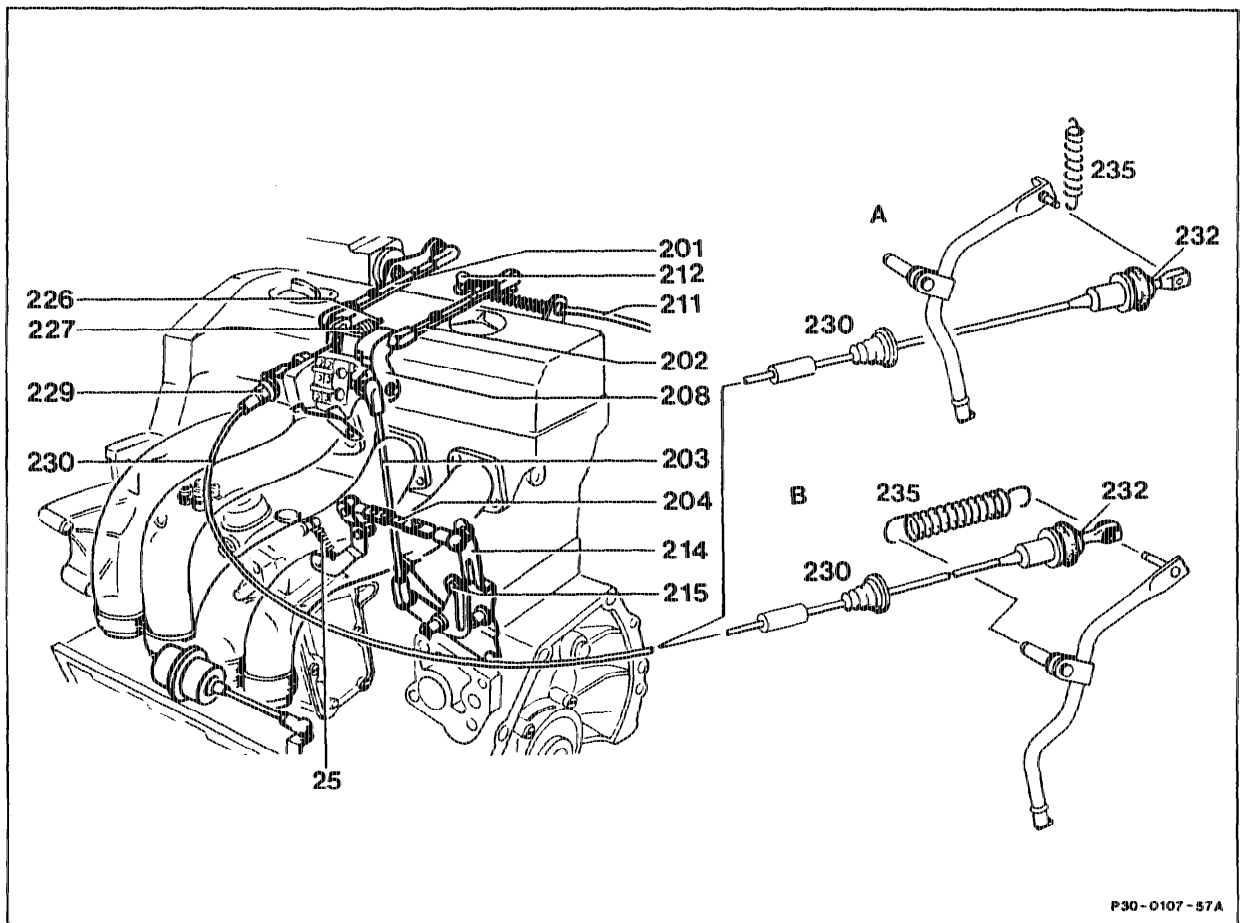


30-1010 Adjusting Accelerator Control Linkage

Preceding work:

Operation no. of operation texts and work units or standard texts and flat rates: 30-1010

A. Engine 602.96 In Models 124, 201



P30-0107-57A

- A Model 201
- B Model 124

| | |
|-----------------------------------|---|
| Accelerator control linkage | examine for bending and ease of movement. |
| Idle stop | check, adjust. The spring plate (226) of the Bowden cable (230) must rest against the compression spring (227) free of tension in the idle position; adjust Bowden cable, if necessary, with the adjusting nut (232) from the interior of the car. |
| Return springs (25 and 235) | check. |

| | |
|---------------------------------------|---|
| Relay lever (214) | move into idle position; this must cause the roller (215) to move against the end stop in the variable-fulcrum lever free of tension. Adjust connecting rod (204), if necessary. Length 219 ± 1 mm. |
| Accelerator control lever (208) | pull to full load; this must cause the injection pump control lever to move against the full load stop and the roller (215) to rest approx. 1 mm before the end stop in the gate. Adjust at adjustable ball head (206) in elongated hole if necessary (Number 5). |
| Cruise control (Tempomat) | adjust: slacken connecting rod (201) at the hexagon bolt "a", move lever of actuator into idle position. |
| Connecting rod (201) | adjust so that it is 0.5–1.0 mm longer than the actual max. distance. Tighten bolt "a". |
| Control push cable (211) | adjust. Detach ball socket (212). Pull control push cable (211) forward until a slight resistance is felt. In this position, attach ball socket free of tension; adjust at the bolt "b" of the connecting rod (202), if necessary. |
| Full throttle stop | check, adjust. With engine switched off, depress accelerator pedal fully to the kickdown switch from the car interior. This must cause the control lever of the injection pump to move against the full load stop; adjust at adjusting screw (229), if necessary. The spring plate (226) must be resting against the compression spring (227) free of tension in idle position. Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from interior of car. |
| Connecting rod (203) | cannot be adjusted. |

Note

Use anti-corrosion grease
Part No. 000 989 87 51 10 when performing
assembly work on the accelerator control.

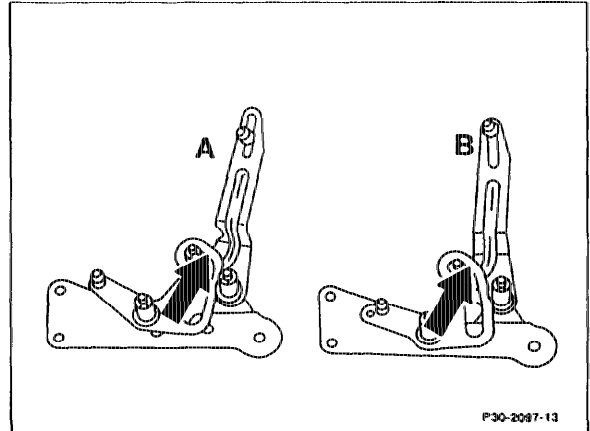
Lengths of connecting rods in mm

| | | |
|--|---------|--------------|
| Item 201 Cruise control connecting rod | 255 ± 1 | |
| Item 202 Idle travel rod of automatic transmission | 197 ± 1 | (pulled out) |
| Item 204 Injection pump connecting rod | 219 ± 1 | |

Note

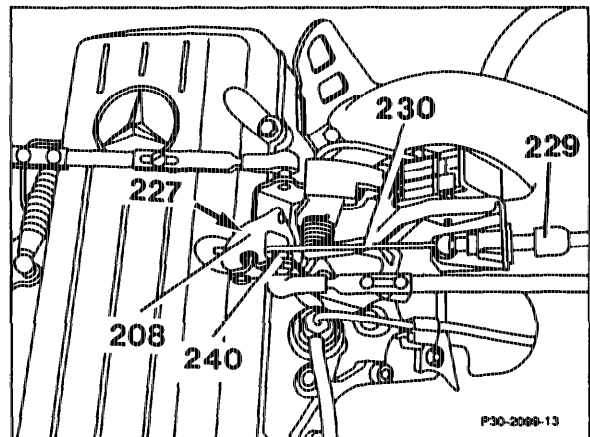
As a result of a modified transmission control, the idle travel at the accelerator pedal is no longer required.

