

# 16. STARTER SYSTEM

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## SERVICE INFORMATION

### GENERAL

- The starter motor can be removed with the engine in the frame.

### SPECIFICATIONS

		STANDARD	SERVICE LIMIT
Starter motor	Brush spring tension	0.560–0.680 kg (1.23–1.50 lb)	400 g (14.1 oz)
	Brush length	12–13 mm (0.47–0.51 in)	5.5 mm (0.22 in)

## TROUBLESHOOTING

### Starter motor will not turn

1. Dead battery.
2. Faulty ignition switch.
3. Faulty starter switch.
4. Faulty neutral switch.
5. Faulty starter relay switch.
6. Loose or disconnected wire or cable.

### Starter motor turns engine slowly

1. Low battery.
2. Excessive resistance in circuit.
3. Binding in starter motor.

### Starter motor turns, but engine does not turn

1. Faulty starter clutch.
2. Faulty starter motor gears.
3. Faulty starter motor or idle gear.

### Starter motor and engine turn, but engine does not start

1. Faulty ignition system.
2. Engine problems.
3. Faulty engine stop switch.