



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

only in combination with standard chassis

Part-no. 082.200.800.009      718 Left-hand-drive

Version 01 – 09/2017





# ASSEMBLY INSTRUCTIONS
















## TECHART Noselift System

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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="651 544 952 600" data-label="Section-Header"> <p> <b>WARNING</b></p> </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="651 842 952 898" data-label="Section-Header"> <p> <b>WARNING</b></p> </div> <p>Risk of injury from electric current.</p> <p>Switch off the ignition and disconnect the battery when working on the vehicle electrical/electronics systems.</p>	
 	<div data-bbox="651 1088 952 1144" data-label="Section-Header"> <p> <b>WARNING</b></p> </div> <p>Hydraulic oil can lead to heavy injuries under pressure squirting out.</p> <p>Poisoning danger by swallowing hydraulic oil.</p> <p>Danger of injury by irritations at contact of hydraulic oil with eyes, mucous membrane and skin.</p> <p>Protective clothing and safety goggles carry. Avoiding contact with eyes, mucous membrane and skin.</p> <p>Not eating, drinking or smoking at dealing with hydraulic oil.</p> <div data-bbox="512 1473 1015 1619">    </div>	  



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

 	<div data-bbox="651 356 951 414"> <b>CAUTION</b></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="651 685 951 743"> <b>CAUTION</b></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="296 987 584 1046"><b>NOTICE</b></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="296 1178 584 1236"><b>NOTICE</b></div> <p>All body parts must be prepared and painted in accordance with the attached painting guide.</p>	





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### II Preparation



On vehicles with non-smoking-package the ashtray has to be retrofitted at the center console.

#### 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**



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### Check TECHART Noselift System parts kit for completeness

Quantity	Part number	Part designation
<b>1</b>	<b>082.200.800.009</b>	<b>Noselift System for 718 left-hand-drive</b>
Consisting of:		
1	091.200.820.100	Hydraulic unit incl. large battery plate
2	097.200.840.100	Large lift cylinder 45 mm for round thread M54x1/10 inch
1	091.200.800.300	Assembly kit wiring harness electrics
1	091.200.830.100	Wiring harness power supply
1	091.200.830.200	Wiring harness CAN connection and integration
1	091.200.800.200	Assembly kit hydraulic lines
2	091.200.810.100	Hydraulic line 1000 mm
2	091.200.010.100	Dust protection
1	091.200.010.101	Buffer stop FA 2035400
2	091.200.020.100	Bracket
2	082.200.170.040	Main spring Noselift FA
2	097.200.070.100	Helper spring Noselift FA
2	091.200.010.100	Dust protection
2	091.200.010.102	Buffer stop RA 1135400
2	097.200.840.015	Intermediate ring, FA
2	082.200.200.100	Main spring RA
1	087.200.831.200	Switch Noselift



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

optional

1	+91.200.801.100	V01: Upgrade non-smoking-package
Consisting of:		
1	991.553.141.02.DML	Ashtray
1	991.612.757.01	Cable loom

or

1	+91.200.802.100	V01: Upgrade smoking-package
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optional

1	+91.200.901.100	V02: Upgrade vehicle without PDCC
Consisting of:		
1	091.200.600.400	Holder set hydraulic cylinder

or

1	+91.200.901.200	V02: Upgrade vehicle with PDCC
Consisting of:		
1	091.200.600.410	Holder set hydraulic cylinder



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System



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.



# **ASSEMBLY INSTRUCTIONS**

## **TECHART Noselift System**

### **III Installation**



**The TECHART Noselift System may not be connected to the power supply before the hydraulic lines are connected.**

**Work may only be carried out on the hydraulic unit and suspension struts when they are disconnected and depressurized and with the hydraulic unit switched off. The hydraulic unit must be secured to prevent it being switched on.**

**Accordingly, the entire hydraulic unit including control system must be disconnected from the battery and the connection line must be insulated against contact with the battery.**

**All pressure lines and lift cylinders must be depressurized before work is carried out on the TECHART Noselift System.**

**The hydraulic unit and lift cylinders can become hot if repeatedly raised and lowered.**

**The relevant safety regulations must be complied with when handling hydraulic fluid.**

**If the power supply fails, the vehicle drops to the normal level.**

**Warning! Before disconnecting the power supply (battery), observe the relevant information supplied by the vehicle manufacturer.**

### 1 Location of components

- 1 TECHART lift cylinder right
- 2 TECHART lift cylinder left
- 3 TECHART hydraulic unit
- 4 Hydraulic line connection, lift cylinder
- 5 CAN-communication connection vehicle – hydraulic unit
- 6 TECHART Noselift switch (at the ashtray unit)
- 7 Level regulator right
- 8 Level regulator left

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Switch is located in the ashtray unit

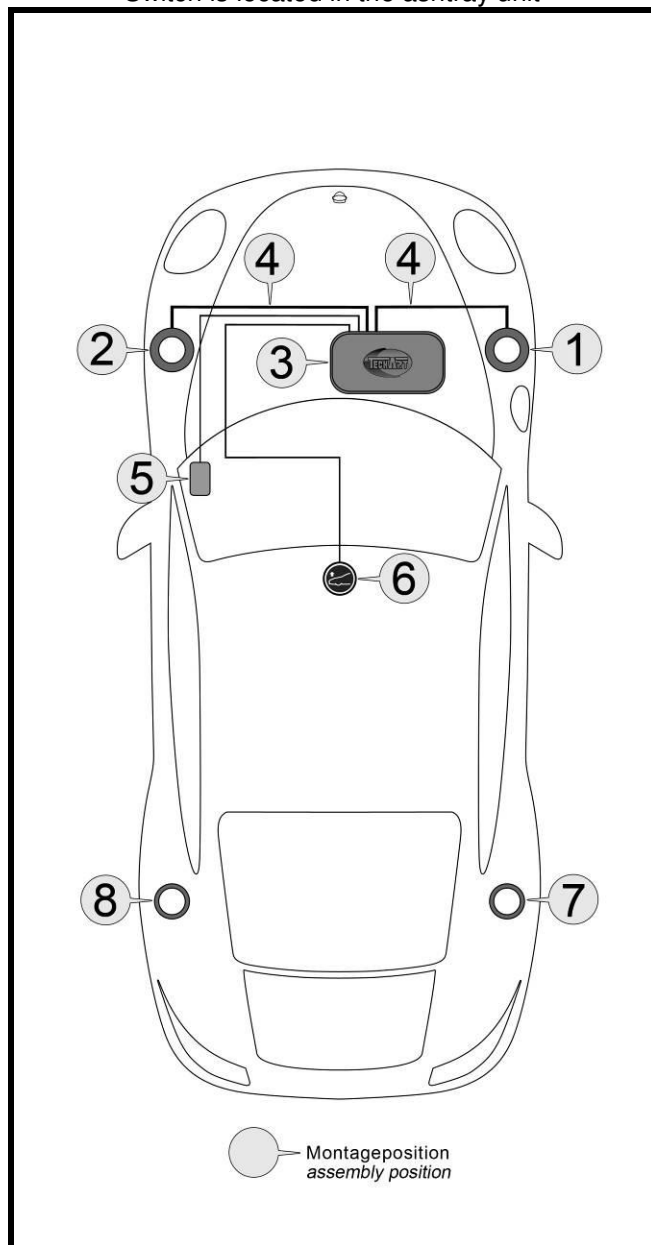


Fig. 01

 Fig. 01 shows the left-hand-drive version. Right-hand-drive vehicles are mirror-inverted.



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 2 Preparing the vehicle



**Before starting work, check that the vehicle is free from defects. Use the PIWIS system tester to read out all the fault memories of the individual vehicle components and first rectify any faults displayed.**

- 1 Raise vehicle at the factory-fitted lift support points.
- 2 Detach the wheels.

### 3 Assembly of left and right lift cylinders

- 1 Detach the suspension struts of the front axle according to the manufacturer's instructions.
- 2 Disassemble the suspension struts according to the manufacturer's instructions.

#### Use the spring compressor. Risk of injury!

- 3 Remove spring seat, spring and dust cover.

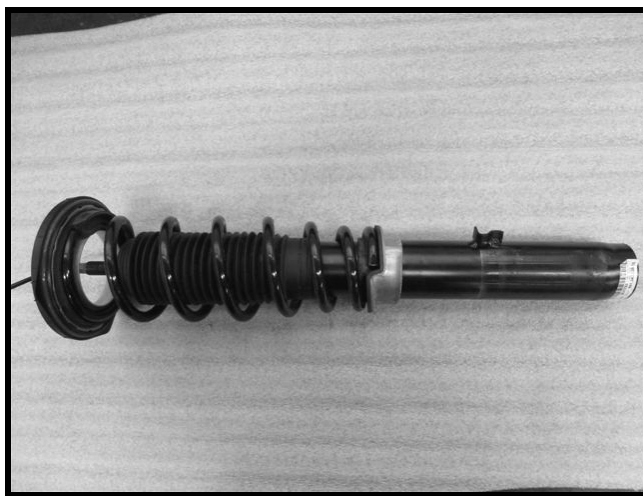


Fig. 02





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 4 Remove the magnetic damper seat.

