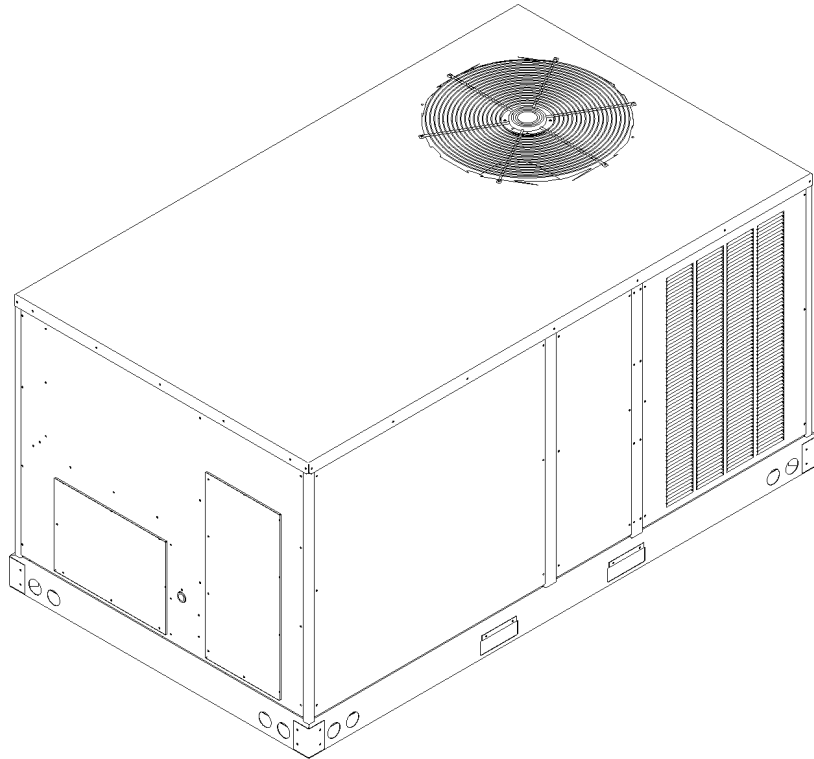


REPAIR PARTS

Light Commercial 3 Phase 3 - 4 Ton Package Heat Pumps

CPH036XXX3BXJXAA
CPH036XXX3BXXXAA
CPH036XXX3DXJXAA
CPH036XXX3DXXXAA
CPH036XXX4BXJXAA
CPH036XXX4BXXXAA
CPH036XXX7BXXXAA
CPH048XXX3BXJXAA
CPH048XXX3BXXXAA
CPH048XXX3DXJXAA
CPH048XXX3DXXXAA
CPH048XXX4BXJXAA
CPH048XXX4BXXXAA
CPH048XXX7BXXXAA



This manual is to be used by qualified technicians only.

This manual replaces RP-512.

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Important Information

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Functional Parts List	3
Illustration and Parts	4 - 13

Views shown are for parts illustrations only, not servicing procedures.

Rev. A: Added CPH0361057BXXXAA, CPH0481057BXXXAA, CPH036XXX3BXJXAA, CPH036XXX3DXJXAA, CPH036XXX4DXJXAA, CPH048XXX3BXJXAA, CPH048XXX3DXJXAA, and CPH048XXX4BXJXAA.

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:
Consumer Affairs Department
Goodman Manufacturing 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 Manufacturing Company, L.P.
7401 Security Way
Houston, Texas 77040
713-861-2500-Telephone
713-863-2382-Facsimile

Functional Parts

Part

No: Description:

Expanded Model Nomenclature

0130M00025S	24V RELAY (M3, M4, M5, M6, M7, M10, M11, M12, M13, M14)	M1 - CPH036XXX3BXJXAA
B1226207	ACCUMULATOR (M8, M9, M10, M11, M12, M13, M14)	M2 - CPH036XXX3BXXXAA
B1226206	ACCUMULATOR (M1, M2, M3, M4, M5, M6, M7)	M3 - CPH036XXX3DXJXAA
0131M00094S	BLOWER MOTOR 230V (M3, M4)	M4 - CPH036XXX3DXXXAA
0131M00091S	BLOWER MOTOR 230V (M10, M11)	M5 - CPH036XXX4BXJXAA
PCBFM103S	BOARD, ELECTRONIC BLOWER TIME DELAY RELAY	M6 - CPH036XXX4BXXXAA
CAP100000370VAS	CAPACITOR 10/370V [BLOWER] (M3, M4)	M7 - CPH036XXX7BXXXAA
CAP150000370VAS	CAPACITOR 15/370V (M10, M11)	M8 - CPH048XXX3BXJXAA
CAP050000370VAS	CAPACITOR 5/370V	M9 - CPH048XXX3BXXXAA
ZP31K5ETFE830	COMPRESSOR 31100, 575/60/3 (M7)	M10 - CPH048XXX3DXJXAA
ZP31K5ETF5830	COMPRESSOR 31200, 200/230/60/3 (M1, M2, M3, M4)	M11 - CPH048XXX3DXXXAA
ZP31K5ETFD830	COMPRESSOR 31200, 460/60/3 (M5, M6)	M12 - CPH048XXX4BXJXAA
ZP39K5ETF5830	COMPRESSOR 39000, 200/230/60/3 (M8, M9, M10, M11)	M13 - CPH048XXX4BXXXAA
ZP39K5ETFD830	COMPRESSOR 39000, 460/60/3 (M12, M13)	M14 - CPH048XXX7BXXXAA
ZP39K5ETFE830	COMPRESSOR 39000, 575/60/3 (M14)	
0131M00007PS	COND MOTOR 1/4 HP, 1 SP, 8 PL (M1, M2, M3, M4, M8, M9, M10, M11)	
B13400269S	COND MOTOR 380/460 50/60 CYCLE (M5, M6, M12, M13)	
0131M00098S	COND MOTOR 575V (M7, M14)	
CONT3P025024VS	CONTACTOR 25 AMP, 3P, 24V (M3, M4, M5, M6, M7, M10, M11, M12, M13, M14)	
CONT3P030024VS	CONTACTOR 30 AMP, 3P, 24V (M1, M2, M8, M9)	
0130M00030S	CUT-OUT SWITCH, HIGH PRESSURE	
0130L00002S	CUT-OUT SWITCH, LOW PRESSURE	
PCBDM101S	DEFROST CONTROL BOARD	
0130M00048	DEFROST THERMOSTAT (34°/60°)	
0130M00038S	TERMINAL BOARD	
B1141643	TRANSFORMER 208/230, 24V (M1, M2, M3, M4, M8, M9, M10, M11)	
B1141653	TRANSFORMER 480V, 75VA, RESETTABLE (M5, M6, M12, M13)	
0130M00045S	TRANSFORMER 575/24V (M7, M14)	

