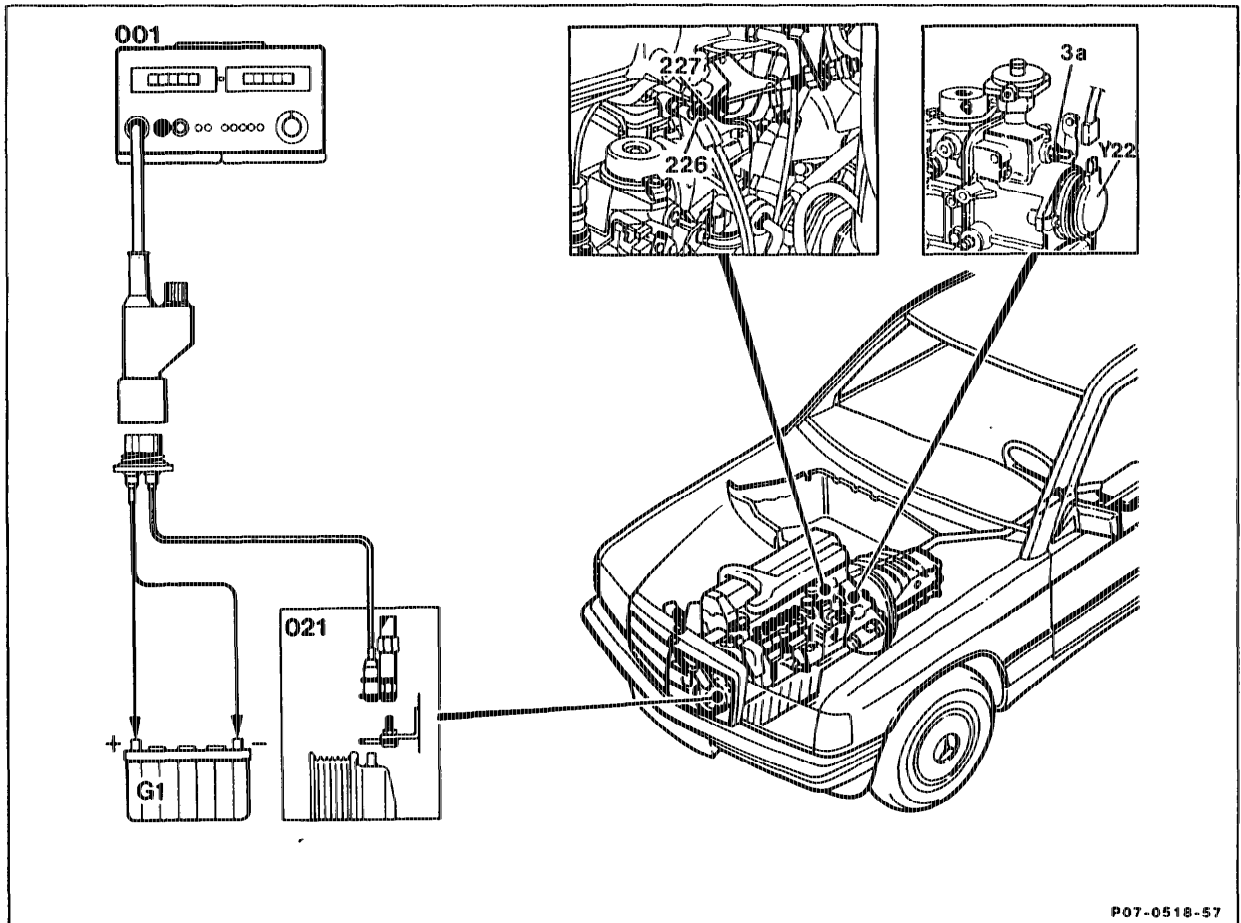


## 07.1-2053 Testing, Adjusting Idling Speed

Preceding work:

Operation no. of operation texts and work units or standard texts and flat rates: 07-2053 or 2056



Tester (001) and pulse generator (021) . . . . . connect, disconnect.

