

AC02 Recall campaign - Checking and reworking fuel line routing

Vehicle Type: **911 Carrera (991)/911 Carrera S (991)**

Model Year: **2012**

Concerns: **Fuel line**

Situation: **There is a possibility that the rapid-action coupling on a fuel line on the underside of the vehicle is touching a heating pipe.**

If the fuel line is touching, this can impair the locking function of the rapid-action coupling, causing the rapid-action coupling to open and as a result, fuel can leak out.

Action Required: To prevent engine problems as a result of this - even the possibility of the engine stopping suddenly - and any danger arising from igniting fuel, the clearance between the fuel line and heating pipe will be checked on the affected vehicles.

- If there is sufficient clearance, a spacer ring must be fitted on the fuel line ⇒ **Scope 1**.
- If there is not sufficient clearance or if the fuel line is touching, the fuel line must be replaced by a new fuel line with a spacer ring ⇒ **Scope 2**.

Affected Vehicles: Only the vehicles assigned to the campaign (see also PIWIS Vehicle Information).

Part Nos.: **Scope 1:** Fitting spacer ring on the fuel line
 000.043.110.19 ⇒ Spacer ring 1 ea.

Scope 2: Replacing fuel line
 000.043.110.18 ⇒ Fuel line 1 ea.

Tools: **Scope 1:**
 Torque screwdriver Nr.89 Pos.5
 Electronic torque wrench, 2 - 100 Nm/1.5 - 74 ftlb. 9768

Scope 2:
 Battery charging computer DPBL 425B-14 1017
 Torque screwdriver Nr.89 Pos.5
 Electronic torque wrench, 2 - 100 Nm/1.5 - 74 ftlb. 9768
 PIWIS Tester II 9818
 Fuel transfer unit Tank Primus 100/100S 1262
 Measuring adapter 9705
 Connecting line 9705/3
 Engine and gearbox jack V.A.G 1383 A 1082

Procedure: **Check clearance between the fuel line and heating pipe.**

- 1 Remove cover for centre underbody ⇒ *Workshop Manual '519319 Removing and installing cover for centre underbody - section on "Removing"*.
- 2 Remove cover for rear underbody ⇒ *Workshop Manual '519419 Removing and installing cover for rear underbody'*.

CAUTION

Hot components

- **Risk of burns**
- ⇒ **Let hot components cool down.**
- ⇒ **Wear personal protective gear.**

CAUTION

Pointed or sharp objects

- **Risk of cracks, pricks or cuts**
- ⇒ **Wear personal protective gear.**

- 3 Remove holder for coolant pipes.
 - 3.1 Pull holder ⇒ *Figure 1 -1-* off the transmission bracket in direction of travel ⇒ *Figure 1 -arrow A-*.
 - 3.2 Unclip holder by pulling it downwards out of the coolant pipe on the right in direction of travel ⇒ *Figure 1 -arrow B-*.

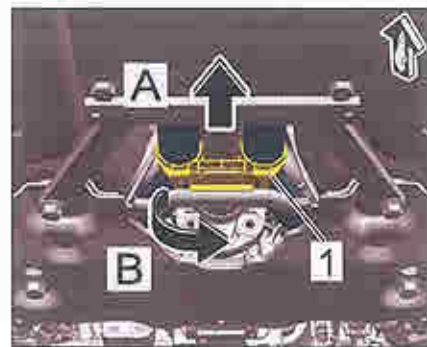


Figure 1

- 4 Remove brace plate.
 To do this, unscrew fastening screws ⇒ *Figure 2 -1-* and remove the brace plate ⇒ *Figure 2 -A-*.

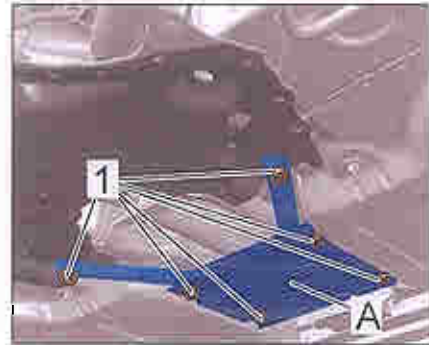


Figure 2

- 5 Disconnect the Tyre Pressure Monitoring (TPM) control unit if necessary.
 - 5.1 Unscrew fastening screws ⇒ *Figure 3 -1-*.
 - 5.2 Pull TPM control unit slightly to the side and leave it hanging on the wire harness.

