



AUDI RS3 LMS UPDATE KIT MJ2020

Neuburg, 01.10.2020

DRAFT V5



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overview

01.

WEIGHT REDUCTION KIT (-25KG)

- 1.1 Door cut out (FR, RL, RR – not FL)
- 1.2 Plastic window front
- 1.3 Plastic window rear
- 1.4 Plastic windows side rear (RL, RR)
- 1.5 Small fan, relay, loom
- 1.6 Light battery
- 1.7 Light clutch
- 1.8 Modification of ABS block

02.

BRAKE COOLING

- 2.1 Modification front-bumper
- 2.2 Air-duct to front-bumper
- 2.3 Modification (cut-out) front grill – pattern
- 2.4 Air-ducts to upright
- 2.5 Air-hoses bumper – upright
- 2.6 Air-intake collector for engine-air
- 2.7 Modification tow-strap

03.

AERO

- 3.1 Front fenders
- 3.2 Bracket front-fender
- 3.3 Bracket fender - sill
- 3.4 Fences for front-fenders
- 3.5 Fences for front-bumper

04.

COCKPIT VENTILATION

- 4.1 Rear-view mirrors with air-inlet
- 4.2 Modification door, door-panel
- 4.3 Modification dashboard
- 4.4 Flange on door-panel and dashboard
- 4.5 Y-piece for defrost
- 4.6 Air-hoses to air-jets

05.

WSC MANDATORY

- 5.1 Engine-mapping 2020
- 5.2 T-intake sensor
- 5.3 Hose for T-intake sensor
- 5.4 Cable for T-intake sensor
- 5.5 Main fuse

06.

RELIABILITY

- 6.1 Driveshaft joints reinforced

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Partlist weight reduction kit

Pos	Weight reduction	Part number	Qty	Comment
1.1	Cut-out door FR - pattern	V03 862 742 LJ	1	Download from online-platform
1.1	Cut-out door RL - pattern	V03 862 742 LK	1	Download from online-platform
1.2	Windscreen plastic	8V6 845 101	1	
1.2	Mounting kit for windscreen	V03 862 704 QM	1	
1.3	Rear window plastic	8V6 845 501 A	1	
1.4	Plastic window RL	8V6 845 205 A	1	
1.4	Plastic window RR	8V6 845 206 A	1	
1.5	Fan (small)	8V6 959 455	1	
1.5	Loom for fan	8V6 971 805	1	
1.5	Relays for fan	8V6 927 181	1	
1.6	Battery	8V6 915 105	1	POWERFSAFE SBS15
1.6	Fixation bracket for battery	8V6 915 303	1	
1.7	Clutch (ALCON)	5FR 141 015	1	
1.8	Modification of ABS block	-----	1	

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Weight reduction

> 1.1 Door cut-out

Mark the cut-out with the pattern.
Before cutting check the contour
by mounting the inner door-cover to.
Correct it according to the cover !



Cut out using the manual and cut-out paper-patterns available on the platform

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Weight reduction

- › 1.2 Plastic window front
 - › 1.3 Plastic window rear
 - › 1.4 Plastic window side rear (RL, RR)
-
- › Replace glass screens by plastic screens
 - › Front windscreen available heated and non-heated
 - › If heated windscreen please order the loom as well (8V6 971 025)
 - › For front and rear-windscreen use mounting kit (V03 862 704 QM)
 - › Rear side windows simply exchange with gluing

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Weight redcution

- › 1.5 Small fan
 - › Remove original fan and bracket
 - › Mount small fan with ty-wraps through the radiator lamellas
 - › Connect fan using loom **8V6 971 805** and relay **8V6 927 181**
Loom has to be connected to the 6 pin CAN-connector on the firewall, the relay to be placed at the firewall and ground to be connected to the ground-bolt on the tunnel
guide the loom through one of the bulkhead-openings (with rubber sealing) and connect +15/+30 and ground to the electrical box in the engine compartment, after guiding the loom through the rubber sealing you can mount the white connector housing to the fan-cables
 - › Fan will start working at 102°C and stop at 95°C



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Weight reduction

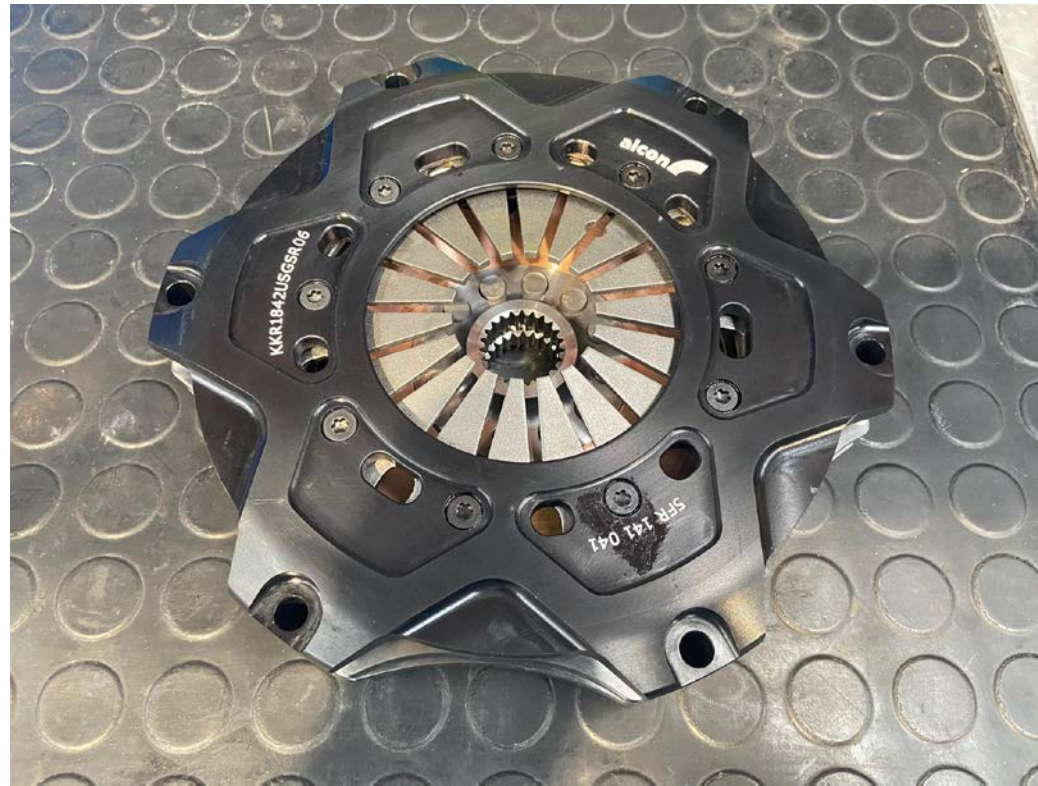
- › 1.6 Light battery
 - › Replace original battery
 - › Place 5mm rubber between the battery and the support (underneath)
 - › Eventually you must bend the sidewalls of the chassis-bracket a little in order to place the battery between (in some cars we found it a little tight)
 - › Use bracket 8V6 915 303 to fix the battery and cover
 - › Fit 2 flathead bolts M5x40 to the bracket in order to fit the cover
 - › Place 5mm rubber-foam between the bracket and the battery as well
 - › Drill 2 holes D=10.5mm to the support using the bracket as a pattern
 - › Fix the bracket with 2x M10x15 bolts with nuts from underneath
 - › Use original cover



