SouthMarine 36620-93J02

SouthMarine 36620-93J02 Main Wiring Harness Instruction Manual

For Suzuki Outboard Motor Remote Control Box with PTT

1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your SouthMarine 36620-93J02 Main Wiring Harness. This harness is designed as an aftermarket replacement for Suzuki outboard motor remote control boxes that feature Power Trim and Tilt (PTT) functionality. Please read this manual thoroughly before installation and use to ensure safe and correct operation.

2. Safety Information

Always prioritize safety when working with electrical components and marine equipment. Failure to follow safety instructions can result in injury, damage to equipment, or electric shock.

- **Disconnect Power:** Before beginning any installation or maintenance, ensure the boat's battery is disconnected to prevent accidental power surges or electric shock.
- **Verify Compatibility:** Confirm that this wiring harness (model 36620-93J02) is compatible with your specific Suzuki outboard motor and remote control box. Refer to your motor's service manual for exact specifications.
- **Proper Tools:** Use appropriate tools for electrical connections to avoid damaging wires or connectors.
- **Secure Connections:** Ensure all connections are tight and secure to prevent intermittent electrical issues or corrosion.
- **Professional Assistance:** If you are unsure about any step of the installation or encounter difficulties, consult a qualified marine technician.

3. Product Overview

The SouthMarine 36620-93J02 Main Wiring Harness is a robust electrical cable assembly designed to connect your Suzuki outboard motor to its remote control box. It features an 8-pin main connector and additional leads for various functions, including Power Trim and Tilt (PTT). The harness length is approximately 6.9 meters (22.6 feet).



Figure 3.1: The SouthMarine 36620-93J02 Main Wiring Harness, coiled for packaging. This image shows the overall length and general appearance of the harness, including various connector types.

4. Setup and Installation

Follow these steps carefully to install the wiring harness. Ensure all safety precautions are observed.

4.1 Pre-Installation Checks

- Confirm the harness length (6.9m / 22.6ft) is sufficient for your application.
- Inspect the harness for any visible damage, kinks, or exposed wires.
- Gather necessary tools: screwdrivers, wire cutters/strippers (if needed for auxiliary connections), electrical tape, zip ties, and a multimeter for testing.

4.2 Installation Steps

1. **Disconnect Battery:** Turn off the engine and disconnect the boat's battery to prevent electrical hazards.
2. **Locate Connection Points:** Identify the main wiring harness connection points on your Suzuki outboard motor and the remote control box. Refer to your motor's service manual for exact locations.
3. **Connect Main 8-Pin Connector:** Carefully align and connect the 8-pin round connector of the new harness to the corresponding receptacle on the outboard motor. Ensure it clicks securely into place.



Figure 4.1: Close-up view of the 8-pin round connector, typically connecting to the outboard motor. Ensure pins are aligned before insertion.

4. **Connect Remote Control Box Connector:** Route the harness to the remote control box. Connect the rectangular multi-pin connector to the corresponding port on the control box. This connection typically handles throttle, shift, and PTT signals.

