

**OIL
BOILER-BURNER UNITS
STEAM AND WATER**



PFA-5 PRESSURE FIRED BOILER-BURNER UNITS

Jacketed—forced draft with oil burner.
50 lbs. water working pressure—15 lbs. steam working pressure.
Equipped for tankless heaters.

pressure fired boiler-burner unit number	gross I = B = R output Mbh	I = B = R burner capacity oil gph	piping and pickup factor		net I = B = R rating			net rating sq. ft. water	Trade Price with standard equipment oil	vent size diam. in.	approx- imate shipping weight	burner model supplied with standard equipment	
					Mbh		sq. ft. steam					(1)	oil
			steam	water	steam	water							
PFA-504-* O(T)	620	5.45	1.333	1.15	465.1	539.1	1938	3594	\$1944.00	10	1840	95A-1-8702-JBT	
PFA-505-* O(T)	786	6.90	1.333	1.15	589.6	683.5	2457	4557	2291.00	10	2210	96A-M-6131-JC-T	
PFA-506-* O(T)	950	8.35	1.333	1.15	712.7	826.1	2969	5507	2554.00	10	2520	96A-M-6131-JC-T	
PFA-507-* O(T)	1116	9.80	1.333	1.15	837.2	970.4	3488	6469	2924.00	10	2880	96A-B-8316-JC-T	
PFA-508-* O(T)	1282	11.20	1.330	1.15	963.9	1114.8	4016	7432	3241.00	10	3190	96A-B-8318-JC-T	
PFA-509-* O(T)	1446	12.65	1.315	1.15	1099.6	1257.4	4582	8383	3469.00	14	3550	96A-B-8318-JC-T	
PFA-510-* O(T)	1612	14.10	1.302	1.15	1238.1	1401.7	5159	9345	4065.00	14	3935	96A-T-A-8419-JC-T	
PFA-511-* O(T)	1776	15.55	1.292	1.15	1374.6	1544.3	5728	10295	4714.00	14	4285	97A-T-A-8614-JC-T	
PFA-512-* O(T)	1944	16.95	1.288	1.15	1509.3	1690.4	6289	11269	5087.00	14	4645	97A-T-A-8614-JC-T	
PFA-513-* O(T)	2108	18.40	1.288	1.15	1636.6	1833.0	6819	12220	5331.00	14	4955	97A-T-A-8614-JC-T	
PFA-514-* O(T)	2272	19.85	1.288	1.15	1764.0	1975.7	7350	13171	5580.00	14	5317	97A-T-A-8615-JC-T	
PFA-515-* O(T)	2440	21.25	1.288	1.15	1894.4	2121.7	7893	14145	6101.00	14	5675	97A-T-2-7635-E-1	
PFA-516-* O(T)	2604	22.70	1.288	1.15	2021.7	2264.3	8424	15095	6492.00	18	5985	97A-Hi-Lo-2-7685-E-1	
PFA-517-* O(T)	2768	24.15	1.288	1.15	2149.1	2407.0	8954	16047	6720.00	18	6345	97A-Hi-Lo-2-7685-E-1	
PFA-518-* O(T)	2936	25.60	1.288	1.15	2279.5	2553.0	9498	17020	7168.00	18	6750	98A-Hi-Lo-2-7771-E-1	
PFA-519-* O(T)	3100	27.00	1.288	1.15	2406.8	2695.7	10028	17971	7420.00	18	7060	98A-Hi-Lo-2-7771-E-1	
PFA-520-* O(T)	3260	28.45	1.288	1.15	2531.1	2834.8	10546	18899	7663.00	18	7420	98A-Hi-Lo-2-7771-E-1	
PFA-521-* O(T)	3430	29.90	1.288	1.15	2663.0	2982.6	11096	19884	7951.00	18	7780	98A-Hi-Lo-2-7771-E-1	

■ Height 3 feet above highest part of roof

The net I = B = R ratings shown are based on piping and pick-up allowances listed above. American-Standard should be consulted before selecting a boiler for installations having unusual piping and pick-up requirements.

Available as assembled unit or with assembled sections—see page 27.

