STARTER MOTOR

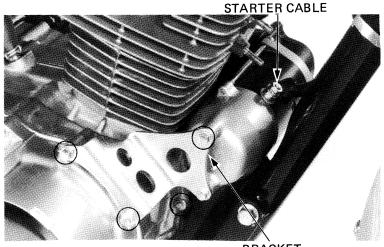
REMOVAL

CAUTION

With the ignition switch OFF, remove the negative cable at the battery before servicing the starter motor.

Remove the exhaust pipe (Page 13–3). Disconnect the starter cable.

Remove the starter motor mounting bolts and bracket and pull the motor out of the engine case.



BRACKET

BRUSH INSPECTION

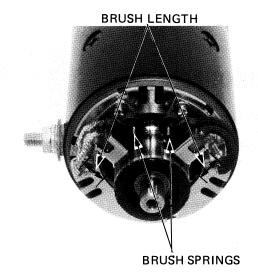
Remove the starter motor case screws and rear cover.

Inspect the brushes and measure the brush length.

Measure brush spring tension with a spring scale.

SERVICE LIMITS:

Brush length: 5.5 mm (0.22 in)
Brush spring tension: 400 g (14.1 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, in which case the starter motor must be replaced.

NOTE

Do not use emery or sand paper on the commutator.

