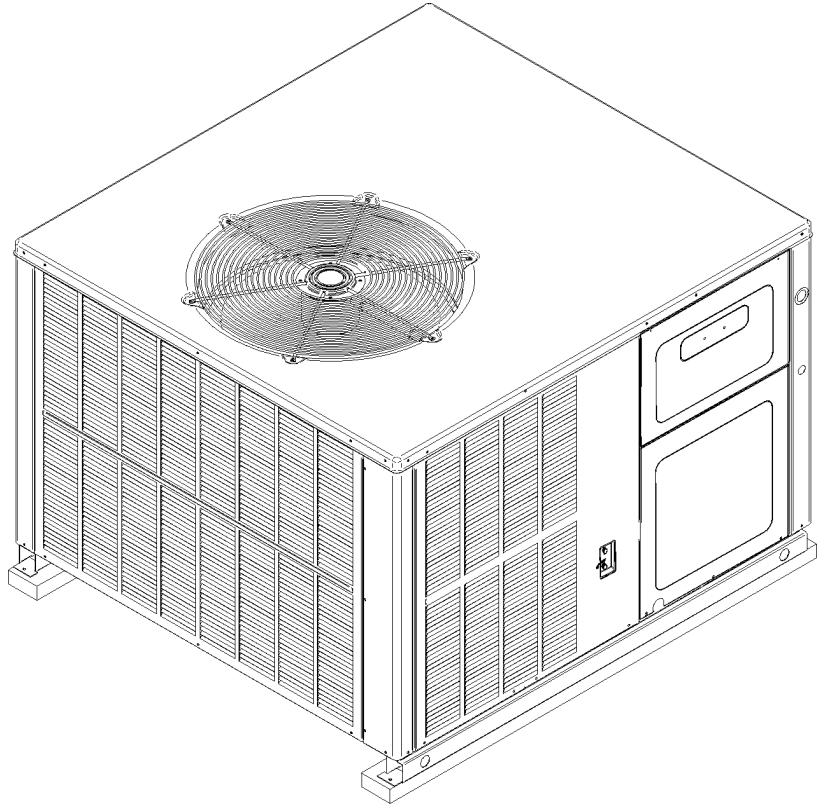


APH14 Multi-Position Residential Package Heat Pump

APH1424M41AA
APH1424M41AB
APH1430M41AA
APH1430M41AB
APH1436M41AA
APH1436M41AB
APH1442M41AA
APH1442M41AB
APH1448M41AA
APH1448M41AB
APH1460M41AA
APH1460M41AB



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This manual is to be used by qualified technicians only.

This manual replaces RP-A3003.

Important Information

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Illustration and Parts	4 - 11

Views shown are for parts illustrations only, not servicing procedures

Text Codes:

AR - As Required

NA - Not Available

NS - Not Shown

00000000 - See Note

QTY - Quantity Example (QTY 3) (If Quantity not shown, Quantity = 1)

M - Model Example (M1) (If M Code not shown, then part is used on all Models)

Expanded Model Nomenclature:

Example M1 - Model#1 M2 - Model#2 M3 - Model#3

Goodman Company, L.P. is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

Warranty service must be performed by an authorized technician, using authorized factory parts. If service is required after the warranty expires, Goodman Company, L.P. also recommends contacting an authorized technician and using authorized factory parts.

Goodman Company, L.P. reserves the right to discontinue, or change at any time, specifications or designs without notice or without incurring obligations.

For assistance within the U.S.A. contact:

Consumer Affairs Department

Goodman Company, L.P.

7401 Security Way

Houston, Texas 77040

877-254-4729-Telephone

713-863-2382-Facsimile

For assistance outside the U.S.A. contact:

International Division

Goodman Company, L.P.

