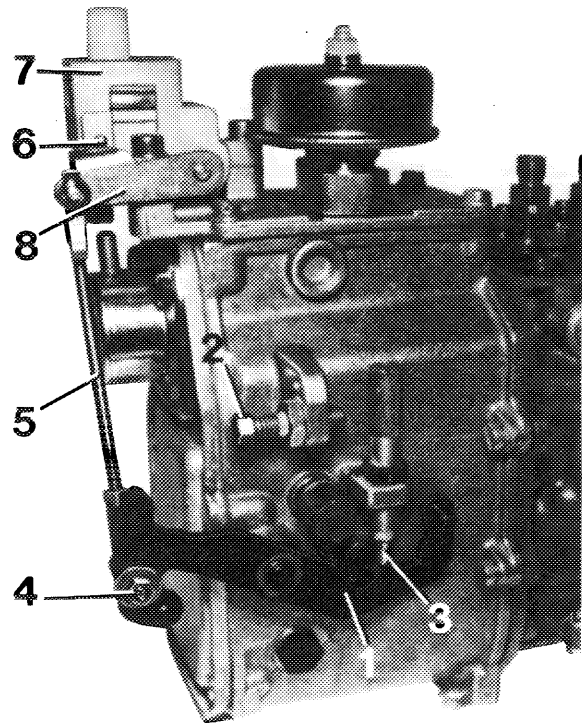


Vehicles with automatic transmission

8 Check whether connecting rod (5) is correctly adjusted. For this purpose, push regulating lever (1) to full throttle stop (2). Actuating lever (8) should have max. 0.5 mm play up to full throttle stop (6). If required, adjust connecting rod (5) with adjustable ball head (4). Connecting rod (5) should be set to 122 mm, measured from center of ball pan to center of linkage. Attach connecting rod.

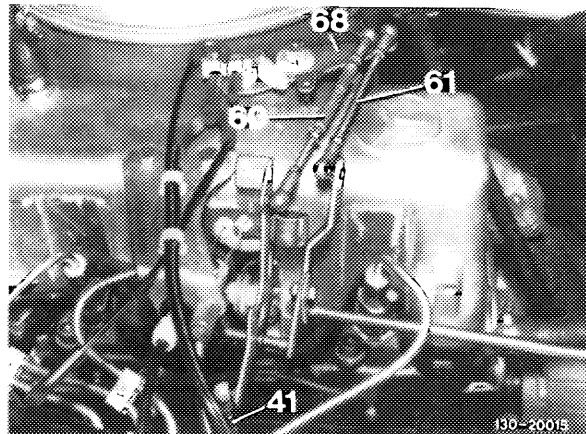
- | | | | |
|---|--------------------------------------|---|--|
| 1 | Regulating lever | 6 | Full throttle stop on vacuum control valve |
| 2 | Full throttle stop on injection pump | 7 | Vacuum control valve |
| 3 | Idle speed stop | 8 | Actuating lever for vacuum control valve |
| 4 | Adjustable ball head | | |
| 5 | Connecting rod | | |



107-17189

9 Adjust idle path rod (60) in fully extended condition to 154 mm and push rod (61) to 137 mm, measured from center to center of ball head.

- | | |
|----|---------------|
| 41 | Push rod |
| 60 | Idle path rod |
| 61 | Pull rod |

