

VW Crafter and MAN TGE 3-way-frontsystem

modell year: VW Crafter as of 2017 (2nd generation) and MAN TGE (VW Crafter II (7C0)) as of 2016



packing list:

- 1x midrange tweeter module incl acoustic cloth cover (left & right), covered
- 1x Mounting template for mid-high module
- 2x „XE26“ neodymium softdome tweeters Ø 26mm (pre-mounted in moulded part)
- 2x „XE100“ midrange drivers Ø 100mm (pre-assembled in the moulded part)
- 2x „XM165“ low-midrange speaker „Power-Woofer“ Ø 165mm
- 2x mounting ring 15mm for „XM165“ Crafter specific (pre-mounted on woofer)
- 2x mid-high frequency crossover incl. cable assembly (Item No.: 65100-MHT-FW)
- 2x woofer crossover incl. cable assembly (Item no.: 65100-TT-FW)
- 1x assembly set - VW Crafter item no.: 65100)

Mounting kit tweeter midrange module:

- 8x Spax screw 3,5 x 25

Mounting kit woofers:

- 8x pan-head screw 3.9 x 16 (pre-mounted on woofer)
- 8x raised countersunk head screw 3.9 x 25

Mounting set for MDF subwoofer

- 4x velcro plates round
- 4x self-adhesive velcro pads
- 4x countersunk screw 3,5x13mm

Installation note:

To avoid vibration noise, secure all cable harnesses with insulating tape or similar. Insulation of the vehicle doors is strongly recommended.

Radio adjustment note:

To achieve the best sound image, all settings on the radio (bass, treble, loudness, etc.) should be set to zero or neutral.

General installation instructions - to be observed without fail!

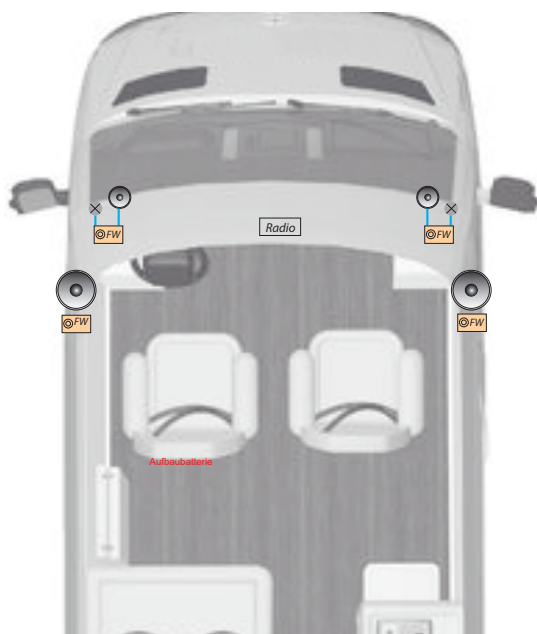
! radio settings:

- To achieve the best sound image, all settings on the radio (bass, treble, loudness, equalizing, etc.) should be set to ZERO or OFF.

Fitting instructions:

To avoid vibration noise, secure all wiring harnesses with insulating tape or similar.

Cable routing / Connection diagram



Tweeter „XE 26“

Mounting in the dashboard of the mid-high module, pre-installed.

Midrange driver „XE 100“

Mounting in the dashboard in the mid-high module, pre-installed.

woofer „XM 165“

Installation in the vehicle body door.

Crossovers

MHT Crossover vehicle-specific in the mid-high module

TT Turnout vehicle-specific
Mounting on the door panel.

1. disassembly of the door panels

1.1. Dismantle the door panel on the driver's and passenger's side.

1.1. lower the window pane completely.



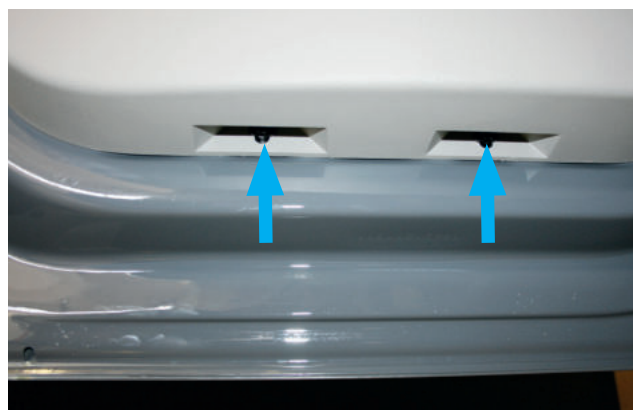
1.2 Unclip the door handle



1.3. switch unit, starting at the door lock switch, lever out (example illustration)



1.4. remove the screw in the middle of the door panel.