Variable-fulcrum lever "A" with idle travel
Variable-fulcrum lever "B" without idle travel

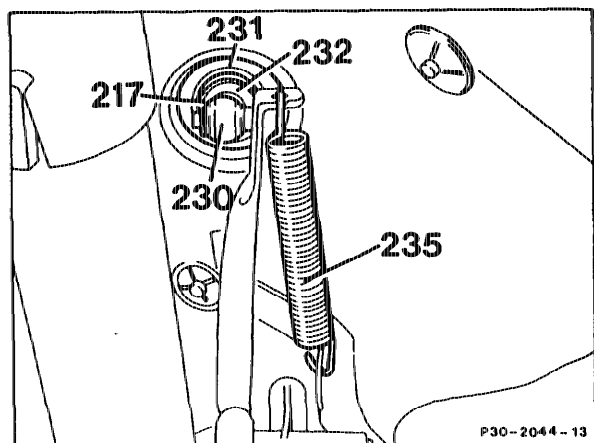


1 Examine accelerator control linkage for bending and ease of movement.

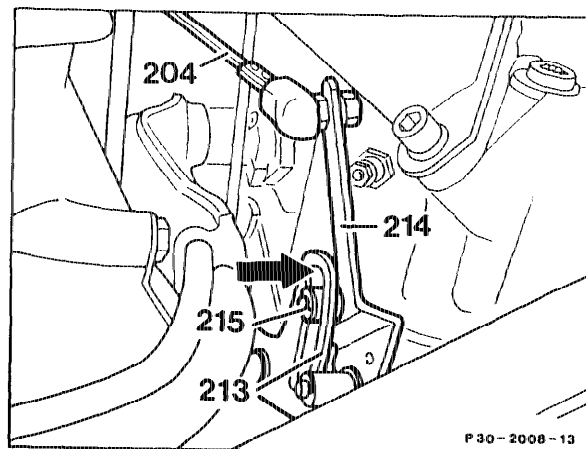
2 Check idle stop, adjust. The spring plate of the Bowden cable (230) must be resting free of tension against the compression spring (227).



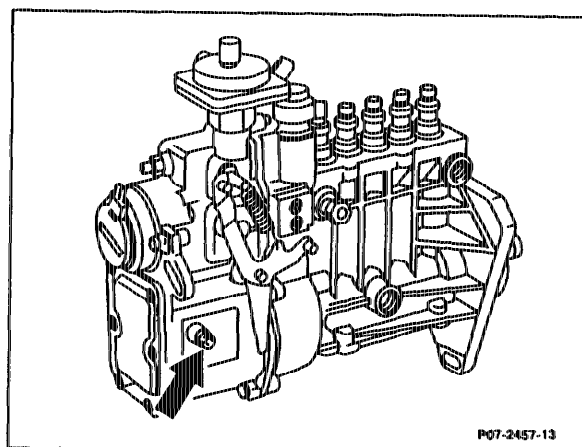
Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from the interior of the car.



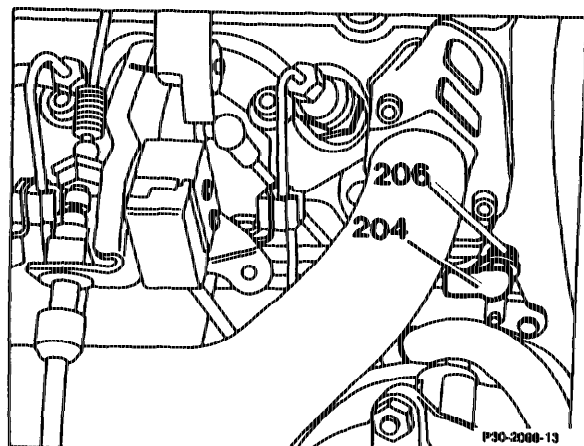
3 Move relay lever (214) into idle position; this must cause the roller (215) to move free of tension against the end stop in the variable-fulcrum lever (arrow). Adjust connecting rod (204), if necessary.



4 Pull accelerator control lever (208) to full load; this must cause the injection pump control lever to move against full load stop (arrow) and the roller (215) to rest approx. 1 mm before the end stop in the gate.

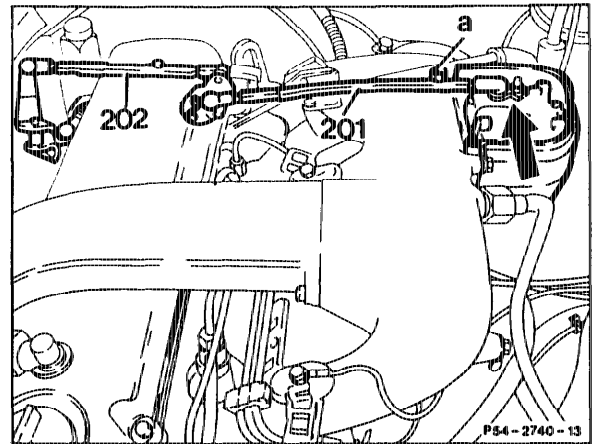


5 Adjust, if necessary, at adjustable ball head (206) in the elongated hole of the relay lever.

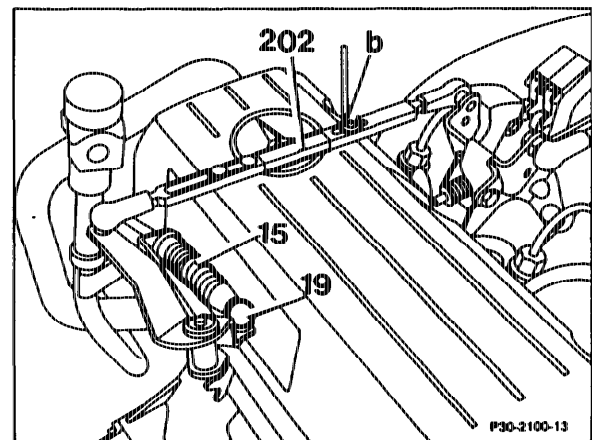


6 Set cruise control. Slacken hexagon bolt (a) on the connecting rod (201).

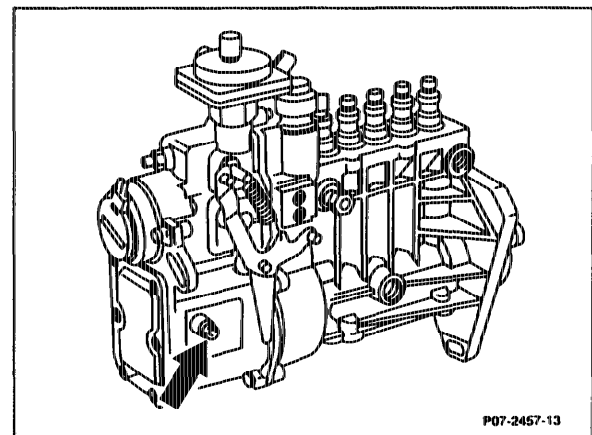
- Move lever of actuator (arrow) into idle position.
- Adjust connecting rod (201) so that it is 0.5 mm longer than the actual max. distance.
- Tighten connecting rod (201) in this position.



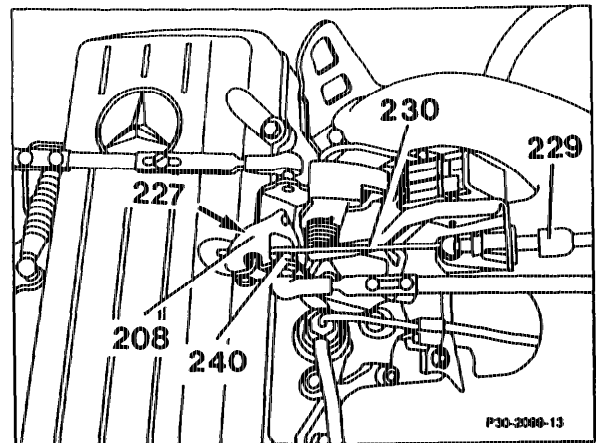
7 Adjust control push cable. Press off ball socket (212) for this step. Pull control cable (211) forward until a resistance is felt. In this position, attach ball socket free of tension. Adjust at the hexagon bolt (b), if necessary (measure connecting rod (202) pulled out).



