## Instrument cluster, On Board Diagnostic (OBD) (through M.Y. 1999)

### **General information**

### Instrument cluster technology

The Audi A4 instrument cluster is available in two versions; the low-line version with "mini-check" system and the high-line version with an LCD multi-function display.

The mini-check system monitors the brake system, Engine Coolant Temperature (ECT), fuel level and engine oil pressure.

The multi-function display contains the following functions:

- Auto check system with radio station and telephone displays
- Ambient outside temperature display
- On-board computer display
- Transmission Range (TR) selector lever display for automatic transmission

Navigation

The speedometer contains a LCD display for the odometer, a trip odometer and the Service Reminder Indicator (SRI).

Indicator lamps are integrated in the speedometer and tachometer.

Accessory instruments are integrated into the instrument cluster.

The instrument cluster is controlled by a microprocessor and has extensive On Board Diagnostic (OBD) capabilities. If any component exhibit signs of failure, a Diagnostic Trouble Code (DTC) is stored in the instrument cluster DTC memory. The DTC can then be identified using the VAG1551 or VAG1552 Scan Tool (ST).

#### Note:

The descriptions in this Repair Manual reference the VAS5051 Diagnostic Operation Center (DOC) and the VAG1551 Scan Tool (ST).

The following Adaptations (adjustments) can be carried out using the tool:

- Adaptation of the fuel sensor characteristics
- Adaptation of the fuel consumption display
- Coding the language versions for the on-board computer and Auto Check system.
- Adaptation of the Service Reminder Indicator (SRI)
- Adaptation of the odometer after instrument cluster replacement.

#### Instrument cluster replacement notes

- Do not disassemble the instrument cluster.
- All warning and indicator bulbs can be replaced separately: m.y. >1997 ⇒ Page 90-4 ; 1998 > ⇒ Page 90-15 . All other malfunctions require replacing the complete instrument cluster.
- If necessary, the instrument cluster should be exchanged within the parts exchange program.
- Fill in the Failure Description Form and send it in, together with the instrument cluster.
- The instrument cluster must be sent back in its original packaging.
- When replacing the instrument cluster, set the Odometer display and the Service Reminder Indicator (SRI) using the VAG1551 Scan Tool (ST) ⇒ <u>Page 01-32</u>.

# On Board Diagnostic (OBD), initiating program

Special tools, test equipment and auxiliary items

- VAS5051 Diagnostic Operation Center (DOC) and/or VAG1551 Scan Tool (ST).
- VAG1551/3 adapter cable

### **Test requirements**

- Fuses OK
- ⇒ Electrical Wiring Diagrams Troubleshooting & Component Locations
- Instrument cluster coding checked according to coding table ⇒ Page 01-25
- Connect VAS5051 Diagnostic Operation Center (DOC) or
- Connect VAG1551 Scan Tool (ST) ⇒ <u>Page</u> 01-241.

Ignition switched on

### Notes:

- If the VAG1551 display remains blank, check the power supply.
- ⇒ Electrical Wiring Diagrams Troubleshooting & Component Locations
- Press the HELP button for additional operating instructions.
- Press the → button to advance through the program sequence.
- An incorrect entry can be cancelled by pressing the -C- button.
- In "Rapid data transfer" operating mode 1, the "Automatic Test Sequence" (address word 00) can be carried out. This will automatically check the DTC memories of all of the control modules in the vehicle which have OBD capability.

01-7

			- Switch ignition on.
			<ul> <li>Switch printer on by pressing PRINT button (indicator light in button comes on).</li> </ul>
			<ul> <li>Press button -1- to select "Rapid data transfer" operating mode 1.</li> </ul>
Rapid data transfer	HELP	<	Indicated on display
Insert address word XX			Address word for instrument cluster: 17
			- Press buttons -1- and -7
Rapid data transfer	Q	∢	Indicated on display
17 - Instrument Cluster			
			- Press -Q- button to confirm input.
8D0919930L B5-Instrument Clus	ter VDOX1	6 🖌	Indicated on display (after approx. 5 seconds) (example)
Coding 00262	WSC 0681	2	
			<ul> <li>SD0919930L: part number of instrument cluster (see also parts exchange program)</li> </ul>
			<ul> <li>B5-Instrument Cluster: component designation</li> </ul>
			VDO: manufacturer ID (UN4 = Nippon Seiki, VD0 = VDO)
			<ul> <li>X16: instrument cluster software version</li> </ul>
			Coding 00262: instrument cluster coding
			▲ WSC 06912: declarabia number

				01-8
			Note:	
			Check coding using the coding table $\Rightarrow \underline{Page \ 01}$ .	
			- Press→ button.	
Rapid data transfer Control module does not answer	HELP	4	<ul> <li>If one of these four messages is displayed, carry out troubleshooting procedures:</li> </ul>	
			$\Rightarrow$ Electrical Wiring Diagrams Troubleshooting & Component Locations	;
Rapid data transfer Error in communication link	HELP	۲	or	
Rapid data transfer K wire not switching to Ground	HELP	۲	or	
Rapid data transfer K wire not switching to B+	HELP	۲	or	
Rapid data transfer Select function XX	HELP	<b>∢</b>	Indicated on display When the HELP button is pressed, a list of possible functions prints out	ŀ
			<ul> <li>Press → button to advance through program sequence.</li> </ul>	

