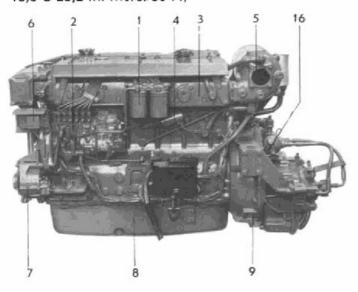
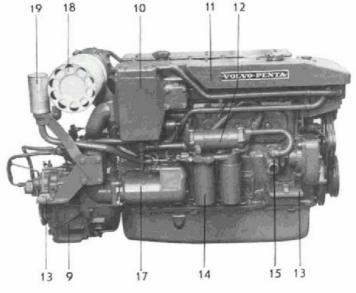
# VOLVO PENTA

# TAMD 60B



6-cylinder, direct-injected 4-stroke diesel engine with turbo-charging and after cooler. 173 kW, 235 hp. Fly-wheel power at sea-leavel conditions. (Barometric pressure 760 mm hg/ 15,0°C 29,2 in. merc./60°F.)





#### STANDARD EQUIPMENT

ENGINE BODY - Cylinder block and cylinder heads of specialalloy cast iron. Double cylinder heads with steel gaskets. Replaceable wet-type cylinder liners. Pistons of light-alloy with cast iron ring carriers. Two compression rings and one oil scraper ring. All rings are chromed. Crankshaft and camshaft are journalled in seven bearings and have surface-hardened bearing races. Main- and big-end bearing shells of lead-bronze. The camshaft, drive outputs, sea-water, injection and lubricating oil pumps are gear-driven. Overhead valves and replaceable valve seats.

The engine is delivered with engine brackets (13) for fixed mounting.

FUEL SYSTEM - Injection pump with centrifugal governor (2) and feed pump as well as flexible hoses with fuel pipe connections for the suction and return lines. Electrically operated stop device (4). Twin fine filters (1).

COOLING SYSTEM - Fresh-water cooling with heat exchanger and expansion tank (11) removable insert. 1" sea-water pump (15). The engine temperature is regulated by means of two thermostats.

LUBRICATING SYSTEM - Pressure lubricating system with double lubricating oil filters of spin-on type (14).

Sea-water cooled oil cooler (12). Lubricating oil sump (8) with oil dip-stick on right or left side. Oil separating filter for crankcase ventilation (19).

TURBOCHARGING SYSTEM - Exhaust gas driven turbo-compressor for supercharging the intake air (5). Fresh-water cooled turbine housing. Sea-water cooled aftercooler (10), for cooling compressor air, which gives a higher degree of efficiency. Air cleaner with changeable filter(18).

EXHAUST SYSTEM - Fresh-water cooled exhaust manifold (3). The turbo-compressor exhaust outlet has a flange for connection of exhaust line.

ELECTRICAL SYSTEM - 12 V starter motor 3 kW (4 hp) Electrical stopping device.

### EQUIPMENT

Volvo Penta electrical system with cut-out relay. This relay prevents engagement of the starter motor unintensionally when the engine is running.

Instrument panel, 12 or 24 V, with rheostat and cable harness 6 m (21 ft). Ready-connected "plug-in" contacts.

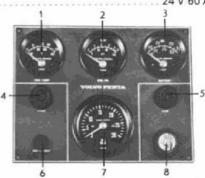
Alternator alternatives.

Alternator	 	12 V 38 A
Alternator	 	24 V 25 A
Alternator	 	24 V 60 A

Instrument panel with:

- Temperature gauge.
- 2. Oil pressure gauge.
- 3. Voltmeter.
- 4. Start contact.
- Stop contact.
- 6. Rheostat, instrument lighting.
- 7. Rev counter.
- 8. Key switch.

Alt. 8.



