

07.4–100 Adjustment of idle speed

A. Standard version

Testing and adjusting data

Engine	Idle speed 1/min	Idle speed emission value % CO
116, 117	700–750	1.5–2.5

B. National version (J) (USA)

Identification: Information plate in national language on cross member in front of radiator or on cylinder head cover.

Adjust engines according to data of respective emission control information plate.

Engine	Model	Idle speed 1/min	Idle speed emission value % CO
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(J)

Information plate: yellow imprint „Japan“.

116, 117	up to 1976	760–800	max. 1.5
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(USA)

Information plate: color code black/green

116	1970/71	750–800	1.0–2.0
117	1972/73	700–800	0.5–2.0
117 Federal emission control (black information plate)	1974		
117 California emission control (green information plate)	1974		max. 1.0 with air injection
117	1975		max 1.5 without air injection

Special tool

Oil telethermometer



116 589 27 21 00

Conventional tools

CO measuring instrument, revolution counter

Note

Do not adjust idle speed when engine is too hot, e.g. immediately following a fast ride or after measuring output on output dynamometer.

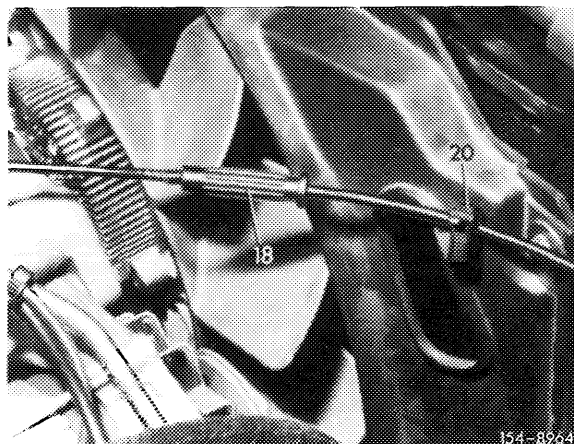
Adjustment

- 1 Switch off air conditioner or automatic climate control. Move selector lever into position „P“.
- 2 Connect test instruments: revolution counter, CO measuring instrument.
- 3 Run engine to operating temperature (60–80°C engine oil temperature).
- 4 Check intake system for leaks. For this purpose, spray all sealed points with Iso-Oktan DIN 51756 or bezzine.

Attention!

Do not use conventional fuel for spraying (vapours dangerous to health). Note inflammability and do not spray on red-hot components or parts of ignition system.

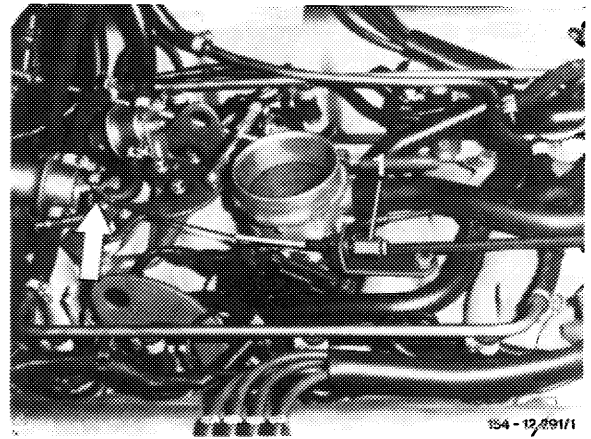
- 5 Check whether Bowden wire for Tempomat/Cruise Control rests free of tension against regulating lever (arrow). Set with adjusting nut (1 or 18), if required.