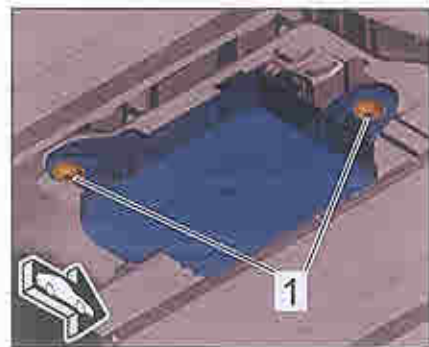


Figure 3

- 6 Remove holder for TPM control unit if necessary.
 - 6.1 Release holder for TPM control unit ⇒ *Figure 4 -1-* at the locking lug ⇒ *Figure 4 -arrow A-* and slide it slightly to the rear ⇒ *Figure 4 -arrow B-*.
 - 6.2 Unclip holder from both coolant pipes.

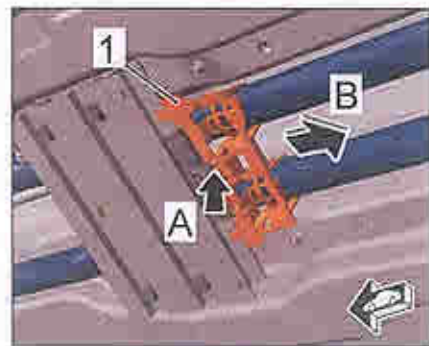


Figure 4

- 7 Detach holder for centre coolant pipes.
 - 7.1 Release holder for coolant pipes ⇒ *Figure 5-1-* at the locking lug ⇒ *Figure 5 -arrow A-* and slide it slightly to the rear ⇒ *Figure 5 -arrow B-*.
 - 7.2 Unclip holder by pulling it downwards out of the coolant pipe on the right in direction of travel ⇒ *Figure 5 -arrow C-*.

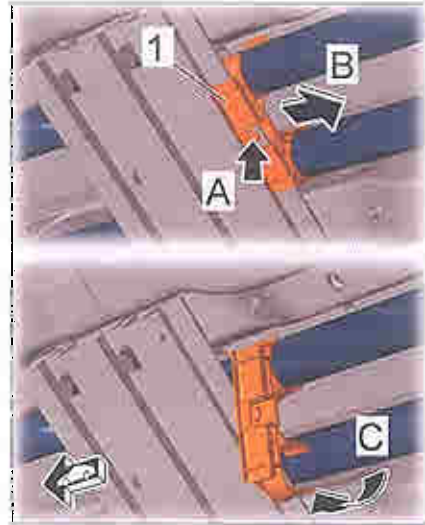


Figure 5



Information

The rapid-action coupling on the fuel line to be checked ⇒ *Figure 6-1*- is located in the rear area of the centre tunnel, above the heating pipe on the right in direction of travel ⇒ *Figure 6-2*-.

Because of the narrow space and the arrangement of the components, the fuel line clearance can only be checked by touch (e.g. with your hand or using your fingers).

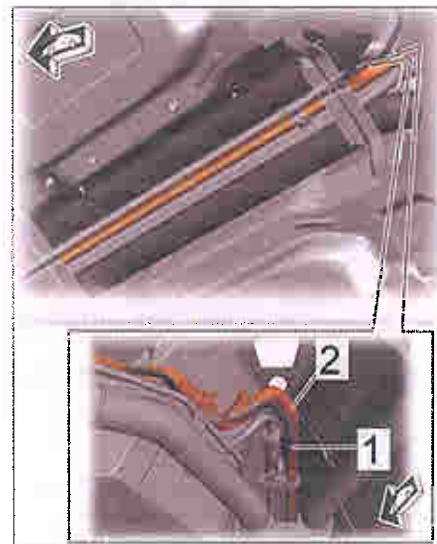


Figure 6

- 8 Check the clearance of the fuel line.
 - 8.1 Slide one hand in between the coolant pipes and heating pipes and pull the rapid-action coupling on the fuel line ⇒ *Figure 7-1*- **carefully** down towards the heating pipe ⇒ *Figure 7-2*-.

