



ASSEMBLY INSTRUCTIONS

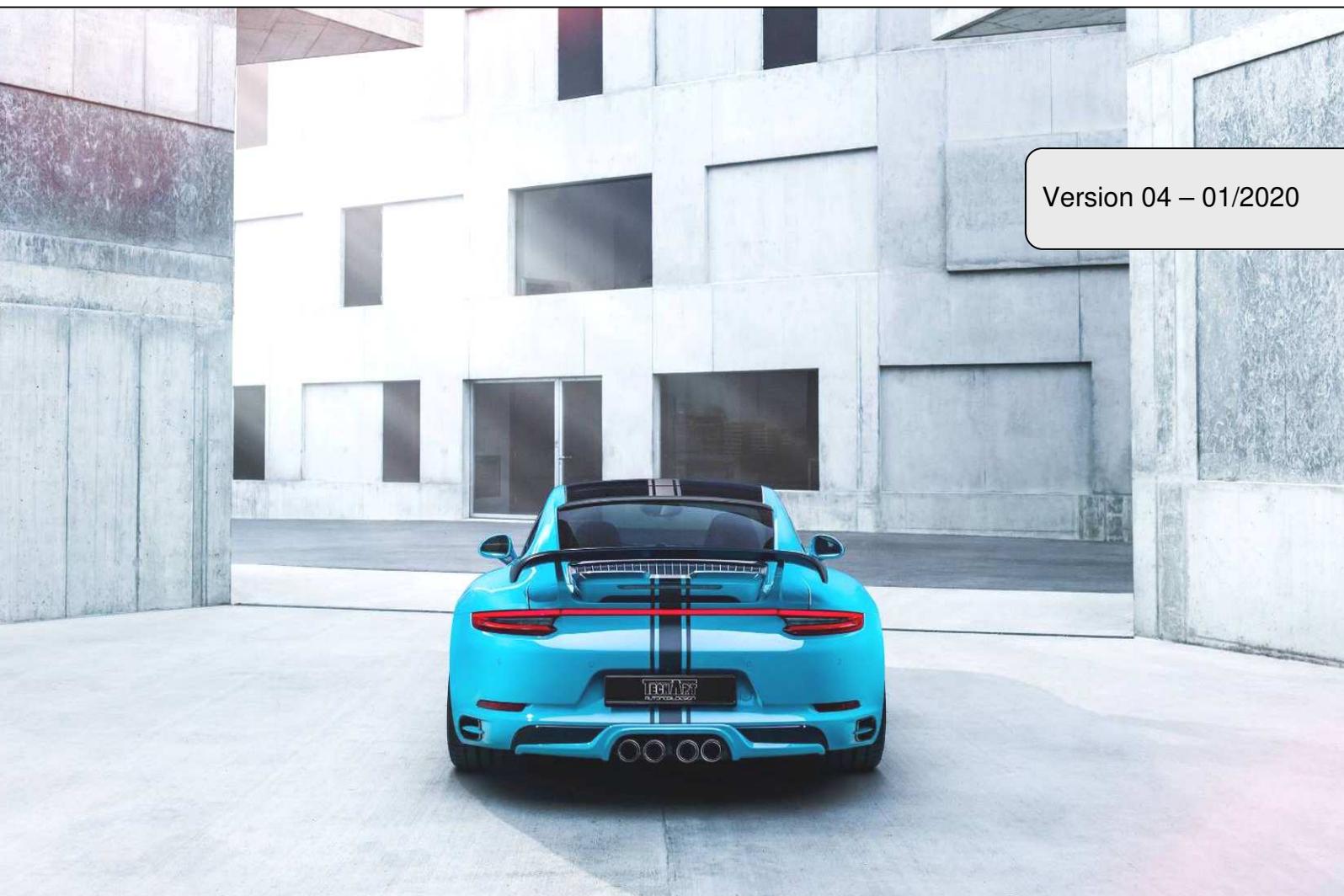
TECHART Valve Exhaust System “Racing”

for 991 Carrera S MY 17 with optional sport exhaust system

Part-no. 091.310.500.009

Exhaust system “Racing” valve controlled, centered outlet

Version 04 – 01/2020





ASSEMBLY INSTRUCTIONS

TECHART valve exhaust system "Racing"