1st version

154-8964

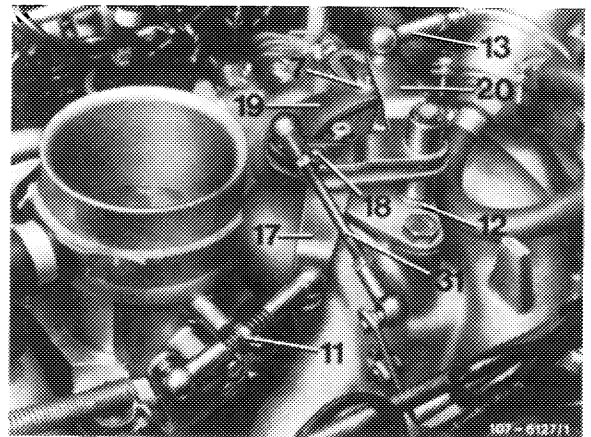
2nd version



6 Check regulating linkage.

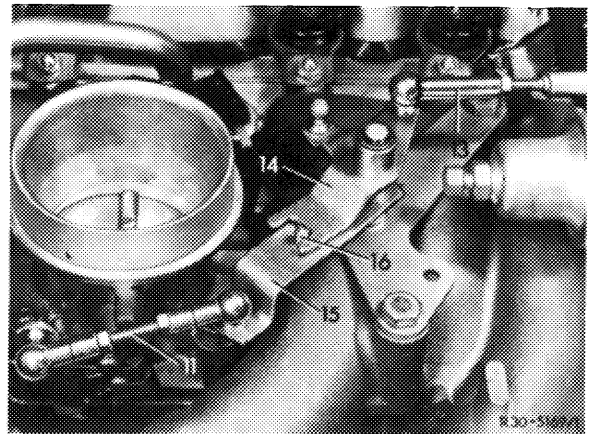
a) On vehicles with gate lever

Check whether roller (7) in gate lever (19) rests free of tension against end stop. Adjust by means of connecting rod (11).

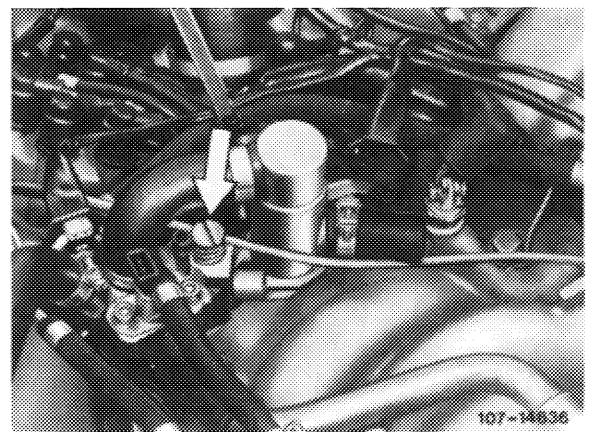


b) On vehicles without gate lever

Check whether regulating lever (14) rests against stop pin (16). Adjust connecting rod (11) if required.



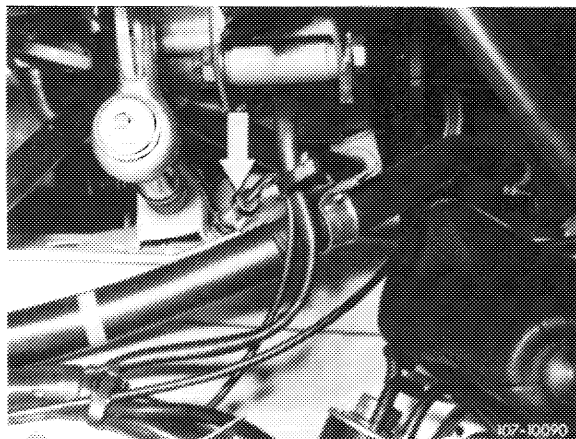
7 Adjust to specified idle speed by means of idle speed air screw (arrow).



8 Test idle speed emission value.

On vehicles USA version model year 1975, test emission value **without** air injection and adjust, if required.

For this purpose, pull plug connection (arrow) of oil temperature switch 17°C at right-hand wheel house and connect to ground. This will switch off the air injection.



