

Parts List, Charging Chart, Wiring Diagrams

PAN4 24 - 60 SERIES 1 Phase R-410A PACKAGE AIR CONDITIONER UNITS



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PAN4 24 - 60 PARTS LIST

KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN424000K00A1	PAN430000K00A1	PAN436000K00A1	PAN442000K00A1	PAN448000K00A1	PAN460000K00A1
01	COMP ZP21K5E-PFV-130	ZP21K5EPFV130	1	*	*	*	*	*
01	COMP ZP24K5E-PFV-130	ZP24K5EPFV130	*	1	*	*	*	*
01	COMP ZP29K5E-PFV-130	ZP29K5EPFV130	*	*	1	*	*	*
01	COMP ZP36K5E-PFV-130	ZP36K5EPFV130	*	*	*	1	*	*
01	COMP ZP42K5E-PFV-130	ZP42K5EPFV130	*	*	*	*	1	*
01	COMP ZP51K5E-PFV-130	ZP51K5EPFV130	*	*	*	*	*	1
02	COIL ASY OUTDOOR 24-30 AL LF	1177741	1	1	*	*	*	*
02	COIL ASY OUTDOOR 36 AL LF	1177743	*	*	1	*	*	*
02	COIL ASY OUTDOOR 48 AL LF	1177332	*	*	*	*	1	*
02	COIL ASY OUTDOOR 48 AL LF	1177756	*	*	*	1	*	*
02	COIL ASY OUTDOOR 60 AL LF	1177751	*	*	*	*	*	1
03	COIL ASY OUTDOOR 24-30 AL RT	1177742	1	1	*	*	*	*
03	COIL ASY OUTDOOR 36 AL RT	1177744	*	*	1	*	*	*
03	COIL ASY OUTDOOR 36 AL RT	1177757	*	*	*	1	*	*
03	COIL ASY OUTDOOR 48 AL RT	1177333	*	*	*	*	1	*
03	COIL ASY OUTDOOR 60 AL RT	1177752	*	*	*	*	*	1
04	COIL ASY INDOOR 24	1177745	1	*	*	*	*	*
04	COIL ASY INDOOR 30	1177746	*	1	*	*	*	*
04	COIL ASY INDOOR 36	1177747	*	*	1	*	*	*
04	COIL ASY INDOOR 42	1177753	*	*	*	1	*	*
04	COIL ASY INDOOR 48	1177754	*	*	*	*	1	*
04	COIL ASY INDOOR 60	1177755	*	*	*	*	*	1
05	MTR BLT 1/230 1 VS 600-1200	1177597	*	*	*	*	1	1
05	MTR BLT 1/230 3/4 VS 600-1200	1177595	*	*	1	*	*	*
05	MTR BLT 1/230 3/4 VS 600-1200	1177596	*	*	*	1	*	*
05	MTR BLW 1/230 1/2 VS 600-1200	1177314	1	1	*	*	*	*
06	MTR CND 1/230 1/3 1100	1177345	*	*	*	*	*	1
06	MTR CND 1/230 1/4 825	1171335	*	*	*	*	1	*
06	MTR CND 1/230 1/8 825	1175625	*	*	*	1	*	*
06	MTR CND 1/230 1/8 825/1	1173699	1	1	*	*	*	*
06	MTR CND 1/230 1/8 825/1	1175625	*	*	1	*	*	*
07	FAN C 22" 3B 1/2" 24 INT	1171220	1	1	*	*	1	*
07	FAN C 22" 3B 1/2" 28 INT	1171219	*	*	1	1	*	1
08	CAP RN RD 370V 5+40	1172147	1	1	*	*	*	*
08	CAP RN RD 370V 5+45	1172124	*	*	1	1	*	*
08	CAP RN RD 370V 70+10	1177750	*	*	*	*	1	1
10	CONTACTOR 1P 25A 24V	1173689	1	1	1	1	*	*
10	CONTACTOR 1P 40A 24V	1173690	*	*	*	*	1	1
13	TRANS 208/230>24 40VA	1173691	1	1	1	1	1	1
14	WHEEL 11-10DD CCW	1177025	*	*	*	1	1	1
14	WHEEL DD 10X10 CW	1175970	1	1	*	*	*	*
14	WHEEL DD11x10x1/2 CW CV	1173815	*	*	1	*	*	*
16	DISTRIBUTOR 4 CIRCUIT R-410A	1174359	*	1	*	*	*	*
16	DISTRIBUTOR 4 CIRCUIT R-410A	1174361	1	*	1	*	*	*

PAN4 24 - 60 PARTS LIST (continued)

KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN424000K00A1	PAN430000K00A1	PAN436000K00A1	PAN442000K00A1	PAN448000K00A1	PAN460000K00A1
16	DISTRIBUTOR 6 CIRCUIT R-410A	1175220	*	*	*	1	1	*
16	DISTRIBUTOR 8 CIRCUIT R-410A	1174244	*	*	*	*	*	1
32	MOUNTING KIT BLW MTR	1175958	1	1	1	*	*	*
32	MOUNTING KIT BLW MTR	1176088	*	*	*	1	1	1
37	PLUG COMPRESSOR	1177318	1	1	1	*	*	*
37	PLUG COMPRESSOR	1177353	*	*	*	1	1	1
38	HTR CC WP 40W 240V TCH196	1176105	*	*	*	*	*	1
38	HTR CC WP 40W 240V TCH268	1176161	*	*	1	*	*	*
39	SWITCH LOW PRESSURE	1174412	1	1	1	1	1	1
40	DRIER LIQ 08 CU IN 3/8 SWEAT	1173679	1	1	1	1	1	1
41	SWITCH HIGH PRESSURE	1174407	1	1	1	1	1	1
43	VALVE TXV 2 TON	1177736	1	1	*	*	*	*
43	VALVE TXV 3 TON	1176869	*	*	1	*	*	*
43	VALVE TXV 3 TON	1177748	*	*	*	1	*	*
43	VALVE TXV 4 TON	1176870	*	*	*	*	1	*
43	VALVE TXV 5 TON	1177749	*	*	*	*	*	1
45	CIRCUIT BOARD X-13 DUAL CAP	1177026	1	1	1	1	1	1
AB	CLAMP CAPACITOR ROUND 2.0"D	1095021	1	1	1	1	*	*
AB	CLAMP CAPACITOR ROUND 2.5"D	1064218	*	*	*	*	1	1
AE	SCROLL	1176074	*	*	*	1	1	1
AE	SCROLL FAN	1176010	1	1	1	*	*	*
AF	PLATE ASY FAN	1176011	1	1	*	*	*	*
AF	PLATE ASY FAN	1176266	*	*	1	*	*	*
AF	PLATE ASY FAN SIDE	1176075	*	*	*	1	1	1
AH	PLATE FAN	1176012	1	1	*	*	*	*
AH	PLATE FAN	1177737	*	*	1	*	*	*
AH	PLATE FAN BOTTOM	1176077	*	*	*	1	1	1
AK	GRILLE ASY 12"	1176013	1	1	*	*	*	*
AK	GRILLE ASY 18"	1177738	*	*	1	*	*	*
AK	GRILLE ASY 20"	1176106	*	*	*	1	1	*
AK	GRILLE ASY 24"	1177339	*	*	*	*	*	1
AL	GRILLE ASY 12"	1176014	1	1	*	*	*	*
AL	GRILLE ASY 18"	1177739	*	*	1	*	*	*
AL	GRILLE ASY 20"	1176107	*	*	*	2	2	*
AL	GRILLE ASY 24"	1177341	*	*	*	*	*	2
AM	GRILLE ASY 12"	1176015	1	1	*	*	*	*
AM	GRILLE ASY 18"	1177337	*	*	1	*	*	*
AM	GRILLE ASY 20"	1176108	*	*	*	1	1	*
AM	GRILLE ASY 24"	1177340	*	*	*	*	*	1
AN	GRILLE ASY 12"	1176016	1	1	*	*	*	*
AN	GRILLE ASY 18"	1177740	*	*	1	*	*	*
AP	PANEL CORNER 12"	1176021	3	3	*	*	*	*
AP	PANEL CORNER 18"	1177347	*	*	3	*	*	*
AP	PANEL CORNER 20" COND	1176109	*	*	*	2	2	*

PAN4 24 - 60 PARTS LIST (continued)

