

Parts List, Charging Chart, Wiring Diagrams

**PAN5 24 - 60 SERIES
1 Phase**

**R-410A PACKAGE AIR CONDITIONER
UNITS**



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PAN5 24 & 36 PARTS LIST

KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN52400K00A1	PAN53600K00A1
01	COMP ZPS30K4E-PFV-130	ZPS30K4EPFV130	*	1
01	COMP ZPS20K4E-PFV-130	ZPS26K4EPFV130	1	*
02	COIL ASY OUTDOOR 24 AL LF	1177321	1	*
02	COIL ASY OUTDOOR 36 AL LF	1177330	*	1
03	COIL ASY OUTDOOR 24 AL RT	1177322	1	*
03	COIL ASY OUTDOOR 36 AL RT	1177331	*	1
04	COIL ASY INDOOR 24	1177320	1	*
04	COIL ASY INDOOR 36	1177327	*	1
05	MTR BLW 1/230 1/2 600-1200	1177314	1	*
05	MTR BLW 1/230 3/4 600-1200	1177344	*	1
06	MTR CND 1/230 1/8 825	1175625	*	1
06	MTR CND 1/230 1/8 825/1	1173699	1	*
07	FAN C 22" 3B 1/2" 24 INT	1171220	1	*
07	FAN C 22" 3B 1/2" 28 INT	1171219	*	1
08	CAP RN RD 370V 5+35	1172110	1	*
08	CAP RN RD 370V 5+40	1172147	*	1
10	CONTACTOR 1P 25A 24V	1173689	1	1
13	TRANS 208/230>24 40VA	1173691	1	1
14	WHEEL 11-10DD CCW	1177025	*	1
14	WHEEL DD 10X10 CW	1175970	1	*
16	DISTRIBUTOR 3 CIRCUIT R-410A	1174360	1	1
22	SENSOR DEFROST O65 C32	1173637	1	1
32	MOUNTING KIT BLW MTR	1175958	1	*
32	MOUNTING KIT BLW MTR	1176088	*	1
37	PLUG COMPRESSOR	1177318	1	1
38	HTR CC WP 40W 240V TCH196	1176105	1	1
39	SWITCH LOW PRESSURE	1174694	1	1
40	DRIER LIQ 08 CU IN 3/8 SWEAT	1173679	1	1
41	SWITCH HIGH PRESSURE	1174695	1	1
42	SWITCH PRESS COMP SOL	1174413	1	1
43	VALVE TXV 2 TON	1177317	1	1
44	PLUG COMP SOLENOID COIL 51"LDS	1177316	1	1
45	CIRCUIT BOARD X-13 DUAL CAP	1177315	1	1
AB	CLAMP CAPACITOR ROUND 2.0"D	1095021	1	*
AE	SCROLL	1176074	*	1
AE	SCROLL FAN	1176010	1	*
AF	PLATE ASY FAN	1176011	1	*
AF	PLATE ASY FAN SIDE	1176075	*	1
AH	PLATE FAN	1176012	1	*
AH	PLATE FAN BOTTOM	1176077	*	1
AJ	CLAMP CAPACITOR ROUND 2.0"D	1095021	*	1
AK	GRILLE ASY 16"	1176017	1	*
AK	GRILLE ASY 18"	1177336	*	1
AL	GRILLE ASY 16"	1176018	1	*

PAN5 24 & 36 PARTS LIST (continued)

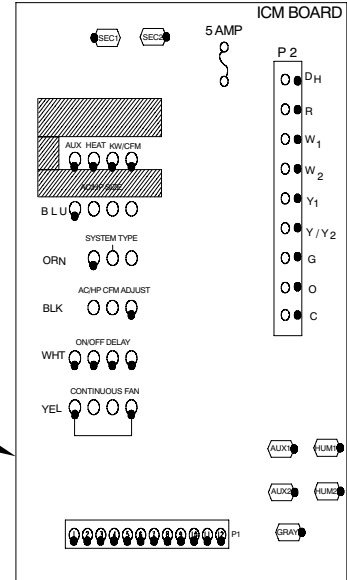
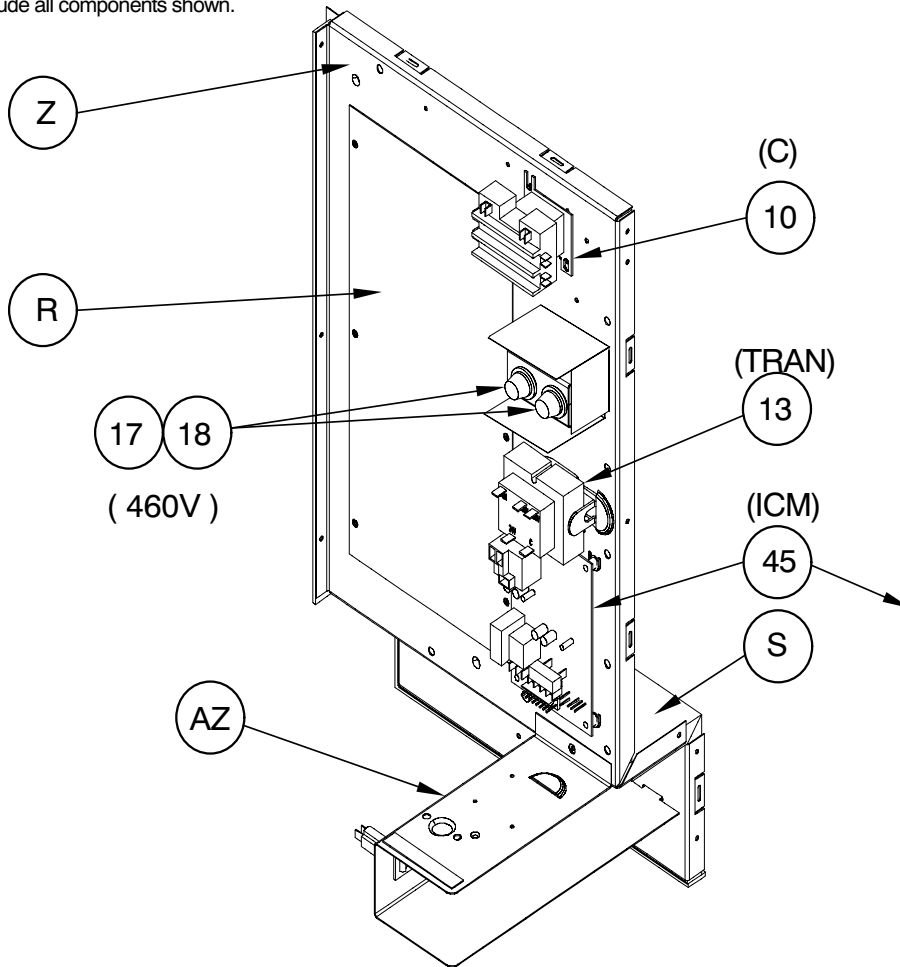
KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN52400K00A1	PAN53600K00A1
AL	GRILLE ASY 18"	1177337	*	2
AM	GRILLE ASY 16"	1176019	1	*
AM	GRILLE ASY 18"	1177338	*	1
AN	GRILLE ASY 16"	1176020	1	*
AP	PANEL CORNER 16"	1176045	3	*
AP	PANEL CORNER 18" COND	1177347	*	2
AQ	BRACKET SUPPORT	1176023	4	*
AQ	BRACKET SUPPORT 16"	1176110	*	4
AR	PANEL CORNER 16" HEADER	1176046	1	*
AR	PANEL CORNER 18" HEADER	1177348	*	1
AS	PARTITION COIL EVAP	1176026	1	1
AZ	BARRIER 24V	1176144	1	*
AZ	BARRIER 24V 42-60	1176148	*	1
BA	PANEL CORNER 18" HEADER	1177349	*	1
BB	SUPPORT BLOWER	1176085	*	1
BC	PARTION COIL EVAP	1176783	1	*
BC	PARTITION COIL SUPPLY	1176084	*	1
BD	SUPPORT BLOWER	1176784	1	1
BE	SHEILD BASE PAN	1176086	*	1
BE	SHIELD BASEPAN	1176794	1	*
BF	INSULATION RETURN DUCT PANEL	1176087	*	1
BF	INSULATION RETURN DUCT PANEL	1176151	1	*
BG	COMPRESSOR MTG BOLT	1176731	4	4
BH	INSULATION COIL PARTITION	1176152	1	*
BH	INSULATION COIL PARTITION	1176153	*	1
BJ	INSULATION COIL PARTITION	1176785	1	*
BJ	INSULATION COIL PARTITION	1176786	*	1
BK	GROMMET	1176613	1	2
BM	BLOCKOFF PANEL UPPER	1177319	1	*
BM	BLOCKOFF PANEL UPPER	1177326	*	1
BN	BLOCKOFF PANEL LOWER	1177223	1	*
BN	BLOCKOFF PANEL LOWER	1177325	*	1
A	RACEWAY	1171428	1	1
B	INSULATION ASY TOP EVAP	1175988	1	*
B	INSULATION ASY TOP EVAP	1176083	*	1
C	BASE PAN ASY	1175989	1	*
C	BASE PAN ASY	1176061	*	1
D	DUCT COVER ASY	1175990	1	*
D	DUCT COVER ASY	1176062	*	2
E	TOP CONDENSER	1175991	1	*
E	TOP CONDENSER	1176063	*	1
F	PARTITION COIL	1175992	1	*
F	PARTITION COIL RETURN	1176064	*	1
G	PARTITION FAN	1175993	1	*

PAN5 24 & 36 PARTS LIST (continued)

