

AE01 - Replacing Engine (Recall Campaign)

Revision: **Revision 1:** July 15, 2014
 There are extensive amendments to this campaign which, to date, has only been published to Canadian and Puerto Rican dealerships.
 Because of the rare occurrence of US dealers performing this Recall rather than it being completed at one of the designated repair facilities, as well as for Field Operations information, AE01 is being republished in this amended form.
PLEASE DELETE ALL OTHER VERSIONS OF AE01 THAT YOU MAY HAVE IN YOUR POSSESSION.

Model Year: **2014**

Vehicle Type: **911 GT3 (991)**

Concerns: **Connecting rod bolts**

Information: This is to inform you of a Recall Campaign on the above-mentioned vehicles. **An engine problem resulting in a fire occurred on two 911 GT3 vehicles.**
 Analyses have shown that engine damage occurred in both cases because a connecting rod bolt became loose and the loose connecting rod then damaged the crankcase.
 To prevent this from happening, new engines with optimized connecting rod bolts are used in all Porsche 991 GT3 vehicles.

- Action Required:
- Replace engine
 - Replace vehicle-specific stickers showing the allocation of vehicle identification number to engine number.

The following steps must **also** be carried out as part of the Porsche 911 GT3 quality initiative 2014:

- Replace vent line for PDK transmission
- Re-program DME and PDK control unit
- Re-program the instrument cluster
- Re-program control units for rear axle steering
- Re-code front-end electronics control unit
- Affix indication sticker on the oil filler neck
- Carry out an extended test drive
- Prepare the vehicle visually
- Give 911 GT3 Owner's Manual Supplement and certificate of engine replacement to the customer

All affected customers also get the Porsche Approved Warranty for their Porsche 911 GT3 for a further 12 months over and above the new vehicle warranty.

For information on how to document the 1-year Porsche Approved Warranty, see section on ⇒ *Technical Information 'AE0100 Invoicing'*.

Affected Vehicles: The VIN(s) can be checked by using PIWIS Vehicle Information link to verify if the campaign affects the vehicle. This campaign is scope specific to the VIN! Failure to verify in PIWIS may result in an improper repair.

Work Procedure: See Attachment "A".

Claim Submission: See Attachment "B".

Overview: **The document is divided into the following sections:**

- ⇒ *Technical Information 'AE0100 Parts and tools'*
- ⇒ *Technical Information 'AE0100 Preliminary work'*
- ⇒ *Technical Information 'AE0100 Replacing engine and replacing vent line on PDK transmission'*
- ⇒ *Technical Information 'AE0100 Tightening torques'*
- ⇒ *Technical Information 'AE0100 Preliminary work for control unit programming'*
- ⇒ *Technical Information 'AE0100 Carrying out control unit programming and coding'*
- ⇒ *Technical Information 'AE0100 Subsequent work for control unit programming'*
- ⇒ *Technical Information 'AE0100 Affixing indication sticker in oil filler opening area in the engine compartment'*
- ⇒ *Technical Information 'AE0100 Replacing vehicle identification stickers'*
- ⇒ *Technical Information 'AE0100 Important information on installing the six-point seat belt'*
- ⇒ *Technical Information 'AE0100 Subsequent work'*
- ⇒ *Technical Information 'AE0100 Invoicing'*
- ⇒ *Technical Information 'AE0100 References'*

Parts and tools

Parts Info:

Part No.	Designation – Location	Qty.
000.043.302.61	⇒ Engine	1 ea.
999.073.443.01	⇒ Combination screw, M12 x 1.5 x 40 – Diagonal brace	2 ea.
999.072.869.01	⇒ Hexagon-head bolt, M12 x 1.5 x 45 – Diagonal brace	2 ea.

999.084.123.09	⇒ Hexagon nut, M10 – Anti-roll bar to connecting link	2 ea.
900.076.064.02	⇒ Hexagon nut, M8 – Anti-roll bar to body	4 ea.
999.072.868.01	⇒ Hexagon-head bolt, M12 x 1.5 x 80 – Rear-axle cross member	2 ea.
999.072.859.01	⇒ Hexagon-head bolt, M12 x 1.5 x 58 – Rear-axle cross member	2 ea.
999.084.445.01	⇒ Hexagon nut, M12 x 1.5 – Rear-axle cross member	4 ea.
999.084.648.01	⇒ Hexagon nut, M10 – Transmission support	2 ea.
999.086.009.02	⇒ Hexagon nut, M12 – Transmission mount	1 ea.
N 908.484.05	⇒ Hexagon nut, M12 x 1.5 – Engine carrier	2 ea.
996.106.801.03	⇒ O-ring – Coolant lines	3 ea.
999.707.660.40	⇒ O-ring – Desiccator	2 ea.
944.573.143.01	⇒ Desiccator	1 ea.
N 906.651.01	⇒ Cheese head bolt, M10 x 1 x 29 – Flywheel to crankshaft	10 ea.
999.385.009.01	⇒ Hexagon round-head bolt, M12 x 1.5 x 55 – Transmission to engine	6 ea.
999.073.517.01	⇒ Cheese head bolt, M10 x 1 x 46.5 – Drive shaft to PDK transmission	12 ea.
997.111.336.90	⇒ Clamp – Front muffler to catalytic converter flange	2 ea.
900.380.005.01	⇒ Hexagon nut, M8 – Front muffler holder	4 ea.

980.111.561.00	⇒ Seal – Catalytic converter flange	2 ea.
900.067.362.01	⇒ Cheese head bolt, M8 x 50 – Restraining straps for rear silencer	2 ea.
999.651.401.01	⇒ Line bracket – Mounting for control line for exhaust flaps to engine carrier	4 ea.
999.512.707.00	⇒ Hose clamp – Mounting for control line for exhaust flaps to vacuum unit	2 ea.
N 100.988.11	⇒ Hexagon-head bolt, M6 x 16 – Heat shield to engine carrier	3 ea.
000.043.209.67	⇒ Breather hose – PDK transmission (gear wheel set space)	1 ea.
9G1.321.011.03	⇒ Breather hose – PDK transmission (clutch chamber)	1 ea.
999.507.909.40	⇒ Holder – Mounting for breather hose to PDK transmission	1 ea.
N 102.627.01	⇒ Combination holder – Breather hoses for PDK transmission	1 ea.
991.006.207.80	⇒ Oil filling sticker	1 ea.
000.043.989.08	911 GT3 ⇒ Owner's Manual Supplement	1 ea.*

* The Owner's Manual Supplement contains descriptions in all relevant languages and can be ordered in the same way as other parts that are required.

The Supplement is supplied through the Porsche Parts Department.

- Also required for vehicles assigned to **campaign scope 1** (vehicles **up to** engine number **MA175 E 01068**):

Part No.	Designation – Location	Qty.
991.110.270.82	⇒ Scoop – Air cleaner housing	1 ea.

Materials: **Required materials** (usually already available in the Porsche Dealership):

Part No.	Designation – Location	Qty.
000.043.301.48	Antifreeze	20-liter container (approx. 5 liters required per vehicle)
000.043.205.93	Klüberplus Gel grease – For greasing O-rings and coolant hoses	100g tube As much as required (approx. 5 grams required per vehicle)
000.043.004.00	Optimoly HT mounting paste – For greasing clamp securing front muffler to catalytic converter flange	90g tube As much as required (approx. 5–10 grams required per vehicle)
000.043.020.00	Optimoly TA assembly grease – For greasing central bolts on wheels	100g tube As much as required (approx. 10 grams required per vehicle)

Other materials:

Clean, lint-free cloth
Cleaning agent (e.g. isopropanol)

Tools:

• **Auxiliary tool:**

Part No.	Designation – Location	Qty.
9A1.101.213.00	Transport eyebolt – For lifting engine	1 for every Porsche Dealership (only if not already available)

• **Special tools:**

Designation/Comment	Purpose
9818 - PIWIS Tester II Battery charger (current rating of at least 40 A)	Creating VAL/control unit programming/on-board diagnosis
9453 - Access ramps Only if required (depending on type of lifting platform)	Moving the vehicle onto the lifting platform

9794 - Assembly aid	Removing and fitting rear wheels
9796 - Socket wrench	
Torque wrench, e.g. Nr.91 Pos.1 - torque wrench (160 – 800 Nm/118 – 590 ftlb.) or Nr.91 Pos.2 - torque wrench (300 – 800 Nm/222 – 590 ftlb.)	
Suitable air-conditioning service unit, e.g. VAS 6456A - A/C service station with rinsing device	Draining and filling refrigerant in the air conditioning system
Nr.21 - Disassembly tool	Disconnecting parking lock cable from PDK transmission
9822 - Assembly tool	Opening and fitting air conditioning lines
9443 - Oil filter wrench	Draining engine oil from engine to be replaced
Oil collection container	
Assembly pliers for spring band clamps, e.g. Nr.72-1 - assembly pliers	Removing and installing engine
VAS 6832 - Master Gear unit elevating platform	
9769 - Retainer plate	
9769/1 - Support	
Suitable tension strap for securing the engine on the lifting platform during removal, e.g. 9454 - strapping belts	
Workshop crane	Lifting the engine
Suitable lifting equipment, e.g. cross member with carabiner hook and lifting straps	
VAS 6766 - Counter-hold tool	Removing and installing flywheel
9321 - Centering pins	
Torque angle torque wrench for tightening the fastening screws for the flywheel to a tightening torque of 25 Nm (19 ftlb.) and torque angle of 120°, e.g. WE1440 - torque/torque angle screw tool or Nr.88 - torque angle torque wrench	
VAS 6199 - Pliers for hose clamp with side cutters	Removing and fitting hose clamps on the control line for exhaust flaps
Coolant collection container	Draining coolant from the engine to be replaced
9696 - Filling device	Filling coolant and bleeding the cooling system

- **Other tools:**

Torque screwdriver, 1.5 – 3 Nm/1 – 2 ftlb., e.g. **Nr.89 Pos.5 - torque screwdriver**

Torque wrench, 4 – 20 Nm/3 – 15 ftlb., e.g. **Nr.90 Pos.2 - torque wrench**

Torque wrench, 10 – 60 Nm/7.5 – 44 ftlb., e.g. **Nr.90 Pos.3 - torque wrench**

Torque wrench, 25 – 130 Nm/19 – 96 ftlb., e.g. **Nr.90 Pos.4 - torque wrench**

Torque wrench, 40 – 200 Nm/30 – 148 ftlb., e.g. **Nr.90 Pos.6 - torque wrench**

Torque angle torque wrench, 4 – 400 Nm/3 – 296 ftlb., e.g. **Nr.88 - torque angle torque wrench**

Insert for torque wrench, Torx E18

Ring insert for torque wrench, a/f 18

Heat gun

Plastic scraper

- **Required PIWIS Tester software:** Version **13.810** (or higher)



Information

To install PIWIS Tester test software version **13.810** on the PIWIS Tester software version **13.800** must already be installed on the PIWIS Tester. PIWIS Tester software version **13.810** should be available as an **online update** from **05.05.2014**.

Control unit programming can also be carried out as part of this campaign using a PIWIS Tester test software version **higher than version 13.810**.

Attachment "A"



Possibility of engine damage

- Emerging engine oil
 - Risk of fire
- ⇒ **To move the vehicle into the workshop, only drive at walking speed or push the vehicle into the workshop**
- ⇒ **Listen for unusual engine noises and stop the engine immediately if necessary**

**Information**

The engines to be replaced will either be requested and must be returned to Porsche. The guidelines for the Warranty Parts Process ("Porsche warranty guidelines" and "Returns and claims guidelines") shall always apply.

If the engine to be replaced is requested and must be returned to Porsche, the following points must be observed:

- Do not damage the packaging in which the new engine is delivered because the engine to be replaced must be returned in this packaging.
- All operating fluids must be drained from the engines before returning them.
- The engine number of the returned engine must be entered in the "causes and correction" line on the Warranty parts request form (barcode). The engine number can be entered either in the PDF file or handwritten on the printout.

Instructions for packaging the engine to be replaced for return delivery can be found under ⇒ **"1X00 Packaging instructions for GT3 engine"** under "Information media" > **"Technical Information (TI)"** in Main Group 1 – Engine in the **PIWIS information system** (select vehicle 991 GT3, model year 2014 – E).

**Information**

Certificates of Engine Replacement will come to you via FedEx from PCNA/Atlanta and should arrive within several days of receipt of the repaired vehicle. Interim time should be used to complete the re-delivery process outlined in AE11 such as paint & dent repairs, cleaning, etc.

The certificate belonging to the vehicle is an important document for the customer that proves that the engine in his/her vehicle was replaced.

The certificate must therefore be treated with the greatest care.

To complete the following check, write down the vehicle identification number and engine number specified on the certificate or copy the certificate to avoid damaging the original certificate.

Work Procedure: 1 Allocate the new engine to the vehicle and request vehicle-specific stickers and certificates from Porsche.

**Information**

Given that the engines are being replaced, the vehicle-specific stickers showing the allocation of vehicle identification number to engine number must be replaced by updated stickers showing the allocation of vehicle identification number to the **new** engine number.

All customers also receive a certificate issued by Porsche AG confirming that the engine has been replaced.

Since it takes approx. **6 working days plus shipping** for Porsche AG to deliver the vehicle-specific stickers and the certificate, the vehicle-specific stickers and documents specified below should be requested as soon as a new engine has been allocated to a certain vehicle:

- Thatcham sticker (3 ea., Part No. 95B.010.004)
- Certificate of engine replacement (1 ea.)

To ensure that your request is processed quickly and efficiently, use the following procedure when ordering the vehicle-specific stickers and certificate:

The vehicle-specific stickers and the certificate must be requested from Porsche through technical support.

As soon as the new engine has been allocated to the vehicle, send the following information to the technical support department.:

- **Vehicle identification number**
- **Engine number** of the engine **to be replaced**
- **Engine number** of the **new** engine, which will be installed in the vehicle
- **Exact mileage (km or miles) of the vehicle**
- **Delivery address** and **name of the contact person in the Porsche Dealership** to whom the documents must be sent

When requesting the documents, also attach **digital photos** showing the following data to the ticket:

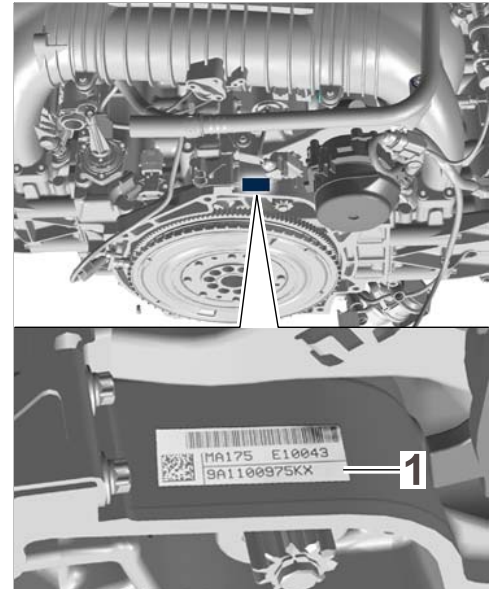
- Vehicle identification number of the vehicle
- Engine number of the new engine
- Engine number of the engine to be replaced

This can help to avoid transmission errors and longer processing times.

