



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 dated as shown in the following index.

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IMPORTANT

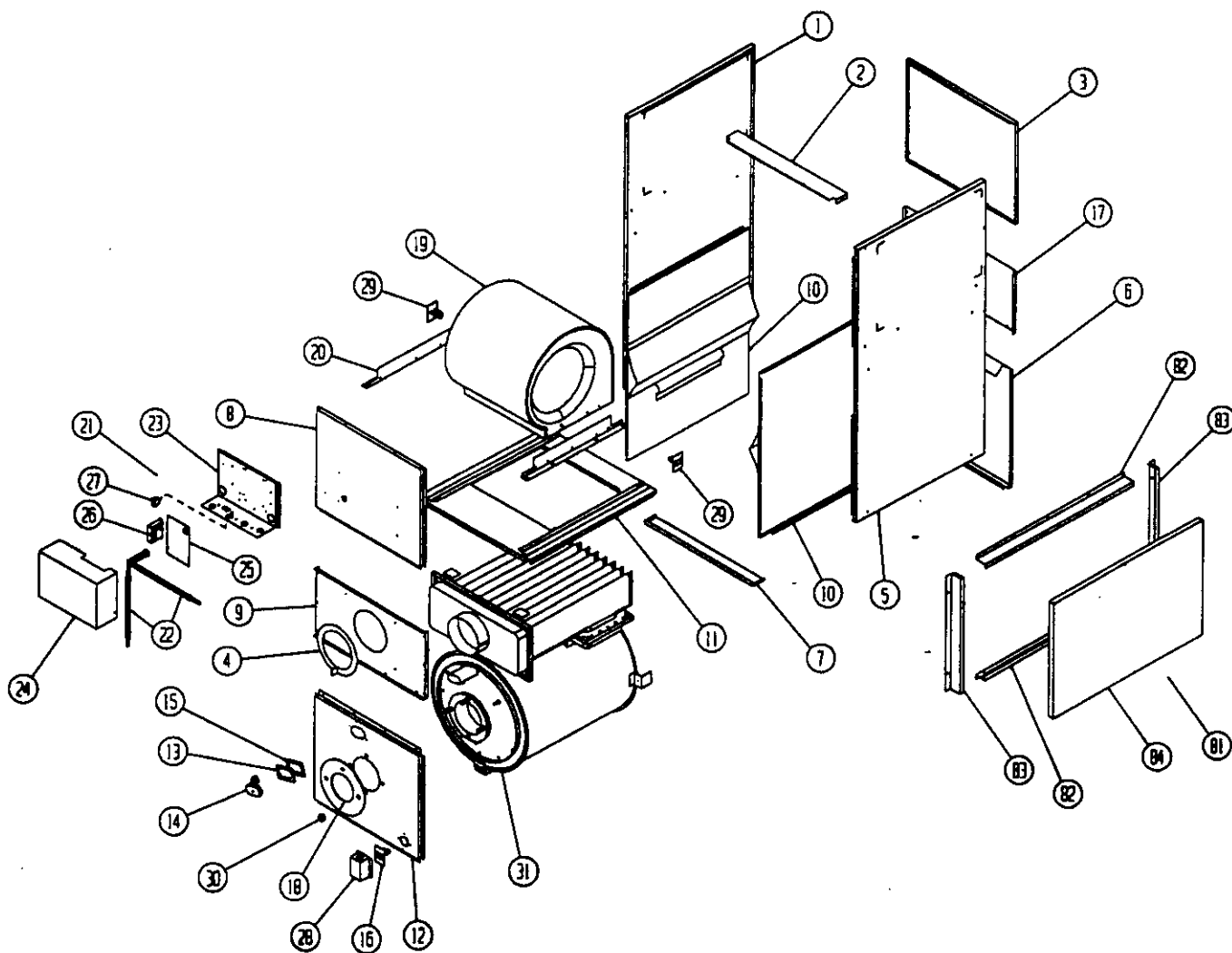
Contact the installing and/or local Bard distributor for all parts requirements. Make sure you have the complete model and serial number available from the unit rating plates.

