Lewmar 590003LEW

Lewmar 140TT 2.2kw Gen. 2 Bow Thruster -12V User Manual

Model: 590003LEW

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Lewmar 140TT 2.2kw Gen. 2 Bow Thruster. Please read this manual thoroughly before attempting any installation or operation. Proper understanding and adherence to these instructions will ensure optimal performance and longevity of your thruster.



Image of the Lewmar 140TT 2.2kw Gen. 2 Bow Thruster, showing the motor housing, propeller, and tunnel. This unit is designed for marine vessel maneuvering.

2. Safety Precautions

Always prioritize safety when working with marine electrical and mechanical systems. Failure to follow these instructions could result in serious injury or damage to the product or vessel.

- Ensure the vessel's main power supply is disconnected before performing any installation, maintenance, or inspection.
- Wear appropriate personal protective equipment (PPE) such as gloves and eye protection.

- All electrical work must be performed by a qualified marine electrician in accordance with local and national regulations.
- Do not operate the thruster out of water.
- Keep hands, feet, and loose clothing clear of the propeller when the thruster is in operation or could be activated.
- Regularly inspect all connections and components for signs of wear or damage.

3. Setup and Installation

Proper installation is crucial for the performance and safety of your bow thruster. Consult a professional marine installer if you are unsure about any step.

3.1 Pre-Installation Checklist

- Verify that the thruster model matches your vessel's voltage (12V for this model).
- Ensure adequate space is available in the bow for the thruster tunnel and motor assembly.
- Confirm that the vessel's battery bank can supply the required current for the thruster.
- Gather all necessary tools and materials, including sealants, fasteners, and wiring.

3.2 Mounting the Thruster

The thruster unit is designed for panel mounting. The tunnel should be securely integrated into the hull, ensuring it is watertight and structurally sound. The motor and gearbox assembly then mounts directly onto the tunnel. Refer to the detailed diagrams provided in the separate installation template for precise measurements and drilling instructions. Ensure all mounting bolts are torqued to the manufacturer's specifications.

3.3 Electrical Connections

Connect the thruster motor to the vessel's 12V DC power supply via a dedicated circuit with appropriate fusing and battery isolation. Use marine-grade, appropriately sized cabling to minimize voltage drop. Ensure all connections are clean, tight, and protected from corrosion. The control panel wiring should be routed safely and connected according to the wiring diagram provided with the control unit (sold separately).

4. Operating Instructions

The Lewmar 140TT Bow Thruster provides precise lateral control for easier docking and maneuvering in confined spaces.

4.1 Basic Operation

- Ensure the thruster's main power switch is ON.
- Activate the thruster using the dedicated control panel (joystick or push-button).
- Apply short bursts of power rather than continuous operation to prevent overheating and conserve battery life.
- Observe the vessel's movement and adjust thruster input as needed.

4.2 Control Panel

The thruster is operated via a remote control panel, typically mounted at the helm. Familiarize yourself with the specific functions of your control panel, which usually includes a power indicator and directional controls (port/starboard). Some advanced panels may offer proportional control for finer adjustments.

5. Maintenance and Care

Regular maintenance will extend the life of your bow thruster and ensure reliable operation.

5.1 Routine Checks

- **Monthly:** Inspect all electrical connections for corrosion or looseness. Check the battery voltage and charge level.
- **Annually (or at haul-out):** Inspect the propeller for damage or fouling. Clean the thruster tunnel of marine growth. Check the gearbox oil level and condition (if applicable, refer to specific gearbox manual). Inspect the motor for signs of overheating or water ingress.
- **After any impact:** Thoroughly inspect the thruster and tunnel for structural damage.

5.2 Winterization

If the vessel is to be laid up in freezing conditions, ensure the thruster tunnel is completely drained of water to prevent ice damage. Disconnect the main power supply to the thruster.

6. Troubleshooting Guide

This section provides solutions to common issues you might encounter with your bow thruster.

Problem	Possible Cause	Solution
Thruster does not operate	No power to unit; Blown fuse/breaker; Faulty control panel; Motor fault.	Check main power switch and battery connections. Inspect and replace fuse/reset breaker. Test control panel. Consult qualified technician for motor inspection.
Reduced thrust	Fouled propeller/tunnel; Low battery voltage; Undersized wiring; Motor overheating.	Clean propeller and tunnel. Check battery charge. Verify wiring gauge. Allow motor to cool down.
Motor runs but no thrust	Shear pin broken (if applicable); Propeller detached.	Inspect propeller connection and shear pin. Replace if necessary.
Excessive noise/vibration	Damaged propeller; Loose mounting; Bearing wear.	Inspect propeller for damage. Check all mounting bolts for tightness. Consult technician for bearing inspection.

7. Technical Specifications

Feature	Detail
Brand	Lewmar
Model Name	590003LEW
Power	2.2kw
Voltage	12V
Item Weight	11.88 Kilograms
Product Dimensions	18"L x 10"W
Material	Plastic (for certain components)

Feature	Detail
Mounting Type	Panel Mount
Special Feature	Waterproof
UPC	743683033216

8. Warranty Information

This Lewmar product is covered by a manufacturer's warranty. For specific details regarding the warranty period, coverage, and claims process, please refer to the warranty documentation included with your purchase or visit the official Lewmar website. Keep your proof of purchase for warranty claims.

9. Customer Support

For technical assistance, spare parts, or further inquiries, please contact Lewmar customer support. You can find contact information and additional resources on the official Lewmar website or through your authorized Lewmar dealer. When contacting support, please have your product model number (590003LEW) and serial number ready. Visit the Lewmar Store on Amazon for more products and information.

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