

PLAINTIFF'S EXHIBIT

ASI-1219

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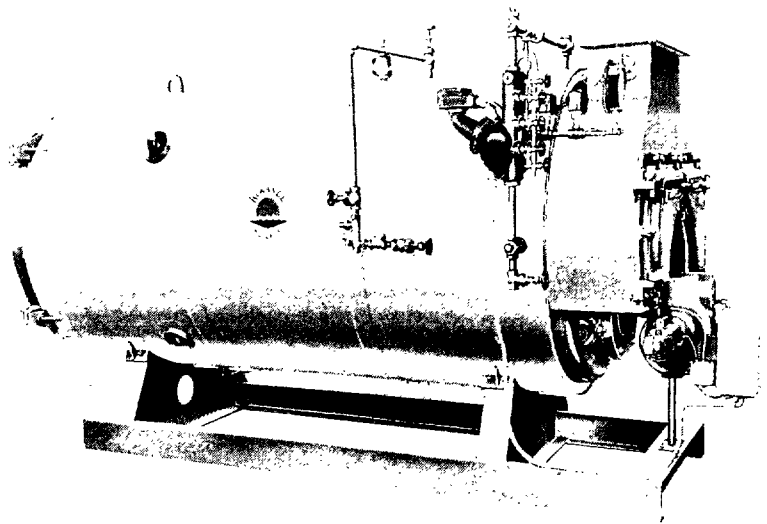
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**AMERICAN-Standard**

KEWANEE BOILER DIVISION



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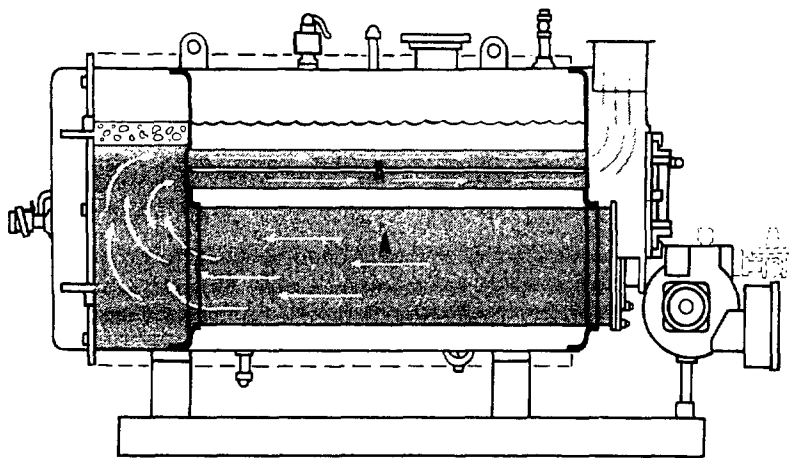
**HIGH PRESSURE OR LOW PRESSURE . . . Kewanee Scottie Jr. Package Unit** is a forced-draft package for gas, oil or gas-oil combination firing . . . fully automatic . . . completely assembled at the factory.

Today, steam or hot water for a plant or building of moderate size should be supplied by a unit that is designed to meet today's exacting requirements. Labor costs are high, so installation of the unit should be quick and uncomplicated. Once installed, the unit should operate automatically, with controls that keep performance smooth, safe and efficient without close adjustments and constant attention by skilled personnel. Construction costs are high, so a stack should not be required—and the boiler room should consume as little floor space as possible, under a standard 8-foot ceiling. Fuel prices are high, so every usable Btu should be transferred from the fuel to the water.

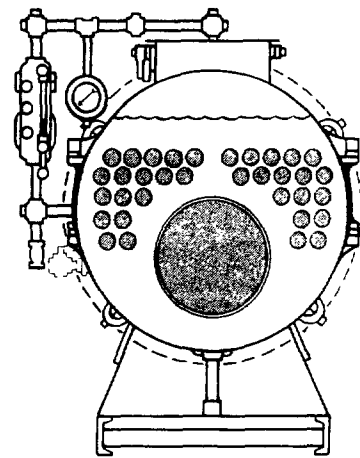
With the Scottie Jr. series package units, Kewanee Boiler Division has perfected today's better way to fire oil and gas for today's better plants and buildings. These compact Kewanee packages are ready to serve wherever products are manufactured, materials are processed or people are working, shopping, learning or living.



