

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

Model Numbers: PGF090H16AA, GPF090H16AA, PGF090L16AA GPF090L16AA

No.	Description	Part Number	090H16AA	090L16AA
1	Compressor, ZR94KCTF5	1096587	1	
1	ZR94KCTFD	1096779	*	1
2	Valve, Gas	1011421	1	1
3	Burner Asy	1009180	1	1
4	Orifice, Burner, Nat. #43	1011377	7	7
4	L.P. # 55	1011354	7	7
5	Burner, Pilot / Igniter	1008731	1	1
8	Motor, Blower 3/240/460 Volt, 2Hp	1065851	1	
8	3/460 Volt, 2Hp	1054600	*	1
9	Wheel, Blower BD12x12x3/4	1099033	1	1
10	Switch, Limit (Rollout)	1005549	1	1
11	Manifold, Gas	1054414	1	1
12	Heat Exchanger	1084485	1	1
13	Gasket, Collector Box	1065210	1	1
14	Box, Collector	1098340	1	1
15	Gasket, Combustion Blower	607014	1	1
16	Blower, Combustion	1054268	1	1
17	Switch, Pressure	1083165	1	1
18	Tube, Sensor	1003687	1	1
19	Plate, Injector	1084333	1	1
20	Plate, Restrictor	1054392	1	1
21	Gasket, Restrictor Plate	1065211	1	1
23	Turbulator, Outlet	1054516	7	7
24	Manifold, Condenser (Discharge)	1084382	1	1
25	Manifold, Condenser (Liquid)	1084381	1	1
26	Port Asy (Test) W/Switches	1096263	1	1
27	Grommet, Compressor Mtg.	1053188	4	4
28	Capacitor, 10Mfd., 440Volt	1094965	1	1
29	Coil, Condenser	1084371	1	1
31	Manifold, Evaporator W/Restrictors (Liquid)	1098565	1	1
32	Coil, Evaporator	1099032	1	1
33	Switch, Limit (Blower Deck)	1065293	1	1
34	Fan, Condenser	1080792	1	1
35	Motor, Condenser 1/240V, 3/4Hp	1098501	1	
35	1/460V, 3/4Hp	1098502	*	1
40	Contactor, 40 Amp, 3 Pole	1071334	1	1
41	Transformer, 208-240V Pri, 24V Sec 65VA	1054637	1	
41	460V Pri, 24V Sec 65VA	1054638	*	1
42	Board, Terminal Low Voltage	1054627	1	1
44	Timer, Fan	1084197	1	1
45	Orifice, Pilot Burner Nat.(.018)	503211	1	1
45	L.P. (.012)	612923	1	1
47	Tube, Pilot	64930	1	1
48	Ignitor & Sensor	1009524	1	1
49	Relay, SPDT	1058148	1	1
54	Switch, Low Pressure	1096252	1	1
55	Switch, High Pressure	1096251	1	1
57	Manifold, Evaporator (Suction)	1098566	1	1
58	Filter, Air 20x30x2	1054503	2	2
60	Switch, Temperature	1098701	1	1
61	Transformer, 460-575V Pri, 230V Sec, 110VA	1054639	*	1
62	Contactor, 25 Amp, 2 Pole	1068288	1	1

