

REPLACEMENT PARTS FOR GAS-FIRED UNIT HEATER

MODEL FT



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IMPORTANT

- Always include complete model and serial number so that any specification change can be considered for parts replacement. It can save time and expense.
- In keeping with our policy of continuous product improvement, we reserve the right to alter any information shown here.
- Order by Part Number (PN) not by option designation.

WE RESERVE THE RIGHT TO SUBSTITUTE FUNCTIONAL REPLACEMENTS.

SERIAL NUMBER

NOTE: The serial number is located on the unit's rating plate.

Decode serial numbers as follows:

Serial No. Sample: **BAB 75 W5 N 00000**
 Elements of No.: **1 | 2 | 3 | 4 | 5**

Key:

- 1 = Date of manufacture (refer to Table 1)**
- 2 = Type of pilot system**
- 3 = Type of gas valve**
- 4 = Type of gas (N = natural, L = propane)**
- 5 = Consecutive number (identification only)**

Table 1. Serial Number Date Codes (Month and Year)

Year	Month											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1995	AUA	AUB	AUC	AUD	AUE	AUF	AUG	AUH	AUI	AUJ	AUK	AUL
1996	AVA	AVB	AVC	AVD	AVE	AVF	AVG	AVH	AVI	AVJ	AVK	AVL
1997	AWA	AWB	AWC	AWD	AWE	AWF	AWG	AWH	AWI	AWJ	AWK	AWL
1998	AXA	AXB	AXC	AXD	AXE	AXF	AXG	AXH	AXI	AXJ	AXK	AXL
1999	AYA	AYB	AYC	AYD	AYE	AYF	AYG	AYH	AYI	AYJ	AYK	AYL
2000	AZA	AZB	AZC	AZD	AZE	AZF	AZG	AZH	AZI	AZJ	AZK	AZL
2001	BAA	BAB	BAC	BAD	BAE	BAF	BAG	BAH	BAI	BAJ	BAK	BAL
2002	BBA	BBB	BBC	BBD	BBE	BBF	BBG	BBH	BBI	BBJ	BBK	BBL
2003	BCA	BCB	BCC	BCD	BCE	BCF	BCG	BCH	BCI	BCJ	BCK	BCL
2004	BDA	BDB	BDC	BDD	BDE	BDF	BDG	BDH	BDI	BDJ	BDK	BDL
2005	BEA	BEB	BEC	BED	BEE	BEF	BEG	BEH	BEI	BEJ	BEK	BEL
2006	BFA	BFB	BFC	bfd	BFE	BFF	BFG	BFH	BFI	BFJ	BFK	BFL
2007	BGA	BGB	BGC	BGD	BGE	BGF	BGG	BGH	BGI	BGJ	BGK	BGL
2008	BHA	BHB	BHC	BHD	BHE	BHF	BHG	BHH	BHI	BHJ	BHK	BHL
2009	BIA	BIB	BIC	BID	BIE	BIF	BIG	BIH	BII	BIJ	BIK	BIL
2010	BJA	BJB	BJC	BJD	BJE	BJF	BJG	BJH	BJI	BJJ	BJK	BJL
2011	BKA	BKB	BKC	BKD	BKE	BKF	BKG	BKH	BKI	BKJ	BKK	BKL
2012	BLA	BLB	BLC	BLD	BLE	BLF	BLG	BLH	BLI	BLJ	BLK	BLL
2013	BMA	BMB	BMC	BMD	BME	BMF	BMG	BMH	BMI	BMJ	BMK	BML
2014	BNA	BNB	BNC	BND	BNE	BNF	BNG	BNH	BNI	BNJ	BNK	BNL