SPECIAL PARTS

0140L00058	GOODMAN LABEL
IO-338D	INSTALLATION INSTRUCTIONS
RP-512A	REPAIR PARTS MANUAL
B1757910	SUPPLEMENTAL INSERT (EBTDR)

Top Panel/Tubing Assy

Image 1

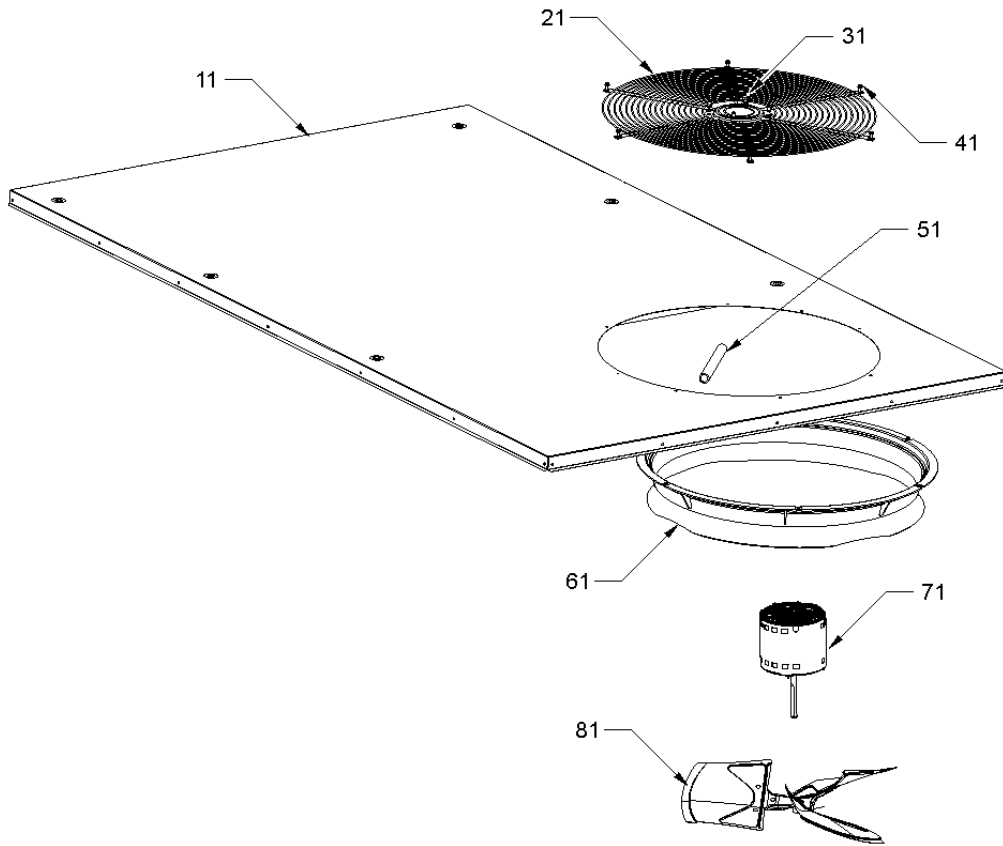
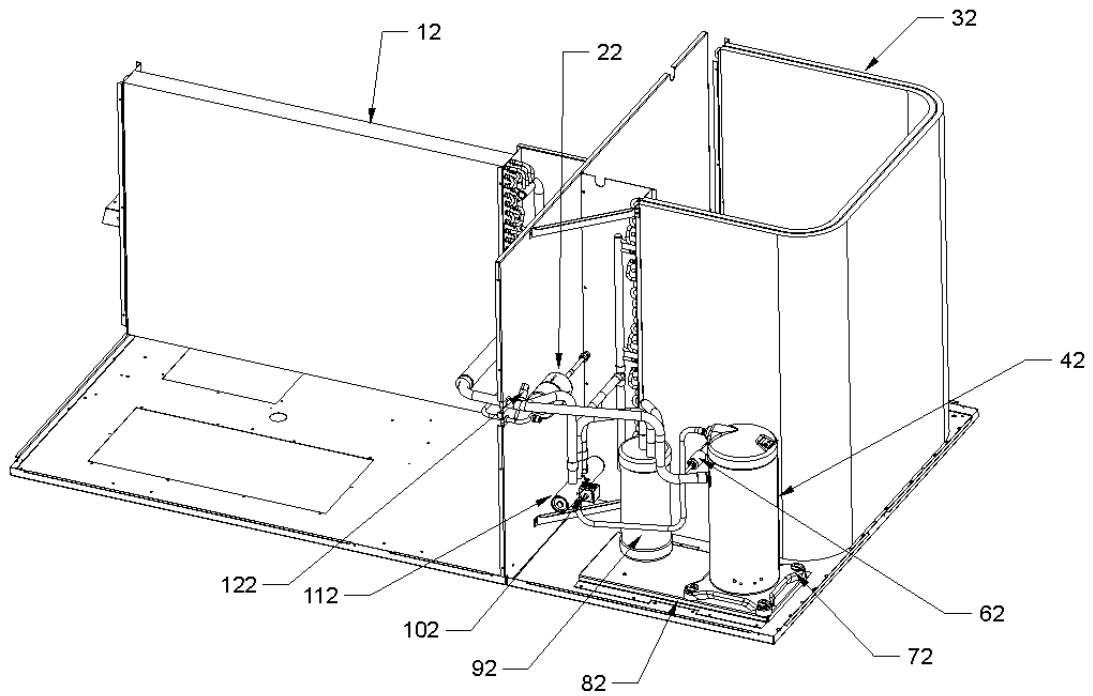


