FIRST-OF-ITS-KIND GAS-FIRED HOT WATER HOME HEATING



REVOLUTION™



BURNHAM® REVOLUTION™ HIGH EFFICIENCY BOILER

The Revolution™ is Your Product...

Many of us take heating for granted. That is, unless your feet are cold—or you feel drafts in a room—or maybe your monthly heating bill is astronomical. Whether you think about it or not, a reliable and versatile heating system is essential in keeping your



family comfortable year round. That's why Burnham developed the Revolution. This gas-fired cast iron boiler is heads above any other boiler on the market in terms of efficiency, safe and quiet operation, and installation flexibility.

Burnham Quality

Burnham packs over 125 years of manufacturing and engineering expertise in each Revolution boiler. This means that all Burnham products, like the Revolution, are designed to the highest standards in quality, safety, and reliability using the latest technology and proven components.

Revolutionary Efficiency

The Revolution is currently the most efficient gas-fired boiler in Burnham's product line. With an annual fuel utilization efficiency of 88%, the Revolution exceeds the requirements for Energy Star certification.

Energy Star is a program developed by the Environmental Protection Agency and the Depart-

> ment of Energy to reduce energy consumption. The Revolution is proof positive that conserving resources doesn't require sacrificing performance.

Installation Flexibility

Burnham designed the Revolution to

adapt to the floor plan of virtually any home. Besides the flexibility of horizontal or vertical venting and the option to use either indoor (induced vent) or outdoor (direct vent) air for combustion, all piping and venting connections are made conveniently from the top access panel.

Ultimately, the Revolution's flexibility allows your contractor to spend less time installing your new boiler, which results in savings to you.

The Revolution is also prepiped with a primary/secondary loop for easy hookup into a low temperature system, and with the addition of a few simple controls, the Revolution boiler is the ideal heat source for radiant floor heat installations.

Available in five sizes, the Revolution has a model thats right for your home heating needs.

Burnham Dependability

You'll enjoy years of reliable performance because the Revolution is constructed with a cast iron heat exchanger. Cast iron has the unique ability to absorb and transfer heat quickly and efficiently while providing unmatched durability. Burnham's cast iron sections reduce fuel consumption and save you money. To assure quality and availability, all Burnham castings are produced in-house—a claim no other boiler manufacturer can make.

Iron couplings called nipples are used to permanently join the cast

iron heat exchanger sections. They expand and contract with the cast iron sections they join,



ensuring the integrity of the entire section assembly. Iron nipples are impervious to petroleum-based chemicals, including anti-freeze, which can deteriorate the gaskets used in some competitors' boilers. Burnham's exclusive Iron Nipple Seal of Dependability certifies the use of this proven method of boiler construction and assures reliable performance for a lifetime.

Unique Section Design

Heat transfer is more efficient in the Revolution due to a unique diamond pin configuration on the left end cast iron section.

Used in combination with Burnham's traditional castings, the diamond pin arrangement allows for more heat transfer, which in turn, reduces operating costs.



Diamond pin heat transfer surface

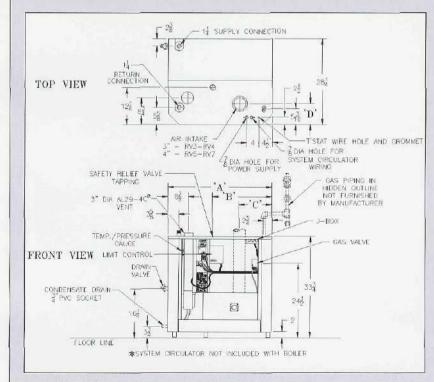
Designed for Performance

When developing the Revolution, Burnham sought input from plumbing and heating contractors to find out what features they would desire to see in a new gas boiler. Their input led to the design of a boiler that achieves the performance and efficiency levels demanded by homeowners. The result is one comprehensive unit. Consider these features:

- Widest variety of venting options available so it fits a wide variety of installations.
- Up to 88% AFUE and an Energy Star partner for total fuel efficiency.

- Familiar and proven gas train and controls to simplify setup and service.
- Honeywell Smartvalve® electronic ignition eliminates extra wiring and separate controls.
- System temperatures anywhere from 55°F to 210°F without worry of damage from condensation.
- A built-in injection pump to provide precise temperature control.
- A built-in primary/secondary loop to save time and simplify installation.
- All connections from top to allow for minimal clearances.

Dimensions and Standard Equipment



Boiler Model	A	В	С	D
RV3	24-3/4	10	5-15/16	7-1/8
RV4	28	13-1/4	7-9/16	7-1/8
RV5	31-1/4	16-1/2	9-3/16	6-7/8
RV6	34-1/2	19-3/4	10-13/16	6-7/8
RV7	37-3/4	23	12-7/16	6-7/8

- · Deluxe insulated jacket
- · Pressure temperature gauge
- · Drain valve
- · Aquastat
- HŚP, 100% shut-off, redundant combination gas valve with 30 second prepurge and continuous retry for ignition
- · Induced draft blower
- · Flame roll-out switch
- · Stainless steel burners
- · Safety relief valve
- · Differential pressure switch
- Separate horizontal vent terminal
- · Separate air intake terminal
- Service J-box
- Injection circulator
- Injection control
- · Integrated by-pass piping system
- · Vent connector and extension pipe
- · Condensate trap
- · Transformer and blower relay
- · User friendly wiring harness





