

## Parker Indirect Fired Hot Water Boiler

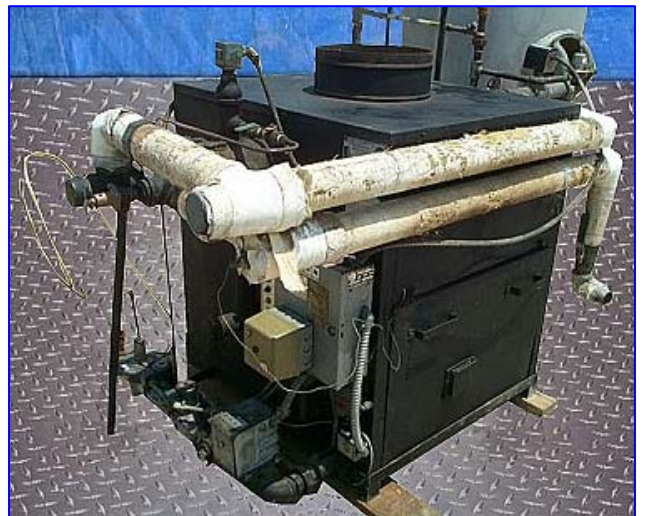
Mfg: Parker

Model: WH-970

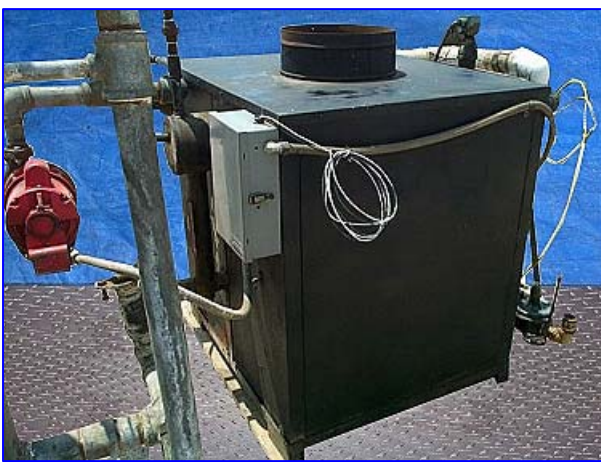
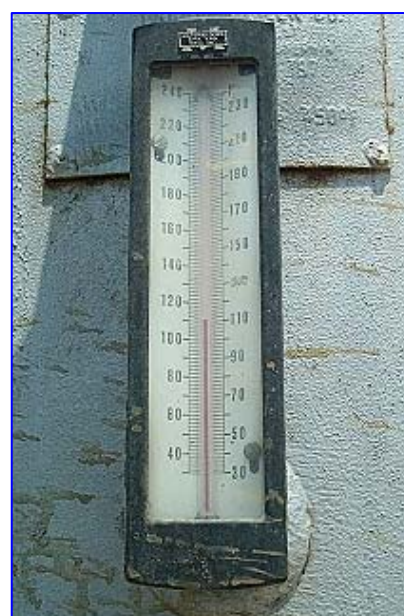
Stock No. CGCB074.1

