

## AMVC 80% Two Stage Variable Speed ECM Upflow Furnace

AMVC80603BNCA  
AMVC80603BXCA  
AMVC80604BNCA  
AMVC80604BXCA  
AMVC80803BNCA  
AMVC80803BXCA  
AMVC80804CNCA  
AMVC80804CXCA  
AMVC80805CNCA  
AMVC80805CXCA  
AMVC80805DNCA  
AMVC80805DXCA  
AMVC81005CNCA  
AMVC81005CXCA



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This manual is to be used by qualified technicians only.

# 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:

Homeowner Support  
Goodman 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 Company, L.P.  
19001 Kermier Road  
Waller, Texas 77484  
713-861-2500-Telephone  
713-863-2382-Facsimile

# Functional Parts

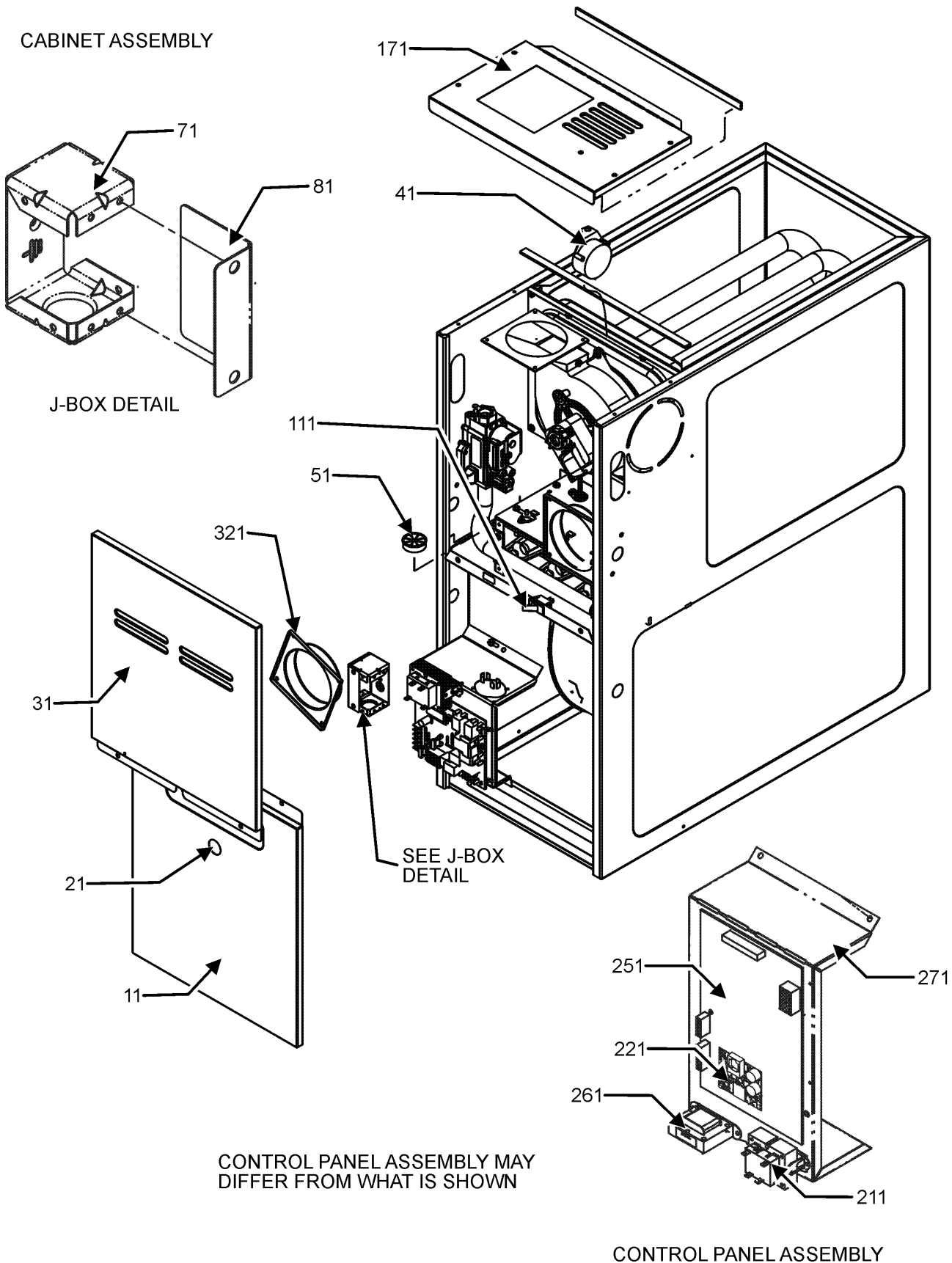
**Part No:**            **Description:**