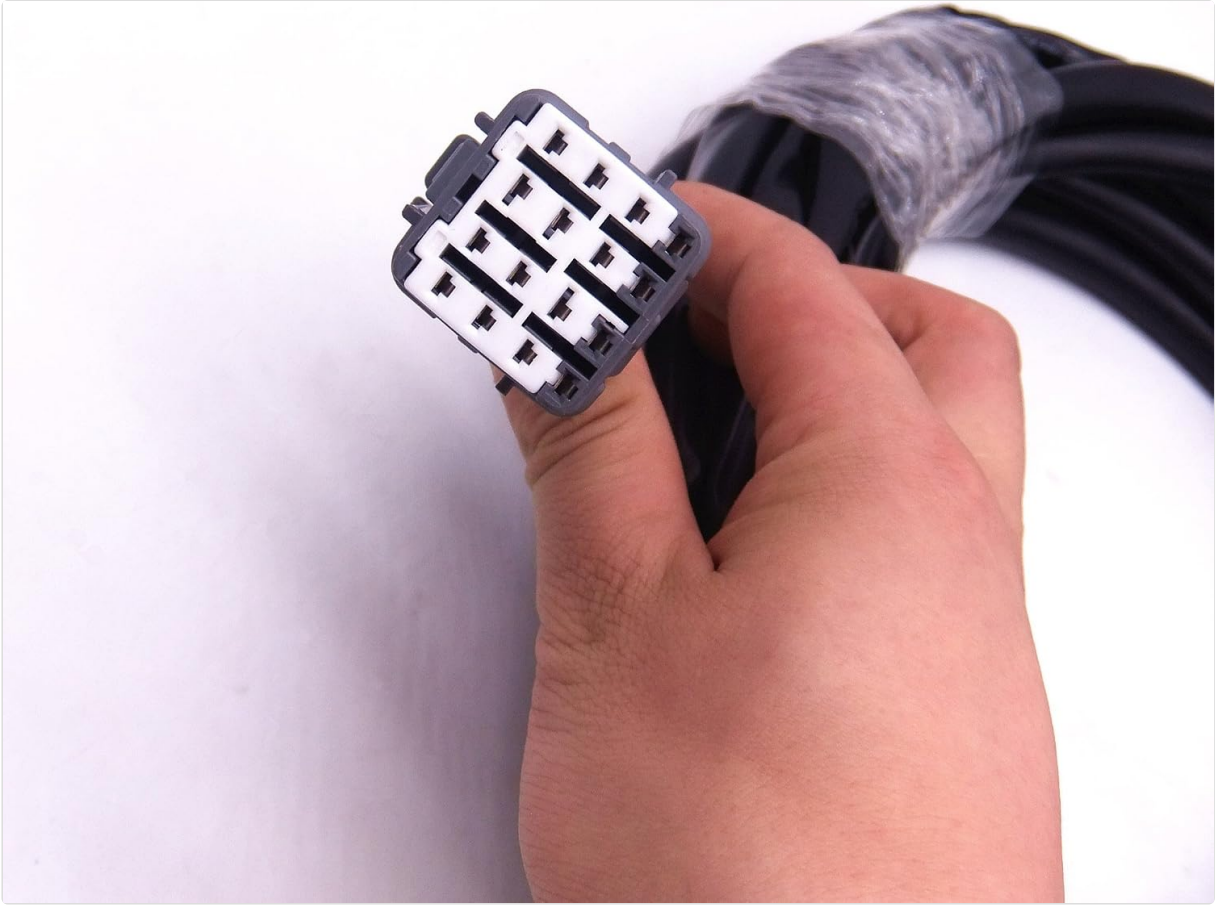


Figure 4.2: Close-up view of the rectangular multi-pin connector, which connects to the remote control box. Verify pin configuration matches the control box receptacle.

5. **Connect PTT and Auxiliary Wires:** The harness includes separate leads for Power Trim and Tilt (PTT) and other auxiliary functions. Connect these to their respective terminals on the remote control box or other designated points. These often involve smaller, distinct connectors.



Figure 4.3: This image shows both the 8-pin round connector and a smaller 4-pin rectangular connector, often used for PTT or other auxiliary functions.



Figure 4.4: Another view of smaller connectors, including a 2-pin connector, which may be used for specific auxiliary circuits or indicators.

6. **Secure Wiring:** Use zip ties or other appropriate fasteners to secure the harness along its route, preventing it from chafing, getting tangled, or interfering with moving parts. Ensure there is enough slack for engine movement if applicable.
7. **Reconnect Battery:** Once all connections are made and secured, reconnect the boat's battery.
8. **Test System:** Start the engine (in neutral) and test all functions of the remote control box, including throttle, shift, and Power Trim and Tilt, to ensure proper operation.

5. Operating Instructions

The SouthMarine 36620-93J02 Main Wiring Harness facilitates the communication between your Suzuki outboard motor and its remote control box. Once correctly installed, the harness enables the following functions:

- **Engine Start/Stop:** Transmits ignition signals.
- **Throttle Control:** Allows for precise control of engine speed.
- **Gear Shifting:** Enables forward, neutral, and reverse gear selection.
- **Power Trim and Tilt (PTT):** Provides control over the motor's trim angle and tilt position.

- **Warning Lights/Gauges:** May transmit signals for various engine warnings or gauge readings, depending on the specific motor and control box configuration.

Operate your remote control box as per your Suzuki outboard motor's owner's manual. The wiring harness acts as the conduit for these commands.

6. Maintenance

Regular inspection and basic maintenance will prolong the life of your wiring harness and ensure reliable operation.

- **Visual Inspection:** Periodically inspect the entire length of the harness for any signs of wear, cracking, chafing, or damage to the outer insulation. Check connectors for corrosion or loose connections.
- **Corrosion Prevention:** In marine environments, corrosion is a common issue. Apply a marine-grade dielectric grease to all electrical connections to protect against moisture and corrosion.
- **Cleaning:** Clean the harness and connectors with a mild, non-abrasive cleaner and fresh water. Avoid high-pressure washing directly on connectors. Ensure all components are dry before reconnecting power.
- **Secure Routing:** Ensure the harness remains securely routed and fastened, preventing it from rubbing against sharp edges or moving parts.

7. Troubleshooting

If you experience issues after installing the wiring harness, consider the following troubleshooting steps:

- **No Power/Intermittent Power:**
  - Check battery connections for tightness and corrosion.
  - Verify all harness connectors are fully seated and locked.
  - Inspect the harness for any visible damage or breaks in the wiring.
- **PTT Not Functioning:**
  - Ensure the PTT specific connectors are properly attached.
  - Check the PTT switch on the remote control box for functionality.
  - Consult your motor's service manual for PTT system diagnostics.
- **Engine Not Starting/Shifting Issues:**
  - Confirm the main 8-pin connector is securely attached to the motor.
  - Verify the remote control box connector is fully engaged.
  - Ensure the engine is in neutral for starting.

If troubleshooting steps do not resolve the issue, it is recommended to seek assistance from a certified marine technician.

8. Specifications

- **Model Number:** 36620-93J02
- **Brand:** SouthMarine
- **Length:** 6.9 meters (22.6 feet)

- **Pin Configuration:** 8-pin main connector with additional auxiliary leads
- **Compatibility:** Suzuki Outboard Motor Remote Control Box with Power Trim and Tilt (PTT) function
- **Material:** Polyvinyl Chloride (PVC)
- **Item Weight:** Approximately 2.13 kg (4.69 lbs)

9. Warranty and Support

For information regarding warranty coverage or technical support for your SouthMarine 36620-93J02 Main Wiring Harness, please refer to the documentation provided at the time of purchase or contact your seller directly. Keep your purchase receipt as proof of purchase.