MAINLINE®
Reliably Comfortable.™

Performance® Gas Furnaces

MP801W

80% A.F.U.E.†
Heating Stages: Single Stage
Motor Type: Constant CFM
Input Rates: 50-150 kBTU [14.65-44.0 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
- **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	1	W	50	3	A	14	UH	S	B	A	S
Brand	**Furnace Efficiency**	**Stages of Heating**	**Motor Type**	**Heating Input (BTUH)**	**AC Max. Capacity**	**Major Series**	**Width**	**Position**	**NOx**	**Controls**	**Minor Series**	**Option Code**
MP - Mainline Performance®	80- 80% AFUE	1 - Single-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
MP801W0503A14UHSBAS
MP801W0504A17UHSBAS
MP801W0754A17UHSBAS
MP801W0755A21UHSBAS
MP801W1005A21UHSBAS
MP801W1255A24UHSBAS
MP801W0503A14UHNBAS
MP801W0504A17UHNBAS
MP801W0754A17UHNBAS
MP801W0755A21UHNBAS
MP801W1004A17UHSBAS
MP801W1004A17UHNBAS
MP801W1005A21UHNBAS
MP801W1255A24UHNBAS
MP801W1505A24UHSBAS
MP801W1505A24UHNBAS

STANDARD EQUIPMENT
100% Safety Lock Out
29-4C Stainless Steel Secondary Heat Exchanger Design
Adjustable Cool Fan Off Delay
Aluminized steel primary heat exchanger design
Blower Compartment Door Safety Switch
Bluetooth® setup and diagnostics
Completely assembled and wired
Direct Drive Motor
Thermostat Connections
Electronic On/Off Blower Time Control
Fully Insulated Heat Exchanger Cabinet
Humidfier Terminal Connection
Induced Draft Motor
Limit Controls
Low Speed Continuous Fan Option
Manual Shut-Off Valve
Marked condensate hoses
One Hour Automatic Retry
Power And Self-Test Diagnostics
Pressure Switch
Constant CFM Electrically Communicated Blower Motor
Redundant Main Gas Control
Single Stage Heating Thermostat Connection
Two Plus* Stage Cooling Thermostat Connection
Dehumidification using Bluetooth® App

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 MP801W 1stg VS-CT UP/HZ SERIES	MP801W0503 A14UH*BAS	MP801W0504 A17UH*BAS	MP801W0754 A17UH*BAS	MP801W0755 A21UH*BAS	MP801W1004 A17UH*BAS	MP801W1005 A21UH*BAS	MP801W1255 A24UH*BAS	MP801W1505 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]
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	15
Min. Overload Protection Device	15	15	15	20	15	15	15	20
Max. Overload Protection Device	15	20	15	25	20	15	15	25
Motor Full Load Amps	6.1	9.6	9.6	12.4	9.6	9.6	9.6	12.4
Heating CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1285 [606]	1550 [732]	1900 [897]	1850 [873]
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 [°C]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	40-70 [23-39]	35-65 [19.4-36.1]	40-70 [23-39]	45-75 [25-42]
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 not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.