ELECTRICAL COMPONENTS

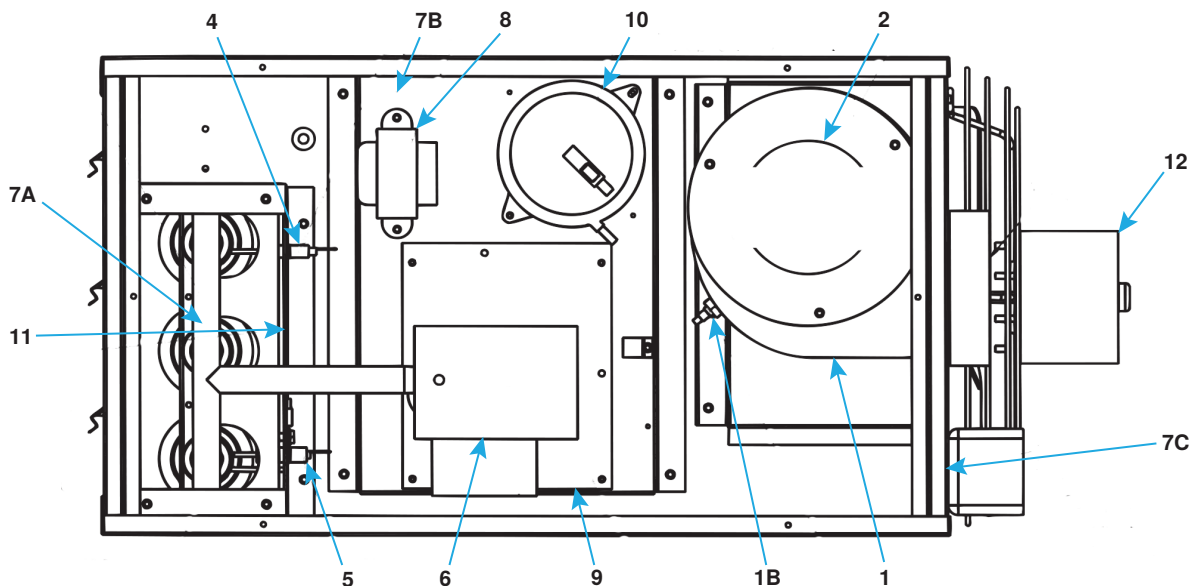


Figure 1. Typical Control Compartment (Refer to Table 2)

Table 2. Electrical Components

Item No.	Component	Description	Unit Size (MBTUh)																	
			30	45	60	75	100	125	150	200	250	300								
			PN																	
1	Venter housing assembly	Standard	147357*			147357			147657		149164	149165								
			164689	164690	164691	—														
		Option AV6 or AL2B	176809	176309	—															
1A	Gasket	Venter	147793*			147793			97300											
1B	Tap		147793	44695																
2	Venter motor and wheel assembly	Standard	147359				148056		148057		149160									
		Option AV6	177148		—															
		Option AL2B	—	176329																
2A	Venter motor	Standard	97738*			148055			148980**		150771									
			148055																	
		Option AV6	175987		—															
Option AL2B	—	175987																		
2B	Venter wheel	Standard	135979			135979			97724		135980									
		Option AV6																		
		Option AL2B	—	135979	—															
2C	Venter motor plate	Standard	135981						97301		164380									
		Option AV6	176311		—															
		Option AL2B	—	176311																
2D	Venter motor plate gasket	Option AV6	155651																	
		Option AL2B	—	155651																
2E	Venter motor plate	Secondary, option AV6	176810																	
2F	Spacer	Option AV6	98872																	
2G	Isolator plate	Option AL2B	—	176310																
2H	Isolator	Rubber, option AL2B	—	113498																
2J	Fan blade	Venter	68005										141570							
3	Venter inlet ring	Option AV6 or AL2B	—	62594									—							
4	Sensor	Flame	147165																	
5	Ignitor	Spark	147166																	
5A	Cable	Ignition, spark Ignitor	147167						148085											
5B	Ignitor/cable***	Assembly	159956						159957											
6	Gas valve	Natural gas	172552				147830				150839									
		Propane	172553				147560				150840									
7A	Limit	Control	45602				—													
7B			—				155764				155765									
7C		Control, auxiliary	—								100799									
8	Transformer	30V	147356																	
9	DSI control board	RAM #3MC4	147102 (replaced by PN 174260)																	
9B		Johnson Controls #G861	174260																	
10	Pressure switch, ≤4000 feet	Standard	148072*			148072				150837										
			164672	164673																
	Option AV6 or AL2B	164672		—																
	Pressure switch, >4000 feet	Standard	149879*			149879				151372										
164674			164675																	
Option AV6 or AL2B	164674		—																	
10A	Sensing tube	Pressure switch	147904			147905		148251												
11	Flame rollout switch	Standard	121275	112752	121275	—														
		Option AV6			—															
		Option AL2B	—	121275																
12	Motor	Fan	Refer to Table 3																	
13	Outlet box	2 × 4, steel	—		17782	—					17782									
13A	Cover	Outlet box			17800						17800									

*Used on units manufactured **before** NOV 1997.

