

<b>ELECTICAL SYSTEM .....</b>	<b>8</b>
<b>STARTER-CURRENT SUPPLY-CC.....</b>	<b>8</b>
BATTERY .....	8
<i>Battery handling instructions .....</i>	<i>8</i>
<i>Inspecting electrolyte level.....</i>	<i>8</i>
<i>Measuring voltage under load .....</i>	<i>9</i>
<i>Basics.....</i>	<i>9</i>
<i>Work sequence when disconnecting and connecting the battery.....</i>	<i>10</i>
<i>Check the battery .....</i>	<i>10</i>
<i>Measure no-load voltage .....</i>	<i>11</i>
<i>Charging batteries.....</i>	<i>12</i>
<i>Removing and installing the battery .....</i>	<i>12</i>
<i>Removing and installing the battery tray.....</i>	<i>14</i>
BATTERY WITH A MAGIC EYE AND BATTERY PLUGS COVERED IN ADHESIVE TAPE .....	15
<i>Checking the battery using the magic eye .....</i>	<i>15</i>
BATTERY WITH A MAGIC EYE WITHOUT BATTERY PLUGS COVERED IN ADHESIVE TAPE (MAINTENANCE-FREE).....	16
<i>Checking the battery using the magic eye .....</i>	<i>16</i>
REMOVING AND INSTALLING THE AC GENERATOR .....	17
<i>Vehicles with petrol engine .....</i>	<i>17</i>
<i>Vehicles with diesel engine.....</i>	<i>17</i>
<i>Removing and installing belt pulley of AC generator .....</i>	<i>19</i>
<i>Removing and installing belt pulley of AC generator with free wheel .....</i>	<i>19</i>
REMOVING AND INSTALLING THE STARTER .....	21
<b>INSTRUMENTS, GCI.....</b>	<b>22</b>
DASH PANEL INSERT (? MY 00) .....	22
<i>Self-diagnosis .....</i>	<i>22</i>
<i>Initiating self-diagnosis of the dash panel insert.....</i>	<i>23</i>
<i>Interrogating fault memory .....</i>	<i>24</i>
<i>Fault table .....</i>	<i>25</i>
<i>Actuator diagnosis .....</i>	<i>27</i>
<i>Erasing fault memory.....</i>	<i>28</i>
<i>Ending output.....</i>	<i>29</i>
<i>Coding control unit.....</i>	<i>29</i>
<i>Reading measured value block.....</i>	<i>30</i>
<i>Adjustment.....</i>	<i>32</i>
<i>Adapt service interval display - SID .....</i>	<i>35</i>
<i>Input values when changing the dash panel insert.....</i>	<i>37</i>
<i>Resetting service interval display (SID) without -V.A.G 1552- / -V.A.G 1551 - .....</i>	<i>38</i>
<i>Resetting service interval display (SID) with -V.A.G 1552- / -V.A.G 1551 - .....</i>	<i>39</i>
<i>Removing and installing the dash panel insert .....</i>	<i>40</i>
<i>Lamp assignment on the dash panel insert.....</i>	<i>41</i>
<i>Contact assignment of plug connections on the dash panel insert.....</i>	<i>41</i>
<i>Test signal from fuel gauge sender -G- .....</i>	<i>44</i>
<i>Contact assignment on the fuel gauge sender - G- .....</i>	<i>44</i>
<i>Check coolant temperature sender .....</i>	<i>45</i>
<i>Testing the speed signal.....</i>	<i>45</i>
TAXIMETER AND PRINTER .....	46
<i>Removing and installing taximeter HALE .....</i>	<i>46</i>
<i>Removing and installing printer HALE.....</i>	<i>46</i>
DASH PANEL INSERT (MY 01 ?) .....	48

