

**PREFACE**

This manual covers the construction, function and servicing procedure of the Honda BF35A·45A outboard motors. Careful observance of these instructions will result in better, safer service work.

Illustrations in this manual are based primarily on the BF45A LRT.

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## SPECIFICATIONS

### DIMENSIONS AND WEIGHTS

Unit: mm (in)

Model	BF35A					BF45A			
	Description code					Description code			
	BSAG (Short type), BLAG (Long type)					BSAF (Short type), BLAF (Long type)			
Type	SH	LH	LR	LRT	SR	SR	LR	LRT	
Overall length	*1: 725 (28.5) *2: 1,059 (41.7)		685 (27.0)						
Overall width	370 (14.6)								
Overall height	1,255 (49.4)	1,360 (53.5)			1,255 (49.4)		1,360 (53.5)		
Dry weight	89 kg (196.2 lb)	91 kg (200.7 lb)	90 kg (198.5 lb)	92 kg (202.9 lb)	88 kg (194.0 lb)		90 kg (198.5 lb)	92 kg (202.9 lb)	
Operating weight (incl. oil)	91.5 kg (201.8 lb)	93.5 kg (206.1 lb)	92.5 kg (204.0 lb)	94.5 kg (208.4 lb)	90.5 kg (200.0 lb)		92.5 kg (204.0 lb)	94.5 kg (208.4 lb)	

\*1: With handlebar raised

\*2: With handlebar extended

### FRAME

Model	BF35A					BF45A			
	Type	SH	LH	LR	LRT	SR	SR	LR	LRT
Transom height	416 mm (16.4 in)	521 mm (20.5 in)			416 mm (16.4 in)		521 mm (20.5 in)		
Transom angle	5 stage adjustment (11.5°, 15.5°, 19.5°, 23.5°, 27.5°)								
Tilting angle	73°								
Swivel angle	37.5° right and left								
Trim angle	—			0–20°		—		0–20°	

Model	BF35A					BF45A			
	SH	LH	LR	LRT	SR	SR	LR	LRT	
Shaft Length	S	L	L	L	S	S	L	L	
Tiller Handle	H	H							
Remote Control			R	R	R	R	R	R	
Gas Assisted Tilt	GAT	GAT	GAT		GAT	GAT	GAT		
Power Tilt/Trim				T				T	
Tachometer				*				*	
Trim meter				*				*	

\*: Standard Equipment

• According to Shaft Length

S: Short Shaft

L: Long Shaft

• According to Control System

H: Tiller Handle Control

R: Remote Control

• According to tilt system

GAT: Gas-assisted Tilt (with gas damper assist function)

T: Power trim & tilt (with hydraulic assist function)

### ENGINE

Model	BF35A	BF45A
Type	4-stroke, O.H.C., 3-cylinder	
Displacement	808 cm <sup>3</sup> (49.4 cu in)	
Bore x stroke	70 x 70 mm (2.8 x 2.8 in)	
Rated power * 1	35 HP (26.1 kw)/4,600–5,600 min <sup>-1</sup> (r.p.m.)	45 HP (33.6 kw)/5,000–6,000 min <sup>-1</sup> (r.p.m.)
Maximum torque	6.0 kg-m (43.4 ft-lb) 3,500 min <sup>-1</sup> (r.p.m.)	6.05 kg-m (43.8 ft-lb) 4,500 min <sup>-1</sup> (r.p.m.)
Compression ratio	9.2 : 1	
Fuel consumption ratio [g/PS·hr]	210	
Cooling system	Forced water circulation by impeller pump with thermostat	
Ignition system	CDI	
Ignition timing	5–32° B.T.D.C.	
Spark plug	DR7EA (NGK), X22ESR-U (NIPPONDENSO)	
Carburetor	Horizontal type, butterfly valve (3 carburetor)	
Lubrication system	Pressure lubrication by trochoid pump	
Lubrication capacity	2.4 ℓ (2.54 US qt, 2.11 Imp qt)	
Starter system	Electric starter	
Stopping system	Grounding of primary circuit	
Fuel	Regular automotive gasoline (86 pump octane; unleaded preferred)	
Fuel tank capacity	25 ℓ (6.6 US gal, 5.5 Imp gal)	
Fuel pump	Mechanical plunger type	
Exhaust system	Underwater type	
Recommended oil	SAE 10 W–30/40	

\* 1: Full throttle r.p.m. range.

### LOWER UNIT

Clutch	Dog clutch (Forward–Neutral–Reverse)
Gear ratio	0.48 (26/33 x 14/23)
Reduction	Spiral bevel
Gear case oil capacity	0.52 ℓ (0.550 US qt, 0.458 Imp qt)
Propeller No. of blades-Dia. x Pitch	3-286 x 330 mm (11-1/4 x 13.0 in)
Propeller rotating direction	Clockwise (viewed from rear)
Propeller driving system	Spline