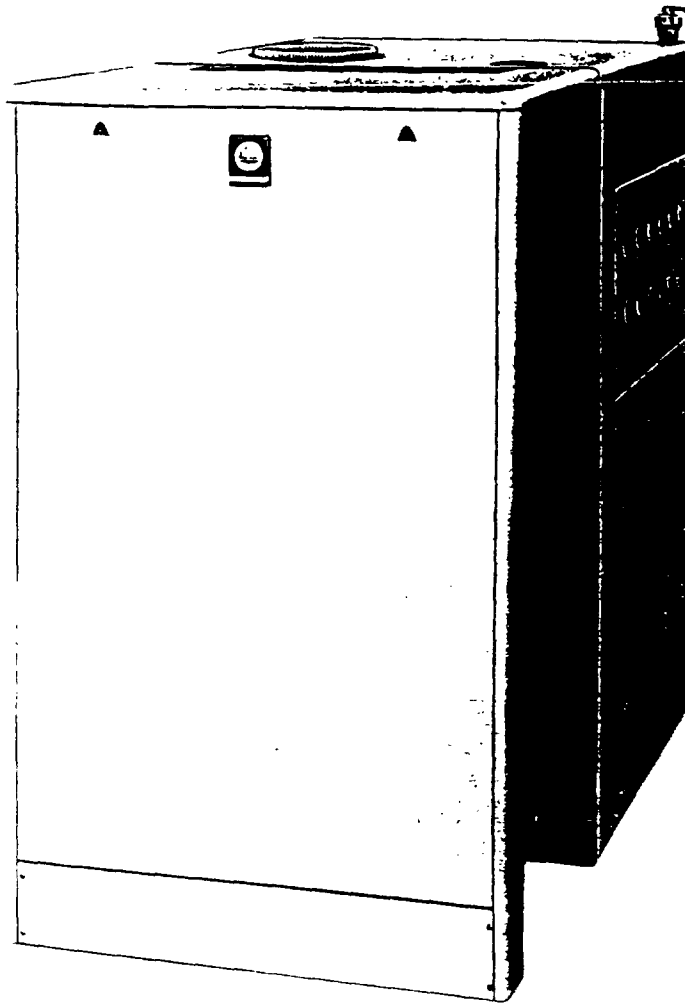




boiler-burner units
and boilers

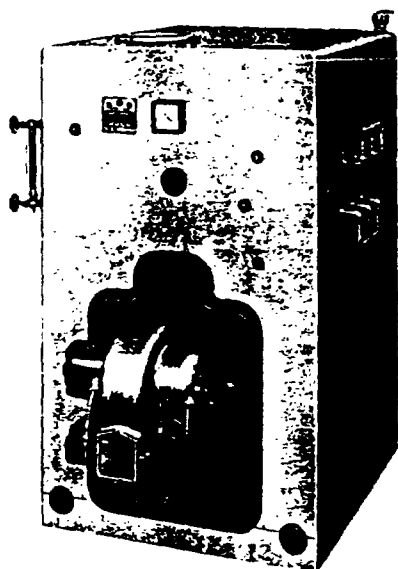
A-5 oil-fired boilers

AMERICAN-Standard

not water or credit

12868

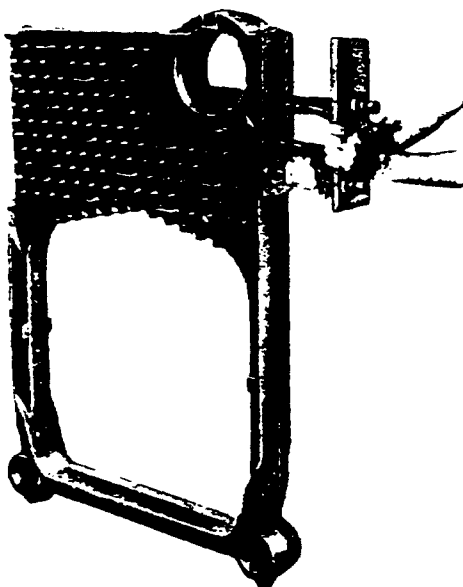
► **A-5 oil-fired boilers—efficient design, economical installation, durable construction**



■ **Automatic oil heating for medium-size buildings**—The A-5 oil-fired unit is designed for installation in large homes and small to medium-size apartments and commercial buildings. This modern boiler has been engineered specifically for oil operation and outstanding performance. It's available in a full range of eight sizes for hot water or steam (six sizes available as boiler-burner units). Exclusive design for medium-range heating requirements, the A-5 boiler is available with jacket extension.