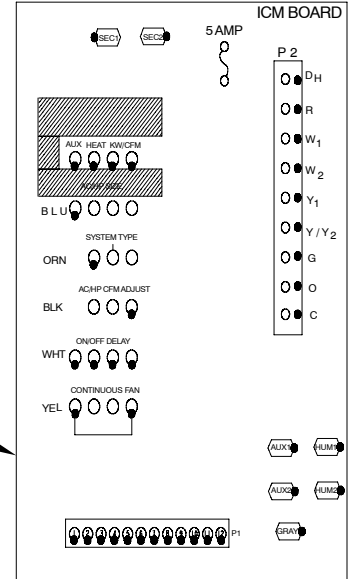
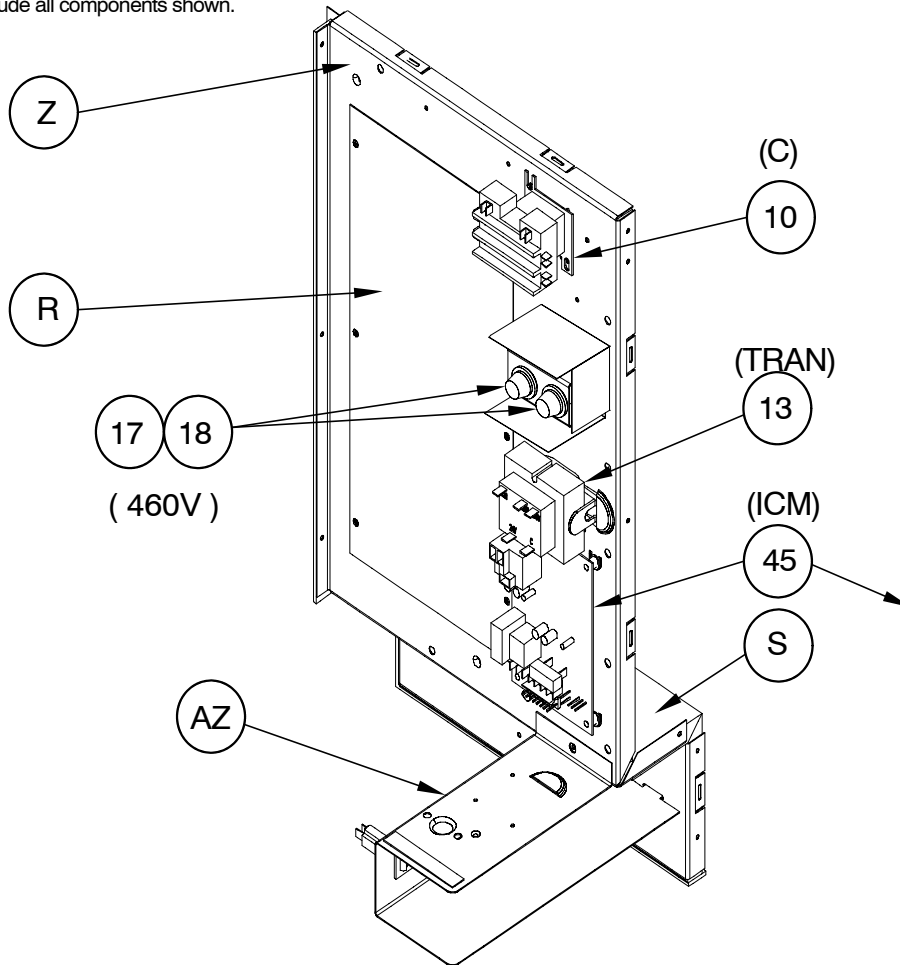
KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN424000K00A1	PAN430000K00A1	PAN436000K00A1	PAN442000K00A1	PAN448000K00A1	PAN460000K00A1
AP	PANEL CORNER 24" COND	1177350	*	*	*	*	*	2
AQ	BRACKET SUPPORT	1176023	4	4	4	*	*	*
AQ	BRACKET SUPPORT 16"	1176110	*	*	*	4	4	4
AR	PANEL CORNER 12" HEADER	1176024	1	1	*	*	*	*
AR	PANEL CORNER 18" HEADER	1177348	*	*	1	*	*	*
AR	PANEL CORNER 20" HEADER	1176111	*	*	*	1	1	*
AR	PANEL CORNER 24" HEADER	1177351	*	*	*	*	*	1
AS	PARTION COIL EVAP	1176026	1	1	1	*	*	*
AS	PARTITION COIL EVAP	1176112	*	*	*	1	1	1
AZ	BARRIER 24V	1176144	1	1	1	*	*	*
AZ	BARRIER 24V 42-60	1176148	*	*	*	1	1	1
BA	PANEL CORNER 20" HEADER	1176113	*	*	*	1	1	*
BA	PANEL CORNER 24" HEADER	1177352	*	*	*	*	*	1
BB	SUPPORT BLOWER	1176085	*	*	*	1	1	1
BC	PARTION COIL EVAP	1176783	1	1	1	*	*	*
BC	PARTITION COIL SUPPLY	1176084	*	*	*	1	1	1
BD	SUPPORT BLOWER	1176784	1	1	1	1	1	1
BE	SHEILD BASE PAN	1176086	*	*	*	1	1	1
BE	SHIELD BASEPAN	1176794	1	1	1	*	*	*
BF	INSULATION RETURN DUCT PANEL	1176087	*	*	*	1	1	1
BF	INSULATION RETURN DUCT PANEL	1176151	1	1	1	*	*	*
BG	COMPRESSOR MTG BOLT	1176731	4	4	4	4	4	4
BH	INSULATION COIL PARTITION	1176152	1	1	1	*	*	*
BH	INSULATION COIL PARTITION	1176153	*	*	*	1	1	1
BJ	INSULATION COIL PARTITION	1176785	1	1	1	*	*	*
BJ	INSULATION COIL PARTITION	1176786	*	*	*	1	1	1
BK	GROMMET	1176613	1	1	1	2	2	2
BL	PARTITION COIL EVAP	1176114	*	*	*	1	1	1
BM	BLOCKOFF PANEL UPPER	1177319	1	1	1	*	*	*
BM	BLOCKOFF PANEL UPPER	1177326	*	*	*	1	1	1
BN	BLOCKOFF PANEL LOWER	1177323	1	1	1	*	*	*
BN	BLOCKOFF PANEL LOWER	1177325	*	*	*	1	1	1
A	RACEWAY	1171428	1	1	1	1	1	1
B	INSULATION ASY TOP EVAP	1175988	1	1	1	*	*	*
B	INSULATION ASY TOP EVAP	1176083	*	*	*	1	1	1
C	BASE PAN ASY	1175989	1	1	1	*	*	*
C	BASE PAN ASY	1176061	*	*	*	1	1	1
D	DUCT COVER ASY	1175990	1	1	1	*	*	*
D	DUCT COVER ASY	1176062	*	*	*	2	2	2
E	TOP CONDENSER	1175991	1	1	1	*	*	*
E	TOP CONDENSER	1176063	*	*	*	1	1	1
F	PARTITION COIL	1175992	1	1	1	*	*	*
F	PARTITION COIL RETURN	1176064	*	*	*	1	1	1
G	PARTITION FAN	1175993	1	1	1	*	*	*

PAN4 24 - 60 PARTS LIST (continued)

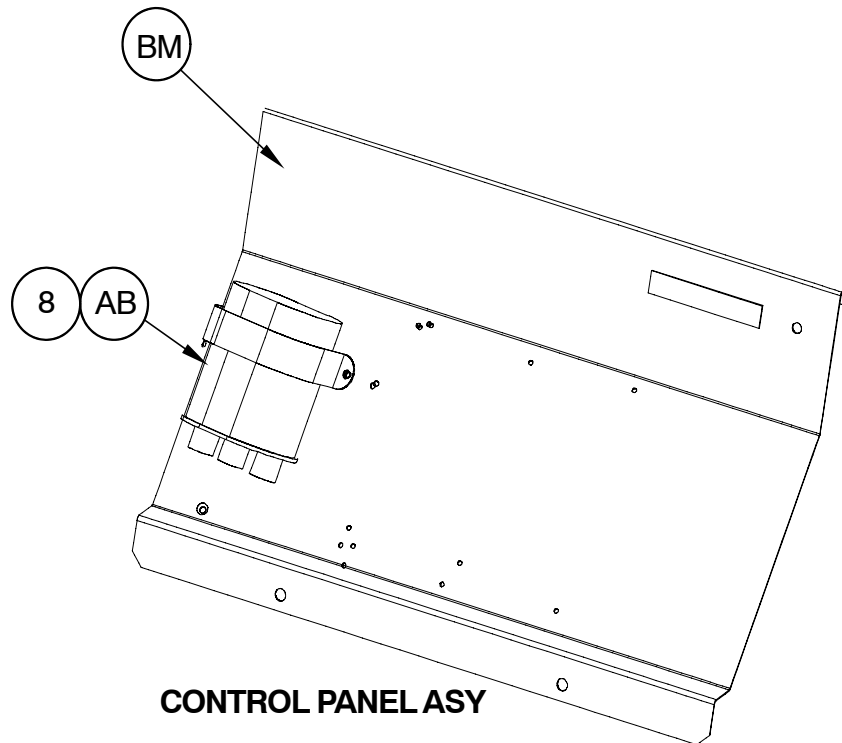
KEY NO.	DESCRIPTION	FAST PARTS NO.	PAN424000K00A1	PAN430000K00A1	PAN436000K00A1	PAN442000K00A1	PAN448000K00A1	PAN460000K00A1
G	PARTITION FAN	1176065	*	*	*	1	1	1
H	PANEL REAR DUCT	1175994	1	1	1	*	*	*
H	PANEL REAR DUCT	1176066	*	*	*	1	1	1
J	PANEL COMP SIDE	1175995	1	1	1	*	*	*
J	PANEL COMP SIDE	1176067	*	*	*	1	1	1
K	PANEL ACCESS	1175996	1	1	1	*	*	*
K	PANEL ACCESS	1176068	*	*	*	1	1	1
L	INSULATION ACCESS PANEL	1175997	1	1	1	*	*	*
L	INSULATION ACCESS PANEL	1176069	*	*	*	1	1	1
M	INSULATION COMP PANEL	1176070	*	*	*	1	1	1
M	INSULATION PANEL COMP	1175998	1	1	1	*	*	*
N	GRILLE OUTLET	1171267	1	1	1	1	1	1
P	GROMMET COMPRESSOR 1.62"DIA	1171270	4	4	4	4	4	4
R	COVER HEATER OPENING	1176139	1	1	1	1	1	1
S	INSULATION CONTROL PLATE	1176140	1	1	1	1	1	1
X	PANEL SIDE POWER SUPPLY	1176141	1	1	1	*	*	*
X	PANEL SIDE POWER SUPPLY	1176145	*	*	*	1	1	1
Y	INSULATION PANEL SIDE	1176142	1	1	1	*	*	*
Y	INSULATION PANEL SIDE	1176146	*	*	*	1	1	1
Z	PLATE CONTROL	1176143	1	1	1	1	1	1
PARTS NOT SHOWN								
(HARNESS ASY CONT BOX	1177735	1	1	1	1	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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32

