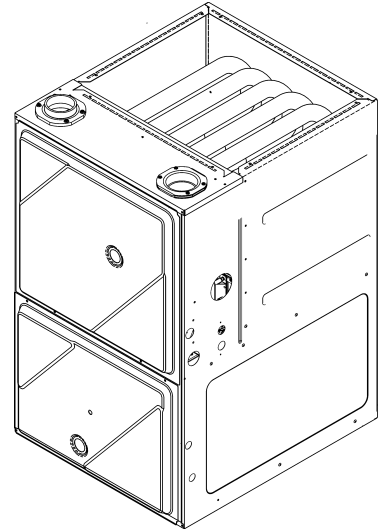


AC9S 96% FER Counter Flow Furnace

AC9S960403BNAA
AC9S960403BNAB
AC9S960603BNAA
AC9S960603BNAB
AC9S960804CNAA
AC9S960804CNAB
AC9S961005CNAA
AC9S961005CNAB
AC9S961205DNAA
AC9S961205DNAB



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This manual is to be used by qualified technicians only.

This manual replaces RP-A2342

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Important Information

Index

Functional Parts List	3
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 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:**

PCBBF166	1 STAGE IFC (M2, M4, M6, M8, M10)
0130F00038	AUX LIMIT - LT BLUE 120° (QTY 2)
0163F00017	BECKETT BURNER (QTY 2)
PCBBF163	CIRCUIT BOARD FURNACE (M1, M3, M5, M7, M9)
0131F00114M	CONTROLLERLESS MOTOR (M7, M8, M9, M10)
0131F00112M	CONTROLLERLESS MOTOR (M1, M2, M3, M4)
0131F00113M	CONTROLLERLESS MOTOR (M5, M6)
0130F00010	FLAME SENSOR
0151M00037	GAS VALVE
0257F00363	HEAT EXCHANGER ASSY (M5, M6)
0257F00364	HEAT EXCHANGER ASSY (M7, M8)
0257F00372	HEAT EXCHANGER ASSY (M9, M10)
0257F00380	HEAT EXCHANGER ASSY (M1, M2)
0257F00362	HEAT EXCHANGER ASSY (M3, M4)
0130F00008	IGNITOR-SINI 17 SEC
20162906	LIMIT, PRIMARY (M9, M10)
0130F00071	LIMIT, PRIMARY (M5, M6)
20162903	LIMIT, PRIMARY (M7, M8)
20162901	LIMIT, PRIMARY (M1, M2, M3, M4)
0130F00123	LIMIT, RESET MAN (M1, M2, M3, M4)
10123534	LIMIT-RESET MAN-ORANGE (M5, M6)
10123539	LIMIT-RESET MAN-ORANGE (M7, M8, M9, M10)
0271F00507	MORRISON 11 X 10 BLOWER (M5, M6, M7, M8)
0271F00508	MORRISON 11 X 11 BLOWER (M9, M10)
0271F00506	MORRISON 11 X 8 BLOWER (M1, M2, M3, M4)
0131F00259	MOTOR PROGRAMMED (M7, M8)
0131F00258	MOTOR PROGRAMMED (M5, M6)
0131F00257	MOTOR PROGRAMMED (M3, M4)
0131F00256	MOTOR PROGRAMMED (M1, M2)
0131F00260	MOTOR PROGRAMMED (M9, M10)
0171M00001	MOTOR-ID, BLOWER
0130M00243	SWITCH, INTERLOCK
0130F00439	SWITCH, PRESSURE (M3, M4, M5, M6, M7, M8)
0130F00447	SWITCH, PRESSURE (M1, M2)
0130F00438	SWITCH, PRESSURE (M9, M10)
0130M00140	TRANSFORMER, 120V TO 24V,40VA