8 Check full throttle stop, adjust. With the engine switched off, depress accelerator pedal fully to the stop on the kickdown switch from the interior of the car. This must cause the control lever to move against the full load stop (arrow) of the injection pump.

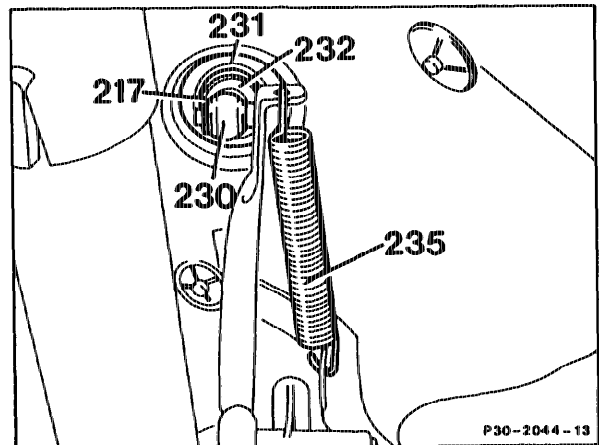


Adjust Bowden cable at adjusting screw (229), if necessary.

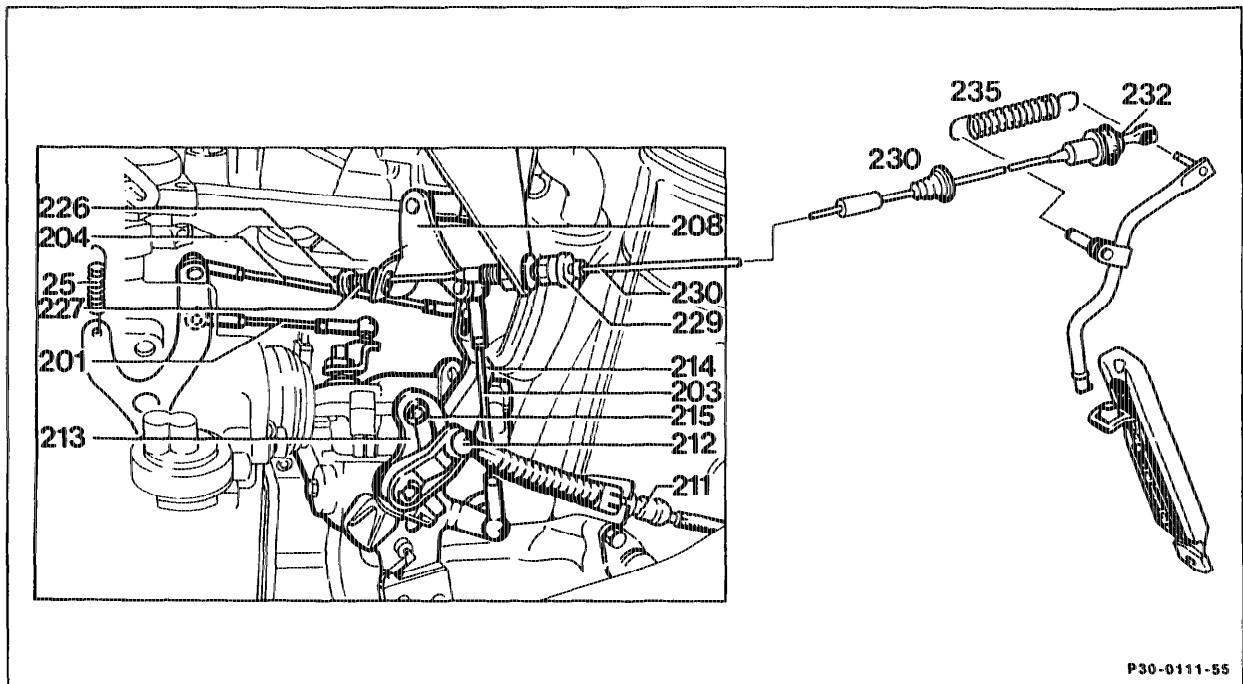


Note

The spring plate of the Bowden cable (230) must be resting free of tension against the compression spring (227) in the idle position. Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from the interior of the car.



B. Engine 603.96 in Model 124



P30-0111-55

| | |
|---------------------------------------|--|
| Accelerator control linkage | examine for bending and ease of movement. |
| Idle stop | check, adjust. The spring plate (226) of the Bowden cable (230) must be resting against the compression spring (227) free of tension in the idle position; adjust Bowden cable, if necessary, with the adjusting nut (232) from interior of car. |
| Return springs (25 and 235) | check. |
| Relay lever (214) | move into idle position; this must cause the roller (215) to move against the end stop in the variable-fulcrum lever free of tension. Adjust connecting rod (204), if necessary. |
| Accelerator control lever (208) | pull to full load; this must cause the injection pump control lever to move against the full load stop and the roller (215) to rest approx. 1 mm before the end stop in the gate. If not, slide adjustable ball head (206) in elongated hole (Number 3). |
| Cruise control (Tempomat) | adjust: detach connecting rod (201) at actuator, move lever of actuator into idle position. |

| | |
|----------------------------------|--|
| Connecting rod (201) | adjust so that it is 0.5–1.0 mm shorter than the actual max. distance. Attach connecting rod. |
| Control thrust cable (211) | adjust. Detach ball socket (212). Push control thrust cable (211) forward until a slight resistance is felt. In this position, attach ball socket free of tension; adjust at Bowden cable, if necessary. |
| Full throttle stop | check, adjust. With engine switched off, depress accelerator pedal fully to the kickdown switch from the passenger compartment. This must cause the control lever of the injection pump to move against the full load stop; adjust at adjusting screw (229), if necessary. The spring plate (226) must be resting against the compression spring (227) free of tension in idle position. Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from interior of car. |
| Connecting rod (203) | cannot be adjusted. |

Note

Use anti-corrosion grease

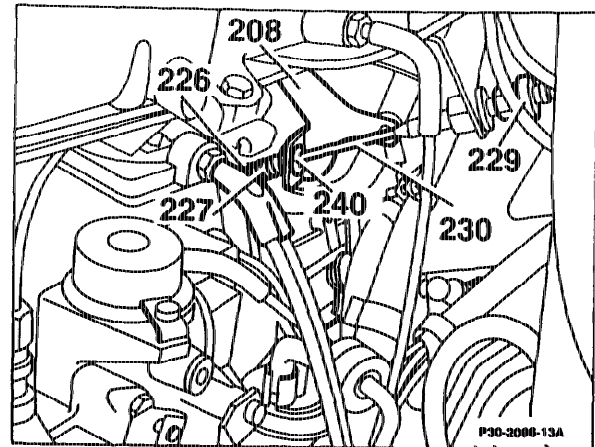
Part No. 000 989 87 51 10 when performing assembly work on the accelerator control.

