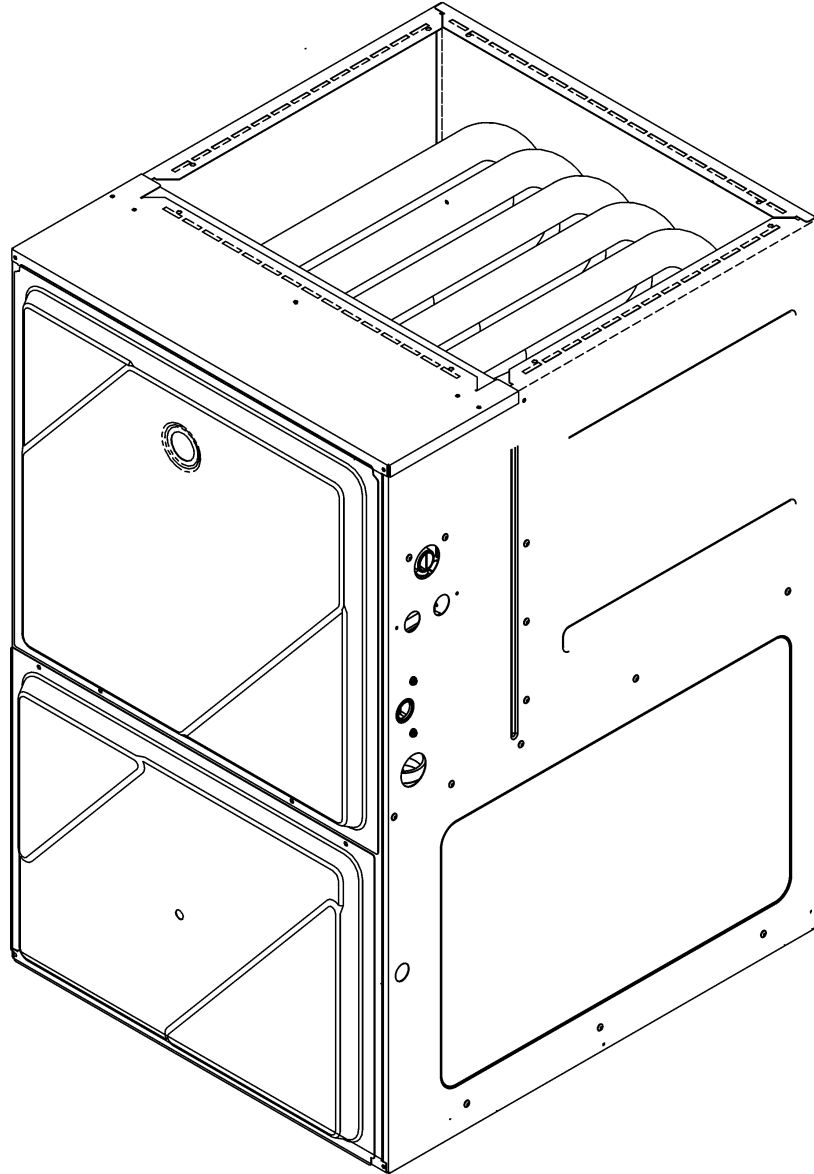


ACVM 97% ECM Counter Flow Furnace



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This manual is to be used by qualified technicians only.

This manual replaces RP-A2001.

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Important Information

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Views shown are for parts illustrations only, not servicing procedures

Short 90% Gas Furnace Project

Rev. A: Added Drain Parts Bag Assembly and Bag Assembly CF.

