
21 = 21.0 inch  
24 = 24.5 inch

**(4) AIRFLOW**  
3 = Up to 3 tons  
4 = Up to 4 tons  
5 = Up to 5 tons

**(5) MOTOR TYPE**  
T = Constant Torque

**(6) STAGE - SINGLE (S)**

**(7) SERIES**  
80% Efficient

**(8) STANDARD/NOx**  
S = Standard  
X = NOx

**SERIAL NUMBER EXPLANATION**

<b>W</b>	<b>0</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>
(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 INPUT CABINET WIDTH AIRFLOW SERIES	FF	FF	FF	FF	FF	
			50	75	75	100	125	
			14	17	21	21	24	
			3	4	4	5	5	
			TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	
<b>PANELS, SHEET METAL, AND MISCELLANEOUS</b>								
1		Jacket Assembly	See Note 1					
1a		Star Bushing	45-18515-01	45-18515-01	45-18515-01	45-18515-01	45-18515-01	
1b		Insulation - Foil Back	68-104821-05	68-104821-06	68-104821-07	68-104821-07	68-104821-08	
1c		Insulation - Sound	68-103537-04	68-103537-01	68-103537-02	68-103537-02	68-103537-03	
1d		Insulation Retainer (2)	AE-67925-01	AE-67925-01	AE-67925-01	AE-67925-01	AE-67925-01	
2a		Top Plate Assembly (includes air deflector) - Platinum	AS-104767-11	AS-104767-12	AS-104767-13	AS-104767-13	AS-104767-14	
2b		Intake Air Deflector (attached to top plate)	AE-101077-02	AE-101077-01	AE-101077-01	AE-101077-01	AE-101077-01	
2c		Left Jacket Baffle	AE-61606-01	AE-61606-01	AE-101899-02	AE-61668-01	AE-61665-01	
2d		Right Jacket Baffle	AE-61606-01	AE-61606-01	AE-101899-01	AE-61668-01	AE-61665-01	
2e		Rear Jacket Baffle	AE-61666-01	AE-61607-01	AE-61667-01	AE-61667-01	AE-61670-01	
2f		Heat Exchanger Bracket - Left Side	See Heat Exchanger/Burner/Manifold Group					
2g		Heat Exchanger Bracket - Right Side	See Heat Exchanger/Burner/Manifold Group					
3		Burner Compartment Door - Upper Door (Private Label Light Gray w/Gray Trim)	AS-104911-34	AS-104911-31	AS-104911-32	AS-104911-32	AS-104911-33	
4		Blower/Filter Door - Lower Door (Private Label Light Gray w/Gray Trim)	AS-104911-54	AS-104911-51	AS-104911-52	AS-104911-52	AS-104911-53	
		Gray Door Filler (with integral molded alignment pins)	68-104374-14	68-104374-11	68-104374-12	68-104374-12	68-104374-13	
		Door Latch Kit (includes two of each: Latch Cam, Gray Latch Handle, O-Ring, Retainer Screw)	PD644035	PD644035	PD644035	PD644035	PD644035	
		Sight Glass - Door	68-21893-04	68-21893-04	68-21893-04	68-21893-04	68-21893-04	
6a		Junction Box	AE-61475-03	AE-61475-03	AE-61475-03	AE-61475-03	AE-61475-03	
6b		Juncton Box Cover	AE-61476-03	AE-61476-03	AE-61476-03	AE-61476-03	AE-61476-03	
8		Exhaust Collar	Available as Accessory RXGW-C01					
11a		Bottom Plate Assembly (Platinum)	AS-104968-11	AS-104968-12	AS-104968-13	AS-104968-13	AS-104968-14	
11b		Solid Bottom	AE-61874-01	AE-61874-02	AE-61874-03	AE-61874-03	AE-61874-04	
12		Blower Shelf Assembly (includes items 12a, 12b, 12d, 12e, 12f)	AS-104809-01	AS-104809-02	AS-104809-06	AS-104809-04	AS-104809-05	
12a		Bracket Door Mounting	AE-104332-04	AE-104332-01	AE-104332-02	AE-104332-02	AE-104332-03	
12b		Gasket - Blower Shelf	68-104382-04	68-104382-01	68-104382-02	68-104382-02	68-104382-03	
12c		Gasket - Door	AE-61951-53	AE-61951-54	AE-61951-55	AE-61951-55	AE-61951-56	
12d		Stripping - Angle Bracket	AE-61951-57	AE-61951-58	AE-61951-59	AE-61951-59	AE-61951-60	
12e		Stripping - Angle Bracket	AE-61951-62	AE-61951-62	AE-61951-62	AE-61951-62	AE-61951-62	
12f		Angle Bracket	AE-104758-01	AE-104758-02	AE-104758-03	AE-104758-03	AE-104758-04	
12g		Side Angle Assembly - Left (includes stripping)	AS-104923-01	AS-104923-01	AS-104923-01	AS-104923-01	AS-104923-01	
12h		Side Angle Assembly - Right (includes stripping)	AS-104923-02	AS-104923-02	AS-104923-02	AS-104923-02	AS-104923-02	

