



The

ASHCRAFT

www.ashcraftcompany.com

COMPANY

Dallas (214)361-661 East Texas (800)442-6135 Fort Worth (817)926-4623 West Texas (800)772-6503

WEIL-McLAIN

MODEL 88

SUBMITTAL SHEET: MODEL 88



JOB NAME

LOCATION

ARCH./ENGR

MFGR's REP: ASHCRAFT COMPANY, INC.

MECH. CONTRACTOR

MODEL NO.

TYPE GAS

Btu/hr INPUT

Btu/hr OUTPUT

NOTES:



Built to
ASME
Specifications

Ratings

Boiler No.	△ I-B-R Burner Capacity			Gross I-B-R Output MBH †	Net I-B-R Ratings ‡			*** Net Sq. Ft. Water	Boiler H.P.	Net Firebox Volume Cu. Ft.	**** Stack Gas Volume CFM	□ Positive Press. In Firebox	I-B-R Vent Dia. Inches	Water Boiler Content (Gals.)	Packaged Boiler Weight Pounds
	** Light Oil G.P.H.	○ Gas MBH	Min. Gas Pres. Req'd. In. W.C.		Steam Sq. Ft.	Steam MBH	Water MBH								
▲ 488°F•	7.0	1,010		810	2,533	608	704	4,694	24.2	11.02	376	.43	10	109	2830
▲ 488 R°F•	6.9	996		794	2,483	596	690	4,600	23.7	11.02	370	.42	10	109	2830
▲ 588°F•	9.4	1,357		1,084	3,388	813	943	6,287	32.4	14.45	507	.44	10	132	3305
▲ 688°F•	11.8	1,703		1,358	4,275	1026	1181	7,874	40.6	18.08	639	.46	10	155	3780
▲ 788°F•	14.2	2,049		1,632	5,225	1254	1419	9,460	48.8	21.61	772	.47	12	178	4205
▲ 888°F•	16.6	2,396		1,904	6,154	1477	1656	11,040	56.9	25.14	906	.49	12	201	4730
▲ 988°F•	18.8	2,713		2,176	7,038	1689	1892	12,614	65.0	28.67	1,031	.50	14	224	5205
▲ 988R°F•	17.2	2,482		1,991	6,442	1546	1731	11,540	59.5	28.67	954	.45	14	224	5205
▲ 1088°F•	21.5	3,103		2,452	7,933	1904	2132	14,214	73.2	32.20	1,184	.52	14	247	5680
▲ 1088R°F•	20.0	2,887		2,304	7,454	1789	2003	13,354	68.8	32.20	1,101	.49	14	247	5680
▲ 1188°F•	23.5	3,392		2,724	8,813	2115	2369	15,794	81.4	35.73	1,299	.53	14	270	6155
▲ 1288°F•	26.0	3,753		3,000	9,704	2329	2609	17,394	89.6	39.26	1,443	.55	14	293	6630
▲ 1388°F•	28.5	4,113		3,270	10,579	2539	2843	18,954	97.7	42.79	1,588	.56	14	316	7105
▲ 1488°F•	31.0	4,474		3,550	11,483	2756	3087	20,580	106.0	46.32	1,735	.58	16	339	7580
▲ 1588°F•	33.0	4,763		3,820	12,358	2966	3322	22,147	114.1	49.85	1,884	.59	16	362	8055
▲ 1688°F•	35.5	5,124		4,090	13,229	3175	3557	23,713	122.2	53.38	2,002	.61	16	385	8530
▲ 1688R°F•	34.5	4,979		3,980	12,875	3090	3461	23,073	118.9	53.38	1,945	.59	16	385	8530
▲ 1788°F•	38.0	5,485		4,370	14,138	3393	3800	25,333	130.5	56.91	2,152	.62	18	408	9005
▲ 1888°F•	40.5	5,845		4,640	15,008	3602	4035	26,900	138.6	60.44	2,303	.64	18	431	9480

See appropriate burner manual. Varies with burner.

- ▲ Substitute "BL" for light oil, "BGL" for gas light oil, "BG" for gas, or "H" for boiler only for use with approved burners. Add prefix "A" to designator for factory assembled unit (example, ABL-488), "P" for "B" for fire-tested package unit (example: PL-488).
- * Substitute "S" for steam, "W" for water.
- For T-intermediate section(s) and tankless heater(s) add suffix "(number required) TIH".
For T-intermediate section(s) with cover plate(s) only add suffix "(number required) TIP".
For T-intermediate section(s) with storage heater(s) add suffix "(Number required) TISH."
- △ Burner input based on maximum of 2,000 ft. altitude—for other altitudes consult Weil-McLain Distributor/Agent or Sales Office.
- ** No. 2 fuel oil—Commercial Standard Spec CS75-56. Heat value of oil—140,000 BTU/G.
- Gas pressure required at control inlet for rated burner input based on 1,000 BTU/cu. ft., 0.60 specific gravity gas.