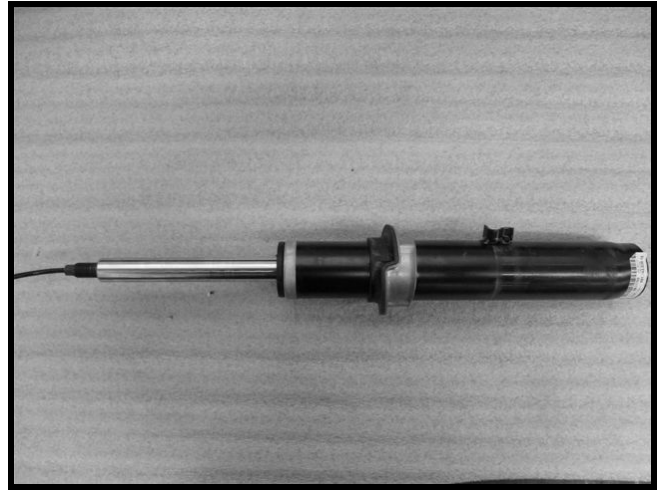


Fig. 03

- 5 Drive the damper cover carefully from the damper with a suitable spike or drift. Do not tilt.



Fig. 04

- 6 Drive out the bottom spring seat from the suspension strut towards the top with a soft-faced-hammer.



Fig. 05



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 7 Slide the TECHART bracket onto the suspension strut up to the stop and tighten. Torque = 10 Nm. Picture shows the version **without** PDCC.



Fig. 06

- 8 Slide the TECHART bracket onto the suspension strut up to the stop and tighten. Torque = 10 Nm. Picture shows the version **with** PDCC.



Fig. 07

- 9 Position the detent as shown in fig. 08.



Fig. 08



For vehicles with PDCC the original PDCC connections at the suspension strut have to be removed and are no longer needed.



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 10 Slide the TECHART Noselift cylinder onto the suspension strut and position the detent above the plane area of the bracket.

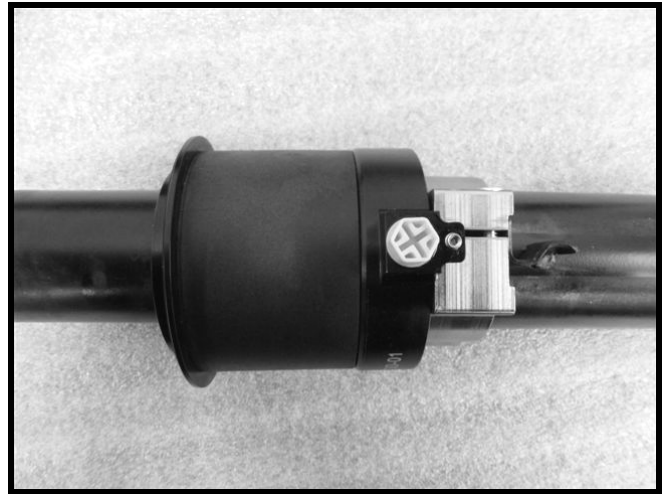


Fig. 09

- 11 If necessary the vehicle height can be raised on the front axle by using spacer rings (fig. 10). These can be optionally installed between the hydraulic cylinder and the TECHART helper spring.



Fig. 10

- 12 Slide the TECHART helper spring on it; drive the damper cover with a soft-faced-hammer onto the damper cartridge und slide the magnetic damper seat on.

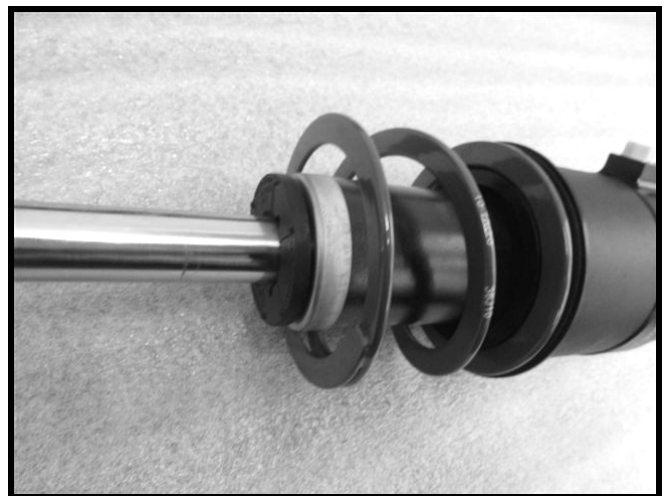


Fig. 11



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 13 Slide the TECHART intermediate ring and the TECHART main spring on.
- 14 Slide the TECHART buffer stop and the TECHART dust cover onto the piston rod.

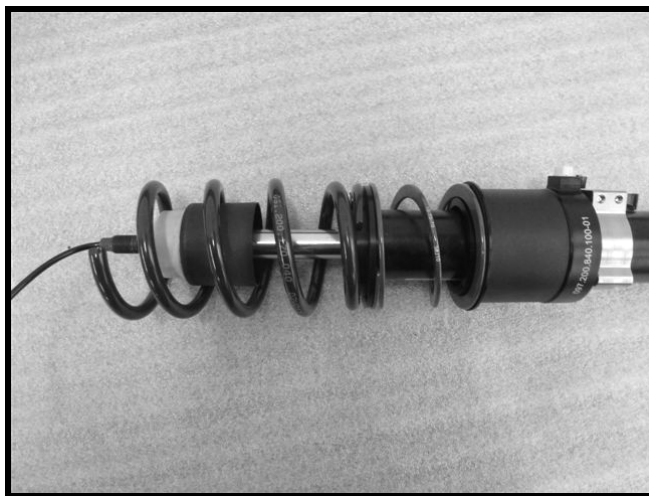


Fig. 12

- 15 Position the spring seat to the TECHART main spring, mount the strut bearing and suspension strut according to the manufacturer's instructions to the vehicle.

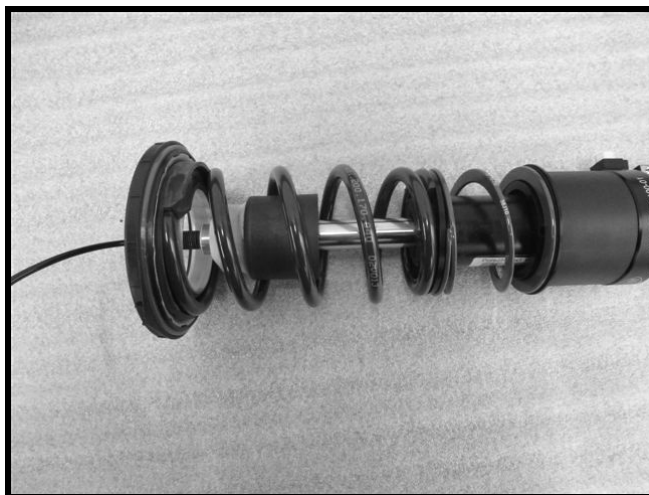


Fig. 13

- 16 The original dust protection, the lower spring plate as well as the rubber pad of the lower spring plate are no longer needed.



Fig. 14



The height of the front axle can be adjusted with spacer rings (fig. 10).

### 4 Assembly level control rear left and right

- 1 Detach the suspension strut of the rear axle according to the manufacturer's instructions.
- 2 Disassemble the suspension struts according to the manufacturer's instructions.

### Use the spring compressor. Risk of injury!

- 3 Dismount the strut bearing according to the manufacturer's instructions.

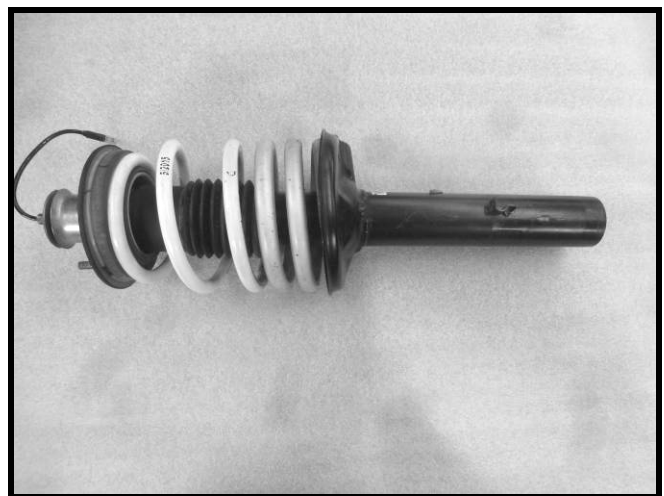


Fig. 15

- 4 Dismantle the suspension strut as shown. The original dust protection is no longer needed.



Fig. 16





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 5 Remove the dust protection, the buffer stop, as well as the steel spring and replace by TECHART components.

