

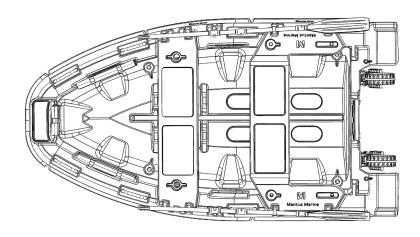
# User Manual

## by Mantus Marine

## Mantus BM104 Dinghy

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# **Table of Contents**

Facts & Figures —————————	р. З
Introduction ————————————————————————————————————	p. 4
Materials —————————	p. 4
Plan/Drawings ————————————————————————————————————	p. 5
Safety——————	p. 6
Hull Identification ————————————————————————————————————	p. 6
Design & Construction ————————————————————————————————————	p. 7
Assembly	p. 12
Operation ————————————————————————————————————	p. 15
Use, Performance, & Towing ————	p. 16
Davit Lifting	p. 18
Storage ————————————————————————————————————	
Repair	p. 19
Transporting by Road ————————————————————————————————————	p. 19
Warranty —	
Appendix ————————————————————————————————————	p. 22



# FACTS AND FIGURES MANTUS DINGHY

0

Length Overall:

10.4 feet

+

Beam:

5.7 ft

4

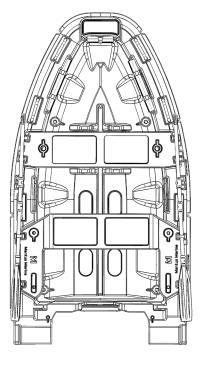
Weight:

220 lbs

0

Weight Capacity:

755 lbs





Height:

28 inches

\$

Shaft Outboard Engine:

SHORT SHAFT

Q°

Engine:

Up to 15 HP

.

Passengers:

4 People



#### Thank you for choosing Mantus Marine for your boating needs.

At Mantus Marine we have a commitment to quality products and continuous improvement, and we have applied that same spirit and energy to our small boat manufacturing. We build all our boats in our warehouse in Houston, Texas USA. We do it with care and attention to detail. Every boat undergoes rigorous quality control, and we are proud of the product that we deliver to our customers. We really hope you enjoy your Mantus Boat for years to come.

## **MATERIALS**

The boats are rotomolded from a custom rotational molding resin tailor fit for the application and PE foam as a second layer (as a two layer laminate) These materials have good UV stability and are very impact resistant. Polyethylene has an impact resistance around <u>5 times better than fiberglass</u>. It is quite difficult to severely damage a boat made from polyethylene as the inherent nature of the material is to flex on impact. Mantus boat hull has a warranty of 4 years, <u>the best in the industry</u>. See Warranty section for details.





## PLAN/DRAWINGS

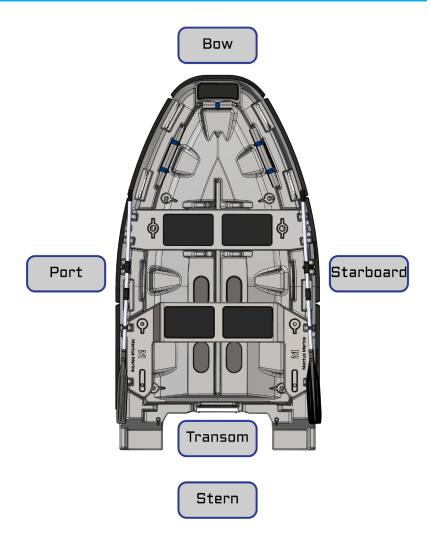


Fig 1.



## SAFETY

Life Jacket or Personal Flotation Device is required (Type I, II or III) for each person on board; and in addition, one throwable Type IV PFD. <a href="Moltre: Obtaining PFDs">Obtaining PFDs</a> is your <a href="moltre: esponsibility">responsibility</a>. Check your local regulations, many jurisdictions require children, age 18 or younger, to always wear PFDs.

A Fire Extinguisher is required to be stored on the boat in a readily accessible location. Check local regulations for their required size of the extinguisher before your trip. The ABYC recommendation for this size vessel is 5-B (Size 5, Type B). **Obtaining a correctly sized fire extinguisher is your responsibility.** If there is a fire onboard, first ensure that all occupants have Personal Flotation Devices and they do not panic, and then extinguish the fire. If it is not possible to stay on the boat then calmly disembark so as not to make the boat unstable.

