

DF175TG/150TG SPECIFICATIONS

MODEL	DF175TG	DF150TG
ENGINE TYPE	Four-Stroke DOHC 16 Valve	
FUEL DELIVERY SYSTEM	Multi Point Sequential Electronic Fuel Injection	
TRANSOM HEIGHT mm (in.)	L: 500 (20) X: 627 (25)	
STARTING SYSTEM	Electric	
WEIGHT kg (lbs.) *	L: 223 (474) X: 228 (485)	
NO. OF CYLINDERS	4	
PISTON DISPLACEMENT cm3 (cu.in.)	2,867 (174.9)	
BORE × STROKE m/m (in.)	97 × 97 (3.81 × 3.81)	
MAXIMUM OUTPUT kW (PS)	129 (175)	110 (150)
FULL THROTTLE OPERATING RANGE rpm	5500-6100	5000-6000
STEERING	Remote	
OIL PAN CAPACITY I (U.S. / Imp. qt.)	8.0 (8.5/7.0)	
IGNITION SYSTEM	Fully-transistorized	
ALTERNATOR	12V 44A	
ENGINE MOUNTING	Shear Mount	
TRIM METHOD	Power Trim and Tilt	
GEAR RATIO	2.50 : 1	
GEAR SHIFT	F-N-R	
EXHAUST	Through Prop Hub Exhaust	
DRIVE PROTECTION	Rubber Hub	
PROPELLER SELECTION (Pitch) All propellers are the 3-blade type Optional *Please inquire at your local dealer for details of the propeller.	15" - 27.5"	

DIMENSIONS





Counter Rotation Model Available. * Dry Weight: Including battery cable, not including propeller and engine oil.

* 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 owners manual carefully. Remember, boating and alcohol or other drugs don't mix. 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.





LEAN BURN

PRODUCT INFORMATION

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DF175TG/150TG



Way of Life!

In Line Fours Offering the Ultimate In Advanced Features, Performance, and Fuel Economy

Built with a strong desire to provide our customers with the very best, most innovative and reliable products possible, Suzuki outboards are recognized around the globe for their unrivaled, award-winning technologies and advanced designs. Two excellent examples of this ethic are the new DF175TG and DF150TG. These powerful 129kW (175PS) and 110 kW (150PS) inline four cylinder four-stroke outboards are engineered with some of our most advanced technologies providing boaters with greater performance, convenience, and efficiency.

Both outboards take full advantage of the Suzuki Lean Burn Control System and Suzuki Precision Control-two advanced technologies that are prominently featured on our flagship DF300AP and DF250AP outboards. Suzuki Lean Burn Control System is an intelligent fuel management system that is providing more and more Suzuki four-strokes with amazing fuel efficiency—up to a 16% improvement over the original DF175 with the new DF175TG helping you further and faster for less. Suzuki Precision Control is our drive-by-wire throttle control and shift system that provides precision control of fuel and airflow for further improvements in fuel efficiency over a wider operating range. The system also offers easy rigging and setup plus smoother and more precise throttle and shift operation.



Main Features of the New DF175TG/150TG

- Suzuki Precision Control (Electronic Throttle and Shift System) delivers smooth and positive gear operation.
- Suzuki Lean Burn Control system combined with Suzuki Precision Control delivers remarkable fuel economy over a wide operating range and smooth power transitions when power is required.
- Rated at 129kW (175PS)/110kW (150PS), the big block 2.86 liter inline four cylinder engines with four-valves per cylinder exceptional power and torque.
- Variable Valve Timing System (DF175TG) delivers greater low to mid range torque for exhilarating acceleration.
- Multi-Stage Induction System delivers excellent top-end performance.

Advanced Technology for the Performance

Suzuki Lean Burn Control System

First introduced on our DF90A/80A/70A four-strokes, the Suzuki Lean Burn Control System is an intelligent fuel delivery system that achieves remarkable improvement in fuel consumption. The system predicts fuel needs through real-time monitoring of engine performance and operating conditions then delivers a leaner fuel mixture to the engine producing fuel saving benefits over the engine's wide operating range, which includes the cruising range where the engine is used a majority of the time. In house testing shows that at medium cruising speeds, the DF175TG achieves a 16% improvement in fuel efficiency over its non-lean

burn DF175.



Comparison of Fuel Efficiency per Liter (New DF175TG vs. Original DF175)



Compared to the original DF175, the new DF175TG delivers up to a 16% improvement in fuel efficiency mainly in the cruising range where the engine is used a majority of the time.