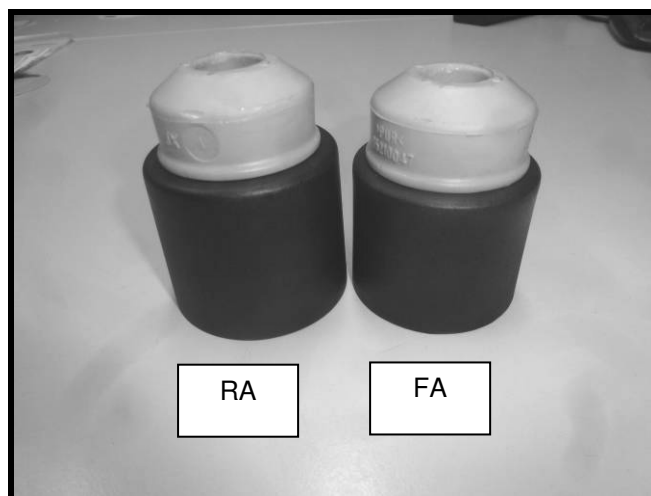


Fig. 17

- 6 Assemble the suspension strut according to the manufacturer's instructions.
- 7 Install the suspension strut according to the manufacturer's instructions.

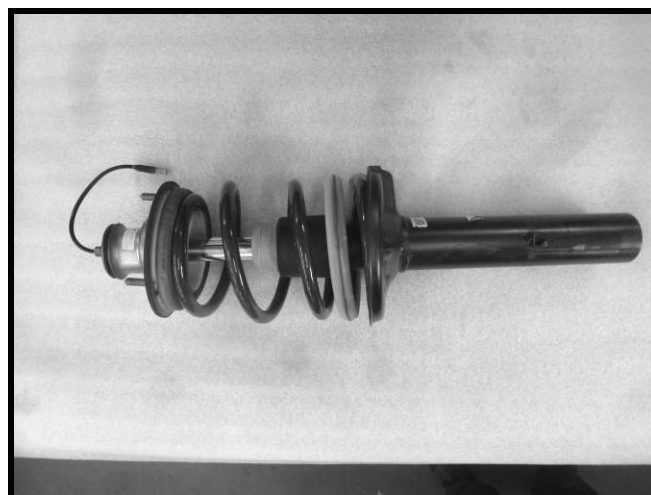


Fig. 18

 The height of the rear axle can not be adjusted.

### 5 Assembly hydraulic unit



These assembly instructions show the left-hand-drive version. For right-hand-driven vehicles one has to act in a mirror-inverted procedure.

- 1 Dismount the battery and then the battery plate.

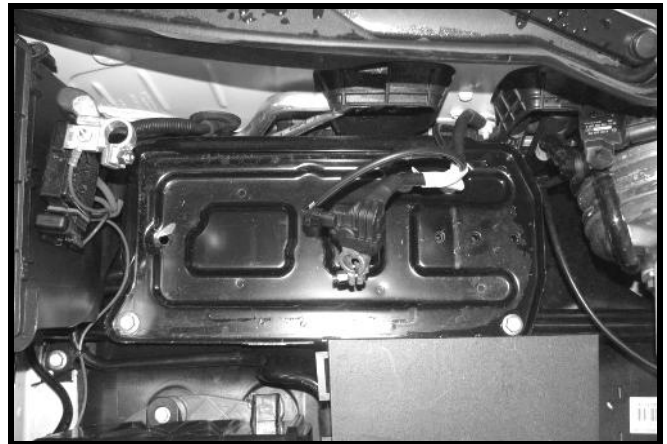


Fig. 19

- 2 Dismount the control unit for the fuel delivery from the battery plate.



Fig. 20

- 3 Tighten the control unit for the fuel delivery to the same place of the TECHART battery plate.

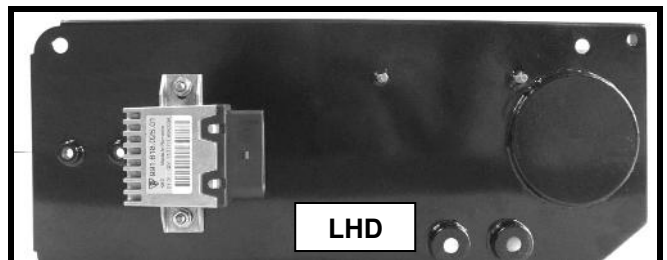


Fig. 21

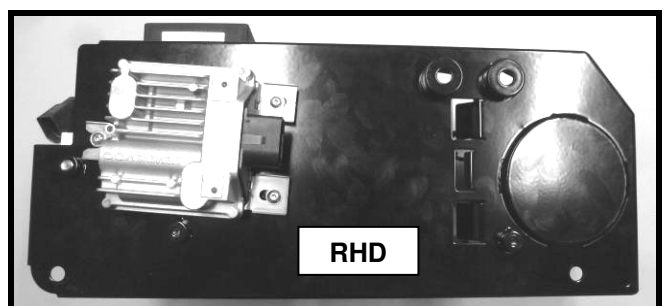


Fig. 22



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 4 Install the TECHART battery plate in the vehicle and insert the control unit for the fuel delivery.

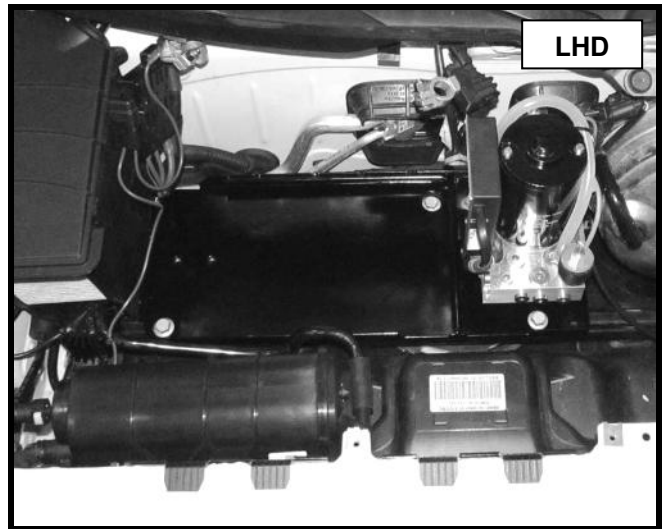



Fig. 23



Fig. 24

 The original battery plate is no longer needed.





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 5 Unscrew both lock bolts (shown in the picture) from the hydraulic unit.
- 6 Mount right (1) and left line (2) with hollow screws.

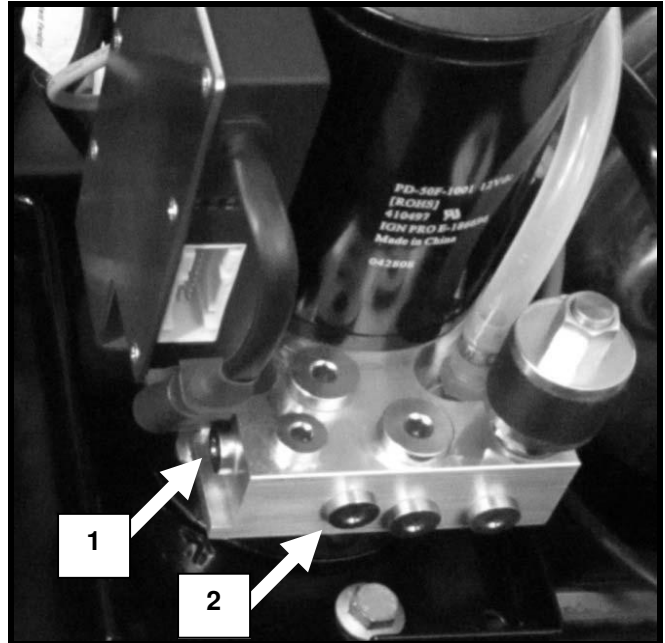


Fig. 25

- 7 Use the supplied gaskets as shown in the picture.

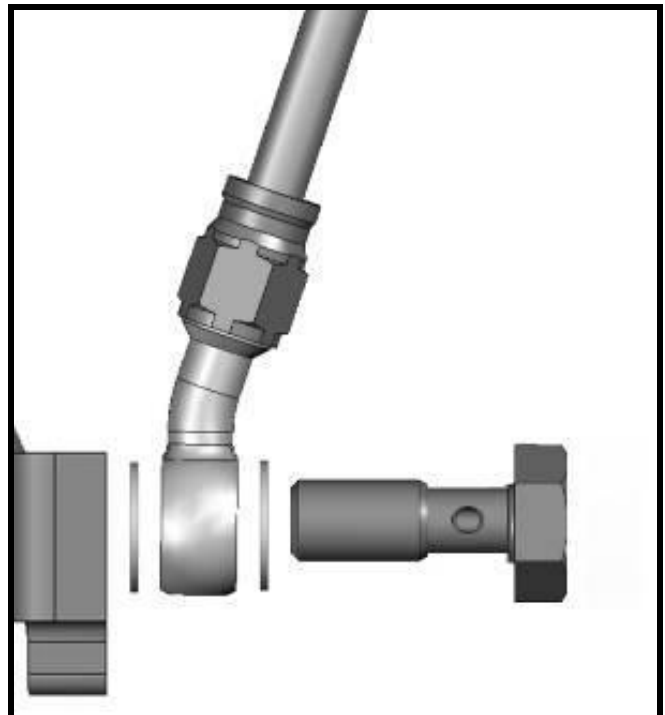


Fig. 26

- 8 Install the battery; do not connect the poles, yet!