<i>Self-diagnosis</i> .....	48
<i>Initiating self-diagnosis of the dash panel insert</i> .....	49
<i>Interrogating fault memory</i> .....	50
<i>Fault table</i> .....	50
<i>Actuator diagnosis</i> .....	50
<i>Erasing fault memory</i> .....	52
<i>Ending output</i> .....	52
<i>Coding dash panel insert</i> .....	52
<i>Reading measured value block</i> .....	54
<i>Adaptation</i> .....	56
<i>Adapting the service interval display when replacing the dash panel insert</i> .....	58
<i>Input values when changing the dash panel insert</i> .....	61
<b>SELF-DIAGNOSIS OF THE GATEWAY</b> .....	<b>63</b>
<i>Initiating self-diagnosis</i> .....	63
<i>Interrogating fault memory</i> .....	64
<i>Fault table</i> .....	64
<i>Erasing fault memory</i> .....	67
<i>Ending output</i> .....	67
<i>Coding control unit</i> .....	67
<i>Reading measured value block</i> .....	68
<i>Removing and installing the dash panel insert</i> .....	70
<i>Contact assignment of plug connections on the dash panel insert</i> .....	70
<i>Test signal from fuel gauge sender -G-</i> .....	73
<i>Contact assignment on the fuel gauge sender -G-</i> .....	73
<i>Check coolant temperature sender</i> .....	73
<i>Testing the speed signal</i> .....	73
<i>Outside temperature sensor -G17 -</i> .....	73
<i>Check oil level and oil temperature sender -G266-</i> .....	73
<b>CAN DATABUS</b> .....	<b>75</b>
<i>Checking the data BUS drive</i> .....	75
<i>Check the terminating resistances of the control units</i> .....	77
<i>Test CAN databus for short-circuit</i> .....	79
<i>Checking the data BUS Comfort version</i> .....	80
<b>INFOTAINMENT</b> .....	<b>81</b>
<b>RADIO SYSTEM</b> .....	<b>81</b>
<i>General Instructions</i> .....	81
<i>Radio system with 4 loudspeakers</i> .....	81
<i>Radio system with 8 loudspeakers</i> .....	82
<i>Overview of radio system</i> .....	85
<i>Removing and installing radio</i> .....	87
<i>Removing and installing loudspeakers</i> .....	87
<i>Removing and installing radio sets "Gamma (MS 501), MS 303, Symphony"</i> .....	89
<b>REMOVING AND INSTALLING THE ROOF AERIAL</b> .....	<b>91</b>
<b>REMOVING AND INSTALLING ROOF AERIAL FOR RADIO AS OF MY 2002</b> .....	<b>93</b>
<b>REMOVING AND INSTALLING ROOF AERIAL FOR RADIO AND TELEPHONE AS OF MY 2002</b> .....	<b>94</b>
<b>REMOVING AND INSTALLING ROOF AERIAL FOR RADIO, TELEPHONE AND NAVIGATION SYSTEM AS OF MY 2002</b> .....	<b>95</b>
<b>TELEPHONE SYSTEMS</b> .....	<b>96</b>
<i>Telephone system - overall view</i> .....	96
<i>Telephone preinstallation 1</i> .....	98
<i>Telephone preinstallation 2 - Cullmann</i> .....	98
<i>Telephone system</i> .....	99
<b>REMOVING AND INSTALLING THE CONTROL UNIT FOR THE MOBILE PHONE OPERATING ELECTRONICS -J412- (INTERFACE BOX)</b> .....	<b>101</b>
<b>OVERVIEW OF THE MOUNT FOR THE MOBILE PHONE 1</b> .....	<b>103</b>

OVERVIEW OF THE MOUNT FOR THE MOBILE PHONE 2 .....	104
REMOVING AND INSTALLING THE MICROPHONE FOR THE TELEPHONE -R38- ? 08.00 .....	106
REMOVING AND INSTALLING THE MICROPHONE FOR THE TELEPHONE -R38- 09.00 ? .....	108
SELF-DIAGNOSIS OF RADIO SYSTEM "GAMMA (MS 501), MS 303 AND SYMPHONY" .....	109
<i>Connecting vehicle system tester -V.A.G 1552- and selecting the control unit for the radio set .....</i>	<i>109</i>
<i>Interrogating and erasing fault memory.....</i>	<i>110</i>
<i>Fault table .....</i>	<i>111</i>
<i>Actuator diagnosis .....</i>	<i>112</i>
<i>Code radio .....</i>	<i>113</i>
<i>Reading measured value block.....</i>	<i>116</i>
REMOVING AND INSTALLING CD CHANGER .....	120
NAVIGATION SYSTEM.....	120
<i>General description .....</i>	<i>121</i>
<i>Self-diagnosis of radio unit in RNS .....</i>	<i>121</i>
<i>Self-diagnosis of navigation unit in RNS.....</i>	<i>121</i>
<i>Interrogating and erasing fault memory.....</i>	<i>123</i>
<i>Fault table .....</i>	<i>123</i>
<i>Actuator diagnosis .....</i>	<i>125</i>
<i>Reading measured value block.....</i>	<i>125</i>
<i>Measured value block 006 (as of SG 3B0919887 D).....</i>	<i>127</i>
<i>Code control unit for RNS.....</i>	<i>130</i>
<i>Electronic anti-theft lock .....</i>	<i>130</i>
<i>Plug connections at Radio-Navigation System.....</i>	<i>131</i>
<i>Removing and installing Radio-Navigation System.....</i>	<i>134</i>
MULTI-FUNCTIONAL STEERING WHEEL .....	136
<i>General description .....</i>	<i>136</i>
<i>Interrogating and erasing fault memory.....</i>	<i>137</i>
<i>Fault table .....</i>	<i>138</i>
<i>Coding multi-functional steering wheel control unit -J453- .....</i>	<i>139</i>
<i>Actuator diagnosis .....</i>	<i>140</i>
<i>Reading measured value block.....</i>	<i>141</i>
<i>Removing and installing the key units of the multi-function steering wheel .....</i>	<i>142</i>
<i>Contact assignment of the 18-pin plug connection for the CU multi-functional steering wheel -J453-.....</i>	<i>143</i>
<b>WINDSCREEN WIPE/WASH SYSTEM .....</b>	<b>144</b>
WINDSCREEN WIPER AND WASHER SYSTEM.....	144
<i>Removing and installing the windscreen wiper and washer system .....</i>	<i>144</i>
<i>Setting park position of windscreen wiper blades.....</i>	<i>145</i>
REPAIRING WINDSCREEN WASHER SYSTEM.....	147
<i>Removing and installing washer reservoir .....</i>	<i>147</i>
<i>Removing and installing washer nozzles.....</i>	<i>148</i>
<i>Setting the washer nozzles.....</i>	<i>148</i>
REPAIRING HEADLAMP CLEANING SYSTEM.....	150
<i>Removing and installing the spray nozzles of the headlamp cleaning system.....</i>	<i>150</i>
<i>Adjusting the spray nozzles .....</i>	<i>150</i>
<i>Removing and installing washer fluid reservoir .....</i>	<i>150</i>
REAR WINDOW WIPER AND WASHER SYSTEM .....	151
<i>Rear window wiper system - Summary of components .....</i>	<i>151</i>
<i>Removing and installing rear window wiper.....</i>	<i>152</i>
<i>Setting park position of rear window wiper .....</i>	<i>153</i>
<i>Adjusting spray nozzle.....</i>	<i>153</i>
<i>Replacing spray nozzle (Octavia Combi).....</i>	<i>153</i>
<i>Replacing spray nozzle (Octavia).....</i>	<i>154</i>
<i>Removing and installing wiper rubber .....</i>	<i>154</i>

