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# REPLACEMENT PARTS MANUAL

## OIL FIRED FURNACE

Models: **FLF085D36E**  
**FLR085D36E**  
**FLF110D48E**  
**FLR110D48E**  
**FLF110D60E**  
**FLR110D60E**  
**FLR140D60E**



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### General Notes

- Revised and/or additional pages may be issued from time to time.
- A complete and current manual consists of pages shown in the following contents section.

### Important

- Contact the installing and/or local Bard distributor for all parts requirements. Make sure you have the complete model and serial number available from the unit rating plate.

### Contents

Description	Page
Cabinet and Functional Components	
♦ Exploded View .....	1
♦ Usage List .....	2
♦ Usage List .....	3
♦ Usage List .....	4
Control Panel	
♦ Layout View .....	5
♦ Usage List .....	6
Blower Assembly	
♦ Exploded View .....	7
♦ Usage List .....	8
Burner Assembly	
♦ Exploded View .....	9
♦ Usage List .....	10
Burner Components	
♦ Exploded View .....	11
♦ Usage List .....	12
♦ Usage List .....	13

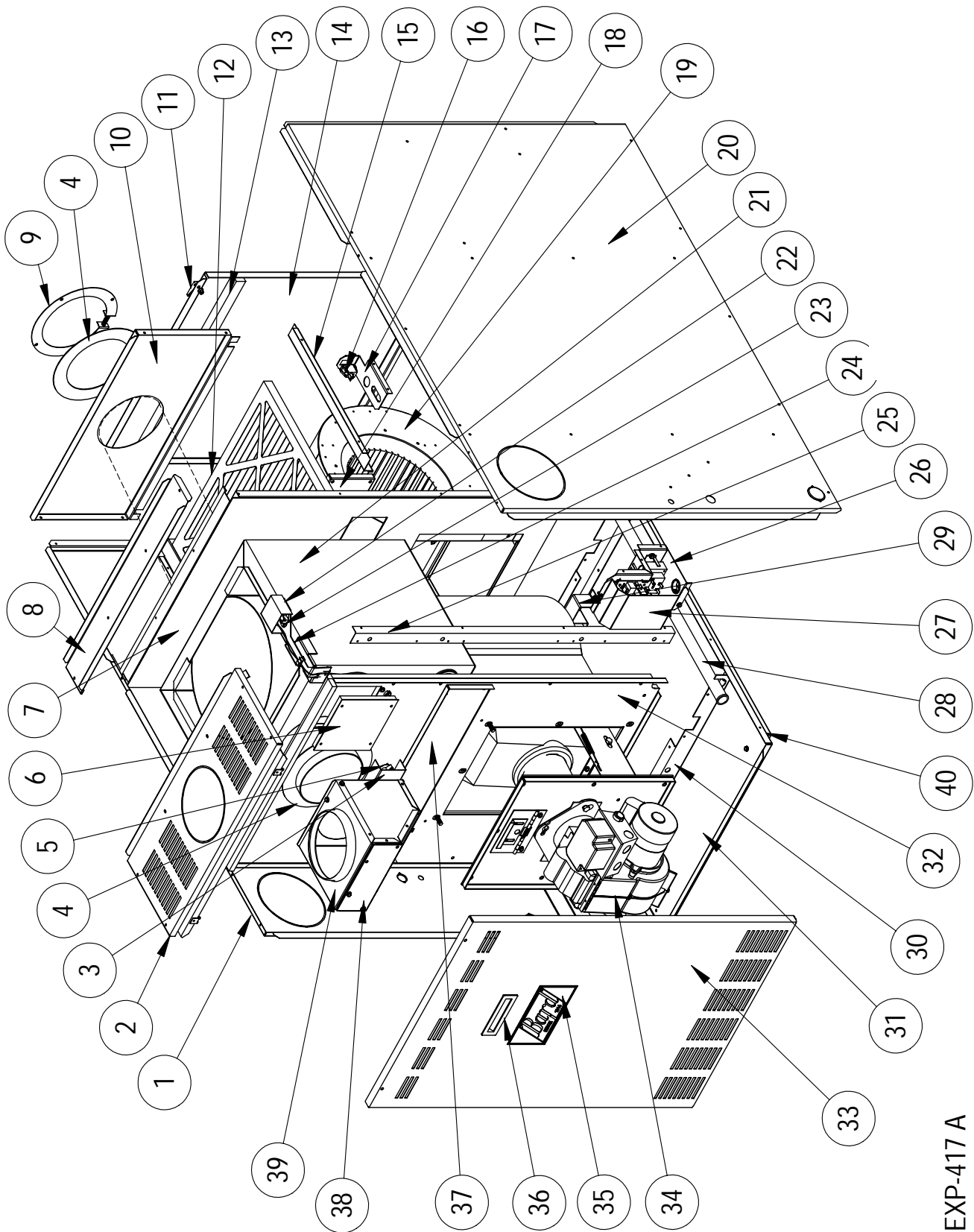


BARD MANUFACTURING COMPANY  
Bryan, Ohio 43506

*Since 1914...Moving ahead, just as planned.*

Manual: 2110-926B  
Supersedes: 2110-926A  
File: Tab 3  
Date: 01-31-05

# CABINET and FUNCTIONAL COMPONENTS



SEXP-417 A

## CABINET and FUNCTIONAL COMPONENTS

Drawing No.	Part No.	Description	FLF085D36E	FLR085D36E	FLF110D48E	FLR110D48E	FLF110D60E	FLR110D60E	FLR140D60E
1	S101-412-4	Left Side Assembly	X	X					
1	S101-414-4	Left Side Assembly			X	X	X	X	
1	S101-416-4	Left Side Assembly							X
2	S107-231-4	Top Fill Assembly	X	X	X	X	X	X	
2	S107-233-4	Top Fill Assembly							X
3	143-094	Partition Limit Cover	X	X	X	X	X	X	X
4	1921-037	Smokepipe Gasket	X	X	X	X	X	X	X
5	8402-147	Backup Limit L190	X		X		X		
5	8402-148	Backup Limit L325		X		X		X	X
6	S142-089	Limit Access Door	X	X	X	X	X	X	X
7	S121-367	Blower Partition	X						
7	S121-363	Blower Partition		X					
7	S121-370	Blower Partition			X		X		
7	S121-364	Blower Partition				X		X	
7	S121-371	Blower Partition							X
8	165-577-4	Top Channel	X	X	X	X	X	X	X
8	165-579-4	Top Channel							
9	166-019	Smokepipe Clamp		X		X		X	X
10	109-172-4	Upper Back	X		X		X		
10	109-171-4	Upper Back		X		X		X	
10	109-173-4	Upper Back							X
