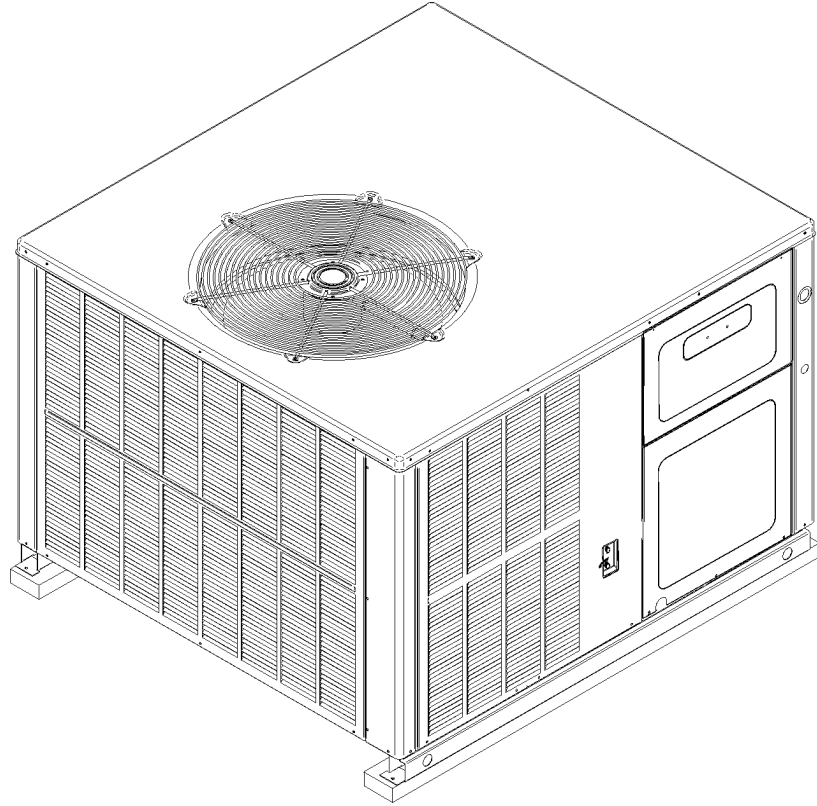


APH16 Multi-Position Residential Package Heat Pump

APH1624M41AA
APH1624M41AB
APH1630M41AA
APH1630M41AB
APH1636M41AA
APH1636M41AB
APH1642M41AA
APH1642M41AB
APH1648M41AA
APH1648M41AB



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This manual is to be used by qualified technicians only.

This manual replaces RP-A3011.

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Important Information

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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:

0130M00242	24V RELAY
D6723303	BLOWER WHEEL
CAP050300440CS	CAP,5/30MFD/440V/DUAL RD (M9, M10)
CAP050350440CS	CAPACITOR 5/35/440V (M1, M2)
CAP050400440CT	CAPACITOR 5/40/440V/DUAL RD (M3, M4, M5, M6)
CAP050450440CT	CAPACITOR 5/45/440V/DUAL RD (M7, M8)
ZPS20K5EPFV130	COMP, 20000,208/130 (M1, M2)
ZPS30K5EPFV130	COMP,30000,208/230 (M5, M6)
ZPS40K5EPFV130	COMPRESSOR 41100, 208/230/60/1 (M9, M10)
ZPS26K5EPFV130	COMPRESSOR, COPELAND (M3, M4)
ZPS35K5EPFV130	COMPRESSOR, COPELAND (M7, M8)
0131M00061	COND MOTOR 1/4 HP, 1 SP, 8 PL (M1, M2, M3, M4, M5, M6)
0131M00429	COND MOTOR 1/4 HP, 1 SP,6 PL (M7, M8, M9, M10)
CONT1P025024V	CONTACTOR 25 AMP, 1P, 24V (M1, M2, M3, M4, M5, M6)
CONT1P030024V	CONTACTOR 30 AMP, 1P, 24V (M7, M8)
CONT2P040024V	CONTACTOR 40 AMP, 2P, 24V (M9, M10)
0130M00197	CONTROL, DEFROST
0163R00022	CRANK CASE HEATER (M1, M2, M3, M4, M5, M6)
0163R00021	CRANK CASE HEATER (M7, M8, M9, M10)
0130M00074	CUT-OUT SWITCH, HIGH PRESSURE
0130M00075	CUT-OUT SWITCH, LOW PRESSURE
PCBDM133	DEFROST CONTROL BOARD
0150G00002	FAN BLADE SWEPT-WING
PCBEM102	PCB, ECM PRIMARY, VSTB
0131M00632	PROGRAMMED MOTOR (M3, M4, M5, M6)
0131M00633	PROGRAMMED MOTOR (M1, M2)
0131M00635	PROGRAMMED MOTOR (M7, M8, M9, M10)
0151R00071	REVERSING VALVE (M7, M8, M9, M10)
0151R00069	REVERSING VALVE (M1, M2, M3, M4, M5, M6)
B1225022	SOLENOID COIL
0130M00199	SWITCH, CRANK CASE HEATER
802007090	TERMINAL BOARD
0130M00138	TRANSFORMER 208/230, 24V