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Weight redcution

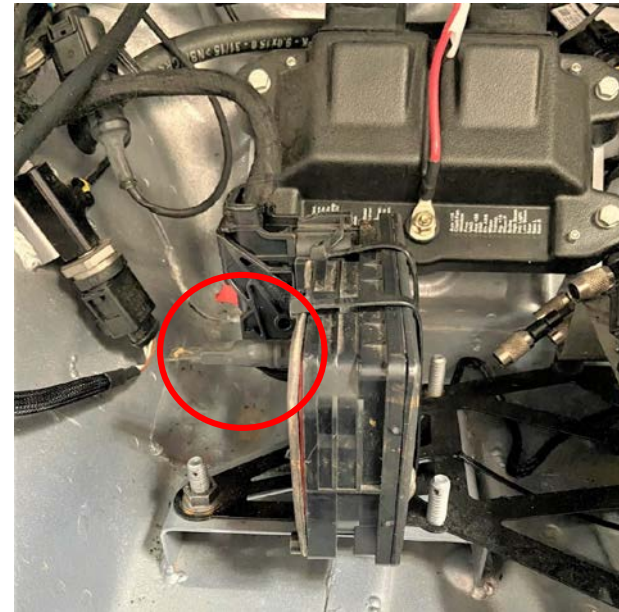
- › 1.7 Light clutch
 - › Replace the original clutch by the light clutch



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Weight redcution

- › 1.8 Modification of ABS block
 - › Take apart the ABS valve-block from the electronic board by opening the bolts
 - › Just cut a Carbon or POM plate to cover and close the board and fix it with glue
 - › Mount the remaining board with cover in the same place on the chassis with the same orientation in the car!



Sensor must have the same orientation in the car like before

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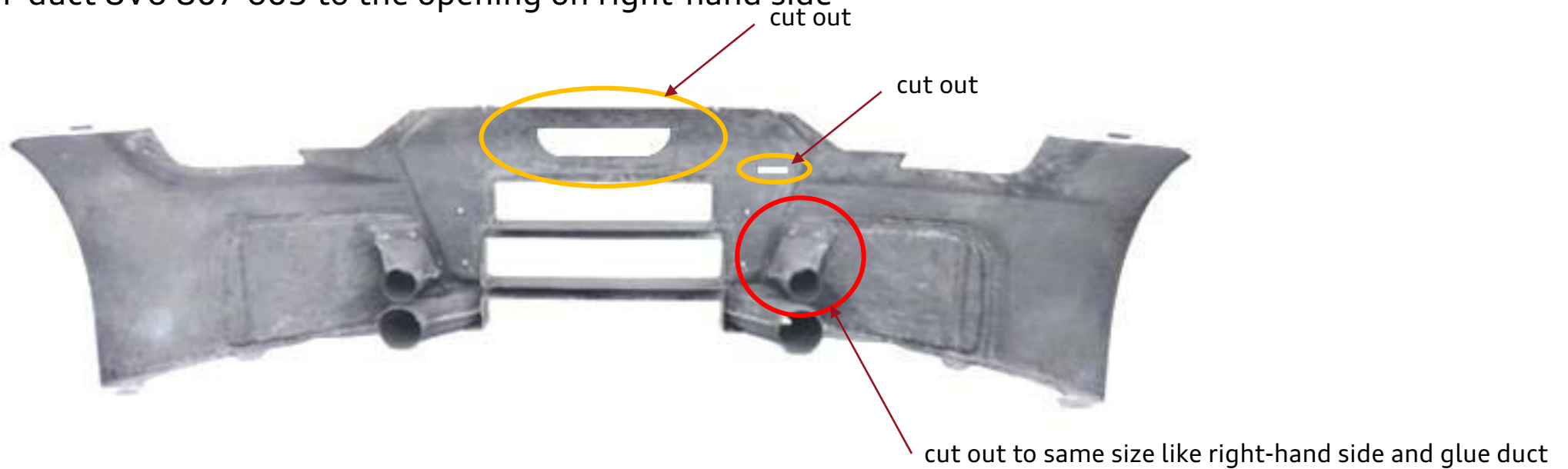
Partlist brake-cooling kit

