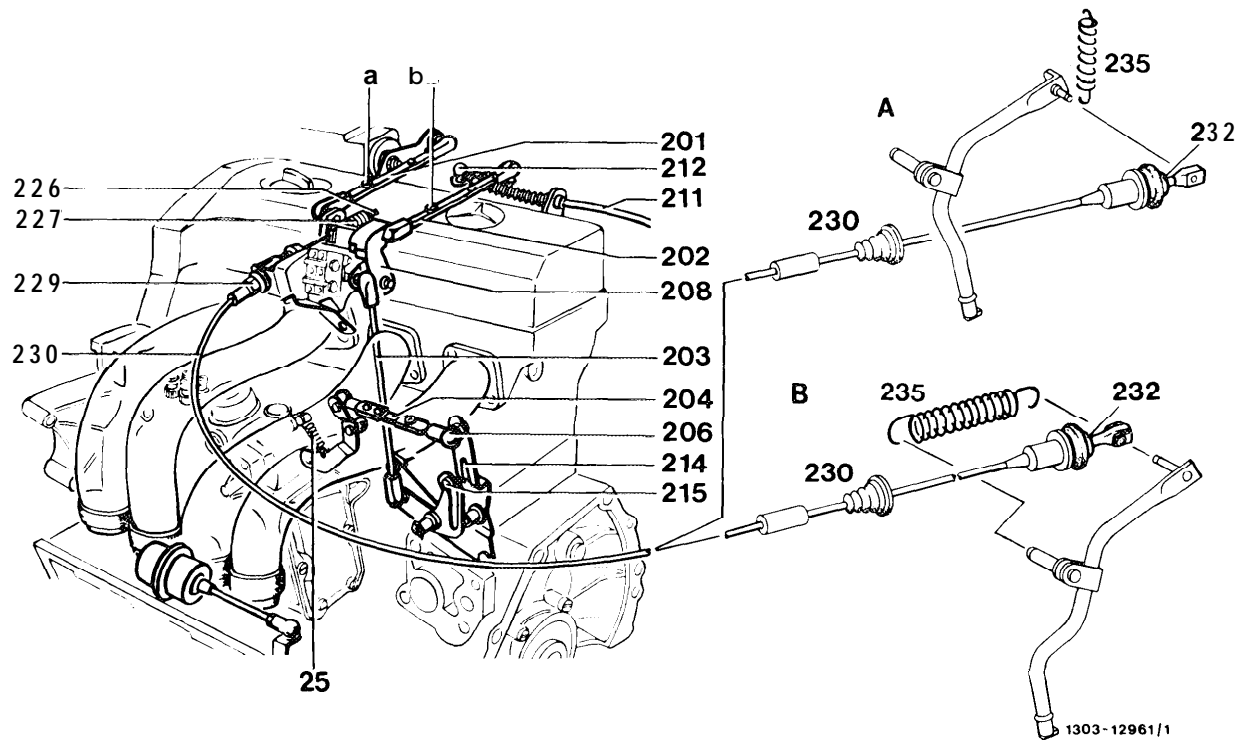




	Job No.
Adjustment of accelerator control linkage	30 - 300
Adjusting accelertaor control linkage - Turbodiesel	30 - 300
Removal and installation of firewall bearing for accelerator lever	30 - 315
Removal and installation of firewall bearing for accelerator pedal lever - Turbodiesel	30 - 315
Removal, installation and adjustment of Bowden cable	30 - 325
Removal, installation and adjustment of Bowden cable - Turbodiesel	30 - 325
Adjusting longitudinal accelerator control shaft Model 126	30 - 327
Removal and installation of accelerator pedal	30 - 330
Removal and installation of accelerator pedal - Turbodiesel	30 - 330
Lubrication of accelerator control linkage and control shafts	30 - 335
Lubrication of accelerator control linkage and control shafts - Turbodiesel	30 - 335
Retrofitting accelerator control shaft and bearing bracket - Turbodiesel	30 - 400

30-300 Adjustment of accelerator control linkage



A Model 201

Accelerator control linkage

Check for bending and ease of movement.

Bowden cable (230)

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

Relay lever (214)

Move into idle position, the roller (215) must be resting free of tension against the end stop in the variable-fulcrum lever.

Adjust connecting rod (204), if necessary.

Engine Length for basic setting

602 219 ± 1

Accelerator control lever (208)	Pull to full load, the injection pump adjusting lever must be contacting the full load stop when this is performed; adjust at variable ball head (206), if necessary.
Tempomat (cruise control)	Adjust: loosen connecting rod (201) at hex bolt "a", move lever of actuator into idle position. Adjust connecting rod (201) such that it is 0.5 mm longer than actual max. distance. Tighten screw "a".
Control cable (211)	Adjust. Detach ball socket (212). Pull control cable (211) forward until a slight resistance is felt. In this position, attach ball socket (212) free of tension, adjust, if necessary, at screw "b" of connecting rod (202).
Full throttle stop	Check, adjust. With engine off, depress accelerator pedal from inside car fully to the stop or to kickdown switch. The adjusting lever of the injection pump must be contacting the full load stop when this is performed; set, if necessary, at adjusting screw (229). The spring plate (226) must be resting free of tension against compression spring (227) in idle position; adjust Bowden cable (230), if necessary, from inside car with adjusting nut (232).

5 Adjusting Tempomat (cruise control)

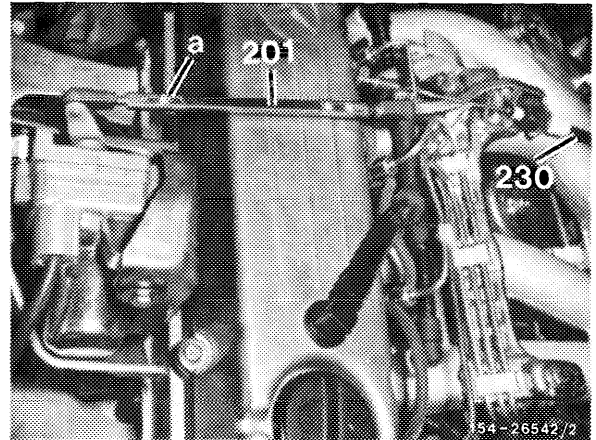
Loosen hex bolt "a" at the connecting rod (201), and move lever of actuator into idle position.

Adjust connecting rod (201) such that it is 0.5–1.0 mm shorter than the actual maximum distance.

Retighten bolt "a".

Note

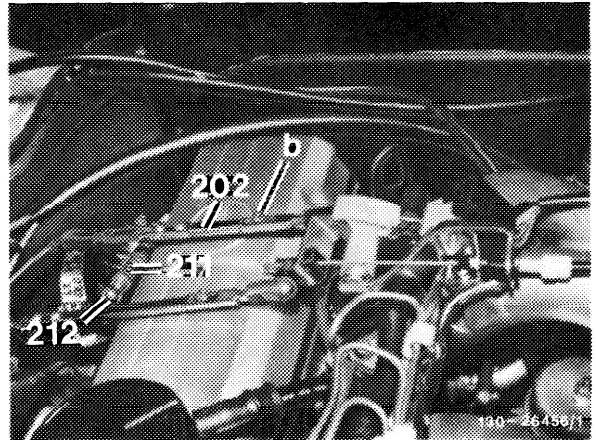
Bolt "a" is not fitted to the round rod. In the case of the round rod, adjust at the ball sockets.



6 Adjusting control cable

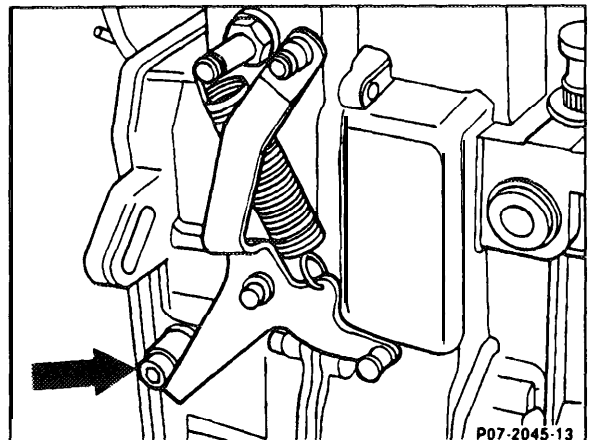
Detach ball socket (202). Pull control cable (211) forward until a slight resistance is felt.

In this position, hold ball socket (212) over the ball head and attach free of tension; if necessary, adjust connecting rod (202) with bolt "b".



7 Checking, adjusting full throttle stop

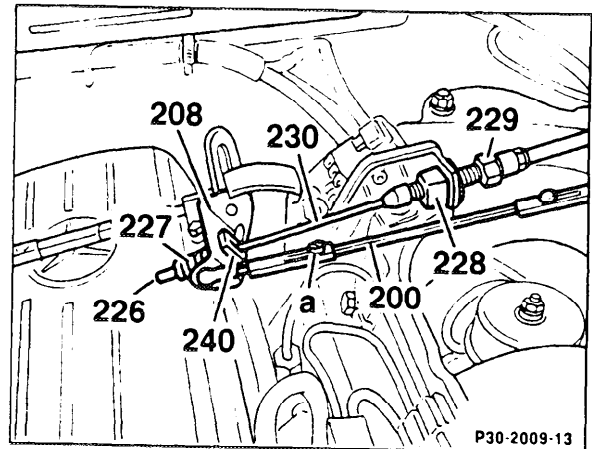
With engine switched off, depress accelerator pedal from inside car fully until it is contacting full throttle stop or, if automatic transmission fitted, until it is contacting the stop of the kickdown switch. To do this the adjusting lever must contact the full load stop noticeably (arrow). Check by applying excess pressure to the connecting rod (204).