Expanded Model Nomenclature

M1 - APH1624M41AA
M2 - APH1624M41AB
M3 - APH1630M41AA
M4 - APH1630M41AB
M5 - APH1636M41AA
M6 - APH1636M41AB
M7 - APH1642M41AA
M8 - APH1642M41AB
M9 - APH1648M41AA
M10 - APH1648M41AB

Cabinet Assembly

Image 1

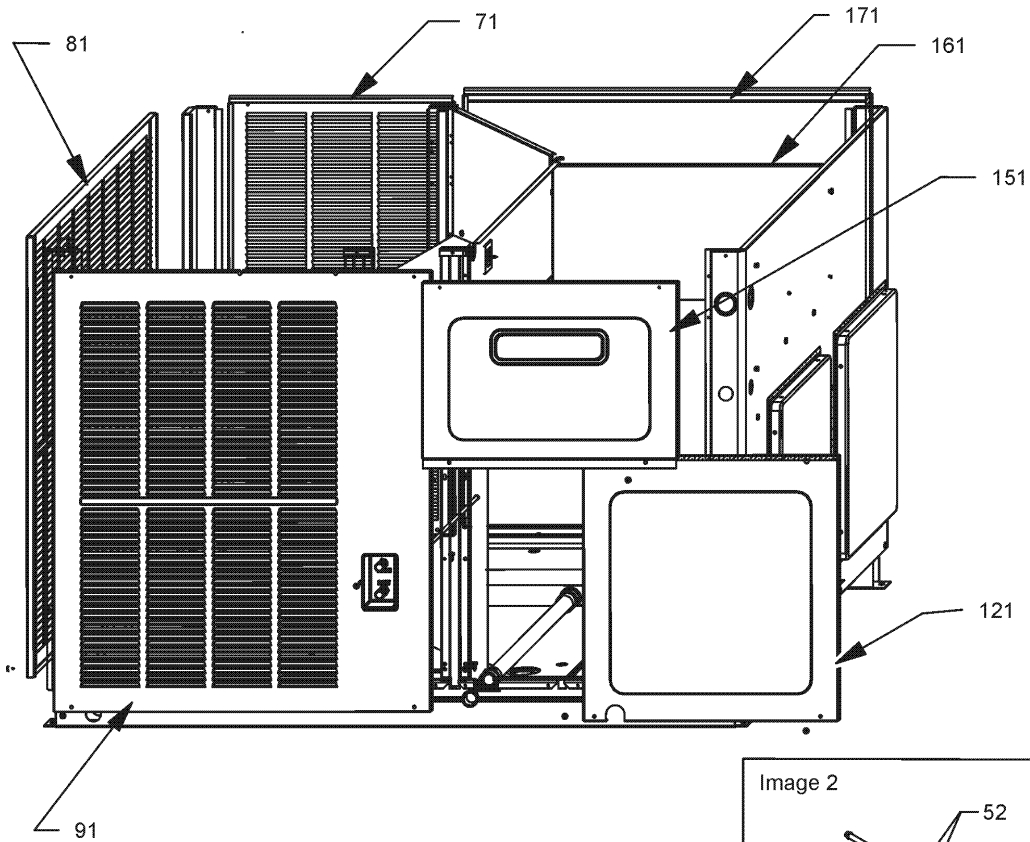
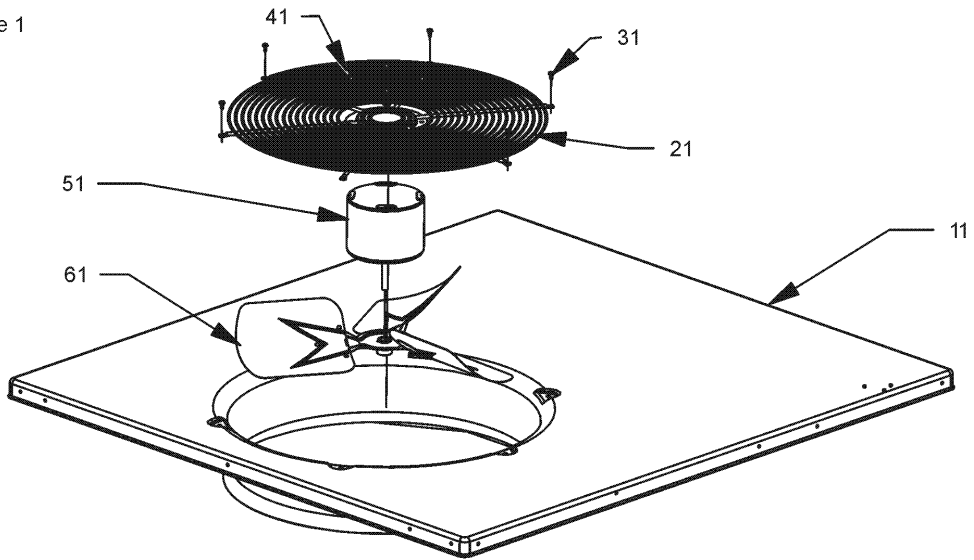
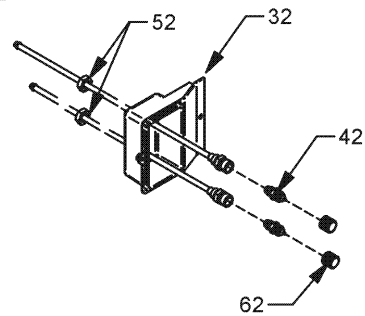


