

Job No.
15-4

## Disassembly and Reassembly of Starter

The carbon brush pressure should be **800–900 g** for all starters.

For the starters of Models 180 D, 180 Db, 190 D, and 190 Db the minimum permissible diameter of the commutator is

**39.5 mm**

and for the starters of all other models

**33.5 mm**

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## Electrical Testing of Starter

The testing procedures for the starter on Models 180 to 220 SE are the same as on Model 190.

### Test Values for Starter

Model	Starter Bosch	Voltage	Current under load (braked)	Speed
		Volts	Amp.	r.p.m.
180	EDG 0.6/6 AR 22	4.5	260–280	675–100
180 D, 180 Db	EJD 1.8/12 R 70	9.0	320–340	1100–1350
190 D, 190 Db	EJD 1.8/12 R 88	9.0	320–340	1100–1350
190 SL	EED 0.8/12 R 28 EED 0.8/12 R 31	10.5	160–180	1050–1400
180 a, 180 b, 220 a, 219, 220 S and 220 SE	EED 0.8/12 R 30	10.5	160–180	1050–1400

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## Trouble Shooting Hints for the Starter

The trouble shooting hints for the starter on Models 180 to 220 SE correspond to those described for Model 190.