Lengths of connecting rods in mm

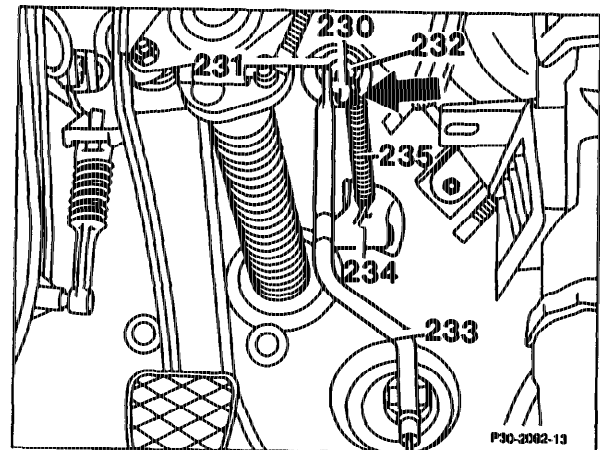
| | |
|---|---------|
| Item 201 Cruise control connecting rod | 101 ± 1 |
| Item 203 Accelerator control lever connecting rod | 120 ± 1 |
| Item 204 Injection pump connecting rod | 154 ± 1 |

1 Examine accelerator control linkage for bending and ease of movement.

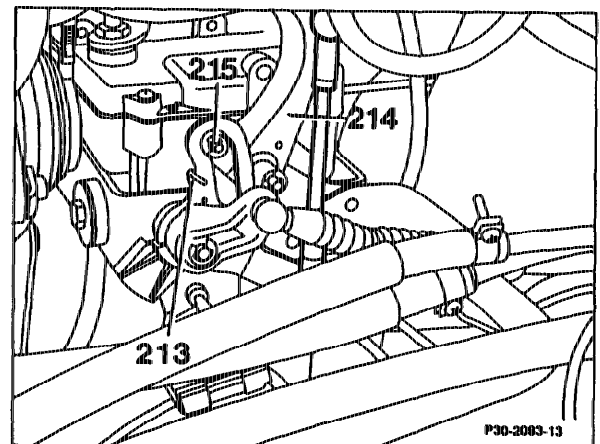
2 Check idle stop, adjust. The spring plate (226) of the Bowden cable (230) must be resting free of tension against the compression spring (227).



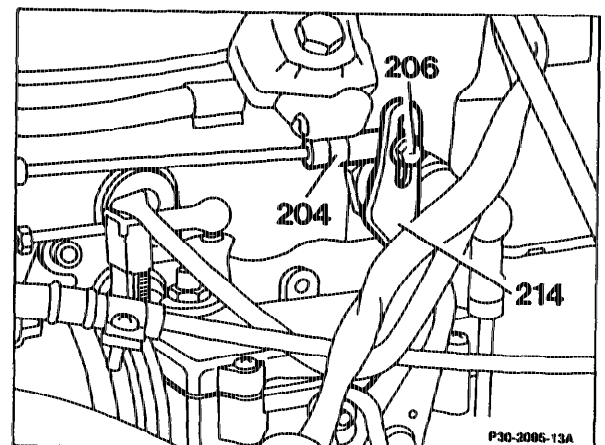
Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from the interior of the car.



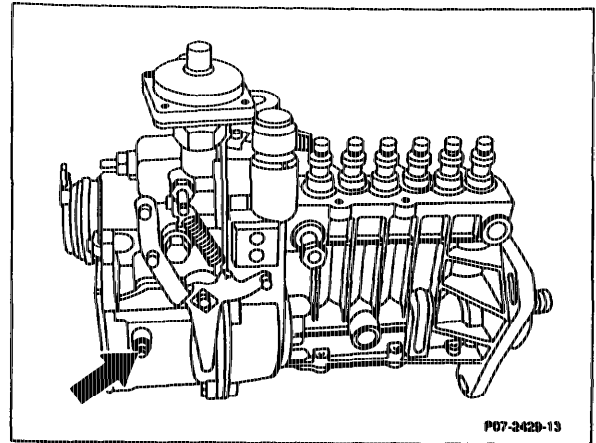
3 Move relay lever (214) into idle position; this must cause the roller (215) to move free of tension against the end stop in the variable-fulcrum lever.



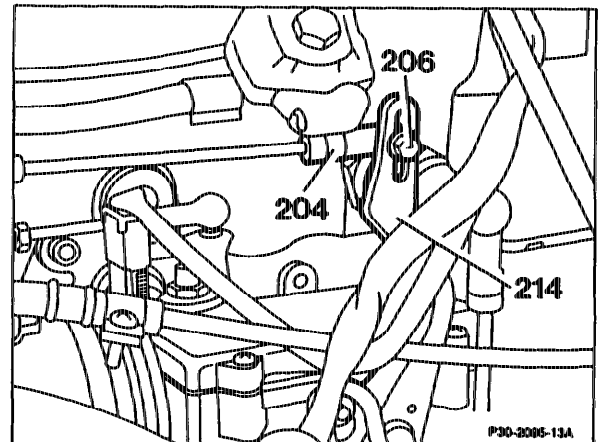
Adjust connecting rod (204), at the adjustable ball head (206), if necessary.



4 Pull accelerator control lever (208) to full load; this must cause the roller (215) to be positioned approx. 1 mm before the end stop in the gate and the injection pump control lever to move against the full load stop (arrow).

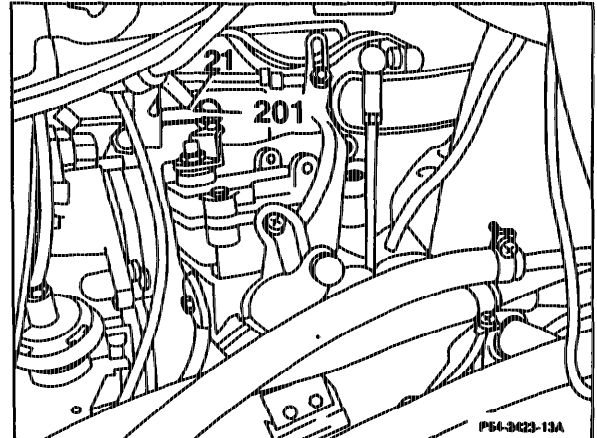


Slide the adjustable ball head (206) in the elongated hole of the relay lever (214), if necessary.

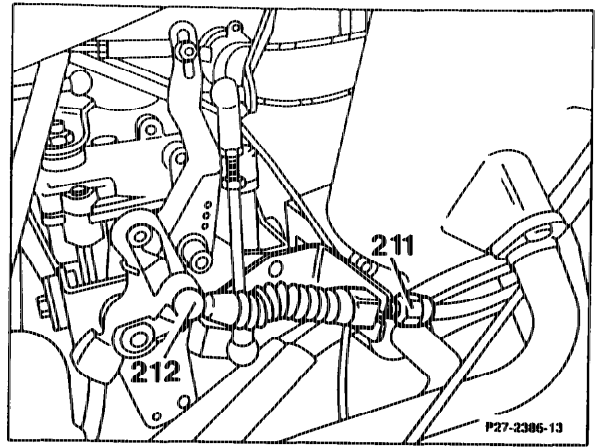


5 Set cruise control. Detach connecting rod (201) at the actuator.

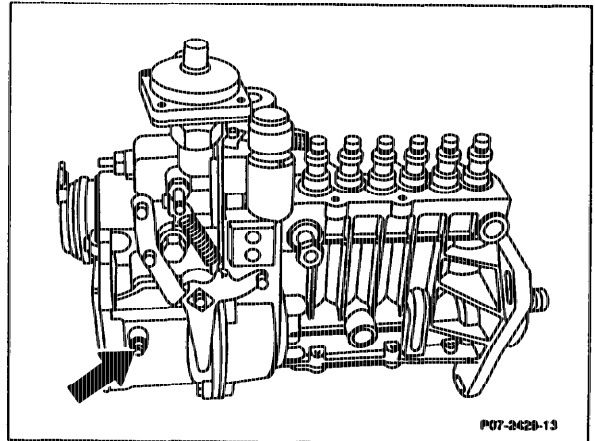
- Move lever of actuator into idle position.
- Adjust connecting rod (201) so that it is 0.5 mm shorter or set one turn shorter.
- Attach connecting rod.



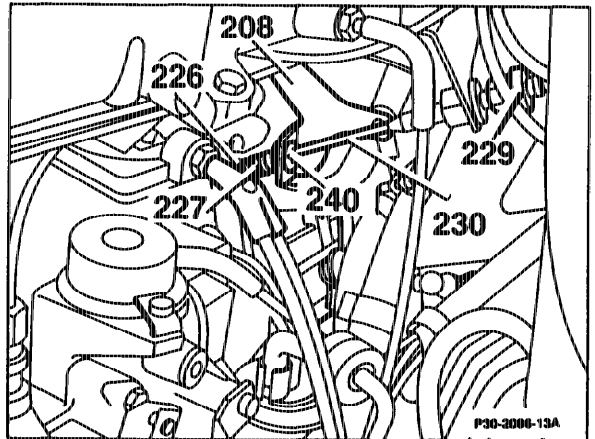
6 Adjust control thrust cable. Press off ball socket (212) for this step. Pull control cable forward until a slight resistance is felt. In this position, attach ball socket free of tension. Adjust Bowden cable (211), if necessary.