BARD MANUFACTURING COMPANY
Bryan, Ohio 43506

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

Manual: 2110-917 Rev. B
Supersedes: Rev. A
File: 2150-004, Tab 3

CABINET COMPONENTS



Date: 10-04-94
Supersedes:

CABINET COMPONENTS

Dwg. 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	
11	9048-206	Partition Panel			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 (195) 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.

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Supersedes:

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CABINET COMPONENTS

Dwg. No.	Part No.	Description	EDS055D36A EDS075D36A	EDS100D48A	EDS125D48A
80	9048-250	Combustible Floor Sub-Base	x		
80	9048-251	Combustible Floor Sub-Base		x	x
81	9048-252	Filter Rack w/Filter (Includes 82 - 84)	x		
81	9048-253	Filter Rack 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

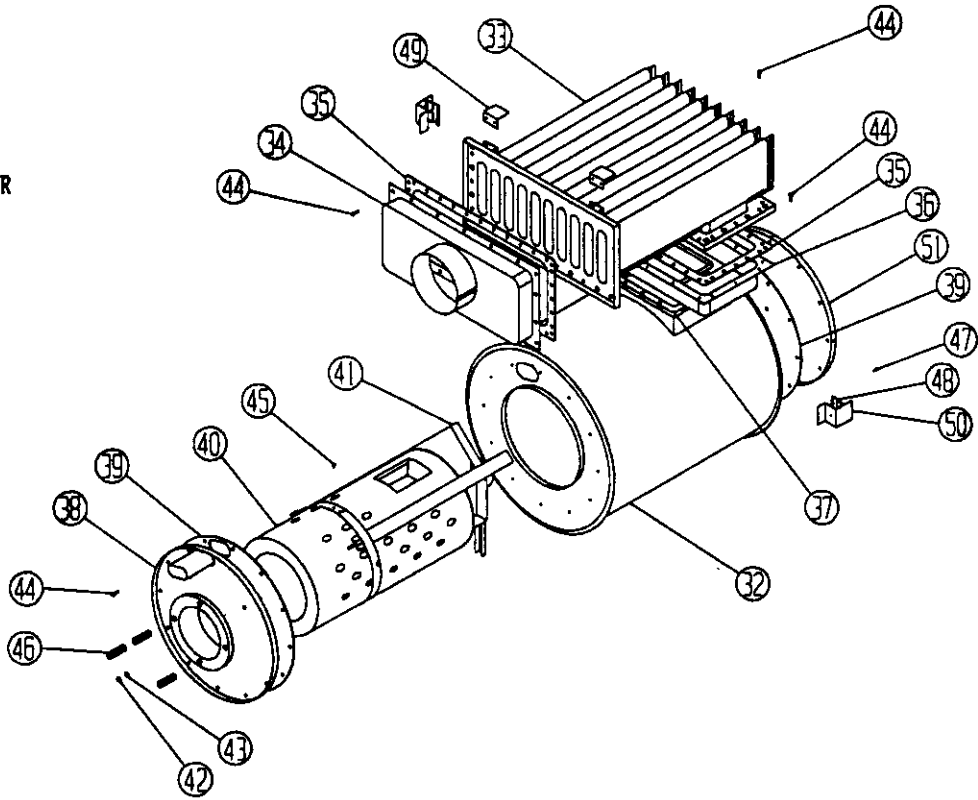
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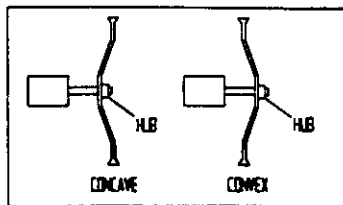
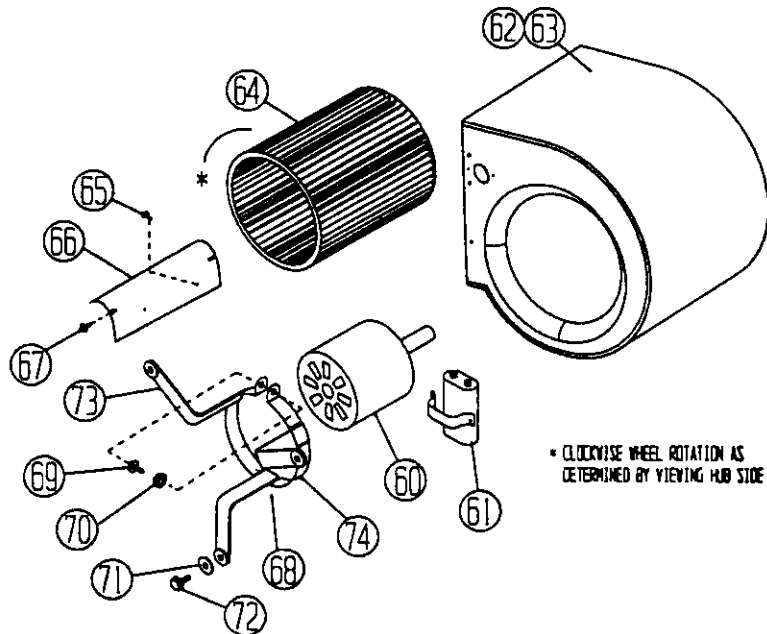
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HEAT EXCHANGER AND BLOWER ASSEMBLIES