Image 2



Cabinet Assembly

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

11	0121G00156PDG	PNL, TOP, PNT
21	0152G00000	FAN GRILLE, RAISED
31	B1393530	SCREW HWH,10 X 1/2, A, YZD, SLOT, SR (M7, M8, M9, M10)
31	M0221817	SMALL SCREW (M1, M2, M3, M4, M5, M6)
41	0163M00006P	ACORN NUT 5/16 HEX BLACK (QTY 4)
51	0131M00061	COND MOTOR 1/4 HP, 1 SP, 8 PL (M1, M2, M3, M4, M5, M6)
51	0131M00429	COND MOTOR 1/4 HP, 1 SP,6 PL (M7, M8, M9, M10)
61	0150G00002	FAN BLADE SWEPT-WING
71	20467701PLG	LOUVERED PANEL, COND SIDE 32" (M1, M2, M3, M4, M5, M6)
71	20467702PLG	LOUVERED PANEL, COND SIDE 40" (M7, M8, M9, M10)
81	20464401PLG	LOUVERED PANEL, COND SIDE 32" (M1, M2, M3, M4, M5, M6)
81	20464402PLG	LOUVERED PANEL, COND SIDE 40" (M7, M8, M9, M10)
91	0121G00658LG	COMPRESSOR PANEL (M2, M4, M6)
91	0121G00659LG	COMPRESSOR PANEL (M8, M10)
91	0121G00144LG	LVR, COMP, 2BANK, CNVRT, 32.5" (M1, M3, M5)
91	0121G00145LG	LVR, COMP, 2BANK, CNVRT, 40" (M7, M9)
121	0121G00165PDG	PNL, BLO, CNVRT, 32.5", PNT (M1, M2, M3, M4, M5, M6)
121	0121G00168PDG	PNL, BLO, CNVRT, 40", PNT (M7, M8, M9, M10)
151	0121G00213DG	CONTROL BOX PANEL
161	0121G00591	BLK-OFF, EVAP, TOP, CNVRT (M7, M8, M9, M10)
161	0121G00592	BLK-OFF, EVAP, TOP, CNVRT (M1, M2, M3, M4, M5, M6)
171	20464801PDG	BLOWER DOOR 32" (M1, M2, M3, M4, M5, M6)
171	20464806PDG	BLOWER DOOR 40" (M7, M8, M9, M10)
NS	0121G00235	FAN BAFFLE
NS	0164G00005	GROMMET-HORSESHOE 1.675 (M2, M4, M6, M8, M10)
NS	17788000083F	PVC CONDUIT 8.25"

