CAPTAIN 3BAB64524-0

CAPTAIN Outboard Propeller Instruction Manual

Model: 3BAB64524-0

1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your CAPTAIN Outboard Propeller. Please read these instructions carefully before use to ensure safe and efficient performance.
This propeller is designed for Mercury and Tohatsu outboard engines ranging from 9.9 HP to 20 HP, featuring a 14-spline shaft.



Figure 1: CAPTAIN Outboard Propeller (Model 3BAB64524-0)

2. Compatibility and Selection

To ensure correct fitment and optimal performance, verify your engine's specifications against the propeller's design. This propeller is compatible with:

- **Engine Horsepower:** 9.9 HP, 12 HP, 15 HP, 18 HP, 20 HP (Mercury/Tohatsu)
- **Spline Count:** 14 Tooth Spline
- **Rotation:** Right-hand rotation
- **Material:** Aluminum
- **Blades:** 3 Blades
- **Dimensions:** 9.25 inch Diameter x 11.5 inch Pitch (for this specific variant)

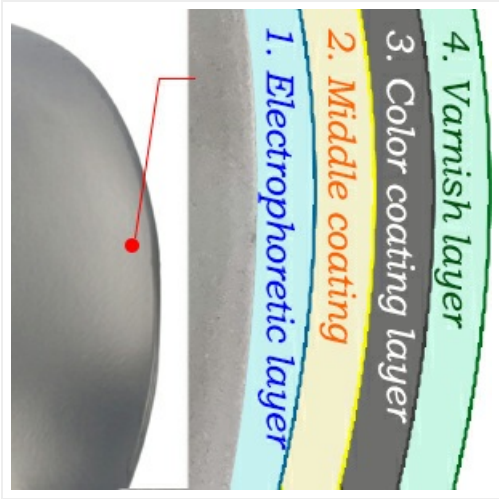


Figure 2: Key factors for selecting the correct propeller size.

If you are unsure about your engine's OEM number or specific requirements, consult your engine's manual or a qualified marine technician.

3. Installation

Safety First: Always disconnect the battery and ensure the engine is off and in neutral before attempting any installation or maintenance. Wear appropriate safety gear, including gloves.

1. **Prepare the Engine:** Tilt the outboard engine up to access the propeller.
2. **Remove Old Propeller (if applicable):**
    - Remove the cotter pin from the propeller nut.
    - Unscrew the propeller nut.
    - Slide off the washer, spacer, and the old propeller.
    - Inspect the propeller shaft for any damage or debris. Clean if necessary.
3. **Install New Propeller:**
    - Apply a thin layer of marine grease to the propeller shaft to prevent corrosion and facilitate future removal.
    - Slide the thrust washer onto the propeller shaft, ensuring it seats correctly against the gearcase.
    - Align the splines of the new CAPTAIN propeller with the splines on the shaft and slide the propeller onto the shaft until it is fully seated.
    - Install the outer washer and then the propeller nut. Tighten the propeller nut securely, but do not overtighten.
    - Insert a new cotter pin through the propeller nut and shaft hole, bending the ends to secure it.
4. **Final Check:** Rotate the propeller by hand to ensure it spins freely without obstruction.