- A. Pre-installed primary/secondary loop
- B. Variable speed injection pump
- C. Induced draft fan
- D. AL29-4C® stainless steel vent
- E. All piping, vent, and electrical connections top mounted
- F. Injection pump control
- G. Honeywell Smartvalve®
- H. Aquastat

Available Venting Options:

- Horizontal venting system
- Vertical venting system
- Combination horizontal venting system (single wall penetration)
- Combination vertical venting system (single roof penetration)
- Direct vent (outdoor air for combustion) or induced vent (indoor air for combustion)

Your Hydronic Heating Source

From cast iron and steel boilers to the Alliance™ family of indirect water heaters, radiant heat pipe and accessories from Burnham Radiant Heating Company, and the EC5000 system manager, Burnham offers all the components for the complete home comfort system. And with the industry's most comprehensive technical support team, now is the time to look where contractors across the country have since 1873, now is the time to look at Burnham.

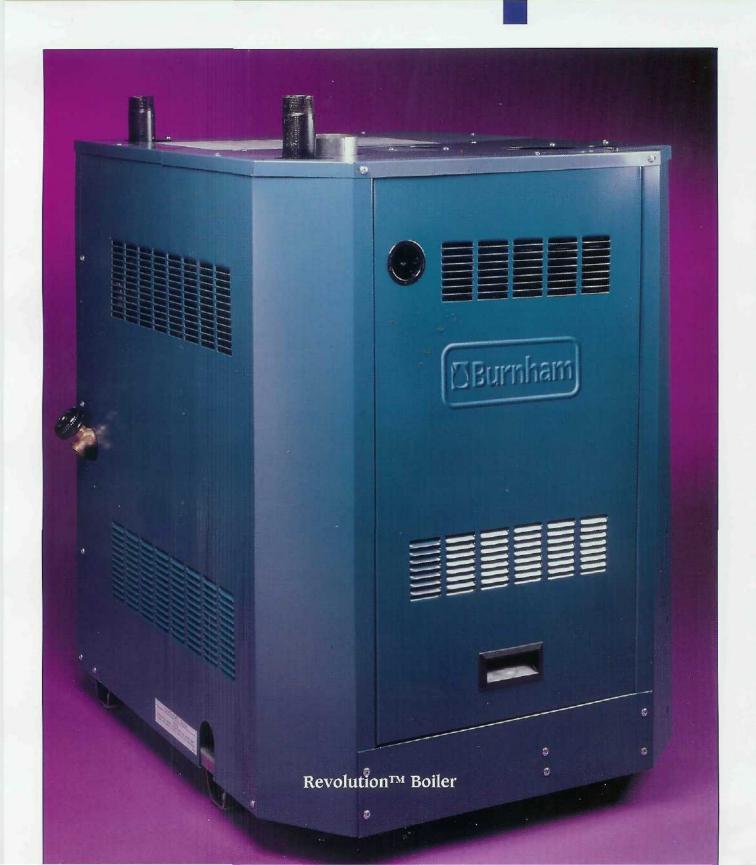
Lifetime True-Blue Limited Warranty

Burnham stands behind every Revolution boiler with a Lifetime limited warranty on the heat exchanger.

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% of parts and labor on qualified repairs for 5 or 10 years from the date of installation. See

from the date of installation. See your Burnham Home Heating Team member for more information.





SPECIFICATIONS













Natural Gas or LP Gas

BOILER MODEL	INPUT MBH	DOE HEATING CAPACITY MBH	I=B=R NET RATING MBH	AFUE%	MAX. VENT LENGTH (EQUIV. FT.)	MAX. AIR INLET LENGTH (EQUIV. FT.)
RV3 RV4	62 96	55 84	48	88.0 87.6	50 50	52 52
RV5 RV6	130 164	114	99 124	87.4 87.2	50 50	52 52 52
RV7	190	166	144	87.0	50	52

Gas, Water, and Vent Connection

BOILER MODEL	GAS VALVE INLET (NPT)	WATER SUPPLY/RETURN (NPT)	AIR INLET DIAMETER (IN)	VENT DIAMETER (IN)
RV3	1/2	1 1/4	3	3
RV4	1/2	1 1/4	3	3
RV5	1/2	1 1/4	4	3
RV6	3/4	1 1/4	4	3
RV7	3/4	- 11/4	4	3

Water Capacity

BOILER MODEL	*	WATER CAPACITY GALLONS*
RV3 RV4 RV5 RV6 RV7	*	3.6 4.4 5.1 5.9 6.6

Equals sum of casting capacity + internal water manifold piping capacity (0.4 gal.)

- 1. Ratings shown are for installations at sea level and elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at a rate of four percent (4%) for each 1000 feet above sea level.
- 2. Net I=B=R ratings shown are based on normal piping and pick-up allowance of 1.15. Consult Burnham for installations having unusual piping and pick-up requirements.
- 3. Maximum equivalent length cannot exceed the sum of the lengths of straight pipe and the equivalent lengths of elbows used. (90° and 45° elbows equal 5 equivalent feet.)
- 4. The Revolution is designed to vent directly through the wall or roof using Burnham's approved vent systems, and $AL29-4C^{\circ}$ stainless steel pipe. Inlet air can be supplied using single wall metal pipe or PVC pipe using Burnham's PVC air intake kit.
- 5. As an ENERGY STAR partner, Burnham has determined that this product meets the ENERGY STAR guidelines for energy efficiency. Using products with the ENERGY STAR label can save energy. Saving energy reduces air pollution and lowers utility