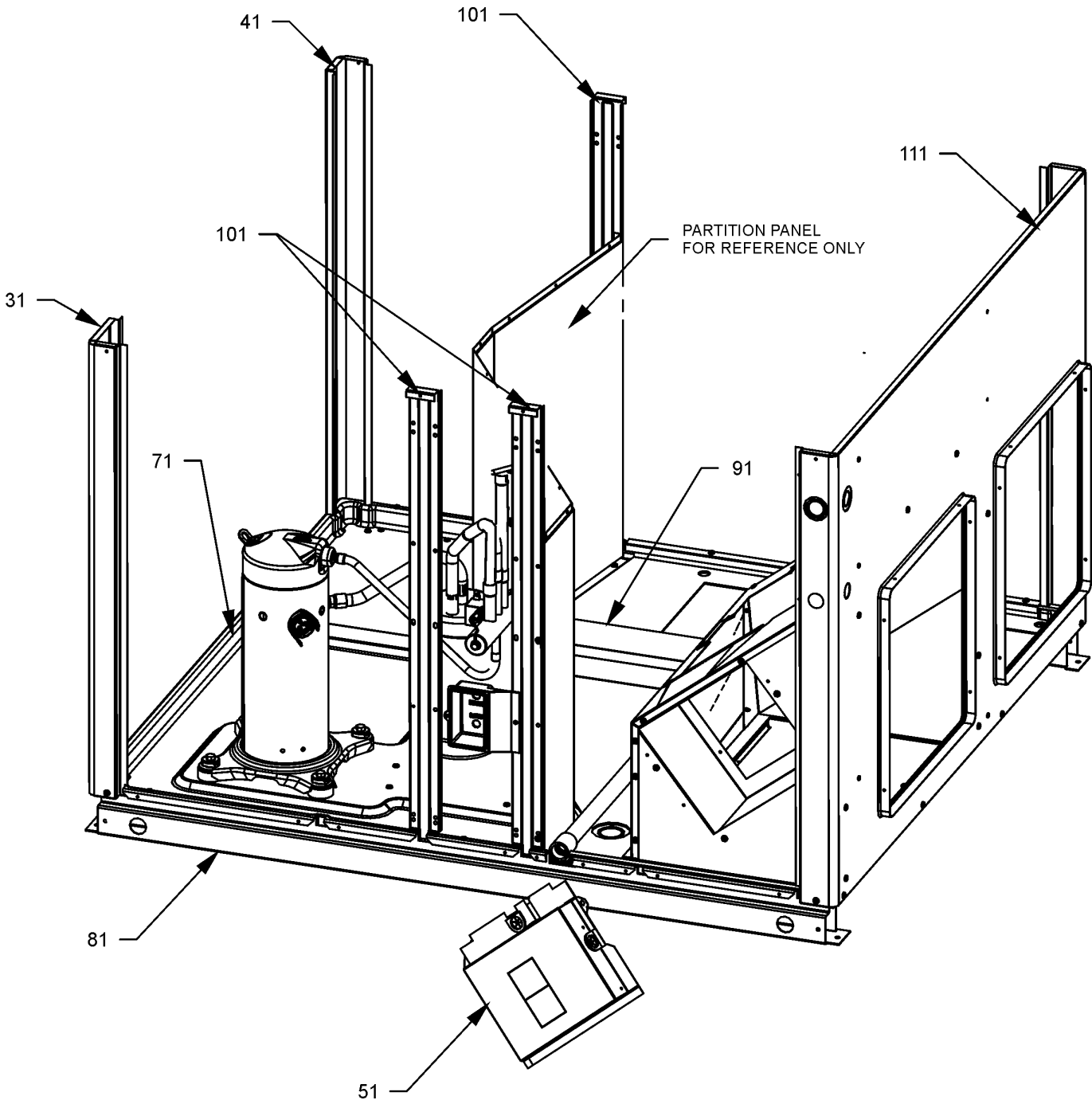
Image 2:

32	0161G00008	ACCESS-FITTING BOX (M1, M3, M5, M7, M9)
42	B1373315	ACCESS FITTING (QTY 2)
52	0163G00000P	FASTEST FITTING NUT (M1, M3, M5, M7, M9)
62	0163M00175	CAP WITH O-RING (QTY 2)

Expanded Model Nomenclature

M1 - APH1624M41AA
M2 - APH1624M41AB
M3 - APH1630M41AA
M4 - APH1630M41AB
M5 - APH1636M41AA
M6 - APH1636M41AB
M7 - APH1642M41AA
M8 - APH1642M41AB
M9 - APH1648M41AA
M10 - APH1648M41AB