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ASSEMBLY INSTRUCTIONS

TECHART valve exhaust system "Racing"

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/electronics 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> | |



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TECHART valve exhaust system "Racing"

II 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





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TECHART valve exhaust system "Racing"

Check TECHART parts kit for completeness

| Quantity | Part number | Part name |
|----------------|------------------|--|
| 1 | 091.310.500.009 | Valve exhaust system "Racing" for 991 Carrera S MY17 |
| Consisting of: | | |
| 1 | 091.310.540.100 | Muffler "Racing" 4-pipe |
| 2 | 091.310.540.200 | Tail pipe carbon matt |
| 2 | 091.310.540.300 | Tail pipe carbon matt "TECHART" logo |
| 40cm | 000300VT4/2.0 | Vacuum hose |
| 40cm | 000300872000 | Fiber glass hose 12mm |
| 1 | 091.100.512.500 | Tail pipe panel |
| 2 | 0039003.9X161025 | Sheet metal screw fillister head with flange 3.9x16 |
| 4 | 000.910.541.090 | One ear clamp A2-B7,4-D9-(7-8.5) |
| 1 | 0009015002502 | Hose connector 4mm straight |

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.



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TECHART valve exhaust system "Racing"

III Installation

1 Prepare vehicle

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

- i** TECHART recommends reading through the assembly instructions completely prior to the start and plan each working step in such way that there will be an ideal accessibility granted to each installation space. E.g. it might be reasonable to install the vacuum before the new rear muffler will be installed, which otherwise could hinder the accessibility to this installation space.

- 1 Raise vehicle at the factory-fitted jacking points.



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TECHART valve exhaust system "Racing"

2 Remove original parts



- 1 Extend the rear wing.
- 2 Dismantle the rear apron, bumper beam, intercooler and the rear muffler according to manufacturer's instructions.
- 3 TECHART recommends to dismantling only the left catalytic converter and remove the muffler towards the left. In case that the rear muffler can not be installed stress-free then one must dismantle both catalytic converters, assemble the complete unit and then reinstall into the vehicle.



The rear muffler is no longer required.



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TECHART valve exhaust system "Racing"

3 Install TECHART parts

3.1 Install vacuum system

- 1 Remove the original steel braided vacuum lines and replace them with the supplied vacuum lines.

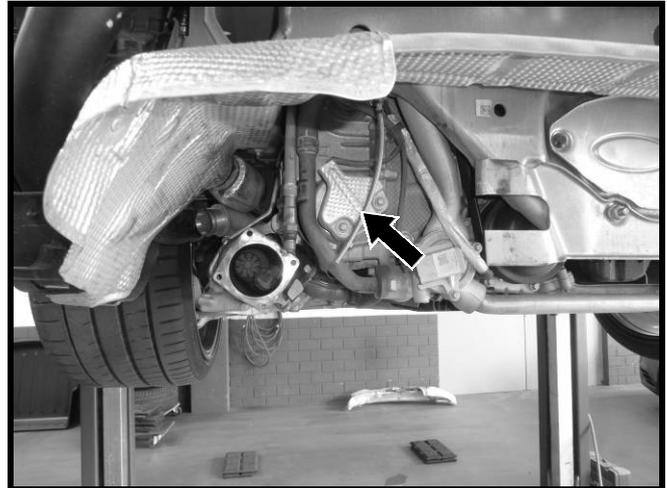


Fig. 01

- 2 Then slide the supplied heat protection hose over the vacuum lines and mount the with the one ear clamp to the vacuum actuator..

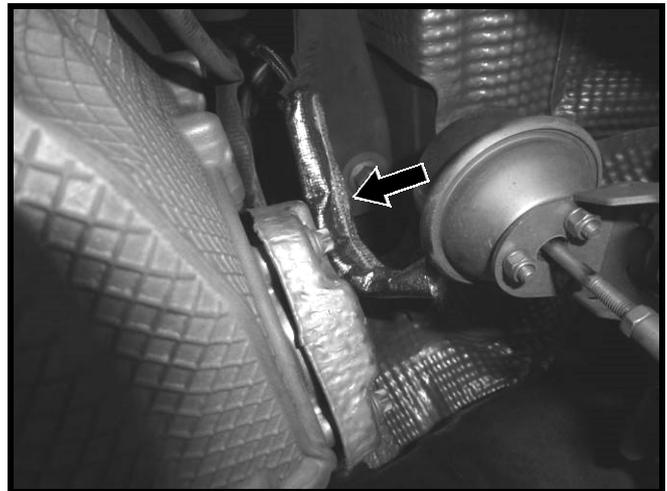


Fig. 02

i Care for sufficient clearance to hot and or rotating parts as well as of tension-free routing when routing the vacuum line.



