## Central locking On Board Diagnostic (OBD)

#### **General Information**

The new generation of central locking is capable of On Board Diagnostic. Use of DTC memory, Output Diagnostic Test Mode and Read Measuring Value Block facilitates the search for malfunctions. The central locking system variation can also be coded using the VAG1551 Scan Tool (ST).

Central locking has two pneumatic circuits. For central locking without keyless entry, the first circuit controls only the fuel filler flap; for central locking with the keyless entry system, the first circuit controls both the fuel filler flap and the driver-side door. The second circuit controls all remaining locking points.

On the safety-version of central locking, if the driver-side (or passenger-side door) is unlocked with a single command, then only that door and the first pneumatic circuit are opened. If there is another unlocking command within 5 seconds, the second pneumatic circuit is also triggered and the whole vehicle is unlocked.

If the rear lock cylinder is triggered only once, all doors will remain locked. The rear lid (or tailgate) will automatically re-lock itself after about 5 seconds. Interior lighting will gradually increase in intensity until fully illuminated (within about 1.5 seconds) when unlocking (fades off when locking).

The control of the luggage compartment lighting proceeds from the central locking pump to the rear lid (or tailgate) contact switch. The lighting will be switched off while the rear lid is open when a certain speed threshold is surpassed (about 5 km/h) or after 10 minutes.

The new remote transmitter now uses radio frequency. For vehicles using the radio frequency remote locking system, the receiver is integrated into the central locking pump. The remote locking antenna is integrated into the wiring harness.

If no doors (or the rear lid) have been opened within 60 seconds after the central locking system is triggered via radio frequency, central locking automatically relocks everything.

If the anti-theft alarm system is armed, central locking cannot be opened via internal buttons.

All vehicles with an anti-theft system are equipped with an ultrasonic interior monitoring system. This could be an interior monitor of the 1st generation (without OBD) or of the 2nd generation (with OBD). All that is necessary is the proper coding of the central locking system  $\Rightarrow$  page 01-91.

Confirmation can be received from central locking as to whether the alarm system has been armed while locking the doors. The confirmation can be signalled by means of a short anti-theft horn signal or by a brief flashing of the emergency flashers. Central locking can also be coded to give no confirmation at all.

Activation of keyless entry can be signalled by a flashing of the emergency flashers.

# Central Locking On Board Diagnostic (OBD), initiating

#### Requirements

- Power supply and fuses for relevant system OK
- ⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder
- VAG1551 Scan Tool (ST) connected ⇒ page 01-1

#### Notes:

- If the display remains blank, check VAG1551 voltage supply according to wiring diagram,
- The Scan Tool (ST) HELP button can provide additional operating instruction.
- The → button is used to advance through the program sequence.
- If an incorrect entry is made, press the -Cbutton to escape.

- Switch printer on by pressing PRINT button (indicator lamp in button lights up).
- Press button -1- to select "Rapid data transfer" operating mode 1.

Indicated on display

<

Rapid data transfer HELP Insert address word XX

01-72

			Address word for central locking: 35
			<ul> <li>Press buttons -3- and -5- to insert "Central Locking" address word 35.</li> </ul>
Rapid data transfer	Q	۲	Indicated on display
35 - Central Locking			- Press -Q- button to confirm input.
Rapid data transfer		<	Indicated on display
Scan Tool sends address wor	d 35		Vehicles > 1997:
8L0862257B CL-Pump, DWA,	Func D04 →	<	After about 5 seconds, display indicates (for example)
Coding 12172	WSC 06812		Vehicles 1998 ≯:
8L0862257B CL-Pump, DWA,	Func D04 →	<	After about 5 seconds, display indicates (for example)
Coding 16140	WSC 06812		All vehicles:
			- Press → button.
Rapid data transfer Select function XX	HELP	۲	Indicated on display

#### Note:

A list of available functions is printed out when the HELP button is pressed.

#### **On Board Diagnostic (OBD) functions**

The following functions are possible:

01 - Check Control Module Versions  $\Rightarrow$  page 01-85.

02 - Check DTC Memory  $\Rightarrow$  page 01-74.

03 - Output Diagnostic Test Mode  $\Rightarrow$  page 01-88 .

05 - Erase DTC Memory  $\Rightarrow$  page 01-137.

06 - End Output  $\Rightarrow$  page 01-139.

07 - Code Control Module  $\Rightarrow$  page 01-91.

08 - Read Measuring Value Block  $\Rightarrow$  page 01-99.

# Check DTC Memory (scan tool function 02)

#### Note:

The DTC display information is updated only when initiating the On Board Diagnostic (OBD) program or when using the "Erase DTC Memory" function 05.

- Switch printer on by pressing PRINT button (indicator lamp in button lights up).