7401 Security Way

Houston, Texas 77040

713-861-2500-Telephone

713-863-2382-Facsimile

Functional Parts

Part No: **Description:**

Part No:	Description:	Expanded Model Nomenclature
D6723303	BLOWER WHEEL	M1 - APH1424M41AA
CAP100400440CT	CAP, 10/40 MFD, 440V/ DUAL RD (M11, M12)	M2 - APH1424M41AB
CAP050400440CT	CAPACITOR 5/40/440V/DUAL RD (M1, M2, M3, M4)	M3 - APH1430M41AA
CAP050450440CT	CAPACITOR 5/45/440V/DUAL RD (M5, M6, M7, M8)	M4 - APH1430M41AB
CAP050700440CT	CAPACITOR 5/70/440V/DUAL RD (M9, M10)	M5 - APH1436M41AA
ZP42K5EPFV130	COMP, 42000, 208/230/60/1 (M9, M10)	M6 - APH1436M41AB
ZPS51K5EPFV130	COMP, 51900/208/230/60/1 (M11, M12)	M7 - APH1442M41AA
ZP21K5EPFV130	COMPRESSOR 21300, 208/230/60/1 (M1, M2)	M8 - APH1442M41AB
ZP25K5EPFV130	COMPRESSOR 25200, 208/230/60/1 (M3, M4)	M9 - APH1448M41AA
ZP31K5EPFV130	COMPRESSOR 31100, 208/230/60/1 (M5, M6)	M10 - APH1448M41AB
ZP36K5EPFV130	COMPRESSOR 36200, 208/230/60/1 (M7, M8)	M11 - APH1460M41AA
0131M00430	COND MOTOR 1/3 HP, 1 SP, 6 PL (M11, M12)	M12 - APH1460M41AB
0131M00061	COND MOTOR 1/4 HP, 1 SP, 8 PL (M1, M2, M3, M4)	
0131M00429	COND MOTOR 1/4 HP, 1 SP, 6 PL (M5, M6, M7, M8, M9, M10)	
CONT1P025024V	CONTACTOR 25 AMP, 1P, 24V (M1, M2, M3, M4, M5, M6, M7, M8)	
CONT2P040024V	CONTACTOR 40 AMP, 2P, 24V (M9, M10, M11, M12)	
0130M00197	CONTROL, DEFROST	
0130L00096	CRANK CASE HEATER-70W 240V (M11, M12)	
0130M00074	CUT-OUT SWITCH, HIGH PRESSURE	
0130M00075	CUT-OUT SWITCH, LOW PRESSURE	
PCBDM133	DEFROST CONTROL BOARD	
0150G00004	FAN BLADE (M5, M6)	
0150M00008	FAN BLADE 22" TNT2203-25 (M1, M2, M3, M4)	
0150G00002	FAN BLADE SWEPT-WING (M7, M8, M9, M10)	
0150M00011	FAN BLADE SWEPT-WING (M11, M12)	
0131G00029	PROGRAMMED MOTOR (M3, M4)	
0131G00033	PROGRAMMED MOTOR (M11, M12)	
0131G00032	PROGRAMMED MOTOR (M9, M10)	
0131G00030	PROGRAMMED MOTOR (M5, M6)	
0131G00028	PROGRAMMED MOTOR (M1, M2)	
0131G00031	PROGRAMMED MOTOR (M7, M8)	
0130M00242	RELAY, 24V (M11, M12)	
0151R00069	REVERSING VALVE (M1, M2, M3, M4)	
0151R00071	REVERSING VALVE (M5, M6, M7, M8, M9, M10, M11, M12)	
B1225022	SOLENOID COIL	
0130M00199	SWITCH, CRANK CASE HEATER (M11, M12)	
0130M00138	TRANSFORMER 208/230, 24V	