Fig. 27



Fig. 28

- 9 For RHD vehicles as of MY 17 one must protect the plastic line against chafing by using the supplied spacer (see arrow).

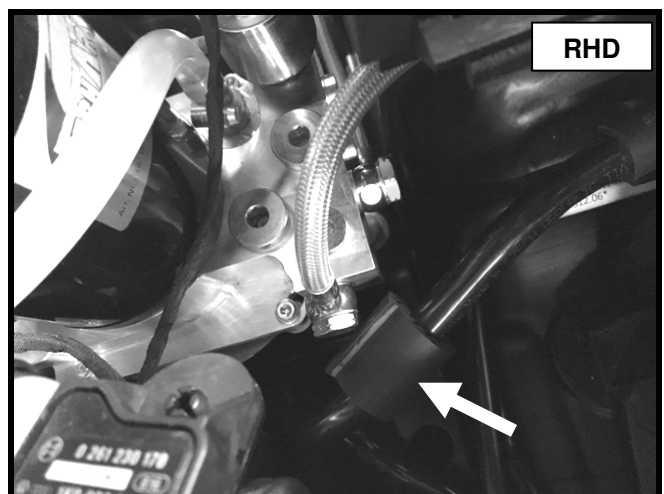




Fig. 29



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

-  A compact battery has to be installed on vehicles with a bigger battery than 70Ah.
-  An AGM (Absorbent Glass Mat) battery bigger than 70 Ah has to be replaced with an AGM battery with 70 Ah. Especially for vehicles with “Start-Stop“-function.

The compact battery must be ordered separately from a specialist dealer!

Compact batteries (manufacturer, order number):

VARTA, 577 400 08

Bosch, 0 092 550 080

Compact AGM batteries (manufacturer, order number):

Porsche, 999.611.070.10

The following Porsche batteries can continue to be used (part number, capacity):

999.611.060.20, 60 AH

999.611.070.20, 70 AH

The following Porsche-AGM- batteries can continue to be used (part number, capacity):

999.611.070.10, 70 AH AGM

The following Porsche batteries must be replaced (part number, capacity):

999.611.080.22, 80 AH

999.611.095.23, 95 AH

The following Porsche-AGM- must be replaced (part number, capacity):

999.611.080.10, 80 AH AGM

999.611.095.11, 95 AH AGM

- 10 Route the right line through the water box towards the wheel house, see picture.

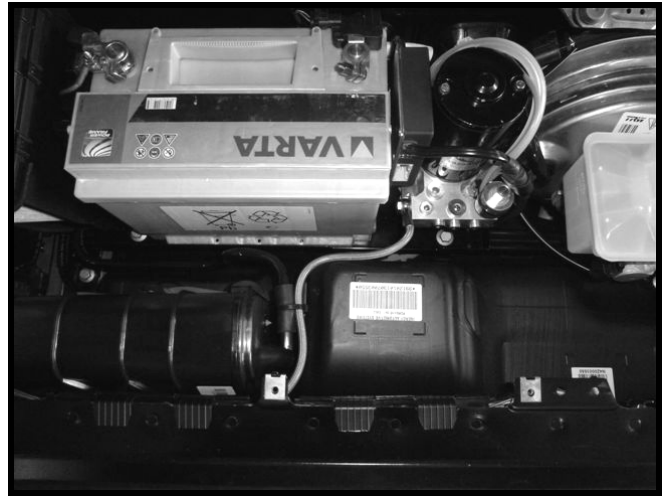


Fig. 30



**Read the assembly instructions for the Tirefit Kit carefully!**

- 11 Route the line in the existing cable guides.



Fig. 31

- 12 Route the line tension-free inside the wheel house.
- 13 The line has to be routed tension- and friction-free in every steering angle and in each suspension setting.



Fig. 32



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 14 Fix the line with edge-clips.



Fig. 33

- 15 Route the line tension-free to the Noselift cylinder.
- 16 The line has to be routed tension- and friction-free in every steering angle and in each suspension setting.



Fig. 34

- 17 Use the supplied gaskets as shown in the picture.

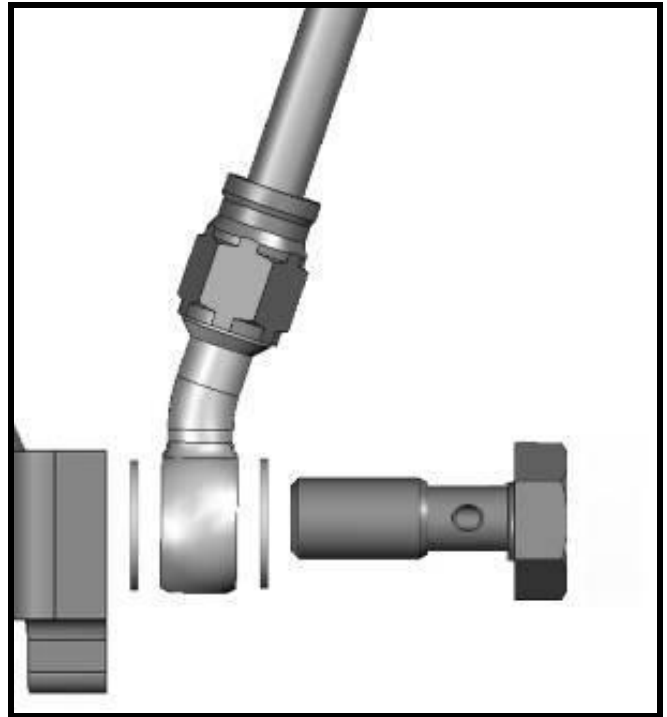



Fig. 35

-  The hydraulic lines must not be kinked or pinched. They must be routed in such a way that they do not chafe against other parts, overextend or sag in any driving or steering situation.

Please care for a sufficient loop-size before the final tightening of the hydraulic line. By choosing the size of the loop you need to make sure that the complete work area of the strut won't be kinked or bent.

-  **IMPORTANT:** Move wheels to the straight-ahead position.



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 18 Route the left line through the water box towards the wheel house, see picture.

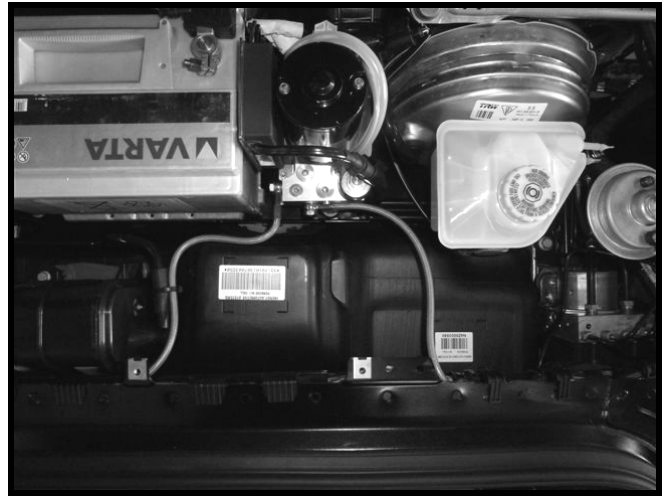


Fig. 36



**Read the assembly instructions for the Tirefit Kit carefully!**

- 19 Route the line in the existing cable guides.



Fig. 37





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 20 Route the line tension-free inside the wheel house.
- 21 The line has to be routed tension- and friction-free in every steering angle and in each suspension setting.

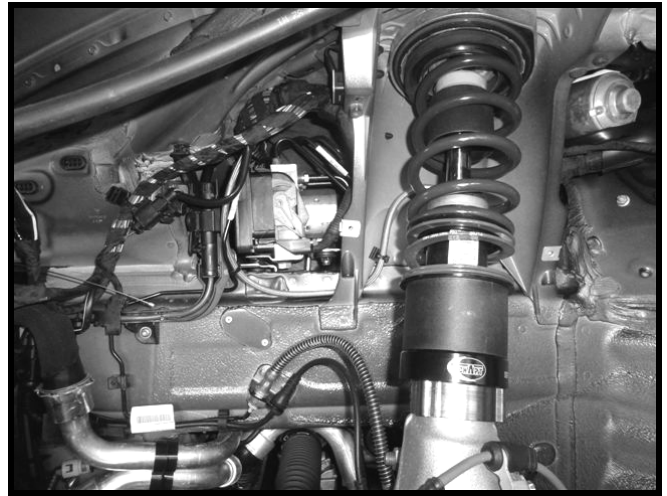


Fig. 38

- 22 Fix the line with edge-clips.



Fig. 39





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 23 Route the line tension-free to the Noselift cylinder.
- 24 The line has to be routed tension- and friction-free in every steering angle and in each suspension setting.