## Carrying out "Check DTC Memory" function 02

- Indicated on display
  - Press buttons -0- and -2- to select "Check DTC Memory" function 02.
- Indicated on display
  - Press -Q- button to confirm input.
- **<** The number of stored DTCs is indicated on display.

The stored malfunctions are displayed and printed out in sequence.

- Look up printed malfunctions in the DTC table and repair all malfunctions  $\Rightarrow$  page 01-76.

Rapid data transfer	HELP
Select function XX	
Rapid data transfer	Q
02 - Check DTC Memory	
X DTC recognized	
X DTG recognized	

$\rightarrow$
HELP

- ✓ If the message "No DTC recognized" is displayed, the program can be returned to the starting point by pressing the → button.
- Indicated on display

If something else is displayed:

- $\Rightarrow$  Scan tool operating instructions
- Erase DTC Memory (function 05)  $\Rightarrow$  page 01-137.
- End Output (function 06)  $\Rightarrow$  page 01-139.
- Disconnect VAG1551 Scan Tool (ST) from Data Link Connector (DLC).

### Diagnostic Trouble Code (DTC) table, central locking

#### Notes:

- The following table lists all the DTCs that can be recognized by the control module for central locking and printed out by the VAG1551 Scan Tool (ST). The DTCs are listed in order according to their 5-digit numbers.
- DTC 5-digit numbers appear only on the print-out from the scan tool.
- Before replacing a component shown as malfunctioning, check wiring and connections to the component as well as the Ground (GND) connections according to the relevant wiring diagram.
- When a repair has been completed, check and then erase DTC memory using the VAG1551 Scan Tool (ST). After that, the vehicle should be locked again (with key or remote control) and DTC memory checked again.
- DTC memory records all static and sporadic malfunctions. When a malfunction occurs, it is first identified as a static malfunction. If it does not occur again it is registered as a sporadic malfunction, and the letters "/SP" appear at the right of the display.
- When the ignition is switched on, all existing malfunctions are automatically re-classified as sporadic malfunctions and will only be registered as static malfunctions if they still occur after testing.
- Sporadic malfunctions which no longer occur after 50 driving cycles are erased automatically.
- The three digit malfunction type number appearing next to the DTC is a data code which may be disregarded.

DTC			
VAG 1551 scan tool display	Possible cause	Corrective action	
00955			
Key 1	<ul> <li>Key not matched</li> </ul>	- Perform remote transmitter coding procedure $\Rightarrow$ page	
Adaptation limit exceeded	<ul> <li>Key operated more than 200 times while out of range</li> </ul>	<u>01-105</u>	
00956			
Key 2	<ul> <li>Key not matched</li> </ul>	- Perform remote transmitter coding procedure $\Rightarrow$ page	
Adaptation limit exceeded	<ul> <li>Key operated more than 200 times while out of range</li> </ul>	<u>01-105</u>	
00957			
Key 3	<ul> <li>Key not matched</li> </ul>	- Perform remote transmitter coding procedure $\Rightarrow$ page	
Adaptation limit exceeded	<ul> <li>Key operated more than 200 times while out of range</li> </ul>	<u>01-105</u>	
00958			
Key 4	<ul> <li>Key not matched</li> </ul>	- Perform remote transmitter coding procedure $\Rightarrow$ page	
Adaptation limit exceeded	<ul> <li>Key operated more than 200 times while out of range</li> </ul>	<u>01-105</u>	
00991			
Interior lighting			

Short circuit to positive	<ul> <li>Short circuit to in wiring</li> </ul>	- Repair wiring according to wiring diagram.
		⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder

DTC		
VAG 1551 scan tool display	Possible cause	Corrective action
01360		
Open ATW Switch	<ul> <li>Short circuit to Ground in wiring 1)</li> </ul>	- Repair wiring according to wiring diagram.
Short circuit to Ground	<ul> <li>Door contact switch, driver's-side - F2- faulty</li> </ul>	⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder
		- Check -F2- and replace if necessary.
01361		
Close ATW Switch	<ul> <li>Short circuit to Ground in wiring 1)</li> </ul>	- Repair wiring according to wiring diagram.
Short circuit to Ground	<ul> <li>Door contact switch, driver's-side - F2- faulty</li> </ul>	⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder
		- Check -F2- and replace if necessary.
01362		
Close Switch for Tailgate-F124	<ul> <li>Short circuit to Ground in wiring 1)</li> </ul>	- Repair wiring according to wiring diagram.
Short circuit to Ground	<ul> <li>Trunk lock alarm/central locking switch -F124- faulty</li> </ul>	⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations
		- Check -F124- and replace if necessary.