No.	Notes	MODEL INPUT CABINET WIDTH AIRFLOW SERIES	FF	FF	FF	FF	FF
			50	75	75	100	125
			14	17	21	21	24
			3	4	4	5	5
			TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)
<b>PANELS, SHEET METAL, AND MISCELLANEOUS</b>							
20a		Pressure Switch					See Electrical Group
20b		Silicon Tubing - Pressure Switch					See Electrical Group
21		Door Switch - Push Button					See Electrical Group
22		Limit - Main Limit (Heat Exchanger Panel)					See Electrical Group
23		Limit - Manual Reset (Burner Compartment)					See Electrical Group
24		Transformer					See Electrical Group
25		Induced Draft Blower (IDB)					See Electrical Group
29		Wire Assembly (Junction Box to Twist Lock)					See Electrical Group
30		Blower Assembly					See Blower Group
30a		Control Mounting Plate					See Blower Group
31a		Housing w/Blower Wheel					See Blower Group
31b		Blower Wheel					See Blower Group
40		Heat Exchanger Assembly					See Heat Exchanger/Burner/Manifold Group
40a		NOx Burner Inserts					See Heat Exchanger/Burner/Manifold Group
40b		NOx Insert Retainer					See Heat Exchanger/Burner/Manifold Group
42		Burner Assembly					See Heat Exchanger/Burner/Manifold Group
43		Manifold (w/o Orifices)					See Heat Exchanger/Burner/Manifold Group
50		Gas Valve					See Gas Controls
51		Integrated Furnace Control Board (IFC)					See Gas Controls
52		Flame Sensor					See Gas Controls
53		Spark Ignitor					See Gas Controls
		Touch-up Paint - Platinum (Aerosol)	523012	523012	523012	523012	523012
		Touch-up Paint - Platinum (Paint Pens)	523013	523013	523013	523013	523013
		Touch-up Paint - Private Label Gray (Aerosol)	523014	523014	523014	523014	523014
		Touch-up Paint - Private Label Gray (Paint Pens)	523015	523015	523015	523015	523015

No.	Notes	MODEL INPUT AIRFLOW SERIES	FF	FF	FF	FF	FF	
			50 14 3	75 17 4	75 21 4	100 21 5	125 24 5	
			TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	
<b>ELECTRIC GROUP</b>								
20a	Stk	Pressure Switch Assembly	42-106257-01	42-106257-01	42-106257-01	42-106257-01	42-106257-01	
20b		Silicon Tubing - Pressure Switch	AE-61737-27	AE-61737-27	AE-61737-03	AE-61737-03	AE-61737-23	
21		Door Switch - Push Button	42-22692-09	42-22692-09	42-22692-09	42-22692-09	42-22692-09	
22	Stk	Limit - Main Limit (Heat Exchanger Panel)	47-104990-01	47-104990-04	47-104990-04	47-104990-04	47-104990-04	
23	Stk	Limit - Manual Reset (Burner Compartment)	47-22861-03 (2)	47-22861-03 (2)	47-22861-03 (2)	47-22861-03 (2)	47-22861-03 (2)	
23a	Stk	Limit - Heat Assisted (Blower Housing)	47-22860-06	47-22860-06	47-22860-06	47-22860-06	47-22860-06	
		Bracket (Limit - Manual Reset)	See Heat Exchanger/Burner Manifold Group					
24	Stk	Transformer	46-24124-06	46-24124-06	46-24124-06	46-24124-06	46-24124-06	
25	Stk	IDB - Induced Draft Blower (with Gasket)	70-101087-01	70-101087-01	70-101087-01	70-101087-01	70-101087-01	
		Gasket - Induced Draft Blower	68-22850-01	68-22850-01	68-22850-01	68-22850-01	68-22850-01	
27	Stk	Capacitor - Blower Motor	N/A	N/A	N/A	N/A	N/A	
28		Strap - Blower Motor Capacitor	N/A	N/A	N/A	N/A	N/A	
		Wiring Harnesses - Blower Motor	See Blower Group					
		Wiring Harness Assembly (Twist-Lock)	45-104931-01	45-104931-01	45-104931-01	45-104931-01	45-104931-01	
29		Wire Assembly (Junction Box to Twist Lock)	45-24371-58	45-24371-58	45-24371-58	45-24371-58	45-24371-58	
52		Flame Sensor	See Gas Controls					
53		Spark Ignitor	See Gas Controls					

No.	Notes	MODEL INPUT AIRFLOW CABINET WIDTH CONFIGURATION	FF	FF	FF	FF	
			75 17 4	75 21 4	100 21 5	125 24 5	
			TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	
<b>BLOWER GROUP</b>							
30	Stk	Blower Assembly (Includes 27, 31a, 31b, 32, 33, 34, 35 and Blower Motor Harnesses):	AS-104614-08	AS-104614-09	AS-104614-10	AS-104614-11	
30a		Control Mounting Plate	AE-104878-02	AE-104878-02	AE-104878-02	AE-104878-02	
23a		Limit - Heat Assisted (Blower Housing)	See Electric Group				
31a		Housing w/Blower Wheel	70-104182-13	70-104182-13	70-104182-17	70-104182-17	
31b	Stk	Blower Wheel	PD703026	PD703026	PD703028	PD703028	
32	Stk	Blower Motor	51-104355-06	51-104356-12	51-104356-08	51-104356-09	
	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	
		Motor Wiring Harness - Speed Plug	45-103551-01	45-103551-01	45-103551-01	45-103551-01	
		Motor Wiring Harness - Power Plug	45-105282-01	45-105282-01	45-105282-01	45-105282-01	