Pos	Brake cooling	Part number	Qty	Comment
2.1	Modification (cut-out) frontbumper - pattern		1	Modification and cut-out (see page 12)
2.2	Air-duct - frontbumper	8V6 807 605	1	Glue to frontbumper (make sure your spare bumper(s) are modified as well)
2.3	Modification (cut-out) front grill - pattern		1	Cut out according instruction (see page 13)
2.4	Air-duct to upright	8V6 615 393 A	1	
2.4	Air-duct to upright	8V6 615 394 A	1	
2.5	Airduct hose D=80 mm L= 1.350 mm		2	Purchase yourself
2.6	Air-intake collector (behind grill)	8V6 129 621	1	
2.7	Modification tow-strap		1	Drill 2 holes and change position (see page 16 and 19)

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Brake cooling

- › 2.1 Modification of front-bumper
 - › Cut the opening of the tow strap (right-hand side) to the same shape as left-hand side
 - › Cut the opening behind the Audi rings – cut the grill as well (see page 12)
 - › Cut a slot for the tow strap in new position (see page 19) – cut the grill as well (see page 12)
- › 2.2 Glue the air-duct 8V6 807 605 to the opening on right-hand side

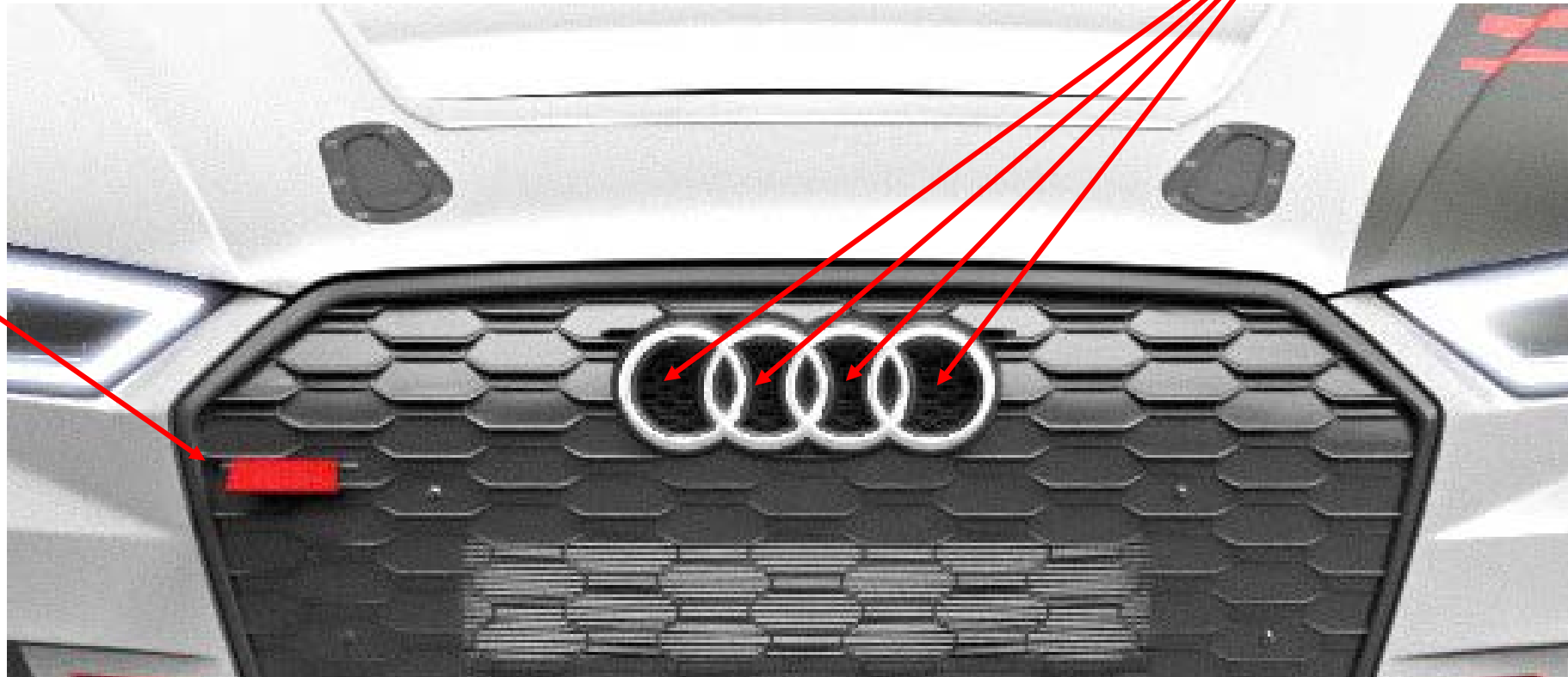


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Brake cooling

- › 2.7 Front-grill
 - › Cut out a slim slot for the new position of the tow-strap

Keep the grid



Cut out for tow-strap

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Brake cooling

- › 2.3 Mount the additional air-ducts to the upright



Seen from outside (wheel removed)



- Drill a base-hole D=4.2mm
- Cut a M5 thread for fixation

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Brake cooling

- › 2.4 Mount 1.350 mm long 80mm flex-hoses from front-bumper to upright
- › Purchase hoses on your own – we are not offering those
- › Fix hoses with ty-wraps to the chassis