<sup>1)</sup> A malfunction is stored if the Ground is connected for more than 1 min. (e.g. due to an incorrect operation of central locking). Only initiate a repair if there is a proper complaint, otherwise erase DTC memory  $\Rightarrow$  page 01-137.

DTC		
VAG 1551 scan tool display	Possible cause	Corrective action
01363		
Switch for CL; Drivers Door-F59	<ul> <li>This indication can be caused by the system itself.</li> <li>There is no malfunction of driver's door central locking</li> </ul>	- Ignore DTC and erase DTC memory $\Rightarrow page 01-137$ .
Incorrect Signal	system switch -F59	
01364		
Switch for CL; Passenger Door- F114	<ul> <li>This indication can be caused by the system itself. There is no malfunction of passenger door central locking system switch -F114</li> </ul>	- Ignore DTC and erase DTC memory $\Rightarrow page 01-137$ .
Incorrect Signal		
01365		
Lock/Unlock Switch/Button Int.	<ul> <li>Short circuit to Ground in wiring 1)</li> <li>Switch for interior lock, driver's side -E150- faulty</li> </ul>	- Repair wiring according to wiring diagram.
Short circuit to Ground	• Switch for interior lock, driver's side -L 150- faulty	⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder
		- Check -E150- and replace if necessary.
	ed if the Ground is connected for more than 1 min. (e.g. due repair if there is a proper complaint, otherwise erase DTC m	

DTC		
VAG 1551 scan tool display	Possible cause	Corrective action
01365		
Lock/Unlock Switch/Button Int. Short circuit to B+	<ul> <li>Short circuit Short circuit to Ground in wiring</li> <li>Switch for interior lock, driver's side -E150- faulty</li> </ul>	<ul> <li>Repair wiring according to wiring diagram.</li> <li>⇒ Electrical Wiring Diagrams, Troubleshooting &amp; Component Locations binder</li> </ul>
		- Check -E150- and replace if necessary.
01366		
Open Via Crash Signal Short circuit to Ground Open/short circuit to B+	<ul> <li>Output Diagnostic Test Mode performed at airbag control module -J234-</li> <li>Airbag control module -J234- was triggered</li> <li>Short circuit in wiring between airbag control module and central locking control module</li> </ul>	<ul> <li>Erase DTC memory ⇒ page 01-137.</li> <li>Repair wiring according to wiring diagram.</li> <li>⇒ Electrical Wiring Diagrams, Troubleshooting &amp; Component Locations binder</li> </ul>
01367		
Switch on Via CL Pump	<ul> <li>Too little pressure in pneumatic lines</li> <li>Central locking pump faulty</li> </ul>	<ul> <li>Check pneumatic lines for leaks.</li> <li>Exchange central locking pump.</li> <li>Check all actuators of central locking system and replace if necessary.</li> </ul>

DTC		
VAG 1551 scan tool display	Possible cause	Corrective action
01368		
Alarm Via Luggage Compartment Switch	<ul> <li>Anti-theft system triggered by unauthorized opening of rear lid</li> <li>Trunk lid alarm switch -F123- faulty</li> </ul>	- Erase DTC memory. - Replace -F123
01369		
Alarm Via Front Hood Switch	<ul> <li>Anti-theft system triggered by unauthorized opening of hood</li> <li>Hood alarm switch -F120- faulty</li> </ul>	- Erase DTC memory. - Replace -F120
01370		
Alarm Via Interior Scanning Short circuit to Ground	<ul> <li>Anti-theft system triggered by control module for ultra-sound sensors -J347-</li> <li>Control module for ultra-sound sensors -J347-faulty</li> <li>Short circuit in wiring between control module for ultra-sound sensors and central locking control module</li> </ul>	<ul> <li>Erase DTC memory.</li> <li>On Board Diagnostic (OBD) ultra-sound interior monitoring ⇒ page 01-108.</li> <li>Repair wiring according to wiring diagram.</li> <li>⇒ Electrical Wiring Diagrams, Troubleshooting &amp; Component Locations binder</li> </ul>
01371		
Alarm Via Door Contact		

Switch Driv. Side	<ul> <li>Anti-theft system triggered by unauthorized opening of driver-side door</li> <li>Door contact switch, driver's side -F2- faulty</li> </ul>	<ul> <li>Erase DTC memory.</li> <li>Replace door contact switch -F2</li> </ul>
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DTC		
VAG 1551 scan tool display	Possible cause	Corrective action
01372		
Alarm Via Door Ctact. Switch Rear PS	<ul> <li>Anti-theft system triggered by unauthorized opening of passenger-side and/or rear door(s)</li> <li>Door contact switches -F3-, -F10-, -F11- faulty</li> </ul>	- Erase DTC memory. - Replace contact switch -F3-, -F10-, -F11
01373		
Alarm Via Radio Ground Teminal	<ul> <li>Anti-theft system triggered by unauthorized removal of radio</li> <li>Ground connection for anti-theft system has an open circuit</li> </ul>	- Erase DTC memory. - Provide Ground connection.
01374		
Alarm Via Terminal 15	<ul> <li>Anti-theft system triggered by unauthorized starting (short circuiting)</li> <li>Short circuit between terminal 30 and 15</li> </ul>	<ul> <li>Erase DTC memory.</li> <li>Repair wiring according to wiring diagram.</li> <li>⇒ Electrical Wiring Diagrams, Troubleshooting &amp; Component Locations binder</li> </ul>

