



SIB 16 01 20 RECALL 20V-471 FUEL PUMP CHECK

2020-10-13

*The affected vehicles have been marked with campaign number 0000163800.

In order to determine if a specific vehicle is affected by this campaign it will be necessary to verify the vehicle VIN in AIR (Aftersales Information Research). Based on the response of the system, either proceed with the repair or take no further action. Please note, open campaigns or vehicle stops may not appear in DCS Warranty Vehicle Inquiry or sales systems until 24-72 hours after they are announced, therefore AIR is always the recommended method for determining open campaigns and vehicle stops.

SITUATION

As part of a previous Safety Recall (13V-617) a steel support ring was installed on the fuel pump flange. In rare cases, this repair can cause cracks in the quick-release coupling resulting in leaks with fuel odor or the leaking of small quantities of fuel.

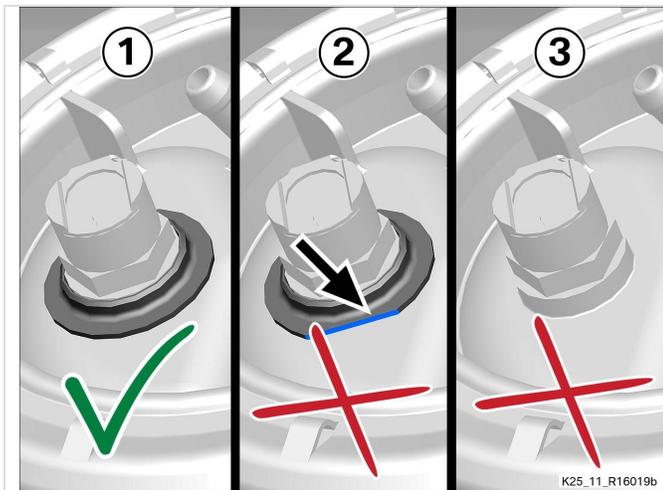


Figure 1: connecting flange of fuel-pump unit

- (1) – Series solution with support ring
- (2) – support ring with missing in circle segment that was retrofitted as part of Safety Recall 13V-617
- (3) – old series status without support ring

CORRECTION

Since Spring 2011, a steel support ring has been installed in production on the fuel pump flange for the quick-release coupling.

Depending on the model, the fuel-pump unit and/or additional fuel-pump unit (K25) must be checked in the affected vehicles and replaced, if condition #2 or #3 are found in figure 1.

In addition, for the R 1200 GS (K25, 0317), the fuel distributor must be replaced in addition to the additional fuel-pump unit, as the quick-release coupling is no longer located directly on the flange.

Customers will be notified by BMW Motorrad USA via First Class mail advising them of this recall. Customers will be asked to schedule an appointment with an authorized BMW Motorrad dealer to have the check/repair performed. In the case of vehicles that are in dealer inventory and have not yet been delivered, the Technical Campaign must be carried out **before delivery** to customers. Vehicles have been marked with a delivery stop.

PROCEDURE

See attached repair instructions 00 60 372, 00 60 736, 00 60 737 and 00 60 738.

WARRANTY and PARTS INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Motorcycles and Scooters.

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in ETK which takes into account specific equipment and/or options. Parts are open for ordering and do not require an IDS ticket.

CHECK ONLY

Defect code

00 00 16 38 00	Checking fuel pump unit, replace if required
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Labor Operation

00 60 372	Check fuel pump unit	Refer to AIR for FRU
+00 60 872	Check fuel pump unit	Refer to AIR for FRU

CHECK AND REPLACE FUEL PUMP

Defect code

00 00 16 38 00	Checking fuel pump unit, replace if required
----------------	--

Labor Operation

00 60 372	Check fuel pump unit	Refer to AIR for FRU
+00 60 872	Check fuel pump unit	Refer to AIR for FRU
00 60 736	Replace fuel pump unit (check for fuel pump unit)	Refer to AIR for FRU

Part Number

16 14 - - - - -	Fuel pump unit (part number, see Electronic Parts Catalogue)
16 11 - - - - -	Seal (part number, see Electronic Parts Catalogue)
16 14 7 722 876	Shaped Seal
16 12 1 176 918	Hose clamp (if required)

CHECK AND REPLACE FUEL PUMP / ADDITIONAL FUEL PUMP (R 1200 GS Adventure (K25/02, 0397; K25/12, 0390; K25/32, 0480))

Defect code

00 00 16 38 00	Checking fuel pump unit, replace if required
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Labor Operation

00 60 372	Check fuel pump unit	Refer to AIR for FRU
+00 60 872	Check fuel pump unit	Refer to AIR for FRU

Labor operations if required

00 60 736	Replace fuel pump unit	Refer to AIR for FRU
00 60 737	Replace auxiliary fuel pump unit	Refer to AIR for FRU
00 60 738	Replace both fuel pump units	Refer to AIR for FRU

Part Number

--	--

16 14 - - - -	Fuel pump unit (part number, see Electronic Parts Catalogue)
16 11 - - - -	Seal (part number, see Electronic Parts Catalogue)
16 11 7 677 883	Seal x 2
16 14 7 722 876	Shaped seal

CHECK AND REPLACE FUEL PUMP / ADDITIONAL FUEL PUMP (R 1200 GS (K25, 0317))

Defect code

00 00 16 38 00	Checking fuel pump unit, replace if required
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Labor Operation

00 60 372	Check fuel pump unit	Refer to AIR for FRU
+00 60 872	Check fuel pump unit	Refer to AIR for FRU

Labor operations if required

00 60 736	Replace fuel pump unit	Refer to AIR for FRU
00 60 737	Replace auxiliary fuel pump unit	Refer to AIR for FRU
00 60 738	Replace both fuel pump units	Refer to AIR for FRU

Part Number

16 14 7 684 348	Fuel pump unit
16 117 675 116	Flange
16 11 7 677 883	Seal x 2
16 14 7 722 876	Shaped seal
13 53 7 703 172	Fuel distributor
- - - - -	63 mm fuel hose (13 53 7 563 456)
13 31 7 659 120	Connecting sleeve
16 12 1 176 918	Hose clamp x 3

FRUs includes all repair procedures to complete the task with allowance for necessary ancillary tasks (e.g., visual inspection, lubrication, cleaning parts etc.) and administrative tasks.

Labor operation code 00 60 372 is a Main labor operation. If you are using a Main labor code for another repair, use the Plus code labor operation instead.

-

NHTSA STATEMENT

Please be reminded that it is a violation of federal law (The Safety Act) for you to sell, lease or deliver any new or used motorcycle covered by this notification until the recall repair has been performed. This means that dealers may not legally deliver new motorcycles to consumers until they are fixed or use/sell replacement equipment/parts subject to this recall. Note also that substantial civil penalties apply to violations of the Safety Act. Also, you should not sell, lease or deliver any used motorcycles subject to a safety recall until the repair is completed. Please follow any special instructions that we provide to you for the return or disposition of recall parts.