Expanded Model Nomenclature

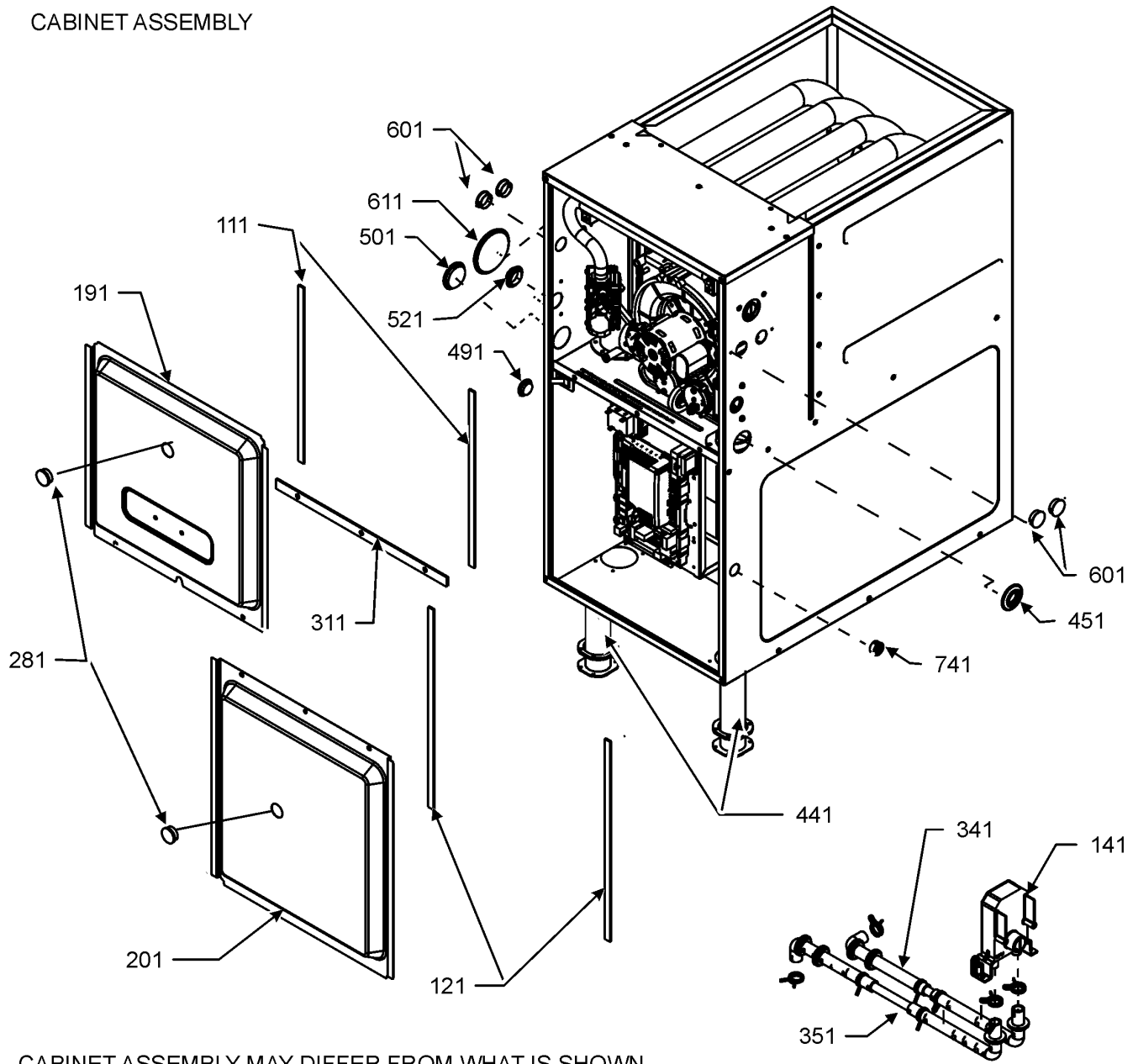
M1 - AC9S960403BNAA
M2 - AC9S960403BNAB
M3 - AC9S960603BNAA
M4 - AC9S960603BNAB
M5 - AC9S960804CNAA
M6 - AC9S960804CNAB
M7 - AC9S961005CNAA
M8 - AC9S961005CNAB
M9 - AC9S961205DNAA
M10 - AC9S961205DNAB

SPECIAL PARTS

0161M00032	NAMEPLATE, AMANA
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Cabinet Assembly