DTC		
VAG 1551 scan tool display	Possible cause	Corrective action
01384		
Alarm via Broken Glass Sensor	<ul> <li>break-in at rear window</li> <li>Open in rear window defroster circuit</li> <li>False alarm</li> </ul>	- Erase DTC memory
(rear window)		- Check and repair wiring and connectors per wiring diagram.
		⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder
		- Replace rear window
		⇒ <u>Repair Manual, Body Exterior, Repair Group 64</u>
01389		
Tailgate Open Switch- F124	<ul> <li>Short circuit to Ground in wiring</li> </ul>	- Repair wiring according to wiring diagram.
Short circuit to Ground	<ul> <li>Trunk lock alarm/central locking switch - F124- faulty</li> </ul>	⇒ Electrical Wiring Diagrams, Troubleshooting & Component Locations binder
		- Replace -F124- in trunk lock.

DTC		
VAG 1551 scan tool display	Possible cause	Corrective action
01403		
Broken Glass Sensors Broken glass sensor for rear left side window -G183 or Broken glass sensor for rear right side window -G184	<ul> <li>Anti-theft alarm triggered by attempted break-in at one of the side windows</li> <li>Open in circuit of one of the side windows</li> <li>False alarm</li> </ul>	<ul> <li>Erase DTC memory</li> <li>Check and repair wiring and connectors per wiring diagram.</li> <li>⇒ Electrical Wiring Diagrams, Troubleshooting &amp; Component Locations binder</li> <li>Replace side window as necessary</li> <li>⇒ Repair Manual, Body Exterior, Repair Group 64</li> </ul>
65535		
Control Module Malfunctioning		- Replace control module.

Rapid data transfer	HELP	
Select function XX		
Rapid data transfer	Q	
01 - Check Control Module Ve	ersions	
8L0862257B CL-Pump, DWA,	Func D04 🍑	
Coding 12172	WSC 06812	

# Check Control Module Versions (scan tool function 01)

- Indicated on display
  - Press buttons -0- and -1- to select "Check Control Module Versions" function 01.
- Indicated on display
  - Press -Q- button to confirm input.

### Vehicles ≻ 1997

Indicated on display

#### **Explanation of display**

- 8L0862257B: Part No. of central locking control modules
- Central locking pump, Anti-theft system: component identification
- D04: software version
- ◆ Coding 12172: coding ⇒ page 01-91
- WSC 06812: dealership number
- Press → button

8L0862257BCL-Pump, DWA, Func D04

WSC 06812

Coding 16140

#### Vehicles 1998 >

Indicated on display

#### **Explanation of display**

- ◆ 8L0862257B: Part No. of central locking control modules
- Central locking pump, Anti-theft system: component identification
- D04: software version
- Coding 16140: coding  $\Rightarrow$  page 01-91
- WSC 06812: dealership number
- Press → button

http://127.0.0.1:8080/audi/servlet/Display?action=Goto&type=repair&id=AUDI.B5.BD04.01.3

01	-87
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Rapid data transfer	HELP
Control module does not answer	
Rapid data transfer	HELP
Error in communication link	
Rapid data transfer	HELP
K wire not switching to Ground	
Rapid data transfer	HELP
K wire not switching to B+	

HELP

Rapid data transfer

#### All vehicles:

If one of these messages is indicated on the display, perform On Board Diagnostic (OBD) according to OBD instructions:

- Indicated on display
  - or
- Indicated on display
  - or
- Indicated on display
  - or
- Indicated on display
  - Check wiring connections for Data Link Connector (DLC).

 $\Rightarrow$  Electrical Wiring Diagrams, Troubleshooting & Component Locations binder

#### Note:

If nothing appears on display:

- $\Rightarrow$  Scan tool operating instructions
- < Indicated on display

Select function XX

# Output Diagnostic Test Mode (scan tool function 03)

#### Notes:

- The Output Diagnostic Test Mode may only be performed with the vehicle stationary and the engine not running.
- Any malfunctions identified by the Output Diagnostic Test Mode must be checked and repaired.

