
Replacement Parts Manual

Downflow / Horizontal Oil Furnace

**Models: FDS055D36A, FDS075D36A,
FDS100D48A, FDS125D48A**

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 plates.

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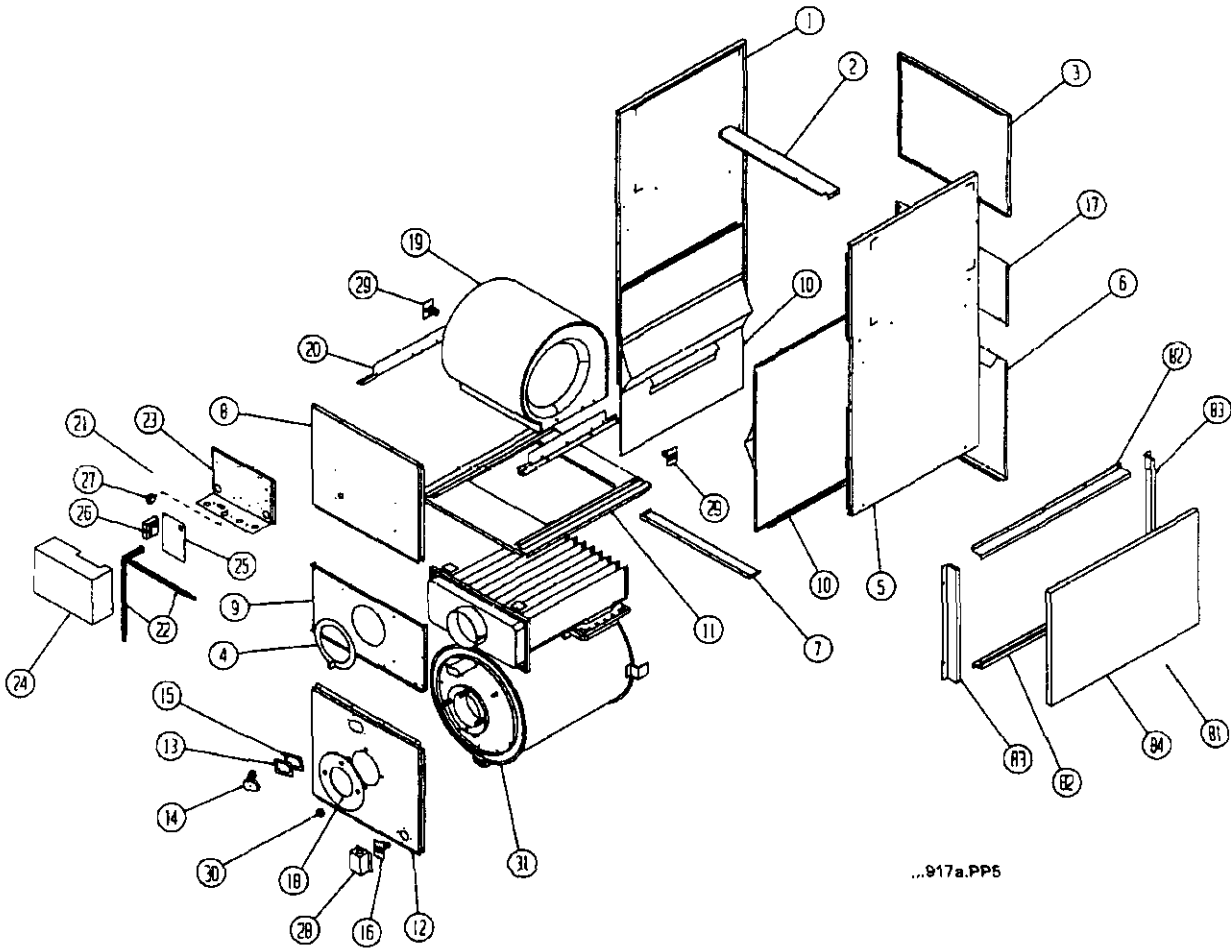


BARD MANUFACTURING COMPANY
Bryan, Ohio 43506

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

Manual: 2110-917 C
File: Rev. B
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Cabinet Components



