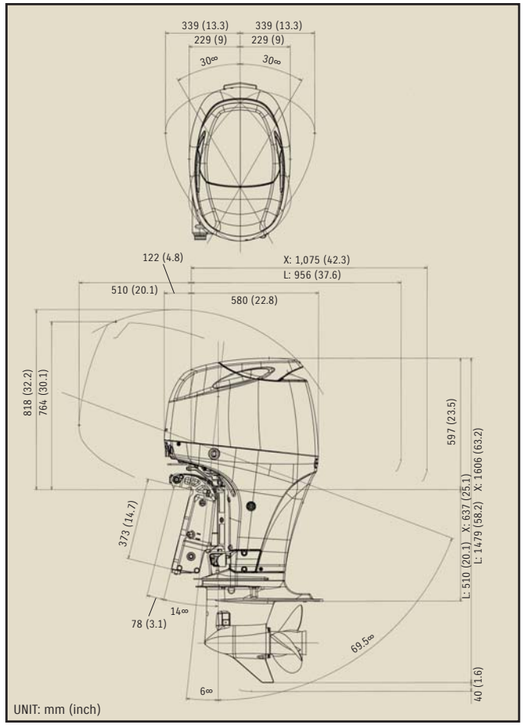
DF70/80/90 SPECIFICATIONS

MODELS	DF70	DF80	DF90
ENGINE TYPE	4-stroke DOHC 16 valves		
FUEL DELIVERY SYSTEM	Multi Point Sequential Electronic Fuel Injection		
SHAFT LENGTH mm (in.)	L: 510 (20), X: 637 (25)		
STARTING SYSTEM	Electric		
WEIGHT kg (lbs.) *	L: 155 (341), X: 158 (348)		
NO. OF CYLINDERS	Inline 4		
PISTON DISPLACEMENT cm3 (cu.in.)	1,502 (91.7)		
BORE × STROKE m/m (in.)	75 × 85 (3.0 × 3.3)		
MAXIMUM OUTPUT kW (PS)/rpm	51.5 (70)/5500	58.8 (80)/5500	66.2 (90)/5800
FULL THROTTLE OPERATING RANGE rpm	5000–6000	5000–6000	5300–6300
STEERING	Remote		
OIL PAN CAPACITY ℓ (US/Ipm.qt.)	4.0 (4.2/3.5)		
IGNITION SYSTEM	Fully-transistorized		
ALTERNATOR	12V 27A		
ENGINE MOUNTING	Shear Mount		
TRIM METHOD	Power Trim and Tilt		
GEAR RATIO	2.59 : 1		
GEAR SHIFT	F-N-R		
EXHAUST	Through Prop Hub Exhaust		
DRIVE PROTECTION	Rubber Hub		
PROPELLER SIZE (in.)** 3-BLADE ALUMINUM	3 × 14 × 13 3 × 13-7/8 × 15 3 × 13-3/4 × 17	3 × 13-3/4 × 19 3 × 13-3/4 × 21 3 × 13-3/4 × 23	

DIMENSIONS



UNIT: mm (inch)

* With battery cable, without propeller & 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 owner's manual carefully. Remember, boating and alcohol or other drugs don't mix. Always use a personal flotation devise. 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
300 TAKATSUKA, MINAMI, HAMAMATSU, JAPAN

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SUZUKI Way of Life!

PRODUCT INFORMATION DF70/80/90

A New Standard in Four-Strokes From Suzuki

Ten years after starting the four-stroke revolution with its award winning DF60 and DF70 outboards, Suzuki is re-inventing the category with three new models, the DF70, DF80, and DF90. As the first of Suzuki's new generation four-strokes, they are a showcase of advancements and achievements—such as digital sequential electronic fuel injection, a powerful 2.59:1 final drive ratio, and a zero-maintenance self-adjusting timing chain—that Suzuki has pioneered over the last ten years. They also feature Suzuki's proven offset drive shaft which, used in combination with a newly designed powerhead, contributes to making the DF90 the smallest and lightest four-stroke outboard in its class. This compact, lightweight design also makes any of these three outboards ideal for use on a wide range of boat types.

New to the Suzuki lineup is the DF80, an outboard that opens up more options for boaters in search of the perfect combination of power and performance. Cowlings on all three outboards feature new graphics on their sides and Suzuki's "S" logo on front giving these first of a new generation of four-strokes a sharp new look.