Compared to the original DF150, the new DF150TG delivers up to a 15% improvement in fuel efficiency mainly in the cruising range where the engine is used a majority of the time.

* Data used in the graphs were obtained through "In-House Suzuki Testing" under uniformed conditions. Results will vary depending upon operating conditions (boat design, size, weight, weather, etc.)

Suzuki Precision Control (Electronic Throttle and Shift Systems)

Suzuki Precision Control is a technologically advanced computer-based control system that replaces the mechanical control cables found in conventional control systems with electronic wiring that eliminates the source of friction and resistance. While you enjoy smooth, little friction throttle and shift 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 builtin 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 single, twin, triple or quad installations as well as dual station operation.



Big Block - High Performance Engine

The new DF175TG/150TG development team based both of these new Suzuki outboards on a big block inline fourcylinder four-stroke engine with a 2,867cm³ displacement. The block is topped with a DOHC powerhead that provides four-valves per cylinder for high performance. While the large displacement allows both to deliver exceptional acceleration and velocity, our engineers made sure that the outboard's final dimensions are as compact and lightweight as possible.

Both outboards feature some of the best of Suzuki's advanced technologies that have been developed to extend engine performance. The DF175TG incorporates the same variable valve timing system that is found on our flagship DF300AP and high-end DF250AP outboards to boost torque in the low to mid power range. Both outboards feature multi-stage induction and a 32-bit onboard computer that monitors and controls engine functions for greater performance, fuel economy and lower exhaust emissions.

Largest Displacement in Their Class

Displacement plays is an important factor in the engine's ability to produce exceptional acceleration and torque–generally speaking, the more the better. At 2,867 cm³, the title for largest displacement in the 129kW (175PS) four-cylinder four-stroke category goes to the DF175TG.

VVT (Variable Valve Timing) (DF175TG)

Variable Valve Timing is utilized to expand the four-stroke engine's power potential, creating an outboard that delivers high performance while retaining the benefits that four-stroke technology provides. Like the flagship DF300AP and DF250AP, the DF175TG's 2.9-liter in-line four-cylinder engine incorporates an aggressive cam profile designed to deliver maximum output and performance from the engine at high rpm. Using Suzuki's advanced Variable Valve Timing to vary the timing of the intake valves by optimizing camshaft timing, Suzuki en-

gineers have gained greater low and mid range torque from the engine, optimizing power output across the entire operating range of the outboard. The system is controlled by hydraulic pressure from the oil pump and the process happens automatically so all you have to do is enjoy the power and performance.





At the comparison test, Multi-Stage Induction System of the motor was operated.



Multi-Stage Induction (MSI)

Getting the right amount of air into the cylinder has a great impact on performance. High-speed operation typically requires a greater volume of air, low-speed less. Suzuki's Multi-Stage Induction system meets these needs by utilizing two intake manifold pipes per cylinder to ensure the engine gets the right amount of air. At low rpm, air enters the combustion chamber through a longer, curved manifold pipe designed to improve combustion and boost low-

m Torque Curve

end torque. As rpm increases, the valves open on the direct intake pipes. Shorter and lacking resistance, these pipes allow a greater volume of air into the chamber, increasing the engine's ability to breathe efficiently at high rpm resulting in higher power output during highspeed operation.



Smooth Operation

Counter Balancer System

One of the inherent characteristics common to in-line four cylinder engines when operating at high rpm is a secondary vibration that is directionally in line with the piston's movements. To neutralize this vibration, Suzuki engineers utilize a secondary balancer system that counters the piston's movement with a horizontal motion. To achieve this, the balancer is divided into left and right sections each rotating in an opposite direction at twice the speed of the crankshaft, effectively countering the secondary vibrations and producing smoother engine operation.

Thrust Mount System

Both outboards also incorporate a combination of two different rubber mount types designed to reduce engine vibration and provide stable operation. Both upper and lower mounts incorporate both soft type and high thrust rubber mounts. Soft type rubber mounts are designed to absorb vibrations generated in the idling through 2,000rpm operating range. High thrust rubber mounts provide stable operation under high loads while providing an improvement in power and performance.

Offset Drive Shaft

Pioneered by Suzuki, the use of the offset drive shaft on four-stroke outboards has long been utilized to reduce the size of the outboard. Found on all Suzuki four-strokes from the DF70A and up, this design positions the crankshaft in front of the drive shaft simultaneously moving the outboard's center of gravity forward. While the design contributes greatly to the outboard's overall compactness and improved power performance, it also moves the engine's axis of inertia, the point where engine vibrations

are at a minimum, up over the upper engine mount. thus greatly reducing vibration. These outboards also incorporate twostage gear reduction designed to take maximum advantage of the power produced by these high performance engines. Providing a final drive ratio of 2.50:1-the largest you can find in either of these outboard classesit delivers powerful torque for quick acceleration and great top-end speed. 30:36=1.20



Quietness

The DF175TG/150TG incorporate large displacement, big block engines that produce a lot of power, but that doesn't mean you have to give up on quiet operation.