Part No:	Description:	Expanded Model Nomenclature
20162904	*PRIMARY LIMIT-TEMPERATURE CONTROL (M5, M6, M7, M8, M11, M12) *Refer to service bulletin SF-054	M1 - AMVC80603BNCA
0130F00573	AIR PRESSURE SWITCH (M7, M8)	M2 - AMVC80603BXCA
0130F00574	AIR PRESSURE SWITCH (M1, M2, M11, M12)	M3 - AMVC80604BNCA
0130F00572	AIR PRESSURE SWITCH (M5, M6)	M4 - AMVC80604BXCA
0130F00660	DATA, FURNACE PCB (M9)	M5 - AMVC80803BNCA
0130F00652	DATA, FURNACE PCB (M1)	M6 - AMVC80803BXCA
0130F00653	DATA, FURNACE PCB (M2)	M7 - AMVC80804CNCA
0130F00654	DATA, FURNACE PCB (M3)	M8 - AMVC80804CXCA
0130F00655	DATA, FURNACE PCB (M4)	M9 - AMVC80805CNCA
0130F00656	DATA, FURNACE PCB (M5)	M10 - AMVC80805CXCA
0130F00657	DATA, FURNACE PCB (M6)	M11 - AMVC80805DNCA
0130F00659	DATA, FURNACE PCB (M8)	M12 - AMVC80805DXCA
0130F00661	DATA, FURNACE PCB (M10)	M13 - AMVC81005CNCA
0130F00662	DATA, FURNACE PCB (M11)	M14 - AMVC81005CXCA
0130F00664	DATA, FURNACE PCB (M13)	
0130F00665	DATA, FURNACE PCB (M14)	
0130F00663	DATA, FURNACE PCB (M12)	
0130F00658	DATA, FURNACE PCB (M7)	
0130F00508	DUAL STAGE PRESSURE SWITCH (M13, M14)	
0130F00509	DUAL STAGE PRESSURE SWITCH (M3, M4, M9, M10)	
0130F00010	FLAME SENSOR	
0151M00027	GAS VALVE	
0130M00141	INDUCTOR, 5.9 AMPS (GMPE100-4) (M3, M4, M7, M8, M9, M10, M11, M12, M13, M14)	
10690402	INTERLOCK SWITCH	
0130F00038	LIMIT, PRIMARY 120 LT BLUE	
0130M00063	LIMIT, PRIMARY, 140, GOLD (M3, M4, M9, M10)	
20162903	LIMIT-BLUE (M1, M2)	
20162905	LIMIT-YELLOW (M13, M14)	
10123529	MANUAL RESET R.O.S. LIMIT (QTY 2)	
0131M00270	MOTOR, 1/2 HP, SERIAL ECM (M1, M2, M5, M6, M7, M8)	
0131M00271	MOTOR, 3/4 HP, SERIAL ECM (M3, M4, M9, M10, M11, M12, M13, M14)	
0131M00781P	MOTOR, VENT 2-STAGE	
PCBKF106	PCB, CONTROL, FURNACE	
PCBCM100	PCB,CONTROL	
0130F00008	SINI IGNITOR	
0130M00140	TRANSFORMER,(120V TO 24V,40VA,	

