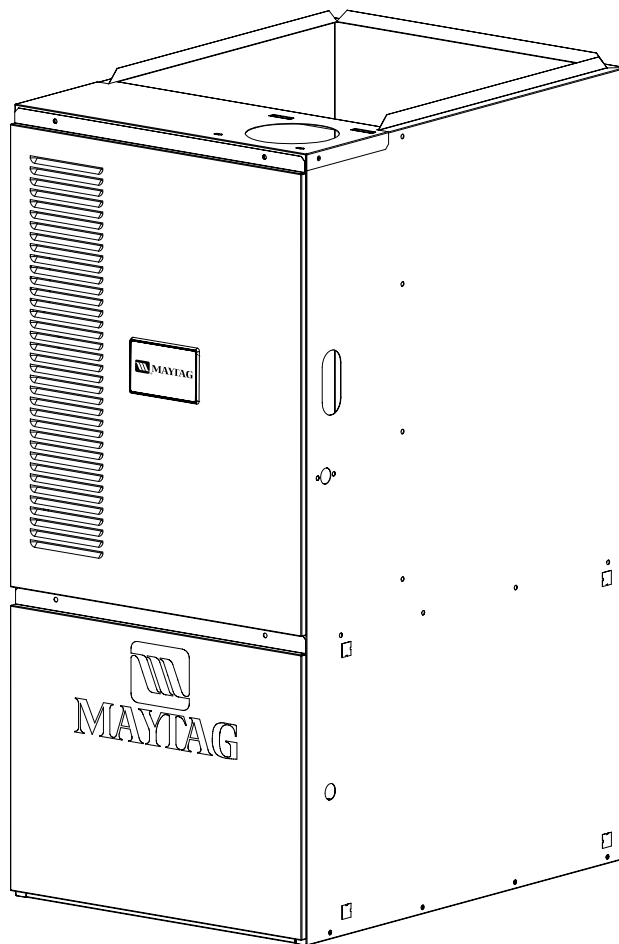




TECHNICAL SPECIFICATIONS

*Model PGF1RA Series
with Variable Speed Blower*



M1200 Product Line

**High Efficiency / Upflow/Horizontal Gas Furnace
Induced Draft - 80+ AFUE**

- **M1200 - 12 YEAR ALL PARTS LIMITED WARRANTY**
- **M1200 WITH UPGRADED WARRANTY PACKAGE - 12 YEAR ALL PARTS & LABOR LIMITED WARRANTY**
- **Both the standard and upgraded limited warranty packages offer a 12 Year Dependability Promise to replace the entire unit, if the unit's major component (heat exchanger or compressor) fails within the first 12 years of operation, to the original owner. All split system products must be installed with a matched indoor air handler or indoor coil to qualify.**
- **Product registration (by consumer or dealer) required for 12-year Warranty and Dependability Promise within a limited period of time after the installation. See current warranty document for details. This can be viewed at www.maytagvac.com or ask your sales representative.**
- **Dealer is responsible for registration of labor portion of warranty.**
- **Also when registered, this furnace upgrades to a limited lifetime heat exchanger warranty.**