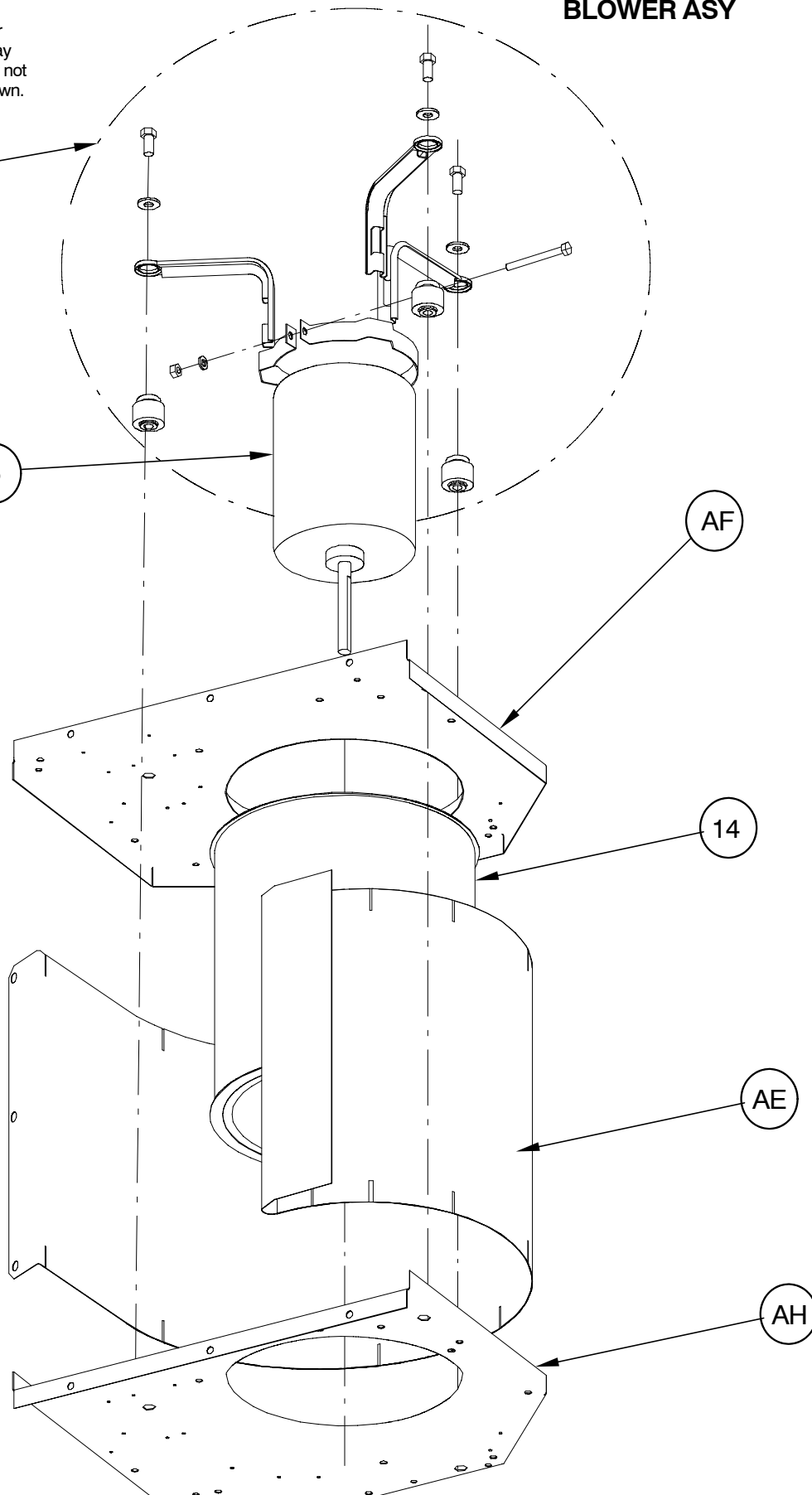
5

AF

14

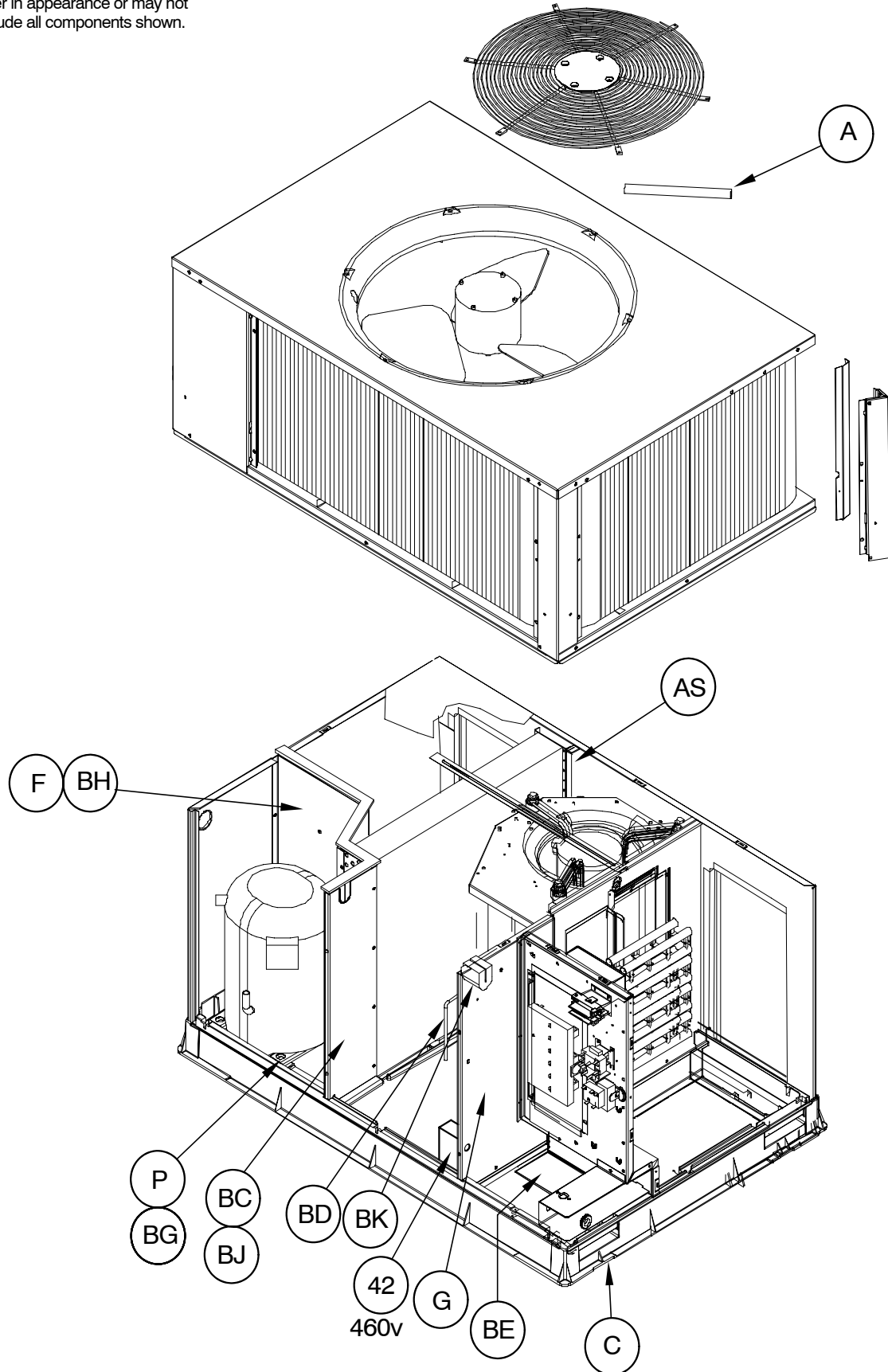
AE

AH



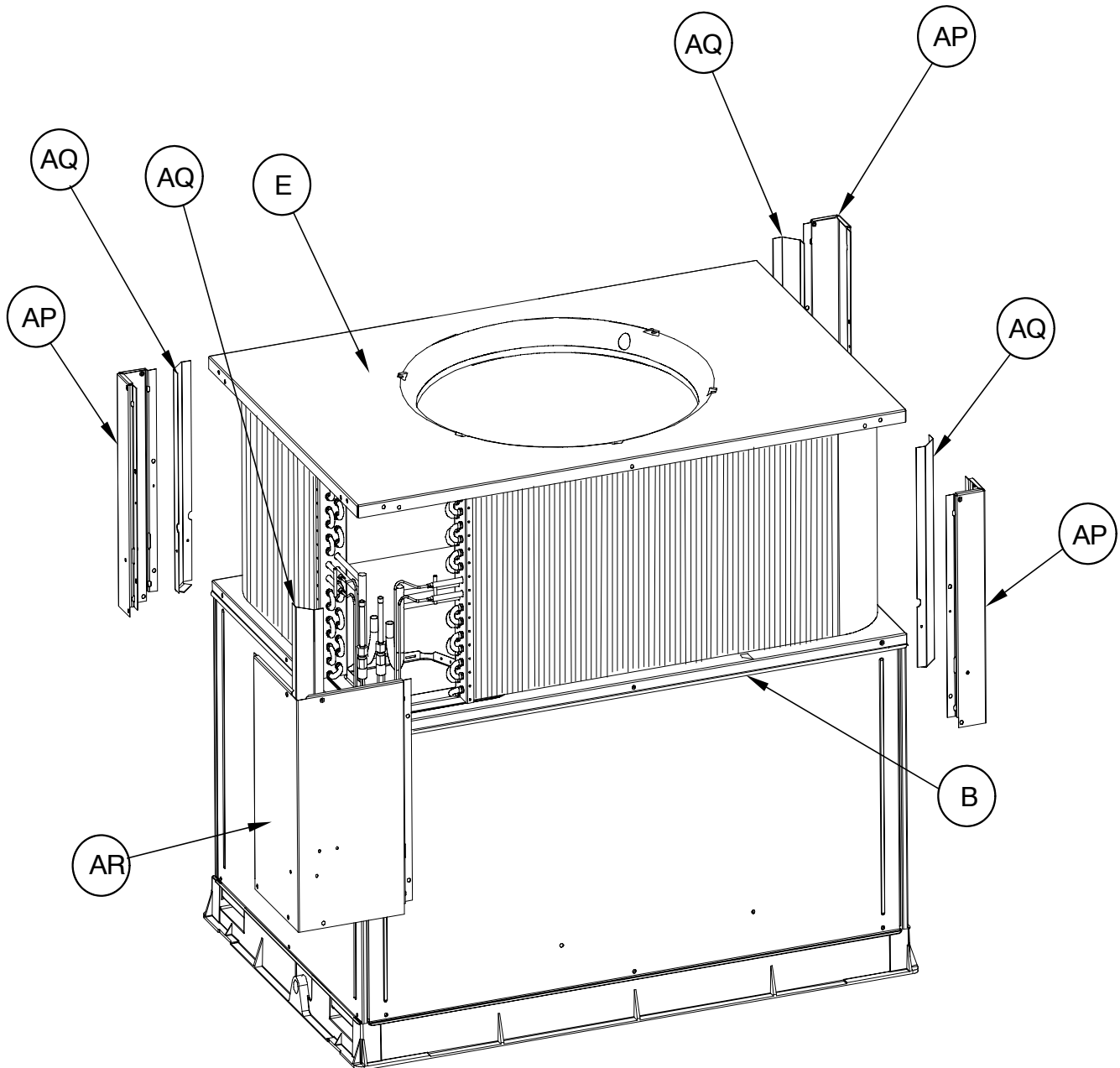
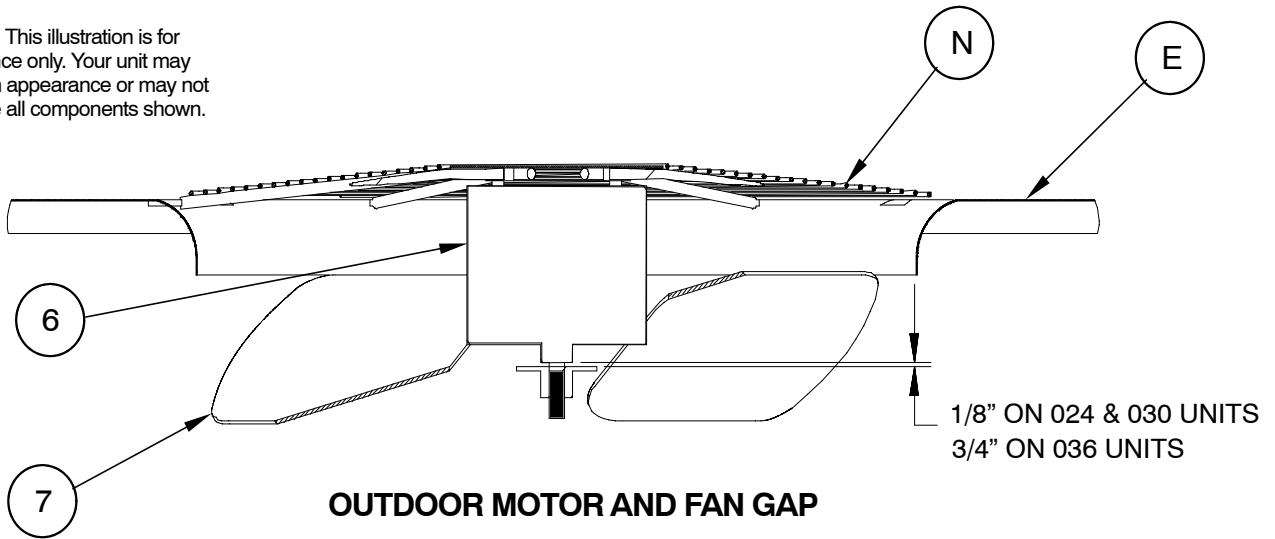