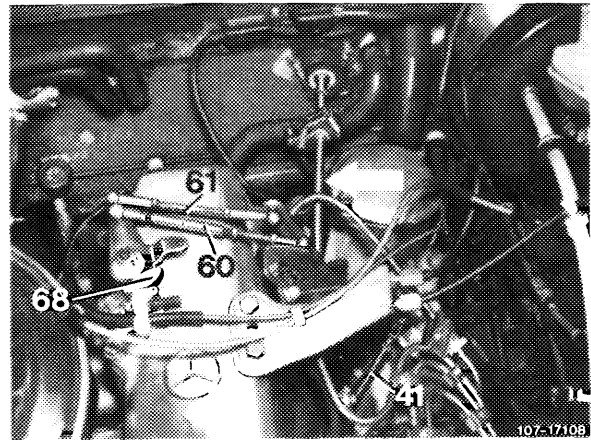


135-20015

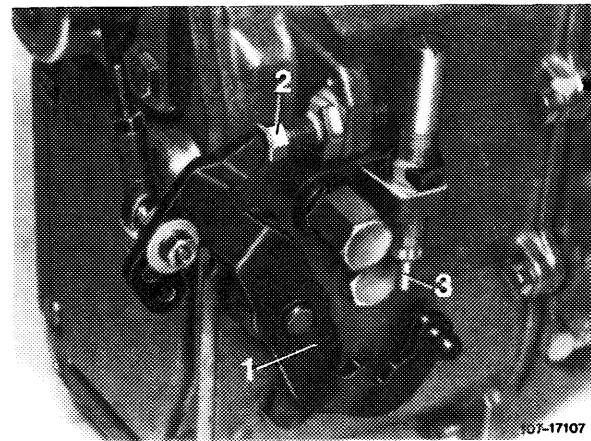
10 Adjust push rod (41) in such a manner that the guide lever (68) is just resting against noticeable control cam lobe (free of tension)

The regulating lever (1) should then rest against idle speed stop (3).

Attach idle path rod (60) and pull rod (61).

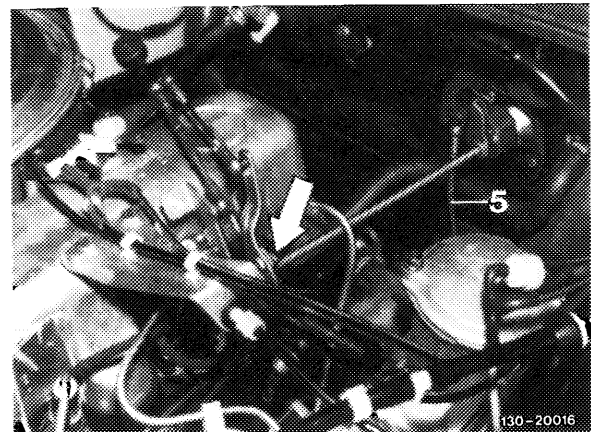


11 Check full throttle stop. With engine stopped, step on accelerator pedal from inside vehicle up to stop on kickdown switch. Accelerator pedal and regulating lever (1) should then rest against full throttle stop (2) of injection pump. If required, adjust regulating linkage by means of adjusting screw (arrow in Fig. item 12) in such a manner that the regulating lever rests against full throttle stop (2) of injection pump (1).



- 1 Regulating lever
- 2 Full throttle stop
- 3 Idle speed stop

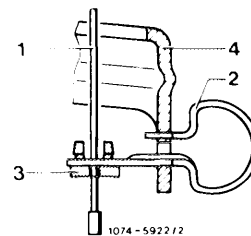
12 If the full throttle stop or the idle speed stop is not attained with this adjusting screw (arrow), adjust push rod (5) from longitudinal regulating shaft to accelerator pedal to 186 mm, measured from center of ball socket to center of damping ring, connect linkage.



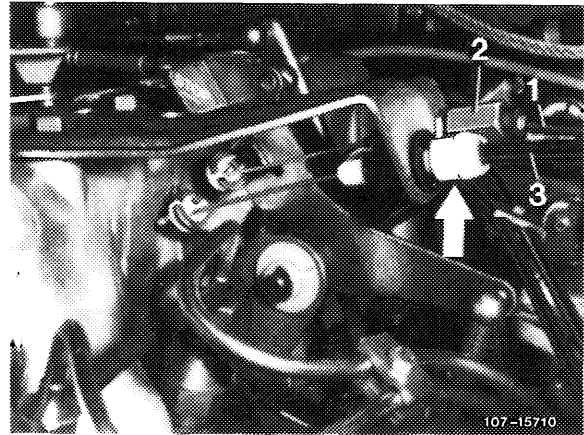
Attention!

If regulating linkage is not moving to full throttle stop, check whether contour spring for idle speed adjuster is correctly installed.

- 1 Cable control for idle speed increase
- 2 Contour spring
- 3 Plastic sleeve
- 4 Guide lever



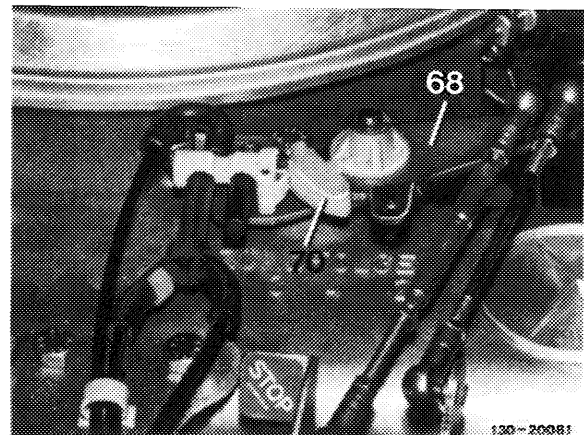
13 Adjust Bowden wire for cruise control/Tempomat. For this purpose, push shutoff lever up to stop. Bowden wire should then rest free of tension against regulating lever.