Serial No. \_\_\_\_\_

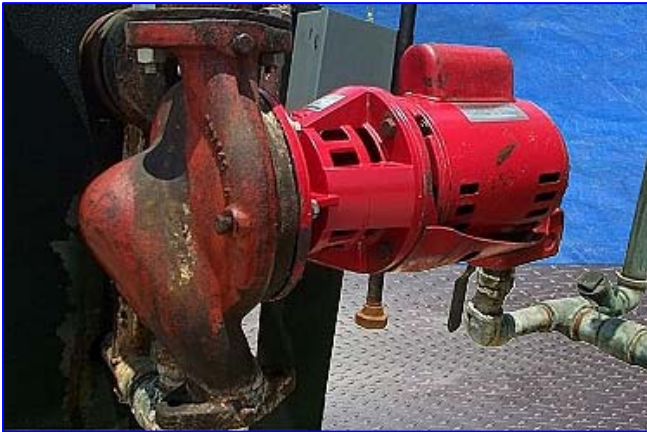
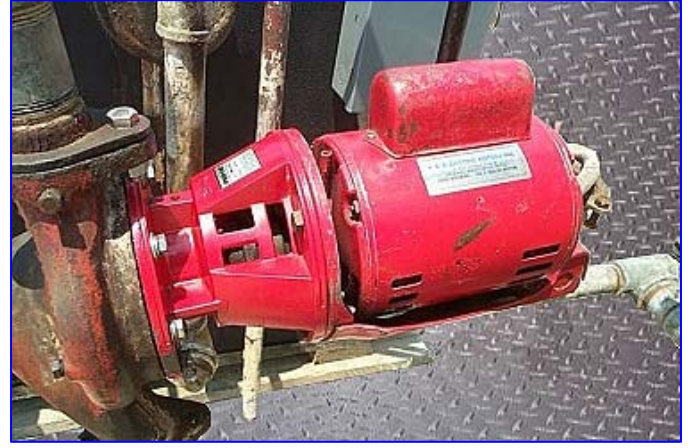
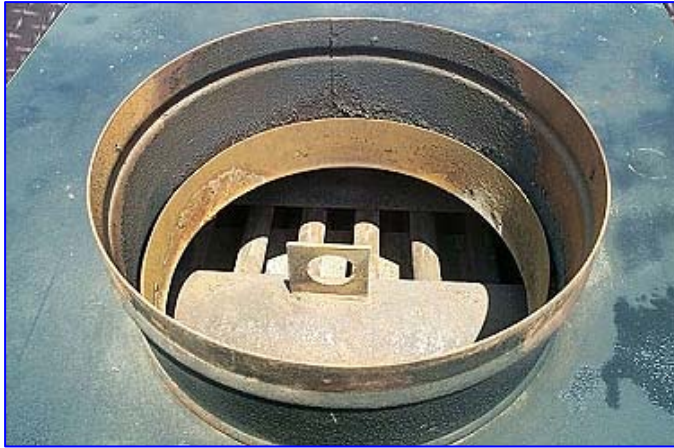
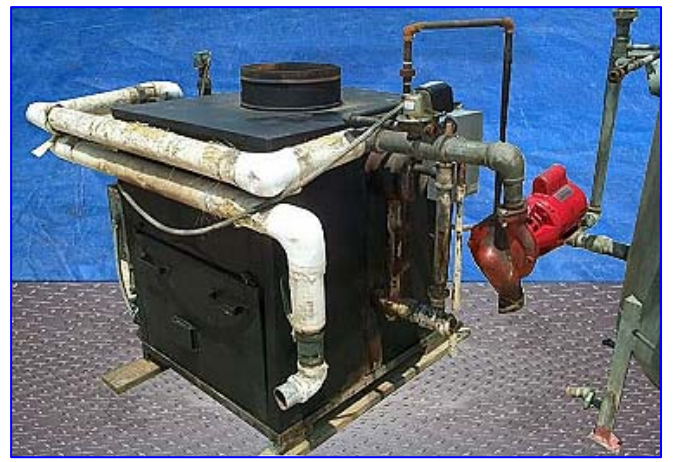
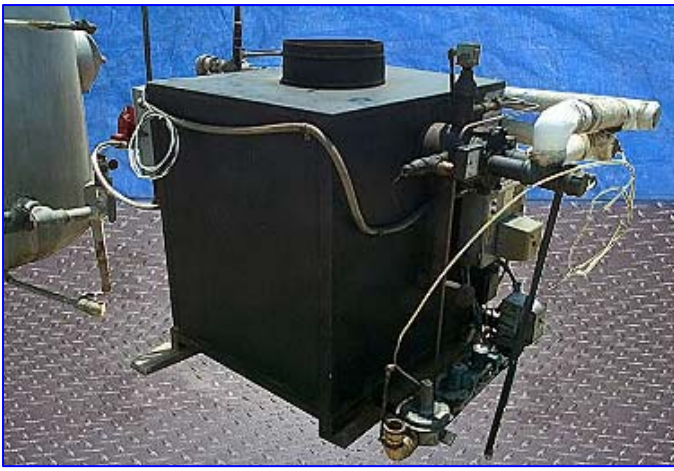
Parker Indirect Fired Hot Water Boiler. Model: WH-970. MAWP: 125 psi., heating surface: 103.5 sq. ft. Horse power input: 29 hp (boiler) (BTU input: 970,000), Horse power output: 23.2 hp (BTU output: 776,000). Output 60 °F rise: 1550 gph, Output 100 °F rise: 930 gph. Recommended flow rate: 54 gpm. Alternating current motor, ½ hp, 1725 rpm, 115/230 V, 5.2/2.6 amps, 60 Hz, 1 phase. Pump. (32) Burners: 5-1/2 in. L x 2 in. W. Honeywell gas modutrol motor, 120 V, 0.36 amps 50 & 60 Hz, 27 watts. Parker electrical control panel. Temp/press. gauge: 60-320 °F, 0-250 psi. Steam outlet: 14 in. dia. Parker steel tank-100 gallons, manway: 22 in. L x 12 in. H (oval). Maximum temperature: 450 °F; thermometer: 30-230 °F. Boiler inlet/outlet: 2-1/2 in. insulated pipe, pump pipe: 2 in. dia., gas pipe: ¾ in. dia., tank inlet/outlet: (2) 2-1/2 in. threaded female. Overall dimensions (boiler): 75 in. L x 45 in. W x 53 in. H. Overall dimensions (tank): 53 in. L x 40 in. W x 115 in. H. Parker electrical control panel, (2) switches: 1st boiler control, 2nd main burner, indicator light: control power, pilot on, level safe, limit safe, burner on.