## SPECIAL PARTS

0161F00006            AMANA NAMEPLATE

# Cabinet and Control Panel Assembly

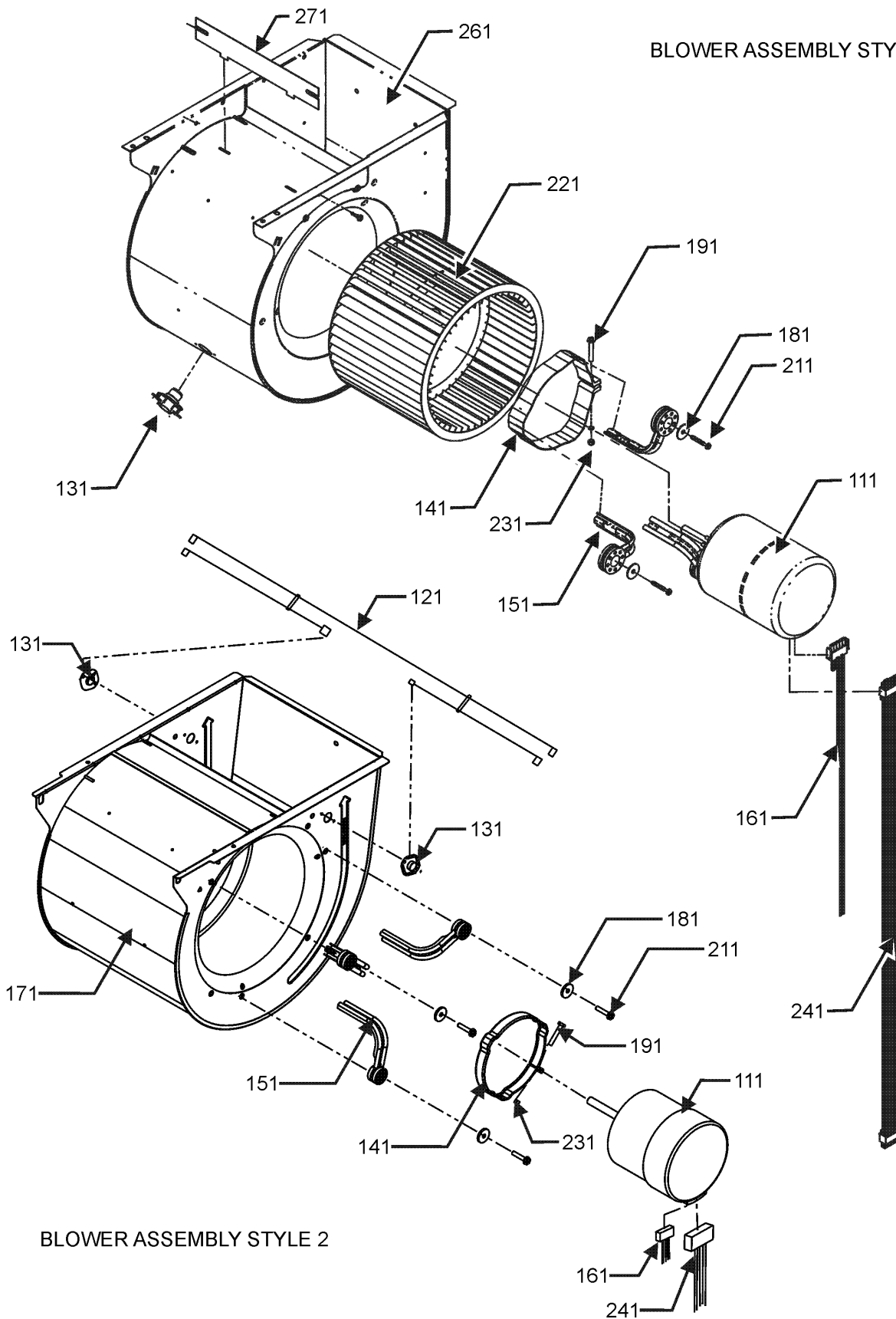


# Cabinet and Control Panel Assembly

Ref. Part No:	Ref. Part No:	Description:	Description:
<b>Image 1:</b>		<b>Expanded Model Nomenclature</b>	
11	0121F00123LG	DOOR, BLOWER, 17.5" PAINTED (M1, M2, M3, M4, M5, M6)	M1 - AMVC80603BNCA
11	0121F00124LG	DOOR, BLOWER, 21"-PAINTED (M7, M8, M9, M10, M13, M14)	M2 - AMVC80603BXCA
11	0121F00125LG	DOOR, BLOWER, 24.5"-PAINTED (M11, M12)	M3 - AMVC80604BNCA
21	B1392139	VIEW PORT BUSHING-BLOWER DOOR	M4 - AMVC80604BXCA
31	0121F00119LG	CONTROL ACCESS DOOR 17.5" (M1, M2, M3, M4, M5, M6)	M5 - AMVC80803BNCA
31	0121F00120LG	CONTROL ACCESS DOOR 21" (M7, M8, M9, M10, M13, M14)	M6 - AMVC80803BXCA
31	0121F00121LG	CONTROL ACCESS DOOR 24.5" (M11, M12)	M7 - AMVC80804CNCA
41	0130F00572	AIR PRESSURE SWITCH (M5, M6)	M8 - AMVC80804CXCA
41	0130F00573	AIR PRESSURE SWITCH (M7, M8)	M9 - AMVC80805CNCA
41	0130F00574	AIR PRESSURE SWITCH (M1, M2, M11, M12)	M10 - AMVC80805CXCA
41	0130F00508	DUAL STAGE PRESSURE SWITCH (M13, M14)	M11 - AMVC80805DNCA
41	0130F00509	DUAL STAGE PRESSURE SWITCH (M3, M4, M9, M10)	M12 - AMVC80805DXCA
