



technical catalog bulletin

GPMX

and GPM
packaged gas-fired boilers
hot water

PLAINTIFF'S EXHIBIT

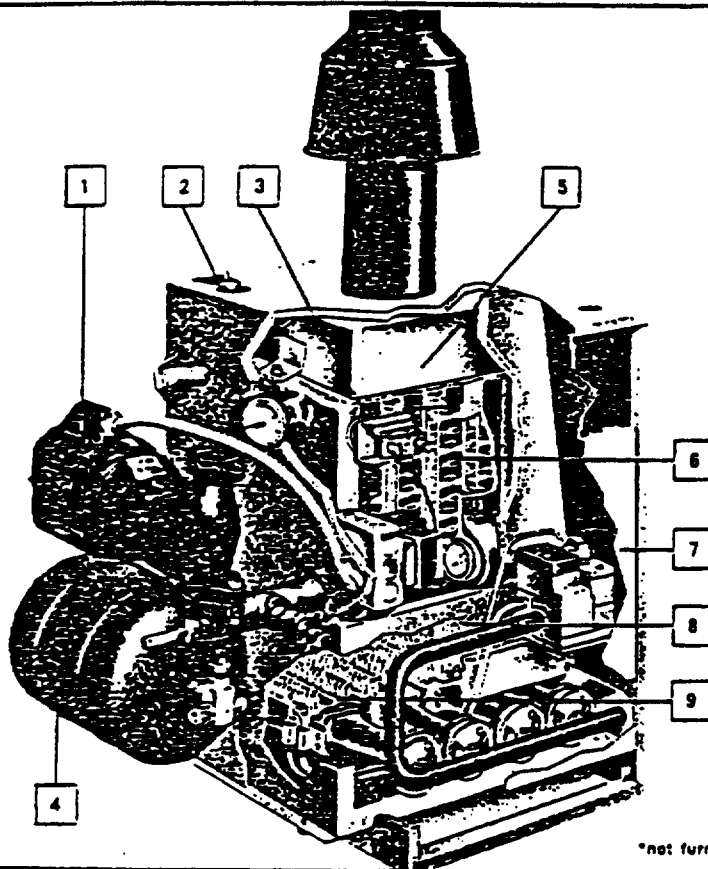
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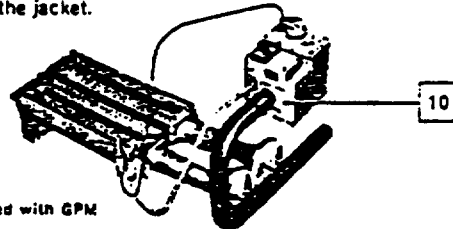
GPMX gas-fired boiler—the most completely packaged cast iron boiler available!

The compact, low-cost GPMX is designed for use in new construction or modernization. It is completely packaged, including pre-wired controls, diaphragm expansion tank, auto fill valve and auto air vent... plus a unique purge valve arrangement to cut installation time to a minimum! New vertical sections provide maximum surface for heat transfer efficiency. Just connect water, fuel and electric supplies and the GPMX is ready to work.

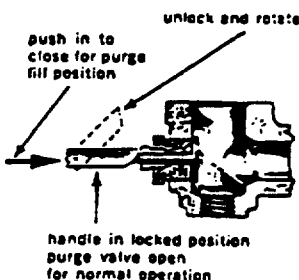
Designed in a full range of six sizes, the GPMX boiler offers a wide selection of outputs—from 52,800 Btuh to nearly 185,000 Btuh's! And it goes in anywhere—in the basement, utility room, closet—and leaves plenty of space for family living. Attractive brown and beige jacket eliminates decorating problems. **FOR PACKAGED UNIT LESS EXPANSION TANK, AUTO FILL VALVE AND AUTO AIR VENT—SPECIFY BOILER MODEL GPM—THE SAME OUTPUT RATINGS APPLY.**



