

ASSEMBLY INSTRUCTIONS

TECHART Aero Hood with Shaft

Art-Nr. 092.121.198.009 for 992 Turbo/ GT3

Type: 092.121.198

Version 05 – 04/2022



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I Important safety information

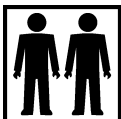
All of the necessary work must be performed by qualified persons with an appropriate level of expertise.

	<div data-bbox="657 562 963 622" data-label="Section-Header">  WARNING </div> <p>Vehicle lifts with an insufficient lifting capacity can collapse under the weight of the vehicle and crush any persons standing underneath.</p> <p>Compare the weight of the vehicle with the lifting capacity of your vehicle lift. The weight of the vehicle must not exceed the lifting capacity of your vehicle lift. The weight of the vehicle can be found in the vehicle operating manual.</p>	
	<div data-bbox="657 857 963 918" data-label="Section-Header">  WARNING </div> <p>Risk of injury from electric current.</p> <p>Switch off the ignition and disconnect the battery when working on the vehicle electrical/electronic systems.</p>	
   	<div data-bbox="657 1144 963 1205" data-label="Section-Header">  WARNING </div> <p>Risk of fire and explosion from ignition of windshield cleaning agents/antifreeze and their vapors.</p> <p>Risk of poisoning from ingesting windshield cleaning agents/antifreeze and breathing in their vapors.</p> <p>Risk of injury due to irritation caused by windshield cleaning agents/antifreeze coming into contact with eyes, skin and other parts of the body.</p> <p>Wear protective clothing and safety glasses. Avoid naked flames, fire and sources of ignition. Avoid contact with eyes, skin and other parts of the body. Do not eat, drink or smoke when handling windshield cleaning agents/antifreeze. Do not breathe in vapors and ensure adequate ventilation. Keep windshield cleaning agents/antifreeze only store them in sealable original containers.</p> <div data-bbox="598 1675 1098 1809">    </div>	  

 	<div data-bbox="657 376 963 434" style="text-align: center;">CAUTION</div> <p>Risk of injury from hands and arms being crushed, cut or lacerated when working with sharp-edged and bulky objects.</p> <p>Wear protective clothing and protective gloves. Keep limbs out of narrow and inaccessible areas of the vehicle and/or avoid dangerous situations by using special tools and suitable aids.</p>	 
	<div data-bbox="657 696 963 754" style="text-align: center;">CAUTION</div> <p>Risk of injury to back, muscles, joints, tendons and ligaments from lifting and carrying heavy and/or bulky objects.</p> <p>Lift and transport heavy and/or bulky objects with the help of other people and/or with suitable aids.</p>	
	<div data-bbox="309 983 592 1041" style="text-align: center;">NOTICE</div> <p>Before starting the assembly procedure, carefully read the assembly instructions in full and pay attention to the safety information and sequence of the individual operation steps.</p>	
	<div data-bbox="309 1162 592 1220" style="text-align: center;">NOTICE</div> <p>All body parts must be prepared and painted in accordance with the attached painting guide.</p>	

II Preparation

Number of people required



For the installation of this product at least two persons are needed.

Help and support

If you have any technical queries, please contact us immediately:
support@techart.de

Check TECHART aero-hood parts kit for completeness

Quantity	Part number	Part designation
1	092.121.198.009	TECHART aero hood

and

1	+92.121.198.000	V01: Aero hood paintable
Consisting of:		
1	092.121.198.100	Aero hood with shaft, paintable

or

1	+92.121.198.001	V01: Aero hood in visible carbon glossy
Consisting of:		
1	092.121.198.100G-01	Aero hood with shaft, glossy

or

1	+92.121.198.002	V01: Aero hood in visible carbon matt
Consisting of:		
1	092.121.198.100M-01	Aero hood with shaft, matt

or

1	+92.121.198.011	V01: Aero hood in Forged Carbon glossy
Consisting of:		
1	092.121.198.100FCG	Aero hood with shaft, Forged glossy

or

1	+92.121.198.012	V01: Aero hood in Forged Carbon matt
Consisting of:		
1	092.121.198.100FCM	Aero hood with shaft, Forged matt

or

1	+92.121.198.003	V01: Aero hood in visible carbon blank
Consisting of:		
1	092.121.198.100RT-01	Aero hood with shaft, matt

