

ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

Part-no. 09Y.300.680.009 for Cayenne Turbo E3 as of MY18

Version 01 – 01/2020





ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

Content

I.	Important safety information	3
II.	Preparation	4
III.	Installation	6
1	Prepare vehicle	6
2	Dismantle original parts	7
3	TECHART CAN wiring harness	9
4	TECHART Plug & Play wiring harness	14
5	Function check	21

I Important safety information

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

	<p style="text-align: center;">WARNING</p> <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>	
	<p style="text-align: center;">WARNING</p> <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>	
 	<p style="text-align: center;">CAUTION</p> <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>	
	<p style="text-align: center;">CAUTION</p> <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>	
	<p style="text-align: center;">NOTICE</p> <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>	



ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

I. Preparation

Number of people required



At least two people are required to install this product.

Help and support

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



ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

Check TECHART parts kit for completeness

Quantity	Part number	Part designation
1	09Y.300.680.009	Power-kit T2 Cayenne Turbo E3 as of MY18
Consisting of:		
1	000.300.101.105	Techtronic auxiliary control unit ET6
1	071.300.100.201 071.300.100.200-02	Cable set Techtronic
1	071.300.100.200-02	PIN-Set Cayenne 9Y0
1	000.300.100.OKT	Octane 100 decal
1	09Y300680200	Turbo charger right cyl. 1-4
1	09Y300680201	Turbo charger left cyl. 5-8
1	09Y310600009	Rear muffler "Sport" valve controlled
1	09Y310800009	Exhaust tail pipes Carbon
1	09Y300680102	Assembly kit Turbo charger
Consisting of:		
2	PAB25372500	Clamp
2	9A725311500	Seal
2	9A714503900	Seal
2	9A725372502	Clamp
2	N 90344501	O-Ring
2	9A700653700	O-Ring
1	9A700875500	O-Ring
1	N 90925001	O-Ring
6	9A700653700	O-Ring
1	9A700875500	O-Ring
1	N 90925002	O-Ring
2	9A700653700	O-Ring
2	9A700875500	O-Ring
1	95810453600	Seal
2	PAB25311500	Seal
6	N 91130802	Hexagon nut

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 Power-Kit 09Y / T2

II. Installation

1. Prepare vehicle

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

Please read the assembly instructions thoroughly and observe the specified procedure and instructions. Due to the technical complexity we recommend to let this installation to be carried out solely by an authorized partner. We can only grant guarantee if the installation has been done correctly.

In respect to the driving safety one should inform the customer that the vehicle is equipped with a power-kit.

2. Dismantle original parts

1. Set the vehicle on a service lift. (turn off the level regulation)
2. Disconnect the battery.
3. Exchange the turbo charger according to the manufacturer's instructions.
4. Detach the front left wheel.
5. Dismantle the driver's door to reach access to the A-pillar.
6. Remove the left inner wheel arch.
7. Remove the rubber stop at the A-pillar and the panel at the fender to the A-pillar.