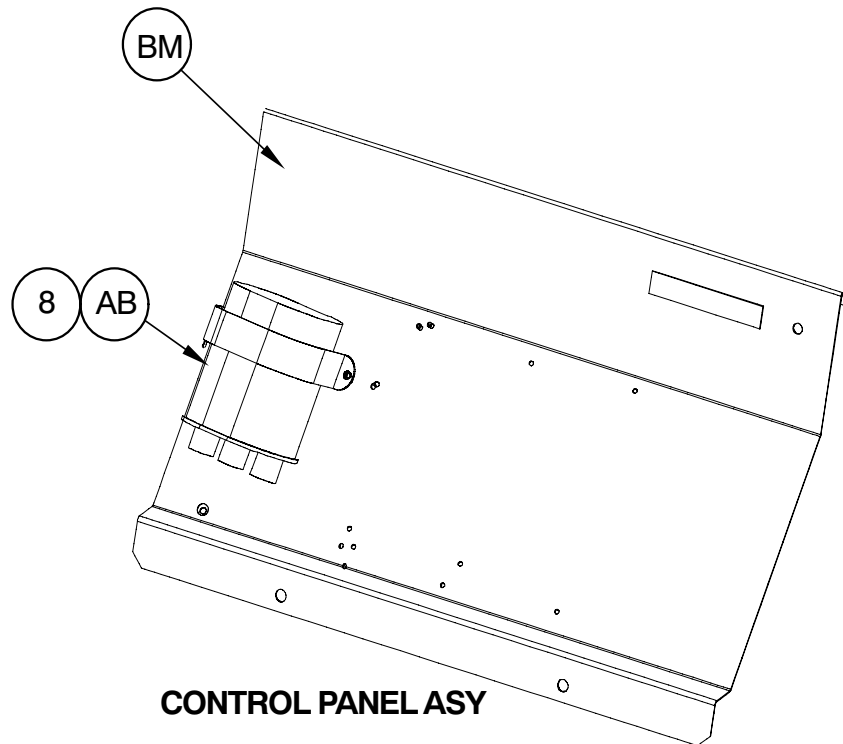
KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN52400K00A1	PAN53600K00A1
G	PARTITION FAN	1176065	*	1
H	PANEL REAR DUCT	1175994	1	*
H	PANEL REAR DUCT	1176066	*	1
J	PANEL COMP SIDE	1175995	1	*
J	PANEL COMP SIDE	1176067	*	1
K	PANEL ACCESS	1175996	1	*
K	PANEL ACCESS	1176068	*	1
L	INSULATION ACCESS PANEL	1175997	1	*
L	INSULATION ACCESS PANEL	1176069	*	1
M	INSULATION COMP PANEL	1176070	*	1
M	INSULATION PANEL COMP	1175998	1	*
N	GRILLE OUTLET	1171267	1	1
P	GROMMET COMPRESSOR 1.62"DIA	1171270	4	4
R	COVER HEATER OPENING	1176139	1	1
S	INSULATION CONTROL PLATE	1176140	1	1
X	PANEL SIDE POWER SUPPLY	1176141	1	*
X	PANEL SIDE POWER SUPPLY	1176145	*	1
Y	INSULATION PANEL SIDE	1176142	1	*
Y	INSULATION PANEL SIDE	1176146	*	1
Z	PLATE CONTROL	1176143	1	1
PARTS NOT SHOWN				
)	HARNESS ASY CONT BOX	1177313	1	1

NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.