and

1	+92.121.198.023	V02: Conversion kit non-flow air shaft
Consisting of:		
1	092.100.185.311	Grille Lock panel left
1	092.100.185.310	Grille Lock panel right
1	092.100.185.301	Panel Lock panel left
1	092.100.185.300	Panel Lock panel right
1	092.100.198.990	Accessory kit conversion non-flow air shaft
2	092.100.196.200	Buffer stop
2	001900M06X50976	Threaded part M6x50 A2K
2	001900M06W379006	Nut with wave washer, M6, galvanized A2K
2	00091089010031	Bond + seal black, Tube 70ml
1	000910219252T	Betaprime 5404, 15ml

or

1	+92.121.198.021	V02: für GT3
Consisting of:		
1	092.100.185.311	Grille Lock panel left
1	092.100.185.310	Grille Lock panel right
1	092.100.185.301	Panel Lock panel left
1	092.100.185.300	Panel Lock panel right
1	992863475AOK1	Cover for lock carrier
1	092.100.198.990	Accessory kit conversion non-flow air shaft
2	092.100.196.200	Buffer stop
2	001900M06X50976	Threaded part M6x50 A2K
2	001900M06W379006	Nut with Wave washer, M6, galvanized A2K
2	00091089010031	Bond + seal black, Tube 70ml
1	000910219252T	Betaprime 5404, 15ml

or

1	+92.121.198.022	V02: Conversion kit flow-through air shaft
Consisting of:		
1	092.100.185.311	Grille Lock panel left
1	092.100.185.310	Grille Lock panel right
1	092.100.185.301	Panel Lock panel left
1	092.100.185.300	Panel Lock panel right

1	092100196990	Accessory kit Aero hood with shaft
Consisting of:		
2	092100196200	Buffer stop
2	001900M06X50976	Threaded part M6x50 A2K
2	001900M06W379006	Nut with wave washer, M6, galvanized A2K
2	4609004631418	Seal ring aluminum 14x18
0.4	000590770075	Cable 0.75 mm ² black
0.4	0005907700759	Cable 0.75 mm ² brown
4	0005905555160	Butt connector watertight transparent 0.2- 0.5 qm ²
1	00090112/15	Clamp RohrGu.12/15
1	00090118/15	Clamp RohrGu.18/15
1	00019000570616	Screw M6x16
1	001900M06986	Hexagon nut self-locking, M 6, galvanized
2	992121577	Bearing pin
2	0005905616666	Cable grommet twin-sided
1	092100185400	Holder horn
2	001900M06X12 274	Screw self-locking M6X12 galvanized blue passivated
2	00091089010031	Bond + seal black, Tube 70ml
1	000910219252T	Betaprime 5404, 15ml
0.03	0009108754102	Sealing tape, 10 x 2mm, 12.5m
2	95557374901	O-ring
1	PAB260749	O-ring
2	992121577ZB	Bearing pin
2	992121577	Bearing pin
1	092100785400	Grille for tailgate panel right
1	092100785401	Grille für tailgate panel left
1	000590502161	Cable tie 4.8x360mm black

Please use the table to check whether all of the required parts are present.

Once parts have been removed from their original packaging, ensure that they are properly handled and stored.

III Component identification

1 Inner component identification

- i** The inner component identifications applied by TECHART must be masked off before painting. These are decisive to TECHART-Support for possible component tracking, complaints or in the event of damage.

- 1 Internal component markings can either be applied directly to the component in the tool or glued in as a label.



Fig. 01

2 Outer component identification

- i** The external component identifications applied by TECHART must be masked off before painting. If the external component markings are no longer visible, the component certificate may lose its validity.

- 1 External component identifications are usually attached to the underside of the component in the non-visible area. These can be used as evidence at a traffic control or a technical service since this is a registered TECHART part.



Fig. 02

IV Paintwork

1 Material of the component



It is important that the paintwork matches to the surface which will be painted

- 1 Before painting, the material to be painted can be read from the inner component identification.

2 Component identification



All internal and external component identifications must be masked off before painting. These must still be readable after painting in custom color.

- 1 The last layer of clear lacquer can then be applied over the entire surface of the component, in this way deep edges around component identifications can be avoided.