Panels and Supports



Panels and Supports

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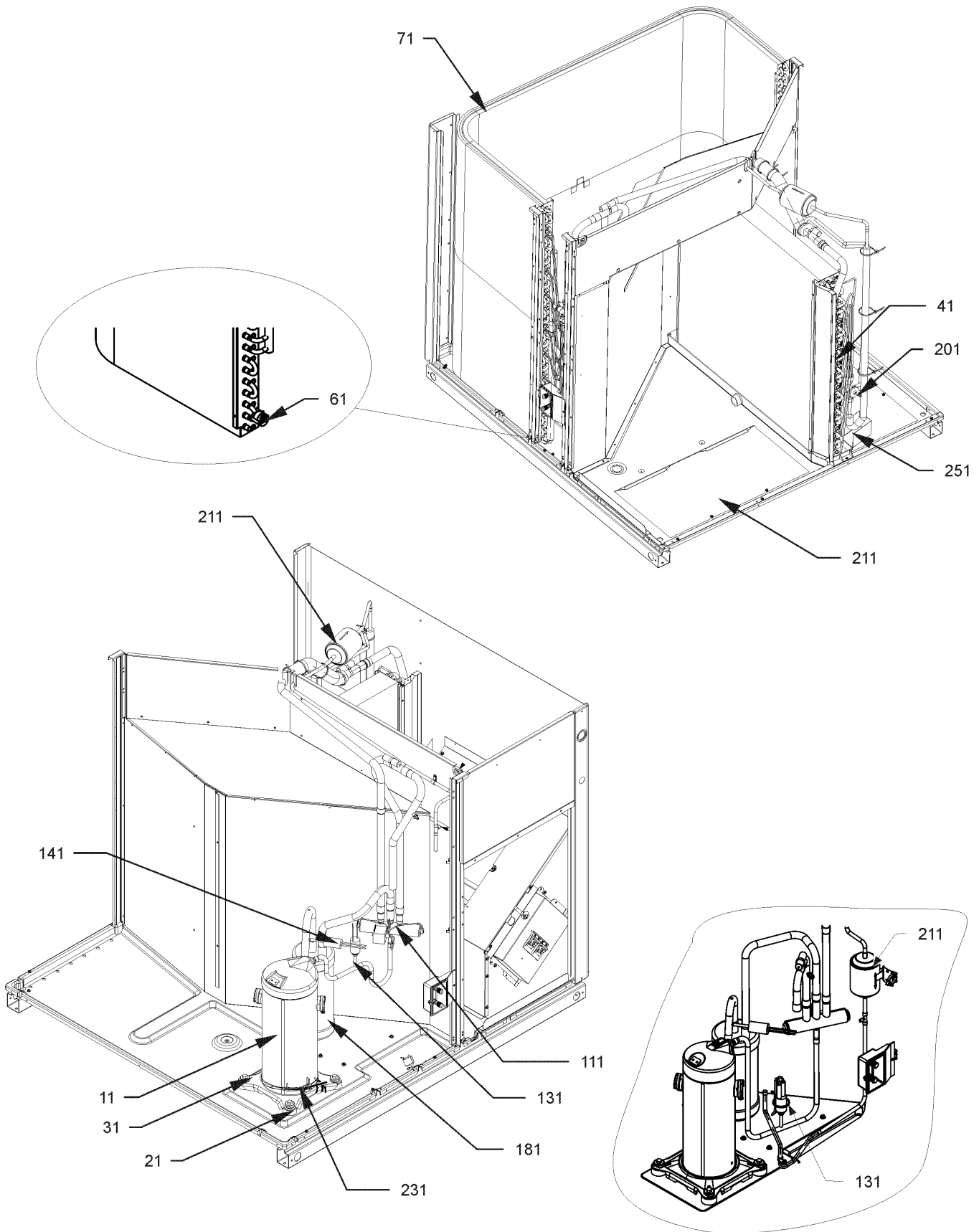
Image 1:

31	20464201PDG	CORNER POST-COMP END 32" (M1, M2, M3, M4, M5, M6)
31	20464202PDG	CORNER POST-COMP END 40" (M7, M8, M9, M10)
41	20464301PDG	CORNER POST-HAIRPIN END 32" (M1, M2, M3, M4, M5, M6)
41	20464302PDG	CORNER POST-HAIRPIN END 40" (M7, M8, M9, M10)
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)
101	0121G00462	POST-SUPPORT, SIDE (M7, M8, M9, M10)
111	0121G00671DG	PNL, DUCT, CNVRT, 32.5" PNT (M1, M2, M3, M4, M5, M6)
111	0121G00672DG	PNL, DUCT, CNVRT, 40" PNT (M7, M8, M9, M10)

Expanded Model Nomenclature

- M1 - APH1624M41AA
- M2 - APH1624M41AB
- M3 - APH1630M41AA
- M4 - APH1630M41AB
- M5 - APH1636M41AA
- M6 - APH1636M41AB
- M7 - APH1642M41AA
- M8 - APH1642M41AB
- M9 - APH1648M41AA
- M10 - APH1648M41AB

Tubing & Coil Assemblies



Tubing & Coil Assemblies

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
<i>Image 1:</i>		Expanded Model Nomenclature	
11	ZPS20K5EPFV130 COMP, 20000,208/130 (M1, M2)	M1 -	APH1624M41AA
11	ZPS30K5EPFV130 COMP,30000,208/230 (M5, M6)	M2 -	APH1624M41AB
11	ZPS40K5EPFV130 COMPRESSOR 41100, 208/230/60/1 (M9, M10)	M3 -	APH1630M41AA
11	ZPS26K5EPFV130 COMPRESSOR, COPELAND (M3, M4)	M4 -	APH1630M41AB
11	ZPS35K5EPFV130 COMPRESSOR, COPELAND (M7, M8)	M5 -	APH1636M41AA
21	B1339533 COMPRESSOR GROMMET (QTY 4)	M6 -	APH1636M41AB
31	M0221641 TF SHOULDER SCREW (QTY 4)	M7 -	APH1642M41AA
41	0202G00542 EVAP COIL ASSY (M9, M10)	M8 -	APH1642M41AB
41	0202G00582 EVAP COIL ASSY (M1, M2, M3, M4)	M9 -	APH1648M41AA
41	0202G00583 EVAP COIL ASSY (M5, M6)	M10 -	APH1648M41AB
41	0202G00707 EVAP COIL ASSY (M7, M8)		
61	0130M00197 CONTROL, DEFROST		
71	0201G00383 COND COIL ASSY (M1, M2, M3, M4)		
71	0201G00402 COND COIL ASSY (M7, M8)		
71	0201G00404 COND COIL ASSY (M5, M6)		
71	0201G00405 COND COIL ASSY (M9, M10)		
111	0151R00069 REVERSING VALVE (M1, M2, M3, M4, M5, M6)		
111	0151R00071 REVERSING VALVE (M7, M8, M9, M10)		
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)		
201	0151G00005 VALVE, NXT (M1, M2, M3, M4)		
201	0151M00049 VALVE, NXT (M5, M6, M7, M8)		
201	0151M00050 VALVE, NXT (M9, M10)		
211	20485201 BI-FLOW FILTER DRIER		
231	0163R00021 CRANK CASE HEATER (M7, M8, M9, M10)		
231	0163R00022 CRANK CASE HEATER (M1, M2, M3, M4, M5, M6)		
241	0121G00148 SINGLE COVER, DOWN DISCHARGE (QTY 2)		
251	0121G00509 DRIP SHIELD		
NS	0159G00002 COMPRESSOR SCROLL HARNESS (M1, M2, M3, M4, M5, M6)		
NS	0159G00004 COMPRESSOR SCROLL HARNESS (M7, M8, M9, M10)		
NS	0159G00001 COMPRESSOR SOLENOID CABLE		
NS	B1488806 COMPRESSOR SOUND BLANKET (M7, M8, M9, M10)		
NS	B1488807 COMPRESSOR SOUND BLANKET (M1, M2, M3, M4, M5, M6)		
NS	0162M00055 FLOWRATOR [COND] (M7, M8, M9, M10)		
NS	0162M00274 FLOWRATOR [COND] (M1, M2, M3, M4, M5, M6)		
NS	0162M00324 FLOWRATOR [EVAP] (M1, M2, M3, M4, M5, M6)		
NS	0162M00325 FLOWRATOR [EVAP] (M7, M8, M9, M10)		
NS	B1225022 SOLENOID COIL		
NS	0130M00199 SWITCH, CRANK CASE HEATER		