■ **Four outstanding engineer-designed features**—First, new vertical flue section design reduces weight. Second, unique hot water tankless heater arrangement permits adaptable installation to meet varying domestic requirements. Third, cast iron sections assure long, dependable service. Fourth, wet base construction extends waterways beneath combustion area for additional heat-absorbing bottom surface.

■ **Installation time and costs cut**—Vertical flue design considerably reduces weight of boiler for easier handling on job. Wet base construction provides a built-in base for each section—no special base required—and permits unit to be installed on combustible flooring. Pre-cast combustion chamber saves time of building chamber. Largest steam assembly can be installed with a single 4" supply—eliminates cost of added header.



■ **New tankless heater arrangement**—A-5 center sections incorporate a new design principle which allows a separate tankless heater to be easily inserted in each center section. With this unique arrangement only one size tankless heater is required for any size hot water or steam boiler. The A-5 economically meets modern domestic hot water requirements. For example, one heater may supply high-temperature water for automatic washers, another heater may supply faucet water and a third for snow melting. First tankless heater rating is 4 gpm, each additional tankless heater 3 gpm. A special copper manifold assembly is available for connecting multiple heaters in parallel, pre-fabricated to reduce installation time. Special center sections are supplied on all A-5 boilers ordered for tankless use. The first tankless heater is installed in the first center section behind the front section. Each additional heater is placed in the following center section. The number of special center sections varies depending on boiler size. Boilers can be ordered with special center sections throughout, at no extra cost, when so specified.

► American-Standard A-5 oil heating units have ratings approved by the Institute of Boiler and Radiator Manufacturers and are constructed to the specifications of the American Society of Mechanical Engineers. Model DH-5 and Model LF-A Arcoflame oil burners, used with A-504 through A-509, are listed by Underwriters' Laboratories, Inc., for No. 1 and No. 2 fuel oil, comply with Commercial Standard CS-75 and are approved by the New York City Board of Standards and Appeals, by the State Fire Marshal of the Commonwealth of Massachusetts and by the Department of Police, State of Connecticut.

1 — jacket extension — optional; matches jacket; has removable front panel for ready access to burner and controls. Arch-type openings provide ample air for combustion and ventilation.

2 — observation door — permits convenient flame viewing; simplifies burner and control adjustments while boiler is firing.

3 — controls — all controls mounted on front of boiler for easy maintenance and adjustment.

4 — built-in canopy — aluminized steel construction permits smaller smoke pipe sizes; makes A-5 readily adaptable to gas firing.

5 — heater — tankless type with finned copper tubing. Features unique installation arrangement. See opposite page.

6 — heater manifold — connects multiple water heater in parallel. Preassembled for quick installation.

7 — boiler sections — rugged cast iron, vertical flue design with large 7-inch nipple port. Off-center nipple port location accelerates circulation. Design combines projecting studs and horizontal bars to extract maximum heat from combustion gases. Boiler sections are easily cleaned from left side only. All sections tested at $2\frac{1}{2}$ times operating pressure.

8 — Model LF-A Arcoflame oil burner — provides dependable, quiet operation with 5 through 9-section A-5 boilers. Efficient Model DH-5 Arcoflame oil burner for 4-section A-5 boiler.

9 — auxiliary air inlet — built into the front of the boiler; provides for easy accurate adjustment of secondary air.