7 Check full throttle stop, adjust. With the engine switched off, depress accelerator pedal fully to the stop on the kickdown switch from the interior of the car. This must cause the control lever (arrow) to move against the full load stop of the injection pump.

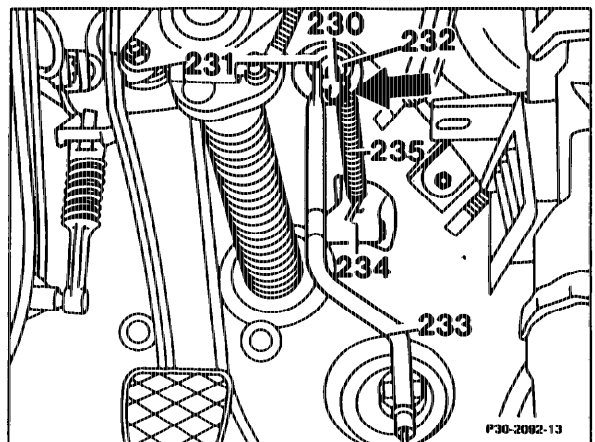


Adjust at the adjusting screw (229), if necessary.

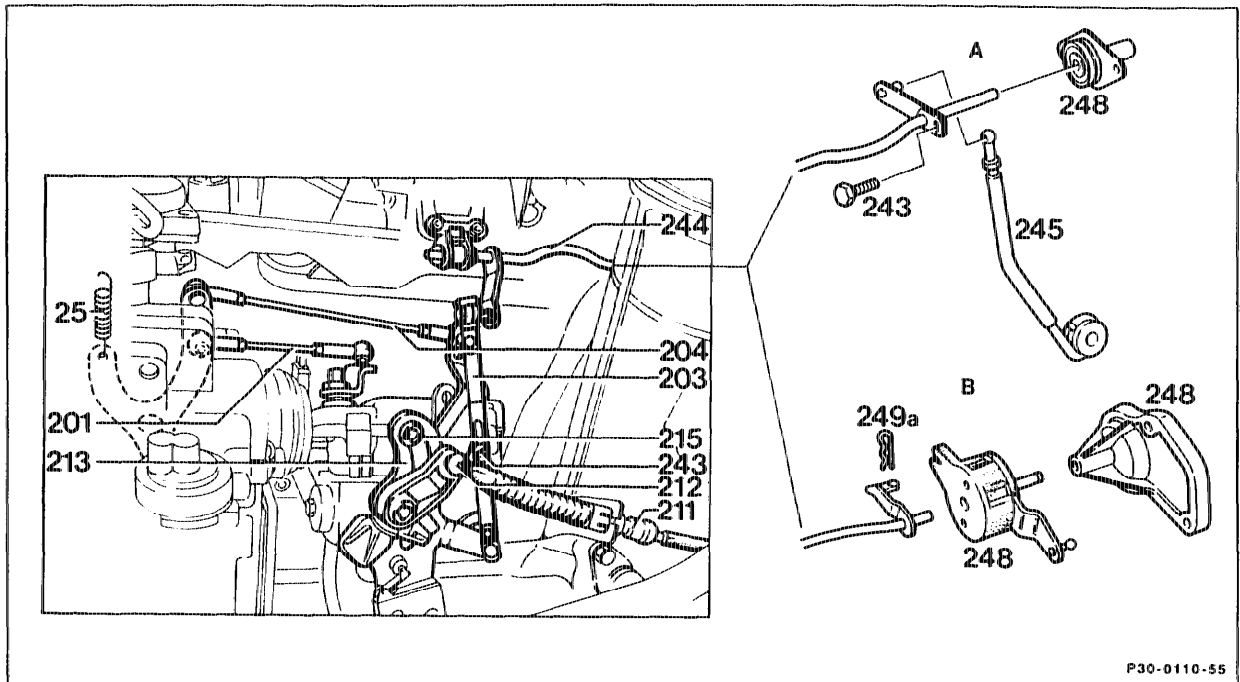


Note

The spring plate (226) of the Bowden cable must be resting free of tension against the compression spring (227) in the idle position. Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from the interior of the car.



C. Engines 603.96/97 in Model 126



P30-0110-55

- A 1st version full throttle adjusting screw on accelerator control shaft
- B 2nd version full throttle adjusting screw on connecting rod (203)

| | |
|-----------------------------------|--|
| Accelerator control linkage | examine for bending and ease of movement. |
| Connecting rod (203) | detach. |
| Relay lever (214) | move into idle position; this must cause the roller (215) to move against the end stop in the variable-fulcrum lever free of tension. Adjust connecting rod (204), if necessary (Number 3). |
| Relay lever (214) | push to full throttle; this must cause the roller (215) to be positioned approx. 1 mm before the end stop in the gate and the injection pump control lever to move against the full load stop, if not slide the adjustable ball head (206) in the elongated hole (Number 4). |
| Cruise control (Tempomat) | adjust: detach connecting rod (201) at actuator. Move lever of actuator into idle position. Adjust connecting rod (201) so that it is 0.5 – 1.0 mm shorter than the actual max. distance. Attach connecting rod. |

Control thrust cable (211) adjust. Detach ball socket (212). Push control thrust cable (211) forward until a slight resistance is felt. In this position, attach ball socket free of tension; adjust at Bowden cable (211), if necessary.

Full throttle stop check, adjust. With the engine switched off, depress accelerator pedal fully to the kickdown switch from the passenger compartment. This must cause the control lever of the injection pump to move against the full throttle stop; adjust at adjusting screw (243), if necessary.

Note

1st version – full throttle adjusting screw on accelerator control shaft

2nd version – full throttle adjusting screw on connecting rod (203).

Note

Use anti-corrosion grease

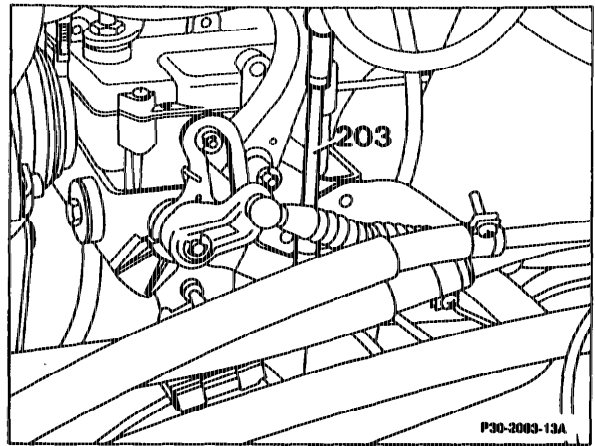
Part No. 000 989 87 51 10 when performing assembly work on the accelerator control.