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

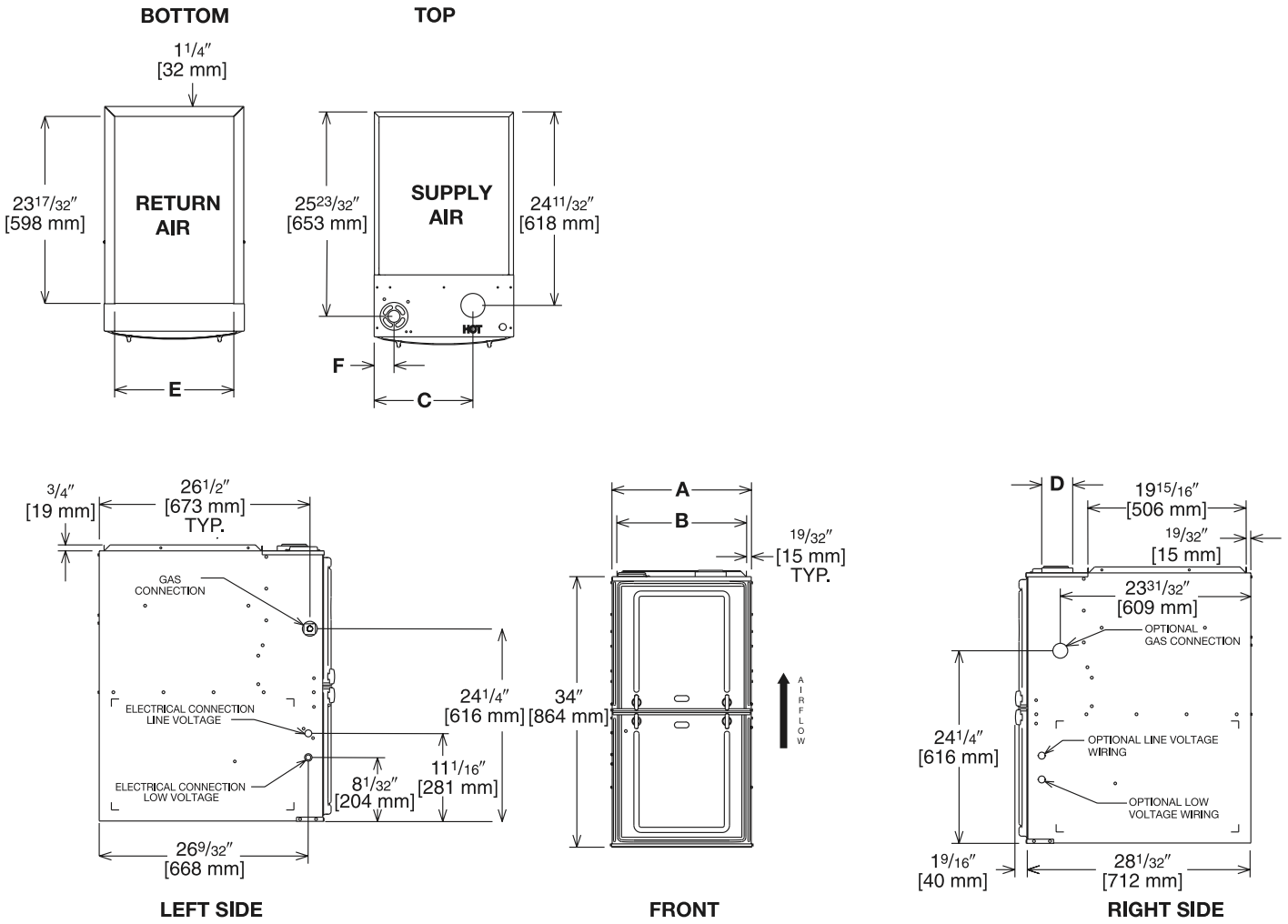


Illustration
ST-A1220-04-00
FIGURE 1

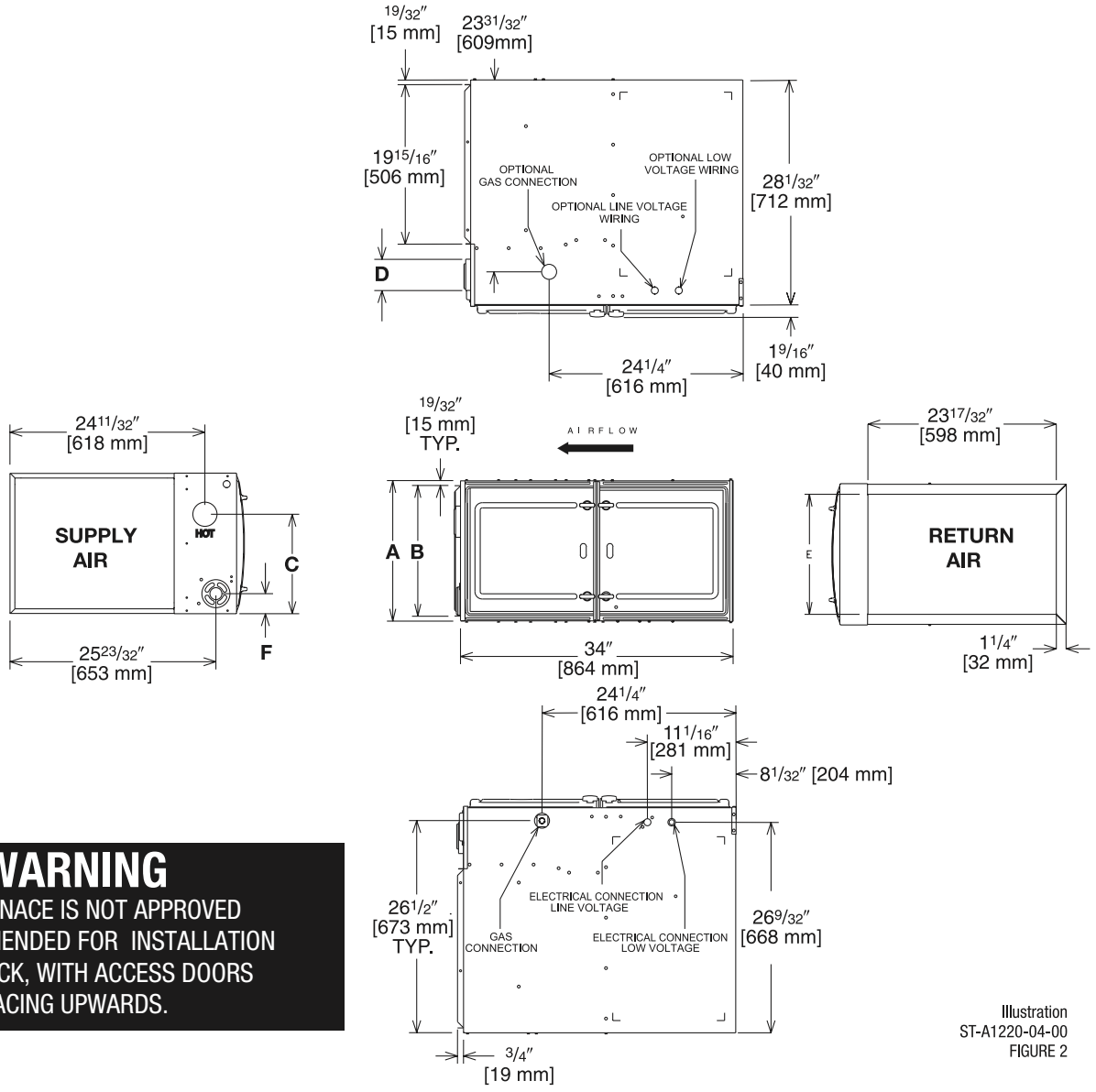
Dimensional Data: Upflow Model

MODEL MP801W-	A	B	C	D	E	F	MINIMUM CLEARANCE (IN.) [mm]					
							LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT
503A14	14 [356]	12 27/32 [326]	10 5/8 [270]	①	11 1/2 [292]	1 7/8 [48]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③
0504A17/ 754A17/1004A17	17 1/2 [445]	16 11/32 [415]	12 3/8 [314]	①	15 [381]	2 1/2 [64]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③
0755A21/1005A21	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
1255A24/1505A24	24 1/2 [622]	23 11/32 [593]	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



WARNING

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

Illustration
ST-A1220-04-00
FIGURE 2

Dimensional Data: Horizontal Model

MODEL MP801W-	A	B	C	D	E	F	MINIMUM CLEARANCE (IN.) [mm]					
							SUPPLY AIR SIDE	RETURN AIR SIDE	BACK	TOP	FRONT	VENT
0503A14	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
0504A17/ 0754A17/1004A17	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
0755A21/1005A21	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
1255A24/1505A24	24 1/2 [622]	23 11/32 [593]	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

Blower Performance Data

TARGET GAS HEATING AIRFLOWS								
	MP801W0503 A14UH*BAS	**MP801W0504 A17UH*BAS**	**MP801W0754 A17UH*BAS**	**MP801W0755 A21UH*BAS**	**MP801W1004 A17UH*BAS**	**MP801W1005 A21UH*BAS**	**MP801W1255 A24UH*BAS**	**MP801W1505 A24UH*BAS**
Factory High Heating CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1285 [606]	1550 [732]	1900 [897]	1850 [873]
