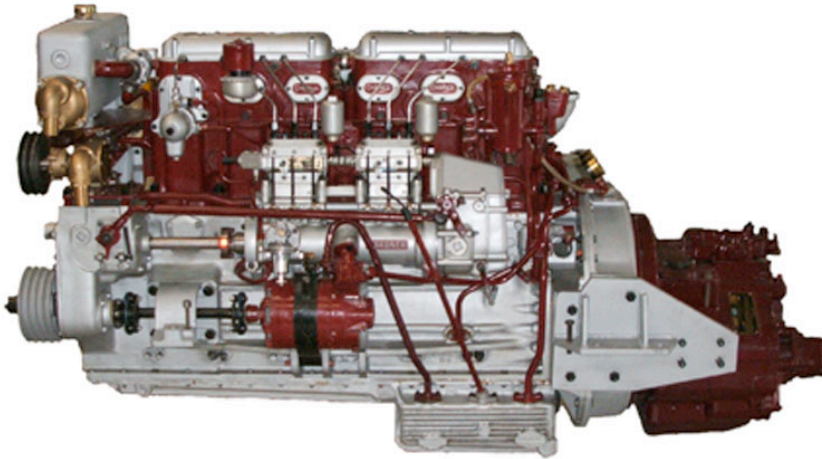


As remanufactured by

GARDNER MARINE DIESELS LIMITED



Specification

127bhp@1500rpm
150bhp@1650rpm
(Other ratings available on request)

Bore – 120.65mm (4.75 in)
Stroke – 152.4mm (6 in)
Aspiration – Natural
Capacity – 10.45 Litres
Configuration – 6 cylinders in-line

Marine Propulsion Diesel Engines:

This outstanding six cylinder 10.45 litre engine offers the greatest degree of efficiency, durability and refinement.

The specific fuel consumption rate of the engine when directly coupled to the dynamometer is the remarkably low value of 0.330 lb./per b.h.p./hour which represents an overall thermal efficiency of no less than 39.73%. If the engine is operated slightly below maximum torque, it does attain over 40% thermal efficiency.

The engine is designed for use with a fresh water closed circuit heat exchanger or keel cooler system. Coolant is circulated at high rate by a centrifugal pump and temperature is automatically controlled at all loads and speeds from idle to maximum output.

The 6LXB features a wide use of aluminium, together with a one-piece cast iron dry lined cylinder block, with detachable cast iron cylinder heads ranged in two units of three.

Crankcase: The aluminium crankcase is pre-loaded vertically by 14 cylinder holding down studs reaching to steel main bearing bridges and transversely by 12 paired bolts embracing the width of the unit at each main bearing location. The combination of this construction achieves great rigidity and facilitates quiet and durable operation of the engine. The high relative expansion and heat conductivity of aluminium permit of small initial bearing clearance and the rapid dissipation of heat.

Crankshaft: The crankshaft, which is machined all over from a die stamping of chromium molybdenum steel, has hollow bored crankpins and main journals, securing reduction of stress concentration and reduced main bearing loading. It carries a torsional vibration damper at its forward end and runs in seven pre-finished copper/lead overlay plated steel bearings and one roller bearing. Bearing areas are generous in the extreme, ensuring long service life.

Cylinder Heads: The cylinder heads carry vertical inlet and exhaust valves with dual springs, valve levers and centrally located fuel sprayers. Valves and valve seat inserts are Stellite faced and the valve levers embody controlled lubrication arrangements for valve ends, stems and push rods. A decompressing device lifts the inlet valves to facilitate hand turning of the engine for routine adjustments. Coolant transfer from cylinder block to heads is by synthetic rubber joint rings independent of the main gas joint which is of solid steel construction.

Fuel Injection: The Gardner cambox/governor assembly is trunnion mounted in permanent alignment on the engine crankcase and carries two matching tandem-mounted three-element C.A.V. B.P.F. fuel injection pumps. The fuel injection pump camshaft, which carries the centrifugal governor at its aft end, is driven by helical gears from the forward end of the valve camshaft. The drive arrangement incorporates the Gardner injection advance and retard mechanism and hand operated levers for each injection plunger are provided for priming and testing purposes.