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TECHART valve exhaust system "Racing"

3.2 Install TECHART valve exhaust system



- 1 Position the TECHART rear muffler 091.310.540.100 (1) in the vehicle, take the original tightening straps and catalytic converters from the vehicle, install and align them.



On vehicles with OPF: turn the original tightening straps in such way that the fixing points face to the front driving direction (clearance to the rear apron).

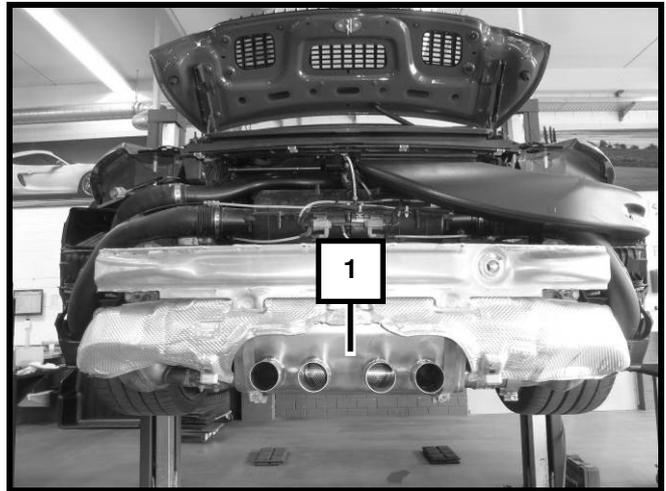


Fig. 03

- 2 Apply all hexagon nuts (999.084.203.01) as well as the screws of the heat protection plate and align the retaining clamp between the catalytic converters (2) and the TECHART valve system.
- 3 Install intercooler.
- 4 Attach TECHART tail pipes.
- 5 Check the alignment of the system.

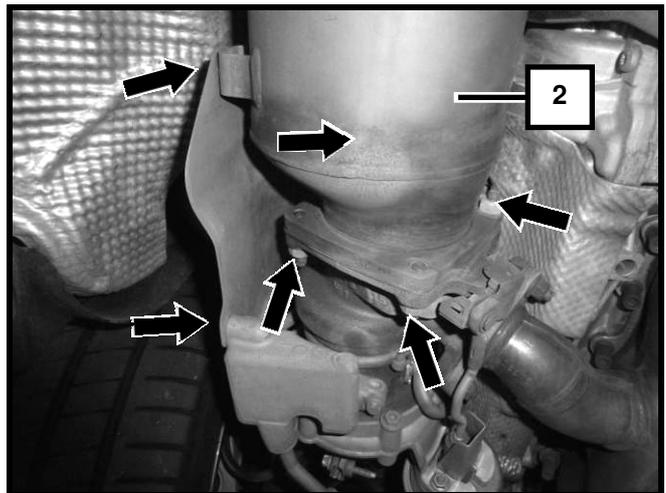


Fig. 04



TECHART recommends to mount the tail pipes with the "TECHART" logo in the center and the ones without logo on the outside.



ASSEMBLY INSTRUCTIONS

TECHART valve exhaust system "Racing"

Perform a function test

- 6 For that start the engine and let it run in idle. After building the vacuum the valve is closed (if the Sport mode is not pressed). Once the Sport or the Sport Plus mode is pressed one can hear a considerably deeper sound.
- 7 Tighten all hexagon nuts at the catalytic converters.
- 8 Recheck the alignment of the exhaust system and adjust, if necessary.
- 9 Tighten the retaining clamps.
- 10 Tighten the tightening straps.
- 11 Align the tail pipes and tighten. Care for sufficient clearance between the tail pipes and the rear apron.
- 12 Tighten the heat protection plate.
- 13 Perform a test drive after completing the installation and recheck the alignment of the tail pipes!
- 14 Tighten the retaining clamps.
- 15 Tighten the tightening straps.

