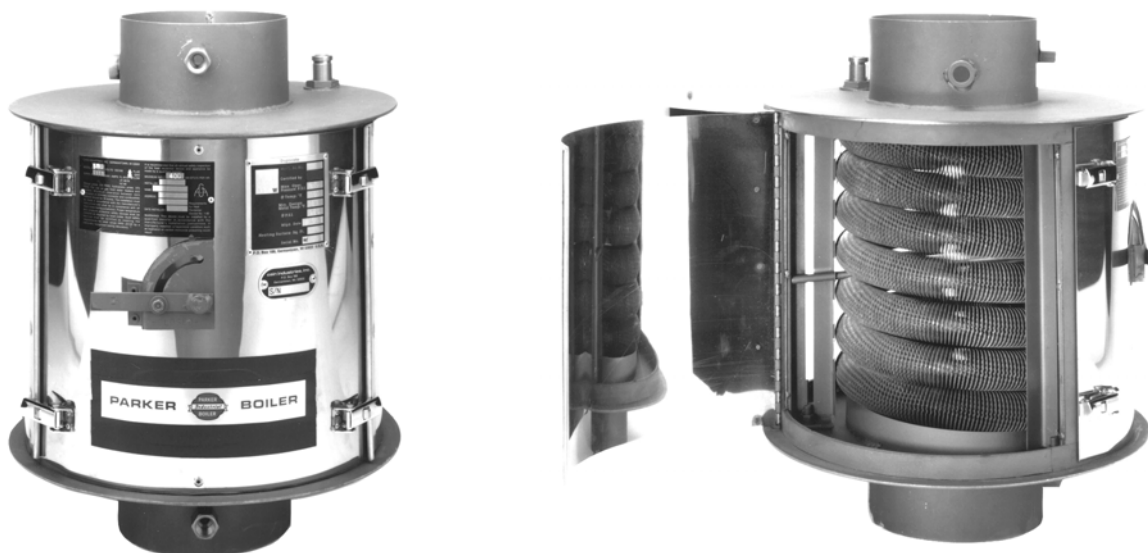


PARKER BOILER HEAT RECLAIMER

GENERAL DESCRIPTION: The Parker Boiler Heat Reclaimer is a device designed to reclaim heat in the form of additional hot water from exhaust stacks of gas and oil burning appliances. On Parker Steam & Hot Water Boilers and Indirect Fired Heaters it is inserted in the vent stack between the boiler and the draft hood or barometric damper.

APPLICATIONS: The concept and use of a stack economizer or heat reclaim device dates from the turn of the century and should be considered on installations requiring additional hot water and increased boiler plant efficiency. As fuel bills continue to rise, the installation of a Parker Heat Reclaim device should be evaluated. The device can raise the net boiler efficiency and also increase bottom line profitability by more fully utilizing the energy already paid for. Typical savings range from 6-10%. There is a wide variety of ways to install the heat reclaimer, some utilizing hot water storage tanks or pressurized boiler feed tanks. Refer to recommended installation drawing INST-122-HR.

PARKER HEAT RECLAIM SYSTEM: The Parker Boiler Heat Reclaimer is sold as an energy recovery package and includes the following components:

- | | |
|---|--|
| 1. Parker Stainless Steel Heat Reclaimer Coil | 6. Two Stack Temperature Gauges |
| 2. Stack Adapters (if required) | 7. Limit Control (Pump Controller) |
| 3. Stainless Steel Housing w/Hinged Access Panel(s) | 8. Temperature & Pressure Relief Valve |
| 4. Iron Fitted or Bronze Circulating Pump | 9. Check Valve |
| 5. Bronze Balancing Valve | |

With the Parker Heat Reclaim System, only a small amount of field piping and electrical work is required to bring the device on-line to recover waste stack heat.

