

VOLVO PENTA

AQUAMATIC 170/280



The Aquamatic 170/280 is a six-cylinder Aquamatic model with an output of 170 h.p. The design of the unit is based on the extensive experience and the advanced technique that has made the Aquamatic one of the best known marine power units in the world for such a long time. The engine with its drive and equipment is designed and built right from the very start for heavy duty marine operation and this, together with the renowned high quality of manufacture, provides maximum running reliability, excellent economy and durability.

The high output of the engine and its high torque in combination with the low fuel consumption make it particularly suitable for large boats. Its compact dimensions when installed and its low weight in relation to output also make possible installation in fast light-weight boats. On the basis of scientific calculations and practical tests it has been found possible to adapt the ratio of the drive so as to utilize engine torque to its maximum. This ensures maximum tractive effort, even in the economical moderate engine speed range.

Dependable at sea

- The engine and outboard drive are fitted together through one single hole in the transom through the medium of a mounting collar in which the rear rubber mounting, the power transmission, the exhaust and cooling channels, steering, lift and control cables are built in.

- The sturdy dimensions of the mounting collar and the large contact areas with fully protected rubber seals against the transom mean that the engine and the outboard drive form a dependable and outstandingly seaworthy unit with the boat — even in the case of extreme stresses.

- The location of the exhaust connection at a satisfactory level above the waterline of the boat and effective protection at all joints provide full security against water forcing its way in.

Reliable running

- Particularly extensive test operations of the engine and the outboard drive in one of the most modern engine laboratories in the world and on marine test circuits guarantee unexcelled lifetime and running reliability.

- The engine is dimensioned for the utilization of full output and has stellite-flashed exhaust valves and hardened intake valves of the self-rotating type which seal against replaceable seats.

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

Convenient for servicing

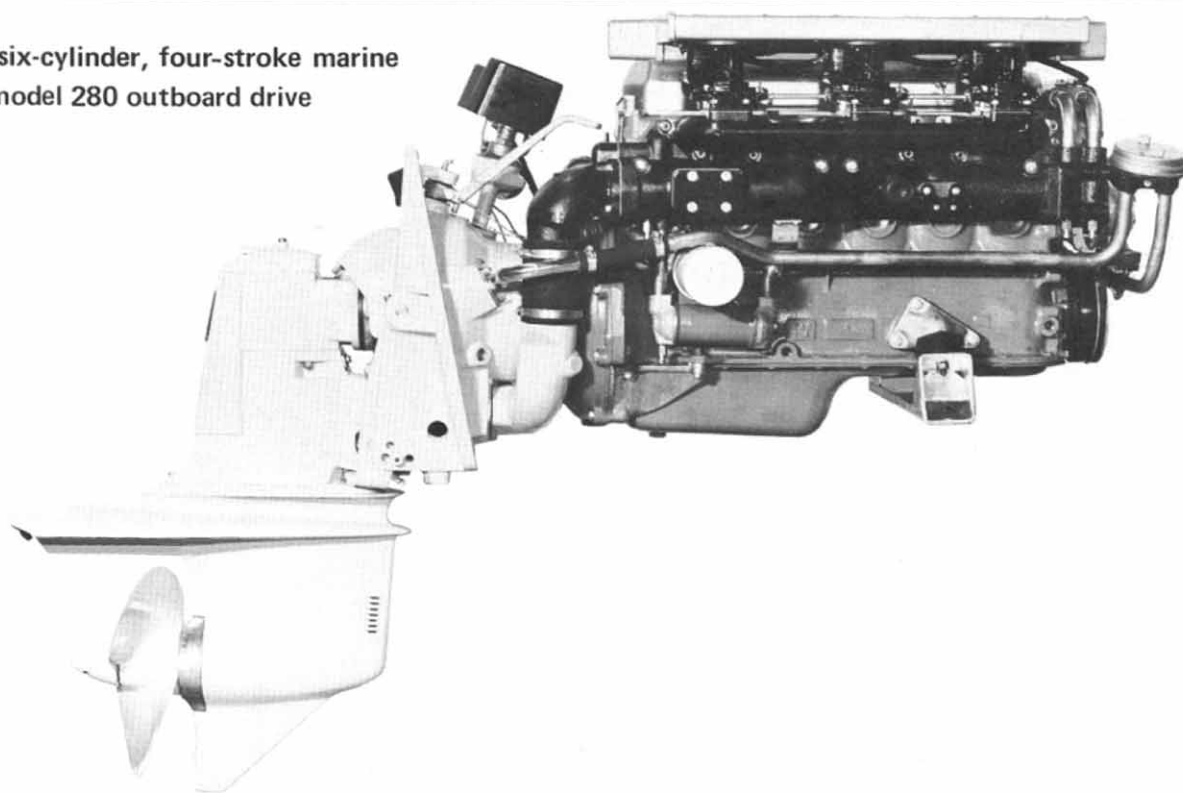
- The Aquamatic 170/280 is a modern engine, easy to use and requires no complicated maintenance.

