



BRUSH INSPECTION

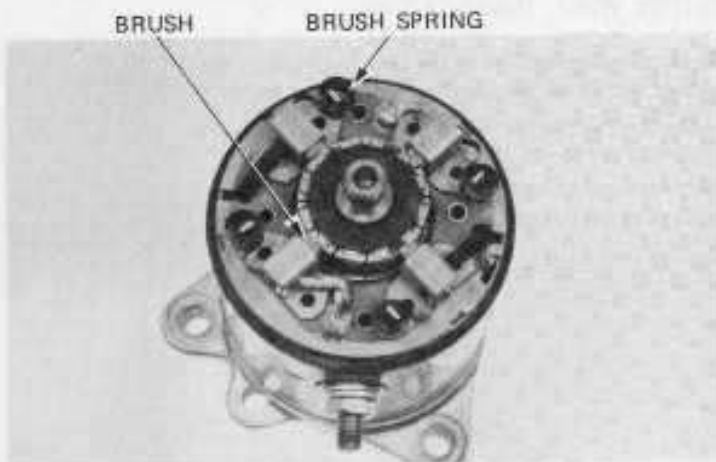
Remove the starter motor case screws and rear cover.

Inspect the brushes and measure the brush length.

SERVICE LIMIT: 4 mm (0.16 in)

Measure brush spring tension with a spring scale.

SERVICE LIMIT: 300 g (10.6 oz)



COMMUTATOR INSPECTION

Remove the armature.

NOTE

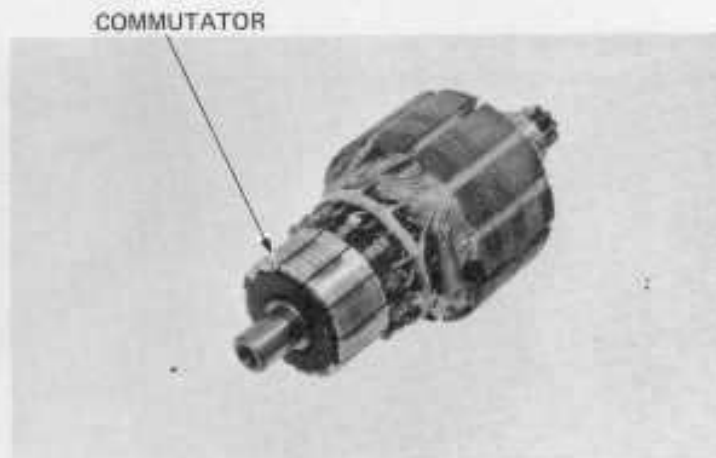
Record the location and number of shims.

Inspect the commutator bars for discoloration.

Bars discolored in pairs indicate grounded armature coils.

NOTE

Do not use emery cloth or sand paper on the commutator.



Check for continuity between pairs of commutator bars, and between commutator bars and armature shaft.

Commutator bar pairs: Continuity

Armature to shaft: No continuity