On Board Diagnostic (OBD) functions
The following functions are possible:
02 - Check DTC Memory $\Rightarrow$ Page 01-10
03 - Output Diagnostic Test Mode $\Rightarrow$ Page 01-15
05 - Erase DTC Memory $\Rightarrow$ Page 01-20
06 - End Output ⇒ <u>Page 01-22</u>
07 - Code Control Module $\Rightarrow$ Page 01-23
08 - Read Measuring Value Block $\Rightarrow$ Page 01-27

10 - Adaptation  $\Rightarrow$ <u>Page 01-32</u>

Rapid data transfer	HELP
Select function XX	
Rapid data transfer	Q
02 - Check DTC Memory	
X DTC recognized	<b>→</b>

## Check DTC Memory (scan tool function 02)

#### Note:

The displayed DTC information is updated only when initiating OBD or with "Erase DTC Memory" function 05.

- Switch printer on by pressing PRINT button (indicator light in button comes on).
- Indicated on display
  - Press buttons -0- and -2- to select "Check DTC Memory" function 02.
- Indicated on display
  - Press -Q- button to confirm input.
- **4** The number of stored DTCs appears in the display.

The stored DTCs are displayed and printed out one after the other.

 Check print-out against DTC table ( ⇒ Page 01-12 ) and repair all malfunctions as necessary.

Rapid data transfer HELP	No DTC recognized!	→
Rapid data transfer HELP		

- ✓ If "No DTC recognized!" is displayed, the program will return to "Select function XX" prompt after the → button is pressed.
- Indicated on display

If something different appears on the display:

- $\Rightarrow$  VAG1551 Scan Tool (ST) operating instructions
- End output (function 06)  $\Rightarrow$ <u>Page 01-22</u>
- Switch ignition off and disconnect scan tool from Data Link Connector (DLC).

## Diagnostic Trouble Code (DTC) table for instrument cluster

Notes:

- The following table lists all possible Diagnostic Trouble Codes (DTCs) which the instrument cluster can recognize and which the VAG1551 scan tool can print.
- DTC numbers only appear on the printout.
- Before replacing any component shown as malfunctioning, check all related wiring and connections of these components and the Ground (GND) connections 
   ⇒ Electrical Wiring Diagrams Troubleshooting & Component Locations
- After the repair has been carried out and the functional system check, re-check and erase the DTC memory using the VAG1551 scan tool.
- The DTC memory records all static and sporadic (intermittent) malfunctions. A malfunction is considered static if it exists for at least 2 seconds (exceptions: 60 seconds for outside temperature display and 30 minutes, for engine coolant sensor). If the malfunction is not present after this time, it will be stored as a sporadic DTC and "/SP" will appear on the right side of the scan tool display.
- After switching the ignition on, all existing DTCs are set to sporadic. If they are still present after the system check, they
  will be stored as static DTCs.
- If a sporadic malfunction does not reoccur within 50 driving cycles (ignition on for at least 5 minutes and vehicle speed greater than 30 km/h or 18 mph), it will be erased.

DTC	Possible cause	Corrective action
VAG1551 scan tool display		
00667		
<ul> <li>Ambient-Temperature Signal</li> <li>Open/Short circuit to B+</li> <li>Short circuit to Ground</li> </ul>	<ul> <li>Vehicles without air conditioning:</li> <li>Open circuit or short circuit</li> <li>Outside air temperature sensor -G17- faulty</li> <li>Vehicles with air conditioning:</li> <li>Open circuit or short circuit</li> <li>A/C control head -E87- faulty</li> </ul>	<ul> <li>Vehicles without air conditioning:</li> <li>Trace malfunction ⇒Electrical Wiring Diagrams, Troubleshooting &amp; Component Locations</li> <li>Replace -G17</li> <li>Vehicles with air conditioning:</li> <li>Trace malfunction ⇒Electrical Wiring Diagrams, Troubleshooting &amp; Component Locations</li> <li>Carry out OBD of air conditioning system ⇒ <u>Repair Manual, Heating &amp; Air Conditioning, Repair Group 01</u></li> </ul>
00771		
<ul> <li>Fuel Level Sensor-G</li> <li>Open/Short circuit to B+</li> <li>Short circuit to Ground</li> </ul>	<ul> <li>Open circuit or short circuit between sender for fuel gauge -G- and instrument cluster</li> <li>Sender for fuel gauge -G- faulty</li> </ul>	<ul> <li>Trace malfunction ⇒Electrical Wiring Diagrams, Troubleshooting &amp; Component Locations</li> <li>Replace -G</li> </ul>

00779		
Outside Air Temperature Sensor- G17 • Open/Short circuit to B+	<ul> <li>Open circuit or short circuit</li> <li>Outside air temperature sensorG17- faulty</li> </ul>	<ul> <li>Trace malfunction ⇒Wiring Diagrams, Troubleshooting &amp; Component Locations</li> <li>Replace -G17</li> </ul>
<ul> <li>Short circuit to Ground</li> </ul>		

