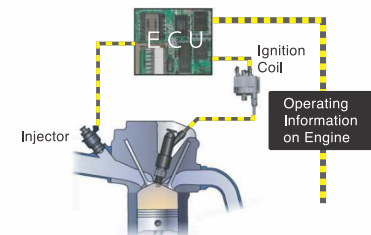


**PGM-FI  
(Programmed Fuel Injection)**

Precise fuel injection control by the ECU (Electronic Control Unit) enables superior combustion control, enhancing fuel efficiency and starting performance.



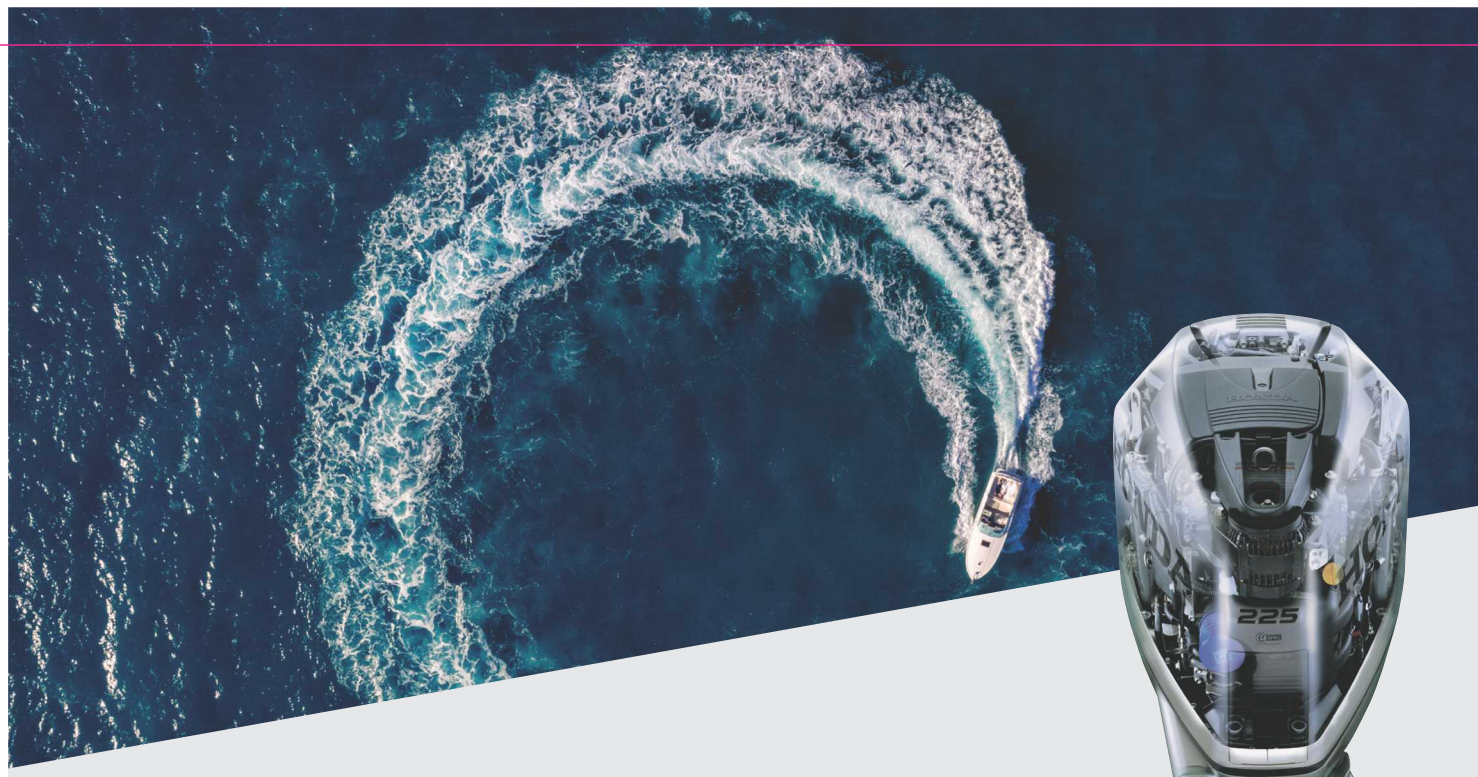
**VTEC  
(Variable Valve Timing and Lift Electronic Control)**

VTEC changes the valve timing and amount of lift according to operating conditions, generating a large amount of power smoothly from low to high engine speeds.



**BLAST  
(Boosted Low Speed Torque)**

The ECU amplifies torque by optimizing the amount of fuel supplied and ignition timing during rapid engine acceleration. This represents unique Honda technology that substantially enhances acceleration performance.