No.	Notes	MODEL INPUT AIRFLOW CABINET WIDTH CONFIGURATION	FF					
			50 14 3	TS(80M/80X)				
<b>BLOWER GROUP</b>								
30	Stk	Blower Assembly - (Before Date Code Shown) - (Includes 27, 31a, 31b, 32, 33, 34, 35 and Blower Motor Harnesses):	AS-104614-07 (W3019)					
30	Stk	Blower Assembly - (On or After Date Code Shown) - (Includes 27, 31a, 31b, 32, 33, 34, 35 and Blower Motor Harnesses):	AS-104614-13 (W3019)					
30a		Control Mounting Plate	AE-104878-02					
23a		Limit - Heat Assisted (Blower Housing)	See Electric Group					
31a		Housing w/Blower Wheel	70-104182-11					
31b	Stk	Blower Wheel	PD703025					
32	Stk	Blower Motor - Before Date Code Shown	51-102172-06 (W3019)					
32	Stk	Blower Motor - On or After Date Code Shown	51-107164-01 (W3019)					
	Stk	Belly Band Motor Mount Kit (includes Motor Mount Arms, Belly Band and Mounting Hardware)	AS-53148-91					
33		ECM Motor Mount (Belly Band)	70-19927-04					
34		Motor Mount Arm (4)	70-19929-10					
35		Screw - Motor Mount Arm (4)	63-101978-01					
		Motor Wiring Harness - Speed Plug (Before Date Code Shown)	45-103551-01 (W3019)					
		Motor Wiring Harness - Power Plug (Before Date Code Shown)	45-105282-01 (W3019)					
		Motor Wiring Harness - Speed Plug (On or After Date Code Shown)	45-103551-02 (W3019)					



No.	Notes	MODEL INPUT CABINET WIDTH AIRFLOW SERIES	FF	FF	FF	FF	FF	
			50	75	75	100	125	
			14	17	21	21	24	
			3	4	4	5	5	
			TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	TS(80M/80X)	
<b>HEAT EXCHANGER, BURNER / MANIFOLD GROUP</b>								
2f		Heat Exchanger Bracket - Left Side	AE-102680-01	AE-67846-02	AE-67846-02	AE-67846-02	AE-67846-02	AE-67846-02
2g		Heat Exchanger Bracket - Right Side	AE-102680-02	AE-67846-02	AE-67846-02	AE-67846-02	AE-67846-02	AE-67846-02
40	Stk	Heat Exchanger Assembly	AS-61579-14	AS-100560-01	AS-61579-12	AS-61579-04	AS-61579-05	AS-61579-05
40a		NOx Burner Inserts	AS-67875-01 (2)	AS-67875-01 (3)	AS-67875-01 (3)	AS-67875-01 (4)	AS-67875-01 (5)	AS-67875-01 (5)
40b		NOx Insert Retainer	AE-67872-01	AE-67872-02	AE-67872-03	AE-67872-03	AE-67872-03	AE-67872-04
42		Burner Assembly (Burner, Support, Brackets, Cover and Bottom Plates, Ignitor Bracket)	AS-104944-01	AS-104944-02	AS-104944-02	AS-104944-03	AS-104944-03	AS-104944-04
42		Burner Assembly - NOx variants (Burner, Support, Brackets, Cover and Bottom Plates, Ignitor Bracket)	AS-104944-11	AS-104944-12	AS-104944-12	AS-104944-13	AS-104944-14	AS-104944-14
42a	Stk	Burner	AS-60993-02	AS-60993-03	AS-60993-03	AS-60993-04	AS-60993-05	AS-60993-05
42b		Burner Support	AE-60997-01	AE-60997-02	AE-60997-02	AE-60997-03	AE-60997-04	AE-60997-04
42c		Burner Support Bracket (2)	AE-61588-02	AE-61588-02	AE-61588-02	AE-61588-02	AE-61588-02	AE-61588-02
42d		Burner Cover Plate	AE-101080-06	AE-101080-02	AE-101080-02	AE-101080-03	AE-101080-04	AE-101080-04
42d		Burner Cover Plate (NOx variants)	AE-101080-16	AE-101080-12	AE-101080-12	AE-101080-13	AE-101080-14	AE-101080-14
42e		Burner Bottom Plate	AE-104927-01	AE-104927-02	AE-104927-02	AE-104927-03	AE-104927-04	AE-104927-04
42f		Igniter Bracket	AE-61885-02	AE-61885-02	AE-61885-02	AE-61885-02	AE-61885-02	AE-61885-02
42g		Screw - Burner Assembly	63-22153-05 (13)	63-22153-05 (14)	63-22153-05 (14)	63-22153-05 (15)	63-22153-05 (16)	63-22153-05 (16)
43		Manifold (w/o Orifices)	81-102427-01	81-102427-02	81-102427-02	81-102427-03	81-102427-04	81-102427-04
		Burner Orifice - Natural Gas	See Orifice Selection Chart					
		Burner Orifice - LP	See Orifice Selection Chart					
		Number of Orifices	(2)	(3)	(3)	(4)	(5)	(5)

No.	Notes	MODEL GAS CODE	FFTS					
			JW					
<b>GAS CONTROLS</b>								
50	Stk	Gas Valve - Natural Gas	60-103901-02					
	Stk,2	Gas Valve - LP	See Note 2					
51	Stk	Integrated Furnace Control Board (IFC)	62-105217-01					
52	Stk	Flame Sensor	62-23543-01					
53	Stk	Spark Ignitor	62-24164-03					
	Stk	LP Conversion Kit - U.S./Canadian Models	FP-15					



**80% 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 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 92-21519-70 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 only. Conversion for operation at High Altitude must be done using the kit specified on the product specification sheet for the unit.

