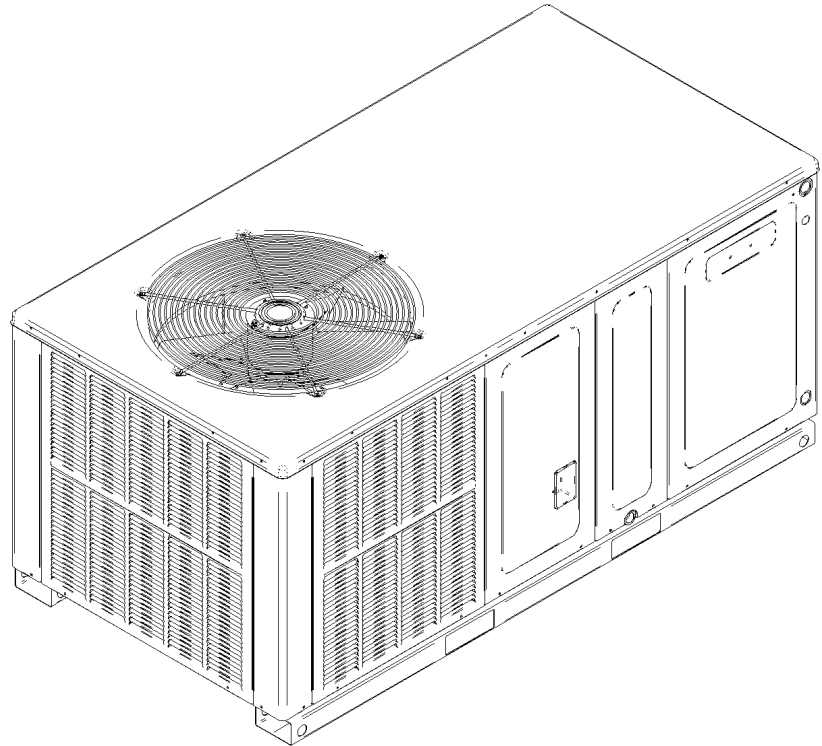


GPH14 Horizontal Package Heat Pump

GPH1424H41DC
GPH1424H41DD
GPH1430H41DC
GPH1430H41DD
GPH1436H41DC
GPH1436H41DD
GPH1442H41EA
GPH1442H41EB
GPH1442H41EC
GPH1448H41EA
GPH1448H41EB
GPH1448H41EC
GPH1460H41EA
GPH1460H41EB
GPH1460H41EC
GPH1460H41FA



This manual is to be used by qualified technicians only.

This manual replaces RP-G3005C.

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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 Manufacturing 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 Manufacturing Company, L.P. also recommends contacting an authorized technician and using authorized factory parts.

Goodman Manufacturing 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:

Homeowner Support

Goodman Manufacturing Company, L.P.

19001 Kermier Road

Waller, Texas 77484

877-254-4729-Telephone

713-863-2382-Facsimile

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

International Division

Goodman Manufacturing Company, L.P.

