

# Adjustment of Accelerator Pedal

Job No.

30-3

## A. Position of Accelerator Pedal

Check the distance of the accelerator pedal from the rubber floor mat in the idle and in the full load position.

Correct distance in the idle position is necessary for correct foot position.

A minimum distance in the full load position is necessary since otherwise there is a danger that the accelerator pedal may rest against the rubber floor mat too early with the result that the throttle valve cannot be fully opened.

The check must be made with the help of a second mechanic.

Models	180 180 D 180 Db	180 a 180 b	190 D 190 Db	190 SL	220 a 219	220 S	220 SE
Distance between rubber floor mat and accelerator pedal in the idle position in mm	70	85	75	70	75	85	85
Minimum distance between rubber floor mat and accelerator pedal in full load position in mm	15	8	15	15	15	8	10

## B. Adjustment of Push and Pull Rod Length

The measurements given in the tables below always refer to the distance between center ball-cup connector and center ball-cup, or center ball-cup connector and center eye.

### I. Model 180

Push rod from control shaft lever to angle lever	398 mm
Pull rod from angle lever to throttle valve lever (carburetor)	270 mm

### II. Models 180 D and Db

Push rod (5) from control shaft lever (4) to angle lever (7)	398 mm
Pull rod (9) from angle lever (7) to relay lever (11) (cylinder head cover)	192 mm
Pull rod (12) from relay lever (11) to throttle valve lever (13) (venturi control unit)	198 mm

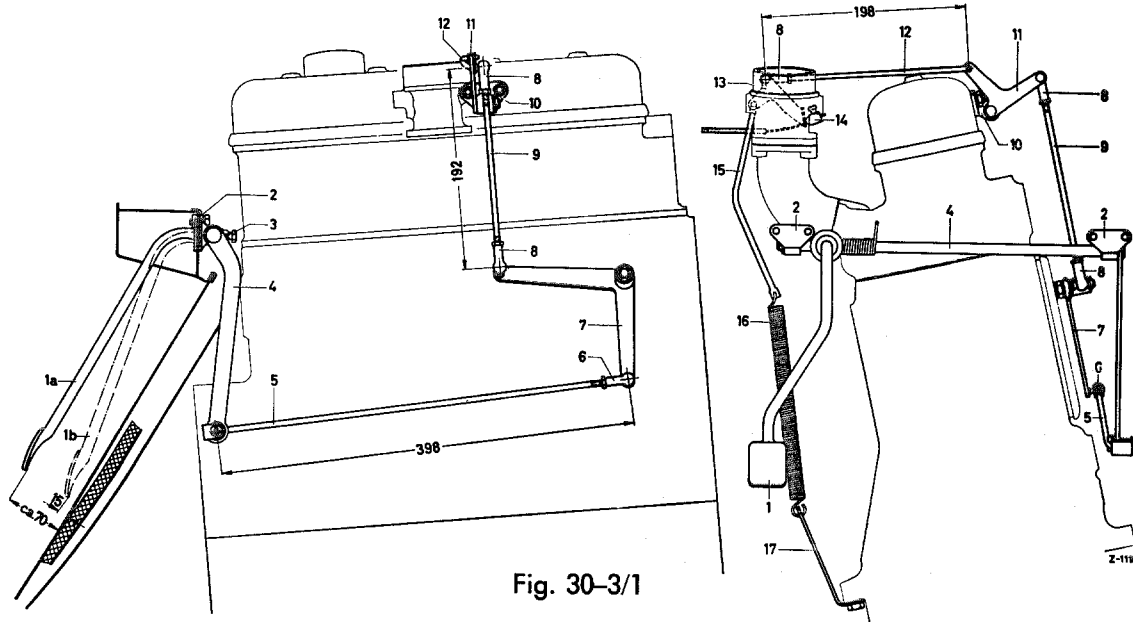


Fig. 30-3/1

- |   |                        |                              |
|---|------------------------|------------------------------|
| 1a Accelerator pedal in idle position       | 6 Ball-cup connector   | 12 Pull rod                  |
| 1b Accelerator pedal in full load position  | 7 Angle lever          | 13 Throttle valve lever      |
| 2 Control shaft bearing                     | 8 Ball-cup connector   | 14 Adjusting ring            |
| 3 Fixing bolt for accelerator pedal bearing | 9 Pull rod             | 15 Connecting rod            |
| 4 Control shaft                             | 10 Relay lever bearing | 16 Return spring             |
| 5 Push rod                                  | 11 Relay lever         | 17 Bracket for return spring |

