

## A word from Suzuki engineers

### Hideto Nakamura (Development and Design Group)

In charge of engine design and overall design coordinator.  
Suzuki Employee for 16 years.

Career in company: PWC engine development, snowmobile engine development, outboard engine design  
I worked on development and design of the outboard motor with a focus on reducing the total weight of the outboard engine.

When we were developing the outboard, we wanted to reduce weight so we looked not only at the large parts, but at the smallest of parts, component shapes, processes, even the materials as well. We also used combustion and flow analysis extensively to determine the optimum shape of each part so as to obtain the desired power output from the engine.

The new DF15A/20A are extremely lightweight and produce great power output from low rpm. I'm very satisfied with the results.

### Yukihiro Yoshikawa (Development and Design Group)

In charge of the design of electronics.  
Suzuki Employee for 15 years.

Since the DF15A/20A are the smallest horsepower outboards to be equipped with fuel-injection, it was a challenge obtaining the same level of performance found in larger outboards while reducing the size of the parts.

In regard to the ECM (Engine Control Module), we designed it to operate without a battery, and incorporated a variety of devices to improve fuel efficiency so you can fully enjoy the features of fuel injection.

### Akinori Yamazaki (Experiment Group)

In charge of experimental development.  
Suzuki Employee for 8 years.

When developing the DF15A/20A, we focused on the features of a battery-less fuel injection system. A number of engine functions can be controlled electronically, startup performance is not influenced by the operating environment, idle rpm is very stable, and by taking advantage of the lean burn system, it delivers superior fuel efficiency.

Compared to the simple structure of a carburetor, we completely rethought the layout of the fuel injection system, giving priority to the function of each part so that the resulting system was the same size and weight of a carburetor.

### Hirohichi Takewaki (Production Design Group)

In charge of engine rigging.  
Suzuki Employee for 8 years.

When we started developing the new DF15A/20A, we made a conscious decision to develop as compact and lightweight an outboard as possible.

In particular, the new fuel injection system enabled us to reduce the size of the outboard, and the use of resins allowed us to reduce its overall weight.

While incorporating fuel injection increased the number of parts compared to a carbureted system, through careful consideration we could fit everything into an engine cover that is nearly the same size as the previous outboard.



