

EFFICIENT & ECONOMICAL GAS-FIRED HOT WATER HOME HEATING



SERIES 2PV



BURNHAM SERIES 2PV GAS-FIRED HOT WATER BOILER

The Cost Saving Alternative to Electric Heat

If you're in the market for a new heating system, look no further. Whether you are building a new home, replacing an inefficient or worn-out boiler, or thinking about converting from expensive electric heat or heat pump, Burnham's Series 2PV is the right home heating investment for you. With annual fuel efficiencies of up to 82.1%, the Series 2PV gas-fired water boiler can reduce your yearly heating bills and pay for itself in fuel savings alone.

How to Determine Your Savings

Your Current Boiler's Efficiency Rating	X	Your Current Annual Fuel Bill	=	Your Estimated New Fuel Bill
82.1				

Example:
Your present boiler's efficiency is rated at 60% and your annual fuel bill is \$1,500.

60	X	\$1,500	=	\$1,096
82.1				

= \$404 Annual Savings

Burnham Hydronic Heating is the Choice for Comfort and Versatility

Steam and hot water heating, known as hydronic heating, has proven to be the most effective and economical home comfort system available. With a well designed, properly maintained hydronic system, you will never experience the hot and cold spots or drafts so common with furnaces and heat pumps. Plus, there are no airborne dust particles, smoke, odors, and germs being carried from one part of the house to another.

Homeowners have tremendous heating versatility with Burnham's Series 2PV boiler. Whether you combine the boiler with an indirect water heater, radiant heat tubing, or zoning controls, the Series 2PV delivers uncompromising comfort and economical operation for your home.

• Abundant Hot Water

Today's lifestyle requires more hot water for daily activities; dish and clothes washing, hot tubs and whirlpool baths and other household appliances have increased the need for domestic hot water. Fortunately, the Series 2PV can be installed with an Alliance indirect water heater to meet every hot water need quickly and cost-effectively.

Unlike gas-fired or electric water heaters, the Alliance water heater uses boiler water as the heat source to produce hot water in an insulated tank.

• Perfect for Radiant Heating

Combine the power of the Series 2PV with radiant pipe to deliver heat from your floor, wall or ceilings to keep you warm. Because of the way radiant heating focuses its heat where you are, virtually no heat is wasted and you can enjoy up to 30% savings over your conventional heating systems with greater comfort. Adding radiant heat to melt snow on your driveway or sidewalks is another optional feature available with the Series 2PV.

• Heat When and Where You Want It

Today's hot water heating systems are far more sophisticated and efficient than the systems just 20 years ago. Burnham supplies electronic controls to meet the needs of your entire home heating and domestic hot water systems. The addition of electronic controls assures your comfort and system efficiency.

The Burnham EC5000 combined with any Burnham boiler directs the heating system to run at its most efficient level. The EC5000 combined with the Series 2PV can control the comfort levels of up to four heating zones plus an indirect water heater.



With the guidance of a qualified heating contractor, you can easily customize your heating system and choose options that add to your home's comfort and value. Burnham's Series 2PV makes heating your home with gas a practical investment today and one you'll appreciate for years to come.

Designed for Performance

The Series 2PV is efficient by design. At the heart of every 2PV boiler is a dependable cast iron heat exchanger that enhances energy efficiency and improves boiler performance. To reduce fuel consumption, rugged cast iron sections are joined with iron couplings called “nipples” to extract the maximum amount of heat from your boiler. The nipples expand and contract with the cast iron sections and are impervious to petroleum based chemicals which have been found to deteriorate gaskets used in competitors’ brands.

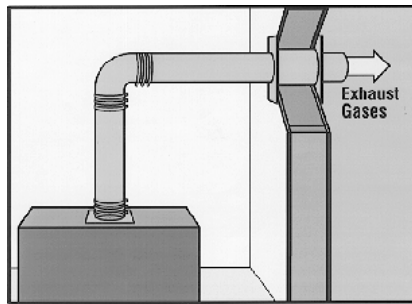


In addition, Burnham backs up all Series 2PV boilers with a True-Blue Lifetime Limited Warranty on the heat exchanger.

Ease of Installation

Since the 2PV vents directly through any outside wall, it can be installed almost anywhere. This means you won’t need to make costly repairs to your old, deteriorating chimney.

