

## A. Testing Armature for Short-Circuit in Windings

Place the armature on a suitable tester, e. g. the EF 2666 Tester made by Bosch. Switch on the tester and turn the armature slowly. If, while the armature is being turned, the metal strip is attracted by the armature, the armature has a short-circuit in the windings (Fig. 15 — 5/1).

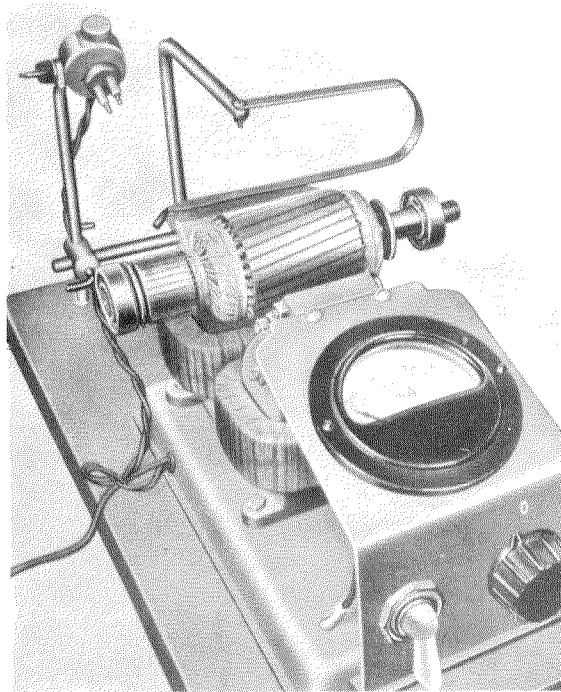


Fig. 15 — 5/1

## B. Testing Armature for Short-Circuit to Ground

Hold the two testing prods of a testing light against the collector and the armature laminations. If the testing light lights up, the current is flowing through the collector and the armature laminations and this indicates a short-circuit to ground.

Before checking, the armature must be thoroughly cleaned so that no surface leakage-current will be shown by the testing light. Surface leakage-current can be caused by metal dust due to the abrasive action of the collector.

## C. Testing Exciter Coil

Hold the two testing prods of the testing light against the lead from the solenoid switch to the exciter coil and on ground. If the testing light lights up, there is a short-circuit to ground in the field coil.

**Note:** Any visible bared windings of the field coil can be insulated with transformer tape and drying lacquer. After insulating, check the field coil once more.

### D. Testing Power Output of Starter

Fix the starter assembly on a suitable test stand. Allow the starter to run and brake it. When this is done, the following test values must be obtained:

**Test Values Starter EED 0.8/12 R 30**

Voltage brake-loaded Volts	Current Amperes	Rotation speed r. p. m.
9.5	160 — 180	1100 — 1250

**Note:** The check must be made with a fully-charged 12 Volt battery with a capacity of 135 Ah.