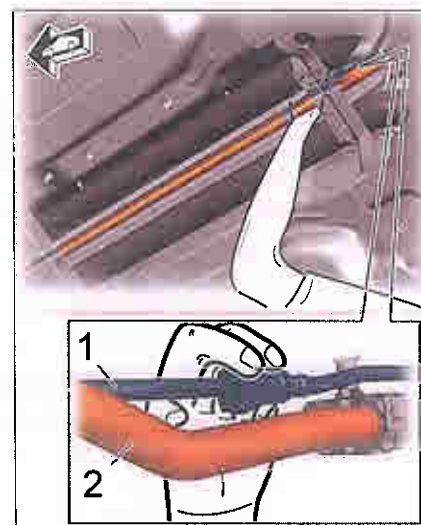


Figure 7

8.2 Assess the clearance of the fuel line.

If the rapid-action coupling on the **fuel line** ⇒ *Figure 8-1-* can be moved down towards the heating pipe ⇒ *Figure 8-2-* and there is **at least 4 - 5 mm between the fuel line** and the heating pipe, **retrofit a spacer ring on the fuel line** ⇒ **Scope 1.**

If the rapid-action coupling on the **fuel line** ⇒ *Figure 8-1-* is **not sufficiently clear** of the **heating pipe**, or is **touching** the heating pipe ⇒ *Figure 8-2-*, **replace the fuel line** ⇒ **Scope 2.**

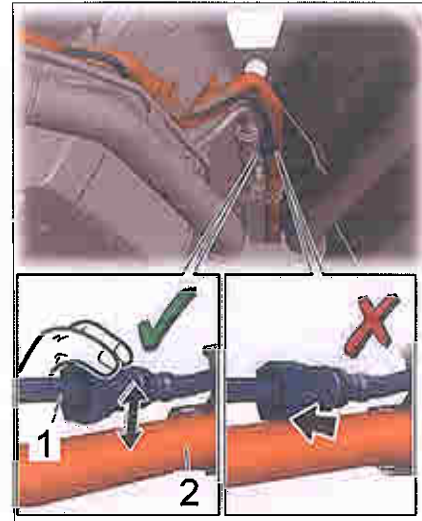


Figure 8

Procedure: **Scope 1: Retrofitting spacer ring on the fuel line.**

- 1 Loosen the heating pipes.
 - 1.1 Carefully unclip the retaining bars using a screwdriver ⇒ *Figure 9 -arrow-*.
 - 1.2 Pull the heating pipes down slightly and press them apart slightly so that the rapid-action coupling on the fuel line is accessible.

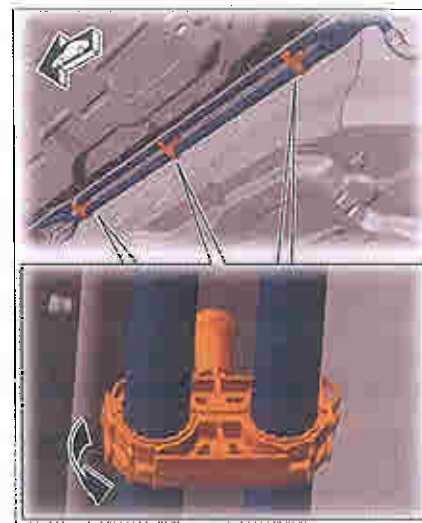
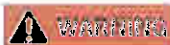


Figure 9



Highly inflammable or explosive materials

- **Danger of fire or explosion**
- ⇒ **Avoid contact with hot parts or sources of ignition.**
- ⇒ **Use suction to remove ignitable vapours.**
- ⇒ **Attach warning sign in a clearly visible position.**



Caustic fluids

- **Danger of chemical burns**
- ⇒ **Avoid contact with caustic fluid.**
- ⇒ **Wear personal protective gear.**
- ⇒ **Ensure that there is good ventilation.**
- ⇒ **If you do come into contact, wash off immediately with plenty of warm water and contact a doctor if necessary.**

- 2 Check locking mechanism on the rapid-action coupling on the fuel line.

