

VOLVO PENTA

BB 165 A



The BB 165 A — a new six-cylinder inboard engine with an output of 165 h.p. at 5000 r.p.m. The presentation of the BB 165 A has been preceded by intensive research work and intensive testing in the Volvo engine laboratory — one of the most modern in the world.

The high output of the engine and its high torque in combination with its low fuel consumption make it particularly suitable for installation in large planing boats. Its compact dimensions when installed and its low weight in relation to the output also make it easy to install even in limited spaces.

The BB 165 A is supplied with a hydraulically actuated reverse/reduction gear with alternative ratios of 1.91:1 (right-hand rotation) and 2.1:1 or 2.91:1 (left-hand rotation).

Installation is facilitated considerably by having all the electric cables collected into one single harness connected to the engine with a ready-for-use connector for the instrument panel.

The many other outstanding features of the engine include:

- Seven-bearing induction-hardened crankshaft with vibration damper. Lead-bronze main and connecting rod bearings.
- Stellite-flashed exhaust valves and hardened intake valves of the self-rotating type which seal against replaceable seats.

- Hyper-effective oil cooler and lubricating oil filter which keep the lubricating oil at its optimum operating temperature and guarantee low bearing wear and maximum dependability.

- Three Zenith-Stromberg horizontal carburetors, specially designed so that they automatically provide the correct fuel-air mixture under all conditions of operation.

- Intake air silencer with flame arresters.

- Fuel pump driven from the camshaft and fitted with a fuel filter and also a hand primer.

- The electrical system includes an alternator with a particularly high charging capacity and is also fully protected from corrosion even down to the electric cable flat pin connectors.

- High location starter motor and alternator and a completely enclosed flywheel to eliminate the risk of bilge water damage.

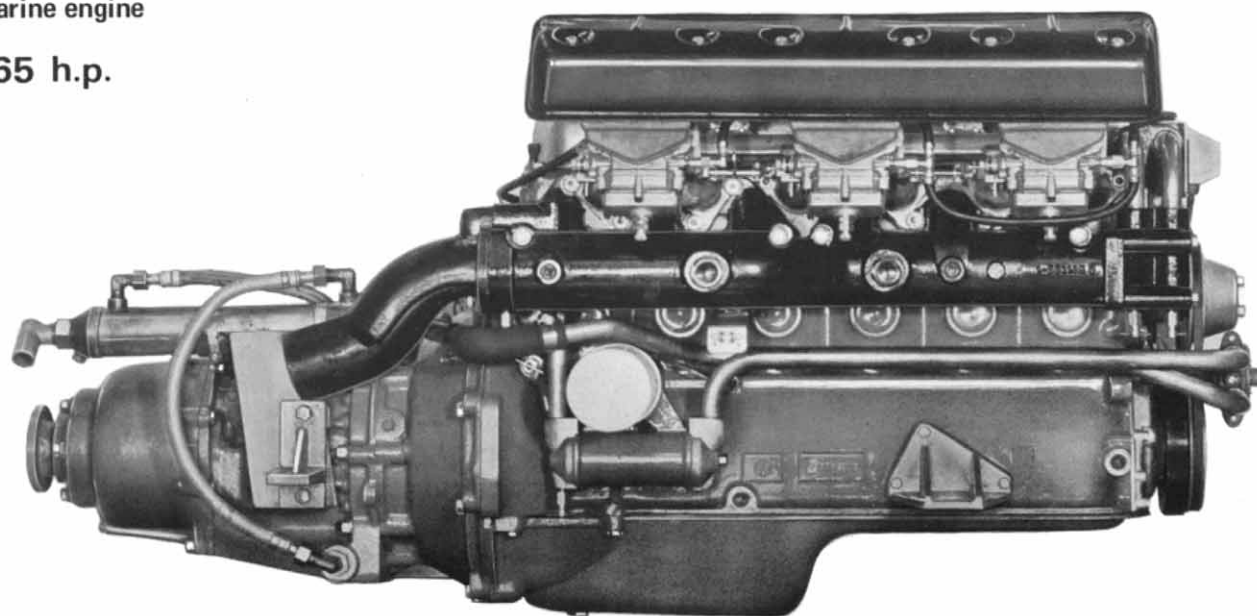
- Water-cooled exhaust manifold of top quality alloy cast-iron. Water-cooled exhaust elbow for connecting up to rubber hose.

- Rubber mountings with adjustable installation height as extra equipment.

- Instrument panel with electric revolution counter, temperature gauge and warning lamps for charging and oil pressure.

