

DB Electrical SHI0157

DB Electrical SHI0157 Starter Instruction Manual

Model: SHI0157 (410-44119)  
Brand: DB Electrical

1. INTRODUCTION

This instruction manual provides essential information for the proper installation, operation, and maintenance of your DB Electrical SHI0157 Starter. Designed for various automotive applications, this starter is a permanent magnet gear reduction (PMGR) type, engineered to meet OEM specifications for reliable vehicle starting. Please read this manual thoroughly before installation and use to ensure safety and optimal performance.

2. PRODUCT SPECIFICATIONS

The DB Electrical SHI0157 Starter is built with the following technical specifications:

Specification	Detail
Family	Hitachi Hi-Performance
Voltage	12 Volts
Power	1.200 kW (1.609 HP)
Condition	New Aftermarket
Rotation Direction	Clockwise
Electric Starter Type	Permanent Magnet Gear Reduction (PMGR)
Number of Teeth	10
Gear OD	1.102" (28mm)
Mount Hole ID	10mm (3 mounting holes)
Mount Hole Type	Unthreaded
Item Weight	8.02 pounds

Specification	Detail
Package Dimensions	10.24 x 5.71 x 4.96 inches

This starter features 12 - 10mm mounting holes for multiple clocking positions, offering installation flexibility.

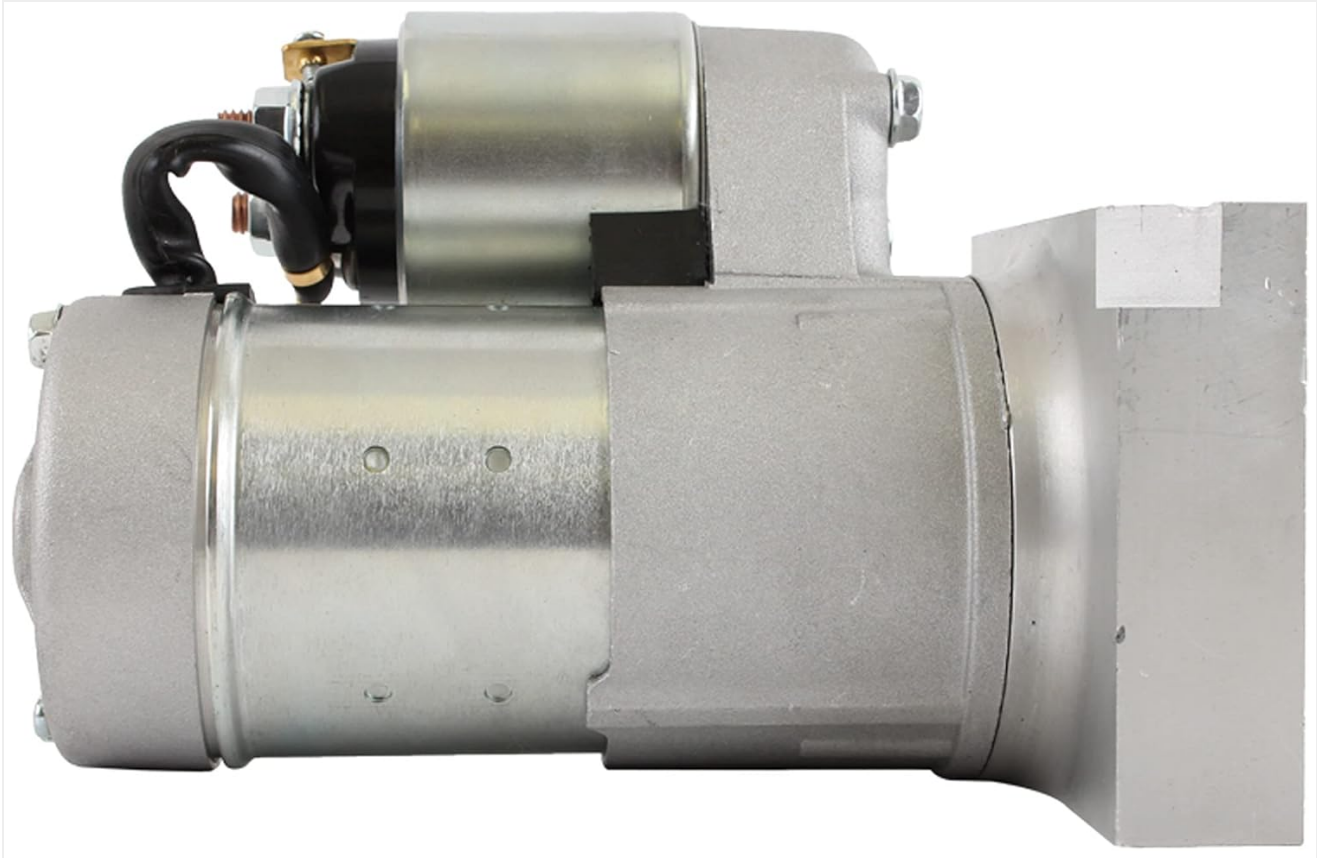


Figure 2.1: Side view of the DB Electrical SHI0157 Starter, showing the solenoid and main body.