To do this, hold the fuel line ⇒ *Figure 10-1* - at the left and right of the rapid-action coupling and pull slightly in opposite directions to check that the locking mechanism is seated securely ⇒ *Figure 10 -arrow-*.

- If the **fuel line** then **opens** because the locking mechanism is not locked correctly, the fuel line must be replaced ⇒ **Scope 2**.
- If the rapid-action coupling on the fuel line is locked correctly ⇒ continue with **Step 3**.

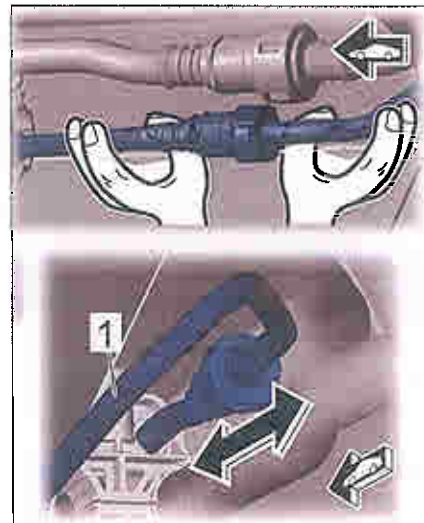


Figure 10

- 3 Fit a spacer ring on the rapid-action coupling on the fuel line.
 - 3.1 Guide a spacer ring ⇒ *Figure 11 -1-* in between the fuel line ⇒ *Figure 11 -2-* and body ⇒ *Figure 11 -arrow A-* and close it around the fuel line as shown ⇒ *Figure 11 -arrows B-*.

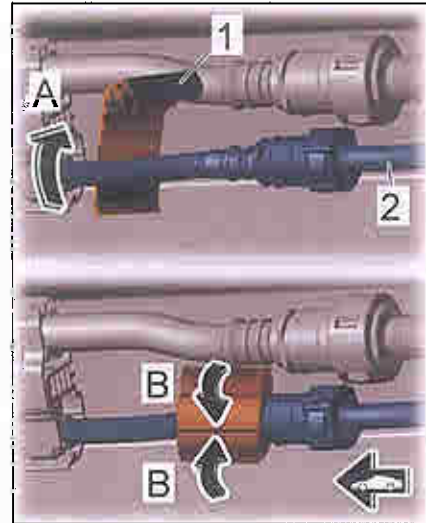


Figure 11

- 3.2 Slide the spacer ring ⇒ *Figure 12-1*- as far as it will go over the rapid-action coupling on the fuel line ⇒ *Figure 12-2*- (⇒ *Figure 12-arrow A*-).
 The catch ⇒ *Figure 12-3*- on the spacer ring must be facing down towards the heating pipe ⇒ *Figure 12-arrow*-.



Information

When sliding on the spacer ring ⇒ *Figure 13-1*-, make sure that the locking button on the rapid-action coupling ⇒ *Figure 13-2*- is **not covered over** by the spacer ring.