51	B1392147	UNIVERSAL BUSHING WITH SLICE	M13 - AMVC81005CNCA
71	4014502	J-BOX	M14 - AMVC81005CXCA
81	4015502	J-BOX COVER	
111	10690402	INTERLOCK SWITCH	
171	0121F00142DG	TOP 17.5" (M1, M2, M3, M4, M5, M6)	
171	0121F00143DG	TOP 21" (M7, M8, M9, M10, M13, M14)	
171	0121F00463DG	TOP, FURNACE 24.5" (M11, M12)	
211	0130M00140	TRANSFORMER,(120V TO 24V,40VA,	
221	PCBCM100	PCB,CONTROL	
251	PCBKF106	PCB, CONTROL, FURNACE	
261	0130M00141	INDUCTOR, 5.9 AMPS (GMPE100-4) (M3, M4, M7, M8, M9, M10, M11, M12, M13, M14)	
271	0121F00218	PANEL, CONTROL MOUNTING	
321	4023500	CHIMNEY TRANSITION TOP	
NS	0161F00006	AMANA NAMEPLATE	
NS	0159F00083	CABLE, RJ12	
NS	0130F00652	DATA, FURNACE PCB (M1)	
NS	0130F00653	DATA, FURNACE PCB (M2)	
NS	0130F00654	DATA, FURNACE PCB (M3)	
NS	0130F00655	DATA, FURNACE PCB (M4)	
NS	0130F00656	DATA, FURNACE PCB (M5)	
NS	0130F00657	DATA, FURNACE PCB (M6)	
NS	0130F00658	DATA, FURNACE PCB (M7)	
NS	0130F00659	DATA, FURNACE PCB (M8)	
NS	0130F00660	DATA, FURNACE PCB (M9)	
NS	0130F00661	DATA, FURNACE PCB (M10)	
NS	0130F00662	DATA, FURNACE PCB (M11)	
NS	0130F00663	DATA, FURNACE PCB (M12)	
NS	0130F00664	DATA, FURNACE PCB (M13)	
NS	0130F00665	DATA, FURNACE PCB (M14)	