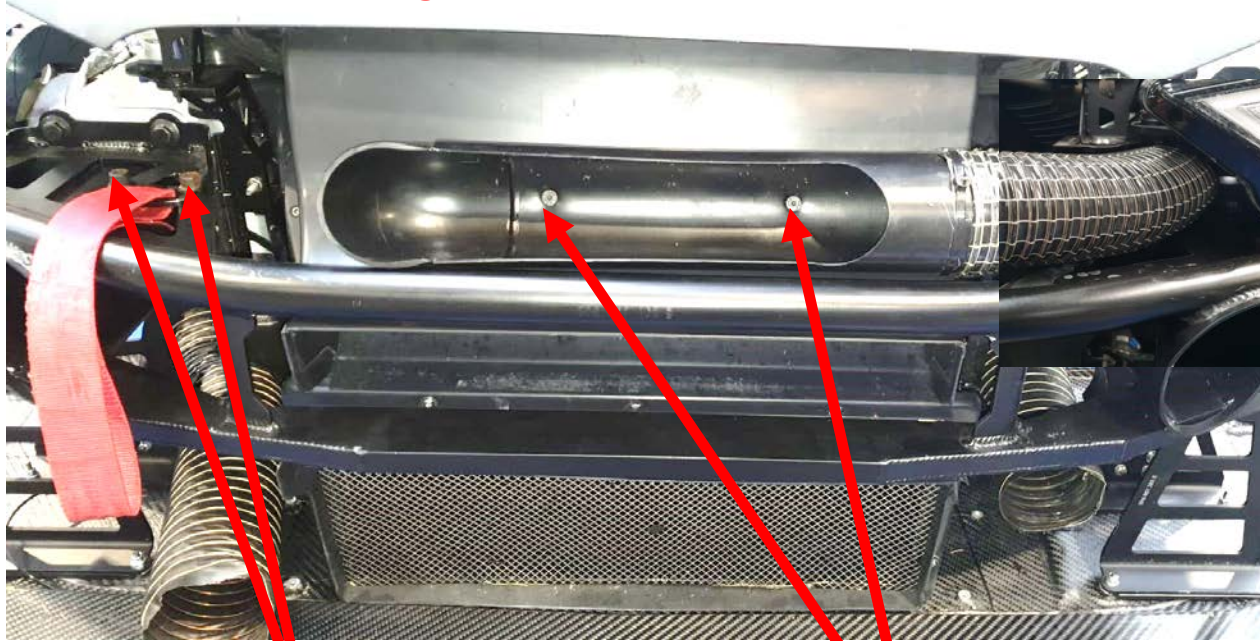


additional
existing

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Brake cooling

- › 2.5 Mount air-intake collector to the intercooler air-duct
 - › Connect original intake-hose from air-filter to air-collector
 - › Drill two holes in front crash-bar bracket and relocate tow strap
 - › **Its not working with endurance bar 5F6 807 109 C**



Drill two holes and bolt tow strap to crash-bar (see page 16)

Drill two holes and bolt on air-collector to air-duct

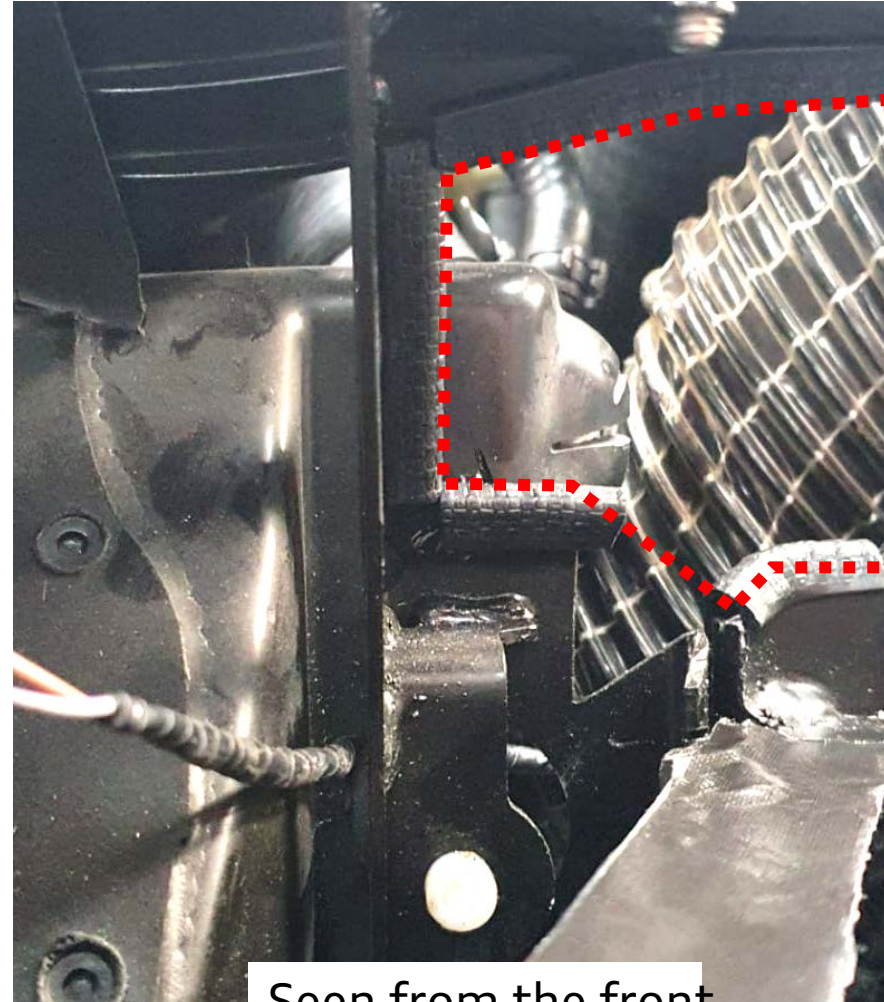
Grind bracket here to guide the hose through



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Brake cooling

- › Cut-out / grind bracket to guide through the flex-hose
- › Cover the edges with U-rubber