Set adjusting screw (229), if necessary.

Note

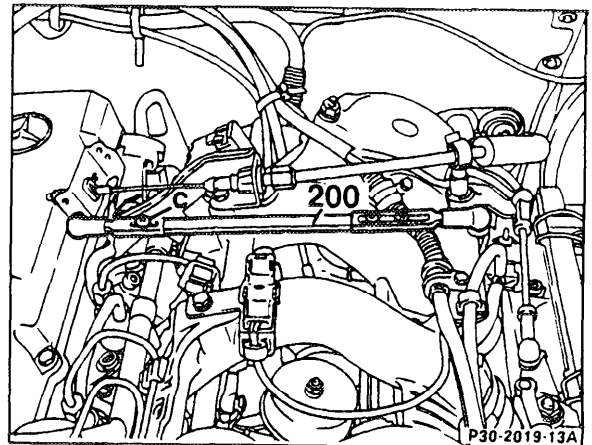
The spring plate (226) of the Bowden cable (230) must be resting free of tension against the compression spring (227).



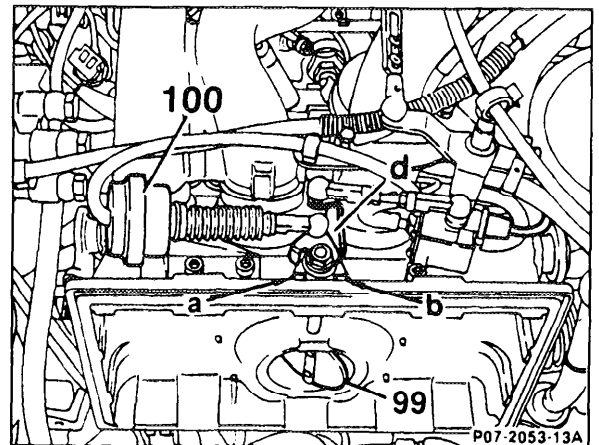
8 Mechanical actuation

Adjust pressure control flap

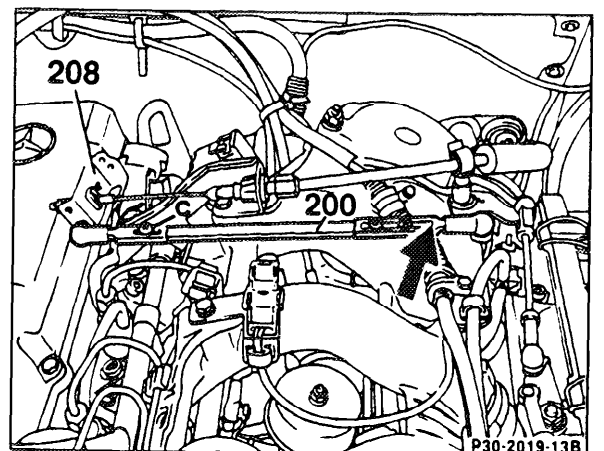
Loosen screw (c) on the connecting rod.



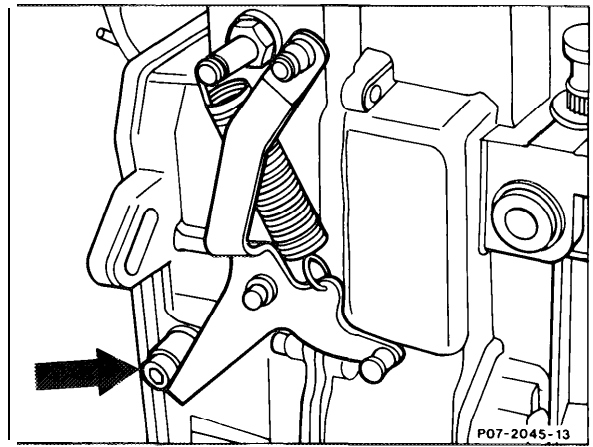
9 Turn reversing lever (d) up to the stop (a).
(The piston rod of the vacuum unit is now compressed).



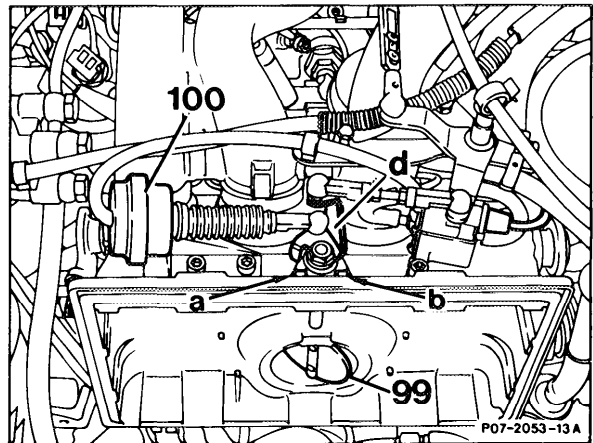
10 At the same time compress connecting rod (200) up to the stop of the rivets (arrow) and retighten screw (c).



11 Check full throttle stop: depress accelerator pedal from inside car fully to the stop or to kickdown switch. The adjusting lever of injection pump must contact the full load stop detectably when this is done.

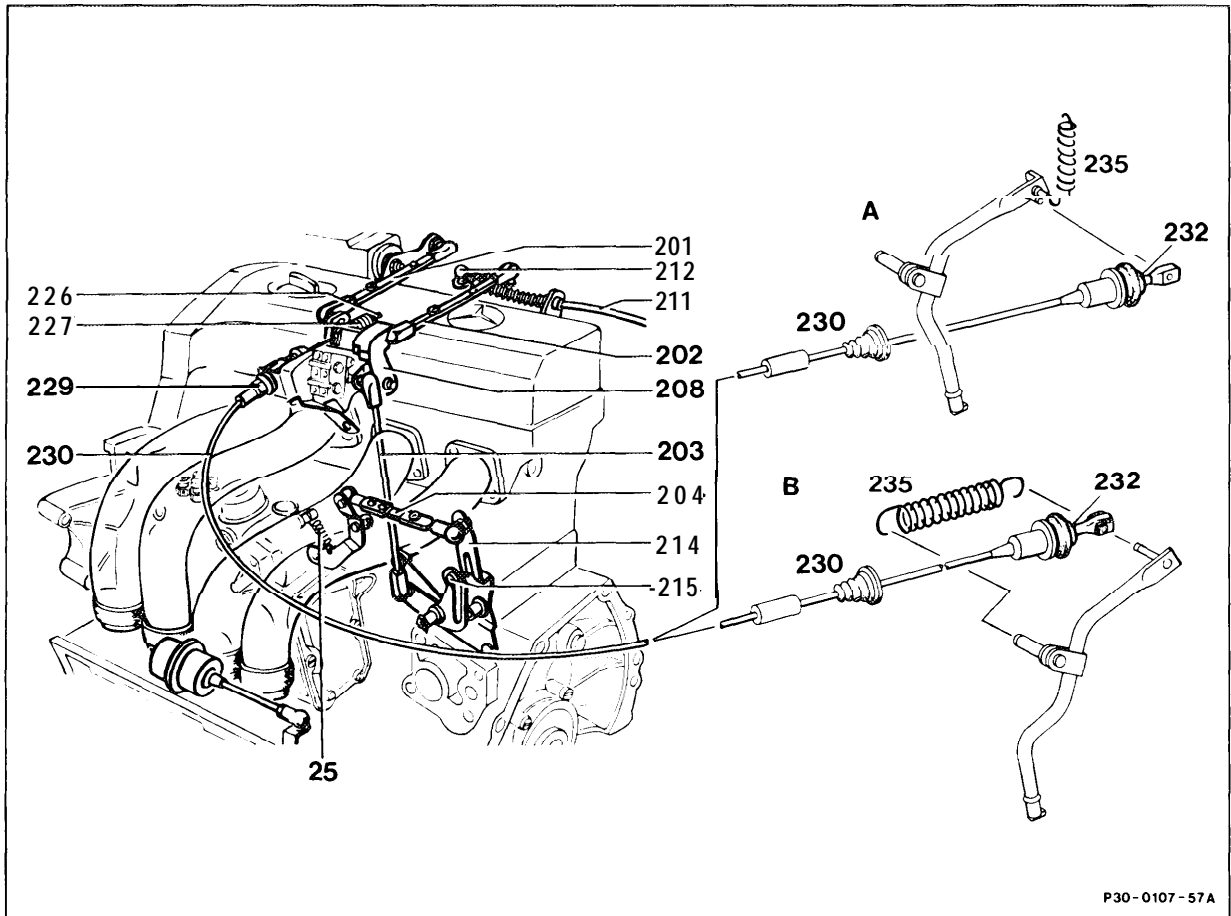


The reversing lever (d) must not contact the stop (b) (approx. 0.5mm play). If there is no play present, repeat adjustment from No. 6.



30-300 Adjusting Accelerator Control Linkage - Turbodiesel

A. Engine 602.96 in Models 124, 201



P30-0107-57A

Accelerator control linkage	examine for bending and ease of movement.
Idle stop	check, adjust. The spring plate (226) of the Bowden cable (230) must resting 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 contact 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 contact the full load stop and the roller (215) to rest approx. 1mm before the end stop in the gate. Adjust at adjustable ball head (206) in elongated hole if necessary (Number 5).
Cruise control (Tempomat)	adjust: loosen 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 off, depress accelerator pedal fully to the kickdown switch from the car interior. This must cause the control lever of the injection pump to contact 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.