Image 2



Top Panel/Tubing Assy

Ref. Part No:	No:	Description:	Ref. Part No:	No:	Description:
<i>Image 1:</i>			NS	0159L00003	COMPRESSOR SCROLL HARNESS
11	0274L00001S	INSULATED ASSY, TOP PANEL	NS	0130M00048	DEFROST THERMOSTAT (34°/60°)
21	0152G00002S	FAN GRILLE	NS	0162M00081S	FLOWRATOR .057 [COND] (M8, M9, M10, M11, M12, M13, M14)
31	0163M00006P	ACORN NUT 5/16 HEX BLACK (QTY 4)	NS	0162M00079S	FLOWRATOR [COND] (M1, M2, M3, M4, M5, M6, M7)
41	0163M00004	SCREW #10X3/4", BLACK (M1, M2, M3, M4, M8, M9, M10, M11)	NS	0162L00003S	FLOWRATOR [EVAP] (M8, M9, M10, M11, M12, M13, M14)
41	M0221817	SMALL SCREW (M5, M6, M7, M12, M13, M14)	NS	0162M00078S	FLOWRATOR [EVAP] (M1, M2, M3, M4, M5, M6, M7)
51	17788000083F	PVC CONDUIT 8.25"	Expanded Model Nomenclature		
61	0161L00000	VENTURI RING 22"	<div style="border: 1px solid black; padding: 5px;"> M1 - CPH036XXX3BXJXAA M2 - CPH036XXX3BXXXAA M3 - CPH036XXX3DXJXAA M4 - CPH036XXX3DXXXAA M5 - CPH036XXX4BXJXAA M6 - CPH036XXX4BXXXAA M7 - CPH036XXX7BXXXAA M8 - CPH048XXX3BXJXAA M9 - CPH048XXX3BXXXAA M10 - CPH048XXX3DXJXAA M11 - CPH048XXX3DXXXAA M12 - CPH048XXX4BXJXAA M13 - CPH048XXX4BXXXAA M14 - CPH048XXX7BXXXAA </div>		
71	0131M00007PS	COND MOTOR 1/4 HP, 1 SP, 8 PL (M1, M2, M3, M4, M8, M9, M10, M11)			
71	B13400269S	COND MOTOR 380/460 50/60 CYCLE (M5, M6, M12, M13)			
71	0131M00098S	COND MOTOR 575V (M7, M14)			
81	0150G00001S	FAN BLADE			
NS	0259L00000	COND MOTOR HARNESS (M1, M2, M3, M4, M7, M8, M9, M10, M11, M14)			
NS	0259L00023	COND MOTOR HARNESS 460V (M5, M6, M12, M13)			
<i>Image 2:</i>					
12	0202L00009S	TUBING ASSY, EVAP COIL (M1, M2, M3, M4, M5, M6, M7)			
12	0202L00014S	TUBING ASSY, EVAP COIL (M8, M9, M10, M11, M12, M13, M14)			
22	20485201	BI-FLOW FILTER DRIER (M8, M9, M10, M11, M12, M13, M14)			
22	B1219204	BI-FLOW FILTER DRIER, STEEL (M1, M2, M3, M4, M5, M6, M7)			
32	0201L00008S	TUBING ASSY, COND COIL (M2, M4, M6, M7)			
32	0201L00012S	TUBING ASSY, COND COIL (M9, M11, M13, M14)			
32	0201L00019S	TUBING ASSY, COND COIL (M1, M3, M5)			
32	0201L00021S	TUBING ASSY, COND COIL (M8, M10, M12)			
42	ZP31K5ETFE830	COMPRESSOR 31100, 575/60/3 (M7)			
42	ZP31K5ETF5830	COMPRESSOR 31200, 200/230/60/3 (M1, M2, M3, M4)			
42	ZP31K5ETFD830	COMPRESSOR 31200, 460/60/3 (M5, M6)			
42	ZP39K5ETF5830	COMPRESSOR 39000, 200/230/60/3 (M8, M9, M10, M11)			
42	ZP39K5ETFD830	COMPRESSOR 39000, 460/60/3 (M12, M13)			
42	ZP39K5ETFE830	COMPRESSOR 39000, 575/60/3 (M14)			
62	0130M00030S	CUT-OUT SWITCH, HIGH PRESSURE			
72	M0221641	TF SHOULDER SCREW (QTY 4)			
82	0121L00004	COMPRESSOR MOUNTING PLATE			
92	B1226206	ACCUMULATOR (M1, M2, M3, M4, M5, M6, M7)			
92	B1226207	ACCUMULATOR (M8, M9, M10, M11, M12, M13, M14)			
112	B1227316S	REVERSING VALVE (M1, M2, M3, M4, M5, M6, M7)			
112	B1227318S	REVERSING VALVE (M8, M9, M10, M11, M12, M13, M14)			
122	0130L00002S	CUT-OUT SWITCH, LOW PRESSURE			
NS	B1339533	COMPRESSOR GROMMET (QTY 4)			