1.5. lower edge of the door trim:
 Unscrew 2x plastic rivets

1.6 Unclip the door trim starting from the bottom by pulling and lift it upwards.
 (Clamping strip on the lower edge of the window is still attached).

1.7. unclip door release bowden cable - pull 1cm on the cable sheathing at the opening lever - then unhook.

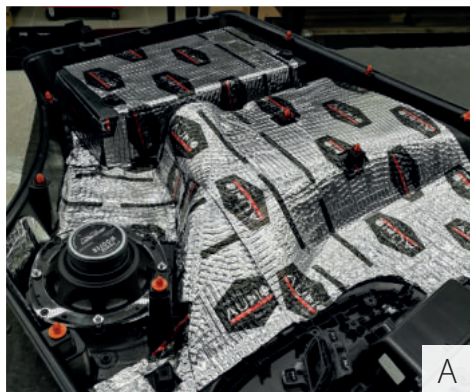
1.8. unplug connector „alarm light, window regulator and mirror adjustment“.



1.9. disconnect original loudspeaker connection and dismantle factory woofer (drill out mounting rivets and remove ->> make sure that the metal pieces do not fall into the inner area of the door.
 Tip: stick adhesive tape behind the rivet).

2. insulation of vehicle doors and door panels

2.1. recommendation: insulation of the door trim



A



B

- Lining the door panels with Alubutyl from behind. see (fig. A), then glue over the entire surface with insulating fleece. see (fig. B)

Important recommendation:

The use of woofers in the door panel causes vibrations due to the vibrations of the bass, which can lead to rattling noises in the vehicle door:

Measures against vibration noise:

2.2. insulation of the vehicle doors

- Cover the back of the door panel with insulating fleece (order no. 27000) or foam or
- Stabilize the rear side of the door panel with stiffening compound (GFK-fibre filler or similar)
- IMPORTANT: Make sure that the cut-outs for the door airbag and loudspeakers are not blocked!
- the *backside of the door panel inside (= outer door skin) with self-adhesive
- Apply bitumen mats / tar mats (see example below).
- by tapping the vehicle door, vibration noises from door mechanism parts (e.g. Bowden cables etc.) and cable harnesses and wrap them with foam material / felt, foam rubber or similar.
- cut off protruding cable ties (rattling noises!)
- Glue felt or foam under the original wiring harness

2.3. insulation of the rear door panel

- Door panel rear side with insulation fleece (order no. 27000) or foam adhesive or
- Stabilize the rear side of the door panel with stiffening compound (GFK-fibre filler or similar)

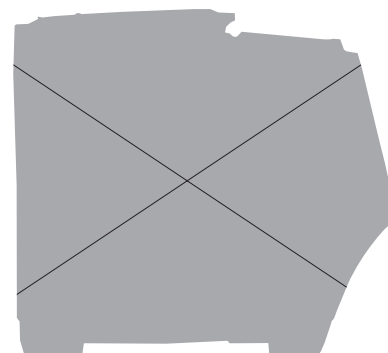
IMPORTANT: Make sure that the cut-outs for the door airbag and loudspeakers are not blocked!



ATTENTION / Danger !!!
No insulating material behind side airbags



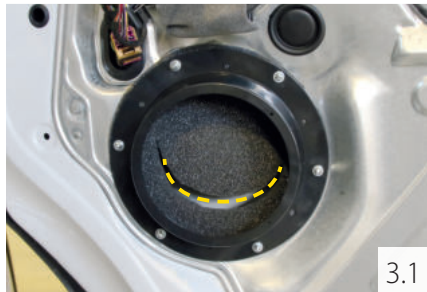
IMPORTANT:
No insulation material behind speakers and door unlocks. Cut out fixing clips



Example illustration

3. woofer installation - original installation location in the vehicle doors

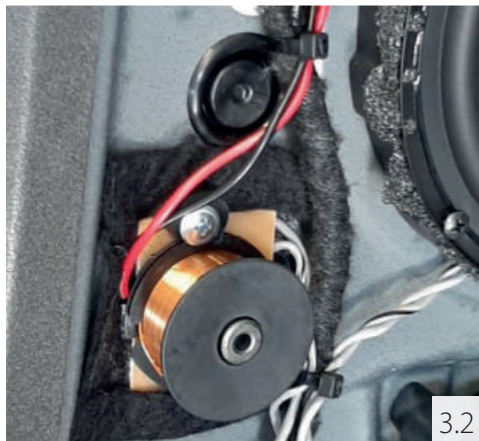
☞ To protect the woofer and adapter ring from water ingress we recommend to install a „Rainstop mat“ (see illustration, Rainstop mat under the mounting ring, included in the scope of delivery).



