

30 Throttle control

	Job No.
Adjusting control linkage	30-300
Removal and installation of front wall bearing for accelerator lever	315
Removal, installation and adjustment of bowden cable	325
Removal and installation of accelerator pedal	330
Lubrication of control linkage and control shafts.	335

30-300 Adjusting accelerator linkage

Adjusting value

Length of connecting rod (204) from injection pump to transfer lever (214) ¹⁾	146 ± 8 mm
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¹⁾ For automatic transmission only.

Note

Grease bearing points as well as ball sockets of linkage with Molykote Longterm 2.

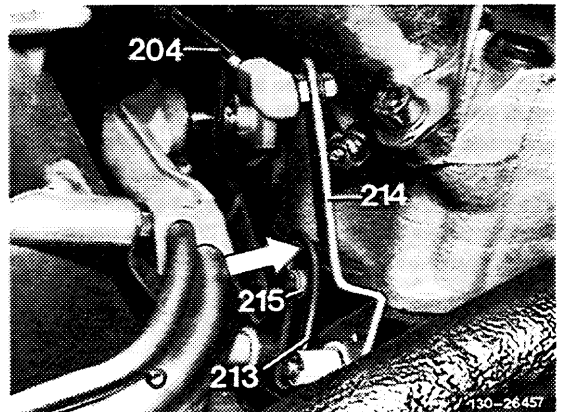
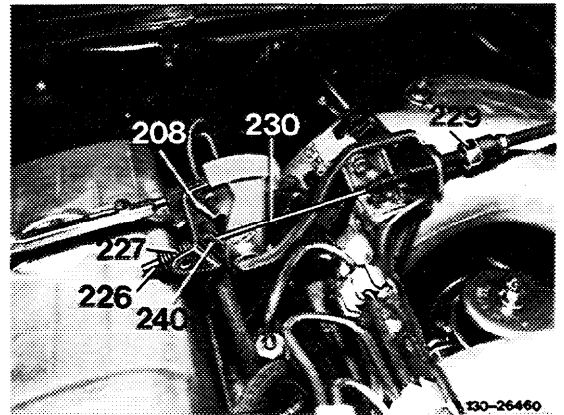
Adjusting

1 Check accelerator linkage for distortion, bowden cable for easy operation. Renew linkage or bowden cable, if required.

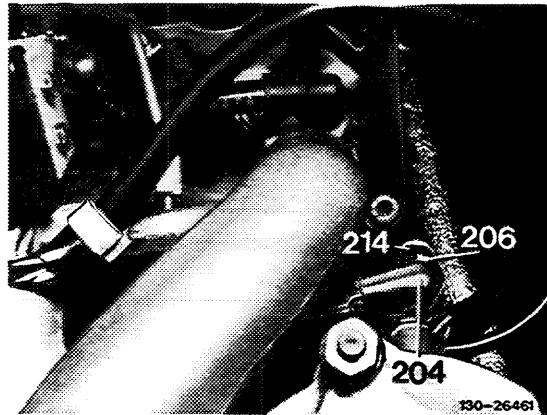
2 Disengage bowden cable (230). For this purpose, force out slotted guide piece (240) on angle lever and remove bowden cable.

3 Vehicles with automatic transmission

Disengage connecting rod (204, adjustable) on transfer lever (214). Check whether adjusting lever of injection pump rests noticeably against idle speed stop. Engage connecting rod (204) free of tension. Make sure that roller (215) in guide block rests free of tension against end stop (arrow) and adjust, if required.



4 Pull to full load on angle lever (208), with adjusting lever of injection pump resting against full load stop. If required, displace adjustable ball head (206) in slot of transfer lever (214) and counterlock.



5 Vehicles with manual transmission

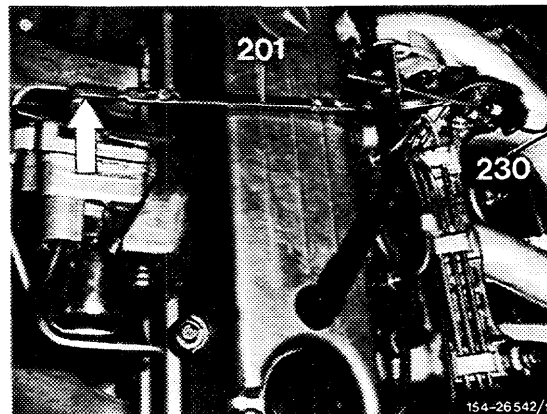
Check whether adjusting lever of injection pump rests noticeably against idle speed stop, disengage connecting rod (201) on cruise control/tempomat for this purpose.