3.3 Modify rear apron

- 1 Modify heat protection (3) and rear apron carrier plate (4).

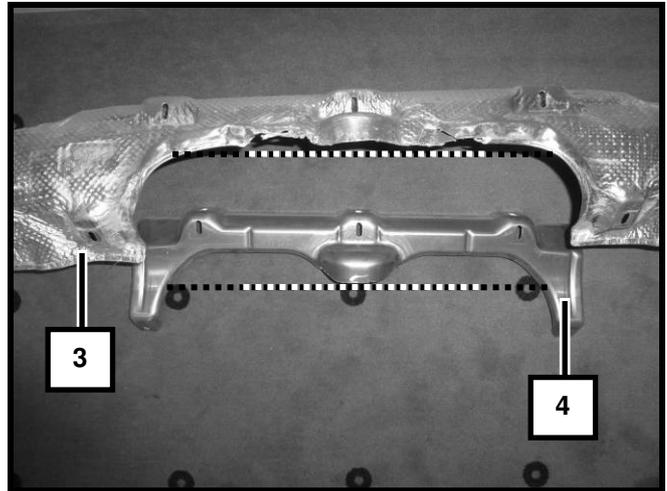


Fig. 05

- 2 Unclip the original tail pipe panel from the rear apron (5).

i The original tail pipe panel is no longer required.

- 3 Remove the fixing bar from the rear apron.

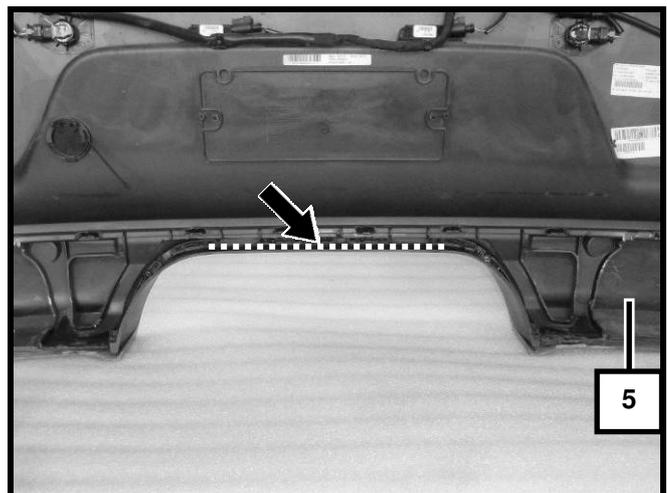


Fig. 06

- 4 Clip the TECHART tail pipe panel 091.100.512.500 (6) into the rear apron (5)
- 5 Fix the TECHART tail pipe panel (6) with two screws 3.9x16 to the rear apron.

