EFFICIENT & ECONOMICAL GAS HOME HEATING + DOMESTIC HOT WATER



MINUTEMAN® II



BURNHAM MINUTEMAN® II GAS-FIRED BOILER/WATER HEATER

Space Saving Combo

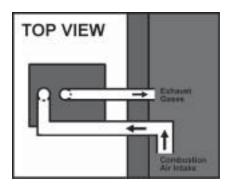
Burnham's Minuteman® II boiler/water heater combines home heating with domestic hot water in one space-saving unit.

Because of its small footprint, it can be easily installed in confined areas or closets. The Minuteman II boiler is ideal for all heating applications ranging from single homes, multi-family units, to industrial or commercial applications.

Available in three sizes from 70 to 140 MBH input, the annual fuel utilization efficiencies are as high as 83%. The Minuteman II unit can also provide hot water at up to 3.3 gallons per minute intermittent draw.

Direct Vent

Burnham's high efficiency Minuteman II is an innovation in boiler design.



An important safety consideration, given today's heavily insulated and tightly constructed homes, is that all the Minuteman II combustion air is taken directly from outside. Installed this way, the Minuteman II is a sealed unit

so not only the air for combustion, but also the products of that combustion are completely sealed off from the air in your living space.

Power Vented

The National Fuel Gas Code has set specific guidelines requiring properly lined chimneys for atmospheric gas boilers and water heaters. Burnham's Minuteman II unit delivers both capabilities in a direct vent unit that avoids the expense of chimney lining.

So, if you don't have a chimney or if your old chimney isn't up to the code, you can install the Minuteman II and vent directly outside through the wall.

Perfect in Many Applications

The Minuteman II boiler/water heater installs almost anywhere, making it perfect for whatever your home heating needs might be.

New home construction...

provides little space for equipment. That's why the Minuteman II is designed to provide hot water and heat in a space similar to that of a standard water heater.

Electric baseboard

conversions...are growing more popular due to lower gas prices, high electric heat costs and greater gas line accessibility. The Minuteman II can replace the electric space heating and the electric hot water heater with just one system.

Conversions from centralized heating...to individual heating units in multifamily housing.

Provides space heating and domestic hot water in small footprint for apartment or condominium applications.

Direct vent replacements... where chimneys are not up to code. Burnham's Minuteman II delivers capabilities in a direct vent unit that avoids the expense of chimney lining by venting through the wall direct to the outside.

Quality Engineered Cast Iron Construction

The rugged cast iron construction of the Minuteman II boiler makes it dependable, efficient, and virtually trouble-free. The



cast iron heat exchanger has a greater water content than those boilers with copper tube

heat exchangers. This can extend the life of the boiler, protect it against adverse operating conditions, and assure quiet operation.

Made in the USA

Unlike some other boiler/water heater units, the Burnham Minuteman II and all its major components are manufactured in the U.S.A.

All Burnham section castings, including those of the Minuteman II boiler, are made at our own in-house foundry. By producing our castings this way, Burnham ensures quality and availability.



The Economical Heating Choice

Burnham's Minuteman® II boiler is efficient by design. At the heart of every Minuteman II is a dependable cast iron heat exchanger that not only enhances energy efficiency, but also improves boiler performance. A draft inducing fan pulls hot gases through the heat exchanger at just the right speed for optimum efficiency. Together, the heat exchanger and fan provide for more heat with less fuel and eliminate heat loss through the vent. No vent damper is required.

Ease of Service

The Minuteman II unit is equipped with split controls: an operating/high limit control, a transformer, and a circulator relay. By using "off-the-shelf" separate



controls instead of a combination control, Burnham has simplified control replacement and reduced replacement costs. The location of the controls also makes regular servicing easier because everything is up front.

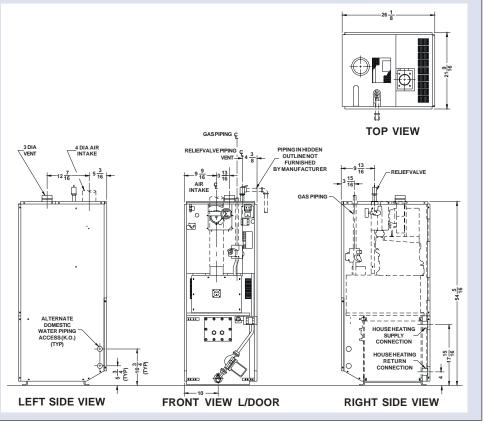
Designed for Safety

The Minuteman II boiler/water heater's sleek blue jacket gives a clean appliance look to the installation, plus it's designed with safety in mind.