**Includes motor (PN 148053), capacitor (PN 163894), and capacitor boot (PN 103182).

***Used only on units with Johnson Controls (#G861) DSI control board (item 9B)—replaces PNs 147166 and 147167.

CABINET, HEAT EXCHANGER, FAN, AND BURNER BOX COMPONENTS

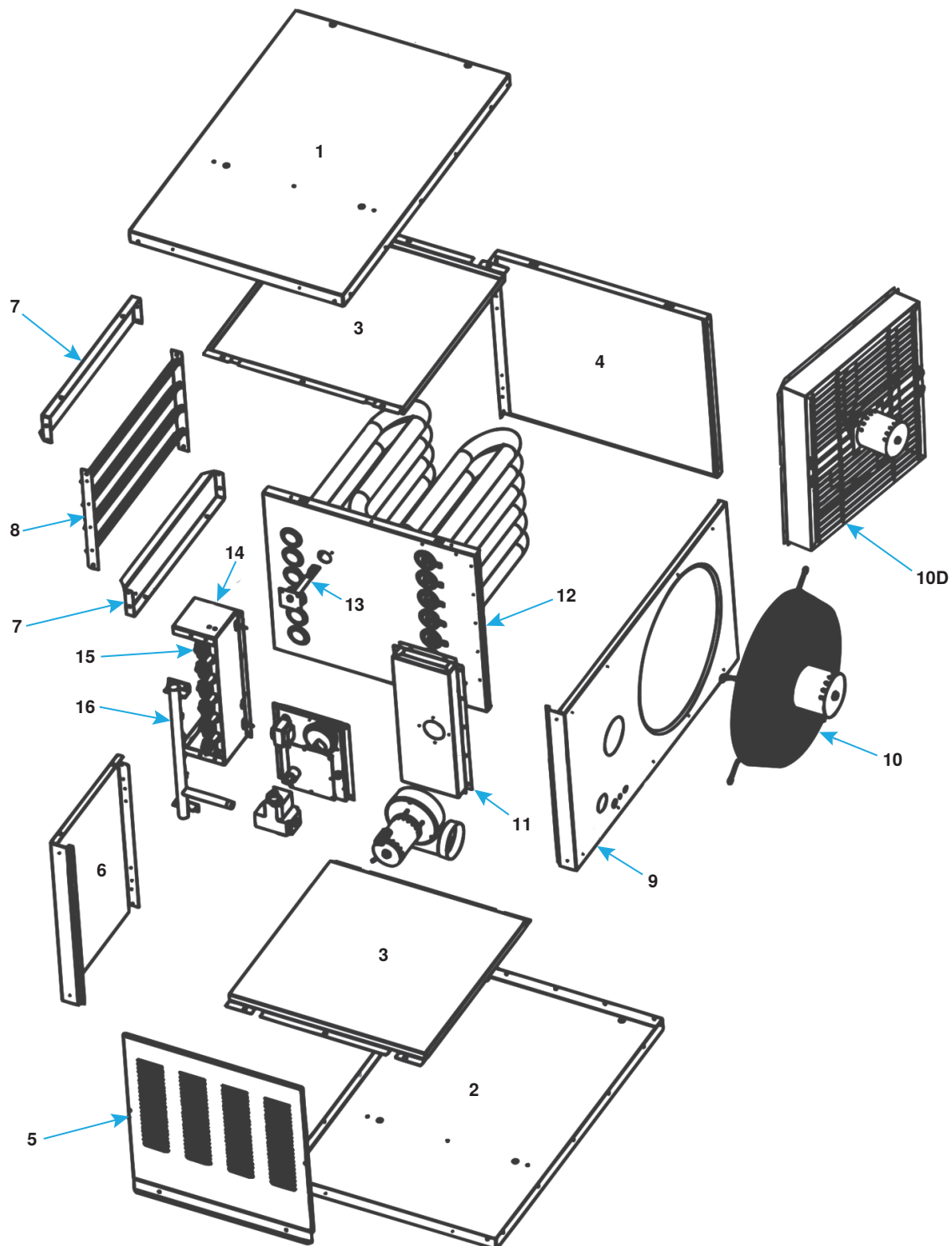


Figure 2. Cabinet, Heat Exchanger, Fan, and Burner Box Components (Refer to [Table 3](#))