CONTROL BOX ASY



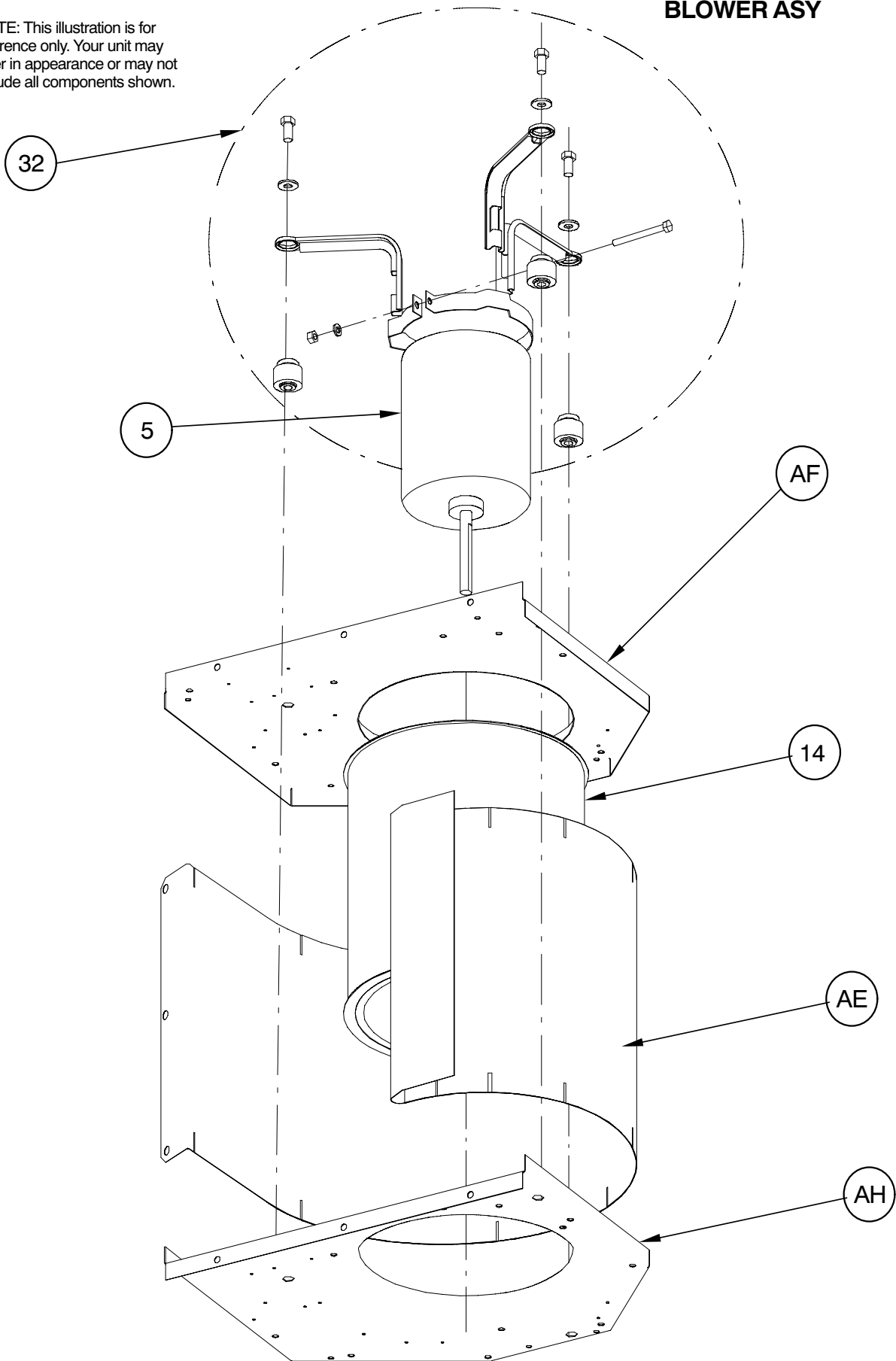
ICM BOARD



CONTROL PANEL ASY

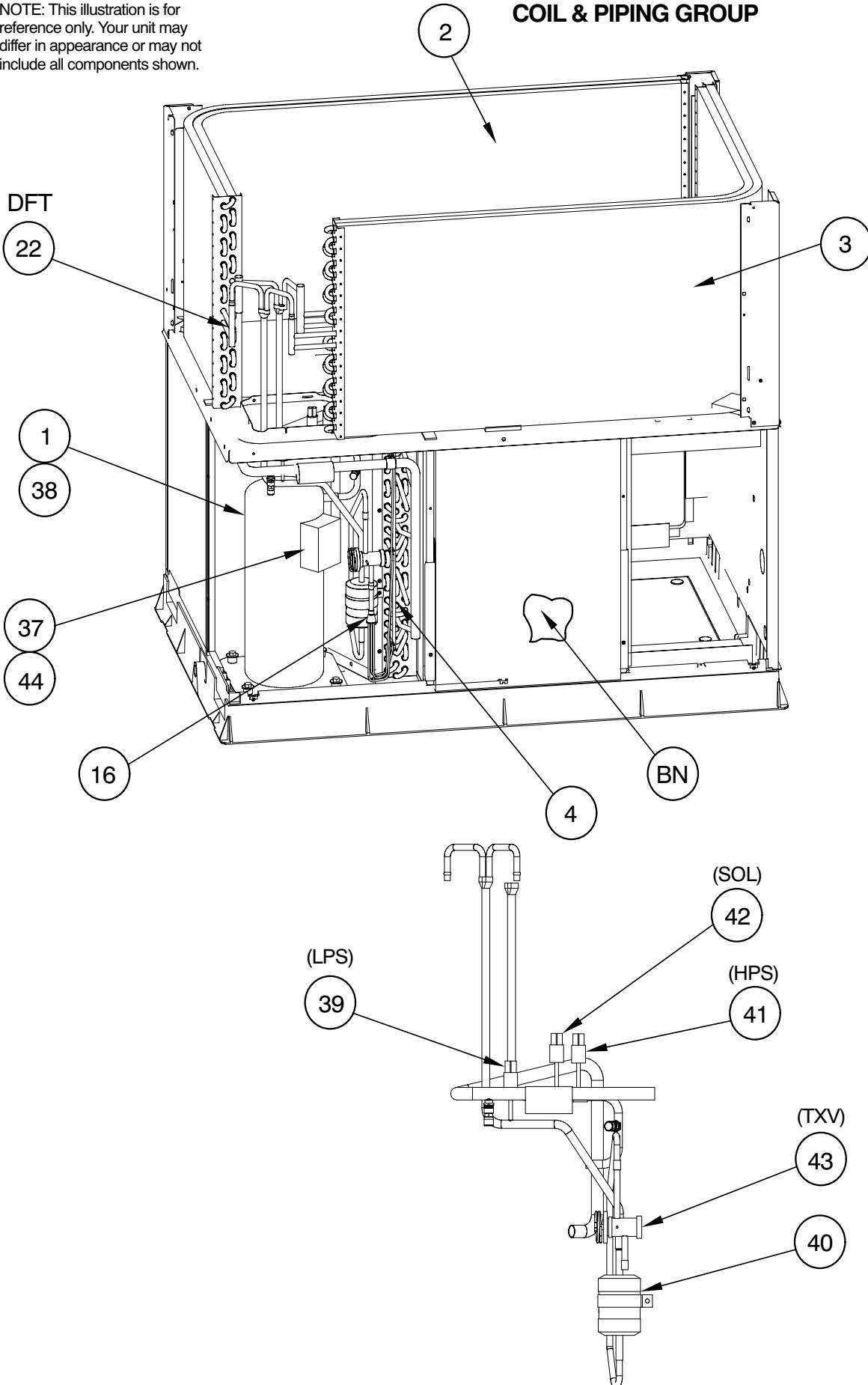
BLOWER ASY

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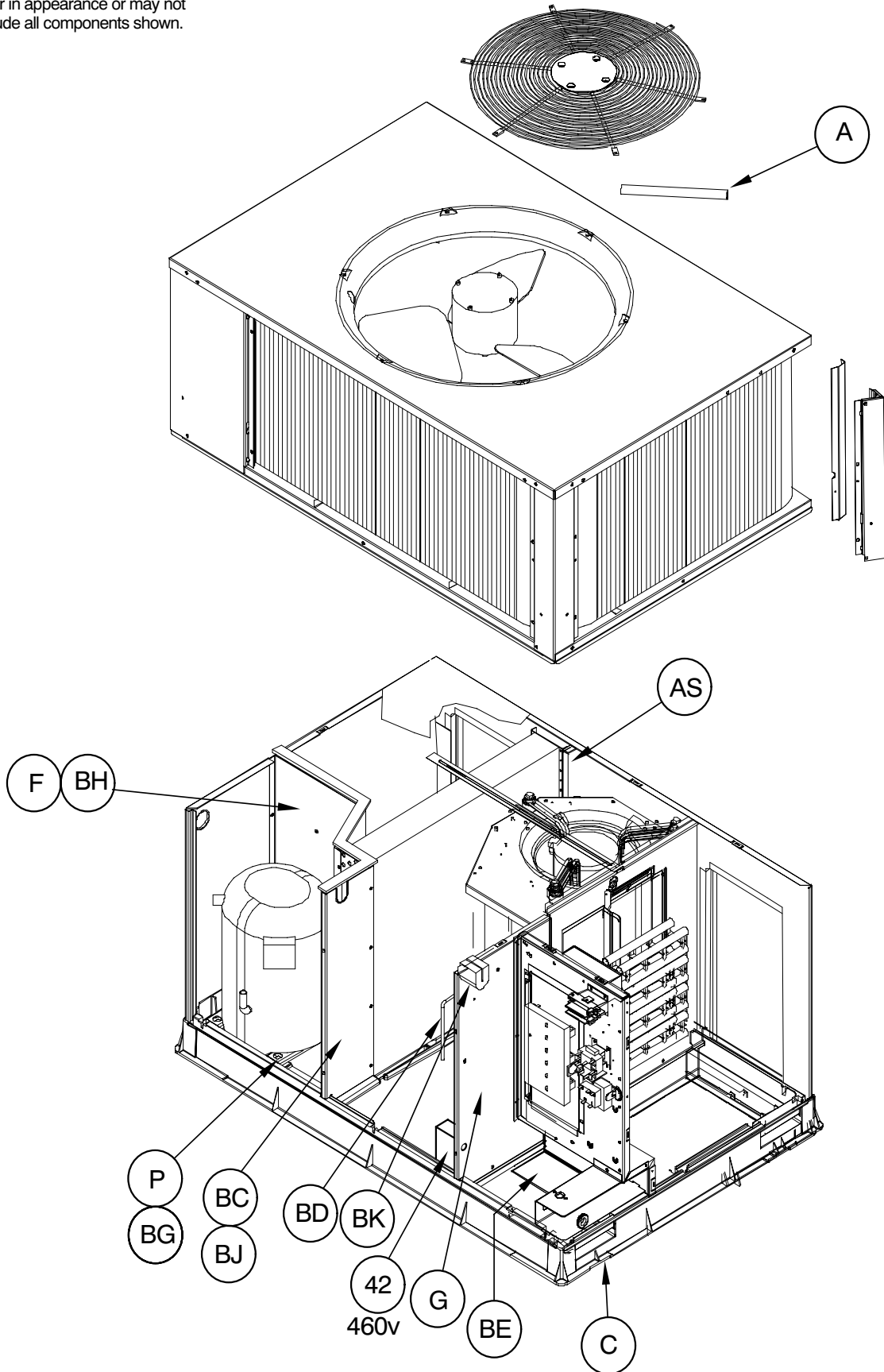
NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.

COIL & PIPING GROUP



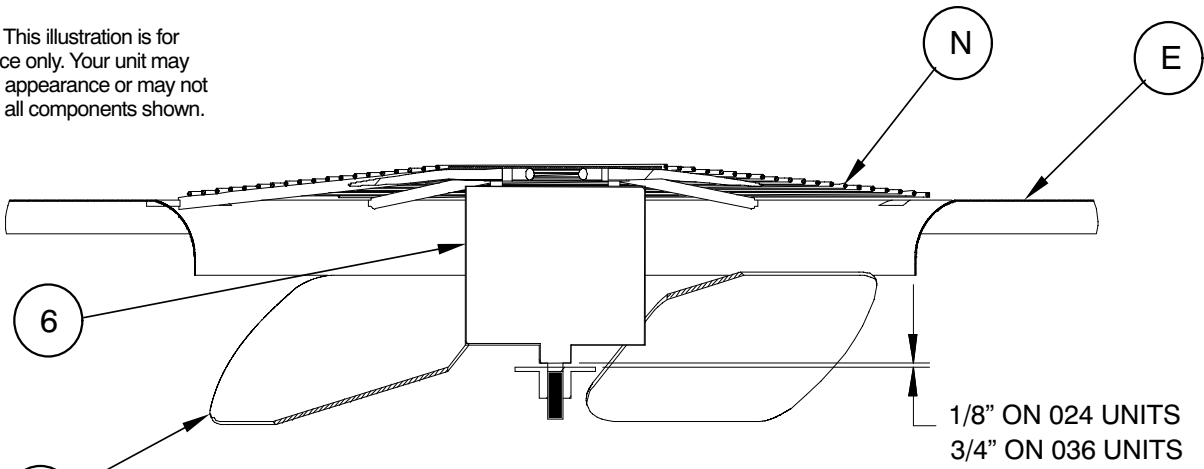
PAN5 24 & 36

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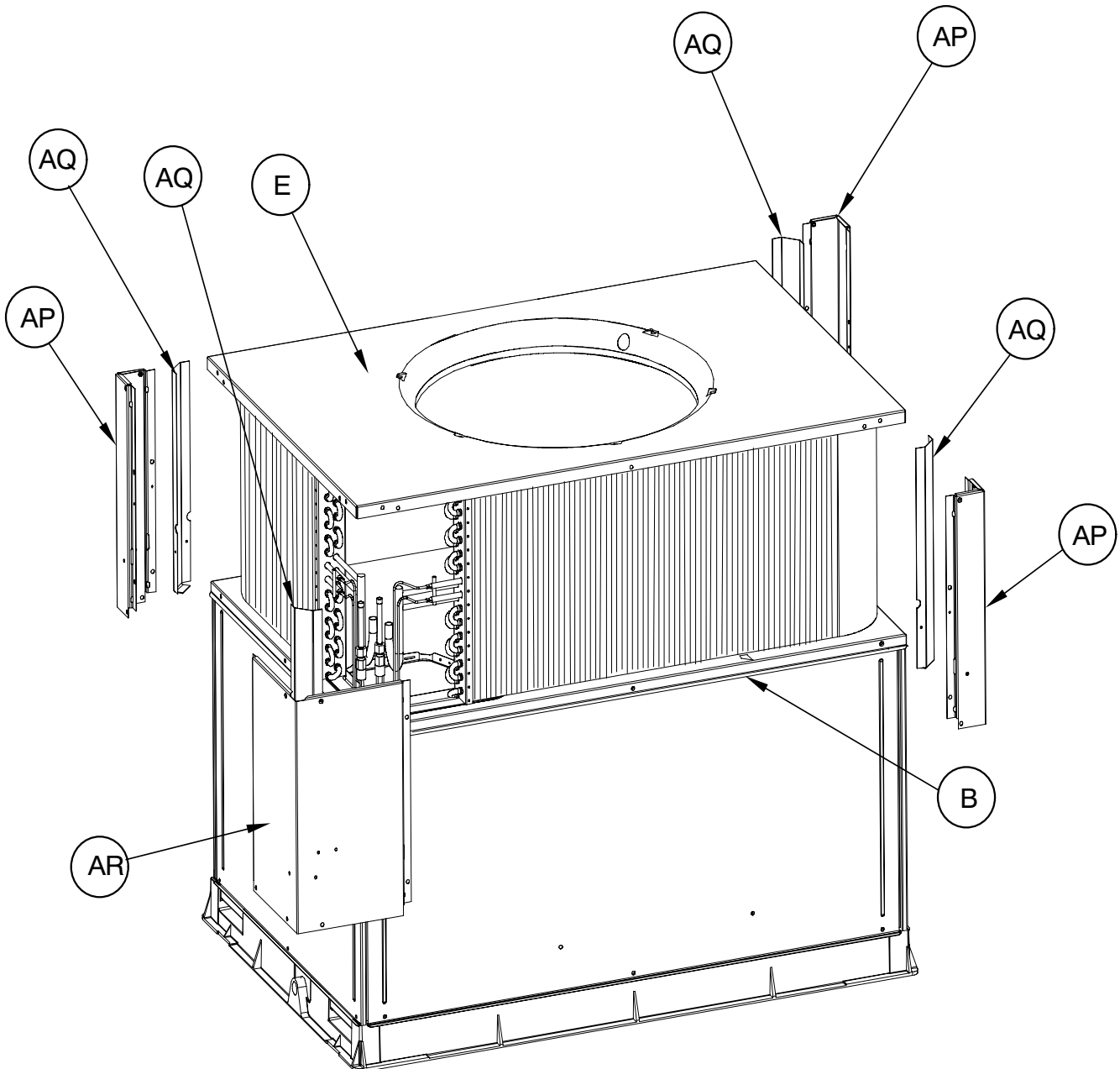


