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› [Evinrude Johnson](#) /

› Evinrude Johnson 2002-2003 Outboard Service Manual for SN/ST 60°V & SN/ST 90°V (60HP, 90HP)

Evinrude Johnson SN/ST 60V, SN/ST 90V, 60HP, 90HP

Evinrude Johnson 2002-2003 Outboard Service Manual

Models: SN/ST 60°V & SN/ST 90°V (60HP, 90HP)

[Introduction](#)

[Setup](#)

[Operating](#)

[Maintenance](#)

[Troubleshooting](#)

[Specifications](#)

[Warranty &](#)

[Support](#)

1. INTRODUCTION

This service manual provides comprehensive instructions for the maintenance, repair, and overhaul of 2002-2003 Evinrude Johnson outboard motors, specifically SN/ST 60°V and SN/ST 90°V models, covering 60HP and 90HP engines. It is designed for qualified technicians and individuals with a thorough understanding of marine engine mechanics. Adherence to the procedures outlined in this manual is crucial for ensuring the safe and efficient operation of your outboard motor.

Always refer to the latest version of this manual for the most accurate and up-to-date information. Safety precautions must be observed at all times when performing any service or repair work.

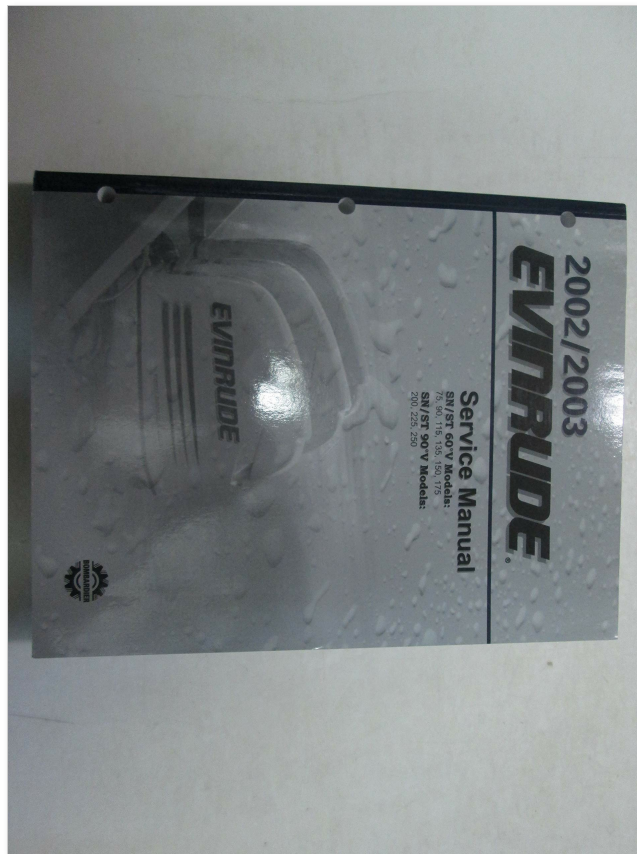


Image 1.1: Front cover of the Evinrude Johnson Service Manual. The cover is dark blue with "EVINRUDE Johnson GENUINE PARTS" printed vertically in white. A barcode with the number 5005259 is visible on the right side.

2. INITIAL SETUP AND PRE-OPERATION CHECKS

Before operating or performing any service on the outboard motor, ensure all components are correctly installed and secured. This section outlines critical initial setup procedures and pre-operation checks.

2.1 Mounting the Outboard Motor

- Verify the transom height is appropriate for the motor's shaft length.
- Securely attach the motor to the transom using the provided clamps and bolts. Ensure all fasteners are torqued to specifications.
- Check for proper trim and tilt range of motion.

2.2 Fuel System Connection

- Connect the fuel line from the fuel tank to the motor's fuel inlet.
- Prime the fuel system until the primer bulb is firm.
- Inspect all fuel connections for leaks.

2.3 Electrical Connections

- Connect the battery cables, ensuring correct polarity (positive to positive, negative to negative).
- Attach the safety lanyard to the kill switch.
- Verify all electrical connections are clean and tight.

3. OPERATING PROCEDURES

This section details the correct procedures for starting, operating, and stopping your Evinrude Johnson outboard motor.