If required, adjust Bowden wire by means of adjusting nut (arrow). Release shutoff lever (idle speed position). Play for Bowden wire (arrow) will be attained in this position.

Engine regulation

A cap (70) is attached to prevent contamination of plastic runway of guide lever and switchover valves.

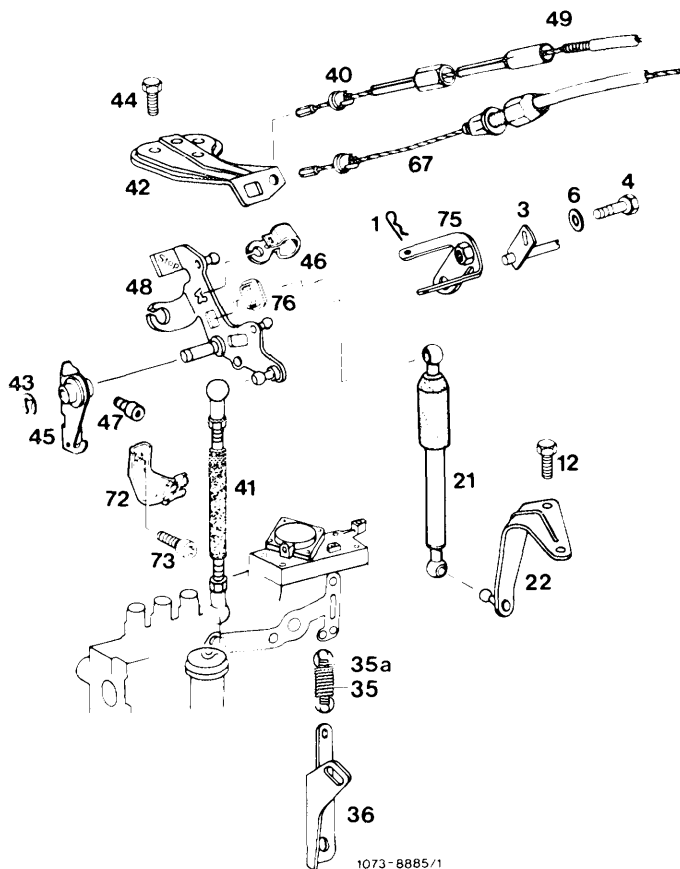


Attention!

During lubrication jobs on regulating system, do not lubricate runway of plastic cam on guide lever (68).

Engine regulation
 Engine 616 in model 123.1
 MW-injection pump with mechanical governor
 (USA) 1981

