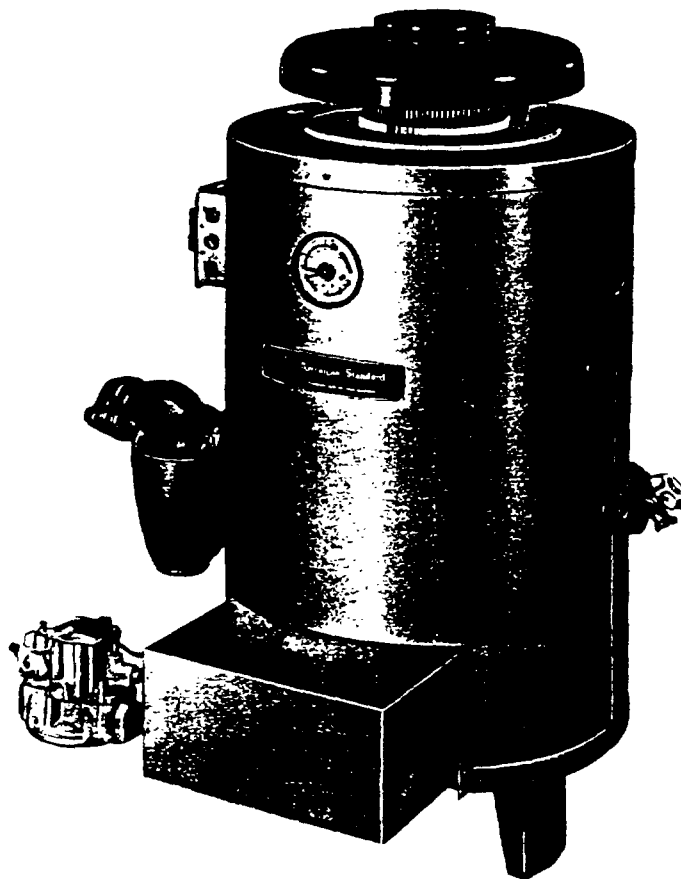
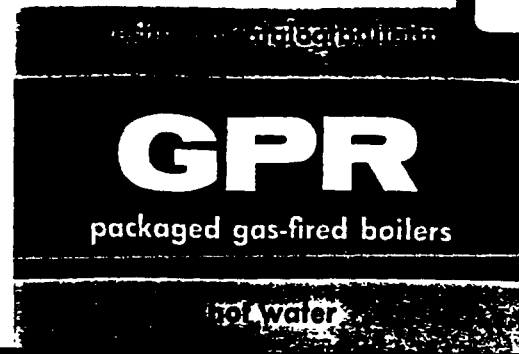


AMERICAN-Standard

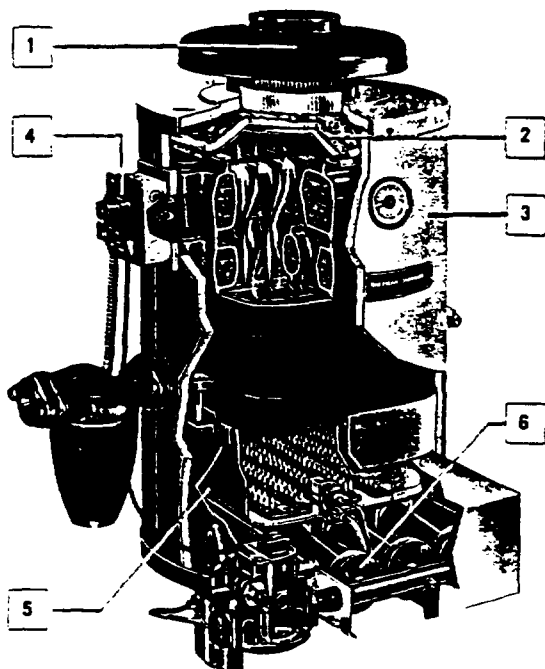


October, 1963

GPR packaged gas-fired boiler—a new concept for low-cost hydronic heating

The revolutionary GPR is a new circular cast iron boiler that's amazingly compact in size and light in weight. The secret of its efficiency is the high heat transfer rate of the vertically-stacked THERM-O-GRID sections, an exclusive American-Standard design. With A.G.A. approved outputs of 60,000 and 80,000 Btuh, the GPR is ideal for residential application—especially in new home con-

struction. The GPR is available completely packaged in three and four section sizes. All controls are mounted and pre-wired for continuous forced hot water circulation. This new low-cost boiler is easy to handle, quick to install. One man can position it on the job—in a 2 x 2 foot area of floor space. The GPR is a little boiler that does a big heating job!