6 Re-engage bowden cable (230).

7 Adjusting cruise control/tempomat

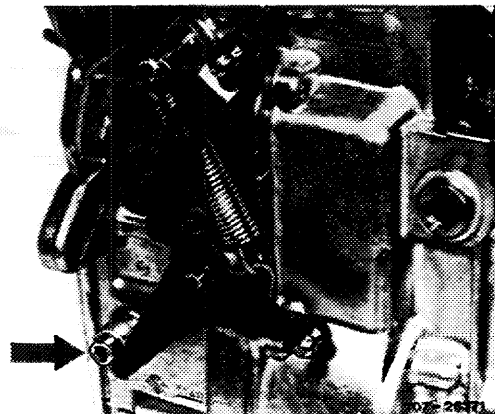
For this purpose, disengage connecting rod (201) on actuator (arrow). Push linkage into idle speed position.

Adjust connecting rod (201) in such a manner that it is 1 mm shorter than the actual max. distance. Engage connecting rod (201) and counterlock.

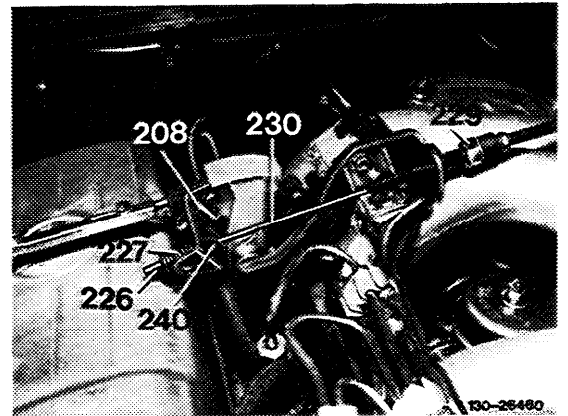


8 Checking full throttle stop

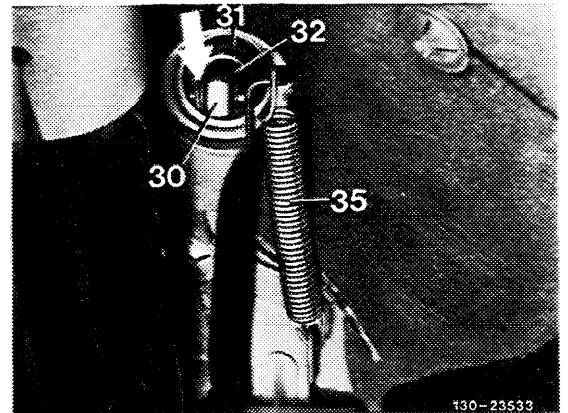
With engine stopped, step on accelerator pedal from inside vehicle down to full throttle stop or with automatic transmission down to stop on kickdown switch. Adjusting lever (arrow) should then noticeably rest against full load stop. Check by applying excess pressure to connecting rod (204). Readjust adjusting screw (229) on bowden cable, if required.



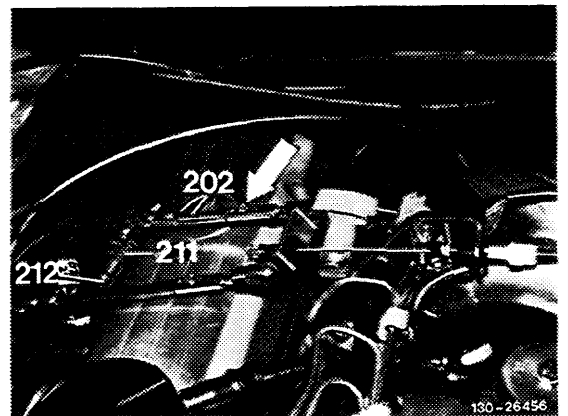
9 In idle position, nipple (226) of bowden cable (230) should rest free of tension against compression spring (227). If required, adjust bowden cable (230) from inside vehicle by means of adjusting nut (232).