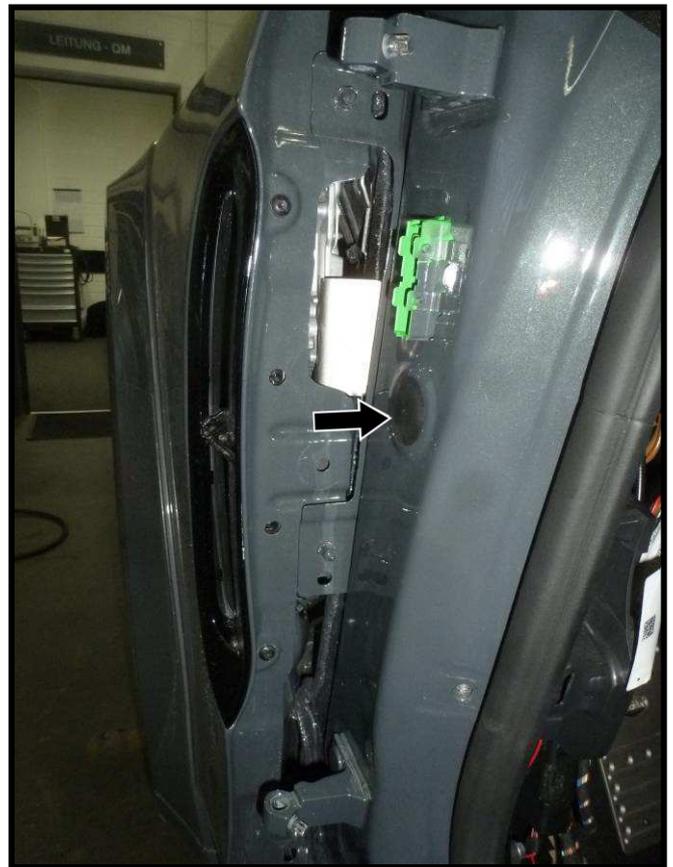


Fig. 01

8. Dismantle the engine compartment cover entirely.



Fig. 02

9. Dismantle the door entry guards entirely.



Fig. 03

10. Remove the A-pillar panel and unplug the green compact plug.



Fig. 04

3. TECHART CAN wiring harness

1. The TECHART PIN-Set Cayenne 071.300.100.200-02 will be pinned into the green compact plug. For this remove the lock (violet) at the green plug.
2. Remove the CAN cable from the plug and connect according to the wiring diagram (see fig. 06).
3. Unpin cable D1 (PK) from the compact plug and pin into the TECHART plug Pin 1.
4. Pin in the blue TECHART cable into the free pin shaft D1.
5. Proceed the same way on Pin D2 (OG/BN) and pin the red TECHART cable into the free pin shaft D2.
6. After that close the lock of both compact plugs (violet).
7. Connect all compact plugs.

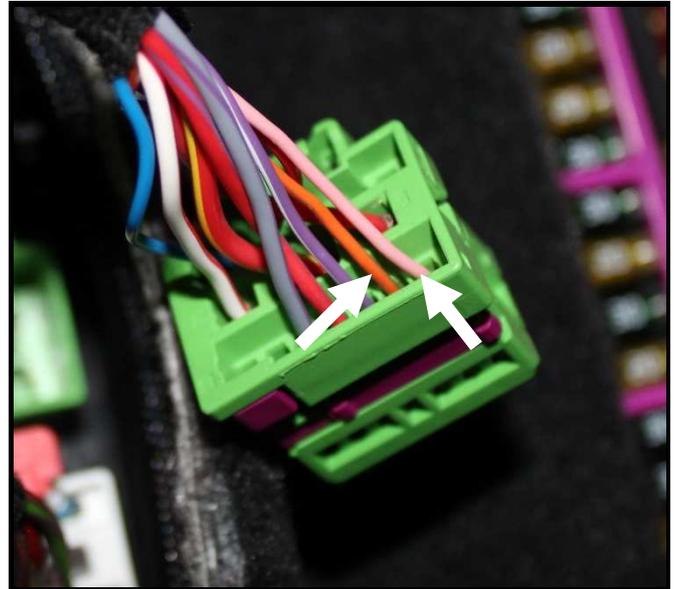


Fig. 05

8. Wiring diagram

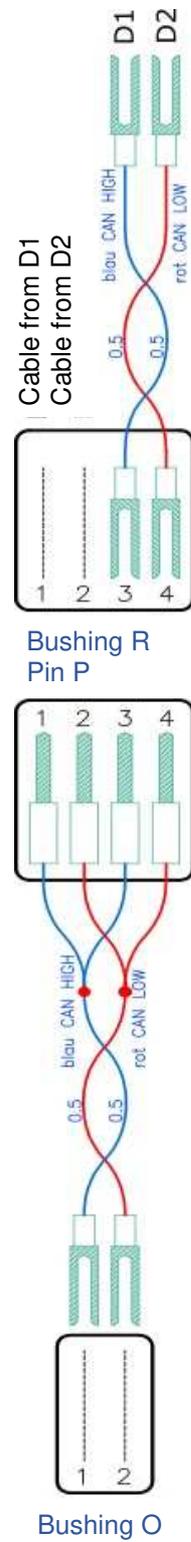


Fig. 06

9. Create a breakthrough ($\varnothing = 5\text{mm}$) at the dismantled rubber stop.



Fig. 07

10. Route the TECHART wiring harness through the A-pillar and through the breakthrough at the rubber stop from the inside to the outside.