## INDIRECT HOT WATER SYSTEM

Assures Rust Free Hot Water, Economical & Reliable  
for Low and High Temperature Applications

Gas, Propane or Low NO<sub>x</sub> Fired Models 300,000 to 3,000,000 BTU Input

209-11 Water Heaters

### Indirect Hot Water Heater System

300,000 to 3,000,000 BTU Input



#### THE COMPLETE HOT WATER SYSTEM INCLUDES:

The Parker Indirect Fired Water Heater is an industrial quality unit designed for economically heating large volumes of domestic or process water for commercial and industrial applications. The all bronze and copper heat transfer coil eliminates the possibility of rust throughout the water passages. The indirect principle of heating the process water with sealed-in primary water combined with controlled circulation minimizes the possibility of scaling within the heat transfer coil for low or high temperature applications.

The Parker Hot Water Storage Tank is of quality construction built in accordance with the ASME Code. Tanks are available vertical or horizontal in a wide range of sizes and include an attractive, durable exterior painted finish and an internal phenolic coating. Special warranted internal tank linings are available at nominal cost. A combination temperature-pressure gauge and safety relief valve are furnished with the system.

The High Duty Circulator has bronze-fitted construction, balanced centrifugal impeller and mechanical seal selected for each specific heater size.

A Packaged Piping Kit is also available and includes all the piping and valves shown above to easily connect the heater to the storage tank.

Stainless Steel Option is available on the heater with 316 stainless steel tubes and all stainless waterways for deionized or pure process water applications. Note: unit outputs are reduced, consult factory.