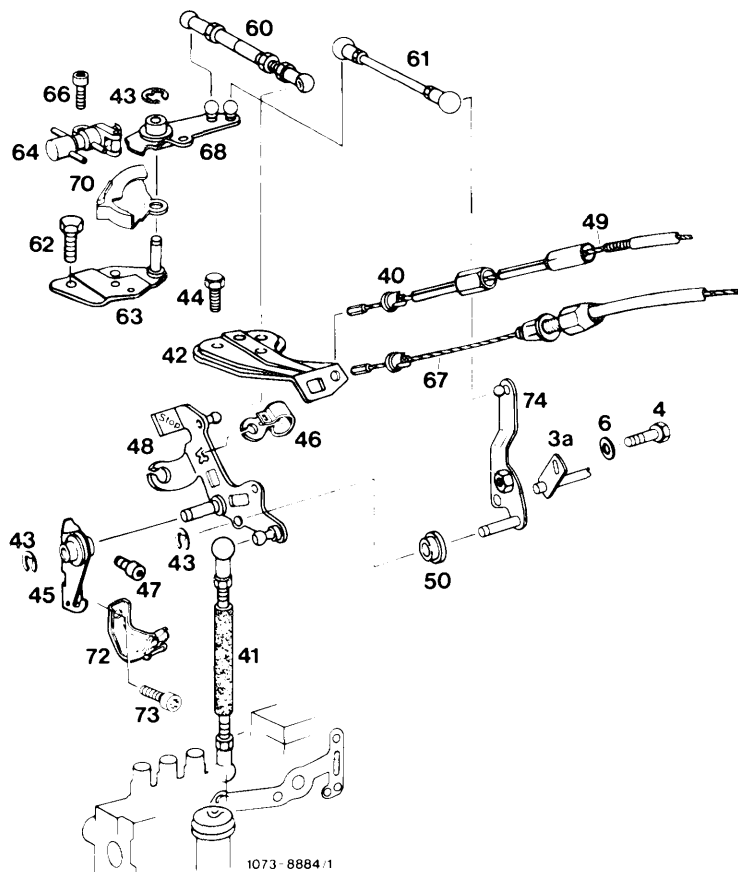
Vehicles with manual transmission



- | | | |
|---------------------------------|----------------------|--|
| 1 Lock | 36 Holder | 48 Angle lever |
| 3 Longitudinal regulating shaft | 40 Plastic sleeve | 49 Bowden wire for idle speed adjuster |
| 4 Adjusting screw | 41 Push rod | 67 Bowden wire for cruise control/Tempomat |
| 6 Washer | 42 Holder | 72 Holder |
| 12 Hex. screw | 43 Lock | 73 Hex. socket screw |
| 21 Damper | 44 Hex. screw | 75 Driver |
| 22 Holder | 45 Bearing | 76 Plastic bushing |
| 35 Compression spring, outer | 46 Contour spring | |
| 35a Compression spring, inner | 47 Hex. socket screw | |

Engine regulation
 Engine 616 in model 123.1
 MW-injection pump with mechanical governor
 (USA) 1981

Vehicles with automatic transmission

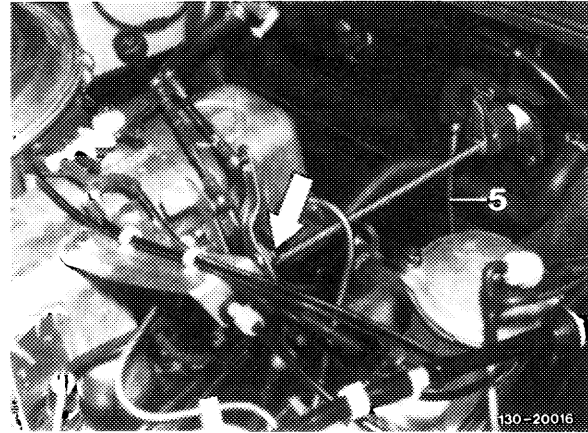


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- | | | | | | |
|----|-------------------------------|----|-------------------------------------|----|---|
| 3a | Longitudinal regulating shaft | 46 | Contour spring | 63 | Holder |
| 4 | Adjusting screw | 47 | Hex. socket screw | 64 | Switchover valve |
| 6 | Washer | 48 | Angle lever | 66 | Hex. socket screw |
| 40 | Plastic sleeve | 49 | Bowden wire for idle speed adjuster | 67 | Bowden wire for cruise control/Tempomat |
| 41 | Push rod | 50 | Plastic bushing | 68 | Guide lever |
| 42 | Holder | 60 | Idle path rod | 70 | Cap |
| 43 | Lock | 61 | Pull rod | 72 | Holder |
| 44 | Hex. screw | 62 | Hex. screw | 73 | Hex. socket screw |
| 45 | Bearing | | | 74 | Guide lever |

Chassis regulation

To reduce vibrations on accelerator pedal, the connection between engine and chassis regulation has been displaced from angle lever on valve cap to front wall. The bearing on front wall has been changed at the same time.



Attention

When removing transmission, also remove longitudinal regulating shaft, so that bearing bracket cannot be damaged by tilting of engine.