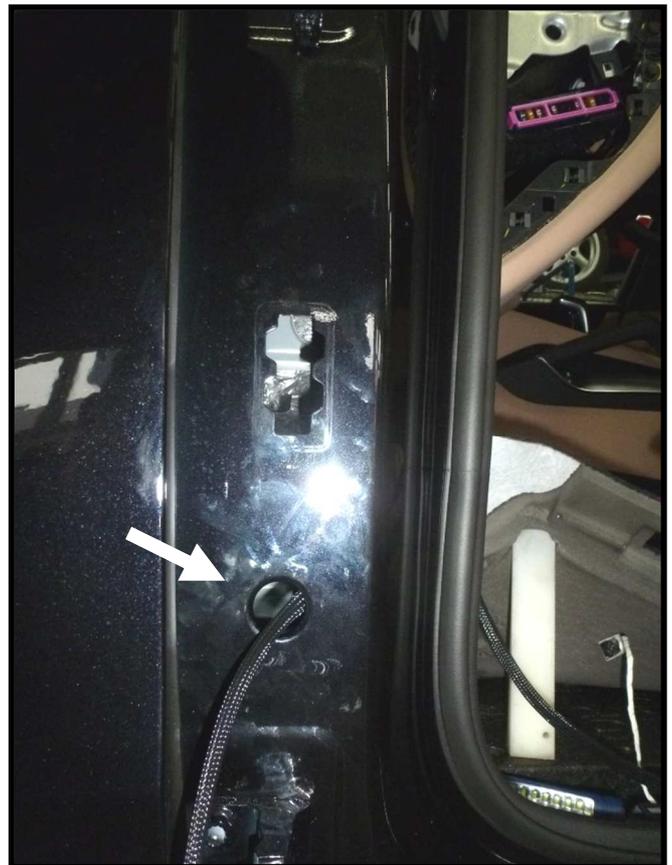


Fig. 08



ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

11. Route the TECHART wiring harness into the wheel house.



Fig. 09

12. Route the TECHART wiring harness parallel to the original wiring harness up to the engine control unit (DME) and fix it with cable ties.



Fig. 10



ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

13. Pin both cable endings into the 3-pole plug.

Pin 1 = blue
Pin 2 = red

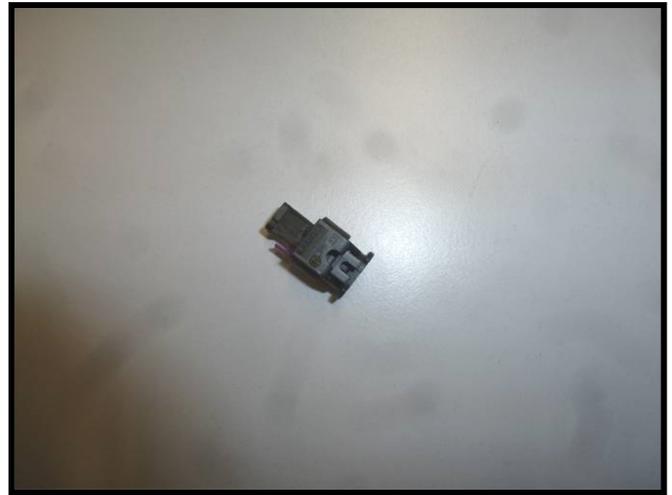


Fig. 11



ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

4. TECHART Plug & Play wiring harness

1. Install the Plug & Play wiring harness.



Fig. 12

2. Route the TECHART wiring harness starting with the big compact plug from the front left along the engine's front side to the right.

