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Sierra 18-6423

Sierra 18-6423 Starter for Yamaha Outboard 75-90 HP Engines User Manual

INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Sierra 18-6423 Starter. This starter is designed for select Yamaha Outboard 75-90 HP Engines. Please read this manual thoroughly before installation and use to ensure safe and efficient performance.

PRODUCT OVERVIEW

The Sierra 18-6423 Starter is a high-quality replacement component engineered for marine environments. It meets stringent industry standards to ensure reliable engine starting.

Key Features:

- Marine grade construction that meets SAE J1171 and ISO 8846 standards.
- High-quality magnets and field coils provide enhanced starting torque.
- Directly replaces Yamaha part numbers 688-81800-12-00, 688-81800-10-00, 688-81800-11-00, and Arco 3427.
- Double-sealed housings and high-quality brushes contribute to a longer service life.

What's in the Box:

- 1 x Sierra 18-6423 Outboard Starter



The image displays the Sierra 18-6423 Starter, a cylindrical black and gold unit with a metal mounting bracket on top and a gear assembly extending from one end. A terminal post with a nut is visible on the gold end.

SETUP AND INSTALLATION

Proper installation is crucial for the safe and effective operation of your new starter. If you are not confident in performing this installation, it is recommended to seek assistance from a qualified marine technician.

Safety Precautions:

- Always disconnect the battery's negative (-) terminal before beginning any electrical work on your engine to prevent accidental starting or electrical shock.
- Wear appropriate personal protective equipment, including safety glasses and gloves.
- Ensure the engine is cool before working on it.

Installation Steps (General Guidance):

1. **Preparation:** Ensure the engine is off and the battery is disconnected. Locate the existing starter motor on your Yamaha outboard engine.
2. **Remove Old Starter:** Disconnect all electrical connections from the old starter, noting their positions for reinstallation. Remove the mounting bolts securing the old starter to the engine block. Carefully extract the old starter.
3. **Install New Starter:** Position the Sierra 18-6423 Starter in the mounting location. Secure it with the appropriate mounting bolts, ensuring they are tightened to the manufacturer's specifications.
4. **Connect Electrical Wiring:** Reconnect all electrical wires to the new starter, ensuring correct polarity and secure connections. Refer to your engine's service manual for specific wiring diagrams if needed.
5. **Reconnect Battery:** Once all connections are secure and verified, reconnect the battery's negative (-) terminal.
6. **Test:** Attempt to start the engine to confirm proper operation of the new starter. Listen for unusual noises and check for any issues.

Compatibility:

This starter is compatible with the following Yamaha Outboard models:

- C75 (1994 to 1996 and 1998 to 1999)
- P75 (1996 to 1999)
- C80 TLRV (1997)
- C85 (1991 to 1996)
- CV85 (1990)
- 90 (1984 to 2003)
- B90 (1998 to 1999)
- C90 (1997 to 2001)

OPERATING INSTRUCTIONS

The Sierra 18-6423 Starter functions as an integral part of your outboard engine's starting system. Its operation is automatic upon activation of the ignition switch.

1. Ensure your outboard engine's fuel system, battery, and safety lanyards are correctly set up according to your engine manufacturer's instructions.
2. Turn the ignition key to the 'START' position. The starter motor will engage the engine's flywheel, rotating the crankshaft to initiate the combustion process.
3. Once the engine starts, release the ignition key. The starter will disengage automatically.
4. Avoid prolonged cranking (more than 10-15 seconds) to prevent overheating the starter motor. Allow a brief cool-down period between starting attempts if the engine does not immediately start.

MAINTENANCE

Regular inspection and basic maintenance can extend the life of your starter and ensure reliable performance.

- **Visual Inspection:** Periodically inspect the starter for any signs of corrosion, especially around the electrical terminals. Check for loose wires or damaged insulation.
- **Terminal Cleaning:** Keep the battery and starter terminals clean and free of corrosion. Use a wire brush and a baking soda solution if necessary, then apply a dielectric grease to protect connections.
- **Battery Condition:** Ensure your marine battery is always fully charged and in good condition. A weak battery can put excessive strain on the starter motor.
- **Mounting Security:** Verify that the starter is securely mounted to the engine block. Loose mounting can lead to vibration and premature wear.

