

A word from Suzuki engineers

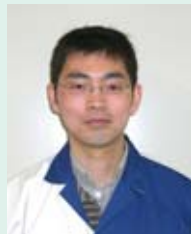
Tomohiko Miyaki (Electronics Design)

The new DF300 is the first Suzuki outboard to incorporate an O₂ Sensor Feedback Control System. This system delivers optimum engine control of fuel properties and operating changes over the life of the engine, resulting in significant improvements in fuel economy. We initially had some apprehensions about the O₂ sensor's reliability because the sensor is not typically designed for marine use. After selecting a water resistant O₂ sensor and mounting it in a location that kept it relatively out of the water, the system was subject to thorough scrutinization, repeated testing under stringent and severe conditions and cruising tests to achieve system reliability and complete the system.



Tomokazu Hikosaka (Engine Design)

Suzuki's flagship outboard, the DF300, incorporates the Suzuki Water Detecting System to increase the reliability of the outboard engine and provide greater operating convenience. In the event that water does enter the fuel supply, the sensor activates an alarm to warn the user. This makes it possible to prevent water from entering the fuel injection system. The filter is also designed to allow visual confirmation. This system helps the user keep the engine in good operating condition and improves both durability and operating convenience.



Hitoshi Matsumura (Research and Development)

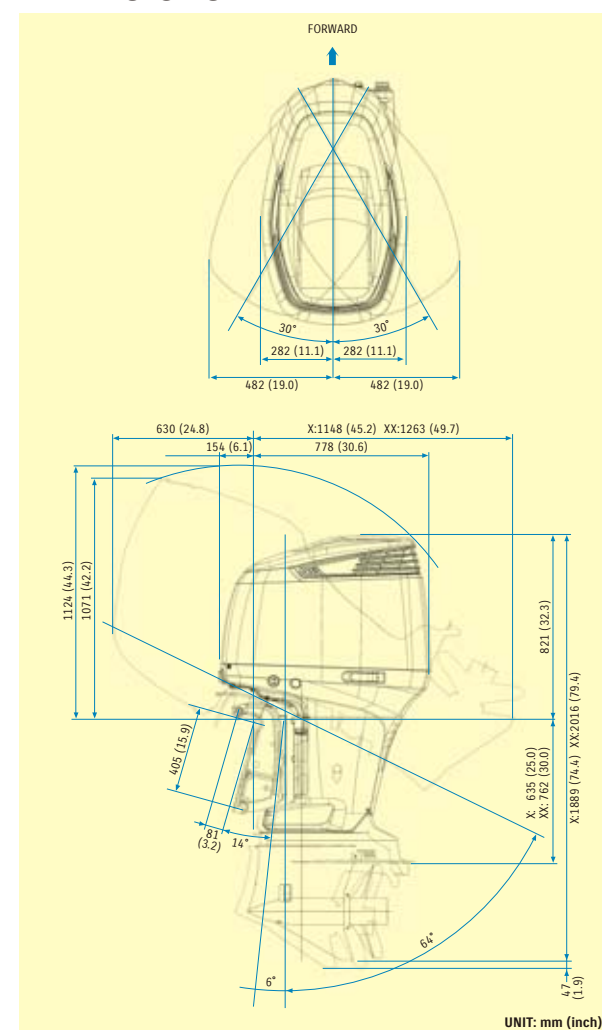
The highly advanced Suzuki Lean Burn Control System used on the DF300 combines the Suzuki Precision Control System with the Lean Burn Control System utilized on the DF90/80/70, DF60, and the new DF50/40. To maintain smooth transitions in power, ignition timing was controlled when changing the air to fuel ratio on prior lean burn control systems. With the new DF300, we also use the electronic throttle system to control air volume during the transition for smoother output during transitions up into the high rpm range. This system was tested on a wide variety of boats to achieve optimum results.