Figure 2.2: Angled view of the starter, highlighting the compact design.



Figure 2.3: End view showing the electrical connection terminals on the solenoid.



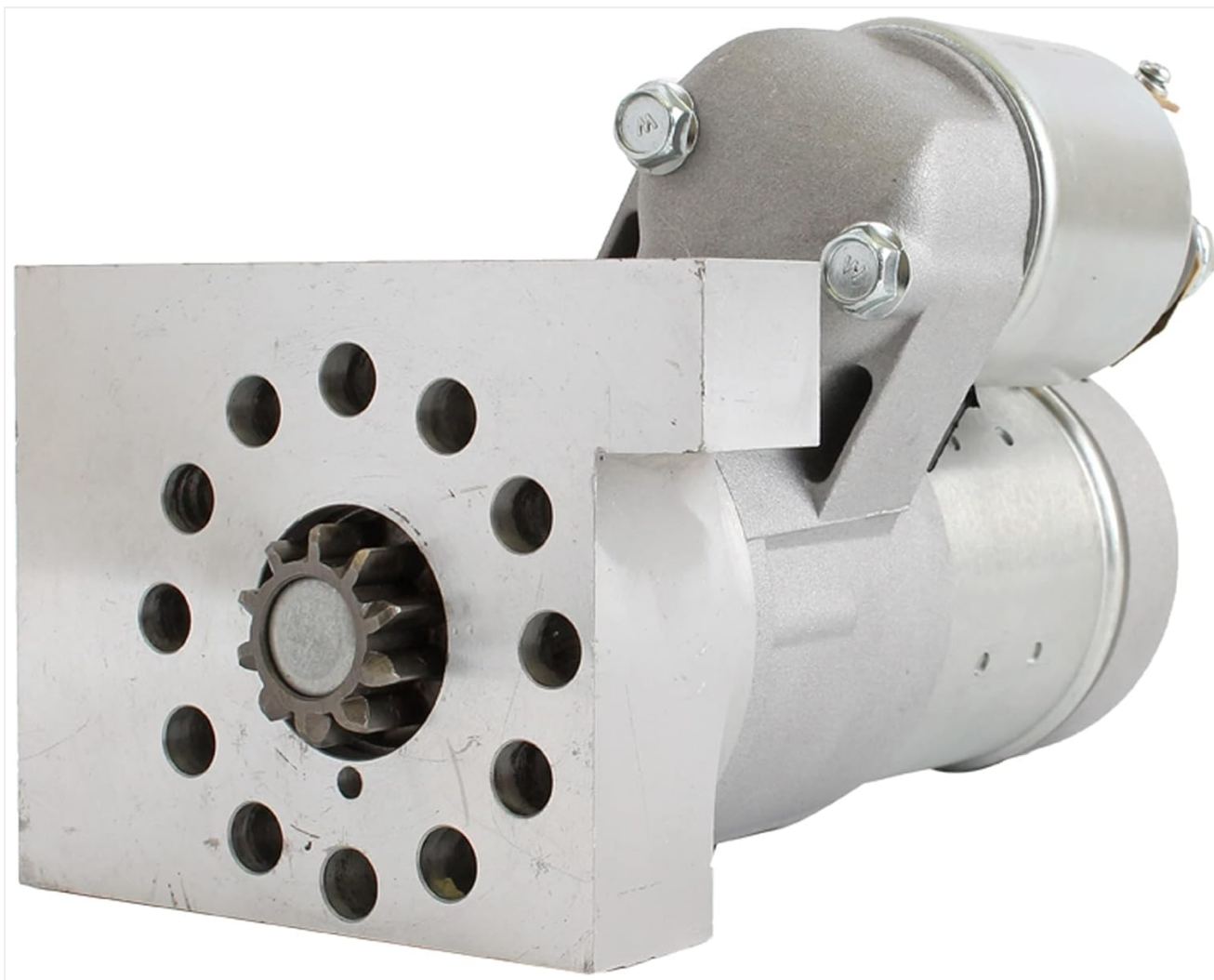


Figure 2.4: View of the starter's mounting plate and the 10-tooth gear (pinion).