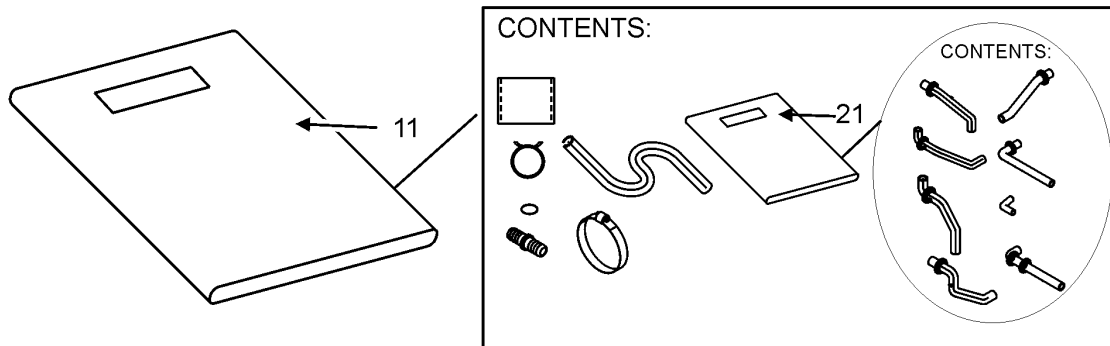
CABINET ASSEMBLY



CABINET ASSEMBLY MAY DIFFER FROM WHAT IS SHOWN

DRAIN TRAP ASSEMBLY

DRAIN KIT ASSEMBLY



Cabinet Assembly

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

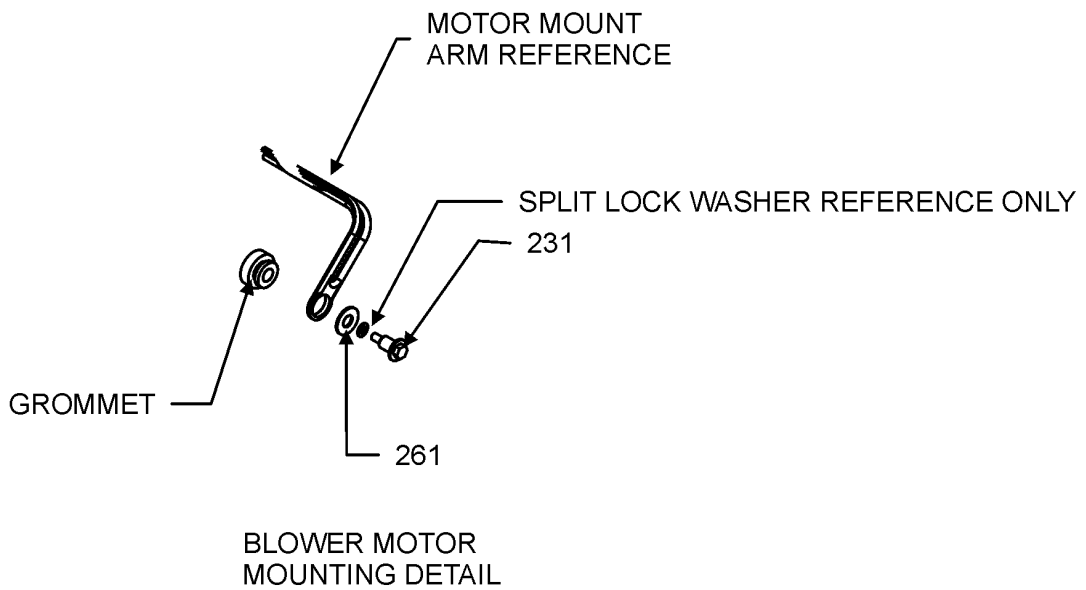
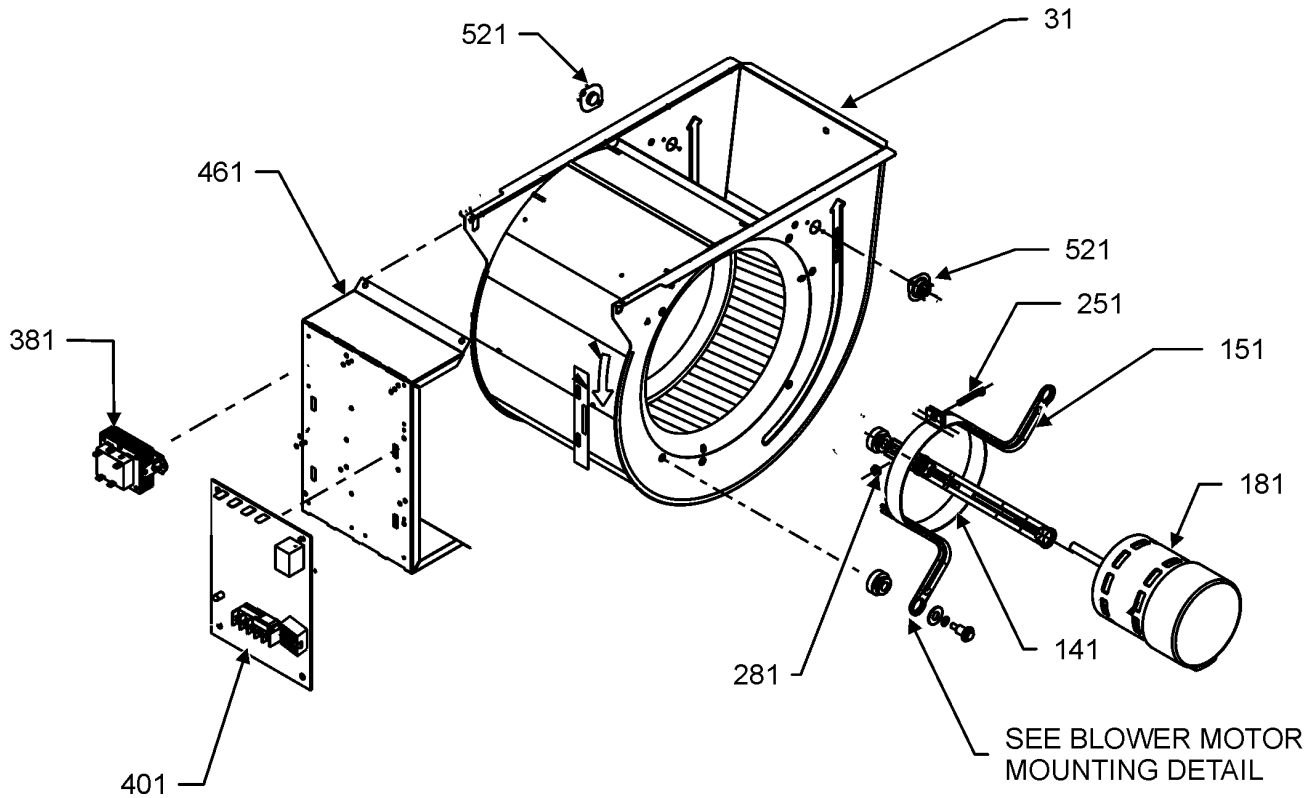
11	0270F05403	DRAIN KIT ASSY
21	0270F05403	DRAIN KIT ASSY
111	0154F00024	GASKET (QTY 2)
121	0154F00025	GASKET (QTY 2)
141	0161F00046	DRAIN TRAP
191	0121F00338LG	DOOR ACCESS 21" PNT (M5, M6, M7, M8)
191	0121F00337LG	DOOR, ACCESS 17.5" PNT (M1, M2, M3, M4)
191	0121F00339LG	DOOR, ACCESS 24.5" PNT (M9, M10)
201	0121F00340LG	DOOR, BLOWER 17.5" PNT (M1, M2, M3, M4)
201	0121F00341LG	DOOR, BLOWER 21" PNT (M5, M6, M7, M8)
201	0121F00342LG	DOOR, BLOWER 24.5" PNT (M9, M10)
281	B1392139	VIEW PORT BUSHING (QTY 2)
311	0154F00020	GASKET, DECK (M1, M2, M3, M4)