11	1171-053	Swell Latch	X	X	X	X	X	X	X
12	7004-041	16 x 20 x 1 Pleated Filter	X	X					
12	7004-042	20 x 20 x 1 Pleated Filter			X	X			
12	7004-043	20 x 25 x 1 Pleated Filter							X
12	7003-041	20 x 20 x 1 Alum Mesh					X	X	
13	1913-006-2200	Foam Seal	X	X	X	X	X	X	
13	1913-006-2500	Foam Seal							X
14	S153-365-4	Blower Door Assembly	X	X					
14	S153-364-4	Blower Door Assembly			X	X	X	X	
14	S153-359-4	Blower Door Assembly							X
15	131-138	Filter Support	X	X					
15	131X139	Right Filter Support			X	X	X	X	
15	131Y139	Left Filter Support			X	X	X	X	
15	131X140	Right Filter Support							X
15	131Y140	Left Filter Support							X
16	8406-076	Door Switch	X	X	X	X	X	X	X
17	112-300	Plug Bracket	X	X	X	X	X	X	X

Table Continued on Page 3

# CABINET and FUNCTIONAL COMPONENTS


Table Continued from Page 2

Drawing No.	Part No.	Description	FLF085D36E	FLR085D36E	FLF110D48E	FLR110D48E	FLF110D60E	FLR110D60E	FLR140D60E
18	S143-092	Rear Cleanout Cover	X	X	X	X	X	X	
18	S143-096	Rear Cleanout Cover							X
19	900-262	Blower Assembly	X	X					
19	900-263	Blower Assembly			X	X			
19	900-264	Blower Assembly					X	X	X
20	S101-411-4	Right Side Assembly	X	X					
20	S101-413-4	Right Side Assembly			X	X	X	X	
20	S101-415-4	Right Side Assembly							X
21	S171-267	Heat Exchanger Assembly	X						
21	S171-269	Heat Exchanger Assembly		X					
21	S171-268	Heat Exchanger Assembly			X		X		
21	S171-270	Heat Exchanger Assembly				X		X	
21	S171-271	Heat Exchanger Assembly							X
22	143-091	Primary Limit Cover	X	X	X	X	X	X	X
23	8402-144	Primary Limit L150	X						
23	8402-145	Primary Limit L230		X		X		X	
23	8402-146	Primary Limit L185			X		X		X
24	112-298	Primary Limit Bracket	X	X	X	X	X	X	X
25	105-1141	Side Angle	X	X					
25	105-1142	Side Angle			X	X	X	X	
25	105-1147	Side Angle							X
26	S117-252	Control Panel	X	X	X	X	X	X	X
27	133-179	Control Panel Cover	X	X	X	X	X	X	X
28	8611-089	2.4 Feet Wire Channel	X	X	X	X	X	X	X
29	164-585	Rear Heat Exchanger Support	X	X	X	X	X	X	X
30	104-1140	Front Heat Exchanger Support	X	X	X	X	X	X	
30	104-1149	Front Heat Exchanger Support							X
31	127-330	Base	X	X	X	X	X	X	
31	127-331	Base							X
32	S121-365	Burner Partition	X						
32	S121-368	Burner Partition		X					
32	S121-366	Burner Partition			X		X		
32	S121-369	Burner Partition				X		X	
32	S121-372	Burner Partition							X