### Note

On model 140 the TDC sensor is installed on the body in the diagnostic socket (X11/4).

Accelerator control . . . . .	examine for ease of operation.
Idle stop on Bowden cable . . . . .	check, the spring plate (226) must be resting against the compression spring (227) free of tension.
Engine . . . . .	warm up to operating temperature (coolant temperature approx. 80 °C).
2-pin coupling at actuator (Y22) . . . . .	unplug, plug in.
Idling speed . . . . .	check, adjust (see table). Slacken locking nut (3a) for this step.
Engine running . . . . .	check. Switch on all ancillaries for this step.

### Test and adjustment data

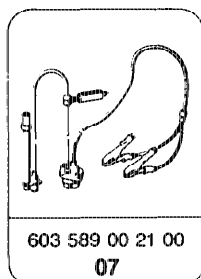
Engine	Electronic idle speed control	
	Idle speed rpm with control	Idle speed rpm Connector at actuator unplugged without control
602.96 man. transmission	740 ± 20	690 ± 40
602.96 aut. transmission	680 ± 20	620 ± 40
603.96	630 ± 20	570 ± 40
603.96, 4MATIC with man. transmission	680 ± 20	620 ± 40
603.970	630 ± 20	570 ± 40
603.971	610 ± 20	560 ± 40

### Adjusting idle speed by means of resistance trimming plug (USA) (J) only Model Years 1986, 1987

If complaints are received regarding idling speed, it is possible to vary the idling speed. The positions of the resistance trimming plug are listed in the table opposite.

Position of resistance trimming plug	Engine 602	Engine 603
1	610 ± 20	570 ± 20
2	630 ± 20	590 ± 20
3	650 ± 20	610 ± 20
4	680 ± 20	630 ± 20
5	700 ± 20	650 ± 20
6	720 ± 20	670 ± 20
7	740 ± 20	700 ± 20

### Special tool

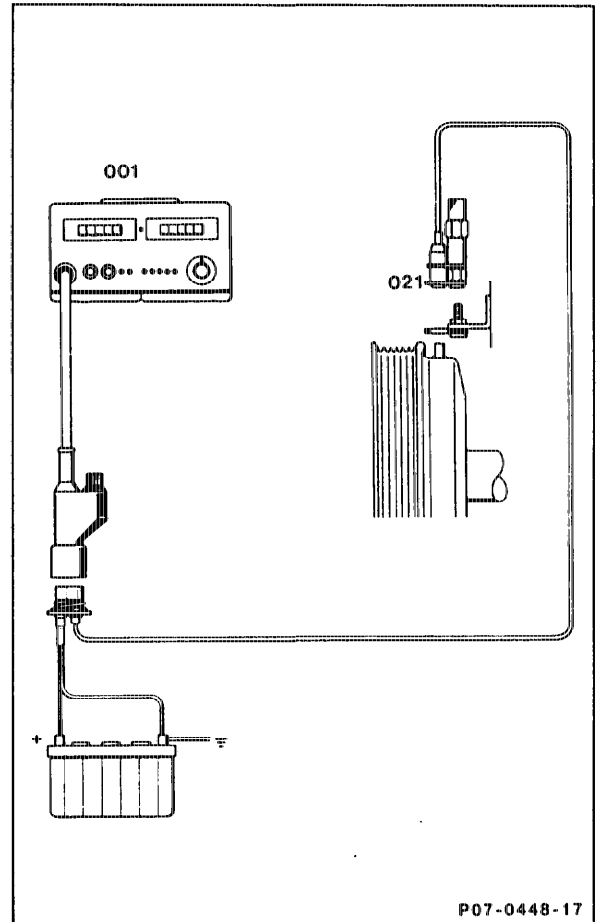


## Commercially available tools and testers

Designation	e. g. make, order no.
Multimeter	Sun, DMM-5
Digital tester	Bosch, MOT 002.01 Sun, DIT 9000