19001 Kermier Road

Waller, Texas 77484

713-861-2500-Telephone

713-863-2382-Facsimile

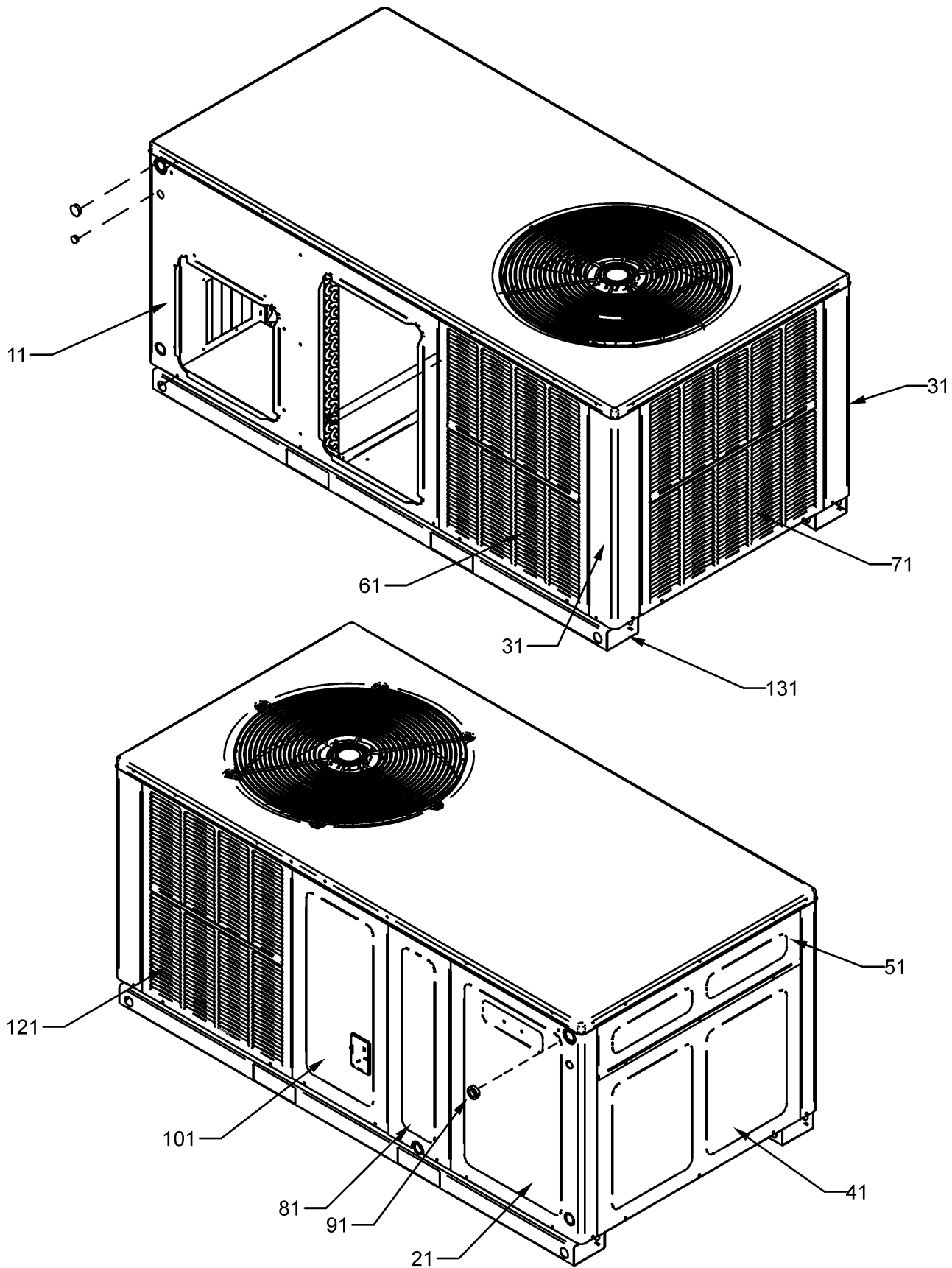
Functional Parts

Part

No: Description:

		Expanded Model Nomenclature
B1368016	BLOWER WHEEL 10 X 8 (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12)	M1 - GPH1424H41DC
B1368054	BLOWER WHEEL 11 X 8 (M13, M14, M15, M16)	M2 - GPH1424H41DD
CAP050400440CT	CAPACITOR 5/40/440V/DUAL RD (M1, M2, M3, M4)	M3 - GPH1430H41DC
CAP050450440CT	CAPACITOR 5/45/440V/DUAL RD (M5, M6, M7, M8, M9, M10, M11, M12)	M4 - GPH1430H41DD
CAP050700440CT	CAPACITOR 5/70/440V/DUAL RD (M13, M14, M15, M16)	M5 - GPH1436H41DC
ZP21K5EPFV130	COMPRESSOR 21300, 208/230/60/1 (M1, M2)	M6 - GPH1436H41DD
ZP25K5EPFV130	COMPRESSOR 25200, 208/230/60/1 (M3, M4)	M7 - GPH1442H41EA
ZP31K5EPFV130	COMPRESSOR 31100, 208/230/60/1 (M5, M6)	M8 - GPH1442H41EB
ZP34K5EPFV130	COMPRESSOR 34500, 208/230/60/1 (M7, M8, M9)	M9 - GPH1442H41EC
ZP39K5EPFV130	COMPRESSOR 39000, 208/230/60/1 (M10, M11, M12)	M10 - GPH1448H41EA
ZP51K5EPFV130	COMPRESSOR 51000, 208/230/60/1 (M13, M14, M15, M16)	M11 - GPH1448H41EB
0131M00061	COND MOTOR 1/4 HP, 1 SP, 8 PL (M5, M6)	M12 - GPH1448H41EC
0131M00009P	COND MOTOR 1/6 HP, 1 SP, 8 PL (M1, M2, M3, M4)	M13 - GPH1460H41EA
0131M00429	COND MOTOR, 1/4 HP, 1 SP, 6 PL (M7, M8, M9, M10, M11, M12, M13, M14, M15, M16)	M14 - GPH1460H41EB
CONT1P025024V	CONTACTOR 25 AMP, 1P, 24V (M1, M2, M3, M4, M5, M6)	M15 - GPH1460H41EC
CONT1P030024V	CONTACTOR 30 AMP, 1P, 24V (M7, M8, M9, M10, M11, M12)	M16 - GPH1460H41FA
CONT2P040024V	CONTACTOR 40 AMP, 2P, 24V (M13, M14, M15, M16)	
0130M00101	CONTROL, DEFROST (M7, M8, M9, M13)	
0130M00099	CONTROL, DEFROST (M1, M2, M3, M4, M5, M6, M10, M11, M12, M14, M15, M16)	
0230G00005	CRANKCASE HEATER SWITCH (M13, M14, M15, M16)	
PCBDM133	DEFROST CONTROL BOARD	
0130M00106	DISC THERMOSTAT CRNKCS HTR (M13, M14, M15, M16)	
0150G00005	FAN BLADE (M1, M2, M3, M4)	
0150G00004	FAN BLADE (M7, M8, M9, M10, M11, M12, M13, M14, M15, M16)	
B1086765	FAN BLADE TYPE 3 (M5, M6)	
0163R00003	HEATER, CRANKCASE 230V 40W (M13, M14, M15, M16)	
0130M00074	HIGH PRESSURE SWITCH (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15)	
0130M00089	HIGH PRESSURE SWITCH (M16)	
0130M00075	LOW PRESSURE SWITCH	
0131M00602	PROGRAMMED MOTOR (M7, M8, M9)	
0131M00600	PROGRAMMED MOTOR (M3, M4)	
0131M00596	PROGRAMMED MOTOR (M5, M6)	
0131M00604	PROGRAMMED MOTOR (M13, M14, M15, M16)	
0131G00035	PROGRAMMED MOTOR (M10, M11, M12)	
0131M00598	PROGRAMMED MOTOR (M1, M2)	
0151R00071	REVERSING VALVE (M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16)	
0151R00069	REVERSING VALVE (M1, M2, M3, M4)	
B1225022	SOLENOID COIL	
0130M00138	TRANSFORMER, 208/230, 24V	