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

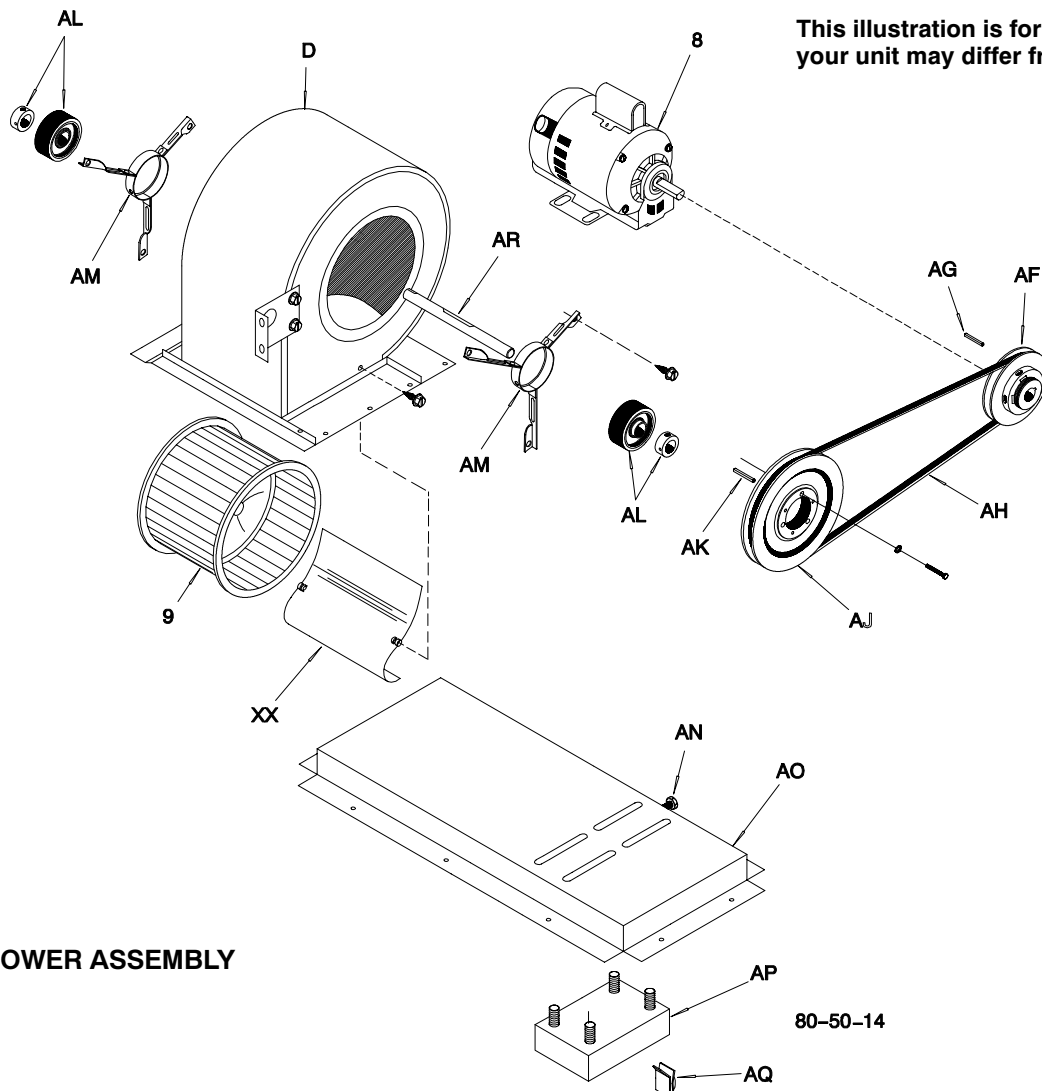
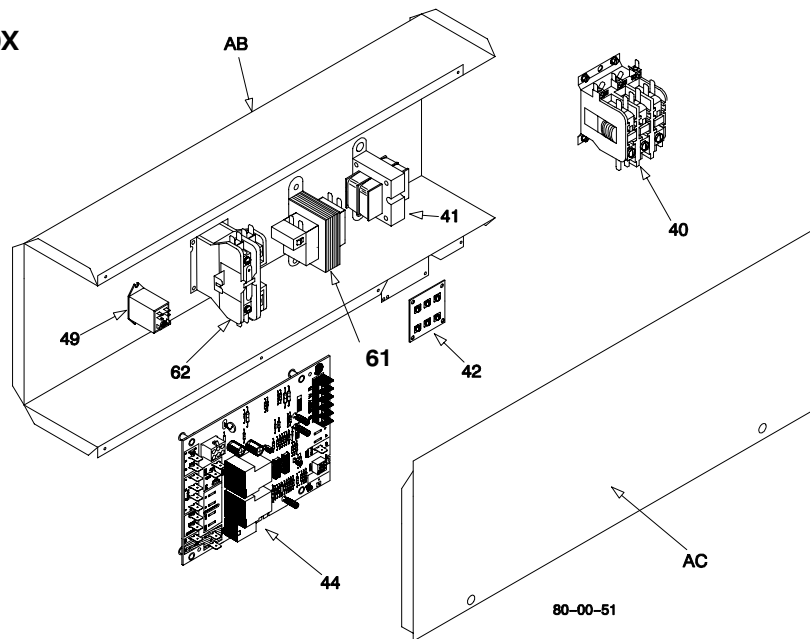
No.	Description	Part Number	090H16AA	090L16AA
A	Grille, Outlet	1072842	1	1
AA	Panel, Supply Air	1068161	1	1
AB	Box, Control	1098606	1	1
AC	Cover, Control Box	1054510	1	1
AD	Retainer, Filter	1054517	2	2
AF	Pulley, Motor	1070664	1	1
AG	Key, Motor Pulley	1065663	1	1
AH	Belt	1054601	1	1
AJ	Pulley, Blower	1098995	1	1
AK	Key, Blower Pulley	1065660	1	1
AL	Bearing / Collar	1054577	2	2
AM	Mount, Bearing Support	1054599	2	2
AN	Screw, Motor Adjusting	1065401	1	1
AO	Base, Motor Support	1054520	1	1
AP	Plate, Motor Slide	1054521	1	1
AQ	U-Clip	1054624	1	1
AR	Shaft	1099030	1	1
AU	Handle, Filter Door	1068209	1	1
B	Panel, Top	1068157	1	1
BB	Pan, Drain	1068366	1	1
C	Orifice, Condenser Fan	1065725	1	1
CC	Partition, Return Air	1054471	1	1
D	Housing, Blower	1099028	1	1
DD	Cover, Duct	1068158	2	2
E	Deck, Blower	1099026	1	1
F	Baffle, Air	1082435	1	1
FF	Bracket, Supply Air	1054525	1	1
G	Panel, Access (Heat Exchanger)	1068181	1	1
GG	Baffle, Air	1054522	1	1
H	Shield, Burner	1054415	1	1
J	Support, Manifold	1084327	2	2
K	Bracket, Ignitor	1054275	1	1
L	Hood, Flue Exhaust	1054621	1	1
LL	Nut, Cap	1067902	4	4
M	Support, Flue	1099025	1	1
N	Bracket, Evap	1098999	1	1
NN	Bracket, Filter Top	1065618	1	1
O	Extension, Combustion Blower	1054461	1	1
OO	Support, Filter Top	1054502	1	1
P	Gasket, Extension	1065260	1	1
PP	Panel, Coil Support	1098509	1	1
Q	Post, Corner (Heating)	1068188	1	1
QQ	Panel, Heating Area	1098508	1	1
R	Panel Access (Gas)	1068184	1	1
S	Panel, Pressure Port	1068164	1	1
SS	Panel, Drain Outlet	1068162	1	1
T	Plate, Pressure Port	1068189	1	1
TT	Panel, Filter Access	1068175	1	1
VV	Post, Return Air	1068168	1	1
W	Post, Corner	1068172	1	1
X	Rail, Base	1065001	2	2
X1	Rail, Base	1054464	1	1
X2	Rail, Base	1084078	1	1
XX	Panel, Blower Cutoff	1098556	1	1

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

No.	Description	Part Number	090H16AA	090L16AA
Y	Panel, Base	1054463	1	1
YY	Post, Center	1068163	1	1
Z	Panel, Return Air	1068160	1	1
)(	Gas Conversion Kit Nat. To L.P.	1084498	1	1
)(	Gas Conversion Kit L.P. To Nat.	1148142	1	1
)(	Manual, Parts List	50904150300	1	1
)(	Manual, Installation	50901160100	1	1