**ECOMo  
(Economy Controlled Motor)**

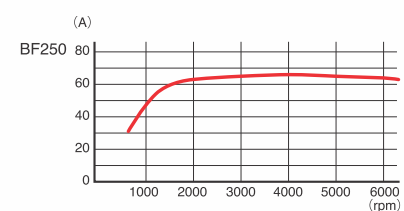
This feature facilitates low fuel consumption with lean burn operation. It achieves fuel efficiency that is particularly high at cruising speeds.



**Charging Performance**

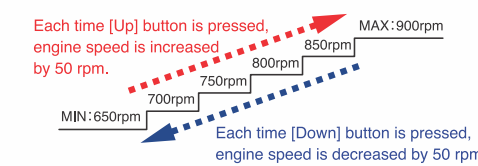
Top in class charging performance has been achieved by adopting a large capacity alternator. Variable charging output control<sup>5</sup> has been provided with the BF250. This allows a diverse range of accessories to be used.

<sup>5</sup> Engine rpm is increased during idling when power demand rises, boosting charging capacity.



**Trolling Control<sup>6</sup>**

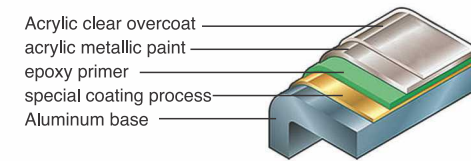
The engine speed can be adjusted at low rpm in fine increments with this button. This simplifies throttle operation to keep the boat at the desired location for fishing when there is a current.



\* For models BF150, BF135 and BF115, engine speed can be adjusted between 650 – 900 rpm, and for model BF60, engine speed can be adjusted between 750 – 1,000 rpm.  
<sup>6</sup> Adapted on BF60/115/135/150

**Special Coating Process  
Unique to Honda**

A unique Honda coating process has been adopted with a focus on durability. The application of four coats provide powerful protection against rust, corrosion by salt water, deterioration due to ultraviolet rays and other elements.



**NMEA2000**

Various outboard engine electronic devices for display of engine information compatible with NMEA 2000 can be used. The NMEA (National Marine Electronic Association) has established a uniform interface standard for digital data exchange between different marine electronic products.



**Big Series**



**BF250**

250PS

**BF200**

200PS

**BF150**

150PS

**BF250**  
**Honda's New Flagship V6-Cylinder 3.6L VTEC Outboard Engine**

- Direct intake system has been adopted to enable direct injection of external air into the engine, minimizing intake temperature and achieving high output.
- Adoption of advanced fuel injection control technology, large-diameter propeller and low gear ratio achieve high level of power, performance and fuel efficiency
- Newly designed gear case achieves reliability and durability needed to handle high power.
- Charging performance of 12V-60A.
- Adoption of variable output while idling control automatically increases engine speed by 100 rpm when power demand rises, boosting charging capacity from 31A to 40A (data from Honda in January 2012)

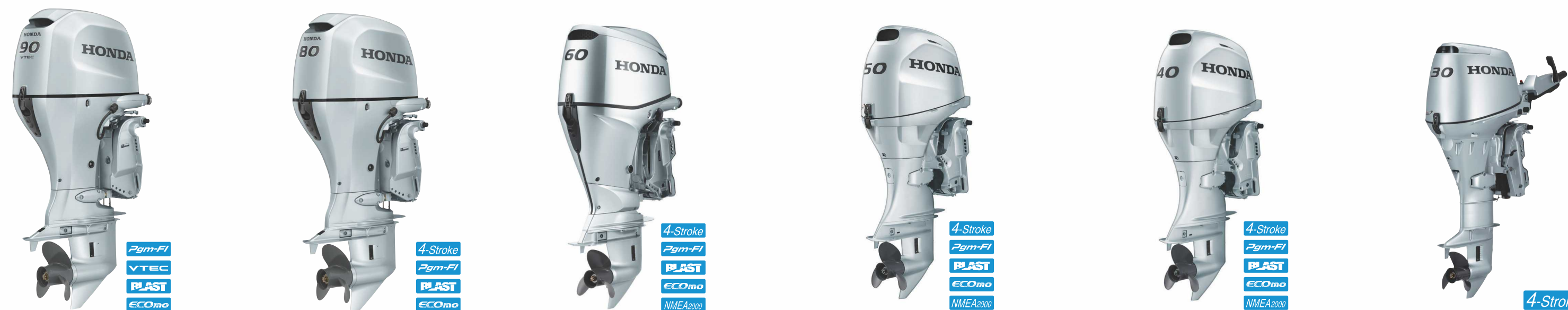
**BF200**  
**V6-3.6L + VTEC (BF200) 4-Stroke Engine High Reliability and Durability**

- Adopts VTEC (BF225) and variable air intake systems. Generates high power from low to high engine speeds.
- Slim, light and easy-to-mount design makes it easy for twin installation.
- Charging performance of 12V-60A.