### 3. COMPATIBILITY AND OEM CROSS-REFERENCE

---

This starter is compatible with a range of vehicles and replaces several OEM part numbers. Always verify fitment with your vehicle's specific requirements before installation.

#### Replaces OEM Numbers:

- **Arrowhead:** SHI0157
- **Hitachi:** PSL100, S114-823, S114-823C, S114-823S
- **J&N Electrical Products:** 410-44116, 410-44119
- **Lester:** 19695

#### Compatible With/Replacement For (Partial List):

- **Buick:** Century (1977-1981), LeSabre (1978-1982), Regal (1977-1987), Skylark (1977-1979)
- **Chevrolet:** 3A, 3B, 3C, 3D, 3E, 3F, 3G (1959), Astro (1985-2002), Bel Air (1955-1975), Biscayne (1958-1972)
- *Note: This is a partial list. Refer to your vehicle's service manual or consult a qualified mechanic for complete compatibility details.*

### 4. INSTALLATION GUIDELINES

---

Installation of an automotive starter requires mechanical knowledge and appropriate tools. If you are not experienced with automotive electrical systems, it is highly recommended to seek professional assistance from a

certified mechanic.

Safety Precautions:

- Always disconnect the vehicle's battery (negative terminal first) before beginning any electrical work to prevent accidental short circuits or injury.
- Ensure the vehicle is securely supported on jack stands if working underneath.
- Wear appropriate personal protective equipment, including safety glasses and gloves.
- Allow the engine to cool completely before working on it.

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

1. Locate the existing starter motor.
2. Disconnect the electrical connections from the old starter (battery cable, solenoid wire).
3. Remove the mounting bolts securing the old starter to the engine block or transmission housing.
4. Carefully remove the old starter.
5. Compare the new DB Electrical SHI0157 starter with the old unit to ensure it is the correct replacement.
6. Install the new starter, ensuring proper alignment with the flywheel and securing it with the mounting bolts. Torque bolts to manufacturer specifications.
7. Reconnect the electrical wires to the new starter's solenoid and battery terminal. Ensure connections are clean and tight.
8. Reconnect the vehicle's battery (positive terminal first, then negative).
9. Test the starter operation.

5. OPERATION

The starter motor is responsible for cranking the engine to initiate combustion. When the ignition key is turned to the "START" position, electrical current flows from the battery to the starter solenoid. The solenoid engages the starter pinion gear with the engine's flywheel and simultaneously sends power to the starter motor. The motor then rotates the flywheel, turning the crankshaft and starting the engine. Once the engine starts, the ignition key should be released, disengaging the starter to prevent damage.

6. MAINTENANCE

Starters are generally low-maintenance components. However, regular checks of the associated electrical system can prolong its life:

- **Battery Condition:** Ensure your vehicle's battery is fully charged and in good condition. A weak battery can overwork the starter.
- **Cable Connections:** Periodically inspect battery cables and starter connections for corrosion, looseness, or damage. Clean and tighten as necessary.
- **Engine Condition:** A well-maintained engine that starts easily reduces the load and wear on the starter.

7. TROUBLESHOOTING

If your vehicle experiences starting issues, consider the following common troubleshooting steps:

Symptom	Possible Cause	Action
---------	----------------	--------

Symptom	Possible Cause	Action
<b>No Crank, No Click:</b>	Dead battery, faulty ignition switch, open circuit in starter wiring.	Check battery charge, inspect battery terminals and starter wiring for corrosion or looseness.
<b>No Crank, Single Click:</b>	Weak battery, faulty starter solenoid, seized engine, poor connection.	Charge/test battery, check battery and starter connections.
<b>Slow Crank:</b>	Weak battery, corroded battery cables, high resistance in starter circuit.	Test battery, clean battery terminals and cable connections.
<b>Starter Spins, Engine Does Not Crank:</b>	Faulty starter drive (bendix), damaged flywheel teeth.	Inspect starter drive and flywheel for damage. Replacement may be necessary.

If troubleshooting does not resolve the issue, consult a qualified automotive technician.

## 8. WARRANTY INFORMATION

---

The DB Electrical SHI0157 Starter comes with a **1-year warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. If the product fails within this period due to a manufacturing defect, DB Electrical will replace it. This warranty does not cover damage caused by improper installation, misuse, neglect, accident, or unauthorized modification.

For warranty claims or assistance, please retain your proof of purchase and contact DB Electrical customer support.

## 9. CUSTOMER SUPPORT

---

For further assistance, technical questions, or to report an issue, please contact DB Electrical customer support. Have your product model number (SHI0157 or 410-44119) and purchase details ready when contacting support. You can find contact information on the official DB Electrical website or through your original point of purchase.