Cabinet Assembly

Image 1

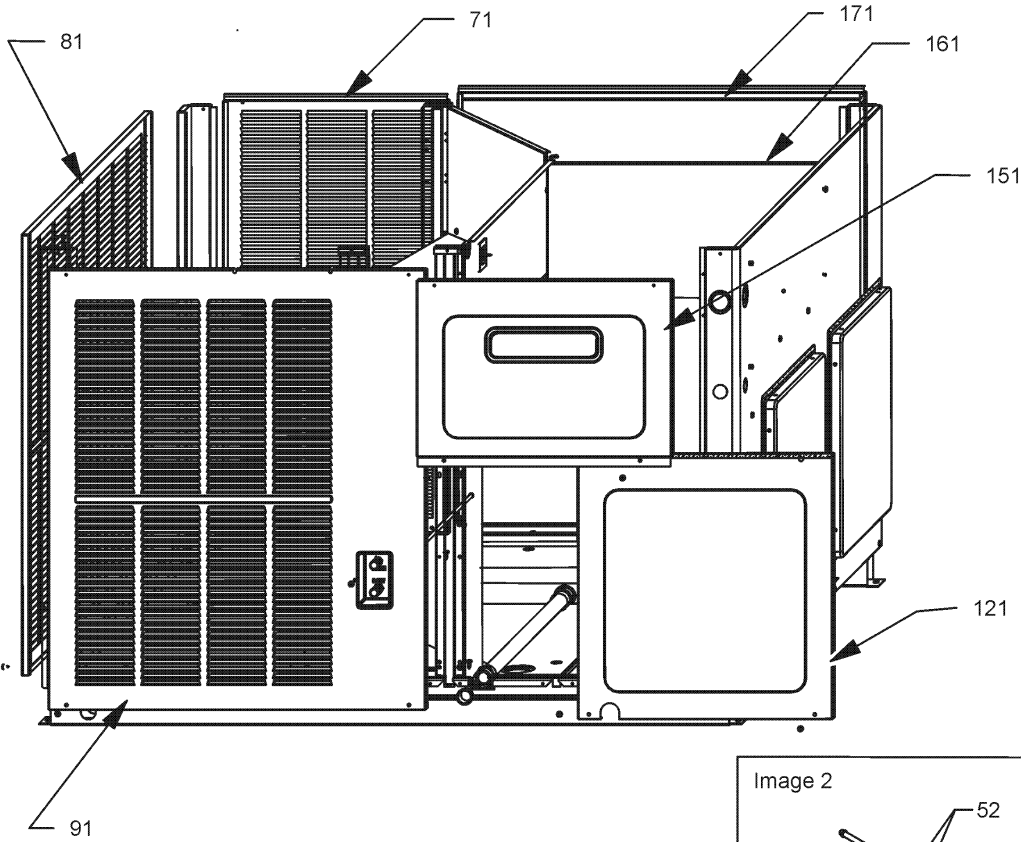
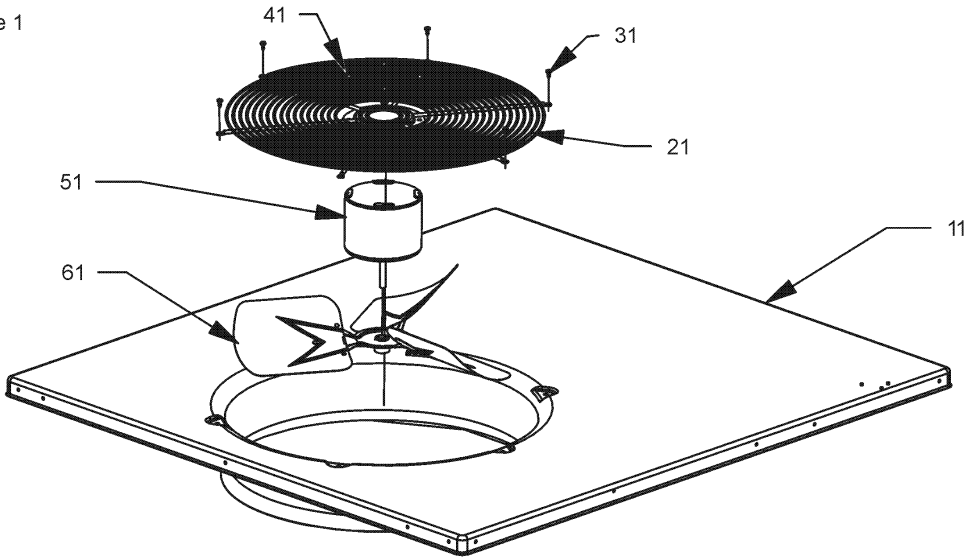
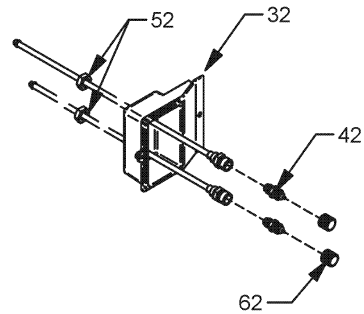