<i>Removing and installing the rain sensor</i> .....	155
<b>LIGHTS, LAMPS, SWITCHES OUTSIDE</b> .....	<b>157</b>
REPAIRING HEADLIGHT .....	157
<i>Overall view ? 07.00</i> .....	157
<i>Overall view 08.00 ?</i> .....	158
<i>Removing and installing headlight</i> .....	158
<i>Setting the headlight beam</i> .....	159
<i>Unglueing a halogen headlight</i> .....	161
<i>Changing light bulbs of headlight</i> .....	162
<i>Removing and installing the headlight range control motor</i> .....	163
REPAIRING TURN SIGNAL LIGHTS .....	165
<i>Removing and installing turn signal lights</i> .....	165
<i>Removing and installing light bulb for the turn signal light</i> .....	165
REMOVING AND INSTALLING SIDE TURN SIGNAL LIGHTS .....	165
REPAIRING REAR LIGHTS .....	167
<i>A general overview</i> .....	167
<i>Removing and installing the light bulb from the lamp holder</i> .....	168
<i>Removing and installing rear light</i> .....	168
REMOVING AND INSTALLING THE LICENCE PLATE ILLUMINATION .....	169
REPAIRING STEERING COLUMN SWITCH .....	170
<i>Removing and installing steering column switch</i> .....	170
<i>Contact assignment on the steering column switch - up to MY 98</i> .....	172
<i>Contact assignment on the steering column switch - as of MY 99</i> .....	173
REPAIRING LOCK CYLINDER AND IGNITION STARTER SWITCH .....	175
<i>Removing and installing lock cylinder</i> .....	175
<i>Removing and installing the ignition switch</i> .....	176
<i>Contact assignment on the ignition starter switch</i> .....	177
REMOVING AND INSTALLING REAR LIGHTS OCTAVIA COMBI .....	177
ADDITIONAL BRAKE LIGHT .....	179
<i>Additional brake light for OCTAVIA</i> .....	179
<i>Additional brake light for OCTAVIA Combi</i> .....	180
ANTI-THEFT WARNING SYSTEM .....	182
<i>Bonnet contact switch -F120- (-F266-)</i> .....	182
<i>Horn for anti-theft alarm system -H8-</i> .....	182
<i>Horn for anti-theft alarm system -H8-</i> .....	182
<i>Replace emergency battery for alarm horn</i> .....	183
PARKING AID - OVERALL VIEW .....	184
<i>Removing and installing parking aid control unit -J446-</i> .....	184
<i>Removing and installing the parking aid warning buzzer</i> .....	185
<i>Removing and installing parking aid senders</i> .....	185
SELF-DIAGNOSIS OF THE PARKING AID .....	187
<i>General Instructions</i> .....	187
<i>Initiating self-diagnosis of the parking aid</i> .....	187
<i>Interrogating and erasing fault memory</i> .....	189
<i>Fault table</i> .....	189
<i>Coding park aid control unit</i> .....	190
<i>Reading measured value block</i> .....	191
<i>Adaptation</i> .....	192
ROOF SIGN "TAXI" .....	194
<i>Removing and installing bracket for "TAXI" roof sign</i> .....	194
SELF DIAGNOSIS FOR THE XENON HEADLIGHTS WITH AUTOMATIC REGULATION (SYSTEM LITRONIC 4.1) .....	195
<i>Interrogating fault memory</i> .....	196
<i>Fault table</i> .....	197