Cabinet Assy

Image 1

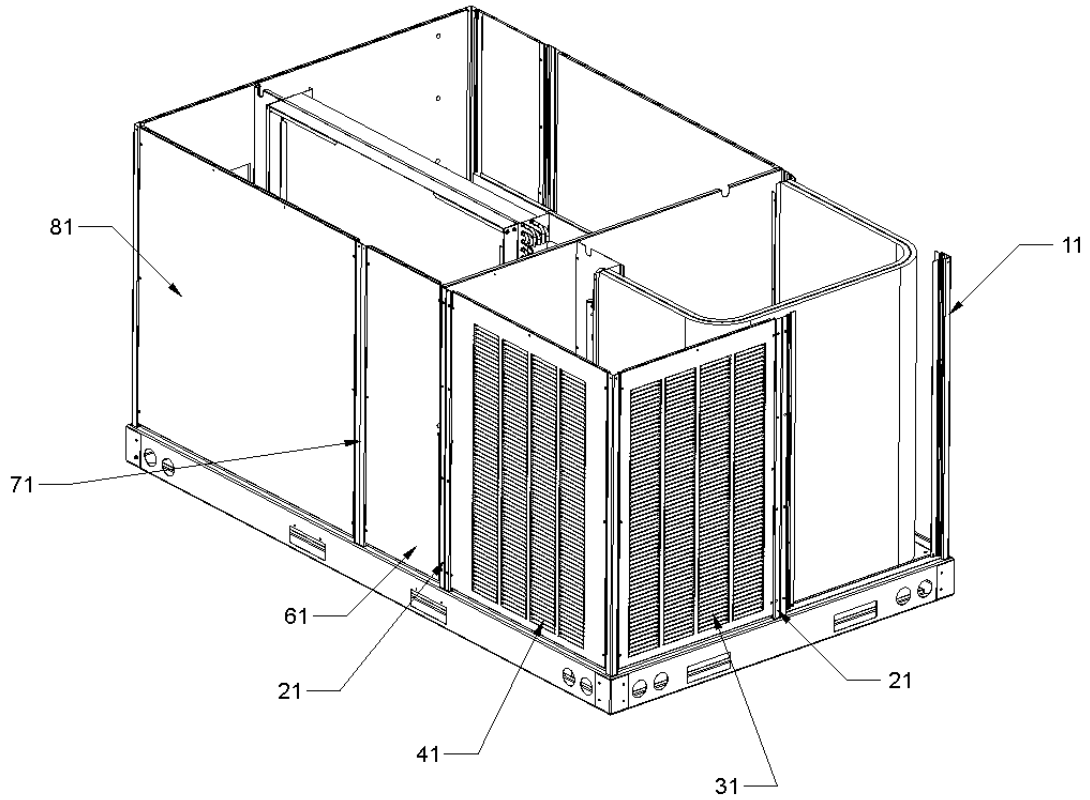
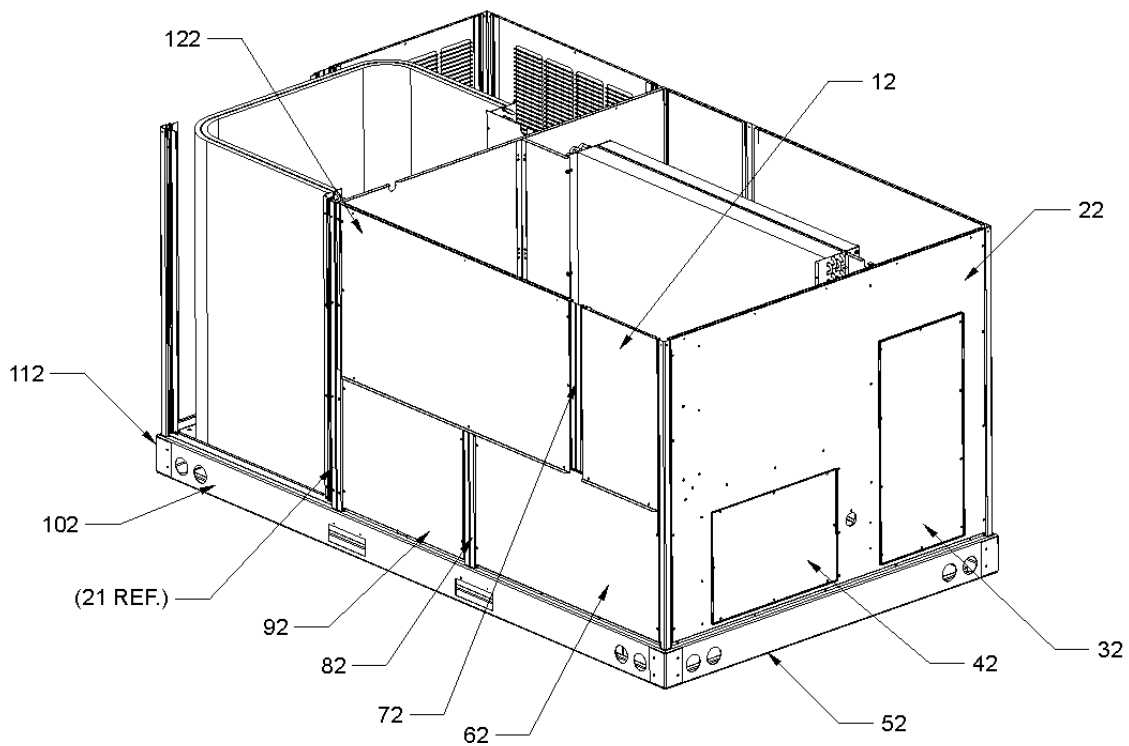


Image 2



Cabinet Assy

Ref. Part No:	Part No:	Description:	Ref. Part No:	Part No:	Description:
---------------	----------	--------------	---------------	----------	--------------

Image 1:

11	0121G00253RFDG	CORNER POST 36" (QTY 4)
21	0121G00283RFDG	POST-SIDE SUPPORT (QTY 3)
31	0121L00128DGS	LOUVERED END PANEL
41	0121L00001DGS	LOUVERED SIDE PANEL
61	0270L00004S	INSULATED ASSY, FILTER DOOR
71	0121L00125RFDG	SIDE POST-FILTER DOOR
81	0270L00003S	INSULATED ASSY, ECONOMIZER DOOR
NS	0140L00058	GOODMAN LABEL

Image 2:

12	0121G00294DGS	CONTROL DOOR
22	0270L00001S	INSULATED ASSY, DUCT PANEL
32	0270L00011S	INSULATED ASSY, RETURN DUCT
42	0270L00012S	INSULATED ASSY, SUPPLY DUCT
52	0121G00262S	BASEPAN RAIL-SHORT (QTY 2)
62	0270L00018S	INSULATED ASSY, HEAT EXCHANGER DOOR
72	0121G00298RFDG	CONTROL POST
82	0121G00299RFDG	POST-BURNER DOOR
92	0121L00017DG	BURNER DOOR
102	0121G00261	BASEPAN RAIL-LONG (QTY 2)
112	0121G00301	RAIL CORNER BRACKET (QTY 4)
122	0270L00002S	INSULATED ASSY, BLOWER DOOR

Expanded Model Nomenclature

M1 - CPH036XXX3BXJXAA
M2 - CPH036XXX3BXXXAA
M3 - CPH036XXX3DXJXAA
M4 - CPH036XXX3DXXXAA
M5 - CPH036XXX4BXJXAA
M6 - CPH036XXX4BXXXAA
M7 - CPH036XXX7BXXXAA
M8 - CPH048XXX3BXJXAA
M9 - CPH048XXX3BXXXAA
M10 - CPH048XXX3DXJXAA
M11 - CPH048XXX3DXXXAA
M12 - CPH048XXX4BXJXAA
M13 - CPH048XXX4BXXXAA
M14 - CPH048XXX7BXXXAA