## HILL IDENTIFICATION

#### **HIN (Hull Identification Number)**

The HIN is located on the upper starboard corner of the transom and on the starboard inner wall (visible once the front seat is removed). The HIN must be clearly visible and must not be removed or tampered with in any way. The Identification Number is very important! Please keep a copy of this number stored in a safe place off the boat. In case of theft, damage, warranty claims, etc., you can use this number to identify and reference your hull.





## **DESIGN & CONSTRUCTION**

## General Description of Parts/Features

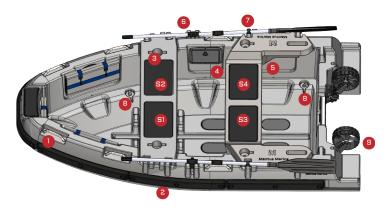


Fig 2.

- 1. Handles
- 2. Bumpers (Replaceable)
- 3. Cup/Rod Holders
- 4. Glove Box
- 5. Rear Seat Securing Bolt (Remove to articulate the Seat)
- 6. Oar Locks
- 7. Oar Strap
- 8. Lifting Points
- 9. Wheels (Optional)
- S1 S5 Seating Positions CAUTION: Use no more than 4 of the 5 seats



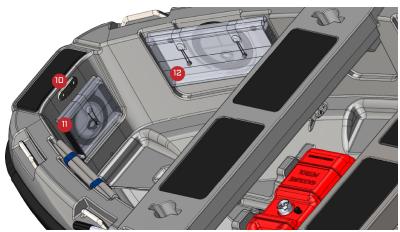


Fig 3.

- 10. Anchor Line Cleat
- 11. Deck Plates (3x under the boat bag)
- 12. Storage Bags (3x)

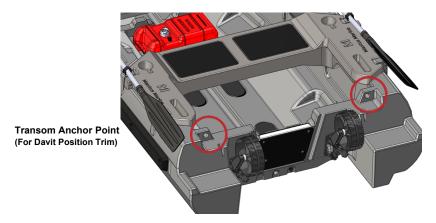


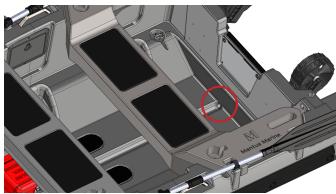
Fig 4.



Tow Eye

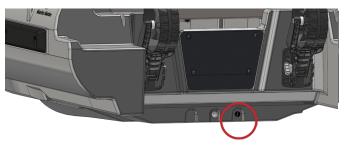


Fig 5.



Deck Drain Plug

Fig 6.



**Hull Drain Plug** 

Fig 7.



## U Shaped Tube

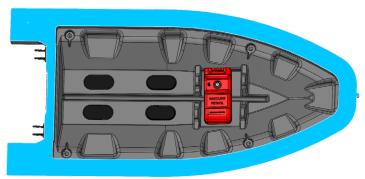


Fig 8.

## Water Born Hull

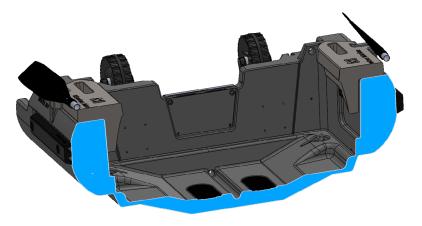


Fig 9.



## **Hull Space**

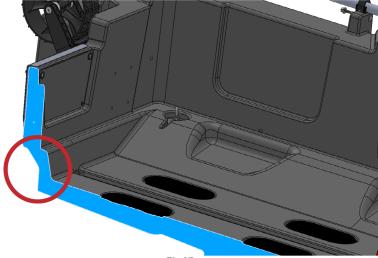


Fig 10.

These two spaces do communicate and the water from the tubes drains into the hull space. In the event of a submersion the tubes would drain into the hull space and removing the hull drain plug will drain the water.

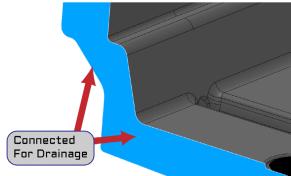


Fig 11.



