



TECH TIPS

Alternator Trouble Shooting Guide

Listed below are some of the more common problems that occur in alternators and charging systems, 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

Low output from the alternator (seen as dim headlights, slow-blinking turn signals, etc)

Possible Causes

- Worn, cracked, glazed or loose belt
- Bad battery
- Battery low on electrolyte
- Bad battery connection
- High voltage drop on wires
- Voltage regulator not adjusted properly (when applicable)
- Bad wiring harness or fusible links
- Bad alternator

Remedy

- Adjust or replace belt and/or tensioner
- Replace battery
- Fill battery to proper level
- Repair or replace connections or cables
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- Adjust or replace regulator as necessary (or replace alternator if internally regulated)
- Isolate the problem and repair or replace as necessary
- Replace the alternator

Symptom

Output from the alternator is too high (seen as overbright headlights, fast-blinking turn signals, burnt out bulbs, etc)

Possible Causes

- Bad battery
- Bad/maladjusted voltage regulator
- Bad battery connections or main fusible link
- Bad wiring harness connections

Remedy

- Replace the battery
- Adjust the regulator (when applicable) or replace the regulator or alternator (when internally regulated)
- Repair or replace connections or cables
- Isolate the problem and repair or replace as necessary



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Symptom
Alternator is noisy

Possible Causes

- Worn, cracked, glazed, loose, misaligned belt or faulty belt tensioner
- Alternator mounting bolts are loose
- Bad alternator bearings
- Grounded stator/blown diode
- Loose alternator pulley
- Worn alternator pulley (or faulty clutch/de-coupling pulley)

Remedy

- Repair or replace as necessary
- Tighten as necessary
- Replace the alternator
- Replace the alternator
- Repair or replace as necessary
- Replace as necessary