PHD012

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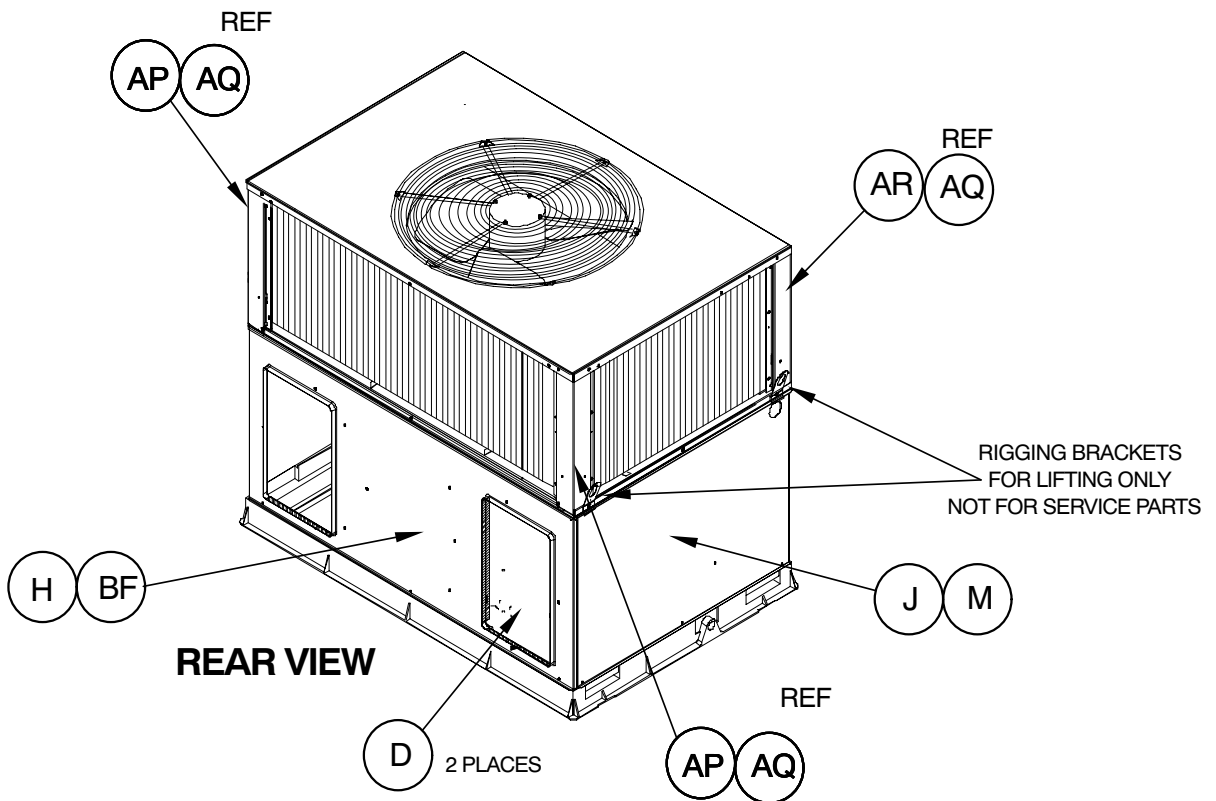
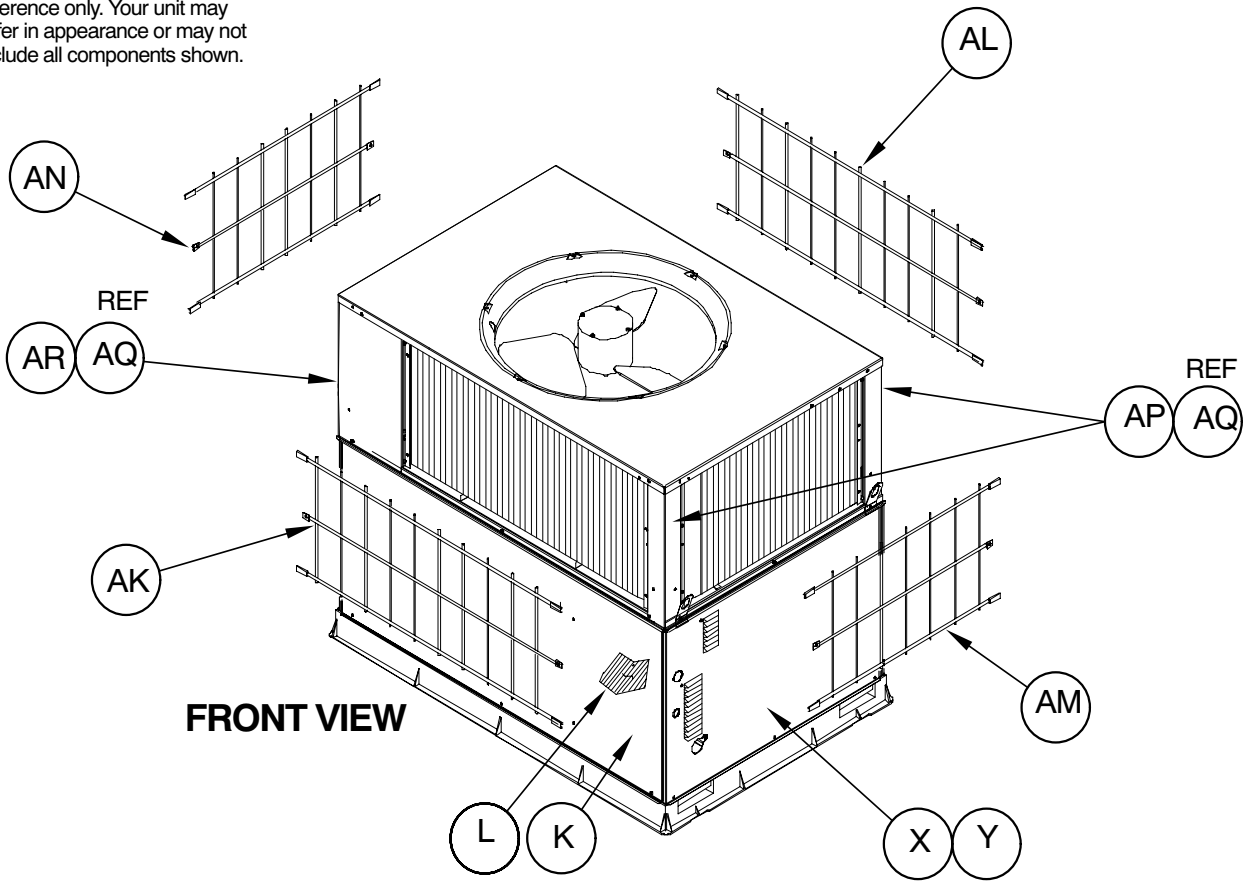


OUTDOOR MOTOR AND FAN GAP



PAN5 24 & 36

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PHD010

PAN5 48 - 60 PARTS LIST

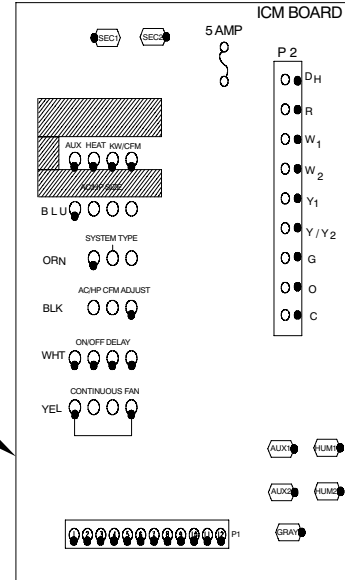
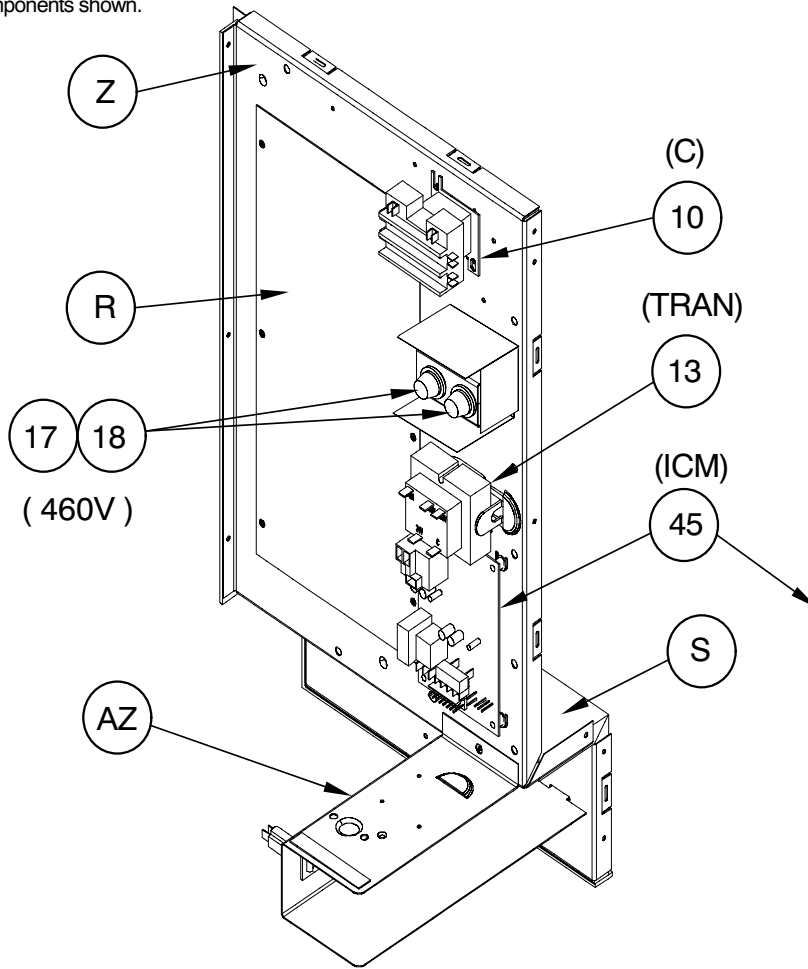
KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN548000K00A1	PAN560000K00A1
01	COMP ZPS40K4E-PFV-130	ZPS40K4EPFV130	1	*
01	COMP ZPS51K4E-PFV-130	ZPS51K4EPFV130	*	1
02	COIL ASY OUTDOOR 48 AL LF	1177332	1	*
02	COIL ASY OUTDOOR 60 AL LF	1177334	*	1
03	COIL ASY OUTDOOR 48 AL RT	1177333	1	*
03	COIL ASY OUTDOOR 60 AL RT	1177335	*	1
04	COIL ASY INDOOR 48	1177328	1	*
04	COIL ASY INDOOR 60	1177329	*	1
05	MTR BLW 1/230 1 600-1200	1177342	1	*
05	MTR BLW 1/230 1 600-1200	1177343	*	1
06	MTR CND 1/230 1/4 900/1100	1177346	1	*
06	MTR CND 1/230 1/3 1100	1177345	*	1
07	FAN C 22" 3B 1/2" 28 INT	1171219	1	1
08	CAP RN RD 370V 45+10	1173702	1	*
08	CAP RN RD 370V 80+10	1173703	*	1
10	CONTACTOR 1P 40A 24V	1173690	1	1
13	TRANS 208/230>24 40VA	1173691	1	1
14	WHEEL 11-10DD CCW	1177025	1	1
16	DISTRIBUTOR 4 CIRCUIT R-410A	1174361	1	*
16	DISTRIBUTOR 6 CIRCUIT R-410A	1175220	*	1
22	SENSOR DEFROST O65 C32	1173637	1	1
32	MOUNTING KIT BLW MTR	1176088	1	1
37	PLUG COMPRESSOR	1177353	1	1
38	HTR CC WP 40W 240V TCH196	1176105	1	1
39	SWITCH LOW PRESSURE	1174694	1	1
40	DRIER LIQ 08 CU IN 3/8 SWEAT	1173679	1	1
41	SWITCH HIGH PRESSURE	1174695	1	1
42	SWITCH PRESS COMP SOL	1174413	1	1
43	VALVE TXV 4 TON	1176870	1	*
43	VALVE TXV 5 TON	1176871	*	1
44	PLUG COMP SOLENOID COIL 51"LDS	1177316	1	1
45	CIRCUIT BOARD X-13 DUAL CAP	1177315	1	1
A	RACEWAY	1171428	1	1
B	INSULATION ASY TOP EVAP	1176083	1	1
C	BASE PAN ASY	1176061	1	1
D	DUCT COVER ASY	1176062	2	2
E	TOP CONDENSER	1176063	1	1
F	PARTITION COIL RETURN	1176064	1	1
G	PARTITION FAN	1176065	1	1
H	PANEL REAR DUCT	1176066	1	1
J	PANEL COMP SIDE	1176067	1	1
K	PANEL ACCESS	1176068	1	1
L	INSULATION ACCESS PANEL	1176069	1	1
M	INSULATION COMP PANEL	1176070	1	1

PAN5 48 – 60 PARTS LIST (continued)