Length of regulating linkage

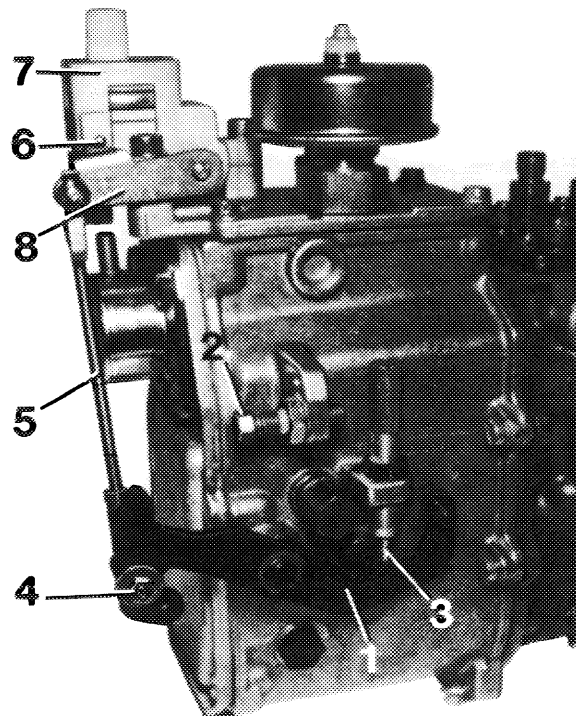
Idle path rod (60 in Fig. item 5) in extended condition	154 mm
Pull rod (61 in Fig. item 5)	137 mm
Push rod (41 in Fig. item 5)	184 mm ¹⁾
Push rod (5 in Fig. item 10)	198 mm

Auxiliary tool (spare part)

Adjusting sleeve	180 072 03 93
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Adjustment

- 1 Check regulating linkage for easy operation and distortion. Replace damaged parts, if required.
- 2 Disconnect all regulating rods.
- 3 Check whether regulating lever (1) of injection pump rests against idle speed stop (3).

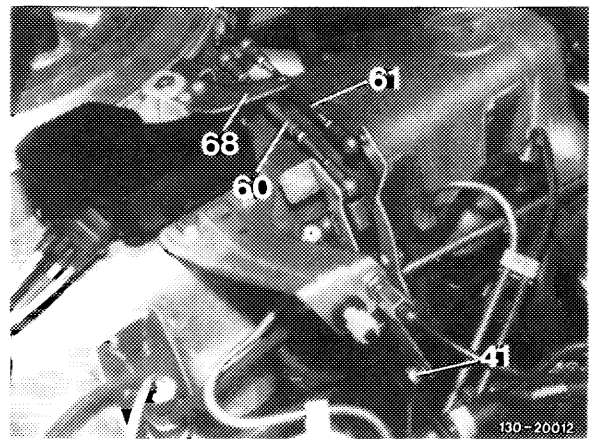


- | | |
|--|--|
| 1 Regulating lever | 6 Full throttle stop on vacuum control valve |
| 2 Full throttle stop on injection pump | 7 Vacuum control valve |
| 3 Idle speed stop | 8 Actuating lever for vacuum control valve |
| 4 Adjustable ball head | |
| 5 Connecting rod | |

107-17189

4 Check whether connecting rod (5) is correctly adjusted. For this purpose, push regulating lever (1) to full throttle stop (2). Actuating lever (8) should then have max. 0.5 mm play up to full throttle stop (6). If required, adjust connecting rod (5) with adjustable ball head (4). Connecting rod (5) should be set to 122 mm, measured from center of ball socket to center of connecting rod linkage.

5 Set idle path rod (60) in fully extended condition to 154 mm and pull rod (61) to 137 mm, measured from center to center of ball head.



41 Push rod
60 Idle path rod
61 Pull rod

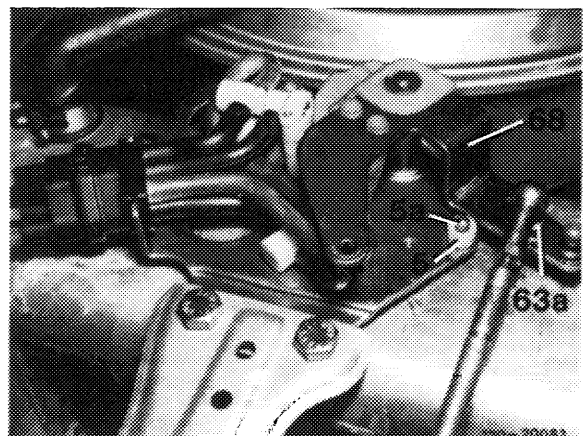
6 Adjust push rod (41) in such a manner that guide lever (68) is just resting against noticeable control cam lobe.

Regulating lever (1) should then rest against idle speed stop (3) (Fig. item 1).

Connect idle path rod (60) and pull rod (61).