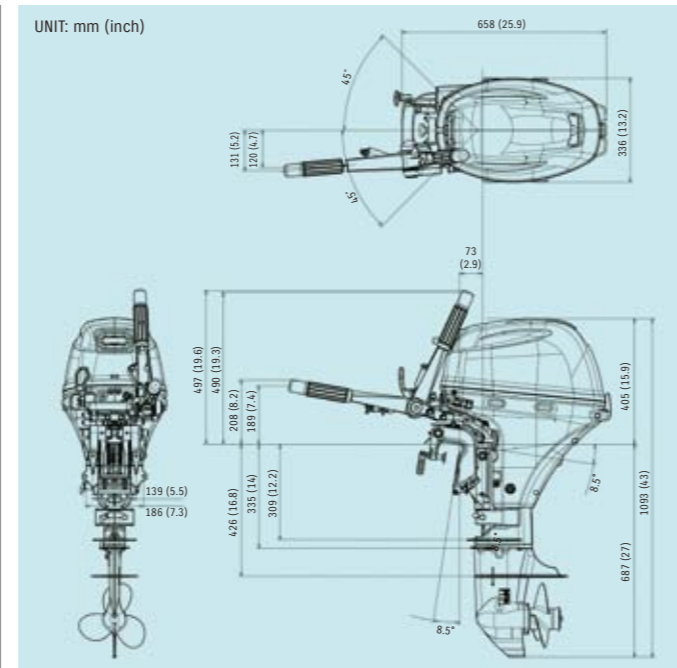
# PRODUCT INFORMATION



## DF20A/15A SPECIFICATIONS

	DF20A		DF15A	
ENGINE TYPE	4-STROKE OHC 4-VALVE			
FUEL DELIVERY SYSTEM	ELECTRONIC FUEL INJECTION			
RECOMMENDED TRANSOM HEIGHT mm (in.)	L: 508 (20), S: 381 (15)			
STARTING SYSTEM	ELECTRIC	MANUAL	ELECTRIC	MANUAL
WEIGHT kg (lbs)	L: 49 (108) S: 48 (106)	L: 45 (99) S: 44 (97)	L: 49 (108) S: 48 (106)	L: 45 (99) S: 44 (97)
*with battery cable, without propeller & engine oil				
NO. OF CYLINDERS	IN-LINE 2			
PISTON DISPLACEMENT cm <sup>3</sup> (cu. in.)	327 (20.0)			
BORE X STROKE m/m (in.)	60.4 X 57 (2.38 X 2.24)			
MAXIMUM OUTPUT kW (PS)/rpm	14.7 (20)/5,800		11.0 (15)/5,500	
FULL THROTTLE OPERATING RANGE rpm	5,300-6300		5000-6000	
STEERING	Tiller			
OIL PAN CAPACITY lit. (US/Imp. qt.)	1.0 (1.06/0.88)			
IGNITION SYSTEM	DIGITAL CDI			
ALTERNATOR	ELECTRIC:12V 12A, MANUAL: 12V 6A			
ENGINE MOUNTING	SHEAR MOUNT			
TRIM METHOD	MANUAL TRIM AND TILT			
GEAR RATIO	2.08 : 1			
GEAR SHIFT	F-N-R			
EXHAUST	THROUGH PROP HUB EXHAUST			
DRIVE PROTECTION	RUBBER HUB			
PROPELLER SIZE (in.)	● 9-1/4 X 7 ○ 9-1/4 X 9 ○ 9-1/4 X 10 ● 9-1/4 X 11		● 9-1/4 X 8 (THICK) ● 9-1/4 X 9 (THICK) ● 9-1/4 X 10 (THICK)	
All propellers are the 3-blade type ○: Standard ●: Optional				

## DIMENSIONS



Please read your owner's manual carefully. Remember, boating and alcohol or other drugs don't mix. Always use a personal flotation device. 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.

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99999-C2042-001 DF20A/15A LEAN BURN PRODUCT INFORMATION ㊦㊧ Printed in Japan 1201

 **SUZUKI**

Way of Life!

Lean Burn **DF20A/15A**

# The World's First 14.7kW (20PS)/11.0kW (15PS) Outboards designed with Lean Burn and Battery-less Fuel Injection

When you want to get up and go, you should be able to. And with Suzuki's portable outboards, you can. State-of-the-art designs make the new DF20A and DF15A among the most technologically advanced portable outboards around. The DF20A is an all-new model that fills the slot between the DF25 and the DF15 in Suzuki's portable lineup with an environmentally conscious, fuel-efficient outboard offering great portable fun. The DF20A and DF15A are the world's first outboards in the 14.7 kW (20PS) and 11.0kW (15PS) classes equipped with a battery-less fuel injection system that offers quick, easy starts and cleaner, fuel efficient operation. Suzuki engineers took a bold approach in building all-new fuel injection system components that are smaller and lighter than those found in previous systems. This keeps the overall weight of the DF20A lower than any other outboard in the four-stroke 14.7kW (20PS) class. And adding Suzuki's proven Lean Burn Control technology to their design, these outboards deliver remarkable fuel economy and reduced emissions throughout their operating range.

## Features

- First outboards in the 14.7kW (20PS) and 11.0kW (15PS) class equipped with a battery-less fuel injection system.\*
- Suzuki's Lean Burn Control system delivers outstanding fuel economy.
- Easy start recoil starter offers reduced effort and quicker starts.
- Lightest outboard in the four-stroke 14.7kW (20PS) class.\*

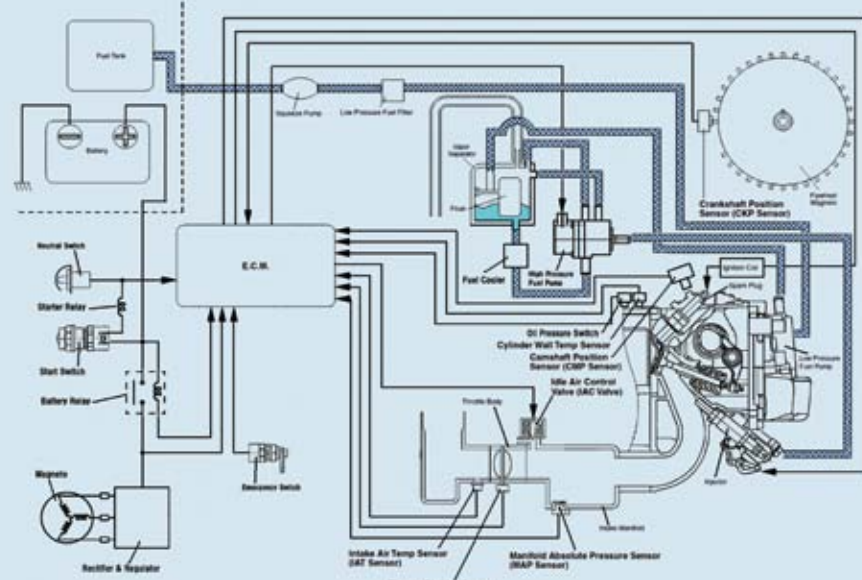
\* According to in-house investigations as of January 2012.

## New Generation Fuel Injection System

These are the first outboards in their respective classes to offer fuel injection, and the DF20A/15A engineering team did an incredible job designing the outboard without adding unneeded bulk or weight. All new components, including the inline high-pressure fuel pump, fuel cooler, vapor separator, fuel injectors, and a new throttle body, were designed as compact and lightweight as possible. The entire system was designed to fit in as little space as possible. The system operates battery-less, which is another industry first in the 14.7kW (20PS) and 11.0kW (15PS) class. While fuel injection systems normally require battery power to deliver quicker starts, smoother running performance, and more acceleration in all conditions, Suzuki's Battery-Less system does this all without the need of battery power.