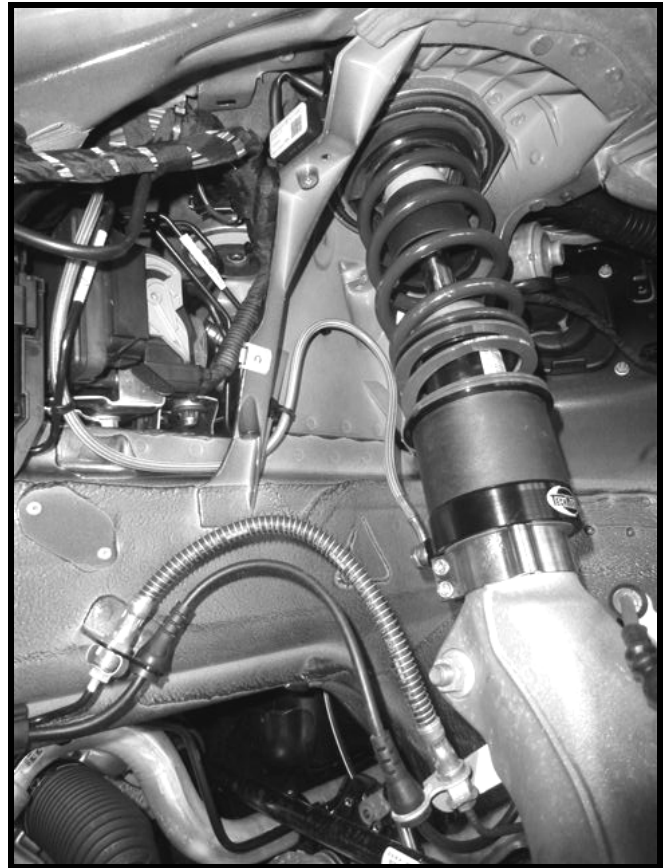


Fig. 40

- 25 Use the supplied gaskets as shown in the picture.

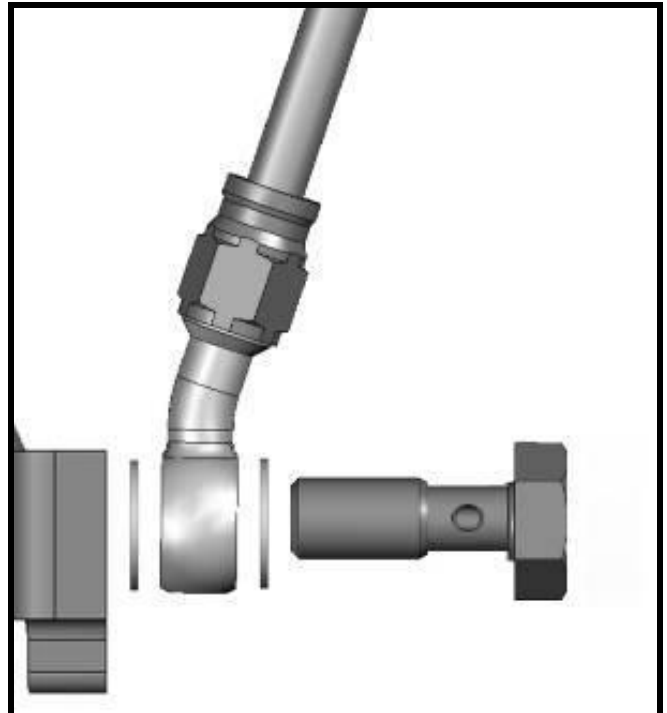


Fig. 41



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

-  The hydraulic lines must not be kinked or pinched. They must be routed in such a way that they do not chafe against other parts, overextend or sag in any driving or steering situation.

Please care for a sufficient loop-size before the final tightening of the hydraulic line. By choosing the size of the loop you need to make sure that the complete work area of the strut won't be kinked or bent.

-  **IMPORTANT:** Move wheels to the straight-ahead position!



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 6 Install electronic-kit

**i** Cables that are improperly routed or connected can cause malfunctions or damage to components. Correct cable routing and cable connection is the basic requirement for durable and fault-free operation.

- 1 Insert the control line into the TECHART control unit (see arrow) and lock the connector.

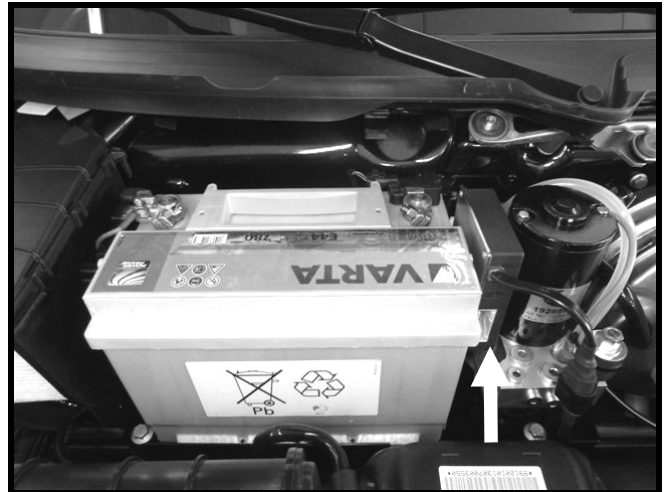


Fig. 42

- 2 Route the control line through the water box left parallel to the hydraulic line.



Fig. 43

- 3 Routing as shown in the picture.



Fig. 44

-  **Fix the connecting line with cable ties at the vehicle's wiring harness.**

- 4 Guide the control line through the rubber grommet into the passenger compartment. Seal the feedthrough with body-adhesive.



Fig. 45

- 5 Route the control line in the interior to the CAN-Gateway (left footwell).



Fig. 46

- 6 Unplug the compact plug CAN-Gateway and dismount the connector housing (see arrow).



Fig. 47



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 7 Remove Pin 15 (OG/GN) and Pin 5 (OG/BN) from the pin carrier with a suitable tool.

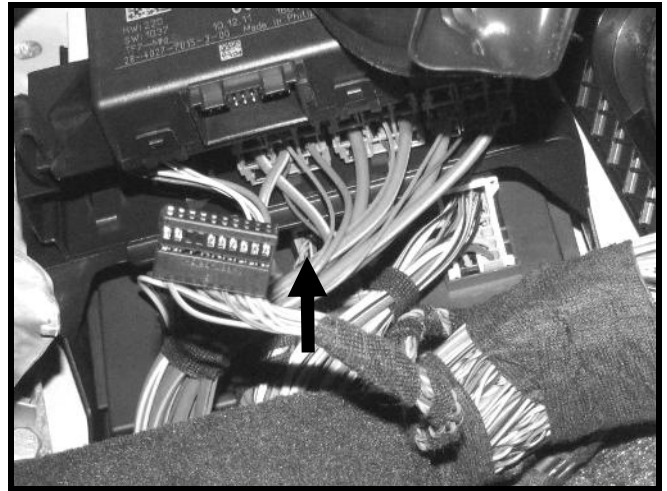


Fig. 48

- 8 For this press the detent with a needle or similar as exemplified shown on the picture.

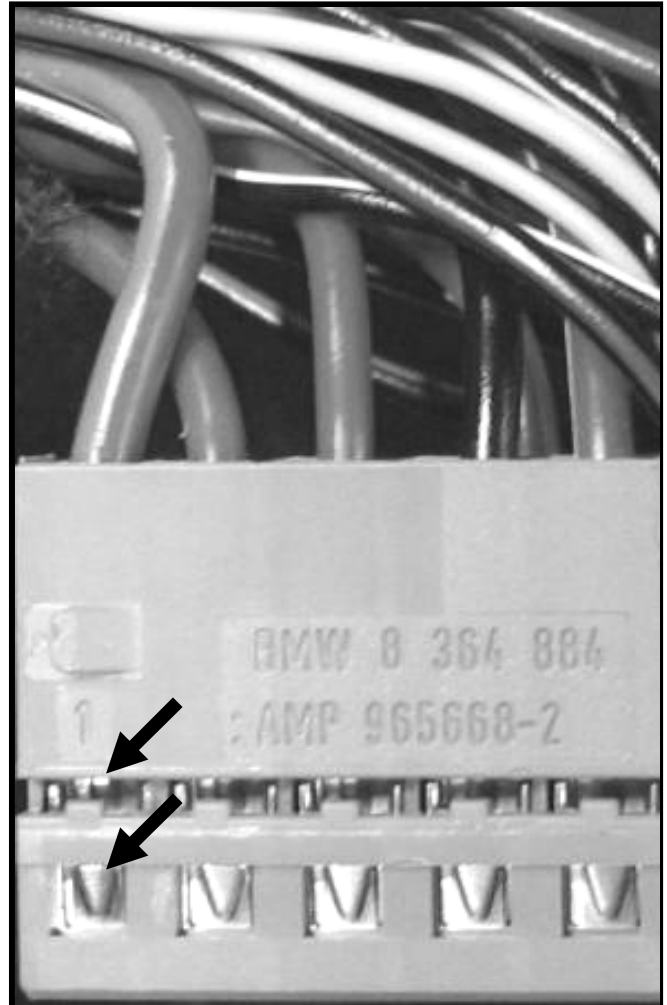


Fig. 49



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 9 Insert the unpinned cables to the supplied compact plug as follows. Connect Pin 15 (OG/GN) into the connector Pin 1. Connect Pin 5 (OG/BR) into connector Pin 2. Interlock the compact plug.

