

TAMD 72A

Special Light Duty (SLD)

6-cylinder, 4-stroke, direct injected turbo-charged marine diesel engine with after-cooler – crankshaft power* 316 kW (430 hp)

* Power rating – see Technical Data

Compact and powerful

The TAMD 72A is a high-performance engine with a very long service life. The engine has been developed for fast planing craft of up to 50 feet. It is also designed for easy, rapid and economical installation.

High torque

The engine is turbo-charged with waste-gate regulated exhaust gas flow and after-cooled. The engine produces high torque at low engine speeds. This provides quick response and excellent acceleration characteristics over a wide range of engine speeds.

Durability and low noise levels

The Volvo in-line six cylinder engine is a well balanced unit with even, vibration-free operation and low noise levels which together, provide the highest level of onboard comfort. The torsionally rigid engine block and crankcase are designed to withstand many hours of demanding operation.

To maintain a stable working temperature in both cylinders and combustion chambers, the engine is equipped with fresh water-cooled oil cooler and piston cooling.

The engine is also fitted with replaceable cylinder liners and valve seatings to ensure maximum durability and service life of the engine. A low-profile cast aluminium sump is also standard.

Low exhaust emission levels

Efficient air-flow and a high pressure injection system ensure an optimum mixture of fuel and air. This greatly contributes to reduced noxious emission levels. The direct injection system ensures low fuel consumption.

Marine electrics

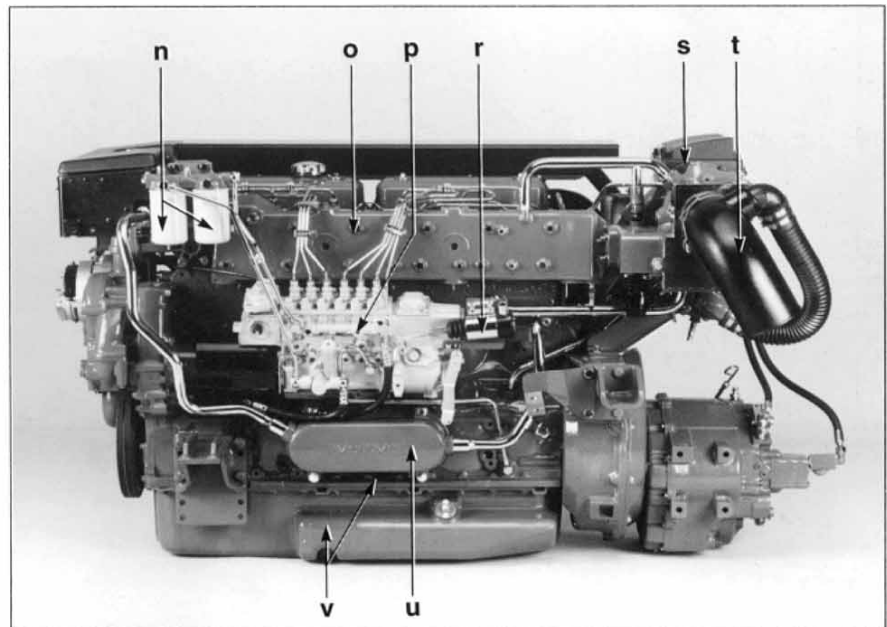
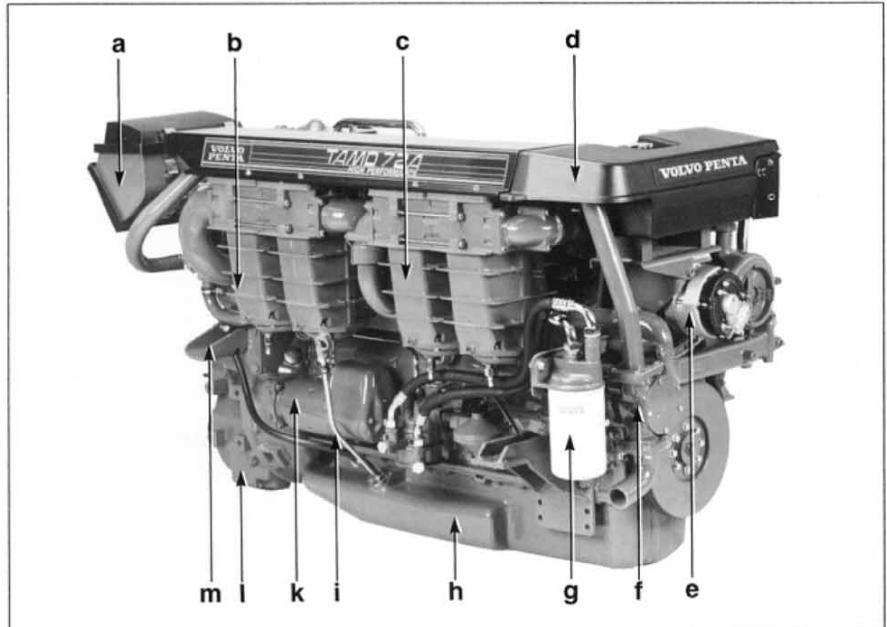
The two pole electrical system is specifically adapted to demanding marine environments with remote and flex-mounted senders and moisture proof connectors. Zinc anodes are fitted as standard for effective protection against galvanic corrosion.

Ease of service and maintenance

Gear-driven sea water and fresh water pumps together with a front-mounted oil filter contribute to ease of service and maintenance.

