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› PARTSRUN Ignition Coil Module User Manual for Kohler M18 M20 MV16 MV18 MV20 Engines

PARTSRUN 52 584 01-S

PARTSRUN Ignition Coil Module User Manual

Models: 52 584 01-S, 52 584 02-S, ZF-IG-A00357

INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your PARTSRUN Ignition Coil Module. This module is designed to replace original equipment manufacturer (OEM) parts and restore proper ignition function to compatible engines.

The ignition coil is a critical component in a gasoline engine's ignition system, responsible for transforming the battery's low voltage into the thousands of volts required to create an electric spark in the spark plugs, igniting the fuel-air mixture.

COMPATIBILITY

This PARTSRUN Ignition Coil Module is a direct replacement for the following OEM part numbers and is compatible with the listed engine models:

- **Kohler OEM Part Numbers:** 5258401, 5258401-S, 5258402, 5258402-S, 52-584-01-S, 52-584-02-S
- **John Deere OEM Part Number:** AET10403
- **Ariens OEM Part Number:** 20713300
- **Compatible Kohler Engines:** M18, M20, MV16, MV18, MV20
- **Compatible John Deere Models:** Lawn vac sweeper models 142, 152, 162



Image: Top view of the PARTSRUN Ignition Coil Module, showing the coil body and spark plug wire.

INSTALLATION INSTRUCTIONS

Safety First: Before beginning any installation, ensure the engine is turned off, cool, and the spark plug wire is disconnected to prevent accidental starting. Wear appropriate safety gear, including gloves and eye protection.

1. **Access the Engine:** Depending on your equipment, you may need to remove engine covers or shrouds to gain access to the existing ignition coil. This typically involves unscrewing fasteners.
2. **Disconnect Old Coil:** Carefully disconnect the spark plug wire(s) from the spark plug(s). Then, disconnect any low-voltage wires connected to the coil. Note their positions for reinstallation.
3. **Remove Old Coil:** Locate the mounting bolts or screws securing the old ignition coil to the engine block or flywheel housing. Remove these fasteners and carefully detach the old coil.
4. **Install New Coil:** Position the new PARTSRUN Ignition Coil Module in the same location as the old one. Ensure proper alignment.
5. **Set Air Gap (Crucial Step):** The air gap between the ignition coil and the flywheel magnets is critical for proper operation. Use a non-magnetic feeler gauge (typically 0.010 to 0.012 inches or 0.25 to 0.30 mm, consult your engine's service manual for exact specifications) to set this gap. Loosely secure the coil, insert the feeler gauge between the coil's laminations and the flywheel magnets, then push the coil firmly against the gauge. Tighten the mounting bolts while holding the coil in place. Remove the feeler gauge.
6. **Reconnect Wiring:** Reconnect the low-voltage wires to the new coil, ensuring they are securely attached. Connect the spark plug wire(s) to the spark plug(s).
7. **Reassemble:** Reinstall any engine covers or shrouds that were removed.



Image: An ignition coil module installed on an engine, showing its position relative to the flywheel.

OPERATION

Once correctly installed, the PARTSRUN Ignition Coil Module operates automatically as part of your engine's ignition

system. When the engine is cranked, the flywheel magnets pass by the coil, inducing a low-voltage current. The coil then transforms this into a high-voltage pulse, which is sent to the spark plug to create the spark necessary for combustion. Ensure all connections are secure and the spark plug is in good condition for optimal performance.

MAINTENANCE

The PARTSRUN Ignition Coil Module is designed for durability and typically requires minimal maintenance. However, regular checks can help ensure its longevity and reliable performance:

- **Inspect Connections:** Periodically check the spark plug wire and low-voltage connections to the coil for corrosion, looseness, or damage. Clean any corrosion and ensure connections are tight.
- **Check Spark Plug Wire:** Inspect the spark plug wire for cracks, fraying, or damage to the insulation. Replace if necessary.
- **Keep Clean:** Ensure the coil and surrounding area are free from excessive dirt, debris, or oil buildup, which can affect heat dissipation and performance.

TROUBLESHOOTING

If your engine experiences ignition-related issues after installing or while using the PARTSRUN Ignition Coil Module, consider the following troubleshooting steps:

Symptom	Possible Cause	Solution
Engine Does Not Start / No Spark	Incorrect air gap setting.	Re-check and adjust the air gap as per installation instructions.
	Loose or corroded wiring connections.	Inspect and secure all electrical connections. Clean any corrosion.
	Faulty spark plug.	Test or replace the spark plug.
	Defective ignition coil (rare for new parts, but possible).	Test the coil with a multimeter for continuity and resistance (consult engine service manual for specifications).
Engine Misfires / Runs Roughly	Incorrect air gap.	Verify and adjust the air gap.
	Damaged spark plug wire.	Inspect spark plug wire for damage; replace if necessary.
	Fouled or worn spark plug.	Inspect and replace spark plug if fouled or worn.

If troubleshooting steps do not resolve the issue, it is recommended to consult a qualified service technician or contact PARTSRUN customer support.

SPECIFICATIONS

- **Brand:** PARTSRUN
- **Manufacturer Part Number:** 52 584 01-S
- **OEM Equivalent Part Numbers:** 5258402-S, 5258401, 52-584-01-S, 5258402, 52-584-02-S, AET10403, 20713300
- **Installation Type:** Coil-on-plug
- **Connector Gender:** Female
- **Item Weight:** 0.2 kg
- **Vehicle Service Type:** Lawn Mower
- **Automotive Fit Type:** Vehicle Specific Fit

WARRANTY INFORMATION

Specific warranty details for this PARTSRUN product are not provided in this manual. Please refer to the product packaging, the seller's website, or contact PARTSRUN customer support for detailed warranty terms and conditions.

CUSTOMER SUPPORT

For any questions, technical assistance, or support regarding your PARTSRUN Ignition Coil Module, please contact the PARTSRUN customer service team. They are available to answer your questions within 24 hours. Refer to your purchase documentation or the PARTSRUN official website for contact methods.

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