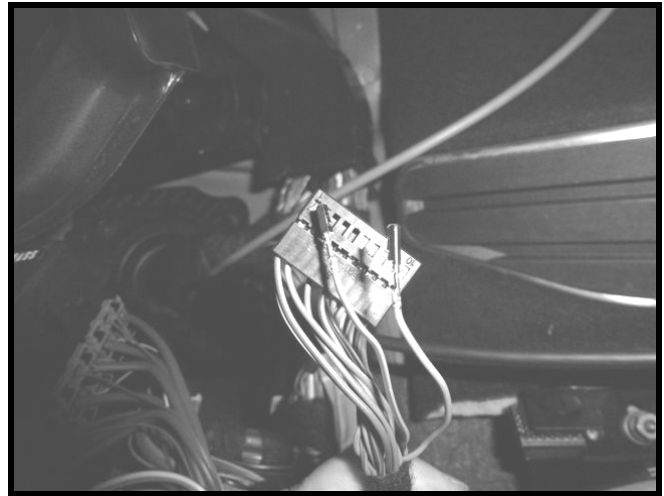


Fig. 50

- 10 Connect Pin 15 (OG/GN) into the connector Pin 1. Connect Pin 5 (OG/BN) into connector Pin 2. Lock the compact plug.

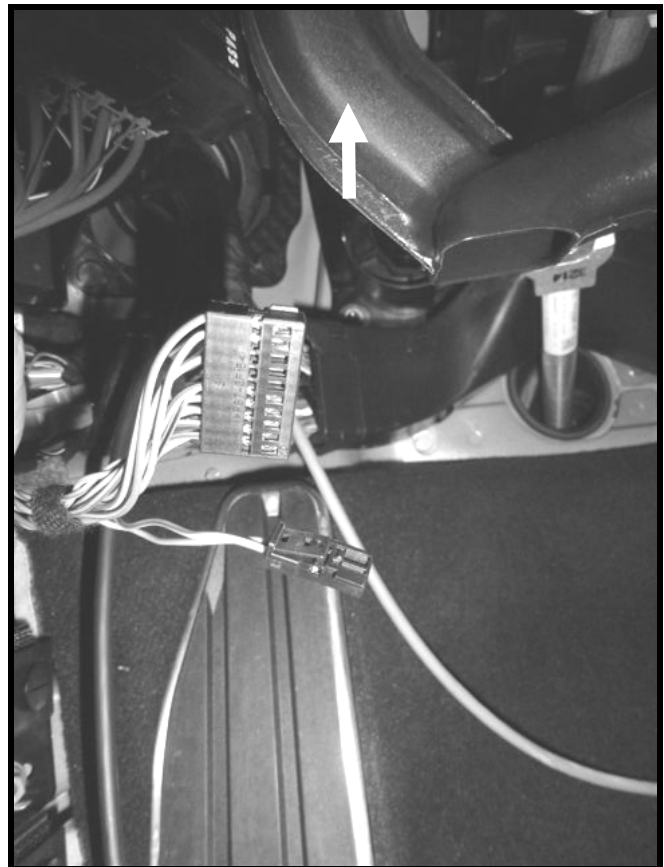


Fig. 51



- 11 Then connect the Pin 1 cable (WH/WH) from the Y-adapter to the available pin shaft 15 of the pin carrier CAN-Gateway, also connect the Pin 2 cable (BN/BN) from the Y-adapter to the available pin shaft of the pin carrier CAN-Gateway.

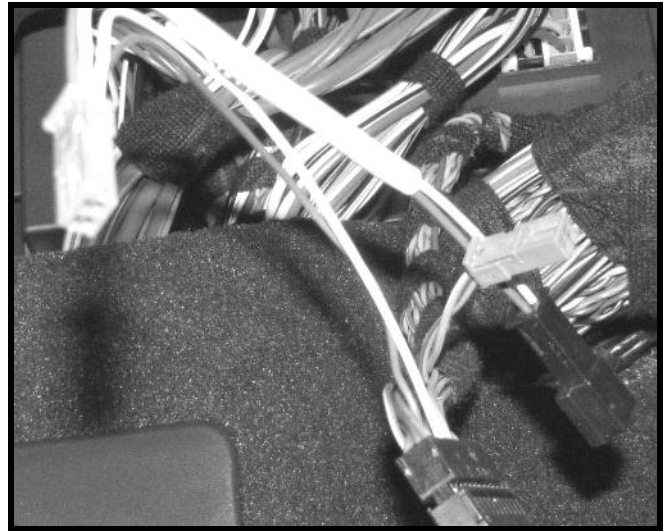


Fig. 52

- 12 Connect the Y-adapter with the control line and the original wiring harness.

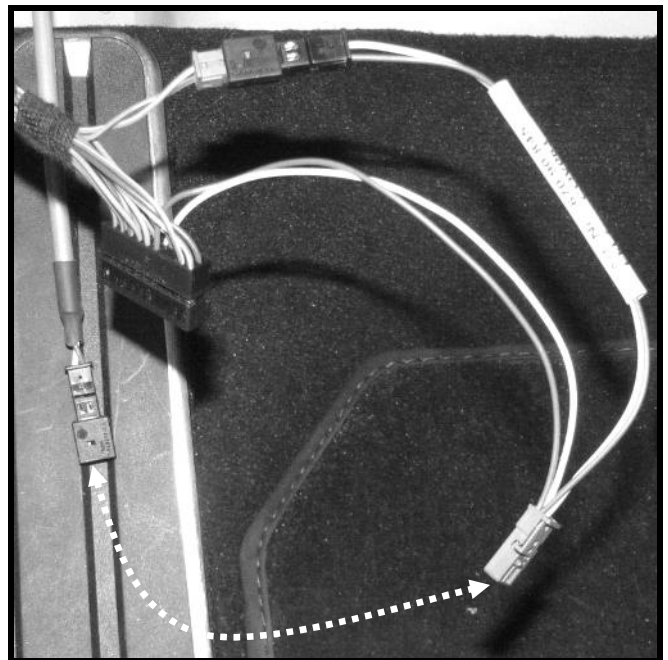


Fig. 53



Fix the connection line with cable ties to the car wiring harness.



- 13 Mount the CAN-Gateway compact plug housing to the pin carrier and insert the compact plug into the CAN-Gateway, then interlock.



Fig. 54

- 14 Route the 4-pole switch line below the center console to the ashtray unit.

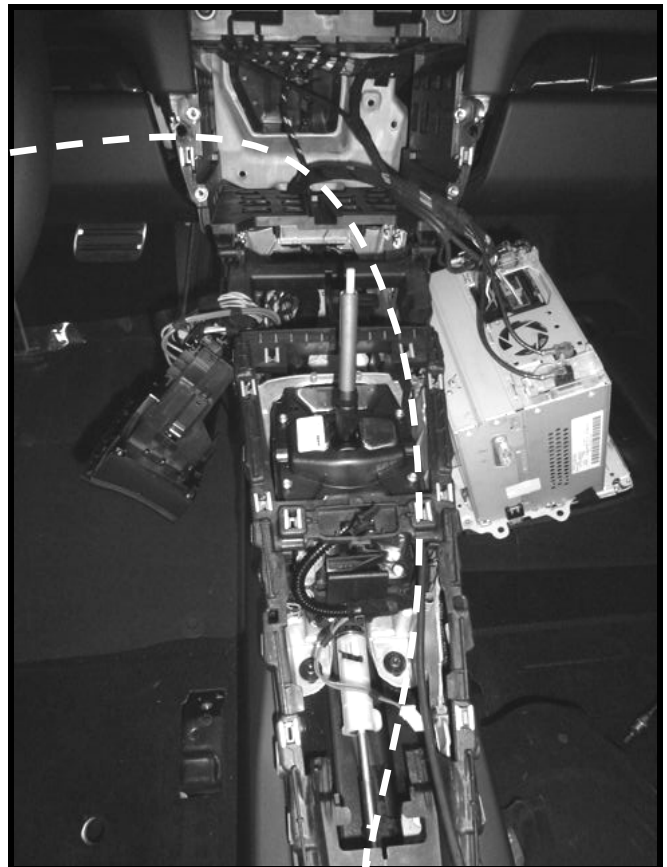


Fig. 55



Fix the connection line with cable ties to the car wiring harness.

- 15 Dismount the cigarette lighter completely.



Fig. 56

- i** Use the TECHART upgrade non-smoking-package +91.200.801.100 on vehicles with non-smoking-packages.

- 16 For that the cigarette lighter socket with the LED ring has to be removed and is no longer required.



Fig. 57

- 17 In exchange the supplied TECHART LED ring will be installed.