1—canopy—features low silhouette design for streamlined appearance.

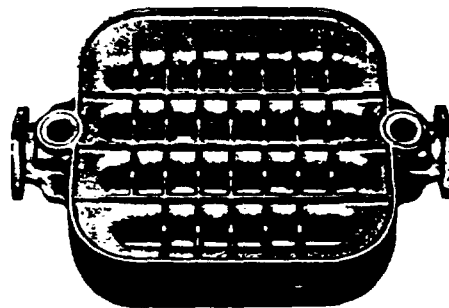
2—sturdy steel canopy—features integral asbestos gasket for gas-tight seal and is easily removable for servicing.

3—insulated steel jacket—is composed of four basic pieces—top, front, back and bottom—with attractive gray finish. Top and front panels are easily removable for access to section assembly and combustion chamber.

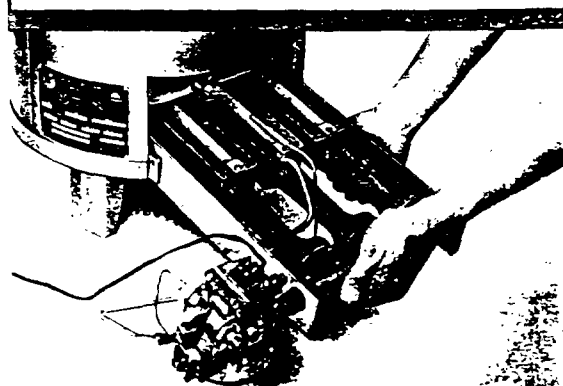
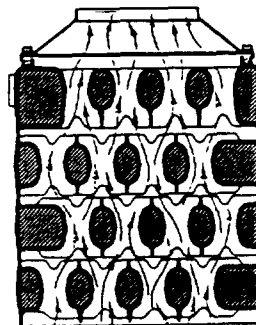
4—controls—are factory-mounted, pre-wired, and easily accessible for service. Extremely sensitive limit control, developed exclusively for GPR, features quick-response to prevent excessive boiler water temperature.

5—dry base assembly—reduces boiler weight. Three steel legs support section assembly. Enclosed type combustion chamber provides compact design, superior performance.

6—burner drawer assembly—incorporates burners, manifold brackets, and rear burner supports into a single, compact unit that slides in and out for quick maintenance and adjustment. Pilot burner is attached directly to combustion chamber for easy access. Combination gas valve features built-in gas regulator (except for LP gas) and thermocouple-type safety pilot switch.



The exclusive THERM-O-GRID section is a compact (12 x 12 x 3 inch) lightweight (30 pound) cast iron section designed by American-Standard to produce a remarkably high ratio of heat output per pound through the use of tubular-finned surfaces. When the THERM-O-GRID sections are assembled, the tubes and fins oppose each other to increase flue gas turbulence and further improve heat transfer. This staggered arrangement also permits quick, thorough cleaning of section assembly. The sections are tested at 2½ times normal water working pressure. Top section functions as an internal air separator, thereby eliminating the need for an additional device.





packaged gas-fired boilers

GPR ratings

boiler number	for installations from sea level to 2000 ft.±			chimney		water content (gallons)
	A.G.A. ratings		net I = B = R ratings • (Btu/hr)	size (inches)	height (feet)	
	input (Btu/hr)	output (Btu/hr)				
natural, mixed or manufactured gases						
GPR-60	75,000	60,000	45,000	5	20	2.1
GPR-80	100,000	80,000	60,000	5	20	2.7
LP gases						
GPR-60	70,000	56,000	42,000	5	20	2.1
GPR-80	95,000	76,000	57,000	5	20	2.7

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

^b Net I=B=R ratings shown include allowance for normal piping loss and pick up load. American-Standard should be consulted before selecting a boiler for installations having unusual piping and pick up requirements.