QUESTIONS REGARDING THIS BULLETIN

Technical inquires	Contact the BMW Technical Support Group via TSARA
Warranty inquires	Submit an IDS ticket to the Warranty Department

Parts inquires | Submit an IDS ticket to the Motorrad Parts Department

Supporting Materials

[picture_as_pdf 16 02 20 Recall 20V-471 Fuel Pump Check.pdf](#)

Service Information Bulletin

Fuel Supply Systems

October 12th, 2020

16 01 20

RECALL 20V-471 FUEL PUMP CHECK



MODEL

E-Series	Model Description*
K25	R 1200 GS, GS Adv, HP2
K26	R 1200 RT, R 900 RT
K27	R 1200 R
K28	R 1200 ST
K29	R 1200 S, HP2
K40	K 1200 S, K 1300 S
K43	K 1200 R, K 1300 R
K44	K 1200 GT, K 1300 GT
K46	S 1000 RR
K48	K 1600

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SITUATION

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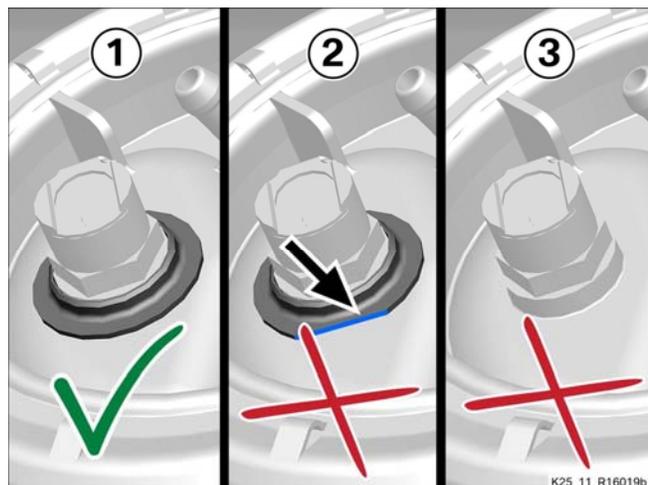


Figure 1: connecting flange of fuel-pump unit

- (1) – Series solution with support ring
- (2) – support ring with missing in circle segment that was retrofitted as part of Safety Recall 13V-617
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(R 1200 GS Adventure (K25/02, 0397; K25/12, 0390; K25/32, 0480))**

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**CHECK AND REPLACE FUEL PUMP / ADDITIONAL FUEL PUMP
(R 1200 GS (K25, 0317))**

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TREAD ACT CUSTOMER REIMBURSEMENT PLAN

If you have paid for the repair described in the attached letter, and you would like your expenses to be considered for reimbursement, please contact your authorized BMW Motorcycle dealer. Expenses paid to repair facilities outside of the BMW Motorcycle dealer network will be considered; however, the repair procedure must meet BMW standards.

Your authorized BMW Motorcycle dealer will request a copy of your owner notification letter, as well as, your previously paid invoice. They will then inspect your motorcycle (if it is still in your possession) prior to submitting a claim on your behalf to BMW of North America, LLC for reimbursement.

Please note the following:

- Only a repair that is the subject of this safety recall is reimbursable. Consequential expenses such as towing, rental, accommodations, damage repairs, etc. will not be reimbursed.
- The Manufacturer's Suggested Retail Price (MSRP) for BMW Genuine Parts will be considered as the guideline for reasonable part charges.
- Repair labor, taxes and hazardous waste disposal, when previously paid, are eligible for reimbursement.
- Expenses for repairs performed more than 10 days after the date of the last owner notification sent by BMW are not eligible for reimbursement.

Your authorized BMW Motorcycle dealer should be able to answer any questions that you may have regarding your qualifications for reimbursement of a previous repair. If you qualify for such a reimbursement, your BMW Motorcycle dealer will also be able to advise you of the manner in which you can expect to receive reimbursement.

Your authorized BMW Motorcycle dealer should be your primary contact on this issue; however, our Customer Relations and Services Department may be contacted at 1-800-525-7417 for any special assistance that you may require.

In special situations where your authorized BMW Motorcycle dealer cannot be of assistance, you may submit your written request for reimbursement to:

Customer Relations and Services Department
BMW of North America, LLC
P.O. Box 1227
Westwood, NJ 07675-1227

If you intend to submit a request for reimbursement to our Customer Relations and Services department, your motorcycle (if it is still in your possession and was repaired at a facility outside of the BMW Motorcycle dealer network) will need to be inspected at an authorized BMW Motorcycle dealer before a claim can be accepted for consideration. This is to ensure that prior repairs at an outside facility meet BMW standards for recall completion.

0382 - R 1200 GS Adventure

00 60 372 Check fuel pump unit

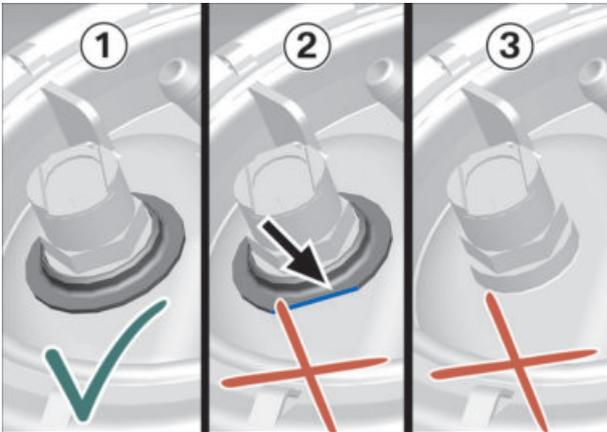
1

► Preparatory work

- Removing left side panel
- Removing right side panel



2



► Checking both fuel-pump flanges

Check

- Check connecting flange of **fuel-pump unit** for presence and/or type of support ring.

Result

- 1: Support ring without flattened area installed.

Measure

- **No measures required.**

Result

- 2: Support ring with flattened area (**arrow**) installed.

Measure

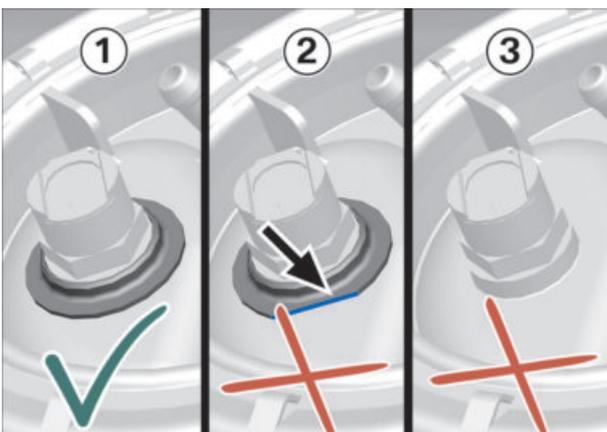
- **00 60 736 Replace fuel-pump unit**

Result

- 3: No support ring installed.