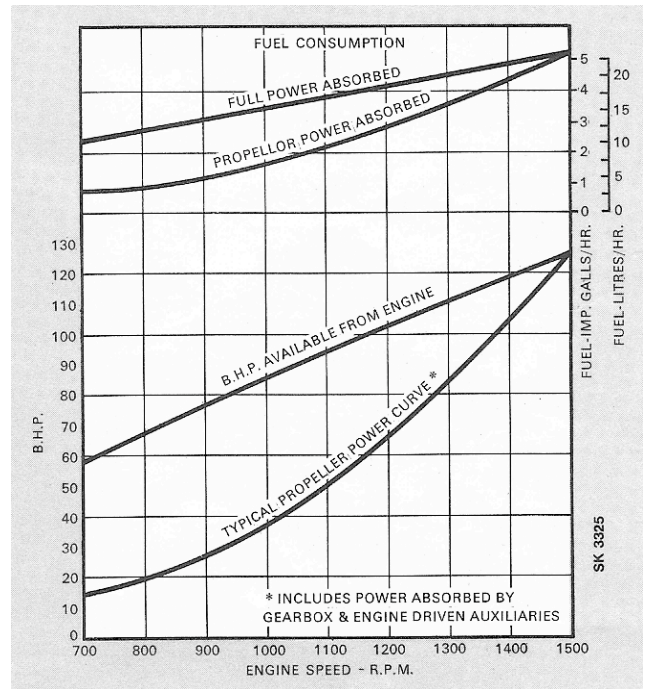
The remanufacturing process:

Every pre-remanufactured engine arrives at our Works in a different condition and thus the range of reengineering processes that will be performed is specific to that engine. In general terms, each engine is disassembled then each component is cleaned and inspected. Any worn parts are replaced, the engine reassembled and it eventually leaves our Works rebuilt to the highest standards that you expect from a Gardner engine.

Such is our confidence in the care and attention we put into the remanufacturing process that Gardner Marine Diesels provide a full written warranty.

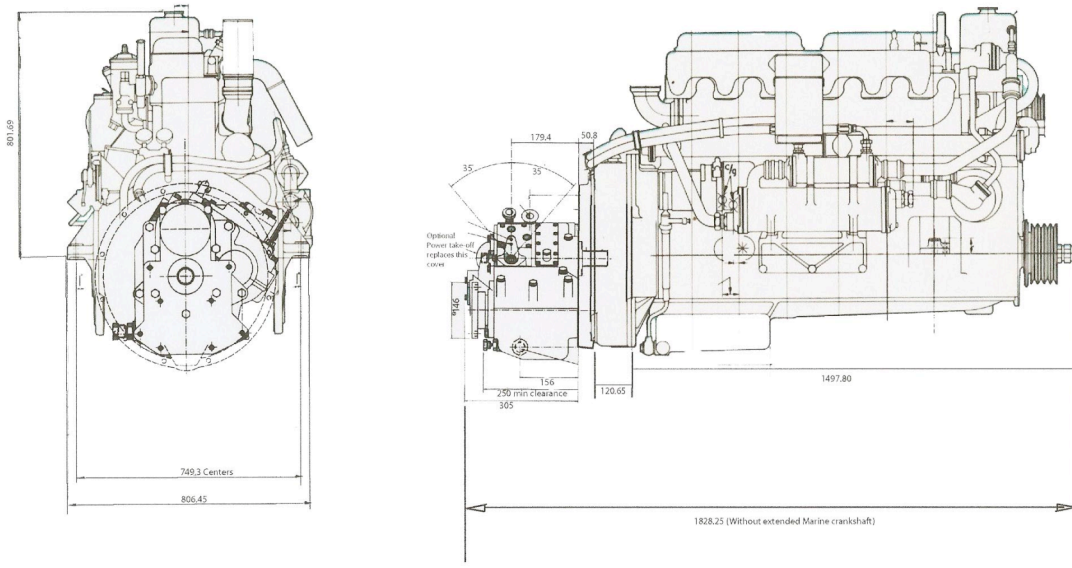
Standard Equipment:

- Fresh water heat exchanger cooling system or, alternatively, adapted for keel cooling.
- SAE 1 flywheel housing
- High inertia SAE 14 flywheel
- Fresh water circulating pump
- Up to 4 groove crankshaft mounted accessory drive
- Lub. oil cooler and full flow filter
- Lub. oil sump emptying pump
- Gearbox lub. oil cooler
- Engine feet
- Amal fuel lift pump
- Engine mounted instruments for water temperature and oil pressure
- 24 volt starter
- 24 volt 40 amp CAV AC5 alternator
- Operation and parts manual



The graph above shows the fuel consumption and propeller power curves of the 6LXB unit at the marine propulsion rating of 127b.h.p.@1500r.p.m.

The propeller power curve has been calculated from the law: propeller h.p. is proportional to r.p.m. cubed which in practise may vary slightly according to the lines of the vessel.



Drawing: 6LXB with PRM 1000 Hydraulic Gearbox
All measurements in mm

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The figures above are approximate only and should not be used designing final installation layout.

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