**PARKER**  
**BOILER CO.**

NEVER A COMPROMISE FOR QUALITY OR SAFETY

5930 Bandini Boulevard  
Los Angeles CA 90040  
Fax (323) 722-2848  
www.parkerboiler.com

Phone (323) 727-9800

BROCHURE 209-11 0C2

# PARKER INDIRECT HEATERS

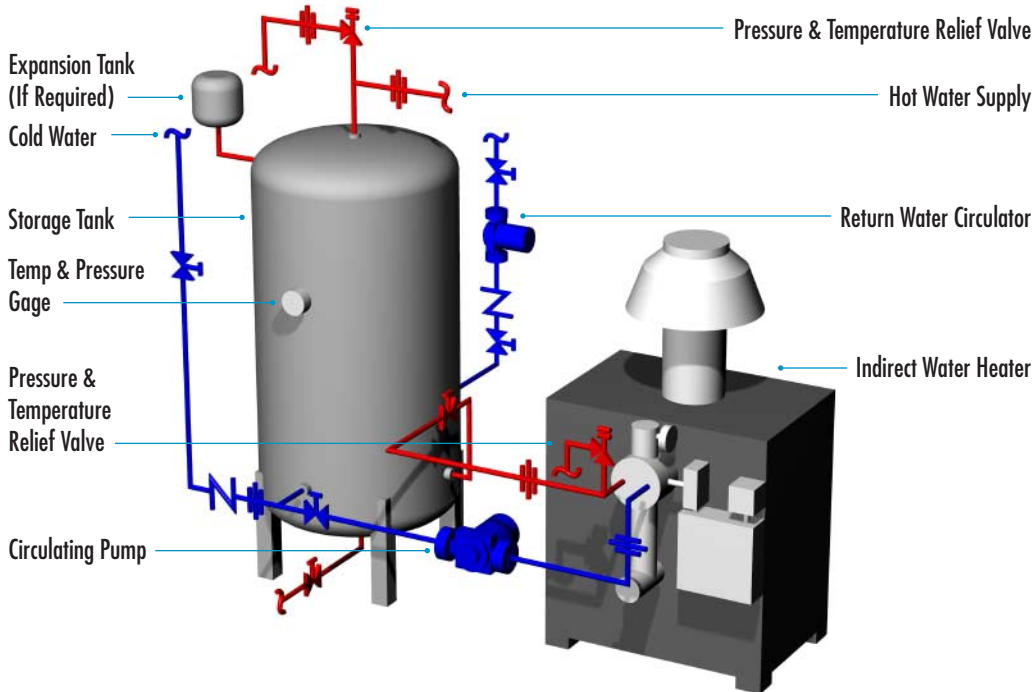
## Natural Thermal Circulation

### General Information



### 209-11 Water Heaters

#### Typical Parker Indirect Hot Water Heater System for Hot Water Service



#### INDIRECT FIRED WATER HEATERS

The Parker WH Model Indirect Fired Water Heater is an excellent choice for Low or High Temperature applications.

#### Uses Include:

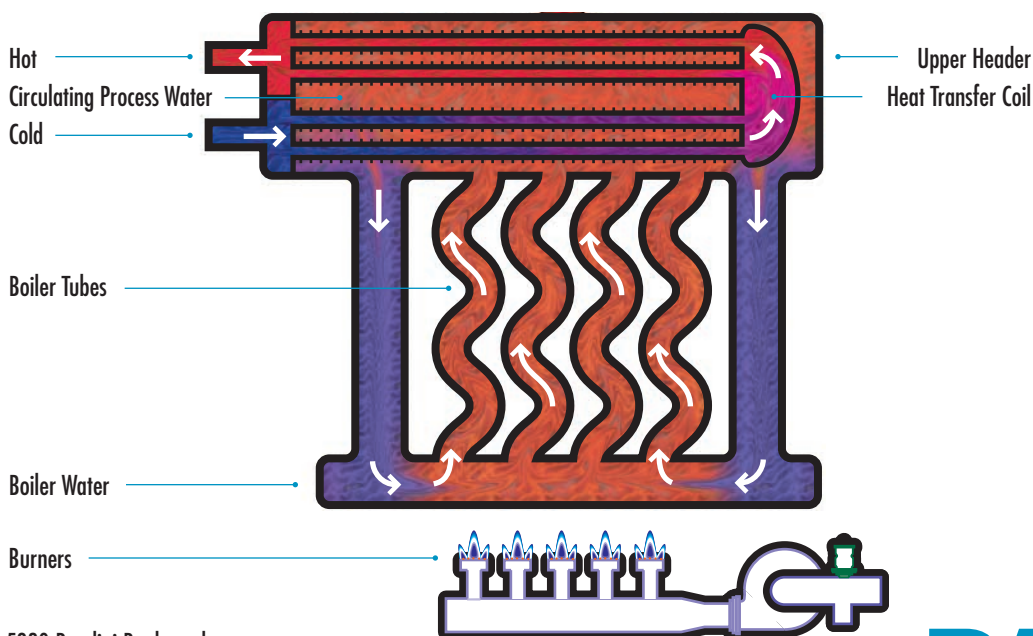
- Laundries
- Hotels
- Apartments
- Food Processing
- Hospitals
- Schools
- Swimming Pools
- Water Source Heat Pumps
- Low Temperature Process Water Applications
- Pond Heating
- Fish Farms
- Radiant Heating

The Basic Principle of indirect heating is accomplished by circulating the low temperature (or circulating process water) through a copper tube heat transfer coil which is mounted internally and immersed in the primary Boiler water. The primary Boiler water is contained in a Bent Steel Tube Bundle and is heated in the furnace area, it rises to the upper header where the heat transfer into the secondary water occurs. The colder secondary water does not come into contact with high furnace temperatures or into contact with the flue gas at all.

