

PROPELLERS

HONDA
MARINE

ENGINEERING FOR *Life*

PROPELLERS

ADDITIONAL MOUNTING/INSTALLATION INFO

The range of Honda propellers has been carefully selected to ensure that precise matching of customers boats and Honda Outboards can be undertaken. It is essential that the correct selection is made for the customer to ensure the perfect match for the boat package is achieved, thus meeting customer expectations. A wide variety of propellers, (varying in diameter & pitch) have been made available to ensure engines operate within the Honda recommended operating range.

When mounting Outboard Motors, some factors must be considered prior to installation. All of these are important to boat handling, engine performance and to maximise engine fuel efficiency.



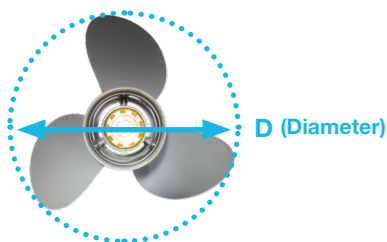
1/ Horizontal Positioning

In most boat applications, engine location is normally at centre line of the transom. However, some boats do require a slight offset to starboard side. The boat manufacturer should provide details on the necessity of this if required. For twin motor applications, both outboards must be mounted at the same distance from the centre point on the transom of the boat.



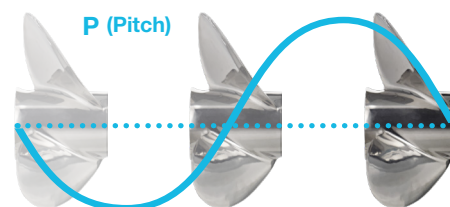
2/ Vertical Positioning

The vertical positioning of the engine is also very important and this will directly affect cavitation/ventilation characteristics, top speed and fuel efficiency. The chosen height position will be different on boat types and dependant on boat hull shape, weight and usage, such as high performance, fishing, commercial, cruising etc. The position for optimum performance may need to be decided upon, only after on water testing with different height settings and propeller types. Always allow for passengers, fuel and equipment on board when determining propeller type.



Diameter:

Is the distance between propeller blade tips through the centre line of the propeller. Large diameter propellers are commonly found on larger slower moving boats and smaller diameter propellers on faster moving craft.



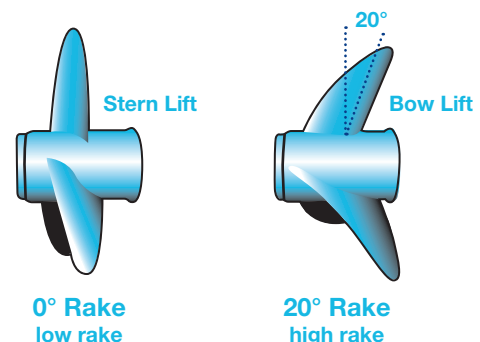
Pitch:

Is the theoretical distance the propeller travels forward upon completion of a full 360° of rotation. This is defined as the propeller pitch. However, as water is not a solid, this figure will not be achieved due to "slip" in the water.

Tip: 1"(25MM) change of pitch will vary engine rpm by approximately 300 / 400 rpm

Rake:

The propeller rake is given by the angle between the vertical line on the prop axis and a line following the edge of the blade. If viewed from the side, the blades will be seen to slope forward or rearward, positive or negative rake. High rake propellers provide better results on higher mounted or trimmed outboards. In general, if the negative rake angle is large, cavitation and ventilation toughness is improved as the rake can help strengthen the blade sections.