311	0154F00021	GASKET, DECK (M5, M6, M7, M8)
311	0154F00022	GASKET, DECK (M9, M10)
341	0270F03125	CF DRAIN TUBE ASSY (M1, M2, M3, M4)
341	0270F03515	CF DRAIN TUBE ASSY (M5, M6, M7, M8)
341	0270F03516	CF DRAIN TUBE ASSY (M9, M10)
351	0270F03126	CF DRAIN TUBE ASSY (M5, M6, M7, M8)
351	0270F03127	CF DRAIN TUBE ASSY (M9, M10)
351	0270F03514	CF DRAIN TUBE ASSY (M1, M2, M3, M4)
441	0161F00064	PIPE, STRAIGHT CF (QTY 2)
451	M0501301	PIPE GROMMET
491	M0570808	BUTTON PLUG
501	M0570806	BUTTON PLUG
521	0161M00027	HOLE PLUG
601	B1392021	PLASTIC PLUG, 1" (2713-BLK) (QTY 4)
611	0163M00460	CLAMP-HOSE (QTY 2)
741	B1392104	UNIVERSAL BUSHING UB 875
NS	M0310345	BUTTON PLUG (QTY 2)
NS	M0570807	BUTTON PLUG
NS	M0209730	DECORATIVE SCREW (QTY 3)
NS	0154F00041	FRESH AIR GASKET
NS	0163M00319	HEX NUT INSERT (QTY 3)
NS	0161M00032	NAMEPLATE, AMANA
NS	M0273904	RETAINER SCREW (QTY 3)

