

## Starter

Job No.
15-0

Both the function and the basic design of the various Bosch starters are the same as those of the type incorporated in Model 190. For the various Bosch starter types installed see Table below.

Type EGD	0.6/6	AR 22	installed in Model 180
Type EJD	1.8/12	R 70	installed in Model 180 D and 180 Db
Type EJD	1.8/12	R 88	installed in Model 190 D and 190 Db
Type EED	0.8/12	R 28	installed in Model 190 SL
Type EED	0.8/12	R 31	
Type EED	0.8/12	R 25	installed in Model 220 a
Type EED	0.8/12	R 30	installed in Models 180 a, 180 b, 219, 220 S, and 220 SE

## Removal and Installation of Starter

Job No.
15-1

### I. Models 180 a, 180 b, 190 D, 190 Db, 220 a, 219, 220 S, 220 SE

On these models the removal and installation procedures for the starter are the same as on Model 190.

### II. Model 180

On Model 180 the removal and installation procedures for the starter are essentially the same as on Model 190; however, the engine must be gently pushed sideways before the starter can be removed upward. The jointing flange between the starter flange and the crankcase is not required on this model.

### III. Models 180 D, 180 Db

The removal and installation procedures are essentially the same as on Model 190, but the following points require attention:

1. Remove the housing vent line to the air filter.
2. Detach the return spring on the venturi control unit linkage and remove together with bracket.

**Note:** Use special wrench Part No. 636 589 00 01 to unscrew the nut on the upper fixing screw of the starter.

When removing the starter, gently push the engine sideways.

There is no jointing flange between the starter flange and the crankcase.

### IV. Model 190 SL

The removal and installation procedures for the starter are essentially the same as for Model 190. Special attention should be given to the following points:

#### a) Cars with Three-Point Engine Suspension

1. Unscrew the three hexagon screws (1) on the pivot bearing (2) for the steering relay arm (3) (Fig. 15-1/1) and push the pivot bearing downward together with the tie-rod.

**Note:** As from Engine End No. 75 00129 the starter EED 0.8/12 R 31 with silentbloc has been installed and the jointing flange (between starter flange and partition plate) is no longer required.

#### b) Cars with Four-Point Engine Suspension

1. Unscrew the hexagon nut (8) from the steering shock absorber on the front axle support (4) (Fig. 15-1/1). Pull the steering shock absorber (6) out of the fixing bolt and push it toward the rear.
2. Unscrew the hexagon screws (1) on the pivot bearing (2) for the steering relay arm on the front axle support (4) and push the

pivot bearing (2) with the tie-rod downward (Fig. 15-1/1).

3. Turn the two hexagon screws and the cable support (3) sideways on the right rear engine mounting (Fig. 15-1/2).
4. When removing the starter gently push the engine sideways.

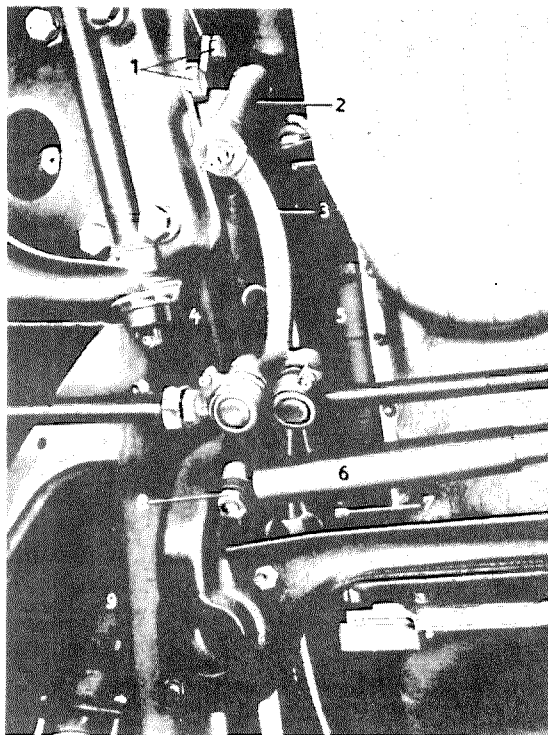


Fig. 15-1/1

- 1 Hexagon screw M 10 × 15
- 2 Pivot bearing (for steering relay arm)
- 3 Steering relay arm
- 4 Front axle support
- 5 Starter
- 6 Steering shock absorber
- 7 Hexagon nut (lower starter mounting)
- 8 Hexagon nut (on fixing bolt)
- 9 Exhaust pipe

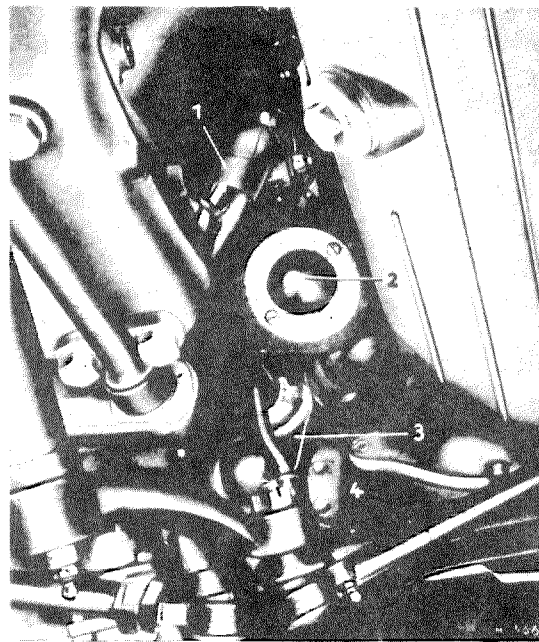


Fig. 15-1/2

- 1 Electrical connections
- 2 Starter (in slide back position)
- 3 Cable support (for starter cable)
- 4 Partition plate (with fixing hole for right rear engine mounting)