04020		
01039		
<ul> <li>ECT Sensor-G2</li> <li>Open/Short circuit to B+</li> </ul>	<ul> <li>Open circuit or short circuit between Engine Coolant Temperature Sensor (ECT) -G2- and instrument cluster</li> </ul>	- Trace malfunction ⇒Electrical Wiring Diagrams, Troubleshooting & Component Locations
	<ul> <li>ECT sensor -G2- faulty</li> </ul>	- Replace -G2
<ul> <li>Short circuit to Ground (GND)</li> </ul>		
01402		
Data Wire from Navigation	<ul> <li>Open circuit in clock enable or data wire</li> </ul>	- Check data wire for damage.
<ul> <li>Incorrect signal</li> </ul>	<ul> <li>Navigation/instrument cluster interface malfunctioning</li> </ul>	- Check causes for electromagnetic malfunctions.
	<ul> <li>Malfunction caused by electromagnetic interference inside and outside vehicle</li> </ul>	⇒ Repair Manual Radio, Telephone, Navigation, Repair Group 97
65535		
Control Module Malfunctioning	<ul> <li>Instrument cluster faulty</li> </ul>	- Replace instrument cluster $\Rightarrow Page 90-1$ .

# Output Diagnostic Test Mode (scan tool function 03)

#### Notes:

- Output Diagnostic Test Mode may only be carried out on a stationary vehicle with the engine off.
- Trace any faults identified by the Output Diagnostic Test Mode, replace the instrument cluster if necessary.

The function "Output Diagnostic Test Mode" cycles all the control elements in the instrument cluster sequentially, if they are installed and coded.

- Concurrent testing of the display ranges of all the analog indicators (coolant temperature gauge, tachometer, speedometer and fuel gauge).
- Activation of the mini-check indicator lights.
- Activation of the seat belt warning lamp.
- Activation of the chime.

- Segment check of the multi-function display and/or the LCD odometer.
- Activation of the instrument cluster lights and dimmer.
- Coolant excess temperature test

#### Notes:

- The instrument cluster lighting test can only be carried out with the lights on.
- The coolant excess temperature test activates the A/C compressor safety shut-off.

### Initiating Output Diagnostic Test Mode

#### Note:

The units displayed are country specific.

- Indicated on display
  - Press buttons -0- and -3- to select "Output Diagnostic Test Mode" function 03.
- Indicated on display
  - Press -Q- button to confirm input.

This will start the Output Diagnostic Test Mode for the analog instruments (displays).

### Indicated on display

Select function XX Rapid data transfer Q 03 - Output Diagnostic Test Mode

**Output Diagnostic Test Mode** 

**Analog Indicators** 

HELP

Rapid data transfer

After pressing the -Q- button, the following tests are run:

- Coolant temperature gauge needle moves over complete range
- Tachometer needle moves over complete range
- Speedometer needle moves over complete range
- Fuel gauge needle moves over complete range

The following preset values are displayed at the end of the test:

Coolant temperature display:	90 ° C (194 ° F)
Tachometer:	3000 RPM
Speedometer:	100 km/h (62 mph)
Fuel level:	1/2

### Note:

If the ignition is switched on or off with any gauge

needle in motion, its movement will be interrupted.

		01-18
		- Press→ button.
Output Diagnostic Test Mode ->	۲	Indicated on display
Instrument Cluster Warning Lights Test		Activation of mini-check indicator lights
		- Press→ button.
Output Diagnostic Test Mode →	<	Indicated on display
Seat Belt Warning Light-K19		Activation of seat belt warning light.
		Note:
		Depending on the model/equipment, the seat belt warning light will be activated via the control module coding. This means that the warning light will be inactive if this test is skipped.
		- Press → button.
Output Diagnostic Test Mode →	۲	Indicated on display
Chime		The chime is activated and sounds continuously.
		- Press → button.

			01-19
Output Diagnostic Test Mode	→	∢	Indicated on display
Segment test			Notes:
			<ul> <li>All indicators on the multi-function display and/or the LCD odometer are cycled.</li> </ul>
			<ul> <li>All segments on the multi-function monitor light up and one bar remains dark.</li> </ul>
			- Press → button.
Output Diagnostic Test Mode	→	۲	Indicated on display
Switch and instrument lighting			The instrument cluster dimming is tested.
			- Press → button.
Output Diagnostic Test Mode	→	∢	Indicated on display
ECT Overheat Test			The A/C compressor safety cut-out will be activated within approx. 5 seconds.
			- Press → button.
Output Diagnostic Test Mode	→	<	Indicated on display
END			<ul> <li>Press → button to end Output Diagnostic Test Mode.</li> </ul>
			This returns the scan tool to the "Select function XX" prompt.
Rapid data transfer	HELP	<	Indicated on display

Select function XX

# Erase DTC Memory (scan tool function 05)

### Note:

*If the DTC memory cannot be erased, check DTC memory again and repair malfunctions.* 

#### Requirements

- DTC memory checked ⇒ <u>Page 01-10</u>
- All malfunctions repaired

After DTC memory has been successfully checked:

- Indicated on display
  - Press buttons -0- and -5- to select "Erase DTC Memory" function 05.