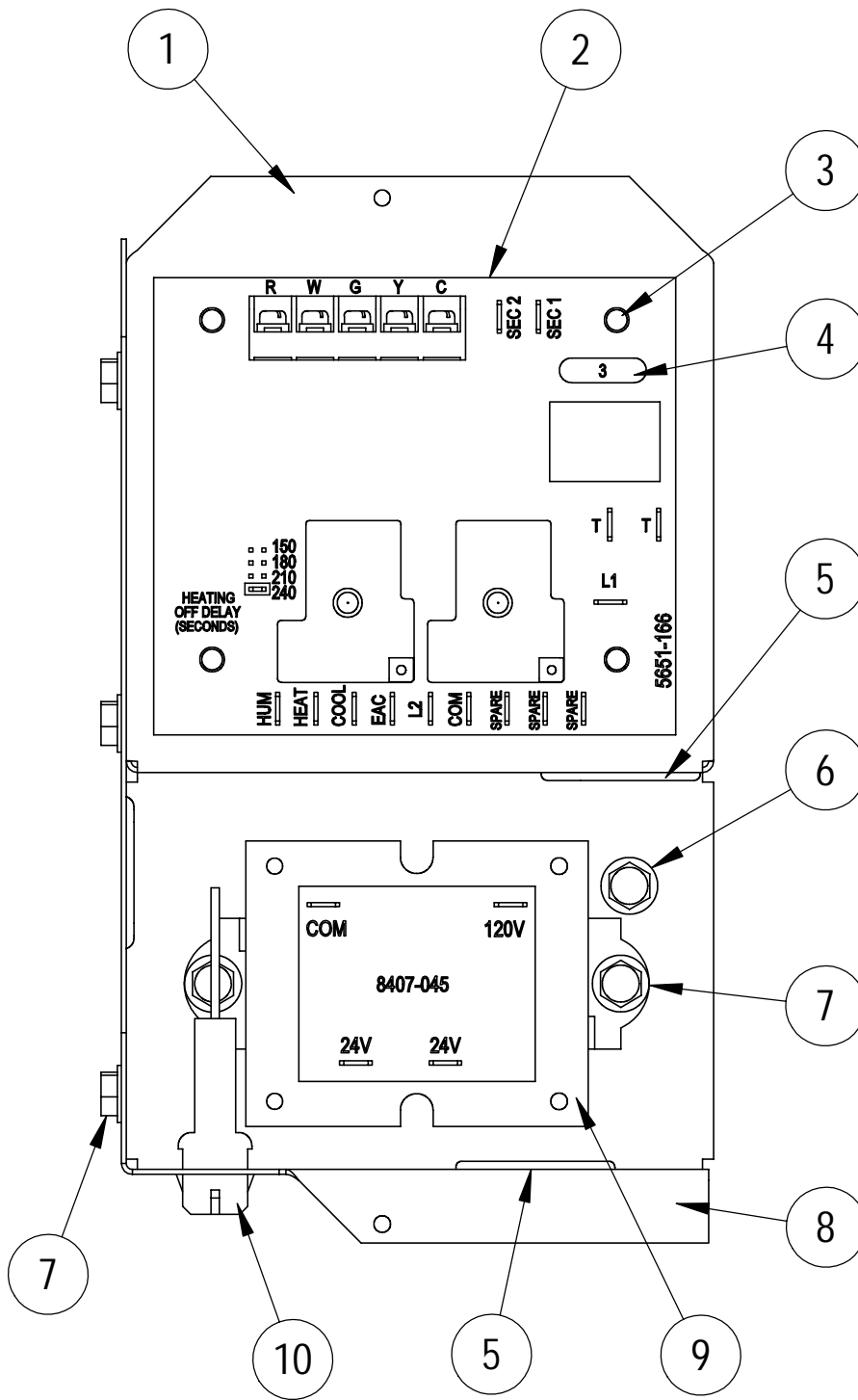
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# CABINET and FUNCTIONAL COMPONENTS

Table Continued from Page 3


Drawing No.	Part No.	Description	FLF085D36E	FLR085D36E	FLF110D48E	FLR110D48E	FLF110D60E	FLR110D60E	FLR140D60E
33	S153-354-4	Vestibule Door	X	X					
33	S153-355-4	Vestibule Door			X	X	X	X	
33	S153-358-4	Vestibule Door							X
34	9020-026	AFG Oil Burner w/.75 GPH Nozzle	X						
34	9020-031	AFG Oil Burner w/.75 GPH Nozzle		X					
34	9020-027	AFG Oil Burner w/1.00 GPH Nozzle			X		X		
34	9020-032	AFG Oil Burner w/1.00 GPH Nozzle				X		X	
34	9020-033	AFG Oil Burner w/1.25 GPH Nozzle							X
35	5252-008	Bard Nameplate	X	X	X	X	X	X	X
36	1171-256	Door Pull	X	X	X	X	X	X	X
37	S143-090	Front Cleanout Cover	X	X	X	X	X	X	
37	S143-095	Front Cleanout Cover							X
38	169-152	Flue Box Door	X	X	X	X	X	X	X
39	S169-150 	Flue Box Assembly	X	<del>X</del>	X	<del>X</del>	X	<del>X</del>	<del>X</del>
40	165-578	Base Channel	X	X	X	X	X	X	X