- 1—circulator—wired for intermittent operation.
- 2—automatic air vent*—bleeds off trapped air from the system water.
- 3—controls—factory mounted, pre-wired and easily accessible for service.
- 4—expansion tank*—diaphragm type provides system air cushion.
- 5—sturdy canopy—removable for servicing. Integral asbestos gasket for gas-tight seal.
- 6—lifetime cast iron sections—vertical sections have multiple pin-like projections for maximum heat extraction and transfer. Sections are water tested at 75 psi (2½ times rated capacity of the relief valve).
- 7—jacket—sturdy steel jacket is insulated with glass fiber insulation to prevent wasteful heat loss and keep jacket cool. Shipped factory installed.
- 8—insulated base—sturdy steel base supports cast iron section assembly.
- 9—durable cast iron drilled port burners—burners and mixer tubes all one piece. (Stainless steel ribbon insert burners provided for LP gases. Optional for natural gas at lower ratings.)
- 10—factory assembled manifold and controls—installed on all boilers and completely enclosed by the jacket.

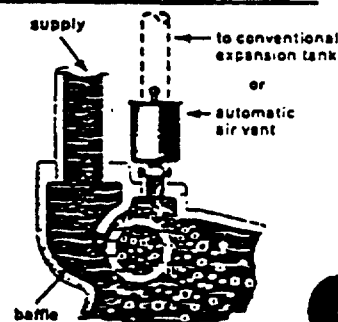


Exclusive purge valve—designed into the circulator elbow fitting this unique arrangement is a time saving and positive device for removing troublesome air from the system. The valve handle is designed to lock the valve in the normal (open) position to prevent accidental closing after the system is in operation.



The ELIMINAIRE[®] is a unique built-in air separator which prevents air from being transmitted to the system. The air is directed to either the conventional type expansion tank or to the automatic air vent. External air separation devices are not required. This important feature simplifies near boiler piping and assures positive air separation essential to proper system performance.

ELIMINAIRE[®] is a trademark of AMERICAN STANDARD INC.





and GPM packaged gas-fired boilers

GPMX and GPM ratings

boiler number	for installations from sea level to 2000 ft. *			number of burners	input per burner (btu/hr)	chimney		water content (gallons)
	A.G.A. ratings		Net I.B.R. ratings (btu/hr)					
	input (btu/hr)	output (btu/hr)						
natural and mixed gases								
GPM(X)-3	66,000	52,800	46,100	2	33,000	4	10	1.56
GPM(X)-4	99,000	79,200	68,700	3	33,000	5	10	2.00
GPM(X)-5	132,000	105,600	92,200	4	33,000	5	10	2.43
GPM(X)-6	165,000	132,000	114,800	5	33,000	6	10	2.87
GPM(X)-7	198,000	158,400	137,400	6	33,000	7	10	3.31
GPM(X)-8	231,000	184,800	160,900	7	33,000	7	10	3.74
LP gases (natural gas with ribbon burners)								
GPM(X)-3R	60,000	48,000	41,700	2	30,000	4	10	1.56
GPM(X)-4R	90,000	72,000	62,600	3	30,000	5	10	2.00
GPM(X)-5R	120,000	96,000	83,500	4	30,000	5	10	2.43
GPM(X)-6R	150,000	120,000	104,300	5	30,000	6	10	2.87
GPM(X)-7R	180,000	144,000	125,200	6	30,000	7	10	3.31
GPM(X)-8R	210,000	168,000	146,100	7	30,000	7	10	3.74

Omit (X) for GPM

* For altitudes above 2000 ft., ratings should be reduced at the rate of 4% for each 1000 ft. above sea level.

Δ Net I.B.R. ratings shown are based on a piping and pick up allowance of 1.15. American Standard should be consulted before selecting a boiler for installations having unusual piping and pick up requirements.

Δ Measured from top of canopy.