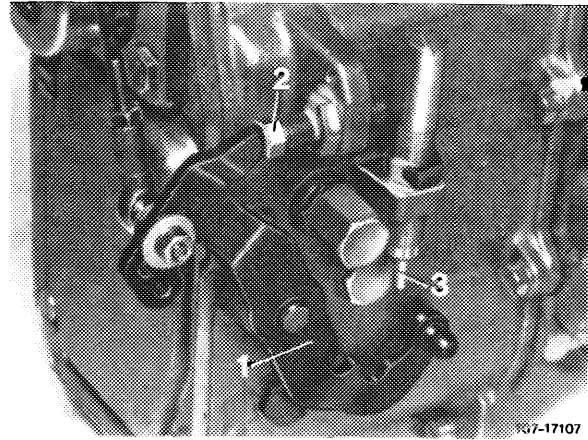
7 Plug adjusting sleeve (5) on stop bolt (5a).

8 Move guide lever (68) to full throttle at adjusting sleeve (5). Regulating lever (1) should then rest against full load stop (2) on injection pump. If required, set adjustable ball head (63a) in slot as required.

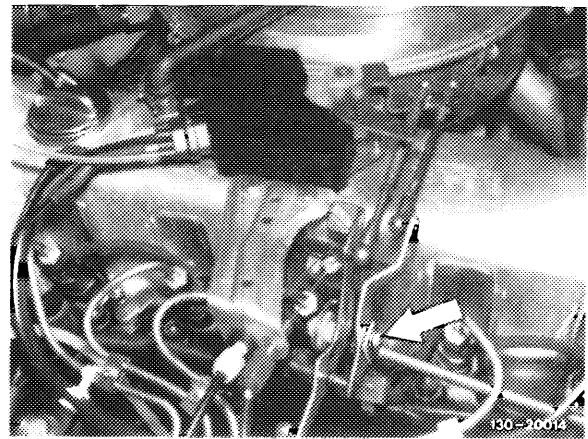


5 Adjusting sleeve
5a Stop bolt
63a Adjustable ball head
68 Guide lever

9 Check full throttle stop. With the engine stopped, step on accelerator pedal from inside vehicle up to stop on kickdown switch. Regulating lever (1) should then rest against full throttle stop of injection pump (2). If required, adjust regulating linkage with adjusting screw (arrow in Fig. item 10) in such a manner that regulating lever rests against full throttle stop (2) on injection pump (1).



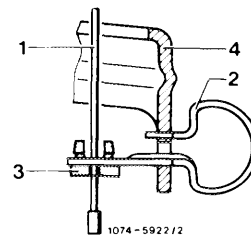
10 If the full throttle stop (2) or the idle speed stop (3) is not attained with adjusting screw (arrow), adjust push rod (5) from longitudinal regulating shaft to accelerating pedal to 198 mm, measured from center of ball socket to center of damping ring. Connect linkage.



Attention!

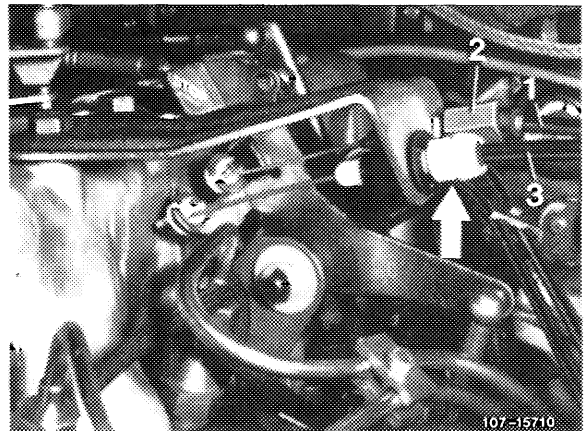
If regulating linkage is not moving to full throttle, check whether contour spring in idle speed adjuster is correctly installed.

- 1 Cable control for idle speed increase
- 2 Contour spring
- 3 Plastic sleeve
- 4 Guide lever



11 Adjust Bowden wire for cruise control/Tempomat. For this purpose, push shutoff lever up to stop. Bowden wire should then rest free of tension against regulating lever.

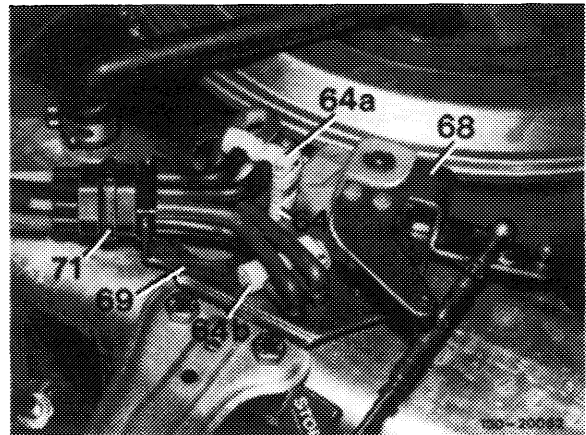
Adjust Bowden wire with adjusting nut (arrow), if required. Release shutoff lever (idle speed position). Play for Bowden wire (arrow) will be attained in this position.