# CONTROL PANEL



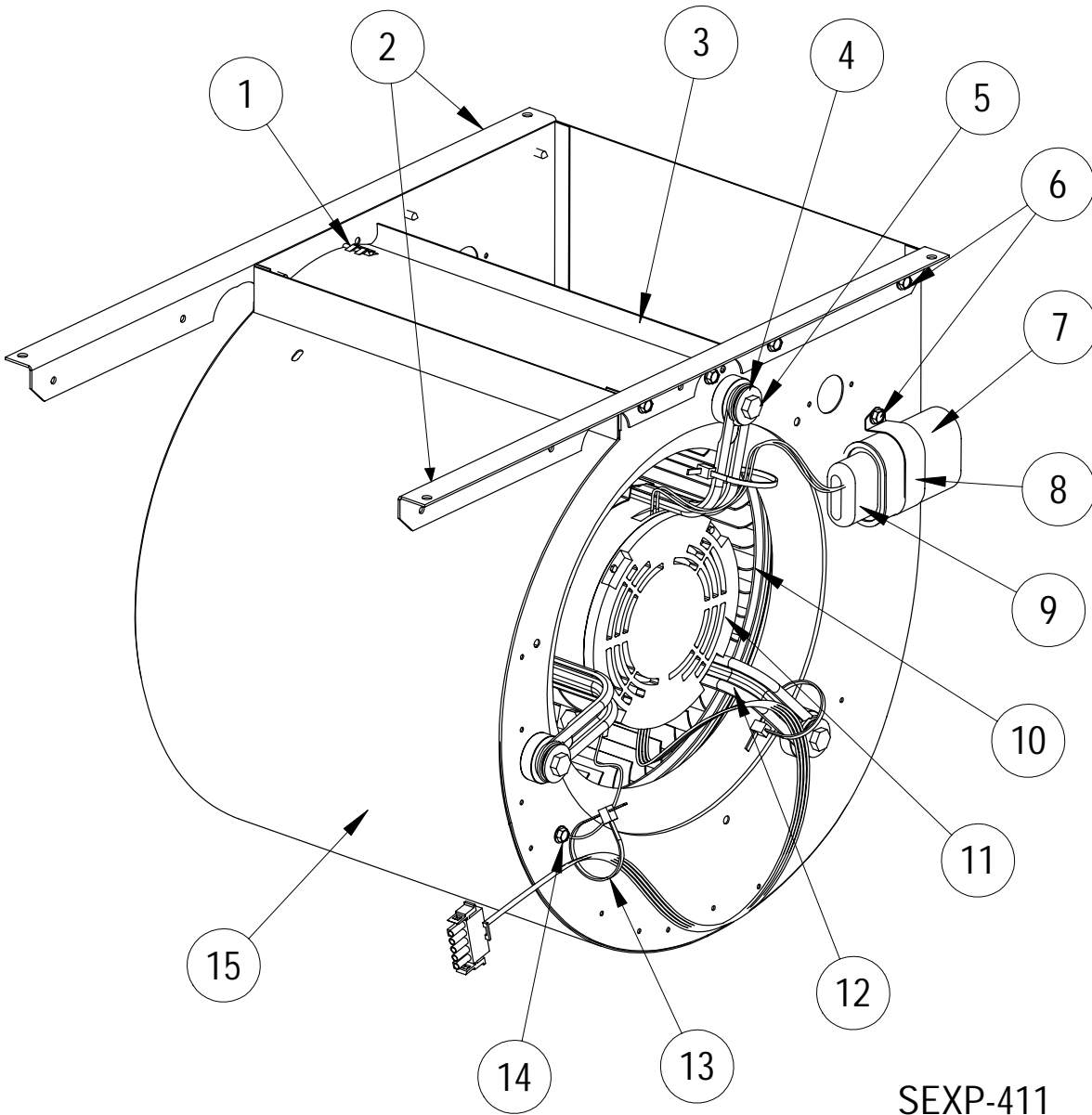
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# CONTROL PANEL

