

## MSD 50983

# MSD Dynaforce 50983 Starter Instruction Manual

Model: 50983 | Brand: MSD

## INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your MSD Dynaforce 50983 Starter. Designed for Chrysler 318-440 cubic inch engines, this starter features a 4.4:1 gear reduction and a compact design. Please read this manual thoroughly before proceeding with installation or operation to ensure safety and optimal performance.

## SAFETY INFORMATION

Always prioritize safety when working with automotive electrical systems and heavy components. Failure to follow safety precautions can result in serious injury or damage to the vehicle.

- Disconnect the vehicle's battery before beginning any installation or maintenance.
- Wear appropriate personal protective equipment, including safety glasses and gloves.
- Ensure the vehicle is securely supported on jack stands if working underneath.
- Avoid contact with hot engine components.
- Consult a qualified automotive technician if you are unsure about any step of the installation process.

## PRODUCT FEATURES

The MSD Dynaforce 50983 Starter incorporates several design elements for enhanced performance and durability:

- **Gear Reduction:** A 4.4:1 gear reduction ratio provides improved torque for efficient engine cranking.
- **Durable Finish:** Features a black powder-coated finish for corrosion resistance and aesthetic appeal.
- **Compact Design:** Engineered to minimize clearance issues, particularly with oil pans and exhaust systems.
- **Supported Armature and Pinion Gear:** Utilizes ball bearings for robust support of the armature and pinion gear, contributing to longevity.
- **Color Options:** Also available in red (this specific model is black).



*Figure 1: Main view of the MSD Dynaforce 50983 Starter, showcasing its black powder-coated finish and compact design.*

## INSTALLATION GUIDE

Proper installation is crucial for the performance and longevity of your starter. It is highly recommended that installation be performed by a qualified automotive technician.

### 1. Preparation

1. Ensure the vehicle's ignition is off and the parking brake is engaged.
2. Disconnect the negative (-) battery cable first, then the positive (+) battery cable.
3. Locate the existing starter motor. Depending on the vehicle, access may require lifting the vehicle and removing other components.

### 2. Removal of Old Starter

1. Carefully disconnect all electrical connections from the old starter (battery cable, solenoid wire). Note their positions for reinstallation.

2. Remove the mounting bolts securing the old starter to the engine block or transmission bell housing.
3. Carefully remove the old starter from the vehicle.

