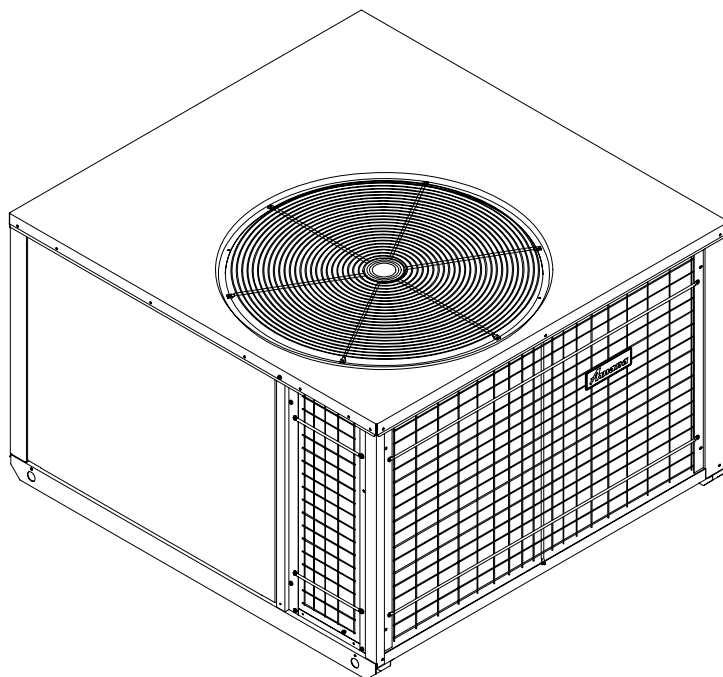


PHD* Package Heat Pump Unit

PHD42C02E	P1235704C
PHD42C02E1	P1239709C
PHD48C02E	P1235705C
PHD48C02E1	P1239710C



RP6312005
Revision 1
March 2006

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Important Information

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Functional Parts List	3
Illustration and Parts	4 - 15

Views shown are for parts illustrations only, not servicing procedures

Rev. 1: Added end bells.

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.

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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:

20214302	BOARD-DEFROST
20158901	BOARD-INTERFACE
D6789033	CAPACITOR-METAL (M1, M3)
D6789042	CAPACITOR-METAL (M2, M4)
11012512	COMP ZR47K3-PFV235 (M2, M4)
11012502	COMP-CP ZR40K3 (M1, M3)
20333002	COND ASSY (M3, M4)
20192002	COND ASSY (M1, M2)
10030914	CONTROL-DEF 30/60
20229801	EVAPORATOR ASSY (M1)
20207201	EVAPORATOR ASSY (M2)
20342701	EVAPORATOR ASSY (M3)
20332901	EVAPORATOR ASSY (M4)
11182905	FAN-CONDENSER CW
20217003	HARNESS-BLOWER (ECM POWER HARNESS 5-PIN)
10685013	HARNESS-COIL (M3, M4)
10685012	HARNESS-COIL (M1, M2)
20203901	HARNESS-COMPRESSOR
20311201	HARNESS-CONTROL
20158801	HARNESS-WIRING (M1, M2, M4)
11118705	HARNESS-WIRING (ECM MOTOR HARNESS 16-PIN) (M3)
0231K00007A	MOTOR BLWR-EC 1/2 (M1, M3)
0231K00021A	MOTOR BLWR-EC 3/4 (M2, M4)
11112806	MOTOR-COND (M2, M4)
11112805	MOTOR-COND (M1, M3)
20509210	SERVICE END BELL (M1, M3)
20510120	SERVICE END BELL (M2, M4)
11120302	TRANSFORMER
D6723302	WHEEL-BLOWER