Seen from the front

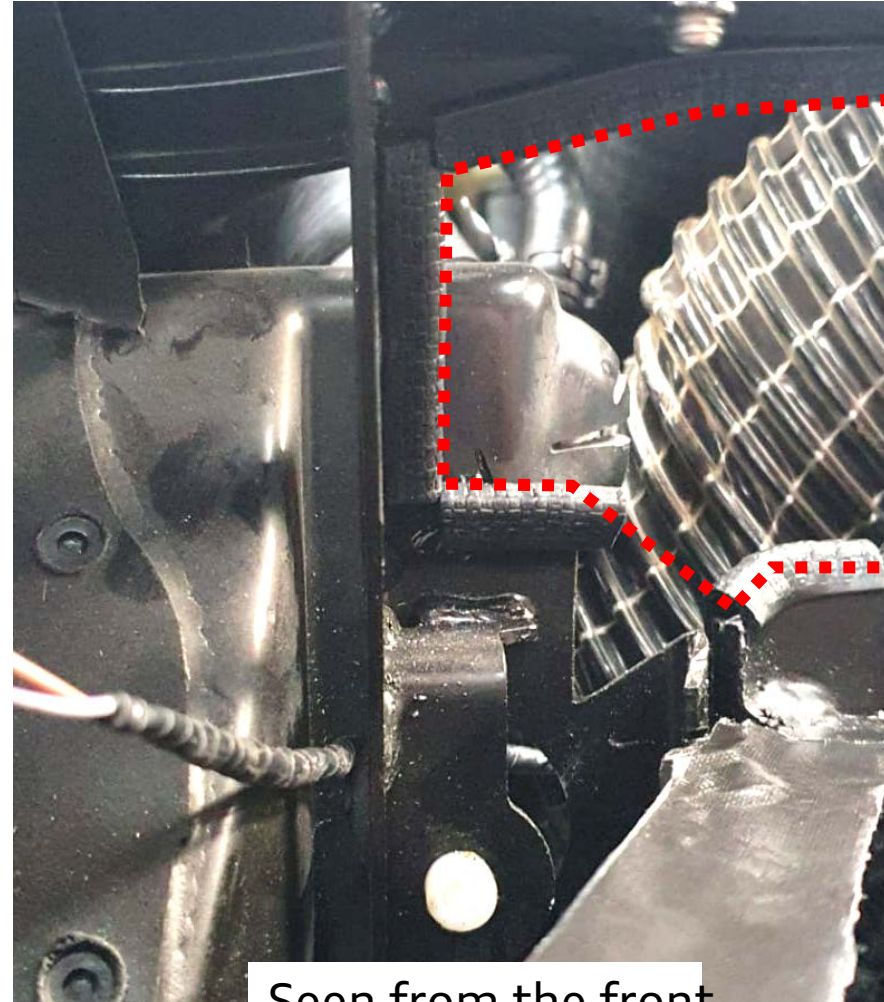
← Cut / grind bracket to guide the flex-hose through

Break the sharp edges with a file and mount protection rubber-sealings (U-shape)

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Brake cooling

- › Cut-out / grind bracket to guide through the flex-hose
- › Cover the edges with U-rubber



Cut / grind bracket to guide the flex-hose through

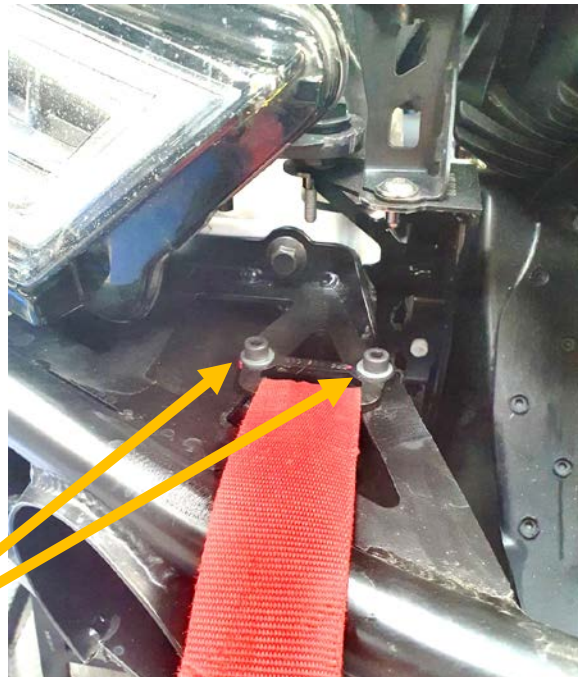
Break the sharp edges with a file and mount protection rubber-sealings (U-shape)

Seen from the front

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Brake cooling

- › 2.6 Modification of tow strap
 - › Remove tow strap from original position and remove the 90°-plate
 - › Relocate the bracket with the strap on the crash-bar next to the fixation flange
 - › Drill two holes of 8,5 mm
 - › Fix the tow-strap with 2x M8x20mm allen-screws with M8 nuts including washer



Drill two holes and
bolt tow strap to crash-bar



Mount with bolts and nuts

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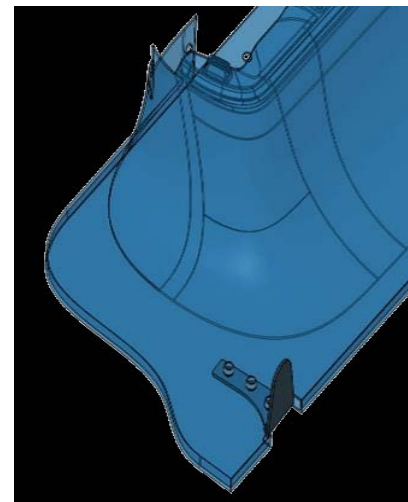
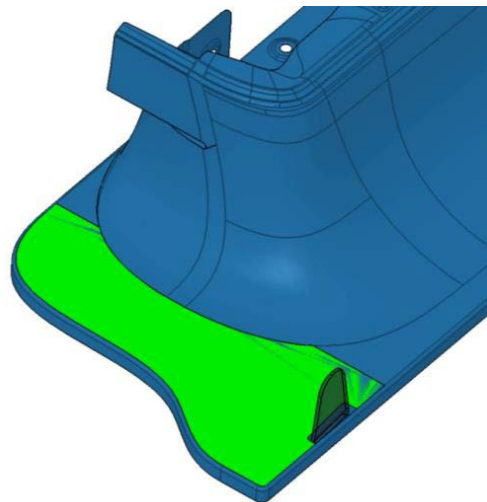
Partlist aero kit