### Adjusting

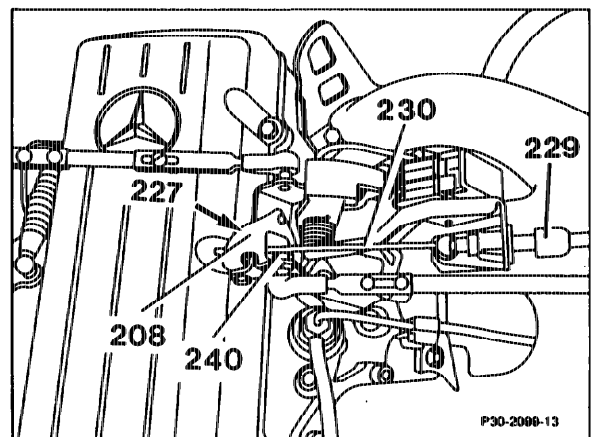
1 Connect digital tester (001) and pulse generator (021).



2 Examine accelerator control for ease of movement and condition.

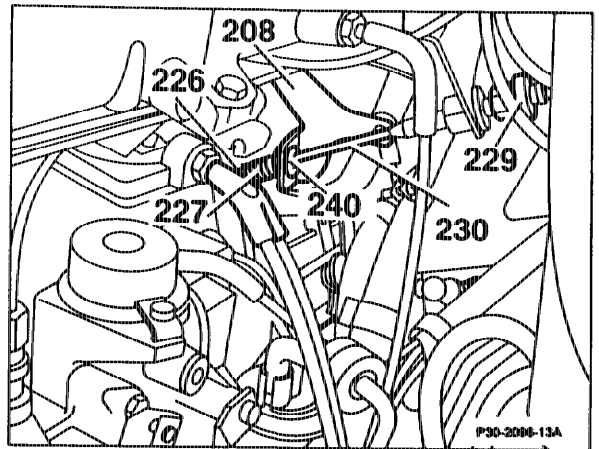
Checking idle stop:

For this step, the spring plate (226) of the Bowden cable (230) must be resting against the compression spring (227) free of tension.



Engine 602.96

Engine 603.96



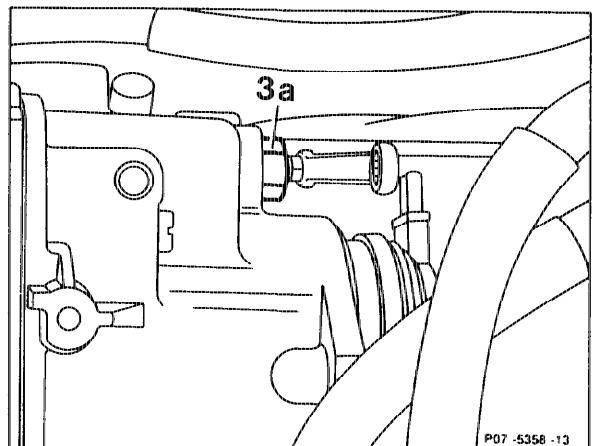
3 Warm up engine to operating temperature (coolant temperature approx. 80 °C).

4 Unplug 2-pin coupling at actuator, plug in.

5 Check idling speed, adjust by slackening locking nut (3a).

**Specifications:**

Engine	Idling speed rpm with control	Idling speed rpm Connector at actuator unplugged without control
602.96 manual transm.	740 ± 20	690 ± 40
602.96 autom. transm.	680 ± 20	620 ± 40
603.96	630 ± 20	570 ± 40
603.96, 4MATIC with man. transm.	680 ± 20	620 ± 40
603.970	630 ± 20	570 ± 40
603.971	610 ± 20	560 ± 40



6 Switch on all ancillaries and check smooth engine running.