Cabinet Assembly



Cabinet Assembly

Ref. Part

No: No:

Description:

Ref. Part

No: No:

Description:

Image 1:

11	0121G00667PDG	DUCT PANEL 27.5" (M1, M2, M3, M4)
11	0121G00051PDG	DUCT PANEL 32.5" (M7, M10)
11	0121G00668PDG	DUCT PANEL 32.5" (M5, M6, M8, M9, M11, M12)
11	0121G00084PDG	DUCT PANEL 36" (M13)
11	0121G00669PDG	DUCT PANEL 36" (M14, M15, M16)
21	0121G00664DG	CORNER PANEL 27.5" (M1, M2, M3, M4)
21	0121G00522DG	CORNER PANEL 32.5" (M7, M10)
21	0121G00665DG	CORNER PANEL 32.5" (M5, M6, M8, M9, M11, M12)
21	0121G00523DG	CORNER PANEL 36" (M13)
21	0121G00666DG	CORNER PANEL 36" (M14, M15, M16)
31	0121G00047PDG	CORNER POST 27.5" (M1, M2, M3, M4)
31	0121G00048PDG	CORNER POST 32.5" (M5, M6, M7, M8, M9, M10, M11, M12)
31	0121G00082PDG	CORNER POST 36" (M13, M14, M15, M16)
41	0121G00271DG	EXTERNAL BLOWER PANEL 27.5" (M1, M2, M3, M4)
41	0121G00272DG	EXTERNAL BLOWER PANEL 32.5" (M5, M6, M7, M8, M9, M10, M11, M12)
41	0121G00273DG	EXTERNAL BLOWER PANEL 36" (M13, M14, M15, M16)
51	0121G00276DG	EXTERNAL CONTROL BOX PANEL
61	0121G00069PDG	LOUVERED PANEL 4 BANK 27.5" (M1, M2, M3, M4)
61	0121G00070PDG	LOUVERED PANEL 4 BANK 32.5" (M5, M6, M7, M8, M9, M10, M11, M12)
61	0121G00090PDG	LOUVERED PANEL 4 BANK 36" (M13, M14, M15, M16)
71	0121G00072PDG	LOUVERED PANEL 5 BANK 27.5" (M1, M2, M3, M4)
71	0121G00073PDG	LOUVERED PANEL 5 BANK 32.5" (M5, M6, M7, M8, M9, M10, M11, M12)
71	0121G00091PDG	LOUVERED PANEL 5 BANK 36" (M13, M14, M15, M16)
81	0121G00065PDG	EVAP PANEL 8.75" X 27.5" (M1, M2, M3, M4)
81	0121G00066PDG	EVAP PANEL 8.75" X 32.5" (M5, M6, M7, M8, M9, M10, M11, M12)
81	0121G00089PDG	EVAP PANEL, 36" EXT RMV (M13, M14, M15, M16)
91	B1392012	GROMMET / HS 1.0 - .79
101	0121G00712DG	COMPRESSOR PANEL (M6, M9, M12)
101	0121G00713DG	COMPRESSOR PANEL (M2, M4)
101	0121G00715DG	COMPRESSOR PANEL (M15, M16)
101	0121G00062PDG	COMPRESSOR PANEL 13.68" X 27.50" (M1, M3)
101	0121G00060PDG	COMPRESSOR PANEL 8.75" X 32.50" (M5, M7, M8, M10, M11)
101	0121G00087PDG	COMPRESSOR PANEL 8.75" X 36" (M13, M14)
121	0121G00072PDG	LOUVERED PANEL 5 BANK 27.5" (M1, M2, M3, M4)
121	0121G00073PDG	LOUVERED PANEL 5 BANK 32.5" (M5, M6, M7, M8, M9, M10, M11, M12)
121	0121G00091PDG	LOUVERED PANEL 5 BANK 36" (M13, M14, M15, M16)
131	0121G00044PRF	BASEPAN RAIL (QTY 2)
NS	0164G00005	GROMMET-HORSESHOE 1.675 (M2, M4, M6, M9, M12, M15, M16)