Expanded Model Nomenclature

- | |
|----------------------|
| M1 - AC9S960403BNAA |
| M2 - AC9S960403BNAB |
| M3 - AC9S960603BNAA |
| M4 - AC9S960603BNAB |
| M5 - AC9S960804CNAA |
| M6 - AC9S960804CNAB |
| M7 - AC9S961005CNAA |
| M8 - AC9S961005CNAB |
| M9 - AC9S961205DNAA |
| M10 - AC9S961205DNAB |

Blower Assembly

BLOWER ASSEMBLY



BLOWER ASSEMBLY MAY DIFFER FROM WHAT IS SHOWN

Blower Assembly

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

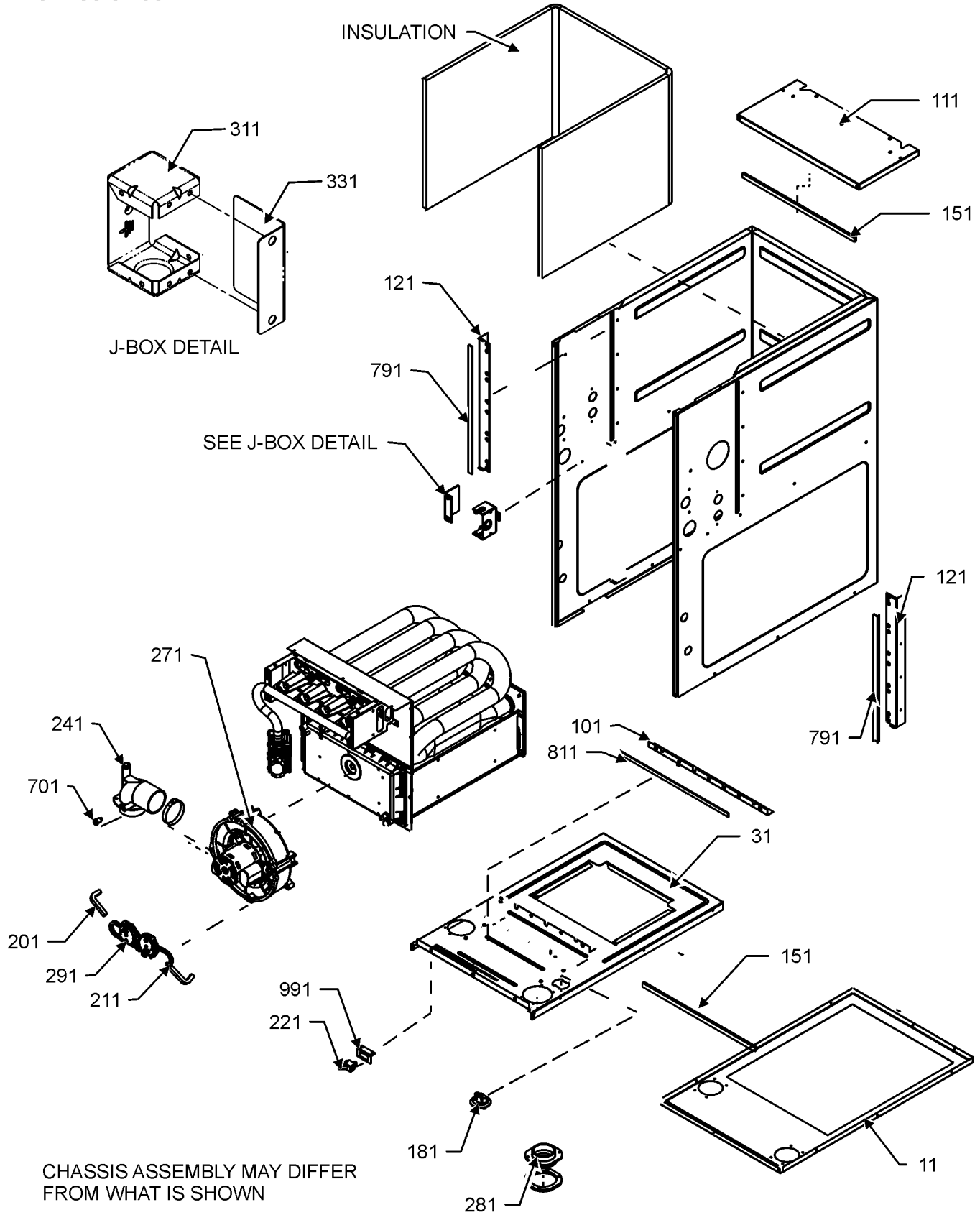
31	0271F00507	MORRISON 11 X 10 BLOWER (M5, M6, M7, M8)
31	0271F00508	MORRISON 11 X 11 BLOWER (M9, M10)
31	0271F00506	MORRISON 11 X 8 BLOWER (M1, M2, M3, M4)
141	0121M00039	MOUNT BAND, MOTOR (HEAVY DUTY)
151	0163M00538	MOUNT ARM, MOTOR (QTY 3)
181	0131F00112M	CONTROLLERLESS MOTOR (M1, M2, M3, M4)
181	0131F00113M	CONTROLLERLESS MOTOR (M5, M6)
181	0131F00114M	CONTROLLERLESS MOTOR (M7, M8, M9, M10)
181	0131F00256	MOTOR PROGRAMMED (M1, M2)
181	0131F00257	MOTOR PROGRAMMED (M3, M4)
181	0131F00258	MOTOR PROGRAMMED (M5, M6)
181	0131F00259	MOTOR PROGRAMMED (M7, M8)
181	0131F00260	MOTOR PROGRAMMED (M9, M10)
231	M0250565	TC SCREW 1.25" (QTY 3)
251	0163M00320	HEX HEAD ALL THREAD TAP BOLT
261	B1392918	FLAT WASHER (QTY 3)
281	B1393800	LOCKNUT, NYLON, INSERT 1/4, 20
381	0130M00140	TRANSFORMER, 120V TO 24V, 40VA
401	PCBBF166	1 STAGE IFC (M2, M4, M6, M8, M10)
401	PCBBF163	CIRCUIT BOARD FURNACE (M1, M3, M5, M7, M9)
461	0121F00464	CONTROL MOUNTING PLATE
521	0130F00038	AUX LIMIT - LT BLUE 120° (QTY 2)
NS	B1392021	1" PLASTIC PLUG (QTY 4)
NS	0159F00160	CTM, MOTOR HARNESS
NS	0259F00024	HARNESS - BLOWER
NS	M0282015	KEPS NUT (M7, M8, M9, M10)
NS	M0267144	SCREW-MACH (M7, M8, M9, M10)
NS	B1392820	SLIT LOCK WASHER (M7, M8, M9, M10)

Expanded Model Nomenclature

M1 - AC9S960403BNAA
M2 - AC9S960403BNAB
M3 - AC9S960603BNAA
M4 - AC9S960603BNAB
M5 - AC9S960804CNAA
M6 - AC9S960804CNAB
M7 - AC9S961005CNAA
M8 - AC9S961005CNAB
M9 - AC9S961205DNAA
M10 - AC9S961205DNAB

