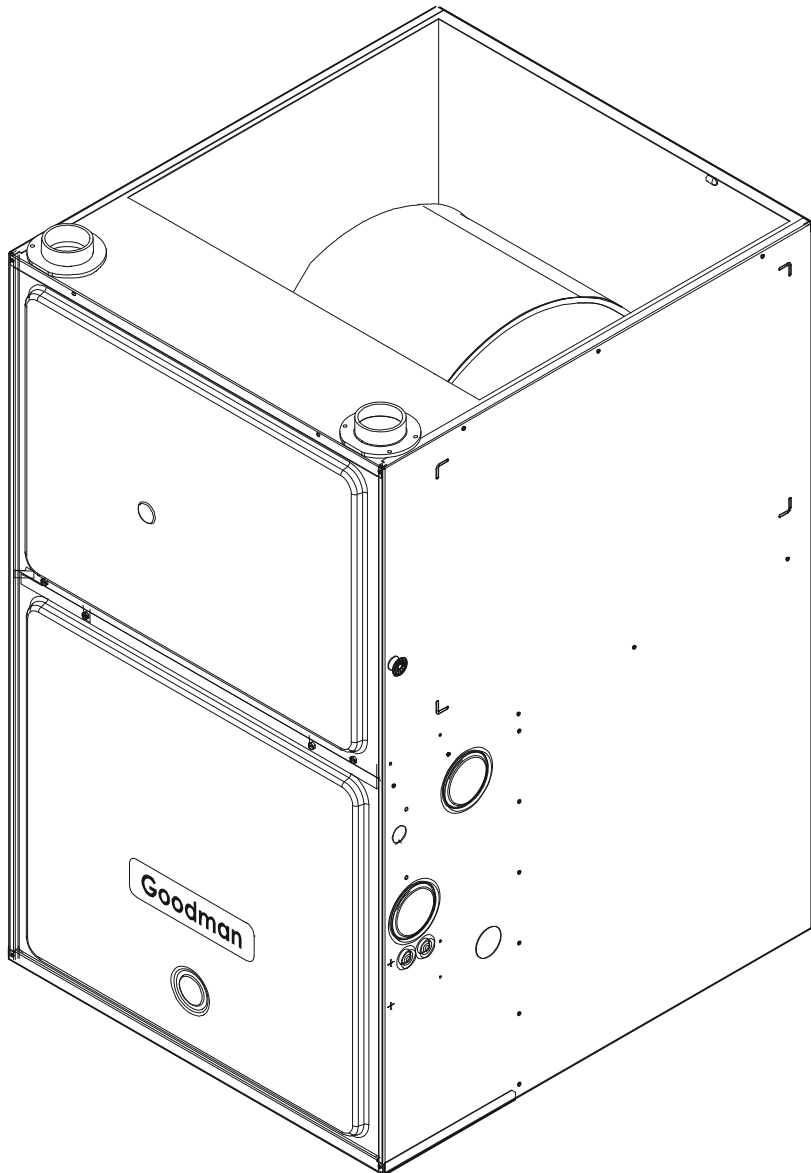


GCH9 90% Counterflow Hybrid Furnace

GCH90453BXAA
GCH90453BXAB
GCH90703BXAA
GCH90703BXAB
GCH90704CXAA
GCH90704CXAB
GCH90904CXAA
GCH90904CXAB
GCH90905DXAA
GCH90905DXAB
GCH91155DXAA
GCH91155DXAB
GCH91155DXAC
GCH91155DXAE



This manual is to be used by qualified technicians only.

This manual replaces RP-407B.

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Important Information

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Views shown are for parts illustrations only, not servicing procedures

11/15/13: Corrections made to the HT EX Assy

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

10735102	BECKETT BURNER (QTY A/R)
0131F00022	BLOWER MOTOR 1/2 HP, 4 SP, 6 PL (M5, M6, M7, M8)
0131F00020	BLOWER MOTOR 1/3 HP, 4 SP, 6 PL (M1, M2, M3, M4)
10759415S	BLOWER MOTOR 3/4 HP, 4 SP, 8 PL (M9, M10, M11, M12, M13, M14)
D6723311	BLOWER WHEEL (M9, M10, M11, M12, M13, M14)
B1368047	BLOWER WHEEL 10 X 10 (M5, M6, M7, M8)
B1368058	BLOWER WHEEL 10 X 8 (M1, M2, M3, M4)
CAP125000370VA	CAPACITOR 12.5/370V (M1, M2, M3, M4)
CAP150000370VA	CAPACITOR 15/370V (M9, M10, M11, M12, M13, M14)
CAP200000370VA	CAPACITOR 20/370V (M5, M6, M7, M8)
0130F00010	FLAME SENSOR
0151F00000P	GAS VALVE - WHITE-RODGERS 2-STAGE (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12)
0151M00028	GAS VALVE,(HW)VR92 (M13, M14)
PCBBF122	IGNITION BOARD, HSI INTEGRATED 2-STG
0130F00008	IGNITOR-SINI 17 SEC
10123518	MANUAL RESET LIMIT (M5, M6)
10123519	MANUAL RESET LIMIT (M1, M2, M3, M4, M7, M8)
10123518	MANUAL RESET LIMIT (M9, M10)
10123519	MANUAL RESET LIMIT (M11, M12)
10123517	MANUAL RESET LIMIT (M1, M2, M3, M4, M5, M6, M11, M12, M13, M14)
10123534	MANUAL RESET LIMIT 220°F (M7, M8, M9, M10)
20197311	PRESSURE SWITCH-LIME (M1, M2, M3, M4, M7, M8, M11, M12, M13, M14)
20197313	PRESSURE SWITCH-PINK (M5, M6, M9, M10)
20162907	PRIMARY LIMIT (M11, M12, M13, M14)
0130F00038	PRIMARY LIMIT - LT BLUE 120° (M13, M14)
20162906	PRIMARY LIMIT - WHITE (M1, M2, M3, M4, M5, M6, M9, M10)
20162904	PRIMARY LIMIT-TEMPERATURE CONTROL (M7, M8)
B1141605	TRANSFORMER 120V TO 24V, 40 VA

M1 - GCH90453BXAA
M2 - GCH90453BXAB
M3 - GCH90703BXAA
M4 - GCH90703BXAB
M5 - GCH90704CXAA
M6 - GCH90704CXAB
M7 - GCH90904CXAA
M8 - GCH90904CXAB
M9 - GCH90905DXAA
M10 - GCH90905DXAB
M11 - GCH91155DXAA
M12 - GCH91155DXAB
M13 - GCH91155DXAC
M14 - GCH91155DXAE

SPECIAL PARTS

0161F00000P	GOODMAN NAMEPLATE
-------------	-------------------

Cabinet

Image 1

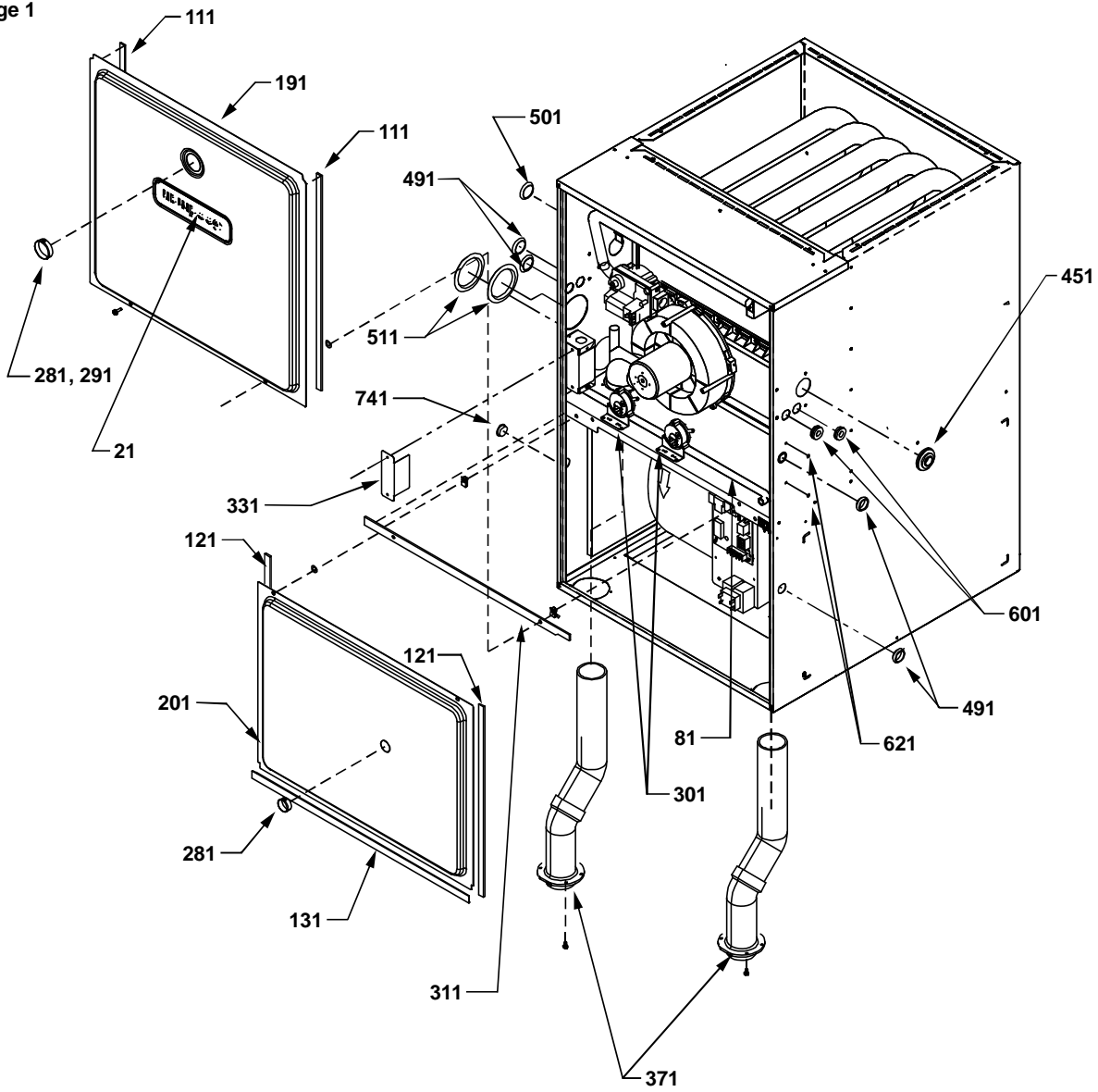
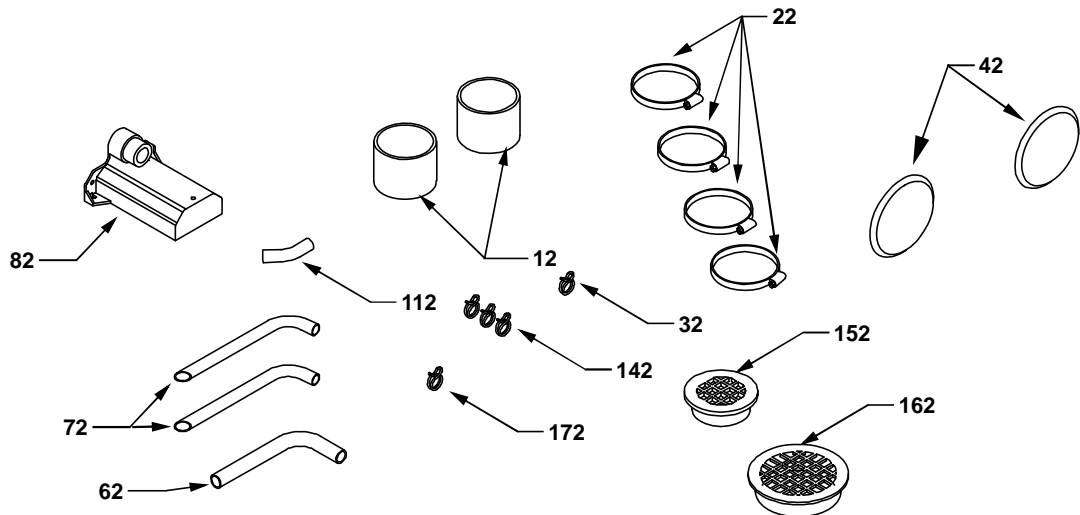


Image 2



Cabinet

**Ref. Part
No: No:**

Description:

**Ref. Part
No: No:**

Description:

Image 1:

21	0161F00000P	GOODMAN NAMEPLATE
81	20201902	DRAIN HOSE
111	20179308	GASKET (QTY 2)
121	20179311	GASKET (M2, M4, M6, M8, M10, M12, M13, M14)
131	20179311	GASKET (M2, M4, M6, M8, M10, M12, M13, M14)
131	20179312	GASKET (M6, M8)
131	20179313	GASKET (M10, M12, M13, M14)
191	0121F00072DG	ACCESS DOOR (M1, M2, M3, M4)
191	0121F00073DG	ACCESS DOOR (M5, M6, M7, M8)
191	0121F00074DG	ACCESS DOOR (M9, M10, M11, M12, M13, M14)
201	0121F00069DG	BLOWER DOOR (M1, M2, M3, M4)
201	0121F00070DG	BLOWER DOOR (M5, M6, M7, M8)
201	0121F00071DG	BLOWER DOOR (M9, M10, M11, M12, M13, M14)
281	B1392139	VIEW PORT BUSHING-BLOWER DOOR (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M13, M14)
291	11104002	VIEW PORT BUSHING-ACCESS DOOR (M1, M3, M5, M7, M9, M11)
301	20197311	PRESSURE SWITCH-LIME (M1, M2, M3, M4, M7, M8, M11, M12, M13, M14)
301	20197313	PRESSURE SWITCH-PINK (M5, M6, M9, M10)
311	22320001	DECK GASKET (M1, M2, M3, M4)
311	22320002	DECK GASKET (M5, M6, M7, M8)
311	22320003	DECK GASKET (M9, M10, M11, M12, M13, M14)
331	10736201	COVER, HIGH VOLTAGE BOX (M1, M3, M5, M7, M9, M11)
371	22309502	FLUE PIPE (QTY 2)
451	M0501301	PIPE GROMMET
491	M0570808	BUTTON PLUG (QTY 4)
501	M0570806	BUTTON PLUG
511	M0570807	BUTTON PLUG (QTY 2)
601	A4691701	GROMMET (QTY 2)
621	M0310345	BUTTON PLUG (QTY 2)
741	B1392104	UNIVERSAL BUSHING UB 875 (QTY 2)
NS	10195518	STANDPIPE BAG ASSY

Expanded Model Nomenclature

M1 - GCH90453BXAA
M2 - GCH90453BXAB
M3 - GCH90703BXAA
M4 - GCH90703BXAB
M5 - GCH90704CXAA
M6 - GCH90704CXAB
M7 - GCH90904CXAA
M8 - GCH90904CXAB
M9 - GCH90905DXAA
M10 - GCH90905DXAB
M11 - GCH91155DXAA
M12 - GCH91155DXAB
M13 - GCH91155DXAC
M14 - GCH91155DXAE

Image 2:

12	10254303	RUBBER COUPLING (QTY 2)
22	0163M00049	HOSE CLAMP (QTY 2)
32	M0119207	HOSE CLAMP
42	M0570807	BUTTON PLUG (QTY 2)
62	20201901	DRAIN HOSE
72	20201802	DRAIN TUBE (QTY 2)
82	20171701	DRAIN TRAP
112	20214203	DRAIN ANGLE
142	M0119205	HOSE CLAMP (QTY 3)
152	B2810816	2" MESH INSERT
162	B2810814	3" MESH INSERT
172	M0119206	HOSE CLAMP

Blower Assembly

Image 1

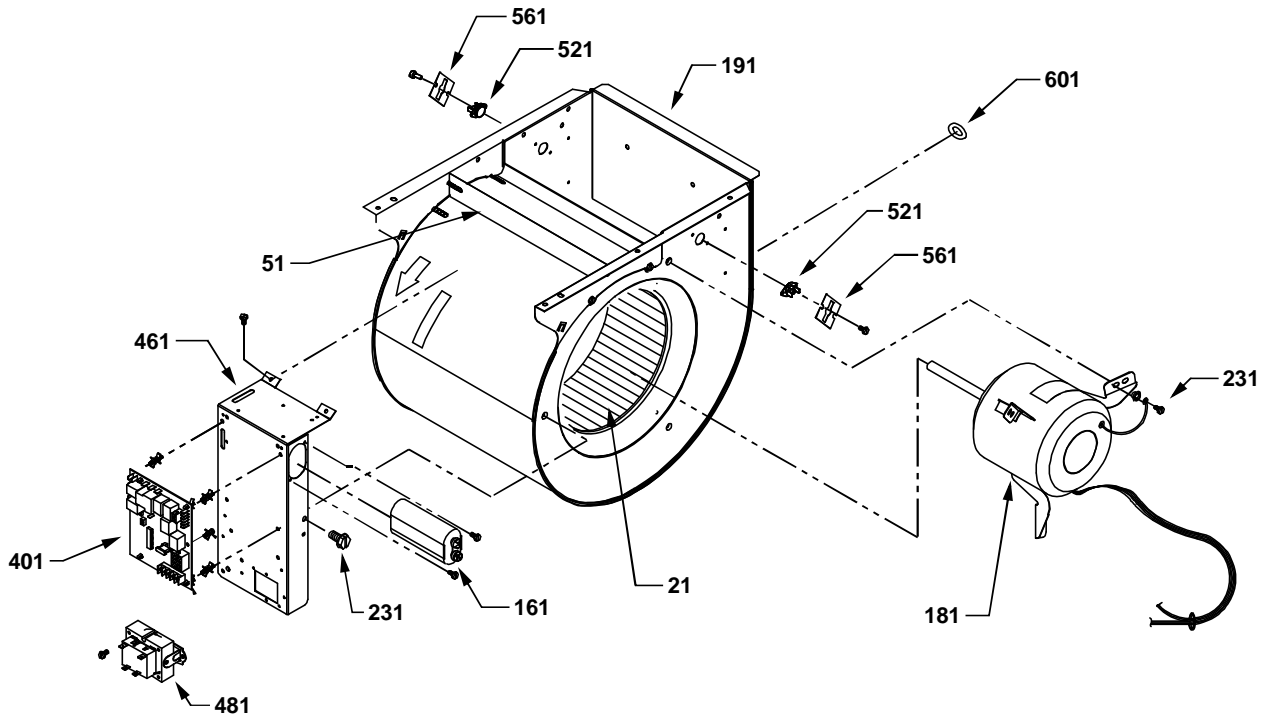
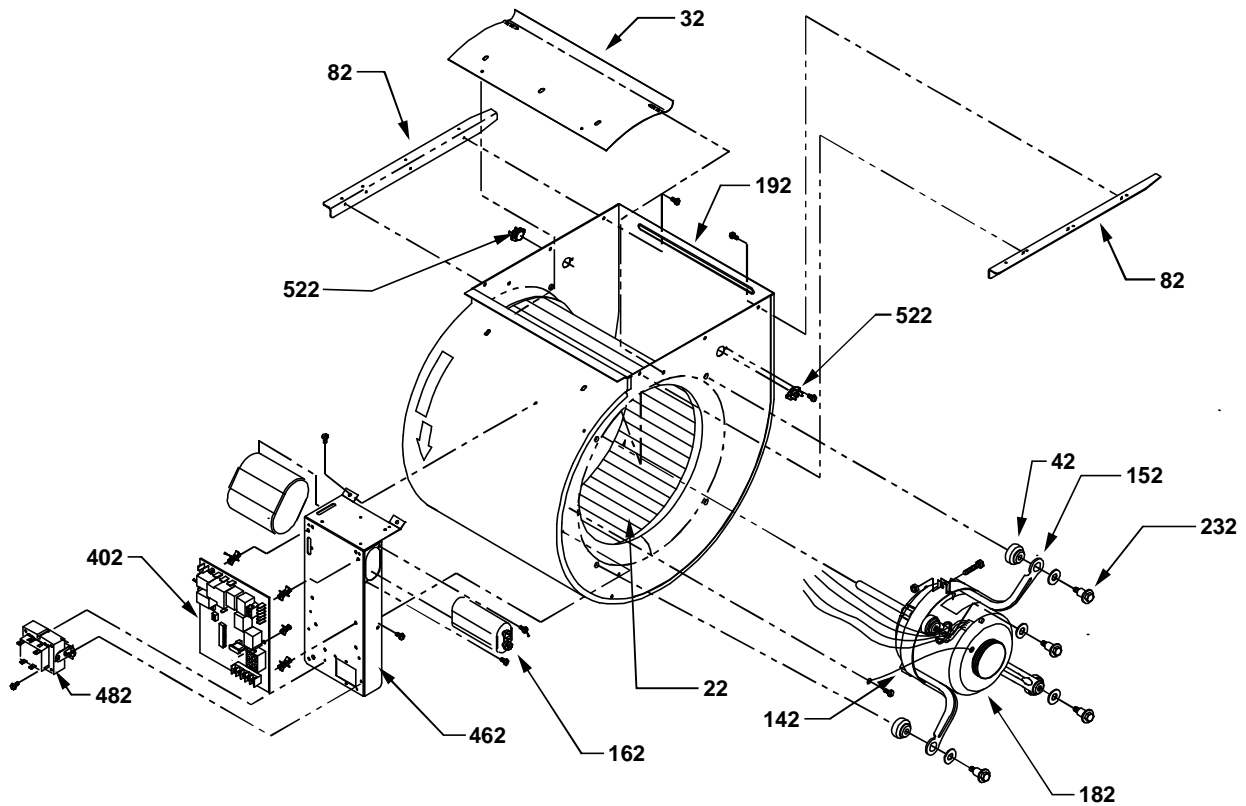


Image 2



Blower Assembly

**Ref. Part
No: No:**

Description:

**Ref. Part
No: No:**

Description:

Image 1:

21	B1368047	BLOWER WHEEL 10 X 10 (M5, M6, M7, M8)
21	B1368058	BLOWER WHEEL 10 X 8 (M1, M2, M3, M4)
51	764741F	BLOWER BLOCK-OFF 10 X 10 (M5, M6, M7, M8)
51	764740	BLWR BLK-OFF,10X8 (M1, M2, M3, M4)
161	CAP125000370VA	CAPACITOR 12.5/370V (M1, M2, M3, M4)
161	CAP200000370VA	CAPACITOR 20/370V (M5, M6, M7, M8)
181	0131F00022	BLOWER MOTOR 1/2 HP, 4 SP, 6 PL (M5, M6, M7, M8)
181	0131F00020	BLOWER MOTOR 1/3 HP, 4 SP, 6 PL (M1, M2, M3, M4)
191	0271F00004P	BLOWER HOUSING ASSY 10 X 10 (M5, M6, M7, M8)
191	0271F00001P	BLOWER HOUSING ASSY 10 X 8 (M1, M2, M3, M4)
231	M0250558	TC SCREW (M1, M2, M3, M4, M5, M6, M7, M8)
401	PCBBF122	IGNITION BOARD, HSI INTEGRATED 2-STG (M1, M2, M3, M4, M5, M6, M7, M8)
461	0121F00025P	CONTROL BRACKET (M1, M2, M3, M4, M5, M6, M7, M8)
481	B1141605	TRANSFORMER 120V TO 24V, 40 VA (M1, M2, M3, M4, M5, M6, M7, M8)
521	10123518	MANUAL RESET LIMIT (M5, M6)
521	10123519	MANUAL RESET LIMIT (M1, M2, M3, M4, M7, M8)
561	2509503F	AUXILIARY LIMIT BRACKET (M1, M2, M3, M4, M5, M6, M7, M8)
601	B1392021	PLASTIC PLUG, 1" (2713-BLK) (M1, M2, M3, M4, M5, M6, M7, M8)
NS	0259F00024	WIRE HARNESS-BLOWER (M1, M2, M3, M4, M5, M6, M7, M8)

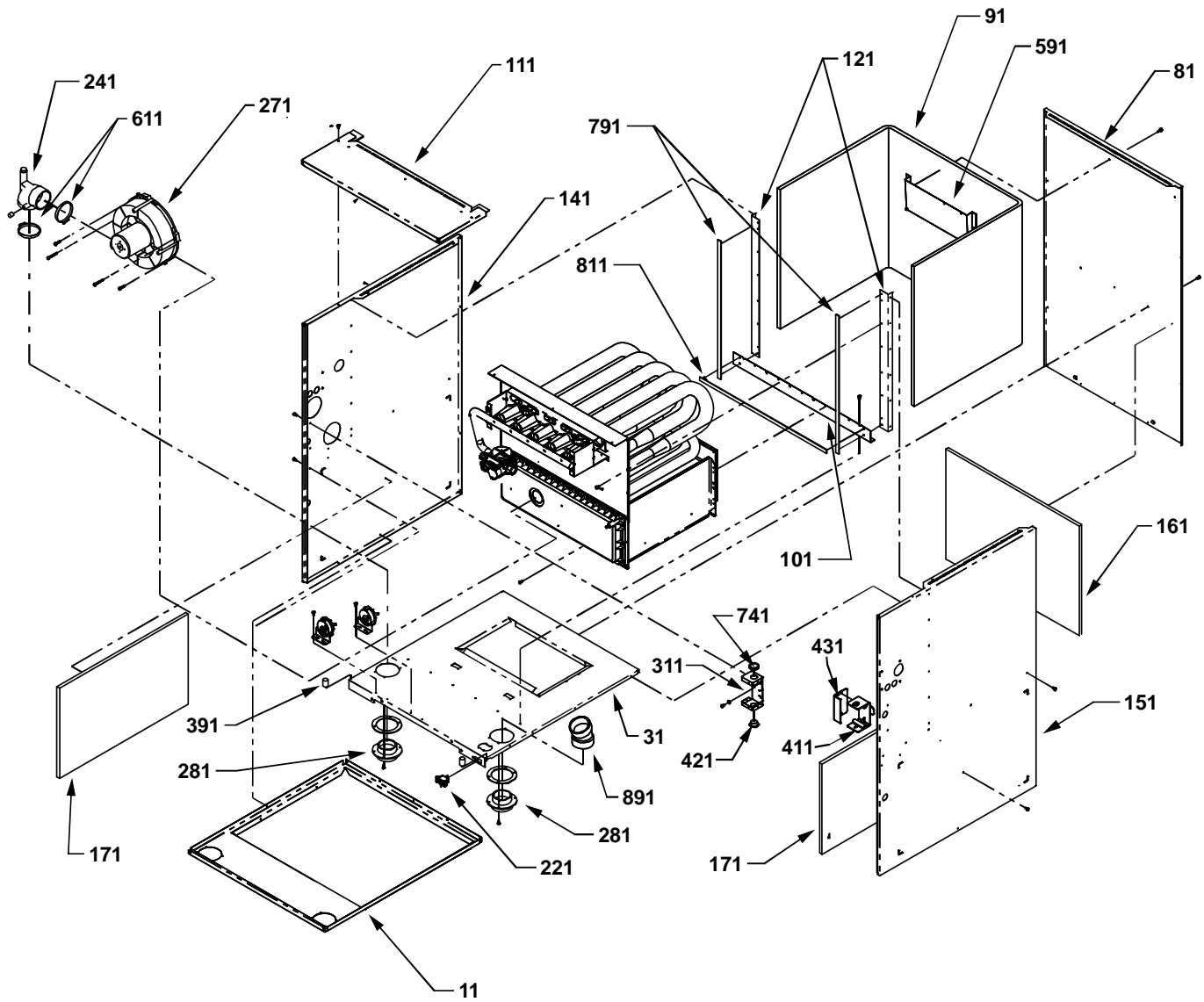
Expanded Model Nomenclature

M1 - GCH90453BXAA
M2 - GCH90453BXAB
M3 - GCH90703BXAA
M4 - GCH90703BXAB
M5 - GCH90704CXAA
M6 - GCH90704CXAB
M7 - GCH90904CXAA
M8 - GCH90904CXAB
M9 - GCH90905DXAA
M10 - GCH90905DXAB
M11 - GCH91155DXAA
M12 - GCH91155DXAB
M13 - GCH91155DXAC
M14 - GCH91155DXAE

Image 2:

22	D6723311	BLOWER WHEEL (M9, M10, M11, M12, M13, M14)
32	C6121807	BLOWER CUT-OFF (M9, M10, M11, M12, M13, M14)
42	A4002702	BLOWER MOTOR GROMMET (M9, M10, M11, M12, M13, M14)
82	20175101	BLOWER SIDE RAIL (M9, M10, M11, M12, M13, M14)
142	10441601	MOTOR MOUNT BAND (M9, M10, M11, M12, M13, M14)
152	10441501	MOTOR MOUNT ARM (M9, M10, M11, M12, M13, M14)
162	CAP150000370VA	CAPACITOR 15/370V (M9, M10, M11, M12, M13, M14)
182	10759415S	BLOWER MOTOR 3/4 HP, 4 SP, 8 PL (M9, M10, M11, M12, M13, M14)
192	0271F00047	BLOWER HOUSING ASSY 11 X 10 (M9, M10, M11, M12, M13, M14)
232	M0221461	TC SCREW (M9, M10, M11, M12, M13, M14)
402	PCBBF122	IGNITION BOARD, HSI INTEGRATED 2-STG (M9, M10, M11, M12, M13, M14)
462	0121F00025P	CONTROL BRACKET (M9, M10, M11, M12, M13, M14)
482	B1141605	TRANSFORMER 120V TO 24V, 40 VA (M9, M10, M11, M12, M13, M14)
522	10123518	MANUAL RESET LIMIT (M9, M10)
522	10123519	MANUAL RESET LIMIT (M11, M12)
522	0130F00038	PRIMARY LIMIT - LT BLUE 120° (M13, M14)
NS	0259F00024	WIRE HARNESS-BLOWER (M9, M10, M11, M12, M13, M14)

Chassis



Chassis

Ref. Part
No: No:

Description:

Ref. Part
No: No:

Description:

Image 1:

11	20273508	BASE PAN (M1, M2, M3, M4)
11	20273510	BASE PAN (M5, M6, M7, M8)
11	20273512	BASE PAN (M9, M10, M11, M12, M13, M14)
31	0121F00044	BLOWER DECK (M1, M2, M3, M4)
31	0121F00046	BLOWER DECK (M5, M6, M7, M8)
31	0121F00049	BLOWER DECK (M9, M10, M11, M12, M13, M14)
81	20273214	BACK PANEL (M1, M2, M3, M4)
81	20273216	BACK PANEL (M5, M6, M7, M8)
81	20273218	BACK PANEL (M9, M10, M11, M12, M13, M14)
91	C6415909	HEAT EXCHANGER INSULATION (M9, M10, M11, M12, M13, M14)
91	C6415910	HEAT EXCHANGER INSULATION (M1, M2, M3, M4)
91	C6415911	HEAT EXCHANGER INSULATION (M5, M6, M7, M8)
101	0121F00018P	DECK RAIL (M1, M2, M3, M4)
101	0121F00019P	DECK RAIL (M5, M6, M7, M8)
101	20191303	DECK RAIL (M9, M10, M11, M12, M13, M14)
111	0270F00103P	TOP COVER ASSY (M1, M2, M3, M4)
111	0270F00104P	TOP COVER ASSY (M5, M6, M7, M8)
111	0270F00105P	TOP COVER ASSY (M9, M10, M11, M12, M13, M14)
121	20191602	SIDE RAIL (M1, M2, M3, M4)
121	20191603	SIDE RAIL (M5, M6, M7, M8)
121	20191604	SIDE RAIL (M9, M10, M11, M12, M13, M14)
141	0121F00093DG	SIDE PANEL LH
151	0121F00091DG	SIDE PANEL RH
161	20006601	INSULATION (M1, M2, M3, M4)
161	20006602	INSULATION (M5, M6, M7, M8)
161	20006603	INSULATION (M9, M10, M11, M12, M13, M14)
171	20006604	SIDE INSULATION (QTY 2)
221	B1370818	INTERLOCK SWITCH
241	20171802	ELBOW
271	0171M00000	BLOWER-ID
281	20049701	FA COUPLING (QTY 2)
311	10736102	HIGH VOLTAGE BOX (M1, M3, M5, M7, M9, M11)
391	M0275521	PLASTIC SEALER (QTY 0)
411	0161F00004	JUNCTION BOX (M2, M4, M6, M8, M10, M12, M13)
411	0161F00012	JUNCTION BOX-PLA (M14)
421	A4554801	SNAP BUSHING (M1, M3, M5, M7, M9, M11)
431	0161F00005	JUNCTION BOX COVER (M2, M4, M6, M8, M10, M12, M13)
431	0161F00013	JUNCTION BOX-LID (M14)
591	11165107	ID BLOWER SHIELD
611	0163M00049	HOSE CLAMP (QTY 2)
741	B1392104	UNIVERSAL BUSHING UB 875 (QTY 2)
791	20194608	GASKET (QTY 2)
811	20194605	GASKET (M1, M2, M3, M4)
811	20194606	GASKET (M5, M6, M7, M8)
811	20194607	GASKET (M9, M10, M11, M12, M13, M14)
891	C6455901	ELBOW-22 1/2 ELL
NS	0159F00002	HARNESS-WIRING (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12)
NS	0159F00010	HARNESS-WIRING (M13, M14)
NS	0164M00008	HOSE-PRESSURE SW (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12, M13)
NS	0164M00010	HOSE-PRESSURE SW (M1, M2, M3, M4)
NS	0164M00011	PRESSURE SWITCH HOSE (M5, M6, M7, M8)
NS	0164M00013	PRESSURE SWITCH HOSE (M9, M10, M11, M12, M13)

Expanded Model Nomenclature

M1 - GCH90453BXAA
M2 - GCH90453BXAB
M3 - GCH90703BXAA
M4 - GCH90703BXAB
M5 - GCH90704CXAA
M6 - GCH90704CXAB
M7 - GCH90904CXAA
M8 - GCH90904CXAB
M9 - GCH90905DXAA
M10 - GCH90905DXAB
M11 - GCH91155DXAA
M12 - GCH91155DXAB
M13 - GCH91155DXAC
M14 - GCH91155DXAE

Heat Exchanger / Manifold / Gas Valve

**Ref. Part
No: No:**

Description:

**Ref. Part
No: No:**

Description:

Image 1:

11	0130F00010	FLAME SENSOR
21	0151F00000P	GAS VALVE - WHITE-RODGERS 2-STAGE (M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12)
21	0151M00028	GAS VALVE,(HW)VR92 (M13, M14)
31	10716003	ORIFICE (QTY A/R)
41	0130F00008	IGNITOR-SINI 17 SEC
51	0257F00160	HEAT EXCHANGER ASSY 3B (M6)
51	0257F00156	HEAT EXCHANGER ASSY 4B (M10)
51	0257F00037P	HT EX ASSY 2B FUR (M1)
51	0257F00161	HT EX ASSY 2B FUR (M2)
51	0257F00034P	HT EX ASSY 3B FUR (M3)
51	0257F00036P	HT EX ASSY 3B FUR (M5)
51	0257F00158	HT EX ASSY 3B FUR (M4)
51	0257F00035P	HT EX ASSY 4B FUR (M7)
51	0257F00159	HT EX ASSY 4B FUR (M8)
51	20194433	HT EX ASSY 4B FUR (M9)
51	0257F00155	HT EX ASSY 5B FUR (M12, M13, M14)
51	20194431	HT EX ASSY 5B FUR (M11)
61	20196401	MANIFOLD - 2 BRNR (M1, M2)
61	20196402	MANIFOLD - 3 BRNR (M3, M4, M5, M6)
61	20196403	MANIFOLD - 4 BRNR (M7, M8, M9, M10)
61	20196404	MANIFOLD - 5 BRNR (M11, M12, M13, M14)
71	10735102	BECKETT BURNER (QTY A/R)
91	20190410	BURNER BRACKET 2B (M1, M2)
91	20190411	BURNER BRACKET 3B (M3, M4, M5, M6)
91	20190412	BURNER BRACKET 4B (M7, M8, M9, M10)
91	20190413	BURNER BRACKET 5B (M11, M12, M13, M14)
131	20170801A	FRONT COVER (M1, M2)
131	20170802A	FRONT COVER (M3, M4)
131	20170901A	FRONT COVER (M5, M6)
131	20170902A	FRONT COVER (M7, M8)
131	20171001A	FRONT COVER (M9, M10)
131	20171002A	FRONT COVER (M11, M12, M13, M14)
141	0154F00000P	COIL GASKET (M1, M2, M3, M4)
141	0154F00001P	COIL GASKET (M5, M6, M7, M8)
141	0154F00002P	COIL GASKET (M9, M10, M11, M12, M13, M14)
151	10123517	MANUAL RESET LIMIT (M1, M2, M3, M4, M5, M6, M11, M12, M13, M14)
151	10123534	MANUAL RESET LIMIT 220°F (M7, M8, M9, M10)
161	M0326804	TUBE PLUG
231	A1781105	CAP-VINYL .500 (QTY 2)
321	11072201	ORIFICE SHIELD (M1, M2)
321	11072202	ORIFICE SHIELD (M3, M4, M5, M6)
321	11072203	ORIFICE SHIELD (M7, M8, M9, M10)
321	11072204	ORIFICE SHIELD (M11, M12, M13, M14)
371	20162907	PRIMARY LIMIT (M11, M12, M13, M14)
371	20162906	PRIMARY LIMIT - WHITE (M1, M2, M3, M4, M5, M6, M9, M10)
371	20162904	PRIMARY LIMIT-TEMPERATURE CONTROL (M7, M8)

Expanded Model Nomenclature

M1 - GCH90453BXAA
M2 - GCH90453BXAB
M3 - GCH90703BXAA
M4 - GCH90703BXAB
M5 - GCH90704CXAA
M6 - GCH90704CXAB
M7 - GCH90904CXAA
M8 - GCH90904CXAB
M9 - GCH90905DXAA
M10 - GCH90905DXAB
M11 - GCH91155DXAA
M12 - GCH91155DXAB
M13 - GCH91155DXAC
M14 - GCH91155DXAE