

BRUSH INSPECTION

Remove the starter motor case screws.

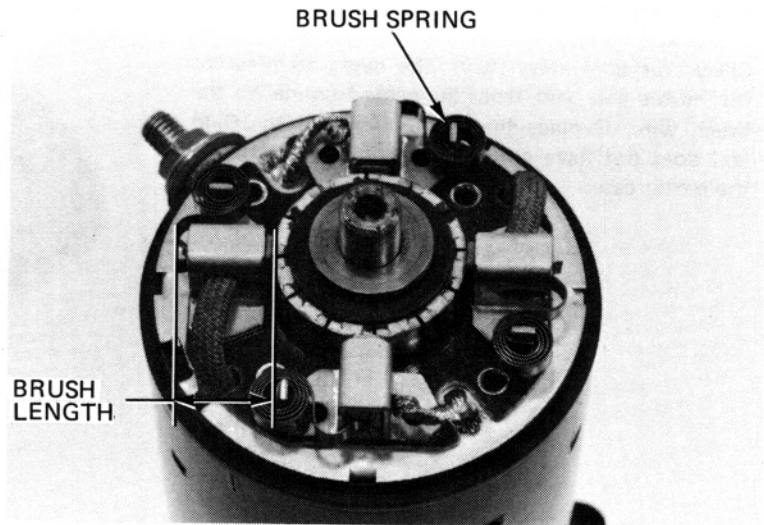
Inspect the brushes and measure the brush length.

Measure brush spring tension with a spring scale.

SERVICE LIMITS:

Brush length: 6.5 mm (0.26 in)

Brush spring tension: 545 g (19.2 oz)



COMMUTATOR INSPECTION

Remove the starter motor case.

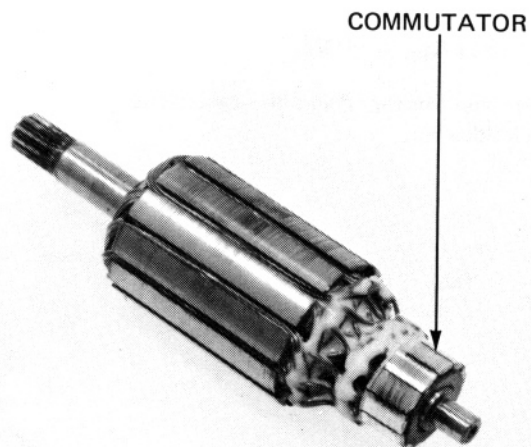
NOTE:

Record the location and number of thrust washers.

Inspect the commutator bars for discoloration. Bars discolored in pairs indicate grounded armature coils.

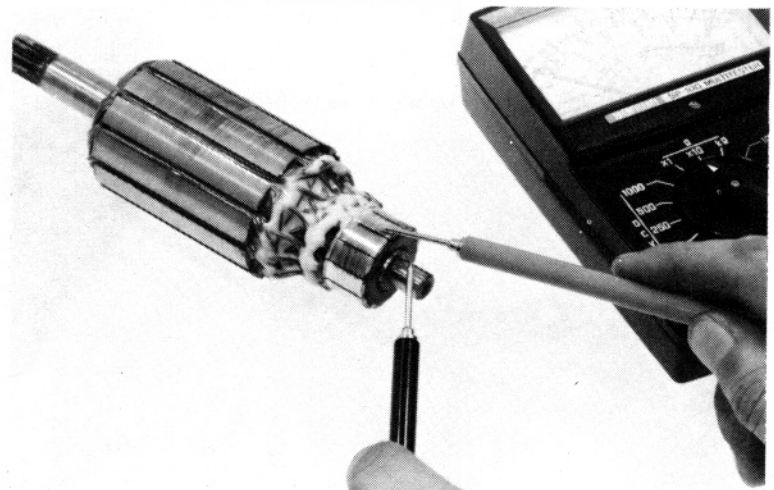
NOTE:

Do not use emery or sand paper on the commutator.



**CONTINUITY BETWEEN
COMMUTATOR BAR PAIRS: NORMAL**

Check for continuity between pairs of commutator bars. Also, make a resistance check between individual commutator bars and the armature shaft. There should be no continuity.



**NO CONTINUITY BETWEEN
COMMUTATOR BARS AND ARMATURE SHAFT: NORMAL**