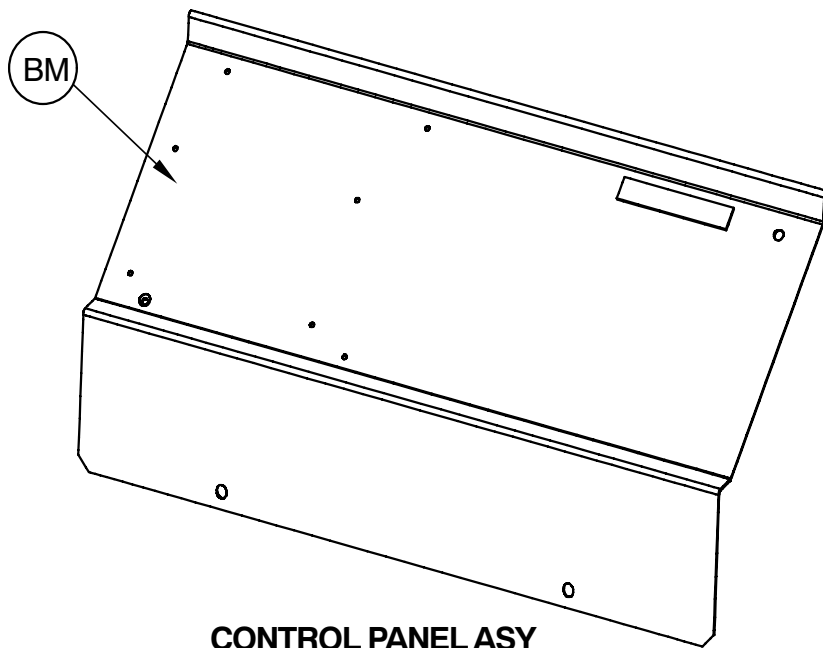
KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN548000K00A1	PAN560000K00A1
N	GRILLE OUTLET	1171267	1	1
P	GROMMET COMPRESSOR 1.62"DIA	1171270	4	4
R	COVER HEATER OPENING	1176139	1	1
S	INSULATION CONTROL PLATE	1176140	1	1
X	PANEL SIDE POWER SUPPLY	1176145	1	1
Y	INSULATION PANEL SIDE	1176146	1	1
Z	PLATE CONTROL	1176143	1	1
AE	SCROLL	1176074	1	1
AF	PLATE ASY FAN SIDE	1176075	1	1
AH	PLATE FAN BOTTOM	1176077	1	1
AJ	CLAMP CAPACITOR ROUND 2.5"D	1064218	1	1
AK	GRILLE ASY 20"	1176106	1	*
AK	GRILLE ASY 24"	1177339	*	1
AL	GRILLE ASY 20"	1176107	2	*
AL	GRILLE ASY 24"	1177341	*	2
AM	GRILLE ASY 20"	1176108	1	*
AM	GRILLE ASY 24"	1177340	*	1
AP	PANEL CORNER 20" COND	1176109	2	*
AP	PANEL CORNER 24" COND	1177350	*	2
AQ	BRACKET SUPPORT 16"	1176110	4	4
AR	PANEL CORNER 20" HEADER	1176111	1	*
AR	PANEL CORNER 24" HEADER	1177351	*	1
AS	PARTITION COIL EVAP	1176112	1	1
AZ	BARRIER 24V 42-60	1176148	1	1
BA	PANEL CORNER 20" HEADER	1176113	1	*
BA	PANEL CORNER 24" HEADER	1177352	*	1
BB	SUPPORT BLOWER	1176085	1	1
BC	PARTITION COIL SUPPLY	1176084	1	1
BD	SUPPORT BLOWER	1176784	1	1
BE	SHEILD BASE PAN	1176086	1	1
BF	INSULATION RETURN DUCT PANEL	1176087	1	1
BG	COMPRESSOR MTG BOLT	1176731	4	4
BH	INSULATION COIL PARTITION	1176153	1	1
BJ	INSULATION COIL PARTITION	1176786	1	1
BK	GROMMET	1176613	2	2
BL	PARTITION COIL EVAP	1176114	1	1
BM	BLOCKOFF PANEL UPPER	1177326	1	1
BN	BLOCKOFF PANEL LOWER	1177325	1	1
PARTS NOT SHOWN				
)	HARNESS ASY	1177313	1	1

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CONTROL BOX ASY



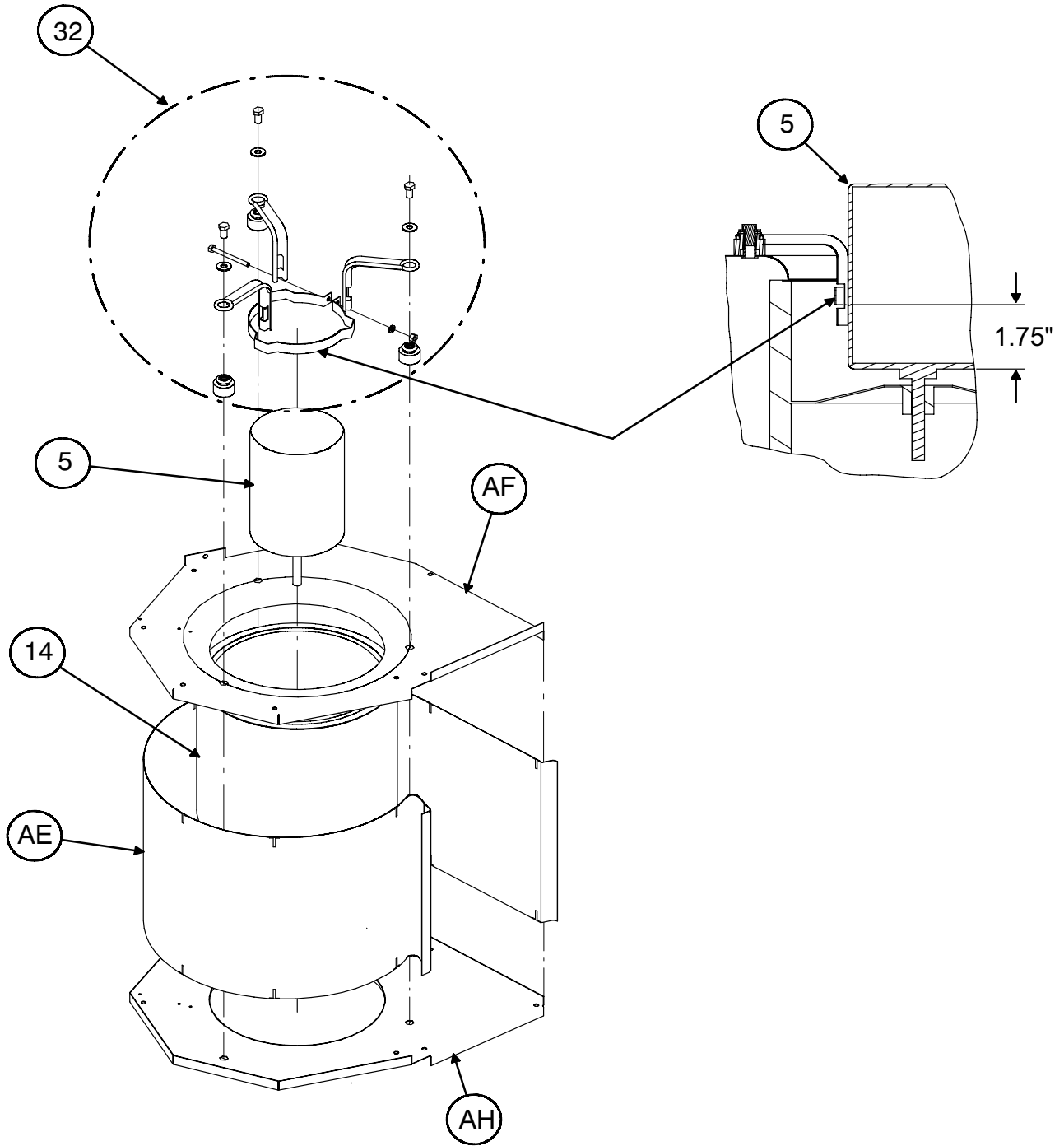
ICM BOARD



CONTROL PANEL ASY

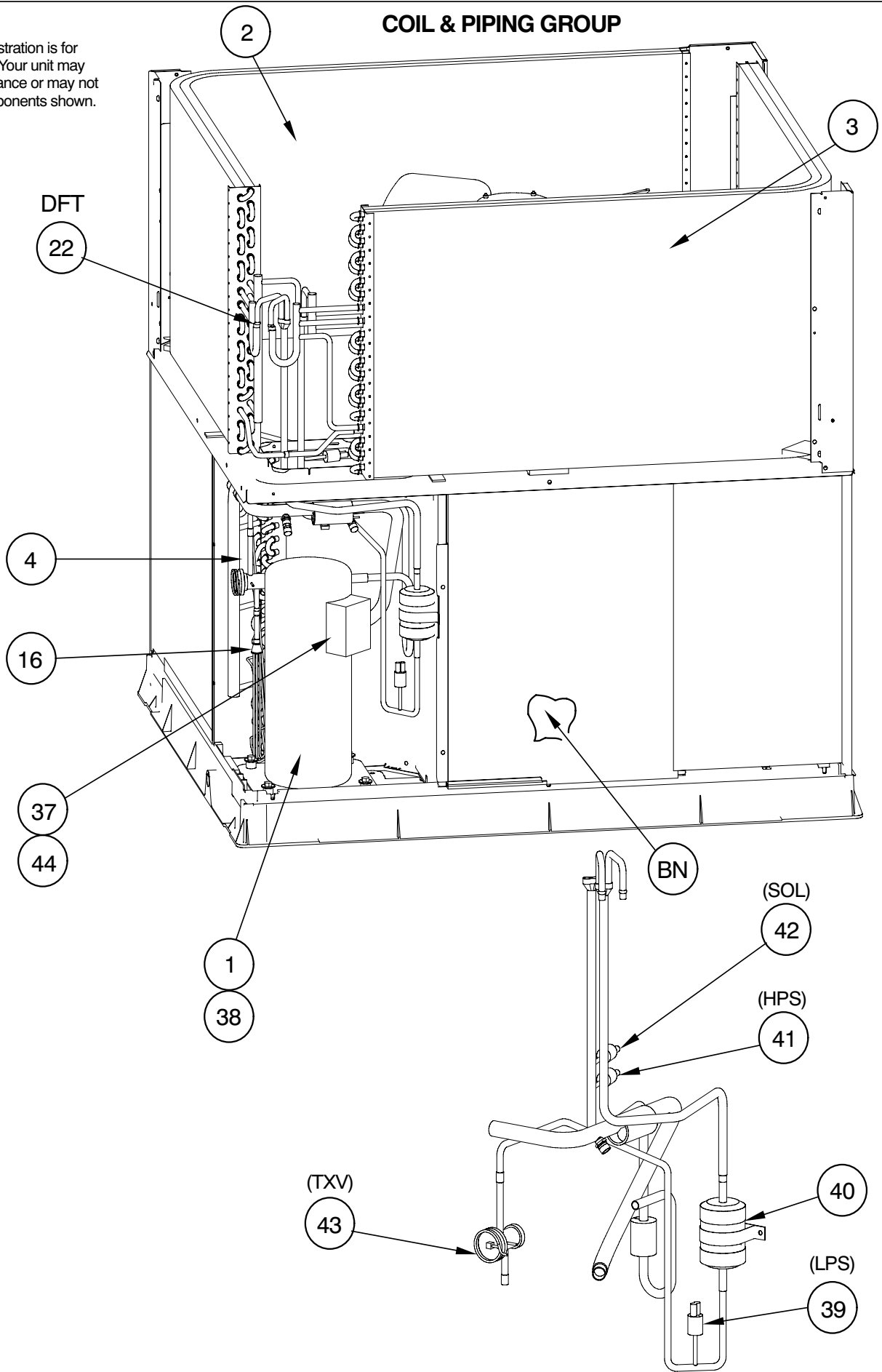
NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.