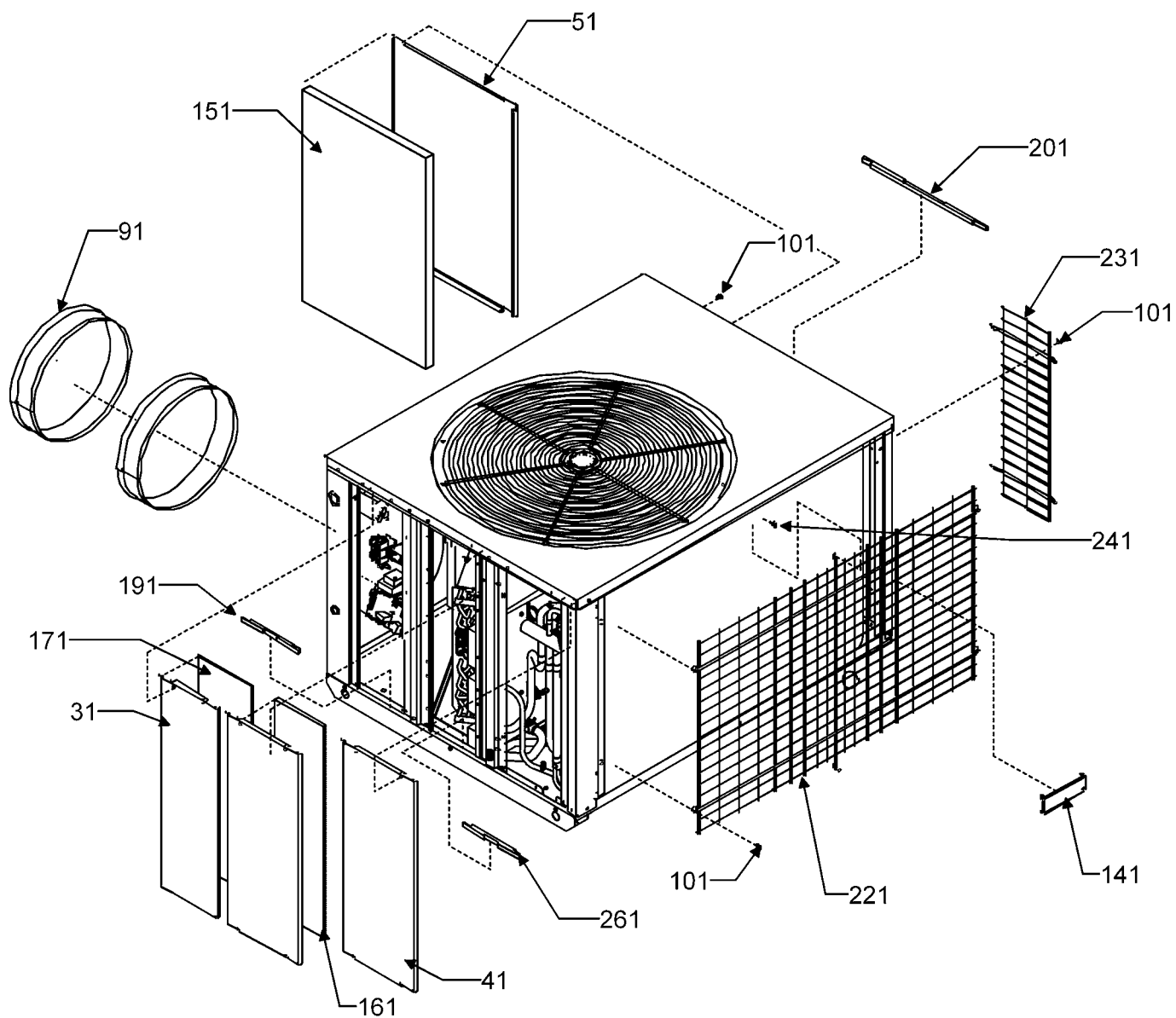
SPECIAL PARTS

10730418	MANUAL-INSTALL
10500218	MANUAL-USERS
RP6312005	PARTS MANUAL
RS6300003	SERVICE MANUAL
20313905	SPEC SHEET (M2, M4)
20313904	SPEC SHEET (M1, M3)
RT6332002	TECHNICAL INFORMATION
10017110	WARRANTY CERT

