

Dinan D650-0003

Dinan D650-0003 Ignition Coil N Series Style Red User Manual

Brand: **Dinan** | Model: **D650-0003**

INTRODUCTION

This user manual provides essential information for the installation, operation, and maintenance of your Dinan D650-0003 Ignition Coil. Designed for specific N Series engines, this high-performance ignition coil is engineered to deliver reliable and consistent spark energy, crucial for optimal engine performance. Please read this manual thoroughly before installation and use to ensure proper function and longevity of the product.

PRODUCT OVERVIEW

The Dinan D650-0003 Ignition Coil is a direct replacement and performance upgrade for compatible BMW N Series engines. It features a robust design and is colored red for easy identification. This coil is designed to provide enhanced spark energy compared to stock units, contributing to improved combustion efficiency.



Figure 1: The Dinan D650-0003 Ignition Coil, showcasing its red body and black boot, designed for direct fitment.



Figure 2: Detailed view of the male connector end of the ignition coil, highlighting the secure connection mechanism.





Figure 3: An extreme close-up of the electrical pins within the coil's connector, ensuring precise electrical contact.

COMPATIBILITY

The Dinan D650-0003 Ignition Coil is compatible with the following BMW N Series engines:

- N20
- N26
- N55
- S55

Always verify compatibility with your specific vehicle model and engine code before purchase and installation.

SPECIFICATIONS

Feature	Detail
Brand	Dinan
Model Name	Dinan D650-0003 Ignition Coil N Series Style Red
Part Number	D650-0003
Vehicle Service Type	Car
Installation Type	Coil Pack
Connector Gender	Male
Material	Plastic
Package Dimensions (L x W x H)	9.02 x 7.01 x 5 inches
Package Weight	318 Grams
UPC	813725029603

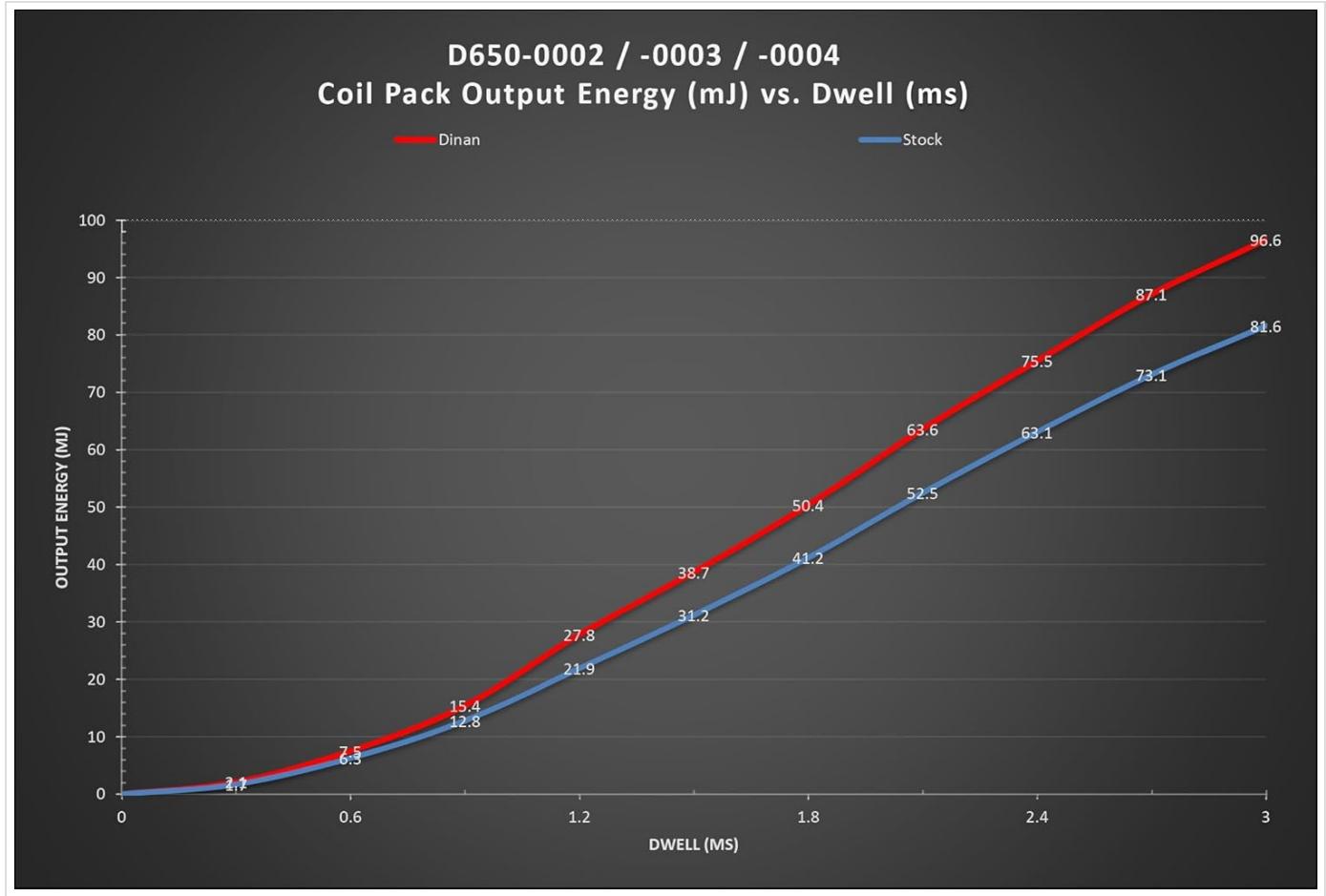


Figure 4: Performance graph illustrating the superior output energy of Dinan coils (red line) compared to stock coils (blue line) across various dwell times.