PAN4 24 - 36

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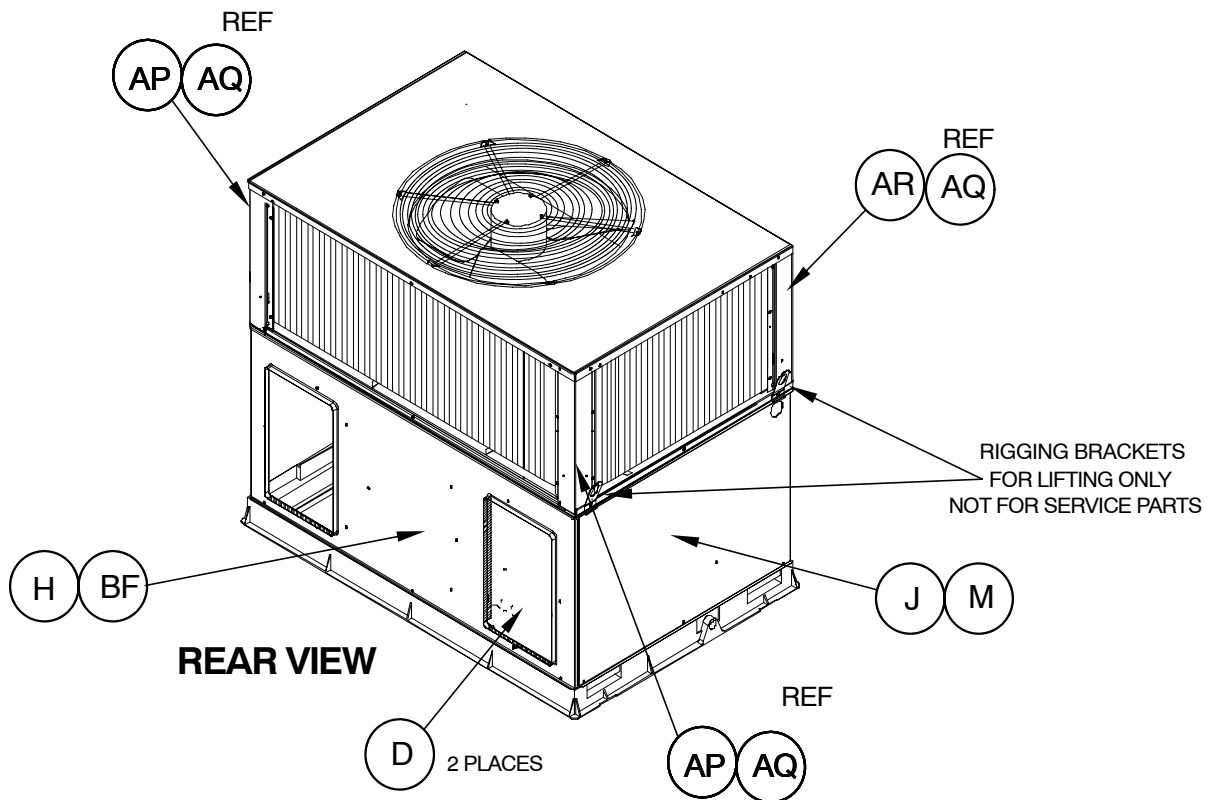
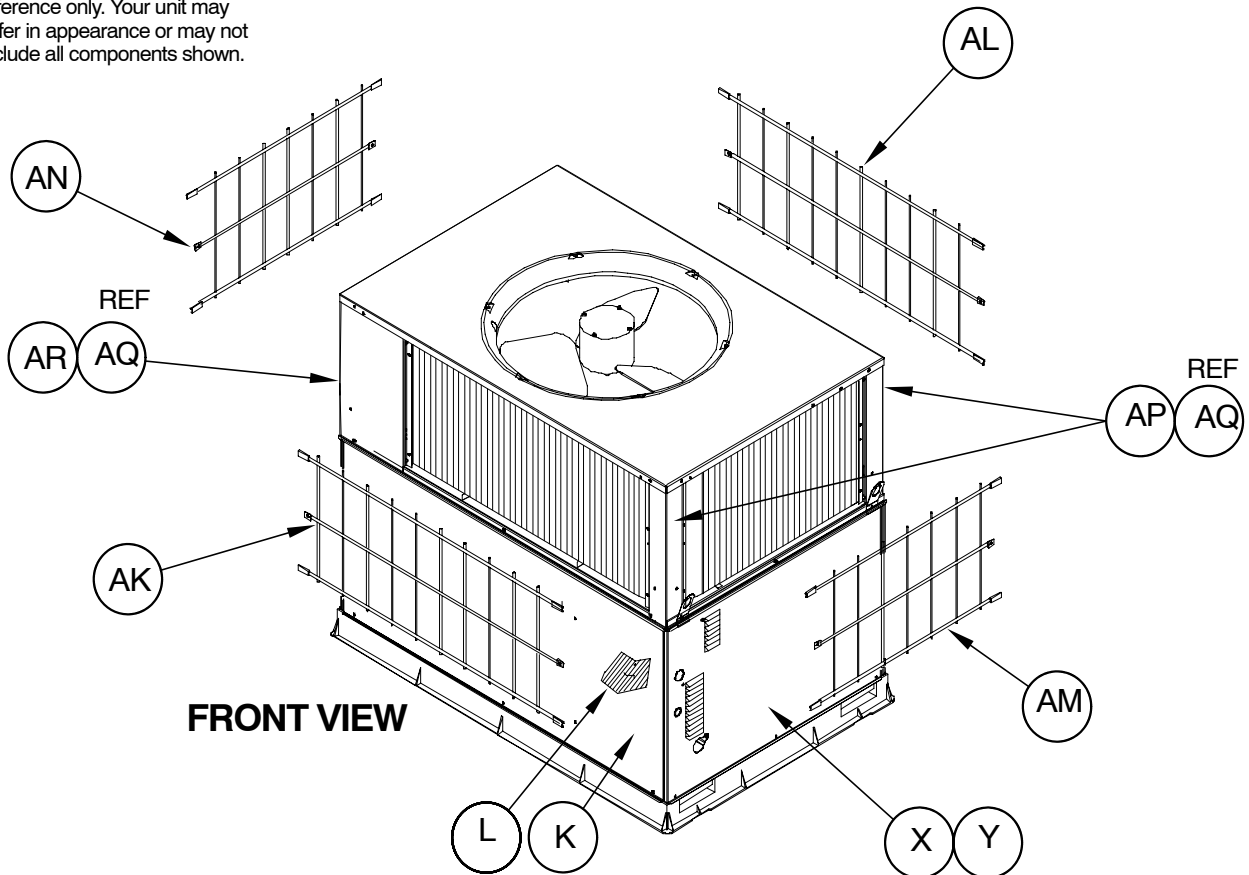
PHD012

