

NGK 5722

NGK 5722 Standard Spark Plug - BR9ES Instruction Manual

1. PRODUCT OVERVIEW

The NGK 5722 Standard Spark Plug, model BR9ES, is engineered for reliable ignition performance in various automotive and power sports applications. It features a 98% pure copper core for efficient heat dissipation, ensuring consistent starts and reducing the risk of overheating. The high-grade alumina silicate ceramic insulator provides superior strength and optimal heat transfer. Cold-rolled threads prevent cross-threading and damage to cylinder heads during installation and removal. Additionally, trivalent plating eliminates the need for anti-seize compound, and corrugated ribs prevent flashover, enhancing durability and performance.



Image 1.1: The NGK 5722 Standard Spark Plug (BR9ES) with its protective cap.

2. SETUP AND INSTALLATION

Proper installation is crucial for optimal spark plug performance and engine longevity. Always consult your vehicle's service manual for specific instructions, torque specifications, and recommended spark plug gap settings.

2.1 Pre-Installation Check

- **Verify Correct Spark Plug:** Ensure the NGK BR9ES is the correct spark plug for your application as specified by the vehicle manufacturer.
- **Inspect for Damage:** Before installation, visually inspect the spark plug for any signs of damage, such as cracked insulators or bent electrodes.
- **Check Gap:** Although NGK spark plugs are typically pre-gapped, it is recommended to verify the gap using a wire-type feeler gauge. Adjust the gap carefully if necessary, bending only the ground electrode. Refer to your vehicle's service manual for the correct gap specification.







Image 2.1: Side view of the NGK 5722 Standard Spark Plug, showing the threads and insulator.

2.2 Installation Steps

1. **Clean Spark Plug Hole:** Ensure the spark plug hole and surrounding area are clean and free of debris.
2. **Thread by Hand:** Start threading the new spark plug into the cylinder head by hand to prevent cross-threading. The trivalent plating on NGK spark plugs eliminates the need for anti-seize.
3. **Torque to Specification:** Once hand-tight, use a torque wrench to tighten the spark plug to the manufacturer's specified torque setting. Overtightening can damage the spark plug or cylinder head, while undertightening can lead to poor heat transfer and potential loosening.
4. **Reconnect Ignition Wire:** Reconnect the ignition wire or coil pack securely to the spark plug.

3. OPERATING PRINCIPLES

The NGK BR9ES spark plug functions by creating an electrical spark across its electrodes, igniting the air-fuel mixture within the engine's combustion chamber. This controlled ignition is essential for the engine's power stroke. The spark plug's design, including its copper core and ceramic insulator, ensures efficient energy transfer and heat management, contributing to consistent engine performance and fuel efficiency.

4. MAINTENANCE

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

4.1 Inspection

- **Visual Check:** Periodically remove spark plugs and inspect the electrodes and insulator tip. Look for signs of wear, deposits (carbon, oil, or fuel), or discoloration.
- **Electrode Wear:** Excessive wear on the center or ground electrode indicates the spark plug is nearing the end of its service life.
- **Fouling:** Black, sooty deposits (carbon fouling), oily deposits (oil fouling), or light brown/tan deposits (normal operation) can indicate engine issues or incorrect heat range.



Image 4.1: Close-up of the NGK 5722 Standard Spark Plug's electrode, showing the gap.

4.2 Replacement

Replace spark plugs according to your vehicle manufacturer's recommended service intervals. These intervals can vary significantly based on engine type and operating conditions. Timely replacement helps prevent misfires, maintains fuel efficiency, and ensures consistent engine performance.

5. TROUBLESHOOTING

If you experience engine performance issues, spark plugs can often be a contributing factor. Here are common symptoms and potential causes:

- **Engine Misfires or Rough Idling:** This can be caused by a fouled, worn, or incorrectly gapped spark plug. It could also indicate issues with the ignition system or fuel delivery.
- **Reduced Fuel Economy:** Worn or inefficient spark plugs can lead to incomplete combustion, resulting in decreased fuel efficiency.
- **Hard Starting:** Weak or inconsistent spark from faulty plugs can make the engine difficult to start, especially in cold weather.
- **Loss of Power or Acceleration:** If spark plugs are not firing correctly, the engine may not produce its full power output.

If troubleshooting spark plugs does not resolve the issue, consult a qualified mechanic to diagnose other potential engine problems.

6. SPECIFICATIONS

Feature	Specification
Brand	NGK
Model Number	5722 (BR9ES)
Core Material	Copper
Thread Size	M14x1.25
Top Material Type	Ceramic
Item Weight	1.94 ounces
Product Dimensions	3.43 x 0.98 x 0.89 inches
Manufacturer Part Number	5722
Vehicle Service Type	Car, Truck (and other compatible engines)

7. WARRANTY INFORMATION

For detailed warranty information regarding the NGK 5722 Standard Spark Plug - BR9ES, please refer to the official NGK website or the product packaging. Warranty terms and conditions may vary and are subject to the manufacturer's policies.

8. SUPPORT

If you require further assistance, have questions about product compatibility, or need technical support, please contact NGK customer service directly. You can find contact information on the official NGK website or through their [Amazon Store Page](#).