### III. Models 180 a and 180 b

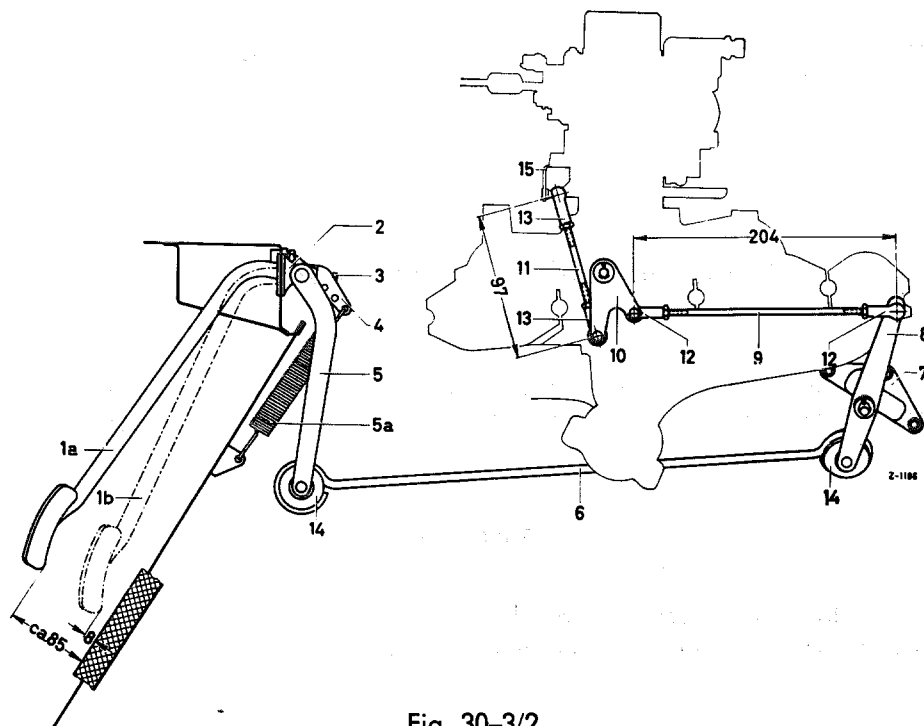


Fig. 30-3/2

- |  |                        |   |
|--|------------------------|---|
| 1a Accelerator pedal in idle position      | 6 Push rod             | 12 Ball-cup connectors on push rod for double lever and relay lever         |
| 1b Accelerator pedal in full load position | 7 Double lever bearing | 13 Ball-cup connectors on pull rod for relay lever and throttle valve lever |
| 2 Control shaft bearing                    | 8 Double lever         | 14 Damper ring  |
| 3 Fixing bolt for accelerator pedal        | 9 Push rod             | 15 Throttle valve lever   |
| 4 Return spring lever                      | 10 Relay lever         |   |
| 5 Control shaft                            | 11 Pull rod            |   |
| 5a Return spring                           |                        |   |

Push rod (6) from control shaft lever to double lever (8)	413 mm
Push rod (9) from double lever (8) to relay lever (10)	204 mm
Pull rod (11) from relay lever (10) to throttle valve lever (15)	97 mm