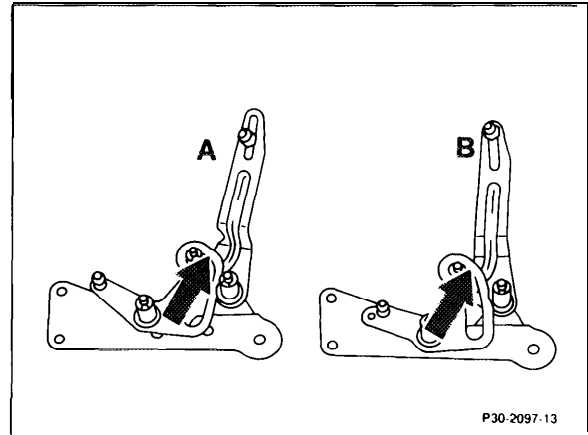
Lengths of connecting rods in mm

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

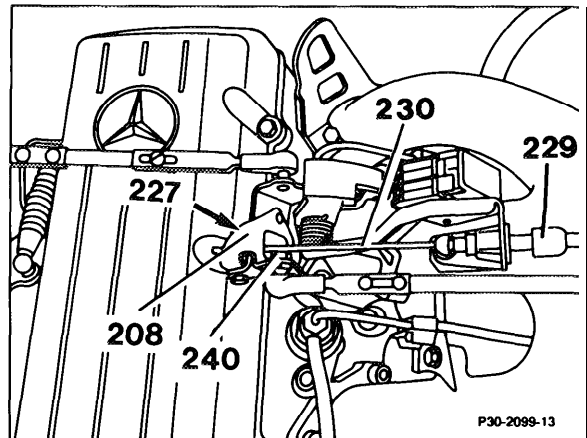
As a result of a modified transmission control, the idle travel at the accelerator pedal is no longer required.

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

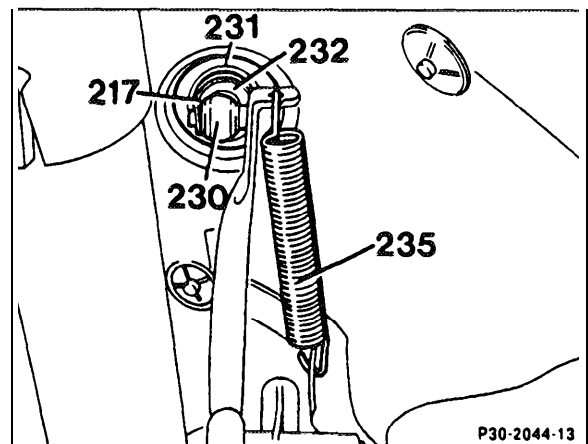


1 Examine accelerator control linkage for bending and ease of movement.

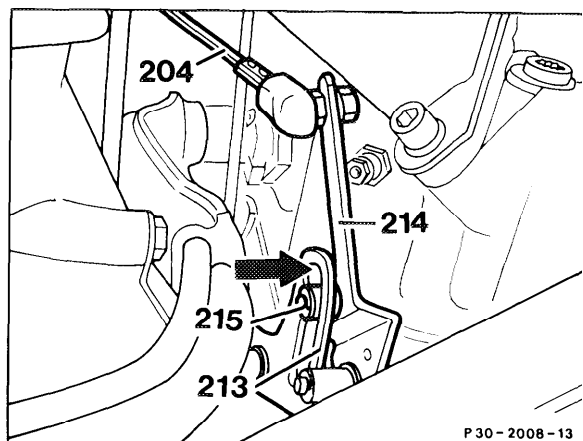
2 Check idle stop, adjust. The spring plate of the Bowden cable (230) must be resting free of tension against the compression spring (227).



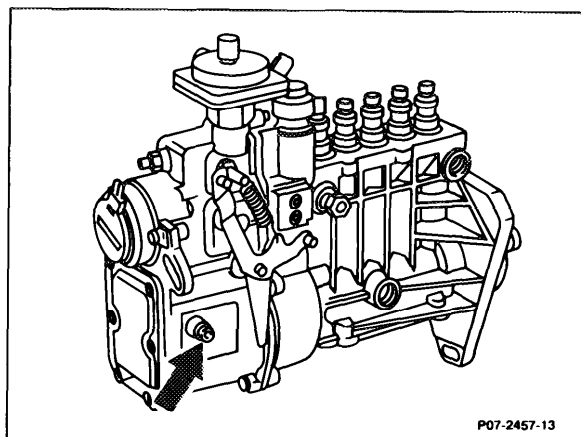
Adjust Bowden cable (230), if necessary, with the adjusting nut (232) from the interior of the car.



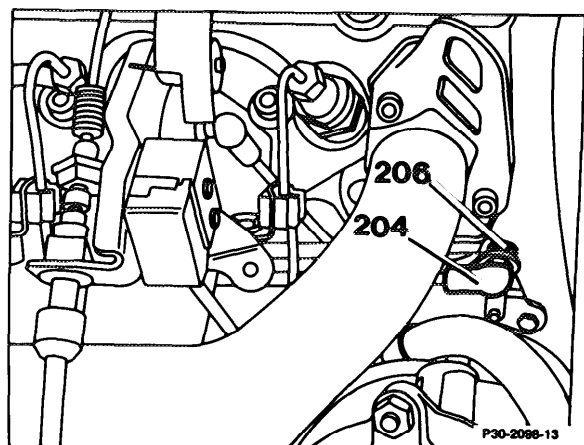
3 Move relay lever (214) into idle position; this must cause the roller (215) to move free of tension against the end stop in the variable-fulcrum lever (arrow). Adjust connecting rod (204), if necessary.



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.

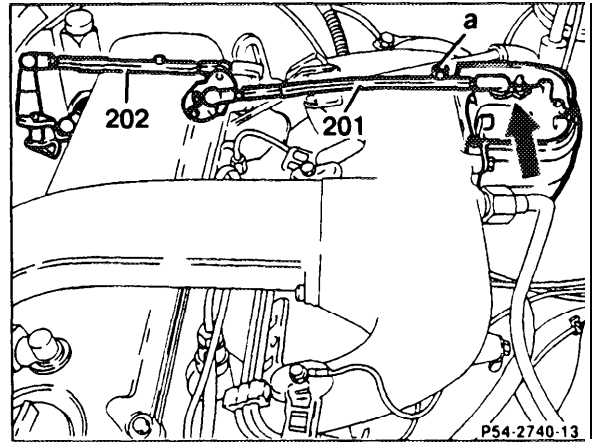


5 Adjust, if necessary, at adjustable ball head (206) in the elongated hole of the relay lever.

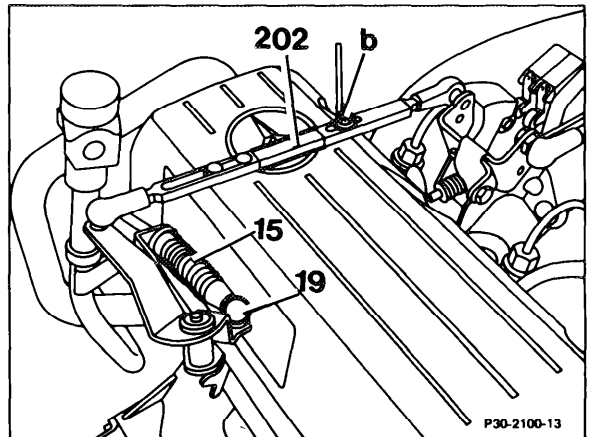


6 Set cruise control. loosen hexagon bolt (a) on the connecting rod (201).

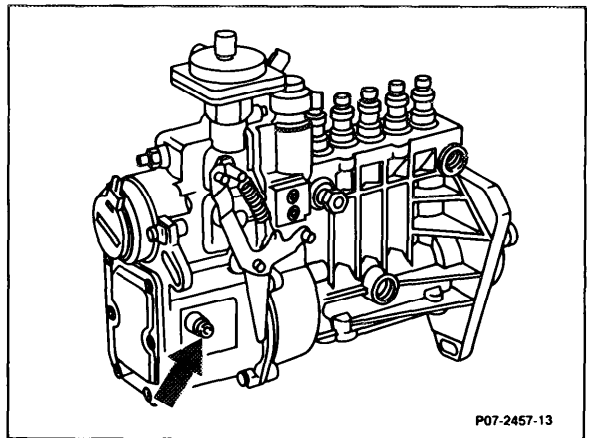
- Move lever of actuator (arrow) into idle position.
- Adjust connecting rod (201) so that it is 0.5 mm longer than the actual max. distance
- Tighten connecting rod (201) in this position.



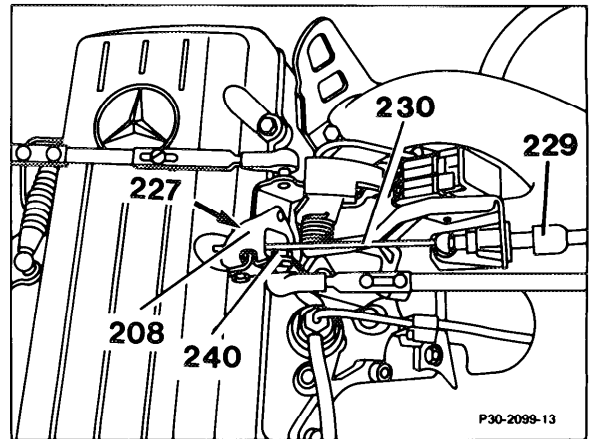
7 Adjust control cable. Press off ball socket (212) for this step. Pull control cable (211) forward until resistance is felt. In this position, attach ball socket free of tension. Adjust at the hexagon bolt (b), if necessary (measure connecting rod (202) pulled out).