Quiet operation is an integral part of Suzuki outboard design, and a character that Suzuki four-strokes have long been noted for. Comparing noise levels between the four-stroke DF175TG and its twostroke counterpart, the graph clearly shows that the DF175TG runs quieter than its two-stroke counterpart.

Comparison



*According to Suzuki Internal Running Test

Advanced Electronics

32-Bit ECM (Engine Control Module)

The DF175TG/150TG are both equipped with a 32-Bit ECM (Engine Control Module) that provides precision control over motor operation, particularly the ignition and fuel delivery systems. This powerful onboard computer monitors and processes key data gathered in real-time from a series of sensors placed in areas crucial to engine operation. Those sensors include the Manifold Absolute Pressure Sensor, Crankshaft Position Sensor, Intake Air Temperature Sensor, Shift Position Sensor, Throttle Position Sensor, Cylinder Wall Temperature Sensor, Camshaft Position Sensor, and Exhaust Jacket Temperature Sensor. Using this data the computer delivers precision control of the engine's ignition and fuel systems maintaining an optimal spark and fuel supply under all operating conditions.

Multi-Point Sequential Electronic Fuel Injection

Suzuki pioneered the use of electronic fuel injection in four-stroke outboards with the launch of its original DF70/60 in 1997. Suzuki's Multi-Point Sequential Electronic Fuel Injection supplies each of the engine's cylinders with an optimized mixture of fuel and air that is injected into the cylinder at high pressure according to commands from the ECM's 32-bit computer. The system delivers improved fuel economy, crisp acceleration and reduced emissions that meet emissions regulations. It also conforms to the Recreational Craft Directive (RCD) Standards, Directive 2003/44EC of the European Parliament and of the Council, and has received a three-star rating from the California Air Resource Board (CARB).



Multi Point Sequential Electronic Fuel Injection

High Output Alternators

The alternator utilized on the DF175TG/150TG is designed to produce a maximum output of 44A (12V), the bulk of which is available with the motor running at a low 1,000

rpm. This ensures an ample supply of power to run an assortment of electronics under most circumstances.



Designed with Convenience in Mind

Tilt Limit Switch

To protect the boat and motor from damage that can oc-

cur when tilting the motor, both outboards incorporate a user adjustable tilt limit switch that prevents the outboard from tilting beyond a predetermined point.



Tilt Limit System

Water-cooled Voltage Regulator with Isolator

Water-cooled voltage regulators incorporated on both outboards dissipate heat in the regulator to enhance durability. The battery charging system also incorporates an isolator function that allows the use of two batteries. The system splits electric current into two circuits and is designed to safeguard the main battery in the event that the sub battery becomes drained.

Fuse Box

Fuses for the outboard's electrical system are housed in a single fuse box located on the side of the outboard motor. This design keeps the outboard's exterior clean while providing convenient access.



Fuse Box

Dual Engine Flush Ports

Over time, salt, sand, and dirt buildup can restrict flow in the cooling system causing damage. To help prevent such buildup, both outboards are equipped with two freshwater flush ports that make flushing the cooling system as easy as possible. With one port located on the port side of the down housing and a second on the front panel, you'll always have easy access to the flushing system whether the boat is in or out of the water.



Durability and Reliability

Suzuki's Anti-Corrosion Finish

To guard against corrosion, Suzuki protects its outboards with its own specially formulated Suzuki Anti-Corrosion Finish. Applied directly to the outboard's aluminum alloy, this finish provides maximum bonding of the finish to the aluminum surface. Layering an epoxy primer undercoat, black metallic finish, and clear acrylic fiber finish on top

of this forms an effective treatment against corrosion, protecting those parts of the outboard's aluminum alloy that are constantly exposed to saltwater.



Enhanced Air Intake System

Both outboards are designed with a large air induction port that maximizes airflow into the engine to boost power output. Channeling airflow through a large silencer, the intake manifold and finally into the cylinders via a high performance DOHC four-valve per cylinder head, the system increases the volume of air flowing into the engine resulting in greater low- to mid-range torque and a wider powerband that is a must for any outboard engine. Also incorporated into the system is a water separator to keep water out of the air intake system.