Table 3. Cabinet, Heat Exchanger, Fan, and Burner Box Components

Item No.	Component	Description	Unit Size (MBTUh)										
			30	45	60	75	100	125	150	200	250	300	
			PN										
1	Outer panel	Top	175827*		175833*		146455				148680		
			147105		147225								
2		Bottom	175828*		175834*								
			147106		147226								
3	Retainer panel	Top/bottom	147155		147223		146615				—		
3A		Top/bottom, small	—								148591		
3B		Top/bottom, large									148616		
4	Side panel	Left	147574		147575		147816		147817		150977		
5	Front panel	Access door	147115		147116		146490		146479				
6		Right	175829*	175830*	175835*	175836*	146492		146493		148681		
			147113	147837	147114	147838							
7		Top/bottom	—				147847	146476	147848	146477	150992	148682	
8	Louver	Assembly	147426		147427		147850	131803	94865		151595		
9	Panel	Fan	175826*		175831*	175832*	148924		147158		148685		
			147108		158734	147586							
10	Fan, fan guard, and motor	Assembly	147181	147182	147183		147672		147673		150997		
		Assembly, option AL2B	—	176490	—								
10A	Guard	Fan	151991		151992		136949		104818				
		Fan, option AL2B	—	151991	—								
10B	Blade	Fan	129853		125566		141598		150155		150838		
		Fan, option AL2B	—	129853	—								
10C	Motor	Fan	147103	147104	150332		147908		147913		156275		
		Fan, option AL2B	—	175988	—								
10D	Mount	Fan guard, assembly	—					147835			150990		
11	Flue wrapper	Assembly	147444**	147445**	147446**	147447	147911	147649	147880	147650	150995	150996	
			158433	158434	158442								
		Assembly, option AV6	176817	158434	—								
11A	Flue gasket	Top/bottom	147394		147395		147651						
11B		Side	147227	147228	147230	147230	147882	147652	147855	147653	147855	147653	
				147229**									
12	Heat Exchanger	Assembly	148067	148068	148069	148070	157939	157940	157941	157942	157943	157944	
12A	Support	Tube	—									148618	
12B	Bracket	Tube support	—						148619				
12C	Clamp	Tube	—						155264			—	
13	Bracket	Limit control	147221					—					
14	Box	Burner	147057**	147058**	147063**	147064	146473		146474		148684		
			158441	158424	158425								
15	Burner rack	Assembly	147577	147578	147579	147580	147822	147823	147824	147825	150783	150784	
15A	Burner		147132									150836	
15B	Support slot	Burner	147566	147567	147568	147569	146482		146484				
15C	Clamp		150184	105185	150153	149595	146481		146483				
16	Manifold		147003	147004**	147136**	156096	151785	151786	151787	151788	151787	151788	
				156094	156095								
16A	Orifice		Refer to Table 4										
17	Angle	Hanger	—									150991	
*Used on units manufactured before MAR 1999.													
**Used on units manufactured before NOV 1997.													