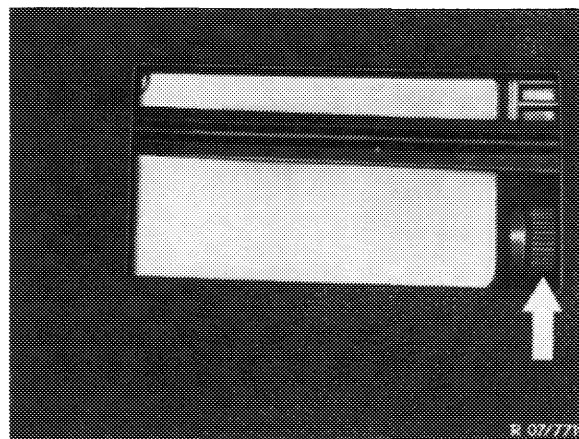
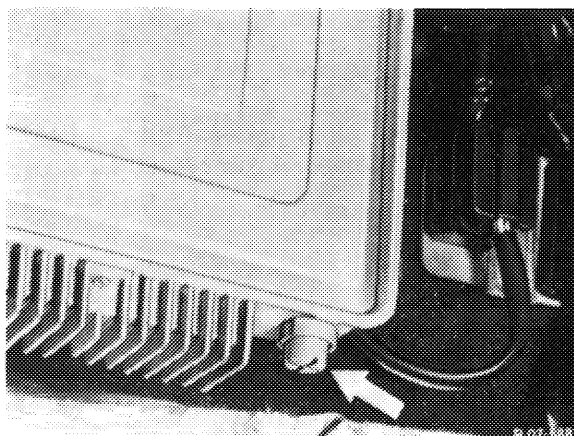
9 Adjust idle speed emission value.

Adjust idle speed emission value on control unit by means of adjusting screw (arrows).

Turning counterclockwise = leaner
Turning clockwise = richer

On model 107 the control unit is accessible after releasing internal lining under glove box. On vehicles with right-hand steering, control unit is mounted at the left.

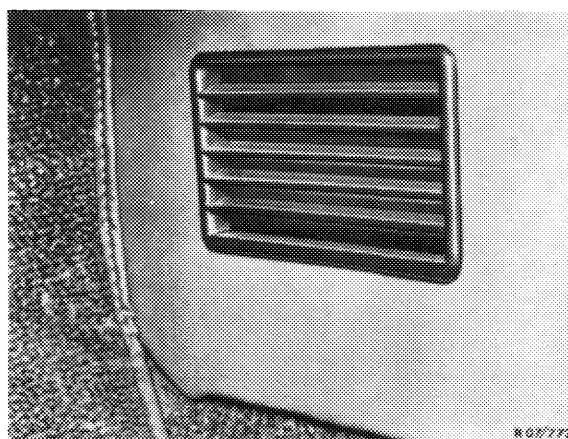
Model 107



Model 116

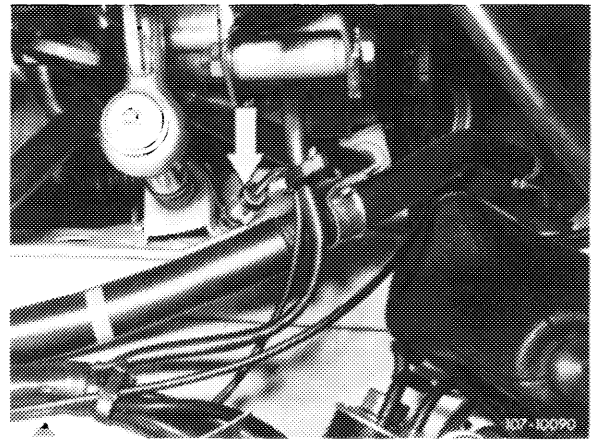
On model 116 the control unit is mounted in legroom at front right. Remove ornamental moulding to adjust emission value.

On vehicles with right-hand steering the control unit is mounted at the left.



Accelerate for a short moment and test idle speed emission value, adjust if required.

On vehicles USA version model year 1975 connect plug connection of temperature switch 17°C. Check idle speed emission value once again (air injection operating). Idle speed emission value should be below the value previously set.



10 Mount air filter. Check idle speed and idle speed emission value once again and adjust, if required.

11 Set selector lever to driving position. Switch-on air conditioner or automatic climate control, turn power steering completely against lock, engine should continue running. Adjust speed, if required.