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

CONTROL BOX

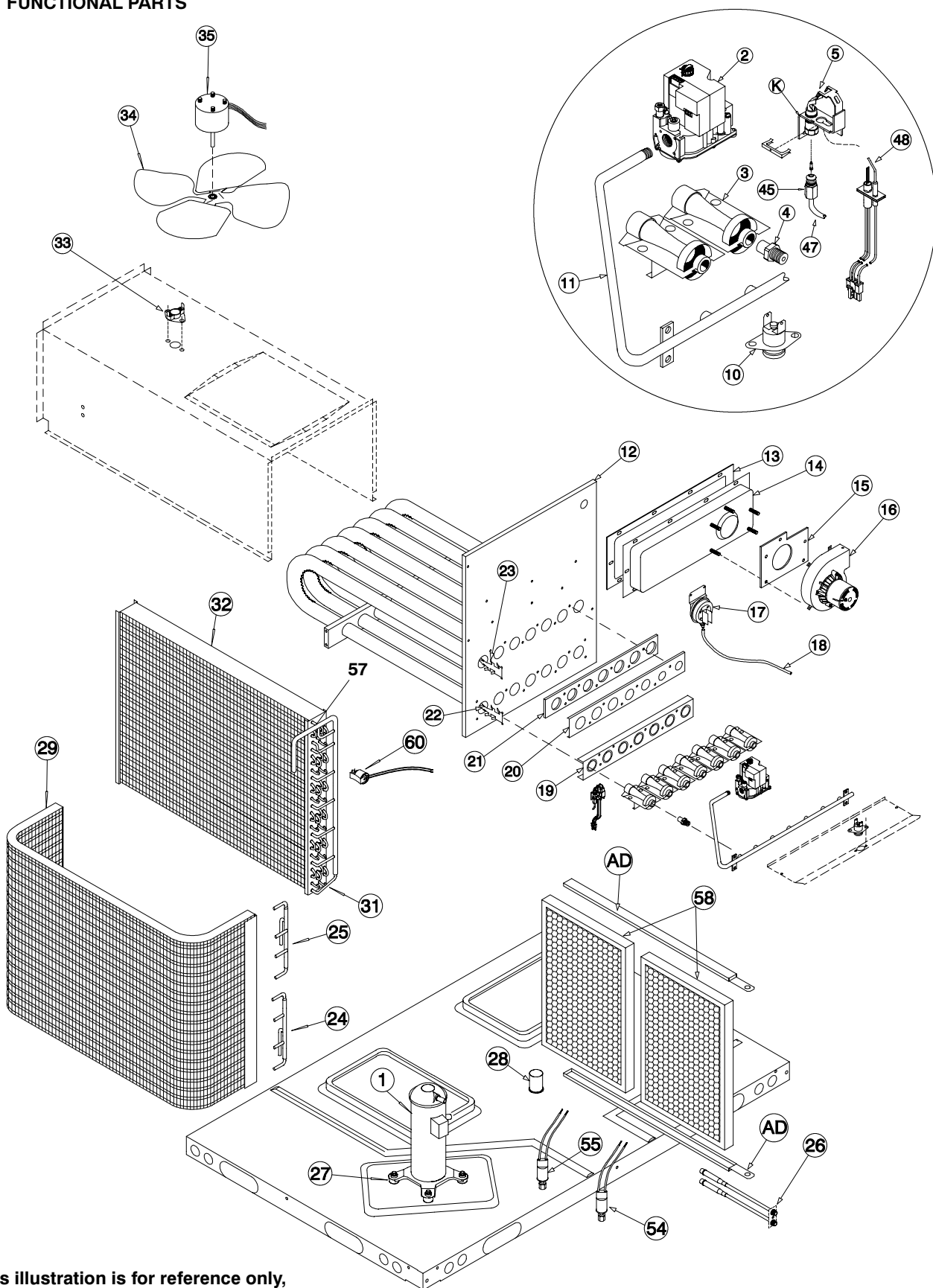


**This illustration is for reference only,
your unit may differ from the one shown.**

BLOWER ASSEMBLY

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

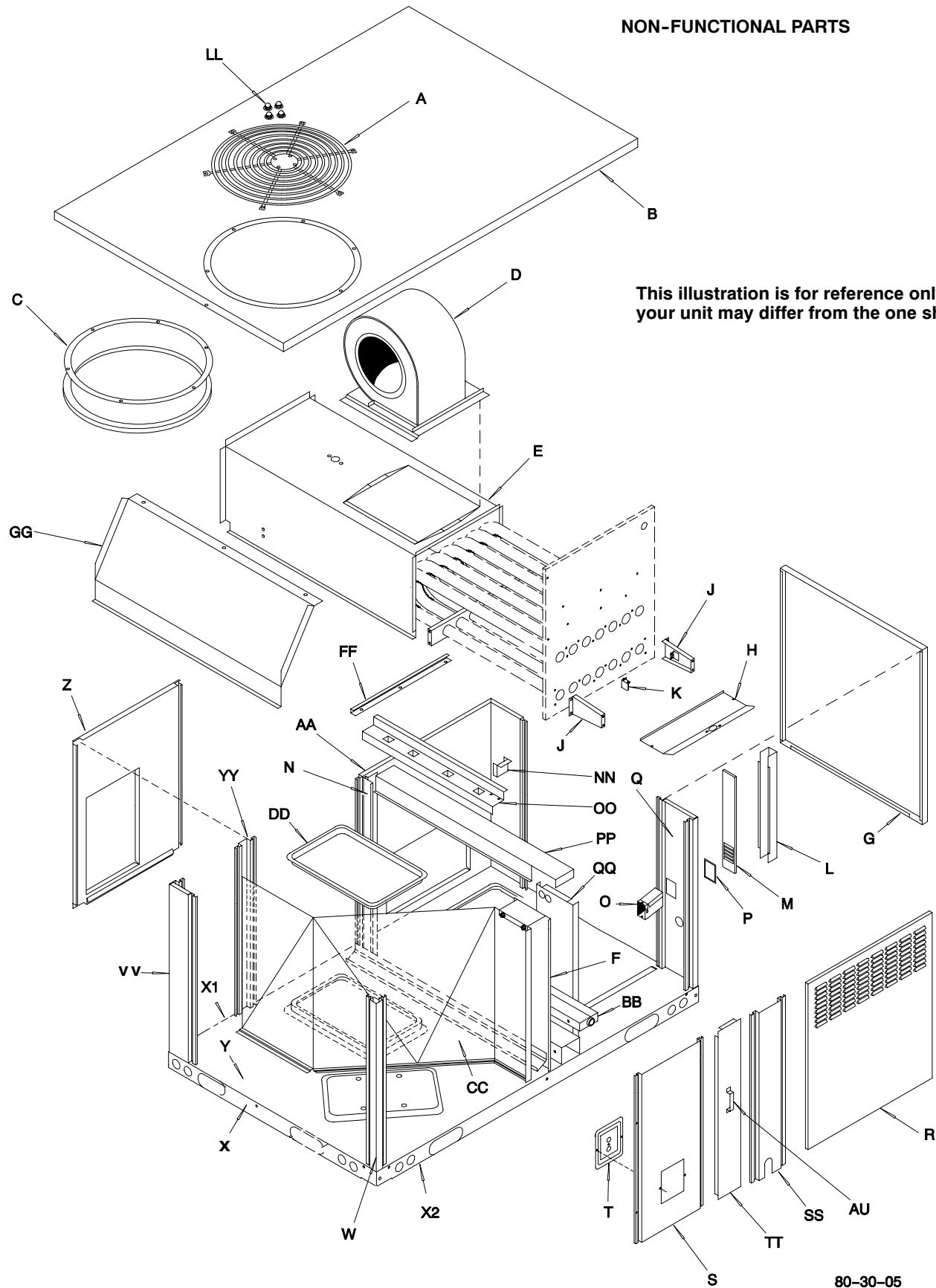
FUNCTIONAL PARTS



This illustration is for reference only,
your unit may differ from the one shown.

80-30-18

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton



208/230 VOLT

Unit Size 7-1/2 Ton Belt Drive Gas/Electric																								
Voltage/Ph/Hz 208/230/3/60			Outdoor Ambient Temperature - Degrees F. Dry Bulb																					
Ampacity 45.0			75				85				95				105				115					
Max. Fuse 70			Entering Indoor Temperature - Degrees F. Wet Bulb																					
Compressor			IDB		59 63 67 71				59 63 67 71				59 63 67 71				59 63 67 71							
RLA 28.85		MBh 84.6 87.6 96.0 -				82.5 85.6 93.7 -				80.5 83.5 91.5 -				76.5 79.3 86.9 -				70.9 73.5 80.5 -						
LRA 195.0			70		S/T 0.73 0.61 0.43 -				0.75 0.63 0.44 -				0.78 0.65 0.45 -				0.81 0.67 0.47 -				0.81 0.68 0.47 -			
Cond & Evap		AMPS 27.1 27.6 28.3 -				28.9 29.5 30.3 -				30.5 31.1 32.0 -				32.1 32.7 33.6 -				33.7 34.3 35.3 -						
Type Fan Blower		HI PR 195 210 222 -				222 239 252 -				253 272 287 -				284 306 323 -				314 338 357 -						
Size/Pitch. 22/28 BD 12-12A		LOPR 57 60 66 -				59 63 68 -				62 66 72 -				65 69 75 -				67 71 78 -						
Motor-Hp .75 2			75		MBh 86.0 88.5 95.8 102.9				83.9 86.4 93.6 100.4				81.9 84.3 91.3 98.0				77.8 80.1 86.7 93.1				72.1 74.2 80.3 86.2			
FLA 2.9 6.0		S/T 0.84 0.75 0.57 0.36				0.86 0.77 0.58 0.37				0.88 0.79 0.60 0.38				0.92 0.82 0.62 0.40				0.93 0.83 0.63 0.40						
LRA 9.5 49.6		AMPS 27.3 27.8 28.6 29.4				29.2 29.7 30.5 31.4				30.8 31.4 32.2 33.2				32.3 33.0 33.9 35.0				33.9 34.6 35.6 36.7						
RPM 1140 1725		HI PR 197 212 224 234				224 241 255 266				255 275 290 303				287 309 326 340				317 341 361 376						