The output DTM activates the following elements in sequence:

- Emergency flashers and anti-theft horn (only for vehicles equipped with anti-theft system)
- Interior monitoring (activated even if interior monitoring is not installed)
- Emergency flashers and interior lights as a test of the crash signal

		01-89
		Carrying out "Output Diagnostic Test Mode" function 03
Rapid data transfer HELP	<	Indicated on display
Select function XX		<ul> <li>Press buttons -0- and -3- to select "Output Diagnostic Test Mode" function 03.</li> </ul>
Rapid data transfer Q	۲	Indicated on display
03 - Output Diagnostic Test Mode		- Press -Q- button to confirm input.
Dutput Diagnostic Test Mode 🛛 🔿	۲	Indicated on display (emergency flasher and anti-theft horn are activated)
Create active alarm		- Press → button.
Dutput Diagnostic Test Mode 🛛 🔿	<	Indicated on display
Next final ctrl: operate		- Press → button.
Output Diagnostic Test Mode →	۲	Indicated on display (central locking control module sends a signal which activates interior monitoring system)
		Notes:

- After activating interior monitoring, a system dependant waiting time of 30 seconds must be maintained.
- ◆ If one alarm is activated, an entry into DTC memory of the control module for central locking will be made "1370; alarm via interior monitoring" as well as into control module for ultra-sound sensors "alarm via sensor for anti-theft warning system; fl, fr, rl, rr".

 Malfunctions must be checked and erased in DTC memory of the respective control module.

Output Diagnostic Test Mo	ode →
Next final ctrl:	operate →
Output Diagnostic Test Mo	ode →
Simulate crash signal	

Output Diagnostic Test Mode	$\rightarrow$
END	
Rapid data transfer	HELP
Select function XX	

. . . . . . . . . . .

- Press → button.
- Indicated on display
  - Press → button.
- Indicated on display (emergency flashers and interior lights are triggered)
  - Press → button.

#### Notes:

- The malfunction "1366; opening via crash-signal" is stored in DTC memory of the control module for central locking.
- Output Diagnostic Test Mode (DTM) must be repeated with airbag control module. After performing output Diagnostic Test Mode (DTM) of airbag control module, DTC "01366 opening via crash signal" will also be stored in control module for central locking.
- The malfunction must be checked in DTC memory of the control module for central locking ⇒ page 01-74 and erased ⇒ page 01-137.
- Indicated on display
  - Press → button.

The program is now back at its starting point.

Indicated on display

# Code Control Module (scan tool function 07)

With coding, different central locking variations can be enabled for possible function/equipment variations.

Central locking variations:

- Central locking with anti-theft system
- Central locking with remote control and antitheft system

#### Notes:

- The basic functions of the central locking system are listed in a standard code table ⇒ page 01-93.
- Further coding variations are possible at the request of the customer ⇒ page 01-94.

# Carrying out "Code Control Module" function 07

- Indicated on display
  - Press buttons -0- and -7- to select "Code Control Module" function 07.

Rapid data transferHELPSelect function XX

Q

Rapid data transfer 07 - Code Control Module

**Code Control Module** 

Enter code number XXXXX (0-32000)

- Indicated on display
  - Press -Q- button to confirm input.
- Indicated on display

Code Control Module	Q
Enter code number 16140	(0-32000)
8L0862257N CL pump, DWA,	Func D12 →
Coding 16140	WSC 06812
Rapid data transfer	HELP
Select function XX	
Rapid data transfer	Q
06 - End Output	
Rapid data transfer	HELP
Insert address word XX	

locking with anti-theft/remote) vehicles1998 >. < Indicated on display - Press -Q- button to confirm input. < - Indicated on display (control module identification with current coding) Note: Explanation of display  $\Rightarrow$  page 01-85. - Press → button < Indicated on display - Press buttons -0- and -6- to select "End Output" function 06. < Indicated on display - Press -Q- button to confirm input.

- Input coding of the central locking control module with keypad (e.g. 16140 for central

Indicated on display

http://127.0.0.1:8080/audi/servlet/Display?action=Goto&type=repair&id=AUDI.B5.BD04.01.3

#### Standard code table

### Vehicles > 1997 (with Delta radio):

Vehicle type	Central locking variation	Standard coding
Audi A4	<ul> <li>Vehicle with central locking and anti-theft system</li> </ul>	03468
	Vehicle with central locking, anti-theft system and keyless entry	12172

### Vehicles 1998 > (with Concert radio):

Vehicle type	Central locking variation	Standard coding
Audi A4	<ul> <li>Vehicle with central locking and anti-theft system</li> </ul>	03340
	Vehicle with central locking, anti-theft system and keyless entry	16140

#### All vehicles:

In addition to basic coding, it is possible to offer customers the following option:

 Vehicle automatically locks upon reaching a speed of about 15 km/h (10 mph) and unlocks when the key is removed from the ignition

#### Optional code table

Vehicles > 1997 (with Delta radio):

Vehicle type	Central locking variation	Optional coding
Audi A4	<ul> <li>Vehicle with central locking and anti-theft system</li> </ul>	03500
	Vehicle with central locking, anti-theft system and keyless entry	12204

### Vehicles 1998 > (with Concert radio):

Vehicle type	Central locking variation	Optional coding
Audi A4	<ul> <li>Vehicle with central locking and anti-theft system</li> </ul>	03372
	Vehicle with central locking, anti-theft system and keyless entry	16172

#### Notes:

Safety central locking (SCL) has the following functions (when vehicle is unlocked):

- If central locking is activated only once (with key or keyless entry), the driver-side door and the fuel filler flap are unlocked, while all other doors and the rear lid remain locked.
- If central locking is immediately activated a second time, the remaining doors and the rear lid are unlocked.

## Standard coding table for vehicles (tailgate with soft-touch) 1999 > :

Vehicle type	Central locking version	Standard coding
Audi A4	<ul> <li>Vehicles with central locking</li> </ul>	00001
	<ul> <li>Vehicles with central locking and anti-theft warning system</li> </ul>	00267
	<ul> <li>Vehicles with central locking and radio-frequency remote control</li> </ul>	12865
	<ul> <li>Vehicles with central locking, anti-theft warning system and radio-frequency remote control</li> </ul>	13131

## Note:

## Coding for vehicles which have tailgates equipped with soft-touch, incorporates:

During mechanical unlocking (via tailgate lock), the tailgate unlocks and opens. In this way, the tailgate can be opened without operating soft-touch.

## Standard coding table for vehicles 18.00 ≻ :

Vehicle type	Central locking version	Standard coding
Audi A4	<ul> <li>Vehicles with central locking</li> </ul>	02049
	<ul> <li>Vehicles with central locking and anti-theft warning system</li> </ul>	02315
	<ul> <li>Vehicles with central locking and radio-frequency remote control</li> </ul>	14913
	<ul> <li>Vehicles with central locking, anti-theft warning system and radio-frequency remote control</li> </ul>	15179

## Notes:

## Coding for vehicles from cw 18.00 incorporates:

- Changed door or window regulator logic. As soon as the door is opened with "terminal. 15 off" the window regulators can
  no longer be operated.
- During mechanical unlocking (via tailgate lock), the tailgate unlocks and opens. In this way, the tailgate can be opened without operating soft-touch.

### All vehicles:

Beside the basic coding, it is possible to offer the customer the following additional functions:

To activate the following additional functions, the following number value must be added to the respective basic coding.

<ul> <li>Safety central locking (SCL)</li> </ul>	+ 4
<ul> <li>Automatic locking of the vehicle at</li> </ul>	+ 32
a speed of approx. 15 km/h	(with SCL + 36)

The value 4 for SCL and 32 for automatic locking above a speed must be added to the current coding.

e.g. CL-pump with ATS/remote and SCL (15179 + 4 = 15183).

## Notes:

- Safety central locking (SCL) has the following function (vehicle locked):
- If the CL is only operated once (via key or remote control), the drivers door and the tank flap will be unlocked while all other doors and

tailgate remain locked.

 If the CL is immediately operated for a second time, the remaining doors and tailgate will also be unlocked.

# Read Measuring Value Block (scan tool function 08)

#### Note:

The current system condition can be determined by using "Read Measuring Value Block" function 08.

# Carrying out "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
  - Press buttons -0-, -0- and -1- to input display group number 1 (001).
  - Press -Q- button to confirm input.

The selected measuring value block is now indicated in standard format.

Rapiù uala li alistei	HELF
Select function XX	
Rapid data transfer	Q
08 - Read Measuring Value Block	
Read Measuring Value Block	
Input display group number XXX	

Ranid data transfer

## Read Measuring Value Block, overview

## Display group 001

Read Measuring Value Block 1			$\rightarrow$ Indicated on display
0100	100	0000	0000
			<ul><li>X • Rear lid: 1 = opened, 0 = closed</li></ul>
			<ul> <li>X • Luggage compartment light:1 = light on, 0 = light off</li> </ul>
			<ul> <li>Switch for unlocking rear lid (A8 only):</li> <li>1 = activated, 0 = not activated</li> </ul>
			<ul> <li>Motor for unlocking rear lid (A8 only):</li> <li>1 = motor running, 0 = motor not running</li> </ul>
		XX	<ul> <li>Actuator switch or internal switch at passenger-side door:</li> <li>00 = not activated, 01 = lock, 10 = unlock, 11 = not permissible</li> </ul>
		хх	<ul> <li>Actuator switch or internal switch at driver-side door:</li> <li>00 = not activated, 01 = lock, 10 = unlock, 11 = not permissible</li> </ul>
	х	<ul> <li>Passen</li> </ul>	ger-side door and rear doors: 1 = open, 0 = closed (USA: only rear doors)
	Х	Driver-s	ide door: 1 = open, 0 = closed (USA: driver-side and passenger-side doors)
	Х	• Hood: 1	= open, 0 = closed
	Position	of key in lock	< cylinder