## **ASSEMBLY**

#### Fitting & Assembly of Oars

When the boat is shipped, the straps to hold down the oars are removed and placed in the glovebox on the starboard side. Follow instructions below to re- attach the oar straps.

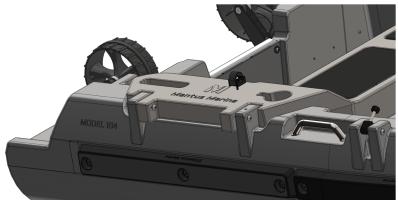


Fig 12.

Use a 5/32 Allen wrench and manually screw in the bolt into the well nut until tight, repeat the process on the other side.

#### The Oars Are Shipped Collapsed

Assemble the oars as in the diagram.



Fig 13.



and install them onto the boat as shown below.



Fig 14.

## Wheels: (if you purchased the boat with wheels)

Wheels will ship separately with instructions for assembly. The bracket will be already installed on the transom, you will just need to install the fork/wheel assembly onto the boat.

Wheels have a Max Weight Capacity of 300lbs

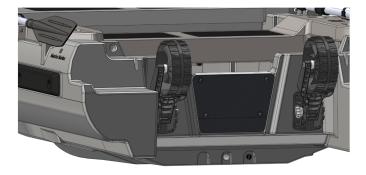


Fig 15.



#### Hull & Deck Drain Plug

The boat has two drain plugs.

Deck Drain Plug is a lever actuated compression plug, this plug is used to drain the deck. It <u>must</u> be inserted before launching the boat and must be removed if the boat is stored out of the water.

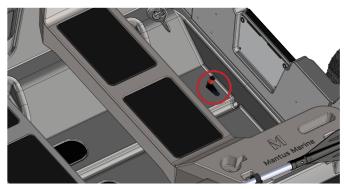


Fig 16.

The Hull Plug is the ¼ NPT plug that drains the hull compartment. Ensure that this plug is inserted before launching the boat. Getting water into the hull compartment should be a rare event (submersion, getting the boat filled with rainwater) as the boat is designed to keep this compartment dry. Raise the bow of the boat and remove the drain plug to drain by turning the plug counterclockwise to open. Do not forget to re-insert after draining.

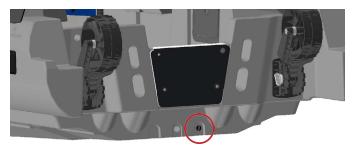


Fig 17.



#### Fuel System

The fuel line is a 5/16 fuel hose that is routed through the starboard tube. There is a quick connect fitting for easy fuel tank removal for refueling. Each boat is fitted with a 6-gallon fuel tank. The provided 6 gallon gas tank weighs 6 pounds empty and 42 pounds full. Always secure your dinghy to a dock or larger vessel, turn off the engine, extinguish open flames, and have all passengers disembark before removing the fuel tank for filling. Follow all fuel tank filling instructions.

#### Air Vent Valve

The boat is well sealed against water intrusion into the interior of the hull. As such, the air inside the hull is subject to expansion and contraction with changing temperature. To prevent hull deformation with temperature change, an air breather valve is installed in the starboard glove compartment.

#### Maintenance

Avoid build-up plant growth, barnacles on the hull.

Boats used in saltwater should be properly protected with antifouling paint but if possible, it is best to remove the boat from the water when not in use.

Marine growth sticks less to polyethylene than fiberglass or aluminum but still does stick to it. Antifouling paint adheres poorly to polyethylene. Antifouling could be applied but the paint could smear if the boat is dragged on surfaces regardless how well the paint is applied.

#### Procedure to Paint Antifouling Paint For HDPE Hull

- 1) Alcohol wash the hull and tape off the area to be painted.
- 2) Abraid the hull with 80 grit sandpaper
- 3) Apply 3M 94 Adhesive
- 4) Paint with any Latex Antifouling Paint.

## OPERATION BEFORE USE

- 1. Check that both drain plugs are in place.
- 2. Check that the oars are properly secured.
- 3. Ensure that the outboard engine clamps are properly tightened.
- 4. Check that the fuel lines connections are secure.
- 5. Be sure you have enough fuel for your boating trip.





## USE, PERFORMANCE, & TOWING

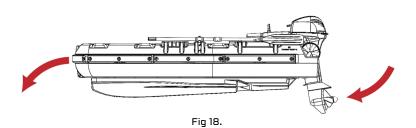
Load Distribution and Trim - One person operation, recommend using a tiller extension and sit as far forward as is practical and comfortable.