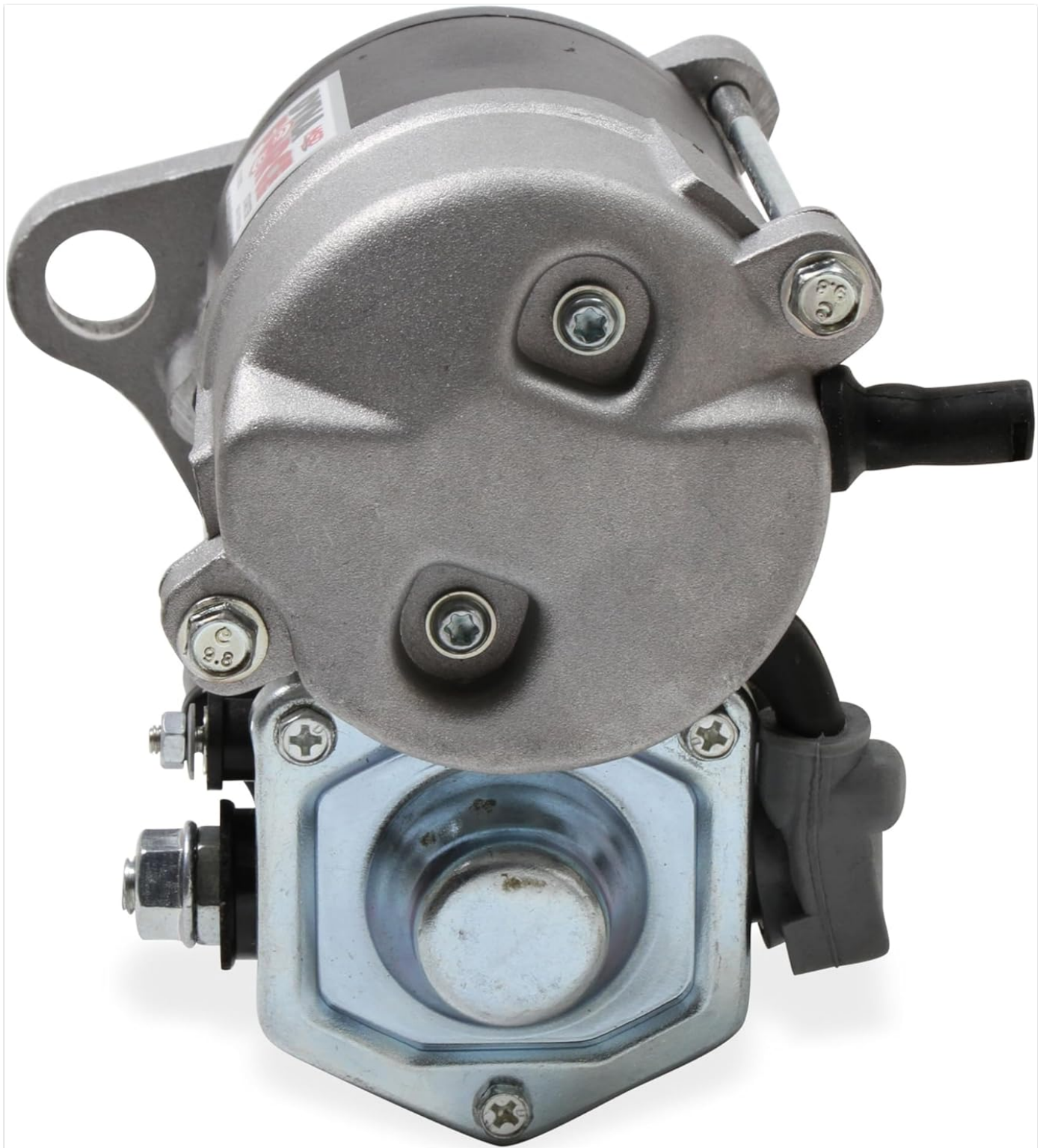


*Figure 2: View of the starter's mounting flange, showing the bolt holes for secure attachment to the engine.*

### **3. Installation of New Starter**

1. Position the new MSD Dynaforce 50983 Starter into place.
2. Install the mounting bolts and tighten them to the manufacturer's specified torque settings. Do not overtighten.
3. Reconnect the electrical wires to the starter solenoid. Ensure connections are clean and secure. The main battery cable connects to the large terminal, and the ignition switch wire connects to the smaller terminal.

