# Soumatrix speakers installation guide

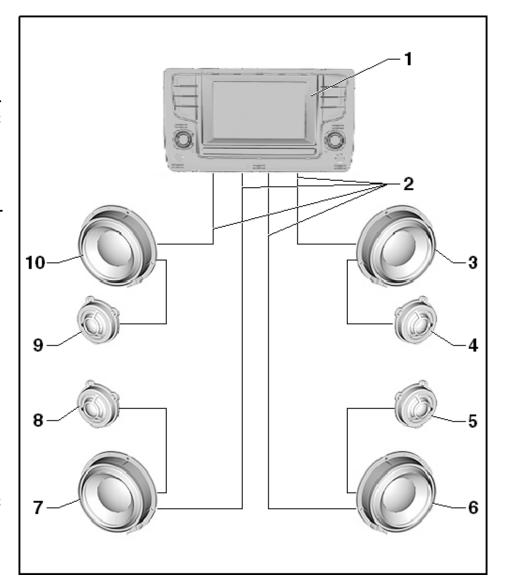
## **Preface**

- Soumatrix coaxial speakers combine bass and treble loudspeaker in one unit.
   Just replace the car original bass loudspeaker in each of the front and rear doors.
- ◆ Please disconnect the car original tweeter to disable it.
- ◆ If the car equipped the amplifier and subwoofer originally, please keep them and work together with Soumatrix speakers.

  You simply adjust the balance or equalizer to fit your own preference. Soumatrix speakers will give you better a room-coustic feeling.
- ◆ This manual quoted some part of VW repair manual group "Communication" and "General body repairs, interior".

## 2.1.1 Overview – sound system, 8 loudspeakers

- 1 Radio -R-/control unit 1 for information electronics -J794-
- 2 LF wires
- 3 Front right bass loudspeaker -R23- in front right-hand door
- 4 Front right treble loudspeaker -R22- in right A-pillar
- 5 Rear right treble loudspeaker -R16- in rear right door
- 6 Rear right bass loudspeaker -R17- in rear right door
- 7 Rear left bass loudspeaker -R15- in rear left door
- 8 Rear left treble loudspeaker -R14- in rear left door
- 9 Front left treble loudspeaker -R20- in left A-pillar
- 10 Front left bass loudspeaker -R21- in front left-hand door



## 2.2.1 Overview of fitting locations – sound system, 8 loudspeakers

## 1 - Front treble loudspeaker

- ☐ Front left treble loudspeaker -R20-
- ☐ Front right treble loudspeaker -R22-
- ☐ In A-pillar trims
- □ Removing and installing

#### 2 - Rear treble speaker

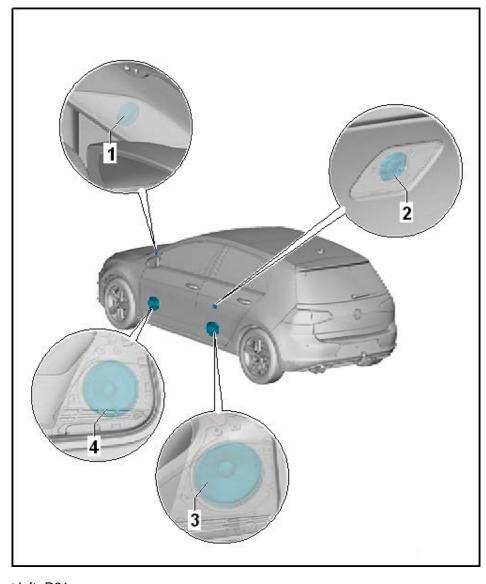
- ☐ Treble loudspeaker, rear left -R14-
- ☐ Treble loudspeaker, rear right -R16-
- 2-door: In side trim panels
- 4-door: In door trim panels
- □ Removing and installing

## 3 - Rear bass speaker

- Bass loudspeaker, rear left -R15-
- □ Bass loudspeaker, rear right -R17-
- ☐ 2-door: In sidewalls
- ☐ 4-door: In rear doors
- ☐ Removing and installing

#### 4 - Front bass loudspeaker

- ☐ Bass loudspeaker, front left -R21-
- ☐ Bass loudspeaker, front right -R23-
- ☐ In lower section of front doors
- □ Removing and installing



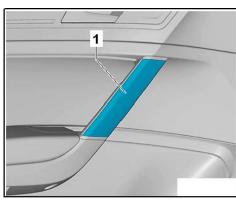
# 2.3 Removing the door trim

## Note

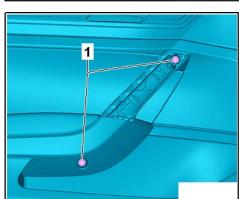
- Removal and installation are described and illustrated for left bass loudspeaker.
- Removal and installation of the right bass loudspeaker are similar (mirror image of left-hand side).