Expanded Model Nomenclature

M1 - PHD42C02E	P1235704C
M2 - PHD48C02E	P1235705C
M3 - PHD42C02E1	P1239709C
M4 - PHD48C02E1	P1239710C

Outer Cabinet



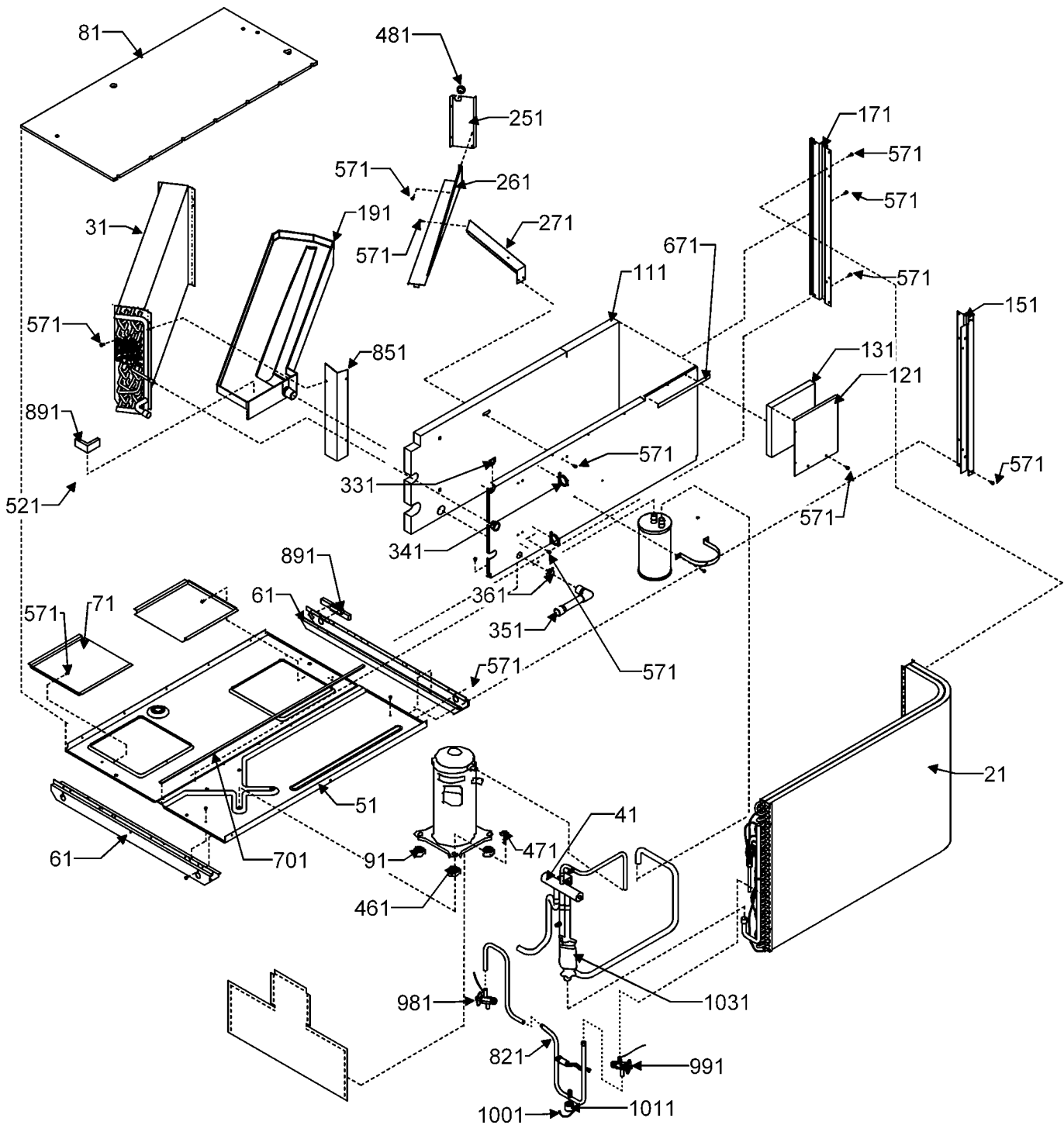
Outer Cabinet

Ref. Part			Ref. Part		
No:	No:	Description:	No:	No:	Description:
Image 1:					
31	11099013	DOOR-CAB			
41	11099014	DOOR-CAB (QTY 2)			
51	11099015	DOOR-CAB			
91	20014201	TRANSITION-DUCT (M1, M3)			
101	M0211017	SCREW-SM #8-1/2LG (QTY 3)			
141	20187902	NAMEPLATE-SIDE			
151	11130118	INSULATION			
161	11131111	INSULATION			
171	20014702	INSULATION			
191	11160106	GASKET-FOAM			
201	11160104	GASKET-FOAM			
221	20199704	GRILLE-FLAT			
231	11184706	GRILLE-FLAT			
241	M0229130	SCREW-SD			
261	11160107	GASKET-FOAM			
NS	M0321216	TIE-ELEC (M1, M2)			

Expanded Model Nomenclature

M1 - PHD42C02E	P1235704C
M2 - PHD48C02E	P1235705C
M3 - PHD42C02E1	P1239709C
M4 - PHD48C02E1	P1239710C

Chassis



Chassis

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
<i>Image 1:</i>		1001 20031203	CLAMP-TXV BULB (M1, M3)
21 20192002	COND ASSY (M1, M2)	1001 M0321216	TIE-ELEC (M1, M2)
21 20333002	COND ASSY (M3, M4)	1011 C6466001	GROMMET-COMP
31 20207201	EVAPORATOR ASSY (M2)	NS 20229304	TUBE-EVAP/LIQUID (M2)
31 20229801	EVAPORATOR ASSY (M1)	NS 20229303	TUBE-EVAP-LIQUID (M1)
31 20332901	EVAPORATOR ASSY (M4)	Expanded Model Nomenclature	
31 20342701	EVAPORATOR ASSY (M3)	M1 - PHD42C02E	P1235704C
41 20217905	REV VALVE WELD (M1)	M2 - PHD48C02E	P1235705C
41 20217907	REV VALVE WELD (M2)	M3 - PHD42C02E1	P1239709C
41 20332602	REV VALVE WELD (M4)	M4 - PHD48C02E1	P1239710C
41 20332603	REV VALVE WELD (M3)		
51 20001202	BASEPAN		
61 20000503	RAIL-BASEPAN (QTY 2)		
71 20001101	COVER-DUCT (QTY 2)		
81 20012902	INSUL-BASEPAN		
91 11012512	COMP ZR47K3-PFV235 (M2, M4)		
91 11012502	COMP-CP ZR40K3 (M1, M3)		
111 20013602	INSUL-COND (M1, M2)		
111 20013604	INSUL-COND PNL (M3, M4)		
121 20000901	PLATE-COND		
131 11130114	INSUL-PLATE		
151 20001805	POST-CORNER		
171 11098721	POST-SIDE (QTY 2)		
191 20000601	PAN-DRIP		
251 11197101	PART-EVAP		
261 20014401	COIL-BAFFLE		
271 20013901	SUPPORT-MOTOR		
331 A4568804	GROMMET-D		
341 M0118702	CLIP-GUIDE		
351 20295401	DRAIN ASSY		
361 M0117605	CLAMP-TUBE (QTY 2)		
461 10107301	GROMMET-COMP FOOT (QTY 4)		
471 M0221641	SCREW-SHOULDER TF (QTY 4)		
481 A4554820	BUSHING-SNAP (QTY AR)		
521 M0275563	SEALER-RTV (QTY 4)		
571 M0221817	SCREW-SM (QTY AR)		
671 10839803	GASKET-.12X.50 (QTY AR)		
701 10839810	GASKET-.18X.38 (QTY AR)		
821 20233502	LIQUID LINE WELD (M1, M2)		
851 20247106	FILLER-EVAP		
891 10839807	GASKET-.37X.75 (QTY AR)		
981 20212403	VALVE-EXP INDOOR (M2)		
981 20212407	VALVE-EXP INDOOR (M1)		
991 20212404	VALVE-EXP OUTDOOR (M2)		
991 20212408	VALVE-EXP OUTDOOR (M1)		
1001 20031201	CLAMP-TXV BULB (M2, M4)		