Features That Deliver Greater Efficiency, Better Economy, and More Boating Pleasure

- **The DF90 is the lightest, most compact outboard in its class.**
- **The DF90 offers top level fuel efficiency in its class.**
- **A new streamlined gear case and highly efficient propeller contribute to increased top speed and economical operation.**
- **Smoother shifting through precision engineering.**
- **All three outboards offer low emissions and clean operation that conform to Euro 1 Emissions Standards (EU Directive 2003/44/EC) – the EU emissions standards (exhaust gases and noise levels) set by the European Parliament and the Council.**

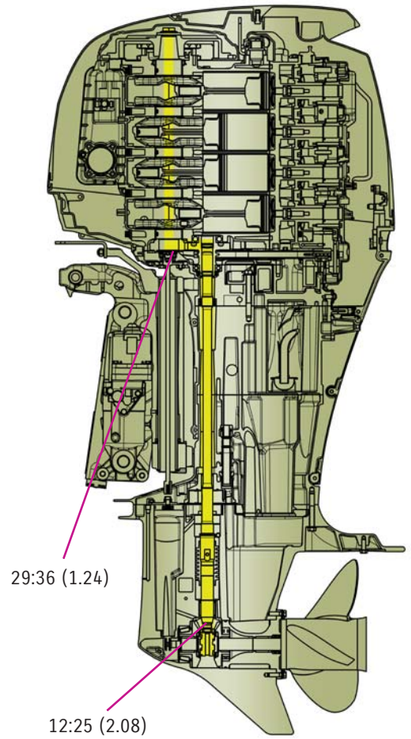
The making of a compact outboard

Suzuki's engineers are well known for their ability at reducing the size of the outboard. Their skills have created some of the most compact four-stroke outboards in their respective classes. Taking a fresh approach to the DF70/80/90, every part and component has been designed from the ground up. Applying the knowledge and technical advancements gained over the last ten years they have succeeded again at reducing outboard size and weight.

Offset Driveshaft

Pioneered with the first generation DF90, Suzuki's offset driveshaft has played an effective role in reducing the size of the outboard. The design uses intermediate reduction gearing to position the crankshaft in front of the driveshaft, moving the outboard's center of gravity forward for better weight distribution on the transom. It also provides improvements in power performance, balance, and vibration reduction.

Combining the offset driveshaft with a newly designed powerhead, Suzuki engineers have created an outboard that is about 7.5cm (3 inches) shorter than the original DF90 and up to 23cm (9 inches) shorter than competitive models making the new DF90 the most compact outboard in its class. Its compact design facilitates installation on a wider range of boats, and offers more room around the transom for fishing and other activities.



Creating a Fuel Efficient Outboard

Suzuki Lean Burn Control System

The lean burn control system is designed to run on a thinner fuel mixture through the use of a lean air-fuel ratio. Suzuki engineers designed a system that predicts fuel needs according to operating conditions. It achieves added fuel economy through a reduction of pumping loss. In order to balance fuel efficiency with clean emissions, the system sets up air-fuel ratio taking advantage of the reaction characteristics of exhaust emissions. The system also has a wide lean burn range that extends up into the top speed range providing more efficient operation at cruising speed as well.

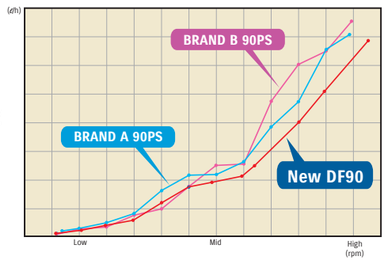
Mechanically Efficient Design

Looking beyond fuel systems for solutions, Suzuki engineers explored ways they could improve efficiency by reducing mechanical loss. They designed a new oil pump that delivers greater mechanical efficiency, and improved hydrodynamics in the lubrication system, allowing oil to move through the system with less resistance. In reducing mechanical loss in these and other areas, Suzuki has created a more efficient engine that contributes to better fuel economy.

Multi-Point Sequential Electronic Fuel Injection

The first generation DF70 was awarded the National Marine Manufacturers Association's Innovation Award for, among other firsts and advancements, its use of Suzuki's Multi-Point Sequential Electronic Fuel Injection system. The second generation DF70/80/90 use this sophisticated system once again to deliver instant throttle response, improved fuel economy, and low emissions. The system uses the ECM's 32-bit computer, which gathers and processes vital operating data in real time from a series of sensors located in critical areas on the engine, to calculate the optimum amount of fuel and air to be injected at high pressure into the cylinders. The system offers excellent fuel efficiency and reduces emissions enabling these outboards to meet Euro 1 Emissions Standards. Other benefits include smooth starts, and maximum operating efficiency.