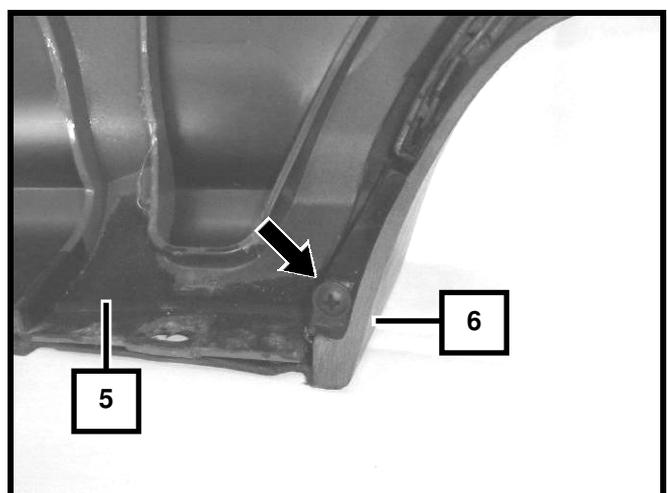


Fig. 07

3.4 Schematic diagram exhaust valve MY17

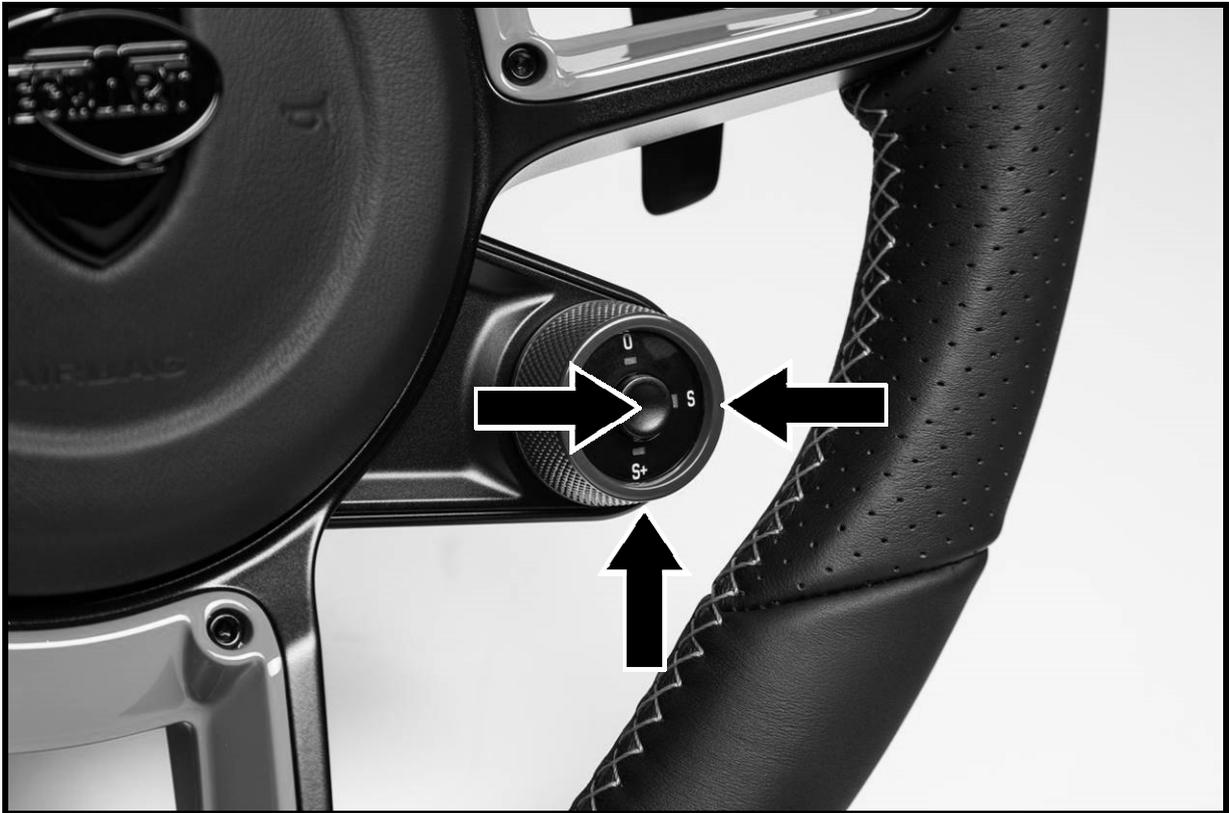


Fig. 08

Travel mode 0: The valve is closed permanently and only opens at a boost pressure of 0.6 bar.

Travel mode S; "Mode Sport" is displayed at the combination instrument: The exhaust valve is only closed within the noise emission relevant range.

Travel mode S+; "Mode Sport Plus" is displayed at the combination instrument: The exhaust valve is only closed within the noise emission relevant range.

Sport Response button; "Sport Response" is displayed at the combination instrument: The exhaust valve is only closed within the noise emission relevant range for only 20 seconds.

Auto Start-Stop button pressed; LED is set: The exhaust valve is only closed within the noise emission relevant range. This button stands hierarchically above the Sport and the Sport Plus buttons! Consequently, when the Auto Start-Stop button is pressed the Sport (Plus) buttons are irrelevant regarding to the exhaust valve control.

i Depending on country-specific variant it is possible that the Auto Start-Stop function can be deactivated permanently (even after restart); then the exhaust valve control with the Sport (Plus) button will only be available after the driver activates the Auto Start-Stop function.



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- i** When using travel mode "Individual" one may activate the exhaust valve for the individual mode by choosing the parameter Sport, Sport Plus or Auto Start Stop.



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TECHART valve exhaust system "Racing"



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Part No. 091.310.500.099