Reversing Valve

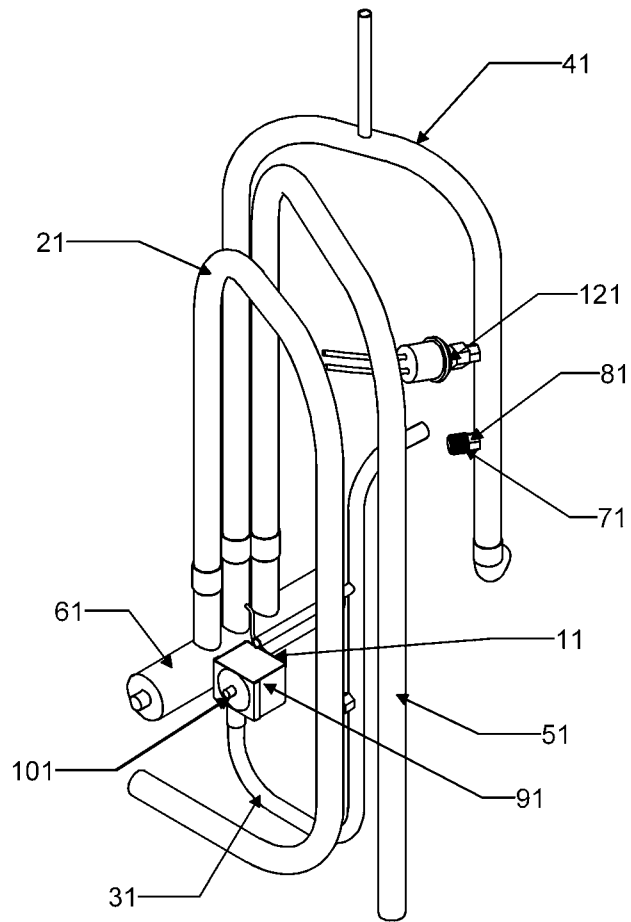
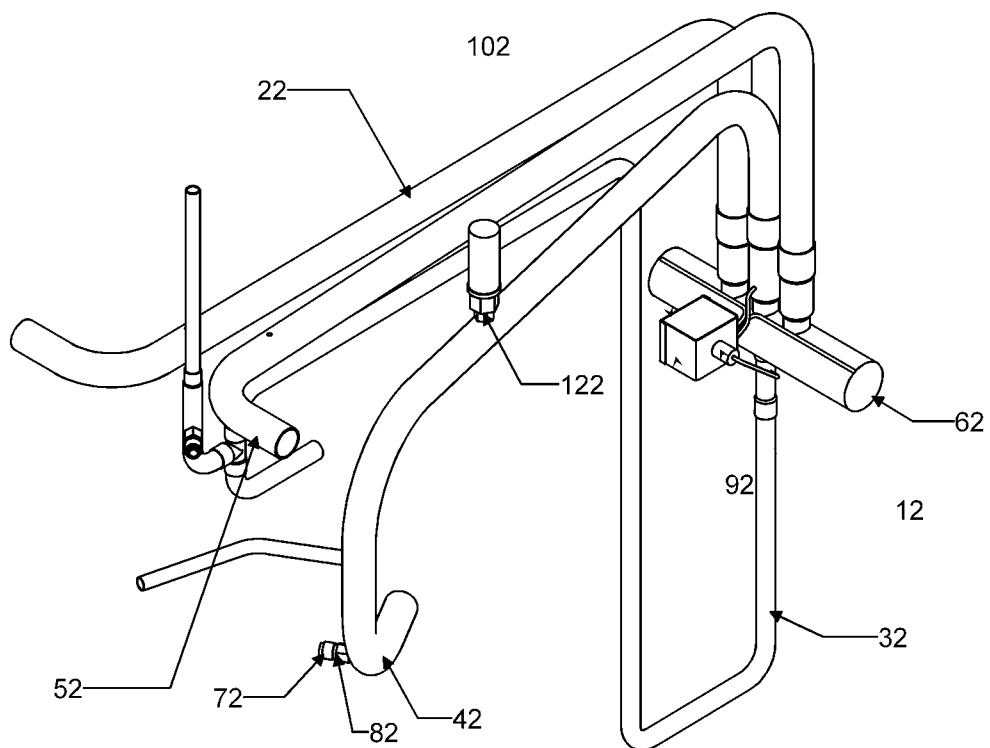