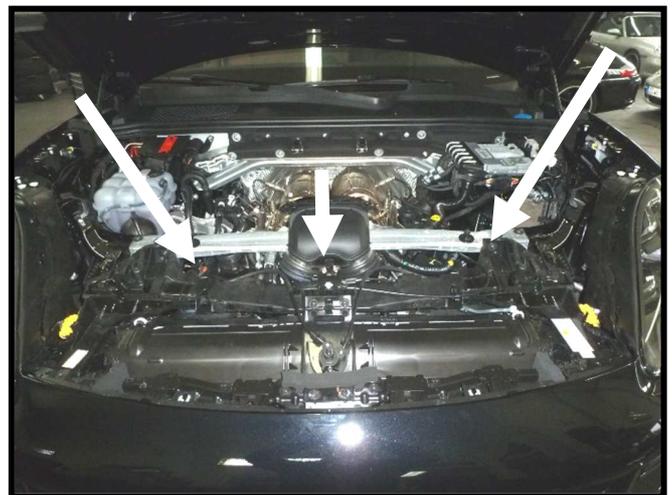


Fig. 13



ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

3. Remove the compact plug of the boost pressure in front of the throttle and insert it at the TECHART wiring harness into the mating plug, which is marked with "boost pressure in front of throttle valve". Then attach the compact plug "boost pressure in front of throttle valve" of the TECHART wiring harness to the sensor.



Fig. 14



Fig. 15



ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

4. Remove the compact plug of the boost pressure sensor after the throttle and insert it at the TECHART wiring harness into the mating plug, which is marked with "boost pressure behind throttle valve". Then attach the compact plug "boost pressure behind throttle valve" of the TECHART wiring harness to the sensor.

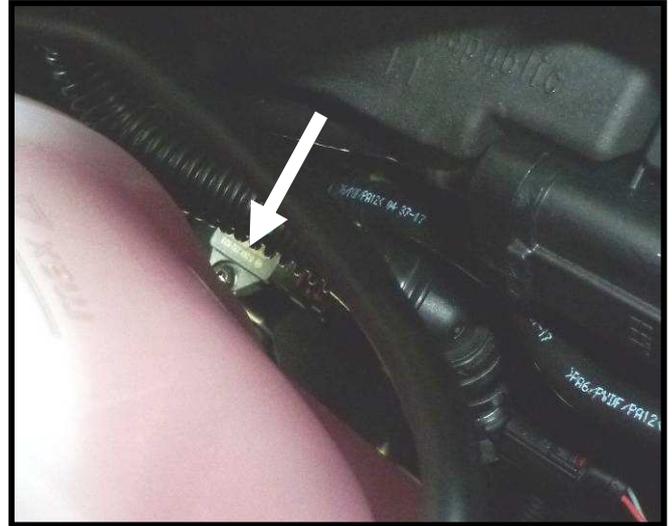


Fig. 16



Fig. 17

5. Remove the compact plug of the rail pressure sensor and insert it at the TECHART wiring harness into the mating plug, which is marked with "rail pressure". Then attach the compact plug "rail pressure" of the TECHART wiring harness to the sensor.