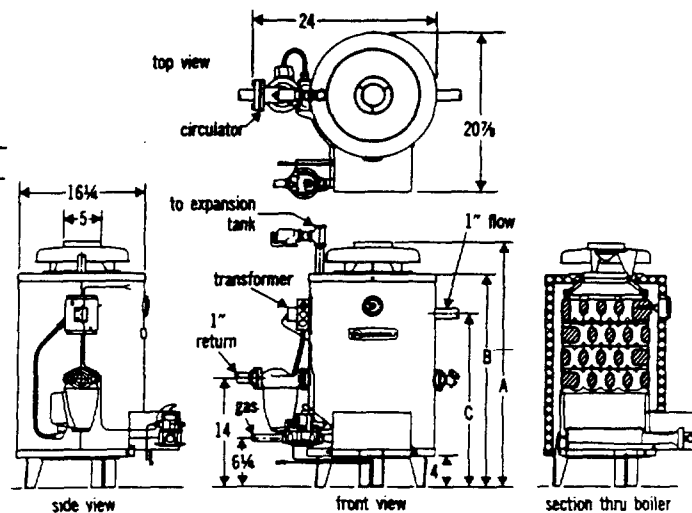
Note: GPR packaged boiler furnished for forced hot water circulation only.

dimensions and tappings

boiler number	number of sections	number of burners	size of tappings (inches)		dimensions (inches)		
			flow	return	A	B	C
GPR-60	3	3	1	1	29	24 3/4	19 3/4
GPR-80	4	3	1	1	32	27 3/4	22 3/4

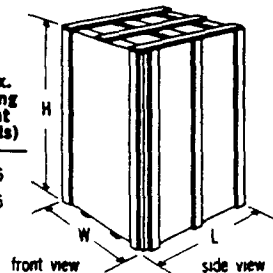
gas connections—(inches-IPS)

boiler number	natural mixed	manufactured	LP
GPR-60	1/2	1/2	1/2
GPR-80	1/2	1/2	1/2



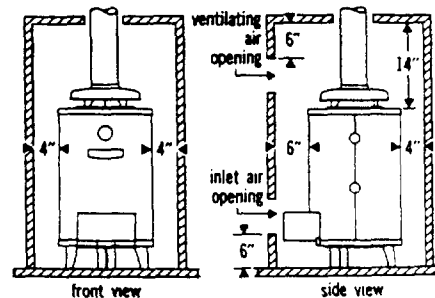
crated dimensions

boiler number	dimensions (inches)			approx. shipping weight (pounds)
	H	W	L	
GPR-60	27 3/4	25	28 1/2	205
GPR-80	30 3/4	25	28 1/2	235



minimum clearance for closet installation

Note: Area of each opening—1 sq. in. for each 1000 Btu/h input—with a minimum of 100 sq. in.

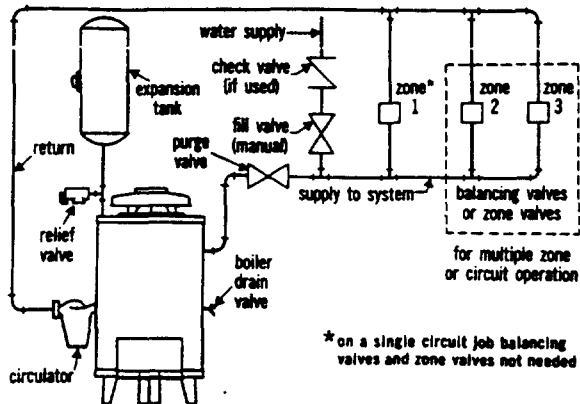


GPR packaged gas-fired boilers are designed and built to comply with the American Society of Mechanical Engineers' Code, and bear their approval symbol. Ratings have been approved by the Institute of Boiler and Radiator Manufacturers. The GPR has been approved by the American Gas Association for all gases. It also bears A.G.A. approval for installation on combustible flooring and for close clearance installations.