Measure

- **00 60 736 Replace fuel-pump unit**



Check

- Check connecting flange of **additional fuel-pump unit** for presence and/or type of support ring.

Result

- 1: Support ring without flattened area installed.

Measure

- **No measures required.**

Result

- 2: Support ring with flattened area (**arrow**) installed.

Measure

- **00 60 737 Replace additional fuel-pump unit**

Result

- 3: No support ring installed.

Measure

- **00 60 737 Replace additional fuel-pump unit**

Check

Result

in the event that both fuel-pump flanges are not OK.

3

Measure

- 00 60 738 Replace both fuel-pump units

► Follow-up work

- Installing right side panel
- Installing left side panel
- Final check of work performed

0382 - R 1200 GS Adventure

00 60 736 Replace fuel pump unit (check for fuel pump unit)

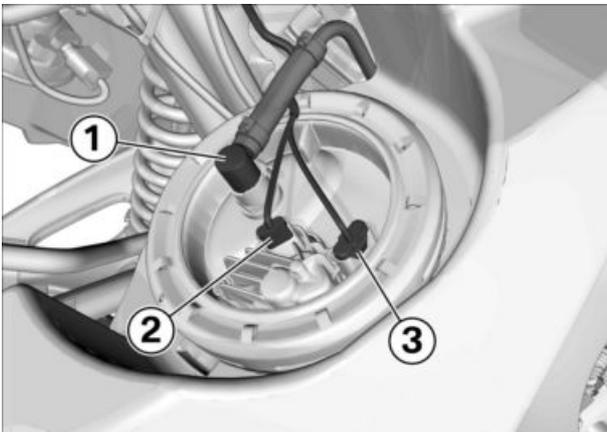
1

► Preparatory work

- Removing seat
- Removing right side cover
- Removing right trim panel of fuel tank
- Removing left side cover
- Removing left trim panel of fuel tank
- Draining fuel tank
- Removing centre trim panel of fuel tank
- Removing top wheel cover

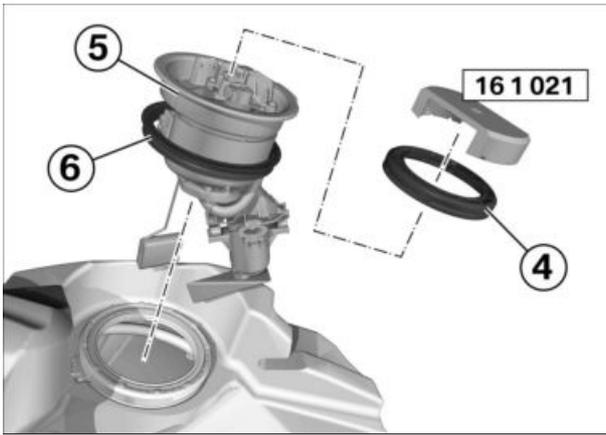


2



► Removing fuel-pump unit

- Disconnect fuel delivery line **(1)**.
- Disconnect plug connections of electric fuel pump **(2)** and filling level indicator **(3)**.



- Remove union nut **(4)** with pin wrench (16 1 021).

ATTENTION

Removal of the fuel-pump unit not in compliance with correct procedure (e.g. prying out with screwdriver)

Leak due to damage to the sealing lip of the flange

- Pull to remove the fuel-pump unit.

- Remove fuel-pump unit **(5)** with sealing ring **(6)**.



– with on-board computer^{OE} (0539)

- Remove union nut **(1)** with pin wrench (16 1 021).

ATTENTION

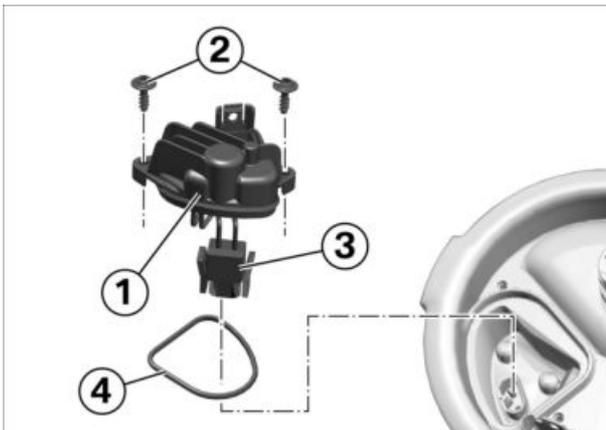
Removal of the fuel-pump unit not in compliance with correct procedure (e.g. prying out with screwdriver)

Leak due to damage to the sealing lip of the flange

- Pull to remove the fuel-pump unit.

- Slightly pull out fuel-pump unit **(2)**.
- Disconnect fill-level sensor connector **(3)**.
- Remove fuel-pump unit **(2)** with sealing ring **(4)**.◇

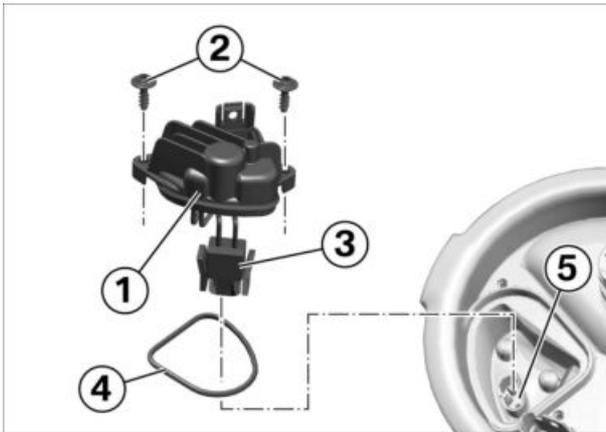
3



► **Removing fuel-pump electronics**

- Remove screws **(2)**.
- Slightly lift electronics module **(1)** and disconnect plug **(3)**.
- Remove electronics module with gasket **(4)**.

4



► Installing fuel-pump electronics

Check

- Check the electrical contacts of plug **(3)** and its socket **(5)**.

Result

Significant signs of corrosion on the contacts.

Measure

- Replace the fuel-pump electronics or the fuel-pump unit.
- Remove water or moisture, if present.
- Check gasket **(4)** for damage. Replace the gasket if it is swollen or damaged.
- Lubricate gasket **(4)** **thinly**.



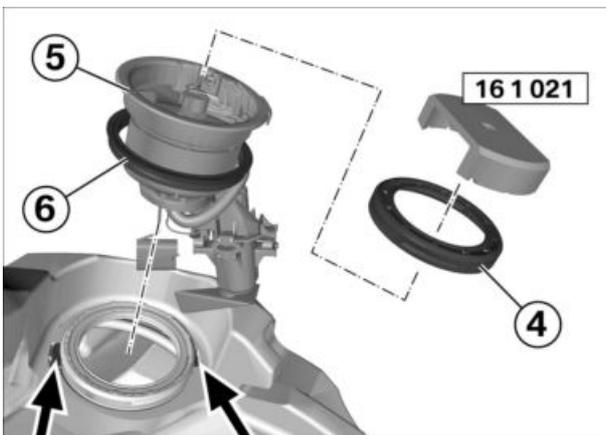
Care products

Rubber care product	83 12 0 397 018
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- Position gasket **(4)** on electronics module **(1)**.
- Connect plug **(3)**.
- Press electronics module **(1)** with gasket **(4)** all the way into the pump flange, taking care to keep the module square in its recess in the process.
- Engage screws **(2)** and tighten uniformly.