PARKER HEAT RECLAIM ACCESSORY PACKAGE: This package includes the following components:

- | | |
|---|----------------------------------|
| 1. (2) BMT-250 Water Temperature Gauges | 2. (2) Ball-Type Shut-off Valves |
|---|----------------------------------|

PARKER PRE-HEAT KIT: This package includes the following components for preheating boiler feedwater on a steam boiler only:

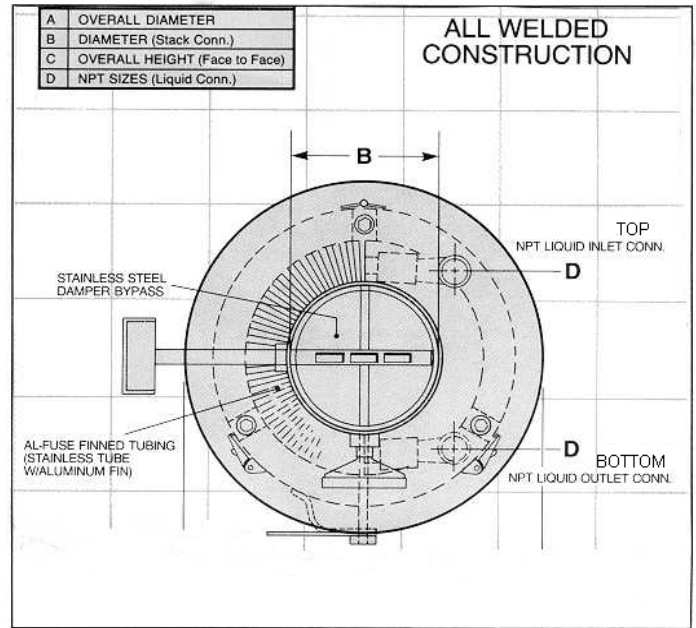
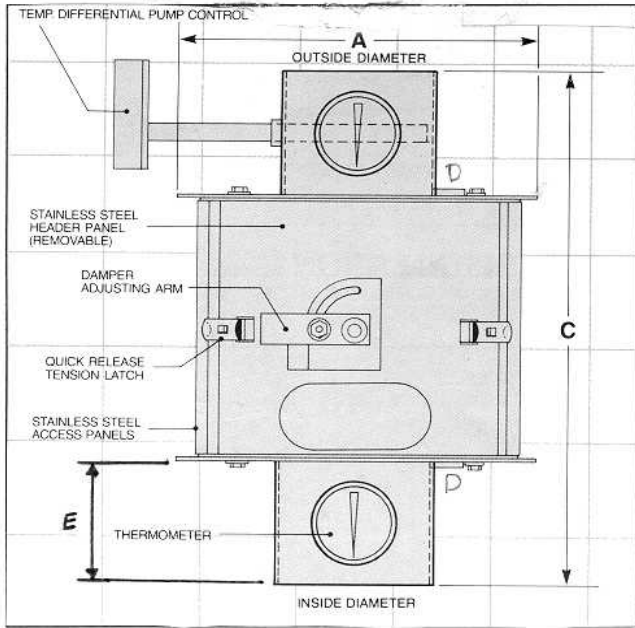
- | | |
|---|---|
| 1. Parker Stainless Steel Heat Reclaimer Coil | 7. Limit Control (Pump Controller) |
| 2. Stack Adapters (if required) | 8. Temperature & Pressure Relief Valve |
| 3. Stainless Steel Housing w/Hinged Access Panel(s) | 9. Check Valve |
| 4. High Temperature Bronze Circulating Pump | 10. Pressurized Storage Tank |
| 5. Bronze Balancing Valve | 11. The contents of the ACCESSORY package above |
| 6. Two Stack Temperature Gauges | |

CERTIFICATIONS AND SPECIFICATIONS: All Parker Boiler Heat Reclaimers are designed for **250 PSI** pressure and **750°F** temperature.

