

PREFACE

This manual covers the construction, function and servicing procedures of the Honda BF15D, BF20D Outboard Motors.

All information contained in this manual is based on the latest product information available at the time of printing. We reserve the right to make changes at anytime without notice.

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As you read this manual, you will find information that is preceded by a **NOTICE** symbol. The purpose of this message is to help prevent damage to the outboard motor, other property, or the environment.

SAFETY MESSAGES

Your safety, and the safety of others, are very important. To help you make informed decisions, we have provided safety messages and other safety information throughout this manual. Of course, it is not practical or possible to warn you about all the hazards associated with servicing these outboard motors. You must use your own good judgment.

You will find important safety information in a variety of forms, including:

- **Safety Messages** -- preceded by a safety alert **⚠** symbol and one of three signal words, **DANGER**, **WARNING**, or **CAUTION**.

These signal words mean:

⚠ DANGER You **WILL** be **KILLED** or **SERIOUSLY HURT** if you don't follow instructions.

⚠ WARNING You **CAN** be **KILLED** or **SERIOUSLY HURT** if you don't follow instructions.

⚠ CAUTION You **CAN** be **HURT** if you don't follow instructions.

- **Instructions** -- how to service this outboard motor correctly and safely.

Honda Motor Co., Ltd
Service Publication Office

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1. SPECIFICATIONS

2. DIMENSIONAL DRAWINGS

1. SPECIFICATIONS

DIMENSIONS AND WEIGHTS

BF15D

Model	BF15D					
Description Code	BALJ					
Type	SH	SHS	SR	LH	LHS	LR
Overall length	650 mm (25.6 in)		640 mm (25.2 in)	650 mm (25.6 in)		640 mm (25.2 in)
Overall width	350 mm (13.8 in)					
Overall height	1,110 mm (43.7 in)			1,240 mm (48.8 in)		
Dry weight (With propeller mounted)	46.5 kg (103 lb)	50.0 kg (110 lb)	50.5 kg (111 lb)	49.5 kg (109 lb)	53.0 kg (117 lb)	52.0 kg (115 lb)
Operating weight	47.9 kg (106 lb)	51.4 kg (113 lb)	51.9 kg (114 lb)	50.9 kg (112 lb)	54.4 kg (120 lb)	53.4 kg (118 lb)
Transom height	433 mm (17.0 in)			563 mm (22.2 in)		
Transom angle	5 stage adjustment (4° , 8° , 12° , 16° , 20°)					
Tilting angle	71°		72°			
Swivel angle	45° right and left					

BF20D

Model	BF20D					
Description Code	BAMJ					
Type	SH	SHS	SR	LH	LHS	LR
Overall length	650 mm (25.6 in)		640 mm (25.2 in)	650 mm (25.6 in)		640 mm (25.2 in)
Overall width	350 mm (13.8 in)					
Overall height	1,110 mm (43.7 in)			1,240 mm (48.8 in)		
Dry weight	46.5 kg (103 lb)	50.0 kg (110 lb)	50.5 kg (111 lb)	49.5 kg (109 lb)	53.0 kg (117 lb)	52.0 kg (115 lb)
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Swivel angle	45° right and left					

ENGINE

Model	BF15D	BF20D
Type	Water cooled 4-stroke, overhead valve, vertical twin	
Displacement	350 cm ³ (21.5 cu. in)	
Bore x stroke	59 x 64 mm (2.3 x 2.5 in)	
Rated horsepower	11.0 kW (15 PS) at 5,000 min ⁻¹ (rpm)	14.7 kW (20 PS) at 5,500 min ⁻¹ (rpm)
Maximum torque	25.2 N·m (2.6 kgf·m, 18.8 lbf·ft) at 3,500 min ⁻¹ (rpm)	25.8 N·m (2.6 kgf·m, 18.8 lbf·ft) at 5,000 min ⁻¹ (rpm)
Compression ratio	9.2: 1	
Fuel consumption	313 g (11.0 oz.)/kWh	337 g (11.9 oz.)/kWh
Cooling system	Forced water circulation by impeller pump with thermostat	
Ignition system	CDI	
Ignition timing	0° ± 2° B.T.D.C.	
Spark plug	CR5EH-9 (NGK), U16FER9 (DENSO)	
Carburetor	Horizontal butterfly valve type single carburetor	
Lubricating system	Forced lubrication by trochoid pump	
Oil capacity	1.0 ℓ (1.06 US qt, 0.88 Imp qt) at oil change 1.3 ℓ (1.37 US qt, 1.14 Imp qt) with oil filter replacement	
Recommended oil	SAE 10W-30, API Service classification SG/SH/SJ	
Starting system	SH, LH Type: Recoil starter SHS, SR, LHS, LR Type: Electric starter and recoil starter	
Stopping system	Ignition primary circuit ground	
Fuel used	Automotive unleaded gasoline (minimum 86 pump octane)	
Fuel tank capacity	Steel tank: 13 ℓ (3.43 US gal, 2.86 Imp gal) Plastic tank: 12 ℓ (3.17 US gal, 2.64 Imp gal)	
Fuel pump	Mechanical plunger type	
Exhaust system	Under water type	

LOWER UNIT

Model	BF15D, BF20D	
Clutch	Dog clutch (Forward-neutral-reverse)	
Gear ratio	0.48 (13/27)	
Reduction type	Spiral bevel gear	
Gear case oil capacity	0.285 ℓ (0.27 US qt, 0.23 Imp qt)	
Propeller	Number of blades	4
	Diameter	235 mm (9-1/4 in)
	Pitch	203 mm (8.0 in)
	Rotating direction	Clockwise (viewed from rear)