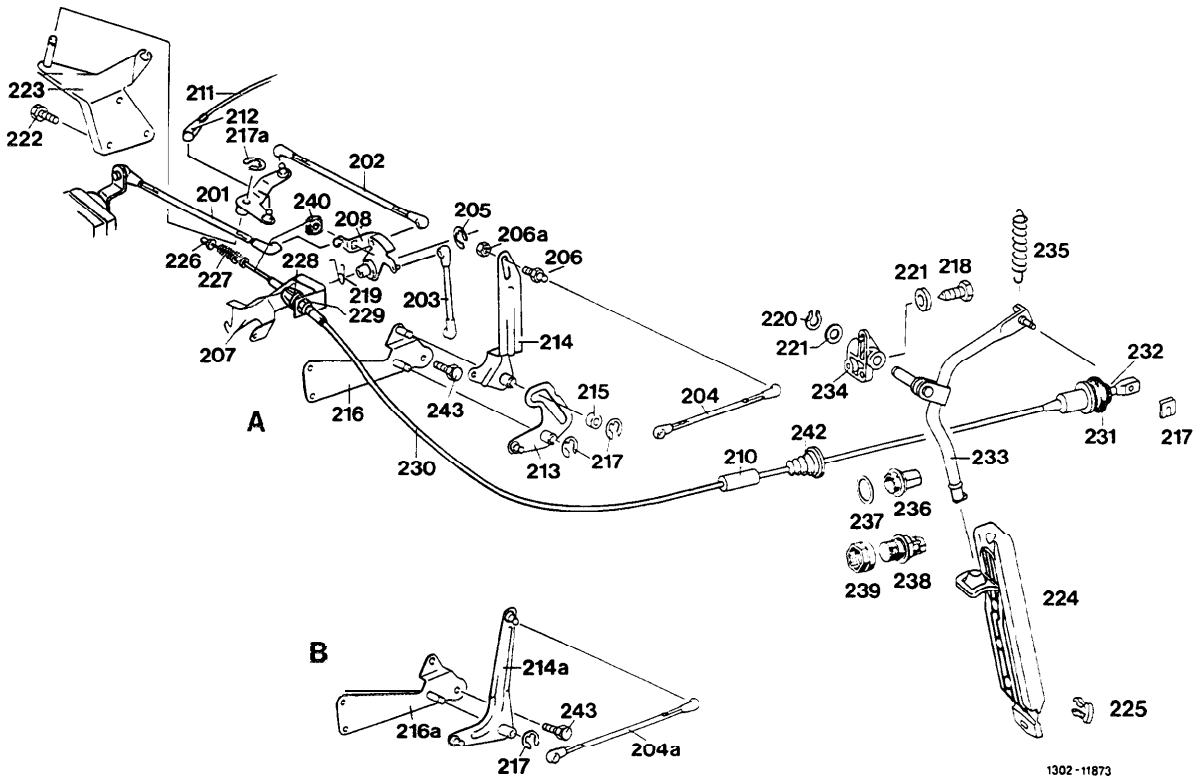


Attention!
Apply full throttle and let accelerator pedal slowly return to idle speed position. In this position, the roller in slotted lever should rest free of tension against end stop. Correct adjustment from inside vehicle with adjusting nut (232), if required.



10 Adjust control pressure cable, pushing off ball socket (212) for this purpose. Pull idle travel rod (202) apart up to stop. Pull control pressure cable (211) forward until slight resistance is felt. In this position, hold ball socket (212) above ball head and engage free of tension, adjusting idle travel rod (arrow), if required.