NOTE: This Orifice sizing chart is based on 25,000 BTU/HR per burner.

NOTE: Factory installed orifices are calculated and sized based on a Natural Gas heating value of 1075 BTU/cu. ft. and an elevation of 0 - 3000 ft.

Energy Value (BTU/cu. ft.)	Elevation (ft.)							
	0 - 1999	2000 - 2999	3000 - 3999	4000 - 4999	5000 - 5999	6000 - 6999	7000 - 7999	8000 - 8999
<b>850</b>	62-22175-38	62-22175-39	62-22175-40	62-22175-41	62-22175-41	62-22175-42	62-22175-42	62-22175-43
<b>900</b>	62-22175-40	62-22175-41	62-22175-42	62-22175-42	62-22175-42	62-22175-43	62-22175-43	62-22175-44
<b>975</b>	62-22175-41	62-22175-42	62-22175-42	62-22175-42	62-22175-43	62-22175-43	62-22175-44	62-22175-44
<b>1075</b>	62-22175-42	62-22175-42	62-22175-43	62-22175-43	62-22175-43	62-22175-44	62-22175-44	62-22175-45
<b>1170</b>	62-22175-43	62-22175-44	62-22175-44	62-22175-44	62-22175-45	62-22175-45	62-22175-46	62-22175-47

**80% GAS FURNACE - ORIFICE SELECTION CHART - LP**

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

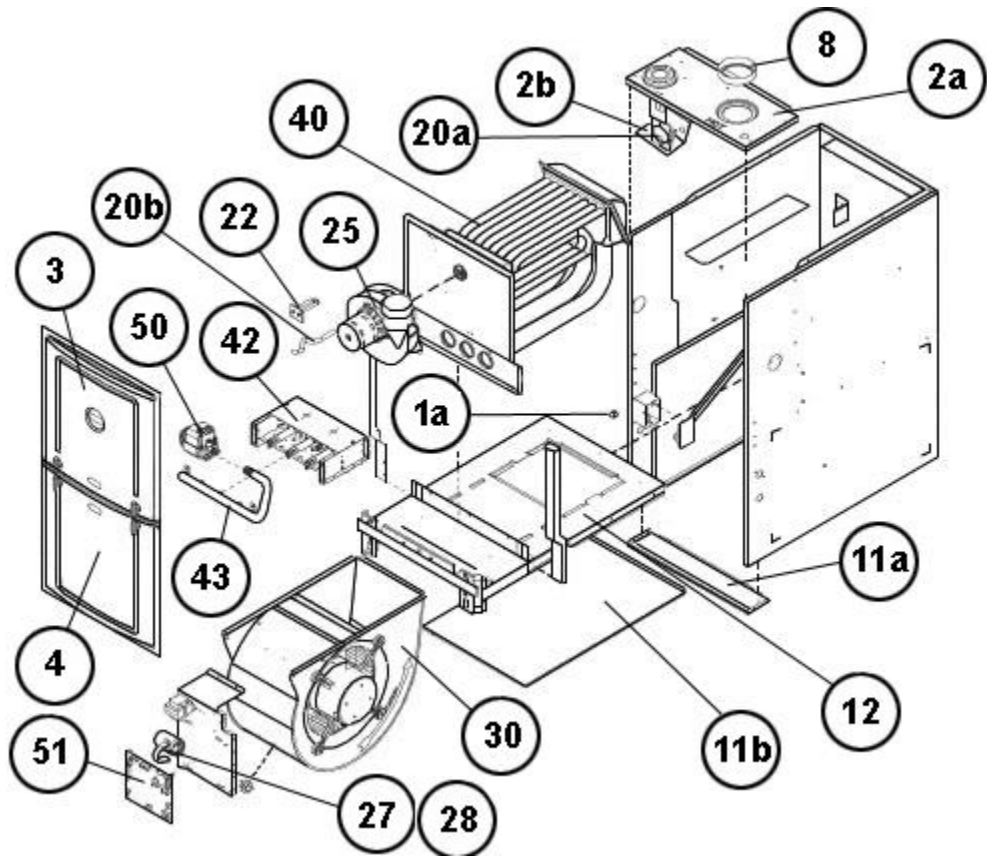
For detailed information and instructions for Orifice selection, see the Gas Furnace LP Conversion Kit Index 92-21519-70 and the latest edition of the National Fuel Gas Code Handbook (NFG), or the National Standard of Canada, Natural Gas and Propane Installation Code, CAN B149.1.