Lengths of connecting rods in mm

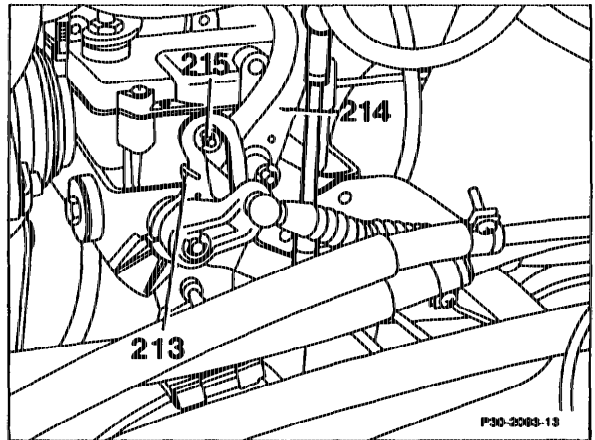
| | |
|---|---------|
| Item 201 Cruise control connecting rod | 101 ± 1 |
| Item 203 Accelerator control lever connecting rod | 120 ± 1 |
| Item 204 Injection pump connecting rod | 154 ± 1 |



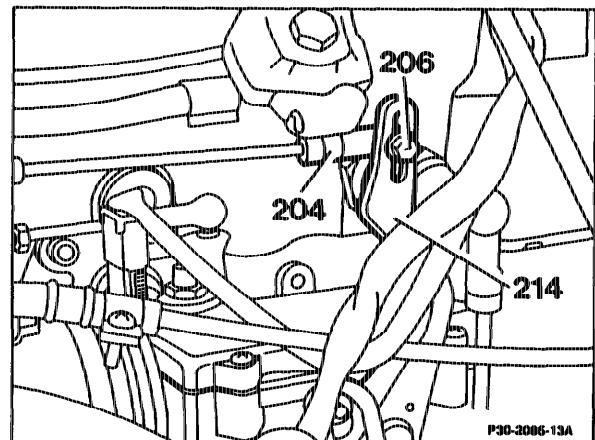
- 1 Examine accelerator control linkage for bending and ease of movement.
- 2 Detach connecting rod (203).



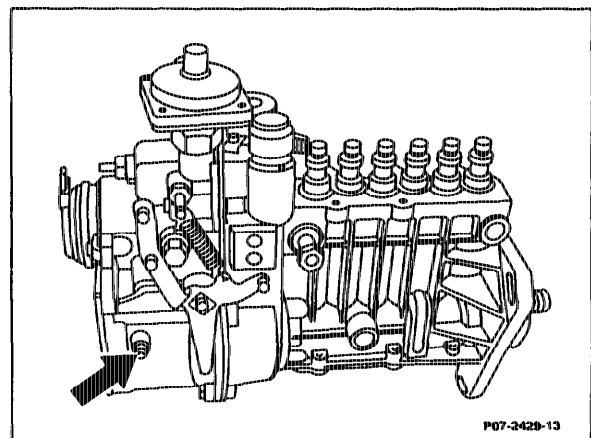
- 3 Move relay lever (214) into idle position; this must cause the roller (215) to move free of tension against the end stop in the variable-fulcrum lever.



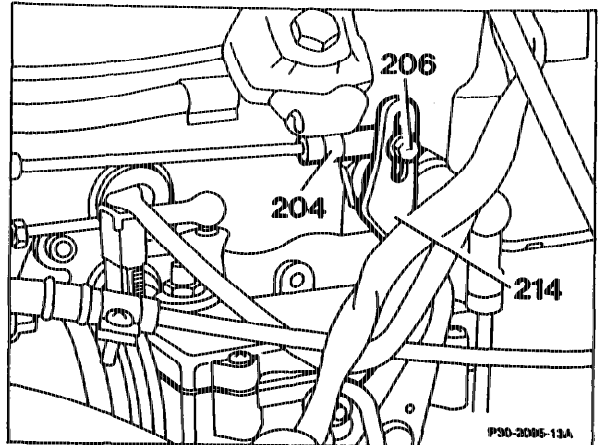
Adjust connecting rod (204) at the adjustable ball head (206), if necessary.



- 4 Push relay lever (214) to full throttle; this must cause the injection pump control lever to move against the full throttle stop (arrow) and the roller (215) to be positioned approx. 1 mm before the end stop in the gate.

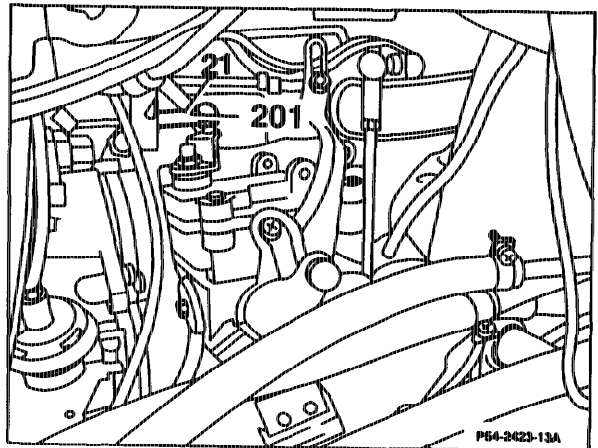


If not, slide the adjustable ball head (206) in the elongated hole of the relay lever.

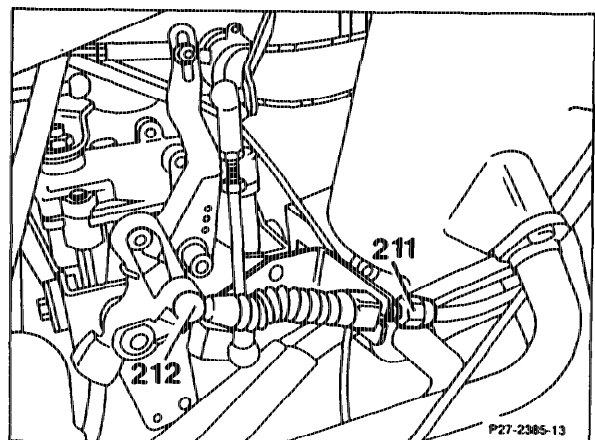


5 Set cruise control. Detach connecting rod (201) at the actuator.

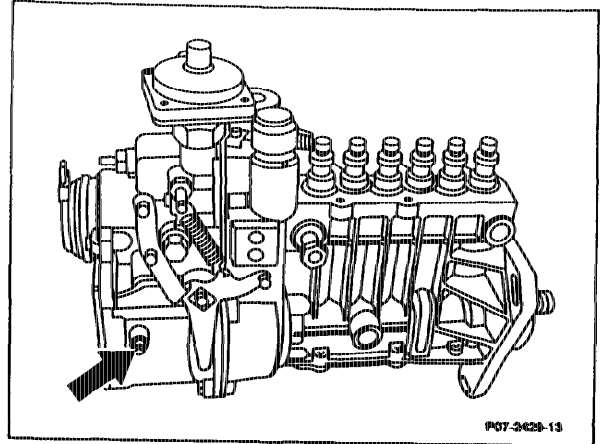
- Move lever of actuator into idle position.
- Adjust connecting rod (201) so that it is 0.05 mm shorter or set one turn shorter.
- Attach connecting rod.



6 Adjust control thrust cable. Press off ball socket (212) for this step. Pull control cable forward until a slight resistance is felt. In this position, attach ball socket free of tension. Adjust at the Bowden cable (211), if necessary.

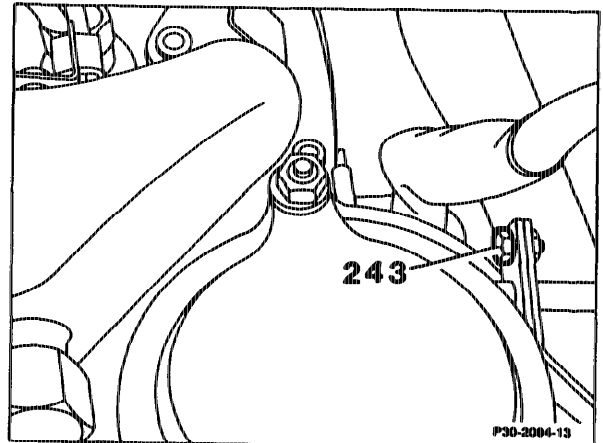


7 Check full throttle stop, adjust. With the engine switched off, depress accelerator pedal fully to the stop on the kickdown switch from the interior of the car. This must cause the control lever to move against the full throttle stop (arrow) of the injection pump.