Cap MFD/Volts 10/440 N/A			80		LOPR 57 61 67 71				60 63 69 74				63 67 73 77				66 70 76 81				68 72 79 84			
Hi Pressure 420		MBh 87.5 89.4 95.6 102.1				85.4 87.3 93.3 99.7				83.4 85.2 91.0 97.3				79.2 80.9 86.5 92.4				73.4 75.0 80.1 85.6						
Lo Pressure 5		S/T 0.92 0.86 0.70 0.52				0.94 0.88 0.72 0.54				0.97 0.91 0.74 0.55				1.00 0.94 0.77 0.57				1.00 0.95 0.77 0.58						
R-22, oz.		AMPS 27.5 28.0 28.8 29.6				29.4 29.9 30.7 31.7				31.0 31.6 32.5 33.5				32.6 33.2 34.2 35.2				34.2 34.9 35.8 37.0						
Operating Chg. See Rating Plate			85		HI PR 199 214 226 236				226 244 257 268				258 277 293 306				290 312 330 344				320 345 364 380			
Heating Data		LOPR 58 62 67 72				60 64 70 74				63 67 73 78				66 70 77 82				69 73 80 85						
Fire Input 160		MBh 89.1 90.8 95.1 101.4				86.9 88.6 92.8 99.0				84.8 86.5 90.5 96.6				80.6 82.1 86.0 91.8				74.6 76.1 79.7 85.0						
Fire Output 130		S/T 0.96 0.93 0.84 0.68				0.98 0.95 0.86 0.70				1.00 0.98 0.89 0.72				1.00 1.00 0.92 0.75				1.00 1.00 0.93 0.75						
Gas Valve HW			EXTERNAL STATIC PRESSURE IN INCHES WATER COLUMN		AMPS 27.7 28.2 29.0 29.8				29.6 30.2 31.0 31.9				31.2 31.8 32.7 33.7				32.8 33.5 34.4 35.5				34.4 35.1 36.1 37.3			
Regulation Snap		HI PR 201 216 228 238				229 246 260 271				260 280 296 309				293 315 333 347				324 348 368 384						
Manifold Press 3.6		LOPR 58 62 68 72				61 65 71 75				64 68 74 79				67 71 78 83				69 74 80 86						
Std Orifice .43		Number of Turns			.2			.4			.6			8			1.0			1.2				
Pilot Orifice .018				CFM Watts RPM			CFM Watts RPM			CFM Watts RPM			CFM Watts RPM			CFM Watts RPM			CFM Watts RPM					
Temp. Rise 30-60																								
Ignition Type HSP																								
Fan On/Off Time			Pulley Turns Open		0			1			2 *			3			4			5				
Unit Weight 745 lbs.																								
			RPM with 2 HP																					
			STD Pulley		1344			1299			1245			1191			1136			1082				
			* Factory Setting Turns Open																					
			1098975 6-29-99																					