**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.

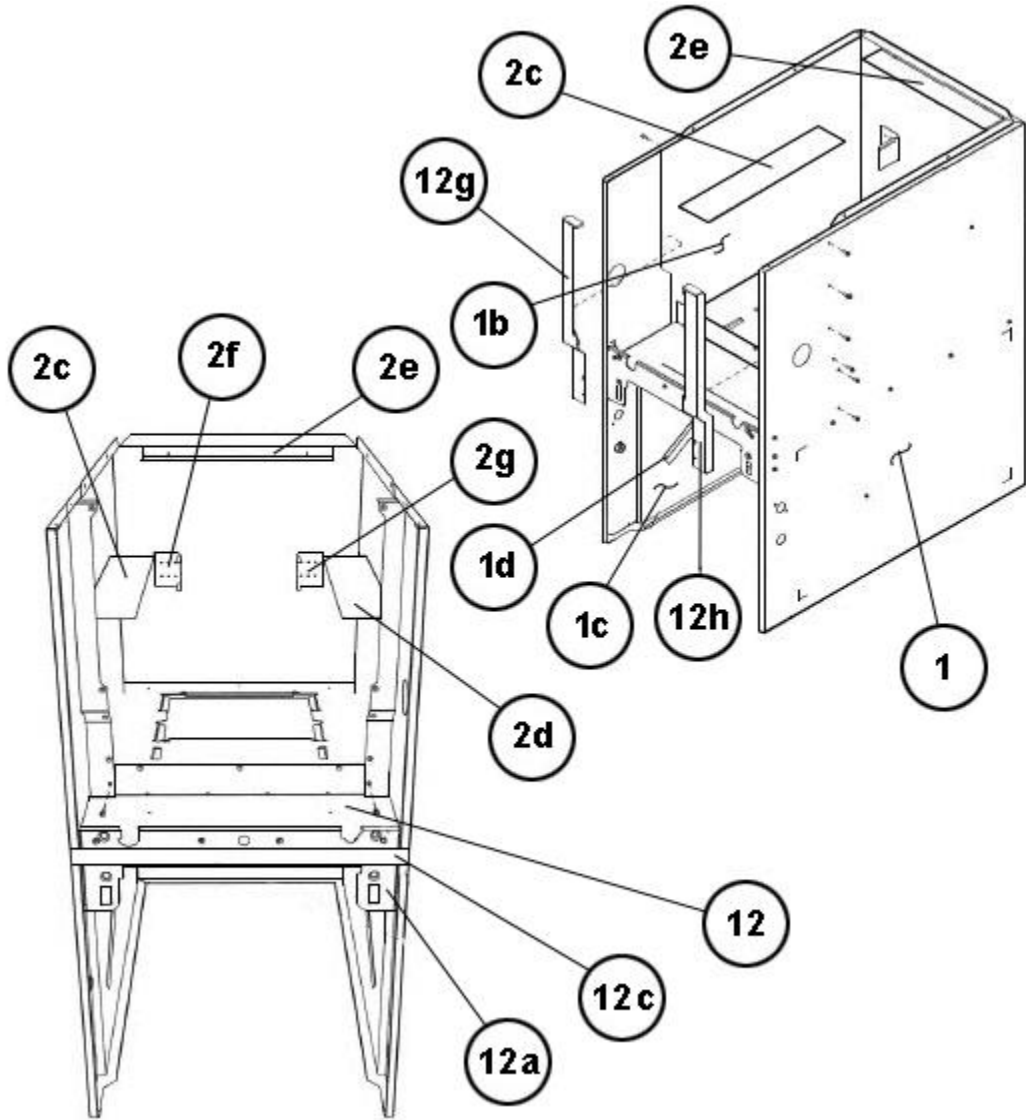
NOTE: This Orifice sizing chart is based on 25,000 BTU/HR per burner. Also, the chart is developed using the specified pressure setting of 10 in. water column instead of the 11.0 in water column used by the NFG and CANB149.1.

NOTE: Orifices supplied in the LP Conversion Kit are calculated and sized based on an altitude of 0 - 4000 ft.