#### IV. Models 190 D and 190 Db

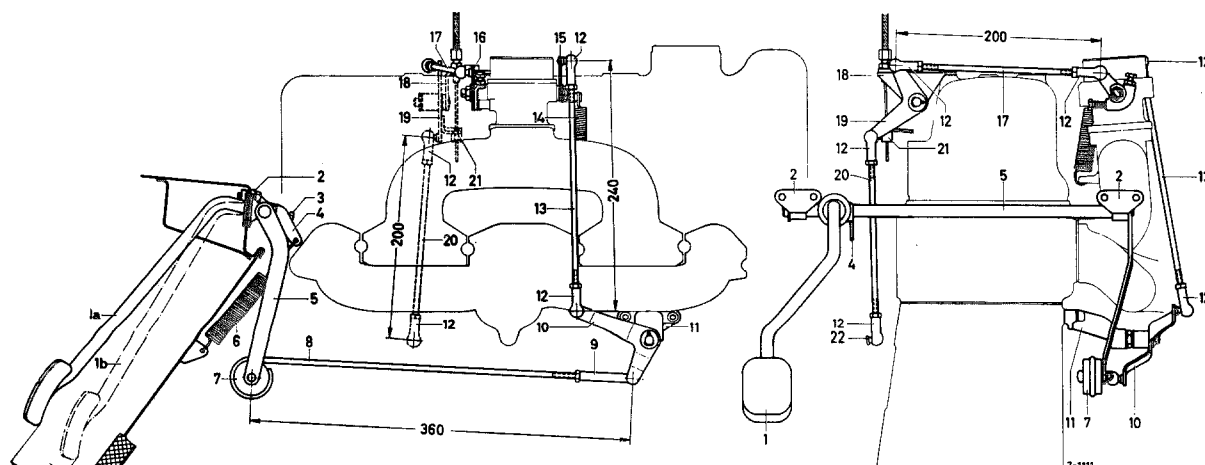


Fig. 30-3/3

- |  |                                    |                                    |
|--|------------------------------------|------------------------------------|
| 1a Accelerator pedal in idle position      | 8 Push rod                         | 16 Throttle valve lever            |
| 1b Accelerator pedal in full load position | 9 Ball-cup connector               | 17 Pull rod                        |
| 2 Control shaft bearing                    | 10 Angle lever                     | 18 Bearing bracket                 |
| 3 Fixing bolt for return spring            | 11 Bearing bracket for angle lever | 19 Angle lever                     |
| 4 Bracket for return spring                | 12 Ball-cup connector              | 20 Pull rod                        |
| 5 Control shaft                            | 13 Pull rod                        | 21 Adjusting ring                  |
| 6 Return spring                            | 14 Return spring                   | 22 Lever for additional adjustment |
| 7 Damper ring                              | 15 Throttle valve lever            |                                    |

Push rod (8) from control shaft lever (5) to angle lever (10)	360 mm
Pull rod (13) from angle lever (10) to throttle valve lever (15) (throttle valve control)	240 mm
Pull rod (17) from throttle valve lever (16) to angle lever (19) (cylinder head cover)	200 mm

Adjustment of pull rod length (20) from angle lever (19) to lever (22) of the mechanical additional adjustment:

1. With the engine at normal working temperature adjust the idle by means of the idle adjustment screw on the throttle valve control to an idle speed of 700 to 800 r.p.m.

**Note:** When the idle is being adjusted, the idle adjustment control knob on the instrument panel must be turned fully to the right so that the wire cable is almost slack in this position; if necessary loosen the clamping screw in the adjusting ring (21) and retighten it.