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Cabinet Components

Drawing No.	Part No.	Description	FDS055D36A, FDS075D36A	FDS100D48A	FDS125D48A
1	9048-186	Left Side Panel (Includes No. 10)	X		
1	9048-187	Left Side Panel (Includes No. 10)		X	X
2	9048-188	Top Panel	X		
2	9048-189	Top Panel		X	X
3	9048-190	Back Top Panel	X		
3	9048-191	Back Top Panel		X	X
4	9048-192	Rosette, Flue Outlet	X	X	X
5	9048-193	Right Side Panel (Includes No. 10)	X		
5	9048-219	Right Side Panel (Includes No. 10)		X	X
6	9048-194	Back Bottom Panel	X		
6	9048-195	Back Bottom Panel		X	X
7	9048-196	Base Panel	X		
7	9048-197	Base Panel		X	X
8	9048-198	Blower Door	X		
8	9048-199	Blower Door		X	X
9	9048-200	Front Center Panel	X		
9	9048-201	Front Center Panel		X	X
10	9048-202	Side Shield	2		
10	9048-203	Side Shield		2	2
11	9048-204	Partition Panel	X		
11	9048-205	Partition Panel		X	X
12	9048-207	Front Bottom Panel	X		
12	9048-208	Front Bottom Panel		X	X
13	9048-140	Rosette Observation Tube	X	X	X
14	9048-141	Observation Door	X	X	X
15	9048-142	Gasket, Rosette Observation Tube	X	X	X
16	9048-209	Limit Control (170) w/Insulator	X		
16	9048-210	Limit Control (170) w/Insulator		X	X
17	9048-211	Back Center Panel	X		
17	9048-212	Back Center Panel		X	X
18	9048-145	Burner Mounting Gasket	X	X	X
19	9048-213	Blower Assembly with 1/3 HP PSC Motor	X		
19	9048-214	Blower Assembly with 1/2 HP PSC Motor		X	
19	9048-215	Blower Assembly with 3/4 HP PSC Motor			X
20	9048-216	Leg, Blower	2		
20	9048-217	Leg, Blower		2	2
21	9048-218	Control Assembly (Includes No. 23-27)	X	X	X
22	9048-220	Wire Harness (Burner and Control Cables)	X	X	X
23	9048-221	Control Box	X	X	X
24	9048-222	Cover, Control Box	X	X	X
25	9048-157	Control, Fan Timer	X	X	X
26	9048-158	Transformer, 40VA	X	X	X
27	9048-159	Continuous Low Speed Fan Switch	X	X	X
28	9048-223	Cover, Limit	X	X	X
29	9048-224	Reverse Flow Limit (140) w/Insulator	2	2	2
31	9048-225	Heat Exchanger (Includes No. 32 - 51)	X		
31	9048-226	Heat Exchanger (Includes No. 32 - 51)		X	
31	9048-227	Heat Exchanger (Includes No. 32 - 51)			X

NOTE: Items shown in exploded views and not listed are standard hardware items available in the field.