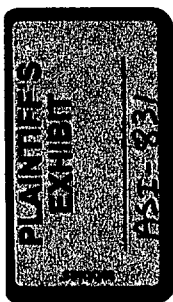
* Substitute letter "S" for steam; "W" for water. Start Up and One Year's Service . . . Price on Application

Suffix (T) denotes boiler with openings in center section for tankless heaters when specified. For Built-in Water Heaters, see page 27.

Nozzles sizes—see page

● Nozzle sizes, gph, furnished with the above oil burners are as follows:

unit	no.	gph.	type	unit	no.	gph.	type	unit	no.	gph.	type	unit	no.	gph.	type	unit	no.	gph.	type	
PFA-504	2	2.75	90°H	PFA-509	1	6.00	80°H	PFA-512	2	7.00	70°H	PFA-514	1	3.50	60°H	PFA-517	1	10.00	90°S	
PFA-505	2	3.50	90°H			16.50	80°H			12.50	70°H	PFA-515	2	8.00	70°H	PFA-518	1	7.50	90°S	
PFA-506	2	4.00	80°H	PFA-510	2	5.50	90°H	PFA-513	2	7.00	70°H			1.50	70°H			1	8.00	90°S
PFA-507	1	4.50	70°H			1.25	90°H			1.40	70°H	PFA-516	2	7.00	90°S			1	10.00	90°S
		1.50	70°H	PFA-511	2	6.50	80°H							1.85	90°S	PFA-519	2	7.50	80°S	
PFA-508	2	5.50	80°H			1.20	80°H	PFA-514	2	8.00	60°H	PFA-517	2	7.00	90°S			1	12.00	80°S



PFA-5 PRESSURE FIRED BOILER-BURNER UNITS

Standard Equipment—All Boilers

Steam: PA404A Pressurized, ASME safety valve, steam gauge, gauge glass with trimmings, drain valve.

Water: L4006A Aquastat, ASME relief valve, pressure and temperature gauge, drain valve.

Standard Equipment—Oil Fired

Flange mounted oil burner—97A-T-A, 97A-T-2, 97A Hi-Lo and 98A Hi-Lo burners furnished with flange and pedestal. On 95-A1, 96A-M, 96A-B, 96A-T-A and 97A-T-A burners, factory installed cad cell, bracket and leads, R8185E light sensing primary control; V4046B instantaneous oil valve, ST70A1002 electronic time delay. On 97A-T-2, 97A Hi-Lo-2 and 98A Hi-Lo-2 burners, R4150A control—provides pre-purge and post-purge, Q520A base, factory installed C7013A photo cell; delayed and instantaneous oil valves, nozzles. 2 stage fuel unit on all burners.

Optional Equipment—Oil Fired

Oil Burners equipped for F.M. or Massachusetts Code requirements for PFA-504 through PFA-514.

Added Trade Price \$215.00

Burners for PFA-515 through PFA-521 are equipped to meet F.M. requirements. (Equipment includes: R4150A which provides pre- and post-purge, C7013A Photo Cell and Q520A Base.)

Oil Burners for F.I.A. requirements—Price on application.

Oil burners for PFA-515 thru PFA-521 for Massachusetts Code requirements—Price on application.

Prewired Control Panels on burners—Prices on application.

Optional burners and assembly arrangements, listed below.

Standard Motor Voltages

PFA-504 thru PFA-510	115/60/1
PFA-511 thru PFA-521	230/60/1

Ordering Examples:

PFA-5 boiler-burner unit for steam with standard equipment.

1—PFA-514-SO boiler-burner unit

PFA-5 boiler-burner unit for water with optional equipment.

1—PFA-511-WO(T) with jacket extension; 4 No. 548 tankless heaters; with L6006A control.