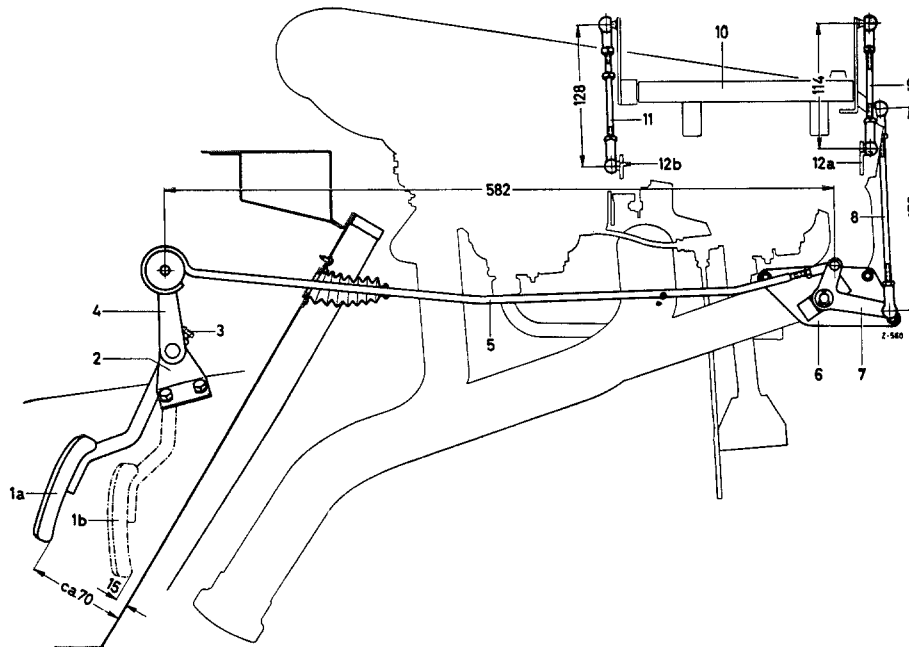
2. Now adjust to its correct length the pull rod (20) from the angle lever (19) on the cylinder head cover to the lever (22) for the

mechanical additional adjustment on the injection pump as follows:

Detach the pull rod (20) from the angle lever (19) and push it downward as far as the idle stop.

In this position, when the throttle valve is in its idle position and the lever on the injection pump control rests against the idle stop, the distance between the ball-cup connector and the ball head should be approx. 1 mm, that is it must be possible to lift the pull rod (20) by about 1 mm in order to attach the ball head of the angle lever.

### V. Model 190 SL



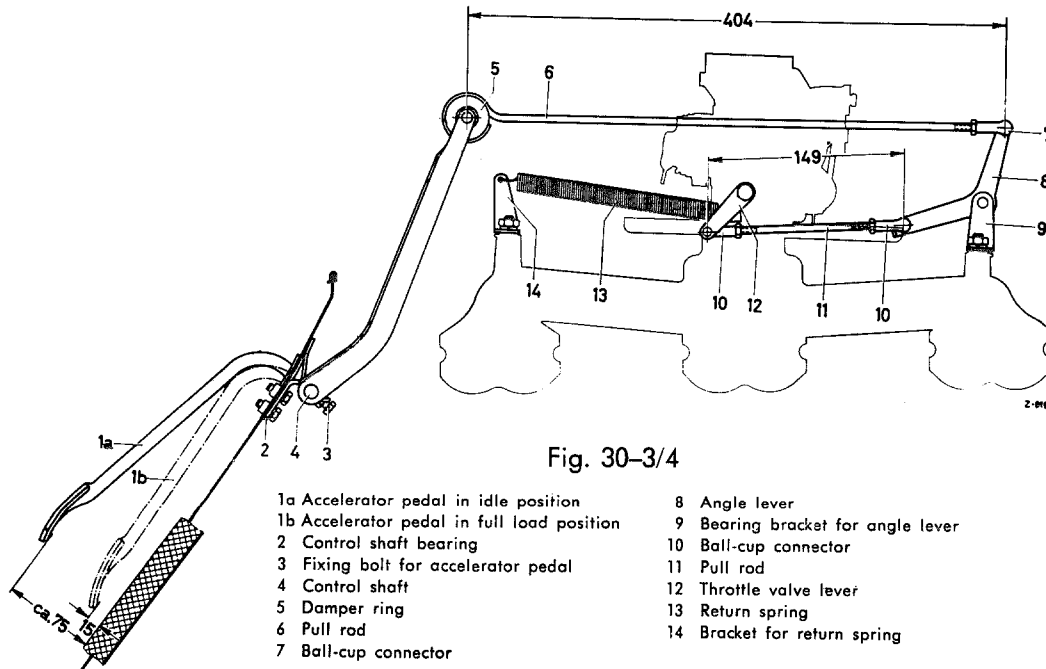
**Fig. 30-3/4**

- |  |  |
|--|--|
| 1a Accelerator pedal in idle position      | 7 Angle lever                              |
| 1b Accelerator pedal in full load position | 8 Push rod                                 |
| 2 Control shaft bearing                    | 9 Push rod                                 |
| 3 Fixing bolt for control shaft lever      | 10 Control shaft bearing at the carburetor |
| 4 Control shaft lever                      | 11 Push rod                                |
| 5 Pull rod                                 | 12a Throttle valve lever for carburetor I  |
| 6 Angle lever bearing                      | 12b Throttle valve lever for carburetor II |