**Information**

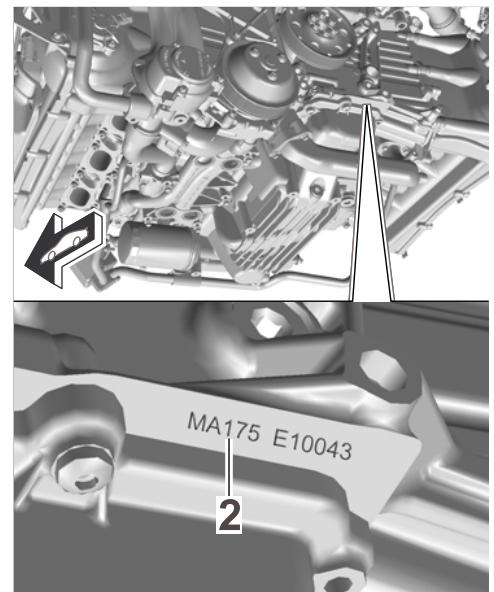
The **engine number** is shown at **two** positions on the engine:

- **Sticker** with engine number printed on it at the **top of the crankcase** ⇒ *Engine number on top of crankcase -1-*.



Engine number on top of crankcase

- **Engine number stamped** into the housing at the **underside of the crankcase** ⇒ *Engine number on underside of crankcase -2-*.



Engine number on underside of crankcase

Compare both engine numbers. The engine numbers must be **identical**.

If the engine numbers are identical, take a photo of the engine number printed on the sticker at the top of the crankcase in order to register with Technical Support and also attach the picture to the PTEC.

If the engine numbers are **not** identical, contact your contact person responsible for parts inquiries in Technical Support.

- 2 Before you start working on a vehicle, use the PIWIS Tester to read out the fault memories and create a Vehicle Analysis Log (VAL). When you have completed the work, use the PIWIS Tester function '**Data management**' > '**VAL data return**' to send the VAL to Porsche.

As a result, there is no need to read out the fault memories when replacing the engine.

Replacing engine and replacing vent line on PDK transmission

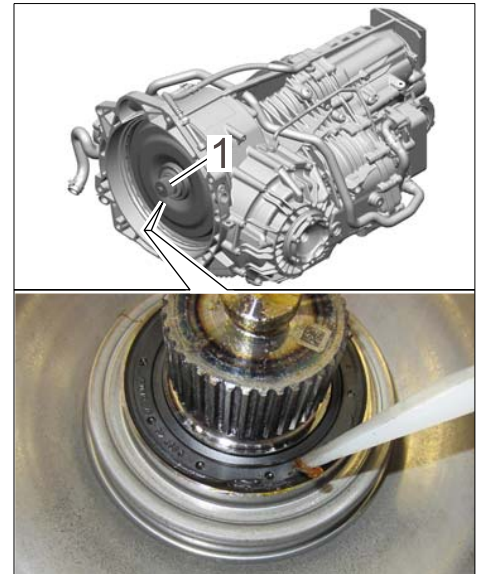
- Work Procedure:
- 1 Drain engine oil from the engine to be replaced and from the oil filter on the engine to be replaced. Then fit the completely empty oil filter and the previously used oil drain plugs back on the engine. For instructions on how to do this, see ⇒ *Workshop Manual '170155 Changing engine oil and oil filter'*.
 - 2 Remove engine with transmission ⇒ *Workshop Manual '100119 Removing and installing engine - section on "Removing"*.
 - 3 Remove Porsche Doppelkupplung (PDK) from the engine to be replaced and place it on a suitable surface. Make sure not to set the PDK transmission down on the oil pan ⇒ *Workshop Manual '373427 Removing and mounting Porsche Doppelkupplung (PDK) - section on "Removing"*.



Information

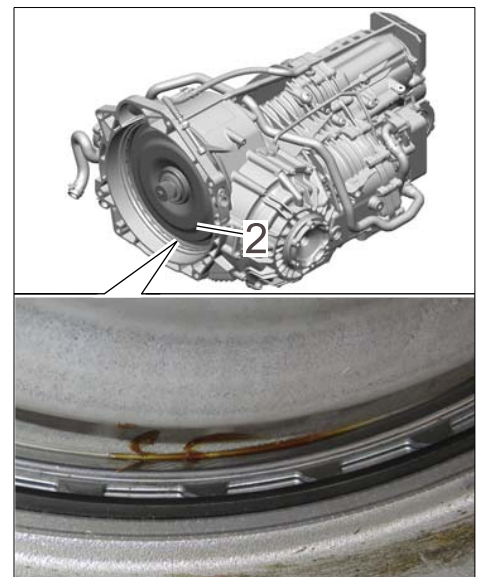
The splines on the drive journal on the PDK transmission are greased at the factory. Grease can therefore be deposited ("apparent leaks") at the following positions in the double-clutch area on the PDK transmission during operation:

- In the radial shaft seal area on the drive journal ⇒ *Grease residue in the drive journal area -1-*.



Grease residue in the drive journal area

- In the transmission bell housing area or in the outer double-clutch area ⇒ *Grease residue in the double-clutch area -2-*.



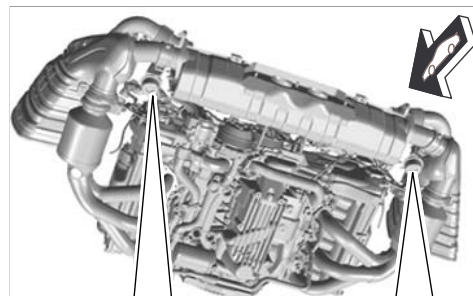
Grease residue in the double-clutch area

These **deposits and traces of grease** do **not impair** operation and must not be confused with **oil leaks (liquid)** .

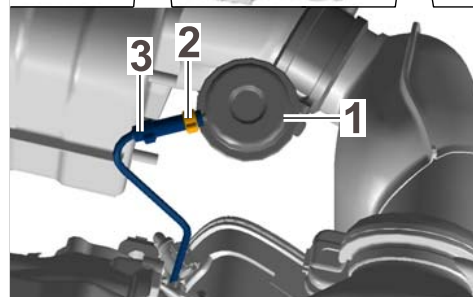
If there are **oil leaks** in the double-clutch area on the PDK transmission, these must be documented and found if possible. Your importer must then contact the Porsche AG Technical Competence Centre in order to agree on how to proceed.

- 4 Remove peripheral parts on the **engine to be replaced**.
 - 4.1 Remove flywheel for the PDK transmission on the engine to be replaced ⇒ *Workshop Manual '136019 Removing and installing flywheel - Porsche Doppelkupplung (PDK) - section on "Removing"*.
 - 4.2 Remove exhaust system (front and rear silencers) on the engine to be replaced.

4.2.1 Cut hose clamp ⇒ *Control line on vacuum unit for exhaust flap -2-* on the control line ⇒ *Control line on vacuum unit for exhaust flap -3-* for the left and right exhaust flap using a suitable tool, e.g. **VAS 6199 - pliers for hose clamp with side cutters** or side cutters.

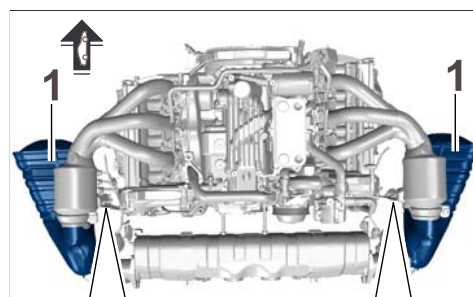


4.2.2 Disconnect control line ⇒ *Control line on vacuum unit for exhaust flap -3-* from the vacuum unit ⇒ *Control line on vacuum unit for exhaust flap -1-* for the left and right exhaust flap.

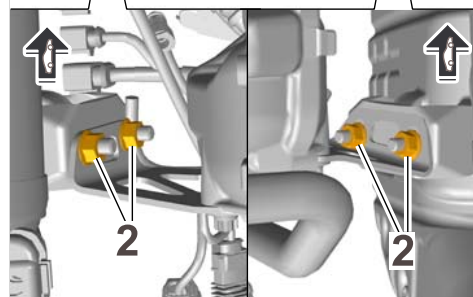


Control line on vacuum unit for exhaust flap

4.2.3 Unscrew and remove fastening nuts ⇒ *Fastening nuts for front mufflers -2-* for the front silencers at the left and right ⇒ *Fastening nuts for front mufflers -1-*.

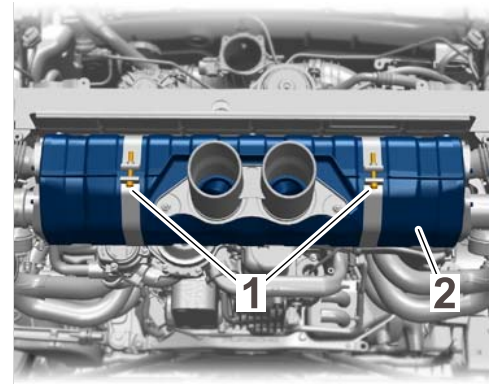


4.2.4 Get a second person to support the exhaust system in order to prevent it from sagging during the subsequent disassembly work.



Fastening nuts for front mufflers

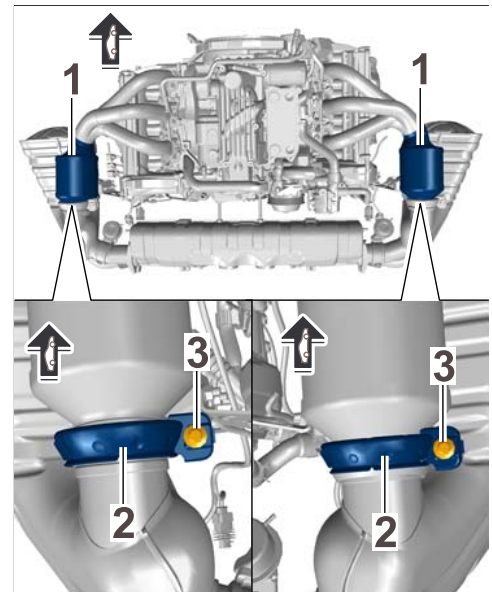
- 4.2.5 Unscrew and remove fastening screws \Rightarrow *Rear silencer -1-* on the restraining straps for the rear silencer \Rightarrow *Rear silencer -2-* and detach restraining straps from the holder on the engine carrier. To do this, push the restraining straps on the rear muffler outwards.



Rear silencer

- 4.2.6 Unscrew and remove fastening screws \Rightarrow *Clamp on catalytic converter flange -3-* on the clamps \Rightarrow *Clamp on catalytic converter flange -2-* on the catalytic converter flange at the left and right \Rightarrow *Clamp on catalytic converter flange -1-* and remove the clamps.

- 4.2.7 Pull front mufflers at the left and right out of the holders and carefully guide the complete exhaust system out to the rear. Place the exhaust system on a suitable surface.

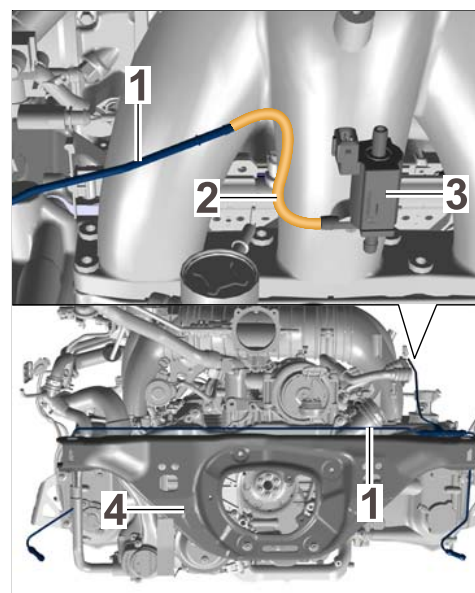


Clamp on catalytic converter flange

4.3 Remove control line for exhaust flaps on the engine to be replaced.

4.3.1 Pull control line ⇒ *Control line for exhaust flaps -1-* out of the hose connecting piece ⇒ *Control line for exhaust flaps -2-* at the change-over valve ⇒ *Control line for exhaust flaps -3-*.

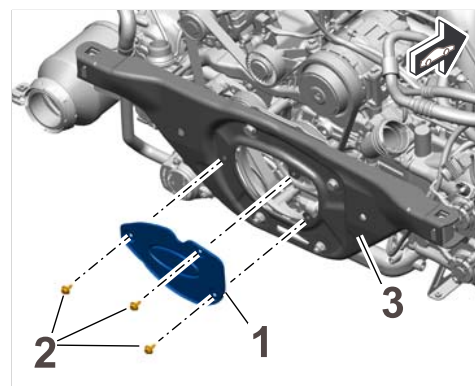
4.3.2 Unclip control line ⇒ *Control line for exhaust flaps -1-* for exhaust flaps from the line brackets on the engine carrier ⇒ *Control line for exhaust flaps -4-* and remove control line.



Control line for exhaust flaps

4.4 Remove heat shield ⇒ *Heat shield on engine carrier -1-* from the engine carrier ⇒ *Heat shield on engine carrier -3-* on the engine to be replaced, if a heat shield is fitted. To do this, unscrew the fastening screws ⇒ *Heat shield on engine carrier -2-* and remove heat shield.

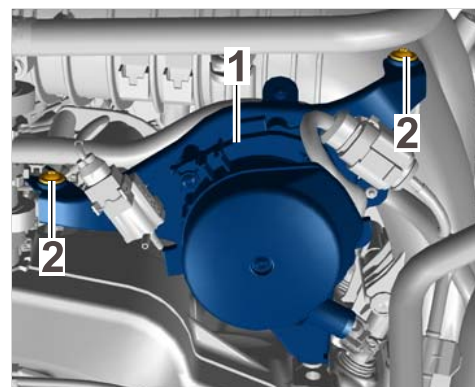
5 Fit transport eyebolt, Part No. 9A1.101.213.00, on the engine to be replaced.