BLOWER ASY



COIL & PIPING GROUP

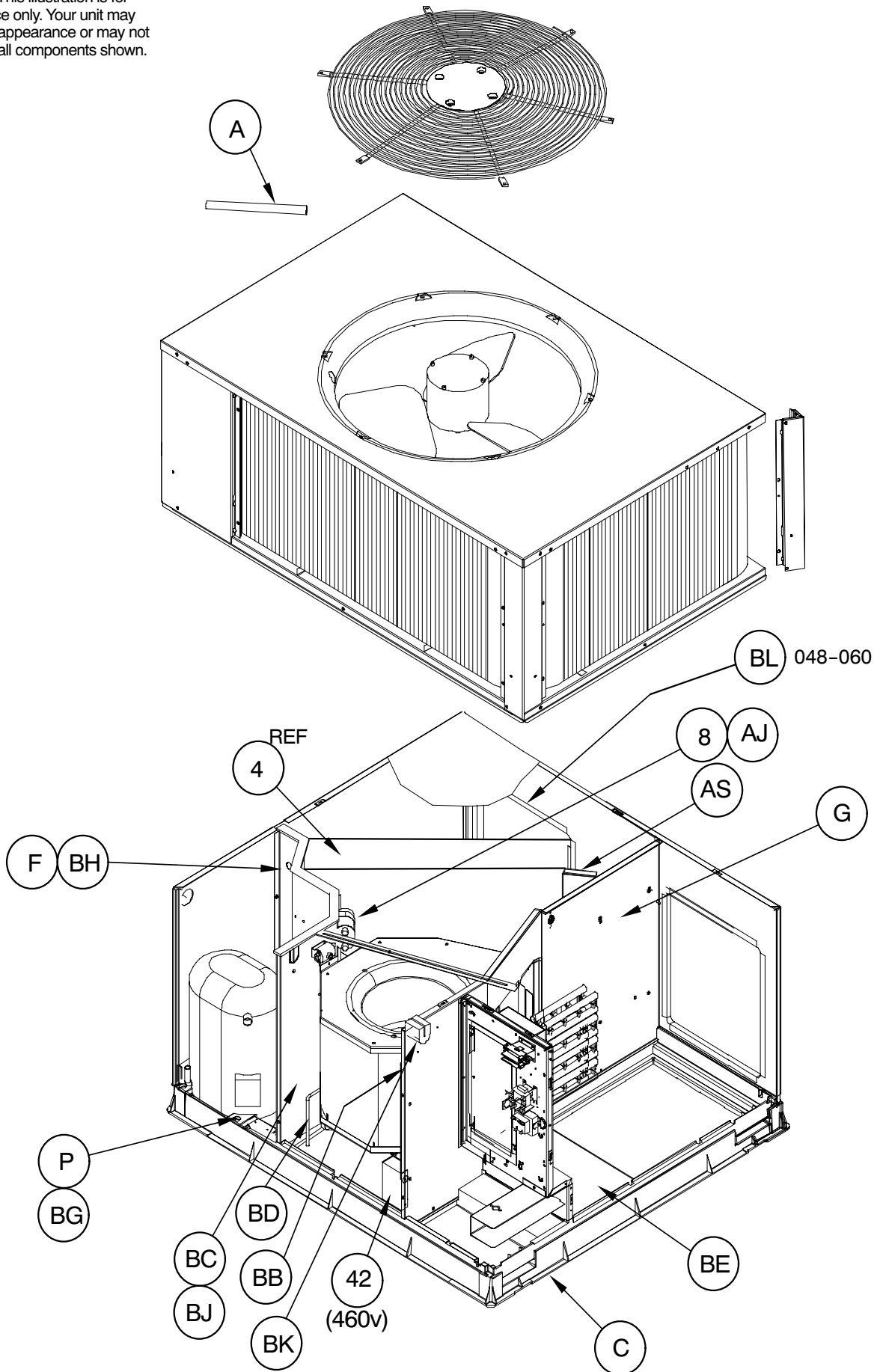
NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.



50-10-16

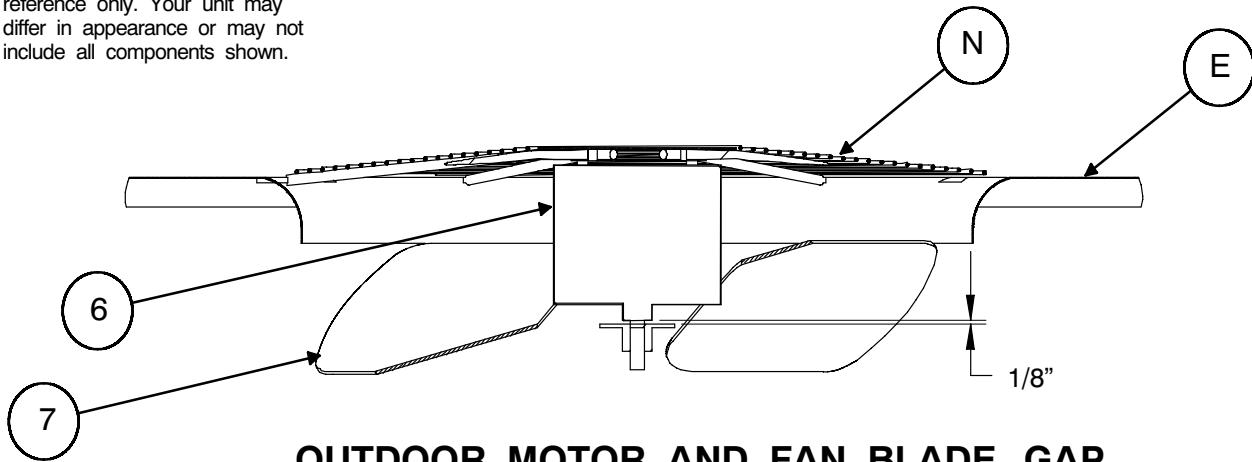
PAN5 48 & 60

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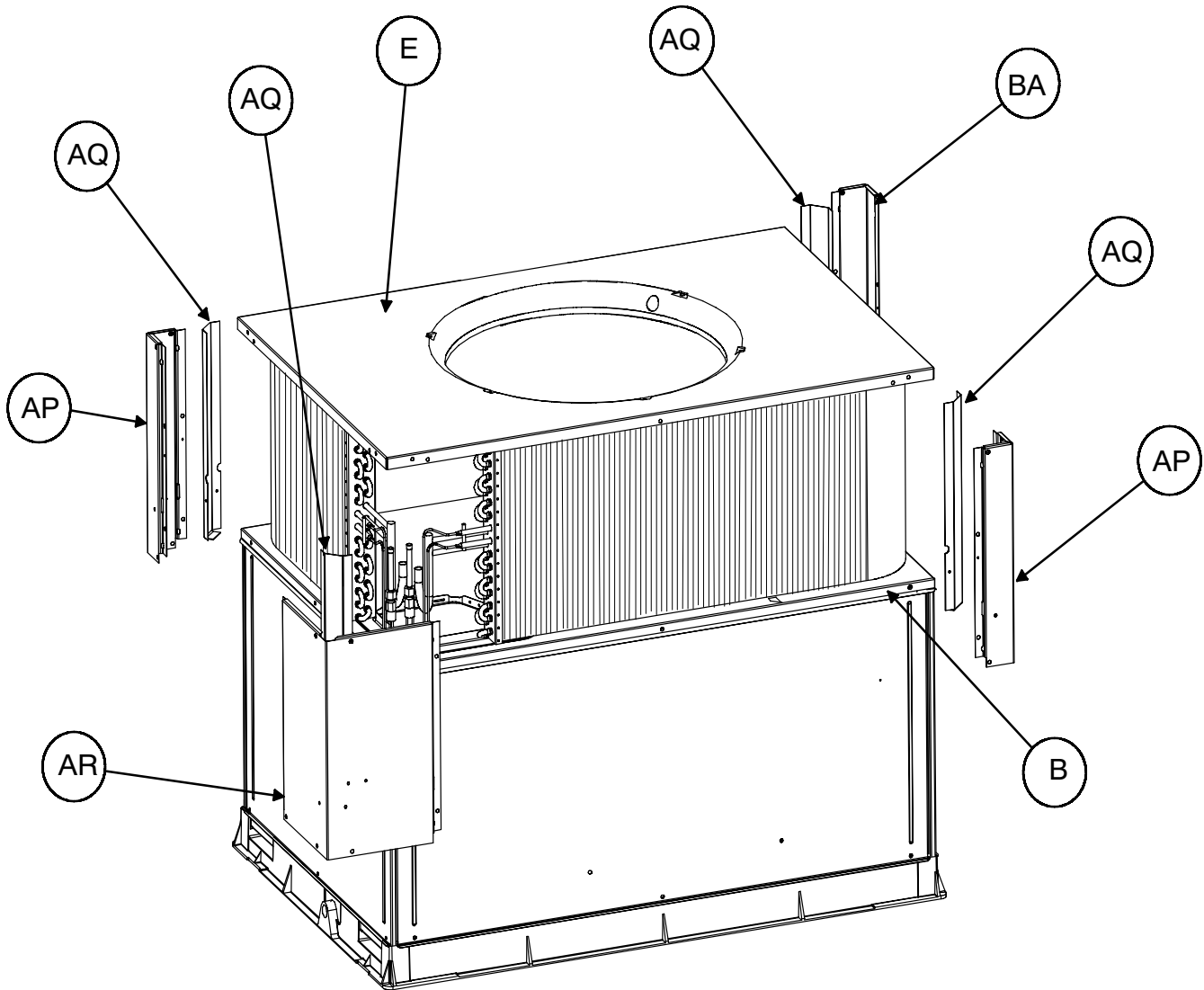