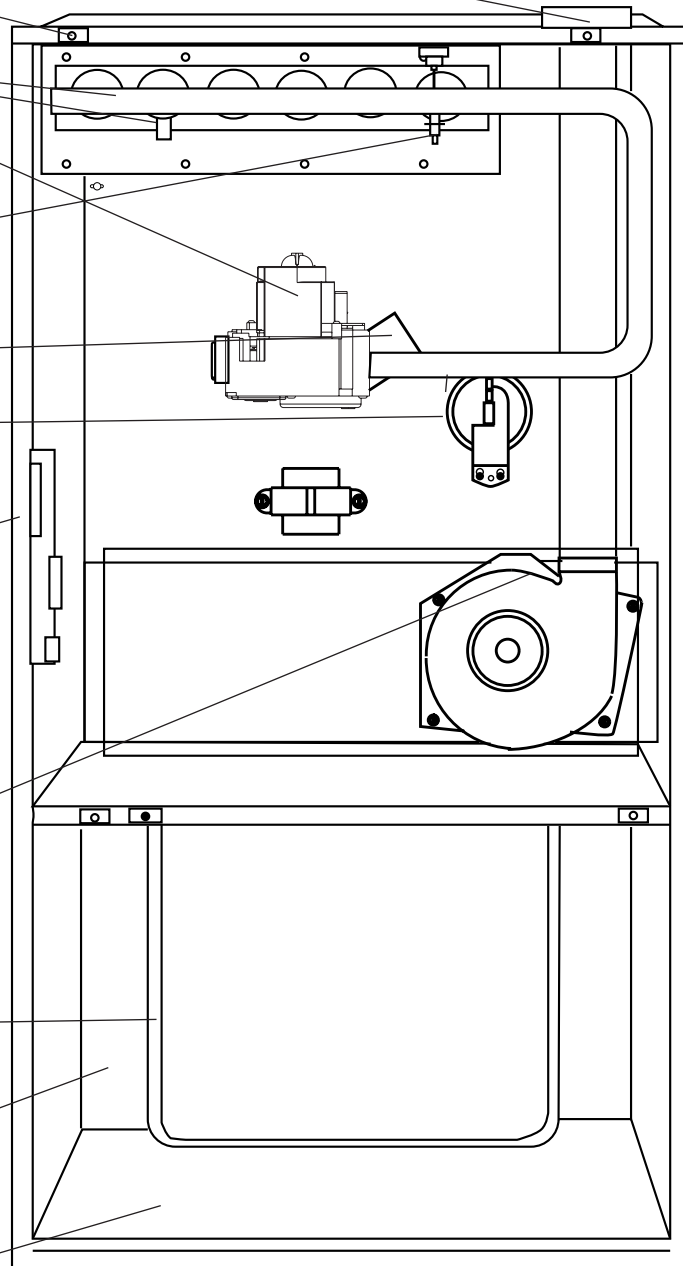


The heart of the PGF1 series furnace with variable speed blower is the ECM motor (electronically commutated motor). The ECM consists of a brushless DC type motor with a microprocessor based variable speed drive. The drive continuously monitors RPM and torque output of the motor. This information is fed into pre-programmed algorithms in the microprocessor for correct motor output to maintain constant airflow regardless of external static pressure. The microprocessor stores delay profiles to optimize the efficiency and performance of the split system. The variable speed blower steps through intermediate airflows during the on and off profiles. This results in smoother, more efficient operation with quiet, gradual starts and stops. The furnace is design certified by CSA International (Canadian Standards Association).