Heat shield on engine carrier

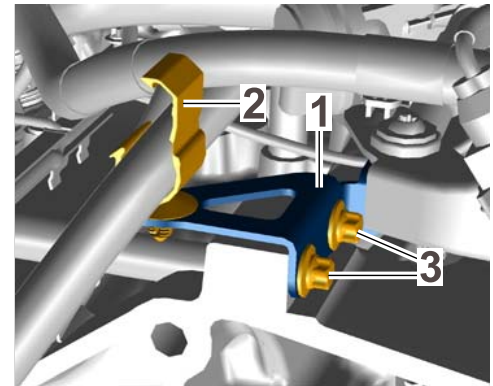
5.1 Unscrew and remove fastening screws ⇒ *Secondary-air pump bracket -2-* on the secondary-air pump bracket ⇒ *Secondary-air pump bracket -1-*.

5.2 Lift secondary-air pump and bracket up off the engine and set it aside with lines connected.



Secondary-air pump bracket

- 5.3 Open line bracket ⇒ *Retaining bracket-2-* and remove line from the line bracket.
- 5.4 Unscrew and remove fastening screws ⇒ *Retaining bracket-3-* for the retaining bracket ⇒ *Retaining bracket-1-*. Set retaining bracket and fastening screws aside.



Retaining bracket

- 5.5 Position the transport eyebolt ⇒ *Transport eyebolt-1-* on the crankcase instead of the retaining bracket you just removed and secure it using the fastening screws ⇒ *Transport eyebolt-2-* you unscrewed before.
Tightening torque 13 Nm (9.5ftlb.)



Transport eyebolt

- 6 Pick up the engine to be replaced using suitable lifting equipment and a workshop crane. Always read and follow the instructions and information for transporting the engine in the workshop ⇒ *Workshop Manual '1001IN Tools for removing units and working on the engine assembly support'*, section on "Transporting the engine in the workshop".

Then lift the engine to be replaced off the unit elevating platform and set it down on a suitable wooden pallet.



Information

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If the engine to be replaced is requested and must be returned to Porsche, the following points must be observed:

- Do not damage the packaging in which the new engine is delivered because the engine to be replaced must be returned in this packaging.
- All operating fluids must be drained from the engines before returning them.
- The engine number of the returned engine must be entered in the "causes and correction" line on the Warranty parts request form (barcode). The engine number can be entered either in the PDF file or handwritten on the printout.

Instructions for packaging the engine to be replaced for return delivery can be found under ⇒ **1X00 Packaging instructions for GT3 engine** under "Information media" > **Technical Information (TI)** in Main Group **1 – Engine** in the **PIWIS information system** (select vehicle 991 GT3, model year 2014 – E).

- 7 Remove transport packaging on the new engine.
- 8 Remove transport eyebolt from the engine to be replaced and fit it on the **new engine** as described in Step 5.
- 9 Pick up the new engine using suitable lifting equipment and a workshop crane and lift it out of the transport packaging onto the unit elevating platform.
Always read and follow the instructions and information for transporting the engine in the workshop ⇒ *Workshop Manual '1001IN Tools for removing units and working on the engine assembly support'*, section on "Transporting the engine in the workshop".
- 10 Remove transport eyebolt from the new engine.

- 10.1 Unscrew and remove fastening screws ⇒ *Transport eyebolt -2-* for the transport eyebolt ⇒ *Transport eyebolt -1-* and remove transport eyebolt.

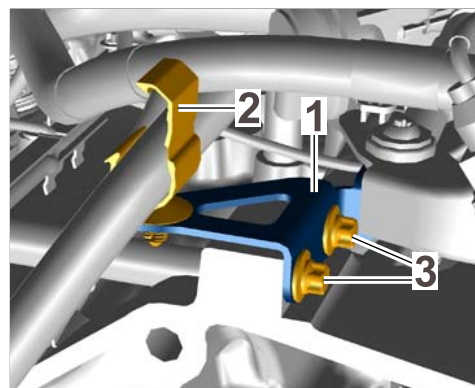


Transport eyebolt

- 10.2 Position retaining bracket ⇒ *Retaining bracket -1-* on the crankcase and screw in and tighten fastening screws ⇒ *Retaining bracket -3-*.

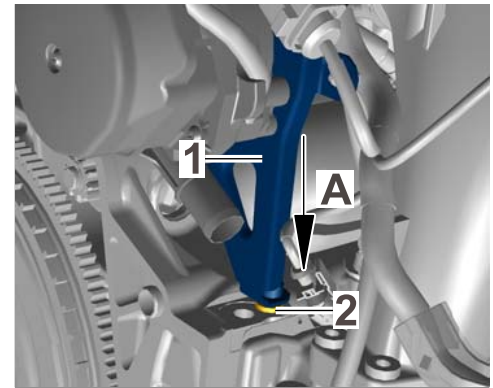
Tightening torque 13 Nm (9.5ftlb.)

- 10.3 Insert line into the line bracket ⇒ *Retaining bracket -2-* and close the line bracket.



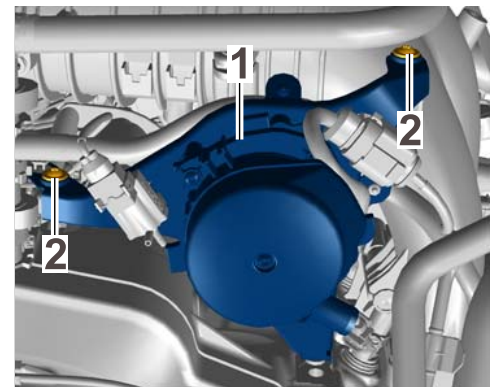
Retaining bracket

- 10.4 Press secondary-air pump bracket ⇒ *Positioning secondary-air pump bracket -1-* into the rear of the two openings ⇒ *Positioning secondary-air pump bracket -2-* on the crankcase ⇒ *Positioning secondary-air pump bracket -A-*.



Positioning secondary-air pump bracket

- 10.5 Screw in and tighten fastening screws ⇒ *Secondary-air pump bracket -2-* on the secondary-air pump bracket ⇒ *Secondary-air pump bracket -1-*.
Tightening torque 13 Nm (9.5 ftlb.)



Secondary-air pump bracket

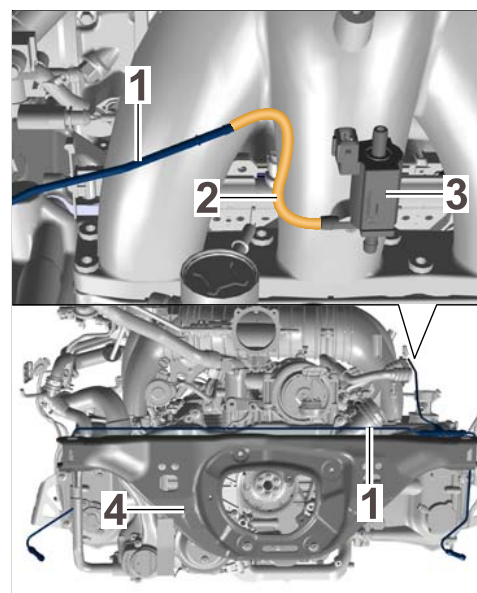
- 11 Fit peripheral parts on the **new engine**.
- 11.1 Fit flywheel for the PDK transmission on the new engine using new fastening screws, Part No. N 906.651.01 ⇒ *Workshop Manual '136019 Removing and installing flywheel - Porsche Doppelkupplung (PDK) - section on "Installing"*.

11.2 Fit control line for exhaust flaps on the new engine.

11.2.1 Secure new line brackets, Part No. 999.651.401.01, to the engine carrier. The line brackets must be secured at the same positions as on the engine to be replaced.

11.2.2 Route control line ⇒ *Control line for exhaust flaps -1-* without tension on the engine carrier ⇒ *Control line for exhaust flaps -4-* and clip it into the line brackets.

11.2.3 Push control line ⇒ *Control line for exhaust flaps -1-* as far as it will go into the hose connecting piece ⇒ *Control line for exhaust flaps -2-* at the change-over valve ⇒ *Control line for exhaust flaps -3-*.



Control line for exhaust flaps

11.3 If a heat shield was fitted on the engine to be replaced, fit the heat shield on the new engine.

To do this, position the heat shield on the engine carrier and screw in and tighten three new fastening screws, Part No. N 100.988.11.

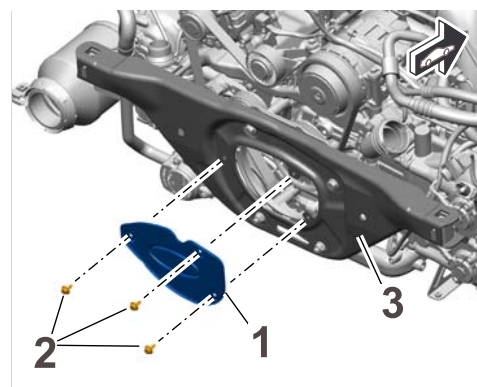
Tightening torque 10 Nm (7.5ftlb.)

11.4 Fit exhaust system on the new engine.

11.4.1 Slide new seals, Part No. 980.111.561.00, onto the catalytic converter flanges at the left and right.

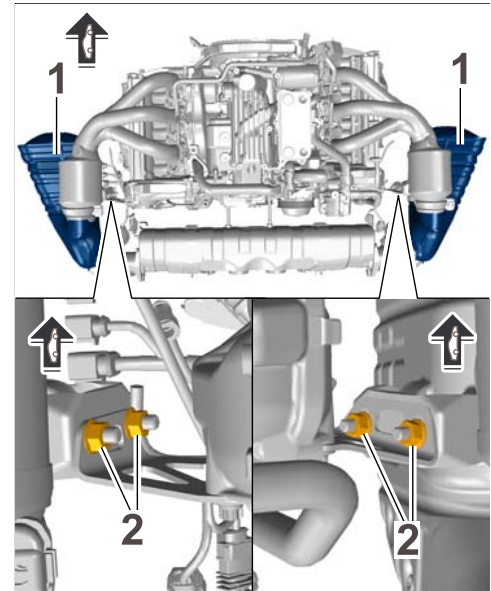
11.4.2 Get a second person to help and position the exhaust system on the engine.

11.4.3 Guide front silencers at the left and right into the holders on the engine.



Heat shield on engine carrier

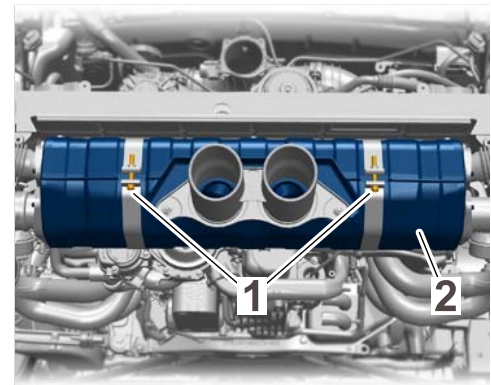
- 11.4.4 Screw in fastening nuts for the front silencers at the left and right only as far as required so that the front silencers can still be moved in the holder.



Fastening nuts for front mufflers

- 11.4.5 Place restraining straps ⇒ *Rear silencer-1*- for the rear muffler ⇒ *Rear silencer-2*- in installation position on the engine carrier and screw in and tighten fastening screws by hand.

- 11.4.6 Apply a light coating of high-temperature grease (e.g. Optimoly HT, Part No. 000.043.004.00) on the new clamps, Part No. 997.111.336.90, before installation.



Rear silencer

11.4.7 Position clamps ⇒ *Clamp on catalytic converter flange -2-* on the catalytic converters at the left and right ⇒ *Clamp on catalytic converter flange -1-* and align the clamps so that the screw head is facing downwards. Screw in fastening screws ⇒ *Clamp on catalytic converter flange -3-* only as far as required so that the clamps can still be turned on the flanges.

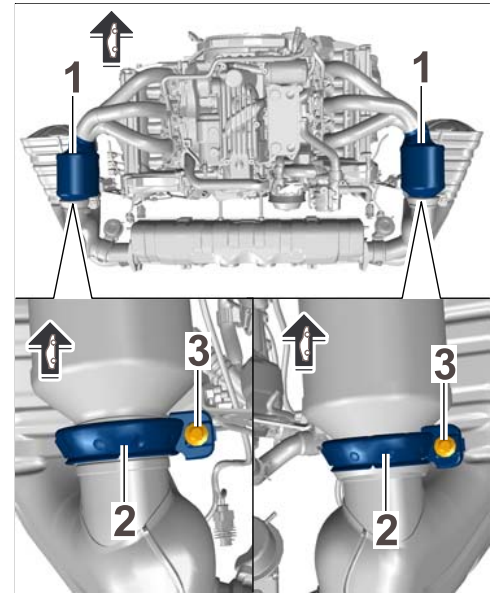
11.4.8 Align rear muffler on the engine carrier and tighten fastening screws for the restraining straps.
Tightening torque 23 Nm (17 ftlb.)

11.4.9 Tighten fastening nuts on the holders for the front mufflers at the left and right.
Tightening torque 23 Nm (17 ftlb.)

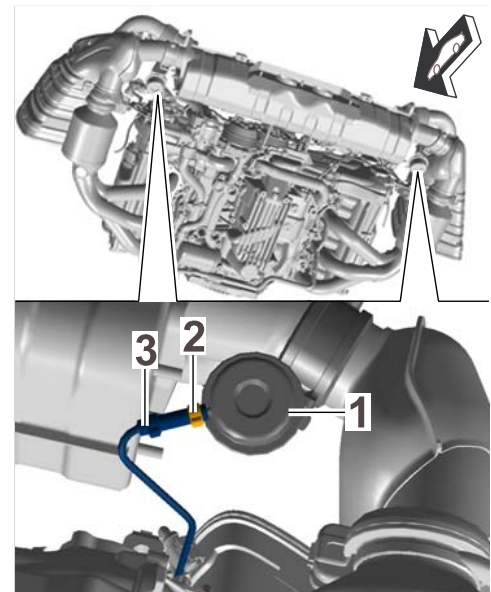
11.4.10 Tighten fastening screw on the clamps.
Tightening torque 23 Nm (17 ftlb.)

11.4.11 Slide a new hose clamp ⇒ *Control line on vacuum unit for exhaust flap -2-*, Part No. 999.512.707.00, at the left and right onto the ends of the control line ⇒ *Control line on vacuum unit for exhaust flap -3-* for exhaust flaps and push line ends at the left and right onto the connection on the vacuum unit ⇒ *Control line on vacuum unit for exhaust flap -1-*.

11.4.12 Secure control line to the vacuum units for the exhaust flaps using the hose clamps at the left and right. To do this, press the hose clamps together using a suitable tool, e.g. **VAS 6199 - pliers for hose clamp with side cutters**.