8 Check full throttle stop, adjust. With the engine 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.

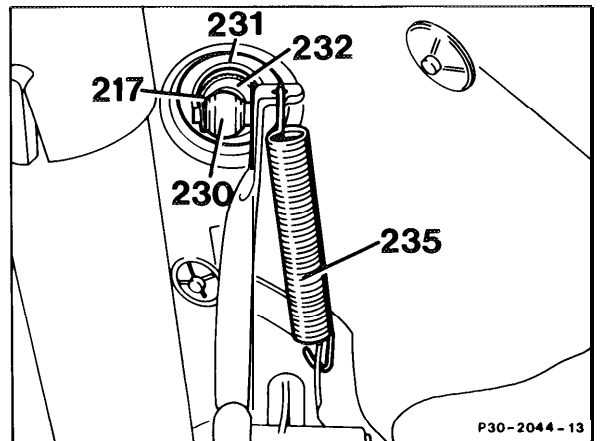


Adjust Bowden cable at adjusting screw (229), if necessary.



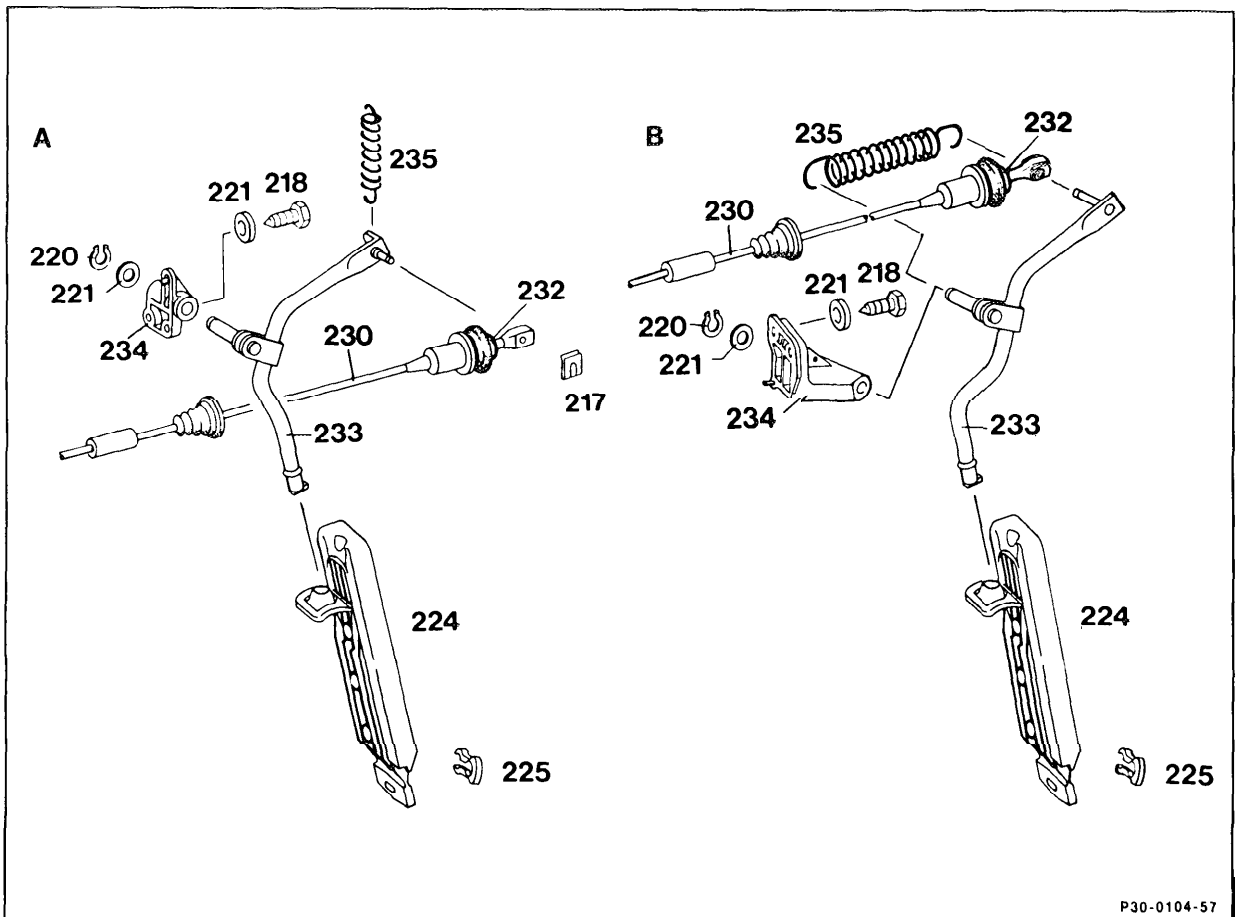
Note

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.



30-315 Removal and installation of firewall bearing for accelerator pedal lever - Turbodiesel

A. Model 124, 201 Turbodiesel



A Model 201
B Model 124

Footwell covering	remove, install.
Accelerator pedal (224)	remove, Install (30-300). Unclip, clip in expanding clip (225) for this step.
Return spring (235)	detach, attach.
Locking element (217)	(Model 201 only) remove, refit.
Bowden cable (230)	detach, attach.

Firewall bearing (234) with accelerator pedal lever (233)

Locking element (220)

Accelerator control

remove, install. Remove, fit bolt (218) and washer (221) for this step. Observe installation note for Model 201.

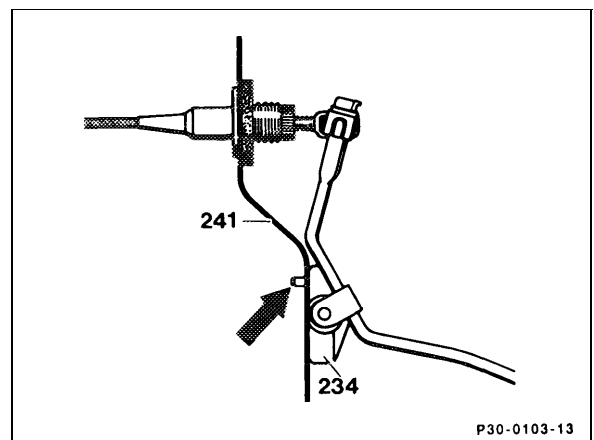
detach from accelerator pedal lever, fit on. Press accelerator pedal lever out of firewall bearing, press in.

check, adjust if necessary (30-300).

Installation note Model 201

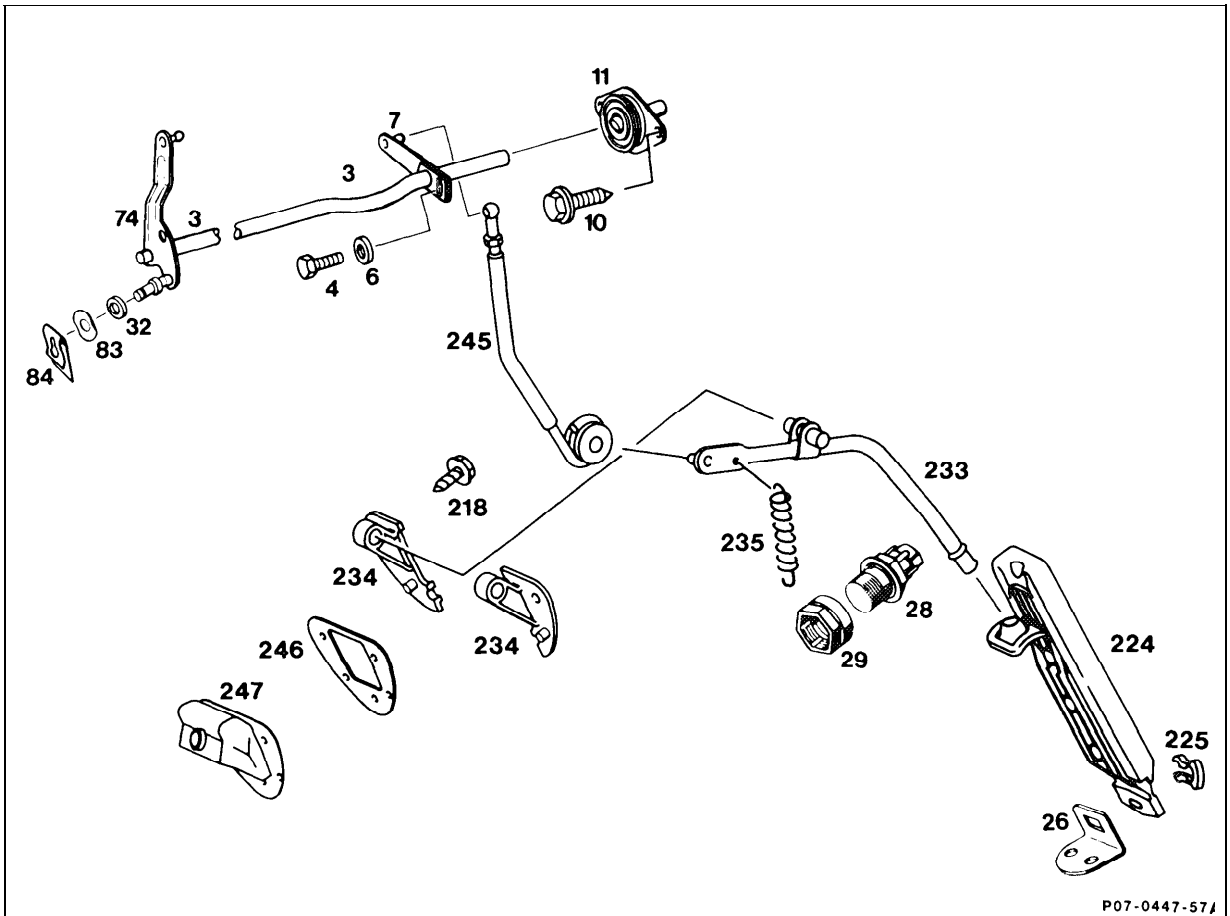
Ensure that the lug (arrow) of the firewall bearing (234) engages in the hole on the firewall (241).