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 more heat with less fuel consumption. No vent damper is required.



Ease of Servicing

• Split Controls

The Series 2PV is equipped with split controls: a separate high limit control, and a transformer/circulator relay. By using “off the shelf” controls, Burnham has simplified service and reduced replacement costs. The location of the controls also makes servicing easier because everything is up front.

• Concealed Controls

All controls are hidden under the boiler jacket to prevent damage and tampering.

State-of-the-Art Controls

• Prepurge Ignition Module

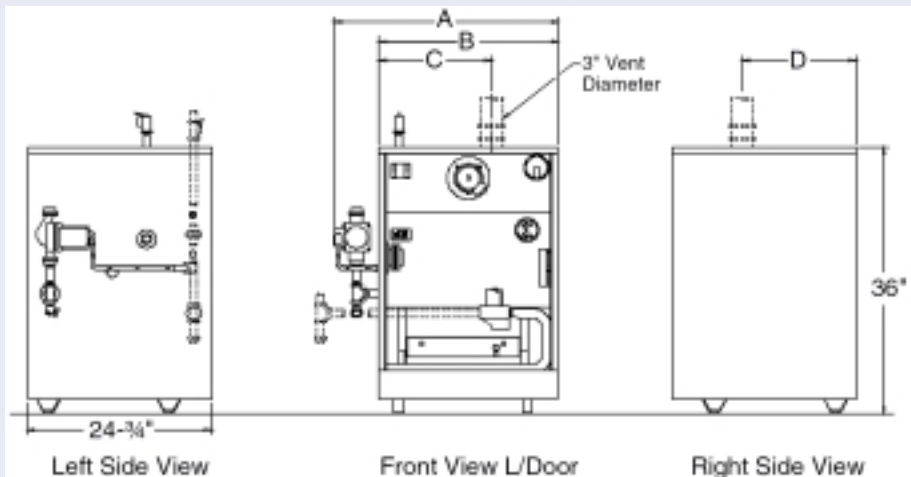
This safety control allows the fan to purge air through the boiler and vent system clearing the system and making sure there is no blockage before trying for ignition.

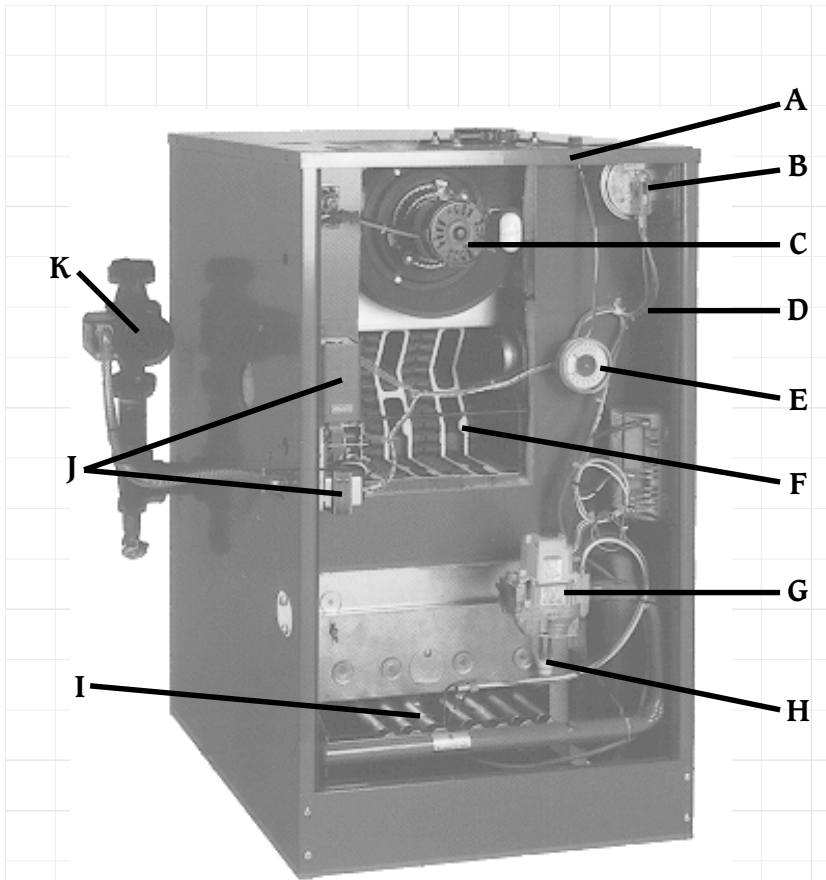
Dimensions (In Inches) and Standard Equipment