Note: GPMX and GPM packaged boilers furnished for forced water circulation only.

gas connections—(inches-IPS)

boiler number	nat.	mixd.	LP
GPM(X)-3	½	½	½
GPM(X)-4	½	½	½
GPM(X)-5	½	½	½
GPM(X)-6	½	¾	½
GPM(X)-7	½	¾	½
GPM(X)-8	¾	¾	½

Omit (X) for GPM

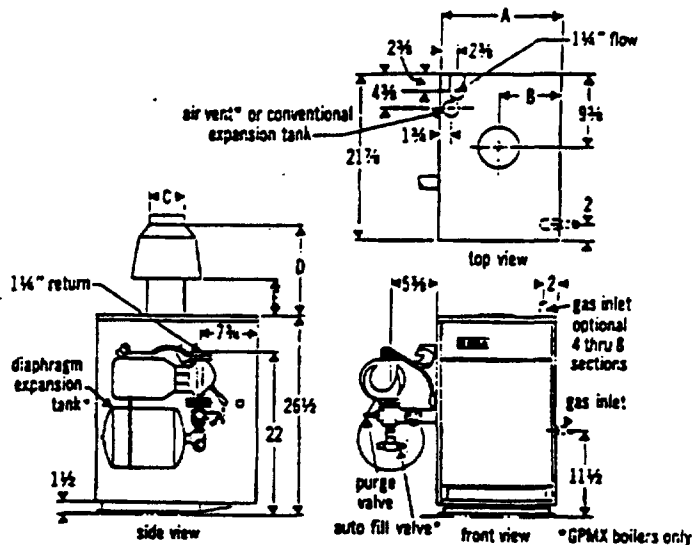
crated dimensions

boiler number	dimensions (inches)			approx. shipping weight (pounds)
	height	width	length	
GPM(X)-3	30	22	25	200
GPM(X)-4	30	25	25	240
GPM(X)-5	30	28	25	285
GPM(X)-6	30	33	27	335
GPM(X)-7	30	36	27	385
GPM(X)-8	30	39	27	430

Omit (X) for GPM

dimension and tapings (inches)

boiler no.	no. of sections	no. of burners	dimensions				
			A	B	C	D	E
GPM(X)-3	3	2	9¾	4½	4	11½	5½
GPM(X)-4	4	3	12¾	6	5	22	15
GPM(X)-5	5	4	15¾	7½	5	22	15
GPM(X)-6	6	5	18¾	9	6	16¾	9¾
GPM(X)-7	7	6	21¾	10½	7	20½	12¾
GPM(X)-8	8	7	24¾	12	7	20½	12¾



minimum clearance for closet installation

Designation	Symbol	GPM-3	GPM-4	GPM-5	GPM-6	GPM-7	GPM-8
From Top	A	56	56	56	56	56	56
From Front	B	6	6	6	6	6	6
From Flue	C	6	6	6	6	6	6
From Back	D	4	4	4	4	4	4
From Left	EL	10	10	12	12	12	12
From Right	ER	3	3	3	3	3	3

APPROVED FOR INSTALLATION ON COMBUSTIBLE FLOOR

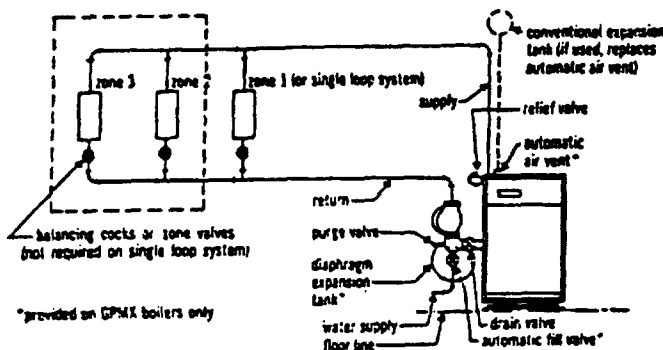
GPMX packaged gas boilers are designed and built to comply with the American Society of Mechanical Engineers' Code, and bear their approval symbol. Ratings have been approved by the Institute of Boiler and

Register Manufacturers. The GPMX has been design certified by the American Gas Association for all gases. It is also A.G.A. design certified for installation on combustible flooring and for close clearance installations.