Drawing No.	Part No.	Description	FLF085D36E	FLR085D36E	FLF110D48E	FLR110D48E	FLF110D60E	FLR110D60E	FLR140D60E
1	S117-252 	Control Panel	X	X	X	X	X	X	X
2	5651-166	Oil Furnace Blower Control	X	X	X	X	X	X	X
3	— — —	1/4" Standoff .188 dia x .156 dia.	4	4	4	4	4	4	4
4	8614-045	3 Amp Fuse	X	X	X	X	X	X	X
5	8611-017	1.125" Snap Bushing	2	2	2	2	2	2	2
6	1012-153	Screw Type AB 10-16x1/2"	X	X	X	X	X	X	X
7	1012-086	Screw Type AB 10-16x1/2" w/nibs	X	X	X	X	X	X	X
8	117-253	Control Panel Wrapper	X	X	X	X	X	X	X
9	8407-045	Transformer 120/24V 40 VA	X	X	X	X	X	X	X
10	3000-1186	Wire Assembly	X	X	X	X	X	X	X

# BLOWER ASSEMBLY

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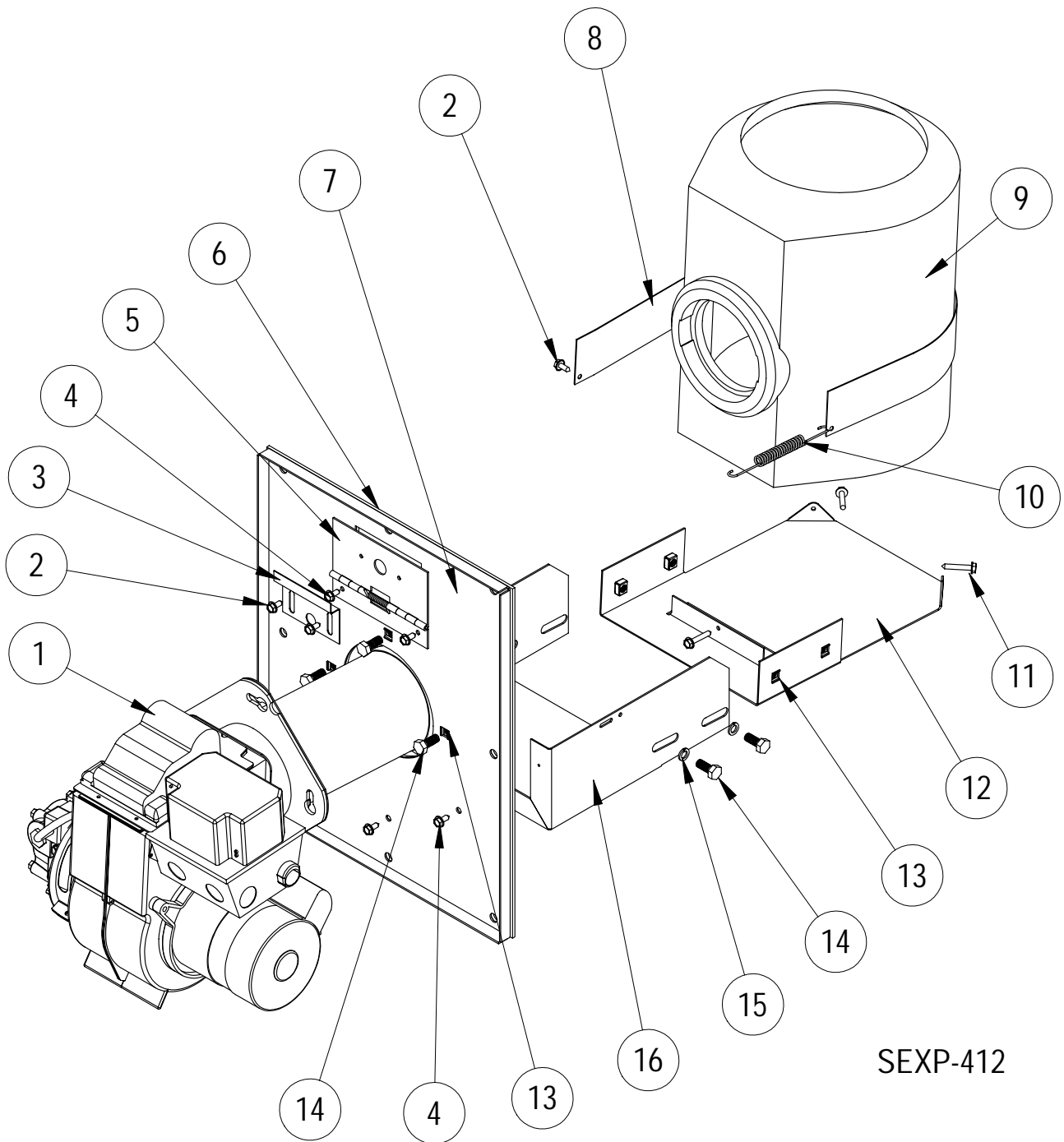