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:

0163F00017	BECKETT BURNER (QTY 3)
0271F00159	BLOWER SHELL & WHEEL ASSY (M1, M2)
0271F00161	BLOWER SHELL & WHEEL ASSY (M3, M4)
0130F00392	DATA, FURNACE PCB
0130F00389	DATA, FURNACE PCB
0130F00390	DATA, FURNACE PCB
0130F00391	DATA, FURNACE PCB
0130F00010	FLAME SENSOR
0151M00024	GAS VALVE
0257F00355	HEAT EXCHANGER ASSY (M2)
0257F00356	HEAT EXCHANGER ASSY (M3)
0257F00357	HEAT EXCHANGER ASSY (M4)
0257F00332	HEAT EXCHANGER ASSY (M1)
0130F00008	IGNITOR-SINI 17 SEC
0130M00141	INDUCTOR, 5.9 AMPS (GMPE100-4) (M3, M4)
20162901	LIMIT-RED (M3)
10123529	MANUAL RESET LIMIT (QTY 2)
0131M00272	MOTOR, 1 HP, SERIAL ECM (M4)
0131M00270	MOTOR, 1/2 HP, SERIAL ECM (M1, M2)
0131M00271	MOTOR, 3/4 HP, SERIAL ECM (M3)
0171M00003	MOTOR-ID, BLOWER
PCBKF201	PCB, FURNACE CONTROL
0130F00483	PRESSURE, SWITCH (M4)
0130F00482	PRESSURE, SWITCH (M1, M2, M3)
0130M00063	PRIMARY LIMIT - GOLD 140° (M2)
0130F00038	PRIMARY LIMIT - LT BLUE 120° (QTY 2)
0130F00036	PRIMARY LIMIT - PINK (M1, M4)
0130F00481	SWITCH, PRESSURE
0130M00140	TRANSFORMER,(120V TO 24V,40VA,