Comparison of Fuel Consumption



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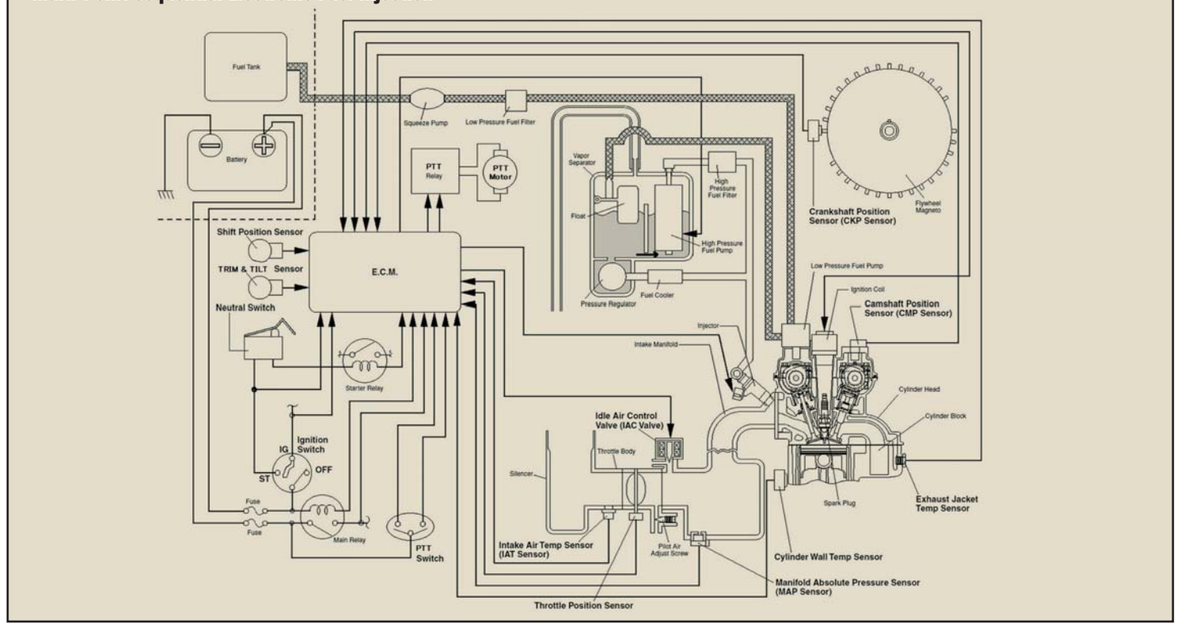
Multi-Point Sequential Electronic Fuel Injection



High Performance Features

DOHC 4-Valve Engine

The DF70/80/90 benefit from Suzuki's unrivaled experience in the design and manufacture of motorcycle, automotive, and marine engines. Drawing upon their past advancements and achievements, Suzuki engineers have provided these new outboards with advanced engineering that delivers high power output, performance, fuel economy, and efficient operation.

Starting with an in-line 4-cylinder block, Suzuki designed an all new, more compact dual overhead cam (DOHC) powerhead with four valves per cylinder. Its design has reduced the overall size of the outboard while providing high performance power. Power is delivered via a two-stage mixed cam drive system consisting of gears that transfer power between the crankshaft and the drive shaft, and a chain that delivers power from the drive shaft to the camshaft.

Two-Stage Gear Reduction

To take maximum advantage of the power produced by these high performance engines, Suzuki engineers have utilized a two-stage gear reduction ever since the introduction of the original DF90. The second generation DF70/80/90 follow in their predecessor's footsteps employing the same method to provide an efficient means of supplying maximum propulsion.

The key to gaining maximum propulsion is through the use of a large diameter propeller with a suitable pitch. But spinning a larger propeller requires more torque, which requires larger gears or a larger gearbox adding weight and resistance that do not always produce effective results. Suzuki engineers have long used a two-stage gear reduction system that provides the needed torque without adding unwanted bulk and weight. Through this method, the DF70/80/90 achieve a powerful 2.59:1 final drive ratio, producing the needed torque for quick acceleration and great top-end speed.

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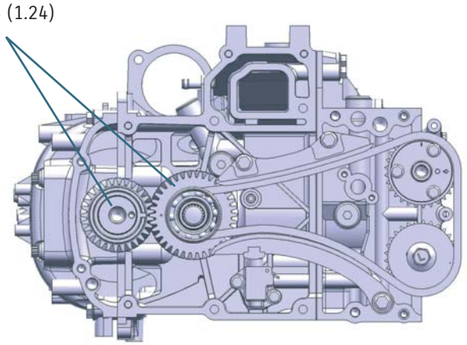


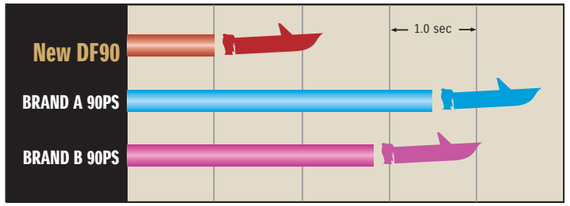
High Performance Features

Streamlined Gear Case and Highly Efficient Propeller

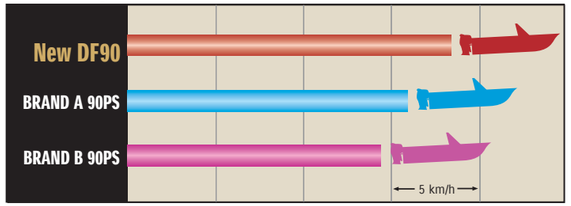
The lower gear case on all three outboard motors utilizes a hydrodynamic design that was first introduced on the flagship DF300. As the lower unit moves through the water its sleek form reduces drag by up to 36% compared to conventional designs, contributing to faster acceleration and increased speed.