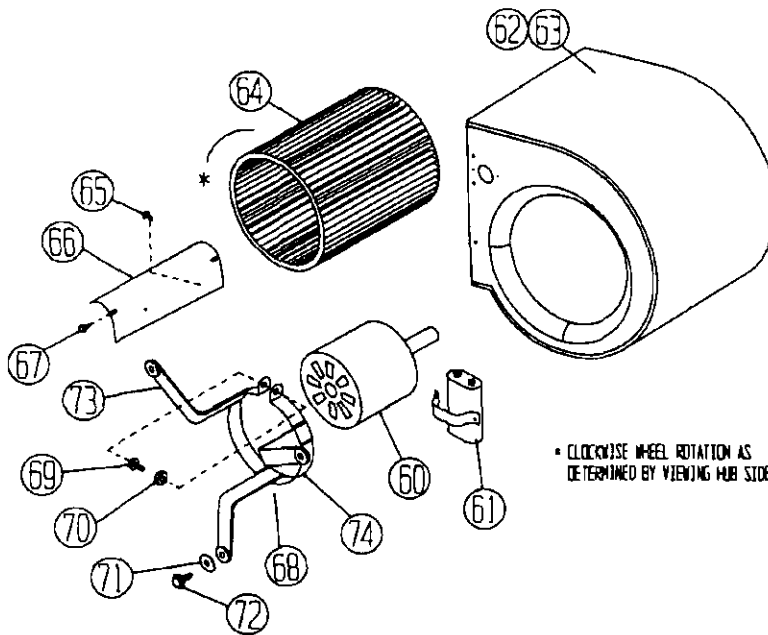
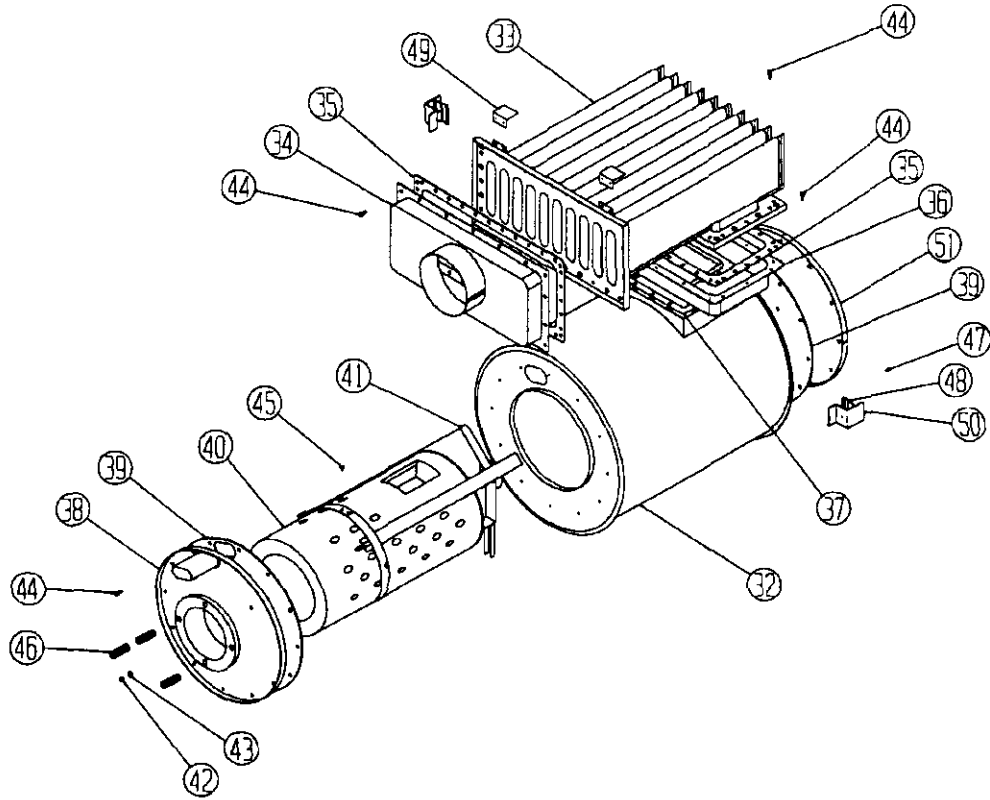
Cabinet Components

Drawing No.	Part No.	Description	WA701-B	WA701-C	WA721-B
80	9048-250	Combustible Floor Sub-Base	X		
80	9048-251	Combustible Floor Sub-Base		X	X
81	9048-252	Filter Riack w/Filter (Includes 82 - 84)	X		
81	9048-253	Filter Riack w/Filter (Includes 82 - 84)		X	X
82	9048-254	Filter Top and Bottom Panel	2		
82	9048-255	Filter Top and Bottom Panel		2	2
83	9048-256	Filter Rear and Access Panel	2		
83	9048-150	Filter Rear and Access Panel		2	2
84	9048-257	Filter	X		
84	9048-258	Filter		X	X

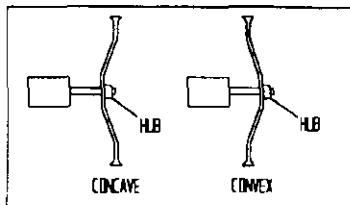
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Heat Exchanger and Blower Assemblies



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Heat Exchanger and Blower Assemblies

Heat Exchanger Assembly			FDS055D36A, FDS075D36A	FDS100D48A	FDS125D48A
Drawing No.	Part No.	Description			
32		Heat-X Primary Drum	(Included in Item 31, Heat-X Assembly)		
33		Heat-X Secondary Tube Section	(Included in Item 31, Heat-X Assembly)		
34	9048-228	Flue Box	X		
34	9048-229	Flue Box		X	X
35	9048-230	Gasket, Tube Plate	2		
35	9048-164	Gasket, Tube Plate		2	2
36		Box, Drum Collector	(Included in Item 31, Heat-X Assembly)		
37		Gasket, Drum Outlet	(Included in Item 31, Heat-X Assembly)		
38	9048-231	Bottom Cover Plate	X		
38	9048-232	Bottom Cover Plate		X	X
39	9048-233	Gasket, Bottom Cover	2	2	2
40	9048-234	Combustion Chamber	X		
40	9048-235	Combustion Chamber		X	
40	9048-259	Combustion Chamber			X
41	9048-236	Band, Combustion Mounting	X		
41	9048-237	Band, Combustion Mounting		X	
41	9048-238	Band, Combustion Mounting			X
46	9048-171	Stud, Burner Mount	3	3	3
48	9048-172	Leg Clamp	2	2	2
49	9048-239	Angle Clamp	2	2	2
50	9048-174	Side Leg	2	2	2
51	9048-241	Rear Cover Plate	X	X	X
52	9048-176	Draft Regulator (Not Shown)	X	X	X

NOTE: Items shown in exploded views and not listed are standard hardware items available in the field.