Rapid data transfer	HELP
Select function XX	

	01-21
۹ 🗸	Indicated on display
	- Press -Q- button to confirm input
→ ∢	Indicated on display
	DTC memory is now erased.
	- Press→ button.
	Indicated on display
	Notes:
4	This message indicates an error in the test sequence:
→ ∢	<ul> <li>This message indicates an error in the test sequence:</li> <li>Observe the test sequence exactly: first check DTC memory, if necessary repair malfunctions then erase</li> </ul>

Rapid data transfer	HELP
Select function XX	
Panid data transfor	0
	u u
06 - End Output	
Rapid data transfer	HELP
Insert address word XX	

## End Output (scan tool function 06)

- Indicated on display
  - Press buttons -0- and -6- to select "End Output" function 06.
- Indicated on display
  - Press -Q- button to confirm input
- Indicated on display
  - Switch ignition off.
  - Disconnect VAG1551 scan tool.

# Code Control Module (scan tool function 07)

This function is used to code the instrument cluster with the following information:

- Optional equipment
- Country specific variations (market versions)
- Number of cylinders
- Engine versions

#### Notes:

- Coding sets the various combinations of the on board computer and check package according to the optional equipment, country specific variations, number of cylinders and engine version.
- The coding table only contains coding combinations for the Audi A4.

#### Initiating instrument cluster coding

Indicated on display

Rapid data transfer

HELP

Select function XX

- Press buttons -0- and -7- to select "Code Control Module" function 07.
- Press -Q- button to confirm input.

					01-24
Code control module Input code number XXXXX (0	Q -32000)	۲	Indicated on disp	lay	
	,		- Input code nur 00262	nber using Coding table $\Rightarrow Page 01-25$ . Example:	
			00 ne	o optional equipment	
			2 C	ountry: USA	
			6 6	cylinders	
			2 G	asoline engine	
Code Control Module	Q	<	- Indicated on d	isplay (example).	
Input code number 00262 (0-32000)			- Press -Q- butt	on to confirm input	
8D0919930L B5-INSTRCLUST	VDO X16	۲	Indicated on disp	lay	
Coding 00262 V	NSC 06812		<ul> <li>Press →buttor</li> </ul>	n to end coding process.	
Rapid data transfer	HELP	<	Indicated on disp	lay	
Select function XX			- Press buttons	-0- and -6	
Rapid data transfer	Q	<	Indicated on disp	lay	
06 - End Output			- Press - O- butt	an to confirm input	

## Coding table

Х			Optional equipment
00			No optional equipment
01			Brake pad wear indicator active
02			Seat belt warning system active
04			Washer fluid level indicator active
16			Navigation (not applicable for USA)
	Х		Market version:
	0		Germany (D)
	1		Europe (EU)
	2		USA (US)
	3		Canada (CDN)
	4		Great Britain (GB)
	5		Japan (JP)
	6		Saudi Arabia (SA)
	7		Australia (AUS)

	Х		Number of cylinders
	4		4-cylinders
	6		6-cylinders
		Х	Engine versions
		0	TDI engine
		2	Gasoline engines, 4 and 6 cylinder

#### Notes:

- Depending on the vehicle equipment, coding for optional equipment is also possible for various combinations.
- If more than one option that can be coded is installed, the coding must be entered as the sum of the individual coding numbers.

### Examples

Washer fluid level indicator and brake pad wear indicator:

04 + 01 = 05

Seat belt warning system and washer fluid level indicator:

02 + 04 = 06

HELP

01-27

Select function XX	
Rapid data transfer	Q
08 - Read Measuring Value Block	
Read Measuring Value Block	HELP
Input display group number XXX	

Rapid data transfer

# Read Measuring Value Block (scan tool function 08)

## Initiating "Read Measuring Value Block" function 08

- Indicated on display
  - Press buttons -0- and -8- to select "Read Measuring Value Block" function 08.
- Indicated on display
  - Press -Q- button to confirm input
- Indicated on display
  - Input display group number from table (  $\Rightarrow$  <u>Page 01-28</u>) and press -Q-button to confirm input.

The scan tool will indicate the selected display group.

### Display group overview

Display group	Indicated on display
001	1 = Vehicle speed (kmh/MPH)
	2 = Engine speed (RPM)
	3 = Oil pressure switch 2 < min
002	1 = Odometer (km/mi)
	2 = Fuel gauge (liters/gal)
	3 = Outside temperature (° C/F)
003	1 = Engine coolant temperature ( ° C/F)
050	1 = Odometer (km/mi)
	2 = Engine speed (RPM)
	4 = Engine coolant temperature ( ° C/F)

### Notes:

The display will always show the actual values from the sensors. Since the instrument panel displays filters the values, they may differ from the actual values.
- If the actual Engine Coolant Temperature (ECT) is between 80° C (176° F) and 100° C (212° F), the instrument panel will always display 90° C (194° F).
- Additional display groups for the instrument cluster are not possible.

