# PRODUCT INFORMATION



# SUZUM DF250SS

The DF250S represents a new kind of Suzuki outboard—a "Sports 4-Stroke" designed for the sportsman who is serious about outboard performance. Based on a 4.0-liter Big Block V6 the DF250SS produces 250 horsepower and delivers outstanding acceleration throughout the entire powerband thanks to the incorporation of some of Suzuki's most advanced technologies. With a 20-inch transom, it's perfect for bass boats, sport pontoons, ski boats, flats and bay boats or any other boat that demands power, performance and reliability. The DF250SS also offers all the advantages of Suzuki's 4-stroke technology, such as superior fuel economy, quiet operation, low vibration, and environmentally friendly operation, all while providing the exciting performance and rock solid reliability in its class. Suzuki's Super Sports, DF250SS. If you're as serious about outboard performance as you are about your sport, then the DF250SS is definitely for you.



### DF250SS Waln Foatures

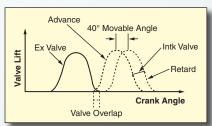
- The DF250SS is designed to deliver performance and reliability that today's sport users demand.
- 4.0-liter Big Block V-6 engine—combined with Suzuki's Variable Valve Timing (VVT) and Multi Stage Induction delivers superior acceleration throughout the entire powerband.
- The 20-inch transom is perfect for bass boats, sport pontoon boats, ski boats, flats and bay boats or any boat that is designed for the sportsman who is serious about outboard performance.
- Gear case features a hydrodynamic design, introduced first on the flagship DF300, that reduces drag resistance for fast acceleration and increased top speed.
- The DF250SS complies with the California Air Resources Board's (CARB) 3-Star Ultra Low Emission Rating.

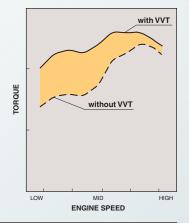
# DF250SS PRODUCT INFORMATION

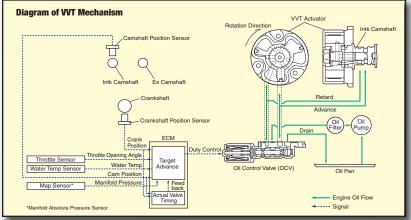
# Suzuki Technologies Deliver Outstanding Performance

#### **VVT (Variable Valve Timing)**

Suzuki engineers started off in a big way by designing the DF250SS based on a big block 4.0-liter engine. This V6 engine features an aggressive cam profile, delivering maximum output and performance at high rpm, and Suzuki's advanced Variable Valve Timing (VVT), provides the DF250SS with the torque needed to boost low- to mid-range acceleration. VVT provides this boost by adjusting the intake valve timing, allowing intake valves to open before the exhaust valves are fully closed. This process creates a momentary overlap in the timing where both sets of valves are open. With VVT, this overlap can be increased or decreased by altering intake timing with the camshafts to optimize timing for low- and mid-range operation.







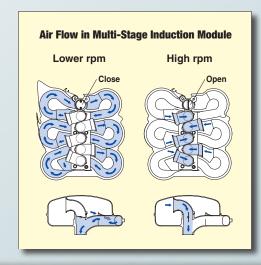
#### **Multi-Stage Induction**

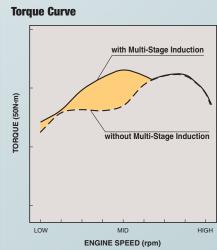
Suzuki engineers also utilized Suzuki's Multi-Stage Induction, which changes intake manifold pipe length according to engine rpm to enhance engine performance. The DF250SS utilizes two intake manifold pipes per cylinder; one operates at low engine rpm and the other takes over at higher rpm. During low engine rpm, air enters the combustion chamber through the longer, curved manifold pipe. The particular length of this pipe allows just the right amount of fresh air into the chamber to improve combustion and boost low-end torque.



Multi-Stage Induction Module

As engine rpm increases, a valve on the intake manifold opens, letting air enter directly into the combustion chamber through the short, straight intake pipe. This allows a greater volume of air into the chamber, increasing the engine's ability to breathe at high rpm, thus improving high-end power output.