Check accelerator control linkage, adjust if necessary (30-300).



P30-0103-13

B. Model 126



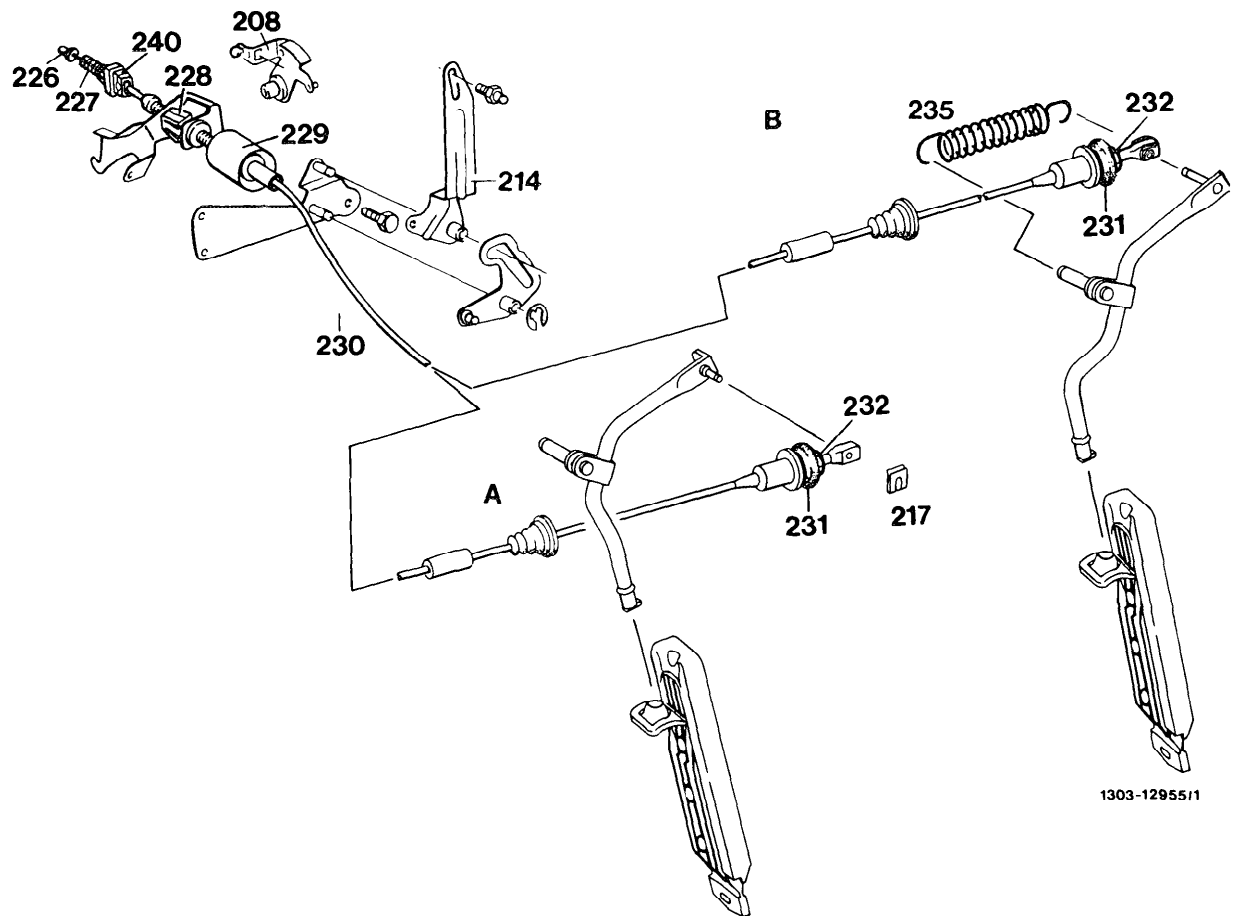
Footwell covering	remove, install.
Accelerator pedal (224)	remove, install (30-300). Unclip, clip in spreader clip (225) for this step.
Return spring (235)	detach, attach.
Firewall bearing (234) with accelerator pedal lever (233)	remove, install. Remove, fit bolt (218) for this step.
Thrust rod (245), intermediate plate (246) and rubber seal (247)	remove, fit.
Accelerator control	check, adjust if necessary (30-300).

Note

The bearing points as well as the ball sockets of the accelerator control linkage should be greased with DB anti-corrosion grease (Part No. 000 989 87 57 10).

The link from the accelerator pedal lever to accelerator pedal is maintenance-free and does not need to be greased.

30-325 Removal, installation and adjustment of Bowden cable



1303-12955/1

A Model 201
 B Model 124

Bowden cable (230)

Detach at accelerator control lever (208),
 remove, install guide piece (240) at control lever
 for this purpose.

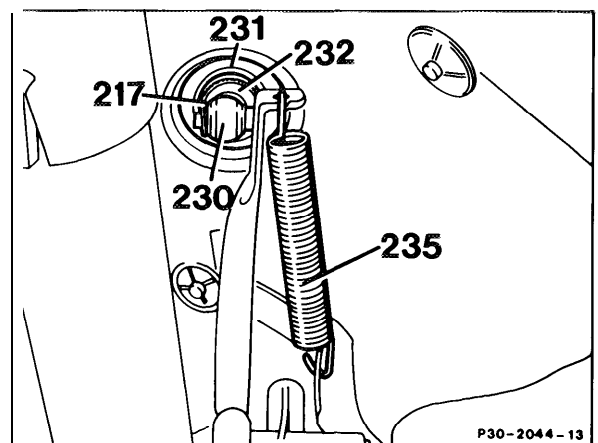
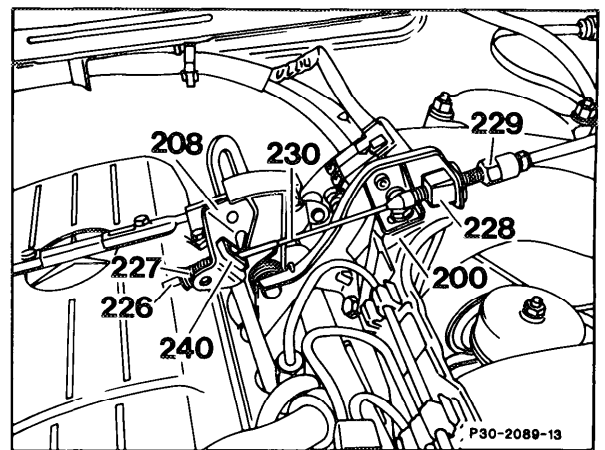
Plastic clips (228)

Compress and remove, install Bowden cable
 (230).

Footwell cover	Remove, install.
Locking plate (217) or spring (235)	Remove, install.
Vacuum lines for key-operated engine stop	Withdraw from, insert into rubber grommet.
Bowden cable (230)	Press out of the way; ensure that the rubber grommet (231) is not pressed out.
Relay lever (214)	
Adjusting screw (229)	Adjust full throttle stop.
Adjusting nut (232)	Adjust idle stop.
Rubber grommet (231)	Ensure that the grommet is correctly located.
Accelerator control	Adjust (30-300).

Removal, installation

- 1 Raise accelerator control lever (208), press out guide element (240) and remove together with Bowden cable (230).
- 2 Compress black plastic clip (228) and remove Bowden cable.
- 3 Remove footwell cover.
- 4 Remove locking plate (217) for Bowden cable (230) in interior of car.

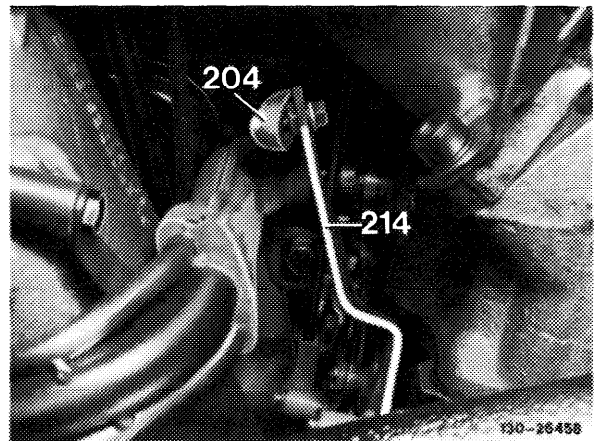


Model 201

- 5 Press Bowden cable (230) out of the way. Ensure that the rubber grommet (231) is not pressed out.
- 6 Pull vacuum lines for key-operated engine stop out of the rubber grommet of the Bowden cable.
- 7 Withdraw Bowden cable entirely from outside between firewall and component compartment wall.
- 8 The parts are reassembled in the reverse order.