Bow Riding High - Boat may remain bow high when accelerating this could be overcome by trimming the engine (see below), accelerating smoothly and evenly in order to avoid excessive strain on the transom, further driver and/or passenger may also move forward, in order to get the boat on plane, then return to their original seating posit. Once the boat is on plane.

When Slowing Down From Planing - Slow the boat gradually to avoid the engine wake from flooding the boat.

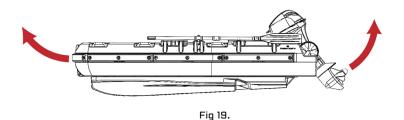
**Re-boarding the Vessel** from water can be accomplished at one side of the back seat with the Mantus Strap Ladder. The strap ladder is slung around the back seat on either the port/starboard side and can be pulled over the edge of the boat into the water. You can then grab the handle at the top of the tube, put a foot in the strap ladder and push up while leaning forward to lift yourself into the boat.

**Trimming The Motor** - As a general rule, the axis of your propeller should be parallel to the surface of the water when the boat is on plane.



If the boat is riding with bow up trim the engine IN





If the boat is riding with bow down trim the engine **OUT** 

#### Suggestion:

If using with 1-2 people, place the regulation pin of the outboard motor on the 1st hole from the transom.

Beware of overloading in the bow of the boat too much, it can result in loss of speed. In rough weather a slight overloading at the bow will ease the motion of the craft.

Do not overpower the boat. For model BM104 we recommend 15 HP as the max engine size (max weight 120 lbs) Using an outboard motor of a larger size is dangerous. It might make the boat unstable when turning or have too much weight at the stern. Using an outboard motor larger than recommended could void your boat's warranty.

#### Towing

#### Please use only the towing eye for towing the boat!

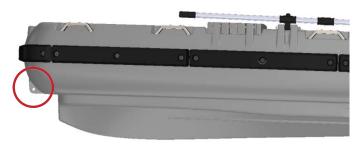


Fig 20.



## **DAVIT LIFTING**

We provide 4 lifting point attachments to lift the boat on the davits. Please only lift using these attachments.

Do not lift with hand handles or seats or oar sockets.

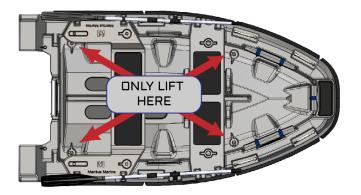


Fig 21.

## **STORAGE**

When storing the boat out of the water we recommend:

Removing the deck drain plug for the duration of storage unless stored inside.

Removing the hull drain plug, draining the hull and reinstalling the hull drain plug.



## REPAIR

#### Scratches

When dealing with scratches you can sand HDPE material to remove undesired scratches. Using 400 Grit sandpaper is safe and will make sure you do not remove too much material, follow up with 800 Grit for polishing.

#### Cracks

The hull of the boat is covered with a 4-year warranty against cracks resulting from nominal use. But in the event you have a crack, please reach out to us: 1-855-262-6887 (See warranty page for details)

\*\*HDPE can be repaired by heat welding and if necessary, we can provide color matched welding material on request. In theory, this technique could be used to modify the boat but please be aware that welding modifications that are not approved by Mantus Marine could void the warranty.\*\*

## TRANSPORTING BY ROAD

There are several types of trailers available, however the trailer must match the boat's weight, the hull and the load. The towing vehicle must have the capability of pulling the load. For any questions on compatible trailers, reach out to your local dealer or feel free to contact Mantus Marine directly.





## WARRANTY

#### MANTUS MARINE DINGHY LIMITED WARRANTY

Mantus Marine's warranties, both express and implied, are only applicable to the original purchaser and non-transferable. Mantus Marine reserves the right to deny warranty claims where proof of original purchase cannot be provided.

**Meaning**: This warranty applies only to the original purchaser. The history of the product becomes difficult to determine once it is second or third-hand, and it may have been damaged and repaired at some point, therefore becoming weakened.

#### **COVERAGE**

Mantus Marine warrants that the product will be free from material defects and failure of material and workmanship for the time periods outlined, specific to the referenced components below.

