

## NGK NGK4512

# NGK Standard Sparkplug LMAR8G

## USER MANUAL FOR YAMAHA YZ250F 2014-2018

Model: NGK4512

### Product Overview

The NGK Standard Sparkplug LMAR8G is engineered for reliable ignition performance in compatible Yamaha motorcycle models. Known for its OEM quality and consistent operation, this spark plug is a critical component in the engine's combustion system, ensuring efficient fuel ignition.



Image: NGK Standard Sparkplug LMAR8G. This image shows the spark plug with its ceramic insulator, metal shell, and electrode tip.

### Key Features:

- Triple-gasket sealing process for enhanced durability and leak prevention.
- Consistent performance, ensuring reliable engine starts and smooth operation.
- Manufactured by NGK, a world leader and OEM supplier of spark plugs.

- Precision engineering with extremely tight tolerances for optimal function.

## Compatibility

This NGK LMAR8G spark plug is designed to fit various Yamaha motorcycle models. Please verify your specific model and year for compatibility before installation.

This Part Fit's The Following Vehicles		
Yamaha WR450F 2021-2024	Yamaha WR250F 2015-2019	Yamaha YZ450F 2020-2024
Yamaha YZ250FX 2015-2019	Yamaha YZ250F 2014-2018	Yamaha YZ450F 50th Anniversary Edition 2024
		Yamaha YZ450F Monster Energy Yamaha Racing Edition 2023
		Yamaha YZ450FX 2021-2024

Image: Compatibility chart showing various Yamaha models. This chart lists specific Yamaha motorcycle models and their corresponding model years that are compatible with this spark plug.

### Known Compatible Models:

- Yamaha WR450F (2021-2024)
- Yamaha WR250F (2015-2019)
- Yamaha YZ450F (2020-2024)
- Yamaha YZ250FX (2015-2019)
- Yamaha YZ250F (2014-2018)
- Yamaha YZ450F 50th Anniversary Edition (2024)
- Yamaha YZ450F Monster Energy Yamaha Racing Edition (2023)
- Yamaha YZ450FX (2021-2024)

## Installation Guide (Setup)

Proper installation is crucial for the spark plug's performance and engine health. If you are unsure about any step, consult a qualified mechanic or your vehicle's service manual.

### Tools Required:

- Spark plug wrench (correct size for LMAR8G)
- Spark plug gap tool (if gapping is required, check vehicle manual)
- Torque wrench
- Anti-seize compound (optional, for spark plug threads)
- Dielectric grease (optional, for spark plug boot)

### Installation Steps:

- Preparation:** Ensure the engine is cool. Disconnect the negative terminal of the battery for safety.
- Access Spark Plugs:** Locate and carefully remove the spark plug cap/boot from the existing spark plug.
- Clean Area:** Clean any debris around the spark plug base to prevent it from falling into the combustion chamber when the plug is removed.
- Remove Old Spark Plug:** Use the spark plug wrench to loosen and remove the old spark plug. Turn counter-clockwise.
- Inspect New Spark Plug:** Before installation, visually inspect the new NGK LMAR8G spark plug for any damage.
- Check Gap (if necessary):** Refer to your vehicle's service manual for the correct spark plug gap specification. If adjustment is needed, use a spark plug gap tool carefully. *NGK spark plugs are typically pre-gapped for common*

applications, but verification is recommended.

7. **Install New Spark Plug:** Hand-thread the new spark plug into the cylinder head to avoid cross-threading. Once finger-tight, use a torque wrench to tighten it to the manufacturer's specified torque setting. Overtightening can damage the cylinder head.
8. **Reconnect:** Reattach the spark plug cap/boot firmly until it clicks into place. Reconnect the battery.
9. **Test:** Start the engine and check for smooth operation.

**Important:** Always refer to your specific vehicle's service manual for precise torque specifications and detailed installation procedures.

## Operation

The NGK LMAR8G spark plug functions as a critical component in the internal combustion engine. It ignites the air-fuel mixture in the combustion chamber by generating an electrical spark across its electrodes. This controlled explosion drives the piston, converting chemical energy into mechanical energy to power the vehicle. Proper operation of the spark plug is essential for efficient fuel consumption, smooth engine running, and reduced emissions.

## Maintenance

Regular inspection and timely replacement of spark plugs are vital for maintaining engine performance and longevity.

### Maintenance Guidelines:

- **Inspection:** Periodically inspect spark plugs for signs of wear, fouling (carbon deposits, oil, fuel), or damage to the electrodes. Consult your vehicle's service manual for recommended inspection intervals.
- **Cleaning:** Lightly fouled spark plugs can sometimes be cleaned, but replacement is generally recommended for optimal performance. Do not use abrasive materials that could damage the electrode or insulator.
- **Replacement Interval:** Spark plugs have a finite lifespan. Refer to your vehicle manufacturer's recommended maintenance schedule for spark plug replacement intervals. Replacing them at the recommended mileage or time ensures consistent ignition and prevents potential engine issues.
- **Proper Torque:** When reinstalling or replacing, always use a torque wrench to ensure the spark plug is tightened to the correct specification. Incorrect torque can lead to overheating, misfires, or damage to the cylinder head.

## Troubleshooting Common Issues

Issues with spark plugs can manifest in various engine performance problems. Here are some common symptoms and potential solutions:

Symptom	Possible Cause (Spark Plug Related)	Solution
Engine Misfires or Rough Idling	Worn, fouled, or incorrectly gapped spark plug.	Inspect and replace spark plug. Verify correct gap.
Hard Starting	Weak or no spark due to worn electrodes or carbon buildup.	Replace spark plug.
Reduced Fuel Economy	Inefficient combustion due to worn or fouled spark plugs.	Replace spark plug.
Engine Knocking or Pinging	Incorrect heat range spark plug or pre-ignition issues.	Ensure correct spark plug type for your engine. Consult a mechanic.

**Note:** Many engine issues can have multiple causes. If troubleshooting does not resolve the problem, it is recommended to consult a professional mechanic.

## Technical Specifications

<b>Brand</b>	NGK
<b>Model Number</b>	NGK4512
<b>Item Weight</b>	1.28 ounces
<b>Product Dimensions</b>	3.75 x 1 x 1 inches
<b>Thread Size</b>	14mm x 1.25mm
<b>Core Material</b>	Standard
<b>Vehicle Service Type</b>	Motorcycle

## Warranty Information

Specific warranty details for NGK products are typically provided by the manufacturer or the authorized seller at the time of purchase. Please retain your proof of purchase for any warranty claims. For the most accurate and up-to-date warranty information, it is recommended to visit the official NGK website or contact their customer service directly.

## Customer Support

For technical assistance, product inquiries, or support regarding your NGK Standard Sparkplug LMAR8G, please contact NGK customer service or the retailer from whom you purchased the product. Have your product model number (NGK4512) and purchase details ready when contacting support.

You can often find contact information on the official NGK website: [www.ngksparkplugs.com](http://www.ngksparkplugs.com)

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