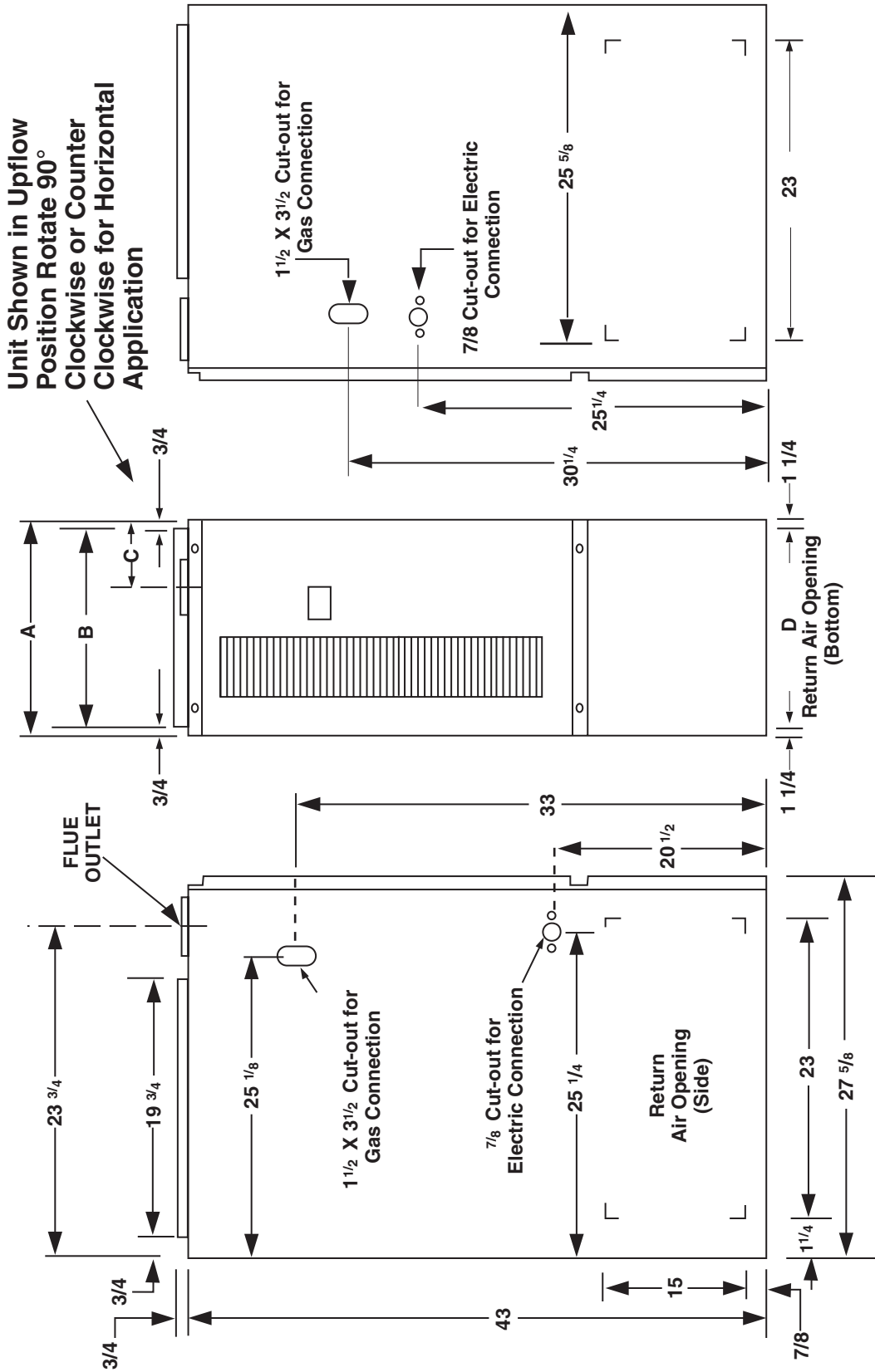
Features and Benefits

- **100% fired and tested** — All units and each component (both mechanical and electrical) are tested on the manufacturing line.
- **Best packaging in the industry** — Unique design assures product will arrive to the homeowner dent free.
- **Clean and quiet operation** — Due to the unique design of in-shot burners, location of inducer, return air vents, and use of insulation.
- **Fixed 30 second blower delay** at burner start-up assures a warm duct temperature at furnace start-up.
- **Fixed 30 second post purge** increases life of heat exchanger.
- **SmartStart™ Control Board** — Provides extended life to ignitors in furnaces using hot surface ignition technology. Programmed to learn the heat-up characteristics of the ignitor, then adapt the ignition time to the characteristics of the furnace so the ignitor is energized appropriately.
- **Dependable, hot surface ignitor** — Innovative application of an appliance type ignitor with a 20 year history of reliability.
- **Color coded wire harness** — Designed to fit the components, all with quick-connect fittings for ease of service and replacement.
- **Approved for categories I and III venting systems** — May be common, dedicated, or horizontal vented for maximum flexibility in installation.
- **Tubular primary heat exchanger** — Heavy gauge aluminized steel heat exchanger assures a long life.
- **Fixed cooling cycle blower-off delay (TDR)** increases cooling performance when matched with a Maytag coil.
- **Fully insulated blower cabinet** for quiet operation.
- **Variable speed blower** included to maximize air conditioner and heat pump efficiencies. On selected units, SEER ratings up to 14 and HSPF ratings up to 8.5 are ARI listed.
- **LP convertible** — Simple burner orifice and regulator spring change for ease of convertibility.
- **Diagnostic lights flash to identify limit failure, pressure switch failure, improper ground and polarization, and low flame signal** — for easy troubleshooting.
- **Incorporates integrated control board** with connections for electronic air cleaner, humidifier and twinning.
- **Two piece door design** enhances furnace appearance and uses screw fasteners for easier accessibility.
- **3 amp fuse** protection against low voltage shorts; protects transformer and control board.
- **Low voltage terminal board** for easy field wiring.
- **Components and Controls** — Designing quality into our products means selecting manufacturers that have a reputation for delivering high quality, dependable products.

- Vent switch** protects against blocked flue. (Not shown)
- Front door screw fasteners** ensure tight fit.
- Aluminized steel in-shot burners**, hot surface ignitor and redundant gas valve provide safe, reliable ignition and efficient combustion.
- Remote flame sensor** for proof of flame carry-over.
- Supply air limit.**
- Single pressure switch** assures proper operation of the induced draft system up to 10,000 feet.
- SmartStart™ integrated control** monitors the burner flame and limit circuit continuously. Blower timing has adjustable OFF settings. Provides humidifier and electronic air cleaner connections.
- Isolation grommets** on the induced draft blower provides quiet and reliable operation.
- Variable speed motor/blower** provides quiet airflow, reliable operation, and is installed on a slide out track.
- Fully insulated blower compartment** for quiet operation.
- Solid bottom base plate** for sturdy construction — with easily removed full bottom knock-out for bottom return applications.