3 Adhesive tape and mounting fixtures



The body tape applied by TECHART is used for later assembly and must be protected over the entire surface before painting.

- 1 The edges of the adhesive body tape must also be free of paint in order not to impair the elasticity of the tape.
- 2 Drilled holes made at the factory that will later be used for screws or rivets may have to be re-drilled to the nominal size depending on the amount of paint.

V Installation

1 Prepare vehicle

i Before beginning, park the vehicle on level ground and turn it off. The front hood must be open.

2 Dismantle the original front hood

- 1 Dismantle the screws of the catch hook and remove it.
- 2 Remove the original hood emblem. To do this, remove the two cutting nuts from the inside.
- 3 Remove the two spray nozzles in the direction of the windshield by unclipping.
- 4 Remove the cover caps on the left and right of the hood hinges and put them aside.
- 5 Remove the nuts from the hood hinges, set aside and remove the hood.

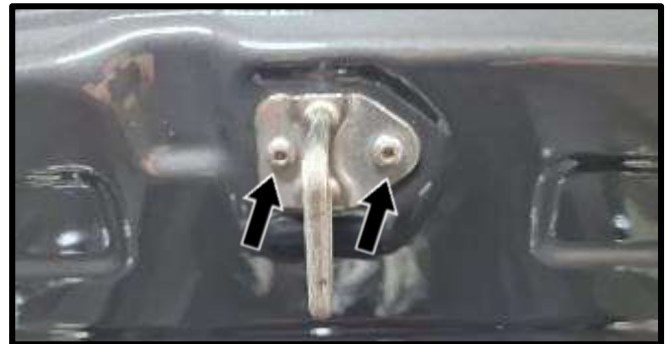


Fig. 03

i The original hood is no longer required.

3 Installation Aero hood

i If the aero hood is installed in connection with the TECHART aero package of the exterior, this is completely assembled first according to the assembly instructions. Then only the Aero hood is mounted and aligned. Chapters 4, 5 and 6 describe the assembly steps depending on the vehicle model and radiator conversion.

- 1 Place the TECHART aero hood on the hinges and fasten with the original nuts. Do not fully tighten the nuts yet.



Fig. 04

- 2 Feed the slash water hose through the mounting hole, connect to the spray nozzles and snap into place.
- 3 Mount the TECHART hood emblem with new cutting nuts (order number 091.965.200.009) or the original hood crest from the inside.



Fig. 05

- 4 Close the aero hood and check the gap to the fender on the left and right. If this is not exactly aligned, loosen the nuts on the hood hinges and readjust the hood a little.
- 5 Repeat this process until the aero hood is in the desired position.
- 6 Then tighten the nuts.
- 7 Then clip the covers over the hood hinges.

4 Assembly Aero hood with non-flow shaft**V02: Conversion kit with non-flow air shaft (+92.121.198.023)**

- 1 Line the top surface of the lock panel with tape. Place the TECHART Lock panel right and left 092.100.185.300/301 on the taped surfaces.



Fig. 06

- 2 Close the hood down and align the panels through the two air ducts of the hood.
- 3 Mark the inner geometry of the two panels with a pen all around.
- 4 Open the hood and remove the panels again.



Fig. 07

- 5 Enlarge the marked section by 15 mm all around and cut out the section from the original panel. ATTENTION, be careful not to cut the side clip on the back of the original panel.
- 6 Reinstall the original panels, insert the TECHART parts, align using the hood and then mask the outer dimensions of the TECHART lock panels with adhesive tape.
- 7 The inner area can then be sanded, cleaned and primed with BETAPRIME 5404.
- 8 Also sand and clean the back of the TECHART panels.

- 9 Place the grille blanks supplied and fold the tabs over the component edge of the lock panels.
- 10 Sand and clean the panels around the shaft on the outside where the grille rests.
- 11 Put the grille back on and fix it with body glue. Possibly fix the grille with pliers.
- 12 With a few points of 2K glue, the grille can be quickly fixed and further assembly can be continued.



Fig. 08

- 13 Clean the adhesive areas of the original panel and the TECHART panel again.
- 14 Apply body adhesive all around to the back of the panel and place it on the original panel using the masking.
- 15 Close the hood and use the slots to align the panels exactly as desired.
- 16 Then fix the panels with adhesive tape and make sure that they are in contact all around.