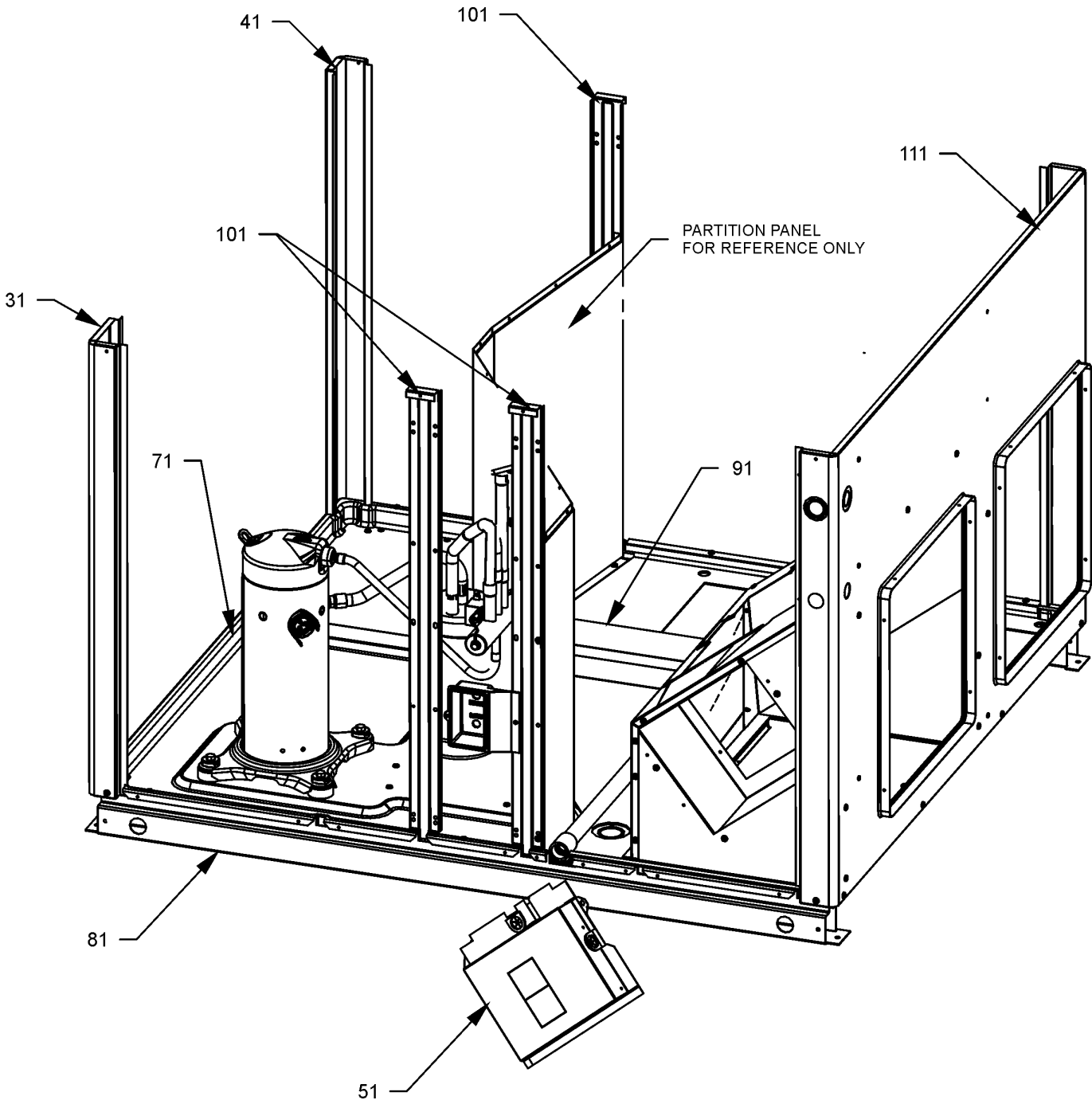
Image 2



Cabinet Assembly

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
Image 1:		Expanded Model Nomenclature	
11	0121G00156PDG PNL, TOP, PNT	M1	- APH1424M41AA
21	0152G00003 FAN GRILLE (M1, M2, M3, M4)	M2	- APH1424M41AB
21	0152G00000 FAN GRILLE, RAISED (M5, M6, M7, M8, M9, M10, M11, M12)	M3	- APH1430M41AA
31	B1393530 SCREW HWH,10 X 1/2, A, YZD, SLOT, SR (M11, M12)	M4	- APH1430M41AB
31	M0221817 SMALL SCREW (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)	M5	- APH1436M41AA
41	0163M00006P ACORN NUT 5/16 HEX BLACK (QTY 4)	M6	- APH1436M41AB
51	0131M00430 COND MOTOR 1/3 HP, 1 SP, 6 PL (M11, M12)	M7	- APH1442M41AA
51	0131M00061 COND MOTOR 1/4 HP, 1 SP, 8 PL (M1, M2, M3,	M8	- APH1442M41AB
51	0131M00429 COND MOTOR 1/4 HP, 1 SP,6 PL (M5, M6, M7, M8, M9, M10)	M9	- APH1448M41AA
61	0150G00004 FAN BLADE (M5, M6)	M10	- APH1448M41AB
61	0150M00008 FAN BLADE 22" TNT2203-25 (M1, M2, M3, M4)	M11	- APH1460M41AA
61	0150G00002 FAN BLADE SWEPT-WING (M7, M8, M9, M10)	M12	- APH1460M41AB
61	0150M00011 FAN BLADE SWEPT-WING (M11, M12)		
71	20467701PLG LOUVERED PANEL, COND SIDE 32" (M1, M2, M3, M4, M5, M6, M7, M8)		
71	20467702PLG LOUVERED PANEL, COND SIDE 40" (M9, M10, M11, M12)		
81	20464401PLG LOUVERED PANEL, COND SIDE 32" (M1, M2, M3, M4, M5, M6, M7, M8)		
81	20464402PLG LOUVERED PANEL, COND SIDE 40" (M9, M10, M11, M12)		
91	0121G00661LG COMPRESSOR PANEL (M12)		
91	0121G00662DG COMPRESSOR PANEL (M2, M4, M6, M8)		
91	0121G00663DG COMPRESSOR PANEL (M10)		
91	0121G00147LG LOUVERED PANEL 4 BANK 40", COMP SIDE (M11)		
91	0121G00223DG SOLID PANEL COMPRESSOR 32.5" (M1, M3, M5, M7)		
91	0121G00224DG SOLID PANEL COMPRESSOR 40" (M9)		
121	0121G00165PDG PNL, BLO, CNVRT, 32.5", PNT (M1, M2, M3, M4, M5, M6, M7, M8)		
121	0121G00168PDG PNL, BLO, CNVRT, 40", PNT (M9, M10, M11, M12)		
151	0121G00213DG CONTROL BOX PANEL		
161	0121G00591 BLK-OFF, EVAP, TOP, CNVRT (M9, M10, M11, M12)		
161	0121G00592 BLK-OFF, EVAP, TOP, CNVRT (M1, M2, M3, M4, M5, M6, M7, M8)		
171	20464801PDG BLOWER DOOR 32" (M1, M2, M3, M4, M5, M6, M7, M8)		
171	20464806PDG BLOWER DOOR 40" (M9, M10, M11, M12)		
NS	0121G00235 FAN BAFFLE		
NS	0164G00005 GROMMET-HORSESHOE 1.675 (M2, M4, M6, M8, M10, M12)		
NS	17788000083F PVC CONDUIT 8.25"		
Image 2:			
32	0161G00008 ACCESS-FITTING BOX (M1, M3, M5, M7, M9, M11)		
42	B1373315 ACCESS FITTING (QTY 2)		
52	0163G00000P FASTEST FITTING NUT (M1, M3, M5, M7, M9, M11)		
62	0163M00175 CAP WITH O-RING (QTY 2)		