Image 1

Image 2



Reversing Valve

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

11	10702201	COIL-REV VALVE (M1, M2)
21	20217701	TUBE-RVLV/INDOOR (M1, M2)
31	20236901	TUBE-RVLV/COMP-D (M1)
41	20236903	TUBE-RVLV/COMP-S (M2)
51	20217601	TUBE-RVLV/OUTDOOR (M1, M2)
61	10680904	VALVE-REVERSING (M1, M2)
71	A4692602	NUT-CAP (M1, M2)
81	A4692801	VALVE-CORE (M1, M2)
91	10702301	COVER-COIL (M1, M2)
101	10702401	LOCKNUT (M1, M2)
121	C6453316	CUTOUT-LOW PRESS (M1, M2)

Image 2:

12	10702201	COIL-REV VALVE (M3, M4)
22	20332001	TUBE-EVAP/REV (M3, M4)
32	20333202	TUBE WELD-DISCH (M4)
32	20333203	TUBE WELD-DISCH (M3)
42	20333102	TUBE WELD-SUCT (M4)
42	20333103	TUBE WELD-SUCT (M3)
52	20331901	TUBE-COND/REV (M3, M4)
62	10680904	VALVE-REVERSING (M3, M4)
72	A4692602	NUT-CAP (M3, M4)
82	A4692801	VALVE-CORE (M3, M4)
102	10702401	LOCKNUT (M3, M4)
122	C6453316	CUTOUT-LOW PRESS (M3, M4)

Expanded Model Nomenclature

M1 - PHD42C02E	P1235704C
M2 - PHD48C02E	P1235705C
M3 - PHD42C02E1	P1239709C
M4 - PHD48C02E1	P1239710C

Internal Components

Image 1

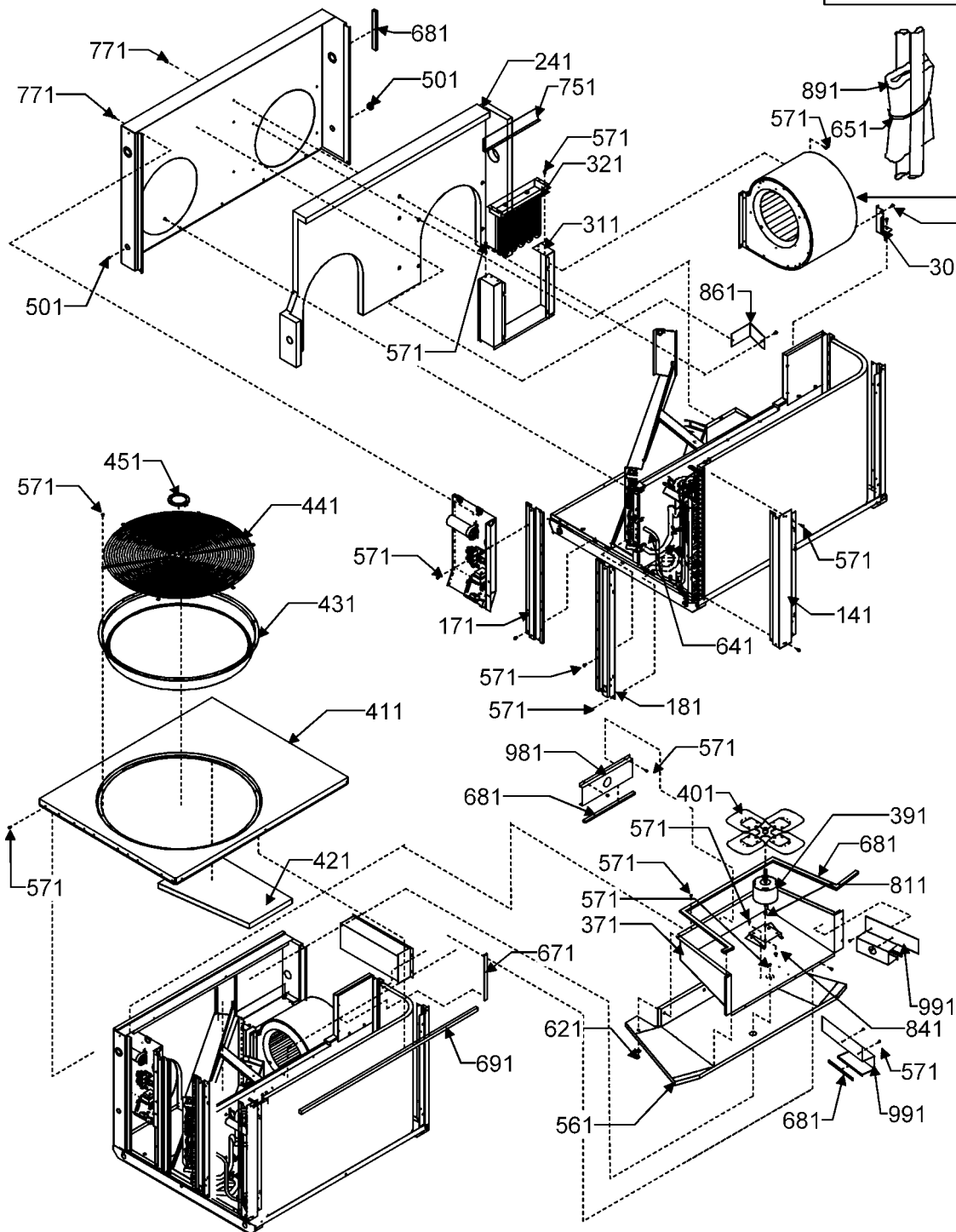
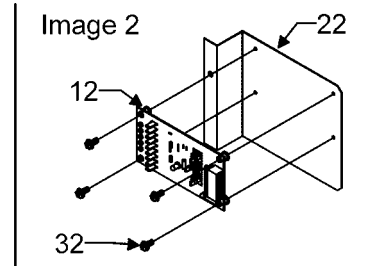