Pos	Aero	Partnumber	Qty	Comment
3.1	Fender L MJ2020	8V6 821 103 A	1	
3.1	Fender R MJ2020	8V6 821 104 A	1	
3.2	Bracket fender L	8V6 821 989 A	1	
3.2	Bracket fender R	8V6 821 990 A	1	
3.3	Bracket fender - sill L	4SA_803_581	1	
3.3	Bracket fender - sill R	4SA_803_582	1	
3.4	Fence L for Fender	8V6 854 969	1	
3.4	Fence R for Fender	8V6 854 970	1	
3.5	Fence L for Bumper	8V6 854 969 A	1	
3.5	Fence R for Bumper	8V6 854 970 A	1	
	Fixation for fences	7L5 018 897 A	12	
	Sill L modification - pattern	V03 862 742 LC	1	Download from online-platform
	Sill R modification - pattern	V03 862 742 LD	1	Download from online-platform
	Front bumper modification - pattern	V03 862 742 LA	1	Download from online-platform

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Aero

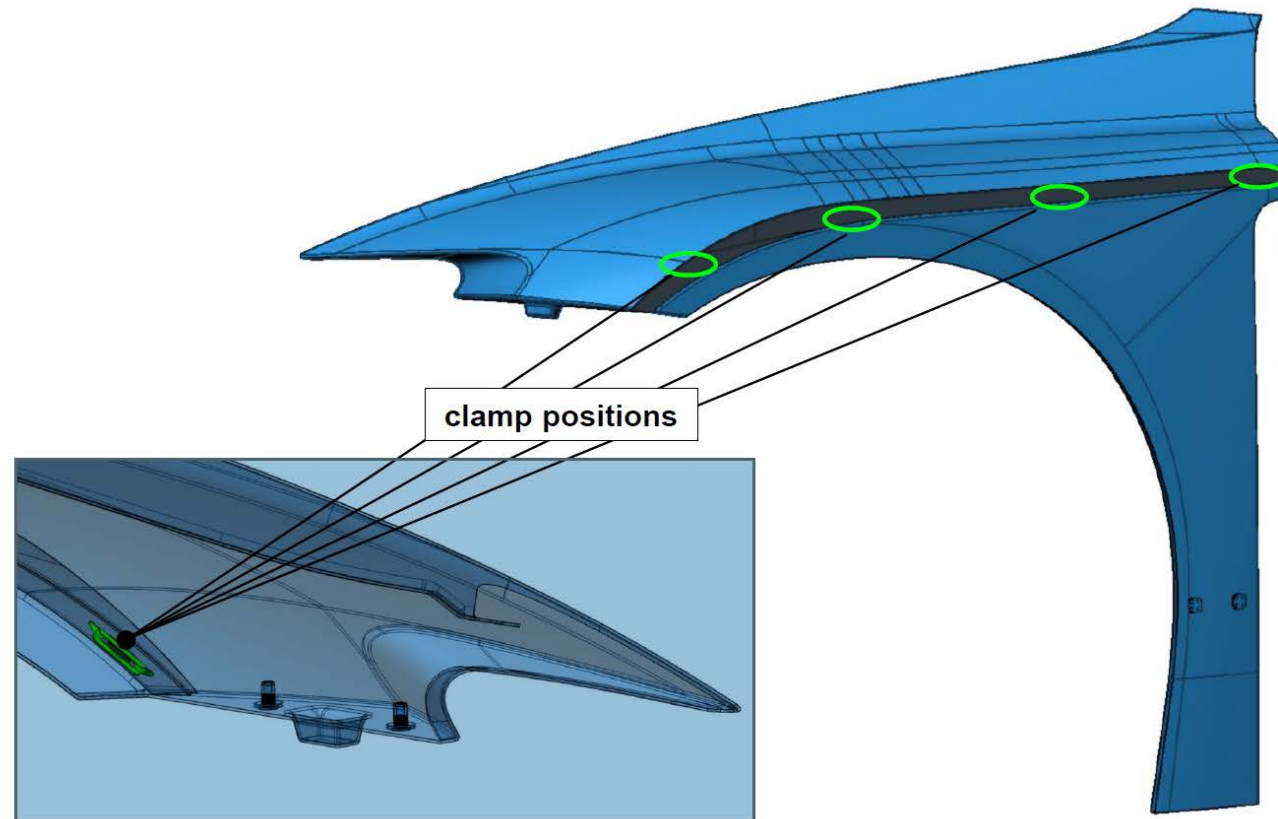
- › 3.1 Front fenders
 - › Exchange the front fenders 8V6 821 103 / 104 to the new spec
- › 3.2 Bracket for front fenders
 - › Exchange bracket 8V6 821 989 / 990 with 989 A / 990 A
- › 3.3 Bracket fender to sill
 - › Modify sill with paper-pattern (available to download on platform)
 - › Add bracket 4SA 803 581 / 582 to mount fender to sill