DF300 SPECIFICATIONS

MODEL	DF300
ENGINE TYPE	4-Stroke DOHC 24-Valve
FUEL DELIVERY SYSTEM	Multi Point Sequential Electronic Fuel Injection
TRANSOM HEIGHT mm (in.)	X: 635 (25) XX: 762 (30)
STARTING SYSTEM	Electric
DRY WEIGHT kg (lbs.) <small>including battery cable, not including propeller and engine oil</small>	X: 274 (604) XX: 279 (615)
NO. OF CYLINDERS	V6 (55-degree)
PISTON DISPLACEMENT cm ³ (cu.in.)	4,028 (245.6)
BORE x STROKE mm (in.)	98 x 89 (3.81 x 3.46)
MAXIMUM OUTPUT kW(PS)/rpm	220.7 (300)/6000
FULL THROTTLE OPERATING RANGE rpm	5700-6300
STEERING	Remote
OIL PAN CAPACITY Lit (U.S. / Imp. qt.)	8.0 (8.5/7.0)
IGNITION SYSTEM	Fully-transistorized
ALTERNATOR	12V 54A
ENGINE MOUNTING	Shear Mount
TRIM METHOD	Power Trim and Tilt
GEAR RATIO	2.08 : 1 (Two-stage Reduction Gear)
GEAR SHIFT	F-N-R (Electronic)
EXHAUST	Through Prop Hub Exhaust
DRIVE PROTECTION	Rubber Hub
PROPELLER SIZE (in.) Diameter x Pitch	Standard and Counter Rotation 16 x 17 15-1/2 x 17 16 x 18.5 15-1/4 x 19 16 x 20 15 x 21 16 x 21.5 14-3/4 x 23 16 x 23 14-1/2 x 25 16 x 24.5 14-1/2 x 27 16 x 26 16 x 27.5 ← (Standard Rotation only)

DIMENSIONS



* Boats and motors come in a large variety of combinations. See your authorized dealer for correct prop. selection to meet recommended RPM range at W.O.T.

Please read your owner's manual carefully. Remember, boating and alcohol or other drugs don't mix. Always wear a personal flotation device when boating. Please operate your outboard safely and responsibly. Suzuki encourages you to operate your boat safely and with respect for the marine environment.

Specifications, appearances, equipment, colors, materials and other items of "SUZUKI" products shown on this catalogue are subject to change by manufacturers at any time without notice and they may vary depending on local conditions or requirements. Some models are not available in some territories. Each model might be discontinued without notice. Please inquire at your local dealer for details of any such changes. Actual body color might differ from the colors in this brochure.

SUZUKI
SUZUKI MOTOR CORPORATION

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Way of Life!

PRODUCT INFORMATION



DF300

Lean Burn



Suzuki Makes The Ultimate Breakthrough— The New DF300 Provides The Ultimate in Efficiency and Power

The original, Innovation Award winning, DF300 broke new ground. It was the very first 220.7kW (300 PS) 4-stroke outboard and it set a new benchmark for performance and power from a compact and lightweight outboard.

Now Suzuki has taken this ultimate outboard to the next level. The addition of Suzuki's Lean Burn Control technology and a new O₂ (Oxygen) Sensor Feedback Control System provides boaters with a dramatic improvement in fuel economy as well as environmentally responsible operation, further enhancing the overall performance and value of the DF300, Suzuki's flagship outboard motor.

Combining Suzuki's advanced Lean Burn Control System, which is already utilized on the new generation DF90/80/70, DF60, and the new DF50/40, with the Suzuki Precision Control system delivers even greater levels of fuel-efficient operation.

The new DF300 is the first Suzuki outboard to incorporate an O₂ (Oxygen) Sensor Feedback Control System, which delivers cleaner and more stable emissions compared to prior systems and provides the engine with an optimum amount of fuel regardless of engine speed.

Suzuki's flagship outboard also features technological advancements such as digital sequential electronic fuel injection, dual overhead cams with four valves per cylinder, variable valve timing, a long-track intake manifold, and more. The DF300 is ideal for single, twin, or triple installations on a wide variety of boats.