INSTALLATION GUIDE

Installation of ignition coils typically involves working with electrical components and within the engine bay. It is highly recommended that installation be performed by a qualified automotive technician. Incorrect installation can lead to damage to the product, vehicle, or personal injury.

General Installation Steps (Consult Vehicle Service Manual for Specifics):

1. **Safety First:** Ensure the vehicle's engine is cool and the battery is disconnected to prevent electrical shock or accidental engine start.
2. **Locate Ignition Coils:** Identify the existing ignition coils, typically located on top of the engine, directly above the spark plugs.
3. **Disconnect Electrical Connector:** Carefully disconnect the electrical connector from each coil. Some connectors may have a locking tab that needs to be released.
4. **Remove Fasteners:** Remove any bolts or fasteners securing the ignition coils in place.
5. **Remove Old Coils:** Gently pull the old ignition coils straight up and out of their respective spark plug wells. Avoid twisting or bending.
6. **Inspect Spark Plugs:** While the coils are removed, it is a good opportunity to inspect the spark plugs for wear and replace them if necessary.
7. **Install New Coils:** Insert the new Dinan D650-0003 Ignition Coils into the spark plug wells, ensuring they are seated firmly. Apply a small amount of dielectric grease to the inside of the coil boot for easier installation and better sealing, if recommended by your vehicle's manual.
8. **Secure Fasteners:** Reinstall any bolts or fasteners to secure the new coils.
9. **Reconnect Electrical Connectors:** Reconnect the electrical connectors to each new coil, ensuring they click into place securely.
10. **Reconnect Battery:** Reconnect the vehicle's battery.
11. **Test:** Start the engine and check for proper operation. Listen for any unusual noises or check for dashboard warning lights.



Figure 5: Dinan ignition coils installed in an engine bay, showing their placement relative to other engine components.



Figure 6: A closer view of two installed Dinan coils, illustrating the connection points and their integration into the engine's ignition system.

Installation Video:



Video 1: "Dinan Ignition Coils - Short Take" provides a brief visual overview of Dinan ignition coils, including their appearance and general application. This video is provided by the manufacturer.

OPERATION

The Dinan D650-0003 Ignition Coil functions as a critical component of your vehicle's ignition system. Its primary role is to transform the low voltage from the vehicle's battery into the high voltage required to create a spark across the spark plug gap. This spark ignites the air-fuel mixture in the engine's cylinders, initiating combustion and powering the vehicle. The enhanced energy output of the Dinan coil ensures a stronger, more consistent spark, which can lead to more efficient combustion and improved engine response.

MAINTENANCE

Ignition coils are generally maintenance-free components. However, regular inspection during routine vehicle servicing is recommended. Check for any visible signs of damage, cracks, or corrosion on the coil body or electrical connectors. Ensure all connections are secure. It is also advisable to replace spark plugs according to your vehicle manufacturer's recommended intervals, as worn spark plugs can put additional strain on ignition coils.

TROUBLESHOOTING

If you experience issues after installing your new ignition coils, consider the following common troubleshooting steps:

- **Misfires or Rough Idling:** This is a common symptom of a faulty ignition coil or spark plug. Ensure the coil is fully seated and the electrical connector is properly attached. Check spark plugs for proper gap and condition.

- **Check Engine Light:** A check engine light accompanied by misfire codes (e.g., P0301, P0302, etc.) indicates an issue with a specific cylinder's ignition. Use an OBD-II scanner to identify the cylinder and inspect the corresponding coil and spark plug.
- **Reduced Power or Fuel Economy:** While less direct, a failing ignition coil can lead to incomplete combustion, resulting in decreased engine performance and increased fuel consumption.
- **Installation Errors:** Double-check all connections and ensure no wires were pinched or damaged during installation. Verify that the correct coil was installed in the correct cylinder if your vehicle uses different coil types.

If problems persist, it is advisable to consult a professional automotive technician for diagnosis and repair.

WARRANTY AND SUPPORT

Dinan products are manufactured to high standards and typically come with a manufacturer's warranty. For specific warranty terms and conditions, please refer to the warranty information provided with your product packaging or visit the official Dinan website. For technical support or further assistance, please contact Dinan customer service through their official channels.

Note: The warranty may be voided if the product is not installed correctly or is used in applications for which it was not designed.

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