HEAT EXCHANGER
ASSEMBLY



BLOWER
ASSEMBLY



Date: 10-04-94
Supersedes:

HEAT EXCHANGER ASSEMBLY

Dwg. No.	Part No.	Description	FDS055D36A FDS075D36A	FDS100D48A	FDS125D48A
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	9048-240	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

Dwg. No.	Part No.	Description	FDS055D36A FDS075D36A	FDS100D48A	FDS125D48A
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 MFD Capacitor w/Boot and Clamp	x		
61	9048-178	15.0 MFD Capacitor w/Boot and Clamp		x	x
62	9048-244	12 x 9 DD Blower w/Legs and Motor Mount	x		
62	9048-245	12 x 9 DD Blower w/ Legs and Motor Mount		x	
62	9048-260	12 x 12 DD 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			x
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

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

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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 * Band Setting	Nozzle	Pump Stage
55,000	Downflow/ Horizontal	DU301	AF 47YH HS	F3 **	3-3/8	4	0	.50 x 80 Deg. Solid	Single
73,000	Downflow/ Horizontal	DU301	AF 47YH HS	F3 **	3-3/8	5	0	.65 x 70 Deg. Solid	Single
100,000	Downflow/ Horizontal	DU301	AF 47YH HS	F3 **	3-3/8	9	0	.90 x 70 Deg. Hollow	Single
125,000	Downflow/ Horizontal	DU302	AF 67YB HS	F6 ***	2-3/4	10	0	1.10 x 70 Deg. Hollow	Single