Clamp on catalytic converter flange



Control line on vacuum unit for exhaust flap

12 Replace vent line for PDK transmission.

12.1 Remove previously installed vent line from the PDK transmission.

12.1.1 Open line bracket ⇒ *Removing vent line -2-* and remove vent line ⇒ *Removing vent line -1-* from the bracket.

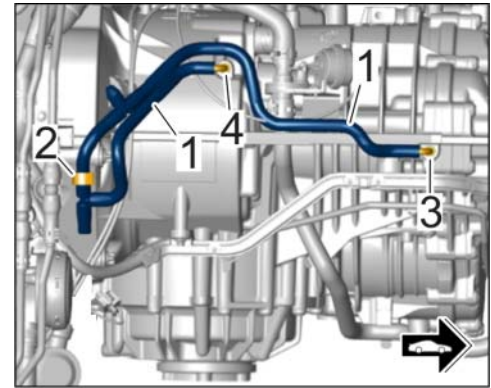
12.1.2 Pull vent line ⇒ *Removing vent line -1-* off ventilation connection for gear wheel set ⇒ *Removing vent line -3-* and off ventilation connection for clutch chamber ⇒ *Removing vent line -4-*.

12.1.3 Remove vent line ⇒ *Removing vent line -1-*.

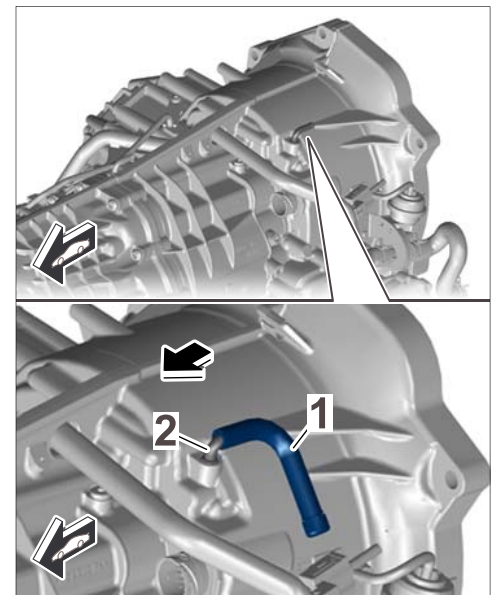
12.2 Fit new breather hose for the clutch chamber on the PDK transmission.

12.2.1 Position new breather hose ⇒ *Installing breather hose for clutch chamber -1-*, Part No. 9G1.321.011.03, on the PDK transmission as shown.

12.2.2 Slide the breather hose ⇒ *Installing breather hose for clutch chamber -1-* as far as it will go onto the ventilation connection for the clutch chamber ⇒ *Installing breather hose for clutch chamber -2-* (⇒ *Installing breather hose for clutch chamber -arrow-*).

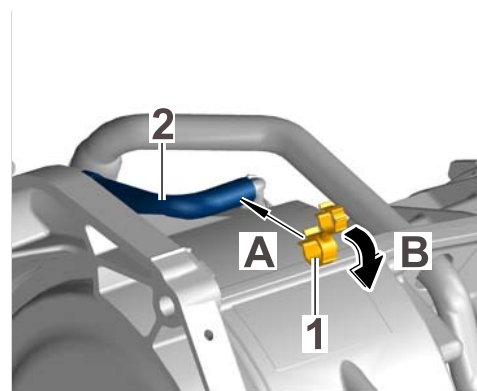


Removing vent line



Installing breather hose for clutch chamber

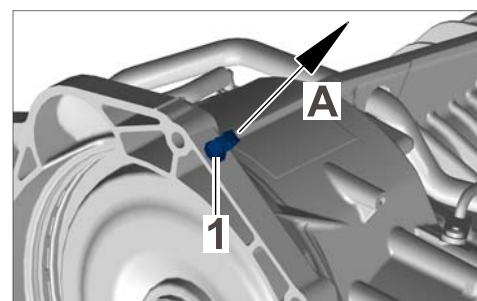
12.2.3 Clip larger opening of the combination holder, Part No. N 102.627.01, ⇒ *Fitting combination holder on vent line -1-* onto the vent line ⇒ *Fitting combination holder on vent line -2-* as shown ⇒ *Fitting combination holder on vent line -A-* and then swivel the combination holder down ⇒ *Fitting combination holder on vent line -B-*.



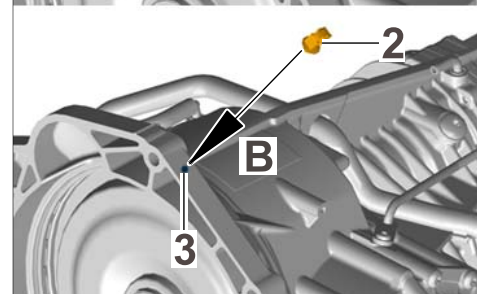
Fitting combination holder on vent line

12.3 Fit new vent line for gear wheel set.

12.3.1 Unclip previously installed line bracket ⇒ *Fitting line bracket on PDK transmission -1-* from the PDK transmission and remove it ⇒ *Fitting line bracket on PDK transmission -A-*.

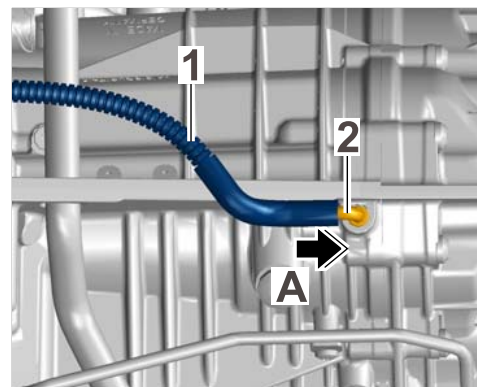


12.3.2 Press new line bracket ⇒ *Fitting line bracket on PDK transmission -2-*, Part No. 999.507.909.40, into the opening ⇒ *Fitting line bracket on PDK transmission -3-* on the PDK transmission ⇒ *Fitting line bracket on PDK transmission -B-*.



Fitting line bracket on PDK transmission

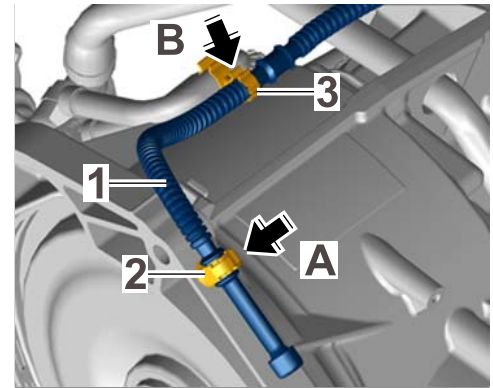
12.3.3 Push new vent line ⇒ *Fitting vent line on connection for gear wheel set -1-*, Part No. 000.043.209.67, as far as it will go onto the ventilation connection ⇒ *Fitting vent line on connection for gear wheel set -2-* for gear wheel set ⇒ *Fitting vent line on connection for gear wheel set -A-*.



Fitting vent line on connection for gear wheel set

12.3.4 Insert vent line ⇒ *Securing vent line -1-* into the line bracket ⇒ *Securing vent line -2-* and close the line bracket ⇒ *Securing vent line -A-*.

12.3.5 Press vent line ⇒ *Securing vent line -1-* as shown **next to the unrippled area** into the combination holder ⇒ *Securing vent line -3-* (⇒ *Securing vent line -B-*).



Securing vent line

- 13 Fit Porsche Doppelkupplung (PDK) on the new engine ⇒ *Workshop Manual '373427 Removing and mounting Porsche Doppelkupplung (PDK) - section on "Mounting"*.
- 14 Check to see which type of rubber scoop is used on the air cleaner housing and replace rubber scoop if necessary.



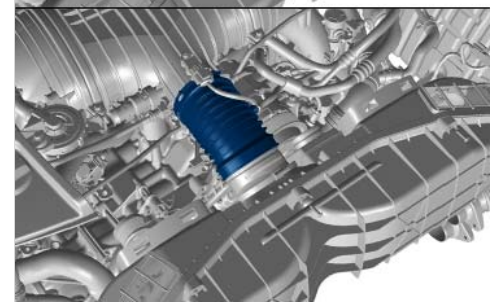
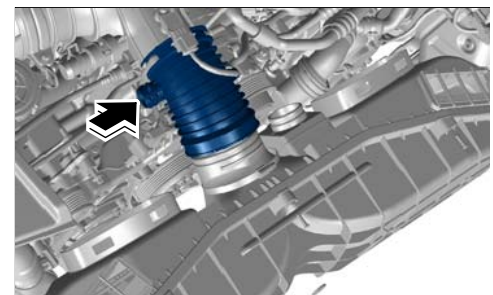
Information

Vehicles **up to** engine number **MA175 E 01068** (engine to be replaced) are fitted with a bleeding system for crankcase and oil tank ventilation, on which the vent line is connected to the rubber scoop ⇒ *Different type of rubber scoop -top-*.

For this reason, there is a connection for the vent line on the left side of the rubber scoop in direction of travel ⇒ *Different type of rubber scoop -arrow-*.

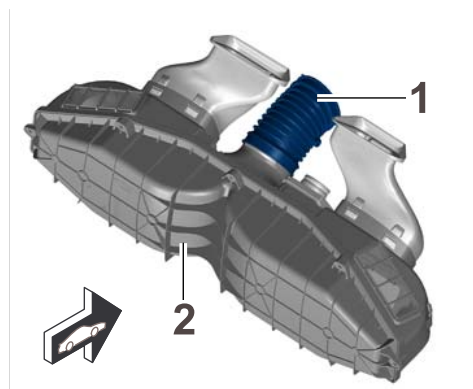
Vehicles **as of** engine number **MA175 E 01069** (engine to be replaced) are fitted with a bleeding system for crankcase and oil tank ventilation, on which the vent line is connected to the resonance tube and as a result, there is no connection at the side of the rubber scoop ⇒ *Different type of rubber scoop -bottom-*.

The vent line is also connected to the resonance tube on the new engine to be installed as part of this measure. Given this, on vehicles with an engine that must be replaced - up to engine number **MA175 E 01068**, the rubber scoop on the air cleaner housing must be replaced by a modified rubber scoop with no side connection for the vent line when installing the new engine (Invoicing: Scope 1).



Different type of rubber scoop

- 14.1 On vehicles **up to** engine number (engine to be replaced) **MA175 E 01068**, replace the rubber scoop ⇒ *Rubber scoop on air cleaner housing -1-* on the air cleaner housing ⇒ *Rubber scoop on air cleaner housing -2-* with a modified rubber scoop, Part No. 991.110.270.82, and secure it to the air cleaner housing using the screw-type clamp. **Tightening torque 3 Nm (2 ftlb.)**
- 14.2 On vehicles **as of** engine number (engine to be replaced) **MA175 E 01069**, the required modified rubber scoop is already used ⇒ No action required.



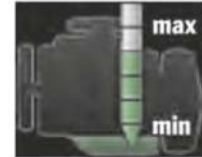
Rubber scoop on air cleaner housing



Information

Observe the following points during the subsequent installation of the engine:

- Before refilling the air conditioning system, **replace the desiccator for the air conditioning system** ⇒ *Workshop Manual '875519 Removing and installing desiccator'*.
- The engine is supplied **filled with engine oil**.
- Check the engine-oil level and only add engine oil if necessary, see note on the recommended engine-oil level below.
- Due to the dry-sump lubrication system used in the 911 GT3, the engine-oil level can only be measured while the **engine is running**.
- Check the **engine oil pressure display** in the instrument cluster when you start the new engine for the first time. The displayed oil pressure must be at least **1.5 bar (+/- 0.2 bar)** immediately after starting the engine.
- Check the engine-oil level using the guided function "**Oil filling**" (DME control unit > "Maintenance/repairs" menu >> "Oil filling" function) on the PIWIS Tester.
- After the warm-up phase, the engine-oil level is shown on the PIWIS Tester display and can also be displayed on the instrument cluster.
- Recommended engine-oil level for optimal engine operation: **3 segments over the Minimum marking** ⇒ *Recommended engine-oil level*.



Recommended engine-oil level

- 15 Install engine with transmission ⇒ *Workshop Manual '100119 Removing and installing engine - section on "Installing"*.

Tightening torques

Tightening
torques:

Location	Explanation	Tightening torque	Torque angle/tolerance
Engine			
Flywheel to crankshaft	Multiple-tooth screw, M10 x 1 x 29 Micro-self-locking – replace screws	25 Nm (19 ftlb.)	+ 120 degrees
Retaining bracket for battery positive cable to crankcase	External Torx screw, M6	13 Nm (9.5 ftlb.)	
Secondary-air pump bracket to crankcase	External Torx screw, M6	13 Nm (9.5 ftlb.)	
Transport eyebolt to crankcase	External Torx screw, M6	13 Nm (9.5 ftlb.)	
Heat shield to engine carrier	Hexagon-head bolt, M6 x 16 Micro-self-locking – replace bolts	10 Nm (7.5 ftlb.)	
Engine carrier to engine mount	Collar nut, M12	85 Nm (63 ftlb.)	

Engine ground strap to body	Hexagon-head bolt, M8	23 Nm (17 ftlb.)	
Air cleaner housing to body	Hexagon-head bolt with washer, M6 x 25	7 Nm (5 ftlb.)	
Rubber scoop to throttle body	Screw-type clamp	3 Nm (2 ftlb.)	
Exhaust system			
Restraining straps for rear silencer	Cheese head bolt, M8 x 50 Replace screw	23 Nm (17 ftlb.)	
Front muffler to holder	Collar nut, M8 Replace nut	23 Nm (17 ftlb.)	
Clamp for front muffler to catalytic converter flange	M8 screw Replace clamp	23 Nm (17 ftlb.)	
PDK transmission			
PDK transmission to engine	Hexagon round-head bolt, M12 x 1.5 x 55 Observe specified tightening sequence	85 Nm (63 ftlb.)	
Drive shaft to PDK transmission flange	Cheese head bolt, M10 x 1	90 Nm (67 ftlb.)	
Cable duct for battery positive cable to PDK transmission	M6 screw (3x)	10 Nm (7.5 ftlb.)	
Battery positive cable to cable socket for PDK transmission	Collar nut, M8	23 Nm (17 ftlb.)	
Transmission mount and transmission bracket			
Brace plate to body	Hexagon-head bolt, M10 x 40 Screws do not have to be replaced	30 Nm (22 ftlb.)	+ 90 degrees
Transmission bracket to body	Hexagon-head bolt, M10 x 50	65 Nm (48 ftlb.)	
Transmission support to body	Collar nut, M10	65 Nm (48 ftlb.)	