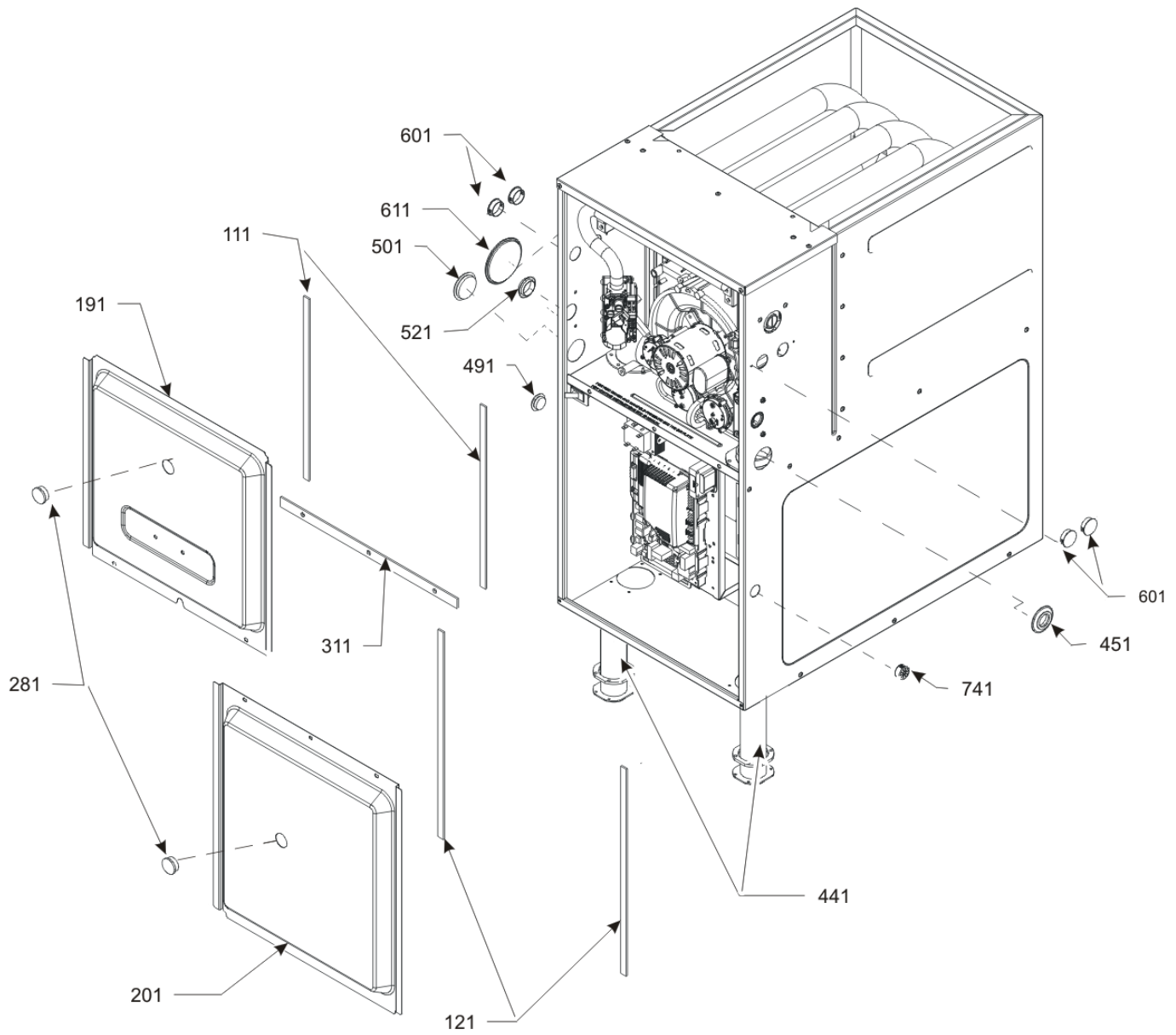
SPECIAL PARTS

0161M00003P AMANA NAMEPLATE

Expanded Model Nomenclature

M1 - ACVM970603BNAA
M2 - ACVM970803BNAA
M3 - ACVM970804CNAA
M4 - ACVM971005CNAA

Cabinet



Cabinet

Ref. Part No:	No:	Description:	Ref. Part No:	No:	Description:
Image 1:					
111	0154F00024	GASKET (QTY 2)			
121	0154F00025	GASKET (QTY 2)			
191	0121F00338LG	DOOR ACCESS 21" PNT (M3, M4)			
191	0121F00337LG	DOOR, ACCESS 17.5" PNT (M1, M2)			
201	0121F00340LG	DOOR, BLOWER 17.5" PNT (M1, M2)			
201	0121F00341LG	DOOR, BLOWER 21" PNT (M3, M4)			
311	0154F00020	GASKET, DECK (M1, M2)			
311	0154F00021	GASKET, DECK (M3, M4)			
441	0161F00064	PIPE, STRAIGHT CF (QTY 2)			
451	M0501301	PIPE GROMMET			
491	M0570808	BUTTON PLUG			
501	M0570806	BUTTON PLUG (QTY 2)			
521	0161M00027	PLUG, HOLE			
601	B1392021	PLASTIC PLUG, 1" (2713-BLK) (QTY 4)			
611	0163M00049	HOSE CLAMP (QTY 2)			
741	B1392104	UNIVERSAL BUSHING UB 875			
NS	0161M00003P	AMANA NAMEPLATE			
NS	0270F03139	BAG ASSY CF			
NS	M0310345	BUTTON PLUG (QTY 2)			
NS	M0570807	BUTTON PLUG			
NS	0270F03125	CF DRAIN TUBE ASSY (M1, M2)			
NS	0270F03126	CF DRAIN TUBE ASSY (M3, M4)			
NS	0270F03514	CF DRAIN TUBE ASSY (M1, M2)			
NS	0270F03515	CF DRAIN TUBE ASSY (M3, M4)			
NS	0270F03141	DRAIN PART BAG ASSY CF			
NS	M0209730	SCREW-DECORATIVE (QTY 3)			
NS	B1392139	VIEW PORT BUSHING-BLOWER DOOR (QTY 2)			

Expanded Model Nomenclature

- | |
|---------------------|
| M1 - ACVM970603BNAA |
| M2 - ACVM970803BNAA |
| M3 - ACVM970804CNAA |
| M4 - ACVM971005CNAA |

