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#### **Bennett Marine 1290BI**

# Bennett Marine 1290Bl Standard (Classic) Hydraulic Trim Tab System

Model: 1290BI

#### INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your Bennett Marine 129OBI Standard (Classic) Hydraulic Trim Tab System. This system is designed to enhance your vessel's performance by allowing precise control over its running attitude, leading to faster planing, improved visibility, reduced pounding, and elimination of porpoising.

For optimal performance and longevity, please read this manual thoroughly before installation and operation.

#### PRODUCT COMPONENTS OVERVIEW

The Bennett Marine 129OBI system includes the following primary components:

- **Hydraulic Power Unit (HPU):** The central component that houses the pump, reservoir, and solenoid valves, responsible for generating hydraulic pressure to move the trim tabs.
- **Trim Tabs:** Two stainless steel planes that attach to the transom of your boat, which are moved up and down by the hydraulic actuators.
- **Hydraulic Actuators:** Cylinders that extend and retract to move the trim tabs, connected to the HPU via hydraulic tubing.
- Control Switch with Indication Unit: An electrical switch and display unit for controlling the trim tabs and showing their current position.



Image: Main components of the Bennett Marine 129OBI Hydraulic Trim Tab System. Shown are the hydraulic power unit (top left), two stainless steel trim tabs with their black hydraulic actuators (center), and the control panel with LED indicators (bottom right).

## **SETUP AND INSTALLATION**

Proper installation is crucial for the safe and effective operation of your trim tab system. It is highly recommended that installation be performed by a qualified marine technician.

#### **Pre-Installation Checklist:**

- · Verify all components are present as listed in the packaging.
- Ensure you have the necessary tools and materials for marine installation.
- Review your boat's transom structure to determine optimal mounting locations for the trim tabs and HPU.

#### General Installation Steps (Consult full installation guide for details):

- 1. **Mounting the Trim Tabs:** Securely attach the trim tabs to the transom, ensuring proper alignment and clearance.
- 2. **Installing Actuators:** Connect the hydraulic actuators to the trim tabs and the transom mounting brackets.
- 3. **Mounting the Hydraulic Power Unit (HPU):** Install the HPU in a dry, accessible location within the boat, typically in the bilge or an engine compartment. Ensure it is mounted upright and level.
- 4. **Running Hydraulic Tubing:** Route the hydraulic tubing from the HPU to each actuator, avoiding sharp bends and potential pinch points. Secure tubing properly.
- 5. **Wiring the Control Switch:** Connect the control switch to the HPU and the vessel's electrical system according to the wiring diagram.

- 6. Filling the HPU: Fill the HPU reservoir with the recommended hydraulic fluid.
- 7. Bleeding the System: Follow the manufacturer's instructions to bleed air from the hydraulic lines.

## **OPERATING INSTRUCTIONS**

The Bennett Marine 129OBI system features an intuitive control switch with an indication unit to help you optimize your boat's performance.

# **Understanding the Control Unit:**

The control unit typically features buttons for "Bow Up" and "Bow Down" for both port and starboard sides, along with LED indicators showing the trim tab position.



Image: The Bennett Marine trim tab control switch. It features two sets of "DN" (down) and "BOW UP" buttons, one for the port side and one for the starboard side. Vertical LED bars on the left (PORT) and right (STBD) indicate the trim tab position. Additional buttons are labeled "ALL UP" and "ALL DN" for simultaneous control.

#### **Basic Operation:**

- To Lower the Bow (Raise Stern): Press the "DN" (Down) button for the respective side (Port or Starboard). Lowering the tabs pushes the stern up, bringing the bow down.
- To Raise the Bow (Lower Stern): Press the "BOW UP" button for the respective side. Raising the tabs allows the bow to come up.
- **Correcting Listing:** If the boat is listing to one side, lower the trim tab on the side that is riding high. For example, if the boat lists to starboard, lower the port trim tab.
- **Planing:** To get on plane faster, fully deploy both trim tabs (press "ALL DN" or both "DN" buttons). Once on plane, gradually retract the tabs until the desired running attitude is achieved.
- Indication Unit: The LED indicators on the control unit show the relative position of each trim tab. A full bar indicates the tab is fully down, while no bar indicates it is fully up.

Always make small adjustments and observe the boat's reaction. Over-trimming can negatively affect performance and fuel efficiency.

## MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your Bennett Marine trim tab system.

#### **Routine Checks:**

• Fluid Level: Periodically check the hydraulic fluid level in the HPU reservoir. Maintain the fluid level

within the specified range. Use only recommended hydraulic fluid.

- Actuators: Inspect actuators for any signs of leaks, corrosion, or damage to the piston rods. Keep the rods clean.
- **Trim Tabs:** Check the trim tab planes for marine growth, damage, or excessive wear. Clean as necessary.
- **Tubing and Wiring:** Inspect hydraulic tubing and electrical wiring for chafing, kinks, or loose connections.
- Mounting Hardware: Ensure all mounting bolts and screws are secure and free from corrosion.

## Winterization (if applicable):

If operating in freezing conditions, consult the full product manual for specific winterization procedures to prevent damage to the hydraulic system.

## **TROUBLESHOOTING**

This section addresses common issues you might encounter. For complex problems, contact a qualified marine technician or Bennett Marine support.

Problem	Possible Cause	Solution
Trim tabs do not move.	No power to HPU, low fluid level, faulty switch, air in system.	Check power supply and fuses. Verify fluid level. Inspect wiring and switch. Bleed the system.
One trim tab moves, the other does not.	Air in one line, faulty solenoid valve, damaged actuator.	Bleed the system. Inspect solenoid connections. Check actuator for damage.
Tabs move slowly or erratically.	Low fluid level, air in system, weak power supply.	Check fluid level and add if necessary. Bleed the system. Verify battery voltage.
HPU runs but tabs don't move.	Low fluid, air in system, internal HPU issue.	Check fluid level. Bleed the system. Contact support if issue persists.

# **SPECIFICATIONS**

Key specifications for the Bennett Marine 129OBI Standard (Classic) Hydraulic Trim Tab System:

• Model: 1290BI

• Trim Tab Dimensions: 12 inches (width) x 9 inches (chord)

• System Type: Hydraulic

• Indication: One Box Indication Unit

• Power Unit: Self-contained hydraulic power unit

• Material: Stainless Steel (trim tabs)

• Item Weight: Approximately 26.2 pounds

• Package Dimensions: Approximately 26.6 x 14.3 x 6 inches

Note: These specifications are subject to change. Refer to the official product documentation for the most current information.

## WARRANTY AND SUPPORT

For detailed warranty information regarding your Bennett Marine 129OBI Hydraulic Trim Tab System, please refer to the warranty card included with your product or visit the official Bennett Marine website. Warranty terms and conditions typically cover manufacturing defects for a specified period. Should you require technical assistance, replacement parts, or have questions not covered in this manual, please contact Bennett Marine customer support directly. Their official website usually provides contact details, FAQs, and additional resources.

Manufacturer: Bennett Marine Model Number: 1290BI ASIN: B08HZJ26CP

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This manual is for informational purposes only. Always follow proper safety procedures and consult professional assistance when necessary.

#### Related Documents - 1290BI



#### Bennett Marine AutoTrimPro: Installation & User's Guide

Comprehensive installation and user guide for the Bennett Marine AutoTrimPro, an all-in-one hydraulic trim tab control system designed to enhance boat performance, efficiency, and ride comfort.



# Bennett Marine AutoTrimPro Installation and User's Guide

Comprehensive installation and user's guide for the Bennett Marine AutoTrimPro, an all-in-one trim tab control system for hydraulic trim tabs. Learn about setup, operation, troubleshooting, and benefits for your boat.



#### OBI Integrated Helm Control Installation Guide for Bennett Marine Hydraulic Systems

Comprehensive installation manual for the Bennett Marine OBI9000H Integrated Helm Control system for hydraulic trim tabs. Includes wiring, calibration, and troubleshooting steps.



## Bennett Marine NMEA1 Trim Tab Indicator Installation Guide

Comprehensive installation instructions for the Bennett Marine NMEA1 Trim Tab position indicator system, covering actuator setup and NMEA 2000 backbone wiring.



## Bennett ATC Auto Tab Control: Owner's Manual & Installation Guide

Comprehensive guide for the Bennett Auto Tab Control (ATC) system, covering product understanding, installation, operation, and troubleshooting for optimal boat trim and performance. Includes wiring diagrams and safety precautions.



## Bennett Marine AutoTrimPro Installation and User's Guide

Comprehensive guide for installing and operating the Bennett Marine AutoTrimPro, an all-in-one electric trim tab control system for boats. Learn about setup, manual and automatic modes, and troubleshooting.