

Gladiator 9G6941 9X0353 9X0354 10R5355 60-29-15001

Gladiator Premium Starter Solenoid Instruction Manual

Model: 9G6941, 9X0353, 9X0354, 10R5355, 60-29-15001

INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of your Gladiator Premium Starter Solenoid. Please read these instructions thoroughly before proceeding with installation or use.

Product Overview

The Gladiator Premium Starter Solenoid is a 12V, 3-terminal intermittent duty component designed to engage the starter motor in various compatible engines and vehicles. It acts as an electromagnetic switch, allowing a small current from the ignition switch to control a much larger current flow from the battery to the starter motor.

What's in the Box

- 1 x Gladiator Premium Starter Solenoid

SAFETY INFORMATION

- Always disconnect the vehicle's battery before performing any electrical work to prevent electrical shock or damage to components.
- Wear appropriate personal protective equipment, including safety glasses and gloves.
- Ensure all connections are clean, tight, and free from corrosion. Loose connections can cause overheating and component failure.
- Refer to your vehicle's specific service manual for detailed wiring diagrams and procedures.

INSTALLATION

- Preparation:** Ensure the vehicle's battery is disconnected. Locate the existing starter solenoid.
- Removal of Old Solenoid:** Carefully disconnect all wires from the old solenoid, noting their positions and labels (e.g., battery positive, starter motor, ignition switch). Remove any mounting bolts or nuts securing the old solenoid.

3. **Mounting the New Solenoid:** Position the Gladiator Premium Starter Solenoid in the same location as the old unit. Secure it using the appropriate mounting hardware. Ensure it is firmly attached to prevent vibration damage.
4. **Wiring Connections:** Connect the wires to the new solenoid's terminals. Typically, there are three terminals:
 - **Large Terminal 1:** Connects to the positive (+) terminal of the battery.
 - **Large Terminal 2:** Connects to the starter motor.
 - **Small Terminal:** Connects to the ignition switch (start signal).Ensure all connections are clean, tight, and correctly oriented.
5. **Final Check:** Double-check all connections for security and correct placement. Reconnect the vehicle's battery.



Image 1: Side view of the Gladiator Premium Starter Solenoid, showing the main body and terminal connections. This image illustrates the overall form factor of the solenoid.



Image 2: End view of the Gladiator Premium Starter Solenoid, highlighting the three terminal posts for electrical connections. This view is crucial for identifying the correct wiring points.

OPERATION

Once correctly installed, the Gladiator Premium Starter Solenoid operates automatically when the ignition key is turned to the "START" position. A small current from the ignition switch energizes the solenoid's coil, creating an electromagnetic field. This field pulls a plunger, which simultaneously closes a heavy-duty contact to allow high current from the battery to flow to the starter motor and, in some designs, pushes the starter drive gear into engagement with the engine's flywheel.

Upon releasing the ignition key from the "START" position, the solenoid de-energizes, cutting off power to the starter motor and disengaging the starter drive.

MAINTENANCE

- Regular Inspection:** Periodically inspect the solenoid and its connections for signs of corrosion, loose wires, or physical damage.
- Clean Connections:** If corrosion is present, disconnect the battery and carefully clean the terminals and wire connectors using a wire brush and battery terminal cleaner. Ensure all connections are re-tightened securely.
- Environmental Protection:** While the solenoid is designed for automotive environments, avoid direct exposure to excessive moisture or harsh chemicals where possible.

TROUBLESHOOTING

| Symptom | Possible Cause | Solution |
|---------|----------------|----------|
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| Symptom | Possible Cause | Solution |
|--|--|--|
| Engine does not crank, no sound. | Dead battery, loose battery cables, faulty ignition switch, open circuit to solenoid. | Check battery charge and connections. Test ignition switch. Verify power to solenoid's small terminal when key is turned to START. |
| Engine does not crank, solenoid clicks once. | Low battery voltage, corroded battery terminals, faulty solenoid (internal contacts worn). | Charge or replace battery. Clean battery terminals. Test solenoid for proper operation (e.g., bypass with jumper cable briefly, with caution). |
| Starter motor spins but engine does not crank. | Faulty starter drive (bendix), solenoid not engaging starter drive (if integrated). | Inspect starter motor and drive assembly. This solenoid is a separate component, so check the starter motor itself. |

SPECIFICATIONS

- Brand:** Gladiator
- Model:** Solenoid
- Voltage:** 12 Volts
- Item Weight:** 3.7 pounds
- Product Dimensions:** 8.8 x 3 x 2.8 inches
- Manufacturer Part Numbers:** 9G6941, 9X0353, 9X0354, 10R5355, 60-29-15001
- Duty Cycle:** Intermittent Duty
- Terminal Configuration:** 3 Terminal

WARRANTY AND SUPPORT

Warranty Information

This Gladiator Premium Starter Solenoid comes with a **1-Year Warranty** from the date of purchase, covering defects in materials and workmanship. This warranty does not cover damage resulting from improper installation, misuse, neglect, accident, or unauthorized repair or modification.

Customer Support

For technical assistance, troubleshooting guidance, or warranty claims, please contact your retailer or the Gladiator customer support channel through which the product was purchased. Please have your purchase receipt and product model information available.