#### **Forged Pistons**

The upper portion of each piston used in the DF250SS is treated with an alumite coating that increases heat resistance. A resin coating applied to the piston skirt improves resistance to wear and reduces friction.



#### **Fuel Cooler**

The cooler the fuel the denser it is, and the denser it is, the more performance it delivers. The DF250SS incorporates a water - cooled fuel rail in the fuel delivery system. The fuel is cooled before it is injected into the cylinder resulting in better combustion and better performance.

system incorporates an automatic hydraulic tensioner to keep the chain

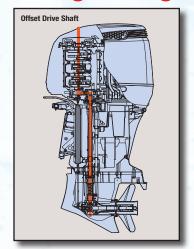
properly adjusted and provide years of maintenance-free operation.

### **Suzuki's Advanced Engineering Delivers Compact Designs**

#### Offset Driveshaft

Suzuki incorporates a number of innovative designs into its outboards. As a result, Suzuki offers some of the most compact outboards in their class. One such design innovation is the offset driveshaft.

Positioning the crankshaft in front of the driveshaft, the outboard's center of gravity



The DF250SS takes advantage of the streamlined gear case introduced on the DF300 to reduce drag created as the lower unit moves through the water. This contributes to faster acceleration and increased speed.

**Streamlined Gear Case** 



is moved forward. This contributes to the overall compact size and provides improved power and performance. It also greatly reduces engine vibration since the engine's axis of inertia, the point where vibrations are at a minimum, is in line with the upper engine mounts.

#### **Two-Stage Cam Drive System**



The DF250SS incorporates Suzuki's proven two-stage cam drive system that uses both gears and chain.

The first stage gears transfer power between the crankshaft and the drive shaft. While the second stage transfers power from the drive shaft to the cam

shafts with a chain. This system allows use of smaller diameter cam sprockets, which in turn allow for a reduction in valve angles also reducing the size of the cylinder head. Additionally, the timing chain

## **Guarding Against the Elements**

#### **Suzuki's Anti-Corrosion Finish**

The outside of the DF250SS is covered with Suzuki's multi-layered anti-corrosion finish that is specially formulated to increase the durability of the engine and help protect the aluminum exterior that is 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.



# DF250SS PRODUCT INFORMATION

#### Large Air Intake, and Flywheel with Fan Blades

Increasing airflow into the engine can increase power output, so Suzuki engineers designed the DF250SS with dual air induction ports to maximize airflow into the engine to obtain maximum power output. The increased airflow delivers more low- to mid-range



Flywheel Magneto

torque and provides the outboard with a wider powerband.



The flywheel is designed with fan blades that expel heat from within the engine cover and discharge the hot air out of the side of the cowl, keeping the temperature within the cowl under control.

### **New Suzuki Water Detecting System**

Water in the fuel can be the source of poor combustion, lower power output, and corrosion.

To help protect the engine from moisture in the fuel, the DF250SS utilizes a water detecting fuel filter that alerts the operator with both visual and audio warnings when water is present in the fuel.



# **Suzuki's Advanced Electronics Optimize Performance**

#### 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 DF60 and DF70—the first four-stroke outboards designed with multi point sequential electronic fuel injection. At the heart of the DF250SS is a multi point sequential fuel injection system

which is operated by an ECM (Engine Control Module) using a series of engine sensors to constantly monitor crucial data in real time. 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 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 cylinder. Benefits of this system include reduced exhaust emissions, which allow the DF250SS to comply with CARB 3-Star emission requirements, lower fuel consumption, smoother starts, crisper acceleration, impressive performance, and maximum efficiency.

#### **Direct Ignition System**

Supplying spark to the DF250SS 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

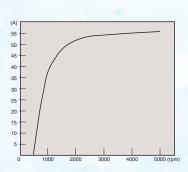


Plug Top Ignition Coil

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.

#### **High Output Alternator**

The DF250SS 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.