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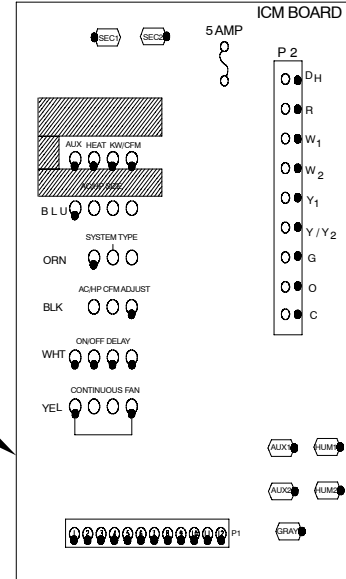
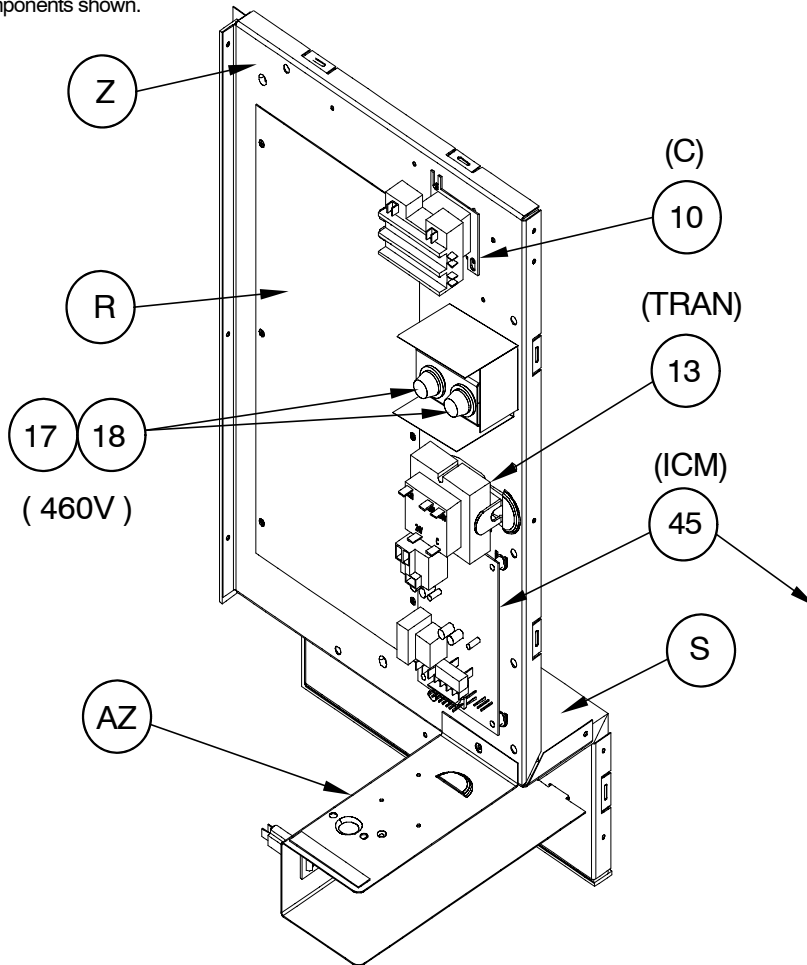
PHD08

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

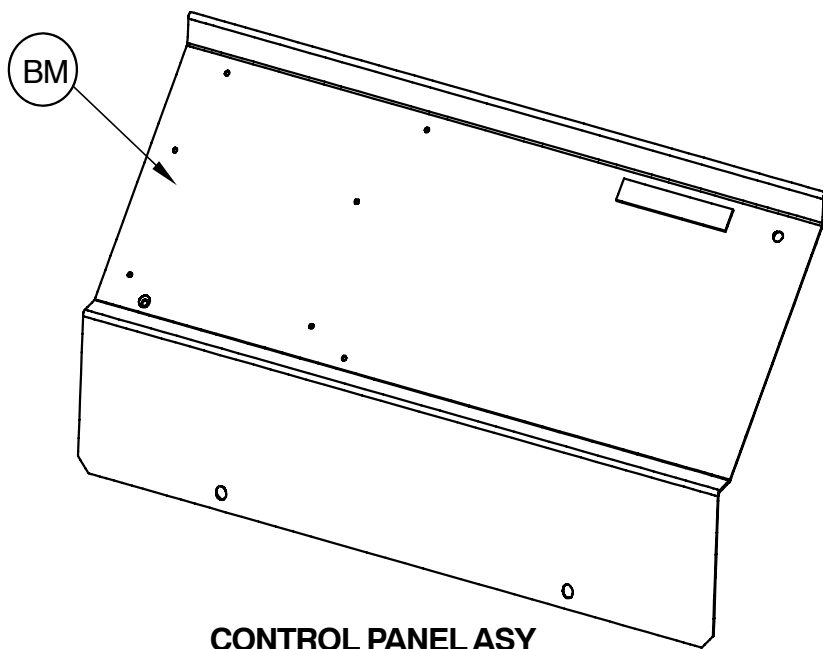


NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.