<i>Actuator diagnosis</i> .....	198
<i>Initiating basic setting</i> .....	199
<i>Erasing fault memory</i> .....	200
<i>Ending output</i> .....	200
<i>Coding control unit</i> .....	200
<i>Reading measured value block</i> .....	201
<b>XENON HEADLIGHTS WITH AUTOMATIC REGULATION (SYSTEM LITRONIC 4.1) - OVERALL VIEW</b> .....	<b>203</b>
<i>Headlight with control unit</i> .....	203
<i>Removing and installing front Xenon headlights</i> .....	204
<i>Changing light bulbs in the headlight</i> .....	205
<i>Removing and installing the D2S discharge lamp</i> .....	206
<i>Removing and installing the ignition/high voltage unit BOSCH 2.3</i> .....	206
<i>Removing and installing stepper motor</i> .....	206
<i>Removing and installing front sender</i> .....	207
<i>Removing and installing rear sender</i> .....	207
<i>Removing and installing control unit</i> .....	208
<i>Possibilities of sender adjustment</i> .....	208
<i>Connection identification of the Xenon headlamps</i> .....	209
<i>Switch over the inner aperture in the Xenon headlight</i> .....	211
<b>LIGHTS, LAMPS, SWITCHES INSIDE, ANTI-THEFT SYSTEM</b> .....	<b>212</b>
<b>DIAGNOSIS OF THE ELECTRONIC IMMOBILISER</b> .....	<b>212</b>
<i>Self-diagnosis of the 1st generation immobiliser</i> .....	212
<i>Initiating self-diagnosis</i> .....	212
<i>Interrogating control unit version</i> .....	214
<i>Interrogating fault memory</i> .....	214
<i>Fault table</i> .....	214
<i>Erasing fault memory</i> .....	216
<i>Ending output</i> .....	216
<i>Reading measured value block</i> .....	217
<i>Adaptation</i> .....	218
<i>Adapt ignition key</i> .....	218
<i>Adaptation after changing the engine control unit</i> .....	221
<i>Adaptation after changing the immobiliser control unit</i> .....	222
<i>Emergency start function with -V.A.G 1552-</i> .....	222
Requirements .....	222
<i>Emergency start function without V.A.G 1552</i> .....	223
Requirements .....	223
<i>Transponder defective and/or key loss</i> .....	224
<i>Replacing reader coil</i> .....	224
<i>Procedure when changing the lock set or the immobiliser control unit</i> .....	224
1. 2-part sticker of the lock set .....	225
2. 3-part sticker of the immobiliser control unit in the dash panel insert .....	226
<i>System check</i> .....	226
<b>REPAIRING SWITCH</b> .....	<b>228</b>
<i>Removing and installing switches in centre console</i> .....	228
<i>Removing and installing light switch</i> .....	228
<i>Removing and installing the headlight range control adjuster</i> .....	228
<i>Removing and installing the door contact switch</i> .....	229
<i>Removing and installing electrical switch for sun roof and interior light</i> .....	229
<i>Removing and installing the mirror adjustment switch</i> .....	230
<i>Removing and installing the switch for the power window lifter</i> .....	231
<b>REPAIRING INTERIOR LIGHTS</b> .....	<b>232</b>
<i>Removing and installing glove box light</i> .....	232
<i>Removing and installing the reading light (rear)</i> .....	232