This eliminates any possibility of flue gas condensation which will occur on Direct Fired Heaters. Sweating and external corrosion of the Boiler Structure and tubes is essentially eliminated. The possibilities of scale, rust and corrosion are minimized by the indirect design principle.

The furnace remains at a steady uniform temperature which results in high combustion efficiency and lower fuel consumption. This principle has proven more efficient and provides for a longer life as opposed to a direct system.

#### Indirect Heating Principle



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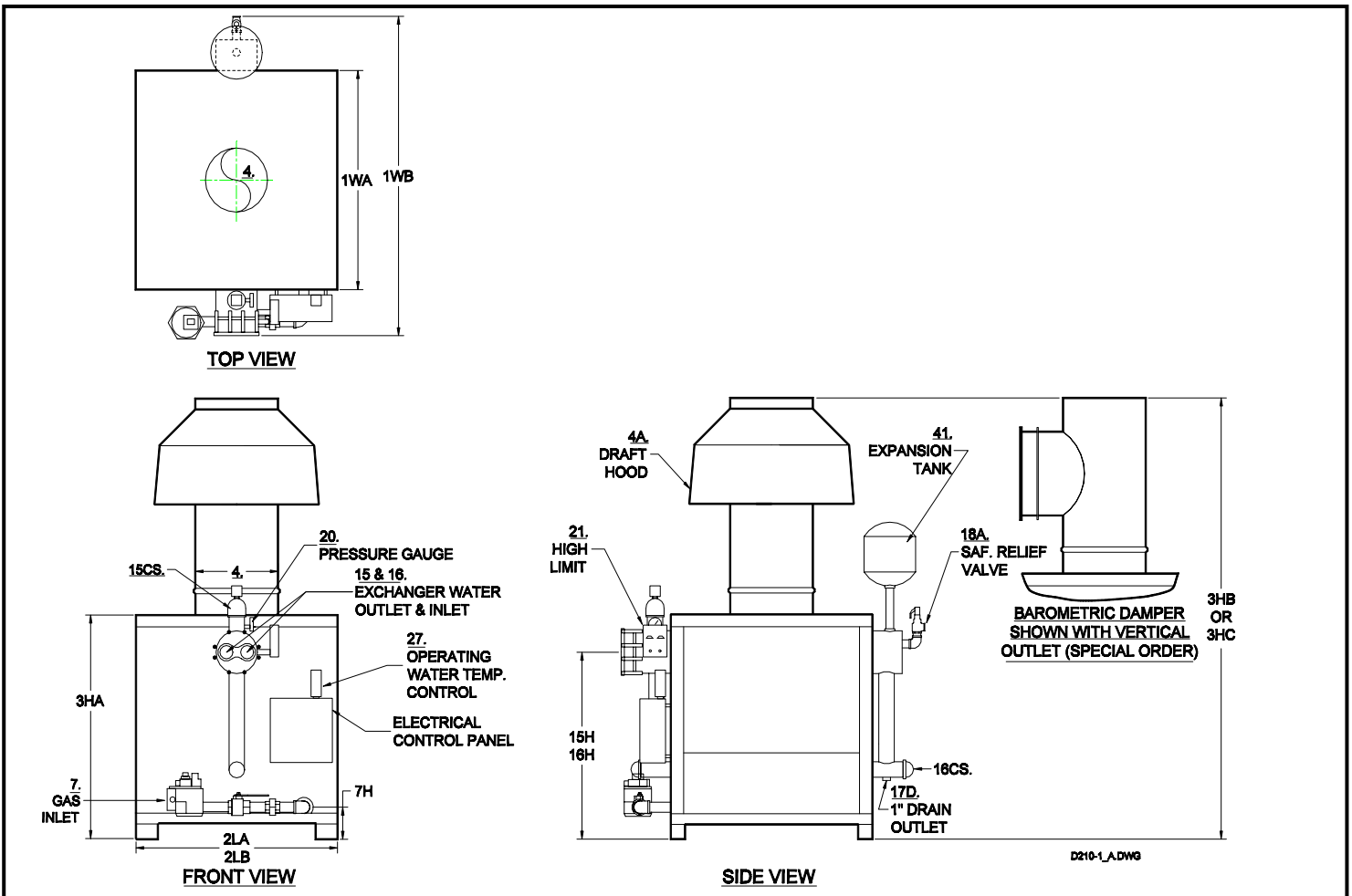
Phone (323) 727-9800