Control Panel & Blower Assembly

Image 1

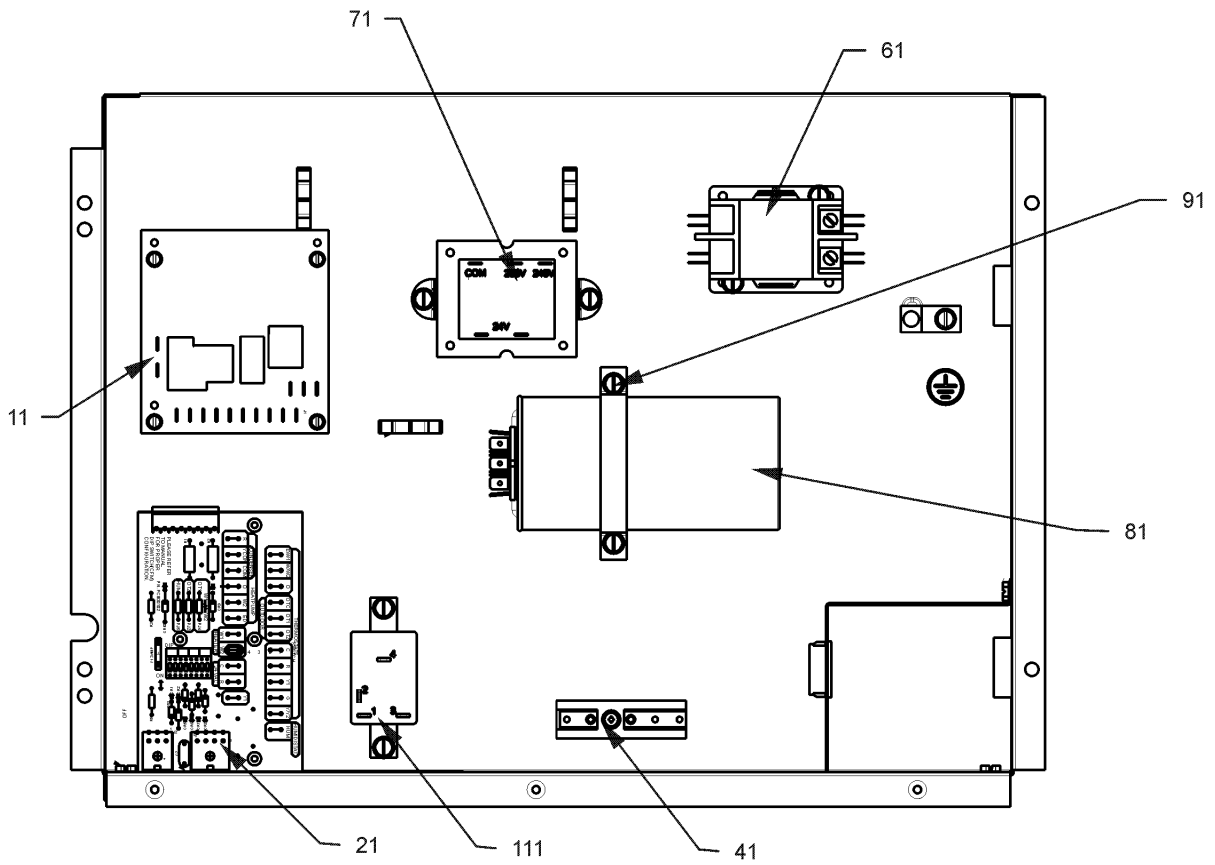
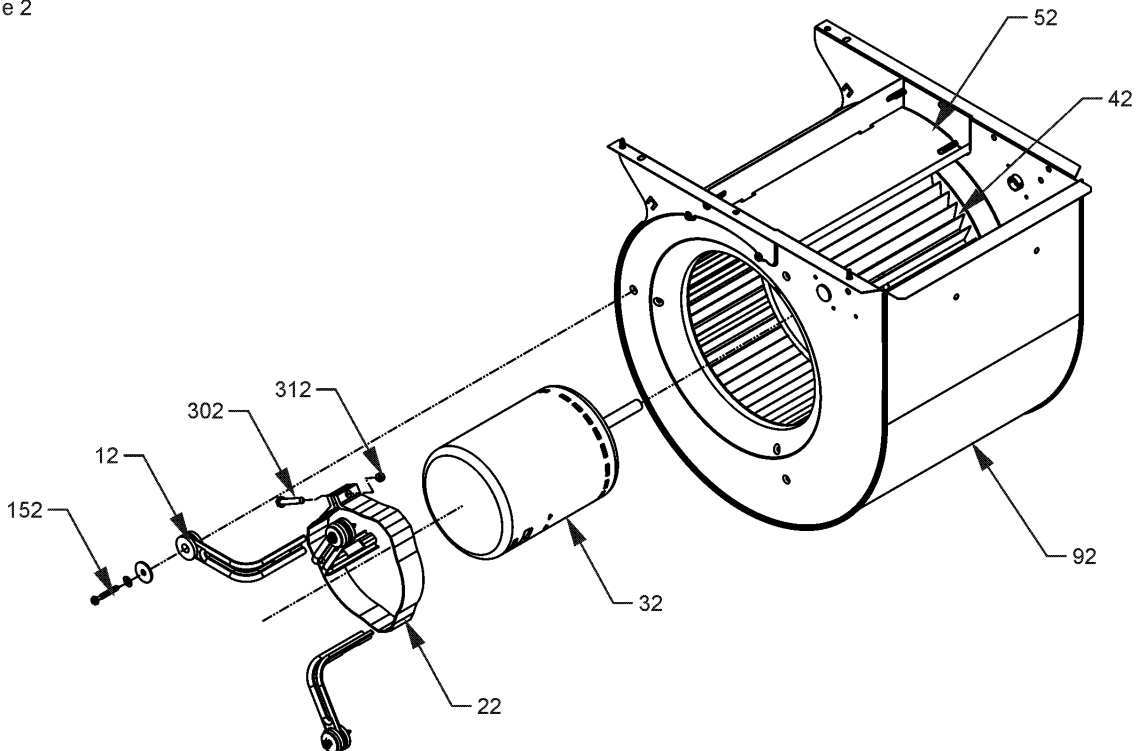