#### 4 YEARS

<u>Hull</u> - The hull is defined as the HDPE boat hull plus seats. The hull is warrantied for a period of 4 years against defects in material or workmanship such as cracks, deformation, and discoloration. This warranty does not include superficial surface blemishes or abrasions.

<u>Handles and Cleats</u> - Handles and cleats are warrantied for a period of 4 years against defects in material and workmanship.

#### 1 YEAR

<u>Wearable Parts and Accessories</u> - Wearable parts and accessories are warrantied for a period of 1 year against defects in material and workmanship. This includes Bumpers, Bags, Oars, Oarlocks, Wheels, Pads, Steps, Drain Plugs, Deck Plates, or any other part that can reasonably be considered wearable or consumable.

#### THIRD PARTY PRODUCTS

Any third party product used in assembly, but not manufactured by Mantus Marine is excluded from this warranty. Please see the applicable original manufacturer warranty.

Fuel Tank - Moeller Fuel Tank Warranty

Fuel Line - Trident Marine Contact Page

Wheels - RailBlaza Warranty Registration



#### **EXCLUSIONS**

Warranty coverage does not include:

- Faults and damage caused by using the product outside of normal use, or by using the product outside of the manufacturer's published recommended guidelines;
- · Faults and damage resulting from general wear-and-tear;
- Faults and damage where modifications and/or repair services to the product have been undertaken
  by any third party not authorized by Mantus Marine;
- Faults and damage caused by failure of any accessory not manufactured by Mantus Marine;
- Faults and damage due to external causes, including acts of god, accident, abuse, misuse, neglect, and failure to perform preventative maintenance and/or repairs;

**Meaning:** If the product is damaged by way of misuse Mantus Marine does not guarantee a replacement or refund. Normal wear-and-tear is not covered.

#### HONORING THE WARRANTY

If the product is faulty or damaged Mantus Marine will, at its discretion, replace the whole or partial product if available (meaning: if only a single component is faulty, only that component will be replaced). Mantus Marine reserves the right to arrange repair in lieu of replacement. In the event that the boat needs to be shipped for repair or replacement, Mantus Marine will only cover shipping within the continental United States. If a replacement or repair is not available, Mantus Marine reserves the right to instead issue a refund.

#### WARRANTY CLAIM PROCEDURE

If you have a warranty claim, please email details of your claim, order number or purchase date, and applicable photo evidence to <a href="mailto:info@mantusanchors.com">info@mantusanchors.com</a>. A member of our team will then be in touch to determine the best means to address your concerns.

#### DISCLAIMER

The product user shall solely be responsible for using all necessary skills and care in sizing, storing, maintaining, and operating the product. You acknowledge that Mantus Marine does not hold any liability to you as to the effectiveness of the product when used outside of the manufacturer's published recommended guidelines. You shall make your own determination as to a product's suitability for your purposes prior to use. Mantus Marine reserves the right to change the design of any product without assuming any obligation to modify any product previously manufactured.

#### LIABILITY

Except as expressly provided for in this warranty, Mantus Marine's liability to you whether in contract, tort or otherwise for any loss, damage or injury arising directly or indirectly from any defect in the products or from any other breach of Mantusf Marine's obligations under this Warranty shall not exceed an amount equivalent to the price invoiced for the faulty products. Mantus Marine shall not be liable for any indirect or consequential injury, specific damage, or loss of any kind whatsoever.



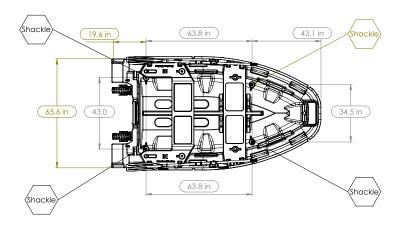
Transom Warning Label



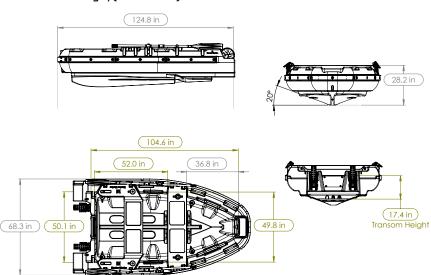


# **APPENDIX**

## Mantus Dinghy (Model 104) Dimensions for Hard Point Attachments



## Mantus Dinghy(Model 104): General Dimensions





NOTES:			







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