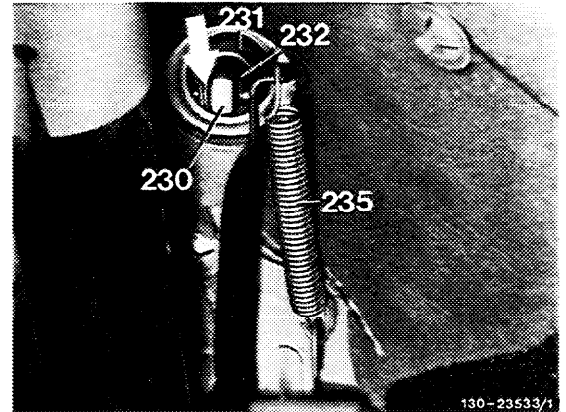
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|------|---|------|-------------------------------|-----|--------------------|
| 201 | Connecting rod | 215 | Roller | 229 | Adjusting screw |
| 202 | idle travel rod | 216 | Holder automatic transmission | 230 | Bowden cable |
| 203 | Connecting rod | 216a | Holder (manual transmission) | 231 | Rubber grommet |
| 204 | Connecting rod (automatic transmission) | 217 | Lock | 232 | Adjusting nut |
| 204a | Connecting rod (manual transmission) | 217a | Lock | 233 | Accelerator lever |
| 205 | Lock | 218 | Screw | 234 | Front wall bearing |
| 206 | Ball head | 219 | Spring | 235 | Return spring |
| 206a | Nut | 220 | Lock | 236 | Full throttle stop |
| 207 | Holder | 221 | Washer | 237 | Washer |
| 208 | Regulating lever | 222 | Nut | 238 | Kickdown switch |
| 210 | Antichaf ing hose | 223 | Holder | 239 | Adjusting nut |
| 211 | Control pressure cable for automatic transmission | 224 | Accelerator pedal | 240 | Guide piece |
| 212 | Ball socket | 225 | Clip | 242 | Sealing sleeve |
| 213 | Slotted lever | 226 | Nipple | 243 | Screw |
| 214 | Transfer lever | 227 | Compression spring | | |
| 214a | Transfer lever (automatic transmission) | 228 | Plastic clip | | |

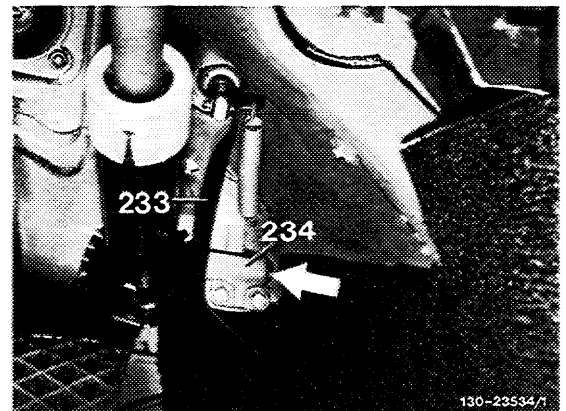
30-315 Removal and installation of front wall bearing for accelerator lever

Removal and installation

- 1 Remove accelerator pedal (30-330).
- 2 Unscrew cover.
- 3 Remove bowden cable (230). Pull off lock (arrow) for this purpose.
- 4 Unscrew front wall bearing (234) and remove together with accelerator lever (233).



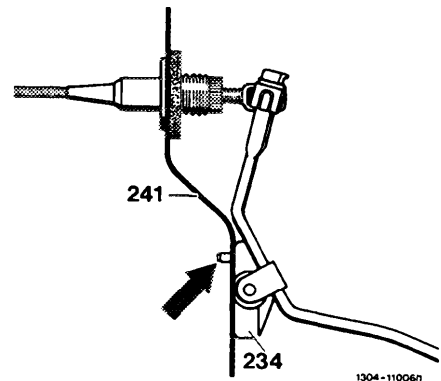
- 5 Disengage return spring (235).
- 6 Remove front wall bearing (234) from accelerator lever (233). Pull off lock (arrow) for this purpose.



Installation note

Make sure that the lug (arrow) of front wall bearing (234) engages in bore on front wall (241).

Check regulating linkage and adjust, if required (30-300).