PFA-5 OPTIONAL ASSEMBLY AND OIL BURNERS

		add to Trade Price						
	ABC oil burners		assembled sections	packaged boiler unit	80 lbs. water test	jacket extension	Gordon-Piatt oil burners	
PFA-504	96A-T-A-8406 JBT	\$163.00	\$ 99.00	\$666.00	\$ 44.00	\$85.15	RL 6 2-0-03-F4B	\$82.50
PFA-505	96A-T-A-8408 JBT	153.00	165.00	684.00	55.00	85.15	RL 6 2-0-03-F4B	61.00
PFA-506	96A-T-A-8408 JCT	153.00	198.00	702.00	66.00	85.15	RL 6 2-0-03-F4B	61.00
PFA-507	96A-T-A-8409 JCT	96.00	231.00	719.00	77.00	85.15	RL 8 0-0-05-F4B	28.00
PFA-508	96A-T-A-8410 JCT	96.00	264.00	737.00	88.00	85.15	RL 8 1-0-05-F4B	28.00
PFA-509	96A-HI-LO-A-8808 JCT	350.00	297.00	848.00	99.00	85.15	RL 8 1-0-05-F4B	28.00
PFA-510	96A-HI-LO-A-8808 JCT	254.00	330.00	869.00	110.00	85.15	RL 8 2-0-10-F4B	77.00
PFA-511			363.00	889.00	121.00	85.15	RL 8 2-0-10-F4B	—
PFA-512			396.00	910.00	132.00	85.15	RL 8 2-0-10-F4B	—
PFA-513			429.00	929.00	143.00	85.15	RL 8 2-0-15-F4B	—
PFA-514			462.00	949.00	154.00	85.15	RL 8 3-0-15-F4B	—
PFA-515			495.00	969.00	165.00	85.15	RL 8 4-0-20-F4B	—
PFA-516			528.00	990.00	176.00	85.15	RL 8 4-0-20-F4B	—
PFA-517			561.00	1010.00	187.00	85.15	RL 10 1-0-20-F4B	—
PFA-518			594.00	1031.00	198.00	85.15	RL 10 1-0-20-F4B	—
PFA-519			627.00	1050.00	209.00	85.15	RL 10 1-0-30-GP100R-F4B	—
PFA-520			660.00	1071.00	220.00	85.15	RL 10 1-0-30-GP100R-F4B	—
PFA-521			693.00	1091.00	231.00	85.15	RL 10 1-0-30-GP100R-F4B	—

**GAS
BOILER-BURNER UNITS
STEAM AND WATER**



PFA-5 PRESSURE FIRED BOILER-BURNER UNITS

Jacketed—forced draft with gas burner.
50 lbs. water working pressure—15 lbs. steam working pressure.
Equipped for tankless heaters.

pressure fired boiler-burner unit number	gross I = B = R output Mbh	I = B = R burner capacity gas input Mbh	piping and pickup factor		net I = B = R rating			net rating sq. ft. water	Trade Price with standard equipment	vent size diam. in.	approx- imate shipping weight	burner model supplied with standard equipment
			steam	water	steam	water	sq. ft. steam					
PFA-504-* G(T)	620	763	1.333	1.15	465.1	539.1	1938	3594	\$3111.00	10	1840	R6 2-G-03-R4795-B 12S
PFA-505-* G(T)	786	966	1.333	1.15	589.6	683.5	2457	4557	3434.00	10	2210	R6 2-G-03-R4795-B 12S
PFA-506-* G(T)	950	1169	1.333	1.15	712.7	826.1	2969	5507	3687.00	10	2520	R6 2-G-03-R4795-B 12
PFA-507-* G(T)	1116	1372	1.333	1.15	837.2	970.4	3488	6469	4114.00	10	2880	R8-G-05-R4795-B 12
PFA-508-* G(T)	1282	1568	1.330	1.15	963.9	1114.8	4016	7432	4446.00	10	3190	R8-G-05-R4795-B 15
PFA-509-* G(T)	1446	1771	1.315	1.15	1099.6	1257.4	4582	8383	4674.00	14	3550	R8-G-05-R4795-B 15
PFA-510-* G(T)	1612	1974	1.302	1.15	1238.1	1401.7	5159	9345	5273.00	14	3935	R8.1-G-05-R4795-B 20
PFA-511-* G(T)	1776	2177	1.292	1.15	1374.6	1544.3	5728	10295	5990.00	14	4285	R8.2-G-05-4150A-H 20
PFA-512-* G(T)	1944	2373	1.288	1.15	1509.3	1690.4	6289	11269	6386.00	14	4645	R8.3-G-10-4150A-H 20
PFA-513-* G(T)	2108	2576	1.288	1.15	1636.6	1833.0	6819	12220	6699.00	14	4955	R10 9-G-10-4150A-H 20
PFA-514-* G(T)	2272	2779	1.288	1.15	1764.0	1975.7	7350	13171	6948.00	14	5315	R10 9-G-10-4150A-H 20
PFA-515-* G(T)	2440	2975	1.288	1.15	1894.4	2121.7	7893	14145	7170.00	14	5675	R10 9-G-10-4150A-H 20
PFA-516-* G(T)	2604	3178	1.288	1.15	2021.7	2264.3	8424	15095	7650.00	18	5985	R10-G-15-4150A-H 25S
PFA-517-* G(T)	2768	3381	1.288	1.15	2149.1	2407.0	8954	16047	7878.00	18	6345	R10-G-15-4150A-H 25S
PFA-518-* G(T)	2936	3584	1.288	1.15	2279.5	2553.0	9498	17020	8124.00	18	6750	R10.1-G-15-4150A-H 25S
PFA-519-* G(T)	3100	3780	1.288	1.15	2406.8	2695.7	10028	17971	8628.00	18	7060	R10 1-G-20-4150A-H 25
PFA-520-* G(T)	3260	3983	1.288	1.15	2531.1	2834.8	10546	18899	8872.00	18	7420	R10.1-G-20-4150A-H 25
PFA-521-* G(T)	3430	4186	1.288	1.15	2663.0	2982.6	11096	19884	9160.00	18	7780	R10 1-G-20-4150A-H 25