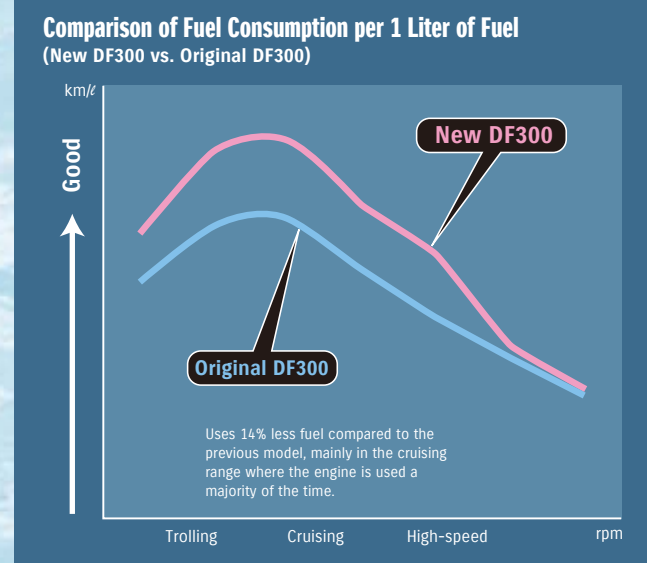
Main Features of the New DF300

- Rated at 220.7kW (300PS), the 4.0 liter, DOHC V6 24-Valve flagship DF300 delivers plenty of power and torque.
- The DF300 is the first Suzuki outboard to utilize the Suzuki Precision Control, an electronic throttle and shift system that offers smooth and positive gear operation.
- Suzuki's Lean Burn Control System combined with the Suzuki Precision Control delivers remarkable fuel economy over a wide operating range and smooth power transitions when power is required.
- The DF300 is the first Suzuki outboard to feature Suzuki's O₂ Sensor Feedback Control System, which delivers cleaner and more stable emissions.
- DF300 incorporates a new fuel filter that detects if there is any water in the fuel and warns the operator.

Suzuki's Lean Burn Control System

Suzuki's innovative Lean Burn Control System was first introduced on the DF90/80/70 to great acclaim from boaters and the media alike. It predicts fuel needs according to operating conditions allowing the engine to run on a more efficient fuel mixture through the use of a lean air-fuel ratio. It delivers its benefits over a wide operating range, providing significant improvements in fuel economy from low-speed operation into the cruising range. Combining this system with the Suzuki Precision Control, electronic throttle and shift system, allows control of the fuel and air flow electronically to increase the limit of the controllable revolution range further improving fuel economy over a wider range. This combination also delivers smooth power transitions when more power is required from the outboard.

In-house testing shows that while cruising, the new DF300 is 14% more economical than its predecessor without sacrificing any of the original DF300's power.



Data used in the graphs were obtained through in-house testing under uniformed conditions. Results will vary depending upon operating conditions (boat design, size, weight, weather, etc.)

Cleaner, More Efficient Operation

Suzuki's advanced four-stroke technologies deliver cleaner and more efficient operation that conforms to EURO 1 Emissions Standards (EU Directive 2003/44/EC) – the EU emission standards (exhaust gases and noise levels) set by the European Parliament and the Council and has received three-star ratings from the California Air Resources Board (CARB).