Adjusting

- 9 Check that the relay lever (214) can be felt contacting the inside idle stop of the injection pump; **adjust accelerator control linkage if necessary (30-300).**

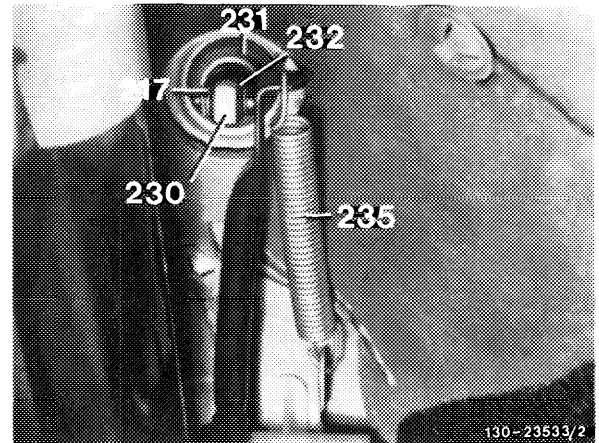


- 10 With the engine off, depress accelerator pedal from inside of car as far as the full throttle stop or, if equipped with automatic transmission, as far as the stop on the kickdown switch. The adjusting lever must be contacting the full throttle stop of the injection pump when performing this step. If necessary, set adjusting screw (229) at Bowden cable.

11 Slowly allow accelerator pedal to return to idle position. In this position, the roller in the variable-fulcrum lever must be resting free of tension against the end stop. If necessary, adjust Bowden cable (230) from inside car with the adjusting nut (232).

After adjusting, there must not be any idle travel between spring plate (226) and spring (227).

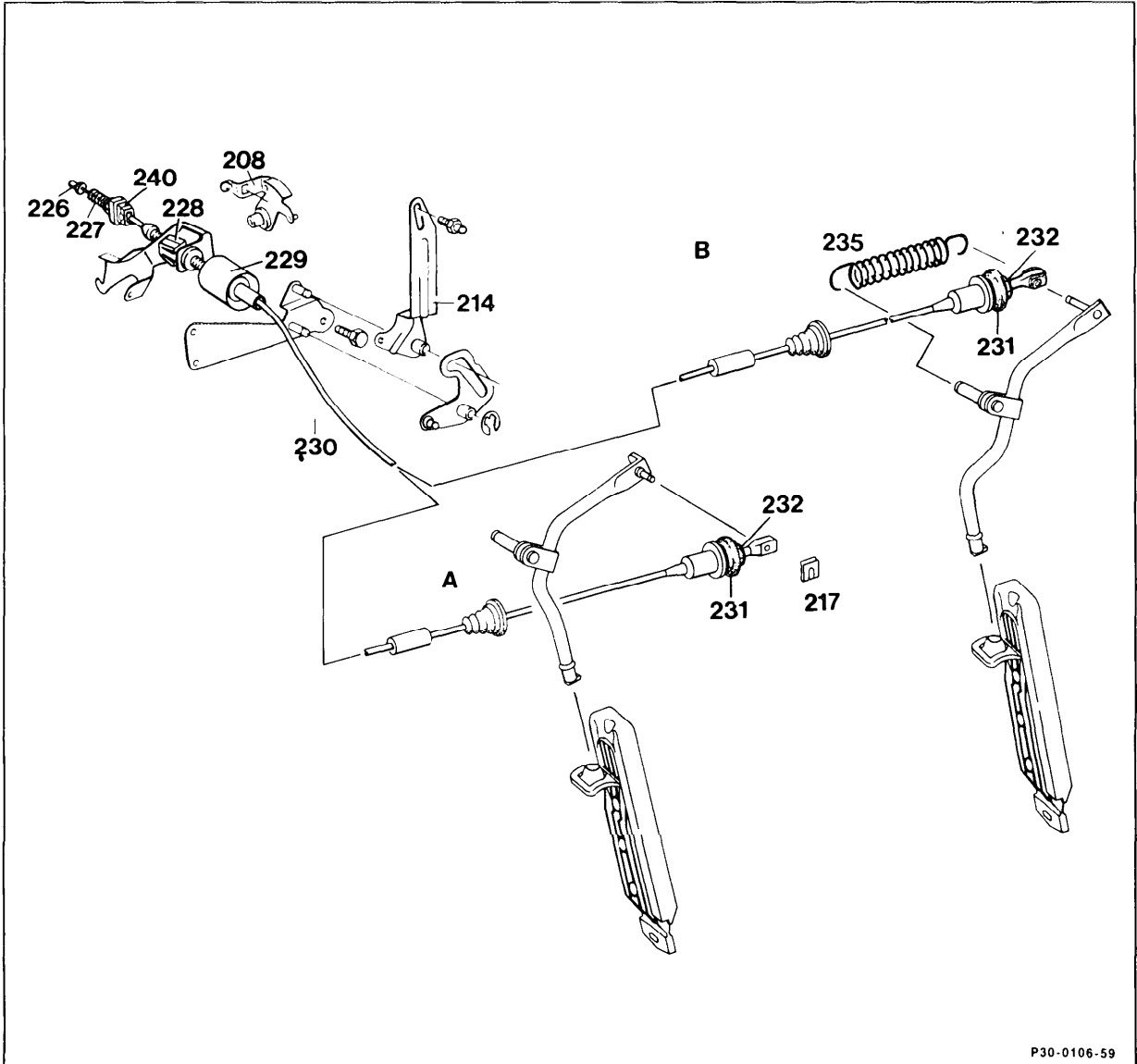
Model 201



Note

When performing assembly work on accelerator control, use anti-corrosion grease Part No. 000 989 87 51 10.

30-325 Removal, adjustment and Installation of Bowden cable -Turbodiesel



A Model 201
B Model 124

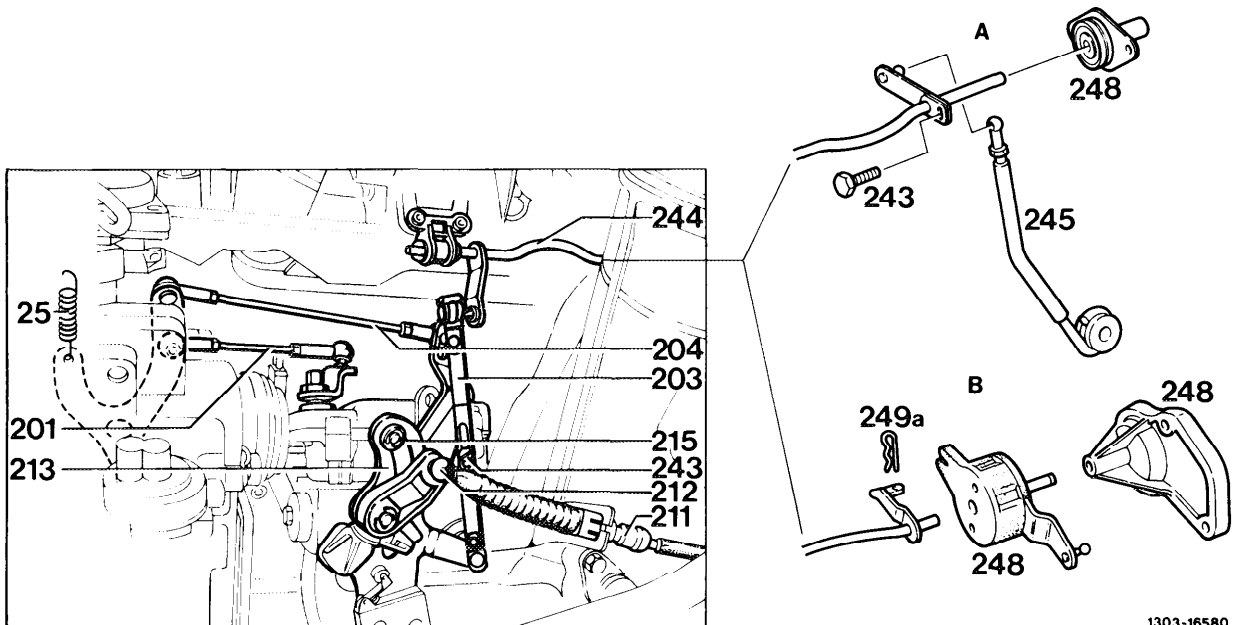
Bowden cable (230)	detach at accelerator control lever (208). Remove, Install guide piece (240) on accelerator control lever for this step.
Plastic clip (228)	compress and remove, install Bowden cable (230).

Footwell covering	remove, install.
Locking element (217)	(Model 201 only) remove, install.
Spring (235)	remove, install.
Vacuum lines for key-operated engine stop	withdraw from rubber grommet, insert.
Bowden cable (230)	press outwards, ensuring that the rubber grommet (231) is not pressed out.
Adjusting screw (229)	adjust full throttle stop.
Adjusting nut (232)	adjust idle stop.
Rubber grommet (231)	ensure correct position.
Accelerator control	adjust (30-300).

Note

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

30-327 Adjusting longitudinal accelerator control shaft Model 126



1303-16580

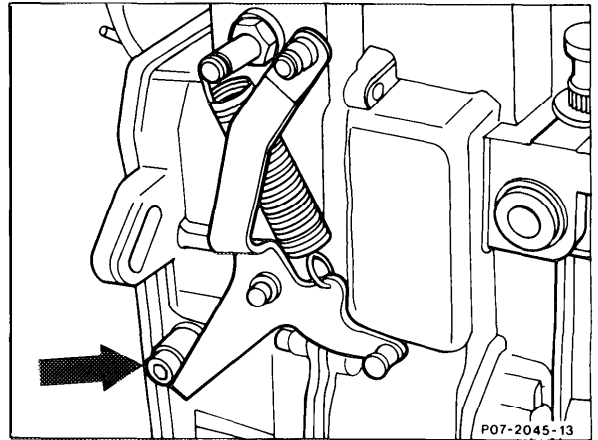
- A 1st version Full throttle adjusting screw on accelerator control shaft
 B 2nd version Full throttle adjusting screw on connecting rod (203)

Full throttle stop check, adjust. With engine off, depress accelerator pedal up to the kickdown switch from interior of car. This must cause the control lever of the injection pump to move against the full throttle stop. Adjust at the 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).