Thanks to the robust torque delivered with Suzuki's two-stage gear reduction, these outboards can turn a large diameter propeller. Suzuki engineered a new highly efficient propeller that takes advantage of this torque to provide faster acceleration and higher top speed.

Comparing Acceleration [0~30mph (48km/h) Elapsed Time]



Comparing Max Speed



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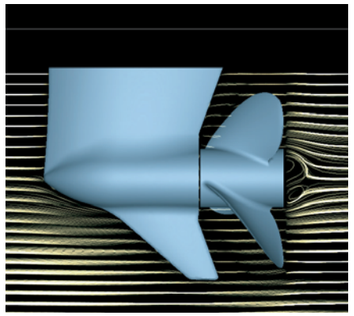
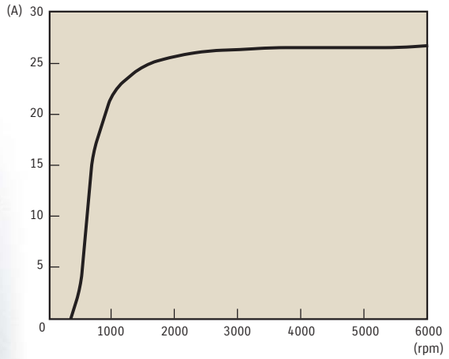


High Output Alternator

Suzuki's DF70/80/90 feature powerful 27A alternators that are designed to generate the bulk of their power at low rpm. These high-output alternators deliver 22A even at a low 1,000 rpm. In most situations, that's enough power to keep an assortment of marine electronics and other accessories operating all day long.



User Friendly Features

Smoother Shifting

Taking a fresh look at the gear case, our engineers redesigned the transmission and shifting system, utilizing new dimensions optimized for strength and rigidity. Components were engineered with greater precision and tighter tolerances to reduce play and noise. Incorporating a shift sensor into the system, the ECM now monitors shift action and then controls the ignition for precise shifting. Overall, refinements to the system led to a 40% improvement in gear transfer compared to the original DF90, resulting in improved performance, precision control and shifting.

Suzuki Easy Start System

The Suzuki easy start system no longer require to hold the key until the engine start. Now simply turn the key and release and the starter will stay engaged until the engine starts.

The system also features more precise cylinder detection, fuel injection, and ignition control to deliver smoother and improved starts, more efficient combustion, and greater fuel economy making the outboard more environmentally friendly.

Dual Engine Flush Ports

The buildup of salt, sand, and dirt in the engine's cooling system can lead to damage over time. The DF70/80/90 are designed with dual freshwater flush ports to make flushing of the cooling system as convenient as possible. One inlet located on the port side and a second on the front panel provide easy access and facilitate flushing of the system whether the boat is in or out of the water.

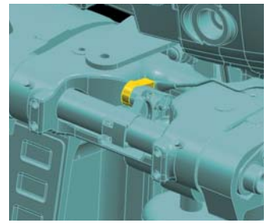
Euro 1 Emissions Standards Label (EU Directive 2003/44/EC)

This label identifies outboard motors that conform to EU emissions standards for exhaust gases and noise levels set by the European Parliament and Council. DF70, DF80, DF90 all conform to these standards, which are effective from January 1st, 2006.

Timing Chain

The DF70/80/90 are equipped with a timing chain that uses an automatic hydraulic tensioner to keep tension in check. The system provides users with years of maintenance free operation

New Trim and Tilt Limit System



The new trim and tilt limit system is designed to protect the boat from damage that can occur when tilting the outboard. The system is designed with a tilt angle sensor that incorporates both the functions of a tilt limit and trim sender. Using a step-free, continuous type tilt limiter makes installation of the outboard possible on nearly any type of boat.

Suzuki Anti Corrosion Finish

Suzuki's specially formulated anti-corrosion finish increases the durability of the engine and helps to protect parts of the aluminum exterior that are constantly exposed to saltwater. Applied directly to the outboards exterior, this advanced finish allows maximum bonding of the finish to the outboard's aluminum surface, creating an effective treatment against corrosion.