Transmission support and transmission bracket to transmission mount	Screw, M12 x 140 with M12 collar nut	120 Nm (89 ftlb.)	
Rear axle			
Rear-axle cross member to carrier side section	2 x M12 x 1.5 x 80 (bottom) 2 x M12 x 1.5 x 58 (top) Always replace screws/bolts following removal	90 Nm (67 ftlb.)	+ 90 degrees
Diagonal brace to rear-axle cross member	M12 x 1.5 x 45 Always replace screws/bolts following removal	30 Nm (22 ftlb.)	+ 90 degrees
Diagonal brace to body (front)	M12 x 1.5 x 40 Always replace screws/bolts following removal	90 Nm (67 ftlb.)	+ 90 degrees
Diagonal brace to mounting for longitudinal arm (diagonal arm)	Cheese head bolt, M8 x 30	23 Nm (17 ftlb.)	
Support plate to diagonal braces and rear-axle cross member	Hexagon-head bolt, M8 x 25	30 Nm (22 ftlb.)	
Support plate to rear-axle cross member	Tapping screw	3 Nm (2 ftlb.)	
Anti-roll bar clamp to mounting	Hexagon nut, M8	25 Nm (19 ftlb.)	
Connecting link (suspension/stabilizer) to anti-roll bar	Collar nut, M10 Always use a new collar nut following removal	40 Nm (30 ftlb.)	+ 30 degrees
Underbody covers/engine guard			
Cover for center and rear underbody	Tapping screw	2.7 Nm (2 ftlb.)	+/- 0.2 Nm (0.1 ftlb.)

Cover for rear underbody	Plastic nut	2.7 Nm (2 ftlb.)	+/- 0.2 Nm (0.1 ftlb.)
Engine guard holder to engine	Torx screw, M8 x 20	20 Nm (15 ftlb.)	
Engine guard	M6 screw	10 Nm (7.5 ftlb.)	
Rear apron/retaining frame with heat protection/lower part of rear lid lock			
Fastening screws at top and bottom of rear apron		3.2 Nm (2 ftlb.)	+/- 0.6 Nm (0.4 ftlb.)
Fastening screws securing rear apron to body side panel (Fastening screws in the cut-outs for the tail lights at the left and right)		7 Nm (5 ftlb.)	+/- 0.7 Nm (0.5 ftlb.)
Retaining frame to body	Collar nut, M6	7 Nm (5 ftlb.)	
Heat protection for retaining frame to heat protection for bumper	Tapping screw, 4.8 x 19	3 Nm (2 ftlb.)	
Fastening screws for lower part of lid lock		23 Nm (17 ftlb.)	
Tail light			
Fastening screws for tail light		5.8 Nm (4.5 ftlb.)	+ 0.58 Nm (0.4 ftlb.) - 0.87 Nm (0.6 ftlb.)
Air conditioning			
Refrigerant lines in engine compartment	Torx screw, M8 x 28	22 Nm (16 ftlb.)	
Refrigerant lines to desiccator	Fastening screw, M6	8 Nm (6 ftlb.)	
Fastening screw securing front wheel housing liner to body		2.7 Nm (2 ftlb.)	+/- 0.2 Nm (0.1 ftlb.)
Battery			
Battery terminal clamp		6 Nm (4.5 ftlb.)	

Wheels			
Wheel to wheel hub/central bolt	<p>All contact surfaces of the wheel, wheel hub and brake disc as well as the trapezoidal thread in the wheel hub must be free of abrasion, sand, dust or chips.</p> <p>Apply some aluminum paste (Optimoly TA) to the trapezoidal thread in the wheel hub if necessary.</p> <p>Grease the conical surface of the central bolt with a very light coating of aluminum paste before fitting each wheel.</p> <p>For advanced grease specifications (which are only necessary under certain conditions), see Workshop Manual ⇒ <i>Workshop Manual '440519 Removing and installing wheel with central bolt'</i>.</p>	600 Nm (444 ftlb.)	<p>3–step tightening procedure</p> <p>Step 1: Tighten to 600 Nm (444 ftlb.).</p> <p>Step 2: Loosen central bolt again (slightly) by approx. 90 angular degrees (1/4 turn).</p> <p>Step 3: Tighten to 600 Nm (444 ftlb.).</p>

Preliminary work for control unit programming

Procedure: 1 Make sure that the PIWIS Tester test software version **13.810** (or higher), which is required for carrying out control unit programming, is available.



Information

To install PIWIS Tester test software version **13.810** on the PIWIS Tester software version **13.800** must already be installed on the PIWIS Tester. PIWIS Tester software version **13.810** should be available as an **online update** from **05.05.2014**.

Control unit programming can also be carried out as part of this campaign using a PIWIS Tester test software version **higher than version 13.810**.

NOTICE

Fault entry in the fault memory and control unit programming aborted due to undervoltage.

- Increased current draw during diagnosis or control unit programming can cause a drop in voltage, which can result in one or more fault entries and the abnormal termination of the programming process.
- ⇒ Before starting control unit programming, connect a suitable battery charger with a current rating of at least 40 A to the vehicle.

NOTICE

Control unit programming will be aborted if the WLAN connection is unstable.

- An unstable WLAN connection can interrupt communication between PIWIS Tester II and the vehicle communication module (VCI). As a result, control unit programming may be aborted.
- ⇒ During control unit programming, always connect PIWIS Tester II to the vehicle communication module (VCI) via the USB cable.

NOTICE

Programming interrupted

- Malfunctions in control unit
 - Risk of damage to control unit
- ⇒ Route the line between the PIWIS Tester and the vehicle communication module (VCI) without tension to prevent the line from slipping out of the USB connection on the PIWIS Tester.
- ⇒ Lock connecting lines on the vehicle communication module (VCI) using the bayonet lock.
- ⇒ Route the line between the vehicle communication module (VCI) and diagnostic socket on the vehicle without tension and make sure that the connector is inserted fully into the diagnostic socket.
- ⇒ Check that the rechargeable battery for the PIWIS Tester is charged sufficiently. Connect the PIWIS Tester to the mains power supply if necessary.

- 2 Carry out general preliminary work for control unit programming as described in ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Preliminary work"*.

Carrying out control unit programming and coding

- **Re-programming DME control unit** (includes re-programming PDK control unit and possibly also re-programming the instrument cluster)
- **Re-programming the instrument cluster** (if it was not already re-programmed during DME control unit programming)

- **Re-programming control units for rear axle steering**
- **Re-coding front-end electronics control unit**

Work Procedure: 1 **Re-program DME control unit.**

The basic procedure for programming a control unit is described in the Workshop Manual - ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Programming"*.



Information

When the DME control unit is programmed, the PDK control unit is also re-programmed automatically.

On vehicles with I-no. **IY1** (model year period 1 – up to week 45), the **instrument cluster** is also re-programmed automatically as well.

Specific information on control unit programming during this campaign:

Type of control unit programming:	Control unit programming using the ' Automatic programming ' function for the DME control unit. DME control unit ⇒ > ' Programming ' menu >> ' Automatic programming ' function.
Programming sequence:	Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence. During the programming sequence, the DME control unit - as well as the PDK control unit - is re-programmed and then re-coded automatically . Do not interrupt programming and coding. Information: On vehicles with I-no. IY1 (model year period 1 – up to week 45), the instrument cluster is also re-programmed automatically during programming.
Programming time (approx.):	12 minutes or 28 minutes (if the instrument cluster is also programmed on vehicles with I-no. IY1).
Part number of the DME data record programmed as part of this campaign:	99161865x 08 (or higher) Following control unit programming, the part number can be read out of the DME control unit in the ⇒ 'Extended identification' menu using the PIWIS Tester.

<p>Procedure in the event of error messages appearing during the programming sequence:</p>	<p>⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"</i>.</p>
<p>Procedure in the event of abnormal termination of control unit programming:</p>	<ul style="list-style-type: none"> • End the guided programming sequence and disconnect the PIWIS Tester from the vehicle. • Switch off ignition and lock the vehicle. • Wait for at least 5 minutes before unlocking the vehicle again and switching on the ignition. • Connect the PIWIS Tester to the vehicle and repeat control unit programming by entering the programming code again. • If the DME and PDK control units have been programmed successfully and only the instrument cluster programming was not completed successfully, the instrument cluster can also be re-programmed individually. To do this, enter the programming code C8K6B in accordance with the programming instructions for the instrument cluster provided below and re-program the instrument cluster.
<p>Procedure in the event of other malfunctions following control unit programming (e.g. analogue speedometer does not work):</p>	<ul style="list-style-type: none"> • Switch off ignition and lock the vehicle. • Wait for at least 5 minutes before unlocking the vehicle again and switching on the ignition. • Check to see if the problem persists.

2 **Re-program the instrument cluster.**



Information

The instrument cluster only needs to be programmed separately if it was not already programmed automatically during DME control unit programming.

If in doubt, check the software version of the instrument cluster in order to determine whether or not programming is required.

The software version of the instrument cluster can be read out of the instrument cluster using the ⇒ **'Extended identification'** menu on the PIWIS Tester. The latest software version is **0373**.

If this software version is already installed on the instrument cluster, there is **no** need to program the instrument cluster. In this case, **continue** with **Step 3** – Re-program control units for rear axle steering.

The basic procedure for programming a control unit is described in the Workshop Manual - ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Programming"*.

Specific information on control unit programming during this campaign:

Type of control unit programming:	Control unit programming using the ' Campaign function in the Additional menu ' on the PIWIS Tester by entering a programming code.
Programming code:	C8K6B
Programming sequence:	<p>Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence.</p> <p>During the programming sequence, the instrument cluster is re-programmed and then re-coded automatically.</p> <p>The display in the instrument cluster is switched off during programming. "bLF" appears on the digital speedometer display.</p> <p>The ignition is still active in the background.</p> <p>Never switch the ignition off and then on again because if you do, programming will be interrupted and will then have to be restarted.</p> <p>The display in the instrument cluster will be switched on again automatically as soon as programming is complete.</p>
Time required for programming and coding (approx.):	20 minutes
Software version programmed during this campaign:	<p>0373</p> <p>Following control unit programming, the software version can be read out of the instrument cluster in the ⇒ 'Extended identification' menu using the PIWIS Tester.</p>
Procedure in the event of error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"</i> .

<p>Procedure in the event of abnormal termination of control unit programming:</p>	<ul style="list-style-type: none"> • End the guided programming sequence and disconnect the PIWIS Tester from the vehicle. • Switch off ignition and lock the vehicle. • Wait for at least 5 minutes before unlocking the vehicle again and switching on the ignition. • Connect the PIWIS Tester to the vehicle and repeat control unit programming by entering the programming code again.
<p>Procedure in the event of other malfunctions following control unit programming (e.g. analog speedometer does not work):</p>	<ul style="list-style-type: none"> • Switch off ignition and lock the vehicle. • Wait for at least 5 minutes before unlocking the vehicle again and switching on the ignition. • Check to see if the problem persists.

3 Re-program control units for rear axle steering.

NOTICE

Programming interrupted

- **Malfunctions in control unit**
 - **Risk of damage to control unit**
- ⇒ **Do not leave the PIWIS Tester unattended and do not carry out any other tasks during the entire programming process (programming takes approx. 4 minutes).**

The basic procedure for programming a control unit is described in the Workshop Manual - ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Programming"*.

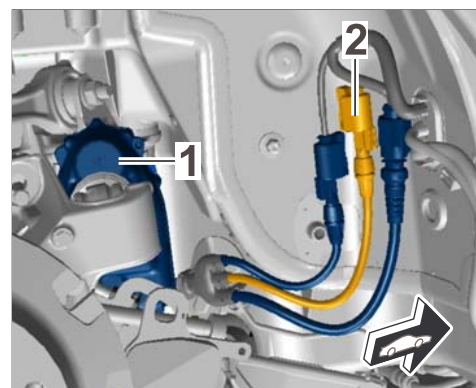
Specific information on control unit programming during this campaign:

<p>Type of control unit programming:</p>	<p>Control unit programming using the 'Campaign' function in the Additional menu on the PIWIS Tester by entering a programming code.</p>
<p>Programming code:</p>	<p>M6J3U</p>

Programming sequence:	Read and follow the information and instructions on the PIWIS Tester during the guided programming sequence. During the programming sequence, the control unit for left rear axle steering is re-programmed first, then the control unit for right rear axle steering is re-programmed automatically . Once programming is complete, both control units are re-coded automatically . Do not interrupt programming and coding.
Time required for programming and coding (approx.):	4 minutes
Software version programmed during this campaign:	1007 Following control unit programming, the software version can be read out of the control units for rear axle steering in the ⇒ 'Extended identification' menu using the PIWIS Tester.
Procedure in the event of error messages appearing during the programming sequence:	⇒ <i>Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester - section on "Troubleshooting"</i> .
Procedure in the event of abnormal termination of control unit programming:	Repeat control unit programming by entering the programming code again. *

* If control unit programming cannot be repeated or cannot be carried out successfully, proceed as follows:

- Disconnect the negative terminal of the vehicle battery while the ignition is switched on and re-connect it after a short time (approx. 10 seconds). Restore communication between the PIWIS Tester and the vehicle and repeat control unit programming by entering the programming code again.
- If programming still cannot be carried out successfully even after disconnecting and connecting the vehicle battery, remove the relevant rear wheel and the wheel housing liner and disconnect the centre electric plug connection ⇒ *Electric plug connections for rear axle steering adjuster -2-* for the affected rear axle steering adjuster ⇒ *Electric plug connections for rear axle steering adjuster -1-* in the rear wheel housing while the ignition is switched on and re-connect it after a short time (approx. 10 seconds). Then repeat control unit programming by entering the programming code again.



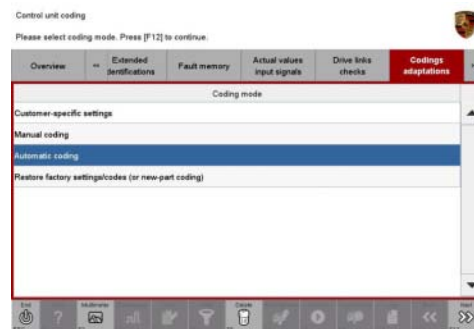
Electric plug connections for rear axle steering adjuster

4 Re-code front-end electronics control unit.

4.1 Select the ⇒ **'Front-end electronics'** control unit in the control unit selection screen (⇒ **'Overview'** menu) and confirm your selection by pressing **•>>** .

4.2 Once the 'front-end electronics' control unit has been found and is displayed in the overview, select the ⇒ **'Codings/adaptations'** menu.