CONTROL BOX ASY



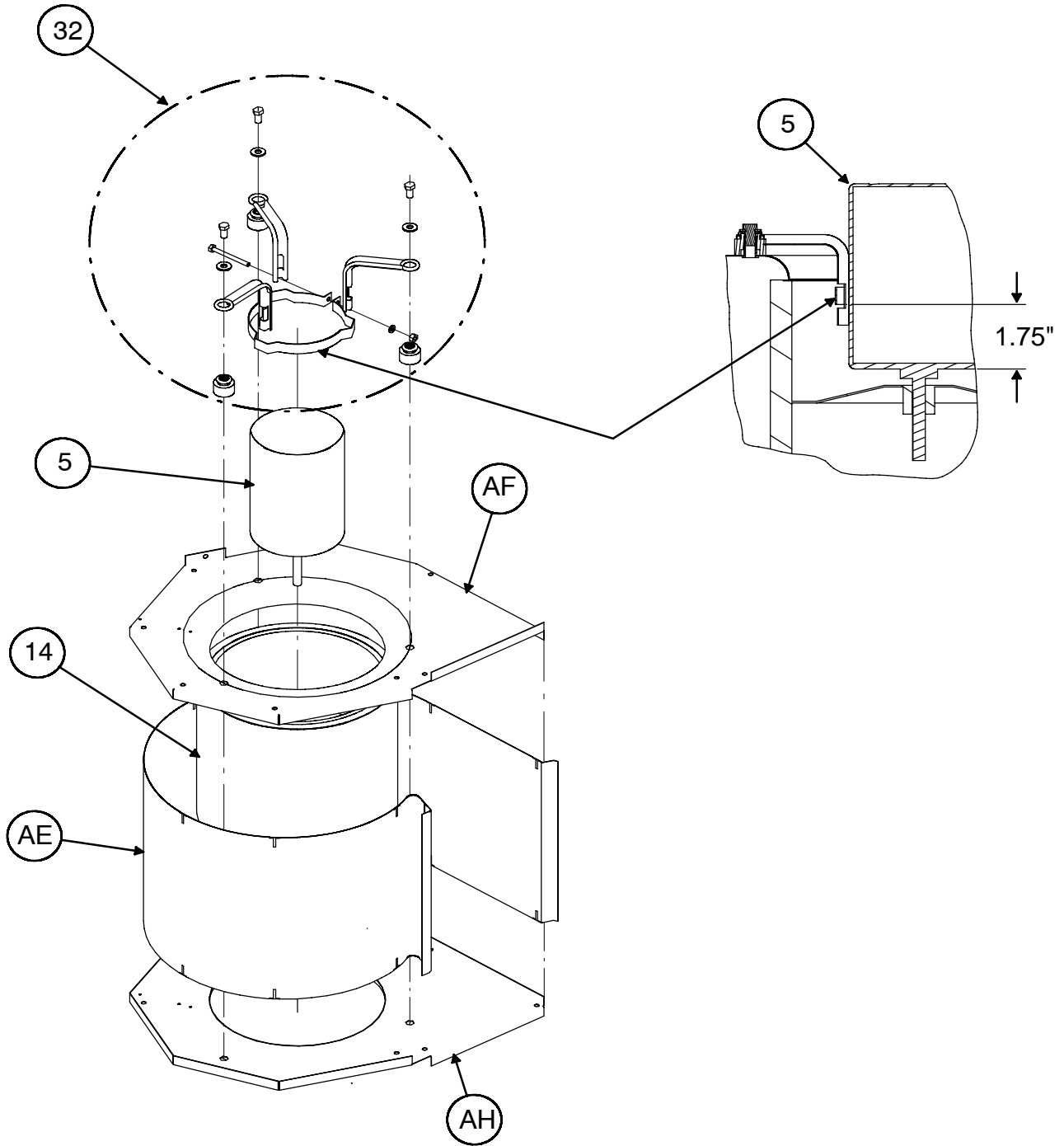
ICM BOARD



CONTROL PANEL ASY

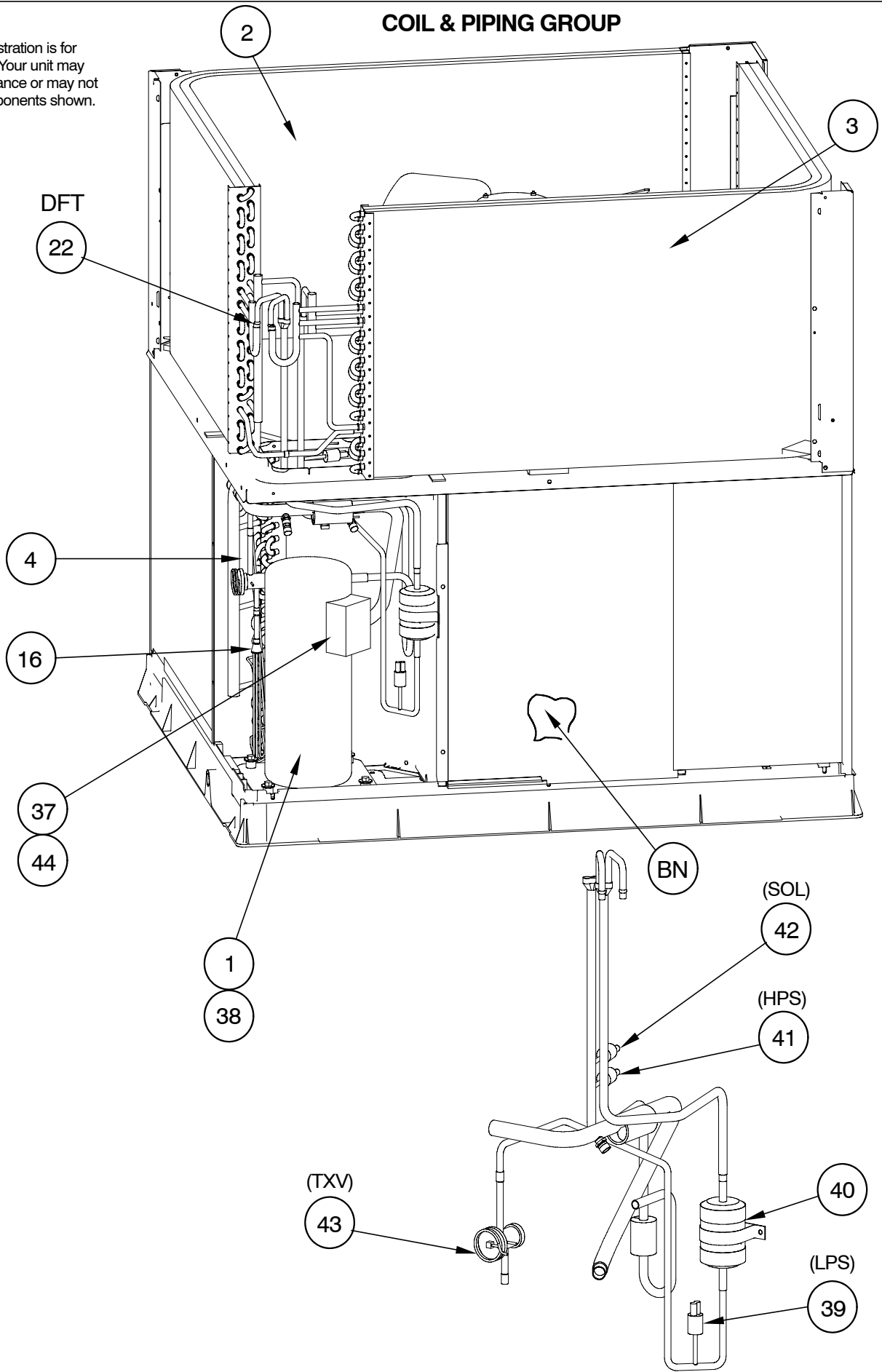
NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.

BLOWER ASY



COIL & PIPING GROUP

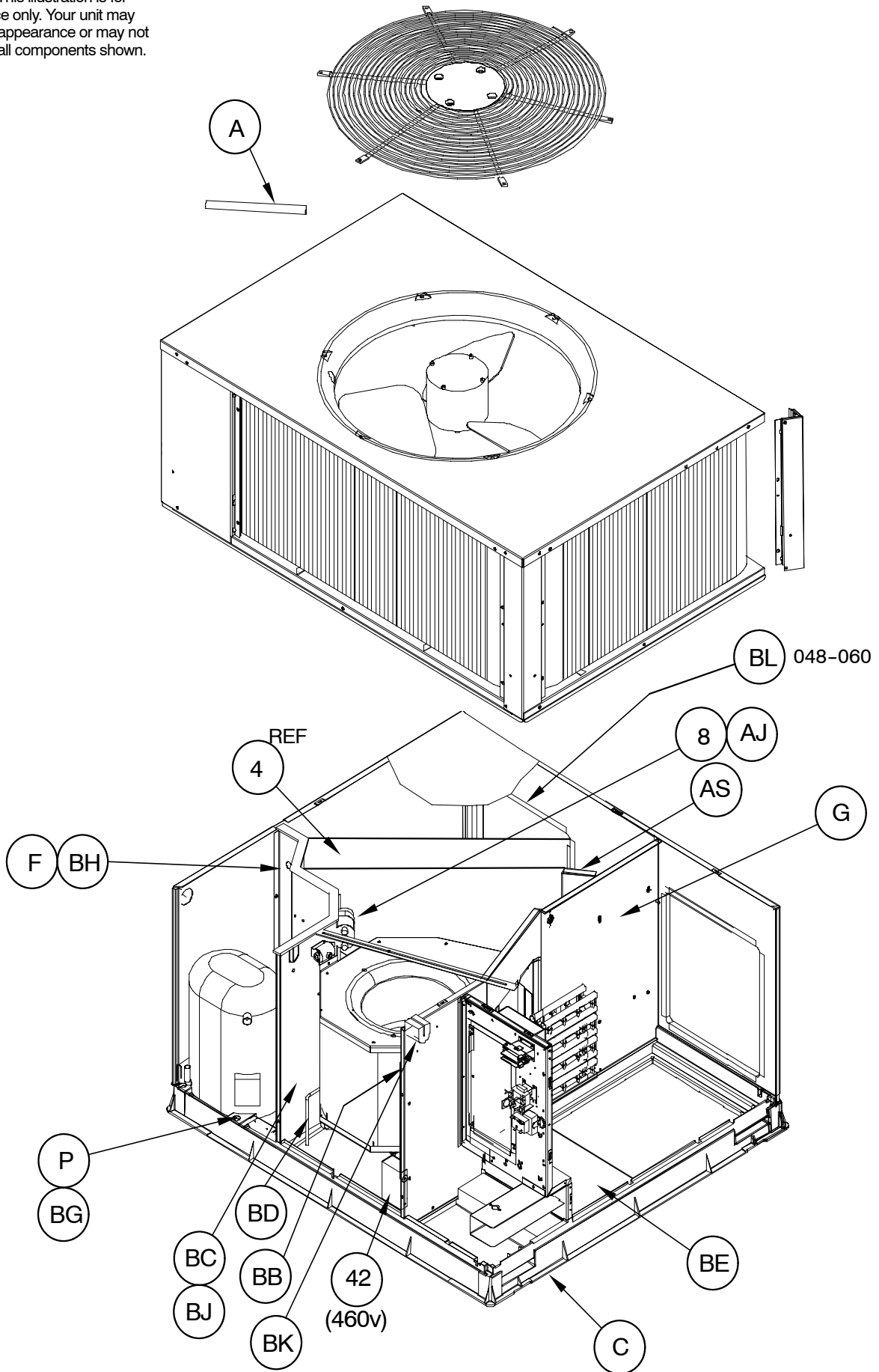
NOTE: This illustration is for reference only. Your unit may differ in appearance or may not include all components shown.