**BF150**  
**In-Line 4-Cylinder 2.4L DOHC / VTEC (BF150) 4-Stroke Engine The Culmination of Unique Technology**

- Adopts advanced fuel injection control technology.
- Reduction in weight achieves top level of acceleration in this class.
- High power, outstanding fuel efficiency and low exhaust emissions.
- Charging performance of 12V-40A.

**Mid Series**



**BF90**

90PS

**BF80**

80PS

**BF60**

60PS

**BF50**

50PS

**BF40**

40PS

**BF30**

30PS

**BF90/BF80**  
**Lightweight & Compact In-Line 4-Cylinder 1.5L VTEC (BF90) 4-Stroke Engine**

- Achieves low fuel consumption by adopting PGM-FI and lean burn control.
- Adoption of BLAST(Boosted Low Speed Torque), world's first outboard engine technology for optimal ignition and timing control, boosts powerful acceleration performance.
- Charging performance of 12V-35A

**BF60**  
**In-Line 3-Cylinder 998cc 4-Stroke Engine Powerful Performance and High Fuel Efficiency Combined at a High Level**

- Advanced fuel injection control technology and optimization of gear case achieve powerful acceleration from low speed and outstanding fuel efficiency.
- Top level of 50-degree steering angle to right and left in this class<sup>7</sup> achieves astonishing maneuverability (remote control spec is an option).
- Charging performance of 12V-17A.

<sup>7</sup> Data from Honda in January 2012

**BF50/BF40**  
**In-Line 3-Cylinder 808cc 4-Stroke Engine Advanced Control Technology Provides Powerful Acceleration and High Fuel Efficiency**

- Adopts BLAST(Boosted Low Speed Torque) in addition to PGM-FI, providing powerful performance at all engine speeds.
- Lean burn control at cruising speeds (ECOMo) achieves high fuel efficiency.
- Charging performance of 12V-17A.



**BF30**  
**In-Line 3-Cylinder 552cc 4-Stroke Engine**

Host of types ideal for wide variety of boats & applications

- Powerful But Quiet
- Light & Easy
- Big on Features

Instead of dampening, we loaded these models with features, like a Center Mount Tiller with up-front controls. A 3 to 3 Induction System that provides smooth, quiet operation. And Autostart Enrichment that automatically adjusts the air/fuel mixture for easy starting and warm-up, just like fuel injection.



### Honda – Pioneer in 4-Stroke Outboard Engines

Ever since Honda introduced the GB30 in 1964, the first 4-stroke outboard engine, it has dedicated itself to the development and production of 4-stroke outboard engines. The commitment to develop 4-stroke outboard engines during the heyday of 2-stroke outboard engines was based on the conviction of Soichiro Honda, the founder of the company, that "Products that are used on the water should not pollute the water." Even though Honda faced disadvantages compared to 2-stroke outboard engines with respect to weight and output, we thought that high combustion efficiency, low fuel consumption, low noise and clean exhaust emissions could only be achieved with a 4-stroke outboard engine. Honda's unique 4-stroke technology has continued to evolve, and the high level of technology has been recognized with the receipt of the "IMTEC Innovation Award"<sup>\*\*1</sup> and the "IBEX Innovation Award"<sup>\*\*2</sup>.



GB30 (1964)



BF8 (1992)

### Preserving the Natural Environment

In 1993, the Lake Boden regulations were implemented, the world's most stringent exhaust emissions regulations for outboard engines at the time. Two-stroke outboard engines were not capable of satisfying these regulations, but Honda 4-stroke outboard engines were among the first to comply with them. They were introduced in 1992, the year before these regulations were implemented.<sup>\*\*3</sup> After this, exhaust emissions regulations were implemented by the EPA (Environmental Protection Agency), CARB (California Air Resources Board) and authorities in Europe, and all Honda outboard engine models achieved one of the highest levels of environmental performance in the world.

<sup>\*\*3</sup> Export Spec. BF8 complied with regulations in 1992.