- † Gross I = B = R ratings have been determined under the I = B = R provision governing forced draft boiler-burner units.
 - ‡ Net I = B = R ratings are based on net installed radiation of sufficient quantity for the requirements of the building and nothing need be added for normal piping and pick-up. Water ratings are based on a piping and pick-up allowance of 1.15. Steam ratings are based on the following allowances: 488-588—1.333; 688—1.323; 788—1.301; 888—1.289; 988-1888—1.288. An additional allowance should be made for gravity hot water systems or for unusual piping and pick-up loads. Consult local Weil-McLain Distributor/Agent or Sales Office.
 - *** Based on average water temperature of 170°F. in heat distributing units.
 - **** Stack gas volume at outlet temperature.
 - With 0.10" W.C. positive pressure at flue collar.
- NOTE: Water boilers tested for 50 PSIG, ASME water working pressure. Available upon special request at 80 P.S.I. working pressure. Steam boilers tested for 15 PSIG, ASME steam working pressure.

Boiler No.	Supply Tappings No. & Size*		Return Tappings No. & Size*	
	Steam	Water	Steam	Water
488	2-5"	2-5"	2-6"	2-6"
588	2-5"	2-5"	2-6"	2-6"
688	2-5"	2-5"	2-6"	2-6"
788	2-5"	2-5"	2-6"	2-6"
888	2-5"	2-5"	2-6"	2-6"
988	2-5"	2-5"	2-6"	2-6"
1088	2-5"	2-5"	2-6"	2-6"
1188	2-5"	2-5"	2-6"	2-6"
1288	3-5"	2-5"	2-6"	2-6"
1388	3-5"	2-5"	2-6"	2-6"
1488	3-5"	2-5"	2-6"	2-6"
1588	3-5"	2-5"	2-6"	2-6"
1688	3-5"	2-5"	2-6"	2-6"
1788	4-5"	2-5"	2-6"	2-6"
1888	4-5"	2-5"	2-6"	2-6"

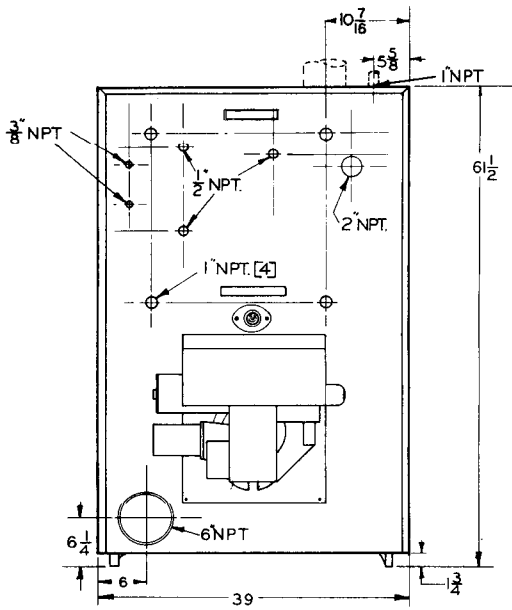
Dimensions (Inches)							
A	B	C	D	E	L	W	H
23			10	54 ³ / ₄	32 ¹ / ₄	30	23 ³ / ₈
31			10	54 ³ / ₄	40 ¹ / ₄	38	31 ³ / ₈
39			10	54 ³ / ₄	48 ¹ / ₄	46	39 ³ / ₈
47			12	53 ³ / ₄	56 ¹ / ₄	54	47 ³ / ₈
55			12	53 ³ / ₄	64 ¹ / ₄	62	55 ³ / ₈
63			14	52 ³ / ₄	72 ¹ / ₄	70	63 ³ / ₈
71			14	52 ³ / ₄	80 ¹ / ₄	78	71 ³ / ₈
79			14	52 ³ / ₄	88 ¹ / ₄	86	79 ³ / ₈
87	39 ¹ / ₂		14	52 ³ / ₄	96 ¹ / ₄	94	87 ³ / ₈
95	47 ¹ / ₂		14	52 ³ / ₄	104 ¹ / ₄	102	95 ³ / ₈
103	55 ¹ / ₂		16	51 ³ / ₄	112 ¹ / ₄	110	103 ³ / ₈
111	63 ¹ / ₂		16	51 ³ / ₄	120 ¹ / ₄	118	111 ³ / ₈
119	47 ¹ / ₂		16	51 ³ / ₄	128 ¹ / ₄	126	119 ³ / ₈
127	31 ¹ / ₂	79 ¹ / ₂	18†	51 ³ / ₄	136 ¹ / ₄	134	127 ³ / ₈
135	39 ¹ / ₂	87 ¹ / ₂	18†	51 ³ / ₄	144 ¹ / ₄	142	135 ³ / ₈

* Use Piping Connections shown in manual.