# Blower Assembly

BLOWER ASSEMBLY STYLE 1



# Blower Assembly

Ref. Part No:	No:	Description:	Ref. Part No:	No:	Description:
<b>Image 1:</b>					
111	0131M00270	MOTOR, 1/2 HP, SERIAL ECM (M1, M2, M5, M6, M7, M8)			
111	0131M00271	MOTOR, 3/4 HP, SERIAL ECM (M3, M4, M9, M10, M11, M12, M13, M14)			
121	0259F00024	WIRE HARNESS-BLOWER (M7, M8, M11, M12)			
131	0130F00038	LIMIT, PRIMARY 120 LT BLUE			
141	0121M00038	MOTOR MOUNT BAND (M1, M2, M3, M4, M5, M6)			
141	0121M00039	MOTOR MOUNT BAND (HEAVY DUTY) (M7, M8, M9, M10, M11, M12, M13, M14)			
151	B1376853	MOTOR MOUNT ARM (M1, M2, M3, M4, M5, M6)			
151	B1376863	MOTOR MOUNT ARM (HEAVY DUTY) (M7, M8, M9, M10, M11, M12, M13, M14)			
161	0259F00049	HARNESS-POWER			
171	0271F00303	BLOWER SHELL & WHEEL (M7, M8, M11, M12)			
181	B1392918	WASHER, FLAT 1/4 ID X 1 OD (QTY 3)			
191	0163M00320	HEX HEAD ALL THREAD TAP BOLT			
211	M0250565	SCREW-TC 1.25" (QTY 3)			
221	B1368047	BLOWER WHEEL (10 X 10) (M9, M10, M13, M14)			
221	0150M00043	WHEEL, BLOWER (10X8) (M1, M2, M5, M6)			
221	B1368016	WHEEL, BLOWER, 10X8 (M3, M4)			
231	B1393800	LOCKNUT, NYLON INSERT 1/4 20			
241	0259M00008	WIRE HARNESS			
261	0271F00111	BLOWER SHELL ASSY (M1, M2, M3, M4, M5, M6)			
261	0271F00112	BLOWER SHELL ASSY (M9, M10, M13, M14)			
271	764741	BLWR BLK-OFF, 10X10 (M9, M10, M13, M14)			
271	764740	BLWR BLK-OFF, 10X8 (M1, M2, M3, M4, M5, M6)			

