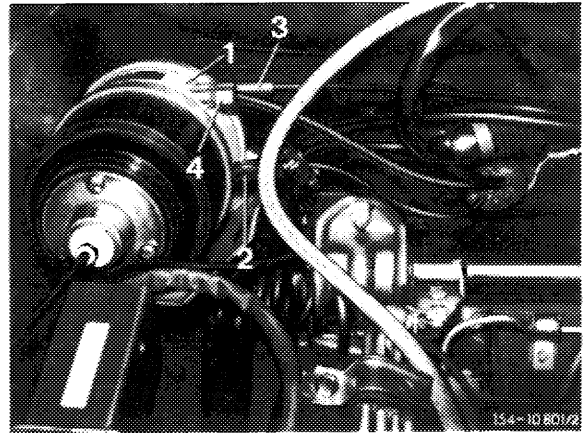


## 54–505 Checking the actuator

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### A. Electrical checkup

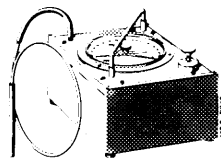
- 1 Pull 2-pole coupler (2) from actuator (1).
- 2 Connect Ohmmeter to connection of actuator (1).
- 3 The resistance should be between 10–22 Ohms.
- 4 If this value is exceeded or not attained, replace actuator (1).



### B. Checking vacuum supply for actuator

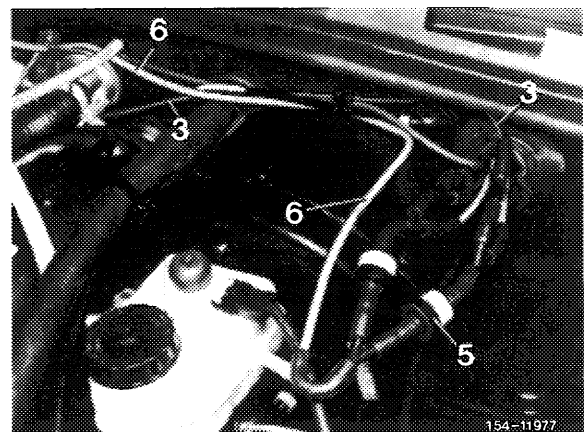
#### Special tool

Tester for vacuum systems

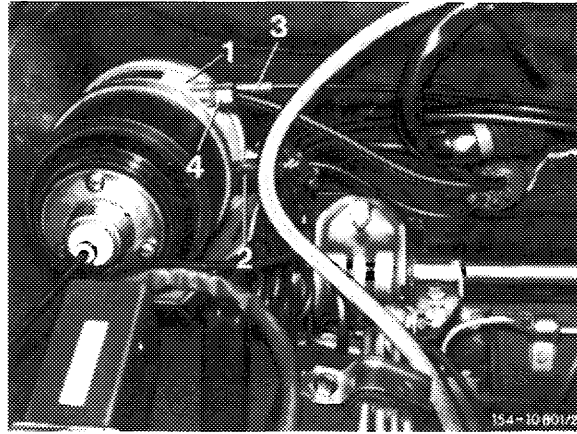


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- 1 Check vacuum line (6) from engine to check valve (5) and vacuum line (3) from check valve (5) to actuator for correct connection.



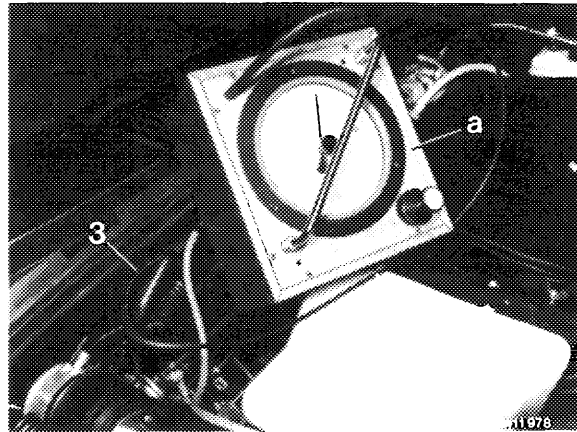
2 Check vacuum line (3) and venting line (4) for correct connection on actuator (1).



3 Pull vacuum line (3) from actuator (1) and connect with tester (a).

4 Start engine, under sudden acceleration, the vacuum on tester (a) should not drop to zero.

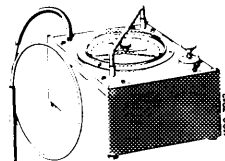
5 Check vacuum system, if indication is negative.



### C. Mechanical and pneumatic checkup of actuator, including cable control and control linkage

#### Special tool

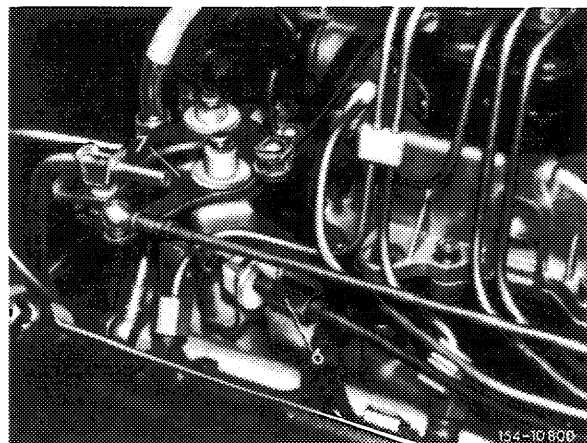
Tester for vacuum system



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1 Remove air filter (not required for engines 110.98, 616 and 617).

2 Check adjustment of cable control (6) on regulating lever (7) and adjust, if required (54–560).

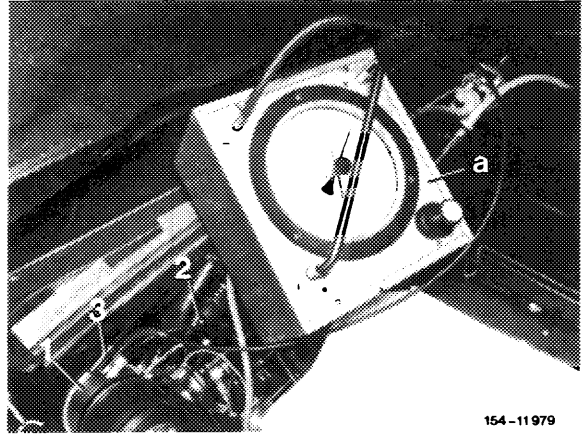


3 Check full throttle position of control linkage with accelerator pedal depressed.

4 Connect tester (a) to connection of actuator (1), pull off vacuum line (3) for this purpose.

5 Pull off 2-pole coupling (2) on actuator (1)

6 Connect one connection of actuator with battery+, the other connection with battery-.



7 Complete the following test steps:

Test step	Required condition	Remedy for negative indication
1	Set up vacuum with tester (a), while watching operation of control linkage and cable control. Control linkage should move uniformly. At approx. 300 mbar vacuum the control linkage should be at full throttle position. A vacuum drop to 100 mbar in 1 minute is permitted.	<p>Check control linkage for easy operation.</p> <p>Check cable control for easy operation.</p> <p>Replace actuator.</p>
2	Disconnect battery from actuator. Control linkage moves into idle position. A noticeable vacuum drop on tester within one minute is not permitted. The previously set up vacuum must remain constant.	Replace actuator.