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Kewanee's two-pass system takes hot gases through furnace (A) and back through all fire tubes (B) to smoke outlet. (Low pressure unit features water back top with water above rear combustion chamber.)



Water surrounds furnace and fire tubes. All fire tubes are utilized equally—there are no baffles to burn out, no unequal temperatures to distort tube sheet. Large furnace and flue area keeps furnace pressures low.

Kewanee Scottie Jr. Package Units are fully assembled at the factory. Burner and all controls are in place and wired. Steel skid is attached . . . all refractory is installed. **When five simple service connections are made, the unit is ready to begin producing hot water or steam at the touch of a switch.**

Both burner and boiler are engineered to perform as an integral unit—smoothly, quietly, efficiently. A fully-enclosed panel houses the automatic controls. Burner shuts down instantly in the event of low water, flame failure, excessive steam pressure or water temperature.

**Only periodic maintenance is required.**

Ratings for the units are computed conservatively. Certified ratings are based on approximately 5.5 square feet of heating surface per boiler horsepower.

**Combustion air is provided by forced draft.** A high speed (3450 rpm) ball-bearing motor drives the blower. Because Kewanee's two-pass system provides a large flue area, excessive blower speed and furnace pressure is not required. A simple vent carries off combustion fumes—no stack is needed.

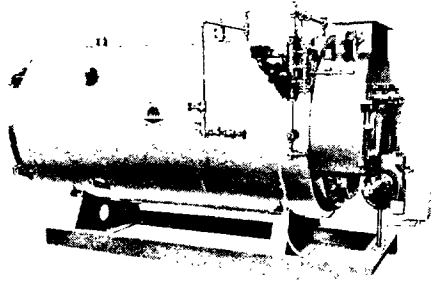
**Choose your burner to meet local conditions.** The Kewanee oil burner is a twin nozzle, high pressure type approved for No. 1 or No. 2 oil. The Kewanee gas burner is equipped for either natural gas or LP gas, according to your specification. The combination gas-oil burners are particularly applicable to installations in

localities where gas is the main fuel but standby oil firing is necessary. Fast fuel changeover can be accomplished by the flick of a switch—or even by automatic controls.

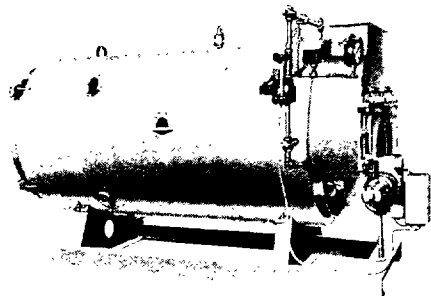
The swirling flame created by forced-draft firing sweeps over the inside surface of the furnace tube. Initial heat transfer at this point is high. On the return pass through the 3" fire tubes, spinner blades in the tubes spiral the hot gases against tube surface. This action unlocks remaining Btu's for transfer to the water. **Certified efficiency of the Kewanee unit is 80%**—actual efficiency, under normal operating conditions, may be even higher.

Fire tubes in Kewanee units follow a vertical and horizontal layout as closely as possible. This permits more space between the main body of tubes for free, rapid circulation of water and unobstructed rise of steam bubbles. A low water line provides a large steam disengaging area, where these freely rising bubbles detach themselves without the extreme turbulence that can cause foaming and priming. Lower water line also increases the steam storage area at the top of the boiler, a further assurance of dry steam in ample amounts.

Kewanee Package Units will meet local and state requirements. Boiler construction meets or exceeds provisions of the A.S.M.E. code. Burner and combustion controls are approved by Underwriters' Laboratories, Inc.



high temperature water above 250°



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A glance at a Kewanee Scottie Jr. Package Unit reveals cleanness of design . . . quality of details, both in materials and workmanship. Welds are smooth—carefully executed. Swing open the cast iron flue doors and you will see that the ends of the fire tubes have been set into the tube sheet with a roller expander and expertly beaded. Burner controls bear nationally recognized names . . . boiler trim is of highest quality.

Rapid, simple access for inspection and maintenance is an important advantage of Kewanee units. Sturdy flue doors and frames are cast iron, produced in the Kewanee Boiler Division foundry and machined to a precision fit. The doors are insulated to retain heat and gasketed to effectively prevent leakage of gases. Quick-opening locking clamps free the doors to swing out on hinges without interfering with firing equipment.

