

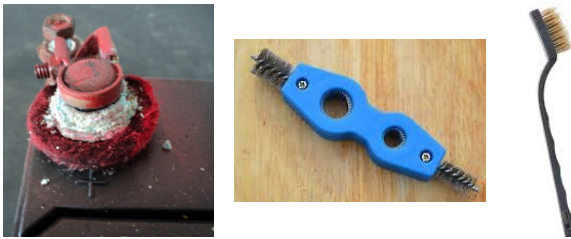
BATTERY INSPECTION & TESTING

One of the most common causes for starter & alternator failure is due to low battery voltage & corrosion on the battery terminals & cables, which causes loss of voltage due to a build up of resistance to the electrical current.

Before replacing a starter or alternator, a thorough inspection & test of the battery or battery banks is necessary.

1. Inspect batteries for any signs of damage, contamination, cracks, leaks & loose terminals.

2. Any battery terminal corrosion must be thoroughly cleaned with a battery post cleaning tool.



3. Careful inspection of the battery cable ends for corrosion must be conducted. The battery cables should be replaced if corrosion is present.



4. Ensure all terminal connections to the battery posts are secure & tight.



5. The battery should be fully charged, with the vehicle's engine off. Terminal voltage OCV (Open Circuit Voltage) for maintenance free batteries must read 12.6 volts at 100% charge. A minimum 12.4 volts at 75% charge is necessary to properly test the vehicles electrical system. Terminal voltage OCV of new batteries must register 12.5 volts before installation. Recharge & re-test any battery that does not meet these required voltage readings.



Note: Cranking a starter motor with the battery in a low voltage condition, can cause the starter's solenoid contacts to weld together, resulting in an over-cranking situation, burning out the starter motor.