The Heat Exchanger (see Spec. Sheet on reverse side) is constructed of TP316 .065"-.130" wall stainless steel tubing with 0.020" aluminum fins spaced 6 FPI (which are metallurgically bonded to the stainless). The heat exchanger is encased in a 304 18 Ga. polished stainless steel housing with gasketed hinged access door panel(s). A stainless steel emergency flue bypass and balancing assembly is standardly furnished. Typical flue gas loss through the heat exchanger on Parker Selections are less than 0.01" W.C. and water side pressure drops are generally under 8.3 PSI. These units are built to ASME Sections I & VIII, and are AGA Certified.

SELECTION AND INSTALLATION ANALYSIS: Heat recovery requires engineering calculations to assure that the maximum heat - no more and no less - is removed from the hot exhaust gases. Parker Boiler has performed a computer analysis of each boiler product and selected the proper size heat reclaimer. These selections are summarized on the Specification Sheet. Parker is interested in insuring Heat Reclaimers are employed properly in assuring boiler operation is not adversely affected and that the customer is deriving maximum energy recovery from his Heat Reclaimer Installation.

PARKER BOILER HEAT RECLAIMER



ITEM		EM8	EM10	EM12	EM14	EM16	EM20	EM24	EM28
PARKER BOILER MODEL SELECTIONS DRAFT HOOD EQUIPPED MODELS									
Steam Boiler	MAX.	7 HP	9.5 HP	15 HP	25 HP	40 HP	50 HP	-	-
Hot Water Boiler - One Required	MAX.	T300	T490	T760	T970	T1140	T2160	-	-
Hot Water Boiler - Two Required	MAX.	-	-	-	-	T2600	T4600	T6800	-
Indirect Hot Water Heater	MAX.	WH300	WH490	WH730	WH970	WH1410	WH1900	WH3000	-
PARKER BOILER MODEL SELECTIONS BAROMETRIC DAMPER EQUIPPED MODELS									
Steam Boiler	MAX.	12 HP	16 HP	30 HP	40 HP	50 HP	90 HP	115 HP	150 HP
Hot Water Boiler - Atmospheric Gas Fired	MAX.	T600	T760	T1140	T1730	T2160	T3600	T4600	T6800
Hot Water Boiler - Power Burner Type	MAX.	*-528	*-672	*-1296	*-1536	*-2304	*-3456	*-5000	*-6250
Indirect Hot Water Boiler	MAX.	WH600	WH730	WH1210	WH1410	WH2270	WH3000	-	-
PARKER HEAT RECLAIMER GENERAL SPECIFICATIONS									
Flue Diameter of Reclaimer (Dimension B)	IN.	8	10	12	14	16	20	24	28
Width (Dimension A)	IN.	18	20	24	28	30	36	42	44
Collar Length (Dimension E)	IN.	4	4	4	4	4	4	4	4
Height (Dimension C)	IN.	23	24.5	28.5	31.8	35.3	39.3	43.3	43.3
Water Inlet & Outlet Size (Dimension D)	IN.	1/2	3/4	3/4	1	1	1	1	1
Balancing Valve, Check Valve & Shutoff Valve Size	IN.	3/4	3/4	3/4	1	1	1	1	1
Median Water Flow Range	GPM.	5	5	5	10	10	10	10	10
Median Water Pressure Drop	PSIG.	2.4	2.4	3.4	2.9	4.11	5.7	7.41	8.34
Heating Surface	SQ. FT.	48	67	100	134	199	282	379	437
Safety Relief Valve	OUTLET IN.	3/4	3/4	3/4	1	1	1	1	1-1/2
Pump Model		Depends on System Configuration							
Net Weight	LBS.	60	79	110	150	175	230	280	340
Approximate Shipping Weight	LBS.	120	158	220	300	350	460	560	680

- NOTES:**
1. Dual stack hot water boilers require two reclaimers of indicated size.
 2. * = Model O- Oil Fired, GO- Combination Gas/Oil Fired, G- Power Gas Fired.
 3. Condensate Drain 1" NPT