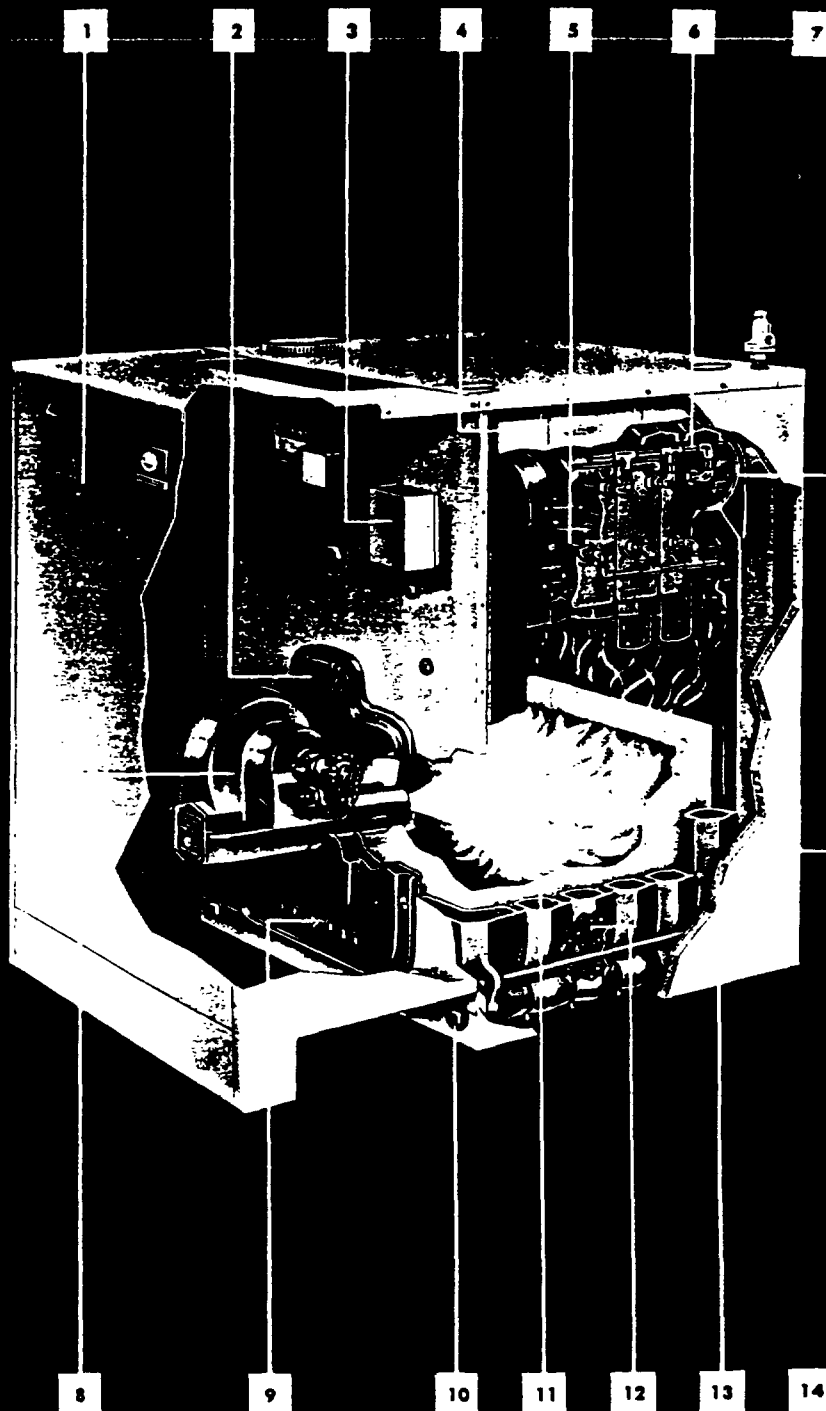
10 — tappings — 4" supply (top) and $2\frac{1}{2}$ " return tappings (bottom) located in both front and back sections. Eliminates need for header on largest steam assembly.

11 — combustion chamber — high-temperature, pre-cast combustion chamber provided for all assemblies; heats quickly and evenly.

12 — wet base construction — provides extra heat-absorbing bottom surface and increased water content. Waterways completely surround combustion area, extend beneath boiler, keep floor cool.

13 — insulation — heavy Fiberglas insulation prevents wasteful heat loss, keeps jacket cool.

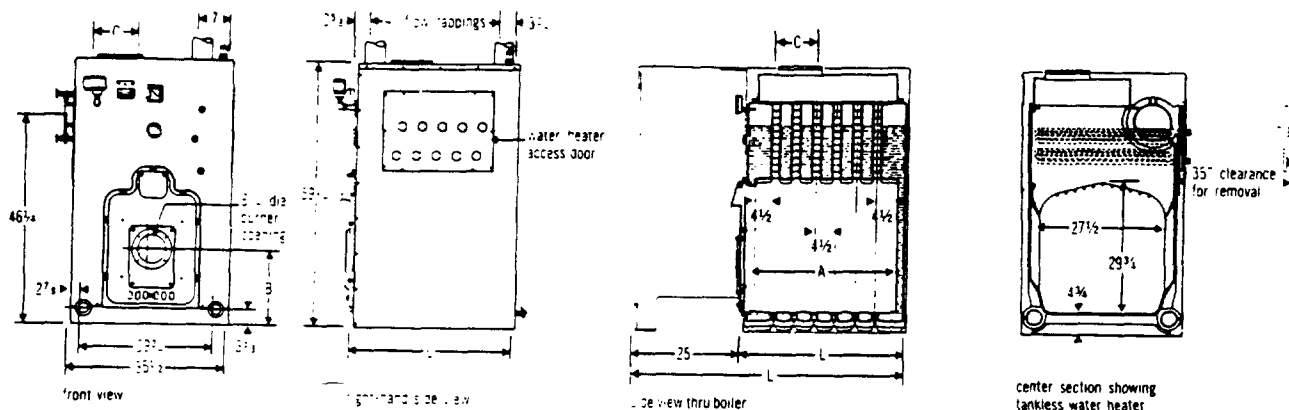
14 — jacket — sturdy steel; smartly styled in sparkling gray finish and smooth radius corners. Interior surfaces coated with corrosion-resistant, high-temperature aluminum paint.