**AMERICAN
STANDARD**

and GPM packaged gas-fired boilers

near boiler piping



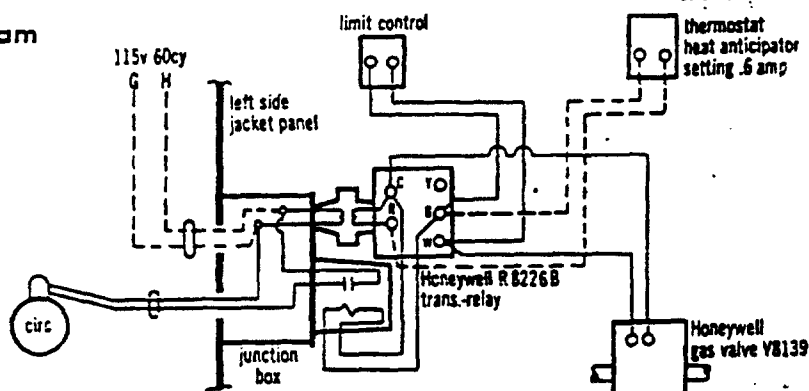
Procedure for filling series loop Heatrim System:

1. Close all zone valves except zone to be purged.
2. Open boiler drain valve.
3. Open fill valve.
4. Close purge valve.
5. Vent air from boiler by manually opening relief valve.
6. Open second valve to be purged. Close first zone. After second zone is purged, open third zone valve and close second zone. Repeat for as many zones as in system. (Note: Always have one zone valve open.)
7. When all zones have been purged, close boiler drain cock.
8. When water appears at relief valve, release lever and allow to close.
9. Continue filling until pressure gauge reads approximately 12 lbs./sq. in. Close fill valve.
10. Open purge valve.

Note 1: Where multiple circuits are used without zone valves, balancing valves should be installed for balancing. These can be shut off to purge each circuit valve individually.

Note 2: For a single loop Heatrim System, no additional vents, valves, drains or other accessories are required.

wiring diagram (for 24 volts)



Boiler Rating (Btu/hr)	Gas Pressure (in. H ₂ O)	Manifold Pressure (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)	Orifice Size (in. H ₂ O)
33,000	0.60	31	32	35	35	38	—	—	—	—	—	—	—
33,000	0.65	30	31	35	35	37	—	—	—	—	—	—	—
33,000	0.70	30	31	32	35	37	—	—	—	—	—	—	—
▲ 30,000	0.60	31	34	36	38	41	—	—	—	—	—	—	—
▲ 30,000	0.65	31	33	36	38	—	—	—	—	—	—	—	—
▲ 30,000	0.70	31	32	35	37	39	—	—	—	—	—	—	—
30,000	0.70	—	—	—	—	—	26	28	29	30	31	—	—
30,000	0.80	—	—	—	—	—	24	26	28	29	30	—	—
30,000	0.90	—	—	—	—	—	22	24	27	28	29	—	—
30,000	1.53	—	—	—	—	—	—	—	—	—	—	52	—
30,000	2.00	—	—	—	—	—	—	—	—	—	—	—	53

orifice pressure table

gas	heating value #	manifold pressure (in. H ₂ O)
City	600-1200	3.5
L.P.	2500 & 3300	11.0

Heating value of gas at sea level. (60°F and 30 in. Hg.)

Note: Table shows orifice sizes by numbered drill sizes. Sea level ratings are to be used for elevations between 0 and 2000 ft. For altitudes above 2000 ft., sea level ratings should be reduced 4% for each 1000 ft. above sea level.



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PLUMBING & HEATING DIVISION

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