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› TORCH K7RTI Spark Plug Instruction Manual

TORCH K7RTI

TORCH K7RTI Spark Plug Instruction Manual

Model: **K7RTI** | Brand: **TORCH**

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your TORCH K7RTI Iridium Spark Plugs. These spark plugs are designed for various vehicle applications, offering reliable ignition performance.

The TORCH K7RTI spark plugs feature a M14*1.25MM thread size, 19MM thread reach, and a 16MM hexagon size. They are compatible with a wide range of vehicles and can replace several OEM spark plug models from brands such as NGK, Champion, Bosch, Denso, and Autolite.



Image: A set of TORCH K7RTI spark plugs, showing both packaged and individual units.

2. SPECIFICATIONS

The following table details the key specifications of the TORCH K7RTI Spark Plug:

Specification	Value
Brand	TORCH
Model Number	K7RTI
Thread Size	M14*1.25MM
Thread Reach	19MM

Specification	Value
Hexagon Size	16MM
Core Material	Copper
Top Material Type	Alloy Steel
Item Weight	7.4 ounces
Product Dimensions	1 x 7 x 7 inches
Compatible OEM Part Numbers	NGK 2667/BKR7EIX BKR7ES BCPR7ES, Champion 206/RW77N OE129 OE179, Bosch F5DP0R, Denso 3290 5310/IK22 5348/IK22G, Autolite 3922 XS3922

SINCE 1961



Image: Detailed dimensions of the TORCH K7RTI spark plug.

3. INSTALLATION

Proper installation is crucial for the optimal performance and longevity of your spark plugs. Follow these steps carefully:

1. **Prepare Tools:** Gather all necessary tools, including a spark plug wrench, torque wrench, and any other required automotive tools.
2. **Take the Old Out:** Carefully remove the old spark plugs from the engine. Note their condition as it can indicate engine health.
3. **Compare the New & the Old:** Before installation, compare the new TORCH K7RTI spark plugs with the old ones to ensure they are the correct type and size.
4. **Use Spark Plug Sleeve:** Use a spark plug sleeve to protect the ceramic insulator during installation.
5. **Install Spark Plugs into Cylinders:** Hand-tighten the new spark plugs into the cylinder head to avoid cross-threading.
6. **Install Ignition Coils:** Reinstall the ignition coils or spark plug wires onto the new spark plugs.

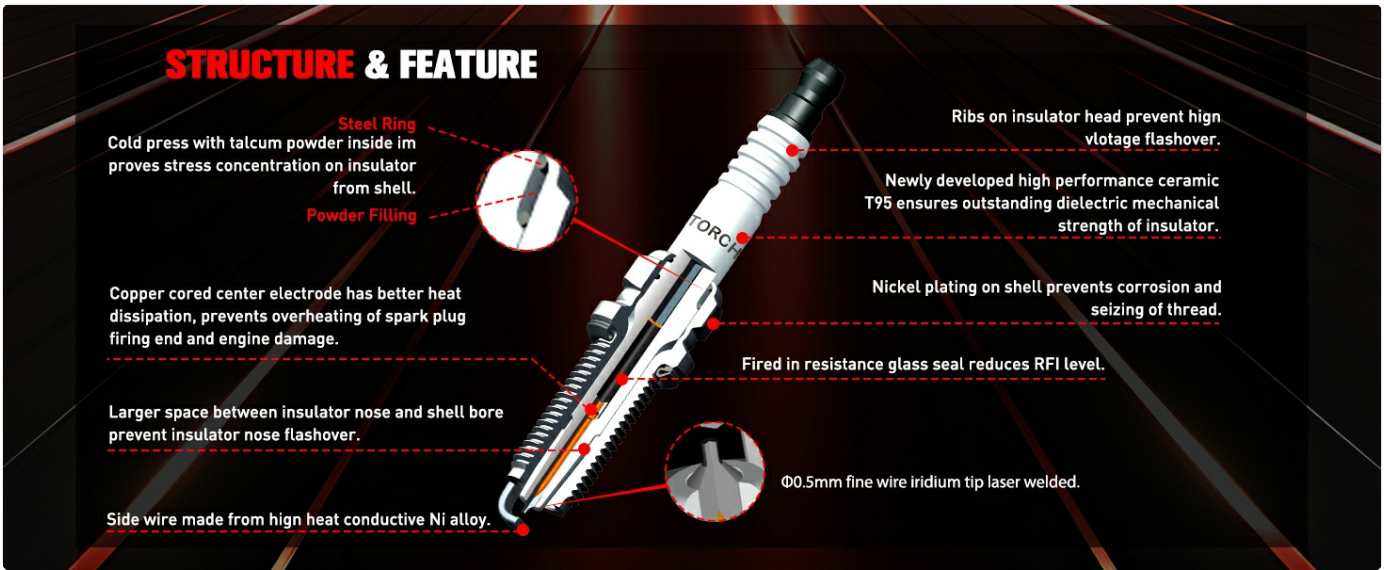


Image: Step-by-step visual guide for spark plug installation.

Torque Specifications

It is critical to tighten spark plugs to the manufacturer's specified torque. Use a torque wrench for accurate tightening. The following table provides general torque specifications:

Spark Plug Type	Torque (N·m)
Flat Seat (with external gasket)	Refer to vehicle manufacturer specifications
Conical Seat (without external gasket)	Refer to vehicle manufacturer specifications
M10 Flat Seat Spark Plug	10 ~ 15
M12 Flat Seat Spark Plug	20 ~ 25
M12 Conical Seat Spark Plug	10 ~ 15
M14 Flat Seat Spark Plug	25 ~ 30
M14 Conical Seat Spark Plug	10 ~ 15
M18 Flat Seat Spark Plug	35 ~ 40

Spark Plug Type	Torque (N·m)
M18 Conical Seat Spark Plug	20 ~ 25

Remarks: On Diesel Engine Refitted engine or other cast iron engine, the installation torque takes the maximum value of the corresponding value $\pm 3\text{N.m}$. Always consult your vehicle's service manual for precise torque specifications.