Panels and Supports



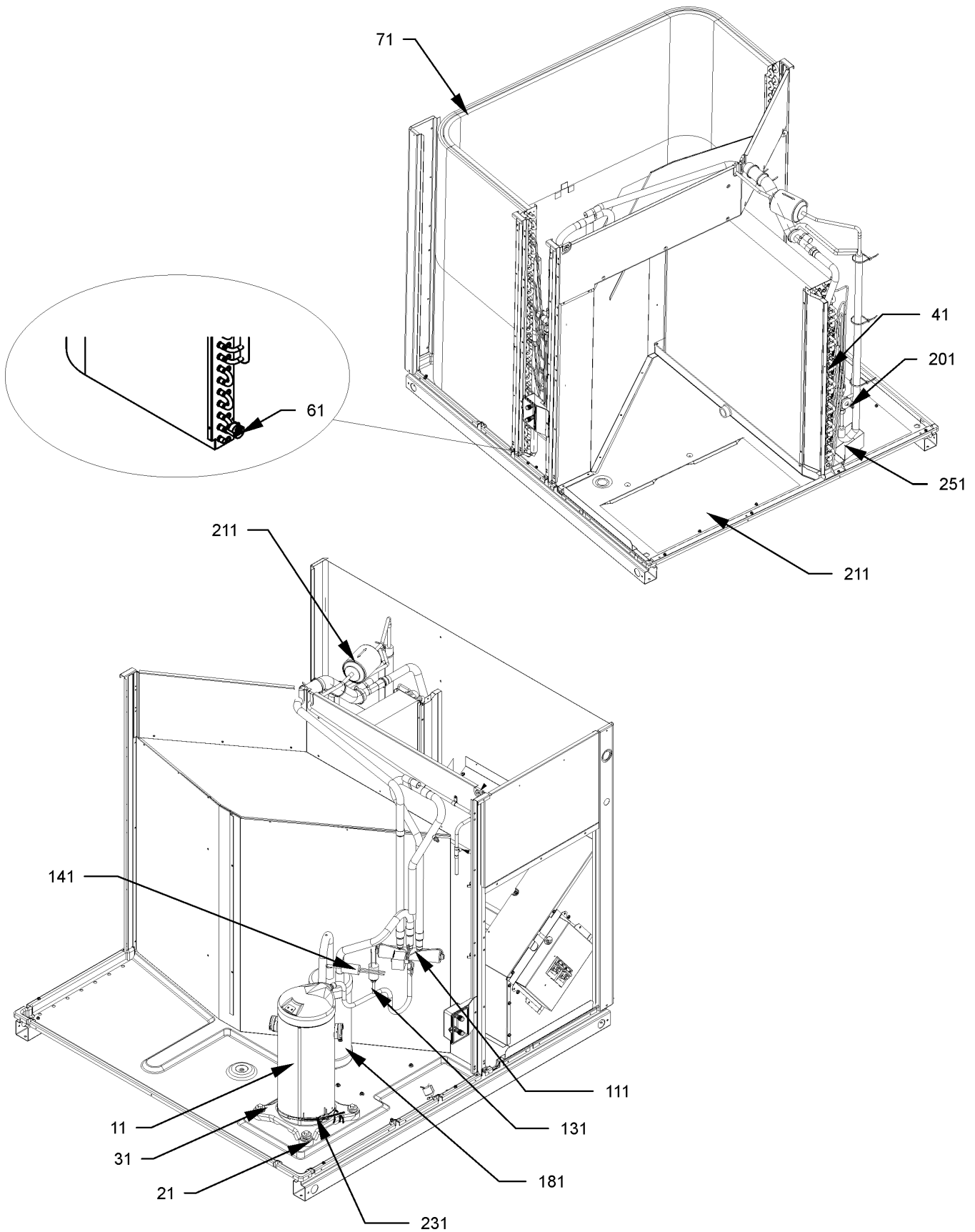
Panels and Supports

Ref. Part No:	No:	Description:	Ref. Part No:	No:	Description:
<i>Image 1:</i>					
31	20464201PDG	CORNER POST-COMP END 32" (M1, M2, M3, M4, M5, M6, M7, M8)			
31	20464202PDG	CORNER POST-COMP END 40" (M9, M10, M11, M12)			
41	20464301PDG	CORNER POST-HAIRPIN END 32" (M1, M2, M3, M4, M5, M6, M7, M8)			
41	20464302PDG	CORNER POST-HAIRPIN END 40" (M9, M10, M11, M12)			
51	0121G00528	COVER, HK (QTY 2)			
71	0121G00290	BASE PAN RAIL (QTY 2)			
81	0121G00444	BASEPAN, PACKAGE			
91	0161G00003	PLASTIC DRIP PAN			
101	0121G00460	POST-SUPPORT, SIDE (M1, M2, M3, M4, M5, M6, M7, M8)			
101	0121G00462	POST-SUPPORT, SIDE (M9, M10, M11, M12)			
111	0121G00671DG	PNL, DUCT, CNVRT, 32.5" PNT (M1, M2, M3, M4, M5, M6, M7, M8)			
111	0121G00672DG	PNL, DUCT, CNVRT, 40" PNT (M9, M10, M11, M12)			
NS	0121G00354	EVAP BLOCK OFF			
NS	0121G00362	EVAP BLOCK OFF (M1, M2, M3, M4, M5, M6, M7, M8)			
NS	0121G00571	EVAP BLOCK OFF (M9, M10, M11, M12)			

Expanded Model Nomenclature

- | |
|--------------------|
| M1 - APH1424M41AA |
| M2 - APH1424M41AB |
| M3 - APH1430M41AA |
| M4 - APH1430M41AB |
| M5 - APH1436M41AA |
| M6 - APH1436M41AB |
| M7 - APH1442M41AA |
| M8 - APH1442M41AB |
| M9 - APH1448M41AA |
| M10 - APH1448M41AB |
| M11 - APH1460M41AA |
| M12 - APH1460M41AB |

Tubing & Coil Assemblies



Tubing & Coil Assemblies

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
<i>Image 1:</i>		Expanded Model Nomenclature	
11	ZP42K5EPFV130	COMP, 42000, 208/230/60/1 (M9, M10)	M1 - APH1424M41AA
11	ZPS51K5EPFV130	COMP, 51900/208/230/60/1 (M11, M12)	M2 - APH1424M41AB
11	ZP21K5EPFV130	COMPRESSOR 21300, 208/230/60/1 (M1, M2)	M3 - APH1430M41AA
11	ZP25K5EPFV130	COMPRESSOR 25200, 208/230/60/1 (M3, M4)	M4 - APH1430M41AB
11	ZP31K5EPFV130	COMPRESSOR 31100, 208/230/60/1 (M5, M6)	M5 - APH1436M41AA
11	ZP36K5EPFV130	COMPRESSOR 36200, 208/230/60/1 (M7, M8)	M6 - APH1436M41AB
21	B1339533	COMPRESSOR GROMMET (QTY 4)	M7 - APH1442M41AA