3.1

Example illustration

3.1 Cut the Rainstop mat to the size of the mounting ring and make a small cut in the lower area (yellow marking). (woofer dismantled in illustration for clarity).



3.2



3.4

3.2 Connect the factory loudspeaker cable with the crossover input and wrap the plug with insulating material to prevent vibration. vibrations with insulating material. Fasten the crossover to the door panel with one of the self-tapping screws (4,2x13mm) and plastic ring to the door panel, before mounting glue on the self-adhesive felt as insulation
-> The crossover must be completely seated on the felt, otherwise there is a risk of short circuit!

-> when installing a fully active system, the installation of the crossover is not necessary and the corresponding loudspeaker cable harness must be routed from the amplifier to the loudspeaker installation location.

3.3. connect woofer to the crossover

3.4 Mount woofer with pre-mounted mounting ring with 4 pcs. pan-head screw 3.9 x 25 (each side) to the factory mounting hole.

CAUTION!!! The cable connections of the woofer must not come into contact with the inner door panel --> insulate if necessary.

Note: After all woofers are connected to the crossover, the polarity of all woofers should be checked at a 9 volt. battery (on crossover input cable on radio/power amp side):
Pole of FW input + to + of 9 V battery.
Pole of FW input - to - of 9 V battery

Both woofers must resonate evenly during this check! (the loudspeaker must move outwards move, not inwards, towards the magnet) A reversed polarity woofer can cancel the entire bass response!

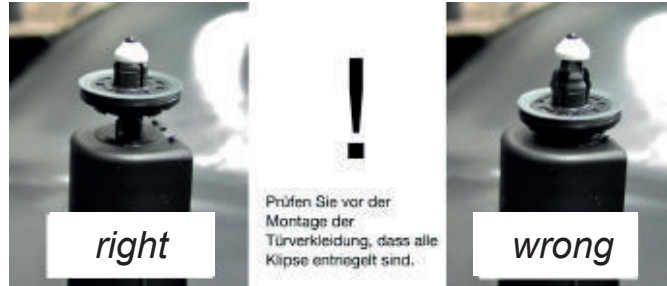
☞ To avoid vibration noise, secure all cable harnesses with insulating tape or similar.

4. mounting the door panels on the vehicle doors

4.1 Hang the door panel in the top of the door shaft strip.

4.2 Reattach the door trim in reverse order.

Make sure that the clips are unlocked, see Fig.



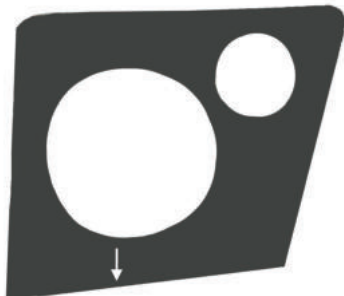
Final inspection after door panel assembly:

Check all functions of the operating elements such as seat adjustment, glove box opening, window lift etc.

5. mounting of the mid-high modules in the dashboard

5.1 Dismantle the A-pillar trim on the driver and passenger side.

5.2 Unplugging the factory tweeter



5.3 Apply the supplied mounting template and mark the cut-outs for tweeter and midrange and midrange speaker (white marker).



5.4 Heat the marked cutout well with a hot air dryer and cut it out with a sharp and cut out with a sharp cutter knife.



5.5 Pull factory tweeter cable forward under cupholder/storage compartment -> if necessary, use cable probe.
(-> when installing a fully active system, the corresponding loudspeaker cable harness must be routed from the amplifier to the respective loudspeaker installation location).



5.6 Connect the factory tweeter cable to the crossover and connect the tweeter and midrange to the crossover outputs.

VW Crafter / MAN TGE

3-way Cab system

Installation manual

Date: 16.08.2023

Art. No. 65100

JEHNERT
Sound Design
A U T O M O T I V E

Notes:

Garantee:

We grant a manufacturers guarantee of 2 years starting from the date of purchase of the doorboard or sound system from the dealer. Within this guarantee period to our choice we either repair or replace free of charge all defects due to material or workmanship. Exempt from this guarantee are damages due to improper use, wear and tear or damages which have to be led back on wear or interventions by third parties. The guarantee does not cover subsequent damages or such defects that only insignificantly impair the value or the usability of the doorboard/sound system. The guarantee does not cover damages due to external influences. Doorboards with additional or wrong assembly drill holes cannot be returned. These are damages to the doorboard which cannot be repaired again.

If you have any questions, our team in Pliezhausen will be happy to assist you at any time:

JEHNERT SOUND DESIGN

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