### Synergy of Advanced Automotive Technology and Outboard Engine Technology

The BF250/225/200/175 outboard engines are based on an engine for the "US Odyssey", the BF150/135/115 outboard engines use an "US Accord" engine as the base, and the BF90/75 outboard engines are based on the Honda Jazz. This has enabled powerful performance and a high level of reliability to be achieved. In addition, Honda was the first company in the world to apply VTEC (Variable Valve Timing and Lift Electronic Control), BLAST (Boosted Low Speed Torque), Lean Burn at cruising speeds, ECOmo (Economy Controlled Motor) and other useful innovative technologies.



BF250



BF250

### Design Concept: Harmonize People and Nature

Some of the main characteristics of Honda outboard engines are the form that flows smoothly and naturally through water and air, and the silver body color that is a reflection of shining water. The body color that has been used since 1990 is being given a new look to make Honda outboard engines more attractive. The new body color accentuates the quality of the surface texture.

### Eco-Friendly Outboard Engines Produced at Eco-Friendly Plant

All Honda outboard engines from are produced at the Hosoe Plant within the Hamamatsu Factory, featuring state-of-the-art high-efficiency production technology.<sup>\*\*4</sup> In order to reduce the environmental impact of the facility, the Hosoe Plant has created a benchmark for environmental performance that embodies the Honda green factory concept. This consists of dramatically reducing CO<sub>2</sub> emissions through the introduction of a Honda Soltec thin-film solar power generation system, the effective utilization of rainwater, zero discharge of wastewater during the production process and the application of various other innovative technologies.



Hamamatsu Factory, Hosoe Plant

<sup>\*\*4</sup> As of January, 2012

### Specifications Big Series

Model	BF250	BF200	BF150
Type	4-Stroke SOHC V6	4-Stroke SOHC V6	4-Stroke DOHC 4 Cylinders, In line
Displacement (cm <sup>3</sup> )	3,583	3,583	2,354
Bore x Stroke (mm)	89 x 96	89 x 96	87 x 99
Full Throttle RPM Range	5,300-6,300	5,300-6,300	5,000-6,000
Rated Power (kW (PS) / rpm)	183.9 (250) / 5,800	147.1 (200) / 5,500	111.9 (150) / 5,500
Cooling System	Water Cooled	Water Cooled	Water Cooled
Fuel Delivery	Programmed Fuel Injection	Programmed Fuel Injection	Programmed Fuel Injection
Ignition System	Fully Transistorized Battery Ignition	Fully Transistorized Battery Ignition	Fully Transistorized Battery Ignition
Starting System	Electric	Electric	Electric
Exhaust	Propeller Boss	Propeller Boss	Propeller Boss
Gear Ratio	2.00	2.00	2.14
Battery Charging Capacity	12V-60A	12V-60A	12V-40A
Transom Height (mm)	L:508 / X:635	L:508 / X:635	L:508 / X:635
Dry Weight (kg)	L:286 / X:292	L:280 / XL:285	L:224 / X:227

### Mid Series

Model	BF90	BF80	BF60	BF50	BF40	BF30
Type	4 Stroke SOHC 4 Cylinder	4-Stroke SOHC 4 Cylinders / 16 Valves	4-Stroke SOHC 3 Cylinders / 12 Valves	4-Stroke SOHC 3 Cylinders / 6 Valves	4-Stroke SOHC 3 Cylinders / 6 Valves	4-Stroke SOHC 3 Cylinder - 2 Valves/ Cyl.
Displacement (cm <sup>3</sup> )		1,496	998	808	808	552
Bore x Stroke (mm)		73 x 89.4	73 x 79.5	70 x 70	70 x 70	61 mm x 63 mm
Full Throttle RPM Range	5,300-6,300	5,000-6,000	5,000-6,000	5,500-6,000	5,000-6,000	5,000-6,000
Rated Power (kW (PS) / rpm)	66.2 (90) / 5,800	56.8 (80) / 5,500	44.1 (60) / 5,500	36.8 (50) / 5,750	29.4 (40) / 5,500	22.3(30) / 6,000
Cooling System		Water Cooled	Water Cooled	Water Cooled	Water Cooled	Water Cooled
Fuel Delivery		Programmed Fuel Injection	Programmed Fuel Injection	Programmed Fuel Injection	Programmed Fuel Injection	3 Carburetors
Ignition System		Fully Transistorized Battery Ignition	Fully Transistorized Battery Ignition	Fully Transistorized Battery Ignition	Fully Transistorized Battery Ignition	PGM-IG
Starting System		Electric	Electric	Electric	Electric	Electric
Exhaust	Underwater Type	Propeller Boss	Propeller Boss	Propeller Boss	Propeller Boss	Through Hub
Gear Ratio	2.33		2.07	2.08	2.08	2.08:1
Battery Charging Capacity	12V-35A		12V-17A	12V-17A	12V-17A	
Transom Height (mm)	L:537 / X:664		L:521 / X:648	L:521 / X:622	L:521 / X:622	L: 508
Dry Weight (kg)	L:166 / X:172	L:165 / X:171	L:110 / X:116	L:98 / X:102	L:98 / X:102	L: 72.5