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

460 VOLT

Unit Size 7-1/2 Ton Belt Drive Gas/Electric			
Voltage/Ph/Hz	460/3/60		
Ampacity	23.0		
Max. Fuse	35		
Compressor			
RLA	14.74		
LRA	95.0		
Cond & Evap	Cond	Evap	
Type	Fan	Blower	
Size/Pitch	22/28	BD12-12A	
Motor-Hp	.75	2	
FLA	1.5	3.0	
LRA	5.0	24.9	
RPM	1140	1400	
Cap MFD/Volts	10/440	N/A	
Hi Pressure	420		
Lo Pressure	5		
R-22, oz.			
Operating Chg.	See Rating Plate		
Heating Data			
Fire Input	160		
Fire Output	130		
Gas Valve	HW		
Regulation	Snap		
Manifold Press	3.6		
Std Orifice	43		
Pilot Orifice	.018		
Temp. Rixe	30-60		
Ignition Type	HSP		
Fan On/Off	Time		
Unit Weight	745		

Outdoor Ambient Temperature - Degrees F. Dry Bulb																							
		75				85				95				105				115					
		Entering Indoor Temperature - Degrees F. Wet Bulb																					
IDB		59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71	59	63	67	71		
70	MBh	84.6	87.6	96.0	-	82.5	85.6	93.7	-	80.5	83.5	91.5	-	76.5	79.3	86.9	-	70.9	73.5	80.5	-		
	S/T	0.73	0.61	0.43	-	0.75	0.63	0.44	-	0.78	0.65	0.45	-	0.81	0.67	0.47	-	0.81	0.68	0.47	-		
	AMPS	13.9	14.1	14.5	-	14.8	15.1	15.5	-	15.6	15.9	16.4	-	16.4	16.7	17.2	-	17.2	17.6	18.1	-		
	HI PR	195	210	222	-	222	239	252	-	253	272	287	-	284	306	323	-	314	338	357	-		
75	LOPR	57	60	66	-	59	63	68	-	62	66	72	-	65	69	75	-	67	71	78	-		
	MBh	86.0	88.5	95.8	102.9	83.9	86.4	93.6	100.4	81.9	84.3	91.3	98.0	77.8	80.1	86.7	93.1	72.1	74.2	80.3	86.2		
	S/T	0.84	0.75	0.57	0.36	0.86	0.77	0.58	0.37	0.88	0.79	0.60	0.38	0.92	0.82	0.62	0.40	0.93	0.83	0.63	0.40		
	AMPS	14.0	14.2	14.6	15.0	14.9	15.2	15.6	16.1	15.7	16.0	16.5	17.0	16.5	16.9	17.3	17.9	17.3	17.7	18.2	18.8		
80	HI PR	197	212	224	234	224	241	255	266	255	275	290	303	287	309	326	340	317	341	361	376		
	LOPR	57	61	67	71	60	63	69	74	63	67	73	77	66	70	76	81	68	72	79	84		
	MBh	87.5	89.4	95.6	102.1	85.4	87.3	93.3	99.7	83.4	85.2	91.0	97.3	79.2	80.9	86.5	92.4	73.4	75.0	80.1	85.6		
	S/T	0.92	0.86	0.70	0.52	0.94	0.88	0.72	0.54	0.97	0.91	0.74	0.55	1.00	0.94	0.77	0.57	1.00	0.95	0.77	0.58		
85	AMPS	14.1	14.3	14.7	15.1	15.0	15.3	15.7	16.2	15.9	16.2	16.6	17.1	16.7	17.0	17.5	18.0	17.5	17.8	18.3	18.9		
	HI PR	199	214	226	236	226	244	257	268	258	277	293	306	290	312	330	344	320	345	364	380		
	LOPR	58	62	67	72	60	64	70	74	63	67	73	78	66	70	77	82	69	73	80	85		
	MBh	89.1	90.8	95.1	101.4	86.9	88.6	92.8	99.0	84.8	86.5	90.5	96.6	80.6	82.1	86.0	91.8	74.6	76.1	79.7	85.0		
85	S/T	0.96	0.93	0.84	0.68	0.98	0.95	0.86	0.70	1.00	0.98	0.89	0.72	1.00	1.00	0.92	0.75	1.00	1.00	0.93	0.75		
	AMPS	14.2	14.4	14.8	15.3	15.1	15.4	15.8	16.3	16.0	16.3	16.7	17.2	16.8	17.1	17.6	18.2	17.6	18.0	18.5	19.1		
	HI PR	201	216	228	238	229	246	260	271	260	280	296	309	293	315	333	347	324	348	368	384		
	LOPR	58	62	68	72	61	65	71	75	64	68	74	79	67	71	78	83	69	74	80	86		