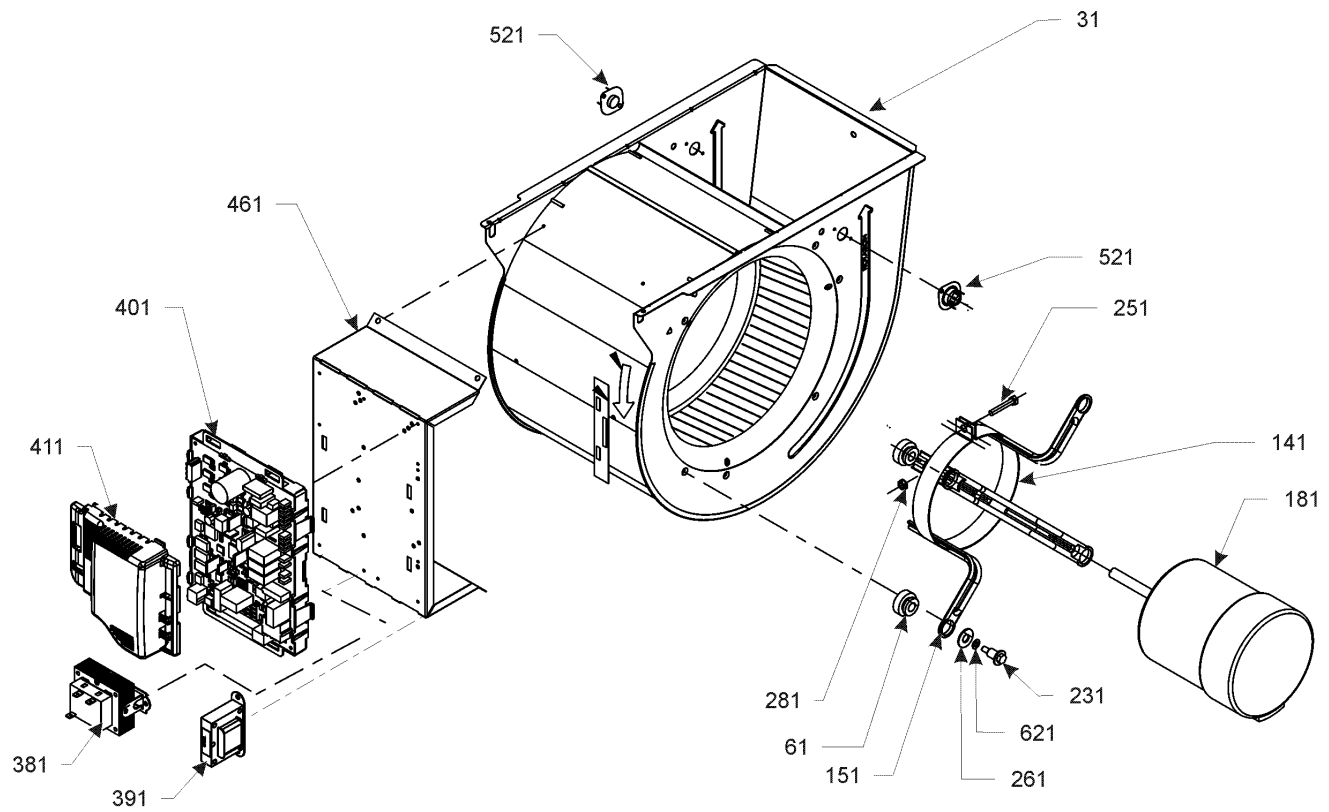
Blower Assembly

*If end bells are needed please order the following:

0131M00182 - 1/2 HP

0131M00183 - 3/4 HP

0131M00184 - 1 HP



Blower Assembly

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
<i>Image 1:</i>			
31	0271F00159		BLOWER SHELL & WHEEL ASSY (M1, M2)
31	0271F00161		BLOWER SHELL & WHEEL ASSY (M3, M4)
61	A4002702		BLOWER MOTOR GROMMET (M3, M4)
141	0121M00038		MOTOR MOUNT BAND (M1, M2)
141	10441601		MOTOR MOUNT BAND (M3, M4)
151	10441501		MOTOR MOUNT ARM (M3, M4)
151	B1376857		MOTOR MOUNT ARM (M1, M2)
181	0131M00272		MOTOR, 1 HP, SERIAL ECM (M4)
181	0131M00270		MOTOR, 1/2 HP, SERIAL ECM (M1, M2)
181	0131M00271		MOTOR, 3/4 HP, SERIAL ECM (M3)
231	M0221461		TC SCREW (M3, M4)
231	M0250565		TC SCREW 1.25" (M1, M2)
251	M0267144		MACHINE SCREW (M3, M4)
251	B1393323		MACHINE SCREW HWH 1/4-20 X 1-1/2 BZ (M1, M2)
261	B1392918		WASHER, FLAT 1/4 ID X 1 OD (M1, M2)
281	M0282015		KEPS NUT (M3, M4)
281	B1393800		LOCKNUT, NYLON, INSERT 1/4, 20 (M1, M2)
381	0130M00140		TRANSFORMER,(120V TO 24V,40VA,
391	0130M00141		INDUCTOR, 5.9 AMPS (GMPE100-4) (M3, M4)
401	PCBKF201		PCB, FURNACE CONTROL
411	0161F00014		COVER, CONTROL BOARD
461	0121F00464		MOUNTING PLATE-CONTROLS
521	0130F00038		PRIMARY LIMIT - LT BLUE 120° (QTY 2)
621	B1392820		WASHER, SPLIT LOCK 1/4 BZ (M3, M4)
NS	0259F00040		CONTROL HARNESS
NS	0130F00389		DATA, FURNACE PCB
NS	0130F00390		DATA, FURNACE PCB
NS	0130F00391		DATA, FURNACE PCB
NS	0130F00392		DATA, FURNACE PCB
NS	B1392021		PLASTIC PLUG, 1" (2713-BLK) (QTY 4)
NS	0259F00041		POWER HARNESS HIGH VOLTAGE
NS	0259F00024		WIRE HARNESS-BLOWER