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Aero

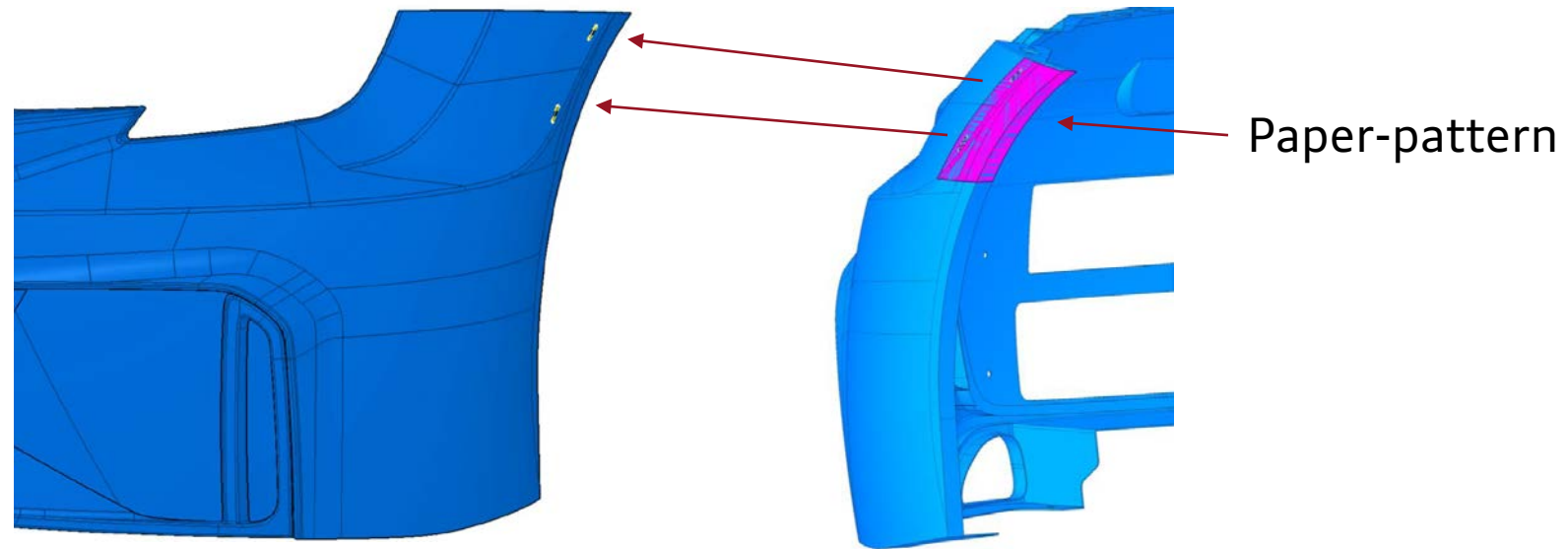
- › 3.4 Fences for fender
 - › Mount fences using the fixation clips 7L5 018 897 A



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Aero

- › 3.5 Fences for front-bumper
 - › Modify front-bumper with the slots for the fences using the paper-pattern (available to download on platform)
 - › Mount fences using the fixation clips 7L5 018 897 A



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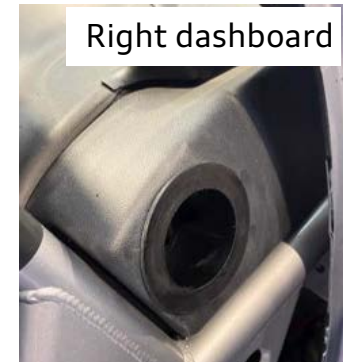
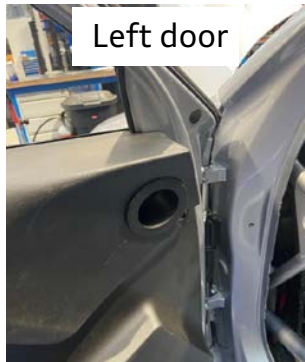
Partlist cockpit ventilation kit

Pos	Cockpit ventilation	Partnumber	Qty	Comment
4.1	Rear view mirror L with air-inlet for cockpit	8V6 857 527 A	1	
4.1	Rear view mirror R with air-inlet for cockpit	8V6 857 528 A	1	
4.2	Modification on door panel - pattern		1	Instruction (see page 25)
4.3	Modification on dashboard-cover - pattern		1	Instruction (see page 2)
4.4	Flange on door-panel and sashboard cover	8V6 810 527	4	
4.5	Y-part after fan for defrost/defog	8V6 820 723	1	
4.6	Airduct hose D=60 mm length 200 mm LHS	Purchase on your own	1	
4.6	Airduct hose D=60 mm length 1.000 mm RHS	Purchase on your own	1	

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Aero

- › 4.1 Exchange standard rear-view mirrors with ventilated ones
 - › Drill the hole in the door-body in case the mirror-foot slips not in completely
- › 4.2 Flange on the dashboard
 - › Use the flange 8V6 810 527 as a pattern to locate the position of the hole in the dashboard
 - › Drill the hole – don't glue until you have not prepared the hole in the door-panel
- › 4.3 Flange on the door-panel
 - › Use the flange on the dashboard as a pattern to locate concentric hole in the door-panel
 - › Cut hole into door panel (plastic) to insert flange 8V6 810 527
- › 4.4 Insert again and finally glue flanges and line up concentric while glue is soft
 - › Make sure that on the dashboard flanges the flex-hose is fitting with enough space to the dashboard-wall