5



► Installing fuel-pump unit

- Check the sealing face of the flange of the fuel-pump unit **(5)** for damage, paying particular attention to the sealing lip. Always replace the flange if the sealing face shows signs of damage.
- Check sealing ring **(6)** for damage and, if necessary, replace it.
- Seat sealing ring **(6)** in the fuel tank and lubricate at contact surface to fuel-pump unit.



Installation tool

Tyre-fitting paste	81 22 0 433 046
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- Carefully insert fuel-pump unit **(5)** in fuel tank, ensuring correct seat of sealing ring **(6)** (visible around the entire circumference).
- Install union nut **(4)** with pin wrench (16 1 021). Make sure that the retaining ring does not turn during this process, and that its lugs **(arrows)** remain in position in the corresponding recesses.



Tightening torques

Fuel pump to fuel tank

Union nut	35 Nm	
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– with on-board computer^{OE} (0539)

- Check the sealing face of the fuel-pump unit (2) for damage, paying particular attention to the sealing lip. Always replace the flange if the sealing face shows signs of damage.
- Check sealing ring (4) for damage and, if necessary, replace it.
- Insert sealing ring (4) in fuel tank and lubricate at contact surface to fuel-pump unit.



Installation tool

Tyre-fitting paste	81 22 0 433 046
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- Connect fill-level sensor connector (3).
- Carefully insert fuel-pump unit (2) in fuel tank, ensuring correct seat of sealing ring (4) (visible around the entire circumference).
- Install union nut (1) with pin wrench (16 1 021). Make sure that the retaining ring does not turn during this process, and that its lugs (arrows) remain in position in the corresponding recesses.



Tightening torques

Fuel pump to fuel tank

Union nut	35 Nm
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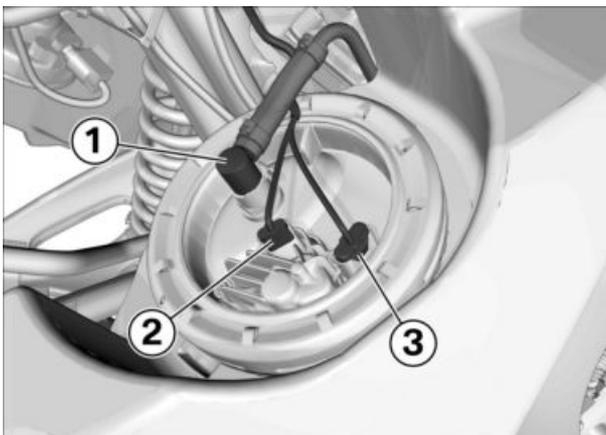
- Connect plug connection for electric fuel pump (2) and fuel gauge (3).
- Check O-ring on quick-release coupling (1) for damage.

ATTENTION

Application of force to close locked quick-action couplings

Leak due to damaged O-rings

- Close the quick-action coupling of the fuel line only with the latch open/pressed.
- Open the lock on the female coupling of fuel delivery line (1) and, applying light pressure, press the connector into the bush until it engages with an audible click.



– without on-board computer^{OE} (0539)

▷ Checking ease of movement of level sensor

- Remove the fuel filler pipe with safety valve and set it aside, still connected to the hoses.
- Use a magnetic rod to check the ease of movement of the pivot-arm sensor. Replace the level sensor if the pivot-arm mechanism does not move freely.
- Check the sealing ring for damage. Replace the sealing ring if it is swollen or damaged.
- Install the fuel filler pipe with safety valve and sealing ring, making sure that the sealing ring is correctly seated.◊

◊

- Check the fuel tank for leaks.

◀

► Follow-up work

- Installing top wheel cover
- Installing centre trim panel of fuel tank
- Filling fuel tank
- Installing left trim panel of fuel tank
- Installing left side cover
- Installing right trim panel of fuel tank
- Installing right side cover
- Installing seat



0382 - R 1200 GS Adventure

00 60 737 Replace auxiliary fuel pump unit (check for fuel pump unit)

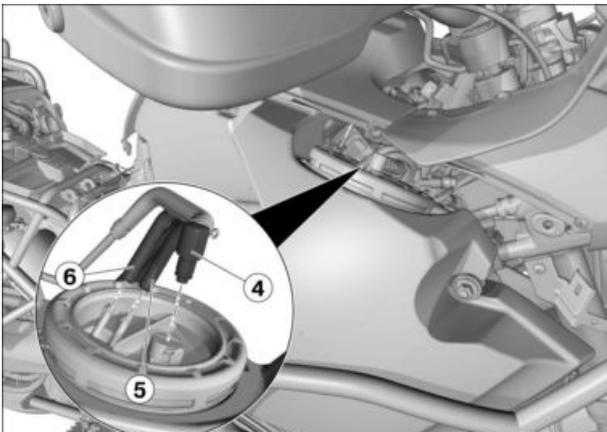
1

► Preparatory work

- Removing seat
- Removing right side cover
- Removing right trim panel of fuel tank
- Removing left side cover
- Removing left trim panel of fuel tank
- Draining fuel tank
- Removing centre trim panel of fuel tank
- Removing top wheel cover

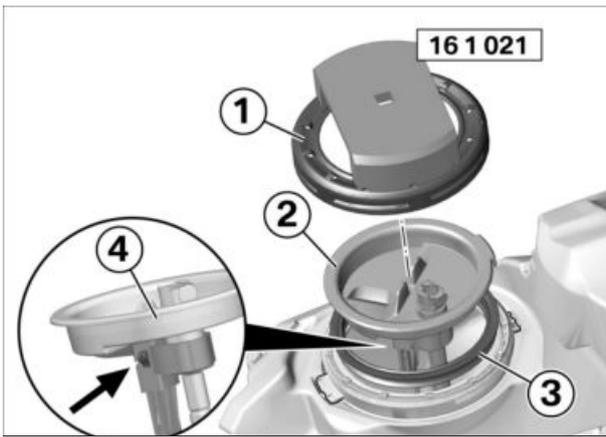


2



► Replacing additional fuel-pump flange

- Disconnect fuel return line **(4)**.
- Disconnect fuel-tank breather line **(5)**.
- Disconnect overflow line **(6)**.



▷ Removing additional fuel-pump flange

- Remove union nut **(1)** with pin wrench (16 1 021).