PROPELLERS

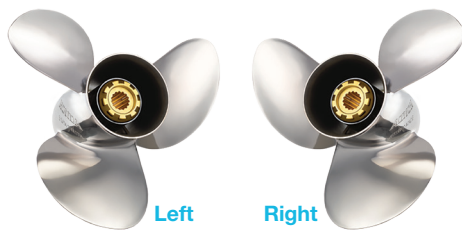
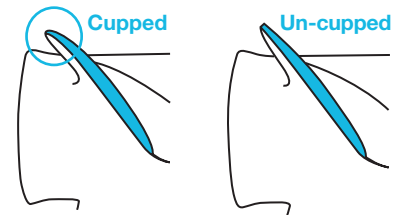
ADDITIONAL MOUNTING/INSTALLATION INFO

Propeller Slip (Slip Factor):

Propeller slip is most commonly expressed as a percentage, this being the difference between the theoretical distance travelled forward (propeller pitch) and the actual distance measured as a result of a full 360° rotation of the propeller. If a propeller with a pitch of 10" only moves the boat forward a distance of 9", the slip factor can be judged to be 10%.

Propeller Cup:

When the trailing edge of a propeller blade has a "curl" away from the boat, it is normally described as being cupped. Cupping the propeller blade is an easy way to increase the pitch or rake without bending the entire blade.



Counter Rotating Propellers:

On selected higher HP outboards, counter rotating propellers are available. The port side propeller is a mirror image (of the std type) and rotates in the opposite direction to the starboard propeller. The opposite turning effect of the propellers reduces the necessity for constant adjustment of steering by the customer, (a neutral steering control) and ensures easier manoeuvrability by balancing out the turning forces created by the propeller rotation. This becomes a more important requirement, especially with motors in excess of 75Hp.

3 Blade Propeller

This is the most common type used and provides excellent levels of performance throughout the outboard operating range. Selected counter rotating versions are also available. A good general purpose type, available in Stainless Steel and Aluminium.

4 Blade Propeller

Less common than 3 blade types, 4 blade propellers provide increased acceleration and mid range performance over similar 3 blade types (although a slightly lower top speed will be achieved). The additional blade also adds to a smoother running application. Ideal for ski-ing/wakeboarding where acceleration and trust is an important operating factor. Available in Stainless Steel and Aluminium.

High Thrust Propeller (BF8D / BF10D / BF15D / BF20D)

Although the BF8D ~ BF20D are supplied with 4 blade propellers as standard equipment, a high thrust 4 blade propeller is also available for use with these motors to enable better matching to heavier, slower moving watercraft. This type of propeller provides higher levels of thrust over the standard type, both in forward and reverse.

High Thrust Propeller (BFP60A)

The BFP60A (High Thrust Model) features a gear-casing based on that of the BF75D / BF90D. By use of this gear-case and a different gear ratio to the std BF60A, high thrust performance is achieved by the slower turning of the propeller and increased grip in the water. Selected propellers from the BF75D / BF90D are listed for use with BFP60A along with newly added versions, unique for use with this model.

PROPELLERS

TYPES OF PROPELLER

Plastic Propeller

(3 Blade)

- Replacement propeller for BF2D ~ BF2.3D
- Perfectly matched to ensure optimum performance



Aluminium Propellers

(3 Blade)

- Light weight, General Purpose Propellers
- Provide excellent levels of performance throughout the engine operating range
- Lower cost alternative to Stainless Steel
- Ideal for use on board as a spare or alternative pitch propeller



Aluminium Propellers

(4 Blade)

In addition to 3 Blade Aluminium propellers, 4 Blade types provide:

- Improved acceleration & powerful thrust in low to mid range
- Smoother running with excellent cruising performance
- Ideal for waterski / wakeboard activities
- Suited to rough water conditions



Aluminium Propellers - Power Thrust (BF8D ~ BF20D)

(4 Blade)

- Light weight - Power Thrust Propellers
- Ideal for use with heavier slow moving craft (displacement type hulls)



Stainless Steel Propellers

(3 Blade)

- Provide higher levels of performance versus comparable Aluminium types
- Higher levels of resistance to blade flexing & cavitation compared to Aluminium
- Suited to high performance leisure craft & commercial applications
- Increased durability due to material hardness compared to Aluminium
- See additional notes in propeller section on boat applications & usage



Stainless Steel Propellers

(4 Blade)

In addition to 3 Blade Stainless Steel propellers, 4 Blade types provide:

- Improved acceleration & powerful thrust in low to mid range
- Smoother running with excellent cruising performance
- Ideal for waterski / wakeboard activities
- Suited to rough water conditions
- See additional notes in propeller section on boat applications & usage



PROPELLERS

PLASTIC PROPELLER

BF2.3D

(3 Blade)

Part Number	Specification (D & P)
58130-ZV0-841ZB	7 1/4" x 4 3/4"



ALUMINIUM PROPELLERS 3 BLADE

BF4AH / BF5DH / BF6AH / BF5A

(3 Blade)

Part Number	Specification (D & P)
58130-ZVD-U01ZA	7 1/4" x 5 1/2"
58130-ZVD-701ZA	7 7/8" x 5 7/8"
58130-ZVD-801ZA	7 7/8" x 8 1/4"
58130-ZVD-003ZA	7 7/8" x 7 1/2"
58130-ZVD-601ZA	7 7/8" x 6 3/4"



BF30D

(3 Blade)

Part Number	Specification (D & P)
58130-ZV7-000ZA	9 1/4" x 12"
58130-ZV7-850ZA	9 3/4" x 9 7/8"
58130-ZV7-860ZB	10" x 8 1/4"
58130-ZW2-F11ZA	9 7/8" x 9"
58130-ZW2-F21ZA	9 7/8" x 10"
58130-ZW2-F31ZA	9 7/8" x 11"
58130-ZW2-F01ZA	9 7/8" x 12"



PROPELLERS

ALUMINIUM PROPELLERS 3 BLADE

BF40D / BF40E / BF50D / BF60A (BF40A / BF50A) (3 Blade)

Part Number	Specification (D & P)	Comments
58130-ZV5-000ZA	11 1/4" x 13"	BF40A / BF50A only
58130-ZV5-850ZA	11 1/2" x 12"	
58130-ZV5-860ZA	11 3/4" x 10"	
58130-ZV5-870ZA	11 1/2" x 14 1/4"	BF40D / BF50D / BF60A BF40A / BF50A
59130-ZV5-007AH	12 1/4" x 7"	
59130-ZV5-008AH	12 1/4" x 8"	
59130-ZV5-009AH	12 1/8" x 9"	BF40D / BF50D / BF60A BF40A / BF50A / BF40E
59130-ZV5-011AH	11 5/8" x 11"	
59130-ZV5-012AH	11 3/8" x 12"	
59130-ZV5-013AH	11 1/8" x 13"	BF40D / BF50D / BF60A
59130-ZV5-014AH	11 1/8" x 14"	
59130-ZV5-015AH	11" x 15"	
59130-ZV5-016AH	11" x 16"	BF40D / BF50D / BF60A
59130-ZV5-017AH	11" x 17"	
58130-ZZ5-000ZA	11 1/4" x 13"	BF40D / BF50D / BF40E
58130-ZZ5-630ZA	11 3/4" x 10"	
58130-ZZ5-660ZA	11 1/2" x 12"	
58130-ZZ5-760ZA	11 1/2" x 14 1/4"	



BFP60A / BF80A / BF100A (3 Blade)

Part Number	Specification (D & P)	Comments
58130-ZW1-011AH	14" x 11"	BFP60A / BF75A / BF75D / BF80A / BF90 / BF90D / BF100A / BF115A / BF130A
58130-ZW1-013AH	13 3/4" x 13"	
58130-ZW1-013B	13 3/4" x 13" CR	BF115A / BF130A
58130-ZW1-015AH	13 1/2" x 15"	BFP60A / BF75A / BF75D / BF80A / BF90 / BF90D / BF100A / BF115A / BF130A
58130-ZW1-015B	13 1/2" x 15" CR	
58130-ZW1-017AH	13 1/4" x 17"	BFP60A / BF75A / BF75D / BF80A / BF90 / BF90D / BF100A / BF115A / BF130A
58130-ZW1-017B	13 1/4" x 17" CR	
58130-ZW1-018AH	13 1/4" x 18"	BF80A / BF100A
58130-ZW1-019AH	13" x 19"	BFP60A / BF75A / BF75D / BF80A / BF90 / BF90D / BF100A / BF115A / BF130A
58130-ZW1-021AH	13" x 21"	
58130-ZZ0-D81ZB	13 1/5" x 19"	BFP60A
58130-ZZ0-D91ZB	13 1/5" x 21"	