31	M0221641	TF SHOULDER SCREW (QTY 4)	M8 - APH1442M41AB
41	0202G00542	EVAP COIL ASSY (M11, M12)	M9 - APH1448M41AA
41	0202G00576	EVAP COIL ASSY (M1, M2)	M10 - APH1448M41AB
41	0202G00577	EVAP COIL ASSY (M3, M4)	M11 - APH1460M41AA
41	0202G00578	EVAP COIL ASSY (M5, M6)	M12 - APH1460M41AB
41	0202G00579	EVAP COIL ASSY (M7, M8)	
41	0202G00580	EVAP COIL ASSY (M9, M10)	
61	0130M00197	CONTROL, DEFROST	
71	0201G00323	COND COIL ASSY (M3, M4)	
71	0201G00328	COND COIL ASSY (M5, M6, M7, M8)	
71	0201G00331	COND COIL ASSY (M11)	
71	0201G00337	COND COIL ASSY (M1, M2)	
71	0201G00339	COND COIL ASSY (M9, M10)	
71	0201G00405	COND COIL ASSY (M12)	
111	0151R00069	REVERSING VALVE (M1, M2, M3, M4)	
111	0151R00071	REVERSING VALVE (M5, M6, M7, M8, M9, M10, M11, M12)	
131	0130M00074	CUT-OUT SWITCH, HIGH PRESSURE	
141	0130M00075	CUT-OUT SWITCH, LOW PRESSURE	
181	B1226206	ACCUMULATOR (M1, M2, M3, M4)	
181	B1226207	ACCUMULATOR .875 (M5, M6, M7, M8, M9, M10, M11, M12)	
201	0151M00050	VALVE, NXT (M11, M12)	
211	20485201	BI-FLOW FILTER DRIER	
231	0130L00096	CRANK CASE HEATER-70W 240V (M11, M12)	
241	0121G00148	SINGLE COVER, DOWN DISCHARGE (QTY 2)	
251	0121G00509	DRIP SHIELD	
NS	0159G00002	COMPRESSOR SCROLL HARNESS (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)	
NS	0159G00004	COMPRESSOR SCROLL HARNESS (M11, M12)	
NS	0159G00001	COMPRESSOR SOLENOID CABLE (M11, M12)	
NS	B1488806	COMPRESSOR SOUND BLANKET (M7, M8, M9, M10, M11, M12)	
NS	B1488807	COMPRESSOR SOUND BLANKET (M1, M2, M3, M4, M5, M6)	
NS	0162M00055	FLOWRATOR [COND] (M11, M12)	
NS	0162M00291	FLOWRATOR [COND] (M9, M10)	
NS	0162M00292	FLOWRATOR [COND] (M5, M6, M7, M8)	
NS	0162M00336	FLOWRATOR [COND] (M1, M2)	
NS	0162M00337	FLOWRATOR [COND] (M3, M4)	
NS	0162M00315	FLOWRATOR [EVAP] (M1, M2)	
NS	0162M00316	FLOWRATOR [EVAP] (M3, M4)	
NS	0162M00318	FLOWRATOR [EVAP] (M5, M6)	
NS	0162M00319	FLOWRATOR [EVAP] (M7, M8)	
NS	0162M00321	FLOWRATOR [EVAP] (M9, M10)	
NS	0162M00325	FLOWRATOR [EVAP] (M11, M12)	
NS	B1225022	SOLENOID COIL	
NS	0130M00199	SWITCH, CRANK CASE HEATER (M11, M12)	

