

AQ D21 B / 280



4-cylinder, 4-stroke diesel engine with swirl chambers. Outboard drive 280D

STANDARD EQUIPMENT

ENGINE BODY — Cylinder block made of cast iron and cylinder head of light-alloy. Pistons made of light-alloy with three compression rings and one oil scraper ring. Crankshaft journalled in five bearings. Overhead valves with replaceable seats. Tool kit for minor adjustments supplied with engine.

FUEL SYSTEM — Rotor-type injection pump with mechanical governor for accurate speed regulation (3). Feed pump (15) with hand primer and flexible hoses with fuel pipe connection for suction and return lines. Fine filter (18) with water separator.

COOLING SYSTEM — Thermostat-controlled fresh-water cooling with heat exchanger (2) and circulation pump. Expansion tank for firm or separate mounting (9). Sea-water pump with neoprene rubber impeller (1).

LUBRICATING SYSTEM — Pressure lubricating system with full-flow lubricating oil filter of the spin-on type (5). Cleanable, tubular-type oil cooler (4). Sealed crankcase ventilation.

INTAKE SYSTEM — Intake silencer (13) with filter.

EXHAUST SYSTEM — Sea-water cooled exhaust manifold and exhaust manifold elbow of cast iron (12). Complete exhaust line for connection to the drive.

ELECTRICAL SYSTEM — Corrosionproof 12 V electrical system, with complete instrument panel. Main fusing with built-in spare fuse is mounted on engine. Brushless alternator with built-in transistor regulator, 35 A, 420 W (17). Starter motor output 1.3 kW (1.8 h.p.) (16). Automatic alarm for oil pressure and water temperature. Concerning instrument panel, see reverse side.

FRONT ENGINE MOUNTING — The engine is supplied with support member with rubber mounting (14).

OUTBOARD DRIVE — Complete with mounting collar, rubber-suspended flywheel housing and installation parts. All gears are of the helical cut bevel type, designed for continuous operation in either direction of rotation.

Cone clutch (patented) of Silent Shift type provides reliable operation and quiet engagement with small manoeuvring forces.

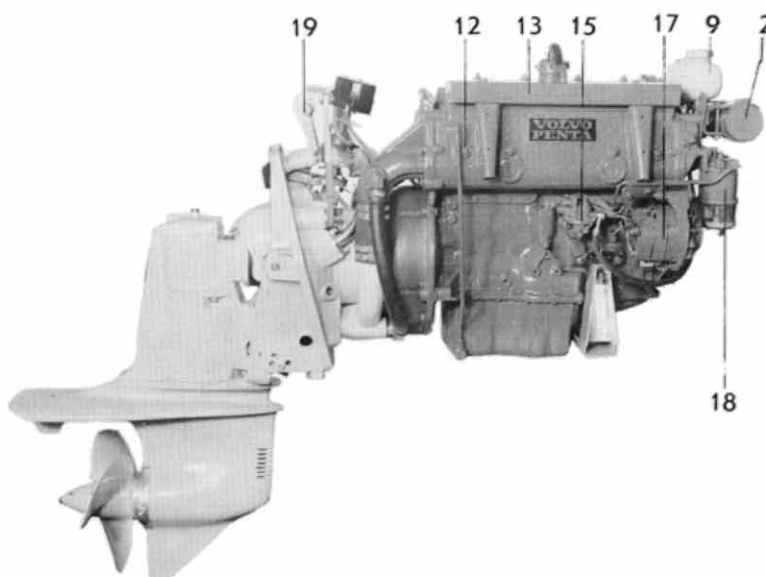
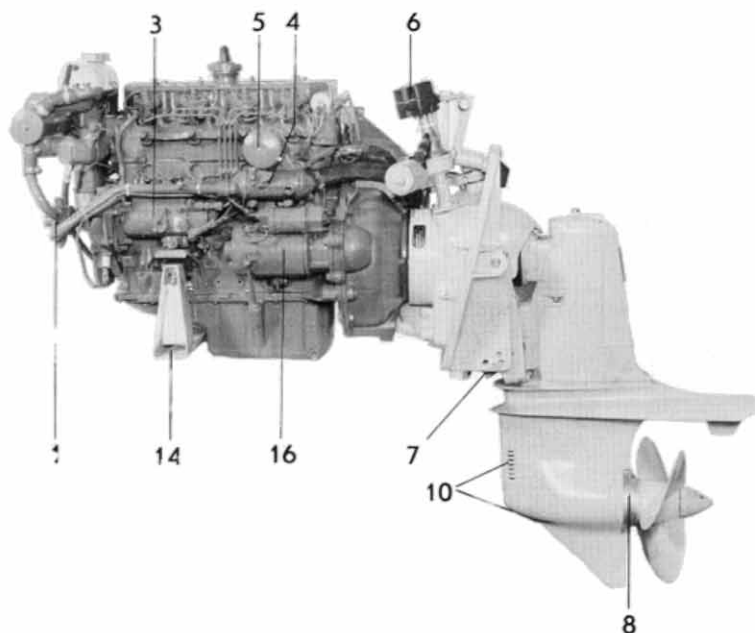
The drive can be tilted up 60°.

The shift mechanism has an easily adjustable link rod for altering the propeller direction of rotation from left-hand to right-hand.

Steering arm (19) with connection for steering cable. Two self sacrificing zinc anodes protect the outboard drive against corrosion (8). Cooling water intake at front and bottom of drive for cooling water supply to engine (10).

