



Alternator oil-fouled

Damage

The entry of oil causes the formation of an oil film on the housing, the windings, the slip rings and the carbon brushes of the alternator. The oil softens the carbon brushes.

Causes

If engine oil gets into the alternator due to defective engine seals, or if hydraulic oil or diesel fuel gets into the alternator due to leaky lines, a lubrication film forms on the slip rings and the carbon brushes. With the abrasion of the carbon brushes, this results in the formation of a compound that leads to poor contacting or short-circuits. The softening of the carbon brushes also leads to premature wear.

Effects

The entry of oil results in reduced alternator performance. In most cases, however, the oil contamination leads to total failure.