EURO 1 Emissions Standards
(EU Directive 2003/44/EC) Label



CARB Three-Star Label

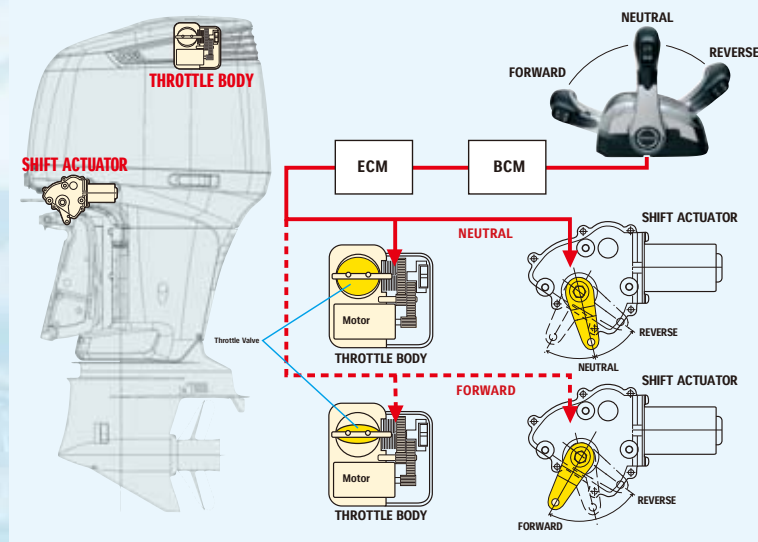
O₂ Sensor Feedback Control System

The new DF300 is the first Suzuki outboard equipped with an O₂ sensor, which enables emissions to be cleaner and more stable. The system controls the air to fuel ratio across each of the engine's operating ranges providing an optimum amount of fuel to the engine regardless of rpm.

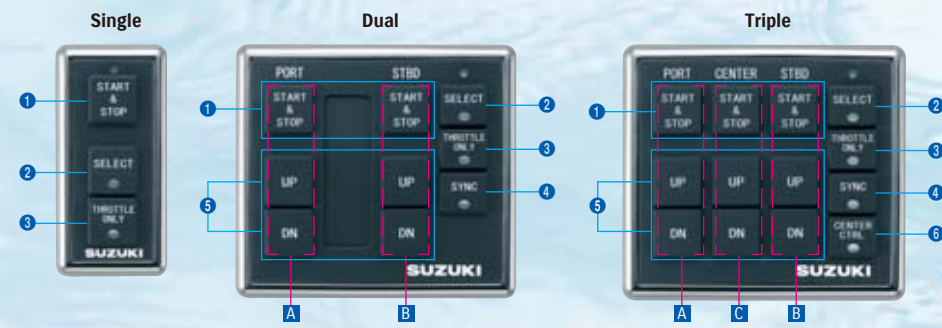
PRODUCT INFORMATION

Suzuki Precision Control (Electronic Throttle and Shift Systems)

Suzuki Precision Control is a technologically advanced computer-based control system that replaces the mechanical cables found in conventional control systems with electronic wiring that eliminates the source of friction and resistance. While you enjoy smooth, friction free throttle operation, the system's computer is processing and transmitting commands in real-time to actuators at the engine that deliver precise throttle controls with smoother, decisive shifting. This is most evident in the low rpm range where operation is noticeably smooth and accurate. When combined with Suzuki's Lean Burn Control System it allows control of fuel and air flow to boost the limit of the controllable revolution range improving fuel economy over a wide operating range. Suzuki Precision Control also features built-in systems that help guard the engine and drive against damage due to mishandling, and its design and simple wiring make installation easy, reducing the time required for rigging and adjustment. The system offers precision control for triple installation as well as dual station operation.



Control Panel Suzuki's Remote Control System puts precision operation right at your fingertips.



- Start Stop Switch**
Switches the engine ON/OFF
 - Station Select Switch**
Switches control between driving stations on boats equipped with more than one driving station.
 - Throttle Only Switch**
Keeps the drive in neutral for throttle operation.
 - Engine Synchronize Switch**
Synchronizes engine RPM on boats with two or more outboards.
 - Tilt Up & Down Switch**
Tilt control for each engine.
 - Center Engine Control Switch**
The center engine is controlled with the port-side remote controller (auto on). With the control in the neutral position, this switch locks the center engine in neutral letting you operate with the remaining two outboards.
- A Port-Side Engine Controls
B Starboard-Side Engine Controls
C Center Engine Controls

Suzuki Modular Instrument System (SMIS)