PROPELLERS

ALUMINIUM PROPELLERS 3 BLADE

BF115D / BF115J / BF135A / BF135D
BF150A / BF150D

(3 Blade)

Part Number	Specification (D & P)	Comments
58130-ZY3-013A	15 1/2" x 13"	
58130-ZY3-015AH	15 1/4" x 15"	
58130-ZY3-015BH	15 1/4" x 15"	Counter Rotating type
58130-ZY3-017AH	15" x 17"	
58130-ZY3-017BH	15" x 17"	Counter Rotating type
58130-ZY3-019AH	14 3/4" x 19"	
58130-ZY3-019BH	14 3/4" x 19"	Counter Rotating type
58130-ZY3-021AH	14 1/2" x 21"	
58130-ZY3-021BH	14 1/2" x 21"	Counter Rotating type
58130-ZY3-023AH	14 1/4" x 23"	
58130-ZY3-015AP	15 3/4" x 15"	
58130-ZY3-017AP	15 1/2" x 17"	
58130-ZY3-017BP	15 1/2" x 17"	Counter Rotating type



PROPELLERS

STAINLESS STEEL PROPELLERS 3 BLADE

BF30D

(3 Blade)

Part Number	Specification (D & P)	Comments
58133-ZV7-009AH	10" x 9"	
58133-ZV7-010AH	10" x 10"	
58133-ZV7-011AH	10" x 11"	
58133-ZV7-013AH	10" x 13"	



BF40D / BF50D / BF60A (BF40A / BF50A)

(3 Blade)

Part Number	Specification (D & P)	Comments
59133-ZV5-009AH	12 1/4" x 9"	
59133-ZV5-011AH	11 3/4" x 11"	
59133-ZV5-012AH	11 1/2" x 12"	
59133-ZV5-013AH	11 1/8" x 13"	
59133-ZV5-014AH	11 1/8" x 14"	
59133-ZV5-015AH	11" x 15"	
59133-ZV5-016AH	10 3/4" x 16"	
59133-ZV5-017AH	11" x 17"	



BFP60A / BF80A / BF90D / BF90A / BF100A / BF115D / BF115J / BF135A / BF135D / BF150A / BF150D

(3 Blade)

Large blade area design provides:

- Great load carrying capability
- Excellent fuel economy

Part Number	Specification (D & P)	Comments
58133-ZW1-A13AH	13 3/4" x 13"	
58133-ZW1-A15AH	13 3/4" x 15"	
58133-ZW1-A17AH	13 1/4" x 17"	
58133-ZW1-A18AH	13 1/4" x 18"	
58133-ZW1-A19AH	13 1/4" x 19"	
58133-ZY3-A15AH	13 1/2" x 15"	



PROPELLERS

BF115D / BF115J / BF135A / BF135D / BF150D / (3 Blade)
BF175A / BF175D / BF200A / BF200D / BF225A / BF225D

Description Provides good acceleration & top end performance on a wide variety of craft.