Х	<ul> <li>Opening driver-side and passenger-side doors: 1 = key activated, 0 = key in middle position</li> </ul>
Х	<ul> <li>Closing driver-side and passenger-side doors: 1 = key activated, 0 = key in middle position</li> </ul>
х	<ul> <li>Opening rear lid: 1 = key activated, 0 = key in middle position</li> </ul>
х	<ul> <li>Closing rear lid: 1 = key activated, 0 = key in middle position</li> </ul>

## Display group 002

Read Mea	suring Value	e Block 2	→ Indicated on display
0100	1000	111	
		Х	<ul> <li>Terminal 15: 1 = Ignition on, 0 = Ignition off</li> </ul>
		Х	S-contact: 1 = S-contact on, 0 = S-contact off
		Х	<ul> <li>Ground signal from radio: 0 = Radio installed, 1 = Radio removed</li> </ul>
	Х	Remo	te transmitter button "open": $1 = activated, 0 = not activated$
	Х	• Remo	te transmitter button "close": 1 = activated, 0 = not activated
	Х	Remo	te transmitter button open "rear lid" (A8 only): 1 = activated, 0 = not activated
	х	Remo	te transmitter button "panic" (USA only): 1 = activated, 0 = not activated
Х	Interio	r light contro	ols: $1 = interior light on, 0 = interior light off$
Х			ndow regulator/sunroof: naintaining voltage supply), 0 = Ground
	Function	on "comfort	close:" 1 = comfort close activated, 0 = not activated
Х	Function	on "comfort	open:" 1 = comfort open activated, 0 = not activated
Х			

## Display group 003

Read Measuring Value Block 3			$\rightarrow$ Indicated on display
0	0001	0	0000
			<ul> <li>Remote transmitter button "open": 2)</li> <li>1 = activated, 0 = not activated</li> </ul>
			<ul> <li>Remote transmitter button "close": 2)</li> <li>X 1 = activated, 0 = not activated</li> </ul>
			<ul> <li>Remote transmitter button open "rear lid" (N/A): 2)</li> <li>1 = activated, 0 = not activated</li> </ul>
			<ul> <li>Remote transmitter button "Panic" (N/A): 2)</li> <li>1 = activated, 0 = not activated</li> </ul>
			X
		Х	Disregard measuring value
	Х	<ul> <li>Keyle</li> </ul>	ess entry key memory position 4 1): 1 = position occupied, 0 = not occupied
	Х	<ul> <li>Keyle</li> </ul>	ess entry key memory position 3 1): 1 = position occupied, 0 = not occupied
	Х	<ul> <li>Keyle</li> </ul>	ess entry key memory position 2 1): 1 = position occupied, 0 = not occupied
	Х	<ul> <li>Keyle</li> </ul>	ess entry key memory position 1 1): 1 = position occupied, 0 = not occupied
х	Disregard m	neasuring	value

<sup>1)</sup> When you activate keyless entry, the relevant keyless entry key memory position blinks.

<sup>2)</sup> This measuring value block also shows non-coded keyless entry keys (e.g. for function control of keyless entry).

## Display group 004 (vehicles up to software version D04)

Read Measuring Value Block 4			$\rightarrow$ Indicated on display
100	1011	1100	1100
			<ul> <li>Anti-theft system activated: 0 = no, 1 = yes</li> </ul>
			<ul> <li>X • Safety central locking: 0 = no, 1 = yes</li> </ul>
			X • Disregard measuring value: coding always 0
			X
		Х	<ul> <li>Anti-theft system activated: 0 = no, 1 = yes</li> </ul>
		Х	<ul> <li>Interior monitoring system is OBD capable: 0 = yes, 1 = no</li> </ul>
		х	<ul> <li>Locking vehicle above a speed: 0 = yes, 1 = no</li> </ul>
		x	<ul> <li>Vehicle is a convertible: 0 = no, 1 = yes</li> </ul>
	Х	• USA-Do	por logic 1) activated: $0 = no$ , $1 = yes$
	Х	Confirm	nation of anti-theft system via emergency flashers: 0 = no, 1 = yes
	х	Confirm	nation of anti-theft system via horn: $0 = no$ , $1 = yes$
	х	Confirm	nation of keyless entry via emergency flashers: 0 = no, 1 = yes
Х	Remote	e transmitter	activated: 0 = no, 1 = yes

http://127.0.0.1:8080/audi/servlet/Display?action=Goto&type=repair&id=AUDI.B5.BD04.01.3

Х	<ul> <li>Activation of security central locking also possible with remote transmitter: 0 = no, 1 = yes</li> </ul>
Х	<ul> <li>Comfort closing also possible with remote transmitter: 0 = no, 1 = yes</li> </ul>

<sup>1)</sup> Window regulators will not work if ignition is off and driver-side door is open.