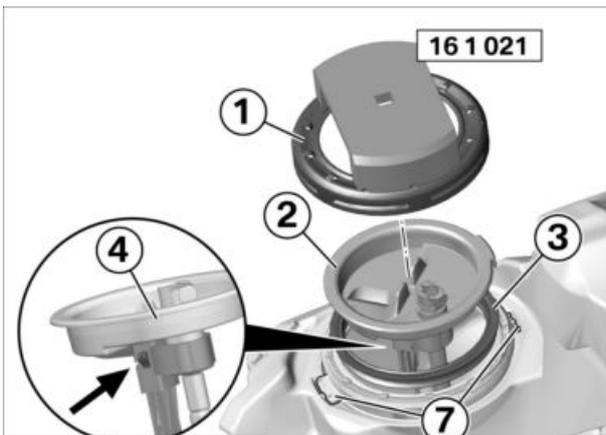
ATTENTION

Removal of the fuel-pump unit not in compliance with correct procedure (e.g. prying out with screwdriver)

Leak due to damage to the sealing lip of the flange

- Pull to remove the fuel-pump unit.

- Slightly pull out additional fuel-pump unit **(2)**.
- Open the retainer (**arrow**), remove flange **(4)** with sealing ring **(3)**.



▷ Installing additional fuel-pump flange

- Check the sealing face of flange **(4)** for damage, paying particular attention to the sealing lip. Always replace the flange if the sealing face shows signs of damage.
- Check sealing ring **(3)** for damage; replace if necessary.
- Seat sealing ring **(3)** in the fuel tank and lubricate the ring's contact face with the additional fuel-pump unit.



Installation tool

Tyre-fitting paste	81 22 0 433 046
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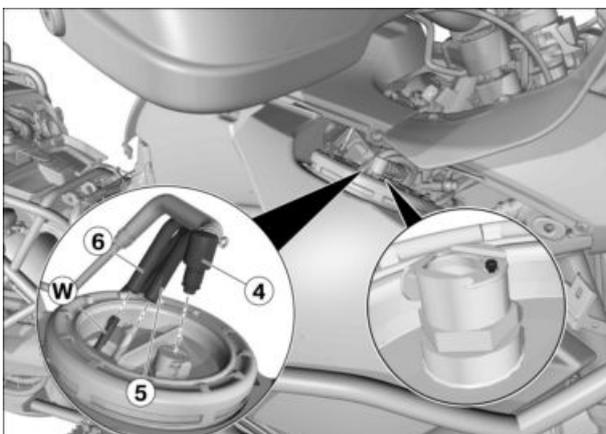
- Position the additional fuel pump on flange **(4)**.
 - » The locking device (**arrow**) engages.
- Carefully introduce additional fuel-pump unit **(2)** into the fuel tank, making sure that sealing ring **(3)** is correctly seated (visible round the entire circumference).
- Install union nut **(1)** with pin wrench (16 1 021). Make sure that the retaining ring does not turn during this process, and that its lugs **(7)** remain in position in the corresponding recesses.



Tightening torques

Fuel pump to fuel tank

Union nut	35 Nm
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- Connect overflow line **(6)**, which has a white identification mark, with the flange marked **(W)** of the fuel-pump unit.
- Connect fuel-tank breather line **(5)**.
- Check the O-rings in quick-action coupling **(4)** for damage; replace if necessary.
- Open the latch on the female coupling of fuel delivery line **(4)** and, applying light pressure, press the male adapter into the female coupling until it engages with an audible click.

► Follow-up work

- Installing top wheel cover
- Installing centre trim panel of fuel tank
- Filling fuel tank
- Installing left trim panel of fuel tank
- Installing left side cover
- Installing right trim panel of fuel tank
- Installing right side cover
- Installing seat



00 60 738 Replace both fuel pump units (check for fuel pump unit)

1

► Preparatory work

- Removing seat
- Removing right trim panel of fuel tank
- Removing left trim panel of fuel tank
- Removing centre trim panel of fuel tank
- Draining fuel tank
- Removing fuel tank

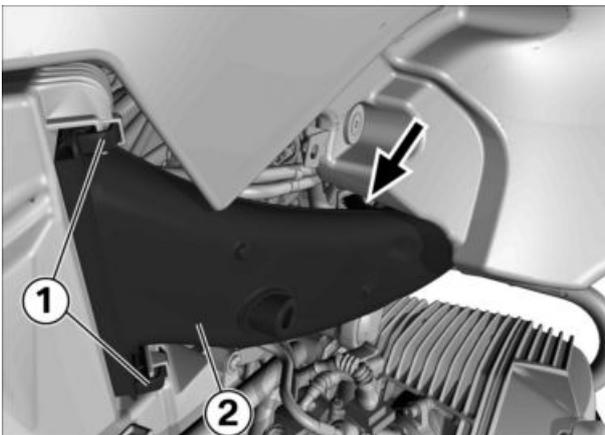


2

► Replacing fuel distributor

▷ Removing intake air pipe

- Disengage retainer **(1)** by pressing at rear and remove.
- Pull the locator **(arrow)** to the side and out of the rubber sleeve and remove intake air pipe **(2)**.



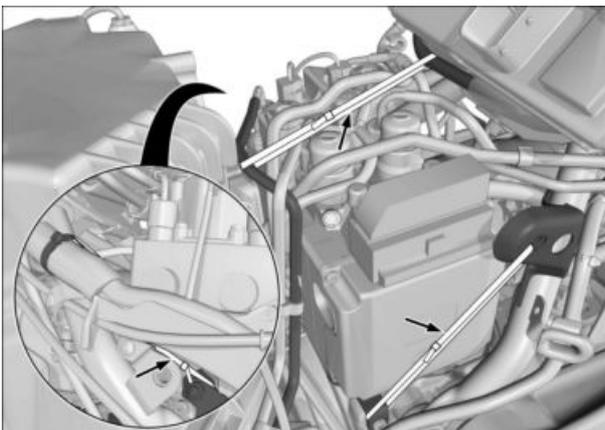
– with BMW MotorradIntegral ABS^{OE} (0645)

▷ Releasing pressure modulator

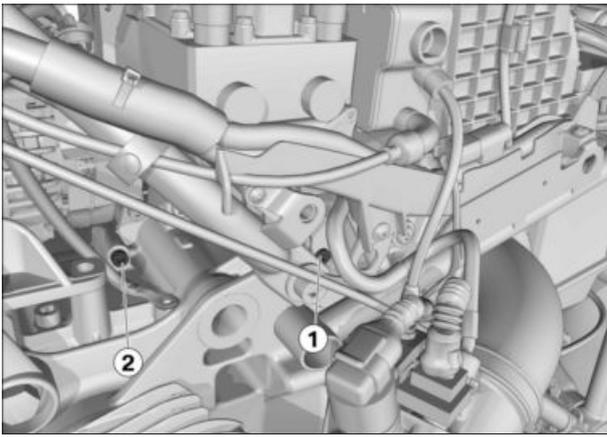
ATTENTION

Brake lines under strain, kinked or incorrectly routed leaks

- Do not strain, kink or trap brake lines.
- Make sure that routing and securing are correct. Swing the handlebars through the full arc of their travel and make sure that clearance relative to all other components is adequate in all situations.



