



Alternator Damage due to short-circuit/polarity reversal

Damage

Damage due to short-circuits/polarity reversal on alternators can be recognized due to interrupted or unsoldered power diodes, an unsoldered stator winding and/or charred rectifier bodies.

Causes

Due to a defective battery or polarity reversal during externally-assisted starting, uncontrolled current flow occurs. Due to the great heat which arises in the event of this short-circuit, the semiconductors are destroyed and the soldered joints melt and are separated.

Effects

The damaged soldered joints and destroyed diodes result in the alternator no longer outputting any power.