Expanded Model Nomenclature

M1 - GPH1424H41DC
M2 - GPH1424H41DD
M3 - GPH1430H41DC
M4 - GPH1430H41DD
M5 - GPH1436H41DC
M6 - GPH1436H41DD
M7 - GPH1442H41EA
M8 - GPH1442H41EB
M9 - GPH1442H41EC
M10 - GPH1448H41EA
M11 - GPH1448H41EB
M12 - GPH1448H41EC
M13 - GPH1460H41EA
M14 - GPH1460H41EB
M15 - GPH1460H41EC
M16 - GPH1460H41FA

Chassis Assembly

Image 1

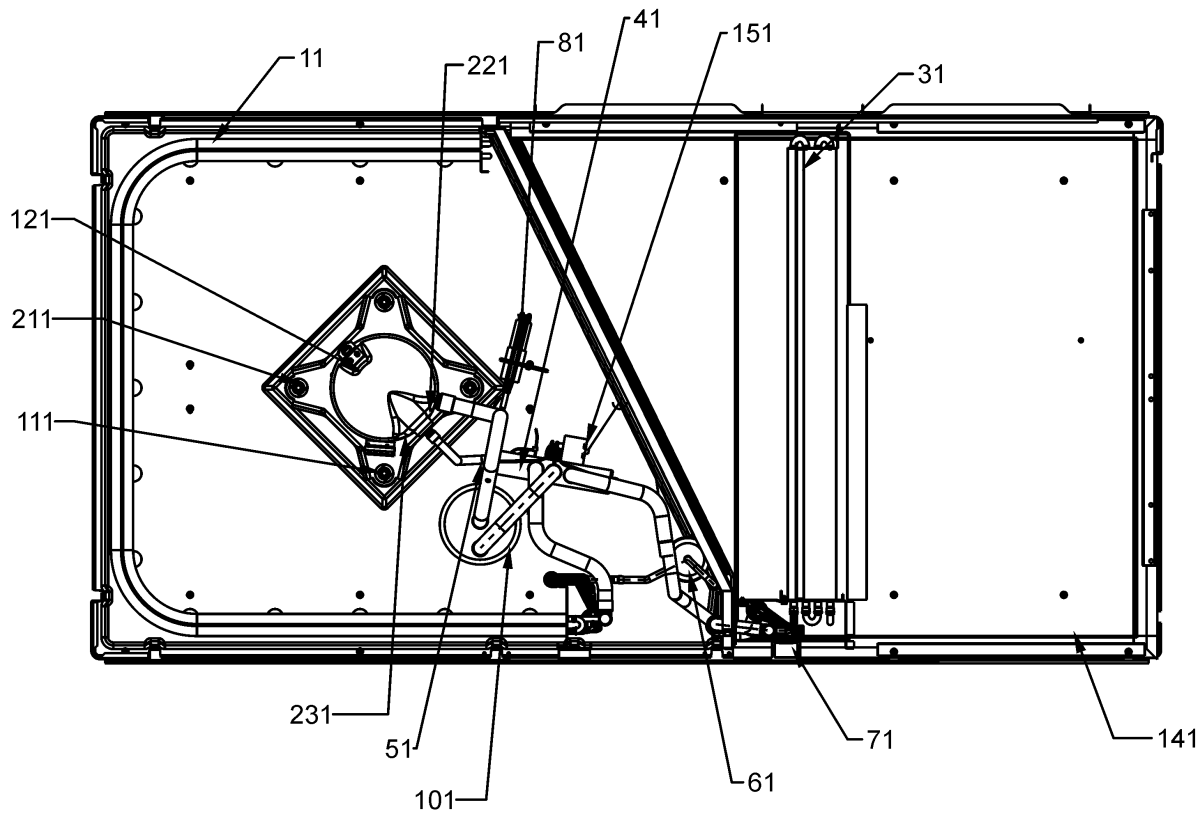


Image 2

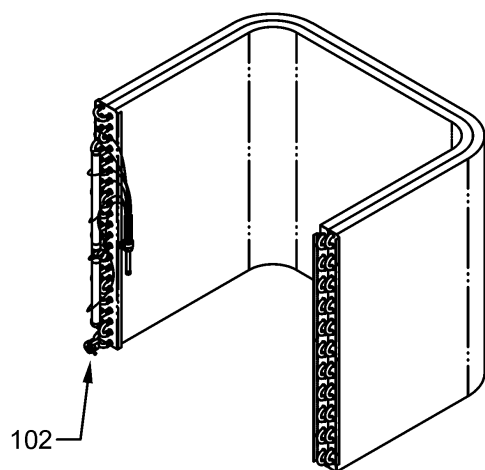
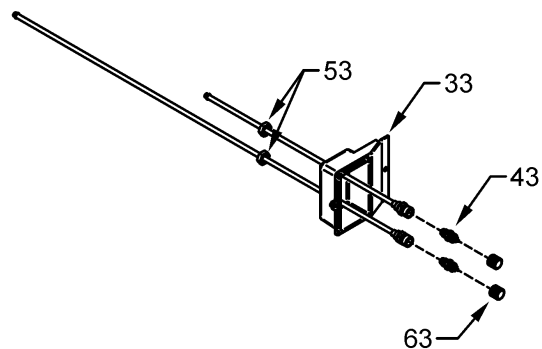


Image 3



Chassis Assembly

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
Image 1:		Image 1:	
11	0201G00279 TUBING ASSY, COND COIL (M1, M2, M3, M4)	NS	0121G00045P POST 27.5" (M1, M2, M3, M4)
11	0201G00298 TUBING ASSY, COND COIL (M5, M6)	NS	0121G00079P POST 32.5" (M5, M6, M7, M8, M9, M10, M11, M12)
11	0201G00332 TUBING ASSY, COND COIL (M10, M11, M12)	NS	0121G00083P POST 36" (M13, M14, M15, M16)
11	0201G00343 TUBING ASSY, COND COIL (M13, M14, M15)	Image 2:	
11	0201G00344 TUBING ASSY, COND COIL (M7, M8, M9)	102	0130M00099 CONTROL, DEFROST (M1, M2, M3, M4, M5, M6, M10, M11, M12, M14, M15, M16)
11	0201R00673 TUBING ASSY, COND COIL (M16)	102	0130M00101 CONTROL, DEFROST (M7, M8, M9, M13)
31	0202G00517 TUBING ASSY, EVAP COIL (M7, M10)	Image 3:	
31	0202G00518 TUBING ASSY, EVAP COIL (M13)	33	0161G00008 ACCESS-FITTING BOX (M1, M3, M5, M7, M8, M10, M11, M13, M14)
31	0202G00559 TUBING ASSY, EVAP COIL (M1, M2)	43	B1373315 ACCESS FITTING (QTY 2)
31	0202G00560 TUBING ASSY, EVAP COIL (M3, M4)	53	0163G00000P FASTEST FITTING NUT (M1, M3, M5, M7, M8, M10, M11, M13, M14)
31	0202G00561 TUBING ASSY, EVAP COIL (M5, M6)	63	0163M00175 CAP WITH O-RING (QTY 2)
31	0202G00562 TUBING ASSY, EVAP COIL (M8, M9, M11, M12)	Expanded Model Nomenclature	
31	0202G00598 TUBING ASSY, EVAP COIL (M14, M15, M16)	<div> M1 - GPH1424H41DC M2 - GPH1424H41DD M3 - GPH1430H41DC M4 - GPH1430H41DD M5 - GPH1436H41DC M6 - GPH1436H41DD M7 - GPH1442H41EA M8 - GPH1442H41EB M9 - GPH1442H41EC M10 - GPH1448H41EA M11 - GPH1448H41EB M12 - GPH1448H41EC M13 - GPH1460H41EA M14 - GPH1460H41EB M15 - GPH1460H41EC M16 - GPH1460H41FA </div>	