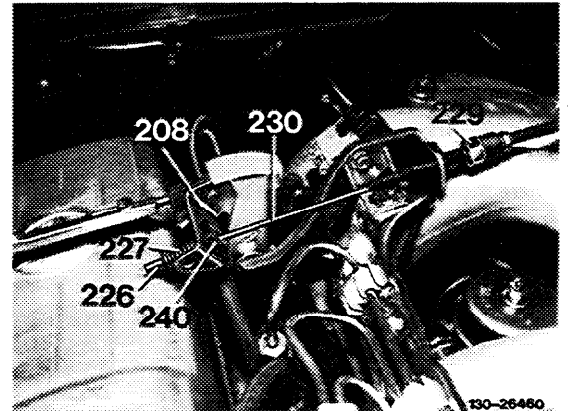
30-325 Removal, installation and adjustment of bowden cable

Removal and installation

1 Disengage bowden cable (230) on control lever (213). Compress and push out guide piece (arrow) for this purpose.

2 Slightly lift angle lever (208) and remove slotted guide piece (240) on angle lever.

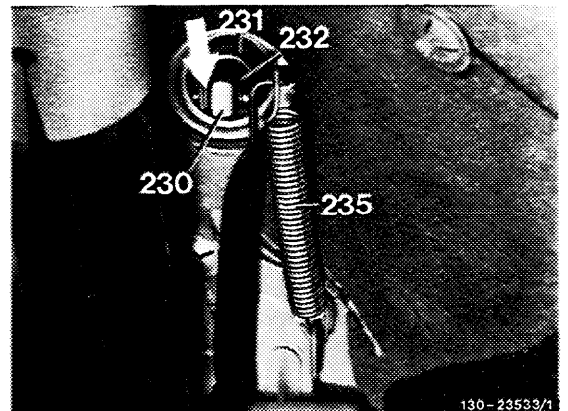
3 Compress black plastic clip (228) and remove bowden cable.



4 Remove lock (arrow) for bowden cable (230) inside vehicle.

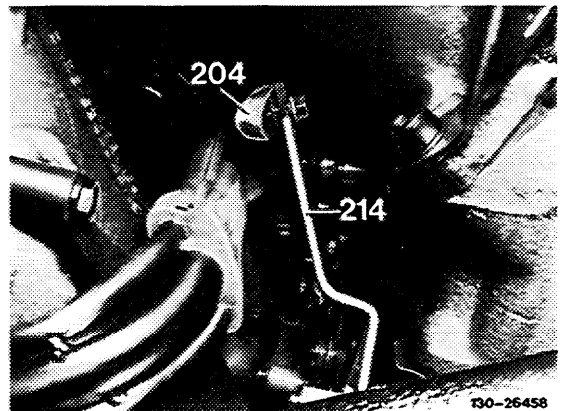
5 Push bowden cable (230) in outward direction. Make sure that the rubber buffer (231) is not pushed out.

6 Remove complete bowden cable from outside between front wall and accessories compartment wall.

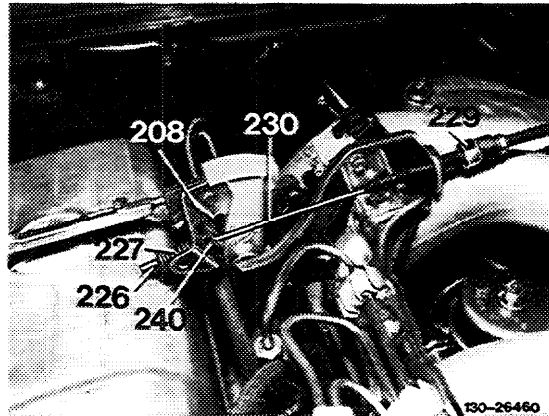


Adjusting

7 Check whether transfer lever (214) rests noticeably against inner idle speed stop of injection pump and adjust control linkage, if required (30-300).