EXTERNAL STATIC PRESSURE IN INCHES WATER COLUMN																		
Number of Turns	.2			.4			.6			.8			1.0			1.2		
	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM	CFM	Watts	RPM
0													2996	2246	1345	2654	2077	1355
1							3095	2107	1295	2885	1992	1297	2571	1825	1300	2473	1775	1305
2				3041	1890	1240	2802	1772	1242	2578	1649	1245	2241	1487	1253	2091	1403	1255
3	3127	1850	1180	2812	1667	1190	2599	1564	1192	2333	1436	1195	1978	1281	1196	1873	1188	1200
4	2993	1590	1126	2752	1492	1133	2478	1376	1136	2228	1228	1140	1895	1096	1142	1754	1043	1145
5	2826	1355	1075	2574	1232	1080	2339	1161	1082	2097	1056	1085	1750	923	1088	1647	873	1090

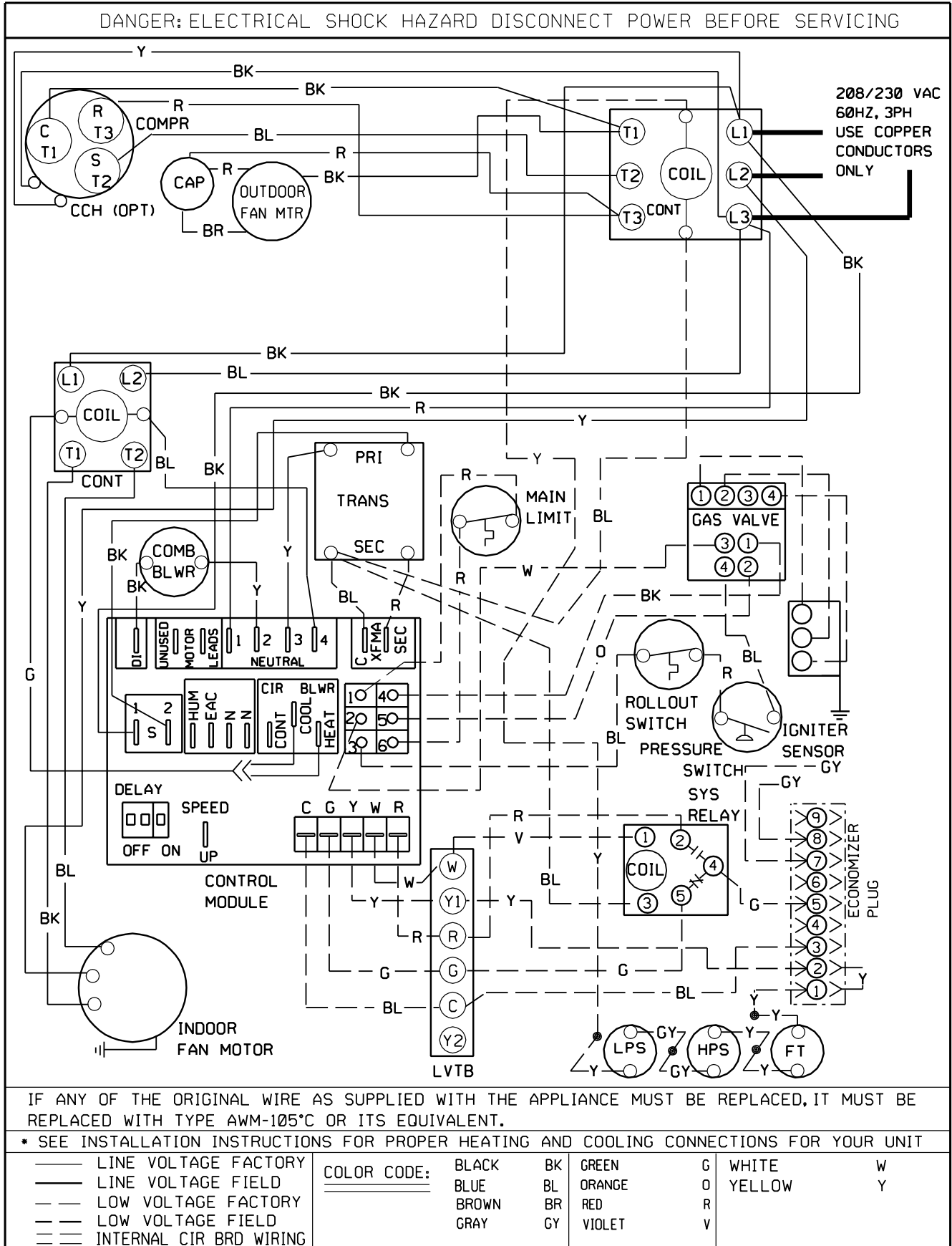
Pulley Turns Open	0	1	2 *	3	4	5
RPM with 2 HP						
STD Pulley	1344	1299	1245	1191	1136	1082