The net I=B=R ratings shown are based on piping and pick-up allowances listed above. American-Standard should be consulted before selecting a boiler for installations having unusual piping and pick-up requirements.

*Substitute letter "S" for steam, "W" for water. START-UP AND ONE YEAR'S SERVICE INCLUDED IN TRADE PRICE OF GAS UNIT (1).
Suffix (T) denotes boiler with openings in center section for tankless heaters when specified. For Built-in Water Heaters, see page 27.

■ Height 3 feet above highest part of roof.

Available as assembled unit or assembled sections—see page 27

Standard Equipment—All Boilers

Steam: PA404A Pressuretrol, ASME safety valve, steam gauge, gauge glass with trimmings, drain valve.
Water: L4006A Aquastat, ASME relief valve, pressure and temperature gauge, drain valve.

Standard Equipment—Gas Fired

Flange mounted gas burner. Standard burner controls meet latest UL requirements. Dual automatic gas valves for added reliability. Gas-electric ignition. Electronic programming controls and components are factory wired in a control cabinet on the burner. Includes R4795 control on 4 thru 10 section; R4150A control on 11 thru 21 section; proven pilot. Standard burners equipped to operate with 1,000 Btu, 0.6 specific gravity natural gas.

Ordering Examples:

PFA-5 boiler-burner unit for steam with standard equipment.

1—PFA-514-SG boiler-burner unit

PFA-5 boiler-burner unit for water with optional equipment.

1—PFA-511-WG(T) with jacket extension; 4 No. 548 tankless heaters.

Specify gas pressure available at gas train inlet

(1) Surcharge for Start-Up and Service west of Mississippi River.
Contact American-Standard for details.

Optional Equipment

PFA-5 units for Factory Mutual and Factory Insurance Association *minimum* requirements at the following additional charges:

boiler size	F.M.	gas fired	F.I.A.
PFA-504-510	\$682.00		\$ 827.00
PFA-511-515	811.00		1074.00
PFA-516-521	811.00		1074.00

For prices of gas burners for use with other than 1000 Btu, 0.6 specific gravity natural gas, or at gas pressures above or below pressures shown in current literature, consult your American Standard District Office.

High Risk F.M. or F.I.A. requirements . . .

Hi-Lo Fire Control

Modulating Fire Control

Alarm System pre-wired and mounted on control cabinet

Optional Combustion Controls

Controls to meet local requirements

For Additional Optional Equipment and assembly arrangements, see page 27.