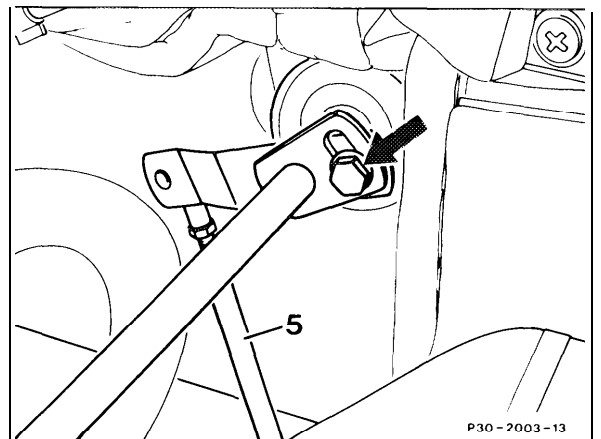
With engine off, depress accelerator pedal as far as the stop on the kickdown switch from the interior of the car. This must cause the accelerator control lever on the injection pump to contact the full throttle stop (arrow).



1 st Version

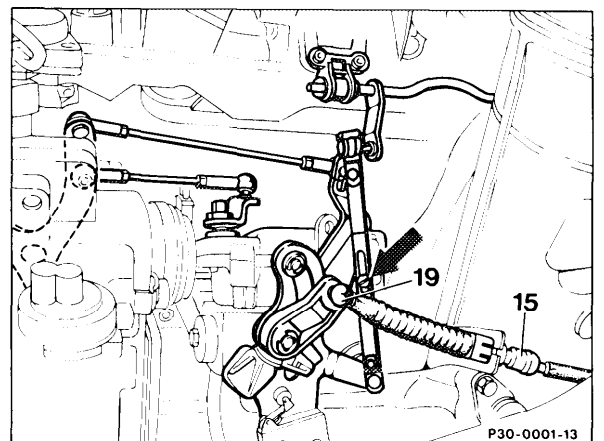
If not, loosen bolt (arrow) and adjust accelerator control linkage so that the accelerator control lever is resting against full throttle stop.

If the full throttle or idle stop is not reached with this adjustment, adjust thrust rod (245) from the longitudinal accelerator control shaft to the accelerator pedal to 222 mm, measured from the center of ball socket to center of damping ring.



2nd Version

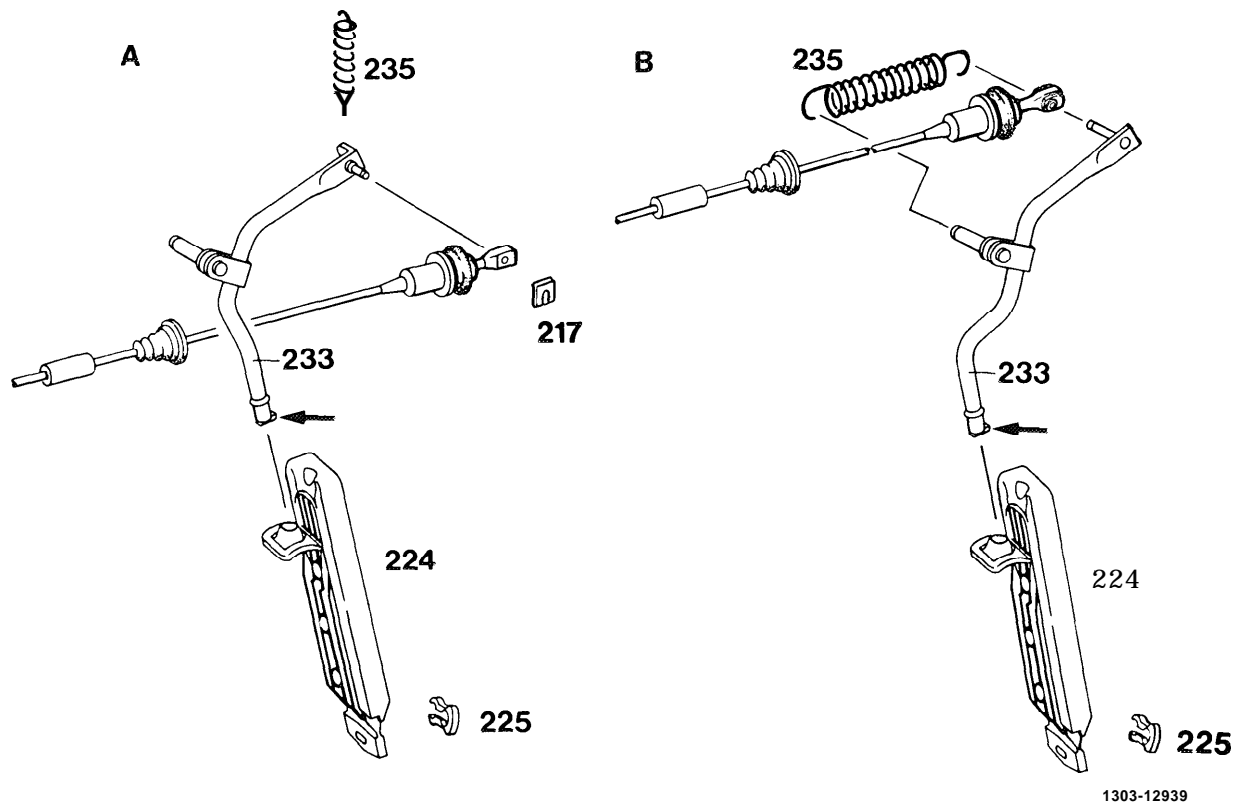
If not, loosen bolt (arrow) and adjust profile rod so that the accelerator control lever is contacting full throttle stop.



Note

It is essential to ensure that the accelerator control operates freely.

30-330 Removal and installation of accelerator pedal



A Model 201

Expanding clip (225)

Compress behind accelerator pedal and remove.

Accelerator pedal (224)

Push down and turn through 180°, then pull down. When doing this, the lug (arrow) on accelerator lever (233) must be aligned with the slot in accelerator pedal.

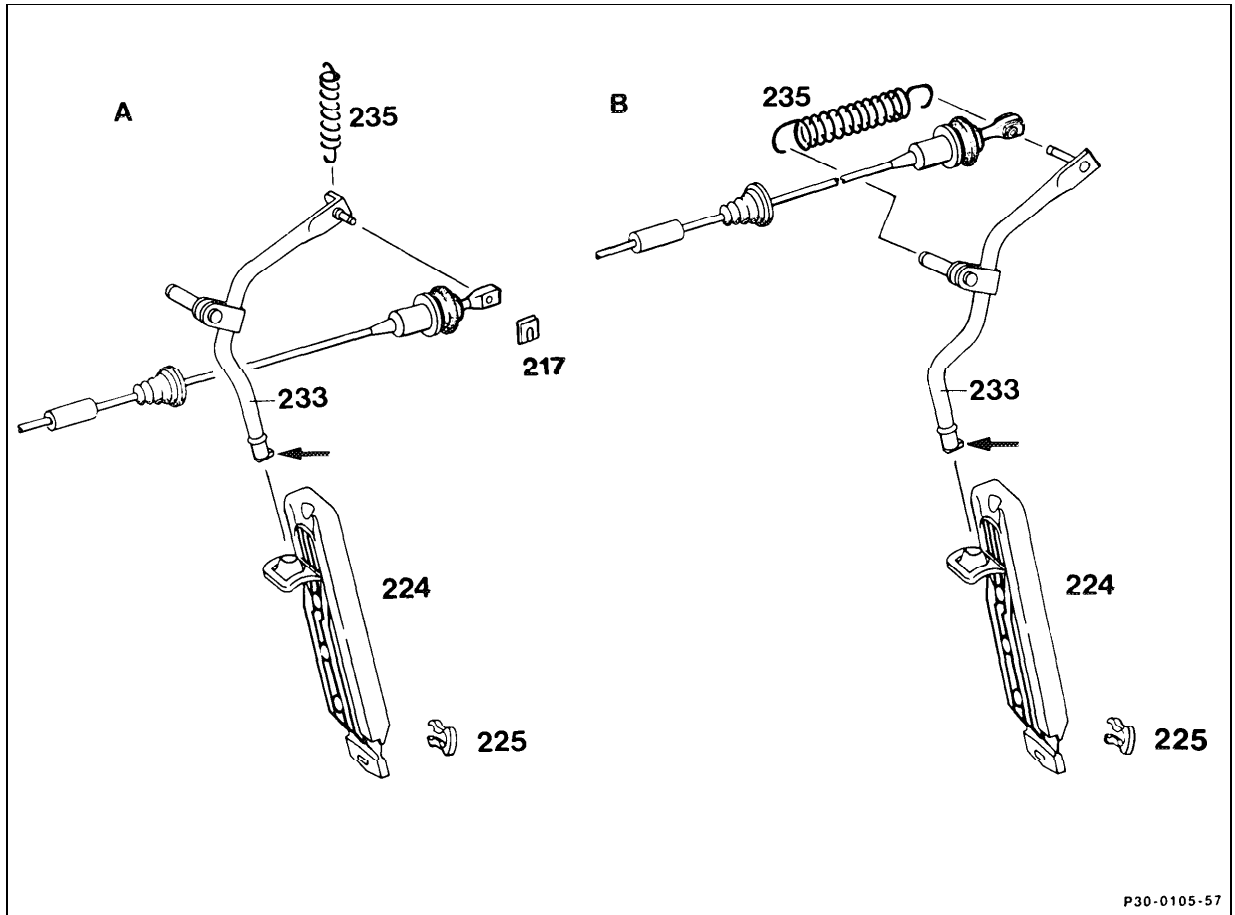
Accelerator lever (233)

Return spring (235)

Note

The connection between accelerator lever and accelerator pedal is maintenance-free and does not require grease.