DIMENSIONS



MODEL NUMBER	A (in.)	B (in.)	C (in.)	D (in.)	MODEL NUMBER	A (in.)	B (in.)	C (in.)	D (in.)
PGF1RA					PGF1RA				
072 ()VB	19 3/4	18 1/4	19 3/4	18 1/4	120 ()VC	22 1/2	21	3 3/4	20
096 ()VB	19 3/4	18 1/4	19 3/4	18 1/4	144 ()VC	22 1/2	21	4 1/4	20

STANDARD EQUIPMENT

Draft inducer; pressure switch; redundant main gas control; hot-surface ignition; 40VA transformer for air conditioner application; limit controls; solid base plate with knock-out for easy removal; direct drive motor; all models can be converted to use L.P. (propane) gas. Factory approved kits *only* must be used and are available as an optional accessory from your distributor.

SPECIFICATIONS

PGF1RA MODEL NUMBERS	072()VB	096()VB	120()VC	144()VC
Input-Btuh (a)	72,000	96,000	120,000	144,000
Heating Capacity - Btuh	58,000	77,000	96,000	115,000
AFUE	80+	80+	80+	80+
Max. Htg Ext. St. Press. In W.C.	0.5	0.5	0.5	0.5
Blower Wheel D x W	11 x 10	11 x 10	11 x 10	11 x 10
Motor H.P. - Speed - Type	Variable	Variable	Variable	Variable
Motor FLA	7.9	7.9	11.1	11.1
Temperature Rise Range - °F	40 - 70	50 - 80	45 - 75	45 - 75
Approximate Shipping Wt. - lbs.	152	163	182	194

All models are 115V, 60 Hz. Gas Connections are 1/2" N.P.T.

AFUE = Annual Fuel Utilization Efficiency

() Can be C or N

(a) Ratings to 2,000 ft. Over 2,000 ft. reduce 4% for each 1,000 ft. above sea level.

VENTING

All models, with the exception of the reduced NOx models, are approved for vertical and horizontal venting applications (see table below). All models may be common vented with a gas water heater. Type B gas vent materials may be used when connected to a vertical vent system. The installation must be in accordance with the venting instructions supplied with the furnace.

These furnaces are approved to use with 3" single wall AL29-4C stainless steel vent pipe in horizontal vent applications, and with the required horizontal vent kit 903196. The pipe is available from the following manufacturers:

Z-Flex Inc. - vent brand name (**Z-VENT**)

Heat-fab Inc. - vent brand name (**Saf-T Vent**)

Flex-L International - vent brand name (**STAR-34 Vent**)

When venting horizontal, this is a Category III furnace, the vent pressure is positive, and the venting system must be sealed in both horizontal and vertical runs.

Model Number	Pipe Size	Reducer Needed*	Flue Outlet (in.)	Max. # Elbows	Max. Ft. Vent Pipe
072()VB	3"	4" to 3"	4	4	35
096()VB	3"	4" to 3"	4	4	35
120()VC	3"	4" to 3"	4	4	35
144()VC*	3"	4" to 3"	5	3	30

* NOTE: Field supplied special 5" to 4" Reducer Kit required for model PGF1RA144(C,N)VC.

Kit	Order Number
U.S. LP conversion Kit (0 to 10,000 ft.)	903616A
Canadian LP Gas Conversion Kit (0 to 4,500 ft.)	903617
Fossil Fuel Kit	914762
Side Return Filter Kit	541036
Bottom Return Filter (20/Box)	A Cabinet 903088 B Cabinet 903089 C Cabinet 903090
Horizontal Vent Kit	903196
Internal Side Return Filter Wire	903152

CAPACITIES — Furnace Airflow Data

All Cooling/Heat Pump Airflow Settings (Data is for operation with filters)

CFM		SWITCH NUMBER							Nominal A/C and HP Capacity
LOW	HIGH	1	2	3	4	5	6	7	
500	720	0	0	0	1				
550	800	0	0	0	0				
610	880	0	0	1	0				
650	945	1	0	0	1				
720	1050	1	0	0	0				
800	1155	1	0	1	0				
900	1305	0	1	0	1				
1000	1450	0	1	0	0				
1060	1530	1	1	0	1				
1100	1595	0	1	1	0				
1170	1700	1	1	0	0				
1290	1870	1	1	1	0				

NOTE: 0 = OFF 1 = ON

Heating Airflow Settings (Data is for operation with filters)

		Normal Air-Flow							
		720	900	1056	1200	1350	1500	1656	1800
Switches	7	1	0	1	0	1	0	1	0
	6	0	0	0	0	1	1	1	1
	5	0	0	1	1	0	0	1	1
80+%	72,000		59	51	44				
	90,000			63	55	49	44		
	96,000			67	59	53	47		
	108,000				67	59	53	48	
	120,000					66	59	54	49
	126,000					69	62	56	51
	144,000						71	64	59

Temperature Rise °F (Recommended settings are Bold)

Notes:

1. Recommended temperature rises are highlighted in bold.
2. Airflow rates of 1800 CFM or more require two return air connections. Data is for operation with filter(s).
3. Temperature rises in the table are approximate. Actual temperature rises may vary.
4. Temperature rises that are shaded grey are for reference only. These conditions are not recommended.
5. For single stage cooling, the indoor blower will operate at the CFM listed in the high column.

Normal Blower Size	11 X 10
Maximum Motor HP	3/4
Motor Type	Programmable Variable Speed
RPM Range	300-1300
Cooling CFM Range*	720-1870
Heating Airflow Range*	720-1800

* Airflow is held constant regardless of external static pressure within the HP and RPM limits of the motor.

CAPACITIES — Furnace Airflow Data (Cont.)

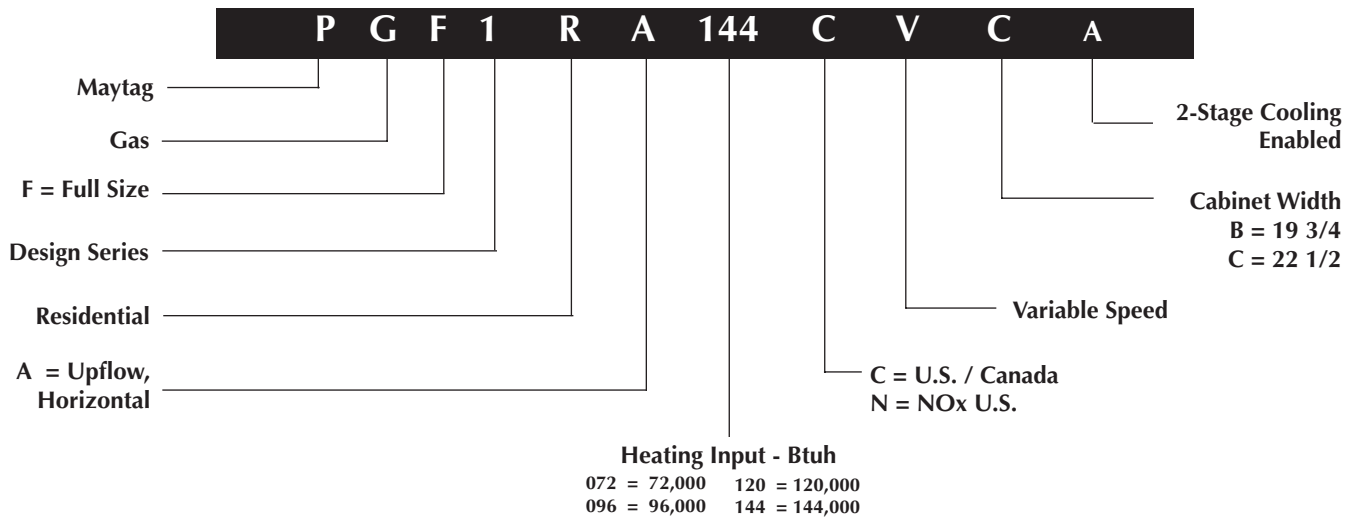
Delay Settings

Delay Description	Switch Number								
	1	2	3	4	5	6	7	8	9
Delay A								0	0
Delay B								0	1
No Delay								1	0
De - Hum								1	1

Note: 0=Off, 1=On

- "Delay A" has a 2-step "on" profile operating the blower at 31% of the selected airflow for 30 seconds, then 75% of the selected airflow for 30 seconds. It will then operate at the selected airflow until the thermostat is satisfied, followed by an "off-cycle" profile running at 50% of the selected airflow for 60 seconds.
- "Delay B" has a single "on" profile operating the blower at 50% of the selected airflow for 30 seconds. It will then operate at the selected airflow until the thermostat is satisfied, followed by an "off-cycle" profile running at 50% of the selected airflow for 90 seconds.
- The "De-Hum" profile will operate the blower at 31% of the selected airflow for 30 seconds, followed by 75% of the selected airflow for 10 minutes. It will then operate at the selected airflow until the thermostat is satisfied.
- The "No Delay" option will ramp the blower up to the selected airflow. When the thermostat is satisfied, it will then ramp the blower off.

IDENTIFICATION CODE



Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations.

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