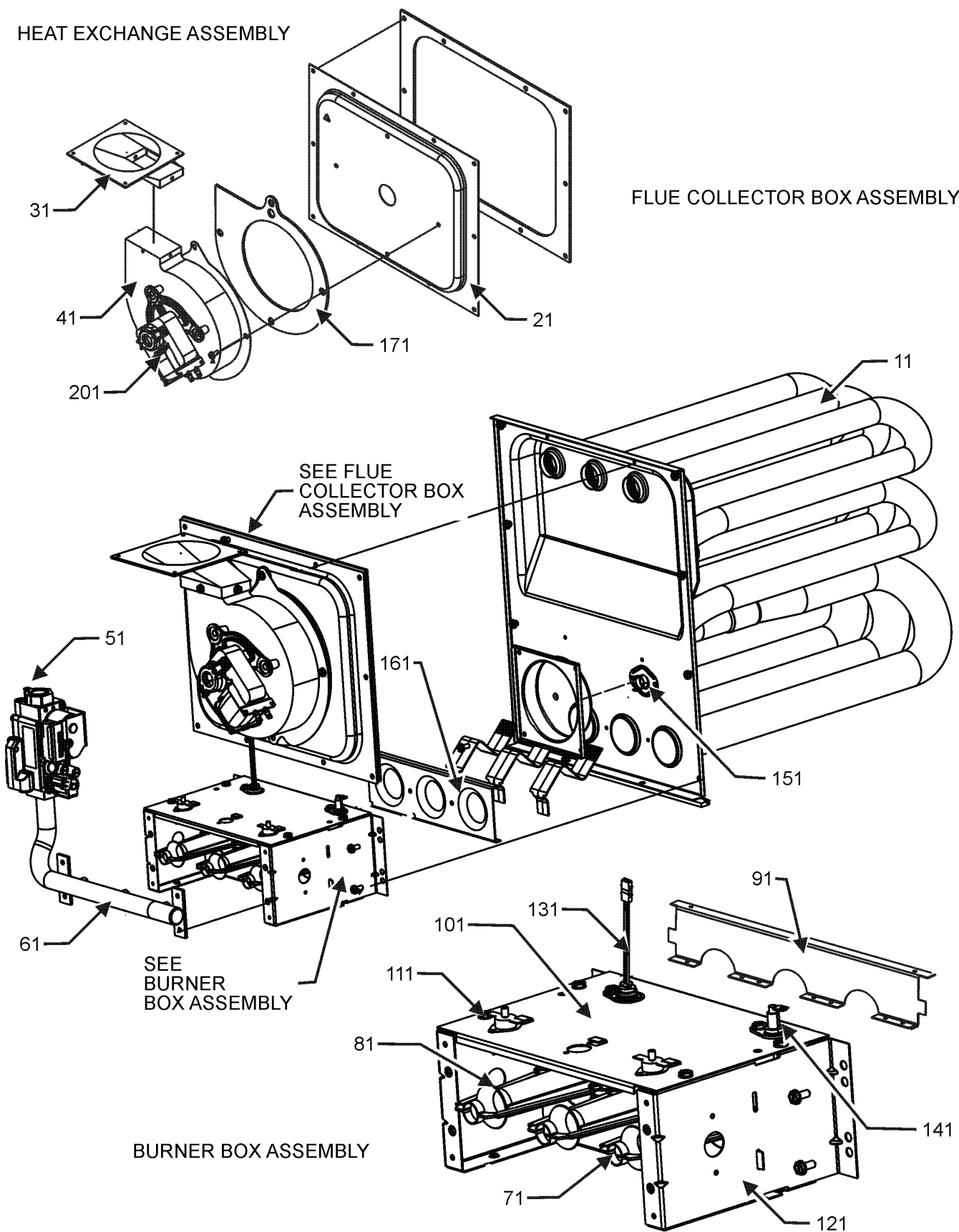
## Expanded Model Nomenclature

M1 - AMVC80603BNCA
M2 - AMVC80603BXCA
M3 - AMVC80604BNCA
M4 - AMVC80604BXCA
M5 - AMVC80803BNCA
M6 - AMVC80803BXCA
M7 - AMVC80804CNCA
M8 - AMVC80804CXCA
M9 - AMVC80805CNCA
M10 - AMVC80805CXCA
M11 - AMVC80805DNCA
M12 - AMVC80805DXCA
M13 - AMVC81005CNCA
M14 - AMVC81005CXCA