Partition Assy

Image 1

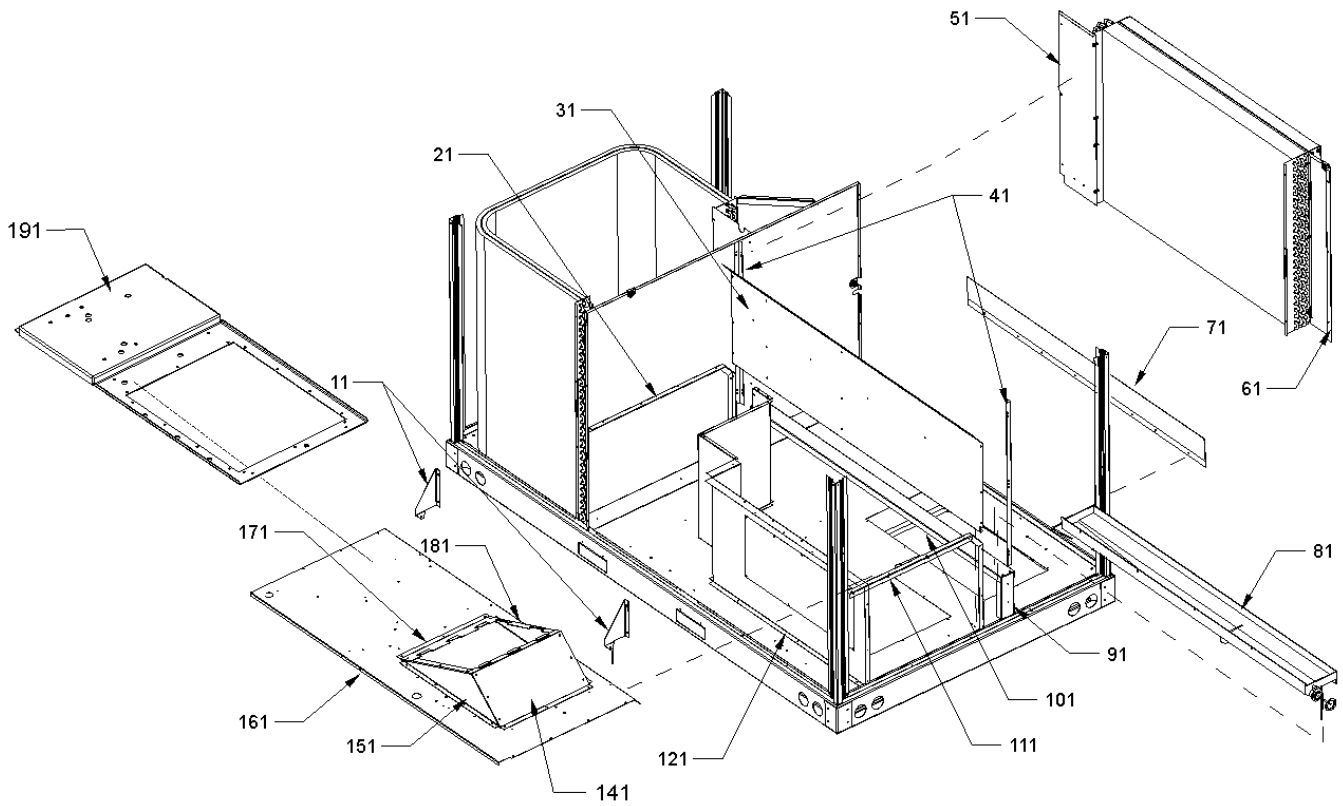
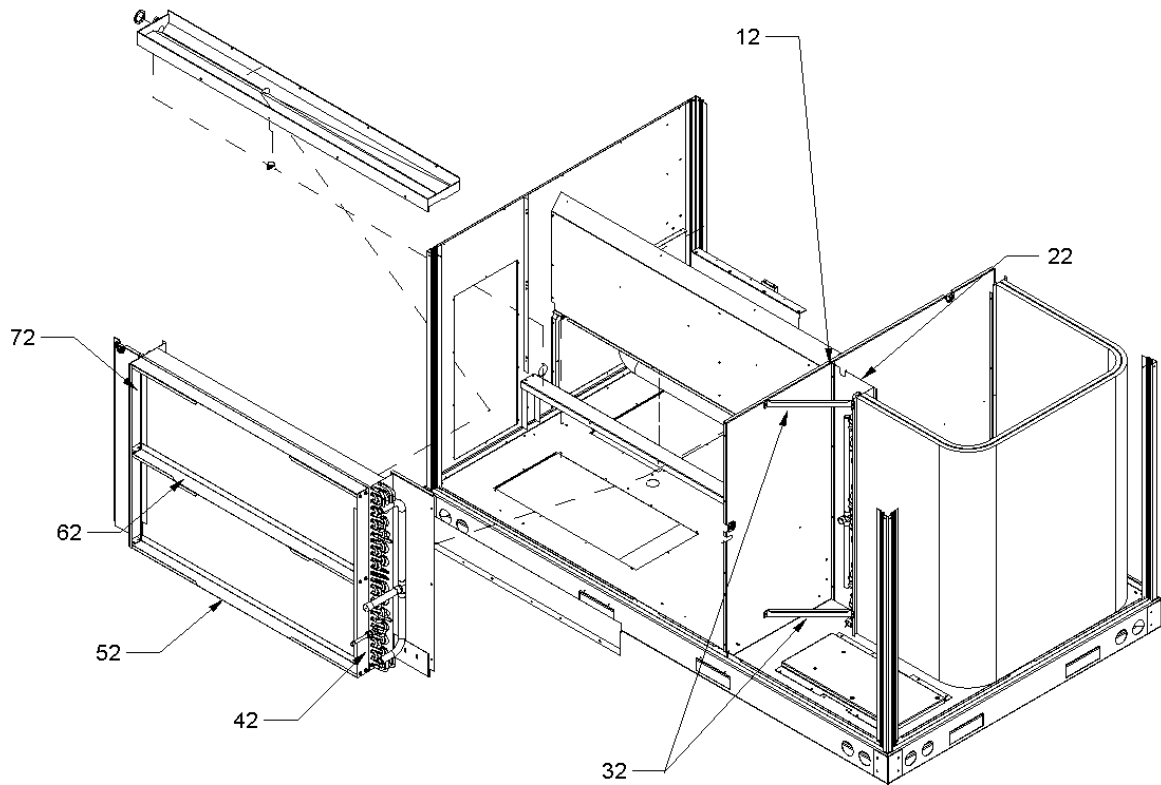