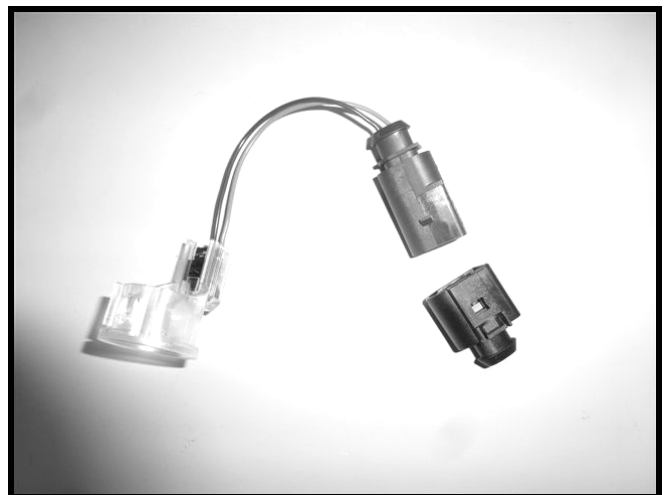


Fig. 58

- 18 For vehicles with the non-smoking package: Replace the center console cable loom with the supplied TECHART cable loom. Disconnect the cable loom below the PCM at the sectioning point (see arrow) then route and connect the new part according to the dismantled one.



Abb. 59

- 19 Unpin PIN A3 (GY/RD) and PIN A1 (BN/BN) at the compact plug cigarette lighter with a suitable tool.
- 20 PIN A2 (RD/RD) remains in the original plug and has no function anymore. Fix the original plug function-free with a cable tie to prevent rattling noises.



Fig. 60

- 21 Insert both unpinned lines into the supplied TECHART compact plug as follows:

- GY/RD to slot 1
- BN/BN to slot 2



Fig. 61



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 22 Connect the compact plug  
TECHART LED ring to the two-  
pole compact plug.

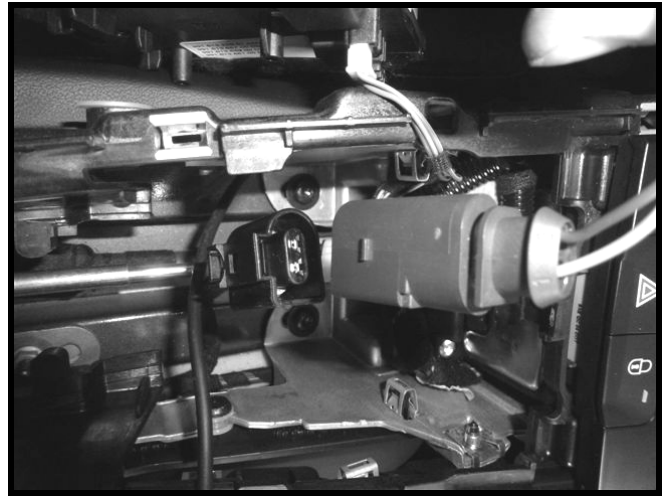


Fig. 62

- 23 Clip the LED ring ton the ashtray  
unit
- 24 Insert the ashtray unit into the  
center console and route the  
control line Noselift through the  
LED ring.

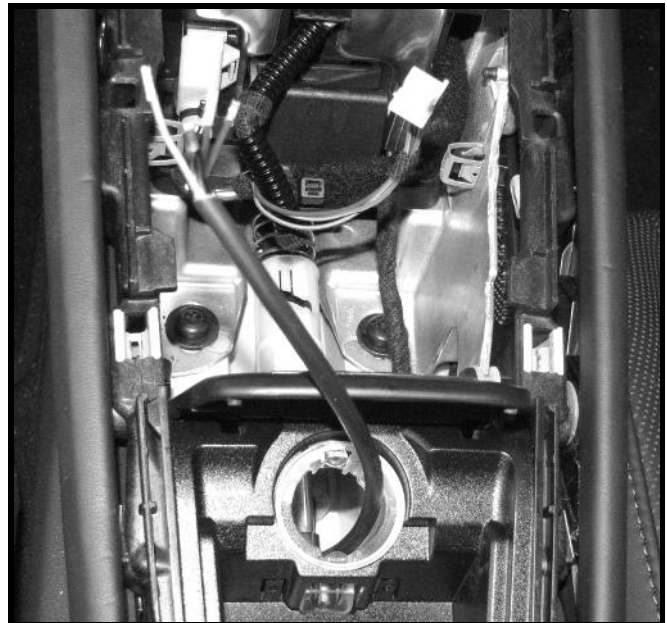


Fig. 63



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

25 Connect the cables as follows to the switch:

- Pin 3 BN/BN switch outlet
- Pin 4 RD/RD switch inlet
- + OG/OG LED Plus
- - BK/BK LED Minus

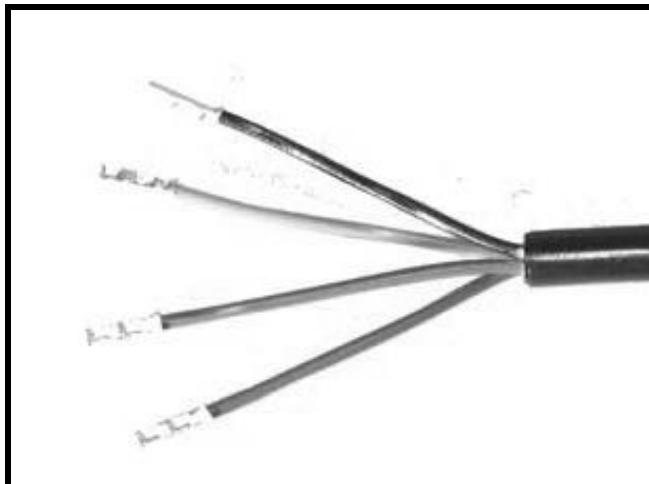


Fig. 64

26 Screw the switch into the adapter and insert the LED ring of the cigarette lighter base.



Fig. 65

27 Re-install the dismantled interior linings, the center console parts as well as the ashtray unit.



Fig. 66



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 7 Installation and connection of the power supply lines

- i** Cables that are improperly routed or connected can cause malfunctions or damage to components. Correct cable routing and cable connection is the basic requirement for durable and fault-free operation.

- 1 Screw the power supply line to both battery poles.



Fig. 67

- 2 For that use the existing stud bolt at the pole terminal.

RD/RD = +

BU/BU = -

- 3 Fix the fuse holder at a suitable place for that remove the protection foil from the adhesive base.

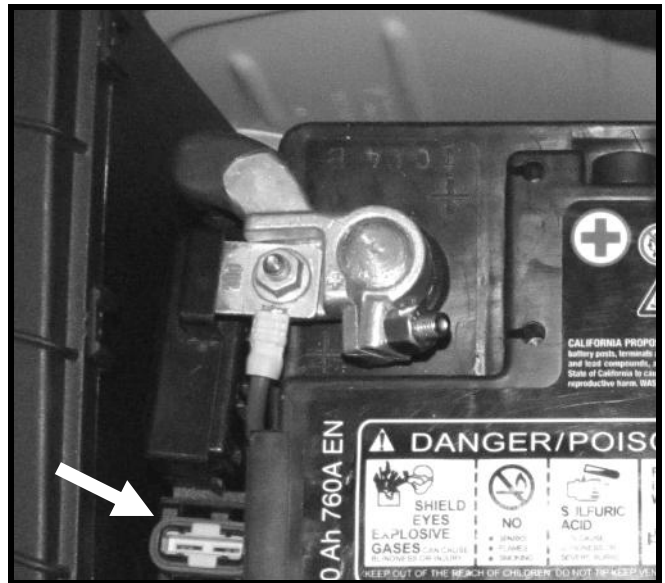


Fig. 68

- i** The bonding surfaces must be free from dust and grease!





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

- 4 Insert the compact plug power supply to the TECHART Noselift control unit (see arrow).



Fig. 69

-  Fix the connection line with cable ties to the car's wiring harness.





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 8 Initial start-up and operation of TECHART Noselift System



**Before initial start-up, a visual inspection of all hydraulic lines and power supply lines is recommended.**

- 1 Place vehicle on its wheels.
- 2 Replace stop plug from hydraulic fluid reservoir with the supplied oil dipstick.
- 3 Fill in the supplied fluid up to the upper marking of the oil dipstick.
- 4 Insert supplied 30A fuse.
- 5 Actuate TECHART Noselift switch (noise of hydraulic pump is audible) => Vehicle raises.
- 6 Lower vehicle by actuating TECHART Noselift switch again.
- 7 Raise and lower vehicle at least 10x. This procedure causes the hydraulic system to bleed itself automatically. Then check the oil level and, if necessary, fill up to the upper marking of the oil dipstick. Ensure that no foreign objects such as metal shavings or other contaminants enter the oil reservoir.
- 8 Lift vehicle on a suitable vehicle lift (position of TECHART Noselift System is irrelevant).



#### **IMPORTANT:**

**The TECHART Noselift System may only be actuated when the vehicle is on its wheels. Actuating the system on a vehicle lift, for example, (extended condition) can cause a defect in the lift cylinders.**

- 9 Perform another visual inspection of all threaded connections for leaks. The TECHART Noselift System must not be actuated under any circumstances.
- 10 After the inspection has been successfully performed, place vehicle on its wheels.