Fig. 18

6. On bank 2 work according to point 3 to 5.

In front of throttle valve

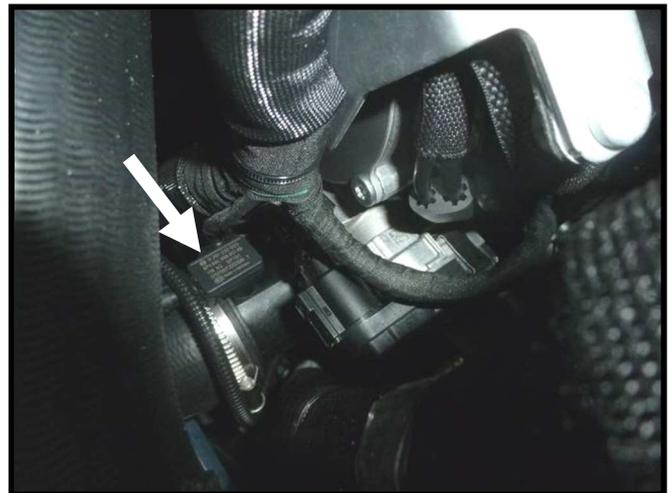


Fig. 19

Behind throttle valve



Fig. 20

Rail pressure



Fig. 21

7. Mount the positive-cable with the fuse holder to the positive-distributor. From there route it to the Techtronic and insert into the 3-pole plug, Pin 3.



Fig. 22

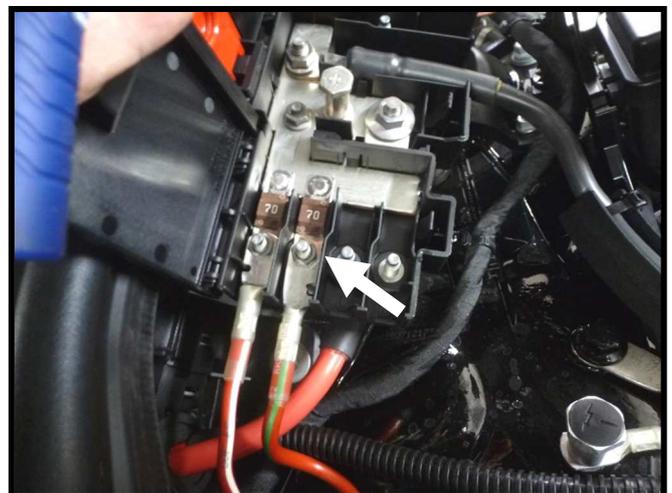


Fig. 23

8. Fasten the TECHART Techtronic module with the supplied bracket
9. Attach the ground cable to the connection of the bracket (see arrow fig. 26)

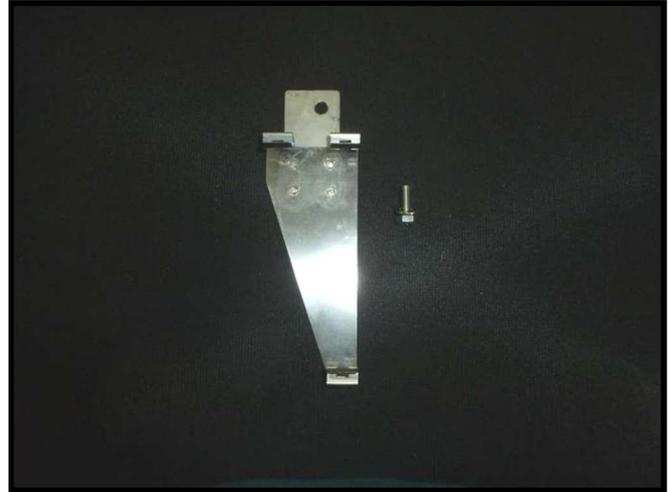


Fig. 24



Fig. 25

10. Fix both TECHART wiring harnesses with cable ties. Care for a tension-free routing and sufficient clearance to all rotating, sharp-edged or hot parts.



Fig. 26



ASSEMBLY INSTRUCTIONS

TECHART Power-Kit 09Y / T2

11. Attach the supplied 100-Octane-decal to the fuel cap in exchange of the original octane decal.



Fig. 27

5. Function check

1. Check if all components are carefully installed and reliable fastened.



Fig. 28

2. Turn the ignition on.
3. With the different colors of the LEDs various operational states are shown:

LED red: ignition off or the signals are not recognized completely.

LED green: all signals recognized, tuning inactive

LED blue: engine warmed-up, sport-mode recognized, tuning activated



Fig. 29

i The LED status “blue” will be reached after a short drive with permanent engine running.