Image 2



Partition Assy

**Ref. Part
No: No:**

Description:

**Ref. Part
No: No:**

Description:

Image 1:

11	0121L00062	EVAP COIL BRACE (QTY 2)
21	0121L00006	MOUNTING ANGLE-DECK, COND END
31	0121L00003	DECK SIDE CHANNEL
41	0121L00005	EVAP MOUNTING ANGLE (QTY 2)
51	0121G00256	EVAP EXTENSION-HAIRPIN SIDE (M8, M9, M10, M11, M12, M13, M14)
51	0121L00153	EVAP EXTENSION-HAIRPIN SIDE (M1, M2, M3, M4, M5, M6, M7)
61	0121G00255	EVAP EXTENSION-RETURN SIDE
71	0121L00016	EVAP BLOW-OFF SHIELD
81	0161L00001	DRAIN PAN
91	0121L00037	SUPPORT LEG, DRAIN PAN
101	0121L00035	DRAIN PAN SUPPORT
111	0121L00007	MOUNTING ANGLE-DECK, DUCT END
121	0121L00160	ELECTRIC HEAT PANEL (M8, M9, M10, M11, M12, M13, M14)
121	0121L00179	ELECTRIC HEAT PANEL (M1, M2, M3, M4, M5, M6, M7)
141	0121G00264	BLOWER TRANSITION, RH END
151	0121G00265	BLOWER TRANSITION, FRONT
161	0121L00159	BLOWER DECK
171	0121G00267	BLOWER TRANSITION, LH END (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
171	0121L00151	BLOWER TRANSITION, LH END (M3, M4, M10, M11)
181	0121G00266	BLOWER TRANSITION, BACK
191	0270L00014S	MOUNTING PLATE ASSY (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
NS	0121L00036	SUPPORT LEG, DRAIN PAN

Expanded Model Nomenclature

M1 - CPH036XXX3BXJXAA
M2 - CPH036XXX3BXXXAA
M3 - CPH036XXX3DXJXAA
M4 - CPH036XXX3DXXXAA
M5 - CPH036XXX4BXJXAA
M6 - CPH036XXX4BXXXAA
M7 - CPH036XXX7BXXXAA
M8 - CPH048XXX3BXJXAA
M9 - CPH048XXX3BXXXAA
M10 - CPH048XXX3DXJXAA
M11 - CPH048XXX3DXXXAA
M12 - CPH048XXX4BXJXAA
M13 - CPH048XXX4BXXXAA
M14 - CPH048XXX7BXXXAA

Image 2:

12	0121L00008	COND MOUNTING ANGLE
22	0121G00258	COND BLOCK-OFF
32	0121L00064	COND COIL BRACE (QTY 2)
42	0121L00204	FILTER ANGLE-VERTICAL (RETURN SIDE)
52	0121L00206	FILTER ANGLE-HORIZONTAL (QTY 2)
62	0121L00220	FILTER RACK STRAP (QTY 2)
72	0121L00205	FILTER ANGLE-VERTICAL (HAIRPIN SIDE)
NS	0160L00008	FILTER 14 X 20 X 2 (QTY 4)

Belt Drive Assy

Image 1

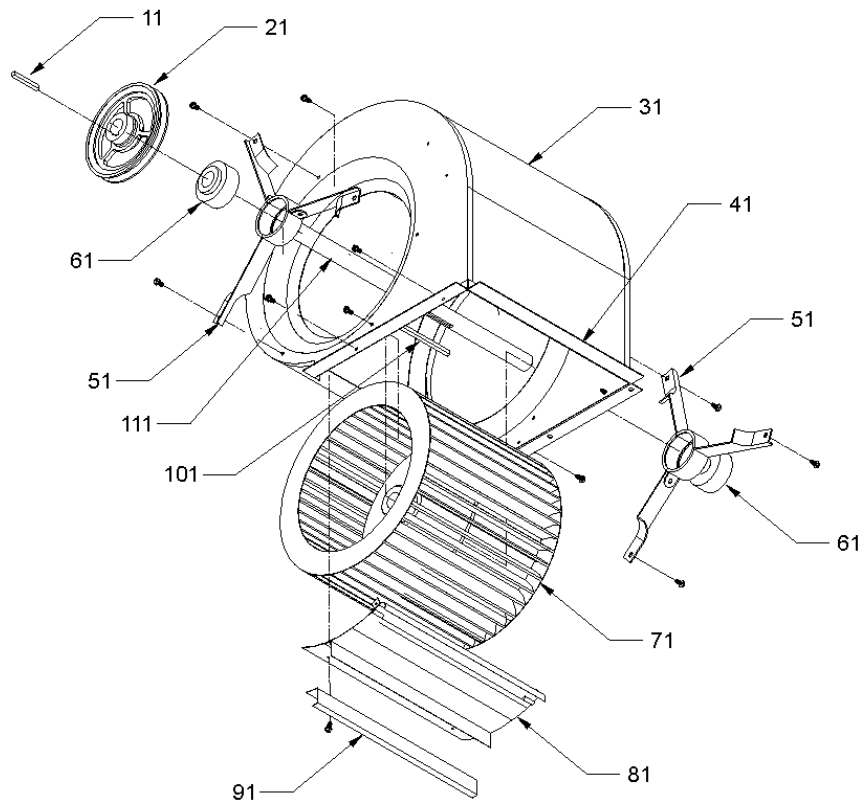
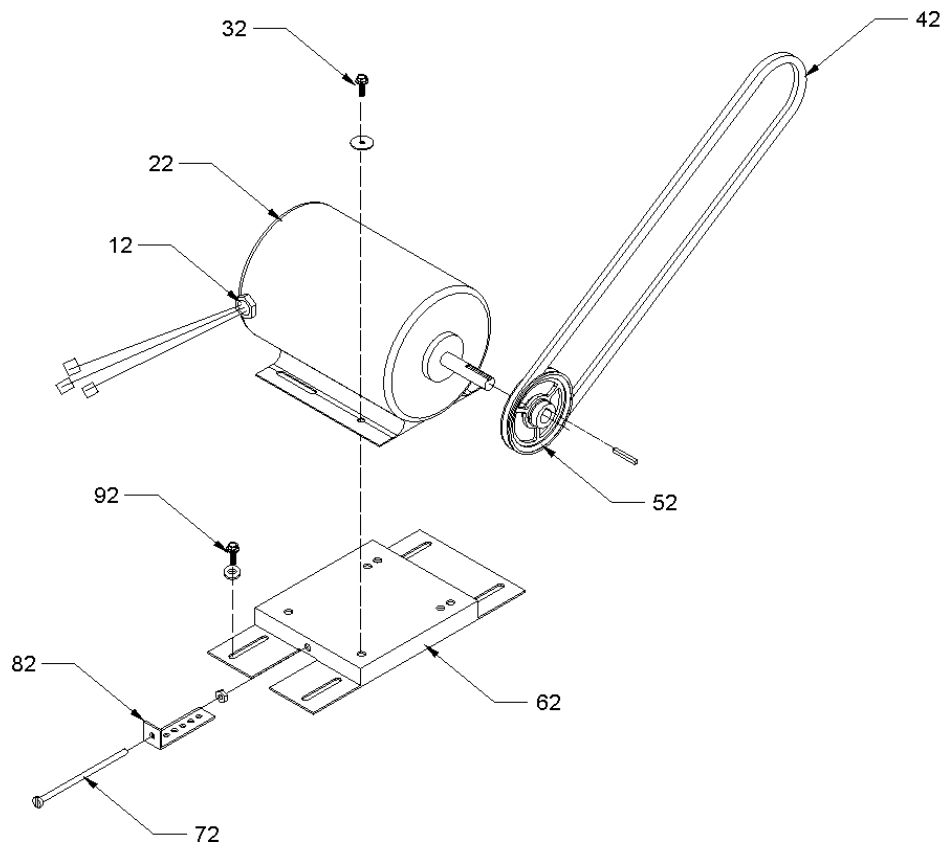