SUZUKI MODULAR INSTRUMENT SYSTEM (SMIS) uses an easy to connect and expandable cable system to transmit graphic and numerical data to Multi-Function gauges. Easy to set up and install system can be used with nearly any boat and DF300 SUZUKI Outboard. Connected to the *NMEA2000® compatible system, the gauges can display real-time readings from compatible electronic probes and the exclusive SMIS engine interface to monitor engine functions. (Engine Monitor with 4" gauge only)

SMIS MULTI-FUNCTION GAUGE

The 4" multi-function gauge uses a state-of-the-art high-contrast, dot matrix display to monitor real-time graphic and numerical digital data. When connected into the SMIS system, it can monitor engine functions, act as a speedometer, tachometer, GPS*, and many others. (*GPS requires additional hardware.) The 2" multi-function gauge is capable of all functions of the 4" gauge except engine monitoring functions. When connected to the SMIS system, it can be programmed to monitor other functions.

<p>4" SMIS Multi-Function Gauge</p> <p>Quad analog page as a tachometer, a volt meter, a water-pressure gauge and a speedometer for single engine</p>	<p>Examples of display**</p> Engine trim page as a trim gauge for single engine Single analog page as a tachometer for single engine Single analog page as a speedometer Fuel manager page as a fuel gauge Dual digital page as an hour meter and a speedometer for single engine Diagnostics page	<p>2" SMIS Multi-Function Gauge</p> <p>Fuel manager page</p>	<p>Examples of display**</p> as a volt meter for single engine Fuel manager page Engine trim page as a trim gauge for single engine
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** The detail instructions of display-operation are explained in the Operation & Installation Manual.

Suzuki's Advanced Technologies Deliver the Utmost in Performance VVT (Variable Valve Timing)

Suzuki's engineers designed a 4.0-liter V6 engine with an aggressive cam profile that delivers maximum output and performance at high rpm. In coupling this cam profile with Suzuki's advanced Variable Valve Timing (VVT), the DF300 delivers the additional torque that outboards need for accelerating in the low to mid-range. VVT achieves this by adjusting the timing of the intake valves, allowing them to open before the exhaust valves are fully closed, creating a momentary overlap in the timing where both sets of valves are open. Using VVT, this overlap can be increased or decreased by altering intake timing with the camshaft resulting in optimum timing for low and mid-range operation.

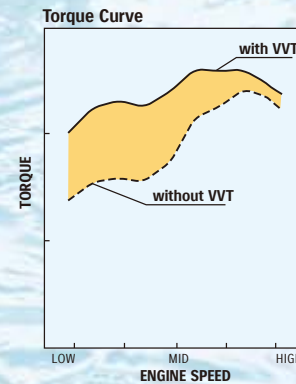
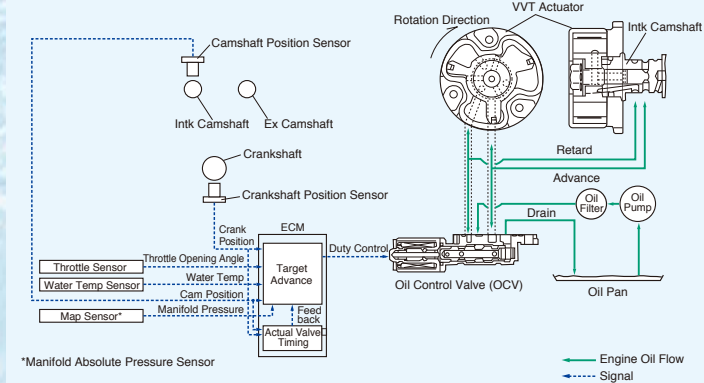
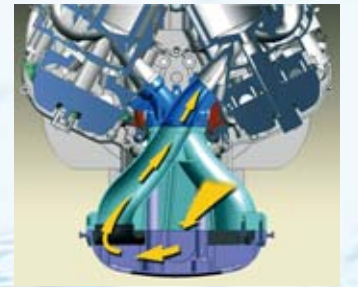