BROCHURE 209-11 DC2

# PARKER BOILER CO.

PARKER INDIRECT FIRED WATER HEATER  
WH300 TO WH 1410 - ATMOSPHERIC GAS FIRED

SPEC. SHEET D-210-I  
7D

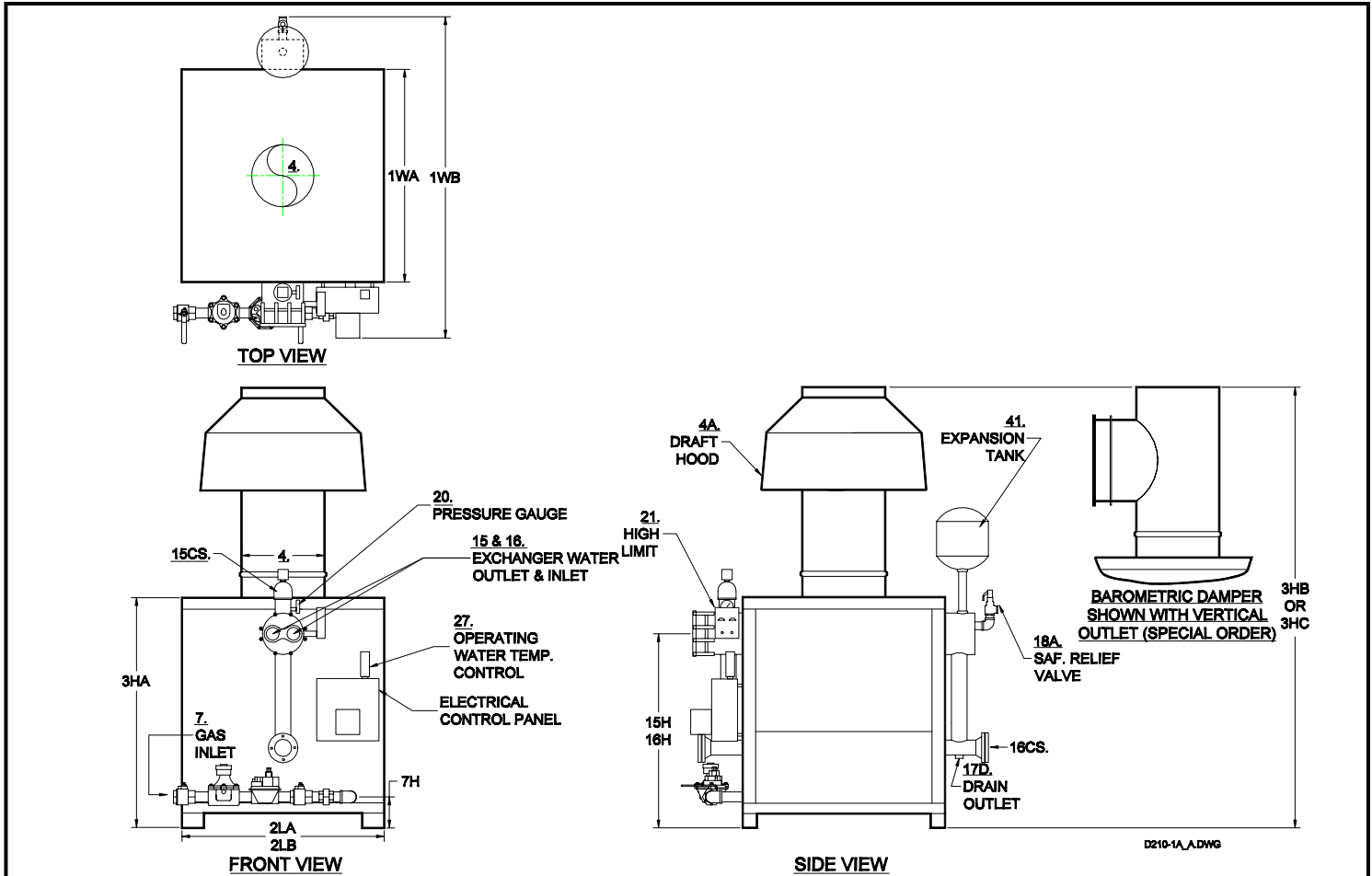


NO.	MODEL NO.	WH300	WH395	WH490	WH600	WH730	WH970	WH1210	WH1410	
A	BTU Input	1000's BTU/HR.	300	395	490	600	730	970	1210	1410
B	BTU Output	1000's BTU/HR.	240	316	392	480	584	776	968	1128
C	Heating Surface	SQ. FT.	41.5	55	55	66.5	77	103.5	127.5	160
D	Output - 60 Degree Rise	G.P.H.	480	632	783	958	1167	1550	1935	2253
E	Output - 100 Degree Rise	G.P.H.	288	379	470	575	700	930	1161	1352
1WA	Width of Cabinet Only	IN.	16	21	21	24	27	34	41	49
1WB	Width Overall Including Controls	IN.	33	37	37	41	44	52	59	67
2LA	Length of Cabinet Only	IN.	39	39	39	39	39	39	39	39
2LB	Length Overall	IN.	39	39	39	39	39	39	39	39
3HA	Height of Cabinet Only	IN.	41	41	41	41	41	41	42	42
3HB	Height Overall Including Draft Hood - (Standard)	IN.	71	73	73	75	75	77	82	82
3HC	Height Overall Inclu. Baro. Damper (Vert. Outlet/Horizontal Outlet) - (Spec.Order)	IN.	57/54	60/58	60/58	60/58	63/60	67/63	68/64	70/68
4A	Vent Stack Diameter with Draft Hood-(Standard)	IN.	8	10	10	12	12	14	16	16