CABINET, HEAT EXCHANGER, FAN, AND BURNER BOX COMPONENTS—CONTINUED

Table 4. Burner Orifices												
Installation Location	Installation Elevation (Feet (Meters))	Gas Type	Unit Size (MBTUh)									
			30	45	60	75	100	125	150	200	250	300
			PN, Drill Size (Quantity)									
US, Canada	0–2000 (0–610)	NG	40414, #48 (2)	40414, #48 (3)	40414, #48 (4)	40414, #48 (5)	11833, #44 (5)	11833, #44 (6)	38678, #45 (8)	11833, #44 (10)	97362, #36 (8)	97362, #36 (10)
		LP	63922, 1.15 mm (2)	63922, 1.15 mm (3)	63922, 1.15 mm (4)	63922, 1.15 mm (5)	11830, #55 (5)	11830, #55 (6)	64676, 1.30 mm (8)	11830, #55 (10)	96344, 1.65 mm (8)	51284, #52 (10)
US	2001–3000 (611–915)	NG	39651, #49 (2)	39651, #49 (3)	39651, #49 (4)	39651, #49 (5)	38678, #45 (5)	38678, #45 (6)	16590, #46 (8)	38678, #45 (10)	11835, #37 (8)	11835, #37 (10)
		LP	63922, 1.15mm (2)	63922, 1.15 mm (3)	63922, 1.15 mm (4)	63922, 1.15 mm (5)	11830, #55 (5)	11830, #55 (6)	97359, 1.25 mm (8)	11830, #55 (10)	51284, #52 (8)	51284, #52 (10)
Canada	2001–4500 (611–1373)	NG	39651, #49 (2)	39651, #49 (3)	39651, #49 (4)	39651, #49 (5)	38678, #45 (5)	38678, #45 (6)	84853, #47 (8)	38678, #45 (10)	45870, #38 (8)	45870, #38 (10)
		LP	39659, #58 (2)	39659, #58 (3)	39659, #58 (4)	39659, #58 (5)	11830, #55 (5)	11830, #55 (6)	97359, 1.25 mm (8)	11830, #55 (10)	61653, 1.55 mm (8)	9789, #53 (10)
US	3001–4000 (916–1220)	NG	39651, #49 (2)	39651, #49 (3)	39651, #49 (4)	39651, #49 (5)	38678, #45 (5)	38678, #45 (6)	84853, #47 (8)	38678, #45 (10)	45870, #38 (8)	45870, #38 (10)
		LP	63922, 1.15 mm (2)	63922, 1.15 mm (3)	63922, 1.15 mm (4)	63922, 1.15 mm (5)	11830, #55 (5)	11830, #55 (6)	97359, 1.25 mm (8)	11830, #55 (10)	61653, 1.55 mm (8)	9789, #53 (10)
	4001–5000 (1221–1525)	NG	39651, #49 (2)	39651, #49 (3)	39651, #49 (4)	39651, #49 (5)	38678, #45 (5)	38678, #45 (6)	84853, #47 (8)	38678, #45 (10)	45870, #38 (8)	45870, #38 (10)
		LP	39659, #58 (2)	39659, #58 (3)	39659, #58 (4)	39659, #58 (5)	11830, #55 (5)	11830, #55 (6)	97359, 1.25 mm (8)	11830, #55 (10)	61653, 1.55 mm (8)	9789, #53 (10)
	5001–6000 (1526–1830)	NG	39652, #50 (2)	39652, #50 (3)	39652, #50 (4)	39652, #50 (5)	16590, #46 (5)	16590, #46 (6)	84853, #47 (8)	16590, #46 (10)	45871, #39 (8)	45871, #39 (10)
		LP	39659, #58 (2)	39659, #58 (3)	39659, #58 (4)	39659, #58 (5)	39658, #56 (5)	39658, #56 (6)	63003, 1.20 mm (8)	39658, #56 (10)	9789, #53 (8)	9789, #53 (10)
	6001–7000 (1831–2135)	NG	39652, #50 (2)	39652, #50 (3)	39652, #50 (4)	39652, #50 (5)	84853, #47 (5)	84853, #47 (6)	40414, #48 (8)	84853, #47 (10)	87391, #40 (8)	87391, #40 (10)
		LP	39659, #58 (2)	39659, #58 (3)	39659, #58 (4)	39659, #58 (5)	39658, #56 (5)	39658, #56 (6)	63003, 1.20 mm (8)	39658, #56 (10)	9789, #53 (8)	9789, #53 (10)
	7001–8000 (2136–2440)	NG	39652, #50 (2)	39652, #50 (3)	39652, #50 (4)	39652, #50 (5)	84853, #47 (5)	84853, #47 (6)	40414, #48 (8)	84853, #47 (10)	11792, #41 (8)	11792, #41 (10)
		LP	95936, #60 (2)	95936, #60 (3)	95936, #60 (4)	95936, #60 (5)	39658, #56 (5)	39658, #56 (6)	63922, 1.15 mm (8)	39658, #56 (10)	9789, #53 (8)	9789, #53 (10)
	8001–9000 (2441–2745)	NG	39650, #51 (2)	39650, #51 (3)	39650, #51 (4)	39650, #51 (5)	40414, #48 (5)	40414, #48 (6)	39656, #49 (8)	40414, #48 (10)	11792, #41 (8)	11792, #41 (10)
		LP	95936, #60 (2)	95936, #60 (3)	95936, #60 (4)	95936, #60 (5)	39658, #56 (5)	39658, #56 (6)	63922, 1.15 mm (8)	39658, #56 (10)	61652, 1.45 mm (8)	11834, #54 (10)

ACCESSORIES/OPTIONS

Vent Caps (Option CC1)



Figure 3. Vent Cap

Table 5. Vent Caps			
Size	Unit Size (MBTUh)		
	30, 45, 60, 75, 100, 125	150, 200, 250	300
	PN		
4-inch	111848	—	—
5-inch	—	111849	—
6-inch		—	111850

Thermostats (Options CL1, CL3, and CM1)

Table 6. Thermostats and Thermostat Accessories		
Option	Component	PN
CL1	Single-stage thermostat	91919
CM1	Thermostat guard and cover	91926

Gas Conversion Kits

Table 7. Gas Conversion Kits					
Gas Type	Unit Size (MBTUh)				
	30, 45, 60, 75	100, 125, 200	150	250	300
	Kit PN				
Natural gas	179315	179317	179318	179327	—
Propane	179316	179319	179320	151180	