packaged gas-fired boilers

near boiler piping



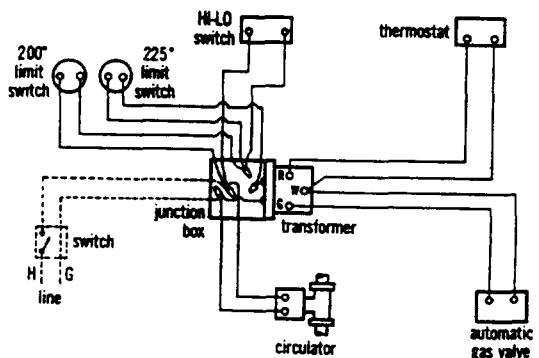
Procedure for filling series loop Heatrim System:

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.

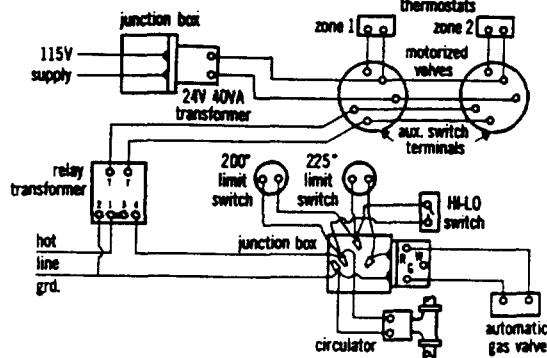
Note 1: Where multiple circuits are used without zone valves, balancing valves should be installed for balancing. These can be shut off to purge each circuit valve individually.

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

wiring diagrams



recommended (two or more zones)



orifice drill sizes — main burner spuds

boiler number	input per burner Btu/h	specific gravity of gas	natural, mixed and manufactured gases								sewage gases				LP gases		orifice pressure table		
			530 Btu cu. ft.	550 Btu cu. ft.	800 Btu cu. ft.	900 Btu cu. ft.	1000 Btu cu. ft.	1100 Btu cu. ft.	1200 Btu cu. ft.	600 Btu cu. ft.	650 Btu cu. ft.	700 Btu cu. ft.	750 Btu cu. ft.	800 Btu cu. ft.	2500 Btu cu. ft.	3300 Btu cu. ft.	gas	heating value	manifold pressure in H ₂ O
GPR-60	25,000	0.40	1/8	1/8	—	—	—	—	—	—	—	—	—	—	—	city	525-550	2.5	
	25,000	0.50	—	29	—	—	—	—	—	—	—	—	—	—	—	city	800-1200	3.5	
	25,000	0.60	—	1/4	36	38	1/2	43	44	—	—	—	—	—	—	LP	2500 & 3300	11.0	
	25,000	0.65	27	—	35	37	41	42	—	—	—	—	—	—	—	sewage	600-800	3.0	
	25,000	0.70	—	27	34	37	40	1/2	43	29	1/2	31	31	32	—				
	25,000	0.80	—	—	—	—	—	—	—	28	30	1/2	31	31	—				
	25,000	0.90	—	—	—	—	—	—	—	1/4	29	30	1/2	31	—				
	23,300	1.53	—	—	—	—	—	—	—	—	—	—	—	—	54				
23,300	2.00	—	—	—	—	—	—	—	—	—	—	—	—	—	55				
GPR-80	33,300	0.40	26	26	—	—	—	—	—	—	—	—	—	—	—				
	33,300	0.50	—	1/4	—	—	—	—	—	—	—	—	—	—	—				
	33,300	0.60	—	19	1/2	32	35	35	38	—	—	—	—	—	—				
	33,300	0.65	19	—	1/4	31	33	35	—	—	—	—	—	—	—				
	33,300	0.70	—	19	30	31	33	34	36	1/2	26	28	29	30	—				
	33,300	0.80	—	—	—	—	—	—	—	20	24	26	28	29	—				
	33,300	0.90	—	—	—	—	—	—	—	19	21	24	26	28	—				
	31,600	1.53	—	—	—	—	—	—	—	—	—	—	—	—	52				
	31,600	2.00	—	—	—	—	—	—	—	—	—	—	—	—	—	53			

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.

■ Both 0.40 and 0.65 gases are required by supplementary utility requirements.

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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