# BLOWER ASSEMBLY

Drawing No.	Part No.	Description	FLF085D36E	FLR085D36E	FLF110D48E	FLR110D48E	FLF110D60E	FLR110D60E	FLR140D60E
1	1012-088	Scew Type AB #10 – 16x3/4	X	X	X	X	X	X	①
2	104-1143	Blower Angle	2	2	2	2	2	2	2
3	144-128	Diffuser	X	X					
3	144-129	Diffuser			X	X	①	①	①
4	1012-109	Washer	3	3	3	3	3	3	3
5	1012-076	1/4 – 20X1-1/4 Type I Bolt	3	3	3	3	3	3	3
6	1012-086	Screw Type AB #10 – 16x1/2 w/nibs	10	10	10	10	10	10	10
7	8552-002	Capacitor 5.0 MFD 370V	X	X					
7	8552-004	Capacitor 7.5 MFD 370 V			X	X			
7	8552-026	Capacitor 15.0 MFD 370V					X	X	X
8	8550-003	Capacitor Bracket	X	X	X	X			
8	8550-006	Capacitor Bracket					X	X	X
9	8611-002	Capacitor Boot	X	X	X	X	X	X	X
10	5152-014	Blower Wheel CW 1/2" 10-9DD	X	X					
10	5152-059	Blower Wheel CCW 1/2" 10-10DD			X	X			
10	5152-053	Blower Wheel CW 1/2" 11-10DD					X	X	X
11	8105-040	Motor 1/3 HP 115VCCW 1075 3 Speed	X	X					
11	8106-033	Motor 1/2 HP 115VCW 1075 4 Speed			X	X			
11	8107-007	Motor 3/4 HP 115VCCW 1075 4 Speed					X	X	X
12	8620-034	Motor Mount Kit	X	X	X	X	X	X	X
13	7950-009	Wire Tie	X	X	X	X	X	X	X
14	1012-153	Screw Type AB #10 – 16x1/2	X	X	X	X	X	X	X
15	151-073	Blower Housing	X	X					
15	151-082	Blower Housing			X	X			
15	①	Blower Housing					①	①	①

① Part no. 5152-050 includes housing, diffuser, and blower wheel part no. 5152-053

