

## Pwc Engine WSM 183-2508

# Pwc Engine Johnson Evinrude Ignition Coil (WSM 183-2508) Instruction Manual

For 25 HP 1993-1997 Manual Start 2-Cylinder Models

## 1. PRODUCT OVERVIEW

This manual provides essential instructions for the installation, operation, and maintenance of your Pwc Engine Johnson Evinrude Ignition Coil, model WSM 183-2508. This ignition coil is designed to deliver reliable performance for compatible outboard marine engines.



**Figure 1:** Pwc Engine Johnson Evinrude Ignition Coil (WSM 183-2508) with attached spark plug wire and boot. The coil body is black with a label indicating "CDI Electronics 183-2508".

## 2. COMPATIBILITY

This ignition coil is compatible with the following engine specifications:

- **Engine Type:** Johnson Evinrude Outboard Motors
- **Horsepower:** 25 HP
- **Model Years:** 1993 - 1997

- **Start Type:** Manual Start
- **Cylinders:** 2-Cylinder
- **General Compatibility:** Fits most 1985-2006 2, 3, 4, and 6 cylinder carbureted 2-stroke engines, excluding 60 Degree models and engines utilizing double coils.
- **Replaces OEM Part Numbers:** 18-5179, 582508

Always verify compatibility with your specific engine model and existing part numbers before installation.

### 3. SAFETY INFORMATION

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**WARNING:** Working with ignition systems involves high voltage. Improper handling can result in severe injury or death. Always follow these safety precautions:

- Disconnect the battery before performing any work on the ignition system.
- Wear appropriate personal protective equipment, including safety glasses and insulated gloves.
- Ensure the engine is cool before beginning work.
- If you are unsure about any step, consult a qualified marine mechanic.
- Keep children and unauthorized personnel away from the work area.

### 4. INSTALLATION INSTRUCTIONS

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Follow these steps for proper installation of the ignition coil:

1. **Preparation:** Ensure the engine is off and the battery is disconnected. Locate the existing ignition coil.
2. **Disconnect Wires:** Carefully disconnect the primary (low voltage) wires from the old ignition coil. Note their positions for correct re-connection.
3. **Remove Spark Plug Wire:** Detach the spark plug wire from the old coil and the spark plug.
4. **Remove Old Coil:** Unbolt and remove the old ignition coil from its mounting bracket.
5. **Install New Coil:** Position the new Pwc Engine ignition coil (WSM 183-2508) onto the mounting bracket. Secure it with the appropriate fasteners. Ensure a snug fit.
6. **Connect Primary Wires:** Reconnect the primary wires to the new coil, ensuring they are attached to the correct terminals as noted during removal.
7. **Connect Spark Plug Wire:** Attach the new spark plug wire (included with the coil) to the coil and then to the spark plug. Ensure the boot is fully seated on both ends.
8. **Final Check:** Double-check all connections for security and proper routing. Reconnect the battery.

After installation, perform a test run of the engine to ensure proper operation.

### 5. OPERATING PRINCIPLES

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The ignition coil is a critical component of your engine's ignition system. Its primary function is to transform the low voltage from the battery into the high voltage required to create a spark at the spark plug. This spark ignites the fuel-air mixture in the engine's cylinders, initiating combustion and powering the engine. When the engine's control unit sends a signal, the coil rapidly charges and discharges, producing a high-voltage pulse that travels through the spark plug wire to the spark plug. The quality and consistency of this high-voltage output are essential for efficient engine performance and reliable starting.

## 6. MAINTENANCE

Ignition coils are generally low-maintenance components. However, periodic inspection can help ensure their longevity and optimal engine performance:

- **Visual Inspection:** Regularly inspect the coil body and spark plug wire for any signs of cracking, fraying, or damage. Ensure connections are secure and free from corrosion.
- **Cleanliness:** Keep the coil and surrounding area clean and free from dirt, oil, and moisture, which can degrade performance.
- **Spark Plugs:** Ensure spark plugs are in good condition and correctly gapped. Worn or fouled spark plugs can put additional strain on the ignition coil.
- **Wiring:** Check all associated wiring for chafing or damage.

If any damage is observed, replace the component immediately to prevent further engine issues.

## 7. TROUBLESHOOTING COMMON ISSUES

| Symptom                       | Possible Cause  | Solution   |
|-------------------------------|---|--|
| Engine misfires or runs rough | Faulty ignition coil, damaged spark plug wire, or worn spark plug.                | Inspect coil and wire for damage. Test coil resistance if possible. Replace if faulty. Check and replace spark plugs.                    |
| Engine fails to start         | No spark from the coil, wiring issue, or other ignition system component failure. | Verify power to the coil. Check for spark at the spark plug. Inspect all connections. Consult a service manual for detailed diagnostics. |
| Reduced engine power          | Weak spark due to a failing coil or related components.                           | Perform a thorough inspection of the ignition system. Consider professional diagnosis.   |

For complex issues, it is recommended to seek assistance from a certified marine technician.

## 8. PRODUCT SPECIFICATIONS

- **Brand:** Pwc Engine
- **Model Number:** WSM 183-2508
- **Replaces OEM#:** 18-5179, 582508
- **Vehicle Service Type:** PWC (Personal Watercraft) / Outboard Marine Engines
- **Connector Gender:** Male
- **Installation Type:** Plug In
- **Manufacturer:** Water Sport Manufacturing
- **Automotive Fit Type:** Vehicle Specific Fit
- **Included:** Spark plug wire

## 9. WARRANTY AND SUPPORT

For information regarding product warranty, returns, or technical support, please refer to the retailer's policy or contact Pwc Engine directly through their official channels. Keep your purchase receipt for warranty claims.

**Note:** This product is manufactured by Water Sport Manufacturing (WSM) and distributed by Pwc Engine.