FEATURES AND BENEFITS



Fast Starts



Reduce Emissions



Fuel Economy



Long Lifespan

Image: Visual guide for spark plug torque specifications.

Important Installation Tips

- Ensure the engine is cool before attempting installation.
- Always use a torque wrench to tighten spark plugs according to the specified torque.
- Do not use electric tools for tightening spark plugs.
- Keep the spark plugs clean and free of oil stains throughout the entire installation process.

SPARK PLUG TORQUE SPECIFICATIONS



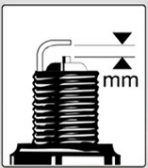
M10Flat Seat Spark Plug
Installation Instruction

Installation Torque: 10 - 15 N.m
Tighten Angle: 90° - 120°



M12Flat Seat Spark Plug
Installation Instruction

Installation Torque: 20 - 25 N.m
Tighten Angle: 120° - 150°



M12Conical Seat Spark Plug
Installation Instruction

Installation Torque: 10 - 15 N.m
Tighten Angle: 15° - 22°



M14Flat Seat Spark Plug
Installation Instruction

Installation Torque: 25 - 30 N.m
Tighten Angle: 120° - 150°



M14Conical Seat Spark Plug
Installation Instruction

Installation Torque: 10 - 15 N.m
Tighten Angle: 15° - 25°

Image: Visual reminder for important installation tips.

4. OPERATING PRINCIPLES AND APPLICATIONS

Spark plugs are vital components in internal combustion engines, responsible for igniting the air-fuel mixture in the

combustion chamber. The TORCH K7RTI spark plugs are designed to provide a consistent and powerful spark for efficient engine operation.

Product Features and Benefits

- **Fast Starts:** Optimized design for quick and reliable engine ignition.
- **Reduced Emissions:** Efficient combustion contributes to lower harmful emissions.
- **Fuel Economy:** Consistent spark helps maintain optimal fuel efficiency.
- **Long Lifespan:** Durable construction for extended service life.



Image: Key features and benefits of TORCH spark plugs.

Applications

TORCH spark plugs are suitable for a wide range of applications, including:

- Motorcycles
- Automotive vehicles
- Marine engines
- Industrial engines
- Lawn & Garden equipment

SPARK THE DIFFERENCE Upgrade Your Spark Plugs for Superior Acceleration!					
	 Electrode	 Platinum	 Iridium	 Iridium Platinum	 Double Iridium
LIFESPAN	20000 miles	50000-80000 miles	50000-80000 miles	80000-100000 miles	100000+ miles
ELECTRODE GAP	2.5 mm	0.8-1.0 mm	0.4-0.6 mm	0.4-0.6 mm	0.4-0.6 mm
FUEL EFFICIENCY	★	★★	★★★	★★★★	★★★★★

Image: Diverse applications of TORCH spark plugs.

5. MAINTENANCE AND REPLACEMENT

Spark plugs are wear-and-tear components and require regular inspection and timely replacement to maintain optimal engine performance.

Why Regular Replacement is Necessary

Spark plugs are crucial for engine operation. Regular inspection and maintenance, including replacement, are essential to ensure a good working environment for the engine. Your vehicle may need spark plug replacement if you observe the following symptoms:

- Engine misfires or rough idling
- Reduced fuel efficiency
- Difficulty starting the engine
- Loss of engine power or acceleration
- Increased exhaust emissions

Recommended Replacement Intervals

The appropriate spark plug replacement interval varies based on the vehicle type, spark plug material, driving conditions, and oil quality. General guidelines are:

- **Turbocharged Models:** 15,000 to 20,000 km (approximately 9,300 to 12,400 miles)
- **Naturally Aspirated Models:** 20,000 to 30,000 km (approximately 12,400 to 18,600 miles)
- **Long-life Spark Plugs (e.g., Iridium):** 50,000 to 60,000 km (approximately 31,000 to 37,000 miles) or more, depending on manufacturer recommendations.

Always refer to your car's maintenance manual for specific replacement schedules. Factors such as driving habits and oil quality can also influence spark plug lifespan.

6. TROUBLESHOOTING

If you experience issues with your engine's performance, spark plugs are often a good starting point for diagnosis. Common symptoms indicating spark plug issues include:

- **Engine Misfires or Rough Idling:** This can be caused by fouled, worn, or incorrectly gapped spark plugs.
- **Difficulty Starting:** Weak or inconsistent spark can lead to hard starting, especially in cold weather.
- **Reduced Fuel Economy:** Inefficient combustion due to worn spark plugs can lead to increased fuel consumption.
- **Loss of Power or Acceleration:** A weak spark can prevent the engine from producing its full power output.
- **Check Engine Light:** Modern vehicles may trigger a check engine light for misfires detected by the engine control unit.

If you encounter these symptoms, inspect your spark plugs for signs of wear, carbon buildup, or damage. Ensure they are correctly gapped and torqued according to specifications. If the spark plugs are old or show significant wear, replacement is recommended.

7. WARRANTY AND SUPPORT

For information regarding product warranty, returns, or technical support, please contact TORCH customer service directly. Keep your purchase receipt and product model number (K7RTI) readily available when contacting support. You can visit the official TORCH store on Amazon for more information and contact options:[TORCH Store](#)

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This manual is for informational purposes only. Always consult a qualified mechanic for complex installations or repairs.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question