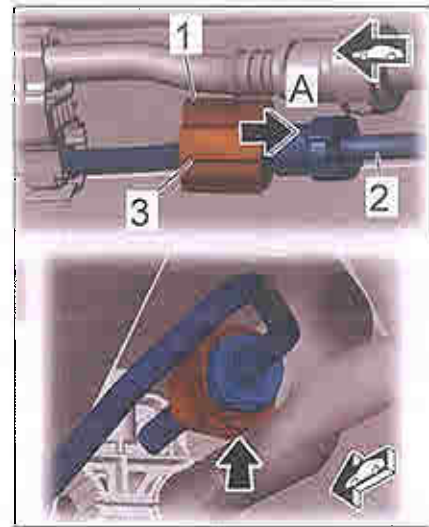


Figure 12

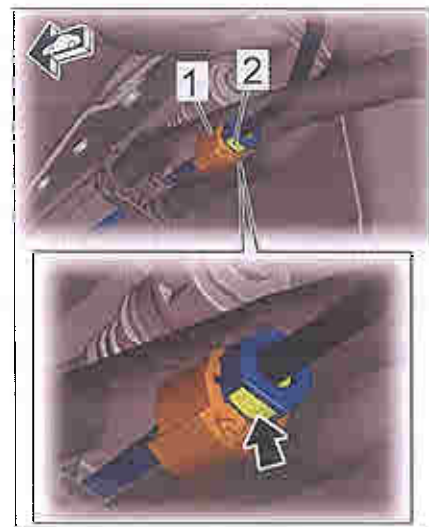


Figure 13

- 4 Secure the heating pipes.
 - 4.1 Press the heating pipes up into the holders and align them.
 - 4.2 Press in the retaining bar until it locks securely ⇒ *Figure 14 -arrow-*. Then press it in again using a screwdriver if necessary.

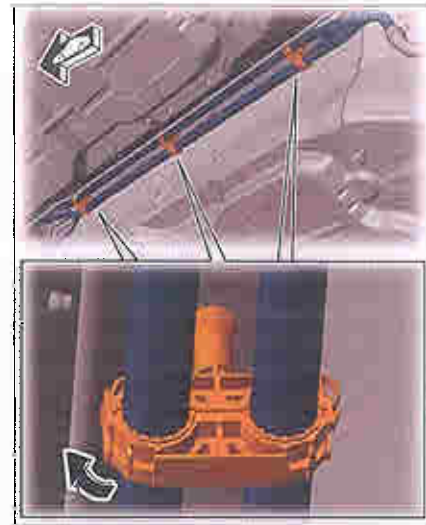


Figure 14

- 5 Secure holder for centre coolant pipes and holder for TPM control unit if necessary.
 - 5.1 Press in holder for coolant pipes ⇒ *Figure 15 -1-* on the right coolant pipe ⇒ *Figure 15 -arrow A-*.
 - 5.2 Clip holder into the aluminium strut on the reinforcement plate ⇒ *Figure 15 -arrow B-*.

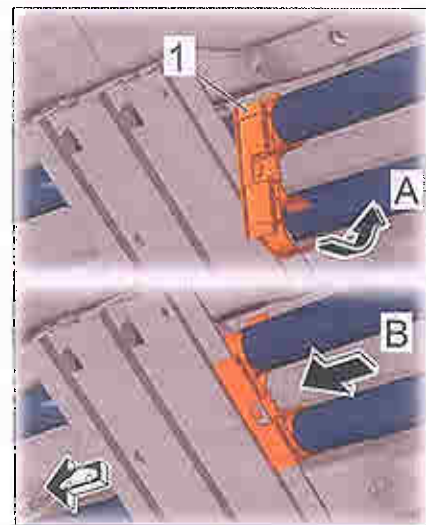


Figure 15

- 5.3 Press in holder for TPM control unit ⇒ *Figure 16-1-* on the coolant pipes, slide it forward and clip it in ⇒ *Figure 16-arrow-*.

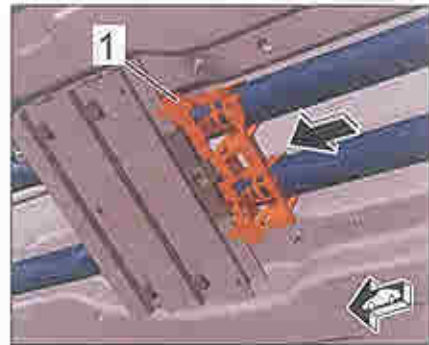


Figure 16

- 6 Install holder for TPM control unit if necessary.
 - 6.1 Place TPM control unit in installation position.
 - 6.2 Tighten fastening screws ⇒ *Figure 17-1-*.

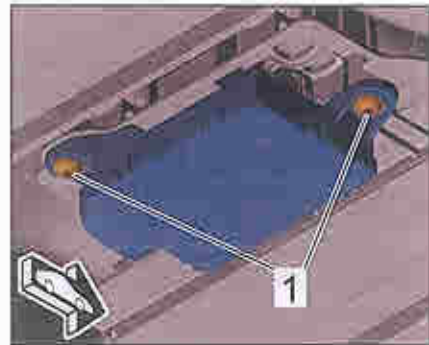


Figure 17

- 7 Install brace plate.
 - 7.1 Place brace plate ⇒ *Figure 18-A-* in installation position.
 - 7.2 Screw in and tighten fastening screws ⇒ *Figure 18-1-* on the brace plate.
Tightening torque 65 Nm (48 ftlb.)