#### Display group 001



#### Display group 002



#### **Display group 003**



Coolant temperature

• 50 to 130 ° C

## Display group 050

Read Measuring Value Block 50		$\rightarrow$	Indicated on display
2390 km	2400 RPM	85.0 °C	
			Coolant temperature
			• 50 to 130 ° C
		Oil tempe	erature
		• Not a	ctivated for Audi A4
	I	Engine spee	ed
		• 0 - 9990	RPM
	Odometer		

#### Adaptation (scan tool function 10)

Function 10 is used to initiate and store the following changes:

- Adaptation of fuel gauge display
- Correction of the fuel consumption display
- Coding of language versions for Auto Check system
- Adaptation of the Service Reminder Indicator (SRI)
- Setting the odometer after instrument cluster replacement.

Individual functions are called up by entering the appropriate adaptation channel number (see adaptation table  $\Rightarrow$  Page 01-33).

### Adaptation table

Adaptation channel	Adaptation function
01	Adaptation of fuel gauge display $\Rightarrow$ Page 01-35
02	Resetting SRI after service $\Rightarrow Page 01-45$
03	Adaptation of fuel consumption display $\Rightarrow$ Page 01-39
04	Language versions of the multi-function display $\Rightarrow Page 01-42$
05	SRI - service interval for oil change (distance in km) $\Rightarrow Page 01-48$
06	SRI - service interval 1 (IN1) distance in km $\Rightarrow$ Page 01-51
07	SRI - service interval 1 (IN1) time in days $\Rightarrow Page 01-54$
08	SRI - service interval 2 (IN2) time in days $\Rightarrow Page 01-57$
09	Adapting odometer reading $\Rightarrow$ Page 01-60

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Adaptation channel	Adaptation function
10	SRI Remaining distance until next oil change service interval after replacing instrument cluster ⇒ Page 01-64
11	SRI Remaining distance until next service interval after replacing instrument cluster $\Rightarrow$ Page 01-67
12	SRI Remaining time until next service interval after replacing instrument cluster $\Rightarrow Page 01-70$
30	Adaptation of fuel gauge sender $\Rightarrow Page 01-73$

Rapid data transfer	HELP
Select function XX	
Dead Measuring Value Disale	•
Read Measuring Value Block	Q
10 - Adaptation	
Adaptation	Q
Insert channel number XX	

#### Initiating "Adaptation" function 10

- Indicated on display
  - Press buttons -1- and -0- to select "Adaptation" function 10.
- Indicated on display
  - Press -Q- button to confirm input.
- Indicated on display
  - Insert desired adaptation channel ( $\Rightarrow$  Adaptation table,  $\Rightarrow \underline{Page \ 01-33}$ ).
  - Press -Q- button to confirm input.

#### Note:

After changing an adaptation value or after an adaptation in a specific channel has been completed, "Adaptation" function 10 must be selected again in order to select another adaptation channel.

Rapid data transfer	HELP
Select function XX	
Adaptation	0
	u u
Insert channel number XX	

#### Adaptation of fuel gauge display

- Indicated on display
  - Press buttons -1- and -0- to select "Adaptation" function 10 and press Q- button to confirm input.
- Indicated on display
  - Press buttons -0- and -3- to insert channel 03.
  - Press -Q- button to confirm input





- Disconnect fuel level sensor harness connector (near rear seat back, under trim in trunk), then perform adaptation of fuel level display.
- Switch ignition off.

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- Using test lead, connect VAG1301 resistance tester to fuel level sensor (see illustration).
  - Set VAG1301 to value of 470.
  - Wait approx. 4 minutes, switch ignition on and observe fuel gauge.





#### Note:

- **<** The fuel gauge reading is correct if the needle remains on the red section at the right side of the reserve zone (see illustration).
  - Press buttons -0- and -1-.
  - Press -Q- button to confirm input

- Indicated on display

The new adaptation value can be entered in two ways: step-by-step or directly.

#### Note:

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If a value over 255 is entered, the "adaptation" function will be cancelled and the procedure will have to be started again.

Channel 1 Adaptation 215	Q	
Channel 1 Adaptation 215	Q	
Store changed value?		
Channel 1 Adaptation 215	→	
Changed value is stored		
Rapid data transfer	HELP	
Insert address word XX		

Step-by-step method:

- Press button -1- to adjust value downward, down to 0 or press button -3- to adjust value upward, up to 255 (example: 215).
- Indicated on display

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- Press -Q- button to confirm input.
- Indicated on display
  - Press -Q- button to confirm input
- Indicated on display
  - Press →button to end fuel gauge adjustment.
- < Indicated on display

	01-39

Rapid data transfer	HELP	
Select function XX		
Adaptation	Q	
Insert channel number XX		
Channel 3 Adaptation 100	$\rightarrow$	

< \_<sub>1 3-</sub> >

# Adapting fuel consumption display (direct input method)

- Indicated on display
  - Press buttons -1- and -0- to select "Adaptation" function 10 and press Q- button to confirm input.
- Indicated on display
  - Press buttons -0- and -3- to insert channel 03.
  - Press -Q- button to confirm input

- The value entered must be between 85% and 115%.
- Input is in steps of 5%.
- Indicated on display
  - Press → button.