Diagram of VVT Mechanism



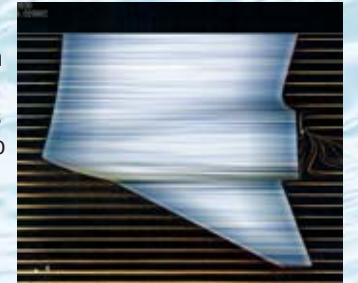
Long Track Intake Manifold

Another performance enhancing feature on the DF300 is a long track intake manifold. Using long intake pipes with an inline layout tuned to smooth airflow into the engine the system provides the DF300 with enhanced power.



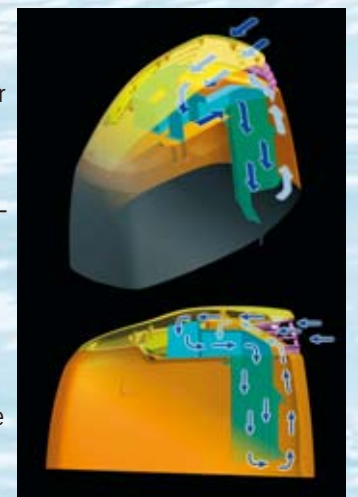
Streamlined Gear Case

The gear case on the DF300 utilizes a hydrodynamic design that reduces drag created as the lower unit moves through the water. This contributes to faster acceleration and increased speed.



Large Air Intake with Water Separator

The DF300 is designed with a large air induction port to maximize airflow into the engine in order to obtain maximum power output. The increased airflow produces more low-to mid-range torque and provides a wide power band that is necessary in an outboard engine. Suzuki also designed the system with a water separator, which aids in keeping water out of the electronic throttle body and a heat shield to keep intake air from being heated by the engine.

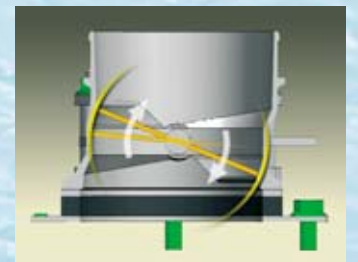


32-Bit ECM and Suzuki's Multi Point Sequential Electronic Fuel Injection

Suzuki pioneered the use of multi-point sequential electronic fuel injection in four-stroke outboards with the introduction of the original DF60 and DF70. At the heart of the DF300's multi point sequential fuel injection system is the ECM (Engine Control Module), which constantly monitors many data, in real time, from a series of sensors placed in critical areas on the engine. This comprehensive network of sensors includes the Manifold Absolute Pressure Sensor, Crankshaft Position Sensor, Intake Air Temperature Sensor, Cylinder Wall Temperature Sensor, Camshaft Position Sensor, and Exhaust Jacket Temperature Sensor. Using a very powerful 32-bit computer, the ECM processes data from all of these sensors and instantly calculates the optimum amount of fuel to be injected at high pressure into each of the V6's cylinders by the multi point sequential fuel injection system. Benefits of this system include reduced exhaust emissions, which allow the DF300 to comply with the California Air Resource Board (CARB) 3-Star emission requirements, lower fuel consumption, smoother starts, crisper acceleration, smoother performance, and maximum efficiency.

Spherical Bore Throttle Body

A spherical bore throttle body smoothes the characteristically turbulently airflow into the engine that occurs as the throttle begins to open. Providing a smoother airflow during acceleration results in increased throttle control and stable engine operation at low rpm.



