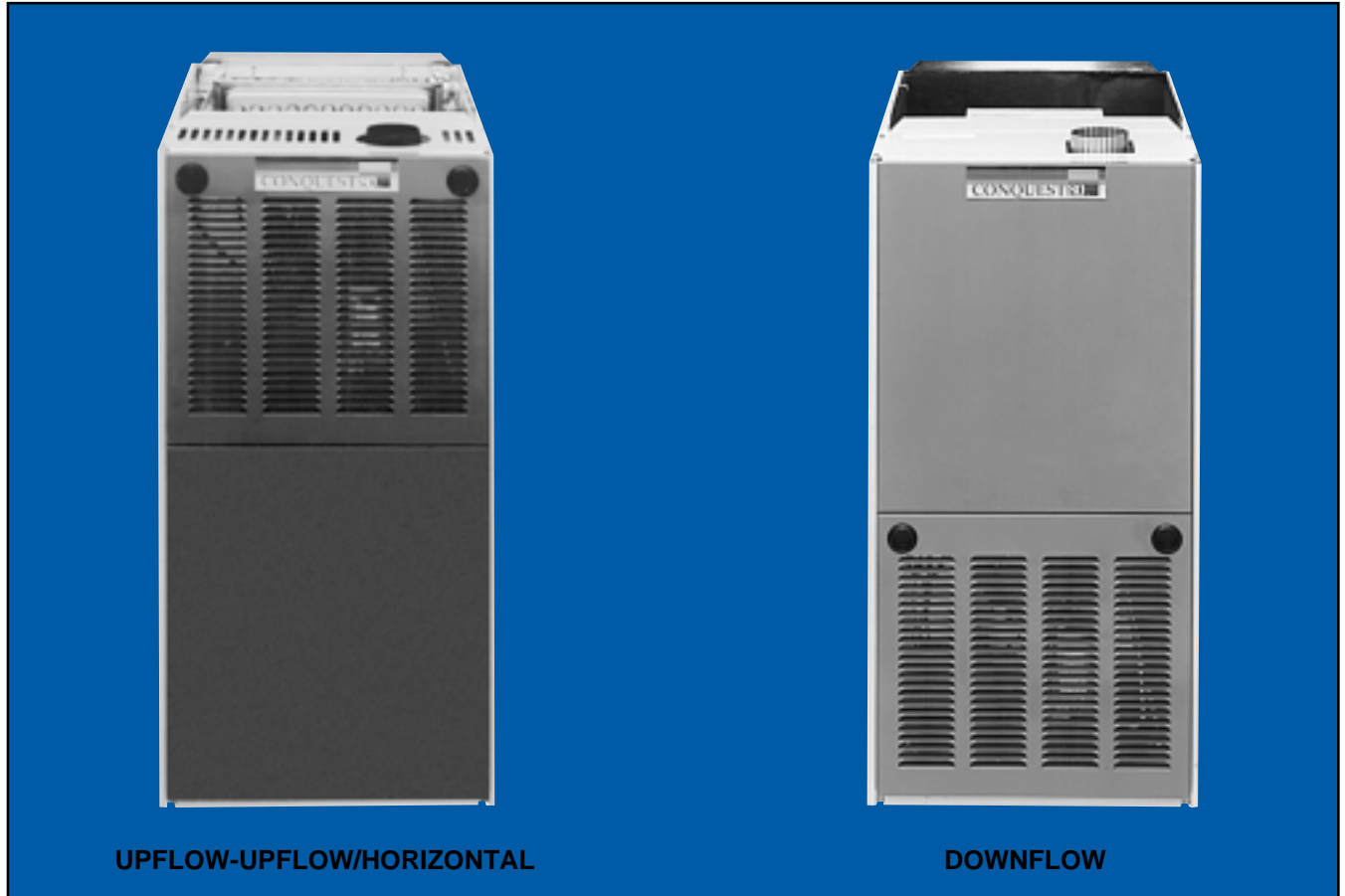


# Comfort-Cire®

## CONQUEST 80®

## GAS FURNACES



**UPFLOW-UPFLOW/HORIZONTAL FURNACES**-For utility room, closet, alcove, crawl space, attic, or basement applications. Capacities from 50,000 to 150,000 BTUH Input.

**DOWNFLOW FURNACES**-For basementless homes or crawlspace applications. Capacities from 50,000 to 150,000 BTUH Input.

UNITS CAN BE COMMON VENTED WITH A GAS WATER HEATER WHEN VENTED VERTICALLY. UNITS MAY BE SIDEWALL VENTED USING A TJERNLUND OR FIELD POWER VENTER.

### FEATURES

- Revolutionary tubular heat exchanger, constructed of both stainless and aluminized steel for the maximum in corrosion resistance.
- Low profile "34 inch" design is lighter, easier to handle, and leaves room for optional equipment.
- Left or right-side gas, electric and condensate drain connections with quick, simple change.
- A slow-open gas valve and a specially designed draft inducer motor make it one of the quietest furnaces on the market today.
- Upflow/Horizontal series allows this furnace to be installed in either upflow or horizontal configurations.
- Integrated solid-state control board.
- Pre-paint galvanized steel cabinet.
- Grab-holes in doors to aid in easy door removal and replacement.



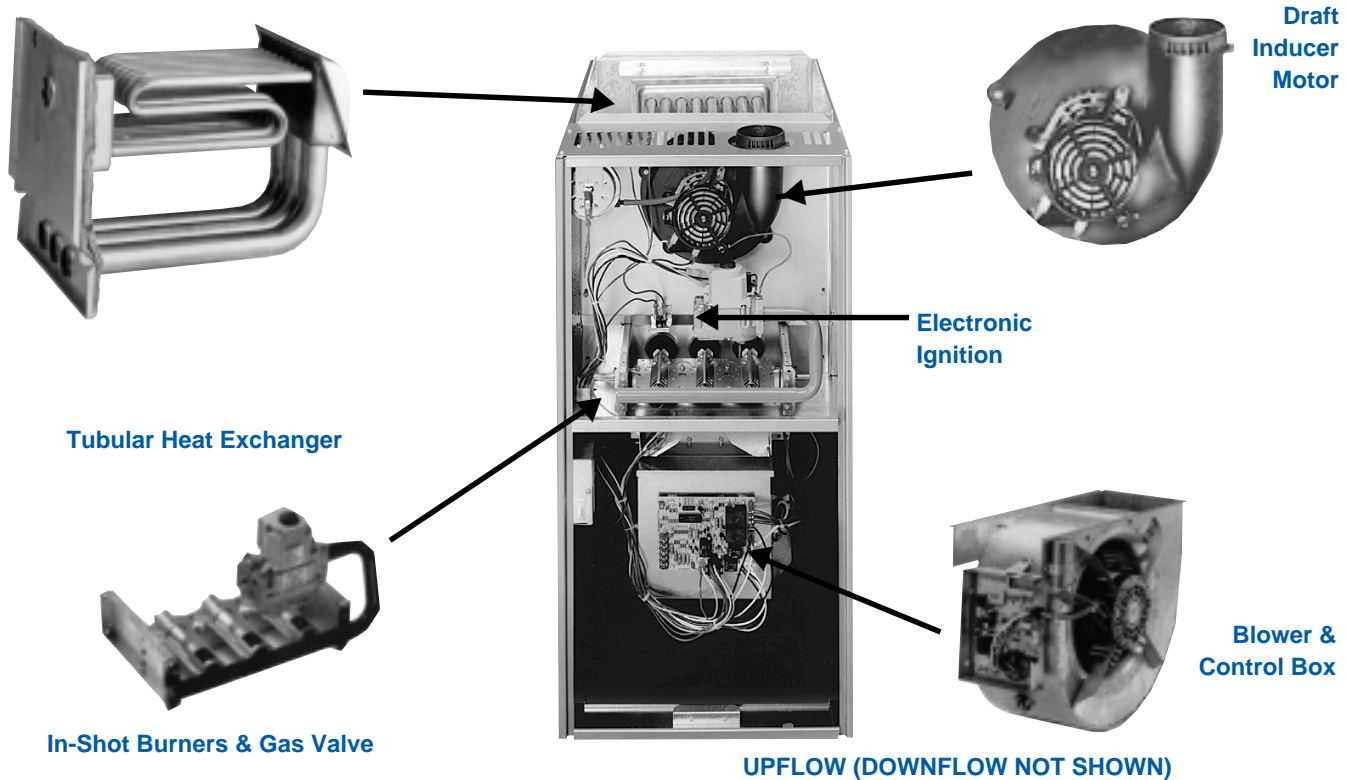
### STANDARD EQUIPMENT-GAS

Completely assembled and wired; induced draft; pressure switch; redundant main gas control; blower compartment door safety switch; solid-state time-on/time-off blower control; manual shut-off valve, pressure regulator for natural and L.P. (propane) gas; transformer; direct drive multi-speed blower motor. Furnaces are equipped with cooling/heating relay and transformer (40VA) ready for air conditioning applications. (Please note: a thermostat is not included as standard equipment.)

### OPTIONAL EQUIPMENT

Side filter frame assembly and return air cabinet for all sizes (See Page 5).

All models can be converted by a qualified distributor or local service dealer to use L.P. (propane) gas without changing burners. Factory approved kits must be used to convert from natural to L.P. (propane) gas.



**WARNING: THIS FURNACE IS NOT APPROVED OR RECOMMENDED FOR USE IN MOBILE HOMES**

## UPFLOW GMUA MODELS-UPFLOW/HORIZONTAL GMUH MODELS

### PHYSICAL DATA AND SPECIFICATIONS

MODEL GMUA	50-E3N	75-E3N	—	100-E3N	—	125-E5N	150-E5N
MODEL GMUH	50-E3N	75-E3N	75-E4N	100-E3N	100-E5N	125-E5N	150-E5N
INPUT-BTU/HR	50,000	75,000	75,000	100,000	100,000	125,000	150,000
HEATING CAPACITY BTU/HR	41,000	60,000	60,000	80,000	80,000	99,000	119,000
HEAT EXT. STATIC PRESSURE	.10	.12	.12	.15	.15	.20	.20
BLOWER (D x W)	11 X 6	11 x 6	11 x 7	11 x 7	11 x 10	11 x 10	11 x 10
MOTOR H.P./SPEEDS/TYPE	1/2-4-PSC	1/2-3-PSC	1/2-3-PSC	1/2-3-PSC	3/4-3-PSC	3/4-3-PSC	3/4-3-PSC
MOTOR FULL LOAD AMPS	6.8	5.8	7.9	7.1	9.5	9.5	9.5
HEATING SPEED	MED-LOW	MED	MED	MED	LOW	LOW	LOW
COOLING SPEED	HIGH	HIGH	HIGH	HIGH	MED	MED	MED
COOLING CFM @ .5" E.S.P. (NOMINAL)	1200	1200	1600	1200	2060	2115	2080
MAX. EXT. STATIC PRESSURE (IN.)	.50	.50	.50	.50	.50	.50	.50
TEMPERATURE RISE RANGE °F	25-55	40-70	25-55	50-80	40-70	35-65	50-80
APPROX. SHIPPING WEIGHT (LBS.)	85	105	105	115	120	140	150
RETURN AIR CABINETS (OPT.) 7603-FILTER SIZE	638 (2) 12 X 16	639 (2) 12 x 16	639 (2) 12 x 16	639 (2) 12 x 16	640 (2) 20 x 16	641 (2) 24 x 16	641 (2) 24 x 16
EXTERNAL FILTER RACK (OPT.) FILTER SIZE	HXGF-CA 15 <sup>3</sup> / <sub>4</sub> x 25	HXGF-CA 15 <sup>3</sup> / <sub>4</sub> x 25	HXGF-CA 15 <sup>3</sup> / <sub>4</sub> x 25	HXGF-CA 15 <sup>3</sup> / <sub>4</sub> x 25	HXGF-CA 19 <sup>1</sup> / <sub>4</sub> x 25	HXGF-CA 22 <sup>3</sup> / <sub>4</sub> x 25	HXGF-CA 22 <sup>3</sup> / <sub>4</sub> x 25
AFUE-H.S.I. MODELS ①	81.4%	80.6%	80.5%	80%	80.0%	80%	80%

NOTES: All models are 115V, 60HZ, 1ϕ. Gas connection size for all models is 1/2" N.P.T.

① In accordance with D.O.E. test procedures.

# DOWNFLOW GMDA MODELS

## PHYSICAL DATA AND SPECIFICATIONS

MODEL GMDA	50-E3N	75-E3N	75-E4N	100-E3N	100-E5N	125-E5N	150-E5N
INPUT-BTU/HR	50,000	75,000	75,000	100,000	100,000	125,000	150,000
HEATING CAPACITY BTU/HR.	41,000	60,000	60,500	80,000	80,000	99,000	120,000
HEAT EXT. STATIC PRESSURE	.10	.12	.12	.15	.15	.20	.20
BLOWER (D x W)	11 x 6	11 x 6	11 x 7	11 x 7	11 x 10	11 x 10	11 x 10
MOTOR H.P./SPEEDS/TYPE	1/2-4-PSC	1/2-3-PSC	1/2-3-PSC	1/2-3-PSC	3/4-3-PSC	3/4-3-PSC	3/4-3-PSC
MOTOR FULL LOAD AMPS	6.8	5.8	7.9	7.1	9.5	9.5	9.5
HEATING SPEED	MED-LOW	MED	MED	MED	LOW	LOW	LOW
COOLING SPEED	HIGH	HIGH	HIGH	HIGH	MED	MED	MED
COOLING CFM @ .5" E.S.P. (NOMINAL)	1200	1200	1600	1200	2060	2185	2145
MAX. EXT. STATIC PRESSURE (IN.)	.50	.50	.50	.50	.50	.50	.50
TEMPERATURE RISE RANGE °F	25-55	40-70	25-55	45-75	40-70	40-70	50-80
APPROX. SHIPPING WEIGHT (LBS.)	85	105	105	115	120	140	150
AFUE-H.S.I. MODELS <sup>①</sup>	82.2%	80.5%	81.1%	80.2%	80%	80%	80%

NOTES: All models are 115V, 60HZ,  $\frac{1}{2}$ " Gas connection size for all models is 1/2" N.P.T.

<sup>①</sup> In accordance with D.O.E. test procedures.

## DOWNFLOW GMDA ACCESSORIES

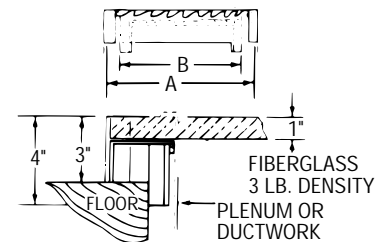
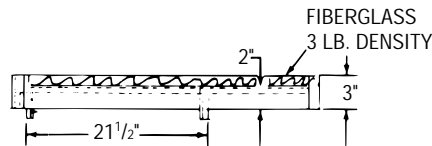
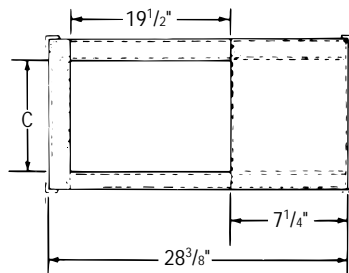
### COMBUSTIBLE FLOOR BASE DIMENSIONS

Base **must be used** if furnace is installed on combustible flooring.

COMBUSTIBLE FLOOR BASE	USE WITH MBH INPUT FURNACE SIZES	A	B	C
7603-99	GMDA 50	14 <sup>1</sup> / <sub>2</sub>	13 <sup>1</sup> / <sub>4</sub>	11 <sup>1</sup> / <sub>4</sub>
7603-100	GMDA 75 & 100-(X)3	18	16 <sup>3</sup> / <sub>4</sub>	14 <sup>3</sup> / <sub>4</sub>
7603-101	GMDA-100-(X)5	21 <sup>1</sup> / <sub>2</sub>	20 <sup>1</sup> / <sub>4</sub>	18 <sup>1</sup> / <sub>4</sub>
7603-102	GMDA 125 & 150	25	23 <sup>1</sup> / <sub>4</sub>	21 <sup>1</sup> / <sub>4</sub>

L.P. KIT NO.
FP01H-H Universal Kit

FOSSIL FUEL KIT
HXPF-F01
HXPF-F02 (TVA)



NOTE: FLOOR OPENING 21<sup>1</sup>/<sub>2</sub> x B  
MAX. PLENUM SIZE 19<sup>1</sup>/<sub>2</sub> x C

### COIL CABINET

MODEL	USE WITH FURNACE MODEL GMDA
DCC-21	50, 75 & 100 (X) 3
DCC-24A	100 (X) 5, 125 & 150

INTERNAL FILTER RACK
HXGF-DB

EXTERNAL FILTER RACK
HXGF-CC

TWINNING KIT
HXGP-F03

Note: Filter Racks Shipped Without Filters

# DOWNFLOW GMDA DIMENSIONS

**TABLE 1. DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES)**

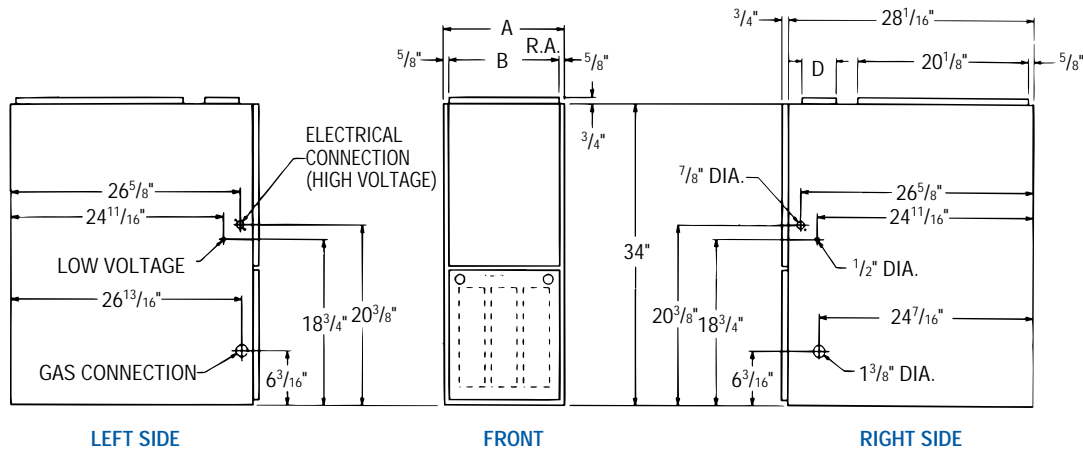
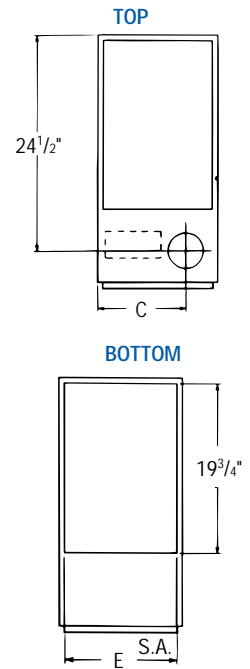
MODEL GMDA	A	B	C	D	E	REDUCED CLEARANCES (IN.)					
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT
50	14	12 <sup>27/32</sup>	10 <sup>3/8</sup>	Ⓐ	13 <sup>1/8</sup>	0	4Ⓞ	0	1	6	6Ⓞ
75	17 <sup>1/2</sup>	16 <sup>11/32</sup>	12 <sup>1/8</sup>	Ⓐ	16 <sup>5/8</sup>	0	3Ⓞ	0	1	6	6Ⓞ
100-(X)3	17 <sup>1/2</sup>	16 <sup>11/32</sup>	12 <sup>1/8</sup>	Ⓐ	16 <sup>5/8</sup>	0	3Ⓞ	0	1	6	6Ⓞ
100-(X)5	21	19 <sup>27/32</sup>	13 <sup>7/8</sup>	Ⓐ	20 <sup>1/8</sup>	0	0	0	1	6	6Ⓞ
125	24 <sup>1/2</sup>	23 <sup>11/32</sup>	15 <sup>5/8</sup>	Ⓐ	23 <sup>5/8</sup>	0	0	0	1	6	6Ⓞ
150	24 <sup>1/2</sup>	23 <sup>11/32</sup>	15 <sup>5/8</sup>	Ⓐ	23 <sup>5/8</sup>	0	0	0	1	6	6Ⓞ

NOTES: Ⓐ Vent connection as shipped from the factory is 3". Certain installations may require a 3" to 4" or 3" to 5" adaptor.

Ⓞ May be 0" with type "B" vent.

Ⓞ May be 1" with type "B" vent

Furnaces must be vented in accordance with AGA/GAMA rating guidelines included with each furnace and in accordance with local codes.



# UPFLOW AND DOWNFLOW COIL CABINETS

CABINET MODEL	ACCEPTS COIL (1) MODEL CA10 OR HA10	FITS FURNACE WIDTH
UCC-17A	18, 24, 30, 36	14" and 17.5"
UCC-21	18, 24, 30, 36, 42, 48	20", 21" and 22"
UCC-24	48, 60, 61	24.5"
DCC-21	18, 24, 30, 36, 42, 48	14" thru 21"
DCC-24A	42, 48, 60, 61	21" and 24.5"

(1) Coils with suffix A - Feature a Nylon Drain Pan.

# COIL CABINET ADAPTER KITS

KIT NUMBER	ADAPTS CABINET MODEL	TO FURNACE WIDTH
7603-703	UCC-17A	21"
7603-704	UCC-17A	24"
7603-705	UCC-21	24"

# UPFLOW GMUA AND UPFLOW/HORIZONTAL GMUH DIMENSIONS

**TABLE 1. DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES)**

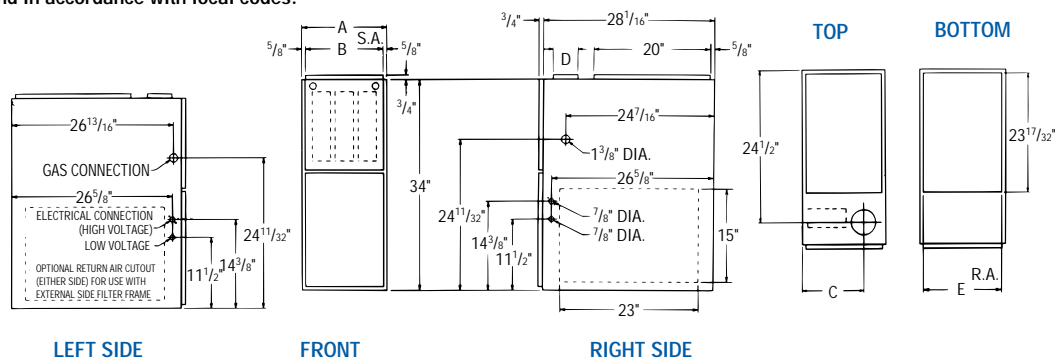
MODEL GMUA/ GMUH	A	B	C	D	E	REDUCED CLEARANCES (IN.)					
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT
50	14	12 <sup>27/32</sup>	10 <sup>3/8</sup>	Ⓐ	11 <sup>1/2</sup>	0	4Ⓞ	0	1	6	6Ⓞ
75	17 <sup>1/2</sup>	16 <sup>11/32</sup>	12 <sup>1/8</sup>	Ⓐ	15	0	3Ⓞ	0	1	6	6Ⓞ
100-(X)3	17 <sup>1/2</sup>	16 <sup>11/32</sup>	12 <sup>1/8</sup>	Ⓐ	15	0	3Ⓞ	0	1	6	6Ⓞ
100-(X)5	21	19 <sup>27/32</sup>	13 <sup>7/8</sup>	Ⓐ	18 <sup>1/2</sup>	0	0	0	1	6	6Ⓞ
125	24 <sup>1/2</sup>	23 <sup>11/32</sup>	15 <sup>5/8</sup>	Ⓐ	22	0	0	0	1	6	6Ⓞ
150	24 <sup>1/2</sup>	23 <sup>11/32</sup>	15 <sup>5/8</sup>	Ⓐ	22	0	0	0	1	6	6Ⓞ

NOTES: Ⓐ Vent connection as shipped from the factory is 3". Certain installations may require a 3" to 4" or 3" to 5" adaptor.

Ⓞ May be 0" with type "B" vent.

Ⓞ May be 1" with type "B" vent

Furnaces must be vented in accordance with AGA/GAMA rating guidelines included with each furnace and in accordance with local codes.



**WARNING: DO NOT INSTALL HORIZONTAL FURNACE ON ITS BACK - EITHER SIDE ONLY.**

## UPFLOW GMUA/GMUH ACCESSORIES

**COIL CABINET - ALL MODELS UCC-17A, UCC-21, or UCC-24.**

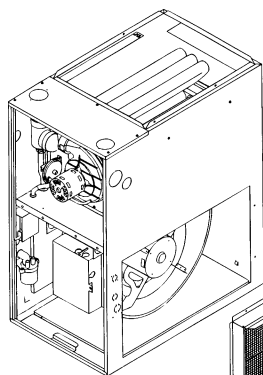
### ACCESSORY RETURN AIR CABINETS

Return Air Cabinets may be installed on rear or either side application except 7603-641 (side application must be on side opposite gas and electrical connections).

SEE PHYSICAL DATA FOR FURNACE MODEL MATCH.

EXTERNAL FILTER RACK	FILTER SIZE
HXGF-CA	Adjustable from 15 3/4 x 25 to 22 3/4 x 25

NOTE: Filters not supplied with filter rack.



### INTERNAL FILTER RACK

HXGF-DA

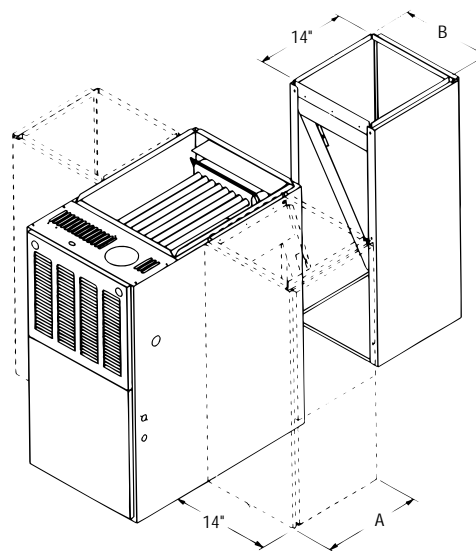
Note: Filter Racks Shipped Without Filters

### L.P. KIT NO.

FP01H-H  
Universal Kit

### FOSSIL FUEL KIT

HXPF-F01  
HXPF-F02 (TVA)



### TWINNING KIT

HXGP-F03

### WARNING: IMPORTANT NOTICE

A SOLID METAL BASE PLATE (SEE TABLE) MUST BE IN PLACE WHEN THE FURNACE IS INSTALLED WITH SIDE OR REAR AIR RETURN DUCTS. FAILURE TO INSTALL A BASE PLATE COULD CAUSE PRODUCTS OF COMBUSTION TO BE CIRCULATED INTO THE LIVING SPACE AND CREATE POTENTIALLY HAZARDOUS CONDITIONS.

FURNACE WIDTH	SOLID BOTTOM KIT NO.
14	7603-94
17 <sup>1/2</sup>	7603-95
21	7603-96
24 <sup>1/2</sup>	7603-97

The 7603-641 may only be installed on rear and left sides.

SEE PHYSICAL DATA FOR FURNACE MODEL MATCH

RETURN AIR CABINETS	A	B	FILTER SIZE
7603-638	14	12 <sup>27/32</sup>	(2) 12 x 16
7603-639	17 <sup>1/2</sup>	16 <sup>11/32</sup>	(2) 12 x 16
7603-640	21	19 <sup>27/32</sup>	(2) 20 x 16
7603-641	24 <sup>1/2</sup>	23 <sup>11/32</sup>	(2) 24 x 16

# BLOWER PERFORMANCE DATA - GMUA/GMUH

MODEL NO.	BLOWER SIZE	MOTOR H.P.	BLOWER SPEED	CFM AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN						
				0.1	0.2	0.3	0.4	0.5	0.6	0.7
50-E3N	11 x 6	1/2	LOW	675	655	635	610	585	555	520
			MED-LO	950	930	905	880	860	830	800
			MED-HI	1115	1090	1070	1040	1015	985	945
			HIGH	1270	1250	1225	1200	1165	1130	1085
75-E3N	11 X 6	1/2	LOW	970	955	940	910	880	845	805
			MED	1110	1090	1070	1040	1010	975	935
			HIGH	1265	1240	1210	1175	1140	1100	1055
75-E4N	11 x 7	1/2	LOW	1245	1220	1195	1165	1135	1105	1065
			MED	1555	1515	1475	1435	1395	1350	1300
			HIGH	1810	1755	1705	1645	1585	1530	1470
100-E3N	11 x 7	1/2	LOW	1050	1040	1030	990	960	920	890
			MED	1220	1195	1160	1140	1105	1060	1020
			HIGH	1410	1380	1345	1300	1255	1205	1150
100-E5N	11 x 10	3/4	LOW	1645	1615	1580	1550	1510	1465	1425
			MED	2045	2000	1955	1905	1845	1785	1720
			HIGH	2320	2260	2200	2130	2060	1985	1910
125-E5N	11 x 10	3/4	LOW	1645	1635	1615	1590	1560	1520	1470
			MED	2050	2015	1980	1935	1885	1835	1775
			HIGH	2365	2310	2250	2185	2115	2035	1950
150-E5N	11 x 10	3/4	LOW	1620	1595	1570	1545	1515	1480	1440
			MED	2010	1985	1960	1915	1850	1800	1730
			HIGH	2340	2275	2215	2145	2080	2010	1940

# BLOWER PERFORMANCE DATA - GMDA

MODEL NO.	BLOWER SIZE	MOTOR H.P.	BLOWER SPEED	CFM AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN						
				0.1	0.2	0.3	0.4	0.5	0.6	0.7
50-E3N	11 x 6	1/2	LOW	735	715	690	660	635	605	575
			MED-LO	1025	1015	995	975	955	930	905
			MED-HI	1185	1165	1150	1130	1100	1075	1040
			HIGH	1345	1330	1310	1295	1265	1235	1205
75-E3N	11 X 6	1/2	LOW	990	975	955	935	905	875	835
			MED	1140	1125	1105	1080	1050	1020	980
			HIGH	1300	1290	1265	1245	1215	1180	1140
75-E4N	11 x 7	1/2	LOW	1210	1205	1195	1180	1165	1155	1130
			MED	1580	1560	1550	1530	1495	1465	1430
			HIGH	1915	1880	1825	1790	1740	1675	1600
100-E3N	11 x 7	1/2	LOW	1070	1055	1040	1010	980	945	905
			MED	1240	1210	1190	1165	1135	1095	1055
			HIGH	1420	1395	1370	1340	1305	1265	1220
100-E5N	11 x 10	3/4	LOW	1690	1670	1655	1615	1585	1565	1525
			MED	-	2085	2055	2005	1970	1945	1880
			HIGH	-	2410	2355	2305	2240	2165	2100
125-E5N	11 x 10	3/4	LOW	-	1690	1660	1635	1580	1535	1480
			MED	-	2090	2035	1985	1930	1850	1785
			HIGH	-	2395	2335	2260	2185	2080	1965
150-E5N	11 x 10	3/4	LOW	1675	1650	1620	1570	1545	1485	1425
			MED	2105	2075	2035	1990	1955	1900	1815
			HIGH	-	-	-	-	-	-	-

## GENERAL TERMS OF LIMITED WARRANTY\*

Heat Controller, Inc., will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

Gas Heat Exchanger Warranty ..... Twenty (20) Years  
 Draft Inducer Warranty ..... Five (5) Years  
 IFC Board ..... Five (5) Years  
 Any Other Part ..... Five (5) Years

\*For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See You Local Installer or Contact the Factory for a Copy.

**WARNING: THIS FURNACE IS NOT APPROVED OR RECOMMENDED FOR USE IN MOBILE HOMES.**

Specifications and performance data subject to change without notice.

HEAT CONTROLLER, INC.

1900 WELLWORTH AVENUE • JACKSON, MICHIGAN 49203

THE QUALITY LEADER IN CONDITIONING AIR