4.3 Select the ⇒ **'Automatic coding'** function and press **•>>** to start coding ⇒ *Automatic coding*.

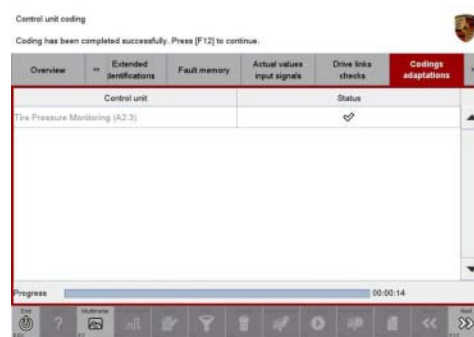


Automatic coding

4.4 When coding is complete, the message "Coding has been completed successfully" is displayed and a tick appears in the 'Status' box ⇒ *Coding successful*.

If coding is not completed successfully (error message "Coding was not completed successfully"), coding must be **repeated**.

4.5 Once coding has been completed successfully, press **•>>** to return to the start page of the ⇒ **'Codings/adaptations'** menu.



Coding successful

- 4.6 Select the ⇒ 'Overview' menu and press •<<" to return to the control unit selection screen.

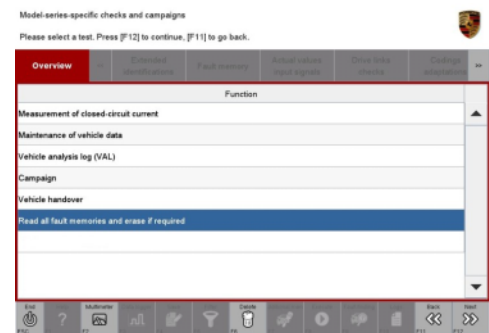
Subsequent work for control unit programming

Work Procedure: 1 Read out and erase fault memories.

- 1.1 In the control unit selection screen (⇒ 'Overview' menu), press •F7" to call up the Additional menu.
- 1.2 Select the function "Read all fault memories and erase if required" and press •>>" to confirm ⇒ *Erasing fault memories*.

The fault memories of the control units are read out.

- 1.3 Once you have read out the fault memories, delete the fault memory entries by pressing •F8" .
- 1.4 Press •F12" ("Yes") in response to the question as to whether you really want to erase all fault memory entries.



Erasing fault memories

The faults stored in the fault memories of the various control units are deleted.



Information

If the fault memories of individual control units (e.g. DME, PDK, etc.) cannot be erased, start the engine briefly and then stop it again. Wait for approx. 10 seconds before switching the ignition on again and re-establish the connection between the PIWIS Tester and the vehicle. Then read out and erase the fault memories of the affected control units again separately.

If the fault memory entries are still present, proceed as follows:

- Switch off ignition.
- Disconnect the PIWIS Tester diagnostic connector from the diagnostic socket.
- Lock the vehicle using the driver's key.
- Wait for approx. 1 minute before unlocking the vehicle again and then read out the fault memories of the control units again and erase them.

If control units are found to have faults which cannot be erased and are not caused by control unit programming, these faults must be found and corrected. This work **cannot** be invoiced under the workshop campaign number.



Information

If the fault memory entry "**01001C: Operator and display Log - No communication**" is stored in the instrument cluster, please **ignore** this. This fault memory entry is caused by a communication problem between the control units during programming.

- 1.5 Once you have erased the fault memories, select the ⇒ **'Overview'** menu and press •<<" to return to the control unit selection screen ⇒ *Control unit selection*.

2 Reset instrument cluster to factory settings.

- 2.1 Select ⇒ **'Instrument cluster'** in the control unit selection screen (⇒ **'Overview'** menu) and press •>>" to confirm your selection ⇒ *Control unit selection – Instrument cluster*.

- 2.2 Once the instrument cluster has been found and is displayed in the overview, select the ⇒ **'Codings/adaptations'** menu.

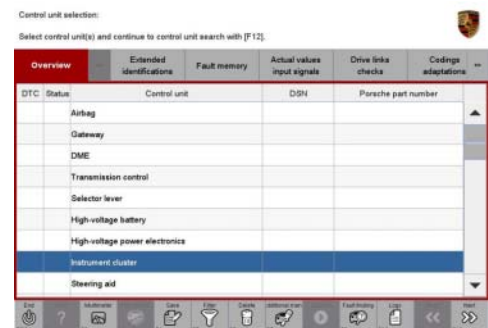
- 2.3 Select ⇒ **'Restore factory settings/codes'** and press •>>" to start the process ⇒ *Resetting instrument cluster to factory settings*.

- 2.4 Once the settings have been reset successfully, press •>>" to continue.

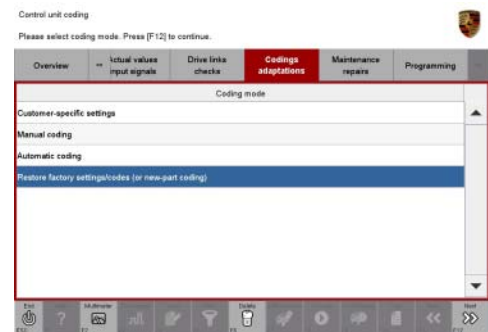
- 2.5 Select the ⇒ **'Overview'** menu and press •<<" to return to the control unit selection screen.



Control unit selection



Control unit selection – Instrument cluster



Resetting instrument cluster to factory settings



Information

When the instrument cluster is reset, the **individual settings** implemented in the instrument cluster by the customer will be **lost** and are reset to the **default values** of the **country version** that applies to the vehicle.

After carrying out the campaign, therefore, please inform your customers that personal settings they have implemented in the instrument cluster will have to be **set again** and provide them with any **help and support** they need for setting the relevant options.

This affects the following settings in the Vehicle menu, for example:

- Lowering of exterior mirror on passenger's side during parking manoeuvres
- Locking settings
- Light & Visibility settings
- Units (kilometers/miles, Celsius/Fahrenheit, ...)
- Language



Information

The values for the Tire Pressure Monitoring (TPM) system will be lost when the instrument cluster is reset.

After carrying out the campaign, the **tire type** and **tire size** must be set again under **Main menu > TPM > Settings** in the instrument cluster. The wheel position values will then be re-taught in the control unit during the **test drive** (at a speed of over **15 mph (25 km/h)**).

To set the tire type and tire size, see ⇒ Owner's Manual, chapter Instrument Panel and Multi-Function Display - 'Tire Pressure Monitoring, TPM'.

3 Check service reminder indicator on the multi-function display in the instrument cluster.

- 3.1 Check the plausibility of the service reminder indicator displays for the various service events (maintenance, intermediate maintenance and oil service) under "Info" >> "Service intervals" in the "Vehicle" main menu on the multi-function display in the instrument cluster.



Information

If the messages "Service now", "Intermediate maintenance now" and/or "Oil service now" are displayed on the multi-function display although the mileage and date for the next service have not yet been reached (implausible service reminder indicator display), the service interval must be reset using the PIWIS Tester so that the messages will no longer be displayed in the instrument cluster.

If this happens, carry out the steps described under **Step 4** – "Reset service reminder indicator and re-write service interval".

If this does **not** happen, continue with **Step 5**.

The fault that resulted in an implausible service reminder indicator display was already corrected by programming the instrument cluster.

4 Reset service reminder indicator and re-write service interval.

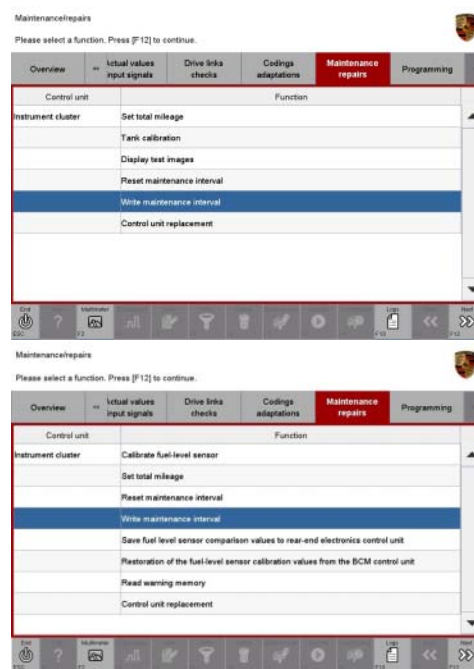


Information

If the service intervals are reset without first carrying out maintenance, intermediate maintenance or an oil service, the original values for the date and mileage of the last service events that are stored in the instrument cluster must then be restored. This ensures that future service intervals will be calculated correctly.

For this reason, the currently stored values for the date and mileage of the last service events must first be read out of the instrument cluster and noted.

- 4.1 Read out the values stored for the mileage and date of the last customer service in the instrument cluster using the PIWIS Tester and take note of them.
 - 4.1.1 Select ⇒ **'Instrument cluster'** in the control unit selection screen (⇒ **'Overview'** menu) and press •>>“ to confirm your selection.
 - 4.1.2 Once the instrument cluster has been found and is displayed in the overview, select the ⇒ **'Maintenance/repairs'** menu.
 - 4.1.3 Select the function ⇒ **'Write service interval'** and press •>>“ to confirm your selection ⇒ *“Write service interval” function.*
 - 4.1.4 Press •>>“ to confirm the message “This procedure is used to write service intervals, e.g. when installing a new instrument cluster”.
 - 4.1.5 Check the value entered for the country in which the vehicle is operated and correct it if necessary. Then press •>>“ to continue.



“Write service interval” function

4.1.6 Take note of the values entered for "**Mileage of last customer service**" and "**Date of last customer service**" under "Major maintenance", "Intermediate maintenance" and "Oil change service" ⇒ *Values for service intervals*.

4.1.7 Press •<<" to return to the start page of the ⇒ '**Maintenance/repairs**' menu.

4.2 Reset service interval.

4.2.1 Select the function ⇒ '**Reset service interval**' on the start page of the ⇒ '**Maintenance/repairs**' menu and press •>>" to confirm your selection ⇒ *"Reset service interval" function*.

4.2.2 Enter a tick in the "Value" field for the phases

- "Major maintenance"
- "Intermediate maintenance"
- "Oil service"

and press •F8" ("Execute") to confirm in order to reset the service intervals ⇒ *Resetting service interval*.

4.2.3 Once the service intervals have been reset, the message "Service interval was reset successfully" will appear.

Press •>>" to continue.
The service intervals must then be re-written.

Write maintenance interval
Please make selection. Continue with [F12], back with [F11].

Control unit	Function	Parameters	Value	Unit
Instrument cluster	Main maintenance	Mileage at last service	77	km
		Date of the last service	19.11.2013	(dd.mm.yyyy)
Intermediate maintenance		Mileage at last service	77	km
		Date of the last service	19.11.2013	(dd.mm.yyyy)
Oil change service		Mileage at last service	77	km
		Date of the last service	19.11.2013	(dd.mm.yyyy)

As a rule, changes are necessary only if the instrument cluster was replaced or the corresponding maintenance measure was already performed earlier.

Values for service intervals

Maintenance/repairs
Please select a function. Press [F12] to continue.

Control unit	Function
Instrument cluster	Set total mileage
	Tank calibration
	Display test images
	Reset maintenance interval
	Write maintenance interval
	Control unit replacement

"Reset service interval" function

Reset maintenance interval
Please select the completed maintenance measure and write with [F8].

Control unit	Phase	Value
Instrument cluster	Main maintenance	<input type="checkbox"/>
	Intermediate maintenance	<input type="checkbox"/>
	Oil service	<input type="checkbox"/>

Note:
The maintenance interval after a completed maintenance measure is reset with this procedure.

Resetting service interval

4.3 Re-write service intervals.

4.3.1 Select the function ⇒ **'Write service interval'** on the start page of the ⇒ **'Maintenance/repairs'** menu and press •>>“ to confirm your selection ⇒ *“Write service interval” function.*

4.3.2 Press •>>“ to confirm the message “This procedure is used to write service intervals, e.g. when installing a new instrument cluster”.

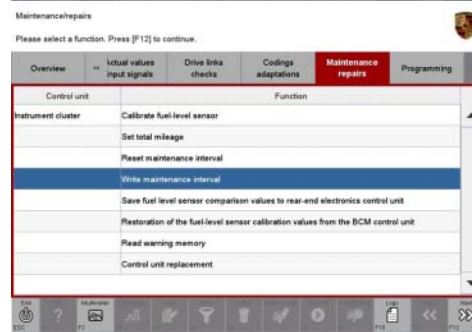
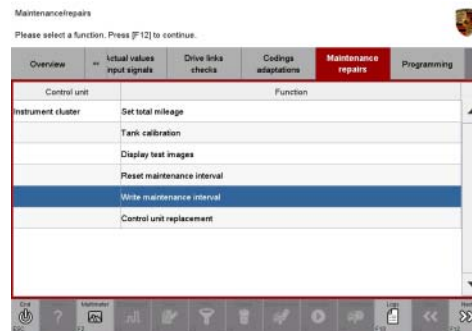
4.3.3 Check the value entered for the country in which the vehicle is operated and correct it if necessary.
Then press •>>“ to continue.