- Service inspection free of charge after 20 hours running and also an extensive factory guarantee provide full servicing security.

- Volvo Penta has built up a well-developed service organization all over the world with workshops carrying good stocks of spares and also with specially-trained personnel at your disposal. You always have Volvo Penta service within easy reach no matter where you are.

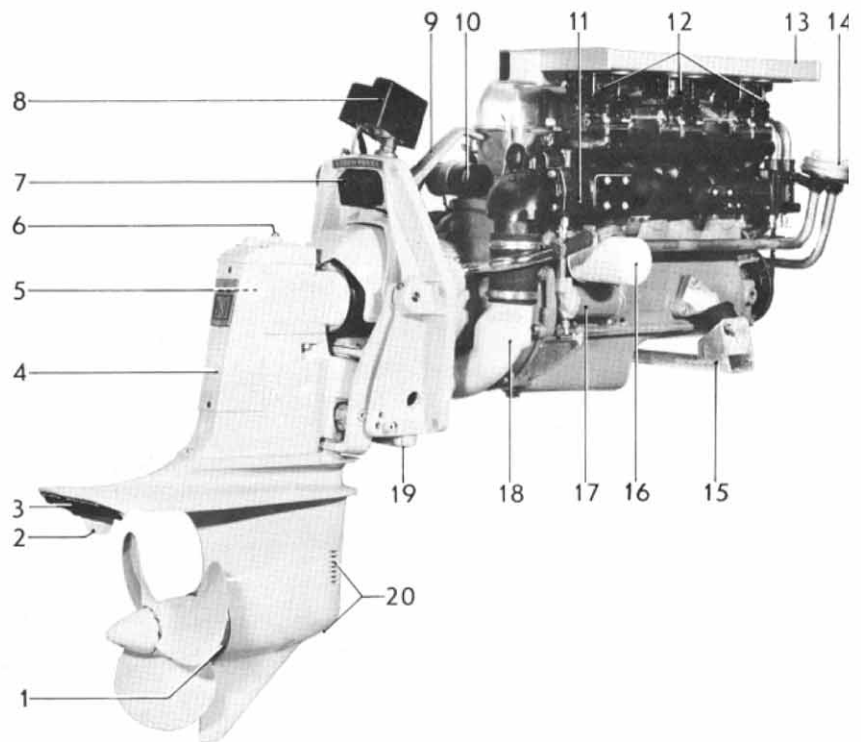
Volvo Penta six-cylinder, four-stroke marine engine with model 280 outboard drive

170 h.p.