BOILER NUMBER	A	B	C	D
203PV	20-1/2"	14-1/2"	10-1/16"	15-5/8"
204PV	23-3/4"	17-3/4"	11"	15-5/8"
205PV	27"	21"	13-1/2"	15-1/4"
206PV	30-1/4"	24-1/4"	15-1/8"	15-1/4"

Standard Equipment:

Deluxe Insulated Jacket
 1-1/4" Circulator
 Pressure/temperature Gauge
 Drain Valve
 High Limit
 EI Module w/ 100% Shut-off, 30 sec.
 Prepurge & Continuous Retry for Ignition
 Induced Draft Fan
 Flame Roll-Out Switch
 J-Box with Transformer/Relay Control
 100% Shut-Off Redundant Combination Gas Valve
 Stainless Steel Burners
 Safety Relief Valve
 Vent Assembly Carton (vent connector, terminal, one locking band, and one three-oz. tube of silicone sealant)





- A. Deluxe insulated jacket
- B. Suction pressure switch proves fan operation
- C. Draft inducing fan
- D. Labeled wiring makes electrical connection easy
- E. Pressure/temperature gauge
- F. Durable cast iron sections for long life
- G. Concealed step opening gas valve for smooth light-off
- H. Flame roll-out switch
- I. Corrosion resistant stainless steel burners
- J. Brand name quality controls
- K. Self-lubricating circulator never needs oil

The Series 2PV is equipped with electronic ignition (EI) for all natural and LP gas models to increase fuel efficiency.

• **Redundant Gas Valve**

The control arrangement provides for a 90-second try for pilot ignition. If after that length of time the pilot is not established, the entire system goes to safety shutdown. After five minutes, the unit will retry for ignition and continue to do so on a programmed basis until a pilot is established or the thermostat is set below room temperature.

Comfort You Can Count On

The additional purchase of Burnham's Winter Warmth Assurance Plan extends the True Blue Limited Warranty protection on 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.



Burnham's Total Offer

Burnham is the one company you can rely on for your complete home heating comfort system. Improve upon your new boiler's efficiency with Burnham's complete line of system components like radiant heating equipment, indirect-fired water heaters, zone controls, baseboard, and even radiators. Every Burnham product is backed by the industry's most comprehensive technical support team. Now is the time to make Burnham the one source for your total hydronic heating system.



Series 2PV Gas Boiler

SPECIFICATIONS



SERIES 2PV RATINGS Natural and LP Gas



BOILER MODEL	INPUT MBH (1)	DOE HEATING CAPACITY MBH	I=B=R NET RATING MBH (2)	AFUE %
203PV	62	51	44	82.1
204PV	96	79	69	82.0
205PV	130	107	93	82.0
206PV	164	135	117	82.0

1. Ratings shown are for installations at sea level and elevations up to 2,000 feet. For elevations above 2,000 feet, ratings should be reduced at the rate of four percent (4%) for each 1,000 feet above sea level.

2. Net I=B=R ratings shown are based on normal I=B=R piping and pick-up allowance of 1.15. Consult Burnham for installations having unusual piping and pick-up requirements such as intermittent system of operation, extensive piping systems, etc.

Venting System:

The 2PV is designed to vent directly through the wall using only AL29-4C® stainless steel piping - Burnham's approved vent system.

Wall Thimble (sold separately) - Venting through a combustible wall requires a single wall thimble for a 203PV or 204PV, and a double wall thimble for a 205PV or 206PV.

Vent pipe length is in equivalent feet. Elbows are 5 equivalent feet which must be subtracted from the total length to determine maximum length of straight pipe.

- Minimum vent length for all models is 7 equivalent feet.
- Maximum vent length is 25 equivalent feet.
- Consult Installation, Operating and Service Instruction for details.