Image 2



Belt Drive Assy

**Ref. Part
No: No:**

Description:

**Ref. Part
No: No:**

Description:

Image 1:

11	B1398604	STEEL KEY (000158812) 2.0" (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
21	B2120011	FIXED SHEAVE (M1, M2, M5, M6)
21	B3204303	FIXED SHEAVE AK61 (M7, M14)
21	B3204310	FIXED SHEAVE AK66 (M8, M9, M12, M13)
31	2539302FS	BLOWER HOUSING 11 X 10 (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
41	0121L00050	BLOWER MOUNTING BRACKET (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
51	B3201300	MOUNTING BRACKET BEARING (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
61	B1399500	BALL BEARING 1.00" (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
71	B1368056	BELT DRIVE BLOWER WHEEL (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
81	1864700F	BELT DRIVE BLOWER CUT-OFF (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
91	0121L00022S	BLOWER MOUNTING ANGLE (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
101	B1398603	STEEL KEY (000158812) 4.5" (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
111	0163L00005	BELT DRIVE BLOWER SHAFT (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
NS	0259L00008	MOTOR HARNESS-BELT DRIVE (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)

Expanded Model Nomenclature

M1 - CPH036XXX3BXJXAA
M2 - CPH036XXX3BXXXAA
M3 - CPH036XXX3DXJXAA
M4 - CPH036XXX3DXXXAA
M5 - CPH036XXX4BXJXAA
M6 - CPH036XXX4BXXXAA
M7 - CPH036XXX7BXXXAA
M8 - CPH048XXX3BXJXAA
M9 - CPH048XXX3BXXXAA
M10 - CPH048XXX3DXJXAA
M11 - CPH048XXX3DXXXAA
M12 - CPH048XXX4BXJXAA
M13 - CPH048XXX4BXXXAA
M14 - CPH048XXX7BXXXAA

Image 2:

12	B1393726	ELECT. CONNECTING BUSHING (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
22	0131L00003S	BELT DRIVE MOTOR 1 HP (M1, M2, M5, M6, M8, M9, M12, M13)
22	0131L00004S	BELT DRIVE MOTOR 1.5 HP 575V (M7, M14)
32	B1393738	BOLT 1/4-20 X 3/4" (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
42	B2110011	FAN BELT AX41 (M1, M2, M5, M6)
42	B2110005	NOTCHED FAN BELT (M7, M8, M9, M12, M13, M14)
52	0163L00024	VARIABLE PITCH SHEAVE 1VL40 X 5/8" (M1, M2, M5, M6)
52	B2120001	VARIABLE PITCH SHEAVE 1VL44 X 3/8" (M7, M8, M9, M12, M13, M14)
62	0270L00046S	MOTOR BASE ASSY (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
72	0163M00045	BOLT 1/4-20 X 4" (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
82	3225000F	BELT TIGHTENER ANGLE (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
92	B1446707	SCREW 5/16-18 X 1" (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)

