62 10 ... Brief description of the test functions:

Test-function display:

Test 01 Roll mode with system test (sequence as before on E36/4).

Test function 01 enables the workshop to conduct a short test of the instrument cluster. Once the function has been started, at display intervals of 3 seconds, the following information is displayed in the LCD:

Display and point allocation in trip-distance and mileometers (GWSZ/TWSZ)

MW scope of delivery	6 digits	1
Code No. of data set	5 digits	2
k-number	4 digits	3
- - - - - -	6 digits	4
Software version	2 digits	5
Amendment index	2 digits	6

Next, the microprocessor moves the pointer (speedo, tachometer, tank, coolant temperature) uniformly to limit position and back. All LCD segments are activated for this period of time. The test procedure then terminates automatically. Premature termination occurs when the trip-distance-counter button is pressed with terminal R OFF or continued selection after terminal 15 and also when travel impulses arise. In the latter case, the prevailing km reading is displayed once again.

Test 02 Engine data

Display of engine factor stored in EEPROM for speed signal evaluation; e.g. "3" engine factor 3.

Test 03 Elapsed and evaluated SI mileage in km

The type of the next service due (lubrication or inspection) is indicated by selecting the relevant letters displayed in the service-interval indicator (SIA).

e.g. GWSZ - - 8750 = SIA OILSERVICE - INSPECTION

or GWSZ - 22450 = SIA OILSERVICE - INSPECTION

Basic value not assessed:

Petrol-driven engines: oil service at 12000 km, inspection at 24000 km

Diesel engines: first oil service at 10000 km, second oil service at 20000 km, inspection at 30000 km

Test 04 Elapsed SI days with piloting of clock symbol

Maximum 716 days based on 2 years

Test 05 SI assessment factors fn and ft (0 or 1)

Currently dependent on engine speed and coolant temperature;

Presentation: n0 or n1...t0 or t1, where n is the speed factor and t is the temperature factor.

Shaft speed threshold

Petrol-driven engines 4512 min^{-1}

Diesel 3808 min^{-1}

Test 06 Tank fill quantity and coolant temperature

Display of values for tank contents and coolant temperature unfiltered.

Presentation:	xx	xx
	Tank	Temp.

Presentation in hexadecimal numbers (refer to illustration and table which follows test functions).

Test 07 Engine speed

Display of prevailing engine speed in rpm.

Test 08 Roadspeed

Display of current vehicle road speed always in km/h (not in mph).

Test 09 Status mileage in km

Information and matching of any difference occurring between the km reading in the encoding connector and the redundant value soldered in the EEPROM.

e.g. display GWSZ - - - - - - - signifies identical readings from EEPROM "E" and EEPROM "I"

(E = external EEPROM in encoding connector)

(I = internal EEPROM in instrument cluster)

e.g. display on GWSZ 012654 I

There is a difference in the km readings stored in memory. The value displayed (e.g. 012654 I) is always the lower reading.

The supplement "I" indicates that this is in the internal, i.e. the soldered EEPROM. An "E" signifies the external EEPROM (encoding connector).

In addition, if counter readings differ, the manipulation point lights up.

After replacement of cluster or encoding connector, the higher km reading in the EEPROM can be matched to the lower reading by holding down the reset button when selecting the test function 09 for > 4 secs. At this point, the SIA data is also transmitted. After successful matching, the manipulation point disappears.

Caution!

Replacement part must always have a smaller km reading otherwise the vehicle-specific km reading is overwritten.

Test 10 Statusbits (input modes)

Display binary in GWSZ (mileometer)

0 = input low,

1 = input high

Test 11 Statusbit (output modes)

Display binary in GWSZ (mileometer)

0 = Output inactive,

1 = Output active

Test 12 free

Test 13 Display of current national codes

ECE

US

Golf

The code cannot be altered in the workshop.

Test 14 Perform software reset

(watchdog test) or complete reset acts like a power interrupt. When executing the function, a RESET is initiated, the diagnosis level is quit and lock ON is activated.

If implausible faults occur, the test should be conducted before any components are replaced.