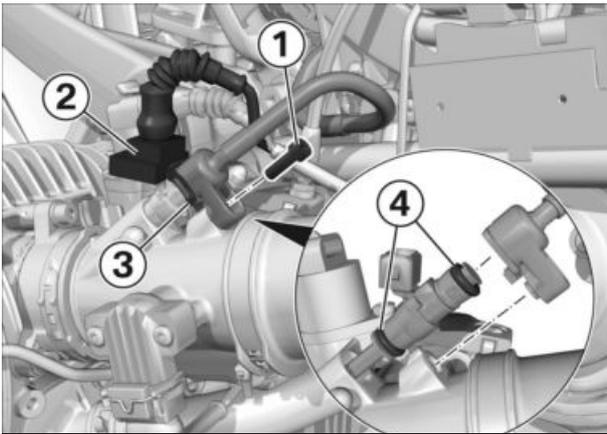
- Use cable ties **(arrows)** to attach the pressure modulator to the frame in such a way that the brake lines are not bent and that the pressure modulator is secure.



- Remove screws **(1)** on left and right.
- Remove screw **(2)**.
- Check the security of the pressure modulator; tighten the cable ties if necessary.◇



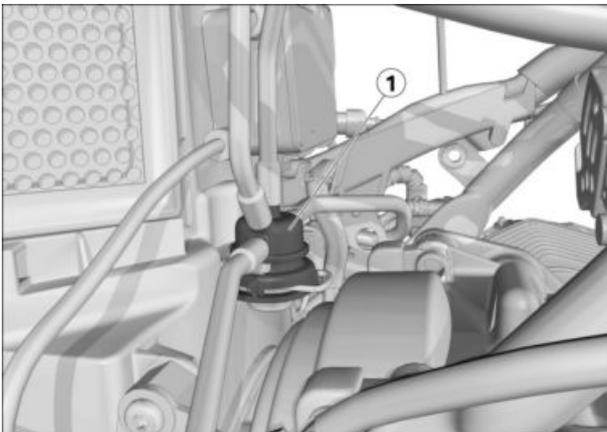
▷ Removing injection valve



- Remove screw **(1)**.
- Disconnect injection-valve plug **(2)**.
- Pull out the injection valve with holder from the throttle-valve stub.
- Remove clip **(3)**.
- Remove the injection valve from its holder, noting O-rings **(4)**.



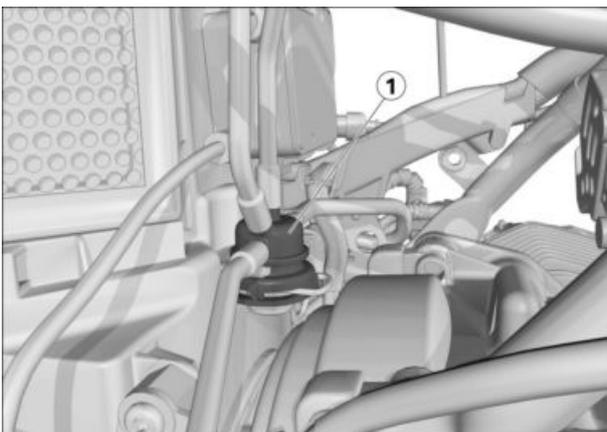
▷ Removing fuel distributor



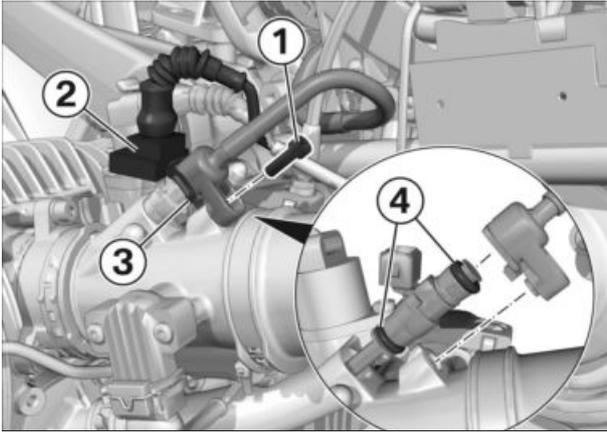
- Pull fuel distributor **(1)** out of the holder on the intake air silencer
- Guide the fuel distributor out toward the right-hand side and remove.



▷ Installing fuel distributor



- Guide the fuel distributor into position from the right-hand side, taking care not to damage the pipe.
- Seat fuel distributor **(1)** in the holder of the intake air silencer.



△

▷ Installing injection valve

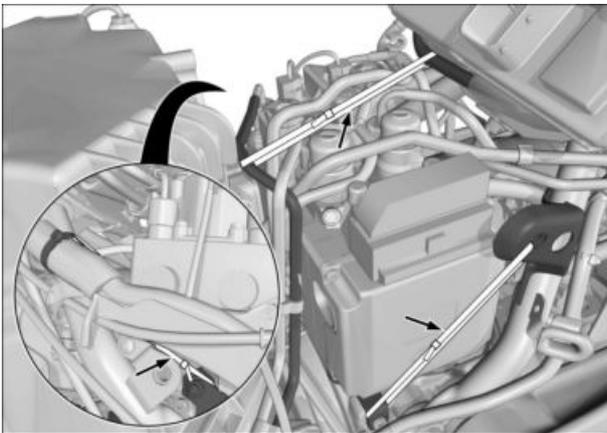
- Check sealing rings **(4)** on the injection valve for damage; replace the sealing rings if damaged or swollen.
- Install the injection valve in its holder, noting O-rings **(4)**.
- Install clip **(3)**.
- Slip the injection valve with holder into the throttle-valve stub.
- Connect injection-valve plug **(2)**.
- Install screw **(1)**.

 Tightening torques		
Holder for injection nozzle to throttle-valve stub		
M5 x 16	5 Nm	

△

– with BMW MotorradIntegral ABS^{OE} (0645)

▷ Secure the pressure modulator



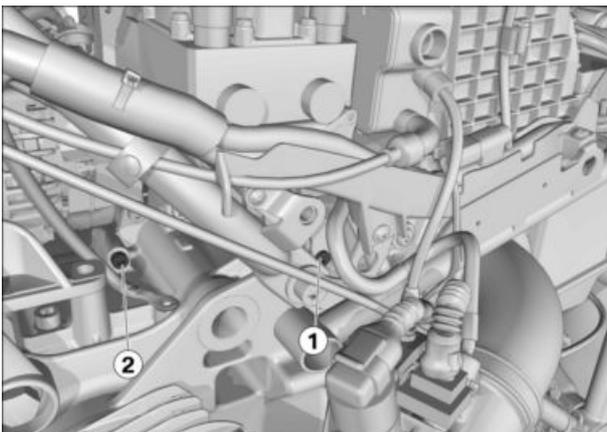
ATTENTION

Brake lines under strain, kinked or incorrectly routed leaks

- Do not strain, kink or trap brake lines.
- Make sure that routing and securing are correct. Swing the handlebars through the full arc of their travel and make sure that clearance relative to all other components is adequate in all situations.