41	0151R00069 REVERSING VALVE (M1, M2, M3, M4)		
41	0151R00071 REVERSING VALVE (M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16)		
51	0130M00074 HIGH PRESSURE SWITCH (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15)		
51	0130M00089 HIGH PRESSURE SWITCH (M16)		
61	B1219204 BI-FLOW FILTER DRIER		
71	0161G00000P PAN, DRIP		
81	0130M00075 LOW PRESSURE SWITCH		
101	B1226206 ACCUMULATOR (M1, M2, M3, M4)		
101	B1226207 ACCUMULATOR .875 (M5, M6, M7, M8, M9, M10, M11, M12, M13, M14, M15, M16)		
111	B1339533 COMPRESSOR GROMMET (QTY 4)		
121	ZP21K5EPFV130 COMPRESSOR 21300, 208/230/60/1 (M1, M2)		
121	ZP25K5EPFV130 COMPRESSOR 25200, 208/230/60/1 (M3, M4)		
121	ZP31K5EPFV130 COMPRESSOR 31100, 208/230/60/1 (M5, M6)		
121	ZP34K5EPFV130 COMPRESSOR 34500, 208/230/60/1 (M7, M8, M9)		
121	ZP39K5EPFV130 COMPRESSOR 39000, 208/230/60/1 (M10, M11, M12)		
121	ZP51K5EPFV130 COMPRESSOR 51000, 208/230/60/1 (M13, M14, M15, M16)		
141	0121G00046P BASEPAN		
151	B1225022 SOLENOID COIL		
211	M0221641 TF SHOULDER SCREW (QTY 4)		
221	0230G00005 CRANKCASE HEATER SWITCH (M13, M14, M15, M16)		
231	0163R00003 HEATER, CRANKCASE 230V 40W (M13, M14, M15, M16)		
NS	0159G00004 COMPRESSOR SCROLL HARNESS		
NS	0130M00106 DISC THERMOSTAT CRNKCS HTR (M13, M14, M15, M16)		
NS	0128G00052 EVAP DRIP SHIELD		
NS	0162M00012P FLOWRATER .071 [COND] (M13, M14, M15)		
NS	0162M00021P FLOWRATOR .047 [COND] (M1, M2, M3, M4)		
NS	0162M00098 FLOWRATOR [COND] (M7, M8, M9, M10, M11, M12)		
NS	0162M00312 FLOWRATOR [COND] (M5, M6)		
NS	0162M00399 FLOWRATOR [COND] (M16)		
NS	0162M00197 FLOWRATOR [EVAP] (M13)		
NS	0162M00213 FLOWRATOR [EVAP] (M5, M6)		
NS	0162M00218 FLOWRATOR [EVAP] (M7, M10)		
NS	0162M00310 FLOWRATOR [EVAP] (M14, M15, M16)		
NS	0162M00311 FLOWRATOR [EVAP] (M8, M9, M11, M12)		
NS	0162M00313 FLOWRATOR [EVAP] (M1, M2)		
NS	0162M00314 FLOWRATOR [EVAP] (M3, M4)		