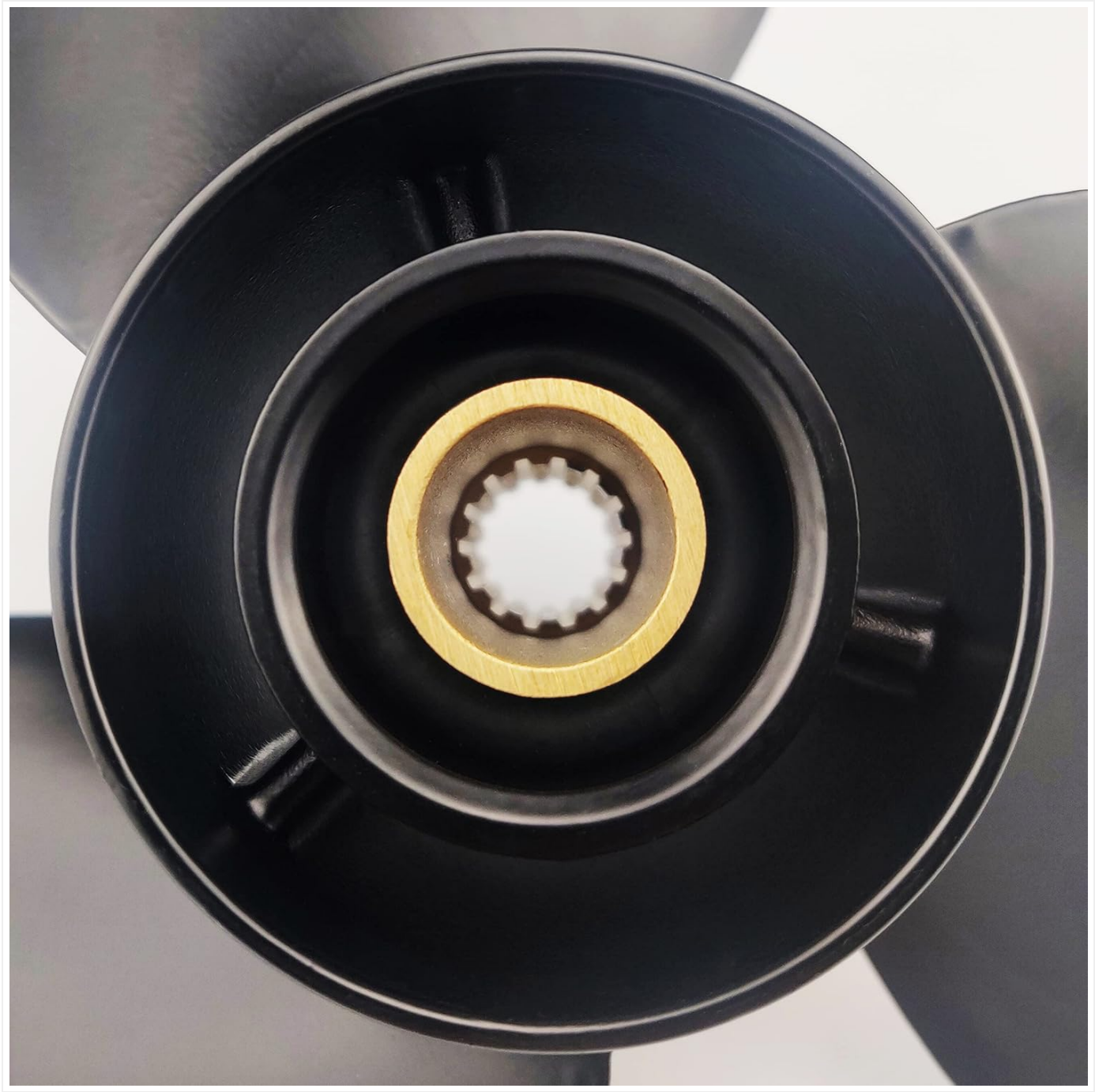


Figure 3: Detailed view of the 14-spline tooth hub.

4. Operation

After installation, operate your boat at low speeds initially to confirm proper function and ensure there are no unusual vibrations or noises. Gradually increase speed, monitoring engine RPM and boat performance. The propeller should provide smooth acceleration and maintain appropriate engine RPM at cruising speeds.

Note: Propeller pitch affects engine RPM and boat speed. If your engine consistently over-revs or struggles to reach its recommended operating RPM range, consider consulting a marine professional for advice on propeller pitch selection.

5. Maintenance

Regular maintenance extends the life of your propeller and ensures safe operation.

- **Visual Inspection:** Before each use, visually inspect the propeller for any signs of damage, such as bent blades, nicks, cracks, or corrosion. Even minor damage can lead to vibration and reduced performance.
- **Cleaning:** After use in saltwater, rinse the propeller with fresh water to prevent salt buildup and corrosion. For stubborn

grime, use a mild soap and brush.

- **Shaft Lubrication:** Periodically remove the propeller (at least once a season or every 100 hours of operation) to inspect the shaft and reapply marine grease. This prevents the propeller from seizing to the shaft.
- **Storage:** If storing the boat for an extended period, remove the propeller, clean it thoroughly, inspect for damage, and store it in a safe place.
- **Damage Repair:** Do not attempt to repair severely damaged propellers yourself. Consult a professional propeller repair shop.

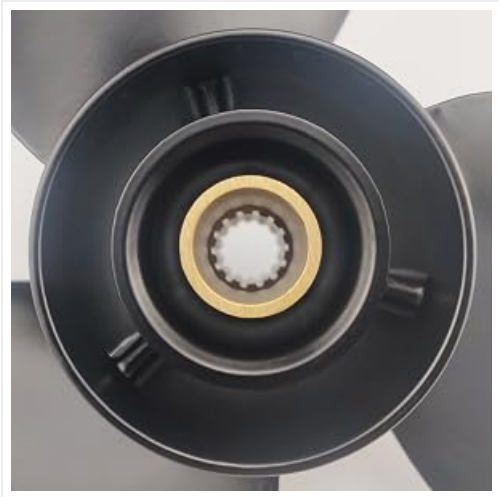


Figure 4: Propeller coating layers for enhanced durability.

6. Troubleshooting

Problem	Possible Cause	Solution
Excessive Vibration	Damaged or bent propeller blade, debris wrapped around prop, loose propeller nut, worn hub.	Inspect propeller for damage/debris. Tighten propeller nut. Replace propeller if damaged or hub is worn.
Loss of Performance/Speed	Damaged propeller, incorrect propeller pitch, engine issues, fouled hull.	Inspect propeller for damage. Verify propeller pitch is suitable for your boat/engine. Check engine and hull.
Propeller Cavitation/Ventilation	Propeller running too high, incorrect trim, damaged propeller, water intake issues.	Adjust engine trim. Inspect propeller for damage. Check engine mounting height.

7. Specifications

Feature	Detail
Brand	CAPTAIN
Model Number	3BAB64524-0
Material	Aluminum
Engine Compatibility	Mercury/Tohatsu 9.9-20 HP
Spline Teeth	14
Blades	3

Feature	Detail
Rotation	Right-hand (RH)
Diameter x Pitch (Variant)	9.25 x 11.5 inches
OEM Equivalent Part Numbers	3BAB64516-1, 3BAB64518-1, 3BAB64521-1, 3BAB64524-1
UPC	754083774142

8. Warranty and Support

Warranty: CAPTAIN offers an after-sale promise. If the product experiences any quality problems, an unconditional return may be offered. Please refer to your purchase documentation for specific warranty terms and conditions.

Customer Support: For further assistance, technical questions, or to explore other propeller models, please visit the official CAPTAIN store or contact customer service through your retailer.

Visit the CAPTAIN Store

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