Image 2



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
21	PCBEM102	PCB, ECM PRIMARY, VSTB
41	802007090	TERMINAL BOARD
61	CONT1P025024V	CONTACTOR 25 AMP, 1P, 24V (M1, M2, M3, M4, M5, M6)
61	CONT1P030024V	CONTACTOR 30 AMP, 1P, 24V (M7, M8)
61	CONT2P040024V	CONTACTOR 40 AMP, 2P, 24V (M9, M10)
71	0130M00138	TRANSFORMER 208/230, 24V
81	CAP050300440CS	CAP.5/30MFD/440V/DUAL RD (M9, M10)
81	CAP050350440CS	CAPACITOR 5/35/440V (M1, M2)
81	CAP050400440CT	CAPACITOR 5/40/440V/DUAL RD (M3, M4, M5, M6)
81	CAP050450440CT	CAPACITOR 5/45/440V/DUAL RD (M7, M8)
91	20520901	CAPACITOR STRAP
111	0130M00242	24V RELAY
NS	0259G00158	COMPRESSOR HARNESS ASSEMBLY (M7, M8, M9, M10)
NS	0259G00168	COMPRESSOR HARNESS ASSEMBLY (M1, M2, M3, M4, M5, M6)
NS	0259G00135	MAIN CONTROL BOX WIRE HARNESS

Image 2:

12	B1376857	MOTOR MOUNT ARM (QTY 3)
22	0121M00038	MOTOR MOUNT BAND
32	0131M00632	PROGRAMMED MOTOR (M3, M4, M5, M6)
32	0131M00633	PROGRAMMED MOTOR (M1, M2)
32	0131M00635	PROGRAMMED MOTOR (M7, M8, M9, M10)
42	D6723303	BLOWER WHEEL
52	764742	BLOWER BLOCK-OFF
92	0271G00024	BLOWER HOUSING ASSY 10 X 9
152	M0250565	TC SCREW 1.25" (QTY 5)
302	B1393323	MACHINE SCREW HWH 1/4-20 X 1-1/2 BZ
312	B1393800	LOCKNUT, NYLON, INSERT 1/4, 20
NS	0259G00153	BLOWER HARNESS ASSEMBLY
NS	B1378700	WIRE HARNESS, LOW VOLTAGE (16-PIN ECM)

Expanded Model Nomenclature

M1 - APH1624M41AA
M2 - APH1624M41AB
M3 - APH1630M41AA
M4 - APH1630M41AB
M5 - APH1636M41AA
M6 - APH1636M41AB
M7 - APH1642M41AA
M8 - APH1642M41AB
M9 - APH1648M41AA
M10 - APH1648M41AB