## Removing

 Lever upper part of handle recess -1- out of mountings in door trim, using removal wedge -3409-.



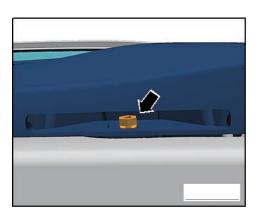
- Remove bolts -1-.



- Release retaining clip -1- with open-end wrench by turning it  $90^{\circ}$  ( $^{1}/_{4}$  turn) in -direction of arrow-.



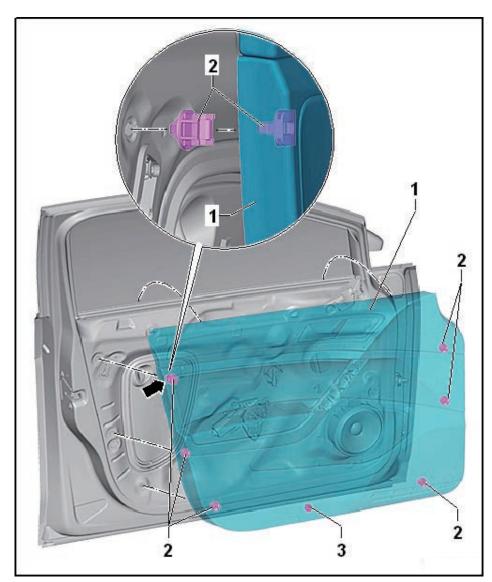
Retaining clip -arrow- is released.



 Force retaining clips -2of door trim -1- out of mountings with wedges -T10383-. Clip -3- has already been released.

# Note

- On 4-door models the upper left clip -arrow- is a crash clip. The crash clip is released automatically when the door trim is detached from the window slot seal.
- On 2-door models have no crash clips installed.
   All door trim clips must be released as described.
- Pull door trim -1- upwards vertically out of window slot seal. On 4door models the crash clip -arrow- is released automatically while doing so.
- Disconnect the electrical plug-in connections from the door trim -1- in accordance with the vehicle's equipment.



# 2.4 Removing the car original bass loudspeakers and installing Soumatrix speakers

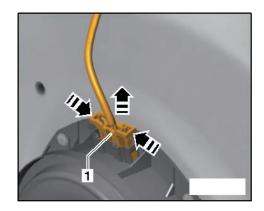
## Note

- Removal and installation are described and illustrated for left bass loudspeaker.
- Removal and installation of the right bass loudspeaker are similar (mirror image of left-hand side).

#### Removing

Carry out following work before starting reinstallation:

- Switch off ignition and all electrical loads, and pull out ignition key.
- Remove door trim ⇒ General body repairs, interior; Rep. gr.
   70; Door trims; Removing and installing front door trim.
- Release connector catch on loudspeaker in -direction of arrow- and disconnect connector -1-.

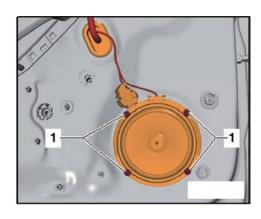


- Drill out rivets -1- with a suitable drill bit and remove loudspeaker.

# (!) Caution

It is essential that all swarf be removed from the door because otherwise corrosion damage will occur.

If necessary, immediately rectify any damage to paintwork caused when drilling out rivets.



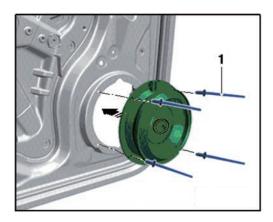
#### Installing

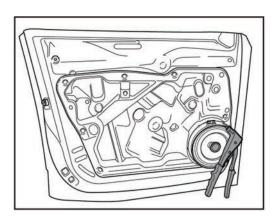
## Note

When installing Soumtarix speakers, secure it with the attached rivets.

- Insert loudspeaker in -direction of arrow- and secure with 4 rivets -1-.
- Push connector back into speaker.

