PREFACE

This manual covers the construction, function and serving procedures for the Honda BF135A•BF150A 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 Labels** –– on the engine cover.
- **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.

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Service Publications Office

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Abbreviations

ACG	Alternator
A/F	Air Fuel Ratio
API	American Petroleum Institute
Approx.	Approximately
Assy.	Assembly
ATDC	After Top Dead Center
ATF	Automatic Transmission Fluid
ATT	Attachment
BAT	Battery
BDC	Bottom Dead Center
BTDC	Before Top Dead Center
BARO	Barometric Pressure
CKP	Crankshaft Position
Comp.	Complete
CMP	Camshaft Position
CYL	Cylinder
DLC	Data Link Connector
ECT	Engine Coolant Temperature
ECM	Engine Control Module
EOP	Engine Oil Pressure
EX	Exhaust
F	Front or Forward
GND	Ground
IAB	Intake Air Bypass
IAC	Idle Air Control
IAT	Intake Air Temperature
I.D.	Inside Diameter
IG or IGN	Ignition
IN	Intake
INJ	Injection
L.	Left
MAP	Manifold Absolute Pressure
MIL	Malfunction Indicator Lamp
O.D.	Outside Diameter
OP	Optional Part
PGM-FI	Programmed-Fuel Injection
P/N	Part Number
Qty	Quantity
R.	Right
SAE	Society of Automotive Engineers
SCS	Service Check Signal
STD	Standard
SW	Switch
TDC	Top Dead Center
TP	Throttle Position

Bl	Black	G	Green	Br	Brown	Lg	Light green
Y	Yellow	R	Red	O	Orange	P	Pink
Bu	Blue	W	White	Lb	Light blue	Gr	Gray

1. SPECIFICATIONS 2. DIMENSIONAL DRAWINGS

1. SPECIFICATIONS

• DIMENSIONS AND WEIGHTS

Model	BF135A						
Description code	BARJ		BASJ	BARJ		BASJ	
Types	LC	LD	LCD	XC	XD	XCC	XCD
Overall length	845 mm (33.3 in)						
Overall width	580 mm (22.8 in)						
Overall height	1,665 mm (65.6 in)			1,790 mm (70.5 in)			
Dry weight (*1)	220 kg (485 lbs)		223 kg (492 lbs)			226 kg (498 lbs)	
Operating weight (including oil)	228 kg (503 lbs)		231 kg (509 lbs)			234 kg (516 lbs)	

*1: With propeller mounted.

Model	BF150A						
Description code	BANJ		BAPJ	BANJ		BAPJ	
Types	LC	LD	LCD	XC	XD	XCC	XCD
Overall length	845 mm (33.3 in)						
Overall width	580 mm (22.8 in)						
Overall height	1,665 mm (65.6 in)			1,790 mm (70.5 in)			
Dry weight (*1)	220 kg (485 lbs)		223 kg (492 lbs)			226 kg (498 lbs)	
Operating weight (including oil)	228 kg (503 lbs)		231 kg (509 lbs)			234 kg (516 lbs)	

*1: With propeller mounted.

• FRAME

Model	BF135A•BF150A						
Types	LC	LD	LCD	XC	XD	XCC	XCD
Transom height (*1)	508 mm (20.0 in)			635 mm (25.0 in)			
Tilting angle	72°						
Tilting stage	Stageless						
Swivel angle	30° right and left						
Trim angle	– 4° to 16°						

*2: Transom angle is at 12°.

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• TYPES OF Honda BF135A•BF150A OUTBOARD MOTORS

It may be necessary to refer to this chart for reference purposes when reading this manual.

Model	BF135A•BF150A						
Types	LC	LD	LCD	XC	XD	XCC	XCD
Shaft length type	L	L	L	XL	XL	XL	XL
Remote control	(○)	(○)	(○)	(○)	(○)	(○)	(○)
Control panel	(○)	(○)	(○)	(○)	(○)	(○)	(○)
Counter rotation			○			○	○
Power trim/tilt	○	○	○	○	○	○	○