Fig. 09



The drilling of the original panel for the TECHART buffer stop is then made. For this, two ways are described as to how the bore can be performed best.

- 17 Determination of the drilling position by measuring the center point of the screw on the plastic panel.
- 18 Determining the drilling position by using spotting paint, which is applied to the screw head of the foremost fender screw, in order to then press on the panel from above.
- 19 Provide the determined drilling point with a through hole of 10 mm.
- 20 Fit the hood catch hook. Use screw locking agent.
- 21 Remove the respective front screws on the fender.
- 22 Instead of the screw, provide the M6x50 mm threaded pin with M6 nut with wave washer, screw in and screw on the supplied buffer stop completely.
- 23 Then set the height of the buffer stop by closing the hood (until it clicks) and correcting the height at the threaded pin.
- 24 Once the height has been adjusted, tighten the speed nut and fit all the plastic covers of the trunk lining.
- 25 Provide the buffer stop with a screw lock and place it on the set to the threaded rod as far as it will go.



Fig. 10

i Make sure that the height of the buffer stop is not adjusted with the buffer itself, but by turning the threaded pin in and out of the body.

5 Installation Aero hood with shaft for GT3**V02: für 992 GT3 (+92.121.198.021)**

- 1 As shown in the picture below, the two pegs, the clips and the indentations on the left and right are cut out from the supplied cover.



Fig. 11

- i** Make sure that the domes remain on the outside of the indentations, they still have a function.

- 2 Mount the original lock carrier cover on the vehicle and line the upper surface with adhesive tape. Place the TECHART lock panels left and right 092.100.185.300/301 on the masked surfaces.



Fig. 12

- 3 Close the hood downwards and align the panels through the two air ducts of the hood.
- 4 Mark the inner geometry of the two panels with a pen all around.
- 5 Open the hood and remove the panels again.



Fig. 13

- 6 Enlarge the marked cutout by 15 mm all around and cut out the cutout from the original cover. **ATTENTION**, be careful here too that the side clip on the back of the original cover is not cut off.
- 7 Reinstall the original cover, insert the TECHART parts, align using the hood and then mask the external dimensions of the TECHART lock covers with adhesive tape.
- 8 The inner area can then be sanded, cleaned and primed with BETAPRIME 5404.
- 9 Also sand and clean the back of the TECHART panels.
- 10 Place the supplied cut-to-size grids and fold the tabs over the component edge of the lock panels.
- 11 Grind and clean the panels around the shaft on the outside on which the grille rests.
- 12 Put the grille back on and fix it with body adhesive. If necessary, fix the grille with pliers.
- 13 With a few points of 2-component adhesive, the grille can be quickly fixed and assembly can be continued.



Fig. 14

- 14 Clean the adhesive areas of the original panel and the TECHART panel again.
- 15 Apply body adhesive all around the back of the panel and place it on the original panel using the masking.
- 16 Close the hood and align the panels exactly as required through the shafts.
- 17 Then fix the panels in place with adhesive tape and make sure that they are well-set on all sides.



Fig. 15

i Then the hole of the original cover for the TECHART stop buffers is drilled. For this purpose, two ways are described how the hole can best be drilled.

- 18 Determination of the drilling position by measuring the center of the screw on the plastic cover.
- 19 Determination of the drilling position by using spotting paint that is applied to the screw head and then pressing on the cover from above.
- 20 Provide the determined drilling point with a through-hole of 10 mm.
- 21 Fit the hood catch hook. Use screw locking agent.

- 22 Remove the front screws on each fender.
- 23 Instead of the screw, provide the M6x50 mm threaded pin with M6 nut with a wave washer, screw in and completely screw on the supplied stop buffer.
- 24 Then set the height of the stop buffer by closing the hood (until it clicks into place) and correcting the height of the threaded pin.
- 25 After you have adjusted the height, tighten the nut and insert all the plastic covers on the trunk lining.
- 26 Provide the stop buffer with screw locking and place it on the set threaded rod as far as it will go.



Fig. 16

i Make sure that the height of the stop buffer is not set with the buffer itself, but by turning the threaded pin in and out of the body.

