



TECH TIPS

Starter Trouble Shooting Guide

Listed below are some of the more common problems that occur in starters along with some of the likely causes and remedies. Due to the number of types of units and systems that exist this is only a general listing of the most common problems, possible causes and remedies that are possible. Also check for vehicle specific Dixie Tech Tips.

Symptom

Starter does not operate, or starter operates slowly

Possible Causes

- Weak or dead battery
- Bad starting system cables or connections
- Bad ignition switch and/or wiring
- Bad starter
- Bad starter solenoid
- Overheated engine

- Incorrect engine oil (too heavy) or old oil
- Incorrect battery (CCA rating too low)

Remedy

- Charge or replace the battery
- Repair/replace cables and connectors
- Repair/replace the switch or wiring
- Replace the starter
- Replace the starter or solenoid
- Allow the engine to cool, possibly install a heat shield on the starter. If the problem persists check the engine cooling system
- Replace oil with correct viscosity
- Replace battery with proper battery

Symptom

Starter motor runs, but does not turn the engine over (does not engage the ring gear or flywheel)

Possible Causes

- Faulty solenoid
- Faulty ring gear or flywheel
- Improper shimming/Installation of the starter
- Bad starter drive

Remedy

- Replace the solenoid or starter
- Replace the ring gear or flywheel
- Check and adjust the starter shimming/positioning
- Replace the starter

Symptom

Starter remains engaged after the engine starts

Possible Causes

- Improper shimming of the starter
- Faulty ignition switch or solenoid wiring
- Faulty solenoid
- Starter mounting hardware is loose (starter misalignment)
- Low voltage to the starter

Remedy

- Check and adjust shims
- Repair or replace the wiring/switch
- Replace the solenoid or starter
- Align starter and tighten hardware

- Load test the battery and check the wiring for voltage drops