### **Features that Offer Convenient Operation**

#### **Tilt Limit Switch**

The outboard tilt system incorporates an adjustable tilt limit switch, which prevents the motor from tilting beyond a predetermined position. This can be used to protect both the boat and motor from damage that can occur when tilting the motor.



Tilt Limit System

#### **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 DF250SS 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 the water or on the trailer.



# DF250SS PRODUCT INFORMATION

\$ SUZUKI.

#### **Genuine Suzuki Parts and Accessories**

Genuine Suzuki Parts and Accessories are your key to total performance and boating satisfaction. Suzuki controls and gauges give boaters the power and information they need to master any day on the water. We offer a full line of premium quality stainless steel props specifically engineered to maximize the performance and fuel efficiency of Suzuki 4-stroke outboards. You can rely on genuine Suzuki fuel and oil filters, engine oil and gear oil. Suzuki Marine 4 Cycle Engine Oil offers your outboard the Ultimate in performance and protection. Our engine oil meets the advanced NMMA FC-W certification, providing superior lubrication and the industries most complete panel of anti-corrosion additives and rust inhibitors. The Suzuki Modular Instrument System 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, these SMIS Multi-Function Gauges display real-time readings that

monitor all engine functions. These gauges are also NMEA 2000 compatible, and with the simple push of a few buttons, access to a wealth of vital data is right at your fingertips. Here at Suzuki Marine, we have what you need to keep your Suzuki outboard running strong season after season.













### **Suzuki Motor Corporation**

Suzuki history begins with the founding of Suzuki Loom Works by Michio Suzuki in October 1909. Realizing that weaver wanted to produce cloth both vertical and horizontal patterns, he developed an automated loom capable of weaving patterned cloth from space dyed yarn. His commitment to innovative engineering was the start of an uncompromising focus on creating products that meet people's needs and offer new life style possibilities.

While the company has evolved, diversified, and expanded since then, we have always honored our founder's commitment to innovative engineering. His philosophy lives on in the "Way of Life!" brand slogan and our dedication to provide our customers with value packed products that bring satisfaction and meet their needs.

#### Suzuki Motorcycles, ATVs & Scooters

Suzuki's full lineup of motorcycles, ATVs and scooters lead the industry with cutting-edge technology, convenient features, unrivaled performance and superior quality.

With a broad lineup that includes sportbikes, cruisers, motocross, dual-sport, adventure, scooters, ATVs and more -Suzuki has built its reputation on performance and innovation. Suzuki's motorcycles, ATVs and scooters have revolutionized the industry and redefined their categories. The rugged KingQuad ATV line celebrates 30 years as the "First on 4-Wheels." The legendary GSX-R line, which practically invented the modern sportbike when introduced in 1986, celebrates the unprecedented milestone of over 1 million units produced worldwide. Suzuki's other product lines, including Burgman scooters, Boulevard cruisers and V-Strom adventure motorcycles, continue to innovate and set the industry-standard for performance, features, quality and value.

A tradition of Innovation

#### Suzuki Outboards

Ranging from the world's first 300 hp four-stroke outboard to the portable DF2.5, Suzuki offers a comprehensive lineup that represents state-of-the-art design and technology. These engines offer great fuel efficiency and environmentally responsible operation that meet many of the toughest emission standards - worldwide. In 2008 Suzuki introduced the first "New Generation" four-stoke outboard motors, the DF90A and DF70A, followed by the DF60A in 2009. 2010 was another big year with the introduction of the NMMA Innovation Award Winning (Sixth Time) DF50A /40A with Lean Burn and the redesigned DF300A with Lean Burn. 2011 followed up with additional design changes for the DF300AP to include the NMMA Innovation Award Winning (Seventh Time) Select Rotation drive system. In 2012 Suzuki introduced the NMMA Innovation Award -Honorable Mention- DF20A/15A with Battery-less EFI/Lean Burn and the redesigned DF115A/ DF140A with Lean Burn. In the same year, Suzuki also added the DF250AP with Lean Burn, Select Rotation and Suzuki Precision Control. These outboards deliver clean running economical operation with Suzuki's Lean Burn Technology. At Suzuki, our goal is to build outboards that

are highly efficient, deliver low fuel consumption and high power output while placing less stress on the environment.