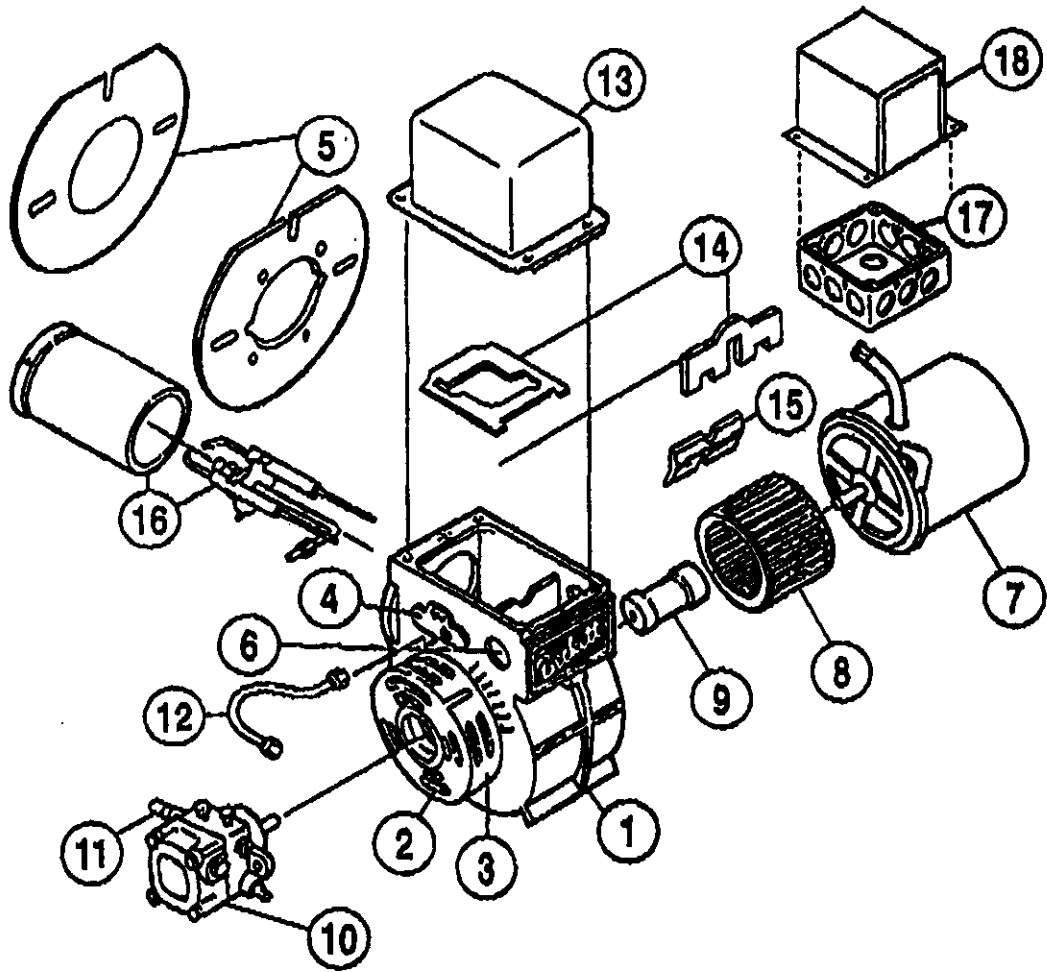
* Air shutter and band settings are factory settings and must be adjusted for individual installations.
 Requires Ceramic Heat Shield 31517 and Retainer 3716.

** F3 Firing Head 51360 (Bard 9022-050) includes Ceramic Heat Shield 31517 (Bard 9022-048) and Retainer 3716 (Bard 9022-049).

*** F6 Firing Head 51361 (Bard 9022-051) includes Ceramic Heat Shield 31517 (Bard 9022-048) and Retainer 3716 (Bard 9022-049).

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 Supersedes:

BURNER COMPONENTS



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BURNER COMPONENTS

Dwg. 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		31429BK	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
		4189	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	Hinge 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	9022-043	AF47YBHS	Air Tube Combination	X	X	
			CONSISTS OF THE FOLLOWING:			
	9022-069	3294053BK	Air Tube	X	X	
	9022-046	NL47YH	Nozzle Electrode Assembly	X	X	
	9022-050	51360	Firing Head (Includes heat shield)	X	X	
	9022-017	5780	Electrode Kit	X	X	
16	9022-044	AF67YBHS	Air Tube Combination			X
			CONSISTS OF THE FOLLOWING:			
	9022-060	3294073BK	Air Tube			X
	9022-047	NL67YB	Nozzle Electrode Assembly			X
	9022-051	51361	Firing Head (Includes 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.

Date: 01-26-95
Supersedes: