MAINLINE®
Reliably Comfortable.™

Performance® Gas Furnaces

MP802W

80% A.F.U.E.†
Heating Stages: Two-Stage
Motor Type: Constant CFM
Input Rates: Upflow/Horizontal: 50-150 kBTU [14.7-44.0 kW]
Configuration Options: Upflow/Horizontal

Manufactured for
Mainline®
HVACmainline.com

† A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

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Features and Benefits

- **Diagnostics:** With the BluArch™ Contractor App & Bluetooth®[1] technology makes monitoring, troubleshooting and repairing the product easier than ever before
- **Dip Switch Free Installation Commissioning via Bluetooth® Technology:** Seamless final install step without DIP switch configuration using the BluArch™ Contractor App
- **Ignition System:** Proven Direct Spark Ignition (DSI) for reliability and longevity
- **Two-Stage Heating:** Furnace operation mainly stays at low capacity around 60-65%, but will switch to high capacity to deliver stable heat distribution
- **Constant CFM Motor:** Truly variable speed technology allows for ultimate humidity control, quieter sound levels and year-round energy savings

[1]*The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks is under license. Other trademarks and trade names are those of their respective owners.*

Gas Furnaces

MP	80	2	W	050	3	A	14	UH	S	B	A	S
Brand	**Furnace Efficiency**	**Stages of Heating**	**Motor Type**	**Heating Input**	**AC Max. Capacity**	**Major Series**	**Width**	**Position**	**NOx**	**Controls**	**Minor Series**	**Option Code**
MP - Mainline Performance	80 - 80% AFUE	2 - Two-Stage	W - ECM Variable Speed	050 - 50,000 [14.7 kW] 075 - 75,000 [22.0 kW] 100 - 100,000 [29.3 kW] 125 - 125,000 [36.6 kW] 150 - 150,000 [44.0 kW]	3 - 3 ton drive 4 - 4 ton drive 5 - 5 ton drive	A - 1st Design Series	14 - 14" Width 17 - 17.5" Width 21 - 21" Width 24 - 24.5" Width	UH - Upflow Horizontal	S - Standard N - Low NOx	B - Communicating, Bluetooth®	A - 1st Series	S - Standard Grade

[ ] Designates Metric Conversions

AVAILABLE MODELS
MP802W0503A14UH*BAS
MP802W0504A17UH*BAS
MP802W0754A17UH*BAS
MP802W0755A21UH*BAS
MP802W1004A17UH*BAS
MP802W1005A21UH*BAS
MP802W1255A24UH*BAS
MP802W1505A24UH*BAS

* S = Standard, N = Low NOx

STANDARD EQUIPMENT	
100% Safety Lock Out	Humidifier Connections
2 Stage Induced Draft Motor	Humidistat Terminal Connection
Adjustable Cool Fan Off Delay	Limit Controls
Adjustable Humidifier On/Off Delay (App Only)	Low Speed Continuous Fan Option
Aluminized Steel Heat Exchanger Design	Manual Shut-Off Valve
Blower Compartment Door Safety Switch	On Demand Dehumidifier Connection
Bluetooth® Diagnostics	One Hour Automatic Retry
Bluetooth® Setup	Power and Self-Test Diagnostics
Completely Assembled and Wired	Pressure Switches
Direct Drive Motor	PWM Controlled Variable Speed Electrically Commutated Blower Motor
Thermostat Connections	Redundant 2 Stage Main Gas Control
Electronic Air Cleaner Connections	Single Speed Option for Heating and Cooling Applications
Electronic On/Off Blower Time Control	Two Plus* Stage Cooling Thermostat Connection
Fully Insulated Heat Exchanger Cabinet	Two Speed Heating

NOTE: A thermostat is not included as standard equipment
*When Connected to Three Speed or Modulating AC/HP Product

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

Physical Data and Specifications—Upflow Models

MODEL NUMBERS MP802W 2 stg VS UP/HZ SERIES	MP802W0503 A14UH*BAS	MP802W0504 A17UH*BAS	MP802W0754 A17UH*BAS	MP802W0755 A21UH*BAS	MP802W1004 A17UH*BAS	MP802W1005 A21UH*BAS	MP802W1255 A24UH*BAS	MP802W1505 A24UH*BAS
Input-BTU/Hr [kW]	50,000 [15]	50,000 [15]	75,000 [22]	75,000 [22]	100,000 [29]	100,000 [29]	125,000 [37]	150,000 [44]
Heating Capacity BTU/Hr [kW] ①	40,000 [12]	40,000 [12]	60,000 [18]	60,000 [18]	80,000 [23]	80,000 [23]	100,000 [29]	120,000 [35]
Low Input BTU/Hr	35,000 [10]	35,000 [10]	52,000 [15]	52,000 [15]	70,000 [21]	70,000 [21]	87,500 [26]	105,000 [31]
Low Heating Capacity BTU/Hr	28,000 [8]	28,000 [8]	42,000 [12]	42,000 [12]	56,000 [16]	56,000 [16]	70,000 [21]	84,000 [25]
Blower (D x W) [mm]	11 x 6 [279 x 152]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Motor H.P. [W] Type	1/2 [373] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	1 [746] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	3/4 [560] VS-CT(ECM)	1 [746] VS-CT(ECM)
Min. Circuit Ampacity	9	13	9	15	12	12	12	16
Min. Overload Protection Device	15	15	15	15	20	15	15	20
Max. Overload Protection Device	15	20	20	20	25	20	20	25
Motor Full Load Amps	6.1	9.6	9.6	12.4	9.6	9.6	9.6	12.4
High Heating CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1425 [673]	1380 [651]	1900 [897]	1680 [793]
Low Heating CFM [L/s]	750 [354]	775 [366]	1150 [543]	1100 [519]	1225 [578]	1200 [566]	1400 [661]	1500 [708]
MAX Cooling CFM [L/s]	1240 [585]	1650 [779]	1650 [779]	1980 [934]	1650 [779]	1980 [934]	1980 [934]	1980 [934]
MIN Cooling CFM [L/s]	300 [142]	500 [236]	500 [236]	500 [236]	500 [236]	500 [236]	500 [236]	500 [236]
Fan CFM [L/s]	600 [283]	800 [378]	800 [378]	1000 [472]	800 [378]	1000 [472]	1000 [472]	1000 [472]
Max. E.S.P. (In. W.C.) [kPa]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]	1.0 [0.25]
Temperature Rise Range °F – High Input	25-55 [13.9-30.6]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	35-65 [19.4-36.1]	35-65 [19.4-36.1]	35-65 [19.4-36.1]	45-75 [25-41.7]
Temperature Rise Range °F – Low Input	20-50 [11.1-27.8]	20-50 [11.1-27.8]	20-50 [11.1-27.8]	20-50 [11.1-27.8]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	30-60 [16.7-33.3]	35-65 [19.4-36.1]
Approx. Shipping Weight (Lbs.) [kg]	104.5 [47]	110 [50]	117.5 [53]	135 [61]	131.5 [60]	140 [64]	143.5 [65]	155.5 [71]
AFUE ②	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%

NOTES: All models are 115V, 60HZ, 1 Ph. Gas connection size for all models is 1/2" [13 mm] N.P.T.
① In accordance with D.O.E. test procedures.
② See Conversion Kit Index Form for high altitude derate.
*S=Standard, N=Low NOx

This furnace does not meet air district requirements of 14 ng/J NOx emissions limit, and thus is subject to a mitigation fee of up to $450.

This furnace is to be installed for propane firing only in air districts requiring 14 ng/J NOx emission limits. Operating in natural gas mode is in violation of these Rules.

[ ] Designates Metric Conversions

Upflow Application

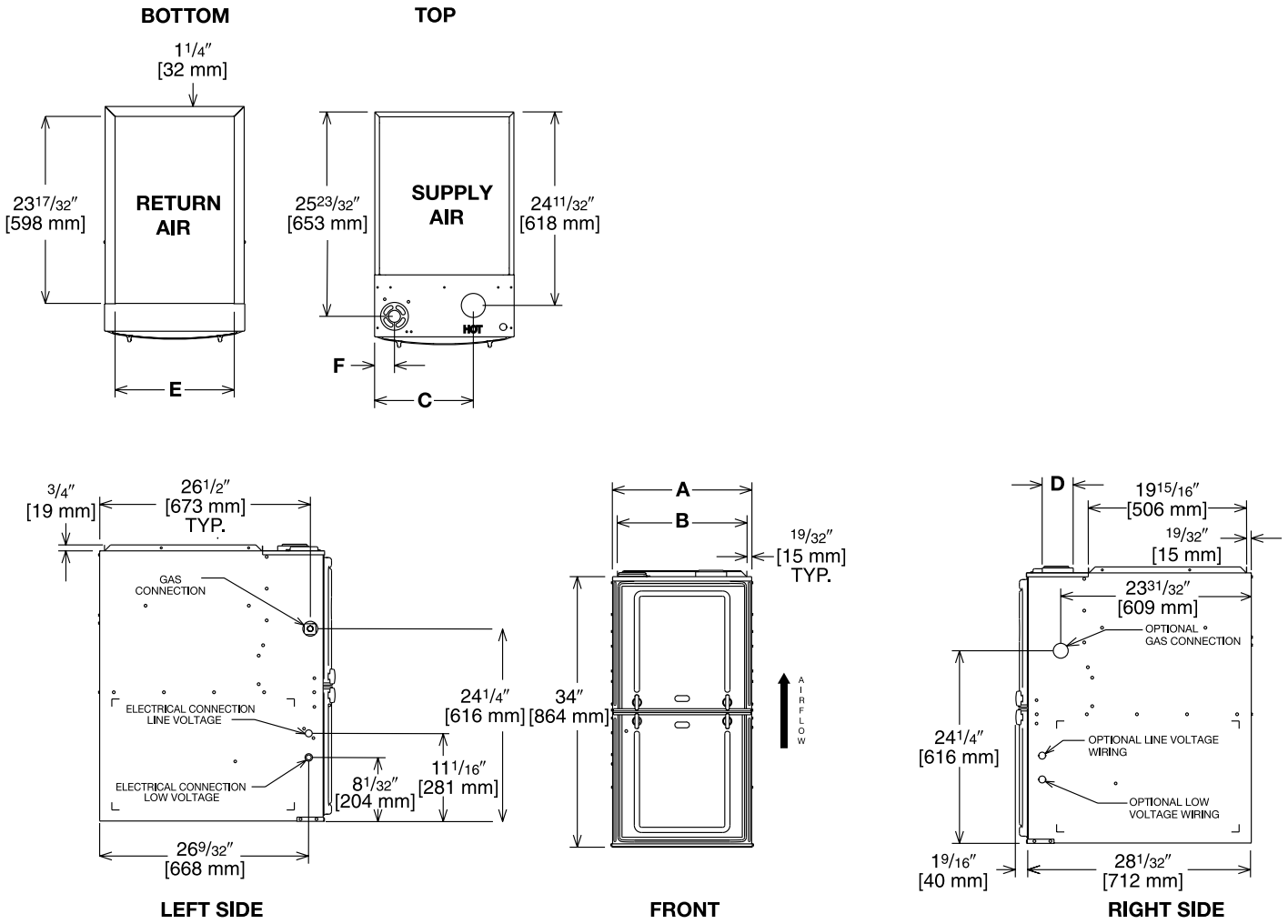

Illustration
ST-A1220-04-00
FIGURE 1

Dimensional Data: Upflow Model

MODEL MP802W	A	B	C	D	E	F	MINIMUM CLEARANCE (IN.) [mm]					
							SUPPLY AIR SIDE	RETURN AIR SIDE	BACK	TOP	FRONT	VENT
050314	14 [356]	12 27/32 [326]	10 5/8 [270]	①	11 1/2 [292]	1 7/8 [48]	4 [102] ②	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③
050417/75417	17 1/2 [445]	16 11/32 [415]	12 3/8 [314]	①	15 [381]	2 1/2 [64]	3 [76] ②	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③
075521/100	21 [533]	19 27/32 [504]	14 1/8 [359]	①	18 1/2 [470]	2 1/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③
125	24 1/2 [622]	23 11/32 [592]	15 7/8 [403]	①	22 [559]	2 1/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.
② May be 0" [0 mm] with type B vent.
③ May be 1" [25 mm] with type B vent.
Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and in accordance with local codes.

[ ] Designates Metric Conversions

Horizontal Application

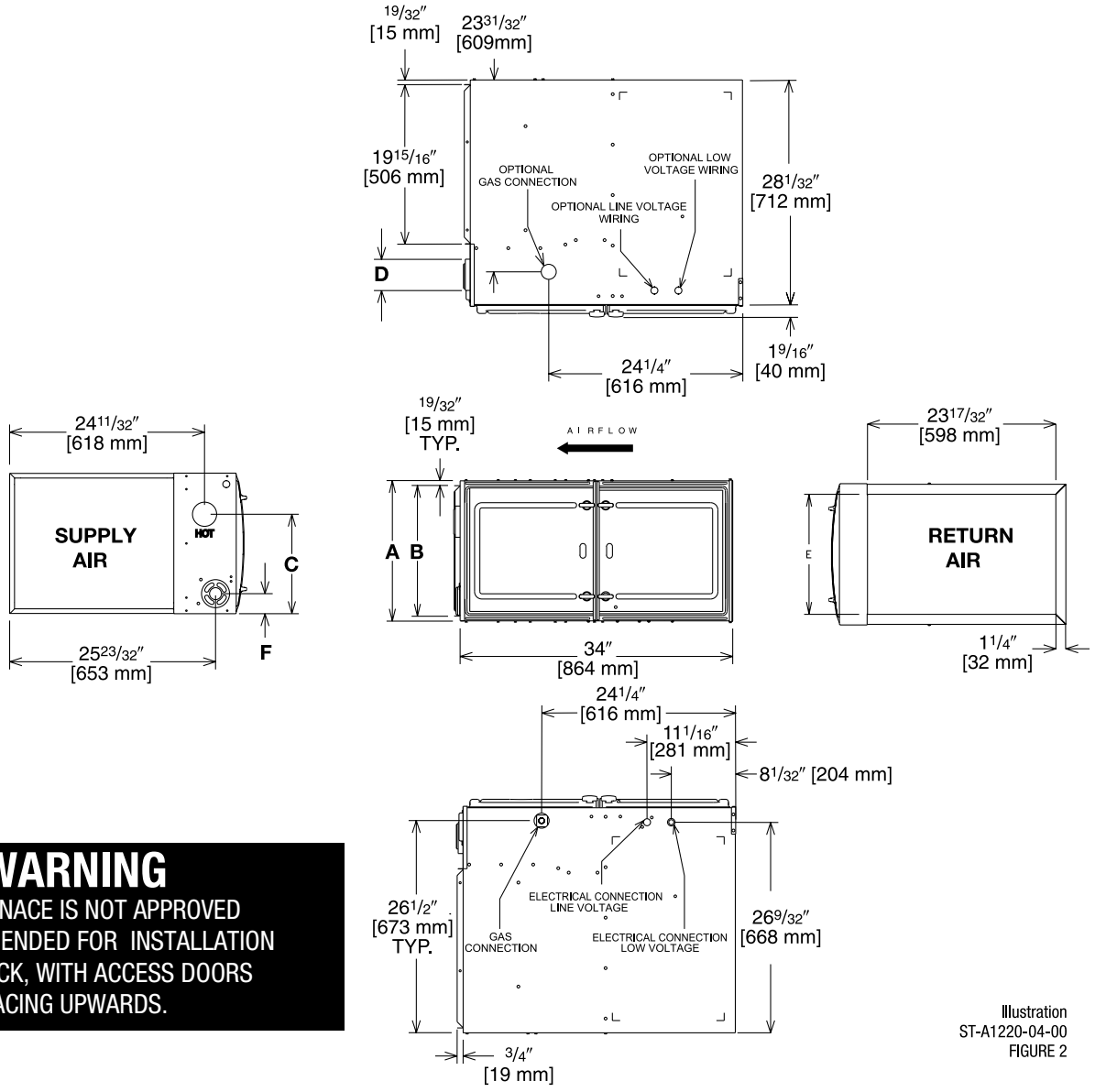

Illustration
ST-A1220-04-00
FIGURE 2

WARNING

THIS FURNACE IS NOT APPROVED
OR RECOMMENDED FOR INSTALLATION
ON ITS BACK, WITH ACCESS DOORS
FACING UPWARDS.

Dimensional Data: Horizontal Model

MODEL MP802W	A	B	C	D	E	F	MINIMUM CLEARANCE (IN.) [mm]					
							SUPPLY AIR SIDE	RETURN AIR SIDE	BACK	TOP	FRONT	VENT
050314	14 [356]	1227/32 [326]	105/8 [270]	①	111/2 [292]	17/8 [48]	4 [102] ②	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③
050417/75417	171/2 [445]	1611/32 [415]	123/8 [314]	①	15 [381]	21/2 [64]	3 [76] ②	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③
075521/100	21 [533]	1927/32 [504]	141/8 [359]	①	181/2 [470]	21/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③
125	241/2 [622]	2311/32 [592]	157/8 [403]	①	22 [559]	21/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.
② May be 0" [0 mm] with type B vent.
③ May be 1" [25 mm] with type B vent.
Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and in accordance with local codes.

[ ] Designates Metric Conversions

Blower Performance Data

TARGET GAS HEATING AIRFLOWS								
	MP802W0503 A14UH*BAS	**MP802W0504 A17UH*BAS**	**MP802W0754 A17UH*BAS**	**MP802W0755 A21UH*BAS**	**MP802W1004 A17UH*BAS**	**MP802W1005 A21UH*BAS**	**MP802W1255 A24UH*BAS**	**MP802W1505 A24UH*BAS**
Factory Low Heating CFM [L/s]	750 [354]	775 [366]	1150 [543]	1100 [519]	1225 [578]	1200 [566]	1400 [661]	1500 [708]
Low Heat Side Return CFM [L/s]	750 [354]	745 [352]	1100 [519]	1150 [543]	1260 [595]	1242 [586]	1480 [698]	1650 [779]
Low Heat Approx. ±7°F CFM [L/s]	660 [311]	698 [329]	1035 [488]	990 [467]	1078 [509]	1086 [513]	1260 [595]	1320 [623]
Low Heat Approx. ±12°F CFM [L/s]	608 [287]	644 [303]	955 [451]	913 [431]	993 [469]	996 [470]	1162 [548]	1215 [573]
Factory High Heating CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1425 [673]	1380 [651]	1900 [897]	1680 [793]
High Heat Side Return CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1539 [726]	1380 [651]	1900 [897]	1815 [857]
High Heat Approx. ±7°F CFM [L/s]	864 [408]	837 [395]	1305 [616]	1283 [506]	1283 [606]	1245 [588]	1710 [807]	1512 [714]
High Heat Approx. ±12°F CFM [L/s]	797 [376]	772 [364]	1204 [568]	1183 [558]	1183 [558]	1146 [541]	1577 [744]	1394 [658]

* S = Standard, N = Low NOx

[ ] Designates Metric Conversions

SIDE RETURN FILTER RACK: RXGF-CD

BOTTOM RETURN FILTER RACK FOR UPFLOW APPLICATION: RXGF-CB

FILTER RACK FILTER SIZES* INCHES		
MODEL	**RXGF-CB (UPFLOW/ HORIZONTAL)**	**RXGF-CD (UPFLOW) SIDE RETURN**
MP802W050	12 1/4 x 25	15 3/4 x 25
MP802W075/ MP802W0755A21	15 3/4 x 25	15 3/4 x 25
MP802W1004A1	19 1/4 x 25	15 3/4 x 25
MP802W125	22 3/4 x 25	15 3/4 x 25
MP802W150	22 3/4 x 25	15 3/4 x 25

Indoor Coil Casings

MODEL NUMBER
RXBC-D14AI
RXBC-D17AI
RXBC-D21AI
RXBC-D21BI
RXBC-D24AI

4" FLUE ADAPTER: RXGW-C01

WARNING: IMPORTANT NOTICE

A SOLID METAL BASE PLATE (SEE TABLE) MUST BE IN PLACE WHEN THE FURNACE IS INSTALLED WITH SIDE 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 IN.	SOLID BOTTOM KIT NO.	BASE PLATE NO.	BASE PLATE SIZE IN.
14	RXGB-D14	AE-61874-01	11 5/8 x 23 9/16
17 1/2	RXGB-D17	AE-61874-02	15 1/8 x 23 9/16
21	RXGB-D21	AE-61874-03	18 5/8 x 23 9/16
24 1/2	RXGB-D24	AE-61874-04	25 5/8 x 23 9/16

For High Altitudes:

OPTION CODE FOR HIGH ALTITUDE: U.S.
None required for high altitudes.

HIGH ALTITUDE CONVERSION KITS: U.S.
None required for high altitudes.

80+ HIGH ALTITUDE INSTRUCTIONS
CAUTION: Always follow National Fuel Gas Code (NFGC) guidelines when converting for high altitudes.

High altitude option codes are not required for these models. However, the burner orifice size needs to be recalculated and verified at elevations above 2000 ft. See Installation Instructions for more information.

L.P. CONVERSION KIT: RXGJ-FP32

MAINLINE®
Reliably Comfortable.™

GENERAL TERMS OF LIMITED WARRANTY*

Mainline® 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.

***For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

Conditional Parts.....Ten (10) Years
(Registration Required)
Heat Exchanger ..... Fifteen (15) Years

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.

"In keeping with its policy of continuous progress and product improvement, Mainline reserves the right to make changes without notice."

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