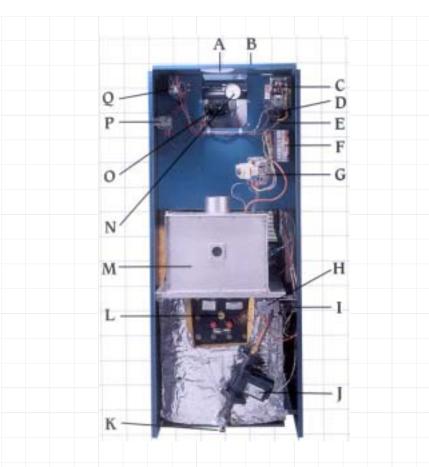
All controls are safely hidden behind the two front panels. The top panel is only removable by an adult-sized person. For added safety, the middle and bottom panels on the Minuteman II combination unit are secured with screws and cannot be removed without tools.

Dimensions (All Sizes) & Standard Equipment STANDARD EQUIPMENT

Section assembly Deluxe insulated jacket Tank circulator High limit Electronic ignition 100% shut-off combination Step-opening gas valve Safety relief valve 30 PSI Induced draft fan Differential suction pressure switch Vent monitor Boiler water monitor switch Transformer/relay Boiler drain valve Pressure-temperature gauge Tank aquastat AL29-4C vent connector AL29-4C terminal Combustion air intake terminal







FEATURES

- A. Air Intake Connection
- **B. Exhaust Connection**
- C. Control Center
- D. Blower Relay
- E. Cast Iron Heat Exchanger (Hidden From View)
- F. Ignition Module
- G. Gas Valve
- H. Aquastat
- I. Tank Relay
- J. Tank Circulator
- K. Drain Valve
- L. Domestic Water Heater
- M. Sealed Combustion Chamber
- N. Temperature/Pressure Gauge
- O. Blower
- P. High Limit
- Q. Differential Pressure Switch

Lifetime Limited Warranty

Every Minuteman cast iron heat exchanger is covered by Burnham's lifetime True Blue Limited Warranty on water and ten years on steam heat exchangers.

The additional purchase of Burnham's Winter Warmth



Assurance plan extends the True Blue Warranty protection of the heat exchanger to 5 or 10-year blanket coverage. The program pays 100%

for parts and labor on qualified repairs for 5 or 10-years from the date of installation. See your Burnham Home Heating Team member for more information.

One Source for Total Comfort

With over 125 years of proven dependability and the broadest product line, Burnham is the one company you can rely on for your complete home heating comfort.

Improve upon your new boiler's efficiency with Burnham's complete line of system components including: radiant heat pipe and accessories from Burnham Radiant Heating Company, low profile baseboard, modern radiators, and electronic controls. Burnham offers all the components for a complete home comfort system along with the industry's most comprehensive technical support team. Now is the time to make Burnham the one source for your total hydronic heating system.





SPECIFICATIONS



MINUTEMAN® II RATINGS









	9, 9								
BOILER NUMBER (1)	INPUT MBH (2)	DOE HEATING CAPACITY MBH	I=B=R NET WATER RATING MBH (3)	DOMESTIC HOT WATER 100° RISE INTERMITTENT DRAW GPM	MAXIMUM VENT LENGTH EQUIV. FT. (4) (5)	MAXIMUM AIR INLET LENGTH EQUIV. FT. (4) (5)	AFUE%	APPROX. SHIPPING WEIGHT (LBS.)	
MMII 4-70	70	58	50	2.9	70	70	83.3	307	
MMII 4-105	105	84	73	3.1	70	70	80.2	307	
MMII 5-105	105	88	77	3.1	70	70	83.3	345	
MMII 5-140	140	112	97	3.3	70	70	80.1	345	

- 1. If LP gas specify on order. Ratings are the same. (MMII5-105 and MMII5-140 not available for LP gas)
- 2. Ratings shown are for installations at sea level and elevations up to 2,000 ft. For elevations above 2,000 ft. ratings should be reduced at the rate of four percent (4%) for each 1,000 ft. above sea level.
- 3. Net I=B=R ratings shown are based on normal I=B=R piping and pick-up allowance of 1.15. Consult the manufacturer for installations having unusual piping and pick-up requirements such as intermittent system operation, extensive piping systems, etc.
- 4. Maximum equivalent length cannot exceed the sum of the length of straight pipe and the equivalent length of any elbow used (90°) and 45° elbows equal 5 equivalent feet).
- 5. The direct vent Minuteman II is designed to vent directly through the wall using Burnham's approved vent system, 3" AL29-4C $^{\odot}$ stainless steel pipe. Inlet air must be supplied from outdoor using 4" 26 gauge galvanized or similar, through the same wall as the vent.
- 6. Working Pressure: 30 PSI