Standard Motor Voltages

unit number	gas burners
PFA-504-511	115-60-1
PFA-512-521	230-60-3

Other optional motor voltages—Price on Application.



PFA-5 PRESSURE FIRED BOILER-BURNER UNITS

Jacketed—forced draft with combination gas/oil burner.
50 lbs. water working pressure—15 lbs. steam working pressure.
Equipped for tankless heaters.

pressure fired boiler-burner unit number	gross = B = R output Mbh	I = B = R burner capacity gas input Mbh	piping and pickup factor		net I = B = R rating			net rating sq. ft. water	Trade Price with standard equipment gas-oil	vent size diam. in.	approx- imate shipping weight	burner model supplied with standard equipment gas-oil
					Mbh		sq. ft. steam					
			steam	water	steam	water						
gas—light oil												
PFA-504.* GO(T)	620	763	1.333	1.15	465.1	539.1	1938	3594	\$3636.00	10	1840	R6.2-GO-03-R4795-B.12S-F4B
PFA-505.* GO(T)	786	966	1.333	1.15	589.6	683.5	2457	4557	3959.00	10	2210	R6.2-GO-03-R4795-B.12S-F4B
PFA-506.* GO(T)	950	1169	1.333	1.15	712.7	826.1	2969	5507	4309.00	10	2520	R6.2-GO-03-R4795-B.12-F4B
PFA-507.* GO(T)	1116	1372	1.333	1.15	837.2	970.4	3488	6469	4679.00	10	2880	R8-GO-05-R4795-B.12-F3
PFA-508.* GO(T)	1282	1568	1.330	1.15	963.9	1114.8	4016	7432	5082.00	10	3190	R8-GO-05-R4795-B.15-F3
PFA-509.* GO(T)	1446	1771	1.315	1.15	1099.6	1257.4	4582	8383	5310.00	14	3550	R8-GO-05-R4795-B.15-F3
PFA-510.* GO(T)	1612	1974	1.302	1.15	1238.1	1401.7	5159	9345	5961.00	14	3935	R8.1-GO-05-R4795-B.20-F3
PFA-511.* GO(T)	1776	2177	1.292	1.15	1374.6	1544.3	5728	10295	6443.00	14	4285	R8.2-GO-07-4150A-H.20-F4H
PFA-512.* GO(T)	1944	2373	1.288	1.15	1509.3	1690.4	6289	11269	6927.00	14	4645	R8.3-GO-10-4150A-H.20-F4H
PFA-513.* GO(T)	2108	2576	1.288	1.15	1636.6	1833.0	6819	12220	7243.00	14	4955	R10.9-GO-10-4150A-H.20-F4H
PFA-514.* GO(T)	2272	2779	1.288	1.15	1764.0	1975.7	7350	13171	7492.00	14	5315	R10.9-GO-10-4150A-H.20-F4H
PFA-515.* GO(T)	2440	2975	1.288	1.15	1894.4	2121.7	7893	14145	7714.00	14	5675	R10.9-GO-10-4150A-H.20-F4H
PFA-516.* GO(T)	2604	3178	1.288	1.15	2021.7	2264.3	8424	15095	8190.00	18	5985	R10-GO-15-4150A-H.25S-F4H
PFA-517.* GO(T)	2768	3381	1.288	1.15	2149.1	2407.0	8954	16047	8418.00	18	6345	R10-GO-15-4150A-H.25S-F4H
PFA-518.* GO(T)	2936	3584	1.288	1.15	2279.5	2553.0	9498	17020	8768.00	18	6750	R10.1-GO-20-4150A-H.25S-F4H
PFA-519.* GO(T)	3100	3780	1.288	1.15	2406.8	2695.7	10028	17971	9188.00	18	7060	R10.1-GO-20-4150A-H.25-F4H
PFA-520.* GO(T)	3260	3983	1.288	1.15	2531.1	2834.8	10546	18899	9548.00	18	7420	R10.1-GO-30-4150A-H.25-F4H
PFA-521.* GO(T)	3430	4186	1.288	1.15	2663.0	2982.6	11096	19884	9836.00	18	7780	R10.1-GO-30-4150A-H.25-F4H

The net I = B = R ratings shown are based on piping and pick-up allowances listed above. American-Standard should be consulted before selecting a boiler for installations having unusual piping and pick-up requirements.