		Note:
		Correction of the fuel consumption display is only carried out with the direct input method.
Channel 3 Adaptation 100	۲	Indicated on display
Input adaptation value XXXXX		<ul> <li>Input desired correction value using keypad on VAG1551, fill in leading digits with zeroes "0".</li> </ul>
		Example:
		Desired input value: 90%
		Keyboard entry: 00090
Channel 3 Adaptation 100 Q	<	Indicated on display
Input adaptation value 00090		- Press -Q- button to confirm input
Channel 3 Adaptation 90 Q	۲	Indicated on display
Store changed value?		- Press -Q- button to confirm input
Channel 3 Adaptation 90 ->	۲	Indicated on display
Changed value is stored		- Press $\rightarrow$ button to end adaptation.

Rapid data transfer	HELP
Insert address word XX	

# Function is unknown $\rightarrow$ or cannot be carried out at the moment.

- Indicated on display
  - Press buttons -1- and -0- to select "Adaptation" function 10 and press Q- button to confirm input.

#### Note:

If an incorrect entry is made, the VAG1551 will switch to the following display:

#### Indicated on display

- Press → button.
- Select "Adaptation" function 10 and adaptation channel 03 again.
- Repeat adaptation of fuel consumption display and press -Q- button to confirm input.

			01-42
			Adapting multi-function display language versions
			Note:
			Adaptation is only carried out on vehicles equipped with on board computer.
Rapid data transfer Select function XX	HELP	۲	Indicated on display
			<ul> <li>Press buttons -1- and -0- to select "Adaptation" function 10 and press - Q- button to confirm input.</li> </ul>
Adaptation	Q	<	Indicated on display
			- Press buttons -0- and -4
			- Press -Q- button to confirm input
Channel 4 Adaptation 1	→	۲	Indicated on display
< <sub>-1 3-</sub> >			Notes:
			<ul> <li>The display shows only the last digit of the five-digit language code, e.g. 1 for German.</li> </ul>
			<ul> <li>Input of incorrect values will end the adaptation function. "Adaptation"</li> </ul>

function 10 must be selected again. • When using the VAG1551 keypad, only the direct input method can be

used.

Language	version	coding	table
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Code	Language
00001	German
00002	English
00003	French
00004	Italian
00005	Spanish
00006	Portuguese

Step-by-step method:

- Press button -1- to move downward and button -3- to move upward through codes. Example: 2 for English.
- Indicated on display
  - Press -Q- button to confirm input.
- Indicated on display
  - Press -Q- button to confirm input.
- Indicated on display
  - Press  $\rightarrow$  button to end language version adaptation.



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		01-44
		Direct input method:
Channel 4 Adaptation 1	→ ∢	Indicated on display
< <sub>-1 3-</sub> >		- Press $\rightarrow$ button.
Channel 4 Adaptation 1	۹ 🗸	Indicated on display
Input adaptation value XXXXX		- Input desired 5-digit code using keypad $\Rightarrow$ Page 01-43.
		Example:
		Code: 2 (English)
		Input value: 00002
		- Press -Q- button to confirm input.
Channel 4 Adaptation 1	۹ 🗶	Indicated on display
Input adaptation value 00002		- Press -Q- button to confirm input.
Channel 4 Adaptation 2	۹ 🗶	Indicated on display
< <sub>-1 3-</sub> >		- Press -Q- button to confirm input.
Channel 4 Adaptation 2	۹ 🗶	Indicated on display
Store changed value?		- Press -Q- button to confirm input.
		Indicated on display

Channel 4 Adaptation 2 → Press → button to end language version adaptation.

Rapid data transfer	HELP
Select function XX	
Adaptation	0
Insert channel number XX	4

#### **Resetting SRI after servicing**

- Indicated on display
  - Press buttons -1- and -0- to select "Adaptation" function 10 and press Q- button to confirm input.
- Indicated on display
  - Press buttons -0- and -2- to insert channel 02.
  - Press -Q- button to confirm input.

- It is possible to reset the SRI without using the VAG1551/1552  $\Rightarrow$  Page 01-77.
- Adaptation channel 2 can only be used for instrument clusters with data version D05 and newer.

Channel 2 Adaptation 1

Channel 2 Adaptation 1 Input adaptation value XXXXX Indicated on display. (service interval will be displayed, e.g. 1)

- 1 indicates that the oil service is due.
- 10 indicates that the inspection service is due.
- 11 indicates that oil and inspection services are due.

#### Note:

Reset the SRI using only the direct input method.

- Press → button.
- Indicated on display

Delete the following service events by using the adaptation values listed below:

Adaptation value	Service Event
00000	Delete OIL and INSP
00010	Delete OIL
00001	Delete INSP

- Using keypad, enter appropriate adaptation value to delete service event, e.g. 00000.
- Press -0- button five times.

				01-47
Channel 2 Adaptation 1	Q	<	Indicated on display	
Input adaptation value 00000			- Press -Q- button to confirm input.	
Channel 2 Adaptation 0	Q	<	Indicated on display	
< <sub>-13-</sub> >			- Press -Q- button to confirm input.	
Channel 2 Adaptation 0	Q	<	Indicated on display	
Store changed value?			- Press -Q- button to confirm input.	
Channel 2 Adaptation 0	→	<	Indicated on display	
Changed value is stored			<ul> <li>Press →button to end SRI reset.</li> </ul>	

Rapid data transfer	HELP
Select function XX	
Adaptation	Q
Insert channel number XX	

David data teasafan

# Adapting SRI for oil change service interval (distance in km)

This function is used to enter the distance (in km) until the next oil change service is due (see service schedule "Maintenance Service").