50-10-16

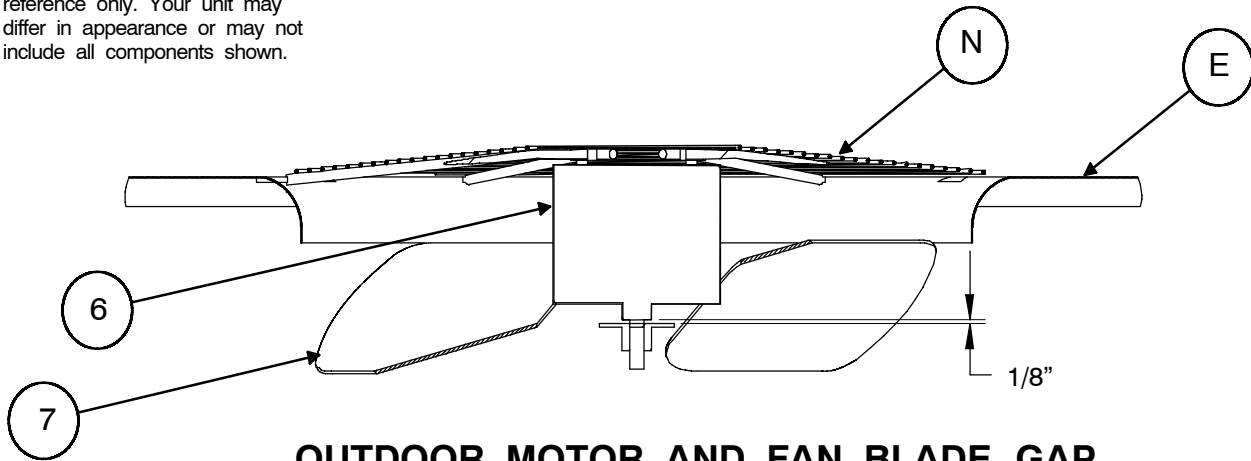
PAN4 42 - 60

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

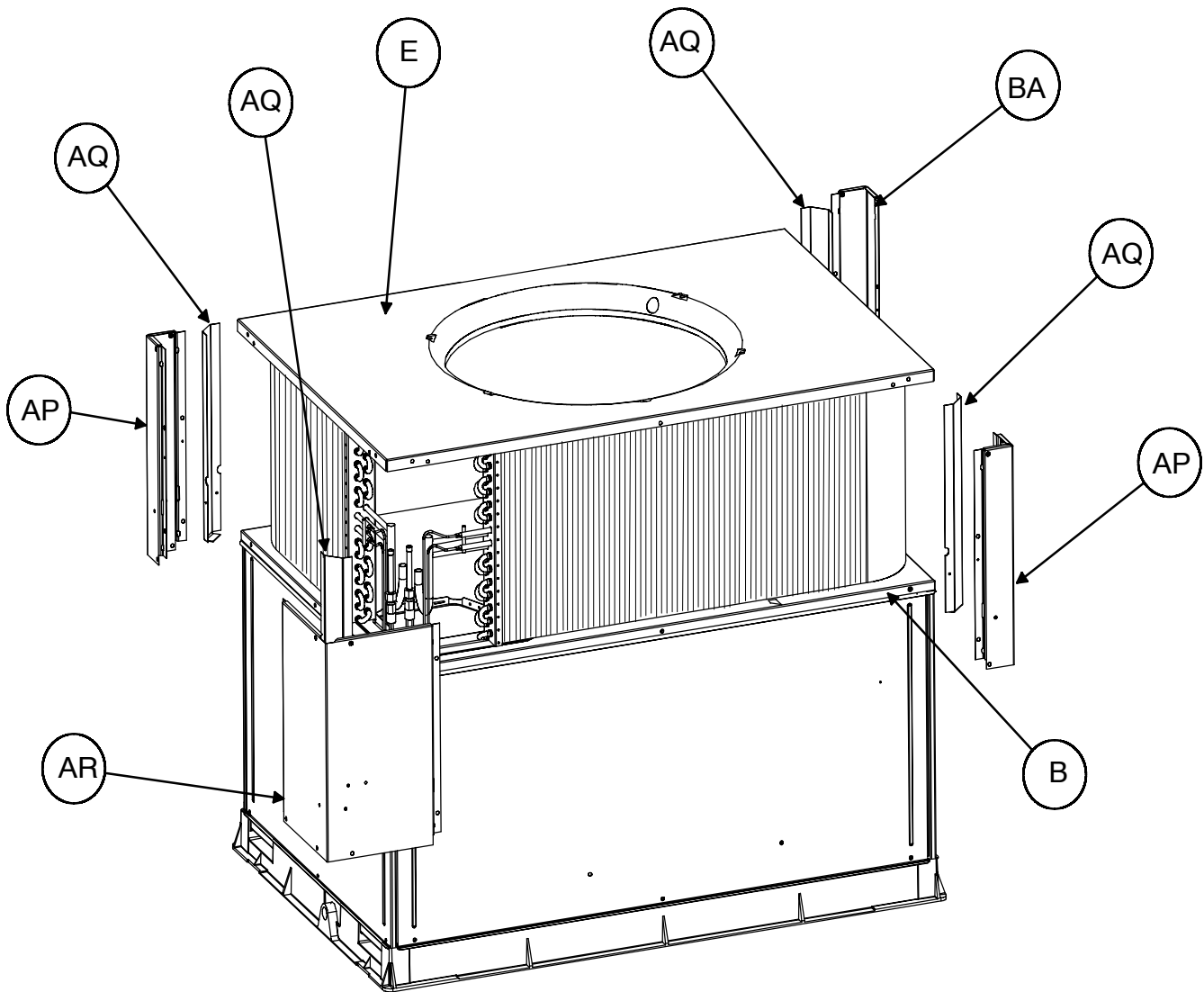


PHD013

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

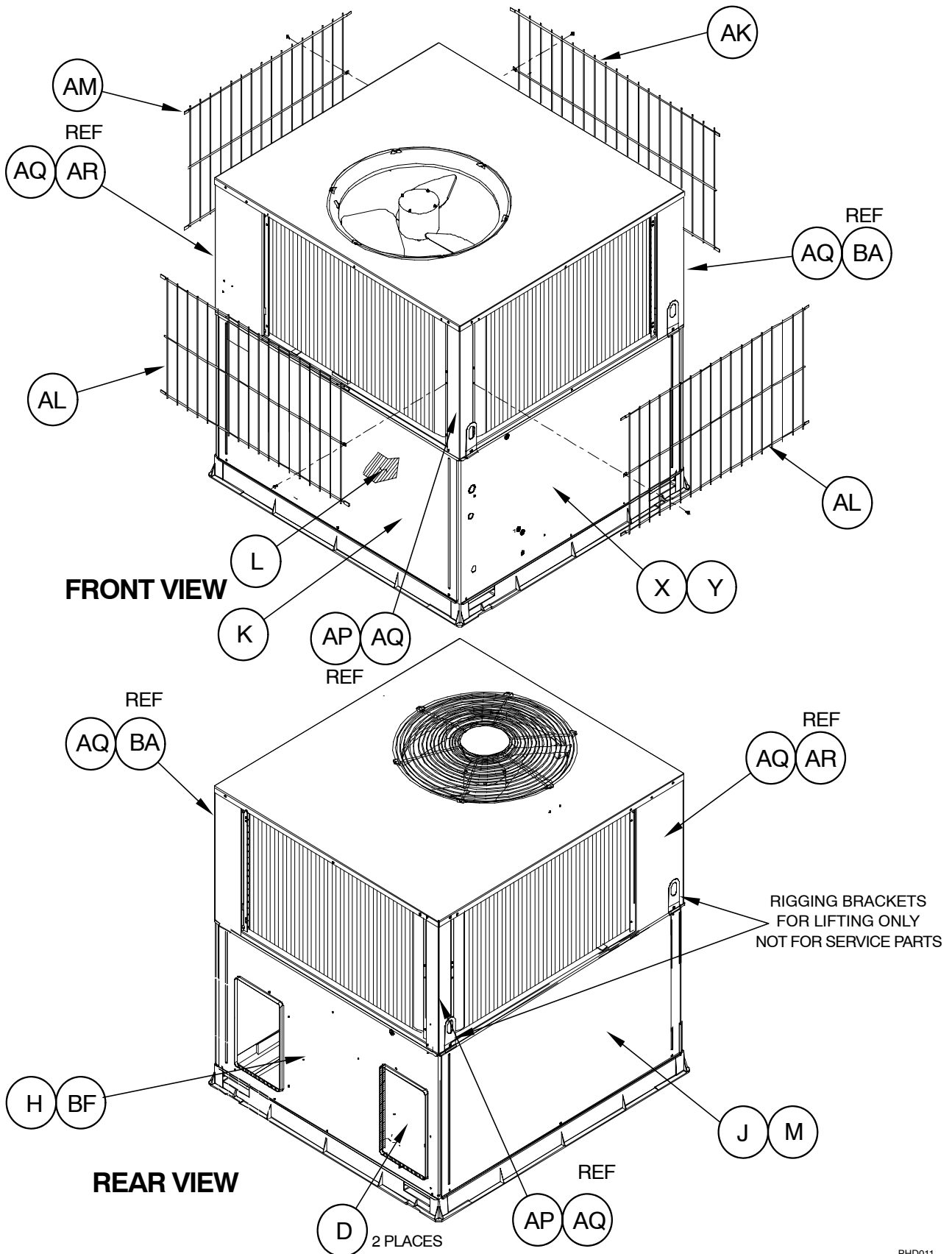


OUTDOOR MOTOR AND FAN BLADE GAP



PAN4 42 - 60

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



PHD011

PAN4 24 - 60 CHARGING CHART

Charging Procedure

- 1- Measure Discharge line pressure by attaching a gauge to the 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.
- 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)	115 (46)
024	12.2 (6.8)	11.7 (6.5)	11.5 (6.4)	11.2 (6.2)	10.4 (5.8)	9.9 (5.5)
030	16.4 (9.1)	15.9 (8.8)	16.1 (8.9)	13.8 (7.7)	15 (8.3)	14.5 (8.1)
036	14.5 (8.1)	14.1 (7.8)	13.5 (7.5)	12.9 (7.2)	11.8 (6.5)	11 (6.1)
042	14.1 (7.8)	13.6 (7.6)	12.8 (7.1)	11.8 (6.6)	10.3 (5.7)	9.1 (5)
048	9.1 (5.1)	8.5 (4.7)	7.9 (4.4)	6.9 (3.8)	5.9 (3.3)	5.1 (2.9)
060	16.3 (9.1)	15.8 (8.8)	15.4 (8.6)	14.7 (8.2)	13.7 (7.6)	13 (7.2)

Required Liquid Line Temperature for a Specific Subcooling (R-410A)

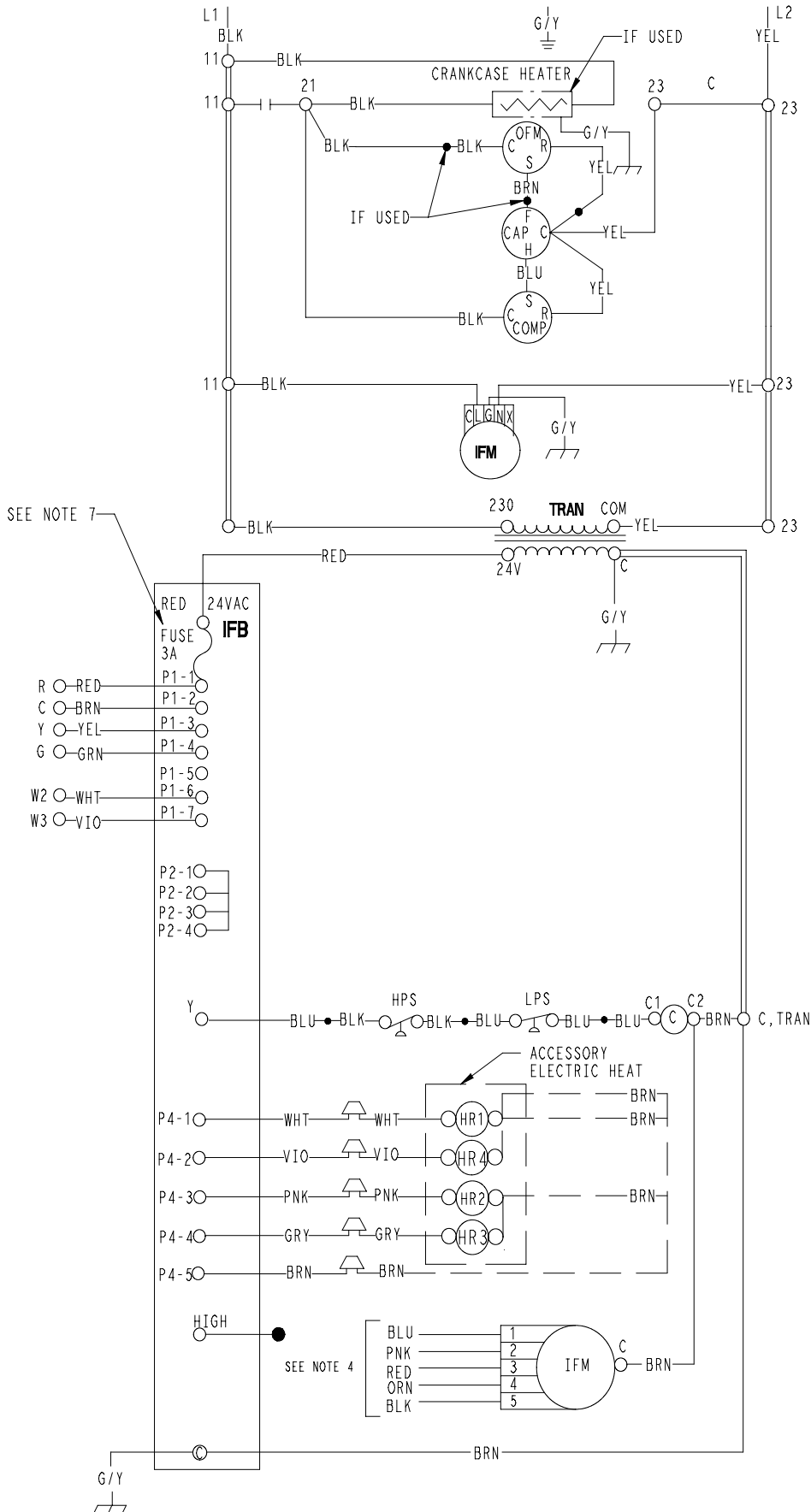
Required Subcooling (°F) (psig)	Required Subcooling (°C)			
	5	10	15	25
174	56	51	46	36
181	59	54	49	39
188	61	56	51	41
195	63	58	53	43
202	65	60	55	45
209	67	62	57	47
216	69	64	59	49
223	71	66	61	51
189	61	56	51	41
196	63	58	53	43
203	66	61	56	46
210	68	63	58	48
217	70	65	60	50
224	72	67	62	52
231	74	69	64	54
238	76	71	66	56
245	77	72	67	57
252	79	74	69	59
260	81	76	71	61
268	83	78	73	63