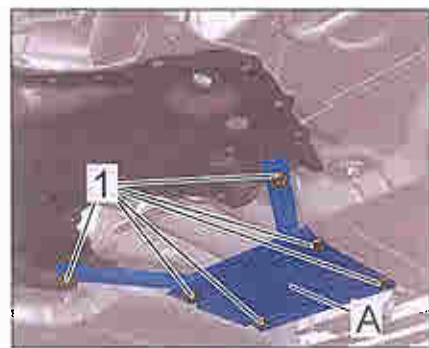


Figure 18

- 8 Install holder for coolant pipes.
 - 8.1 Press in holder for coolant pipes ⇒ *Figure 19-1* - on the right coolant pipe ⇒ *Figure 19 -arrow A-*.
 - 8.2 Clip holder into the aluminium strut on the reinforcement plate ⇒ *Figure 19 -arrow B-*.
- 9 Install cover for centre underbody
⇒ *Workshop Manual '519319 Removing and installing cover for centre underbody'*.
- 10 Install cover for rear underbody
⇒ *Workshop Manual '519419 Removing and installing cover for rear underbody'*.
- 11 Enter the campaign in the Warranty and Maintenance booklet.

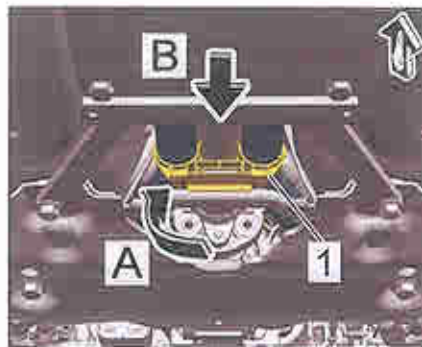


Figure 19

Procedure:

Scope 2: Replacing fuel line.

- 1 Remove fuel line ⇒ *Workshop Manual '203819 Removing and installing fuel supply line - section on "Removing"*.
- 2 **Fit new fuel line (Part No. 000.043.110.18)** ⇒ *Workshop Manual '203819 Removing and installing fuel supply line - section on "Installing"*
- 3 Enter the campaign in the Warranty and Maintenance booklet.

Scope 1:

Checking and reworking fuel line**Working Time:**

Checking and reworking fuel line

Labor time: **143 TU**

Includes: Removing and installing cover for centre underbody
 Removing and installing cover for rear underbody
 Loosening and securing TPM control unit
 Retrofitting spacer ring on the fuel line

Parts Required:

000.043.110.19 Spacer ring 1 ea.

Invoicing: ⇒ **Damage code AC02 99 000, Repair code 1**

Scope 2:

Checking and replacing fuel line

Working Time:

Checking and replacing fuel line Labor time: **328 TU**

Includes:

- Moving cover into service position
- Removing and installing battery
- Removing and installing battery console
- Removing and installing cover for front underbody
- Removing and installing cover for centre underbody
- Removing and installing cover for rear underbody
- Draining and filling fuel
- Loosening and securing fuel tank
- Removing and installing sub-frame for front-axle carrier

Parts Required:

000.043.110.18 Fuel line 1 ea.

Invoicing: ⇒ **Damage code AC02 99 000, Repair code 2**

- References:
- ⇒ Workshop Manual '2X00IN Basic safety instructions for working on the fuel system'
 - ⇒ Workshop Manual '200317 Draining and filling fuel'
 - ⇒ Workshop Manual '201019 Removing and installing fuel tank'
 - ⇒ Workshop Manual '270619 Removing and installing battery'
 - ⇒ Workshop Manual '400919 Removing and installing front-axle cross member'
 - ⇒ Workshop Manual '519219 Removing and installing cover for front underbody'
 - ⇒ Workshop Manual '519319 Removing and installing cover for centre underbody'
 - ⇒ Workshop Manual '519419 Removing and installing cover for rear underbody'
 - ⇒ Workshop Manual '852219 Removing and installing cover'