Control Panel & Blower Assembly

Image 1

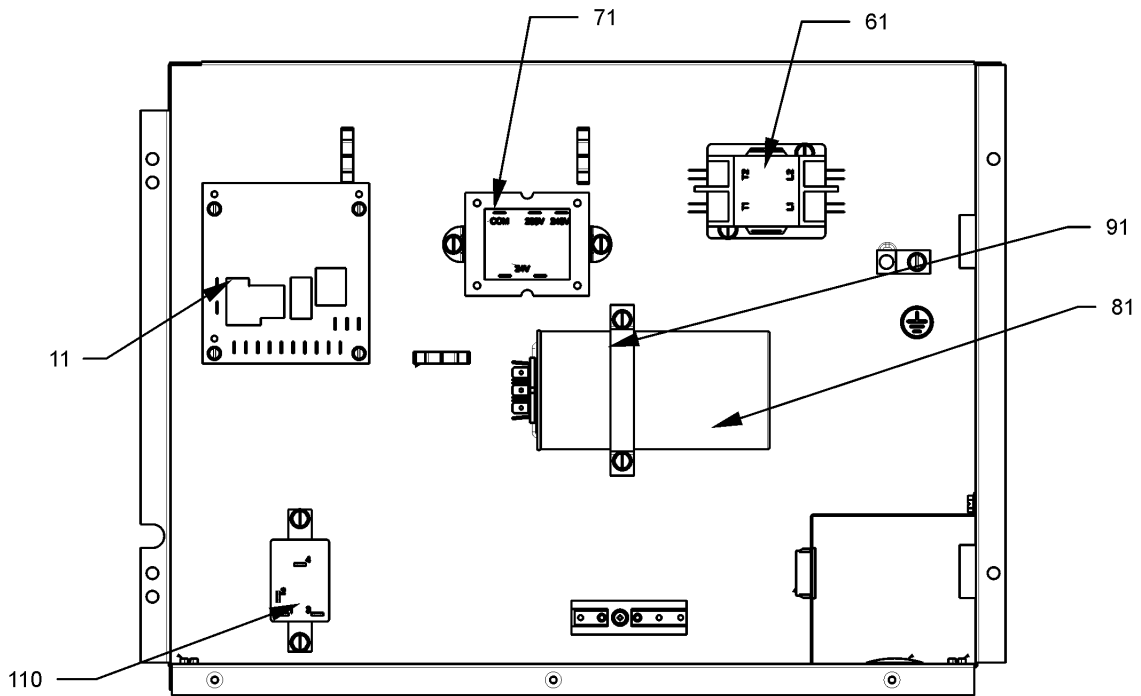
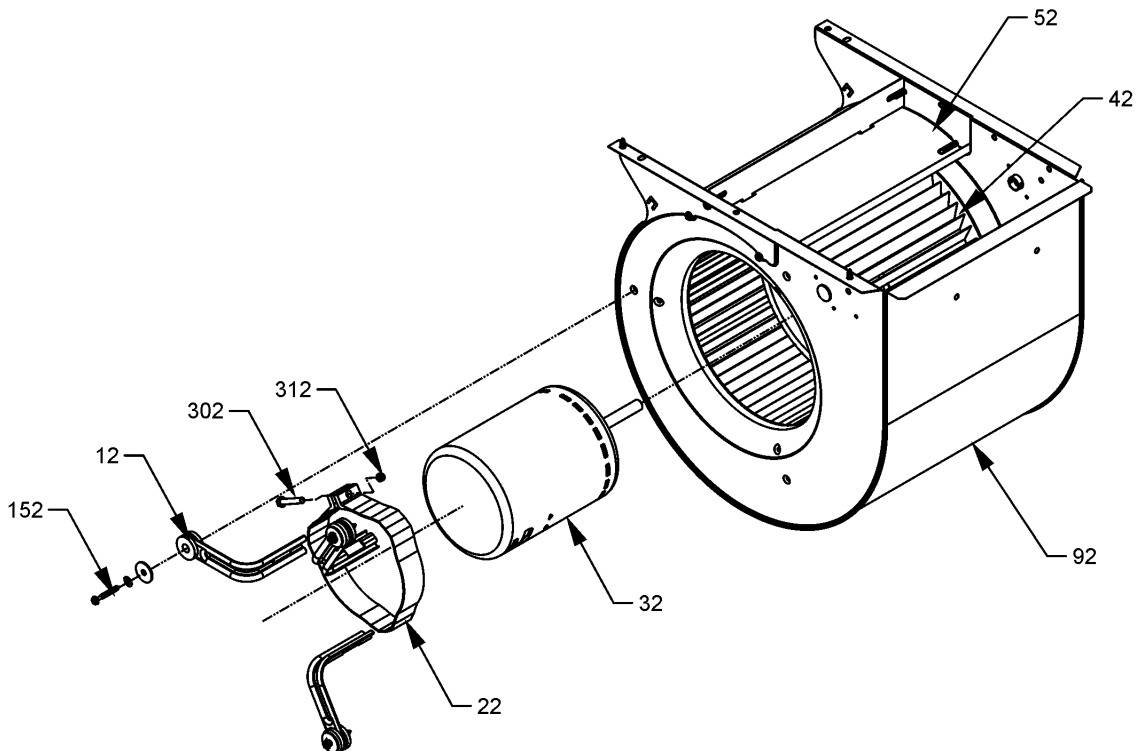