# BURNER ASSEMBLY

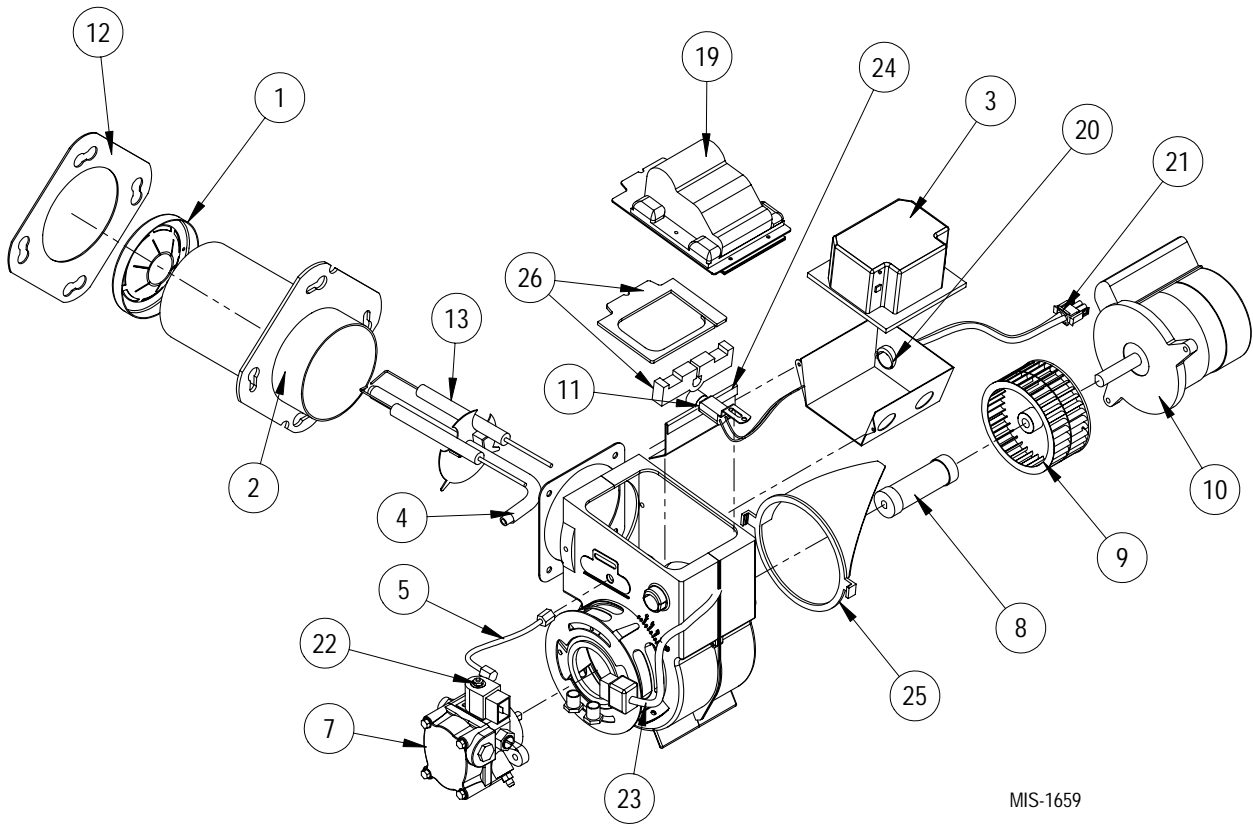


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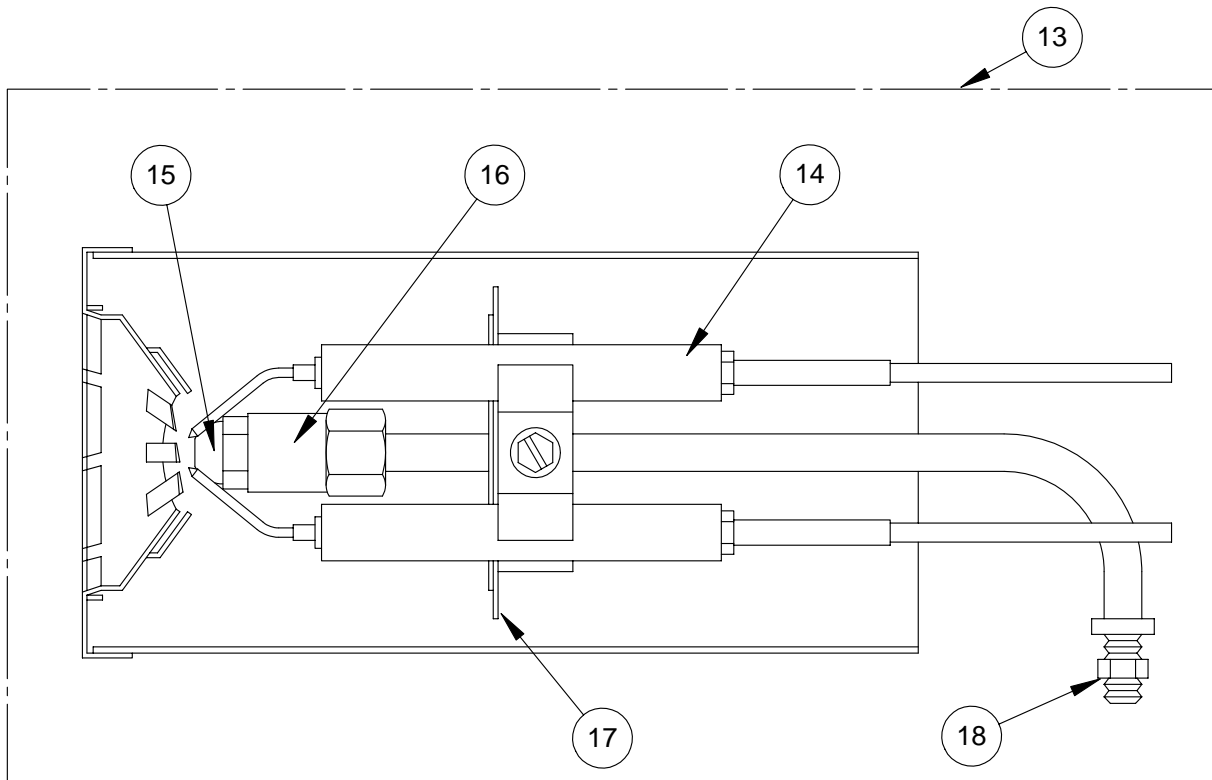
# BURNER ASSEMBLY

Drawing No.	Part No.	Description	FLF085D36E	FLR085D36E	FLF110D48E	FLR110D48E	FLF110D60E	FLR110D60E	FLR140D60E
1	9020-026	AFG Burner Assembly .75 GPH 70° H	X						
1	9020-031	AFG Burner Assembly 1.00 GPH 70° H		X					
1	9020-027	AFG Burner Assembly .75 GPH 70° H			X		X		
1	9020-032	AFG Burner Assembly 1.00 GPH 70° H				X		X	
1	9020-033	AFG Burner Assembly 1.25 GPH 70° H							X
2	1012-153	Screw Type AB #10 – 16x1/2"	3	3	3	3	3	3	3
3	143-026	Inspection Door Cover Plate	X	X	X	X	X	X	X
4	1012-086	Screw Type AB #10 – 16x1/2" w/nibs	5	5	5	5	5	5	5
5	142-027	Inspection Door Hinge	X	X	X	X	X	X	X
6	1921-057	Front Plate Gasket	X	X	X	X	X	X	
6	1921-058	Front Plate Gasket							X
7	S160-036	Front Plate Assembly	X	X	X	X	X	X	
7	S160-037	Front Plate Assembly							X
8	140-198	Combustion Chamber Support	X	X	X	X	X	X	
8	140-199	Combustion Chamber Support							X
9	7090-014	Pyrolite Combustion Chamber	X	X	X	X	X	X	
9	7090-015	Pyrolite Combustion Chamber							X
10	5401-007	Stainless Steel Spring	X	X	X	X	X	X	X
11	1012-145	Screw Type AB #10 0150 16x1"	3	3	3	3	3	3	3
12	S140-292	Bracket Extension	X	X	X	X	X	X	
12	S140-302	Bracket Extension							X
13	1012-218	1/4 – 20 Cage Nut	7	7	7	7	7	7	7
14	1012-051	1/4 – 20x3/4 Hex Head Bolt	7	7	7	7	7	7	7
15	1012-126	1/4" Type "A" Washer	4	4	4	4	4	4	4
16	112-297	Combustion Chamber Bracket	X	X	X	X	X	X	
16	112-302	Combustion Chamber Bracket							X