Pull rod (5) from control shaft lever (4) to angle lever (7)	582 mm
Push rod (8) from angle lever to control shaft lever	176 mm
Push rod (9) from control shaft lever to throttle valve lever (12 a) for carburetor I	114 mm
Push rod (11) from control shaft lever to throttle valve lever (12 b) for carburetor II	128 mm

**Note:** The push rod (11) is provided with a right hand and a left hand thread and has a hexagon collar in the center so that the two carburetors can be adjusted to one another without the push rod having to be removed.

## VI. Models 220 a and 219



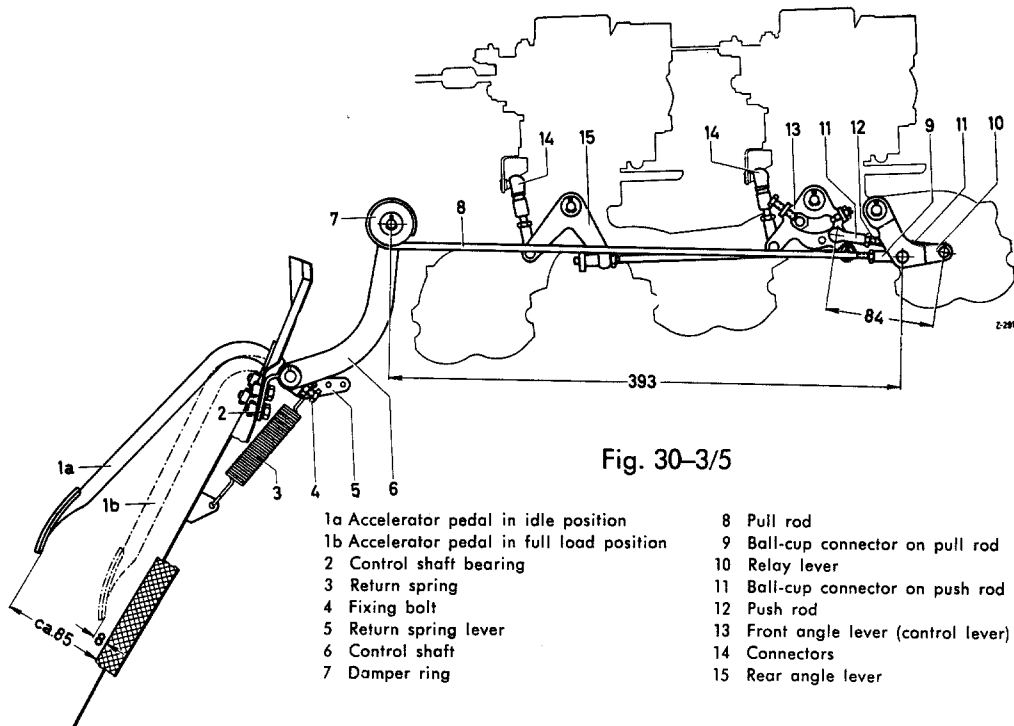
Pull rod (6) from control shaft lever (4) to angle lever (8)

404 mm

Pull rod (11) from angle lever (8) to throttle valve lever (12)

149 mm

## VII. Model 220 S



Pull rod (8) from control shaft lever (6) to relay lever (10)  
Push rod (12) from relay lever to front angle lever (13)

393 mm  
84 mm

#### **VIII. Model 220 SE**

Push rod from control shaft lever to adjustment lever of the injection pump 382 mm  
For the adjustment of the push and pull rods from the adjustment lever to the relay lever and the venturi control unit see Job No. 01-3, Section O.

**Note:** After adjusting the push and pull rods recheck on all models the distance between the accelerator pedal and the rubber floor mat. If the distance is excessive, check whether the accelerator pedal is bent. If that is the case, correct the distance by straightening the accelerator pedal.