3.1 Starting the Engine

1. Ensure the motor is in neutral.
2. Attach the safety lanyard to the operator.
3. Prime the fuel system if necessary.
4. Turn the ignition key to the "START" position. Release the key once the engine starts.
5. Allow the engine to warm up for a few minutes at low RPM.

3.2 Shifting Gears

- Always shift gears at low engine RPM.
- Move the shift lever firmly and quickly from neutral to forward or reverse.
- Avoid prolonged idling in gear.

3.3 Stopping the Engine

1. Reduce engine speed to idle.
2. Shift the motor into neutral.
3. Turn the ignition key to the "OFF" position or pull the safety lanyard.

4. MAINTENANCE SCHEDULE AND PROCEDURES

Regular maintenance is essential for the longevity and reliable performance of your outboard motor. This section outlines recommended maintenance intervals and procedures.

4.1 Daily Checks (Before Each Use)

- Check fuel level and condition.
- Inspect propeller for damage.
- Verify steering and throttle operate smoothly.
- Check for any visible leaks (fuel, oil, water).

4.2 100-Hour / Annual Maintenance

- Change engine oil and filter (if applicable).
- Replace spark plugs.
- Inspect and clean fuel filter.
- Check and adjust valve clearance (if applicable).
- Lubricate all grease points.
- Inspect water pump impeller and replace if worn.
- Check battery terminals and charge level.

4.3 Winterization and Storage

- Stabilize fuel and run engine to circulate.
- Fog cylinders with storage oil.
- Drain gearcase oil and refill with fresh lubricant.
- Disconnect and remove battery for storage in a cool, dry place.
- Clean and wax the exterior of the motor.

5. TROUBLESHOOTING COMMON ISSUES

This section provides guidance for diagnosing and resolving common operational problems. For complex issues, consult a qualified service technician.

Symptom	Possible Cause	Solution
Engine Fails to Start	<ul style="list-style-type: none">• No fuel• Dead battery• Kill switch disengaged• Fouled spark plugs	<ul style="list-style-type: none">• Check fuel tank, prime system• Charge or replace battery• Engage kill switch lanyard• Inspect/replace spark plugs
Engine Runs Rough / Misfires	<ul style="list-style-type: none">• Clogged fuel filter• Incorrect spark plug gap• Carburetor issues	<ul style="list-style-type: none">• Replace fuel filter• Adjust spark plug gap• Clean or rebuild carburetor
Overheating	<ul style="list-style-type: none">• Clogged cooling water intake• Worn water pump impeller• Thermostat malfunction	<ul style="list-style-type: none">• Clear intake ports• Replace impeller• Test and replace thermostat

6. TECHNICAL SPECIFICATIONS

This section provides key technical specifications for the 2002-2003 Evinrude Johnson SN/ST 60°V and SN/ST 90°V outboard motors.

- **Engine Type:** V-block, 2-stroke outboard
- **Horsepower:** 60HP, 90HP
- **Cylinder Configuration:** 60°V (60HP), 90°V (90HP)
- **Fuel Type:** Unleaded gasoline (minimum 87 octane)
- **Oil Type:** TC-W3 certified 2-stroke outboard oil
- **Gearcase Lubricant:** Marine gear lubricant (specific viscosity as per manual)
- **Spark Plug Type:** Refer to specific engine model in manual for correct plug type and gap.
- **Recommended Torque Values:** Refer to detailed sections within this manual for all fastener torque specifications.
- **Part Number Reference:** [5005259](#) (Example part number, refer to specific parts catalog for accuracy)

7. WARRANTY AND SUPPORT INFORMATION

For information regarding product warranty, please refer to the original purchase documentation or contact an authorized Evinrude Johnson dealer. This service manual does not constitute a warranty statement.

7.1 Customer Support

For technical assistance, parts inquiries, or authorized service, please contact your local Evinrude Johnson dealer. A list of authorized dealers can typically be found on the official Evinrude Johnson website.

- **Online Resources:** Visit the official Evinrude Johnson website for additional support documents, FAQs, and dealer locators.
- **Authorized Service Centers:** Only authorized service centers should perform complex repairs to ensure proper

function and maintain warranty validity.

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