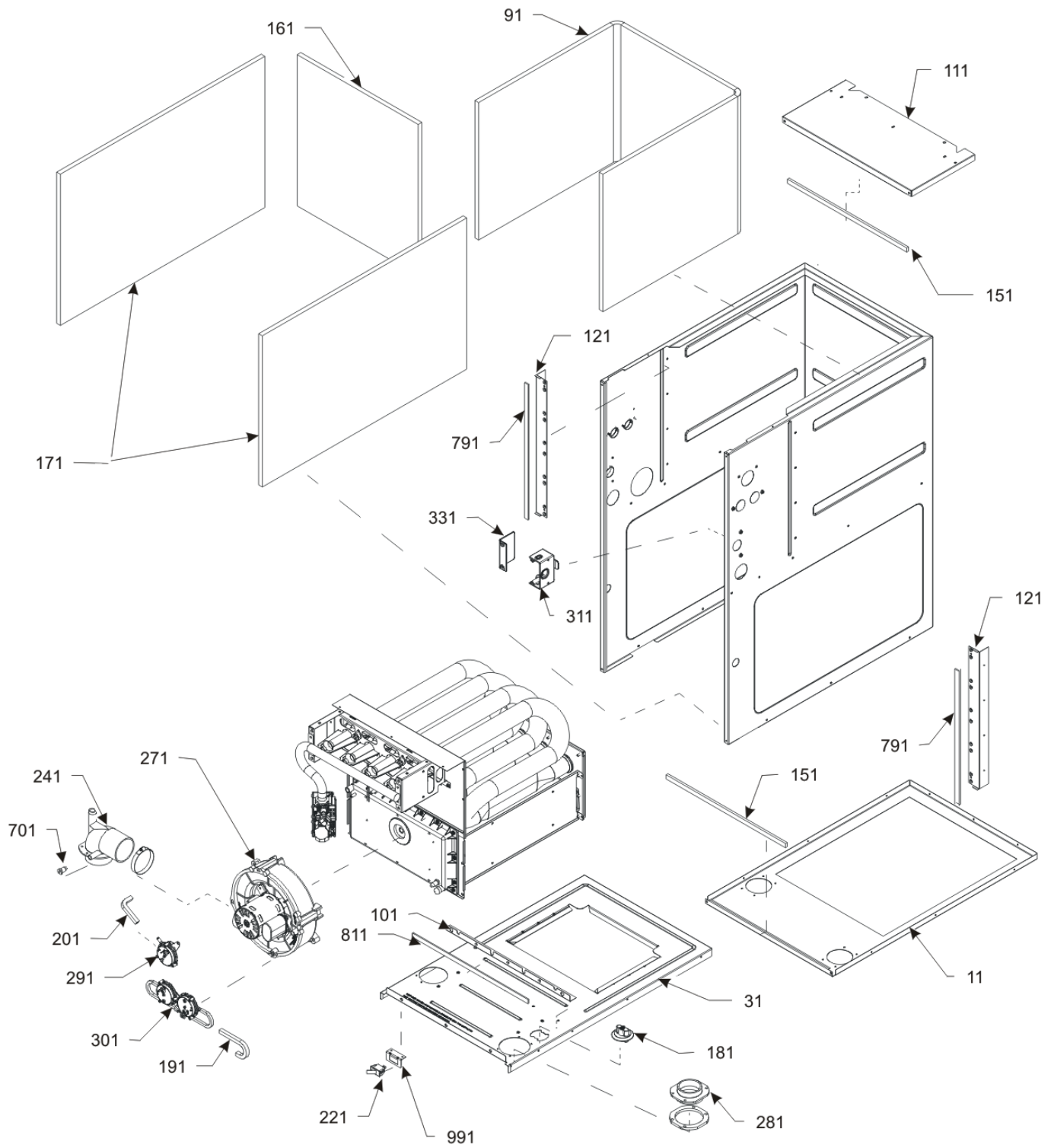
Expanded Model Nomenclature

M1 - ACVM970603BNAA
M2 - ACVM970803BNAA
M3 - ACVM970804CNAA
M4 - ACVM971005CNAA

*If end bells are needed please order the following:

0131M00182 - 1/2 HP
 0131M00183 - 3/4 HP
 0131M00184 - 1 HP

Chassis



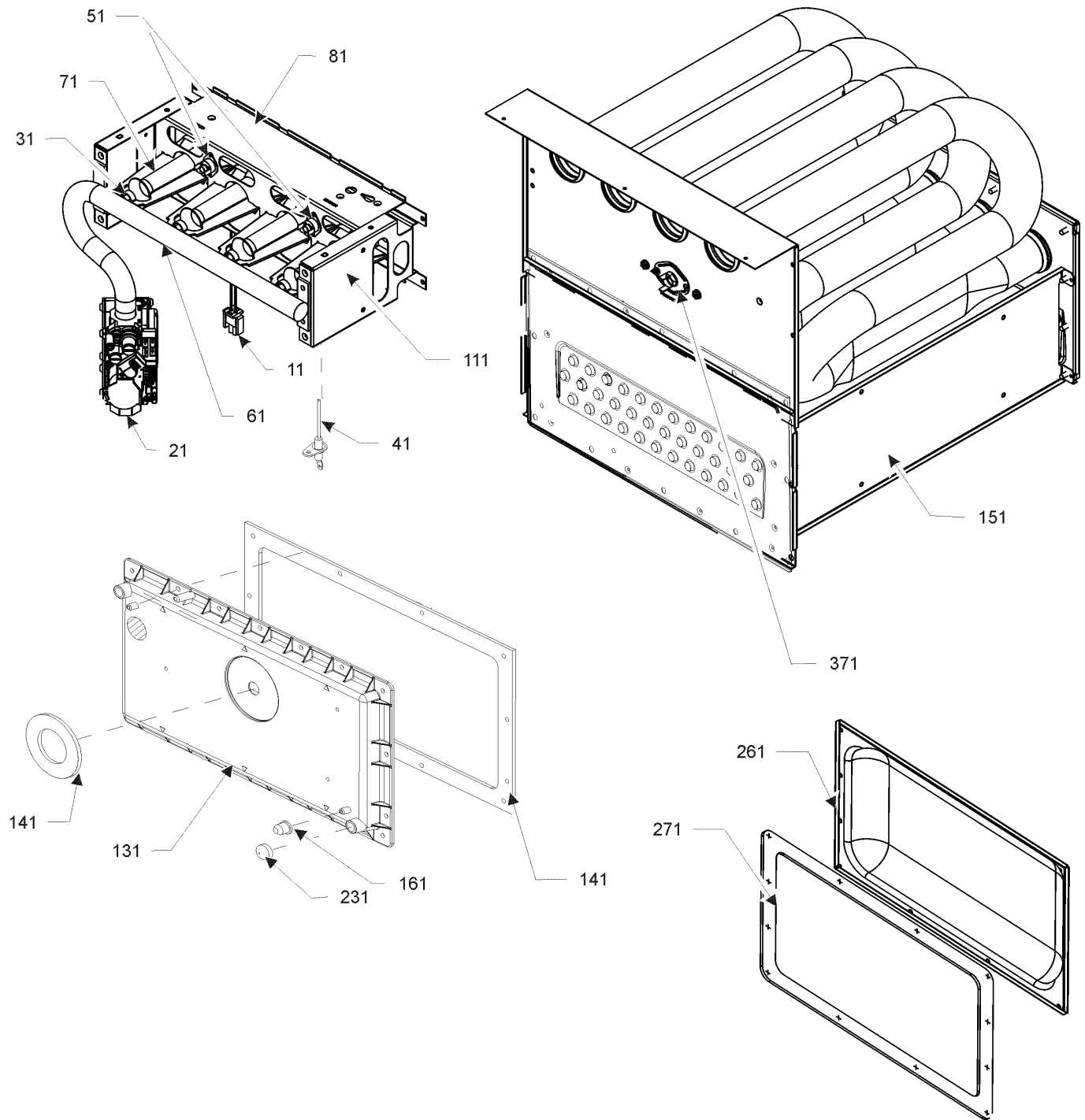
Chassis

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
Image 1:			
11	0121F00427DG		PAINTED BASEPAN-17.5" CF (M1, M2)
11	0121F00435DG		PAINTED BASEPAN-21" CF (M3, M4)
31	0121F00425		DECK-BLOWER, 17.5" CF (M1, M2)
31	0121F00433		DECK-BLOWER, 21" CF (M3, M4)
91	0160F00015		INSULATION, HT EXCHANGER 17.5" (M1, M2)
91	0160F00016		INSULATION, HT EXCHANGER 21" (M3, M4)
101	0121F00314		ANGLE, DECK (M1, M2)
101	0121F00315		ANGLE, DECK (M3, M4)
111	0121F00426DG		TOP, PAINTED FURNACE 17.5" CF (M1, M2)
111	0121F00434DG		TOP, PAINTED FURNACE 21" CF (M3, M4)
121	0121F00313		ANGLE, SIDE (QTY 2)
151	20179309		GASKET-FA (M1, M2)
151	20179310		GASKET-FA (M3, M4)
161	0160F00012		INSULATION-BACK 17.5" (M1, M2)
161	0160F00013		INSULATION-BACK 21" (M3, M4)
171	0160F00018		INSULATION, SIDE (QTY 2)
181	0159F00050		HARNESS-WIRING
191	0164M00029		25" PRESSURE SWITCH HOSES (M3, M4)
191	0164M00012		PRESSURE SWITCH HOSE (M1, M2)
201	0164M00019		HOSE-PRESSURE SW 6"
221	10690402		INTERLOCK SWITCH
241	0164F00003		ELBOW-FLUE, 17.5" CFLOW (M1, M2)
241	0164F00004		ELBOW-FLUE, 21" CFLOW (M3, M4)
271	0171M00003		MOTOR-ID, BLOWER
281	0161F00037		COUPLING
291	0130F00481		SWITCH, PRESSURE
301	0130F00482		PRESSURE, SWITCH (M1, M2, M3)
301	0130F00483		PRESSURE, SWITCH (M4)
311	0161F00042		JUNCTION BOX PLA
331	0161F00043		JUNCTION BOX LID
791	0154F00015		GASKET (QTY 2)
811	0154F00014		GASKET (M1, M2)
811	0154F00016		GASKET (M3, M4)
991	0121F00389		BRACKET, DOOR SWITCH
NS	0161F00046		DRAIN TRAP
NS	0164M00008		HOSE-PRESSURE SW (M3, M4)