6 Installation Aero hood with flow-through shaft**V02: Conversion kit with flow-through air shaft (+92.121.198.022)**

i The conversion to the TECHART Aero hood with flow-through air shaft is always carried out after the conversion of the aero package. To do this, the TECHART front apron must be assembled, but not mounted on the vehicle.

- 1 Drain the coolant by unscrewing the two drain screws as shown in the figure below.
- 2 Then provide the drain screws with new sealing rings and mount with 25 Nm.



Fig. 17

- 3 Unclip the left and right air ducts.
- 4 Dismantle both impact beams.
- 5 Dismantle coolant hoses from the outer radiator to the middle radiator. Catch escaping coolant in a suitable container.

i Seal the dismantled radiators with tape to prevent from dirt.

- 6 Unclip the side plastic plugs of the radiator and remove the radiator from the air duct.
- 7 Unclip the original air duct of the middle radiator to also dismantle the holding frame behind it, this frame will be needed again.



Fig. 18

- 8 Remove the holder of the two horns and dismantle them from the holder, the horns are needed again.
- 9 Unscrew the air duct behind the middle radiator from the body. To do this, remove the two upper and lower screws / nuts.
- 10 Fasten the air conditioning lines behind, coming from the fender on the right in the direction of travel, using the 12mm/18mm hose clamps supplied in the "Aero hood" accessory kit and an M6x16 mm screw and nut. With this, the lines can be pressed a little backwards, closer to the body, so that clearance for the middle air shaft is guaranteed.



Fig. 19

- 11 Then extend the short cable of the horns using the cable and crimp connector provided in the aero hood accessory kit. The brown cable is extended with the brown cable and the black/yellow cable is extended with the black cable.
- 12 After connecting the cables, heat the crimp connectors with a hot air blower.
- 13 After the extensions, the wiring harness must be completely insulated again. Use commercially available insulating tape for this.



Fig. 20

- 14 Separate the supplied air duct 9GT121288. To do this, press the locking lugs and unclip. Both halves are needed again.
- 15 Then mount the air duct on the body. Use the original screw connection.
- 16 As shown in the picture, the cable for the horns and ACC must be laid towards the center.
- 17 Other cables are laid to the passenger side.



Fig. 21

- 18 Put the rubber grommet 25x30x36 left and right over the water connector of the cooler.
- 19 Insert the cooler into the air duct and secure it with the long, unprocessed bearing pin at the bottom.

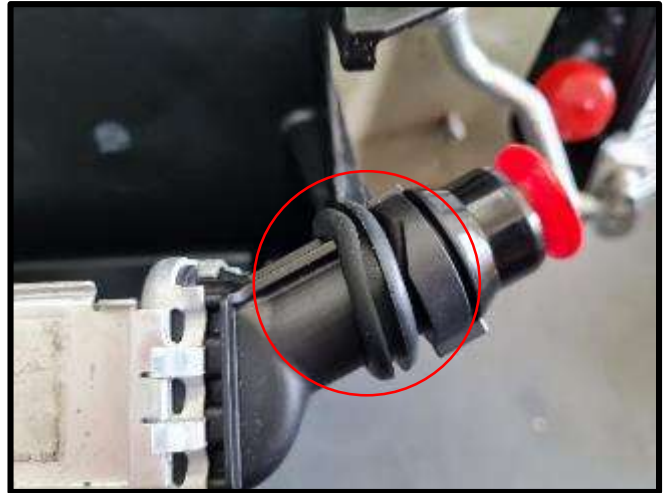


Fig. 22

- 20 If the cooler is now pressed against the top of the air duct, the notch in the rubber grommet must sit exactly on the wall of the air duct.
- 21 Push the radiator back so far that the passage of the upper bearing pin is pushed behind the hole by the original pin diameter.
- 22 Then snap the short bearing pin into the upper holes of the air duct.
- 23 Attach the original holding frame of the cooler again.
- 24 Then put the second half of the supplied air duct back onto the half that has already been mounted on the car.



Fig. 23

- 25 Before installing the air duct 092.100.185.200, it must be processed under the following conditions:
- 26 The red line marks the component surface to which the supplied sealing tape must be affixed. Included in the accessory kit "Aero hood" 2x180 mm.

