

uxcell a19071500ux0703

uxcell 90919-02235 Ignition Coil User Manual

For Toyota ST210, Vista, Ardeo, SV50, Nadia, SXN10

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your uxcell 90919-02235 Ignition Coil. Please read these instructions carefully before proceeding with installation or any related procedures. Proper installation ensures optimal performance and longevity of the product.

2. PRODUCT OVERVIEW

The uxcell 90919-02235 Ignition Coil is a direct replacement component designed for specific Toyota vehicle models. It is engineered to deliver high energy output for efficient engine operation and low emissions. This ignition coil features copper windings for superior electrical conductivity, ensuring reliable performance. It is built to strict quality control standards to provide a durable and OE-comparable replacement part.

Key Features:

- Direct replacement for OE part number 90919-02235.
- Designed for specific applications in Toyota ST210, Vista, Ardeo, SV50, Nadia, and SXN10 models.
- Utilizes copper windings for enhanced connectivity and performance.
- Contributes to low emissions and high energy output.
- Built to strict quality control standards for durability.



Figure 2.1: Front view of the uxcell 90919-02235 Ignition Coil. This image displays the main body of the ignition coil, including the electrical connector at the top and the spark plug boot at the bottom.



Figure 2.2: Detailed dimensions of the ignition coil and a close-up of the 4-pin electrical connector. The overall length is 18cm (7.09"), width is 7.8cm (3.07"), and height is 4.4cm (1.73").



Figure 2.3: Angled view of the ignition coil, highlighting the electrical connector and mounting point.



Figure 2.4: Close-up view of the 4-pin electrical connector, showing the internal pin arrangement.

3. SPECIFICATIONS

Feature	Detail
Brand	uxcell
Model Number	a19071500ux0703
OE Number	90919-02235
Other Part Number	9091902235
Color	Gray
Dimensions (L*W*H)	7.09" x 3.07" x 1.73" (18cm x 7.8cm x 4.4cm)
Pin Number	4 pins
Voltage	DC 12V

Feature	Detail
Item Weight	9.6 ounces
Vehicle Service Type	Car
Installation Type	Bolt-On
Compatible Models	Toyota ST210, Vista, Ardeo, SV50, Nadia, SXN10

4. SETUP AND INSTALLATION

Safety Warning:

- Always disconnect the vehicle's battery before performing any electrical work to prevent injury or damage.
- Ensure the engine is cool before handling ignition components.
- Wear appropriate personal protective equipment, including gloves and eye protection.
- If you are unsure about any step, consult a qualified mechanic.

Tools Required:

- Socket wrench set
- Extension bar (if needed)
- Torque wrench (recommended)
- Dielectric grease (optional, for spark plug boot)

Installation Steps:

1. **Locate Ignition Coils:** Identify the location of the ignition coils on your engine. They are typically mounted directly on top of the spark plugs or connected via spark plug wires.
2. **Disconnect Battery:** Disconnect the negative terminal of your vehicle's battery.
3. **Remove Electrical Connector:** Carefully disconnect the electrical connector from the ignition coil by pressing the release tab and pulling. Avoid pulling on the wires.
4. **Remove Mounting Bolts:** Use a socket wrench to remove the bolts securing the ignition coil to the engine or valve cover.
5. **Remove Old Coil:** Gently pull the old ignition coil straight up to remove it from the spark plug well. Inspect the spark plug boot for any damage or wear.
6. **Install New Coil:** Apply a small amount of dielectric grease to the inside of the new coil's spark plug boot (optional, but recommended). Carefully insert the new uxcell ignition coil into the spark plug well, ensuring it seats properly onto the spark plug.
7. **Secure Mounting Bolts:** Reinstall the mounting bolts and tighten them to the manufacturer's specified torque (refer to your vehicle's service manual).
8. **Reconnect Electrical Connector:** Reconnect the electrical connector to the new ignition coil until it clicks into place.
9. **Reconnect Battery:** Reconnect the negative terminal of the vehicle's battery.
10. **Test:** Start the engine and check for proper operation and any diagnostic trouble codes.

5. OPERATING PRINCIPLES

The ignition coil is a crucial component of your vehicle's ignition system. Its primary function is to transform the low voltage from the vehicle's battery (12V DC) into the thousands of volts required to create a spark across the spark plug gap. This high-voltage spark ignites the air-fuel mixture in the engine's combustion chamber, initiating the power stroke. Each ignition coil is responsible for providing spark to one or more spark plugs, depending on the engine design.

6. MAINTENANCE

Ignition coils are generally maintenance-free components. However, regular inspection during routine vehicle servicing can help identify potential issues before they lead to failure.

Recommended Maintenance Checks:

- **Visual Inspection:** During spark plug replacement or other engine maintenance, visually inspect the ignition coils for any signs of cracking, discoloration, or corrosion on the housing or electrical connectors.
- **Electrical Connections:** Ensure all electrical connectors are securely attached and free from dirt or moisture.
- **Spark Plug Boots:** Check the spark plug boots for tears, hardening, or signs of arcing. Replace if damaged.

If any damage is observed, consider replacing the affected ignition coil to prevent misfires or engine performance issues.

7. TROUBLESHOOTING

Common symptoms of a failing ignition coil include:

- **Engine Misfires:** The engine may run rough, stumble, or hesitate, especially under acceleration.
- **Reduced Fuel Economy:** An inefficient spark can lead to incomplete combustion, wasting fuel.
- **Check Engine Light:** The vehicle's onboard diagnostic system may detect a misfire and illuminate the Check Engine Light, often accompanied by specific diagnostic trouble codes (DTCs) related to ignition system faults (e.g., P0301-P0308 for cylinder misfires).
- **Rough Idling:** The engine may idle unevenly or vibrate excessively.
- **Difficulty Starting:** A weak or absent spark can make the engine hard to start.

Troubleshooting Steps:

1. **Scan for DTCs:** Use an OBD-II scanner to retrieve any stored diagnostic trouble codes. This can often pinpoint the specific cylinder with a misfire.
2. **Inspect Wiring and Connectors:** Check all wiring harnesses and connectors leading to the ignition coils for damage, corrosion, or loose connections.
3. **Swap Coils:** If a specific cylinder misfire is detected, swap the suspected faulty coil with a known good coil from another cylinder. If the misfire moves to the new cylinder, the coil is likely defective.
4. **Check Spark Plugs:** Ensure spark plugs are in good condition and correctly gapped. A fouled or worn spark plug can mimic a coil issue.
5. **Professional Diagnosis:** If troubleshooting steps do not resolve the issue, or if you are uncomfortable performing these checks, it is recommended to seek professional diagnosis from a qualified mechanic.

8. WARRANTY AND SUPPORT

For warranty information or technical support regarding your uxcell 90919-02235 Ignition Coil, please refer to the purchase documentation or contact uxcell customer service directly. Ensure you have your product model number (a19071500ux0703) and purchase details available when contacting support.

You can visit the official uxcell store on Amazon for more product information and support resources: [uxcell Amazon Store](#)