TROUBLESHOOTING

If you experience issues with your engine starting, consider the following common troubleshooting steps before assuming a starter malfunction.

Symptom: Engine does not crank or cranks slowly.

- **Check Battery:** Ensure the battery is fully charged and the terminals are clean and tight. A weak battery is a common cause of starting problems.

- **Check Connections:** Verify all electrical connections to the starter and solenoid are secure and free of corrosion.
- **Check Solenoid:** The starter solenoid acts as a relay. If you hear a click but no crank, the solenoid might be faulty, or there might be insufficient power reaching the starter motor.
- **Engine Seized:** In rare cases, the engine itself might be seized. Try to manually turn the flywheel (with spark plugs removed and battery disconnected) to rule this out.

Symptom: Starter spins but does not engage the engine.

- This often indicates an issue with the starter drive (bendix gear) not extending or engaging the flywheel. The starter may need replacement or repair.

For persistent issues, it is recommended to consult a qualified marine mechanic for diagnosis and repair.

SPECIFICATIONS

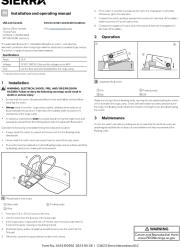
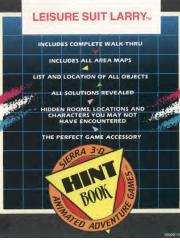
Specification	Detail
Model	Outboard Starter
Item Weight	6.47 pounds
Package Dimensions	10.63 x 6.22 x 4.65 inches
Item Model Number	18-6423
Manufacturer Part Number	18-6423
OEM Part Number (Replaces)	688-81800-12-00
Brand	Sierra
Material	Metal
Phase Type	Three Phase
Manufacturer	Sierra
UPC	808282137786

WARRANTY AND SUPPORT

All Sierra parts are covered under Sierra's Industry Leading Customer Satisfaction Warranty. Sierra warrants its products to be free of defects in workmanship and materials for the useful life of the product. If a Sierra product fails to comply with the warranty, Sierra will repair or replace the defective product free of charge. The warranty is subject to additional terms, conditions, and limitations.

For detailed warranty information or product support, please visit the [Sierra Store](#) or contact Sierra customer service directly.

Related Documents - 18-6423

	<p>Sierra STATS Engine Diagnostics Operating Manual</p> <p>Operating manual for the Sierra STATS diagnostic tool, covering marine engine diagnostics, features, and support for major brands like Mercury, Yamaha, Suzuki, Honda, Volvo, Yanmar, Kawasaki, and BRP.</p>
	<p>Sierra All-in-1 Fuel Tank Combo Package Installation Manual</p> <p>Installation guide for the Sierra All-in-1 Fuel Tank Combo Package (models 053701-10, 053703-10). This document provides detailed instructions, scope of delivery, recommended tools, and component identification for universal outboard engine fuel systems.</p>
	<p>Sierra Automatic Float Switch 053001-10: Installation and Operating Manual</p> <p>Detailed installation and operating guide for the Sierra Automatic Float Switch (Model 053001-10). Learn how to safely install, operate, and maintain this corrosion-resistant bilge pump switch for reliable boat bilge water management.</p>
	<p>Sierra SRMG Series Manual Griddles Owner's Manual</p> <p>This owner's manual provides comprehensive instructions for the installation, operation, and maintenance of Sierra SRMG series manual griddles, including models SRMG-12, SRMG-24, SRMG-36, SRMG-48, and SRMG-60. Essential for qualified personnel.</p>
	<p>Leisure Suit Larry Hint Book - Sierra On-Line Game Guide</p> <p>Comprehensive hint book for Sierra On-Line's Leisure Suit Larry adventure game. Includes walk-throughs, maps, object locations, solutions, and FAQs to help players complete the game.</p>
	<p>Sierra SRSP-18 Stock Pot Range Owner's Manual: Installation & Operation Guide</p> <p>Comprehensive owner's manual for the Sierra SRSP-18 Stock Pot Range, detailing installation, operation, maintenance, and troubleshooting for commercial kitchens.</p>