Blower Assembly			FDS055D36A, FDS075D36A	FDS100D48A	FDS125D48A
Drawing No.	Part No.	Description			
60	9048-241	Motor, 1/3 PSC 3 Speed Direct Drive	X		
60	9048-242	Motor, 1/2 PSC 3 Speed Direct Drive		X	
60	9048-177	Motor, 3/4 PSC 3 Speed Direct Drive			X
61	9048-243	7.5 MFCDC Capacitor w/Boot and Clamp	X		
61	9048-178	15.0 MFCDC Capacitor w/Boot and Clamp		X	X
62	9048-244	12 x 9 SS Blower w/Legs and Motor Mount	X		
62	9048-245	12 x 9 SS Blower w/Legs and Motor Mount		X	
62	9048-260	12 x 12 SS Blower w/Legs and Motor Mount			X
63	9048-246	Blower Housing 12 x 9 TR	X	X	
63	9048-247	Blower Housing 12 x 12 TR			X
64	9048-248	Blower Wheel 12 x 9 Convex 1/2" Bore	X	X	
64	9048-181	Blower Wheel 12 x 12 Concave 1/2" Bore			
66	9048-249	Cutoff 12 x 9	X	X	
66	9048-182	Cutoff 12 x 12			X
68	9048-183	Belly Band Motor Mount 12" Blower	X	X	X
73	9048-184	Motor Mount Arm 12" Blower	3	3	3
74	9048-185	Motor Mount Band	X	X	X

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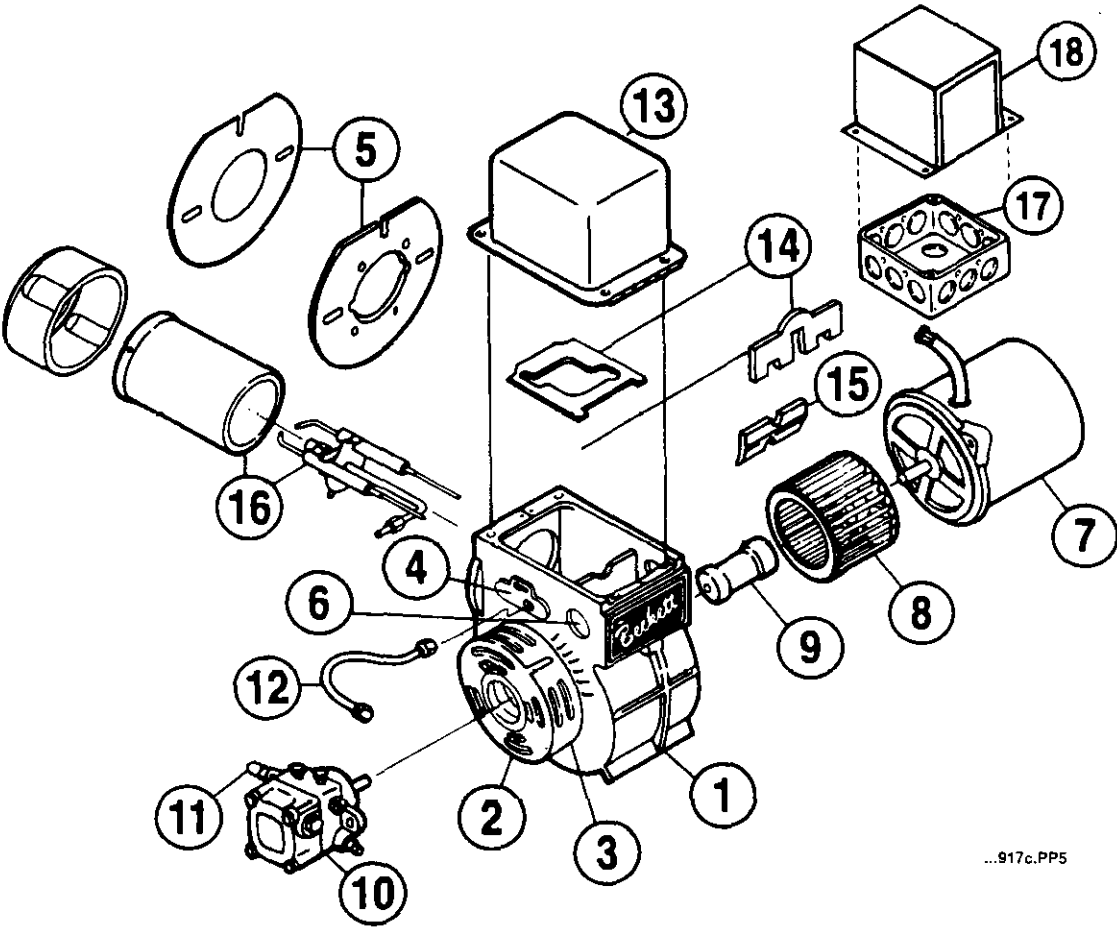
Furnace / Burner Specification Chart

