

FORWARD DRIVE (FWD)

Forward facing Duoprop with counter-rotating propellers

Forward facing propellers

- Forward facing propellers work in undisturbed water, ahead of the drive, providing more efficient use of the engine's power
- Propellers are 67 cm (26.5 inches) forward of the propeller location on the DPS sterndrive, locating the propellers in an optimum position for watersports activities
- No exhaust passage in the propeller hub allows for more blade area, providing good top speed, fuel economy and acceleration
- Propellers are "off-the-shelf" items, as opposed to the highly customized propellers found on some inboards
- Duoprop® propellers create a symmetrical wakeboarding wake and equally shaped wakesurfing wave on your side of choice

Power trim

- High capacity trim system integrated with the transom shield and controlled at the helm, provides quick adjustments to the drive trim angle
- Power trim is used to adjust the thrust angle of the propellers, allowing for greater adjustment of the boat's running attitude; better control of the boat's wake during watersports activities and better ride when cruising
- Vectoring the propeller thrust can reduce the amount of ballast needed to create a large wake
- Adjusting the propeller thrust angle also improves fuel economy, acceleration, and top speed (compared to inboards)
- Enlarged trim plane on the drive also adds to these benefits

Drive

- Cone clutch for smoother shifting
- Pattern-matched spiral bevel gears reduce noise and improve reliability
- Break-away coupling between vertical shafts potentially reduces drive damage if the drive strikes an underwater object
- Built-in release function allows the drive to kick-up quickly if the drive strikes an underwater object, reducing drive damage
- Standard tilt specification 52° (42° and 32° available as option on engine order)
- The drive can be turned 28° in each direction
- Easy access drive and transom shield anodes
- Available in the following drive ratios; 1.95:1, 2.14:1, 2.32:1

Steering

- Engine and Forward Drive package is equipped with power steering for effortless control of the boat's steering
- Duoprop propellers provide improved low speed and reverse handling and have less torque steer (track straighter) at cruising speeds
- Provides equal steering to both sides, many inboards steer poorly to one side

Comfort

- The exhaust is dispersed by the propeller wash to improve surfer/ wakeboarder comfort and also reduces overall noise behind and around the boat
- Forward Drive is only mated to engines with catalyzed exhaust systems and computer controlled emissions programs, this substantially reduces the carbon monoxide content of the exhaust at the stern of the boat and reduces the possibility of Station Wagon Effect
- Adjustable trim angle provides more control of boat attitude when running, producing a drier and more comfortable ride



Versatility

- Forward Drive's many new features allow for the design of new boat models that are multi-use, not boats dedicated to one watersports activity; cruising, fishing, multiple watersports are all possible from the same boat model

Installation

- Complete package, from engine to propeller, from one supplier, greatly reduces the number of components needed to plan and complete an installation
- Full installation support from Volvo Penta's Engineering and Applications departments
- No separate exhaust devices, struts, rudder, or shafts required, reduces the need for ballast devices

Support and Service

- Covered by Volvo Penta's 2+3 Factory Protection Plan, for five total years of coverage
- Supported by Volvo Penta's extensive global dealer network, available around the clock, 365 days a year through our Volvo Action Service
- Forward Drive is built on a combination of proven technologies from the DPS sterndrive and IPS; training, competence, tools, parts, and support materials are in place for complete support

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