4B	Vent Stack Diameter with Barometric Damper	IN.	6	8	8	8	10	12	12	14
7A / 7A1	Std. Nat. Gas Inlet Size/Supply Press; Max: 14" WC; Min.:7" WC	IN.	3/4	3/4	1	1	1	1-1/2	1-1/2	1-1/2
7A2	Nat. Gas Manifold Pressure at Burner	IN. WC	4	4	4	4	4	4	4	4
7B	Hi Press. Nat. & Propane Gas Inlet Size/(Supply Press. 1-5 PSI)	IN.	3/4	3/4	3/4	3/4	3/4	1-1/2	1-1/2	1-1/2
7B1	Propane Manifold Pressure at Burner	IN. WC	18	18	18	18	18	18	18	18
7H	Gas Inlet Height From Floor	IN.	5	5	5	5	5	5	6	6
15&16	Exchanger Water Outlet and Inlet Size	IN.	1-1/2	1-1/2	1-1/2	1-1/2	1-1/2	2	2	2
15H&16H	Exchanger Water Outlet and Inlet Height From Floor	IN.	34	34	34	34	34	34	35	35
15&16CS	Outlet & Inlet Size for Closed System Heating	IN.	2	2	2	2	2	2	2-1/2	2-1/2
18AHP	Safety Relief Valve Drain Size- 125 PSI	OUTLET IN.	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
18ALP	Safety Relief Valve Drain Size- 30 PSI	OUTLET IN.	3/4	1	1	1	1	1 1/4	1 1/4	1 1/2
J	Water Capacity	GAL.	8.5	11	11	13	15	19	21	25
K	Net Weight of Boiler	LBS.	625	790	790	1095	1360	1590	1780	2100
L	Domestic Crated Shipping Weight of Boiler	LBS.	715	885	895	1205	1485	1720	1920	2250

