

A. Testing Armature for Short-Circuit in Coil

Place the armature on a suitable tester, e.g. the Tester EF 2666 made by Bosch. Switch on the tester and turn the armature slowly. The armature has a short-circuit in the coil if the metal strip is attracted during the turning of the armature (see Figure 15-5/1).

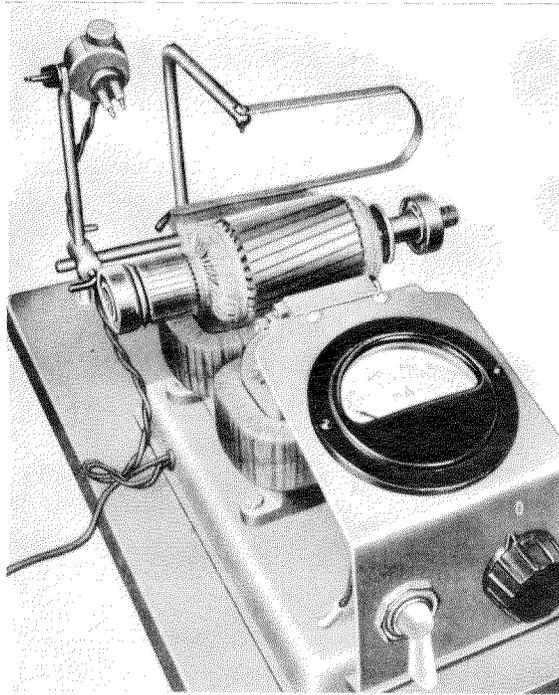


Figure 15-5/1

B. Testing Armature for Ground Short-Circuit

Hold the two testing prods of a testing lamp against the commutator and the armature laminations. If the testing lamp lights up, the current is flowing through the commutator and the armature laminations thus indicating a ground short-circuit.

Thoroughly clean the armature before the testing, so that the lamp does not respond to creeping current. The creeping current can be caused by metal dust deposits consisting of commutator grit.

C. Testing Exciter Coil

Put the two testing prods of the testing lamp on ground and the lead between solenoid switch and exciter coil. If the testing lamp lights up, there is a short-circuit to ground in the exciter coil.

Note: Any visibly naked windings can be insulated with tape and air drying lacquer. Check the field coil again after the insulating operation.

D. Testing Power Output of Starter

Fix the starter assembly on a suitable test stand: Operate and brake-test the starter.

The test must be made with a well charged battery with a voltage of 12 volt and a capacity of 135 Ah (see Job No. 15-0).