Image 2



Control Panel & Blower Assembly

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
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Image 1:

11	PCBDM133	DEFROST CONTROL BOARD
61	CONT1P025024V	CONTACTOR 25 AMP, 1P, 24V (M1, M2, M3, M4, M5, M6, M7, M8)
61	CONT2P040024V	CONTACTOR 40 AMP, 2P, 24V (M9, M10, M11, M12)
71	0130M00138	TRANSFORMER 208/230, 24V
81	CAP100400440CT	CAP, 10/40 MFD, 440V/ DUAL RD (M11, M12)
81	CAP050400440CT	CAPACITOR 5/40/440V/DUAL RD (M1, M2, M3, M4)
81	CAP050450440CT	CAPACITOR 5/45/440V/DUAL RD (M5, M6, M7, M8)
81	CAP050700440CT	CAPACITOR 5/70/440V/DUAL RD (M9, M10)
91	20520901	CAPACITOR STRAP
111	0130M00242	RELAY, 24V (M11, M12)
NS	0259G00129	HARNESS, CONTROL (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10)
NS	0259G00134	HARNESS, CONTROL (M11, M12)

Image 2:

12	B1376857	MOTOR MOUNT ARM (QTY 3)
22	0121M00038	MOTOR MOUNT BAND
32	0131G00028	PROGRAMMED MOTOR (M1, M2)
32	0131G00029	PROGRAMMED MOTOR (M3, M4)
32	0131G00030	PROGRAMMED MOTOR (M5, M6)
32	0131G00031	PROGRAMMED MOTOR (M7, M8)
32	0131G00032	PROGRAMMED MOTOR (M9, M10)
32	0131G00033	PROGRAMMED MOTOR (M11, M12)
42	D6723303	BLOWER WHEEL
52	764742	BLOWER BLOCK-OFF
92	0271G00024	BLOWER HOUSING ASSY 10 X 9
152	M0250565	TC SCREW 1.25" (QTY 3)
302	B1393323	MACHINE SCREW HWH 1/4-20 X 1-1/2 BZ
312	B1393800	LOCKNUT, NYLON, INSERT 1/4, 20

Expanded Model Nomenclature

M1 - APH1424M41AA
M2 - APH1424M41AB
M3 - APH1430M41AA
M4 - APH1430M41AB
M5 - APH1436M41AA
M6 - APH1436M41AB
M7 - APH1442M41AA
M8 - APH1442M41AB
M9 - APH1448M41AA
M10 - APH1448M41AB
M11 - APH1460M41AA
M12 - APH1460M41AB