30-330 Removal and Installation of accelerator pedal - Turbodiesel



A Model 201
B Model 124

Expanding clip (225)	compress behind accelerator pedal and withdraw.
Accelerator pedal (224)	push upwards and turn through 180°, then withdraw downwards. This aligns the lug (arrow) on the accelerator pedal lever (233) with the slot in the accelerator pedal.
Accelerator pedal lever (233)	remove, install.
Return spring (235)	detach, attach.

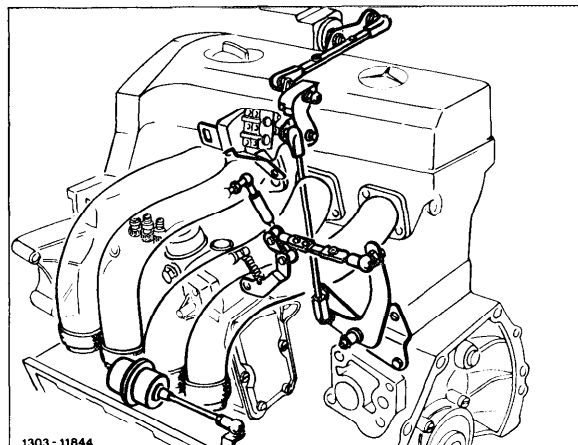
Note

Removal and installation of the accelerator pedal on Model 126 is identical to that for Models 124 and 201. The link from the accelerator lever to the accelerator pedal is maintenance-free and does not need to be greased.

30-335 Lubrication of accelerator control linkage and control shafts

- After each engine wash, lubricate all bearing points of all control shafts, control levers, joints of accelerator control linkage with an oil can.
- The Bowden cable is maintenance-free and does not need to be lubricated.

Version with manual transmission

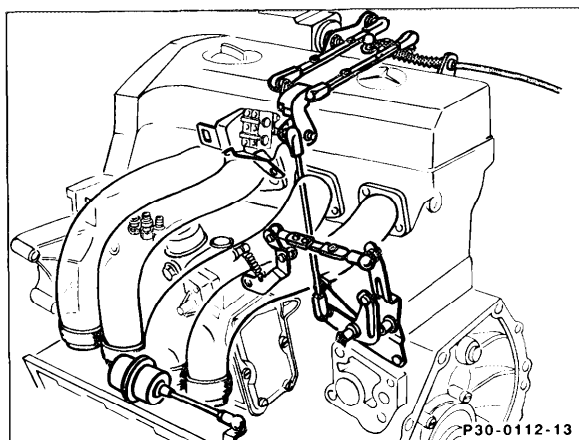


- Only the following hydraulic oils may be used:

CastrolDB Hydraulic Fluid
Mobil Aero HFA
Shell Aero Fluid 4

- When performing assembly work on accelerator control linkage, use anti-corrosion grease 594 M 3 (make: Pfinder) Part No. 000 989 87 51 10.
- Examine accelerator control shafts, control levers, relay levers, ball sockets, Bowden cable and accelerator control linkage for ease of movement and wear.

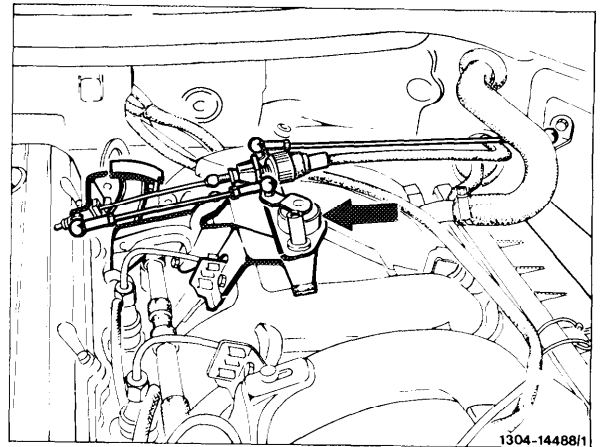
Version with automatic transmission



Note

The friction damper (arrow) must not be lubricated.

Arrangement on manual transmission with support and friction damper



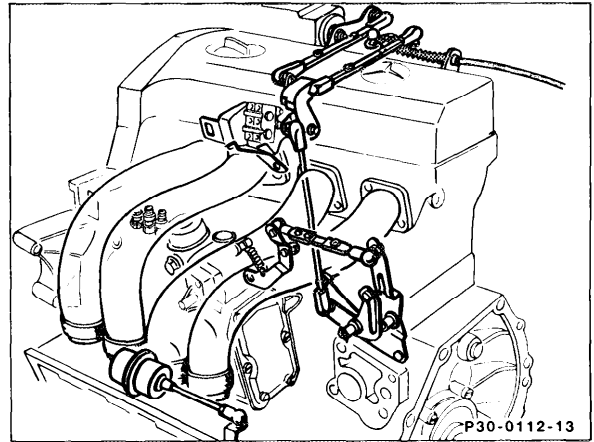
30–335 Lubrication of accelerator control Linkage and control shafts - Turbodiesel

- After each engine wash, lubricate all bearing points of all control shafts, accelerator control levers and joints of the accelerator control linkage with an oil can.
- The Bowden cable is maintenance-free and does not need to be lubricated.
- Only the following hydraulic oils may be used:

Castrol DB Hydraulic Fluid

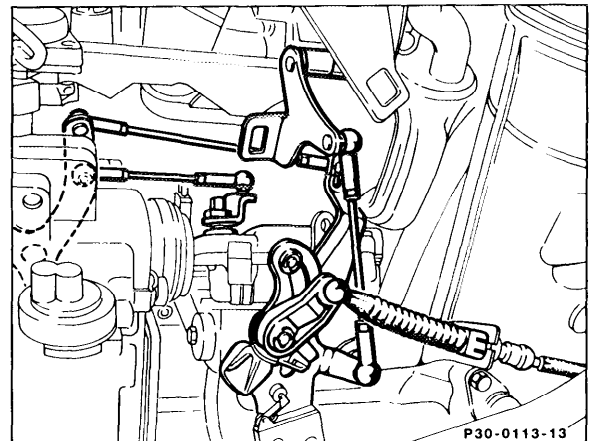
Mobil Aero HFA

Shell Aero Fluid 4



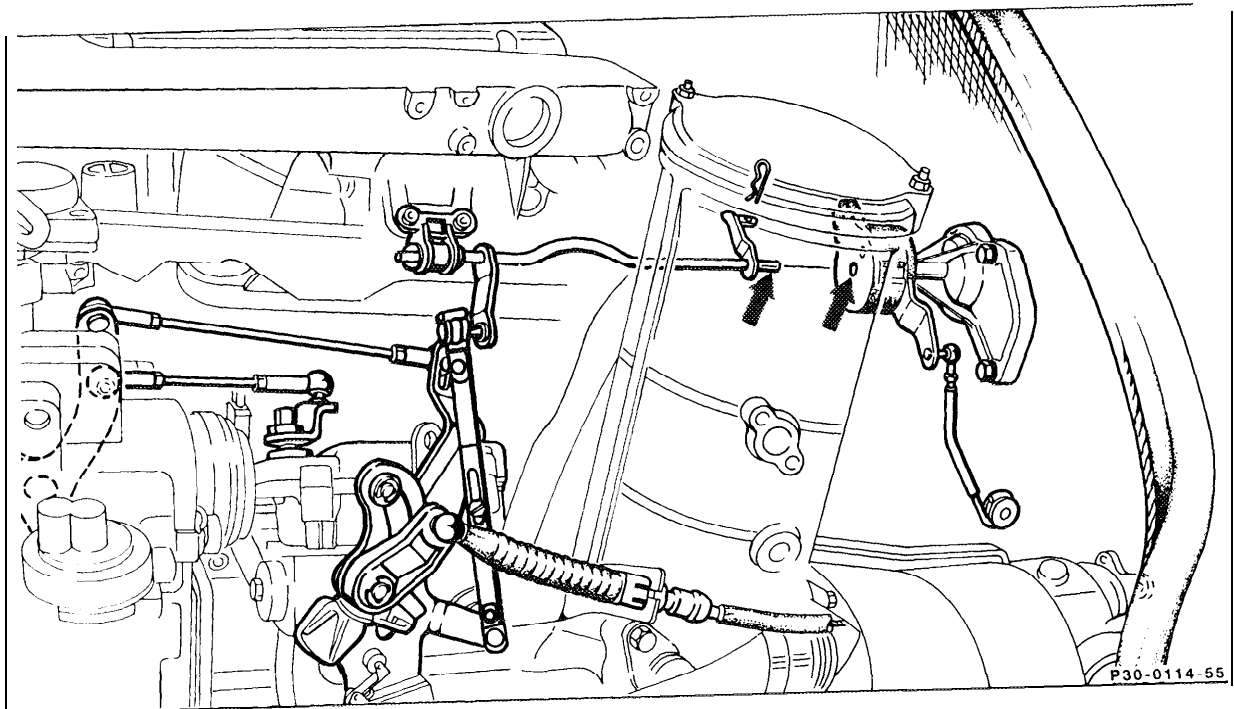
Engine 602.96, Model 201

- Use anti-corrosion grease MB Part No. 000 989 87 57 10 when performing assembly work on the accelerator control linkage.
- Check the accelerator control shafts, control levers, relay levers, ball sockets, Bowden cable and accelerator control linkage for ease of movement and wear.



Engine 603.96, Model 124

The link between accelerator control shaft and lever (arrow) must not be lubricated.



Engine 603.96, Model 126