IMPORTANT! POSITIVE BATTERY CABLE MUST BE DISCONNECTED AT BATTERY PRIOR TO INSTALLATION!
THIS IS A PERFORMANCE MODIFICATION, NOT JUST A REPLACEMENT STARTER.
ALL INSTRUCTIONS & PROCEDURES MUST BE FOLLOWED FOR A SUCCESSFUL INSTALLATION.
The 3193 and 13510 starters are intended for use on Chevrolet small and big block V8 engines as well as 90 degree V6 engines with either a 153 tooth (12 ¾” OD) or 168 tooth (14” OD) flywheel and with a 12 volt negative ground electrical system.
CAUTION: NEVER OPERATE 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.

Starter removal and installation
1. Disconnect starter wiring harness and remove old starter.
2. Make sure that the engine block to starter mounting surface is free of any rust, paint or debris to ensure proper grounding.
3. Hold new starter motor in position at engine block. Determine correct bolt holes in starter mounting block to use. The notch in the top of the mounting block is for the oil pan rail clearance.
4. Install (2) supplied mounting bolts. Tighten to 38 ft lbs.

Wiring the starter
1. Attach the positive battery cable to the large starter terminal. DO NOT OVERTIGHTEN THE NUT! The stud terminal is made of soft brass for superior conductivity and will strip if overtightened.
2. Connect existing ignition switch wire to the spade terminal.

Indexing the starter
If the starter interferes with the engine block or any component, the entire starter can be indexed about the nose to gain additional clearance.

Pinion Back Lash
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 provided shims.