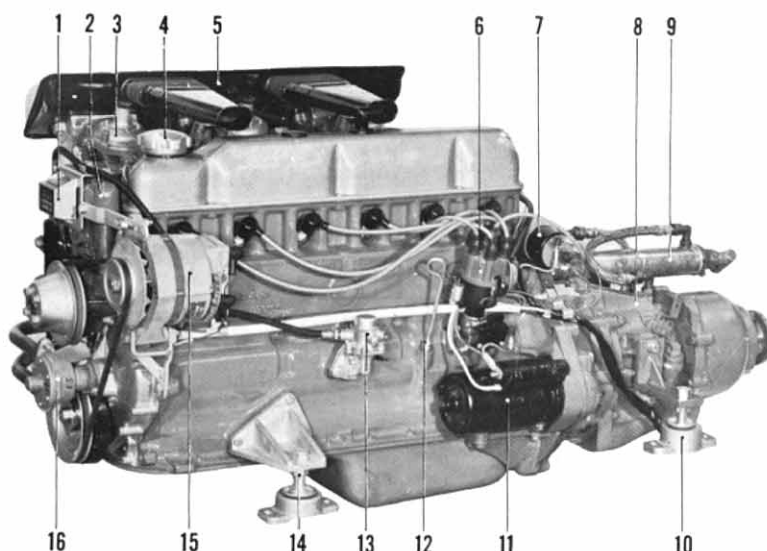
**Volvo Penta six-cylinder, four-stroke
marine engine**

165 h.p.

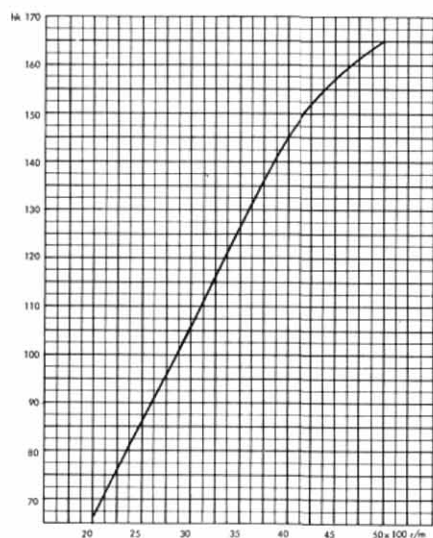
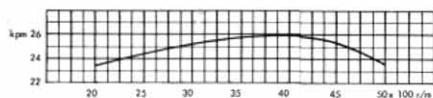


VOLVO PENTA MARINE ENGINE TYPE BB 165 A

1. Transistorized regulator
2. Thermostat housing
3. Carburetors (3), Zenith Stromberg
4. Oil filler
5. Air intake silencer with flame arresters
6. Distributor
7. Ignition coil
8. Hydraulically actuated reverse/reduction gear type "Velvet Drive"
9. Oil cooler
10. Adjustable rear rubber mountings (extra)
11. Starter motor
12. Oil dipstick
13. Fuel pump
14. Adjustable front rubber mountings
15. Alternator, 12 V, 38 A.
16. Sea-water pump



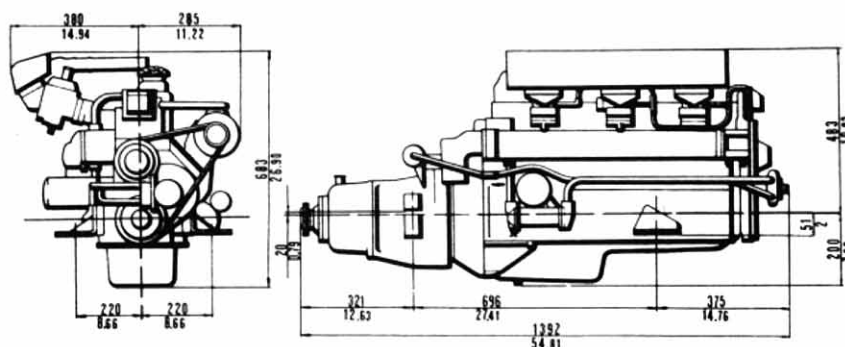
BB 165A



DATA

Type of operation . . . Four-stroke carburetor engine with overhead valves
 Type designation BB165A
 Output (SAE) 106-165 h.p.
 Engine speed, r.p.m. 3000-5000
 Number of cylinders 6 in line
 Capacity, litres (cu.in.) 2.979(182)
 Bore/stroke, mm (in.) 88.9/80(3.50/3.15)
 Compression ratio 9.2:1
 Total weight, including reverse gear, kg(lb.)approx. 290(640)
 Max. engine inclination 18°

DIMENSION DRAWING (engine with reverse/reduction gear)



We reserve the right to carry out modifications



AB VOLVO PENTA

Box 392, 401 26 Göteborg 1, Sweden
 Telephone 23 54 60
 Cable: Penta
 Telex 207 55