Engine regulation

Three switchover valves (64, 64a, 64b) are mounted on a valve plate (69) to control EGR and automatic transmission. Connection is made by means of a central plug (71). A cap is mounted to prevent contamination of plastic runway.

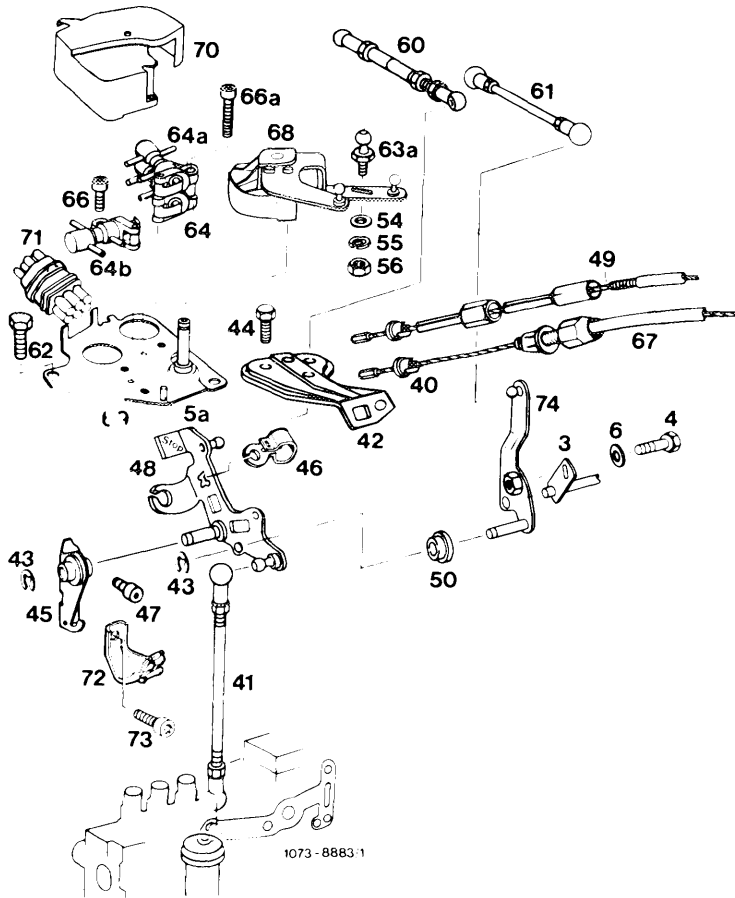
- 64 Switchover valve for automatic transmission
- 64a Switchover valve, idle speed shutoff – EGR
- 64b Switchover valve, full throttle shutoff – EGR
- 68 Guide lever
- 69 Valve plate
- 71 Central plug



Attention!

During lubricating jobs on regulating system, do not lubricate runway of plastic cam on guide lever (68).

Engine regulation
 Engine 617 in model 123.1
 MW-injection pump with mechanical governor
 (USA) 1981