Blower/Control Box Assy

Image 1

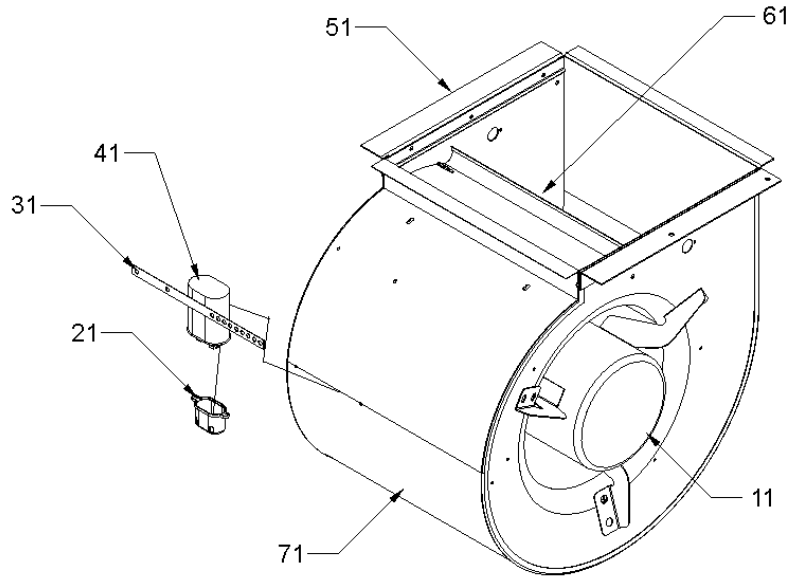
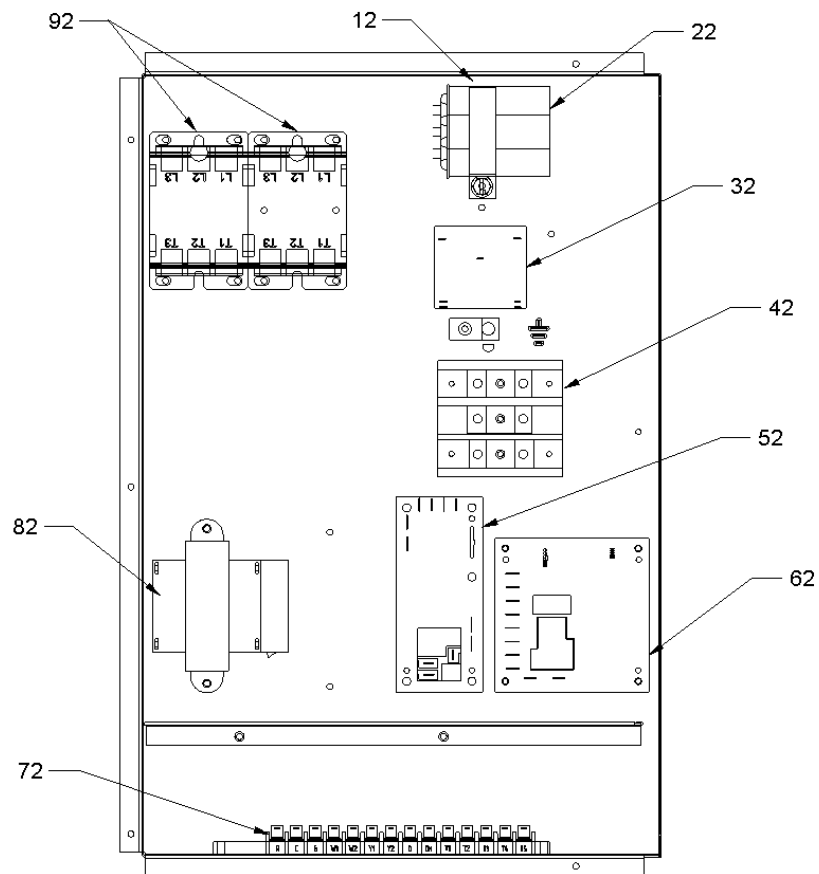


Image 2



Blower/Control Box Assy

**Ref. Part
No: No:**

Description:

**Ref. Part
No: No:**

Description:

Image 1:

11	0131M00091S	BLOWER MOTOR 230V (M10, M11)
11	0131M00094S	BLOWER MOTOR 230V (M3, M4)
21	B821700	CAPACITOR BOOT (M3, M4, M10, M11)
31	20520901	CAPACITOR STRAP (M3, M4, M10, M11)
41	CAP100000370VAS	CAPACITOR 10/370V [BLOWER] (M3, M4)
41	CAP150000370VAS	CAPACITOR 15/370V (M10, M11)
51	0121L00150	BLOWER MOUNTING ANGLE (M3, M4, M10, M11)
61	C6121806	BLOWER CUT-OFF (M3, M4, M10, M11)
71	11185817	BLOWER HOUSING (M3, M4, M10, M11)
NS	0150M00014S	BLOWER WHEEL (M3, M4, M10, M11)
NS	M0250558	TC SCREW (M3, M4, M10, M11)

Image 2:

12	20520901	CAPACITOR STRAP
22	CAP050000370VAS	CAPACITOR 5/370V
32	0130M00025S	24V RELAY (M3, M4, M5, M6, M7, M10, M11, M12, M13, M14)
42	16330-3S	POWER BLOCK
52	PCBFM103S	BOARD, ELECTRONIC BLOWER TIME DELAY RELAY
62	PCBDM101S	DEFROST CONTROL BOARD
72	0130M00038S	TERMINAL BOARD
82	B1141643	TRANSFORMER 208/230, 24V (M1, M2, M3, M4, M8, M9, M10, M11)
82	B1141653	TRANSFORMER 480V, 75VA, RESETTABLE (M5, M6, M12, M13)
92	CONT3P025024VS	CONTACTOR 25 AMP, 3P, 24V (M3, M4, M5, M6, M7, M10, M11, M12, M13, M14)
92	CONT3P030024VS	CONTACTOR 30 AMP, 3P, 24V (M1, M2, M8, M9)
102	0130M00045S	TRANSFORMER 575/24V (M7, M14)
NS	0259L00014	CONTROL HARNESS 230V (M1, M2, M8, M9)
NS	0259L00037	CONTROL HARNESS 230V (M3, M4, M10, M11)
NS	0259L00013	CONTROL HARNESS 460V/575V (M5, M6, M7, M12, M13, M14)
NS	0259L00005	ECONOMIZER HARNESS
NS	0259L00036	EVAP MOTOR HARNESS, PSC (M3, M4, M10, M11)
NS	0259L00032	LCM HARNESS, ELECTRIC HEAT (M1, M2, M5, M6, M7, M8, M9, M12, M13, M14)
NS	0259L00003	POWER HARNESS
NS	0259L00015	RELAY HARNESS 460V/575V (M5, M6, M7, M12, M13, M14)
NS	0259L00035	WIRE HARNESS, ELECTRIC HEAT (M3, M4, M10, M11)

Expanded Model Nomenclature

M1 - CPH036XXX3BXJXAA
M2 - CPH036XXX3BXXXAA
M3 - CPH036XXX3DXJXAA
M4 - CPH036XXX3DXXXAA
M5 - CPH036XXX4BXJXAA
M6 - CPH036XXX4BXXXAA
M7 - CPH036XXX7BXXXAA
M8 - CPH048XXX3BXJXAA
M9 - CPH048XXX3BXXXAA
M10 - CPH048XXX3DXJXAA
M11 - CPH048XXX3DXXXAA
M12 - CPH048XXX4BXJXAA
M13 - CPH048XXX4BXXXAA
M14 - CPH048XXX7BXXXAA