<i>Removing and installing front ashtray illumination</i> .....	233
<i>Removing and installing make-up mirror lamp</i> .....	233
<i>Removing and installing door warning lamp</i> .....	233
<i>Removing and installing warning light for airbag switch-off function</i> .....	234
REPAIRING THE HORN .....	235
<i>Removing and installing horn</i> .....	235
<i>Removing and installing luggage compartment light</i> .....	235
<i>Removing and installing switch for remote release/fuel tank cap</i> .....	236
REMOVING AND INSTALLING THE LUGGAGE COMPARTMENT POWER SOCKET .....	238
SENSOR FOR INTERIOR MONITORING -G273- .....	239
<i>Removing and installing</i> .....	239
<i>Inspection</i> .....	239
<i>Regulate sensitivity</i> .....	240
ALARM SYSTEM .....	241
<i>Removing and installing foot switch for alarm system</i> .....	241
SELF-DIAGNOSIS OF THE 2ND GENERATION IMMOBILISER MY 01 ? .....	241
SELF-DIAGNOSIS OF THE 3RD GENERATION IMMOBILISER MY 01 ? .....	242
<i>Carry out self-diagnosis of immobiliser</i> .....	242
<i>Interrogating fault memory</i> .....	243
<i>Fault table</i> .....	243
<i>Erasing fault memory</i> .....	243
<i>Ending output</i> .....	244
<i>Reading measured value block</i> .....	244
<i>Performing the log-in procedure</i> .....	245
<i>Adapt ignition key</i> .....	245
<i>Adaptation after changing the new engine control unit</i> .....	245
<i>Adaptation after insertion of a used engine control unit</i> .....	246
<i>Adaptation after changing the new immobiliser control unit</i> .....	247
<i>Adaptation after insertion of an already used dash panel insert</i> .....	248
Requirements .....	248
<b>WIRING</b> .....	<b>250</b>
RELAY HOLDER, FUSE HOLDER .....	250
<i>Removing and installing relay and fuse holder</i> .....	250

Removing:

**Note**

If necessary, determine the anti-theft code of the radio set before disconnecting the battery.

- First of all disconnect the battery earth strap → [Chapter](#).
- Unscrew nut -3- and remove cable strap.
- Remove insulating cap, unscrew nut -1- and disconnect cable B+.
- Unplug connector -2-.

**Note**

Mark the direction of rotation for re-installation before removing the V-ribbed belt.

- Remove V-ribbed belt → [Engine, Mechanics](#) → [Rep. Gr.13](#).
- Remove tensioning element for V-ribbed belt.

Vehicles with air conditioning system and vane pump for power-assisted steering located at the top:

**Note**

Do not open the hydraulic circuit when removing the vane pump.

- Remove the vane pump for the power-assisted steering from the bracket and place it with the connected lines to the right → [Chassis](#) → [Rep. Gr.48](#).

Vehicles with increased cooling:

- Remove right auxiliary fan → [Engine, Mechanics](#) → [Rep. Gr.19](#).

**Note**

Protect the radiator e.g. with cardboard from damage.

All vehicles:

- Screw out the fixing screws for the generator and carefully remove the generator upwards.

Installing:

The generator is installed in the reverse order of removal.

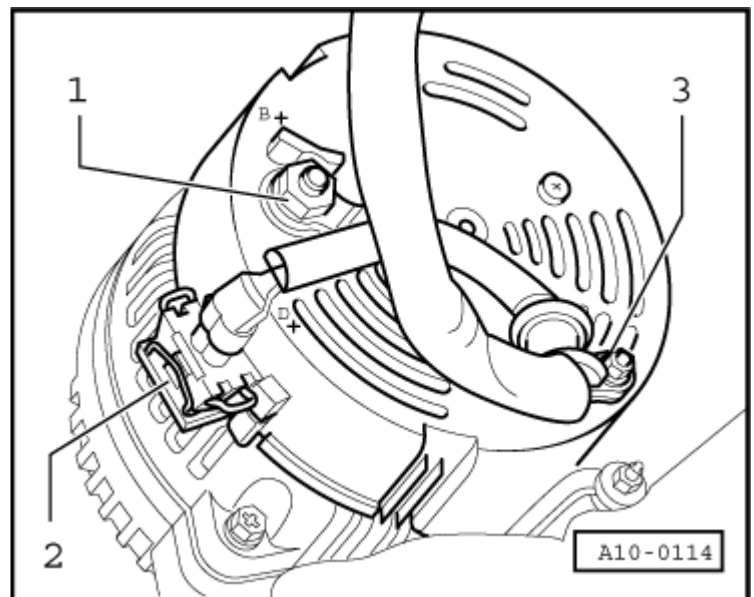
**Note**

Knock back the threaded bushings of the fixing screws for the generator approx. 1 mm before the re-installation.

**Note**

Observe the instructions when reconnecting the battery → [Chapter](#).

Tightening torques:



Readout on display: Vehicle system test HELP  
 – Enter 11. Select function XX

Readout on display: Vehicle system test Q  
 – Confirm the entry with key Q. 11 - Login procedure

Readout on display: Login procedure  
 – Enter code number 13861 and confirm entry with key Q. Enter code number XXXXX

Readout on display: Vehicle system test HELP  
 – Enter function 10 and confirm with key Q. Select function XX

Readout on display: Adjustment  
 – Enter 09 (channel number) and confirm entry with key Q. Enter channel number XX

Readout on display:

Note

Only a direct entry is possible using the keypad of the vehicle system tester -V.A.G 1552 -!

– Move forward in test program with key →.