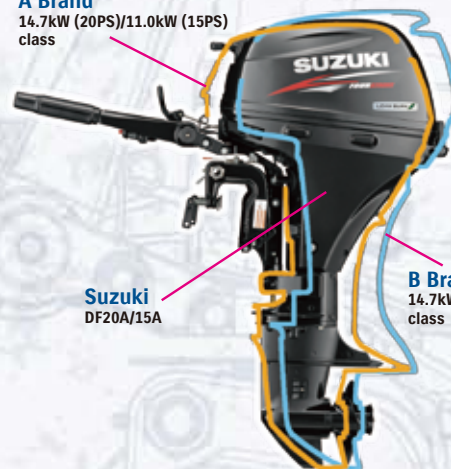
Fuel injection system (Electric Start Model)



## Light Weight & Compact

To create as light and compact an outboard as possible, our DF20A/15A engineering team focused heavily on reducing the size and weight of each part and component, looking to create the smallest, lightest parts possible without compromising their integrity. Their success delivered an outboard that is the lightest in the 4-stroke 14.7kW(20PS) class—about 5% lighter than the closest competitor.

A Brand  
14.7kW (20PS)/11.0kW (15PS)  
class



Suzuki  
DF20A/15A

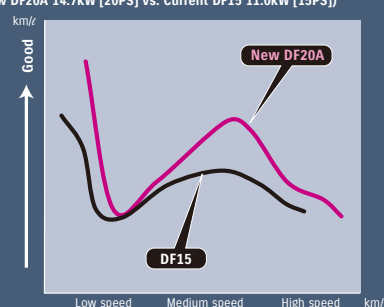
B Brand  
14.7kW (20PS)/11.0kW (15PS)  
class

## Superior Fuel Economy – Suzuki's Lean Burn Control System

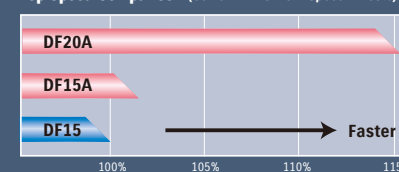
First introduced on our DF90/80/70, the Suzuki Lean Burn system is an intelligent system that monitors engine performance and operating conditions to predict fuel needs and deliver a leaner fuel mixture to the engine. The system delivers remarkable improvements in fuel economy over the engine's entire operating range. This system is found on nine Suzuki models from the new DF15A up to the flagship DF300A, providing boaters with top-level fuel economy at all operating speeds.

**LEAN BURN**

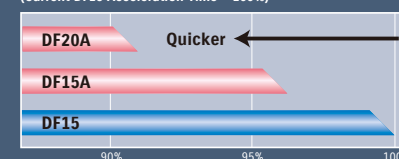
Comparison of Running Distance per 1 Liter of Fuel  
(New DF20A 14.7kW [20PS] vs. Current DF15 11.0kW [15PS])



Top Speed Comparison (Current DF15 Max. Speed = 100%)



Acceleration Time Comparison (0-50m)  
(Current DF15 Acceleration Time = 100%)



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

## PRODUCT INFORMATION DF20A/15A LEAN BURN

## Easy to Use

In addition to better fuel economy, the fuel injection system makes starting the outboard easier and more dependable in nearly all operating conditions or environment. While our carburetor models are some of the finest outboards available, fuel injection makes the DF20A/15A operate even smoother with reduced engine vibration.

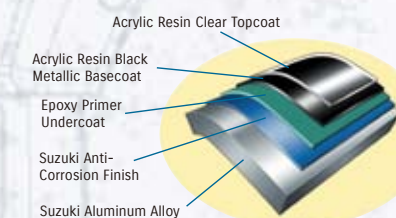
## Easy Start Recoil Starter

While fuel injection makes starts easier, the DF20A/15A engineering team designed a starter with a very light recoil load that requires less pull strength. Requiring much less effort to pull the starter makes starts exceptionally easy for almost everyone.



## Suzuki's Anti Corrosion System

Suzuki protects the outboard's exterior from harmful corrosion with its own specially formulated anti-corrosion finish. Applying the finish directly to the outboard's aluminum surface, allows maximum bonding of the finish to the surface to increase durability and help protect parts that are constantly exposed to saltwater.



## Cleaner, Efficient Operation

Suzuki's advanced four-stroke technology delivers cleaner and efficient outboard operation that conforms to the Recreational Craft Directive (RCD) - Directive 2003/44/EC of the European Parliament and of the Council, and have received "Three-Star Ultra Low Emission" ratings from the California Air Resources Board (CARB).