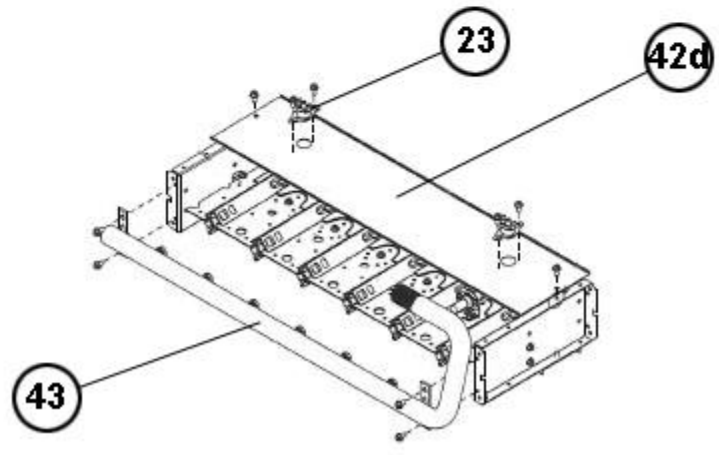
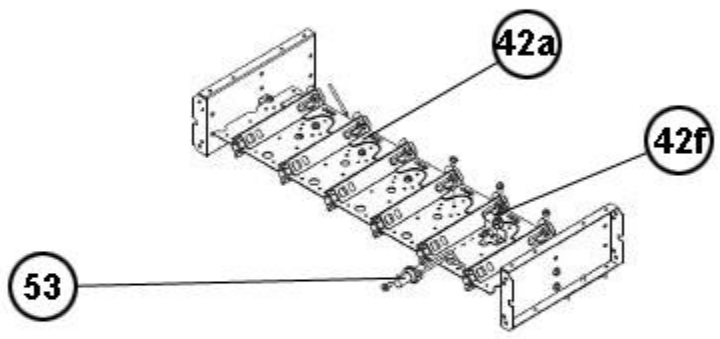
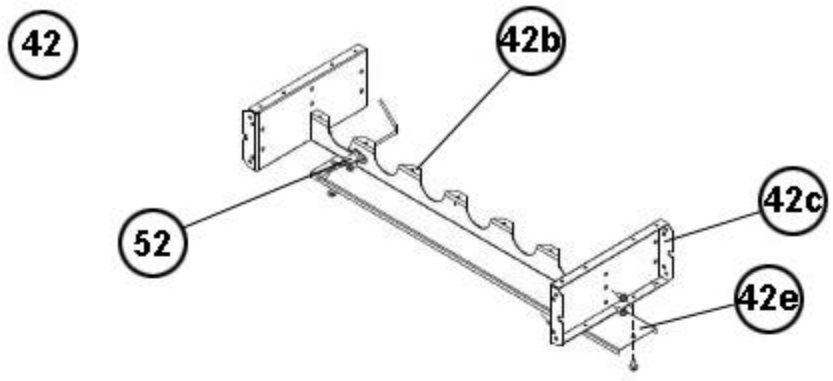
Elevation (ft.)	Orifice							
0 - 2000	62-22175-54							
2001 - 3000	62-22175-54							
3001 - 4000	62-22175-54							
4001 - 5000	62-22175-54							
5001 - 6000	62-22175-54							
6001 - 7000	62-22175-54							
7001 - 8000	62-22175-55							
8001 - 9000	62-22175-55							
9001 - 10000	62-22175-55							