The test mode is quit automatically.

Test 15 Lock off / Lock on

This function is preset to Lock ON when the test function is switched on. To change over, button must be held down while selecting.

The display then switches every 3 seconds from L ON to L OFF.

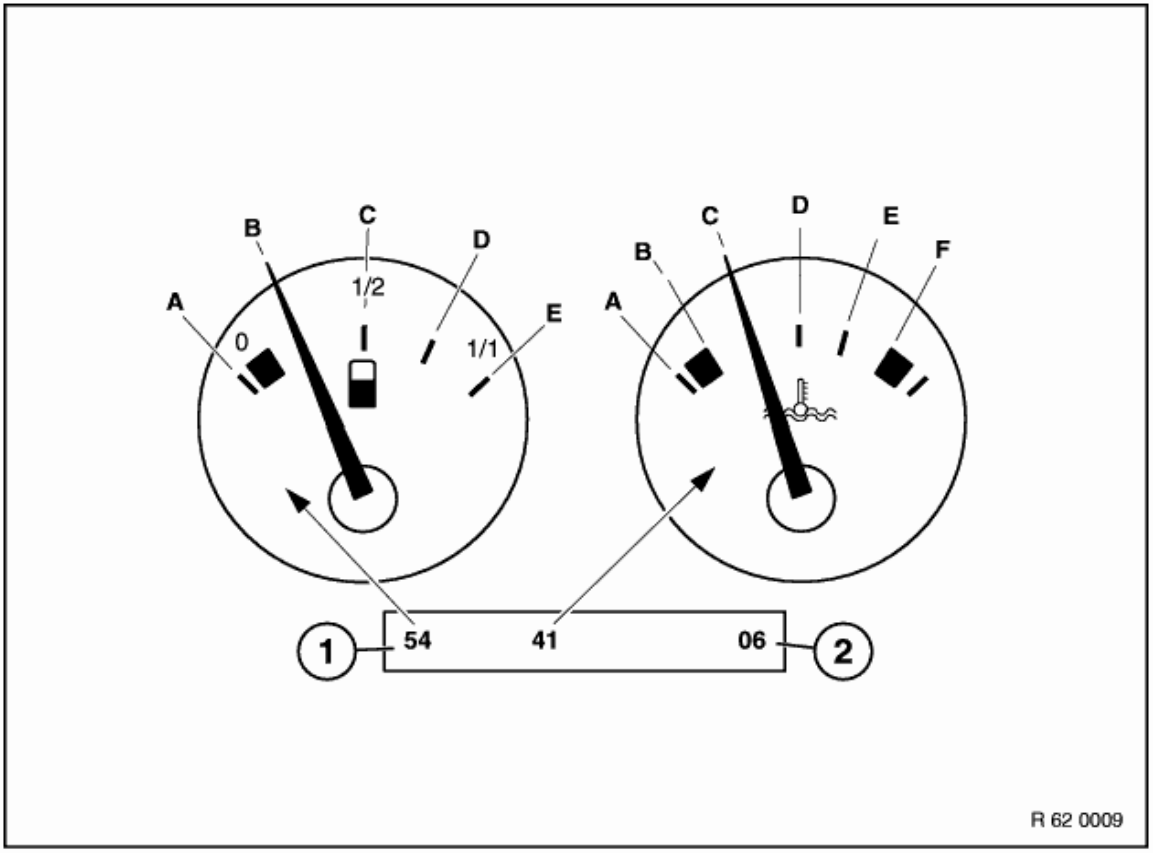
Once desired status is reached, release the button.

Test 00 Termination of cluster diagnosis (test function)

and return to normal operation.

Fuel-gauge setting	Hex value
1st Dash A	0d
End of spare	37
2. Dash B	54
3. Dash C	90
4. Dash D	c4
5. Dash E (full)	f0

Temp.-pointer setting	Hex value
1st Dash A	ce
2. Dash B	6d
3. Dash C	5c
4. Dash D (centre)	4f-23
5. Dash E	1e
6. Dash F	18



1 LCD display	2 Test No.