PHD013

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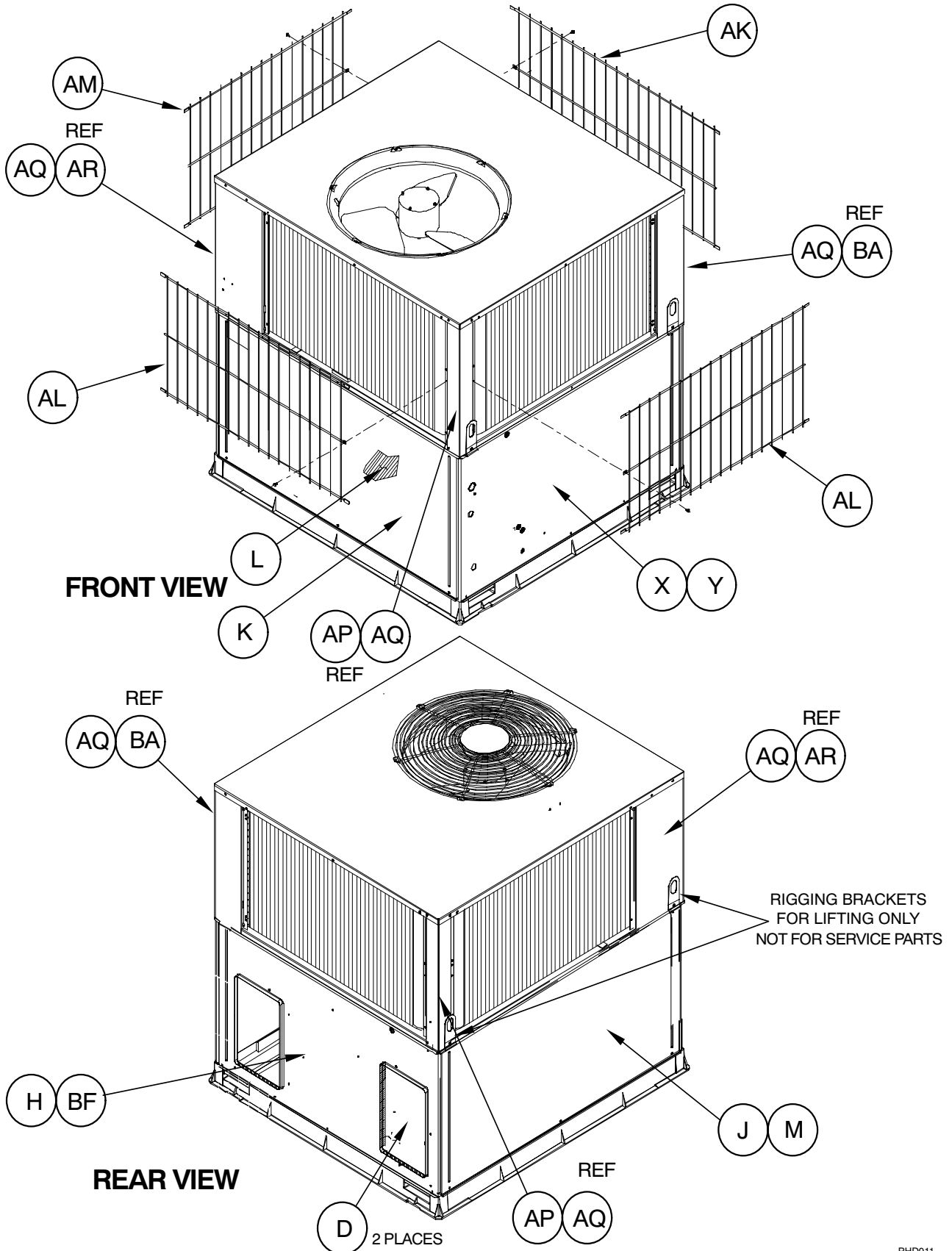


OUTDOOR MOTOR AND FAN BLADE GAP



PAN5 48 & 60

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PHD011

PAN5 24 – 60 CHARGING CHART

Charging Procedure

- 1- Measure Discharge line pressure by attaching a gauge to the service port.
- 2- Measure the Liquid line temperature by attaching a temperature sensing device to it.
- 3- Insulate the temperature sensing device so that the Outdoor Ambient doesn't affect the reading.
- 4- Refer to the required Subcooling in the table based on the model size and the Outdoor Ambient temperature.
- 5- Interpolate if the Outdoor temperature lies in between the table values. Extrapolate if the temperature lies beyond the table range.

- 6- Find the Pressure Value corresponding to the the measured Pressure on the Compressor Discharge line.
- 7- Read across from the Pressure reading to obtain the Liquid line temperature for a required Subcooling.
- 8- Add Charge if the measured temperature is higher than the liquid line temperature value in the table.
- 9- Add Charge using the service connection on the Suction line of the Compressor.

Required Subcooling °F (°C)					
Model Size	Outdoor Ambient Temperature				
	75 (24)	82 (28)	85 (29)	95 (35)	105 (41)
024	15.5 (8.6)	15.6 (8.7)	15.7 (8.7)	15.8 (8.8)	15.9 (8.9)
036	14 (7.7)	13.9 (7.7)	13.9 (7.7)	13.8 (7.7)	13.7 (7.6)
048	21 (11.6)	20.8 (11.5)	20.7 (11.5)	20.4 (11.3)	20.2 (11.2)
060	16.2 (9)	16.6 (9.2)	16.8 (9.3)	17.3 (9.6)	17.8 (9.9)

Required Liquid Line Temperature for a Specific Subcooling (R-410A)										
Pressure (psig)	Required Subcooling (°F)				Pressure (kPa)	Required Subcooling (°C)				
	5	10	15	25		3	6	8	14	
174	5.6	5.1	4.6	3.6	120.0	1.3	1.1	0.8	0.2	
181	5.9	5.4	4.9	3.9	124.8	1.5	1.2	0.9	0.4	
188	6.1	5.6	5.1	4.1	129.6	1.6	1.3	1.0	0.5	
195	6.3	5.8	5.3	4.3	134.4	1.7	1.4	1.2	0.6	
202	6.5	6.0	5.5	4.5	139.3	1.8	1.6	1.3	0.7	
209	6.7	6.2	5.7	4.7	144.1	2.0	1.7	1.4	0.9	
216	6.9	6.4	5.9	4.9	148.9	2.1	1.8	1.5	1.0	
223	7.1	6.6	6.1	5.1	153.7	2.2	1.9	1.6	1.1	
230	7.3	6.8	6.3	5.3	158.6	2.3	2.0	1.7	1.2	
237	7.5	7.0	6.5	5.5	163.4	2.4	2.1	1.9	1.3	
244	7.7	7.2	6.7	5.7	168.2	2.5	2.2	2.0	1.4	
251	7.9	7.4	6.9	5.9	173.0	2.6	2.3	2.1	1.5	
259	8.1	7.6	7.1	6.1	178.6	2.7	2.4	2.2	1.6	
267	8.3	7.8	7.3	6.3	184.1	2.8	2.6	2.3	1.7	
275	8.5	8.0	7.5	6.5	189.6	2.9	2.7	2.4	1.8	
283	8.7	8.2	7.7	6.7	195.1	3.1	2.8	2.5	1.9	
291	8.9	8.4	7.9	6.9	200.6	3.2	2.9	2.6	2.0	
299	9.1	8.6	8.1	7.1	206.1	3.3	3.0	2.7	2.2	
308	9.3	8.8	8.3	7.3	212.3	3.4	3.1	2.8	2.3	
317	9.5	9.0	8.5	7.5	218.5	3.5	3.2	2.9	2.4	
326	9.7	9.2	8.7	7.7	224.7	3.6	3.3	3.0	2.5	
335	9.9	9.4	8.9	7.9	230.9	3.7	3.4	3.1	2.6	
344	10.1	9.6	9.1	8.1	237.2	3.8	3.5	3.3	2.7	
353	10.2	9.7	9.2	8.2	243.4	3.9	3.6	3.4	2.8	
363	10.4	9.9	9.4	8.4	250.3	4.0	3.7	3.5	2.9	
373	10.6	10.1	9.6	8.6	257.1	4.1	3.9	3.6	3.0	
383	10.8	10.3	9.8	8.8	264.0	4.2	4.0	3.7	3.1	
393	11.0	10.5	10.0	9.0	270.9	4.3	4.1	3.8	3.2	
403	11.2	10.7	10.2	9.2	277.8	4.4	4.2	3.9	3.3	
413	11.4	10.9	10.4	9.4	284.7	4.5	4.3	4.0	3.4	
423	11.6	11.1	10.6	9.6	291.6	4.6	4.4	4.1	3.5	
433	11.7	11.2	10.7	9.7	298.5	4.7	4.5	4.2	3.6	
443	11.9	11.4	10.9	9.9	305.4	4.8	4.6	4.3	3.7	
453	12.1	11.6	11.1	10.1	312.3	4.9	4.7	4.4	3.8	
463	12.2	11.7	11.2	10.2	319.2	5.0	4.7	4.5	3.9	
473	12.4	11.9	11.4	10.4	326.1	5.1	4.8	4.6	4.0	
483	12.6	12.1	11.6	10.6	333.0	5.2	4.9	4.7	4.1	
493	12.7	12.2	11.7	10.7	339.9	5.3	5.0	4.7	4.2	
503	12.9	12.4	11.9	10.9	346.8	5.4	5.1	4.8	4.3	
513	13.0	12.5	12.0	11.0	353.7	5.5	5.2	4.9	4.4	
523	13.2	12.7	12.2	11.2	360.6	5.6	5.3	5.0	4.4	
533	13.3	12.8	12.3	11.3	367.5	5.6	5.4	5.1	4.5	

