

# Removal and Installation of Control Cable from Heater Plug Starting Switch to Injection Pump

Job No.

30-11

## I. Models 180 D and 180 Db

### Removal:

1. Remove the front plate for the glow plug starting switch, the ashtray, and the guides of the ashtray.
2. Pull the cotter pin out of the control cable lever of the glow plug starting switch and remove the washer.
3. Unscrew the hexagon nut fastening the fixing clip of the wire coil to the bracket of the starter switch and remove the cable from the glow plug starting switch.
4. Press the fixing clips for the control cable out of the front panel cover.
5. Pull the cotter pin out of the lever on the injection pump, remove the washer and the control cable.
6. Unscrew the hexagon nut fastening the fixing clip of the wire coil to the stop bracket of the injection pump.
7. Pull the control cable out of the cowl toward the front.

### Installation:

8. Push the control cable through the cowl from the front and attach the eye of the

control cable to the lever of the glow plug starting switch, install the washer and lock it by means of a cotter pin.

9. Screw the fixing clip together with the wire coil to the bracket.
10. Install the front plate of the glow plug starting switch, the guides of the ashtray and the ashtray itself. Put the control lever in a horizontal position.
11. Attach the wire coil to the front panel cover by means of the clips.
12. Attach the slotted eye of the control cable to the lever of the injection pump.
13. Screw the wire coil with the fixing clip to the stop bracket in such a way that when the control lever is in the horizontal position there is a clearance of 0.5–1.0 mm between the bolt of the lever on the injection pump and the front part of the slotted eye.

**Note:** This clearance must be adjusted accurately in order to ensure that, when the engine is switched off, the control lever on the injection pump can be pulled far enough in the direction "stop" and, when the engine is started, it can be pulled far enough in the direction "voll" (full on).

14. Install the rubber grommet in the cowl.

## II. Models 190 D and 190 Db

### a) Removal and Installation:

#### Removal:

1. Detach the glow plug starting switch from the cowl and pull it slightly toward the

front. Remove the cotter pin from the collar bolt and remove the collar bolt.

2. Unscrew the wire coil from the bracket of the glow plug starting switch.

3. Pull the cotter pin out of the lever of the injection pump and remove the dished washer and the control cable.
4. Unscrew the fixing clip on the stop bracket and remove the wire coil.
5. Pull the control cable through the cowl toward the front.
9. Attach the eye of the control cable to the lever on the injection pump, install the dished washer and secure by means of a cotter pin.

**Note:** The rubber strap of the end piece should have some lateral play between the lever on the injection pump and the dished washer in order to prevent jamming of the control cable.

**Installation:**

6. Check the elastic-metal buffers between the injection pump and the stop bracket to find out if they are still serviceable.
7. Push the control cable together with the wire coil through the cowl and attach the wire coil to the bracket and the control cable to the glow plug starting switch.
8. Install the glow plug starting switch and put it in the position „Fahrt“ (driving position).
10. Use the fixing clip to attach the wire coil to the stop bracket of the injection pump in such a way that there is a clearance of 1.0–1.5 mm between the bolt of the injection pump lever and the top stop of the slotted hole.

**Note:** This clearance must be adjusted accurately in order to ensure that when the engine is switched off the control lever can be pulled far enough in the direction “stop” and when the engine is started it can be pulled far enough in the direction “voll” (full on).

**b) Subsequent Installation of Rubber-Mounted Control Cable for Glow Plug Starting Switch**

1. Replace the control cable (2) for the glow plug starting switch.
2. Replace the stop bracket on the injection pump by the stop bracket (1) with three elastic-metal buffers (4). Correct positioning of the stop bracket can be ensured if necessary by installing a washer between the spotfaced holes in the injection pump housing and the stop bracket.
3. Install a longer bolt (6) to take the rubber-insulated end piece (7) of the control cable; this bolt is located on the start and stop lever (8) of the injection pump. To do this remove the lever and remove the riveted bolt. Install the new screw bolt together with a nut and lock washer. When installing the lever make sure that there is a sufficient distance between the injection pump housing and the fixing nut of the bolt.
4. Attach the control cable, using fixing clip, screw and nut of the old stop bracket.

Attach the cable to the clip so as to leave a clearance of 1.0–1.5 mm between the bolt of the adjusting lever and the top stop of the end piece of the control cable. Install a dished washer (5) Part No. 621 990 00 40 between the rubber strap (7) of the end piece of the control cable and the cotter pin.

**Note:** Do not install a spring washer since such a washer would increase the tension so much that the cable might jam on the lever. The rubber strap (7) of the end piece should in fact have some lateral play between the lever (8) and the dished washer (5) in order to prevent jamming in any case (Fig. 30-11/1).

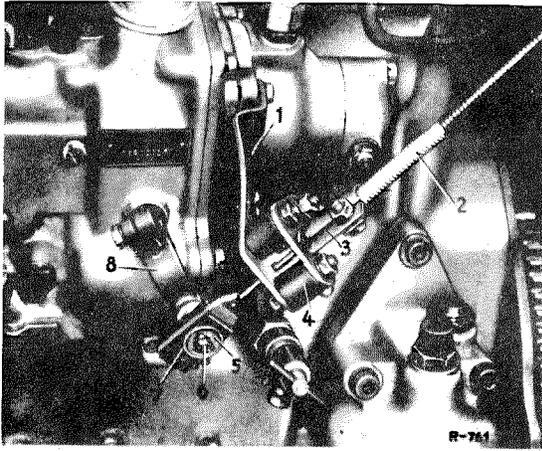


Fig. 30-11/1

- 1 Stop bracket
- 2 Control cable
- 3 Fixing angle
- 4 Elastic-metal buffer
- 5 Washer
- 6 Bolt

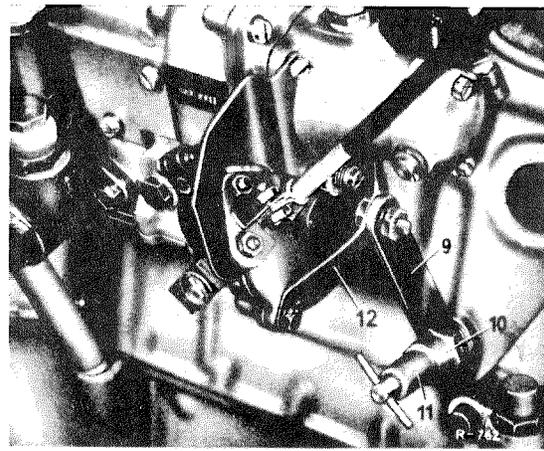


Fig. 30-11/2

- 7 Rubber strap
- 8 Start and stop lever
- 9 Support
- 10 Threaded union
- 11 Drain valve
- 12 Bell-shaped support