## Display group 004 (vehicles from software version D05)

Read measuring value block 4			$\rightarrow$	Indicated on display
100	1111	1000	1100	
			Х	<ul> <li>Anti-theft warning system activated: 0 = No, 1 = Yes</li> </ul>
			Х	<ul> <li>Safety-CL activated: 0 = No, 1 = Yes</li> </ul>
			х	<ul> <li>Confirmation of anti-theft warning system via emergency flashers:0 = No, 1 = Yes</li> </ul>
				<ul> <li>Tailgate opening, lock cylinder rear: 0 = No, 1 = Yes</li> </ul>
			Х	
		Х	• Ant	i-theft warning system activated: 0 = No, 1 = Yes
		Х	• Inte	rior monitoring is OBD cabable: 0 = Yes, 1 = No
		х	• Loc	king vehicle above a speed: 0 = No, 1 = Yes
		х	• Veh	nicle is a Cabrio: 0 = No, 1 = Yes
	х	• USA-c	loor logic	1) activated: $0 = No$ , $1 = Yes$
	х		mation of b, 1 = Yes	radio-frequency remote control button "open" via emergency flashers:
		Confire	mation of	anti-theft warning system via ATS horn: 0 = No, 1 = Yes
	Х	Confir	mation of	radio-frequency remote control button "lock" via emergency flashers:

	X • 0 = No, 1 = Yes
Х	<ul> <li>Radio-frequency remote control activated: 0 = No, 1 = Yes</li> </ul>
X	<ul> <li>For safety central locking selection, CL-function for operation via radio frequency remote, otherwise SCL- function: 0 = No, 1 = Yes</li> </ul>
Х	<ul> <li>Comfort locking/ -unlocking also possible via radio-frequency remote control: 0 = No, 1 = Yes</li> </ul>

<sup>1)</sup> All window regulators are not functional, if the ignition is switched off and the drivers door is open at the same time.

## Remote transmitter, coding

Two remote transmitters are supplied with the vehicle. If further transmitters are required, they must be coded to interact properly with the central locking control module.

This procedure must be performed after changing the batteries in keys with remote control function, or if the scan tool displays DTCs of 00955 to 00958

## Remote transmitter coding procedure

- Switch ignition on (using separate key).
- Check how many transmitters have already been coded in measuring value block 003 ⇒ <u>Read Measuring Value Block page 01-99</u>.

## Indicated on display

Display field 2 indicates how many remote transmitters have been coded and in which memory positions (in the example given, 1 transmitter in position 1).

- Lock vehicle from outside using key to be coded via driver-side door lock.
- Press "unlock" button within 5 seconds often enough to reach next memory position (in example given, twice).

Read Measuring Value Block 3		3 →
0	0001 0	0000

Every press of the button is confirmed by the emergency flashers and the anti-theft system horn.

- Wait 5 seconds.

- Now press "unlock" button one more time (vehicle unlocks).
- Switch ignition off and remove ignition key.
- Check function of new transmitter.
- Check display field 2 in measuring value block 003. It should now display another "1" (in example given: 1100).

#### Note:

Be sure that new transmitters are always coded into free memory positions. If occupied positions (distinguishable by a "1") are used, the transmitter previously coded to this position will no longer work.

# Existing remote transmitter recoding procedure

This procedure must be performed after changing the batteries in keys with remote control function, or if the scan tool displays DTCs of 00955 to 00958

- Press any button on transmitter.

If vehicle does not respond by locking or

unlocking:

- Lock and unlock vehicle within 30 seconds using driver-side lock.
- Now check function of recoded remote transmitter.

## **Clearing memory positions**

#### Note:

It is possible to clear all memory positions, e.g. if a customer loses a remote transmitter. Proceed as follows:

- Switch ignition on using key.
- Then mechanically lock central locking from outside vehicle using key.
- Activate remote transmitter "unlock" button on key five times at one second intervals. A short horn signal will sound each time.
- Then, after 6 seconds, press remote transmitter "unlock" button to confirm this clearing procedure one more time.

Central locking should no longer unlock itself via remote transmitter.

- Switch ignition off.

Up to four transmitters can now be coded again.