AQUAMATIC 170B/280C

1. Anti-corrosion zinc ring
2. Trim tab
3. Exhaust outlet
4. Casing over control units
5. Oil filler plug
6. Oil dipstick
7. Rubber damper for drive tip-up
8. Electro-mechanical lift
9. Steering rod with connection for steering system
10. Ignition coil
11. Water cooled exhaust manifold
12. Down-draught carburetors (Solex)
13. Air intake silencer and flame arresters
14. Water filter
15. Front engine mounting with rubber block
16. Spin-on full-flow oil filter
17. Cleanable oil cooler of tubular type
18. Exhaust pipe
19. Zinc plate
20. Water intakes



Outboard drive 280

Outboard drive 280 is a modification of the well-known 270-drive which has more than proved its outstanding operational reliability and durability. The lower gear housing on drive 280 has an entirely new design, which gives it low flow resistance, this resulting in better speed performance within the higher speed ranges. Drive 280 has also improved steering characteristics at the moment of planing, due to a new exhaust gas construction. Other unique qualities of the 280-drive common with the 270-drive:

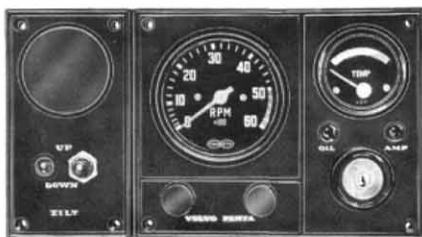
- Cone clutch (patented) of Silent Shift type assures smooth, quiet shifting with small manoeuvring forces.
- All gears are extra powerfully dimensioned in order to cope with maximum loads for long periods. The drive runs smoothly thanks to the bevel gearing.
- Easily readjustable linkage system in gear mechanism for change-over from left to right hand rotating propeller.
- Cooling water intake with gill protection and a extra intake in the bottom of the drive fully ensure that cooling water is supplied to the engine.
- Retaining pawl of patented design, provides full security when reversing and prevents the drive from tilting up when quickly

closing the throttle on forward. On the other hand, it also permits the drive to tilt up when striking underwater obstacles, e.g., logs, etc.

- Electro-mechanical lift for tilting up the drive and ready-wired electric cable harness are included in the standard electrical equipment. The electrical system is fully embedded in plastic, which makes it corrosion- and waterproof.

DATA

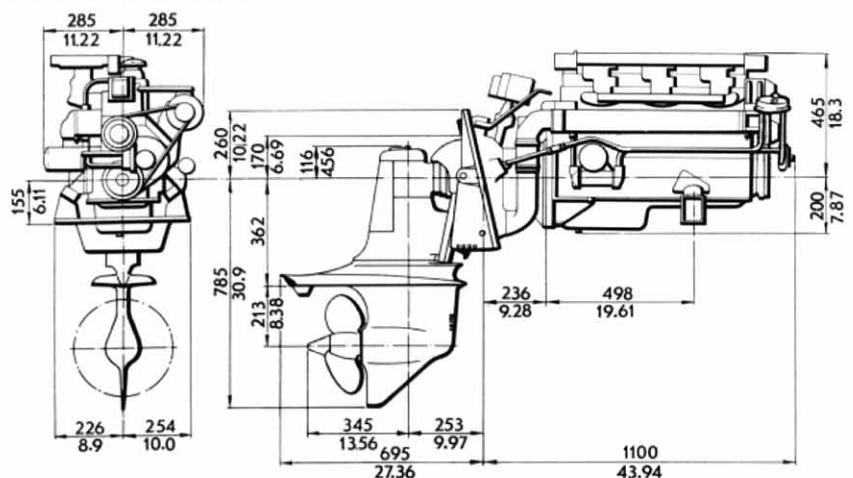
Type of operation	Four-stroke carburetor engine with overhead valves
Type designation	AQ170B/280C
Max. output (SAE)	170 h.p.
Max. operating speed, r.p.m.	5000
Number of cylinders	6 in line
Capacity, litres (cu. in.)	2.979 (182)
Bore/stroke, mm (in.)	88.9/80 (3.50/3.15)
Compression ratio	9.5:1
Outboard drive, type designation/ratio	280C/1.89:1
Total weight, kg (lb.)	320 (705)



Instrument panel — can be supplemented with smaller panels for extra instrumentation.

Electric revolution counter, electric temperature gauge, warning lamps for charging and oil pressure, switch and switch key are included as standard. Electric cable harness 7 m (23 ft.) in length with ready-connected joint contact.

DIMENSION DRAWING



We reserve the right to carry out modifications



AB VOLVO PENTA

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