# Heat Exchange Assembly

HEAT EXCHANGE ASSEMBLY

FLUE COLLECTOR BOX ASSEMBLY





# Heat Exchange Assembly

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:
<b>Image 1:</b>		<b>Expanded Model Nomenclature</b>	
11	0270F00933	HEAT EXCHANGER ASSY (M1, M2, M3, M4)	M1 - AMVC80603BNCA
11	0270F00934	HEAT EXCHANGER ASSY (M5, M6)	M2 - AMVC80603BXCA
11	0270F00935	HEAT EXCHANGER ASSY (M7, M8, M9, M10)	M3 - AMVC80604BNCA
11	0270F00936	HEAT EXCHANGER ASSY (M13, M14)	M4 - AMVC80604BXCA
11	0270F03017	HEAT EXCHANGER ASSY (M11, M12)	M5 - AMVC80803BNCA
21	0121F00328	17.5" COLLECTOR BOX 1.250" DIA (M1, M2)	M6 - AMVC80803BXCA
21	0121F00332	17.5" COLLECTOR BOX 1.375" DIA (M3, M4)	M7 - AMVC80804CNCA
21	0121F00334	21" COLLECTOR BOX 1.625" DIA (M11, M12)	M8 - AMVC80804CXCA
21	0121F00333	21" COLLECTOR BOX 1.75" DIA (M13, M14)	M9 - AMVC80805CNCA
21	0121F00336	21" FLUE COLLECTOR BOX 1.50" (M9, M10)	M10 - AMVC80805CXCA
21	0121F00655	COLLECTOR BOX 17.5" 1.437 DIA (M5, M6)	M11 - AMVC80805DNCA
21	0121F00659	COLLECTOR BOX 21" 1.40 DIA (M7, M8)	M12 - AMVC80805DXCA
31	0128F00006	CHIMNEY TRANSITION BOTTOM	M13 - AMVC81005CNCA
41	0131M00781P	MOTOR, VENT 2-STAGE	M14 - AMVC81005CXCA
51	0151M00027	GAS VALVE	
61	0120F00007	MANIFOLD (M1, M2, M3, M4)	
61	0120F00008	MANIFOLD (M5, M6, M7, M8, M9, M10, M11, M12)	
61	0120F00009	MANIFOLD (M13, M14)	
71	10716005	ORIFICE (QTY 3)	
81	B4022700	INSHOT BURNER ASSY 3" (QTY 3)	
91	0121F00168	BURNER RACK, 3 CELL (M1, M2, M3, M4)	
91	0121F00169	BURNER RACK, 4 CELL (M5, M6, M7, M8, M9, M10, M11, M12)	
91	0121F00170	BURNER RACK, 5 CELL (M13, M14)	
101	0121F00163	TOP, BURNER BOX 3 CELL (M1, M2, M3, M4)	
101	0121F00164	TOP, BURNER BOX 4 CELL (M5, M6, M7, M8, M9, M10, M11, M12)	
101	0121F00165	TOP, BURNER BOX 5 CELL (M13, M14)	
111	10123529	MANUAL RESET R.O.S. LIMIT (QTY 2)	
121	0121F00146	BURNER BOX SIDE (QTY 2)	
131	0130F00008	SINI IGNITOR	
141	0130F00010	FLAME SENSOR	
151	20162904	*PRIMARY LIMIT-TEMPERATURE CONTROL (M5, M6, M7, M8, M11, M12) *Refer to service bulletin SF-054	
151	0130M00063	LIMIT, PRIMARY, 140, GOLD (M3, M4, M9, M10)	
151	20162903	LIMIT-BLUE (M1, M2)	
151	20162905	LIMIT-YELLOW (M13, M14)	
161	4028001	ORIFICE PLATE, 3CELL (M1, M2, M3, M4)	
161	4028002	ORIFICE PLATE, 4CELL (M5, M6, M7, M8, M9, M10, M11, M12)	
161	4028003	ORIFICE PLATE, 5CELL (M13, M14)	
171	0154F00004	VENT MOTOR GASKET 17.5" (M1, M2, M3, M4, M5, M6)	
171	0154F00005	VENT MOTOR GASKET 21" (M7, M8, M9, M10, M11, M12, M13, M14)	
201	DY6.186.070	VENT MOTOR CAPACITOR	
NS	0259F00062	INDUCER HARNESS ASSY	
NS	0259F00063	WIRE HARNESS ASSY	
NS	0259F00260	WIRE HARNESS ASSY	
NS	0259F00261	WIRE HARNESS ASSY	
NS	0259F00262	WIRE HARNESS ASSY	