Chassis Assembly

CHASSIS ASSEMBLY



CHASSIS ASSEMBLY MAY DIFFER FROM WHAT IS SHOWN

Chassis Assembly

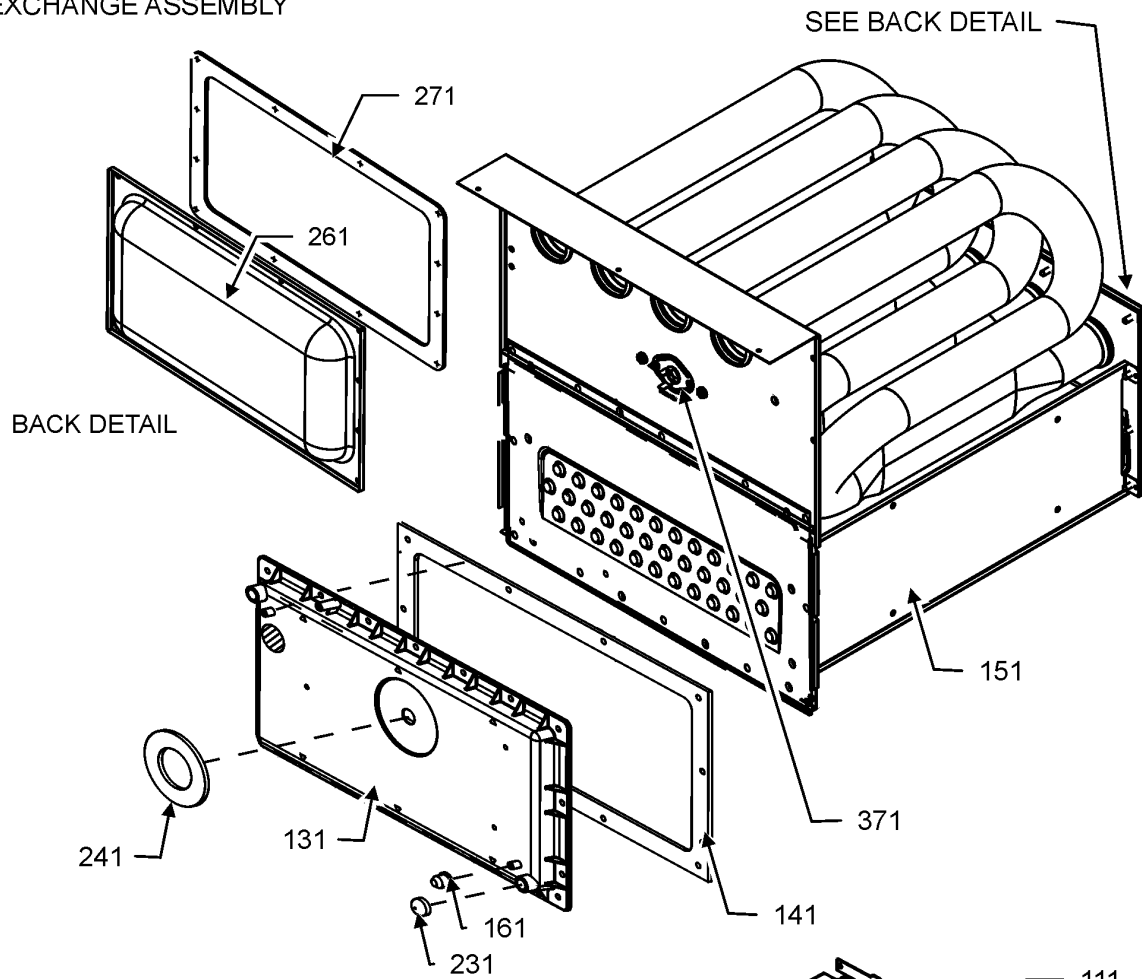
Ref. Part No:	Ref. Part No:	Description:	Description:
Image 1:			
11	0121F00548DG	PAINTED BASEPAN, 17.5 CF (M1, M2, M3, M4)	
11	0121F00549DG	PAINTED BASEPAN, 21 CF (M5, M6, M7, M8)	
31	0121F00536	DECK-BLOWER 17.5" CF (M1, M2, M3, M4)	
31	0121F00537	DECK-BLOWER 21" CF (M5, M6, M7, M8)	
101	0121F00314	ANGLE, DECK (M1, M2, M3, M4)	
101	0121F00315	ANGLE, DECK (M5, M6, M7, M8)	
111	0121F00426DG	TOP, PAINTED FURNACE 17.5" CF (M1, M2, M3, M4)	
111	0121F00434DG	TOP, PAINTED FURNACE 21" CF (M5, M6, M7, M8)	
121	0121F00313	SIDE ANGLE (QTY 2)	
151	20179309	GASKET (M1, M2, M3, M4)	
151	20179310	GASKET (M5, M6)	
181	0159F00144	WIRE HARNESS (M3, M4, M5, M6, M7, M8, M9, M10)	
181	0159F00145	WIRE HARNESS (M1, M2)	
201	0164M00118	HOSE- PRESSURE SW 10" (M1, M2)	
201	0164M00117	HOSE- PRESSURE SW 8" (M3, M4, M5, M6, M7, M8, M9, M10)	
211	0164M00119	HOSE- PRESSURE SW 12" (M1, M2, M3, M4)	
211	0164M00120	HOSE- PRESSURE SW 14" (M5, M6, M7, M8)	
211	0164M00121	HOSE- PRESSURE SW 16" (M9, M10)	
221	0130M00243	SWITCH, INTERLOCK	
241	0164F00003	ELBOW-FLUE, 17.5" CFLOW (M1, M2, M3, M4)	
241	0164F00004	ELBOW-FLUE, 21" CFLOW (M5, M6, M7, M8)	
241	0164F00005	ELBOW-FLUE, 24.5" CFLOW (M9, M10)	
271	0171M00001	MOTOR-ID, BLOWER	
281	0161F00037	COUPLING	
291	0130F00438	SWITCH, PRESSURE (M9, M10)	
291	0130F00439	SWITCH, PRESSURE (M3, M4, M5, M6, M7, M8)	
291	0130F00447	SWITCH, PRESSURE (M1, M2)	
311	0161F00042	JUNCTION BOX	
331	0161F00043	JUNCTION BOX LID	
701	M0326804	TUBE PLUG	
791	0154F00015	GASKET (QTY 2)	
811	0154F00014	GASKET (M1, M2, M3, M4)	
811	0154F00016	GASKET (M5, M6, M7, M8, M9, M10)	
991	0121F00389	BRACKET, DOOR SWITCH	
NS	0160F00015	INSULATION, HT EXCHANGER 17.5" (M1, M2, M3, M4)	
NS	0160F00016	INSULATION, HT EXCHANGER 21" (M5, M6, M7, M8)	