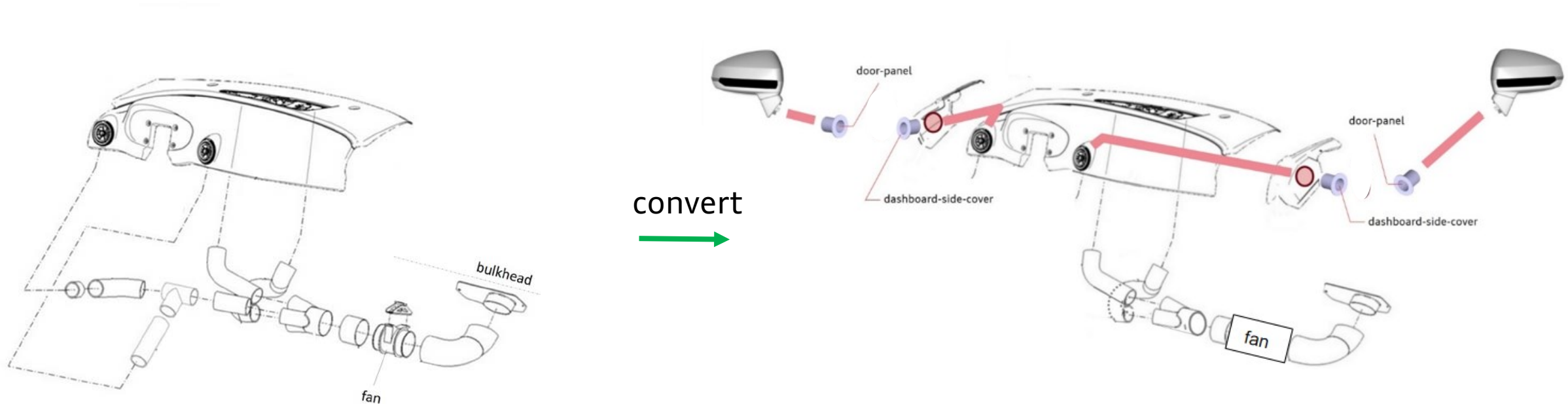


To optimize airflow you can tape the slots

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Aero

- › 4.5 Exchange standard 1 -> 3 y-pipe with 1 -> 2 y-pipe
 - › Connect windscreen-defog only with 1 -> 2 pipe to blower
- › 4.6 Connection hoses
 - › Connect flange right to air-nozzle right with 60 mm flex-hose 1.000 mm long
 - › Connect flange left to air-nozzle left with 60 mm flex-hose 200 mm long



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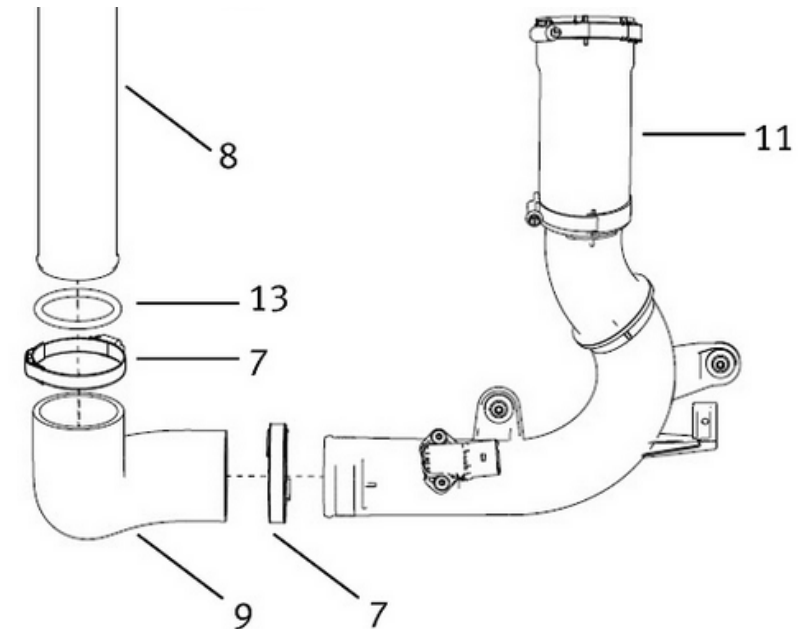
Partlist WSC mandatory

Pos	WSC mandatory	Partnumber	Qty	Comment
5.1	Engine map 2020 WSC spec	5F6 906 259 AJ (for SEQ 100%)	1	Download from online-platform
5.2	T-int sensor	5FR 919 379	1	
5.3	Hose for T-int sensor	5F6 145 838	1	
5.4	T-int sensor cable	Purchase direkt from FRW	1	FRW SRL Via della Tecnica 26 36100, Vicenza, Italy Tel +39-0444289460 E-mail: commercial@frw-wires.com Internet: www.frw-wires.com
5.5	Main fuse kit	5F6 915 423	1	Not mandatory from WSC before 2021

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Aero

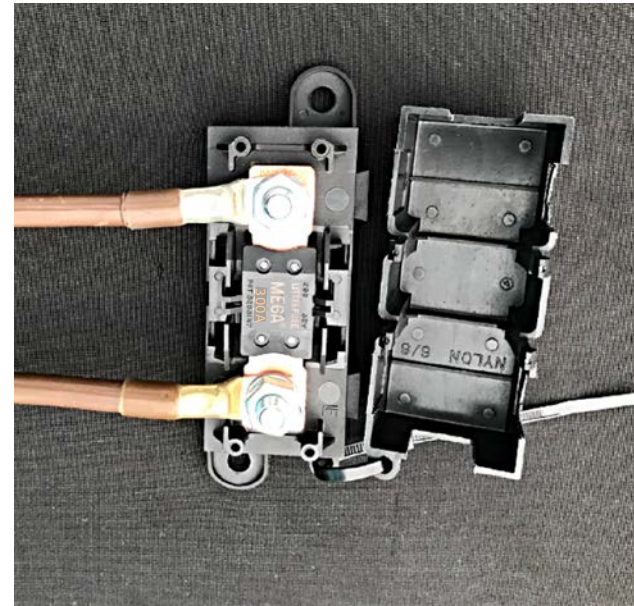
- › 5.1 Engine map WSC 2020 spec
 - › 100% map for SEQ download from portal and flash with DIAGRA LE
- › 5.2 T-intake sensor
 - › Exchange hose #11 with the new hose 8V6 145 838
 - › Mount sensor 5FR 919 379 (Marelli PT1000-M6)
 - › Connect sensor to scrutenering logger using loom xxx xxx xxx (FRW TCR-AITSC-v20.1.0)



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Aero

- › 5.5 Main fuse (**not yet mandatory from WSC**)
 - › 350 A fuse
 - › Exchange ground cable from battery to chassis with fuse-set 8V6 915 423



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Partlist reliability

Pos	WSC mandatory	Partnumber	Qty	Comment
6.1	Reinforced driveshaft joints	8V6 407 311	2	

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Reliability

- › 6.1 Reinforced drive-shaft joint
 - › Change outer joint on existing or new drive-shafts

2003

 Audi Sport

GOOD LUCK FOR YOUR RACES !