POWER TRANSMISSION - The engine can be supplied with hydraulically operated reverse gear equipped with oil cooler (16) and pre-drilled propeller shaft flange according to the following alternatives:

- Alt. 1. TD MG 502 (10° down angle) red. 1.5:1 for L-H and R-H prop. (9).
- Alt. 2. TD MG 502 (10° down angle) red. 2:1 for L-H and R-H
- Alt. 3. TD MG 502 (10° down angle) red. 2.5:1 for L-H and R-H prop. (9).
- BW 73 CR red. 2:1 for R-H prop. Alt. 4.
- Alt. 5. BW 73 CR red. 3:1 for L-H prop.
- Alt. 6. BW V-drive red. 1.51:1 for R-H prop.
- Alt. 7. BW V-drive red. 1.53:1 for L-H prop.
- BW V-drive red. 1.99:1 for R-H prop. Alt. 9. BW V-drive red. 1.98:1 for L-H prop.

#### EXTRA EQUIPMENT -

#### FUEL SYSTEM

Water-separating fuel filter with glass or metal housing.

#### COOLING SYSTEM

Fresh-water filter. Cooling-water intake complete. Separate expansion tank. Sea-water filter.

#### **EXHAUST SYSTEM**

Water-cooled exhaust elbow. Exhaust rubber hose for wet exhaust line. Hull through-fitting, complete. Flexible compensator hose, dry. Dry exhaust elbow. Compensator for straight installation. Joint piece (6" to 5") for wet exhaust line.

#### POWER TRANSMISSION

Vee-belt pulley for crankshaft.

#### **ELECTRICAL SYSTEM**

Charging distributor for charging 2-battery system.

Master switch.

Instrument panel with, among others, hourmeter, warning lamps, warning siren and pressure gauge for reverse gear oil pressure and turbo charging pressure.

Instrument panel with rudder indicator and tank gauge.

Cable harness extension.

#### **ENGINE MOUNTING**

Flexible engine mounting.

#### **BOAT ACCESSORIES**

Hydraulic pump. Oil scavenging pump, electrical.

Oils. Paints.

Anti-freeze.

Tool kit.

#### CONTROLS AND CONTROL SYSTEM

VP single-control lever for both speed and forward-reverse operation, top mounted or side-mounted. Single or twin installation S-type control. Topmounted, only speed regulation. Control cables.

Dual station control unit.

#### PROPELLER EQUIPMENT

Flexible propeller shaft coupling. Propeller shafts. Propeller shaft sleeves. Propellers.

#### DATA \_

Type of operation . . . . . . . . . . . . . . . . . 4-stroke turbo-charged after-cooled diesel with direct injection and overhead valves Type designation ...... TAMD 60B Flywheel power at (221 hp at 2800 r/min) Propeller shaft output Total weight, engine, compl. with reverse gear TD 502 approx .750 kg (1655 lb.)

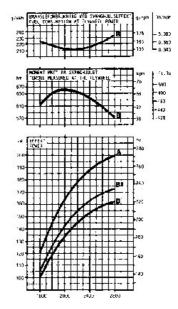
Curve A: Highest flywheel power obtainable in the test room without thermal overload. This power corresponds to DIN 6270 "Höchstleistung".

Curve B1: Flywheel power for pleasure craft duty (sea level conditions). Air pressure – 1,01 bar (29.2 in merc), temperature = 15.0°C (60°F).

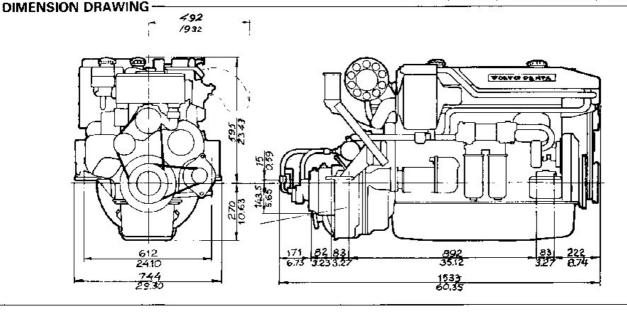
Curve B: Propeller shaft power for pleasure craft duty according to DIN 6270 Leistung B (corresponds for practical use also to 1-hour's power according to BS 649, 1958). Only occasional use at full engine throttle. Normal cruising is expected to be at a comfortable part-throttle operation.

The flywhool power for the engine is approx 4% higher than the indicated values for

All measurements apply to a run-in engine. See separate sheet "Engine Diagram" Group 21 no 100-1.



1 hk = 1 hp (metric system) = 0,986 HP (Imp US meas, system)



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We reserve the right to carry out modifications

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