PAN5 24 - 60 208 / 230 - 1 - 60

CONNECTION WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING

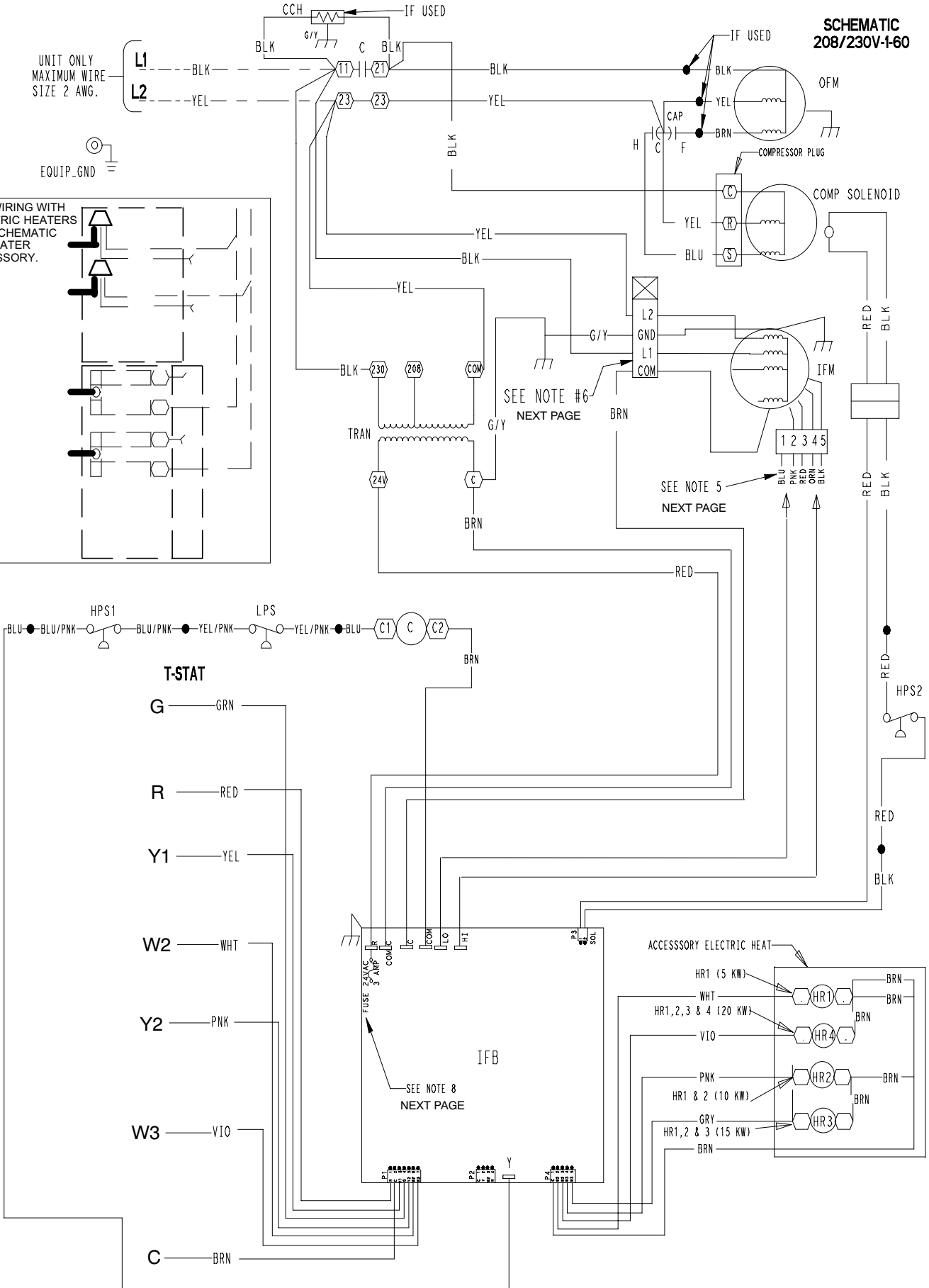
**SCHEMATIC
208/230V-1-60**

FIELD
SUPPLY
POWER

UNIT ONLY
MAXIMUM WIRE
SIZE 2 AWG.

EQUIP_GND

FOR WIRING WITH
ELECTRIC HEATERS
SEE SCHEMATIC
ON HEATER
ACCESSORY.



T-STAT

G — GRN

R — RED

Y1 — YEL

W2 — WHT

Y2 — PNK

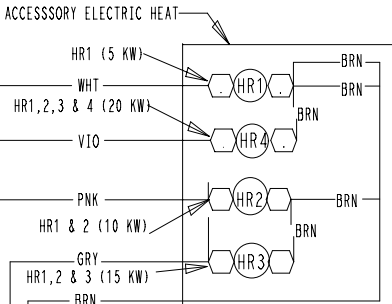
W3 — VIO

C — BRN

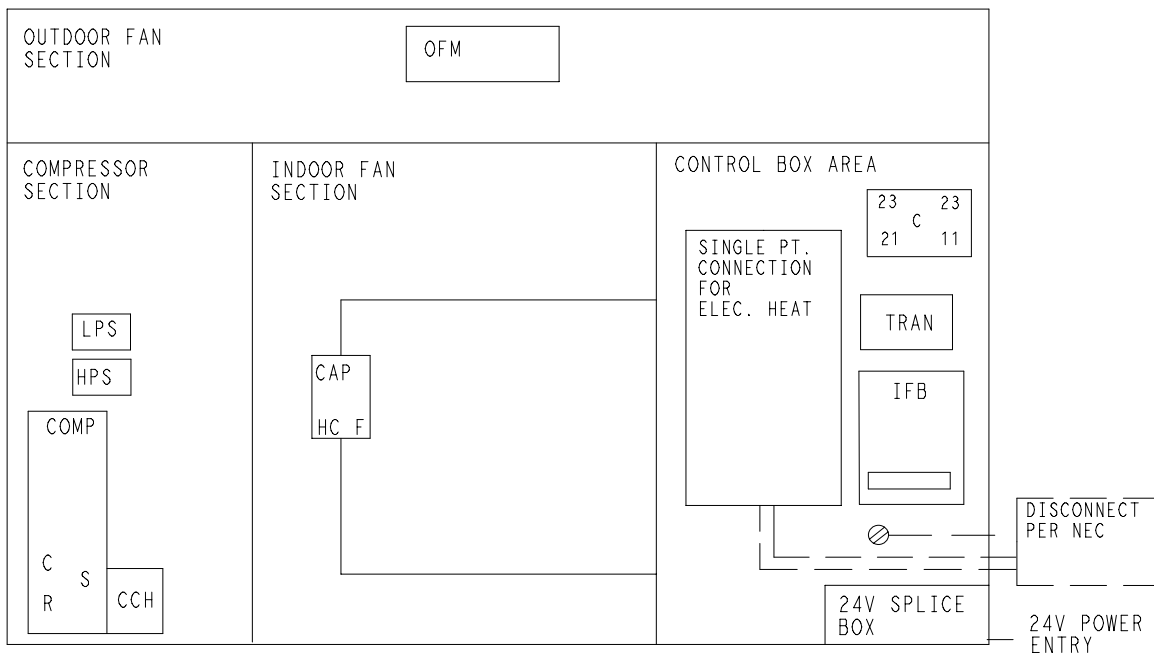
SEE NOTE #6
NEXT PAGE

SEE NOTE 5
NEXT PAGE

IFB
SEE NOTE 8
NEXT PAGE



UNIT COMPONENT ARRANGEMENT



NOTES:

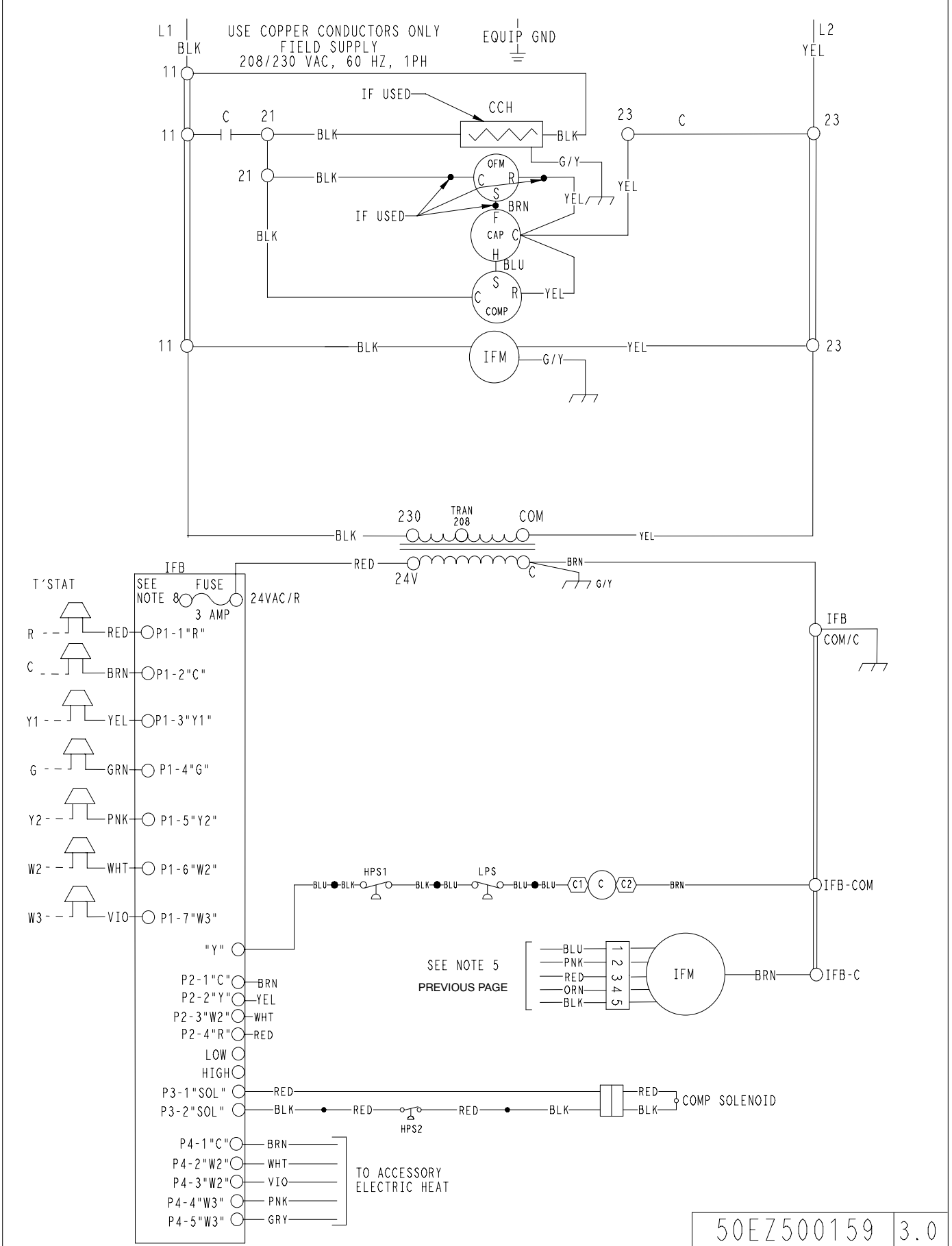
1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED, IT MUST BE REPLACED WITH TYPE 90 DEGREE C WIRE OR IT'S EQUIVALENT.
3. USE 75 DEGREE COPPER CONDUCTORS FOR FIELD INSTALLATION.
4. DEFROST TIMER TO BE SET AT 60 MIN.
5. SEE INSTALLATION INSTRUCTIONS FOR PROPER HEATING AND COOLING CONNECTIONS FOR YOUR UNIT. INDOOR FAN PLUGS -"DO NOT DISCONNECT UNDER LOAD."
6. "DO NOT DISCONNECT PLUG UNDER LOAD."
7. USED ON 024 AND 060 UNITS ONLY.
8. THIS FUSE IS MANUFACTURED BY LITTLEFUSE, P/N 257003.

LEGEND

	FIELD SPLICE	C	CONTACTOR
	TERMINAL (MARKED)	CAP	CAPACITOR
	TERMINAL (UNMARKED)	CB	CIRCUIT BREAKER
	SPLICE	CCH	CRANK CASE HEATER
	SPLICE (MARKED)	COMP	COMPRESSOR MOTOR
—	FACTORY WIRING	CTD	COMPRESSOR TIME DELAY
- - -	FIELD CONTROL WIRING	FCB	FAN CONTROL BOARD
— — —	FIELD POWER WIRING	GND	GROUND
- - - -	ACCESSORY OR OPTIONAL WIRING	HPS	HIGH PRESSURE SWITCH
—	TO INDICATE COMMON	HR	HEATER RELAY
—	POTENTIAL ONLY:	IFB	INDOOR FAN BOARD
—	NOT TO REPRESENT WIRING	IFM	INDOOR FAN MOTOR
		LPS	LOW PRESSURE SWITCH
		OFM	OUTDOOR FAN MOTOR
		TRAN	TRANSFORMER
		T-STAT	THERMOSTAT

LADDER WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING



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