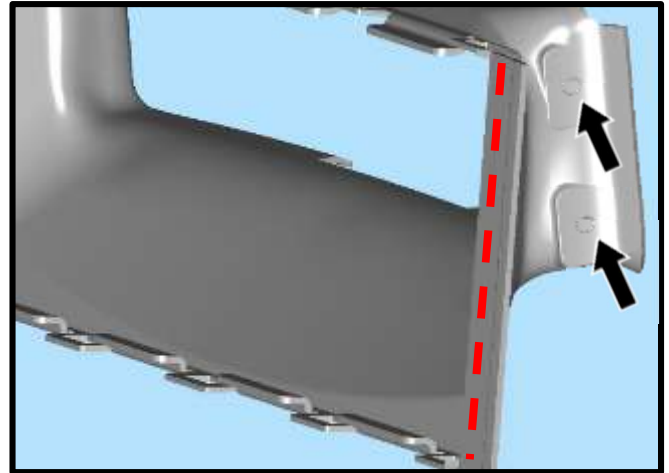


Fig. 24

- 27 Depending on the vehicle variant, the temperature sensor must be positioned and glued in the upper or lower position using the supplied bracket 092.100.185.250. In vehicles with "HomeLink", the temperature sensor must be attached in the lower position.
- 28 On vehicles with ACC, the markings at the top and bottom of the central air duct must be cut out.
- 29 Then mount the air duct.
- 30 Hold the supplied holder for the horns on the inside of the upper impact beam.
- 31 Now, as described below, two markings must be made for M6 threads. Mark the lower edge of the impact beam measured 55 mm upwards and the dimension 120mm symmetrically to the center of the impact beam.

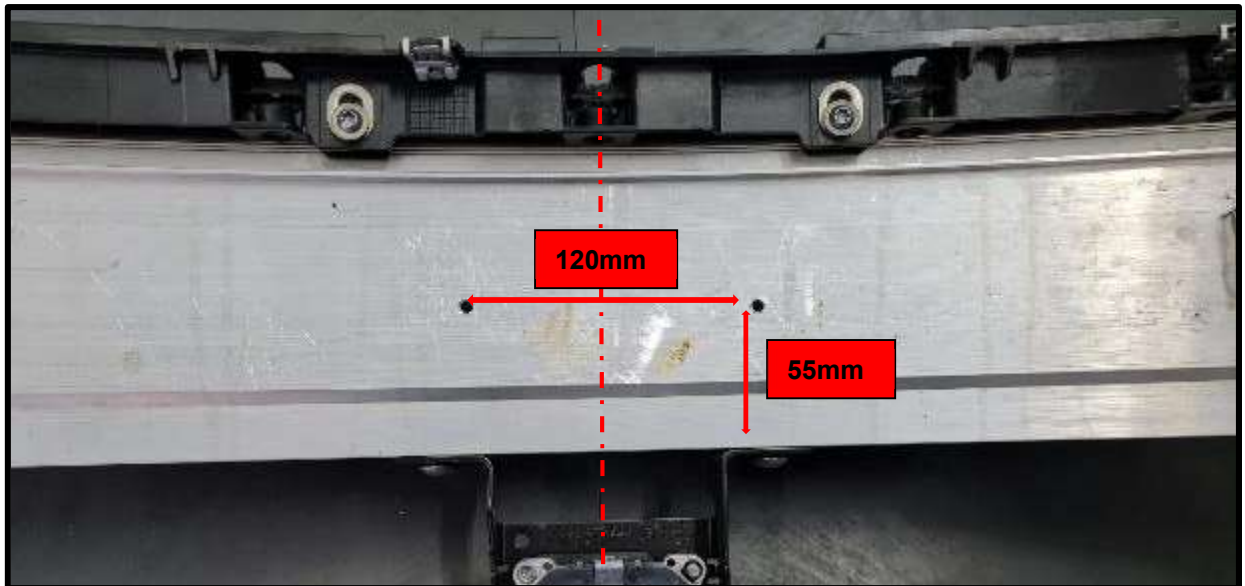


Fig. 25

- 32 Mount both horns with the original nuts on the TECHART holder for the horns 092.100.185.400.
- 33 Make sure that both horns are aligned as shown in the pictures.



Fig. 26

- 34 Screw the pre-assembled holder to the impact beam with two M6x12 mm self-locking.