### Portable Series

Model	BF20	BF10	BF6
Type	4-Stroke SOHC 2 Cylinders / 4 Valves	4 Stroke Overhead Valve, Vertical Twin	4 Stroke Overhead Valve, Single Cylinder
Displacement (cm <sup>3</sup> )	350	222	127
Bore x Stroke (mm)	59 x 64	58 x 42	60 x 45
Full Throttle RPM Range	5,000-6,000	5,000-6,000	5,000-5,500
Rated Power (kW (PS) / rpm)	14.7 (20) / 5,500	7.4 (10) / 5,500	4.5 (6) / 5,500
Cooling System	Water Cooled	Water Cooled	Water Cooled
Fuel Delivery	1 Carburetor	1 Carburetor	1 Carburetor
Ignition System	CDI (Capacitor Discharge Ignition) Magneto	CDI (Capacitor Discharge Ignition) Magneto	CDI (Capacitor Discharge Ignition) Magneto
Starting System	Electric / Manual	Recoil Starter	Recoil Starter
Exhaust	Propeller Boss	Underwater Type	Underwater Type
Gear Ratio	2.08	2.33	2.08
Battery Charging Capacity	12V-6A	12V-6A	N/A
Transom Height (mm)	L:563 / X:703	L:563 / X:703	L:561
Dry Weight (kg)	L:49.5	L:44.5 / X:48.5	L:27.5

- Wear a life jacket to ensure safe boating and observe applicable boating regulations and proper boating etiquette.
- Specifications are subject to change without notice.
- All boaters shown are wearing personal flotation devices.
- Thoroughly read the instruction manual and the warranty before using the outboard motor.
- Make sure to perform inspections and preventive maintenance.

• "Dry weight" indicates the weight of the lightest model.  
• Specifications may differ depending upon the region. Please ask the dealer about the details.



Transom height

Call Customer Care (Toll Free)  
**1800-11-2323**

HONDA INDIA POWER PRODUCTS LTD.  
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# HONDA MARINE

Go the Distance!  
with Honda 4 Stroke Outboards



Outboard Motors

Empower People, To Do Better.

### It All Started with a Desire to Keep Our Air and Water Clean

In the age before Honda developed the now mainstream 4-stroke outboard engines, many people thought that it was virtually impossible from a technical standpoint to develop a 4-stroke outboard engine. Honda enthusiastically took on this challenge. The history of 4-stroke outboard engines can be told with the outboard engines developed by Honda. Since outboards are used in the great outdoors the thing that we are most proud of is our steadfast commitment to the concept of "foremost concern for the environment".



We have followed this principle since outboard development started in the 1960s, aiming to keep water clean and air fresh. Honda will continue to take on this challenge with useful innovative concepts and unique technology, guaranteeing nature will be preserved for future generations.



BF Outboard Engine Lineup Features Honda DNA  
From 127cc Compact Air-Cooled 6PS Engine to V6-3.6L  
VTEC Engine with Unparalleled Power

### Portable Series



BF20  
20PS



BF10  
10PS



BF6  
6PS

### BF20

In-Line 2-Cylinder 350cc 4-Stroke Engine  
Host of types ideal for wide variety of boats and applications

- 3 stage Carburetion.
- While conventional carburetors go directly from lean mixture in idle to rich mixture at full throttle BF20 adds a third middle stage for better efficiency and smoother and stronger operation.
- Pendulum mount system
- Honda's exclusive triangulated rubber mount system absorbs vibration and provides unbelievable smooth operation

### BF10

In-Line 2-Cylinder 222cc 4-Stroke Engine  
Powerful, Easy to handle and compact body

- Easy one-Hand Starting
- The digital CDI system retards spark to top dead Center during starting to greatly reduce the effort required to pull start the engine by hand
- Positive lubrication:- A camshaft driven Automotive style trochoid oil pump ensures critical engine component long term durability.
- Engine alert system:- The integrated warning system protects the engine from severe damage due to low oil pressure, over revving and over heating.

### BF6

127 cc Single cylinder 4 Stroke engine, Easy to carry

- Largest fuel tank in the segment to go further.
- Ergonomic carry handle.
- Low Vibration- Rubber engine mounts
- One touch engine stop