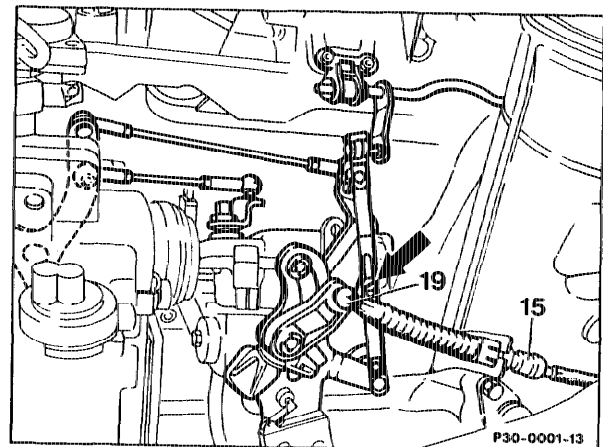


Adjust at the adjusting screw (243), if necessary.

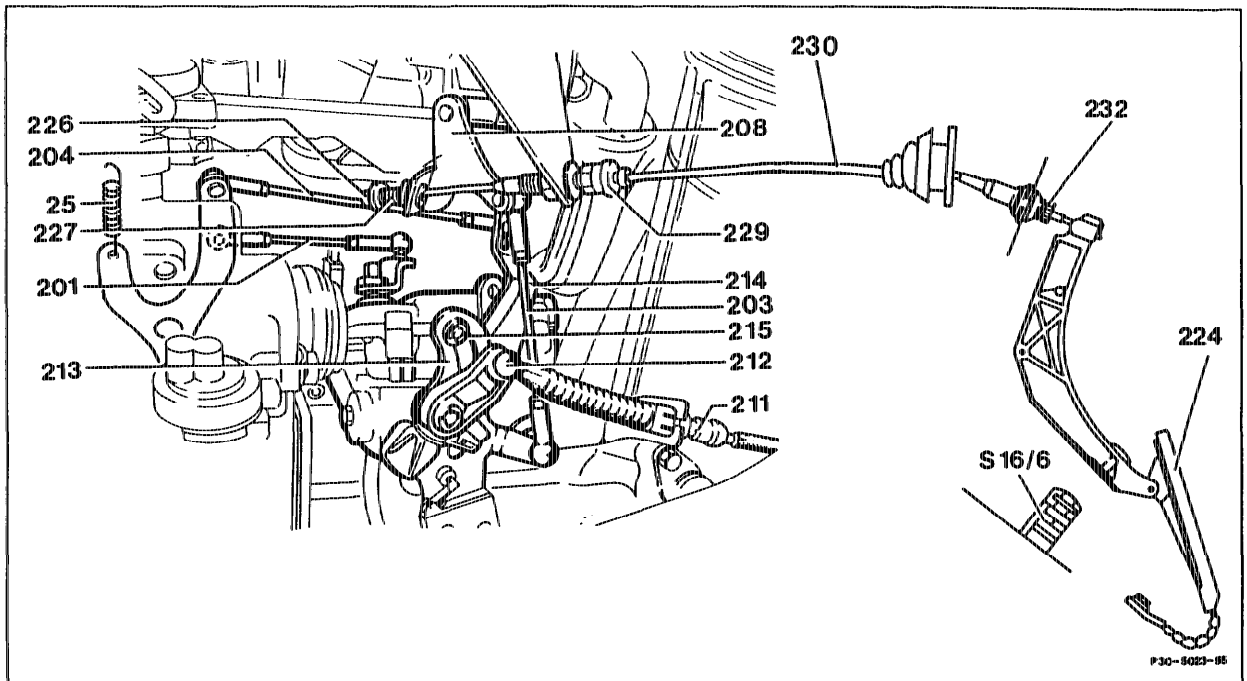
1st version
Full throttle adjusting screw (243) on the accelerator control shaft



2nd version
Full throttle adjusting screw on the connecting rod (203)



D. Engine 603.971 in Model 140



Accelerator control linkage

examine for bending and ease of movement.

Idle stop

check, adjust.

The spring plate (226) of the Bowden cable (230) must be resting against the compression spring (227) free of tension in the idle position; adjust Bowden cable, if necessary, with the adjusting nut (232) from interior of car.

Return springs (25 and 235)

check.

Relay lever (214)

move into idle position; this must cause the roller (215) to move against the end stop in the variable fulcrum lever free of tension.

Adjust connecting rod (204), if necessary.

| | |
|---------------------------------------|--|
| Accelerator control lever (208) | pull to full throttle; this must cause the injection pump control lever to move against full load stop and the roller (215) to rest approx. 1 mm before the end stop in the gate. If not, slide adjustable ball head (206) in oblong hole (see notes). |
| Tempomat cruise control | detach connecting rod (201) at actuator, move lever of actuator into idle position. |
| Connecting rod (201) | adjust so that it is 0.5–1.0 mm shorter than the actual maximum distance. Attach connecting rod. |
| Control pressure cable (211) | adjust. Detach ball socket (212). Push control pressure cable (211) forward until a slight resistance is felt. In this position, attach ball socket free of tension; adjust at Bowden cable if necessary. |
| Full throttle stop | check, adjust. With engine switched off, depress accelerator pedal fully to the kickdown switch from the passenger compartment. This must cause the control lever of the injection pump to move against full load stop; adjust at adjusting screw (229), if necessary. The spring plate (226) must be resting against the compression spring (227) free of tension in idle position. Adjust the Bowden cable (230), if necessary, with the adjusting nut (232) from interior of car. |
| Connecting rod (203) | cannot be adjusted. |

Note

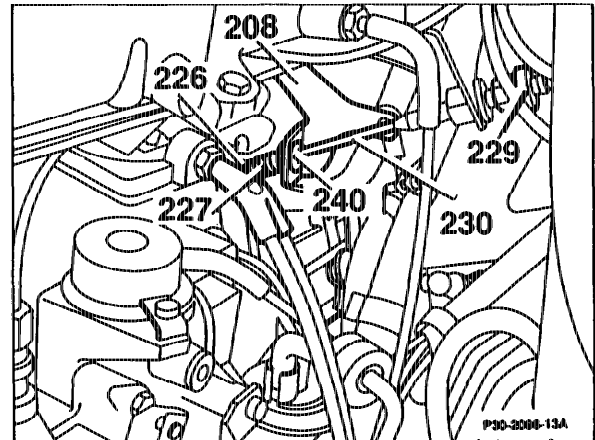
Use anti-corrosion grease Part No. 000 989 87 51 10 when performing assembly work on the accelerator control.

Lengths of connecting rods in mm

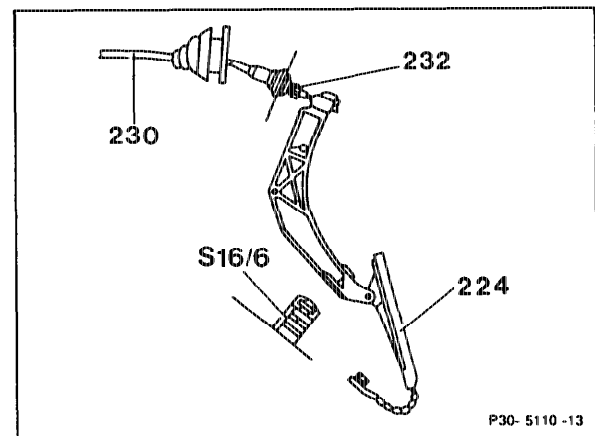
| | |
|---|---------|
| Item 201 Tempomat cruise control connecting rod | 101 ± 1 |
| Item 203 accelerator control lever connecting rod | 120 ± 1 |
| Item 204 injection pump connecting rod | 154 ± 1 |

1 Examine accelerator control linkage for bending and ease of movement.

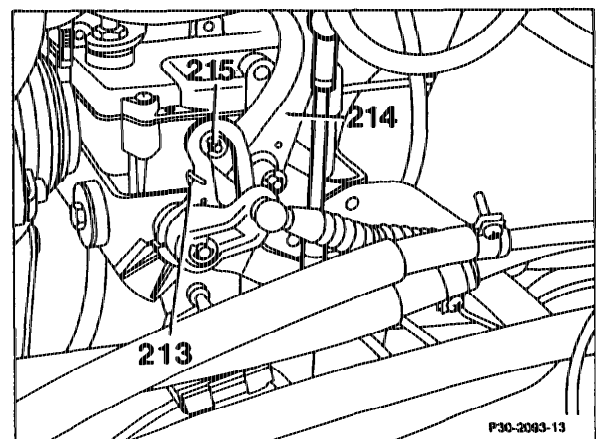
2 Check idle stop, adjust. The spring plate (226) of the Bowden cable (230) must be resting free of tension against the compression spring (227).



