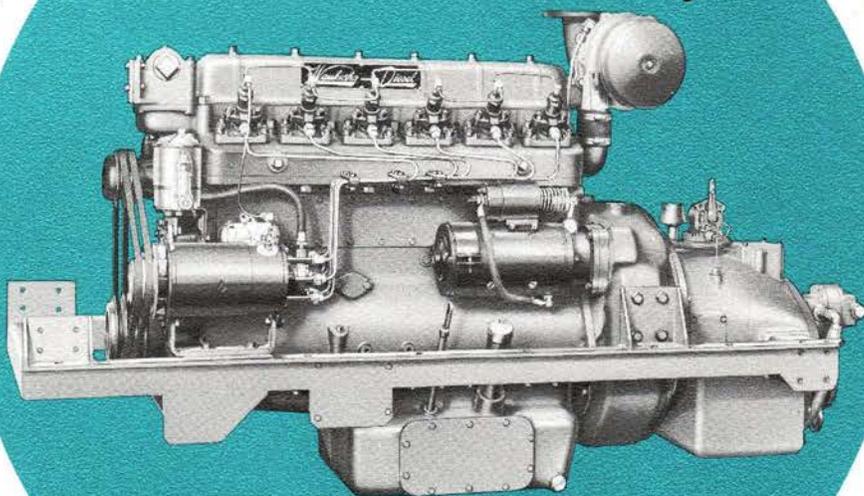


NEW

The "197 Bristol Bay"



designed for gillnetters

WAUKESHA MARINE DIESELS

The "197 Bristol Bay" marine diesel is a 302 cu. in., four cycle, 6-cylinder engine, developing 110 horsepower. Like all Waukesha Marine Diesels, the "197 Bristol Bay" has a built-in reserve of power for extra long life and low maintenance operation. The crankshafts are precision machined and ground with large bearing surfaces. Pistons, rings and connecting rods are installed in matched sets resulting in a well balanced performance. Crankcase and structural elements are ribbed and flanged for extra strength. The engine is compact and all parts are designed to be readily accessible for service and inspection. The back page has a description of the principal engine components and the accessories furnished for marine operation.

EQUIPMENT "197 BRISTOL BAY" MARINE DIESEL

Engine — Waukesha 6-cylinder heavy-duty four-stroke cycle overhead valve Diesel engine. Stellite-faced intake and exhaust valves in special alloy valve guides. Stellite-faced inserts. Mushroom valve lifters are hardened and ground. Screw and lock nut valve adjustment. Drop forged rocker arms. Waukesha alloy iron one-piece-crankshaft-and-cylinder-casting with dry-sleeve renewable cylinder liners. Deep-ribbed main bearing bridges stiffen the entire structure. Connecting rods of drop-forged heat-treated steel are rifle-drilled. Heavy drop-forged heat-treated steel crankshaft. Seven 2 $\frac{5}{8}$ inch main bearings, with hardened main journals and crankpins, precision-type bearing shells, and extra deep bearing caps. Full-floating piston pins and heavy-duty, oil-cooled aluminum alloy pistons with non-stick rings. Flywheel and SAE No. 3 housing. Water-cooled manifold.

Cooling System — Belt driven, centrifugal water pump and by-pass, flange-mounted at the front of the cylinder block. Engines engineered for keel cooling.

Lubrication System — Full pressure lubrication by positive gear-type pump through large drilled passages to each main, camshaft, connecting rod, piston pin, piston, rocker arm, and to idler gear stud and gears. Valve mechanism and cylinder walls drenched by oil mist. Oil cooler on cylinder block with automatic by-pass. Adjustable pressure regulator. Large capacity oil filters.

Fuel Injection System — Roosa Master gear-driven injection pump with drawn steel injection lines to single orifice, pintle-type nozzles. Roosa vane-type primary feed pump with hand primer. Large capacity fuel oil filters.

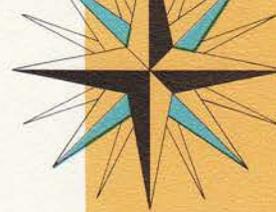
Governor — Variable speed, centrifugal governor, mounted on and driven by injection pump. Fully enclosed, self-lubricating.

Instruments and Controls — Oil pressure and water temperature gauges and alarm cut-off switches. Starter switches, instrument panel, tachometer drive; pyrometer when specified. Other accessories and equipment available when specified.

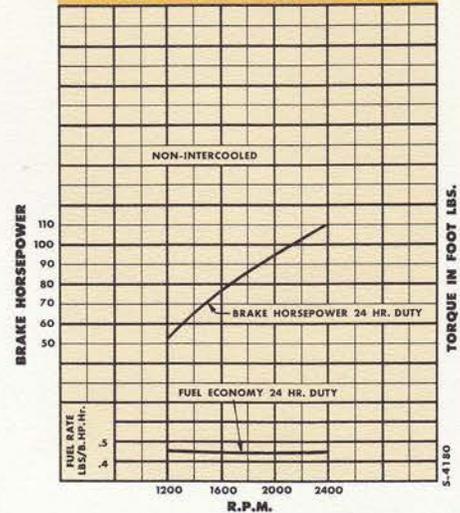
Air Cleaners — Dry type.