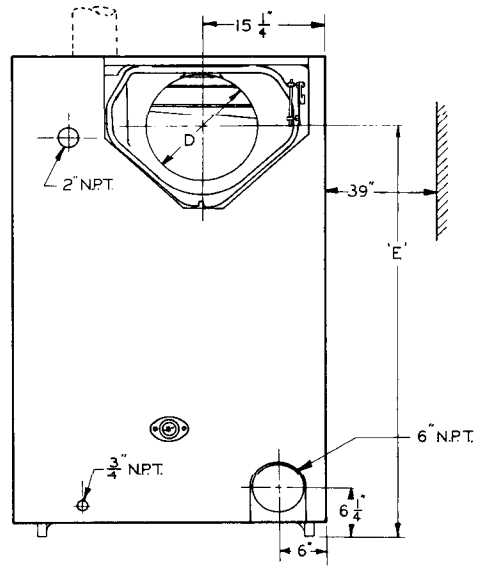
† 16¹/₈" x 19⁷/₈" Oval Collar

No. 88 BURNER LENGTH CHART
DIMENSION "F"

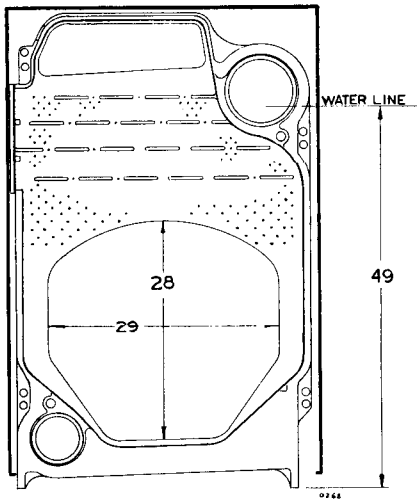
Boiler Size	Carlin	Webster	Power-Flame	Gordon-Piatt
488R	21	37	31	26
488	21	37	31	26
588	21	37	31	29
688	21	37	34	29
788	21	32	34	29
888	21	32	34	29
988R	—	32	34	29
988	26	35	34	29
1088R	26	35	34	29
1088	26	35	34	29
1188	26	35	39	29
1288	26	35	39	29
1388	26	35	39	29
1488	26	35	39	31
1588	—	35	39	31
1688R	—	35	39	31
1688	—	35	39	31
1788	—	35	44	31
1888	—	35	44	31



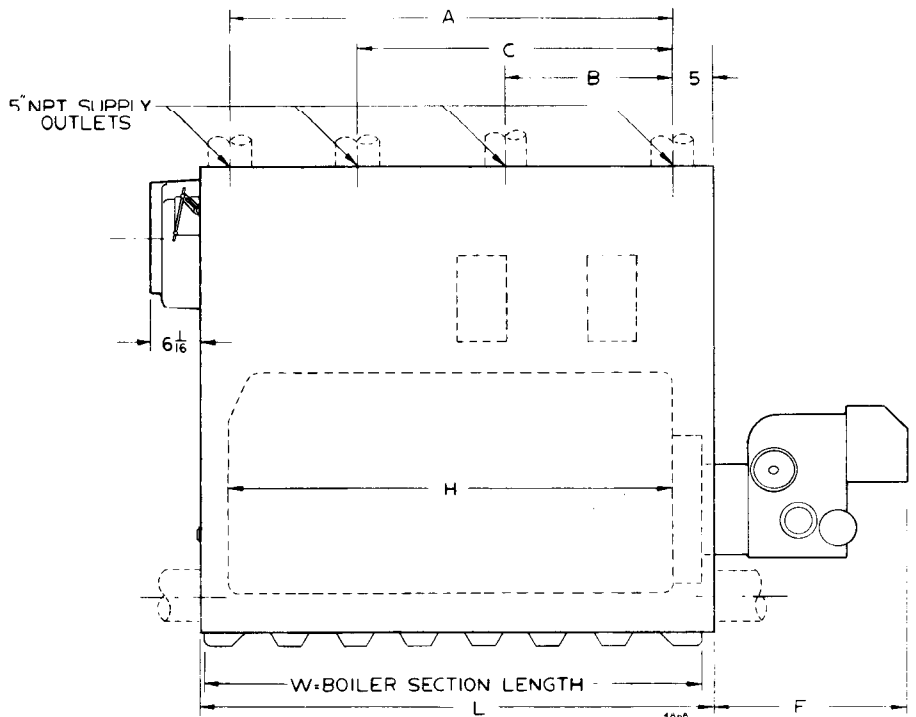
FRONT



BACK



INTERMEDIATE



SIDE