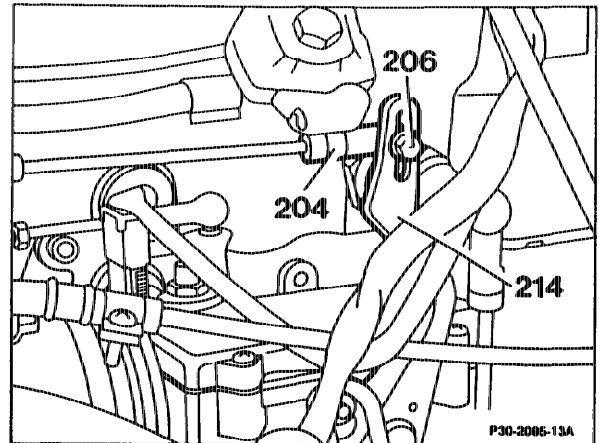
Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from the interior of the car.



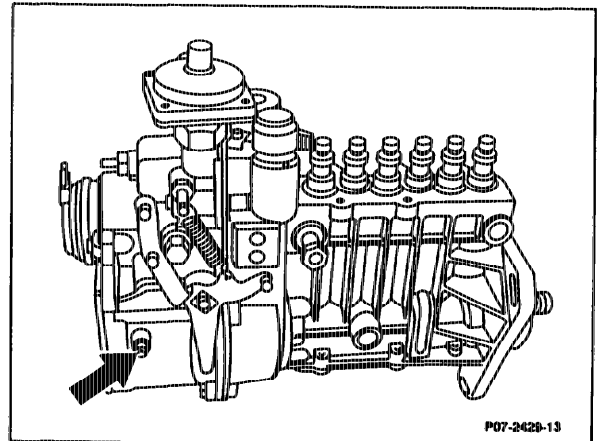
3 Move relay lever (214) into idle position; this must cause the roller (215) to move free of tension against the end stop in the variable fulcrum lever.



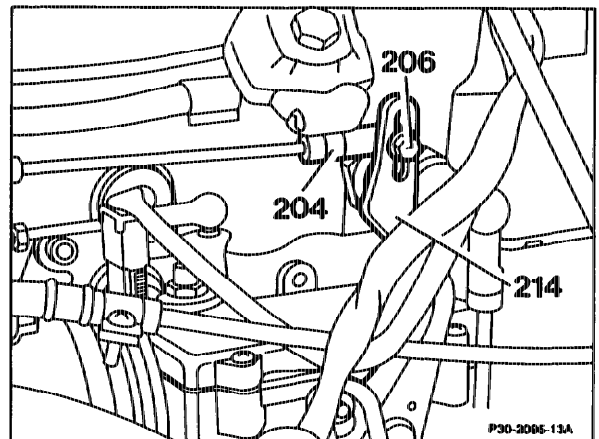
Adjust connecting rod (204) at the adjustable ball head (206), if necessary.



4 Pull accelerator control lever (208) to full throttle; this must cause the roller (215) to be positioned approx. 1 mm before the end stop in the gate and the injection pump control lever to move against the full load stop (arrow).

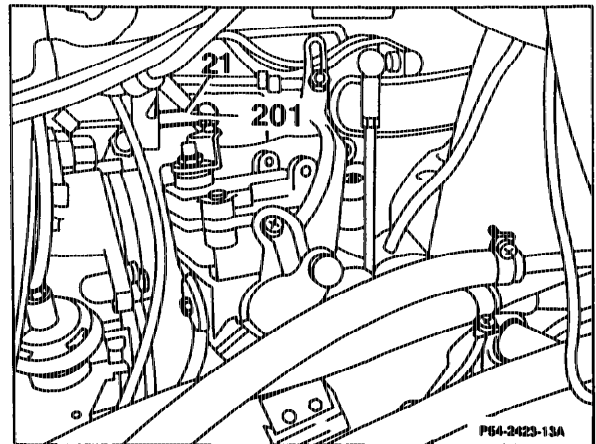


Slide the adjustable ball head (206) in the oblong hole of the relay lever (214), if necessary.

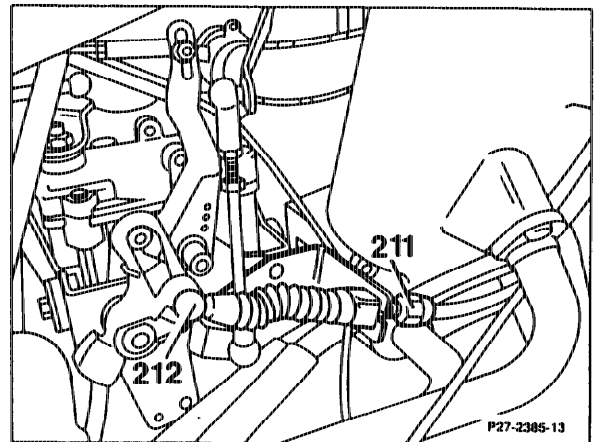


5 Set Tempomat cruise control. Detach connecting rod (201) at the actuator.

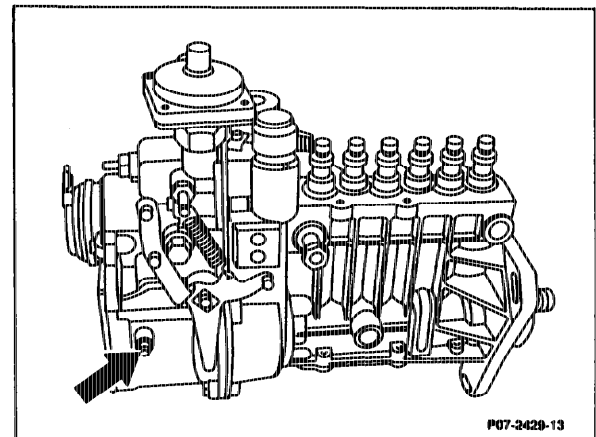
- Move lever of actuator into idle position.
- Adjust connecting rod (201) so that it is 0.5 mm shorter or set one turn shorter.
- Attach connecting rod.



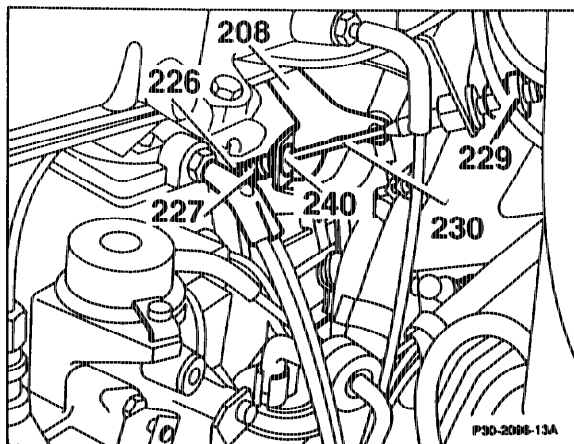
6 Adjust control pressure cable. Press off ball socket (212) for this step. Pull control cable forward until a slight resistance is felt. In this position, attach ball socket free of tension. Adjust Bowden cable (211), if necessary.



7 Check full throttle stop, adjust. With the engine switched off, depress accelerator pedal fully to the stop on the kickdown switch from the interior of the car. This must cause the control lever (arrow) to move against the full load stop of the injection pump.



Adjust at the adjusting screw (229), if necessary.



Note

The spring plate (226) of the Bowden cable must be resting free of tension against the compression spring (227) in the idle position. Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from the interior of the car.