Reversing pawl (7) of patented design permits the drive to kick up when striking underwater objects. Yet holding the drive in downward position when going in reverse or pulling back the throttle rapidly in forward motion.

Electro-mechanical power tilt (6) with completely plastic embedded electrical system.



EXTRA EQUIPMENT

FUEL SYSTEM

Water-separating filter with or without flexible houses
 Water separator
 Fuel line kit with copper piping and installation parts
 Cap with connections for fuel tank

COOLING SYSTEM

Extra cooling water intake for mounting on transom

ELECTRICAL SYSTEM

Charging distributor for charging 2-battery system

Extra instruments: Hourmeter, fuel- and water gauge, voltmeter, oil pressure gauge, rudder indicator.

Instrument panel for extra instrument
 Master switch

Cable harness extension for instrument panel

OUTBOARD DRIVE

Extensions for outboard drive

BOAT ACCESSORIES

Electrically operated bilge pump
 Original paint
 Oils
 Electro-mechanical trim tabs

CONTROLS AND CONTROL SYSTEM

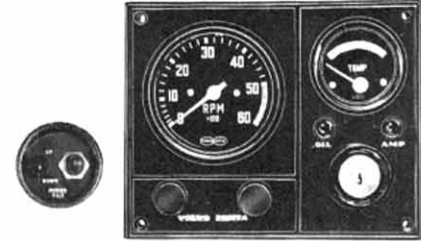
VP single-control lever for both speed and forward-reverse operation, top-mounted or side-mounted. Single or twin installation.
 Control cables
 Steering gears
 Steering lock
 Steering wheel
 Steering cables
 Ball joint for steering cable
 Tie-bar kit for twin installation

AQUAMATIC PROPELLERS

DATA

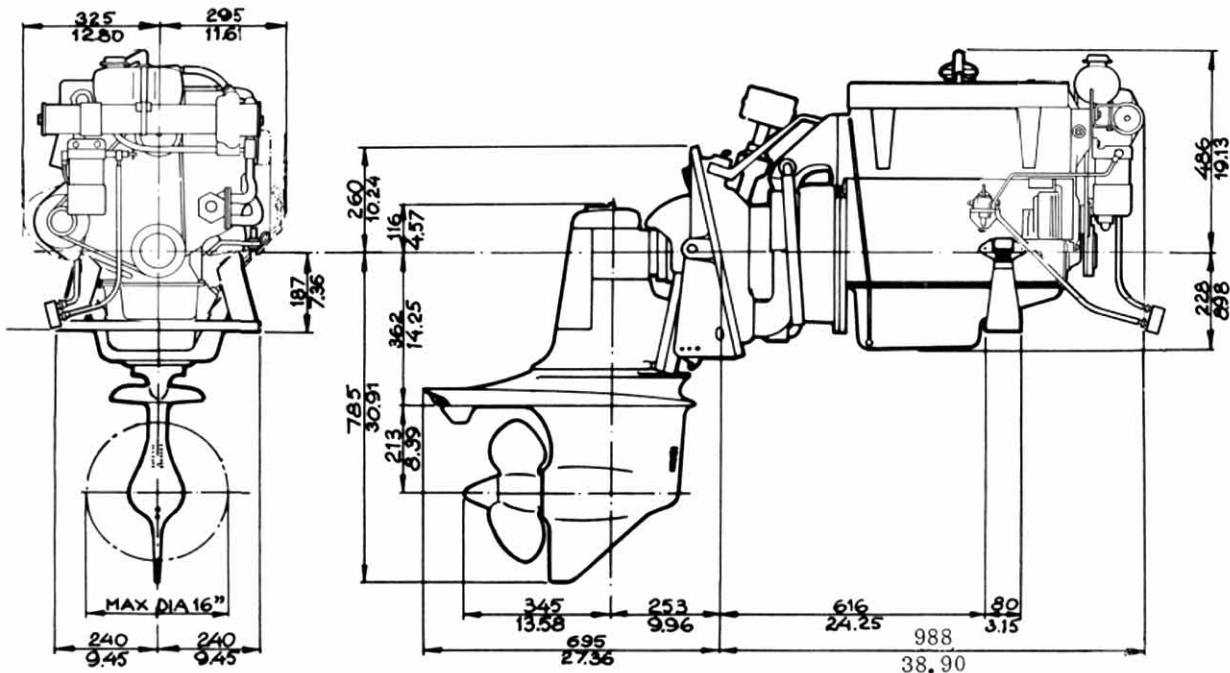
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| Type of operation | 4-stroke diesel engine with swirl chambers |
| Designation | AQD21B/280D |
| Max. output ¹⁾ kW (hp) | 47 (64) |
| Max. operating speed, r/s (rpm) | 75 r/s (4500 rpm) |
| Number of cylinders | 4 in-line |
| Capacity, dm ³ (in ³) | 2.112 (129) |
| Bore/stroke, mm (in) | 90/83 (3.54/3.27) |
| Valves | overhead |
| Outboard drive, type design. and red. | 280D/2.15:1 |
| Total weight, kg (lb), approx. | 330 (725) |

1) Max. flywheel output acc. to DIN 6270 Leistung B



The instrument panel is provided with a key switch, rev counter, temperature gauge, warning lamps for battery charging, oil pressure and for connection of glow plugs, switch for instrument panel light and one extra switch. Cable harness, 7 m (23 ft.) in length, with plug-in contact already fitted. Control lamp and switch for drive lift and 7 m (23 ft.) electric cable harness with plug-in contact are also supplied.

DIMENSION DRAWING



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