Expanded Model Nomenclature

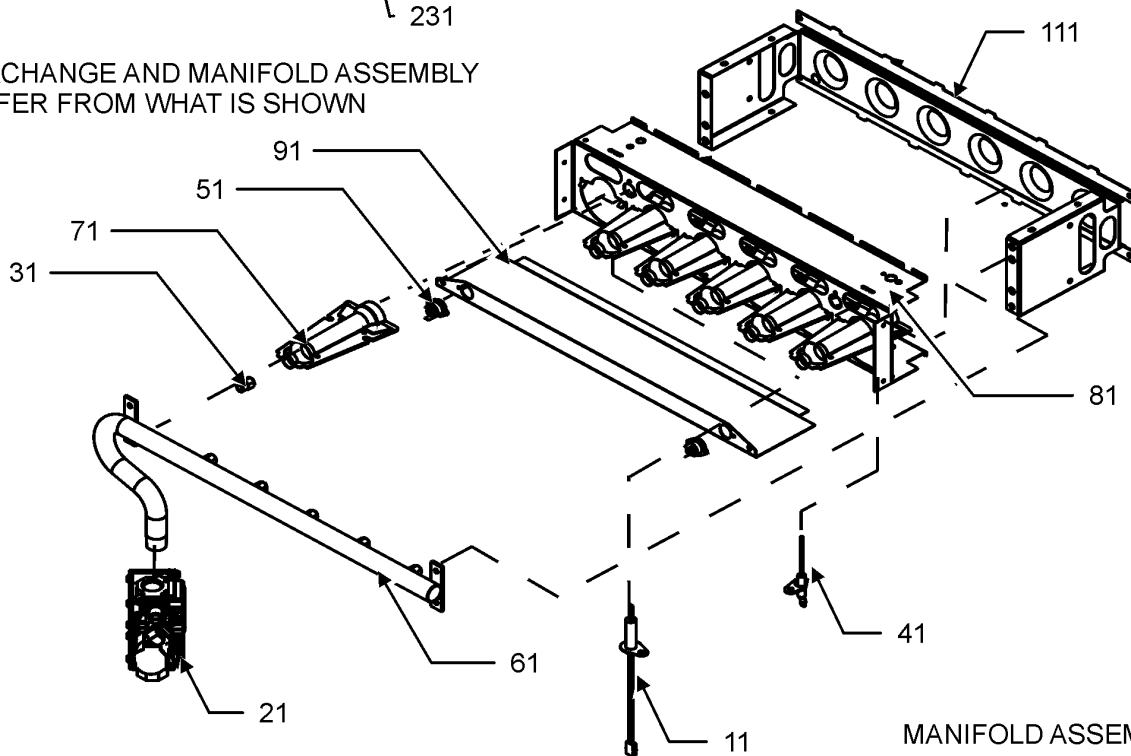
M1 - AC9S960403BNAA
M2 - AC9S960403BNAB
M3 - AC9S960603BNAA
M4 - AC9S960603BNAB
M5 - AC9S960804CNAA
M6 - AC9S960804CNAB
M7 - AC9S961005CNAA
M8 - AC9S961005CNAB
M9 - AC9S961205DNAA
M10 - AC9S961205DNAB