L: Long shaft XL: Extra-long shaft (○): Optional part

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• ENGINE

Model	BF135A	BF150A
Description code	BEARJ	BEANJ
Type	4-stroke, D.O.H.C., 4-cylinder	4-stroke, D.O.H.C., VTEC, 4-cylinder
Displacement	2,354 cm^3 (143.6 cu-in)	
Bore x stroke	87 x 99 mm (3.4 x 3.9 in)	
Rated power (Full throttle range)	100.7 kW (135 HP) at 5,000 – 6,000 min^{-1} (rpm)	111.9 kW (150 HP) at 5,000 – 6,000 min^{-1} (rpm)
Maximum torque	196 N·m (20.0 kgf·m, 145 lbf·ft)	202 N·m (20.6 kgf·m, 149 lbf·ft)
Compression ratio	9.6 : 1	
Fuel consumption ratio	350 g/kW·h (257 g/HP·h, 0.575 lb/HP·h)	320 g/kW·h (235 g/HP·h, 0.526 lb/HP·h)
Cooling system	Forced water circulation by impeller pump with thermostat	
Ignition system	Full transistorized, battery ignition	
Ignition timing	0° ± 2° at 750 min^{-1} (rpm) B.T.D.C.	
Spark plug	IZFR6K11 (NGK), SKJ 20DR-M11 (DENSO)	
Fuel supply system	Programmed fuel injection	
Fuel injection system	Electronic control	
Fuel injection nozzle	Multi-hole type	
Fuel pipe	Rubber tubes	
Lubrication system	Pressure lubrication by trochoid pump	
Lubrication capacity	7.35ℓ (7.8 US qt, 6.5 Imp qt) [with oil filter replacement: 6.7ℓ (7.1 US qt, 5.9 Imp qt)] [without oil filter replacement: 6.5ℓ (6.9 US qt, 5.7 Imp qt)]	
Starting system	Electric starter	
Stopping system	Primary circuit ground	
Fuel used	Unleaded gasoline with a pump octane number 86 or higher	
Fuel pump	Electric and mechanical plunger type	
Exhaust system	Underwater type	
Recommended oil	SAE 10W-30	