Top Panel and Control Box Assembly

Image 1

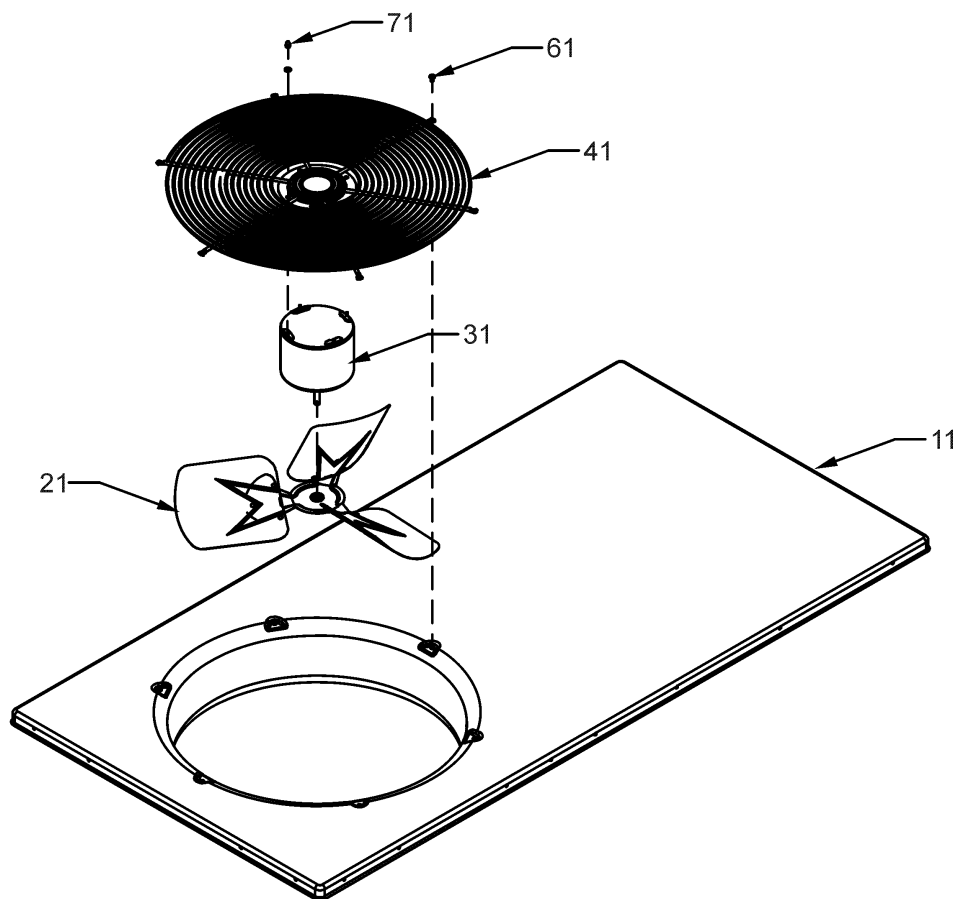
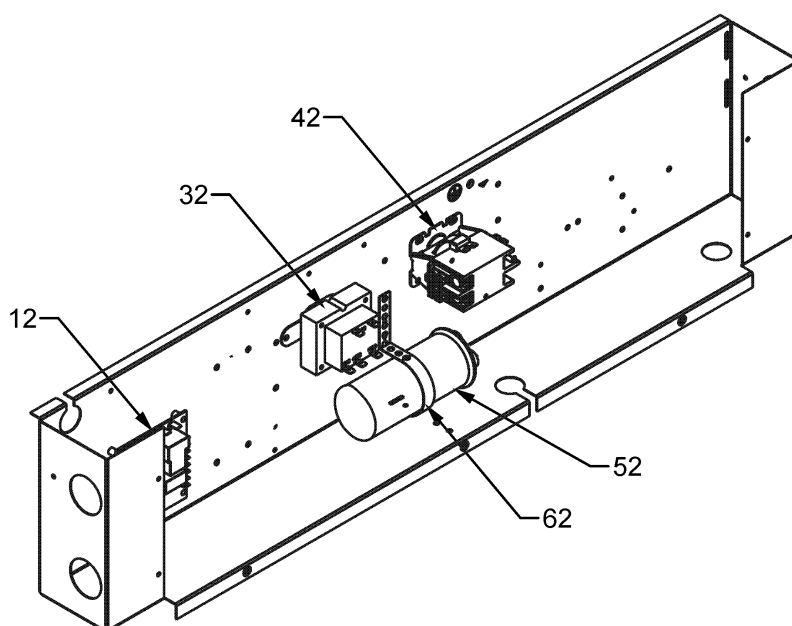