- < Indicated on display
  - Press buttons -1- and -0- to select "Adaptation" function 10 and press Q- button to confirm input.

Indicated on display

- Press buttons -0- and -5- to insert channel 05.
- Press -Q- button to confirm input.

**Channel 5 Adaptation 1** 

< \_13 >

#### Indicated on display

The display shows the number of kilometers remaining until the next oil change service is due (the "1" indicates 1000 km remaining).

- Values can only be entered in increments of 1000 km. Therefore, the distance indicated is in units of 1000.
- In countries where speedometers are calibrated in miles, adjustments must still be made in kilometers. Therefore convert miles to kilometers (miles x 1.609 = kilometers) to get the required adaptation value.
- If the instrument cluster must be replaced, observe notes  $\Rightarrow \underline{Page \ 01}$ .
- When using the scan tool keypad, only the direct input method can be used.
- If an incorrect value is input, the "adaptation" function 10 will be cancelled and must be initiated again.
- Press → button.

		01-50
Channel 5 Adaptation 1	۲	Indicated on display
		<ul> <li>Input desired interval value using keypad on VAG1551, fill in leading digits with zeroes "0."</li> </ul>
		Example:
		Specification: 15000 km
		Input value: 00015
Channel 5 Adaptation 1 Q	∢	Indicated on display
Input adaptation value 00015		- Press -Q- button to confirm input.
Channel 5 Adaptation 15 Q	<	Indicated on display
< <sub>-13-</sub> >		- Press -Q- button to confirm input.
Channel 5 Adaptation 15 Q	∢	Indicated on display
Store changed value?		- Press -Q- button to confirm input.
Channel 5 Adaptation 15	<	Indicated on display
Changed value is stored		<ul> <li>Press →button to end SRI adaptation.</li> </ul>

				01-5
			Adapting SRI for inspection service Interval-1 (IN1) (distance in km)	
			This function is used to enter the distance remaining (distance in km) until the next maintenance service is due (see service schedule "Maintenance Service").	
Rapid data transfer	HELP	<	Indicated on display	
Select function XX				
			<ul> <li>Press buttons -1- and -0- to select "Adaptation" function 10 and pres Q- button to confirm input.</li> </ul>	SS -
Adaptation	Q	<	Indicated on display	
Insert channel number XX			- Press buttons -0- and -6- to insert channel 06	
Adaptation Insert channel number XX	Q	∢	<ul> <li>Press buttons -1- and -0- to select "Adaptation" function 10 and pres Q- button to confirm input.</li> <li>Indicated on display</li> <li>Press buttons -0- and -6- to insert channel 06.</li> </ul>	SS -

- Press -Q- button to confirm input.

01-51

**Channel 6 Adaptation 5** 

< 13 >

01-52

#### Indicated on display

The display shows the number of kilometers remaining until the next maintenance service is due (the "5" indicates 5000 km remaining).

- Values can only be entered in increments of 1000 km. Therefore, the distance indicated is in units of 1000.
- In countries where speedometers are calibrated in miles, adjustments must still be made in kilometers. Therefore convert miles to kilometers (miles x 1.609 = kilometers) to get the required adaptation value.
- If the instrument cluster must be replaced, observe notes  $\Rightarrow \frac{Page \ 01}{75}$ .
- When using the scan tool keypad, only the direct input method can be used.
- If an incorrect value is input, the "adaptation" function 10 will be cancelled and must be initiated again.
- Press → button.

			01-53
Channel 6 Adaptation 11		۲	Indicated on display
			<ul> <li>Input desired interval value using keypad on VAG1551, fill in leading digits with zeroes "0."</li> </ul>
			Example:
			Specification: 30000 km
			Input value: 00030
Channel 6 Adaptation 11	Q	<	Indicated on display
Input adaptation value 00030			- Press -Q- button to confirm input.
Channel 6 Adaptation 30	Q	<	Indicated on display
< <sub>-1 3-</sub> >			- Press -Q- button to confirm input.
Channel 6 Adaptation 30	Q	۲	Indicated on display
Store changed value?			- Press -Q- button to confirm input.
Channel 6 Adaptation 30	→	۲	Indicated on display
Changed value is stored			<ul> <li>Press →button to end SRI adaptation.</li> </ul>
Rapid data transfer	HELP	4	Indicated on display
Select function XX			

			Adapting SRI for inspection service Interval-1 (IN1) (time in days)
			This function is used to enter the time until the next inspection service 1 is due (see service schedule "Maintenance Service").
Rapid data transfer	HELP	<	Indicated on display
Select function XX			<ul> <li>Press buttons -1- and -0- to select "Adaptation" function 10 and press - Q- button to confirm input.</li> </ul>
Adaptation	Q	<	Indicated on display
Insert channel number XX			- Press buttons -0- and -7- to insert channel 07.
			- Press -Q- button to confirm input.

**Channel 7 Adaptation 11** 

< \_1 3- >

#### Indicated on display

The display shows the days remaining until the next inspection service 1 is due (in this example "11" indicates 110 days remaining).