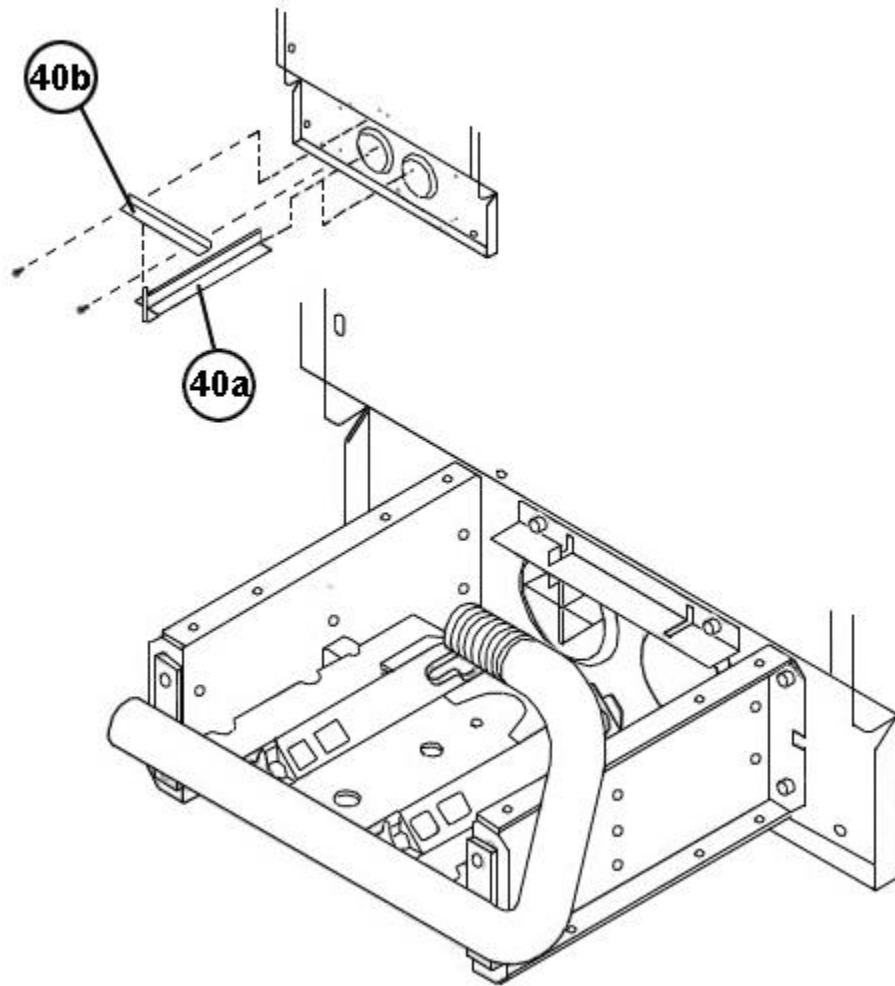
Exploded View



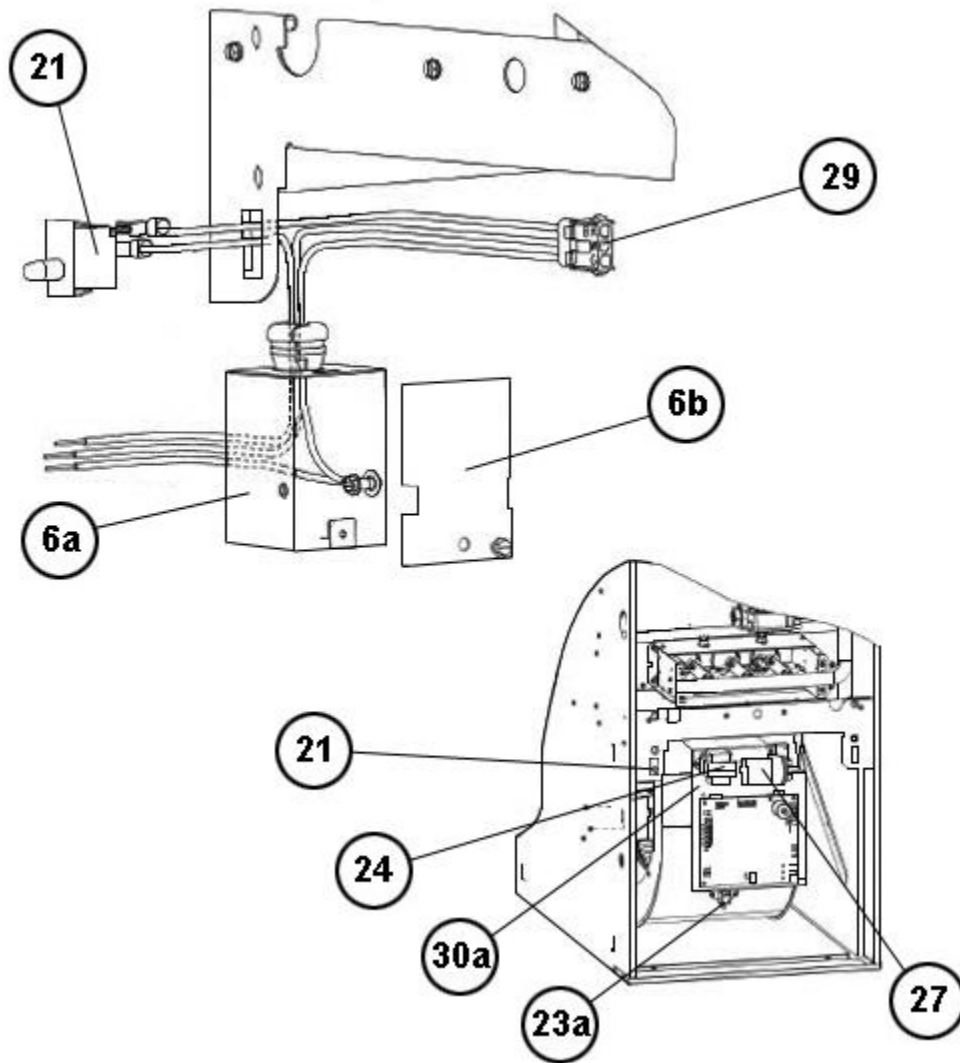
Cabinet Interior



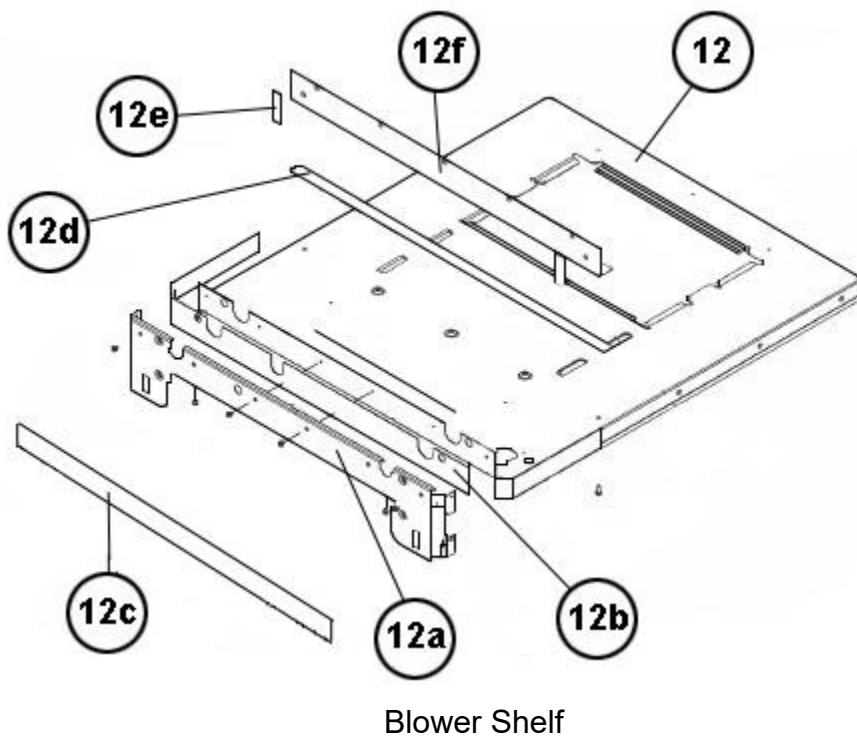
Burner Assembly

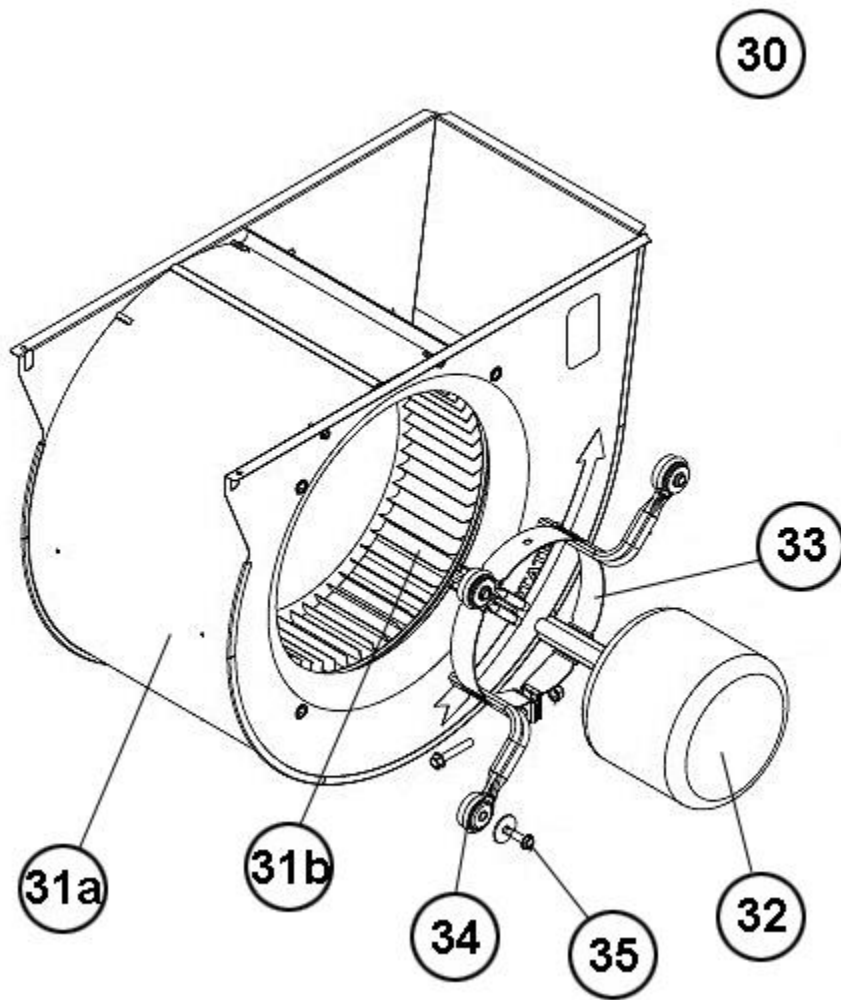