Furnace / Burner Specification Chart Beckett AFG Burner with Ignition Transformer

Bonnet Capacity	Model	Burner Spec No.	Air Tube No.	Head	Static Plate	Air * Shutter Setting	Air * Bank Setting	Nozzle	Pump Stage
55,000	Downglow/ Horizontal	DU301	AF 47YH HS	F3	3-3/8	4	0	.50 x 80 Deg. Solid	Single
73,000	Downglow/ Horizontal	DU301	AF 47YH HS	F3	3-3/8	5	0	.65 x 70 Deg. Solid	Single
100,000	Downglow/ Horizontal	DU301	AF 47YH HS	F3	3-3/8	9	00	.90 x 70 Deg. Hollow	Single
125,000	Downglow/ Horizontal	DU302	AF 67YB HS	F6	2-3/4	10	0	1.10 x 70 Deg. Hollow	Single

* Air shutter and band settings are factory settings and must be adjusted for individual installations. Requires Ceramic Heat Shield 31517 and Retainer 3716.

Burner Components



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Drawing No.	Bard Part No.	Beckett Part No.	Description	FDS055D36A, FDS075D36A	FDS100D48A	FDS125D48A
1		5877	Burner Housing Assembly	X	X	X
*2		3709	Air Shutter	X	X	X
		4198	Retaining Screw	X	X	X
*3		5151501	Air Band	X	X	X
		4198	Screw	X	X	X
		4150	Nut	X	X	X
*4		3493	Escutcheon Plate	X	X	X
		4292	Screw	X	X	X
5		31492BK	Flange	X	X	X
		31428	Flange, Gasket	X	X	X
6		2139	Hole Plug	X	X	X
7	9022-013	2456	Drive Motor	X	X	X
		7189	Mounting Screws	X	X	X
8	9022-045	2999	Blower Wheel (Use Only RWB Replacement)	X	X	X
9	9022-011	2454	Coupling	X	X	X
10	9022-010	2460	Fuel Unit -- Single Stage (Suntec)	X	X	X
		4189	-- Mounting Screws	X	X	X
11	9022-009	2256	Pump Nozzle Port Fitting	X	X	X
12	9022-008	5636	Connector Tube Assembly	X	X	X
13	9022-068	5878	Ignition Transformer Assembly	X	X	X
			CONSISTS OF THE FOLLOWING:			
	9022-057	2442U	Ignition Transformer	X	X	X
		4217	Higning Screws	X	X	X
		4292	Holding Screws	X	X	X
	9022-066	51304	Transformer Gasket Kit	X	X	X
14	9022-066	51304	Transformer Gasket Kit	X	X	X
*15		5880	Low Firing Baffle	X	X	X
16	9022-072	AF47UHFS	Air Tube Combination	X	X	
			CONSISTS OF THE FOLLOWING:			
	9022-069	3294053BK	Air Tube	X	X	
	9022-046	NL47YH	Nozzle Electrode Assembly	X	X	
	9022-003	F-3	Firing Head	X	X	
	9022-071	51713	Ceramic Heat Shield	X	X	
	9022-017	5780	Electrode Kit	X	X	
16	9022-073	AF67YBFS	Air Tube Combination			X
			CONSISTS OF THE FOLLOWING:			
	9022-060	3294073BK	Air Tube			X
	9022-047	NL67BY	Nozzle Electrode Assembly			X
	9022-042	F-6	Firing Head			X
	9022-071	51713	Ceramic Heat Shield			X
	9022-017	5780	Electrode Kit			X
17	9022-067	2362	Junction Box			
18	9022-056	7022U	Primary Relay (R8184G)			

* These items included in 5877 Burner Housing Assembly.
When ordering parts -- state Beckett burner model, part description and part number.

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