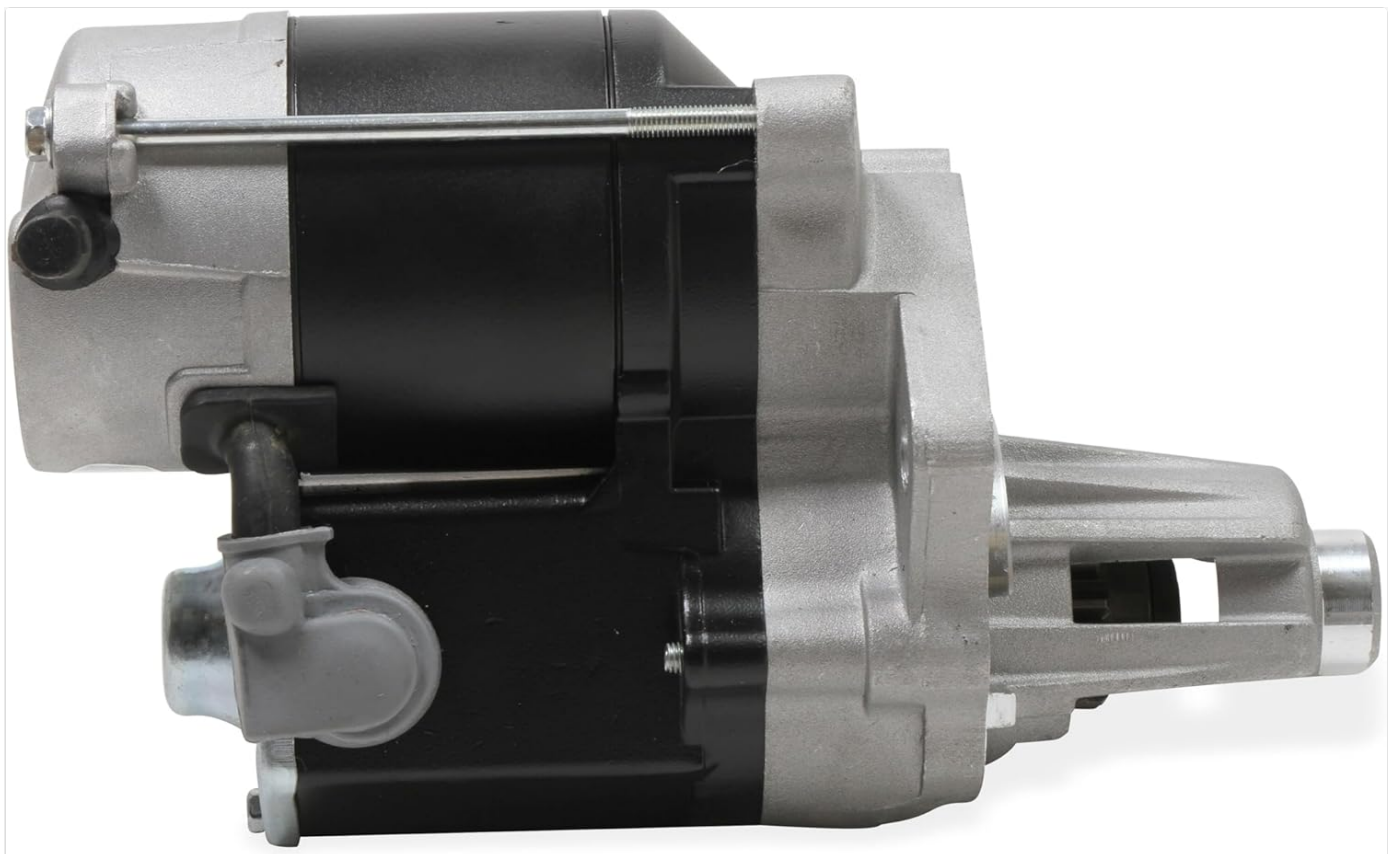




*Figure 3: Side view of the starter, highlighting the electrical connection points for the battery cable and solenoid wire.*

#### **4. Final Steps**

1. Reconnect the positive (+) battery cable, then the negative (-) battery cable.
2. Verify all connections are tight and secure.
3. Test the starter by attempting to start the engine.



*Figure 4: Side profile of the MSD Dynaforce 50983 Starter, showing its overall compact form factor.*

## OPERATION

The MSD Dynaforce 50983 Starter operates in conjunction with your vehicle's ignition system to crank the engine. Once installed correctly, its operation is standard for an automotive starter.

- Ensure the vehicle is in Park or Neutral.
- Turn the ignition key to the "START" position. The starter motor will engage the engine's flywheel, rotating the crankshaft to initiate combustion.
- Release the key once the engine starts. Do not hold the key in the "START" position for extended periods after the engine has fired, as this can damage the starter or flywheel.

## MAINTENANCE

The MSD Dynaforce 50983 Starter is designed for durability and typically requires minimal maintenance. Regular checks can help ensure its longevity.

- **Battery Condition:** Ensure your vehicle's battery is in good condition and fully charged. A weak battery can strain the starter.
- **Electrical Connections:** Periodically inspect all electrical connections to the starter for corrosion or looseness. Clean and tighten as necessary (with the battery disconnected).
- **Mounting Bolts:** Check that the starter's mounting bolts remain tight.
- **Environmental Exposure:** While the powder coat offers protection, avoid excessive exposure to water, dirt, and road salt where possible.

## TROUBLESHOOTING

If you experience issues with your starter, consider the following common problems and solutions:

- **Starter Does Not Engage or Clicks:**
  - Check battery charge and terminals.
  - Inspect all electrical connections to the starter for looseness or corrosion.
  - Verify the ignition switch and neutral safety switch are functioning correctly.
- **Starter Cranks Slowly:**
  - Battery may be low or failing.
  - Poor electrical connections (battery cables, ground straps).
  - Engine may have internal issues (e.g., excessive drag).
- **Grinding Noise During Cranking:**
  - Indicates improper engagement between the starter pinion gear and the flywheel. Check mounting and ensure correct starter application.
  - Flywheel teeth may be damaged.

If troubleshooting steps do not resolve the issue, consult a professional automotive technician.

SPECIFICATIONS

Feature	Detail
Model Number	50983
Brand	MSD
Engine Compatibility	Chrysler SBM/BBM 318 to 440 cubic inch engines
Gear Reduction	4.4:1
Motor Type	3 Hip Motor
Finish	Black Powder Coat
Material	Aluminum, Nickel
Item Weight	11.4 pounds
Product Dimensions (L x W x H)	12.5 x 7.25 x 5.5 inches
Wattage	1.5 KW
UPC	085132509836

WARRANTY AND SUPPORT

For specific warranty information regarding your MSD Dynaforce 50983 Starter, please refer to the documentation included with your purchase or visit the official MSD website. For technical support or further assistance, please contact MSD customer service directly.

*Note:* Unauthorized modifications or improper installation may void the product warranty.