- Values can only be entered in increments of 10 days. Therefore the display shows blocks of 10 days.
- If the instrument cluster must be replaced, observe notes  $\Rightarrow \frac{Page \ 01-}{75}$ .
- When using the scan tool keypad, only the direct input method can be used.
- If an incorrect value is input, the "adaptation" function 10 will be cancelled and must be initiated again.
- Press → button.

			01-56
Channel 7 Adaptation 11		۲	Indicated on display
			<ul> <li>Input desired interval value using keypad on VAG1551, fill in leading digits with zeroes "0."</li> </ul>
			Example:
			Specification: 360 days
			Input value: 00036
Channel 7 Adaptation 11	Q	<	Indicated on display
Input adaptation value 00036			- Press -Q- button to confirm input.
Channel 7 Adaptation 36	Q	۲	Indicated on display
< <sub>-13-</sub> >			- Press -Q- button to confirm input.
Channel 7 Adaptation 36	Q	<	Indicated on display
Store changed value?			- Press -Q- button to confirm input.
Channel 7 Adaptation 36	→	۲	Indicated on display
Changed value is stored			<ul> <li>Press →button to end SRI adaptation.</li> </ul>
Rapid data transfer	HELP	۲	Indicated on display
Select function XX			

			Adapting SRI for inspection service Interval-2 (IN2) (time in days)
			This function is used to enter the time until the next inspection service 2 is due (see service schedule "Maintenance Service").
Rapid data transfer Select function XX	HELP	۲	Indicated on display
			Q- button to confirm input.
Adaptation Insert channel number XX	Q	∢	Indicated on display
			- Press buttons -0- and -8
			- Press -Q- button to confirm input.

**Channel 8 Adaptation 45** 

< \_1 3- >

#### Indicated on display

The display shows the days remaining until the next inspection service 2 is due (in this example "45" indicates 450 days remaining).

- Values can only be entered in increments of 10 days. Therefore the display shows blocks of 10 days.
- If the instrument cluster must be replaced, observe notes  $\Rightarrow \frac{Page \ 01}{75}$ .
- When using the scan tool keypad, only the direct input method can be used.
- If an incorrect value is input, the "adaptation" function 10 will be cancelled and must be initiated again.
- Press → button.

		01-59
Channel 8 Adaptation 45	۲	Indicated on display
		<ul> <li>Input desired interval value using keypad on VAG1551, fill in leading digits with zeroes "0."</li> </ul>
		Example:
		Specification: 720 days
		Input value: 00072
Channel 8 Adaptation 45 Q	<	- Indicated on display
input adaptation value 00072		- Press -Q- button to confirm input.
Channel 7 Adaptation 72 Q	<	- Indicated on display
< . <sub>1 3</sub> . >		- Press -Q- button to confirm input.
Channel 7 Adaptation 72 Q	∢	- Indicated on display
Store changed value?		- Press -Q- button to confirm input.
Channel 7 Adaptation 72 ->	<	- Indicated on display
Changed value is stored		<ul> <li>Press →button to end SRI adaptation.</li> </ul>
Rapid data transfer HELP	∢	Indicated on display
Select function XX		

#### Adapting odometer display (km/mi)

This function is used to adapt the odometer reading (in km or miles) after replacing the instrument cluster.

- The adaptation function can only be carried out on an instrument cluster with an odometer reading of not more than 100 kilometers (62 miles).
- The adaptation function can only be carried out once for each instrument cluster.
- Only a larger adaptation value can be entered, not a lower one.
- If an incorrect value is entered and confirmed, no correction is possible. If this is the case, the instrument cluster must be replaced with a new one.
- In countries where speedometers are calibrated in miles, adjustments must still be made in kilometers. Therefore convert miles to kilometers (miles x 1.609 = kilometers) to get the required adaptation value.

 If the instrument cluster must be replaced, observe notes ⇒ <u>Page 01-75</u>.
			Selecting function:
			- Press -C- button.
Rapid data transfer	HELP	۲	Indicated on display
Select function XX			- Press buttons -1- and -1- to select "Login-Procedure" function 11.
Rapid data transfer	Q	<	Indicated on display
11 - Login-procedure			- Press -Q- button to confirm input.
Login procedure		<	Indicated on display
Enter code number XXXXX			- Enter code number 13861.
Login procedure	Q	۲	Indicated on display
Enter code number 13861			- Press -Q- button to confirm input.
Rapid data transfer	HELP	۲	Indicated on display
Select function XX			- Press buttons -1- and -0- to select "Adaptation" function 10.
Rapid data transfer	Q	۲	Indicated on display
10 - Adaptation			- Press -Q- button to confirm input.
Adaptation Insert channel number XX	Q	∢	Indicated on display

01-61

## 01-62

- Press buttons -0- and -9- to select channel number 09.
- Press -Q- button to confirm input
- Indicated on display

## Note:

When using the VAG1551 keypad, only the direct input method can be used.

- Press → button to advance through program sequence.
- Indicated on display
  - Input adaptation value using keypad.

## Example:

**Odometer reading = 89627** 

08963



Channel 9 Adaptation 2

Channel 9 Adaptation 2 Q
Input adaptation value XXXXX