boiler-burner unit		boiler number		net I = B = R rating		gross I = B = R output	I = B = R burner capacity gph	chimney	
				steam	water			size inches	height feet
steam	water	steam	water	Btu/hr	sq ft	Btu/hr			
A-504-SB	A-504-WB	A-504-S	A-504-W	195,800	816	195,800	2.55	8 x 12	15
A-505-SB	A-505-WB	A-505-S	A-505-W	259,600	1082	259,600	3.30	8 x 12	20
A-506-SB	A-506-WB	A-506-S	A-506-W	319,600	1332	319,600	4.00	12 x 12	20
A-507-SB	A-507-WB	A-507-S	A-507-W	381,100	1588	381,100	4.75	12 x 12	20
A-508-SB	A-508-WB	A-508-S	A-508-W	441,100	1638	441,100	5.55	12 x 16	25
A-509-SB	A-509-WB	A-509-S	A-509-W	501,100	2088	501,100	6.30	12 x 16	25
—	—	A-510-S	A-510-W	561,100	2338	561,100	7.00	12 x 16	25
—	—	A-511-S	A-511-W	622,700	2594	622,700	7.65	16 x 16	30

*Add suffix letter T to boiler number when one or more center sections are ordered with provision for tankless water heater(s) No. 530.
 Note: TANKLESS HEATER RATINGS — First tankless heater 4 gpm, each additional tankless heater 3 gpm.
 • Nozzle size, gph, furnished with A-5 units are as follows: No. A-504, 2.50—60° or 70°S; A-505, 3.00—80°H; A-506, 3.50—80°H; A-507, 4.50—80°H; A-508, 5.00—60°H; A-509, 6.00—60°H.

dimensions and tappings



boiler number	number and size tappings—inches		dimensions—inches				
	flow	return	A	B	C	L flush jacket	L jacket extension
A-504	2-4"	4-2 1/2"	18	13 1/4	9	22 7/8	47 7/8
A-505	2-4"	4-2 1/2"	22 1/2	16 3/4	9	27 3/8	52 3/8
A-506	2-4"	4-2 1/2"	27	16 3/4	10	31 7/8	56 7/8
A-507	2-4"	4-2 1/2"	31 1/2	16 3/4	10	36 3/8	61 3/8
A-508	2-4"	4-2 1/2"	36	16 3/4	10	40 7/8	65 7/8
A-509	2-4"	4-2 1/2"	40 1/2	16 3/4	12	45 3/8	70 3/8
A-510	2-4"	4-2 1/2"	45	16 3/4	12	49 7/8	74 7/8
A-511	2-4"	4-2 1/2"	49 1/2	16 3/4	12	54 3/8	79 3/8

assemblage of sections

boiler number	arrangement of sections
A-504	F, C, C, B
A-505	F, C, C, C, B
A-506	F, C, C, C, C, B
A-507	F, C, C, C, C, C, B
A-508	F, C, C, C, C, C, C, B
A-509	F, C, C, C, C, C, C, C, B
A-510	F, C, C, C, C, C, C, C, C, B
A-511	F, C, C, C, C, C, C, C, C, C, B

F—Front connecting section

C—Center section

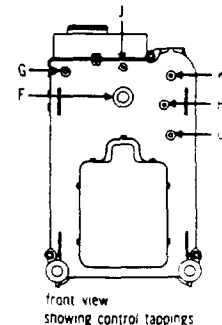
B—Back connecting section

▲CT section with heater opening substituted for C section as specified

control applications

location on boiler	size inches	steam	water
F	2 1/2	low water cut-off	not used
G	3/4	pressure limit control	temperature limit control
H	3/4	operating control tankless heater	not used
J	1/2	pressure gauge	combination altitude gauge and thermometer
K	3/4	not used	operating control tankless heater
L	3/4	not used	reverse acting control

Note:—2" Blow-off on back of back section 2" Safety or relief valve on top of back section.



front view showing control tappings

► American-Standard A-5 Oil-Fired Boilers are another development in hydronics—the science of heating and cooling with water.

12871



AMERICAN-Standard PLUMBING AND HEATING DIVISION

AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

40 WEST 40TH STREET • NEW YORK 18, NEW YORK

Litho in U.S.A.