High Heat Side Return CFM [L/s]	960 [453]	930 [439]	1450 [684]	1425 [673]	1325 [625]	1380 [651]	1900 [897]	1850 [873]
High Heat Approx. ±7°F CFM	864 [408]	837 [395]	1305 [616]	1283 [606]	1155 [545]	1395 [658]	1710 [807]	1655 [781]
High Heat Approx. ±12°F CFM	796 [376]	772 [364]	1204 [568]	1183 [558]	1065 [503]	1287 [607]	1577 [744]	1536 [725]

* S = Standard, N = Low NOx

[ ] Designates Metric Conversions

BOTTOM RETURN FILTER RACK FOR UPFLOW APPLICATION: RXGF-CB

SIDE RETURN FILTER RACK: RXGF-CD

FILTER RACK FILTER SIZES* INCHES [mm]		
MODEL	**RXGF-CB (UPFLOW/ HORIZONTAL)**	**RXGF-CD (UPFLOW) SIDE RETURN**
MP801W0503A14	12 1/4 x 25 [311 x 635]	15 3/4 x 25 [400 x 635]
MP801W0504A17/ MP801W0754A17/ MP801W1004A17	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]
MP801W0755A21/ MP801W1005A21	19 1/4 x 25 [489 x 635]	15 3/4 x 25 [400 x 635]
MP801W1255A24/ MP801W1505A24	22 3/4 x 25 [578 x 635]	15 3/4 x 25 [400 x 635]

4" FLUE ADAPTER: RXGW-C01

Indoor Coil Casings

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

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. [mm]	SOLID BOTTOM KIT NO.	BASE PLATE NO.	BASE PLATE SIZE IN. [mm]
14 [356]	RXGB-D14	AE-61874-01	11 5/8 x 23 9/16 [295 x 598]
17 1/2 [445]	RXGB-D17	AE-61874-02	15 1/8 x 23 9/16 [384 x 598]
21 [533]	RXGB-D21	AE-61874-03	18 5/8 x 23 9/16 [473 x 598]
24 1/2 [622]	RXGB-D24	AE-61874-04	25 5/8 x 23 9/16 [651 x 598]

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-FP15

[ ] Designates Metric Conversions

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.**

Parts ..... Five (5) Years
Heat Exchanger ..... Ten (10) 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."

www.MainlineCollection.com

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