Readout on display:

Example: Channel 09 AAdaptation 0 Q  
 Kilometre reading = 89627 Enter adaptation value XXXXX

0 8 9 6 3

X				Hundred thousands: 100000 ... 900000 km
X				Ten thousands: 10000 ... 90000 km
	X			Thousands: 1000 ... 9000 km
		X		Hundreds: 100 ... 900 km
			X	Tens: 10 ... 90 km
				Ones: rounded up to the next ten

– Enter adaptation values with the keypad.

Readout on display: Channel 09 Adaptation 0 Q  
 – Confirm the entry with key Q. Enter adaptation value 08963

Readout on display:

The km reading entered now appears in the display of the dash panel insert.

If the displayed km reading is not O.K., e.g. because an incorrect entry was made:

– Press key C and repeat the entry with the correct adaptation value. Channel 09 Adaptation 8963 Q  
 ↑ ↓->

If the displayed km reading in the display of the dash panel insert is O.K.:

– Confirm the entry with key Q.

Readout on display: Channel 09 Adaptation 8963 Q  
 – Confirm the entry with key Q. Store changed value?

Readout on display: Channel 09 Adaptation 8963  
 – End the adjustment of the kilometre reading on the display with the key →. -> Changed value stored



the odometer. Then the dash panel insert must be replaced → Chapter.

## Initiating self-diagnosis of the dash panel insert

Special tools and workshop equipment required

- t Vehicle system tester -V.A.G 1552-
- t Diagnostic cable -V.A.G 1551/3, 3A, 3B oder 3C-

Test requirements:

- t Test fuses according to current flow diagram.
- t Code dash panel insert → Chapter.

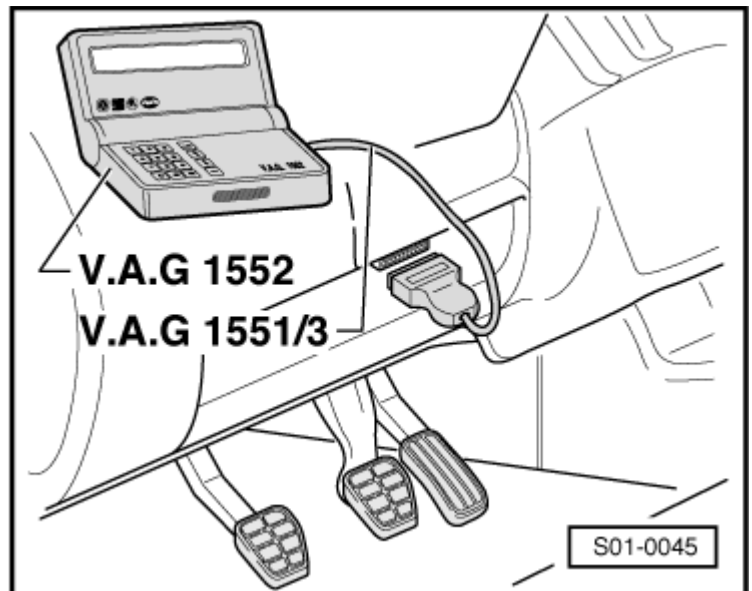
Vehicle system tester -V.A.G 1552-

Test conditions

- l Battery voltage at least 11.5 volts
- l Earth connection to engine and gearbox O.K.
- l Fuses O.K.

The diagnostic connection is located in the storage compartment on the driver's side.

- Connect vehicle system tester -V.A.G 1552- with appropriate cable.
- Switch on ignition.



Readout on display:

### Note

If there is no readout on the display: → [Operating instructions of vehicle system tester.](#)

- Enter address word 17 "dash panel insert" and confirm with key Q.

After approx. 5 secs the display will show e.g.:

- t 1U0920810A: Number of the dash panel insert
- t COMBI+IMMOBILISER: Designation of component
- t VDO: Manufacturer's identification
- t X06: Software version of dash panel insert (other readouts are possible)
- t Coding 05112: Coding of the dash panel insert
- t WSC 00123: Workshop code

```
Vehicle system test  
HELP  
Enter address word XX
```

```
1U0920810A COMBI+IMMOBILISER  
VDO X06  
Coding 05112 WSC  
00123
```

## Reading measured value block

Readout on display:

- Select function 08 “Read measured value block” and confirm with Q.

Vehicle system test  
HELP  
Select function XX

Readout on display:

- Enter display group number and confirm the entry with the key Q.

Read measured value block  
HELP  
Enter display group  
number XXX

### Note

If a control element has not been fitted in accordance with the equipment, the relevant value is not displayed.

