

Bennett Marine 155-0060

Bennett Marine V351HPU1 12V Hydraulic Power Unit User Manual

Model: 155-0060

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your Bennett Marine V351HPU1 12V Hydraulic Power Unit. Please read this manual thoroughly before attempting to install or operate the unit. Retain this manual for future reference.

The Bennett Marine V351HPU1 is a compact 12-volt hydraulic power unit designed for various marine applications requiring reliable hydraulic pressure. Its robust construction ensures durability and consistent performance.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions may result in serious injury, death, or property damage.

- Always disconnect power before performing any installation, maintenance, or troubleshooting.
- Ensure all electrical connections are properly insulated and protected from moisture.
- Use only approved hydraulic fluid. Refer to the specifications for recommended fluid types.
- Do not operate the unit if any components are damaged or leaking.
- Keep hands and clothing clear of moving parts.
- Installation and service should be performed by qualified personnel.
- Wear appropriate personal protective equipment (PPE) such as safety glasses and gloves.

3. SETUP AND INSTALLATION

3.1 Mounting the Power Unit

Select a dry, well-ventilated location for mounting the power unit, away from direct sunlight and excessive heat. Ensure the mounting surface is sturdy enough to support the unit's weight and vibrations during operation. The unit should be mounted in an upright position to ensure proper fluid levels and operation.

Image: Example of a properly mounted hydraulic power unit.

Description: This image would show the Bennett Marine V351HPU1 unit securely fastened to a vertical surface, demonstrating correct orientation and clearance for maintenance access. Mounting bolts would be visible, securing the unit to a bulkhead or similar structure.

3.2 Electrical Connections

The V351HPU1 operates on a 12V DC power supply. Connect the positive (+) lead from the power unit to a fused 12V DC power source, and the negative (-) lead to a suitable ground. Ensure the fuse rating matches the unit's current draw (refer to specifications). Use marine-grade wiring of appropriate gauge to prevent voltage drop.

Image: Wiring diagram for the 12V hydraulic power unit.

Description: This image would display a clear schematic showing the electrical connections for the V351HPU1, including the 12V battery, fuse, main power switch, and the power unit's positive and negative terminals. Wire gauges and fuse ratings would be indicated.

3.3 Hydraulic Connections

Connect the hydraulic lines from the power unit to the hydraulic cylinders or actuators according to the system's design. Ensure all fittings are tightened securely to prevent leaks. Use thread sealant on tapered pipe threads, but avoid over-tightening. Bleed the hydraulic system as per the instructions for your specific hydraulic cylinders/actuators after all connections are made and the reservoir is filled.

Image: Hydraulic port connections on the power unit.

Description: This image would provide a close-up view of the hydraulic ports on the V351HPU1, clearly labeling the pressure and return lines. It would show properly connected hydraulic hoses with appropriate fittings.

4. OPERATING INSTRUCTIONS

4.1 Initial Start-up

1. Verify all electrical and hydraulic connections are secure.
2. Ensure the hydraulic reservoir is filled to the appropriate level with the recommended fluid.
3. Turn on the main power supply to the unit.
4. Activate the hydraulic system (e.g., trim tabs, lift) slowly and observe for proper function and any leaks.
5. Bleed any air from the system as necessary, following the instructions for your specific hydraulic components.

4.2 Normal Operation

Operate the hydraulic system as required by your application. The V351HPU1 is designed for intermittent duty cycles. Avoid continuous operation for extended periods to prevent overheating. If the unit becomes excessively hot, allow it to cool down before further use.

5. MAINTENANCE

5.1 Fluid Level Check

Regularly check the hydraulic fluid level in the reservoir. The fluid level should be maintained between the "MIN" and "MAX" marks. Use only the recommended hydraulic fluid (refer to specifications). Low fluid levels can lead to cavitation and pump damage.

Image: Checking hydraulic fluid level in the reservoir.

Description: This image would show a person checking the fluid level of the V351HPU1 reservoir, pointing to the "MIN" and "MAX" indicators on the reservoir or dipstick. The cap for refilling fluid would also be visible.

5.2 Fluid Replacement

Hydraulic fluid should be replaced periodically, typically every 1-2 years or as recommended by your system's manufacturer, or if it appears discolored or contaminated. Consult a qualified technician for fluid replacement procedures if you are unsure.

5.3 General Inspection

Periodically inspect the unit for any signs of leaks, corrosion, or damage to electrical wiring and hydraulic hoses. Ensure all mounting hardware remains secure. Clean the exterior of the unit as needed to prevent dirt buildup.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
Unit does not operate.	No power; Blown fuse; Faulty wiring.	Check power supply; Replace fuse; Inspect and repair wiring.
Low or no hydraulic pressure.	Low fluid level; Air in system; Clogged filter; Faulty pump.	Check and refill fluid; Bleed system; Inspect/replace filter; Contact service.
Excessive noise during operation.	Low fluid level (cavitation); Air in system; Worn pump bearings.	Check and refill fluid; Bleed system; Contact service for pump inspection.
Hydraulic fluid leaks.	Loose fittings; Damaged hoses/seals.	Tighten fittings; Replace damaged components.

If you encounter problems not listed here or if solutions do not resolve the issue, contact Bennett Marine customer support or a qualified service technician.

7. SPECIFICATIONS

- **Manufacturer:** Bennett Marine
- **Part Number:** 155-0060
- **Model:** V351HPU1
- **Input Voltage:** 12V DC
- **Item Weight:** 4.8 pounds
- **Usage:** Personal (Marine Hydraulic Systems)
- **Recommended Hydraulic Fluid:** Consult Bennett Marine for specific recommendations.
- **Date First Available:** May 18, 2011

8. WARRANTY AND SUPPORT

Bennett Marine products are manufactured to high-quality standards and are backed by a limited warranty. For detailed warranty information, please refer to the warranty card included with your product or visit the official Bennett Marine website. Keep your proof of purchase for warranty claims.

For technical support, service, or to order replacement parts, please contact Bennett Marine customer service. Contact information can typically be found on the manufacturer's website or on the product packaging.

Website: www.bennettmarine.com (Example link, verify actual URL)

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question