Expanded Model Nomenclature

- | |
|---------------------|
| M1 - ACVM970603BNAA |
| M2 - ACVM970803BNAA |
| M3 - ACVM970804CNAA |
| M4 - ACVM971005CNAA |

Heat Exchanger / Manifold / Gas Valve



Heat Exchanger / Manifold / Gas Valve

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
<i>Image 1:</i>			
11	0130F00008		IGNITOR-SINI 17 SEC
21	0151M00024		GAS VALVE
31	0163F00004		ORIFICE (QTY 3)
41	0130F00010		FLAME SENSOR
51	10123529		MANUAL RESET LIMIT (QTY 2)
61	0163F00008		MANIFOLD (M1)
61	0163F00009		MANIFOLD (M3)
61	0163F00010		MANIFOLD (M4)
61	0163F00014		MANIFOLD (M2)
71	0163F00017		BECKETT BURNER (QTY 3)
81	0121F00455		BRACKET-BURNER 3 (M1)
81	0121F00454		BRACKET-BURNER 4 (M2, M3)
81	0121F00453		BRACKET-BURNER 5 (M4)
111	0121F00458		ORIFICE BRACKET-BURNER 3 (M1)
111	0121F00457		ORIFICE BRACKET-BURNER 4 (M2, M3)
111	0121F00466		ORIFICE BRACKET-BURNER 5 (M4)
131	0161F00027		COVER, FRONT (M4)
131	0161F00031		COVER, FRONT (M2)
131	0161F00056		COVER, FRONT (M1)
131	0161F00065		COVER,FRONT (M3)
141	0154F00011		GASKET, FRONT (M1, M2)
141	0154F00012		GASKET, FRONT (M3, M4)
151	0257F00332		HEAT EXCHANGER ASSY (M1)
151	0257F00355		HEAT EXCHANGER ASSY (M2)
151	0257F00356		HEAT EXCHANGER ASSY (M3)
151	0257F00357		HEAT EXCHANGER ASSY (M4)
161	M0326804		TUBE PLUG
231	A1781105		CAP-VINYL .500
261	0121F00317		COVER, REAR (M1, M2)
261	0121F00318		COVER, REAR (M3, M4)
271	0154F00008		GASKET, REAR CVR (M1, M2)
271	0154F00009		GASKET, REAR CVR (M3, M4)
371	20162901		LIMIT-RED (M3)
371	0130M00063		PRIMARY LIMIT - GOLD 140° (M2)
371	0130F00036		PRIMARY LIMIT - PINK (M1, M4)
NS	0121F00439		HEAT SHIELD-PRIMARY LIMIT
NS	0121F00355		SHIELD, COIL (QTY 2)

Expanded Model Nomenclature

- | |
|---------------------|
| M1 - ACVM970603BNAA |
| M2 - ACVM970803BNAA |
| M3 - ACVM970804CNAA |
| M4 - ACVM971005CNAA |