# **VOLVO PENTA**

## MD 2B



Volvo Penta MD 2 B is a 2-cylinder, 4-stroke marine diesel engine with direct injection. The exceptionally compact outer dimensions and the considerably powerful propeller thrust make the engine specially suitable for installation in small fishing boats, work boats, pleasure boats and as an auxiliary unit in sailing craft.

MD 2 B is a further development of the well-known MD 2 engine. It has many components in common with MD 1 B and MD 3 B, which gives special advantages from the view-point of service and parts supply.

Direct injection ensures immediate starting on diesel fuel oil without any preheating, for example, with glow plugs.

The MD 2 B is very economical. To a great extent this is due to the effective design of the combustion chamber and also to the fact that the fuel injection pump is fitted with a centrifugal-type governor, which always supplies the engine with the correct fuel quantity for the varying loads and speeds.

MD 2 B is delivered with the easy operating "Mono-Shift" reverse gear which requires specially small forces.

The reverse gear is built on the cone clutch in the wellknown aquamatic drives. Both speed and reverse gear are operated with the same control lever e.g. "fingertip control".

The engine is supplied with the following alternative equipment:

- With manual start and reduction/reverse gear type RB ratio 1.87:1.
- With starter-generator and reduction/reverse gear type RB ratio 1.87:1.
- With starter motor, alternator and reduction/reverse gear type MS ratio 1.91:1.
- With starter generator and reduction/reverse gear type RB ratio 3.42:1.

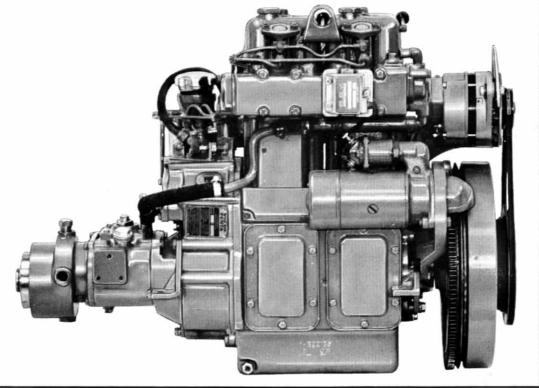
Here are some of the outstanding features included in the standard equipment:

- Feed pump with hand primer for fuel and with effective fuel filter. This makes it possible to locate the fuel tank lower than the engine.
- Built in injection pump with all speed governor for accurate speed governing. The governor requires only small manoeuvre forces from the speed control.
- Full-flow lubricating oil filter of the "Spin-On" type easy to change.
- Thermostat-controlled cooling system means that the engine always runs at its most favourable operating temperature. Sea-water pump with an impeller made of neoprene rubber.
- Effective intake silencer.
- Decompression device and raised hand starter facilitate manual starting and the cold starting device also provides easy starting in cold weather.

#### **VOLVO PENTA**

2-cylinder, 4-stroke marine diesel engine with direct injection

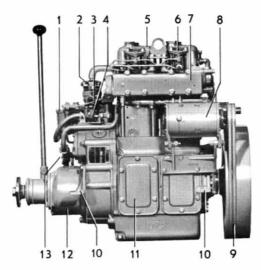
25 h.p.







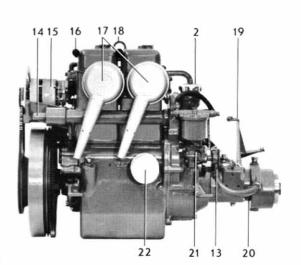
#### **VOLVO PENTA MARINE DIESEL ENGINE** TYPE MD 2B





Instrument panel is included as standard on elec. equipped engines

- 1. Fuel filter
- Filler cap for oil
- 3. Fuel injection pump
- Speed control
- Rocker arm casing
- 6. Injector
- Water-cooled exhaust manifold
- Starter generator (only engines with elec. equipment)
- Flywheel
- Engine mounting
- Inspection cover
- Reduction/reverse gear type RB (ratio 1.87:1)
- Sea-water pump
- 14. Hand start shaft
- Alternator (included as standard on engines with MS Red/reverse gear)
- 16. Decompression device
- 17. Air silencer
- 18 Lifting eyelet
- Bracket for manoeuvring
- cables Reduction/reverse gear
- type MS (ratio 1.91:1)
- Feed pump
- 22. Spin on oil filter



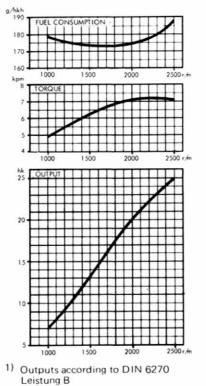
#### **EXTRA EQUIPMENT**

Water-cooled exhaust elbow Flexible engine mounting Flexible propeller shaft coupling Fuel tank Pulley

Water-cooled exhaust pipe Dry exhaust pipe

Bottom connection parts Alternator 12V-38A Remote control cold-starting control Elec. bilge pump Propellers, shafts and sleeves Controls and cables Water separator for fuel Elevated hand start

#### **ENGINE DIAGRAM**

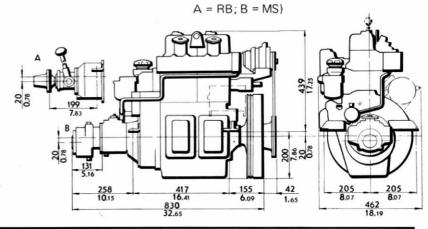


We reserve the right to carry out modifications

#### DATA

peration: 4-stroke diesel with direct injection
ontinuous output, h.p. (DIN) 1) at r.p.m
ax. torque kpm (lb.ft.)/r.p.m
ore, mm (in.)
roke, mm (in.)
apacity, cm <sup>3</sup> (cu.in)
alves
ompression ratio
ax, inclination while running
et weight, including reduction/reverse gear, approx. kg (lb.)

## **DIMENSION DRAWINGS** (engine with reduction/reverse gear





### AB VOLVO PENTA

Box 392, S-401 26 Göteborg 1, Sweden

Tel: 23 54 60 Telegram: Penta Telex: 207 55