4.3.4 Overwrite the current value for the parameters **“Mileage of last customer service”** and **“Date of last customer service”** under **“Major maintenance”**, **“Intermediate maintenance”** and **“Oil change service”** and enter the values for the mileage and date of the last customer service, which you read out and noted in **Step 4.1.6** for the service events

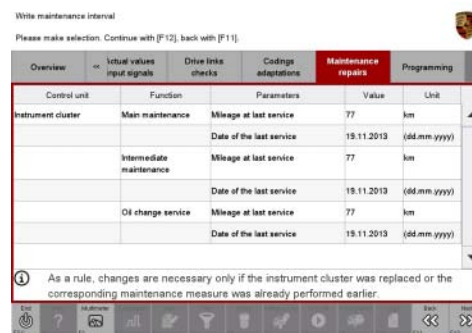
- Maintenance
- Intermediate maintenance
- Oil service

instead ⇒ *Changing values for service intervals.*

4.3.5 Confirm the values you have entered by pressing •>>“ .

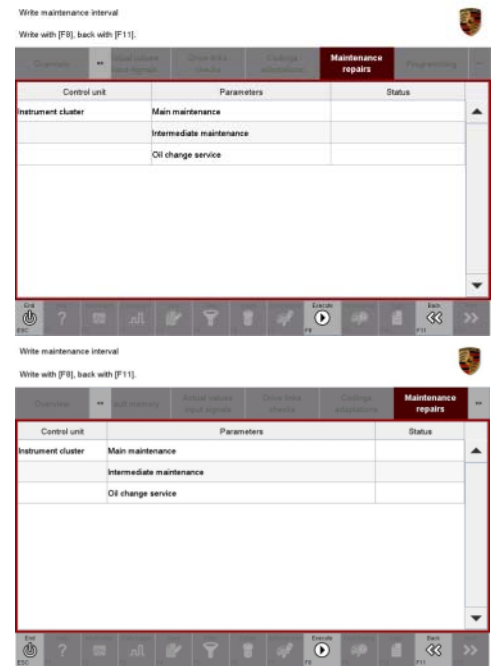


“Write service interval” function



Changing values for service intervals

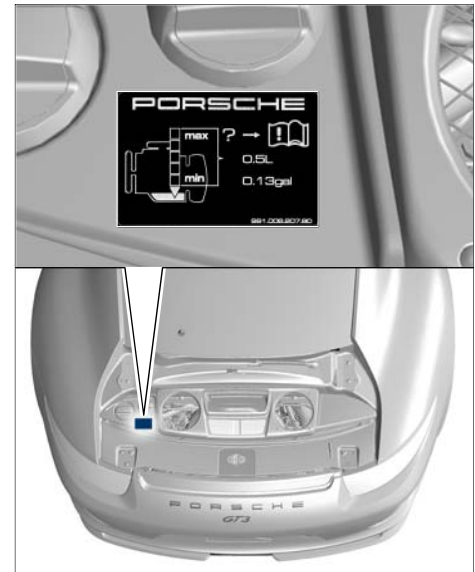
- 4.3.6 Write the service interval by pressing •F8" ("Execute")
⇒ *Writing service interval*.
 - 4.3.7 Once the service interval has been written, a tick will appear in the "Status" box.
 - 4.3.8 The message "Service interval was written successfully" is then displayed.
Press •>>" to continue.
 - 4.3.9 Select the ⇒ **'Overview'** menu and press •<<" to return to the control unit selection screen.
- 5 Switch off ignition.
 - 6 Disconnect the PIWIS Tester from the vehicle.
 - 7 Switch off and disconnect the battery charger.

*Writing service interval*

Applying indication sticker in the oil filler opening area in the engine compartment

- Work Procedure:
- 1 Open the engine compartment lid.
 - 2 Clean the plastic cover in the oil filler opening area using a suitable cleaning agent (e.g. isopropanol) and then rub it dry with a clean, lint-free cloth.

- 3 Affix oil filling indication sticker, Part No. 991.006.207.80, to the plastic cover in the oil filler opening area as shown ⇒ *Affixing indication sticker in oil filler opening area.*



Affixing indication sticker in oil filler opening area

Replacing vehicle identification stickers

NOTICE

Effects of heat from hot-air gun

- Risk of damage to paintwork, interior and peripheral components
- ⇒ Heat sticker carefully and only for as long as absolutely necessary

Work Procedure: Once the engine in the vehicle has been replaced, the stickers affixed to the vehicle showing the vehicle identification number and engine number must be replaced with updated stickers showing the engine number of the **newly installed engine**.

The stickers must be affixed at the following positions on the **right-hand side of the vehicle in direction of travel**:

- Engine compartment lid
- Bottom of A-pillar
- Luggage compartment lid

On vehicles with **country version China (C33)**, the vehicle **identification plate** affixed to the bottom of the B-pillar in the door entry area on the right-hand side of the vehicle in direction of travel must **also** be replaced.

- 1 **Affix new vehicle identification stickers over existing stickers on the engine compartment lid, bottom of A-pillar and luggage compartment lid.**

- 1.1 Check that the vehicle identification number and engine number shown on the **new** stickers match the vehicle identification number of the vehicle and the engine number of the **newly installed engine**.

1.2 **Affix new sticker on the engine compartment lid.**

- 1.2.1 Clean the sticker ⇒ *Sticker on engine compartment lid* affixed to the engine compartment lid using a suitable cleaning agent (e.g. isopropanol) and then rub it dry with a clean, lint-free cloth.

- 1.2.2 Affix a new sticker over the existing sticker in such a way that the existing sticker is **covered exactly** by the new sticker. When affixing the new sticker, make sure that the new sticker is affixed with the **same text alignment** as the existing sticker.

- 1.2.3 Close the engine compartment lid.

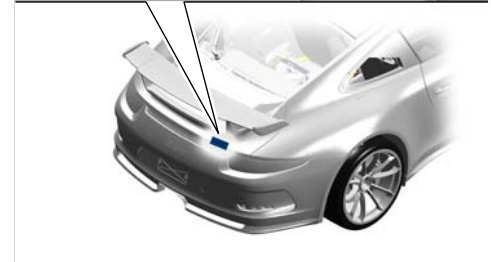
1.3 **Affix new sticker to the bottom of the A-pillar.**

- 1.3.1 Open the doors on the right-hand side of the vehicle.

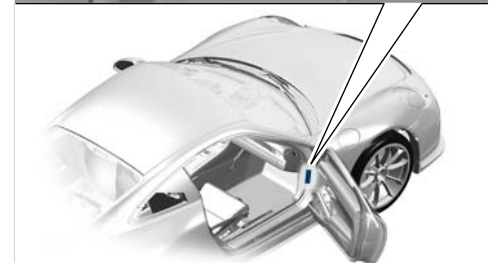
- 1.3.2 Clean the sticker ⇒ *Sticker on bottom of A-pillar* affixed to the A-pillar using a suitable cleaning agent (e.g. isopropanol) and then rub it dry with a clean, lint-free cloth.

- 1.3.3 Affix a new sticker over the existing sticker in such a way that the existing sticker is **covered exactly** by the new sticker. When affixing the new sticker, make sure that the new sticker is affixed with the **same text alignment** as the existing sticker.

- 1.3.4 Close the doors on the right-hand side of the vehicle.



Sticker on engine compartment lid



Sticker on bottom of A-pillar

1.4 **Affix new sticker on the luggage compartment lid.**

1.4.1 Open the luggage compartment lid.

1.4.2 Clean the sticker ⇒ *Sticker on luggage compartment lid* affixed to the side of the luggage compartment lid using a suitable cleaning agent (e.g. isopropanol) and then rub it dry with a clean, lint-free cloth.

1.4.3 Affix a new sticker over the existing sticker in such a way that the existing sticker is **covered exactly** by the new sticker. When affixing the new sticker, make sure that the new sticker is affixed with the **same text alignment** as the existing sticker.

1.4.4 Close the luggage compartment lid.



Sticker on luggage compartment lid

Important information on installing the six-point seat belt



Six-point seat belt not installed in accordance with regulations

- **Danger of injury if six-point seat belt is not installed properly**
- **The vehicle's general certification can be rendered null and void**

⇒ **Screw six-point seat belt securely to the bodyshell**

⇒ **Do not change the threaded joint for the three-point seat belt when installing the six-point seat belt**



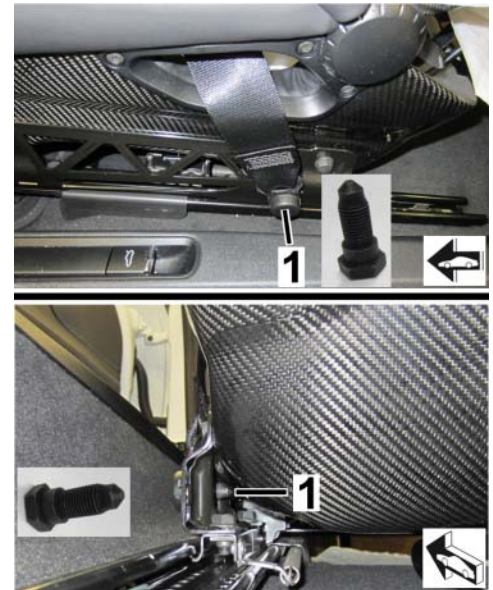
Information

On vehicles with a six-point seat belt, check that the six-point seat belt and three-point seat belt are installed correctly:

- The **six-point seat belt** must be screwed **securely to the bodyshell** in accordance with FIA specifications and must **not** therefore be secured **to the seat** together with the three-point seat belt.
- There must be **no changes made** to the threaded joint for the components of the **three-point seat belt** because otherwise, the **vehicle's general certification will be rendered null and void**.

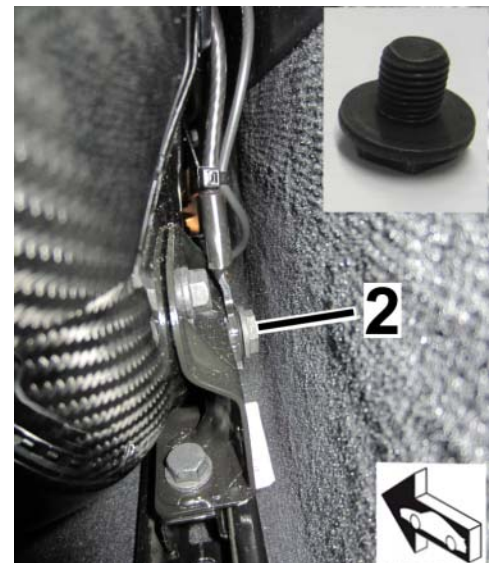
Make sure that the components of the **three-point seat belt** are secured to the seat using the correct fastening screws:

- Secure **three-point seat belt** to the sports bucket seat using **long** fastening screw, Part No. 999.075.057.09 ⇒ *Mounting for three-point seat belt on sports bucket seat -1-*



Mounting for three-point seat belt on sports bucket seat

- Secure **seat-belt buckle** to the sports bucket seat using **short** fastening screw, Part No. 999.218.101.02 ⇒ *Mounting for seat-belt buckle on sports bucket seat -2-*



Mounting for seat-belt buckle on sports bucket seat

- Following removal, always fit **new** fastening screws and observe the specified tightening torques.

Work Procedure: Procedure for correct installation of the **six-point seat belt** ⇒ *Workshop Manual '691519 Removing and installing six-point seat belt'*.

Subsequent work

Work Procedure: 1 Test-drive the vehicle according to the criteria for carrying out a test drive as part of the sales check and also observe the following instructions:

- Only allow the service advisor or workshop staff with the relevant qualification and experience (e.g. workshop manager) to test-drive the vehicle
- Drive **normally** for a distance of approx. **24 miles (40 kilometers)**
- Only drive with the selector lever in position "D"
- Maximum engine speed: **7,000 rpm**
- **Do not drive in kickdown mode** in order to ensure that a maximum engine speed of 7,000 rpm is not exceeded
- **Do not** drive off with **Launch Control**
- Check vehicle for unusual handling behavior, vibrations and noise
- Add additional oil or coolant if necessary.

Warm-up phase

During the warm-up phase, the maximum engine speed is limited to 7,000 rpm in order to protect the engine. The symbol appears on the multifunction display on the instrument panel throughout this period. The symbol goes out as soon as the engine oil reaches a temperature of approximately 113° F (45° C).

When accelerating or overtaking in selector-lever position M, shift up to the next gear before the engine speed limit is reached.



- 2 After carrying out the test drive and before stopping the engine, create a Vehicle Analysis Log (VAL) using the PIWIS Tester while the engine is running and when the work is complete, use the '**Data management**' > '**VAL data return**' function on the PIWIS Tester to send the VAL to Porsche AG.
- 3 Raise the vehicle again using the lifting platform and check the engine for leaks or other problems. To do this, remove the engine guard and re-fit it after checking the engine ⇒ *Workshop Manual '108019 Removing and installing engine guard'*.

Prepare the vehicle visually before handing it over to the customer and carry out any minor repairs that are required in accordance with Porsche Dynamic Repair.

This can include the following tasks, for example:

- Cleaning the vehicle thoroughly inside and out and getting it ready

- Dent repairs
- Paint repairs
- Alloy wheel reconditioning
- Interior cosmetic repairs
- Glass repairs (in the event of stone chip damage to the windscreen – if repairs are possible)

For visual preparation and any minor repairs that may be required, the **maximum** invoice value corresponds to **200 TU** of the **hourly charging rate under warranty**.

The costs incurred can also be invoiced as **sublet labor** in the campaign claim for AE01, see also section on ⇒ *Technical Information 'AE0100 Invoicing'*.

- 4 Enter the recall campaign in the Warranty and Maintenance booklet.
- 5 Give the "911 GT3" Owner's Manual Supplement, Part No. 000.043.989.08 (Item No. WKD 991 18 00 15) and the certificate of engine replacement to the customer. Also inform the customer about the engine speed limit when the engine oil is cold and the corresponding indicator light in the instrument cluster. Further run-in procedures can be found in the Owner's Manual under "Break in hints for the first 2,000 miles (3,000 kilometers)".

Attachment "B"

Claim Submission - Recall Campaign AE01

Warranty claims should be submitted via WWS/PQIS.

Open campaigns may be checked by using either the PIWIS Vehicle Information system or through PQIS Job Creation.

Labor, parts, and sublet will be automatically inserted when Technician is selected in WWS/PQIS. If necessary, the required part numbers will need to be manually entered into warranty system by the dealer administrator.

Below, please find specific coding instructions to claim the Loaner Vehicle and Vehicle Storage (where applicable). These coding instructions must be strictly adhered to. Along with claiming the AE01 / AE11 campaign, separate PQIS line(s) must be created for the corresponding Loaner vehicle and if applicable, storage fees:

Loaner vehicle reimbursement:

Customer Statement and Technical Evaluation:

Part ID - C903

Reason Code - 9731 (A text box will appear, enter Loaner Vehicle - please see the screen prints listed below).

Repair Code 1.

Cause Segment:
Part ID - C903
Reason Code - 9735
Repair Code 1
Warranty Code 2
Attach completed loaner agreement to PQIS job.

Search result

Selection: C9030 Rental car

Customer not available

C9030	<input type="radio"/>	1000	Mechanical faults
	<input type="radio"/>	1100	Adjustment fault
	<input type="radio"/>	1200	Incorrect/missing part
	<input type="radio"/>	1300	Unevenness/out-of-true
	<input type="radio"/>	1400	Temperature fault
	<input type="radio"/>	1500	Torn/broken
	<input type="radio"/>	1600	Ineffective
	<input type="radio"/>	1700	Stiff
	<input type="radio"/>	1800	loose-fitting
	<input type="radio"/>	2000	Noises
	<input type="radio"/>	4000	Electrical faults
	<input type="radio"/>	4600	Inconsistent media
	<input type="radio"/>	5000	Leaks
	<input type="radio"/>	6100	Black smoke/blue smoke
<input checked="" type="radio"/>	9731	Other <input type="text" value="Loaner Car"/>	

Graphic 1

Job management — Cause

Search result

Selection: C9030 Rental car

C9030	<input type="radio"/>	1000	Mechanical faults
	<input type="radio"/>	1100	Adjustment fault
	<input type="radio"/>	1200	Incorrect/missing part
	<input type="radio"/>	1300	Unevenness/out-of-true
	<input type="radio"/>	1400	Temperature fault
	<input type="radio"/>	1500	Torn/broken
	<input type="radio"/>	1600	Ineffective
	<input type="radio"/>	1700	Stiff
	<input type="radio"/>	1800	loose-fitting
	<input type="radio"/>	2000	Noises
	<input type="radio"/>	4000	Electrical faults
	<input type="radio"/>	4600	Inconsistent media
	<input type="radio"/>	5000	Leaks
	<input type="radio"/>	6100	Black smoke/blue smoke
<input checked="" type="radio"/>	9735	Repairs in accordance with PAG instructions	

Graphic 2

In the event storage charges have been incurred, please submit with the following:

Customer Statement and Technical Evaluation:

Part ID - C908

Reason Code - 9731 (A text box will appear, enter Vehicle Storage - please see the screen prints listed below).