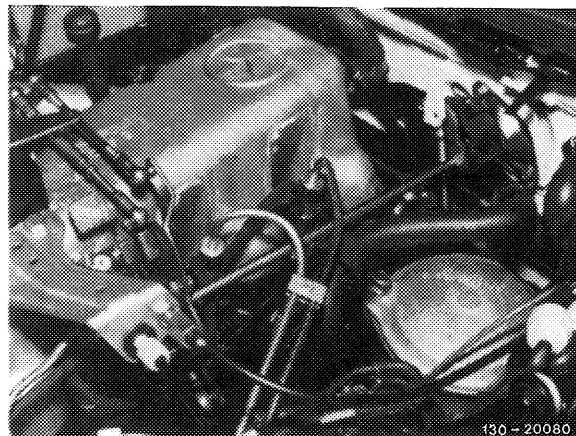


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- | | | | | | |
|----|-------------------------------|-----|---|-----|--|
| 3a | Longitudinal regulating shaft | 48 | Angle lever | 64a | Switchover valve, idle speed shutoff — EGR |
| 4 | Screw | 49 | Bowden wire for idle speed adjuster | 64b | Switchover valve, full throttle stop — EGR |
| 5a | Stop bolt | 50 | Plastic bushing | 66 | Hex. socket screw |
| 6 | Washer | 54 | Washer | 66a | Hex. socket screw |
| 40 | Plastic sleeve | 55 | Snap ring | 67 | Bowden wire for cruise control/Tempomat |
| 41 | Push rod | 56 | Nut | 68 | Guide lever |
| 42 | Holder | 60 | Idle path rod | 69 | Valve plate |
| 43 | Lock | 61 | Pull rod | 70 | Cap |
| 44 | Hex screw | 62 | Hex. screw | 71 | Central plug |
| 45 | Bearing | 63a | Adjustable ball head | 72 | Cable holder |
| 46 | Contour spring | 64 | Switchover valve for automatic transmission | 73 | Hex. socket screw |
| 47 | Hex. socket screw | | | 74 | Guide lever |

Chassis regulation

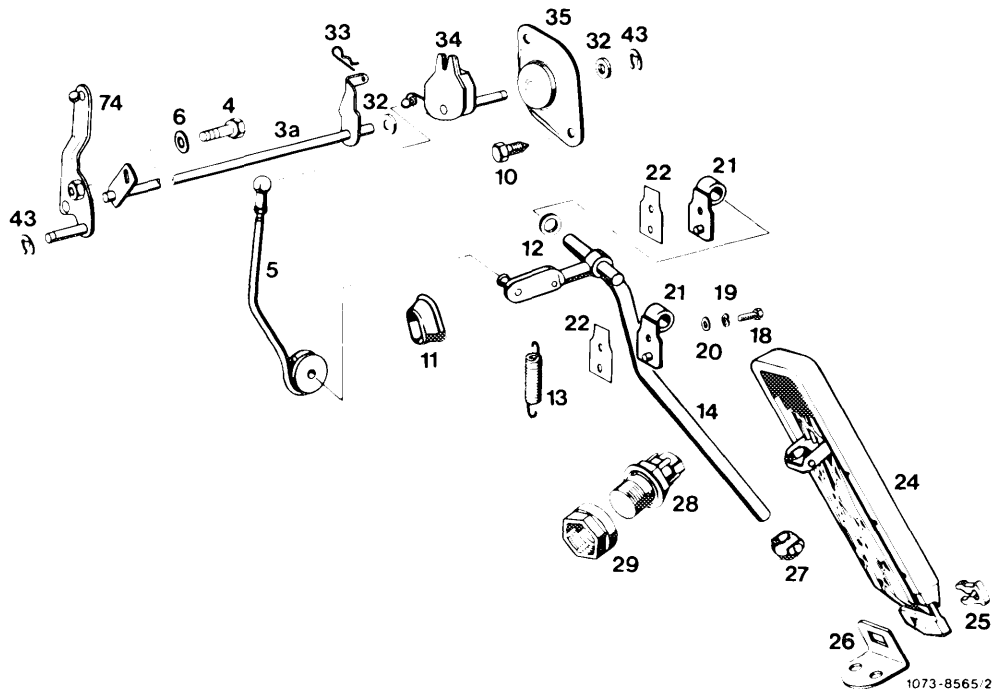
To reduce vibrations on accelerator pedal, the connection between engine and chassis regulation has been displaced from angle lever on valve cap to front wall. Bearing on front wall has been changed at the same time.



Attention!

When removing transmission, also remove longitudinal regulating shaft, so that bearing bracket is not damaged by tilting of engine.

Chassis regulation with longitudinal regulating shaft
 Model 123.1 (USA) 1981



- | | | | | | |
|----|-------------------------------|----|-------------------|----|------------------------------|
| 3a | Longitudinal regulating shaft | 18 | Hex. screw | 28 | Kickdown switch |
| 4 | Adjusting screw | 19 | Domed washer | 29 | Adjusting nut |
| 5 | Push rod | 20 | Washer | 32 | Plastic spacing ring |
| 6 | Washer | 21 | Bearing | 33 | Lock |
| 10 | Screw | 22 | Gasket | 34 | Regulating lever with damper |
| 11 | Rubber grommet | 24 | Accelerator pedal | 35 | Bearing holder |
| 12 | Plastic spacing ring | 25 | Clip | 43 | Lock |
| 13 | Return spring | 26 | Fastening plate | 74 | Guide lever |
| 14 | Accelerator pedal | 27 | Joint | | |