- Larger Blade area
- Moderate Cupping

Part Number	Specification (D & P)	Comments
58133-ZY3-A17AH	14 1/4" x 17"	
58133-ZY3-B17AH	14 1/4" x 17"	Counter Rotating type
58133-ZY3-A19AH	14" x 19"	
58133-ZY3-B19AH	14" x 19"	Counter Rotating type
58133-ZY3-A21AH	14" x 21"	
58133-ZY3-B21AH	14" x 21"	Counter Rotating type

Description Provides better load carrying capability and higher levels of fuel efficiency for higher power Honda Outboard engines

- High camber blade geometry
- Large blade area

58133-ZY3-A15S	15 1/2" x 15"	
58133-ZY3-B15S	15 1/2" x 15"	Counter Rotating type
58133-ZY3-A17S	15 1/4" x 17"	
58133-ZY3-A19S	15" x 19"	
58133-ZY3-B19S	15" x 19"	Counter Rotating type
58133-ZY3-A21S	14 3/4" x 21"	
58133-ZY3-B21S	14 3/4" x 21"	Counter Rotating type
58133-ZY3-A23S	14 1/2" x 23"	
58133-ZY3-B23S	14 1/2" x 23"	Counter Rotating type



PROPELLERS

STAINLESS STEEL PROPELLERS 3 BLADE

BF115D / BF115J / BF135A / BF135D / BF150A / BF150D / BF175A / BF200A / BF225A (3 Blade)

Description This 3 Blade High Rake range provides better results on higher mounted or trimmed outboards, improving cavitation and ventilation toughness.

Part Number	Specification (D & P)	Comments
58133-ZY3-A16HR	14 3/4" x 16"	
58133-ZY3-B16HR	14 3/4" x 16"	Counter Rotating type
58133-ZY3-A17HR	14 3/4" x 17"	
58133-ZY3-B17HR	14 3/4" x 17"	Counter Rotating type
58133-ZY3-A18HR	14 3/4" x 18"	
58133-ZY3-B18HR	14 3/4" x 18"	Counter Rotating type
58133-ZY3-A19HR	14 3/4" x 19"	
58133-ZY3-B19HR	14 3/4" x 19"	Counter Rotating type
58133-ZY3-A20HR	14 3/4" x 20"	
58133-ZY3-B20HR	14 3/4" x 20"	Counter Rotating type
58133-ZY3-A21HR	14 1/2" x 21"	
58133-ZY3-A22HR	14 1/4" x 22"	
58133-ZY3-B22HR	14 1/4" x 22"	Counter Rotating type



BF115J / BF135D / BF150D / BF175D / BF200D / BF225D / BF250D (3 Blade)

Part Number	Specification (D & P)	Comments
58133-ZY3-A15LX	15 3/4" x 15"	
58133-ZY3-B15LX	15 3/4" x 15"	Counter Rotating type
58133-ZY3-A16LX	15 5/8" x 16"	
58133-ZY3-B16LX	15 5/8" x 16"	Counter Rotating type
58133-ZY3-A17LX	15 1/2" x 17"	
58133-ZY3-B17LX	15 1/2" x 17"	Counter Rotating type
58133-ZY3-A18LX	15 3/8" x 18"	
58133-ZY3-B18LX	15 3/8" x 18"	Counter Rotating type
58133-ZY3-A19LX	15 1/4" x 19"	
58133-ZY3-B19LX	15 1/4" x 19"	Counter Rotating type
58133-ZY3-A20LX	15 1/8" x 20"	
58133-ZY3-B20LX	15 1/8" x 20"	Counter Rotating type
58133-ZY3-A21LX	15" x 21"	
58133-ZY3-B21LX	15" x 21"	Counter Rotating type



PROPELLERS

ALUMINIUM PROPELLERS 4 BLADE

BF8D / BF10D / BF15D / BF20D (standard type) (4 Blade)

Part Number	Specification (D & P)	Comments
Standard Propeller		
58130-ZW9-B23ZA	10" x 6 1/4"	
58134-ZV4-007AH	9 1/4" x 7"	
58134-ZV4-008AH	9 1/4" x 8"	
58134-ZV4-009AH	9 1/4" x 9"	
58134-ZV4-010AH	9 1/4" x 10"	
58134-ZV4-011AH	9 1/4" x 11"	
High Thrust Propeller Kit		
06581-ZW9-A40ZA	10" x 6 1/4"	BF8D / BF10D
06581-ZY0-S00ZB	10" x 7 5/8"	BF15D / BF20D