* Factory Setting Turns Open

1098976
6-29-99

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

208/230 VOLT CONNECTION CONNECTION WIRING DIAGRAM



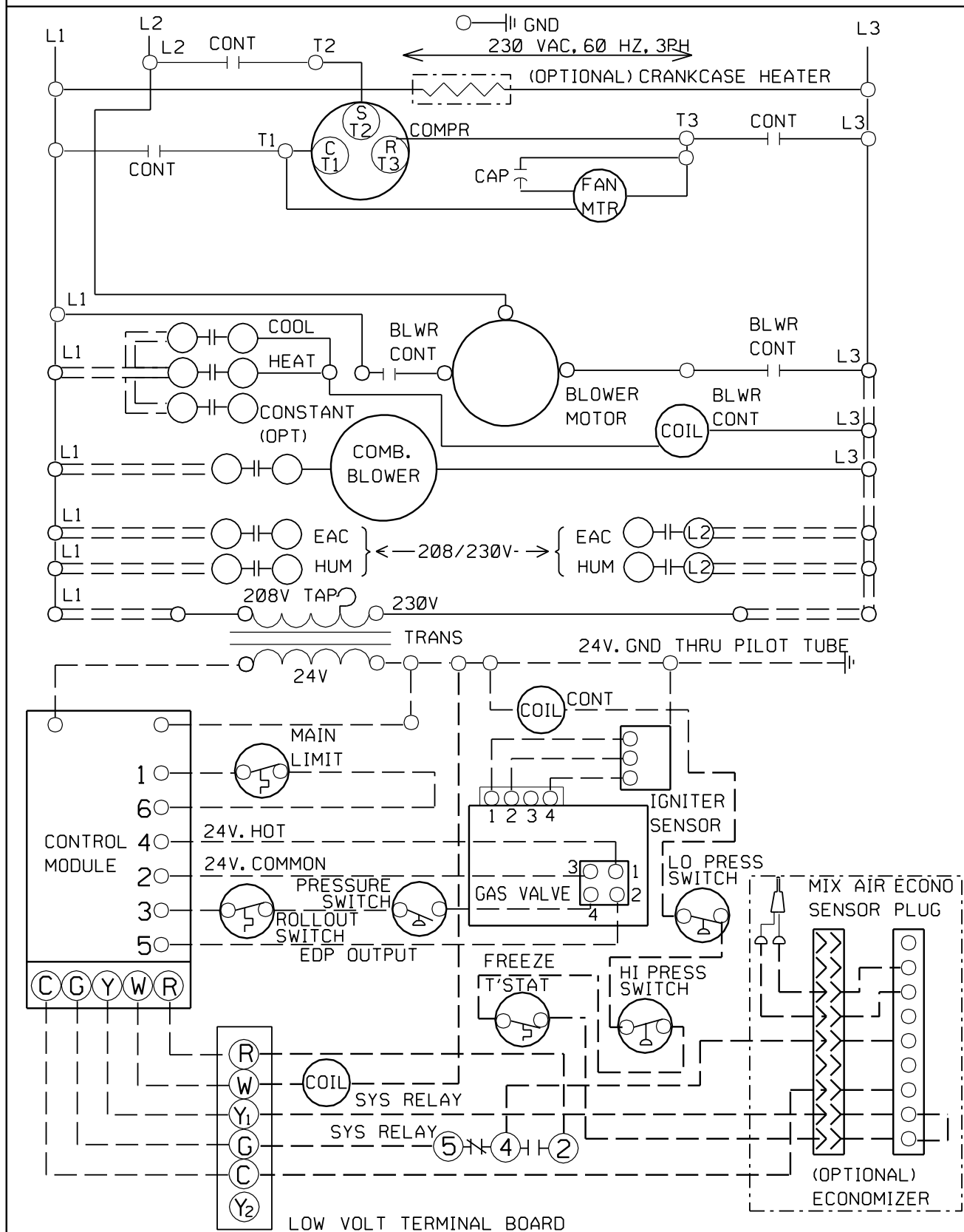
1099034

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

208/230 VOLT LADDER

LADDER WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING



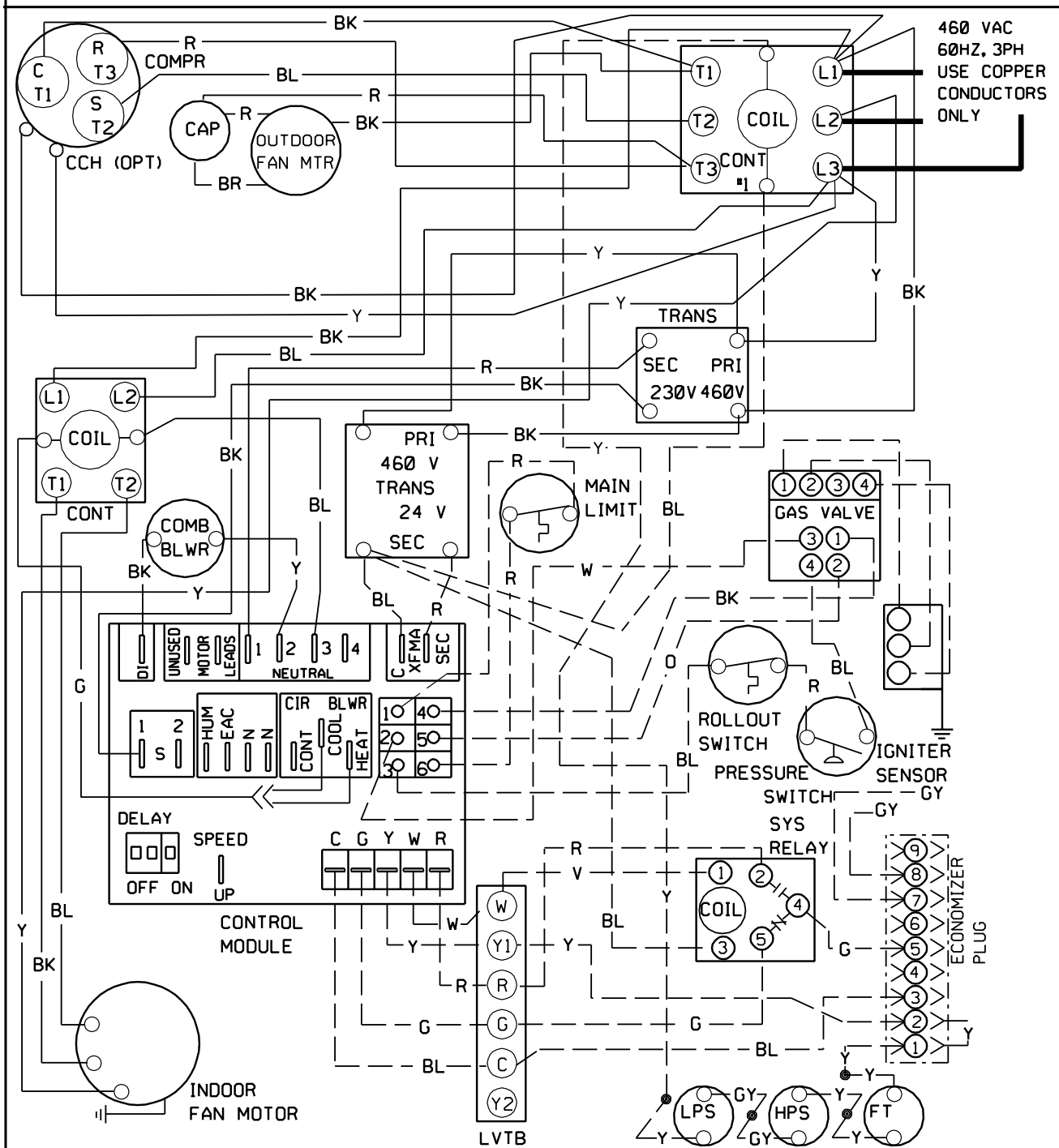
1099035

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

460 VOLT CONNECTION

CONNECTION WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING



IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE APPLIANCE MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE AWM-105°C OR ITS EQUIVALENT.

• SEE INSTALLATION INSTRUCTIONS FOR PROPER HEATING AND COOLING CONNECTIONS FOR YOUR UNIT

— LINE VOLTAGE FACTORY	COLOR CODE:	BLACK	BK	GREEN	G	WHITE	W
— LINE VOLTAGE FIELD		BLUE	BL	ORANGE	O	YELLOW	Y
— LOW VOLTAGE FACTORY		BROWN	BR	RED	R		
— LOW VOLTAGE FIELD		GRAY	GY	VIOLET	V		
— INTERNAL CIR BRD WIRING							

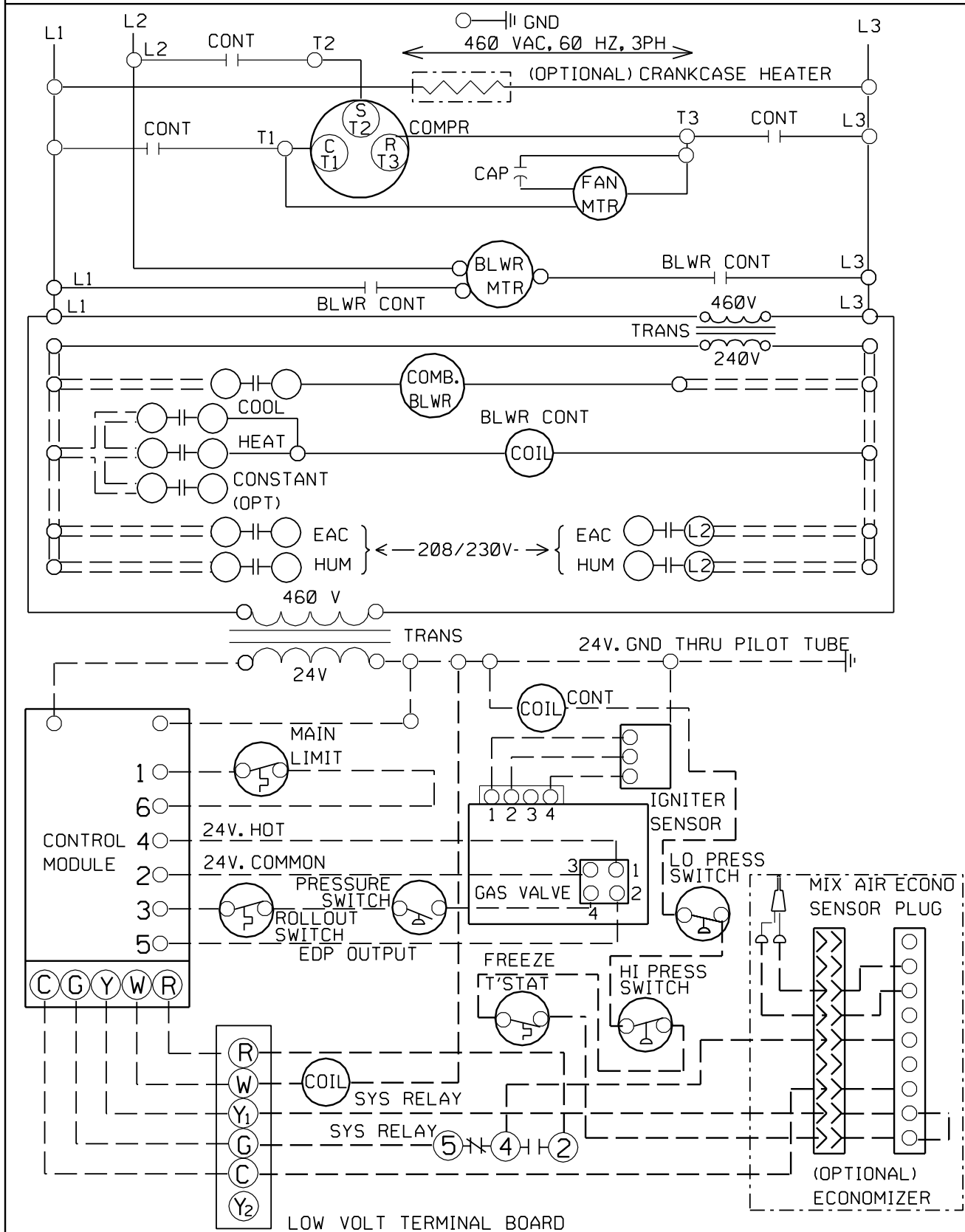
1099039-A

Parts List, Tech Labels & Wiring Diagrams for PGF & GPF 71/2 Ton

460 VOLT LADDER

LADDER WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING



1099040