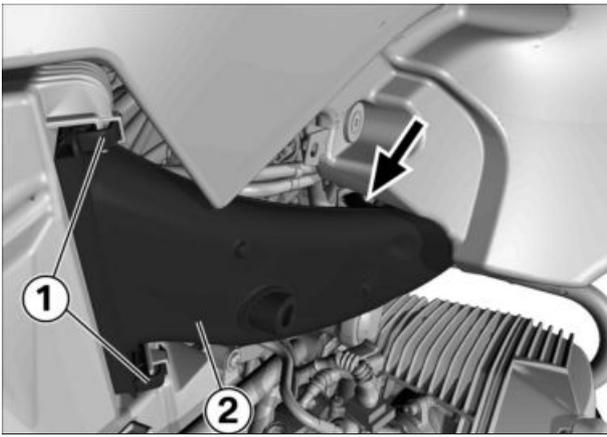
- Open cable ties **(arrows)**.

- Install screws **(1)** and **(2)**.



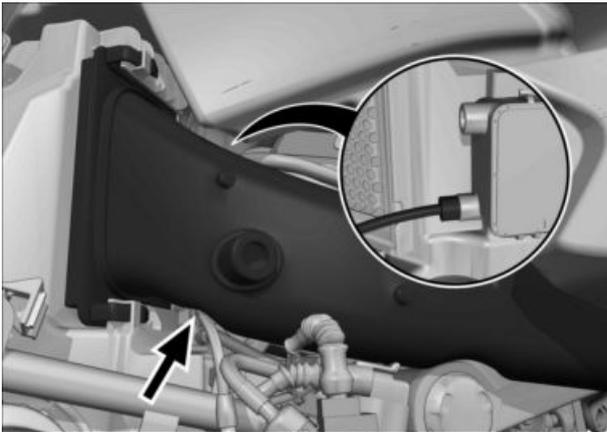
 Tightening torques		
ABS pressure modulator to engine		
M6 x 20, Replace screw Thread-locking compound (micro-encapsulated)	8 Nm	– with BMW MotorradIntegral ABS (0645)

△



▷ **Installing intake air pipe**

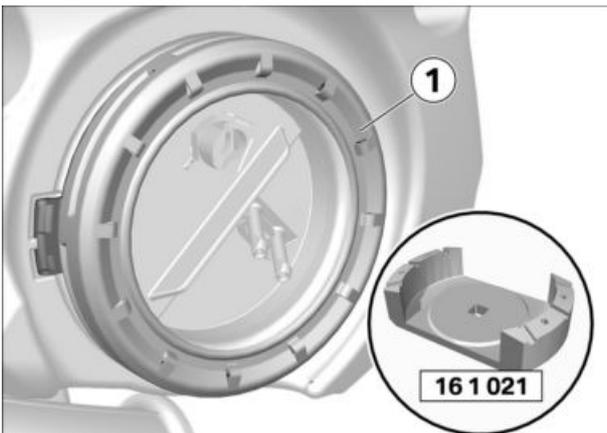
- Slide intake air pipe **(2)** into position and push in retainers **(1)** until they engage with an audible click.
- Push the retaining pin **(arrow)** fully home in the rubber sleeve.



- Check that the throttle-valve cable is seated in the guide of the air intake pipe **(arrow)** and that it is has not been pulled out of the divider.



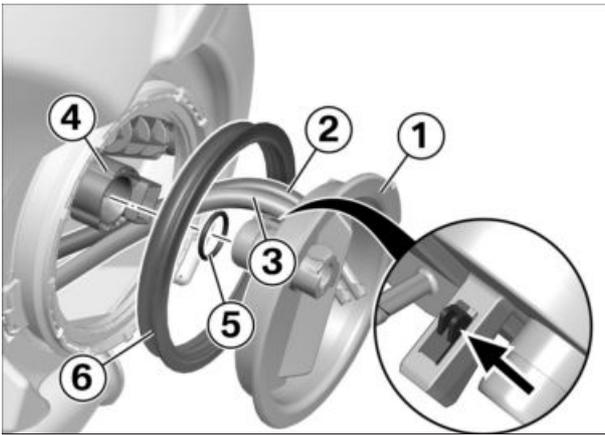
3



▶ **Replacing additional fuel-pump flange**

▷ **Removing additional fuel-pump flange**

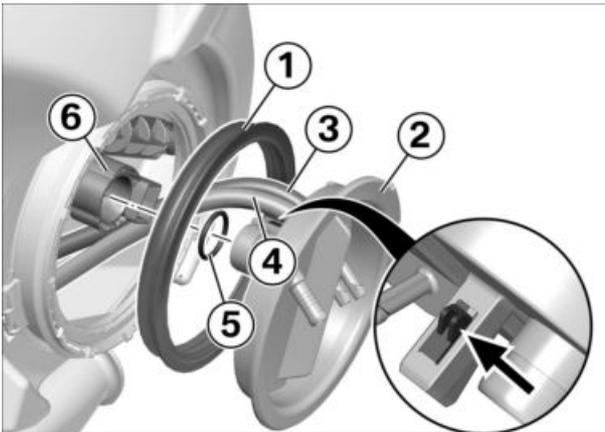
- Remove union nut **(1)** with pin wrench for fuel-tank ring (16 1 021).



- Slightly pull out additional fuel-pump flange **(1)**.
- Mark dirty-water hose **(2)** and disconnect.
- Disconnect fuel-tank breather line **(3)**.
- Unclip additional fuel pump **(4)** (**arrow**) and remove together with O-ring **(5)**.
- Remove additional fuel-pump flange **(1)** and seal **(6)**.

△

▷ Installing additional fuel-pump flange



- Replace seal **(1)** if it is swollen or damaged.
- Hold additional fuel-pump flange **(2)** with seal **(1)** in position.
- Connect dirty-water hose **(3)** marked during the removal process.
- Connect fuel-tank breather line **(4)**.
- Check O-ring **(5)** for damage; replace if necessary.
- Install additional fuel pump **(6)** with O-ring **(5)**.
 - » The locking device (**arrow**) engages.
- Insert seal **(1)** and lubricate contact face with additional fuel-pump flange **(2)**.



Installation tool

Tyre-fitting paste	81 22 0 433 046
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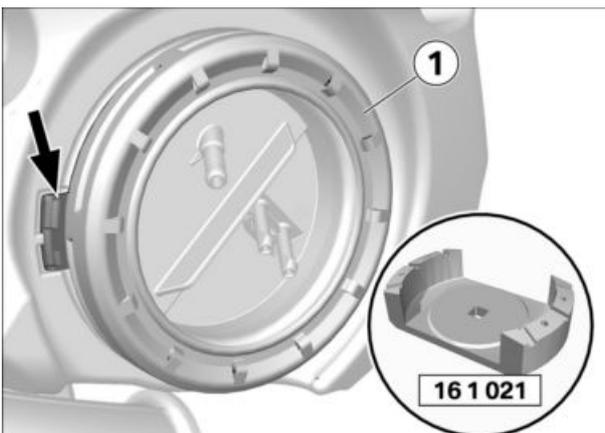
- Install additional fuel-pump flange **(2)** making sure that seal **(1)** is correctly seated (visible round the entire circumference).
- Install union nut **(1)** with pin wrench for tank ring (16 1 021), making sure that the lugs are correctly seated in the recesses (**arrow**).