BF30D (4 Blade)

Part Number	Specification (D & P)	Comments
58134-ZV7-011AH	10 1/4" x 11"	
58134-ZV7-012AH	10 1/8" x 12"	
58134-ZV7-013AH	10" x 13"	
58134-ZV7-014AH	10" x 14"	
58134-ZV7-015AH	10" x 15"	



BF40D / BF50D / BF60A (4 Blade)

Part Number	Specification (D & P)	Comments
58134-ZV5-009AH	11 7/8" x 9"	
58134-ZV5-010AH	11 3/8" x 10"	
58134-ZV5-011AH	11 1/8" x 11"	BF40D / BF50D / BF60A BF40A / BF50A
58134-ZV5-012AH	10 7/8" x 12"	
58134-ZV5-013AH	10 1/2" x 13"	
58134-ZV5-014AH	10 1/2" x 14"	



BFP60A / BF80A / BF100A (4 Blade)

Part Number	Specification (D & P)	Comments
58134-ZW1-013AH	13 1/4" x 13"	
58134-ZW1-015AH	13" x 15"	Suitable for use on: BFP60A / BF75A / BF75D / BF90A / BF90D / BF115A / BF130A
58134-ZW1-017AH	12 3/4" x 17"	
58134-ZW1-019AH	12 1/2" x 19"	
58134-ZW1-021AH	12 1/2" x 21"	



PROPELLERS

ALUMINIUM PROPELLERS 4 BLADE

BF115D / BF115J / BF135A / BF135D / BF150A / BF150D / BF175A / BF200A / BF225A (4 Blade)

Part Number	Specification (D & P)	Comments
58134-ZY3-015A	14 3/4" x 15"	
58134-ZY3-015B	14 3/4" x 15"	Counter Rotating type
58134-ZY3-017A	14 1/2" x 17"	
58134-ZY3-019A	14 1/4" x 19"	
58134-ZY3-019B	14 1/4" x 19"	Counter Rotating type
58134-ZY3-021A	14" x 21"	
58134-ZY3-021B	14" x 21"	Counter Rotating type



STAINLESS STEEL PROPELLERS 4 BLADE

BF115D / BF115J / BF135A / BF135D / BF150A / BF150D / BF175A / BF175D / BF200A / BF200D / BF225A / BF225D / BF250A / BF250D (4 Blade)

Description This 4 Blade High Rake range, offers excellent cruising performance and maneuvering capability making it ideal for offshore applications.

- Very Powerful Thrust
- Smooth Operation
- Provides additional transom lift

Part Number	Specification (D & P)	Comments
58134-ZY3-A15HR	14 1/2" x 15"	
58134-ZY3-B15HR	14 1/2" x 15"	Counter Rotating type
58134-ZY3-A17HR	14 1/4" x 17"	
58134-ZY3-B17HR	14 1/4" x 17"	Counter Rotating type
58134-ZY3-A18HR	14 1/8" x 18"	
58134-ZY3-B18HR	14 1/8" x 18"	Counter Rotating type
58134-ZY3-A19HR	14 1/8" x 19"	
58134-ZY3-B19HR	14 1/8" x 19"	Counter Rotating type
58134-ZY3-A20HR	14" x 20"	
58134-ZY3-B20HR	14" x 20"	Counter Rotating type
58134-ZY3-A21HR	14" x 21"	
58134-ZY3-B21HR	14" x 21"	Counter Rotating type
58134-ZY3-A23HR	14" x 23"	
58134-ZY3-B23HR	14" x 23"	Counter Rotating type
58134-ZY3-A25HR	14" x 25"	
58134-ZY3-B25HR	14" x 25"	Counter Rotating type



New inner hubs for our S/S propellers

Part Number	Comments
08135-ZW1-003HE	for all +++ZW1+++ SS propellers
08135-ZY3-003HE	for all +++ZY3+++ SS propellers



* The pictures shown, may not correspond with the content of the package that goes with the partnumber(s) mentioned.