### Measured value block 125

Reading measured value block 125			→	← Readout on display
Engine 1	Gearbox 1	ABS 1		
				not assigned
			ABS control unit 1 ABS 1 - CAN databus communication O.K. 1 ABS 0 - CAN databus communication N.O.K.	
			Automatic gearbox control unit 1 Gearbox 1 - CAN databus communication O.K. 1 Gearbox 0 - CAN databus communication N.O.K.	
			Engine control unit 1 Engine 1 - CAN databus communication O.K. 1 Engine 0 - CAN databus communication N.O.K.	

### Measured value block 126

Reading measured value block 126			→	← Readout on display
Steering angle 1	Airbag 1			
				not assigned
			not assigned	
			Airbag control unit 1 Airbag 1 - CAN databus communication O.K. 1 Airbag 0 - CAN databus communication N.O.K.	
			Steering angle 1 Steering angle 1 - CAN databus communication O.K. 1 Steering angle 0 - CAN databus communication N.O.K.	

### Measured value block 127

Reading measured value block 127			→	← Readout on display
FWD 1				
				not assigned

# Infotainment Radio system

## General Instructions

### WARNING

Disconnect earth strap from the battery before commencing work on the electrical system.

### Note

Additional information

→ [Operating instruction for car radio](#)

t When retrofitting equipment, carrying out repair work or fault finding

→ [Current Flow Diagrams, Electrical Fault Finding and Fitting Locations](#)

→ [Installation instruction for car radio](#)

t Detailed assembly information, e.g. detaching and attaching trim panels → [Body Work](#).

t All radio systems are equipped with the “Key-Card” anti-theft code or “Quick-out” mounting.