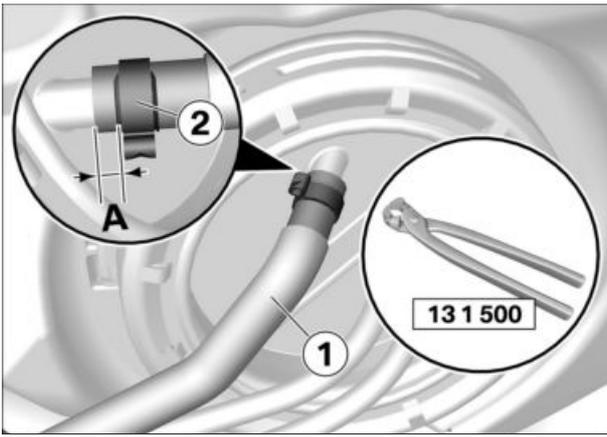


Tightening torques

Fuel pump to fuel tank

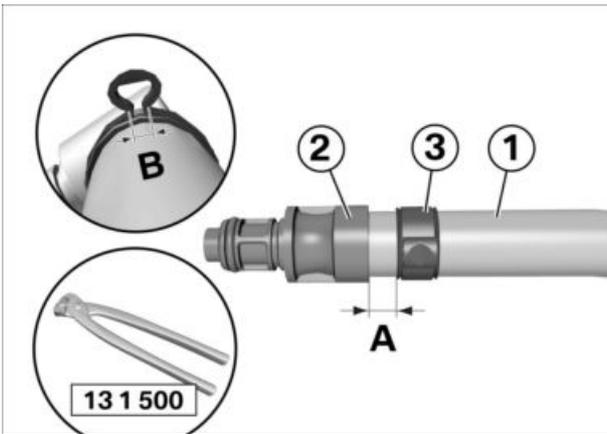
Union nut	35 Nm	
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- Install fuel hose **(1)** with **new** clip **(2)**.
- Align clip **(2)** at distance **(A)** and use pliers (13 1 500) to squeeze it fully closed.

 Technical data			
Distance A (distance from end of hose to hose clamp)		3 mm	



ATTENTION

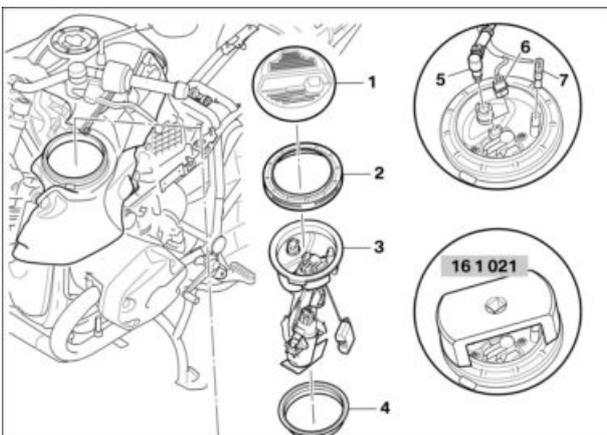
Refitting hoses with non-reusable clamps at the same place

- leaks
- Always replace clamps fitted with non-reusable clamps.
 - Slip **new** fuel line **(1)** on to quick-action coupling **(2)**.
 - Slip **new** clip **(3)** onto the hose until distance **(a)** is correct and use pliers (13 1 500) to squeeze the clip to size **(b)**.

 Technical data			
Distance A (distance from end of hose to hose clamp)		3 mm	
Distance b (specified closed size for single-eye clamp on quick-action coupling)		4 mm	



4



► **Removing fuel-pump unit**

- Remove union nut **(2)** with pin wrench (16 1 021).

ATTENTION

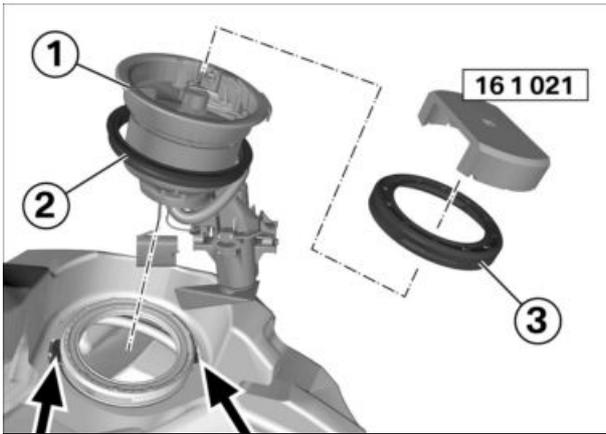
Removal of the fuel-pump unit not in compliance with correct procedure (e.g. prying out with screwdriver)

Leak due to damage to the sealing lip of the flange

- Pull to remove the fuel-pump unit.
- Remove fuel-pump unit **(3)** with sealing ring **(4)**.



5



► Installing fuel-pump unit

- Check the sealing face of the flange of the fuel-pump unit **(1)** for damage, paying particular attention to the sealing lip. Always replace the flange if the sealing face shows signs of damage.
- Check sealing ring **(2)** for damage and, if necessary, replace it.
- Seat sealing ring **(2)** in the fuel tank and lubricate at contact surface to fuel-pump unit.



Installation tool

Tyre-fitting paste	81 22 0 433 046
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- Carefully insert fuel-pump unit **(1)** in fuel tank, ensuring correct seat of sealing ring **(2)** (visible around the entire circumference).
- Install union nut **(3)** with pin wrench (16 1 021). Make sure that the retaining ring does not turn during this process, and that its lugs **(arrows)** remain in position in the corresponding recesses.



Tightening torques

Fuel pump to fuel tank

Union nut	35 Nm	
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▷ Checking ease of movement of level sensor

- Remove the fuel filler pipe with safety valve and set it aside, still connected to the hoses.
- Use a magnetic rod to check the ease of movement of the pivot-arm sensor. Replace the level sensor if the pivot-arm mechanism does not move freely.
- Check the sealing ring for damage. Replace the sealing ring if it is swollen or damaged.
- Install the fuel filler pipe with safety valve and sealing ring, making sure that the sealing ring is correctly seated.



- Check the fuel tank for leaks.



6

► Follow-up work

- Installing fuel tank
- Filling fuel tank
- Installing centre trim panel of fuel tank
- Installing left trim panel of fuel tank
- Installing right trim panel of fuel tank
- Installing seat