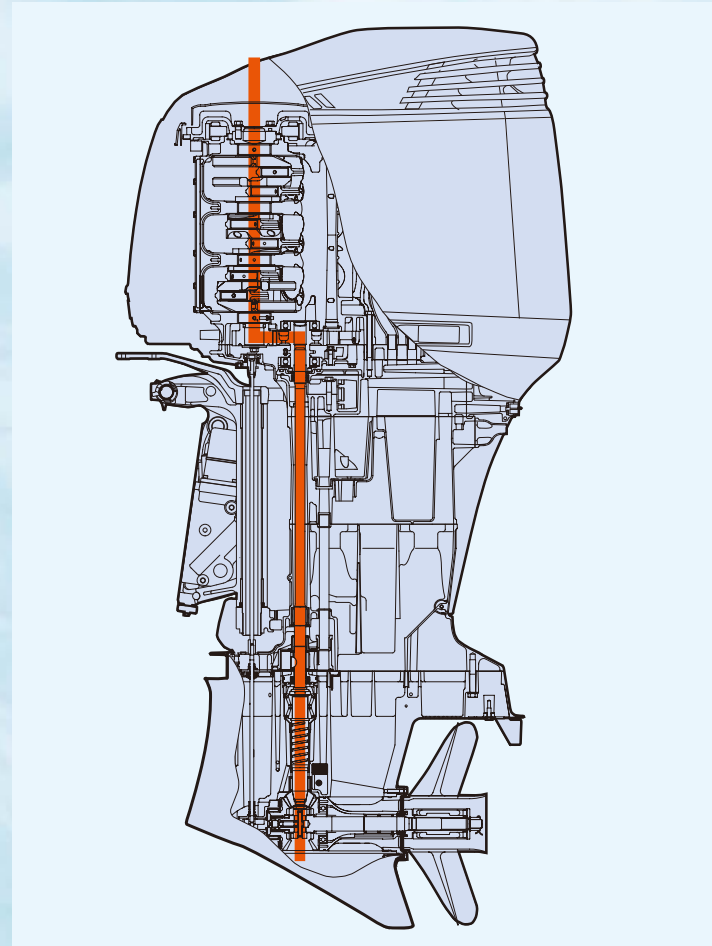
Fuel Cooler

The cooler the fuel the denser it is, and the denser it is the better performance it delivers. Incorporating a fuel cooler in the DF300's fuel delivery system cools the fuel before it enters the engine. Providing the engine with an optimum fuel supply results in better combustion and more performance.

PRODUCT INFORMATION

Offset Driveshaft

Suzuki outboards are among the most compact outboards in their respective classes. That's due in part to the utilization of Suzuki's proven offset driveshaft system. This design places the crankshaft in front of the driveshaft through the use of intermediate reduction gearing. In addition to providing an increase in power performance and adding to the compactness of the outboard, this system moves the outboard's center of gravity forward, resulting in contribution to weight distribution, balance, directional stability, and less vibration.



Two-Stage Cam Drive System

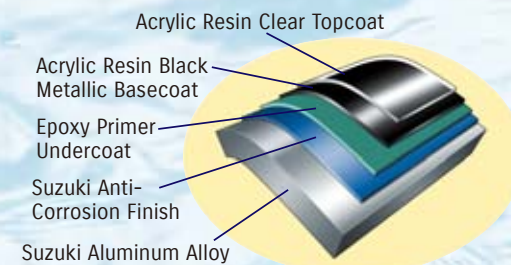
The DF300 utilizes a two-stage cam drive system that incorporates both gears and a chain. First stage gears transfer power between the crankshaft and the drive shaft from which a second stage utilizes a chain to deliver power from the driveshaft to the camshaft. This system allows for the use of smaller cam sprockets, which in turn allow for a reduction in valve angles also reducing the size of the cylinder head. An automatic hydraulic tensioner incorporated into the timing chain system keeps the chain properly tensioned and provides years of maintenance-free operation.



Cam Drive System

Suzuki's Anti Corrosion Finish

The outside of the DF300 is covered with Suzuki's anti-corrosion finish that is specially formulated to increase the durability of the engine and help protect parts of the aluminum exterior that are constantly exposed to saltwater. This advanced finish offers maximum bonding of the finish to the outboard's aluminum surface, creating an effective treatment against corrosion.