Remainder of installation is carried out in reverse order of removal.





## 2.5 Disconnecting front original tweeter

The front left tweeter and front right tweeter are installed in dash panel.

# i Note

- Removal is described and illustrated for front left tweeter.
- Removal of the front right ttweeter are similar (mirror image of left-hand side).

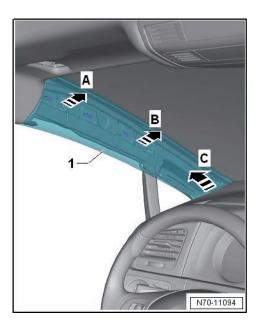
#### Removing

#### **Upper A-pillar trim**

# Note

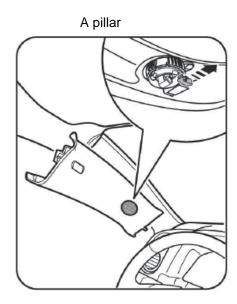
Removal and installation are described for the left vehicle side. Follow same instructions for the right side as appropriate.

- Remove A-pillar gap cover.
- Release upper A-pillar trim -1- from door seal beading.
- Release upper A-pillar trim -1- starting at top and continuing up to first catch -arrows A- using removal wedge.
- To release the barb-type retaining clips pull upper A-pillar trim -1- upwards out of dash panel -arrow B-. This will cause the retaining clips to be released from body mountings.
- Disconnect connector on treble loudspeaker and remove upper A-pillar trim -1-.



## Note

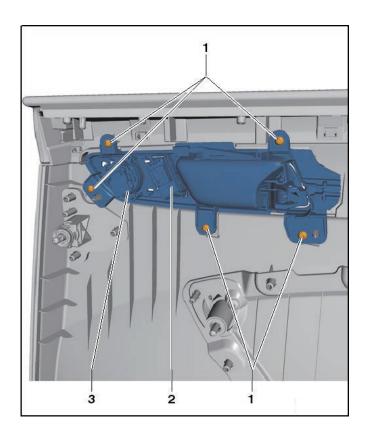
- ◆ In order to improve the acoustic environment, it is necessary to release original treble and center speakers
- Disconnect the original treble and center speakers.



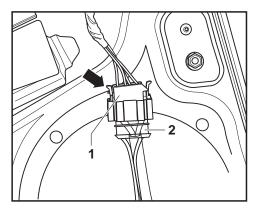
# 2.6 Disconnecting and installing rear original tweeter

## Note

- Removal and installation are described and illus rear left tweeter.
- Removal and installation of the rear right tweetetrated for are similar (mirror image of left-hand side).
- Disconnect rear treble loudspeaker from door trim.

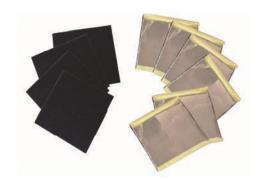


Just release the connector, don't remove anything.

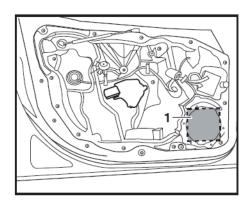


## Acoustic Improvement on door (optional)

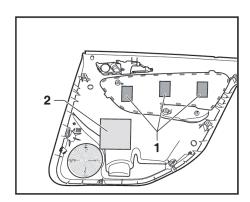
- ◆ The acoustic components can improve the acoustic result in car by key position treatment.
- The real stuff y u can see as picture shown.
- The left side are absorber sheet, which can absorber air shock from the speaker back.
- The right side are damping sheet, which can reduce the vibration from the door.



- Paste the absorber sheet - 1 - on the door sheet metal behind the speaker as the pic shown.



- Paste the damping sheet - 1 - 2 - on the right position. It depends vibration point by touch.



## Tweeter angle adjustment

- ◆ Soumatrix speakers tweeter is Bionic wide-angle point source design, which can be rotated 90 degree.
- For your best listening position, you can adjust the tweeter angle toward your ear.
- The left side speakers, you should rotate the tweeter to a limited quarter turn to the left-hand.
- The right side speakers, you should rotate the tweeter to a limited quarter turn to the right-hand.

Left side speakers Right side speakers

- Please reverse the detached process to recover the door trim panel and the connectors. Ensure all the funtion is OK.
- To obtain best result, leave Soumatrix speakers to burn-in at least 20 hours below 80% power after installation.