Image 2



Internal Components

**Ref. Part
No: No:**

Description:

**Ref. Part
No: No:**

Description:

Image 1:

141	20001704	POST CORNER
171	11098721	POST-SIDE (QTY 2)
181	11098722	POST-SIDE
241	20013802	INSUL-BACK (M1, M3)
241	20013803	INSUL-BACK (M2, M4)
301	20013202	BRACKET-BLWR
311	20020701	HEATER BOX (M1, M3)
311	20237801	HEATER BOX (M2, M4)
321	20237601	TOP-HEATER BOX (M2, M4)
321	20020601	TOP-HTR BOX (M1, M3)
371	11098304	PART-FAN
391	11112805	MOTOR-COND (M1, M3)
391	11112806	MOTOR-COND (M2, M4)
401	11182905	FAN-CONDENSER CW
411	20000704	COVER-TOP
421	11182501	INSUL-TOP
431	20171401	ORIFICE-COND
441	11112003	GRILLE-FAN
451	C6196704	PLATE-LOGO
501	A4603801	GROMMET (QTY 2)
511	M0250558	SCREW-TC
561	11197402	INSUL-FAN PART
571	M0221817	SCREW-SM (QTY AR)
621	11197701	WASHER-RETAINER (QTY 2)
641	M0275521	SEALER-PLASTIC (M1, M2)
651	M0321202	TIE-ELEC LG (QTY AR)
671	10839803	GASKET-.12X.50 (QTY AR)
681	10839801	GASKET-.25X.50 (QTY AR)
691	10839712	GASKET .62X.75 (QTY AR)
751	20237501	BAFFLE-HEATER BX (M2, M4)
751	20037201	HEATER BOX-BAF (M1, M3)
771	M0220819	SCREW-SM (QTY 9)
811	20042802	GROMMET-ISLR (QTY 4)
841	M0280801	NUT-HEX (QTY 4)
861	20247001	BRACKET-EVAP
891	10839807	GASKET-.37X.75 (QTY AR)
981	20248502	BAFFLE-SOUND
991	20248402	BAFFLE-SOUND (QTY 2)
NS	M0104102	CLIP-CORD (QTY 3)

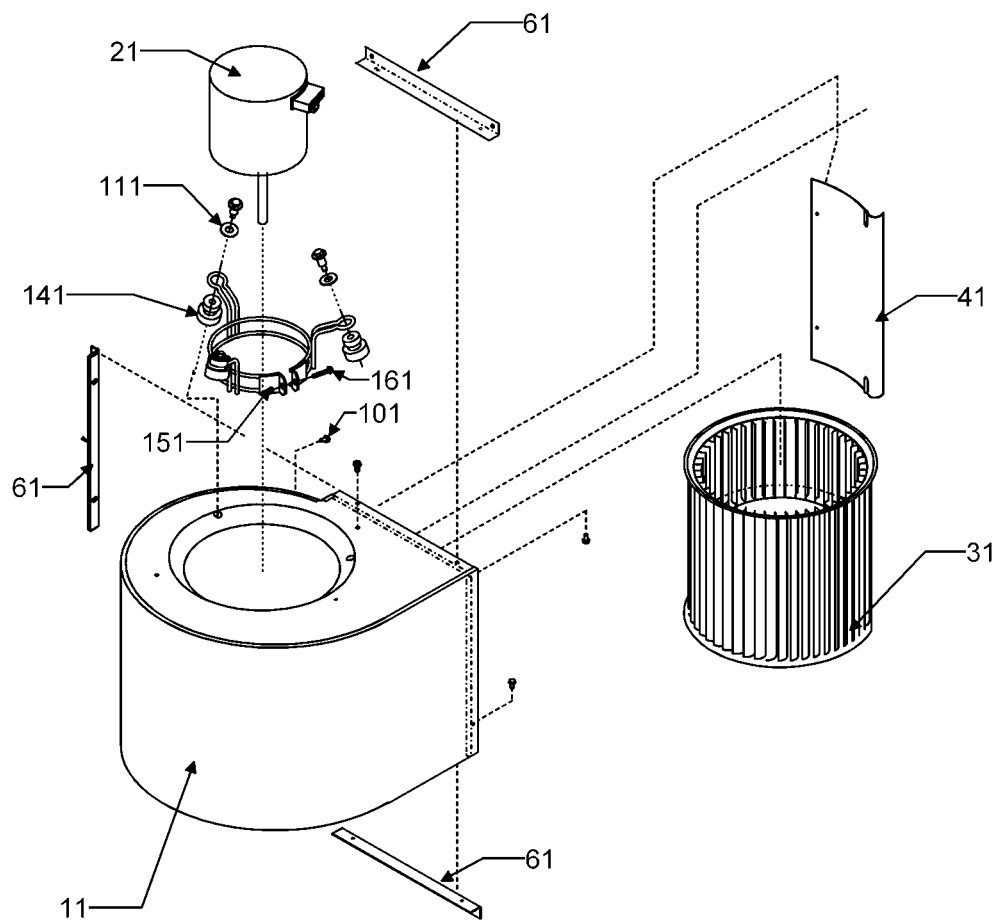
Image 2:

12	20158901	BOARD-INTERFACE
22	20191902	BRACKET-INTFC
32	M0216519	SCREW-SM (QTY 4)

Expanded Model Nomenclature

M1 - PHD42C02E	P1235704C
M2 - PHD48C02E	P1235705C
M3 - PHD42C02E1	P1239709C
M4 - PHD48C02E1	P1239710C

Blower/Interface Assembly



Blower/Interface Assembly

Ref. Part

No: No:

Description:

Ref. Part

No: No:

Description:

Image 1:

11	20162503	BLOWER HSG WELD
21	0231K00007A	MOTOR BLWR-EC 1/2 (M1, M3)
21	0231K00021A	MOTOR BLWR-EC 3/4 (M2, M4)
31	D6723302	WHEEL-BLOWER
41	C6121810	CUTOFF
61	20021101	RAIL-BLOWER (QTY 2)
101	M0221817	SCREW-SM (QTY AR)
111	M0274008	WASHER-FLAT (QTY 3)
141	A4002701	GROMMET (QTY 3)
151	M0282015	NUT-KEPS
161	M0267144	SCREW-MACH
NS	M0216519	SCREW-SM (QTY 2)
NS	20509210	SERVICE END BELL (M1, M3)
NS	20510120	SERVICE END BELL (M2, M4)