# **ASSEMBLY INSTRUCTIONS**

## **TECHART Noselift System**

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### **9 Final inspection**

- 1 Perform a general function test of the vehicle.
- 2 Read out and erase all fault memories with the PORSCHE system tester and/or rectify any faults.
- 3 Align and adjust vehicle geometry in line with the manufacturer's instructions.
- 4 Adjust headlamps.
- 5 Next, carry out a test drive, then check the fault memory again.



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 10 Tightening torques

Location	Description	Type	Basic value
Brake caliper to wheel carrier	M 12 x 1.5	Tightening torque	85 Nm
Piston rod to front axle supporting mount	M 14 x 1.5	Tightening torque	50 Nm
Piston rod to rear axle supporting mount w/o PASM	M 12 x 1.5	Tightening torque	60 Nm
Piston rod to rear axle supporting mount with PASM	M 12 x 1	Tightening torque	35 Nm
Control arm to ball joint	M 12 x 1.5	Tightening torque	75 Nm
Tie rod/linkage steering to wheel carrier	M 12 x 1.5	Tightening torque	75 Nm
Control arm – camber eccentric	M 12 x 1.5	Tightening torque	100 Nm
Diagonal link to control arm	M 14 x 1.5	Tightening torque	160 Nm
Suspension strut supporting mount to body, front axle	M 8	Tightening torque	33 Nm
Suspension strut supporting mount to body, rear axle	M10	Tightening torque	46 Nm
Anti-roll-bar mount to anti-roll bar	M 10 x 1.5	Tightening torque	46 Nm
Suspension strut to wheel carrier, front axle	M 12 x 1.5	Tightening torque	85 Nm
Suspension strut to wheel carrier, rear axle	M 12 x 1.5	Tightening torque	110 Nm
Wheel to wheel hub	M 14 x 1.5	Tightening torque	160 Nm
Lift cylinder banjo bolt	M 10 x 1	Tightening torque	20 Nm
Drive shaft to hub (C4), replace always.	M 22 x 1.5	Tightening torque	460 Nm



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### IV Further Information


#### 1 Adjustment values for vehicle height

-  The following values refer to the curb weight i.e. full fuel tank/fluids, vehicle with tools but without driver or additional weights.

Table of vehicle height wheel center to fender fold:

718

Axle	Vehicle height in mm	
FA	$S_{rm} = \text{min. } 335 \text{ mm}$	
RA	$S_{rm} = \text{min. } 340 \text{ mm}$	

-  Permissible lateral deviation of vehicle: Max. height difference between left and right = 5 mm per axle.



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### Measurement of the vehicle's height:

The measurement  $S_{rm}$  is between wheel center and fender fold. TECHART recommends to measure as follows.



### Height measurement report chassis

Vehicle		License plate		Inspector	
Date		Kilometer reading		VIN:	
Tank level		Order no.			

### FL

Air-pressure		bar
Tire		
S <sub>1</sub>		mm
S <sub>2</sub>		mm
S <sub>rm</sub>		<b>mm</b>
S <sub>asp</sub>		mm

### FR

Air-pressure		bar
Tire		
S <sub>1</sub>		mm
S <sub>2</sub>		mm
S <sub>rm</sub>		<b>mm</b>
S <sub>asp</sub>		mm

### HL

Air-pressure		bar
Tire		
S <sub>1</sub>		mm
S <sub>2</sub>		mm
S <sub>rm</sub>		<b>mm</b>
S <sub>asp</sub>		mm

### HR

Air-pressure		bar
Tire		
S <sub>1</sub>		mm
S <sub>2</sub>		mm
S <sub>rm</sub>		<b>mm</b>
S <sub>asp</sub>		mm

Measure S<sub>1</sub> and S<sub>2</sub>. In this case S<sub>rm</sub> will be calculated with the following formula.  
S<sub>asp</sub> is for the sake of completeness.

$$S_{rm} = (S_1 - S_2) / 2 + S_2$$

S<sub>1</sub> = Distance fender fold to rim flange bottom  
S<sub>2</sub> = Distance fender fold to rim flange top  
S<sub>rm</sub> = Distance fender fold to rim center  
S<sub>asp</sub> = Distance fender fold to asphalt



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 2 Technical Data

Operating voltage 11.5 - 15 Volt DC

Power consumption max. 40 A (activated), < 20 mA (not activated)

Operating temperature -20°C to +75°C

Operating pressure 90 - 120 bar (vehicle dependent)

Weight 5.4 kg empty

Dimensions (L/W/H) 430 mm / 185 mm / 230 mm



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 3 Maintenance

The TECHART Noselift System is largely maintenance free. However, the following operations have to be performed regularly:

- Check level of hydraulic oil twice a year. The oil level should be between the upper and lower marking.
- Check hydraulic lines and connections for damages and leaks once a year.
- An oil change is not necessary.

### 4 Notes on hydraulic oil

The TECHART Noselift System is supplied with hydraulic fluid (separate). After installing the lift cylinders and hydraulic lines, the TECHART Noselift System must raise and lower the vehicle at least 10 times. The air is forced out of the hydraulic circuit during this procedure. Then check the oil level and, if necessary, fill up to the upper marking of the oil dipstick. Ensure that no foreign objects such as metal shavings or other contaminants enter the oil reservoir.

If the system is ever removed, the hydraulic line must be disconnected at the lift cylinder. Only a small quantity of hydraulic oil then escapes from the line. Collect the oil in a suitable clean container. Make sure that the reservoir is oil resistant. If the hydraulic oil is reused, it must be filtered using a filter suitable for hydraulic oil when it is added to the oil reservoir. If new oil is used, the old oil fluid must be disposed professionally.





# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 5 Operating framework and self-help

#### 1. Diagnosis via LED status

##### LEDs at the control unit

- **LED red: Power.** Is lit as soon as the control unit is turned on. Turns off as soon as the control unit shuts off. If no CAN Bus is recognized the control unit turns off after 2 minutes.

The LED does not light up at all -> check the power supply.

The LED lights up for about 2 minutes -> check CAN Bus wiring.

- **LED blue: CAN communication.** Is lit as soon as about 2.5V is attached to the CAN input.

It does not check the correct polarity. If the CAN voltage is missing the control unit turns off after 2 minutes.

The LED does not light up -> check the CAN Bus wiring.

- **LED green: Status push-button.** Is lit as soon as the push-button sends an impulse.

The LED does not light up when using the push-button -> check the wiring and function of the push-button.

##### LED push-button, passenger compartment

- **LED red, push-button:**
  - Is flickering after pressing the Noselift until the final position is reached.
  - Lights up permanently as long as Noselift remains in final position.
  - Flashes during the release until zero position is reached and then goes out.
  - Is flickering after pressing (without the pump running) in case of a failure which leads to the fail-safe-mode, but only when fail-safe-mode is activated immediately. If the push-button is pressed at a later time during the fail-safe-mode the push-button will not flicker anymore since the control unit will be deactivated during the fail-safe-mode.
  - LED is flickering / no Noselift function -> reset the control unit. For that remove the fuse for one minute to interrupt the power supply of the system.



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

### 2. Operating framework fail-safe mode



This system has a set of safety functions which prevent damages to the vehicle and the environment.

#### Undervoltage

To grand a safe engine start the Noselift system turns off, as soon as the on-board voltage declines below 9V. For example, if the Noselift is used with a discharged or weak battery without engine running (without generator load), the Noselift control unit will turn off.

The LED push-button flickers. To restart the system a reset has to be performed, for that the system has to be disconnected from the power supply for one minute (pull fuse). If this occurs again check the on-board power supply and repair, if necessary.

Please note: On modern vehicles the generator charging might start after a few minutes of driving to fulfill the strict exhaust-regulations.

#### Overload protection

To prevent too high currents and therefore cause the increase of temperature the system turns off when reached a current flow of over 40A. This can happen when the lift cylinder or the pump is mechanically rough-running, the viscosity of the hydraulic oil is extremely thick (extreme low outdoor temperature) or the pump has an electronic damage. On extreme high outdoor temperatures (e.g. on race track operations) the inner friction of the lift cylinders increases.

The LED push-button flickers. To restart the system a reset has to be performed, for that the system has to be disconnected from the power supply for one minute (pull fuse). If this occurs again check the current flow to the hydraulic pump and repair the defective component, if necessary.

#### Underload protection

If the pump turns to easily the system will assume a leakage of the hydraulic system and the system switches to fail-safe-mode to prevent that the hydraulic oil will be hoisted from the system to the environment. Also a not sufficiently aerated system can cause a fail-safe mode.

The LED push-button flickers. To restart the system a reset has to be performed, for the system has to be disconnected from the power supply for one minute (pull fuse). Check the system for leak-tightness and seal or aerate the system, if necessary.



# **ASSEMBLY INSTRUCTIONS**

## **TECHART Noselift System**

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### **6 Disposal information**

- Electronic components and hydraulic components contain both environmentally harmful and recyclable components.
- Dispose of the components in an environmentally friendly and proper manner in accordance with legal requirements.



# ASSEMBLY INSTRUCTIONS

## TECHART Noselift System

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Part No. 091.200.800.099