#### Suzuki Motorsports

On the track, Suzuki has captured major championships around the world. The experience, knowledge and expertise gained on the track produces race proven, leading edge technologies that are utilized in every vehicle we make. Suzuki supplies you with the best combination of performance, durability, reliability, efficiency, ease-of-use, and value. It's why Champions Choose Suzuki. So, what are you gonna ride?

To learn more about Suzuki, visit your local Suzuki dealer or go to







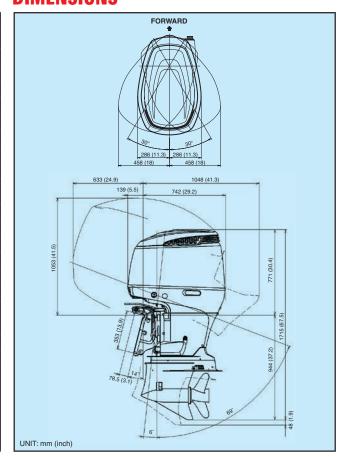




#### DF250SS SPECIFICATIONS

MODEL	DF250SS
ENGINE TYPE	4-Stroke DOHC 24 Valve
FUEL DELIVERY SYSTEM	Multi Point Sequential Electronic Fuel Injection
TRANSOM HEIGHT	20 in.
STARTING SYSTEM	Electric
WEIGHT (lbs.)	578lbs
NO. OF CYLINDERS	V6 (55-degree)
DISPLACEMENT	245.6 cu. in. (4,028cc)
BORE X STROKE in. (mm)	3.81 x 3.46 in. (98 x 89mm)
MAXIMUM OUTPUT /rpm	250 hp
FULL THROTTLE OPERATING RANGE rpm	5300-6300
STEERING	Remote
OIL PAN CAPACITY	8.5 qt. / 8.0 Lit.
IGNITION SYSTEM	Solid State Direct Ignition
ALTERNATOR	12V 54A
ENGINE MOUNTING	Shear Mount
TRIM METHOD	Power Trim and Tilt
GEAR RATIO	2.08 : 1 Final Drive Ratio
GEAR SHIFT	F-N-R
EXHAUST	Through Prop Hub Exhaust
DRIVE PROTECTION	Rubber Hub
PROPELLER SIZE (in.) 3 or 4-BLADE STAINLESS STEEL TYPE (OPTIONAL)	3 x 16 x 17 3 x 16 x 18.5 3 x 14-3/4 x 29 3 x 16 x 20 3 x 14-3/4 x 31 3 x 16 x 21.5 3 x 14-3/4 x 31 3 x 16 x 21.5 3 x 14-3/4 x 32 4 x 14-1/2 x 28 3 x 16 x 24.5 3 x 16 x 24.5 4 x 14-1/2 x 29 4 x 14-1/2 x 30 4 x 14-1/2 x 31

#### **DIMENSIONS**



- \* The weight of the motors are "Dry-Weight", not including propeller,
- \* Boats and motors come in a large variety of combinations. See your authorized dealer for correct propeller 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 USCG-approved life jacket. Please operate your outboard safely and responsibly. Suzuki encourages you to operate your boat safely and with respect for the marine environment.

SUZUKI MOTOR CORPORATION reserves the right to change, without notice or obligation, equipment, specifications, colors, materials and other items to apply to local conditions. Each model may be discontinued without notice. Please inquire at your local dealer for details of any such changes.

Actual body colors may differ slightly from the colors in this brochure.



#### **CARB THREE-STAR LABEL**

The three-star label identifies engines that meet the California Air Resources Board's most stringent exhaust emission standards



#### **EPA 2010 LABEL**

Suzuki's four-stroke technology is compliant with EPA's stringent 2010 exhaust emission standards and 2010-later evaporative emission standards set by the U.S. Environmental Protection Agency



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