# BURNER COMPONENTS




MIS-1659



MIS-1663

## BURNER COMPONENTS

Drawing No.	Bard Part No.	Supplier Part No.	Description	FLR085D36E	FLR110D48E FLR110D60E	FLR140D60E
1	9022-034	360004	Head (F4)	X		
1	9022-042	360006	Head (F6)		X	X
2	9022-004	 51236007BK	Air Tube & Flange Assembly	X	X	X
3	9022-080	7456U	Primary Control	X	X	X
4	9022-007	571801	Bulkhead Fitting	X	X	X
5	9022-008	5636	Connector Tube	X	X	X
7	9022-082	21844U	"CleanCut" Oil Pump	X	X	X
8	9022-011	2454	Coupling	X	X	X
9	9022-083	2999	Blower Wheel	X	X	X
10	9022-084	21805R/218	PSC Motor 1/7 H.P.	X	X	X
11	9022-085	7006Q	CAD Cell	X	X	X
12	9022-021	3811	Mounting Flange Gasket	X	X	X
13	9022-015	NL72YH	Nozzle Line Electrode Assembly	X	X	X
14	9022-017	5780	Electrode Insulator Assembly	X	X	X
15	9011-016	2663	Nozzle .75 GPH 70 Degree A	X		
15	9011-018	2711	Nozzle 1.00 GPH 70 Degree A		X	
15	9011-020	21383	Nozzle 1.25 GPH 70 Degree A			X
16	9022-016	312U	Nozzle Adapter	X	X	X
17	9022-023	3384	Static Plate (3-3/8")	X	X	X
18	9022-018	3666	Bulkhead Fitting Locknut	X	X	X
19	9022-079	7440	Solid State Igniter	X	X	X
20	9022-086	3741	Junction Box	X	X	X
21	9022-055	31838	Power Cord	X	X	X
22	9022-087	21755	Solenoid Valve Coil	X	X	X
23	9022-088	210807	Solenoid Valve Cord	X	X	X
24	9022-089	3708	Restrictor Baffle	X	X	X
25	9022-090	31231	Air Guide	X	X	X
26	9022-093	51304	Igniter Gasket Kit	X	X	X

# BURNER COMPONENTS

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Drawing No.	Bard Part No.	Supplier Part No.	Description	FLF085D36E	FLF110D48E FLF110D60E
1	9022-034	360004	Head (F4)	X	
1	9022-042	360006	Head (F6)		X
2	9022-004	51236007BK	Air Tube & Flange Assembly	X	X
3	9022-080	7456U	Primary Control	X	X
4	9022-007	571801	Bulkhead Fitting	X	X
5	9022-008	5636	Connector Tube	X	X
7	9022-082	21844U	"CleanCut" Oil Pump	X	X
8	9022-011	2454	Coupling	X	X
9	9022-083	2999	Blower Wheel	X	X
10	9022-084	21805R/218	PSC Motor 1/7 H.P.	X	X
11	9022-085	7006Q	CAD Cell	X	X
12	9022-021	3811	Mounting Flange Gasket	X	X
13	9022-014	NL90YH	Nozzle Line Electrode Assembly	X	X
14	9022-017	5780	Electrode Insulator Assembly	X	X
15	9011-016	2663	Nozzle .75 GPH 70 Degree A	X	
15	9011-018	2711	Nozzle 1.00 GPH 70 Degree A		X
16	9022-016	312U	Nozzle Adapter	X	X
17	9022-023	3384	Static Plate (3-3/8")	X	X
18	9022-018	3666	Bulkhead Fitting Locknut	X	X
19	9022-079	7440	Solid State Igniter	X	X
20	9022-086	3741	Junction Box	X	X
21	9022-055	31838	Power Cord	X	X
22	9022-087	21755	Solenoid Valve Coil	X	X
23	9022-088	210807	Solenoid Valve Cord	X	X
24	9022-089	3708	Restrictor Baffle	X	X
25	9022-090	31231	Air Guide	X	X
26	9022-093	51304	Igniter Gasket Kit	X	X