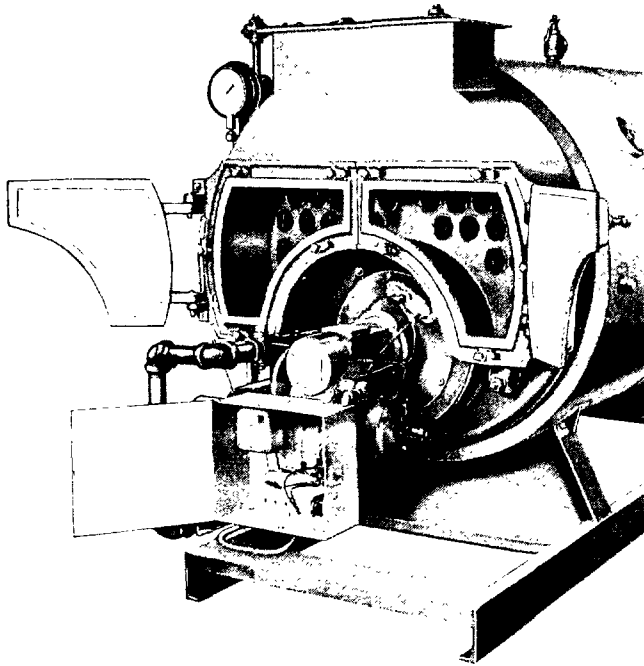
Access is also provided to the rear combustion chamber as well as to all water surfaces. Adequate and ample handholes provide for inspection and cleaning of the tubes in all units of the Scottie Jr. series, with manholes in the larger sizes, 59 hp and above.

Boiler heads and furnaces in high pressure

units are of firebox quality steel. All other steel plate is of flange quality steel, in thicknesses that meet or exceed A.S.M.E. boiler code requirements. On high pressure units, welds subjected to tension are X-rayed and entire boiler is heated in a furnace to 1200°F., to stress-relieve welds and formed sections.

A gas-tight welded steel smokebox is standard equipment on Kewanee units, fitted with a quadrant lock damper. On the rear combustion chamber a pyrex observation port allows observation of the flame.

When specified, Kewanee units are fire-tested at the factory. Heavily-insulated steel jackets are also available, at the option of the owner, as well as coils in low pressure units to provide an ample, steady supply of domestic hot water.



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The 68-office network of Kewanee men stretches throughout every state for prompt attention to service calls. From your first contact with the Kewanee organization throughout the long life of your Kewanee unit, there is always a Kewanee man ready to answer questions or provide skilled on-the-spot assistance with problems of maintenance or repair. Just pick up your telephone!

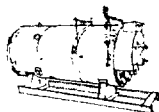
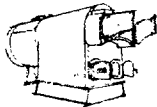
**DIMENSIONS**

unit number	high pressure	HM-18-W	HM-29-W	HM-39-W	HM-45-W	HM-59-W	HM-65-W	HM-78-W	HM-92-W	
	low pressure	LM-18-W	LM-29-W	LM-39-W	LM-45-W	LM-59-W	LM-65-W	LM-78-W	LM-92-W	
RATINGS*	BOILER HORSEPOWER	18	29	39	45	59	65	78	92	
	STEAM PER HOUR—212° F.	lb	624	996	1356	1577	2031	2258	2705	3185
	BTU PER HOUR	1000's	606	967	1316	1530	1971	2191	2625	3091
	STEAM	sq ft	2520	4030	5480	6370	8210	9130	10940	12880
	WATER	sq ft	4040	6450	8770	10200	13140	14610	17500	20610
	A—length overall**	8-9	11-3	11-6	12-7	13-3	14-2	13-2½	14-5½	
	B—width overall	4-6	4-6	5-0	5-0	5-6	5-6	6-1	6-1	
	C—steam supply height	4-11½	4-11½	5-5½	5-5½	6-0	6-0	7-0	7-0	
	D—smoke outlet height	5-6	5-6	5-11½	5-11½	6-5½	6-5½	7-1½	7-1½	

\*certified output

\*\*Includes oil burner. Gas burner extends additional 17 inches.

Above dimensions and drawings are for high pressure unit. Figures are also approximately correct for low pressure unit. For complete specifications, see catalog bulletins 3314-3, 3315-3, 3316-3.



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101 FRANKLIN ST., KEWANEE, ILLINOIS