Expanded Model Nomenclature

M1 - PHD42C02E	P1235704C
M2 - PHD48C02E	P1235705C
M3 - PHD42C02E1	P1239709C
M4 - PHD48C02E1	P1239710C

Control Box and Gaskets

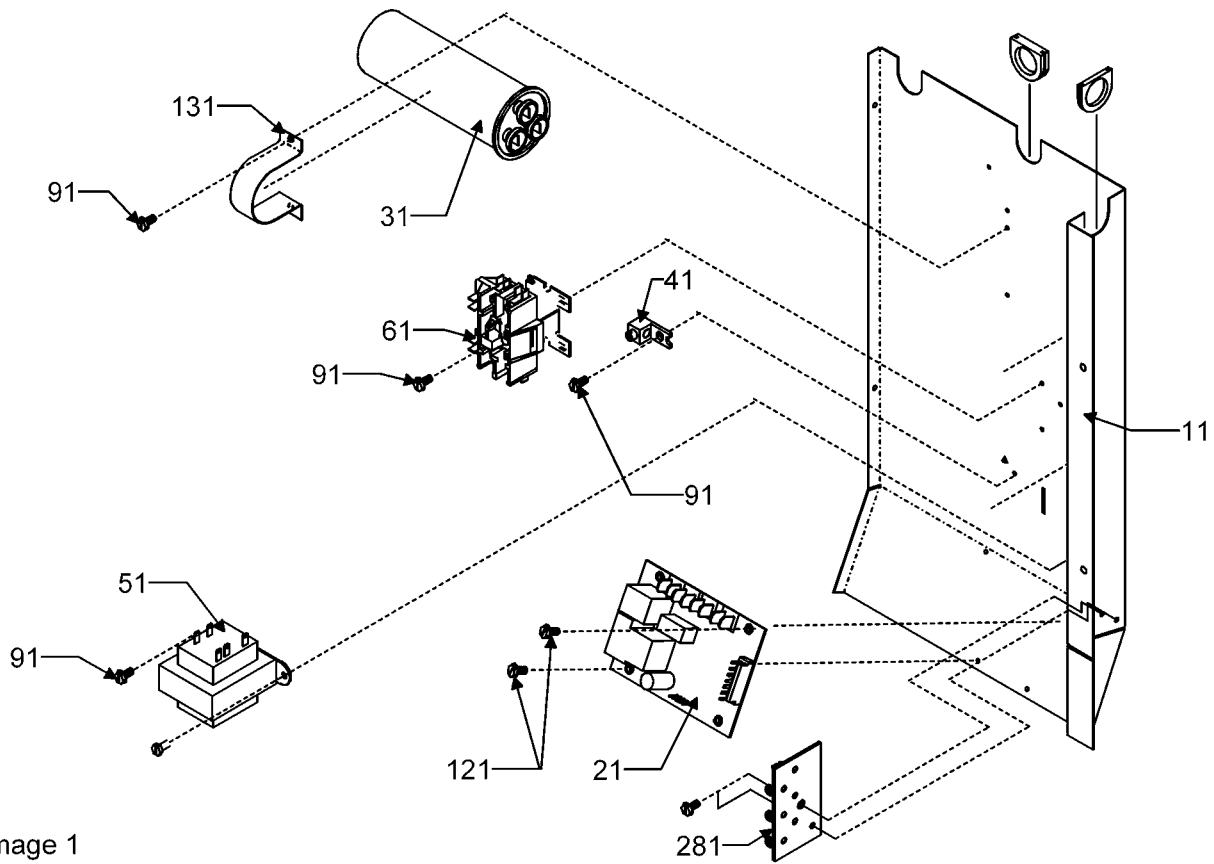
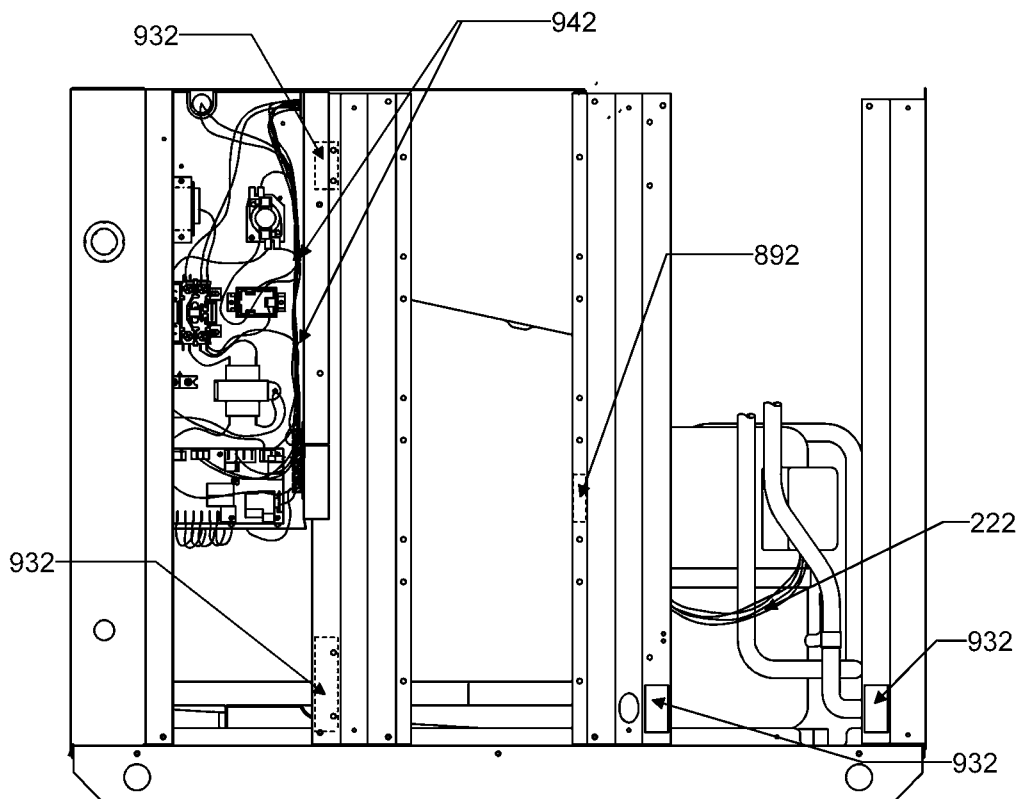


Image 1

Image 2



Control Box and Gaskets

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

Image 1:

11	20014104	CONTROL BOX
21	20214302	BOARD-DEFROST
31	D6789033	CAPACITOR-METAL (M1, M3)
31	D6789042	CAPACITOR-METAL (M2, M4)
41	A9015201	LUG-GROUND (M3)
41	A9015203	LUG-GROUND (M1, M2, M4)
51	11120302	TRANSFORMER
61	C6170002	CONTACTOR-30A (M1, M3)
61	C6170005	CONTACTOR-40A (M2, M4)
91	M0211016	SCREW-SM #8-3/8LG (QTY 7)
121	M0216519	SCREW-SM (QTY 2)
131	C6300503	STRAP-CAP
281	20244002	BOARD-TERMINAL

Image 2:

222	20203901	HARNESS-COMPRESSOR
892	10839807	GASKET-.37X.75 (QTY AR)
932	10839811	GASKET-.12X1.0 (QTY AR)
942	M0321204	TIE-ELEC SM (QTY AR)

Expanded Model Nomenclature

M1 - PHD42C02E	P1235704C
M2 - PHD48C02E	P1235705C
M3 - PHD42C02E1	P1239709C
M4 - PHD48C02E1	P1239710C