276	85	80	75	65
284	87	82	77	67
292	89	84	79	69
300	91	86	81	71
309	93	88	83	73
318	95	90	85	75
327	97	92	87	77
336	99	94	89	79
345	101	96	91	81
354	103	98	93	83
364	105	100	95	85
374	107	102	97	87
384	108	103	98	88
394	110	105	100	90
404	112	107	102	92
414	114	109	104	94
424	116	111	106	96
434	118	113	108	98
444	119	114	109	99
454	121	116	111	101
464	123	118	113	103
474	124	119	114	104
484	126	121	116	106
494	127	122	117	107
504	129	124	119	109
514	131	126	121	111
524	132	127	122	112
534	134	129	124	114

Required Subcooling (°C)	Required Subcooling (°C)			
	3	6	8	14
1200	13	11	8	2
1248	15	12	9	4
1296	16	13	10	5
1344	17	14	12	6
1393	18	16	13	7
1441	20	17	14	9
1489	21	18	15	10
1537	22	19	16	11
1303	16	13	11	5
1351	17	15	12	6
1399	19	16	13	8
1448	20	17	14	9
1496	21	18	15	10
1544	22	19	16	11
1593	23	20	18	12
1641	24	21	19	13
1689	25	22	20	14
1737	26	23	21	15
1792	27	25	22	16
1848	29	26	23	17
1903	30	27	24	19
1958	31	28	25	20
2013	32	29	26	21
2068	33	30	27	22
2130	34	31	28	23
2192	35	32	29	24
2254	36	33	31	25
2316	37	34	32	26
2378	38	35	33	27
2440	39	36	34	28
2509	40	38	35	29
2578	41	39	36	30
2647	42	40	37	31
2716	44	41	38	32
2785	45	42	39	33
2854	46	43	40	34
2923	47	44	41	35
2992	48	45	42	36
3061	48	46	43	37
3130	49	47	44	38
3199	50	48	45	39
3268	51	48	46	40
3337	52	49	47	41
3406	53	50	47	42
3475	54	51	48	43
3544	55	52	49	44
3612	56	53	50	45
3681	56	54	51	45

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LADDER WIRING DIAGRAM

DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING



50VL500078 6.0