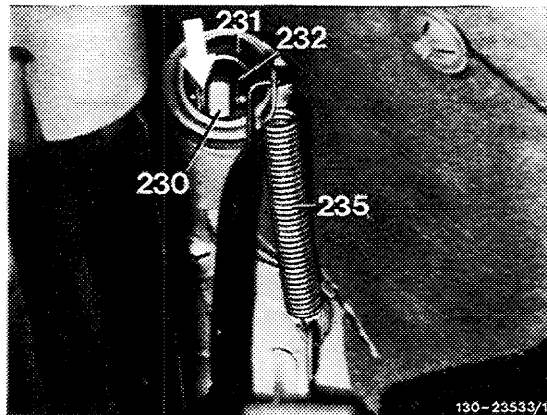


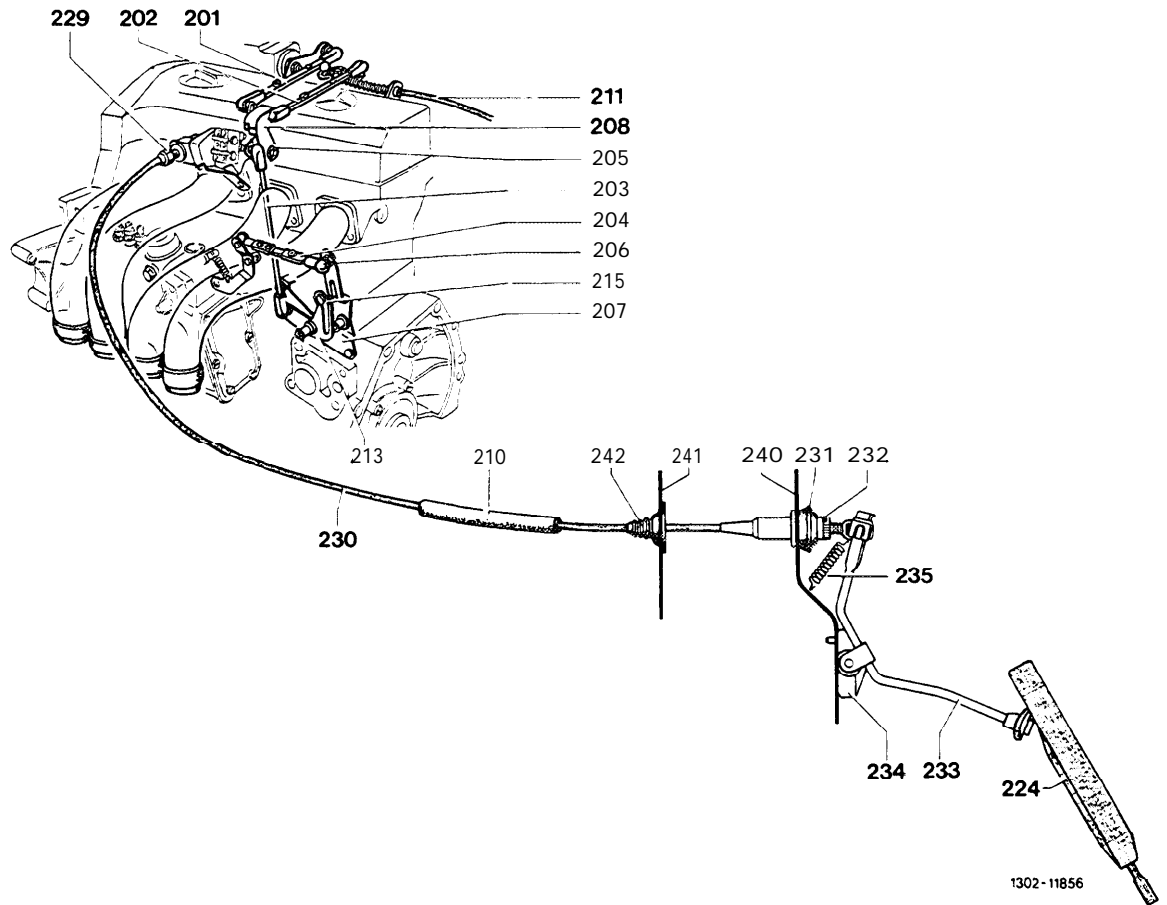
8 With engine stopped, step on accelerator pedal from inside vehicle down to full load stop or with automatic transmission down to stop on kickdown switch. Adjusting lever should then rest against full load stop of injection pump. Readjust adjusting screw (229) on bowden cable, if required.



9 Let accelerator pedal slowly return to idle speed position. In this position, roller in slotted lever should rest free of tension against end stop. If required, adjust bowden cable (230) with adjusting nut (232) from inside vehicle.