Image 2



Top Panel and Control Box Assembly

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

11	0121G00274DG	TOP PANEL PAINTED
21	0150G00004	FAN BLADE (M7, M8, M9, M10, M11, M12, M13, M14, M15, M16)
21	0150G00005	FAN BLADE (M1, M2, M3, M4)
21	B1086765	FAN BLADE TYPE 3 (M5, M6)
31	0131M00061	COND MOTOR 1/4 HP, 1 SP, 8 PL (M5, M6)
31	0131M00009P	COND MOTOR 1/6 HP, 1 SP, 8 PL (M1, M2, M3,
31	0131M00429	COND MOTOR, 1/4 HP, 1 SP, 6 PL (M7, M8, M9, M10, M11, M12, M13, M14, M15, M16)
41	0152G00003	FAN GRILLE
61	M0221817	SMALL SCREW (QTY 4)
71	0163M00006P	ACORN NUT 5/16 HEX BLACK (QTY 4)
NS	17788000083F	PVC CONDUIT 8.25"

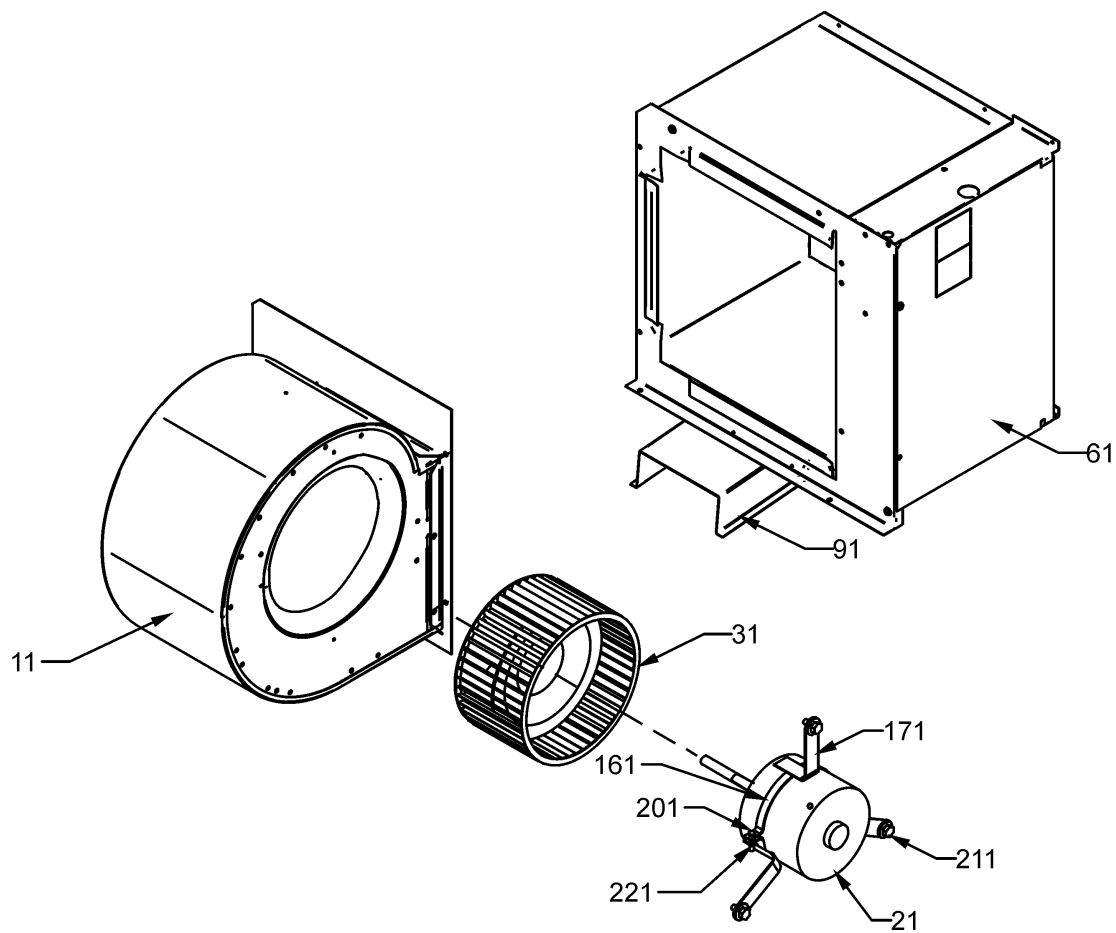
Image 2:

12	PCBDM133	DEFROST CONTROL BOARD
32	0130M00138	TRANSFORMER, 208/230, 24V
42	CONT1P025024V	CONTACTOR 25 AMP, 1P, 24V (M1, M2, M3, M4, M5, M6)
42	CONT1P030024V	CONTACTOR 30 AMP, 1P, 24V (M7, M8, M9, M10, M11, M12)
42	CONT2P040024V	CONTACTOR 40 AMP, 2P, 24V (M13, M14, M15, M16)
52	CAP050400440CT	CAPACITOR 5/40/440V/DUAL RD (M1, M2, M3, M4)
52	CAP050450440CT	CAPACITOR 5/45/440V/DUAL RD (M5, M6, M7, M8, M9, M10, M11, M12)
52	CAP050700440CT	CAPACITOR 5/70/440V/DUAL RD (M13, M14, M15, M16)
62	20520901	CAPACITOR STRAP
NS	0259G00003	WIRE HARNESS, ELECTRIC HEAT

Expanded Model Nomenclature

M1 - GPH1424H41DC
 M2 - GPH1424H41DD
 M3 - GPH1430H41DC
 M4 - GPH1430H41DD
 M5 - GPH1436H41DC
 M6 - GPH1436H41DD
 M7 - GPH1442H41EA
 M8 - GPH1442H41EB
 M9 - GPH1442H41EC
 M10 - GPH1448H41EA
 M11 - GPH1448H41EB
 M12 - GPH1448H41EC
 M13 - GPH1460H41EA
 M14 - GPH1460H41EB
 M15 - GPH1460H41EC
 M16 - GPH1460H41FA

Blower Assembly



Blower Assembly

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
Image 1:			
11	10324248		BLOWER HOUSING 10 X 8 (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12)
11	0271G00017		BLOWER HOUSING 11 X 8 (M13, M14, M15, M16)
21	0131G00035		PROGRAMMED MOTOR (M10, M11, M12)
21	0131M00596		PROGRAMMED MOTOR (M5, M6)
21	0131M00598		PROGRAMMED MOTOR (M1, M2)
21	0131M00600		PROGRAMMED MOTOR (M3, M4)
21	0131M00602		PROGRAMMED MOTOR (M7, M8, M9)
21	0131M00604		PROGRAMMED MOTOR (M13, M14, M15, M16)
31	B1368016		BLOWER WHEEL 10 X 8 (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12)
31	B1368054		BLOWER WHEEL 11 X 8 (M13, M14, M15, M16)
61	0121G00039P		HEATER KIT COVER
91	0121G00040P		BLOWER SUPPORT
161	0121M00038		MOTOR MOUNT BAND
171	B1376853		MOTOR MOUNT ARM (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12)
171	B1376857		MOTOR MOUNT ARM (M13, M14, M15, M16)
201	B1393323		MACHINE SCREW HWH 1/4-20 X 1-1/2 BZ
211	M0250565		TC SCREW 1.25" (QTY 3)
221	B1393800		LOCKNUT, NYLON, INSERT 1/4, 20
NS	C6121810		BLOWER CUT-OFF (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12)
NS	2964700		BLOWER CUT-OFF 11 X 8 (M13, M14, M15, M16)

Expanded Model Nomenclature

M1 - GPH1424H41DC
M2 - GPH1424H41DD
M3 - GPH1430H41DC
M4 - GPH1430H41DD
M5 - GPH1436H41DC
M6 - GPH1436H41DD
M7 - GPH1442H41EA
M8 - GPH1442H41EB
M9 - GPH1442H41EC
M10 - GPH1448H41EA
M11 - GPH1448H41EB
M12 - GPH1448H41EC
M13 - GPH1460H41EA
M14 - GPH1460H41EB
M15 - GPH1460H41EC
M16 - GPH1460H41FA