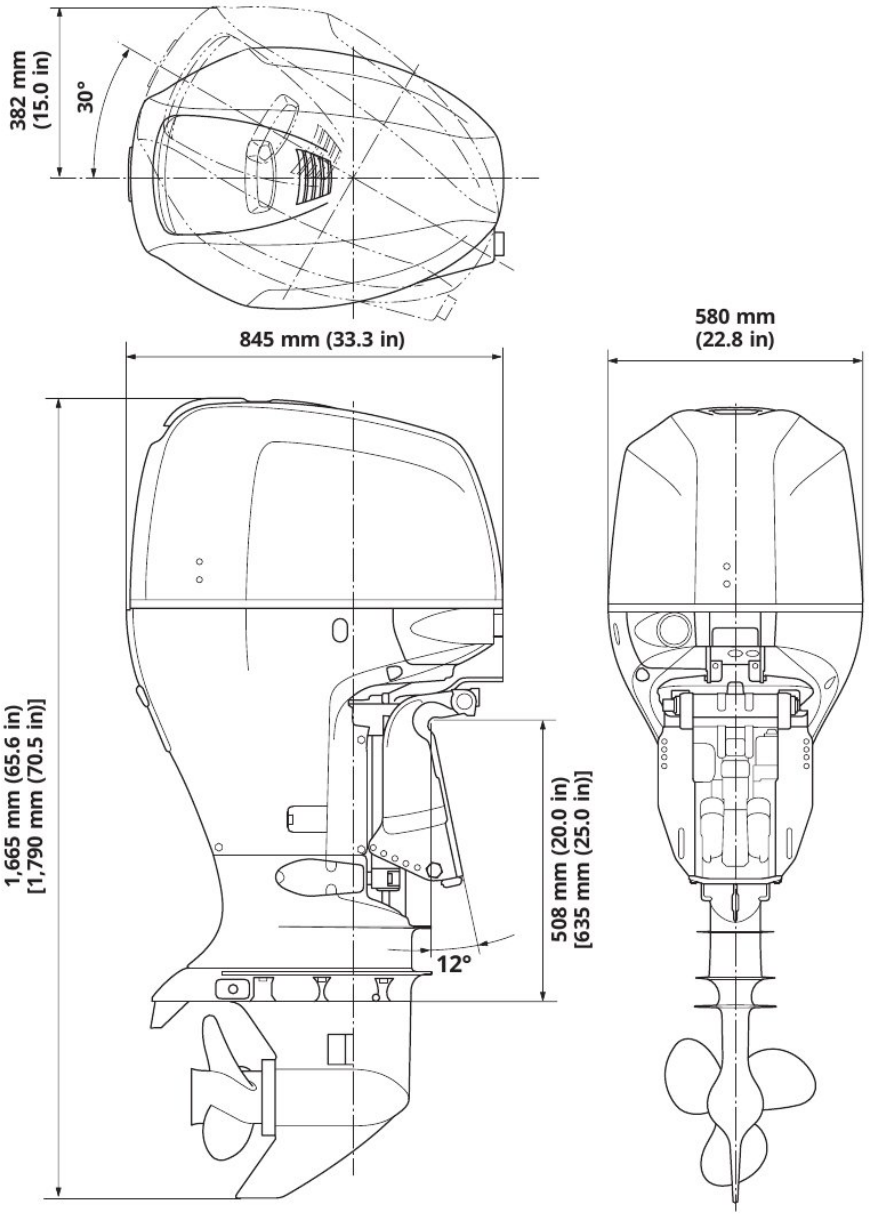
• LOWER UNIT

Clutch	Dog clutch (Forward – Neutral – Reverse)
Gear ratio	0.467 (14/30)
Reduction	Spiral bevel
Gear case oil capacity	0.98ℓ (1.04 US qt, 0.86 Imp qt)
Propeller rotating direction	Clockwise (viewed from rear): LC, LD, XC and XD types Counterclockwise (viewed from rear): LDC, XCC and XCD types
Propeller driving system	Spline

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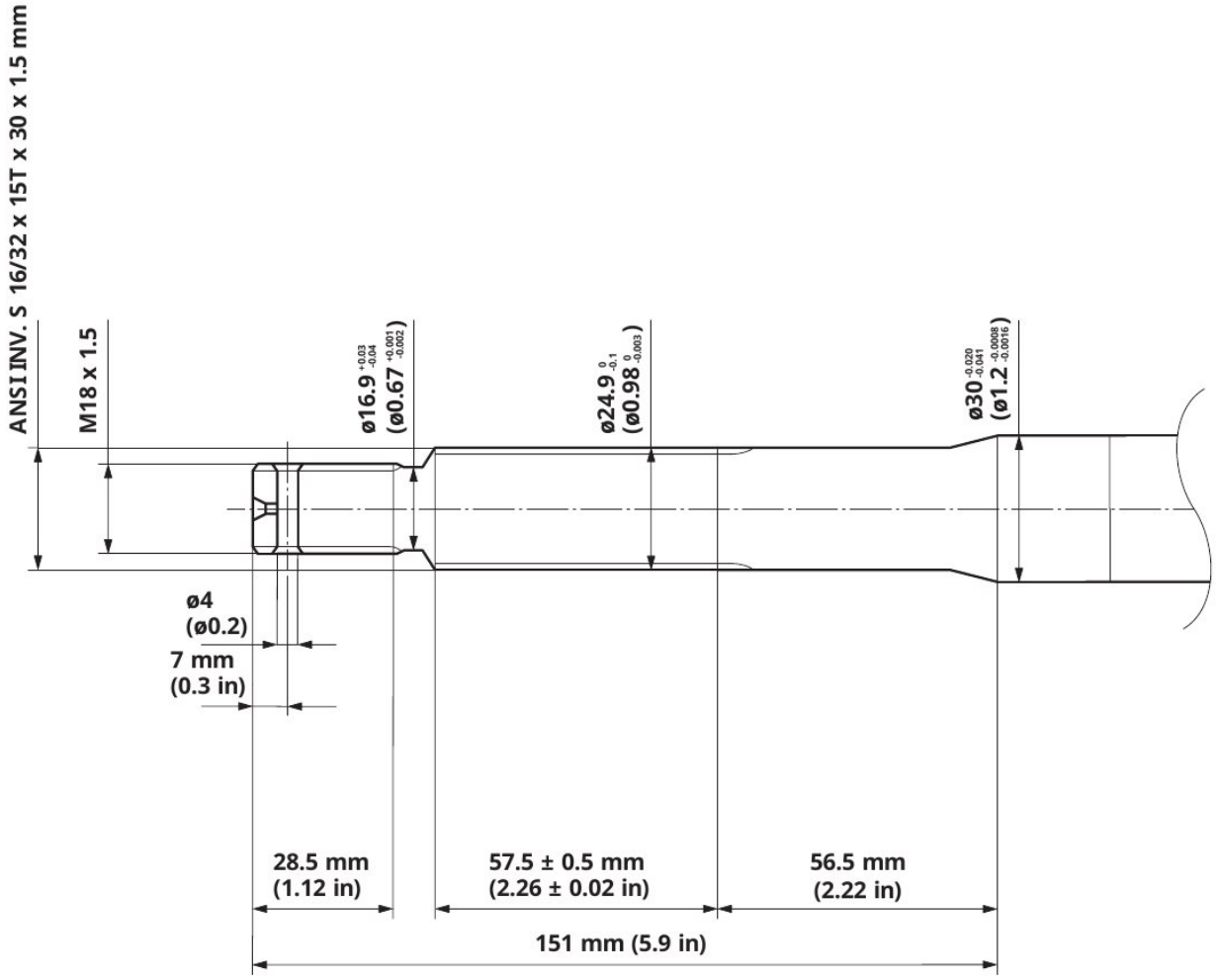
2. DIMENSIONAL DRAWINGS

[ ]: Extra-long shaft type



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• PROPELLER SHAFT



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