4. Install dismantled covers as well as the driver’s door.
5. Perform a test drive and read out all fault codes.

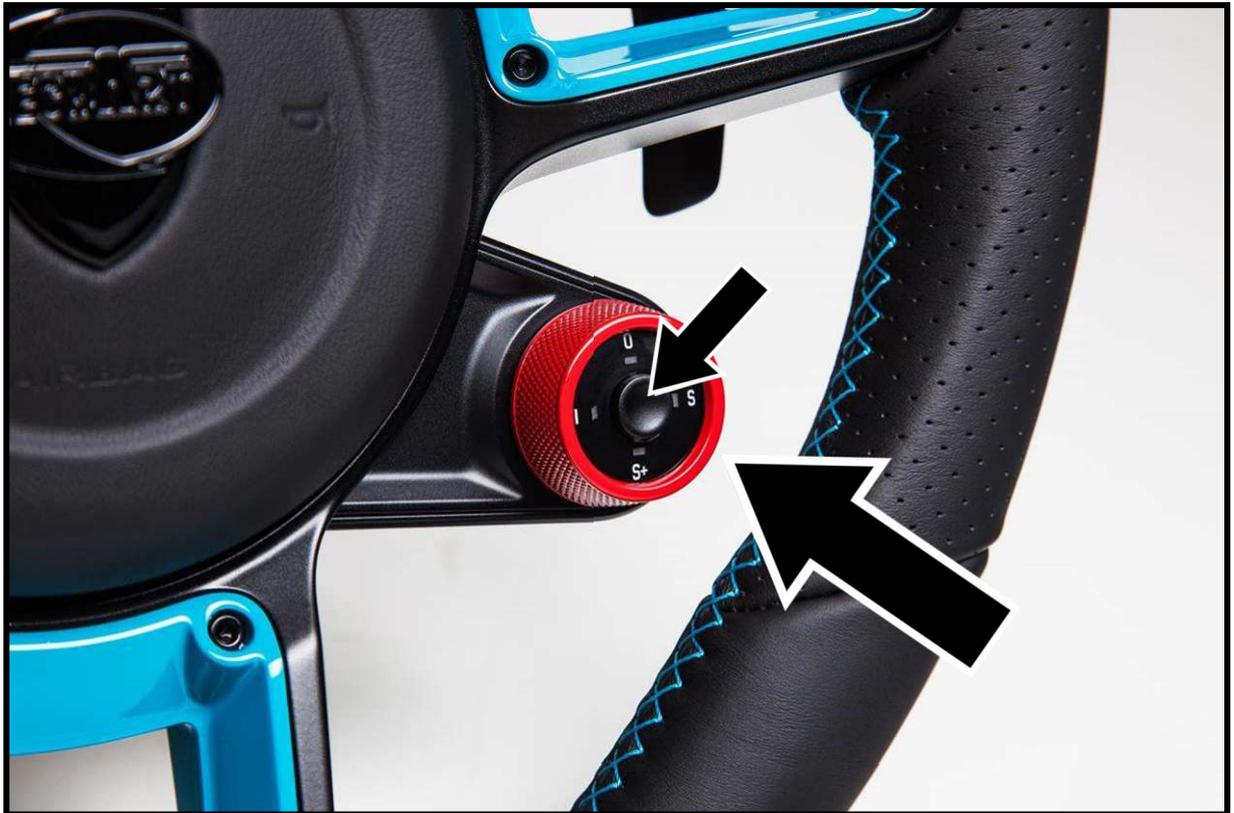


Fig. 30

- i** The activation of the power increase will be effected by the travel mode-switch at the steering wheel. If the sport-/sport plus mode is not chosen or the sport response button at the normal mode was not pressed then the engine will run with the standard power.
- i** Please consider that the power values of the Techtronic power increase will only be reached with an activated sport mode, operating temperature and a fuel quality of 100 octane.

If these requirements are complying then the power increase will be activated progressively.



ASSEMBLY INSTRUCTIONS

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