Comprehensive service network

Volvo Penta has a well established network of authorized service agents in more than 100 countries throughout the world. These service centres offer Original Volvo Penta parts as well as skilled personnel to ensure the best possible service.



The engine shown may vary from the standard unit.

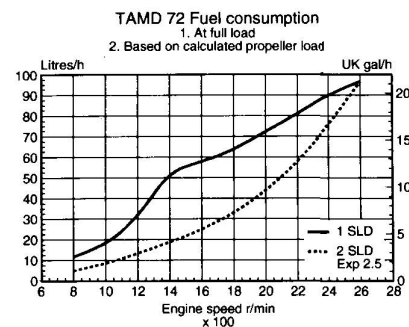
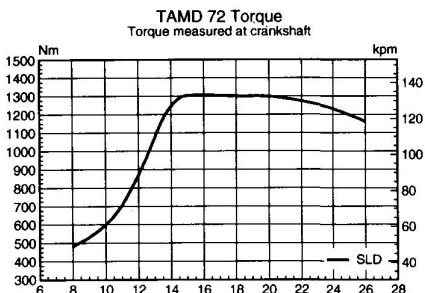
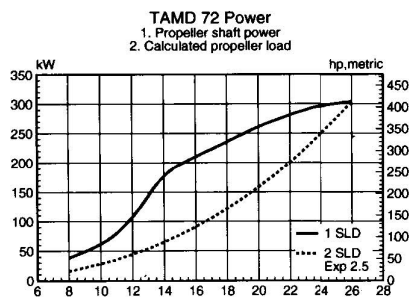
- | | | |
|-----------------------------|------------------------------------|-----------------------------------|
| a. Air filter, paper type | g. Front mounted oil filter | o. Wet exhaust manifold |
| b. Aftercooler, watercooled | h. Oil sump | p. Injection pump |
| c. Heat exchanger | i. Oil dipstick | r. Stop solenoid |
| d. Thermostat housing | k. Starter motor | s. Turbo charger |
| e. Alternator | l. Reverse gear | t. Exhaust elbow, wet type |
| f. Sea water pump | m. Adjustable rear engine mounting | u. Oil cooler |
| | n. Twin fuel filter | v. Fuel pipes for tank connection |

**VOLVO
PENTA**

General data

Type designation	TAMD 72A
No of cylinders	6
Configuration	4-stroke direct-injected turbocharged and charge air cooled diesel engine
Fuel grade EN590	1D or 2D
Bore, mm (in)	104.7 (4.12)
Stroke, mm (in)	130 (5.12)
Displacement, litres (in ³)	6.73 (411)
Compression ratio	15.6:1
Crankshaft power at crankshaft speed, r/min	
SLD, kW (hp) (2600 r/min) ¹⁾	316 (430)
Torque ²⁾	
SLD, Nm (ft. lb)	1300 (959)
Spec. fuel consumption ²⁾	
SLD, g/kWh (lb/hph)	255 (0.42)
Dry weight, kg (lb)	890 (1962)
Dry weight with MG507A, kg (lb)	1068 (2355)

- 1) Technical data according to ISO 3046 Fuel Stop Power. Fuel 40°C (104°F), lower calorific value of 42700 kJ/kg and density of 840 g/litre at 15°C (60°F)
- 2) Torque and specific fuel consumption apply at the specified crankshaft output.



Basic engine equipment

Flywheel housing, flange size SAE 2
 Engine brackets
 Freshwater cooled turbocharger and exhaust manifold
 Seawater cooled aftercooler
 Air cleaner, paper type
 Fuel injection pump with centrifugal regulator and smoke limiter
 Oil and fuel filters of spin-on type
 Fresh water cooled oil cooler
 Starter motor 24 V
 Heat exchanger
 Oil separating filter for crankcase ventilation
 Pump coupling cover
 Two-pole electrical system, 24 V
 Alternator, 24 V/60 A
 Stop solenoid, 24 V
 Oil pressure and coolant temperature senders
 Alarm switches for oil pressure and coolant temperature
 Electrical terminal box with semi-automatic fuses
 Flywheel
 Attachment for control cable, type 333 or 443
 Engine frame
 Crankshaft power 316 kW (430 hp) at 2600 r/min

Technical description

- Engine block and cylinder heads are made of cast iron alloy.
- Two cylinder heads. A flame barrier protects the cylinder head gasket.
- Replaceable cylinder liners and valve seatings.
- Nitrocarbonized crankshaft with seven bearings
- Oil-cooled, forged aluminium pistons.

- Three piston rings the upper of which is of the keystone type.
- Identical matrix for heat exchanger and aftercooler make them fully interchangeable.

Fuel system

- Injection pump with centrifugal governor and smoke limiter. The operating lever has low setting forces.
- Fuel feed pump
- High pressure fuel lines
- Twin fine fuel filters
- Electrical fuel stopping device

Cooling system

- Seawater-cooled charge air cooler
- Gear-driven freshwater pump and front mounted sea water pump with neoprene impeller.
- Heat exchanger cooler with seawater pump

Lubrication system

- Fresh water cooled oil cooler
- Frontmounted oil filter of spin-on type
- By-pass oil filter

Turbo-charger

- Freshwater cooled turbo-charger with waste-gate for high torque at low engine speed.

Electrical system

- 12 or 24 V electrical system incl alternator, 60 or 40 A respectively, and charging sensor.
- Electrical terminal box with automatic fuses.