## Radio system with 4 loudspeakers

Bass speaker front right -3- and left -2-

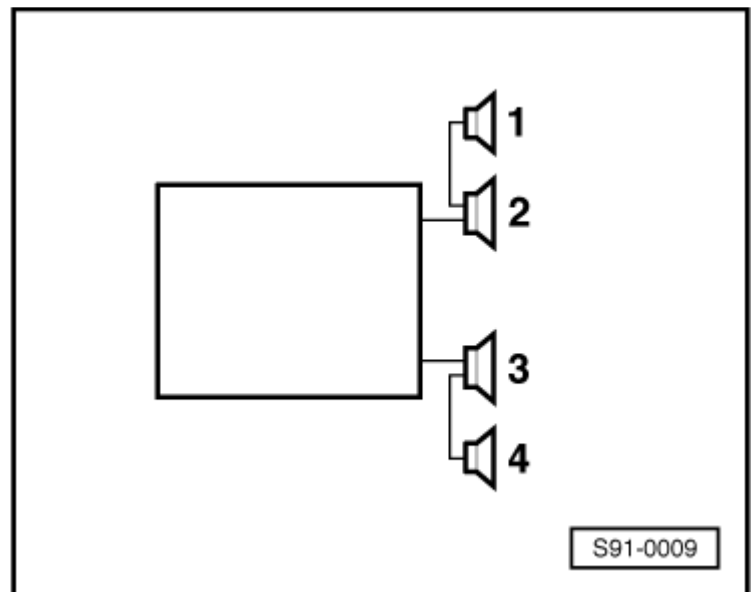
t installed in the door pocket

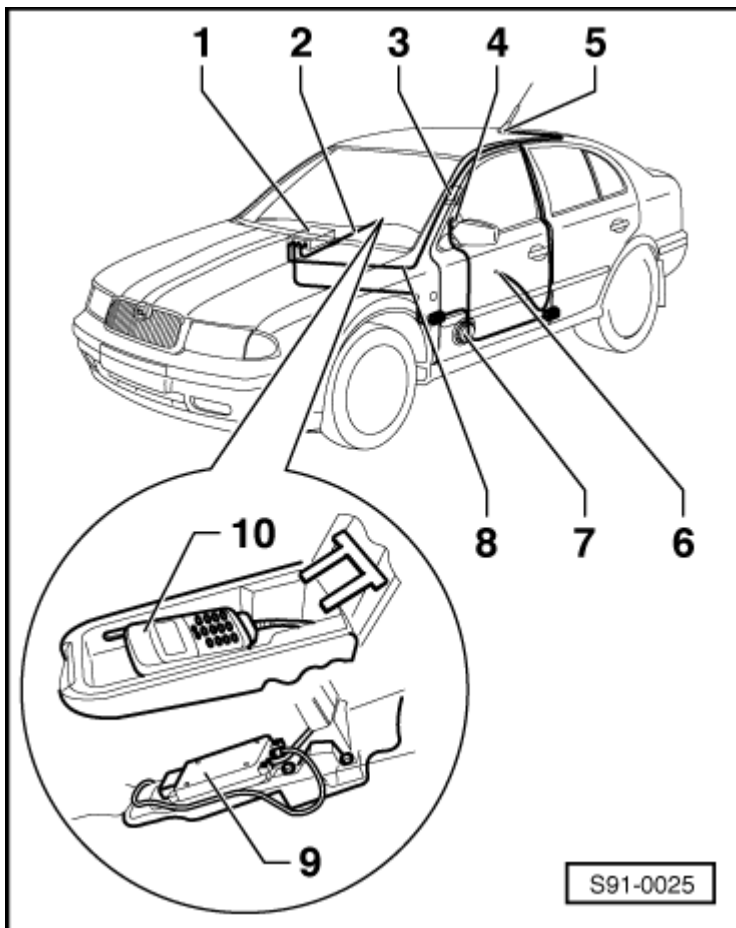
t Diameter 168 mm

Treble speaker front right -4- and left -1-

t installed in the door at the top in the exterior  
t mirror trim panel

t Diameter 36 mm





1 - Radio

q removing and installing → [Chapter](#)

2 - Cable from interface box to radio

q Mute

q Signal for door loudspeaker

3 - Telephone microphone -R38-

q in the left trim panel of pillar A

q removing and installing → [Chapter](#)

4 - Treble speaker

q in exterior mirror trim panel on inside

q removing and installing → [Chapter](#)

5 - Roof aerial for radio and mobile phone

q with aerial amplifier for radio

q removing and installing → [Chapter](#)

6 - Aerial cable for telephone

q Routing along the left B pillar up to the centre console

7 - Bass speaker

q installed in door trim panel

q removing and installing → [Chapter](#)

8 - Aerial cable for radio

q Routing along the left A pillar up to the middle of the dash panel

9 - Control unit for the mobile phone operating electronics -J412- (interface box)

q under the centre console next to the handbrake lever

X				Coding number for the country
0				Europe and other countries
X				Coding number for sound tuning
0				Basic setting
	X			Coding number for number of passive rear loudspeakers
	2			2 passive front loudspeakers
	4			4 passive loudspeakers
		X		Coding number for sound system correction
		0		no correction
		2		with correction
			X	Coding number for radio configuration
			1	Radio with active roof aerial
			3	Radio with CD changer and active roof aerial
			5	Radio with second display in dash panel insert and active roof aerial
			7	Radio with second display in dash panel insert, active roof aerial and CD changer

Table of codes (as of MY02)				
X				Coding number for the country
0				Europe
1				other countries
X				Coding number for sound tuning
0				Basic setting
	X			Coding number for number of passive loudspeakers <sup>1)</sup>
	0			no loudspeakers
	1			1 passive loudspeaker - front left
	2			2 passive loudspeakers - front
	3			2 passive loudspeakers - rear
	4			4 passive loudspeakers
		X		Coding number for sound system correction
		0		no correction
			X	Coding number for radio configuration
			0	Radio without active roof aerial, CD changer and CAN databus communication
			1	Radio with active roof aerial (without CD changer and CAN databus communication)
			2	Radio with CD changer (without active roof aerial and CAN databus communication)
			3	Radio with CD changer and active roof aerial (without CAN databus communication)
			4	Radio with CAN databus communication (without active roof aerial and CD changer)
			5	Radio with active roof aerial and CAN databus communication (without CD changer)
			6	Radio with CD changer and CAN databus communication (without active roof aerial)
			7	Radio with active roof aerial, CD changer and CAN databus communication

<sup>1)</sup> at present only code numbers 2 and 4 are valid

#### Code radio

- Connect vehicle system tester -V.A.G 1552- and select the radio (address word 56); ignition is switched on  
→ [Chapter](#).

Readout on display:

Vehicle system test

HELP

- Enter 07 for the function "Code control unit".

Select function XX

Readout on display:

Vehicle system test

Q

- Confirm the entry with the key Q.

07 Coding control unit



Measured value block 002

Reading measured value block 2			→	← Readout on display
50 cm	20km/h	Signal off	Light OFF	
				Warning light   Light ON   Light OFF <sup>1)</sup>
				Warning buzzer   Signal on   Signal off
		Vehicle speed   0 ... 300 km/h		
	Minimum distance   Minimum distance of the four distances measured			

<sup>1)</sup> Also displayed if warning light not fitted.

Measured value block 003

Reading measured value block 3			→	← Readout on display
12.0 V	Rev. yes	Tr. no	activated	
				Function button   activated <sup>1)</sup>   not activated
				Trailer display   Tr. yes   Tr. no
		Reverse gear display   Rev. yes   Rev. no		
	Supply voltage sensors   0 ... 15 V			

<sup>1)</sup> Also displayed if function button not fitted.

## Adaptation

The volume of the warning signal can be altered with the Adaptation function (channel 01):

Performing function “10 - Adaptation”

Readout on display:

- Enter address word 10 and confirm the entry with the key Q.

Vehicle system test  
HELP  
Select function XX

Readout on display:

- Enter 10 (channel number).

Adaptation  
Enter channel number XX