*Substitute letter "S" for steam; "W" for water. START-UP AND ONE YEAR'S SERVICE. INCLUDED IN TRADE PRICE OF GAS-OIL UNIT (1)
Suffix (T) denotes boiler with openings in center section for tankless heaters when specified. For Built-in Water Heaters, see page 27.

■ Height 3 feet above highest part of roof.

Available as assembled unit or assembled sections—see page 27

Standard Equipment—All Boilers

Steam: PA404A Pressuretrol, ASME safety valve, steam gauge, gauge glass with trimmings, drain valve.
Water: L4006A Aquastat, ASME relief valve, pressure and temperature gauge, drain valve.

Standard Equipment—Gas-Light Oil Fired

Flange mounted combination gas-oil burner. Standard burner controls meet latest UL requirements. Manually operated fuel switch for dual fuel change-over. Dual automatic gas valves for added reliability. Gas-electric ignition. Electronic programming controls and components are factory wired in a control cabinet on the burner. Includes R4795 control on 4 thru 10 section; R4150A control on 11 thru 21 section; proven pilot. Standard burner equipped to operate on No. 1 or No. 2 fuel oil and 1,000 Btu, 0.6 specific gravity natural gas.

Standard Motor Voltages

unit number	gas-oil burners
PFA-504-510	115-60-1
PFA-511	230-60-1
PFA-512-521	230-60-3

Other optional motor voltages—Price on Application.

(1) Surcharge for Start-Up and Service west of Mississippi River. Contact American-Standard for details.

Ordering Examples:

- PFA-5 boiler-burner unit for steam with standard equipment.
- 1—PFA-514-SGO boiler-burner unit.
- PFA-5 boiler-burner unit for water with optional equipment.
- 1—PFA-511-WGO(T) with jacket extension; 4 No. 548 tankless heaters.

Specify gas pressure available at gas train inlet

▲ Nozzle sizes, gph, furnished with combination gas-light oil burners are as follows. (nozzle capacity is dependent on oil pressure)

unit	no.	gph.	type	unit	no.	gph.	type	unit	no.	gph.	type
PFA-504	1	4.00	90°H	PFA-510	2	5.00	90°S	PFA-516	2	7.00	60°S
PFA-505	1	5.00	90°H	PFA-511	2	5.50	90°S	PFA-517	2	8.00	60°S
PFA-506	1	6.50	90°H	PFA-512	2	6.00	90°S	PFA-518	2	8.00	60°S
PFA-507	2	4.00	90°S	PFA-513	2	7.00	60°S	PFA-519	2	8.00	60°S
PFA-508	2	4.00	90°S	PFA-514	2	7.00	60°S	PFA-520	2	8.50	60°S
PFA-509	2	5.00	90°S	PFA-515	2	7.00	60°S	PFA-521	2	9.00	60°S

Optional Equipment

PFA-5 units for Factory Mutual and Factory Insurance Association minimum requirements at the following additional charges:

boiler size	gas-oil fired	
	F.M.	F.I.A.
PFA-504-510	\$ 824.00	\$ 899.00
PFA-511-515	1059.00	1227.00
PFA-516-521	1054.00	1239.00

Automatic Fuel Changeover

Trade Price \$237.00

For prices of gas-oil burners for use with other than 1000 Btu, 0.6 specific gravity natural gas, or at gas pressures above or below pressures shown in current literature, consult your American Standard District Office.

High Risk F.M. or F.I.A. requirements

Hi-Lo Fire Control

Modulating Fire Control

Alarm System pre-wired and mounted on control cabinet

Optional Combustion Controls

Controls to meet local requirements

Additional optional equipment and assembly arrangements—see page 27.

Gas and Gas-Oil Burners not stocked at Bond Plant 3 to 4 weeks lead time for shipment of Standard Equipped Burners after receipt of order at Hydronic Order Service Center