Starting — 12-volt electric starting motor with switches, ammeter, ring gear, generator and regulator; or air starting available.

Reverse and Reduction Gears — In sizes and ratios to match service requirements. Consult your nearest distributor, or the Waukesha Motor Company.



PERFORMANCE



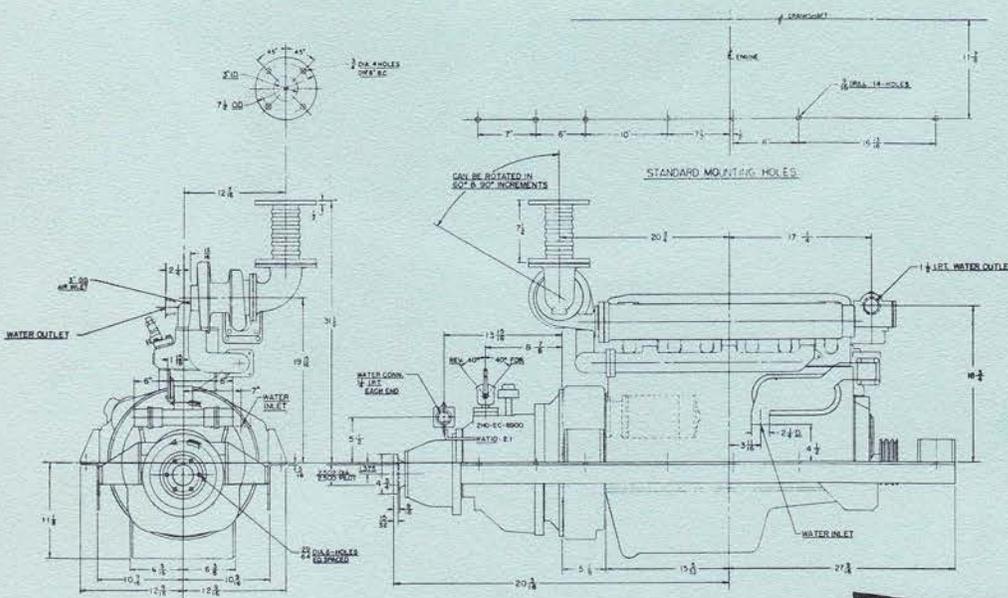
TURBOCHARGED

Curve S-4180 shows the performance of the "197 Bristol Bay" using exhaust turbo-charger without intercooler. Aluminum pistons, standard crankshaft and camshaft are used. Permissible maximum speed is 2400 rpm. Ratings conform to Internal Combustion Engine Institute Standards.

Handwritten notes:
 - MAX. IS 275 FT LBS @ 1800 rpm
 (DLC is 216 ft lbs @ 1600 rpm)

SCHEMATIC INSTALLATION DIAGRAM — 197 BRISTOL BAY MARINE ENGINE

(Dimensions not guaranteed. Detail prints available for layout work)



| PRINCIPAL ENGINE DIMENSIONS | |
|---|-----------------------------------|
| Bore and Stroke | 4 x 4 |
| Number of Cylinders | 6 |
| Displacement, cubic inches | 302 |
| Number of Main Bearings | 7 |
| Front Main Bearing, dia. x lgth. | 2 $\frac{5}{8}$ x 1 $\frac{1}{8}$ |
| Center Main Bearing, dia. x lgth. | 2 $\frac{5}{8}$ x 1 $\frac{1}{4}$ |
| Inter. Main Brgs. (4) dia. x lgth. | 2 $\frac{5}{8}$ x 1 $\frac{3}{4}$ |
| Rear Main Bearing, dia. x lgth. | 2 $\frac{5}{8}$ x 1 $\frac{3}{4}$ |
| Crankshaft Thrust taken at rear bearing | |
| Connecting Rod Bearings, dia. x lgth. | 2 $\frac{5}{8}$ x 1 $\frac{3}{8}$ |
| Connecting Rod Length, c. to c. | 6 $\frac{3}{4}$ |
| Piston Pin, floating, dia. x lgth. | 1 $\frac{1}{4}$ x 3 $\frac{3}{8}$ |
| Rings, compression (3) | 1 $\frac{1}{8}$ |
| Rings, oil control (2) | 3 $\frac{1}{8}$ |
| Valve, intake, clear diameter | 1 $\frac{1}{8}$ |
| Valve, exhaust, clear diameter | 1 $\frac{3}{8}$ |
| Timing Gears, face width | 1 $\frac{1}{8}$ |
| Oiling System, capacity, gal., bare engine (does not include lines and filters) | 1 $\frac{3}{4}$ |
| Flywheel Housing, SAE size | 3 |
| Weight, (approx.) lb. | 1550 |