NOx Insert Assembly



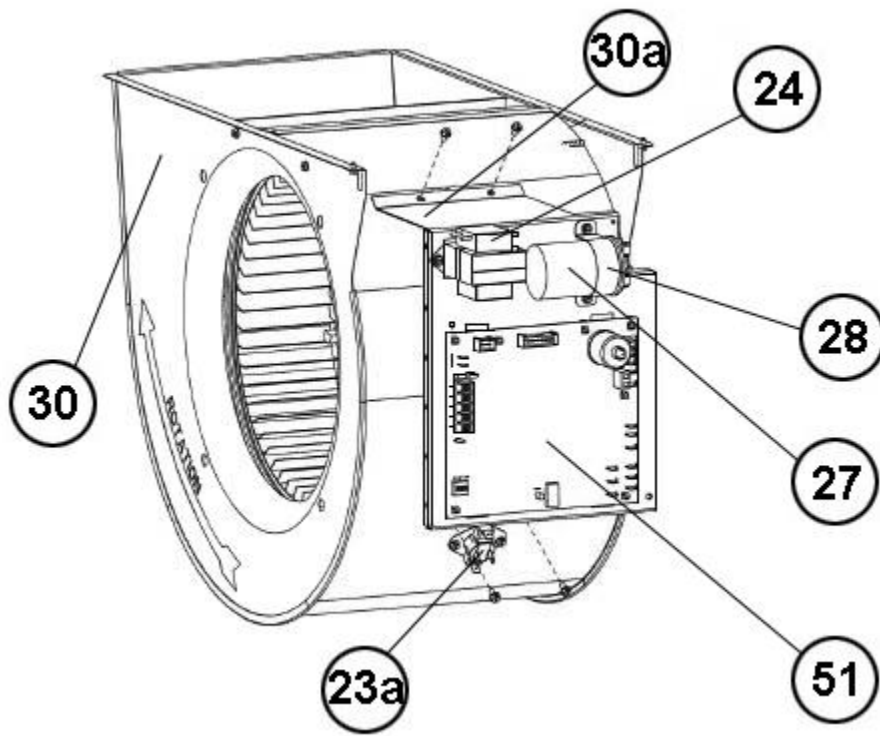
Junction Box





Blower Assembly





Control Board Mounting

# 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.