There should be no idle travel between nipple and spring following adjustment.





- 201 Connecting rod
- 202 Idle travel rod
- 203 Connecting rod
- 204 Connecting rod
- 205 Lock
- 206 Ball head
- 207 Holder
- 208 Angle lever
- 210 Anti-chafing hose

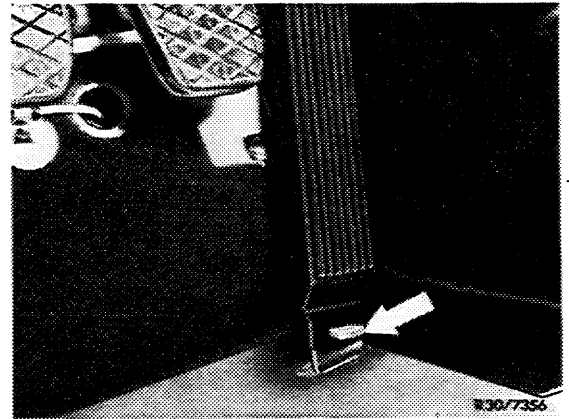
- 211 Control pressure cable control for automatic transmission
- 213 Slotted lever (automatic transmission only)
- 215 Roller
- 224 Accelerator pedal
- 229 Adjusting screw
- 230 Bowden cable

- 231 Rubber grommet
- 232 Adjusting nut
- 233 Accelerator pedal
- 234 Front wall bearing
- 235 Return spring
- 240 Front wall
- 241 Unit compartment wall
- 242 Sealing sleeve

30-330 Removal and installation of accelerator pedal

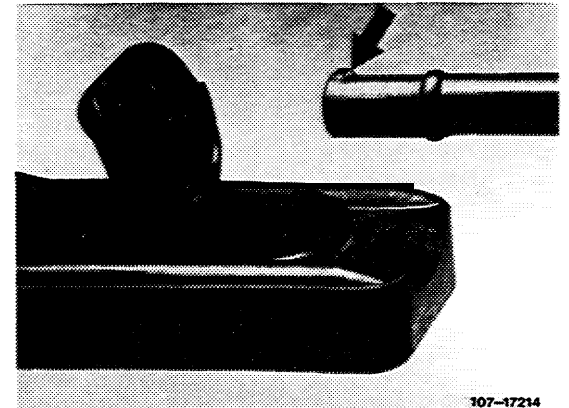
Removal

1 Compress expanding clip (arrow) behind accelerator pedal and pull out.



2 Slide accelerator pedal in upward direction and rotate by 180°.

3 Pull accelerator pedal down, lug (arrow) on accelerator lever should be in alignment with groove in accelerator pedal.



Installation

4 For installation proceed vice versa, making sure that the expanding clip is reliably engaging.

The connection from accelerator lever to accelerator pedal requires no service and need not be lubricated.

Lubricating

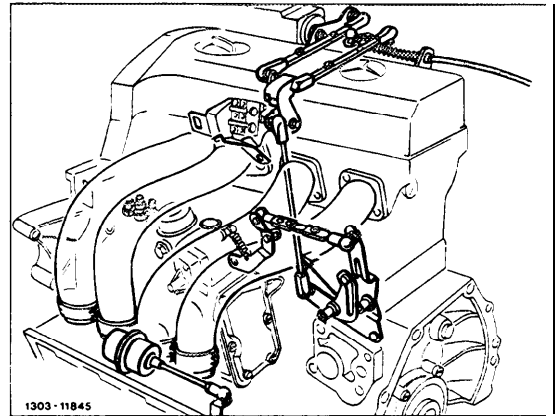
Following each engine wash and preservation of engine compartment, lubricate all bearing points, all control levers and joints of control linkage with an oil can.

On USA version vehicles, use the following hydraulic oils only for this purpose.

- BP-Aero-Hydraulik 1
- Castrol DB Hydraulik Fluid
- Esso Univers J-13
- Mobil Aero HFA
- Shell Aero Fluid 4

The bowden cable requires no service and need not be lubricated.

Layout manual transmission



Layout automatic transmission