MINIMUM LISTED CLEARANCES TO COMBUSTIBLE CONSTRUCTION:	12" Cabinet Sides & Rear	48" Cabinet Top	6" Draft Hood Vent Connector	12" Baro. Damper Chimney Connector
Recommended Clearances for Access: Inspection Doors 18"; Front (Cabinet Width 1WA + 10" For Exchanger Removal); Controls 24"; Electrical Panel 30"; Additional Space may be required by Local Codes				

Note: All of the above dimensions are for a standard trim model. Due to continuous improvements, specifications are subject to change without notice.

PARKER INDIRECT FIRED WATER HEATER  
WH1900 TO WH3000 - ATMOSPHERIC



NO.		MODEL NO.	WH1900	WH2270	WH2650	WH3000
A	BTU Input	1000's BTU/HR.	1900	2270	2650	3000
B	BTU Output	1000's BTU/HR.	1520	1816	2120	2400
C	Heating Surface	SQ. FT.	208	251	287	331
D	Output - 60 Degree Rise	G.P.H.	3037	3628	4237	4797
E	Output - 100 Degree Rise	G.P.H.	1822	2177	2542	2878
1WA	Width of Cabinet Only	IN.	40	46	52	59
1WB	Width Overall Including Controls	IN.	63	71	75	82
2LA	Length of Cabinet Only	IN.	54	54	54	54
2LB	Length Overall	IN.	54	54	54	54
3HA	Height of Cabinet Only	IN.	53	53	53	53
3HB	Height Overall Including Draft Hood - (Standard)	IN.	97	99	99	101
3HC	Height Overall Including Baro. Damper (Vert. Outlet/Horizontal. Outlet) - (Special Order)	IN.	83 / 82	83 / 82	87 / 84	87 / 84
4A	Vent Stack Diameter with Draft Hood - (Standard)	IN.	20	22	22	24
4B	Vent Stack Diameter with Barometric Damper	IN.	16	16	18	18
7A/ 7A1	Std. Nat. Gas Inlet Size / Supply Press; Max: 14" WC; Min.: 7" WC	IN.	2	2	2	2
7A2	Nat. Gas Manifold Pressure at Burner	IN. WC	4	4	4	4
7B	Hi Press. Nat. & Propane Gas Inlet Size (Supply Press. 1-5 PSI)	IN.	1-1/2	1-1/2	1-1/2	1-1/2
7B1	Propane Manifold Pressure at Burner:	IN. WC	18	18	18	18
7H	Gas Inlet Height From Floor	IN.	5	5	5	5
15&16	Exchanger Water Outlet and Inlet Size	IN.	2-1/2	2-1/2	2-1/2	2-1/2
15H&16H	Exchanger Water Outlet and Inlet Height From Floor	IN.	44	44	44	44
15&16CS	Outlet & Inlet Size for Closed System Heating	IN.	3	3	3	3
17D	Drain Opening	IN.	1-1/4	1-1/2	1-1/2	1-1/2
18AHP	Safety Relief Valve Drain Size- 125 PSI	OUTLET IN.	1	1	1	1-1/4
18ALP	Safety Relief Valve Drain Size- 30 PSI	OUTLET IN.	1-1/2	2	2	2
J	Water Capacity	GAL.	30	35	40	50
K	Net Weight of Boiler	LBS.	2695	3150	3575	3940
L	Domestic Crated Shipping Weight of Boiler	LBS.	2945	3450	3925	4380

MINIMUM LISTED CLEARANCES TO COMBUSTIBLE CONSTRUCTION:	12"	48"	6"	12"
	Cabinet Sides & Rear	Cabinet Top	Draft Hood Vent Connector	Baro. Damper Chimney Connector

Recommended Clearances for Access: Inspection Doors 18"; Front (Cabinet Width 1WA + 10" For Exchanger Removal); Controls 24"; Electrical Panel 30"; Additional Space may be required by Local Codes

Note: All of the above dimensions are for a standard trim model. Due to continuous improvement, specifications are subject to change without notice