Repair Code 1.

Cause Segment:

Part ID - C908

Reason Code - 9735

Repair Code 1

Warranty Code 2

Attach completed invoice for storage.

Note: Up to \$21.00 per day may be claimed. The number of days should be noted in the PQIS comments in the Cause segment.

NOTE:

The documentation for the loaner and vehicle storage must show as a billable item. If no dollar amount is billed out on these documents a copy of the repair order must also be attached to PQIS to support claim payment.

Search result

Selection: C9080 Additional expense

Customer not available

C9080		
<input type="radio"/>	1000	Mechanical faults
<input type="radio"/>	1100	Adjustment fault
<input type="radio"/>	1200	Incorrect/missing part
<input type="radio"/>	1300	Unevenness/out-of-true
<input type="radio"/>	1400	Temperature fault
<input type="radio"/>	1500	Torn/broken
<input type="radio"/>	1600	Ineffective
<input type="radio"/>	1700	Stiff
<input type="radio"/>	1800	loose-fitting
<input type="radio"/>	2000	Noises
<input type="radio"/>	4000	Electrical faults
<input type="radio"/>	4600	Inconsistent media
<input type="radio"/>	5000	Leaks
<input type="radio"/>	6100	Black smoke/blue smoke
<input checked="" type="radio"/>	9731	Other <input type="text" value="Vehicle Storage"/>

Graphic 3

Job management — Cause

Search result

Selection: C9080 Additional expense		
C9080	<input type="radio"/>	1000 Mechanical faults
	<input type="radio"/>	1100 Adjustment fault
	<input type="radio"/>	1200 Incorrect/missing part
	<input type="radio"/>	1300 Unevenness/out-of-true
	<input type="radio"/>	1400 Temperature fault
	<input type="radio"/>	1500 Torn/broken
	<input type="radio"/>	1600 Ineffective
	<input type="radio"/>	1700 Stiff
	<input type="radio"/>	1800 loose-fitting
	<input type="radio"/>	2000 Noises
	<input type="radio"/>	4000 Electrical faults
	<input type="radio"/>	4600 Inconsistent media
	<input type="radio"/>	5000 Leaks
	<input type="radio"/>	6100 Black smoke/blue smoke
	<input checked="" type="radio"/>	9735 Repairs in accordance with PAG instructions

Graphic 4

Scope 1: Vehicles **up to** engine number **MA175 E 01068** (engine to be replaced):

Working time:

Replacing engine

Labor time: **1365 TU**

- Includes:
- Creating Vehicle Analysis Log (VAL)
 - Draining engine oil from engine to be replaced and from oil filter on engine to be replaced
 - Removing engine to be replaced and installing new engine
 - Removing and mounting Porsche Doppelkupplung (PDK)
 - Removing peripheral parts on the engine to be replaced and fitting them on the new engine
 - Replacing vent line on PDK transmission
 - Checking engine-oil level
 - Replacing desiccator for air conditioning system
 - Carrying out control unit programming and coding
 - Affixing oil filling indication sticker on the oil filler opening in the engine compartment
 - Replacing vehicle identification stickers
 - Test-driving the vehicle and carrying out final acceptance inspection

Required parts and materials:

000.043.302.61	Engine	1 ea.
991.110.270.82	Scoop	1 ea.

999.073.443.01	Combination screw, M12 x 1.5 x 40	2 ea.
999.072.869.01	Hexagon-head bolt, M12 x 1.5 x 45	2 ea.
999.084.123.09	Hexagon nut, M10	2 ea.
900.076.064.02	Hexagon nut, M8	4 ea.
999.072.868.01	Hexagon-head bolt, M12 x 1.5 x 80	2 ea.
999.072.859.01	Hexagon-head bolt, M12 x 1.5 x 58	2 ea.
999.084.445.01	Hexagon nut, M12 x 1.5	4 ea.
999.084.648.01	Hexagon nut, M10	2 ea.
999.086.009.02	Hexagon nut, M12	1 ea.
N 908.484.05	Hexagon nut, M12 x 1.5	2 ea.
996.106.801.03	O-ring	3 ea.
999.707.660.40	O-ring	2 ea.
944.573.143.01	Desiccator	1 ea.
N 906.651.01	Cheese head bolt, M10 x 1 x 29	10 ea.
999.385.009.01	Hexagon round-head bolt, M12 x 1.5 x 55	6 ea.
999.073.517.01	Cheese head bolt, M10 x 1 x 46.5	12 ea.
997.111.336.90	Clamp	2 ea.
900.380.005.01	Hexagon nut, M8	4 ea.
980.111.561.00	Seal	2 ea.
900.067.362.01	Cheese head bolt, M8 x 50	2 ea.
999.651.401.01	Cable clamp	4 ea.
999.512.707.00	Hose clamp	2 ea.
N 100.988.11	Hexagon-head bolt, M6 x 16	3 ea.
000.043.209.67	Breather hose	1 ea.
9G1.321.011.03	Breather hose	1 ea.
999.507.909.40	Holder	1 ea.
N 102.627.01	Combination holder	1 ea.
991.006.207.80	Oil filling sticker	1 ea.
000.043.989.08	911 GT3 Driver's Manual Supplement	1 ea.
000.043.301.48	Antifreeze (20-liter container)	0.25 ea. (= approx. 5 liters)
000.043.205.93	Klüberplus Gel grease (100g tube)	0.05 ea. (= approx. 5 g)

000.043.004.00	Optimoly HT mounting paste (90g tube)	0.1 ea. (= approx. 10 g)
000.043.020.00	Optimoly TA assembly grease (100g tube)	0.05 ea. (= approx. 5 g)
Required auxiliary tool:		
9A1.101.213.00	Transport eyebolt	1 ea.*
* The transport eyebolt is only required if it is not already available in the Porsche Dealership. The transport eyebolt must only be invoiced once for the first vehicle during warranty processing in each Porsche Dealership. Only the required parts and materials must be invoiced in the campaign claim for the remaining vehicles on which work is carried out as part of this campaign in the Porsche Dealership.		
⇒ Damage code AE01 099 000 2		

- **Costs incurred for visual preparation and minor repairs:**

Costs incurred for visual preparation of the vehicle and for minor repairs in accordance with Porsche Dynamic Repair, which were carried out as part of the Porsche 911 GT3 quality initiative 2014, can also be invoiced in the campaign claim for AE01 as **sublet labor**.

The maximum invoice value corresponds to **200 TU** of the **hourly charging rate under warranty**.

- **Documentation of the 1-year Porsche Approved Warranty:**

The additional 1-year Porsche Approved Warranty for the vehicle is provided **free of charge** and is entered in the system by Porsche.

The **Porsche Approved Warranty certificate** must be completed fully and a copy must be placed in the vehicle documents folder as documentation for the customer. The Porsche Approved Warranty certificate can be found under "**Standard forms**" for the 911 GT3 (991) model year 2014 in the **PIWIS information system**.

Scope 2: Vehicles **as of** engine number **MA175 E 01069** (engine to be replaced):

Working time:	
Replacing engine	Labor time: 1365 TU
Includes:	<ul style="list-style-type: none"> Creating Vehicle Analysis Log (VAL) Draining engine oil from engine to be replaced and from oil filter on engine to be replaced Removing engine to be replaced and installing new engine Removing and mounting Porsche Doppelkupplung (PDK) Removing peripheral parts on the engine to be replaced and fitting them on the new engine Replacing vent line on PDK transmission

Checking engine-oil level
 Replacing desiccator for air conditioning system
 Carrying out control unit programming and coding
 Affixing oil filling indication sticker on the oil filler opening in the engine compartment
 Replacing vehicle identification stickers
 Test-driving the vehicle and carrying out final acceptance inspection

Required parts and materials:

000.043.302.61	Engine	1 ea.
999.073.443.01	Combination screw, M12 x 1.5 x 40	2 ea.
999.072.869.01	Hexagon-head bolt, M12 x 1.5 x 45	2 ea.
999.084.123.09	Hexagon nut, M10	2 ea.
900.076.064.02	Hexagon nut, M8	4 ea.
999.072.868.01	Hexagon-head bolt, M12 x 1.5 x 80	2 ea.
999.072.859.01	Hexagon-head bolt, M12 x 1.5 x 58	2 ea.
999.084.445.01	Hexagon nut, M12 x 1.5	4 ea.
999.084.648.01	Hexagon nut, M10	2 ea.
999.086.009.02	Hexagon nut, M12	1 ea.
N 908.484.05	Hexagon nut, M12 x 1.5	2 ea.
996.106.801.03	O-ring	3 ea.
999.707.660.40	O-ring	2 ea.
944.573.143.01	Desiccator	1 ea.
N 906.651.01	Cheese head bolt, M10 x 1 x 29	10 ea.
999.385.009.01	Hexagon round-head bolt, M12 x 1.5 x 55	6 ea.
999.073.517.01	Cheese head bolt, M10 x 1 x 46.5	12 ea.
997.111.336.90	Clamp	2 ea.
900.380.005.01	Hexagon nut, M8	4 ea.
980.111.561.00	Seal	2 ea.
900.067.362.01	Cheese head bolt, M8 x 50	2 ea.
999.651.401.01	Cable clamp	4 ea.
999.512.707.00	Hose clamp	2 ea.
N 100.988.11	Hexagon-head bolt, M6 x 16	3 ea.

000.043.209.67	Breather hose	1 ea.
9G1.321.011.03	Breather hose	1 ea.
999.507.909.40	Holder	1 ea.
N 102.627.01	Combination holder	1 ea.
991.006.207.80	Oil filling sticker	1 ea.
000.043.989.08	911 GT3 Driver's Manual Supplement	1 ea.
000.043.301.48	Antifreeze (20-liter container)	0.25 ea. (= approx. 5 liters)
000.043.205.93	Klüberplus Gel grease (100g tube)	0.05 ea. (= approx. 5 g)
000.043.004.00	Optimoly HT mounting paste (90g tube)	0.1 ea. (= approx. 10 g)
000.043.020.00	Optimoly TA assembly grease (100g tube)	0.05 ea. (= approx. 5 g)
Required auxiliary tool:		
9A1.101.213.00	Transport eyebolt	1 ea.*
<p>* The transport eyebolt is only required if it is not already available in the Porsche Dealership. The transport eyebolt must only be invoiced once for the first vehicle during warranty processing in each Porsche Dealership. Only the required parts and materials must be invoiced in the campaign claim for the remaining vehicles on which work is carried out as part of this campaign in the Porsche Dealership.</p>		
⇒ Damage code AE01 099 000 2		

- **Costs incurred for visual preparation and minor repairs:**

Costs incurred for visual preparation of the vehicle and for minor repairs in accordance with Porsche Dynamic Repair, which were carried out as part of the Porsche 911 GT3 quality initiative 2014, can also be invoiced in the campaign claim for AE01 as **sublet labor**.

The maximum invoice value corresponds to **200 TU** of the **hourly charging rate under warranty**.

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The **Porsche Approved Warranty certificate** must be completed fully and a copy must be placed in the vehicle documents folder as documentation for the customer. The Porsche Approved Warranty certificate can be found under "**Standard forms**" for the 911 GT3 (991) model year 2014 in the **PIWIS information system**.

References

- References:
- ⇒ *Workshop Manual '033500 Fault memory for on-board diagnosis'*
 - ⇒ *Workshop Manual '100119 Removing and installing engine'*
 - ⇒ *Workshop Manual '1001IN Tools for removing units and working on the engine assembly support'*
 - ⇒ *Workshop Manual '1X00IN Technical values - GT3'*
 - ⇒ *Workshop Manual '108019 Removing and installing engine guard'*
 - ⇒ *Workshop Manual '136019 Removing and installing flywheel - Porsche Doppelkupplung (PDK)'*
 - ⇒ *Workshop Manual '170155 Changing engine oil and oil filter'*
 - ⇒ *Workshop Manual '193817 Draining and filling coolant (incl. bleeding the cooling system)'*
 - ⇒ *Workshop Manual '198119 Removing and installing engine-compartment blower'*
 - ⇒ *Workshop Manual '2X00IN Work instructions after disconnecting the battery'*
 - ⇒ *Workshop Manual '243619 Removing and installing air guide'*
 - ⇒ *Workshop Manual '242519 Removing and installing air cleaner housing'*
 - ⇒ *Workshop Manual '261519 Removing and installing retaining frame with heat protection'*
 - ⇒ *Workshop Manual '373427 Removing and mounting Porsche Doppelkupplung (PDK)'*
 - ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*
 - ⇒ *Workshop Manual '4X00IN Tightening torques for rear axle'*
 - ⇒ *Workshop Manual '420619 Removing and installing rear-axle cross member'*
 - ⇒ *Workshop Manual '421419 Removing and installing support plate'*
 - ⇒ *Workshop Manual '422119 Removing and installing rear drive shaft'*
 - ⇒ *Workshop Manual '429019 Removing and installing rear anti-roll bar'*
 - ⇒ *Workshop Manual '440519 Removing and installing wheel with central bolt'*
 - ⇒ *Workshop Manual '519319 Removing and installing cover for centre underbody'*
 - ⇒ *Workshop Manual '519419 Removing and installing cover for rear underbody'*
 - ⇒ *Workshop Manual '558619 Removing and installing lower part of rear lid lock'*
 - ⇒ *Workshop Manual '635519 Removing and installing rear apron'*
 - ⇒ *Workshop Manual '8X00IN Technical data for air-conditioning system'*
 - ⇒ *Workshop Manual '870317 Draining and filling refrigerant'*
 - ⇒ *Workshop Manual '875519 Removing and installing desiccator'*
 - ⇒ *Workshop Manual '9X00IN Basic instructions and procedure for control unit programming using the PIWIS Tester'*

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