Fig. 27

- 35 On the plastic strip of the upper bumper beam, the clips on the left and right outside, the reinforcement tab on the left and right next to it, and the brackets in the center left and right must be cut off, as marked in the picture below.



Fig. 28

- 36 Connect the supplied cooling water hoses to the radiator connections of the outer and middle radiators.
- 37 Reinstall both impact beams on the vehicle.
- 38 Lower impact beam: 23 Nm
- 39 Side struts: 23 Nm
- 40 Upper impact beam: 55 Nm
- 41 Clip in the original side air ducts again.
- 42 Install the assembled TECHART front apron according to the assembly instructions of the TECHART Aerokit.

- 43 As shown in the picture below, the two pegs, the clips and the indentations on the left and right of the original cover are cut out.



Fig. 29



Make sure that the domes remain on the outside of the indentations, they still have a function.

- 44 Mount the original lock carrier cover on the vehicle and line the upper surface with adhesive tape. Place the TECHART lock panels left and right 092.100.185.300/301 on the masked surfaces.



Fig. 30

- 45 Close the hood downwards and align the panels through the two air ducts of the hood.
- 46 Mark the inner geometry of the two panels with a pen all around.
- 47 Open the hood and remove the panels again.



Fig. 31

- 48 Enlarge the marked cutout by 15 mm all around and cut out the cutout from the original cover. **ATTENTION**, be careful here too that the side clip on the back of the original cover is not cut off.
- 49 Reinstall the original cover, insert the TECHART parts, align using the hood and then mask the external dimensions of the TECHART lock covers with adhesive tape.
- 50 The inner area can then be sanded, cleaned and primed with BETAPRIME 5404.
- 51 Also sand and clean the back of the TECHART panels.

- 52 Place the supplied cut-to-size grids and fold the tabs over the component edge of the lock panels.
- 53 Grind and clean the panels around the shaft on the outside on which the grille rests.
- 54 Put the grille back on and fix it with body adhesive. If necessary, fix the grille with pliers.
- 55 With a few points of 2-component adhesive, the grille can be quickly fixed and assembly can be continued.



Fig. 32

- 56 Clean the adhesive areas of the original panel and the TECHART panel again.
- 57 Apply body adhesive all around the back of the panel and place it on the original panel using the masking.
- 58 Close the hood and align the panels exactly as required through the shafts.
- 59 Then fix the panels in place with adhesive tape and make sure that they are well-set on all sides.



Fig. 32

i Then the hole of the original cover for the TECHART stop buffers is drilled. For this purpose, two ways are described how the hole can best be drilled.

- 60 Determination of the drilling position by measuring the center of the screw on the plastic cover.
- 61 Determination of the drilling position by using spotting paint that is applied to the screw head and then pressing on the cover from above.
- 62 Provide the determined drilling point with a through-hole of 10 mm.
- 63 Fit the hood's catch hook. Use screw locking agent.

- 64 Remove the front screws on the fender.
- 65 Instead of the screw, provide the M6x50 mm threaded pin with M6 nut with a wave washer, screw in and completely screw on the supplied stop buffer.
- 66 Then set the height of the stop buffer by closing the hood (until it clicks into place) and correcting the height of the threaded pin.
- 67 After you have adjusted the height, tighten the nut and insert all the plastic covers on the trunk lining.
- 68 Provide the stop buffer with screw locking and place it on the set threaded rod as far as it will go.



Fig. 33

i Make sure that the height of the stop buffer is not set with the buffer itself, but by turning the threaded pin in and out of the body.

7 Completing the vehicle

- 1 Rectify the entire fault memory. (PIWIS 3)
- 2 If not already done, the cooling system must be refilled and vented with the PIWIS tester.
- 3 Mount the wheels, observe the torques according to the manufacturer's instructions. On wheels with 5-hole fastening, the wheel bolts are tightened to 160 Nm. In the case of wheels with central locking, these are tightened to 600 Nm, loosened by 90 °, and then tightened again to 600 Nm. ATTENTION, the wheels must be freely suspended.
- 4 If the vehicle is equipped with ACC, night vision assistant or front camera, these must be recalibrated. (PIWIS 3)
- 5 Carry out a test drive with the vehicle and then check the vehicle for leaks and check the fault memory. If there are errors, rectify them.

TECHART

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