



# INSTALLATION INSTRUCTIONS

## 51306ZG & 51302ZG Starters

### CAREFULLY READ THESE INSTRUCTIONS BEFORE ATTEMPTING ANY MODIFICATIONS!

Proper installation of this starter is the responsibility of the installer. Improper modification or installation will void your warranty and may result in vehicle damage or personal injury. If you have any installation questions, refer to your factory shop manual or call our Tech Service personnel at 270-781-9741.

## IMPORTANT!

**POSITIVE BATTERY CABLE MUST BE DISCONNECTED AT BATTERY PRIOR TO INSTALLATION!**  
**ALL INSTRUCTIONS & PROCEDURES MUST BE FOLLOWED FOR A SUCCESSFUL INSTALL.**

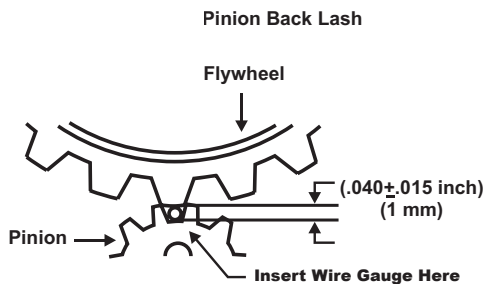
### Starter installation

1. Disconnect starter wiring harness and remove old starter.
2. Hold new starter motor in position at engine block.
3. Reinstall mounting bolts. Tighten to 38 ft lbs.

Before operating starter, pinion clearance **MUST** be checked!

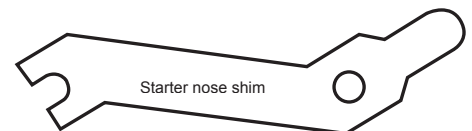
Note that shims may or may not be necessary – it depends upon actual clearances as noted below.

**This starter is not equipped with a third R terminal post, use part #51340 remote Hot Start Solenoid kit.**



### Pinion Back Lash - 51306ZG

When the pinion is engaged into the ring gear, there is to be .040"±.015" backlash between them. This can be checked with a wire gauge (a standard size paper clip will work fine) when holding the pinion into the ring gear with a screwdriver. If the fit is too tight, shim the nose from the block using the shims provided. 51302ZG does not require shims.



### Wiring the starter

1. Attach the positive battery cable to the large solenoid terminal. **DO NOT** connect it to the terminal that is connected to the black starter motor cable.
2. Reconnect the original smaller gauge solenoid wire(s) to the small terminal.

**CAUTION: NEVER OPERATE THIS STARTER MOTOR MORE THAN 30 SECONDS AT A TIME WITHOUT ALLOWING IT TO COOL FOR AT LEAST TWO MINUTES.**

Overheating caused by extended cranking will damage the starter motor and void warranty.