Heat Exchange and Manifold Assembly

HEAT EXCHANGE ASSEMBLY



HEAT EXCHANGE AND MANIFOLD ASSEMBLY
MAY DIFFER FROM WHAT IS SHOWN



MANIFOLD ASSEMBLY

Heat Exchange and Manifold Assembly

Ref. Part No: No:	Description:	Ref. Part No: No:	Description:											
Image 1:		Image 1:												
11	0130F00008	IGNITOR-SINI 17 SEC	NS 0121F00439	PRIMARY LIMIT-HEAT SHIELD										
21	0151M00037	GAS VALVE	NS 0121F00355	SHIELD, COIL (QTY 2)										
31	10716005	ORIFICE (QTY 2)	Expanded Model Nomenclature											
41	0130F00010	FLAME SENSOR	<table border="1"> <tr><td>M1 - AC9S960403BNAA</td></tr> <tr><td>M2 - AC9S960403BNAB</td></tr> <tr><td>M3 - AC9S960603BNAA</td></tr> <tr><td>M4 - AC9S960603BNAB</td></tr> <tr><td>M5 - AC9S960804CNA A</td></tr> <tr><td>M6 - AC9S960804CNAB</td></tr> <tr><td>M7 - AC9S961005CNA A</td></tr> <tr><td>M8 - AC9S961005CNAB</td></tr> <tr><td>M9 - AC9S961205DNA A</td></tr> <tr><td>M10 - AC9S961205DNAB</td></tr> </table>		M1 - AC9S960403BNAA	M2 - AC9S960403BNAB	M3 - AC9S960603BNAA	M4 - AC9S960603BNAB	M5 - AC9S960804CNA A	M6 - AC9S960804CNAB	M7 - AC9S961005CNA A	M8 - AC9S961005CNAB	M9 - AC9S961205DNA A	M10 - AC9S961205DNAB
M1 - AC9S960403BNAA														
M2 - AC9S960403BNAB														
M3 - AC9S960603BNAA														
M4 - AC9S960603BNAB														
M5 - AC9S960804CNA A														
M6 - AC9S960804CNAB														
M7 - AC9S961005CNA A														
M8 - AC9S961005CNAB														
M9 - AC9S961205DNA A														
M10 - AC9S961205DNAB														
51	0130F00123	LIMIT, RESET MAN (M1, M2, M3, M4)												
51	10123534	LIMIT-RESET MAN-ORANGE (M5, M6)												
51	10123539	LIMIT-RESET MAN-ORANGE (M7, M8, M9, M10)												
61	0163F00007	MANIFOLD (M1, M2)												
61	0163F00008	MANIFOLD (M3, M4)												
61	0163F00009	MANIFOLD (M5, M6)												
61	0163F00010	MANIFOLD (M7, M8)												
61	0163F00011	MANIFOLD (M9, M10)												
71	0163F00017	BECKETT BURNER (QTY 2)												
81	0121F00456	BRACKET-BURNER 2 (M1, M2)												
81	0121F00455	BRACKET-BURNER 3 (M3, M4)												
81	0121F00454	BRACKET-BURNER 4 (M5, M6)												
81	0121F00453	BRACKET-BURNER 5 (M7, M8)												
81	0121F00451	BRACKET-BURNER 6 (M9, M10)												
91	0121F00539	SHEILD, BURNER (M1, M2)												
91	0121F00540	SHEILD, BURNER (M3, M4)												
91	0121F00541	SHEILD, BURNER (M5, M6)												
91	0121F00542	SHEILD, BURNER (M7, M8)												
91	0121F00543	SHEILD, BURNER (M9, M10)												
111	0121F00469	ORIFICE BRACKET-BURNER 2 (M1, M2)												
111	0121F00468	ORIFICE BRACKET-BURNER 3 (M3, M4)												
111	0121F00467	ORIFICE BRACKET-BURNER 4 (M5, M6)												
111	0121F00466	ORIFICE BRACKET-BURNER 5 (M7, M8)												
111	0121F00465	ORIFICE BRACKET-BURNER 6 (M9, M10)												
131	0161F00030	COVER, FRONT (M5, M6)												
131	0161F00053	COVER, FRONT (M1, M2)												
131	0161F00054	COVER, FRONT (M3, M4)												
131	0161F00060	COVER, FRONT (M7, M8)												
131	0161F00063	COVER, FRONT (M9, M10)												
141	0154F00026	GASKET FRONT COVER (M1, M2, M3, M4)												
141	0154F00030	GASKET FRONT COVER (M5, M6, M7, M8)												
141	0154F00034	GASKET FRONT COVER (M9, M10)												
151	0257F00362	HEAT EXCHANGER ASSY (M3, M4)												
151	0257F00363	HEAT EXCHANGER ASSY (M5, M6)												
151	0257F00364	HEAT EXCHANGER ASSY (M7, M8)												
151	0257F00372	HEAT EXCHANGER ASSY (M9, M10)												
151	0257F00380	HEAT EXCHANGER ASSY (M1, M2)												
161	M0326804	TUBE PLUG												
231	A1781105	CAP-VINYL .500												
241	0154F00043	GASKET ID BLOWER												
261	0121F00317	COVER, REAR (M1, M2, M3, M4)												
261	0121F00318	COVER, REAR (M5, M6, M7, M8)												
261	0121F00319	COVER, REAR (M9, M10)												
271	0154F00037	GASKET, REAR CVR (M1, M2, M3, M4)												
271	0154F00038	GASKET, REAR CVR (M5, M6, M7, M8)												
271	0154F00039	GASKET, REAR CVR (M9, M10)												
371	0130F00071	LIMIT, PRIMARY (M5, M6)												
371	20162901	LIMIT, PRIMARY (M1, M2, M3, M4)												
371	20162903	LIMIT, PRIMARY (M7, M8)												
371	20162906	LIMIT, PRIMARY (M9, M10)												
NS	0154F00041	GASKET FRESH AIR												
NS	0121F00583	INSULATION, RETAINER (M1, M2, M3, M4)												
NS	0121F00584	INSULATION, RETAINER (M5, M6, M7, M8)												