Strengthened Forged Pistons

The upper portion of pistons used in the big V6 engine is treated with an alumite coating that increases heat resistance. A resin coating applied to the piston skirt increases resistance to wear and reduces friction.



New Suzuki Water Detecting System

Water in the fuel can be the source of poor combustion, lower power output, and corrosion. To protect the engine from moisture in the fuel, the DF300 is the first Suzuki outboard to utilize a water detecting fuel filter that alerts the operator with both visual and audio warnings when water is present in the fuel.



Water-Cooled Voltage Regulator

The outboard's electric system includes a water-cooled voltage regulator that dissipates heat in the regulator to enhance engine durability.

Fuse Box

Fuses protecting the DF300's electric system are assembled into a single fuse box located on the side of the outboard motor, which provides convenient access while offering a clean exterior.

Easier Maintenance Dual Engine Flush Ports

The buildup of sand and salt in the engine's cooling system can lead to engine damage. To aid in reducing such buildup, the DF300 is designed with two freshwater flush ports that make flushing of the cooling system as convenient and easy as possible. With one port located on the rear panel and the second on the front panel, access is easy and flushing out the system is possible whether the boat is in or out of the water.



Highly Reliable Direct Ignition System

Supplying spark to the big V6 engine is an advanced ignition system that utilizes integral type spark plug caps with built-in ignition coils. The system is controlled by the outboard's powerful 32-bit computer and provides each cylinder with optimum spark timing. In addition to reducing the number of parts and simplifying the wiring system, this arrangement greatly reduces electronic engine "noise" that can interfere with VHF radios, fish finders, and other marine electronics.

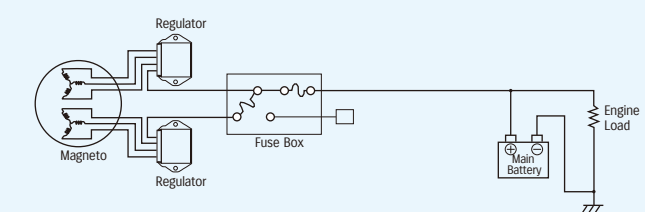


Convenient Dual Circuit Charging System

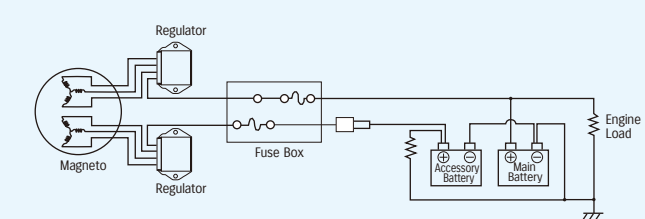
The DF300 incorporates a dual circuit charging system that can be adapted* to accommodate the dual-battery configurations often used on large boats. When used in this configuration the system is designed to charge both the main and auxiliary batteries simultaneously but on independent circuits. With this you can drain down the accessory battery powering your electronics and still have a fully charged main battery for starting the motor.

* Utilization of this system requires the purchase of an optional wiring harness.

SINGLE CHARGING SYSTEM

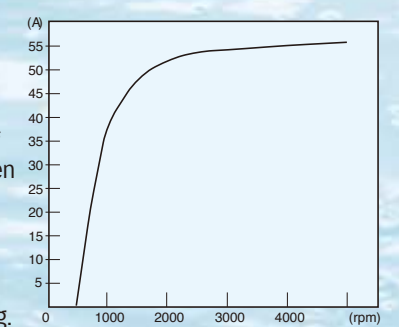


DUAL CHARGING SYSTEM



High Output Alternator

The DF300 generates electricity from a high output alternator that delivers 54A (12V) of electrical power. Suzuki's design allows the alternator to produce a majority of its output at low rpm, so even when operating at 1000rpm it can produce approximately 38A of power. In most situations, this is enough power to keep an assortment of electronics up and running.



ELECTRONIC FUEL INJECTION DF300 LEAN BURN