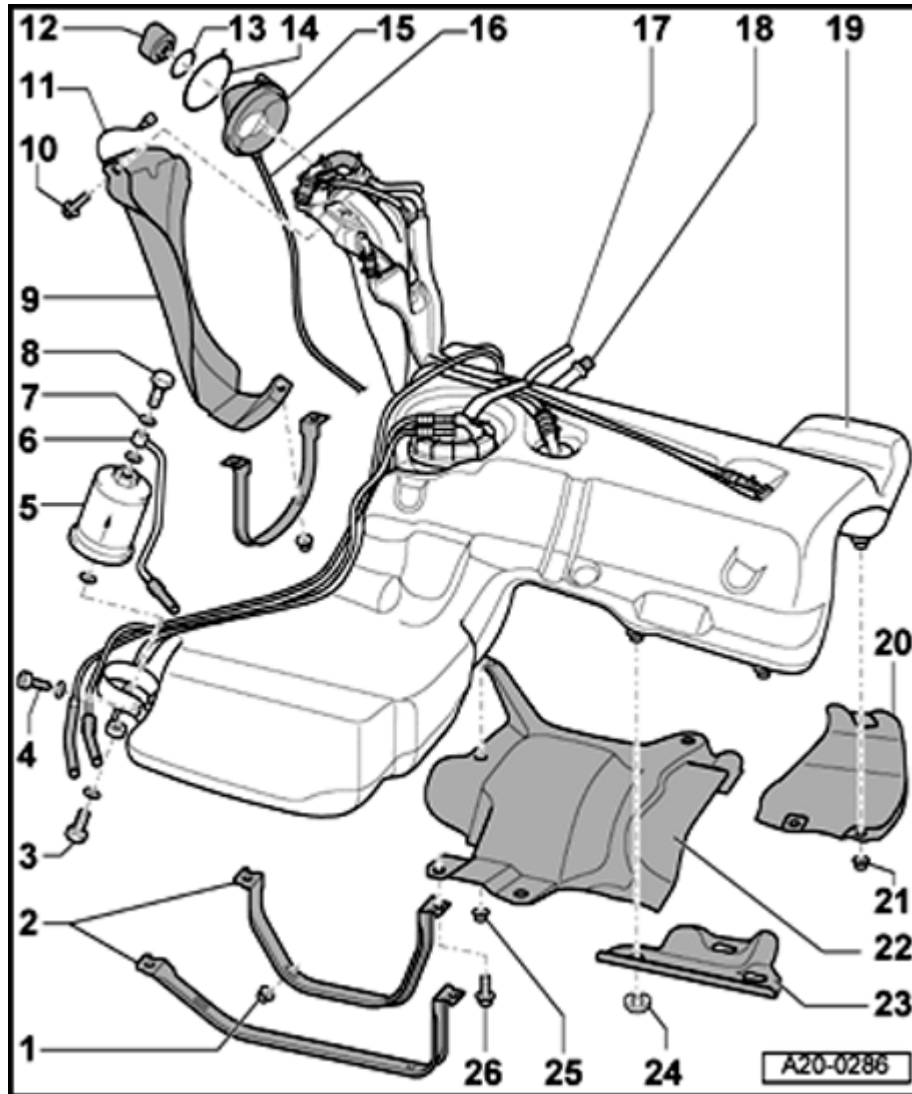


20-53



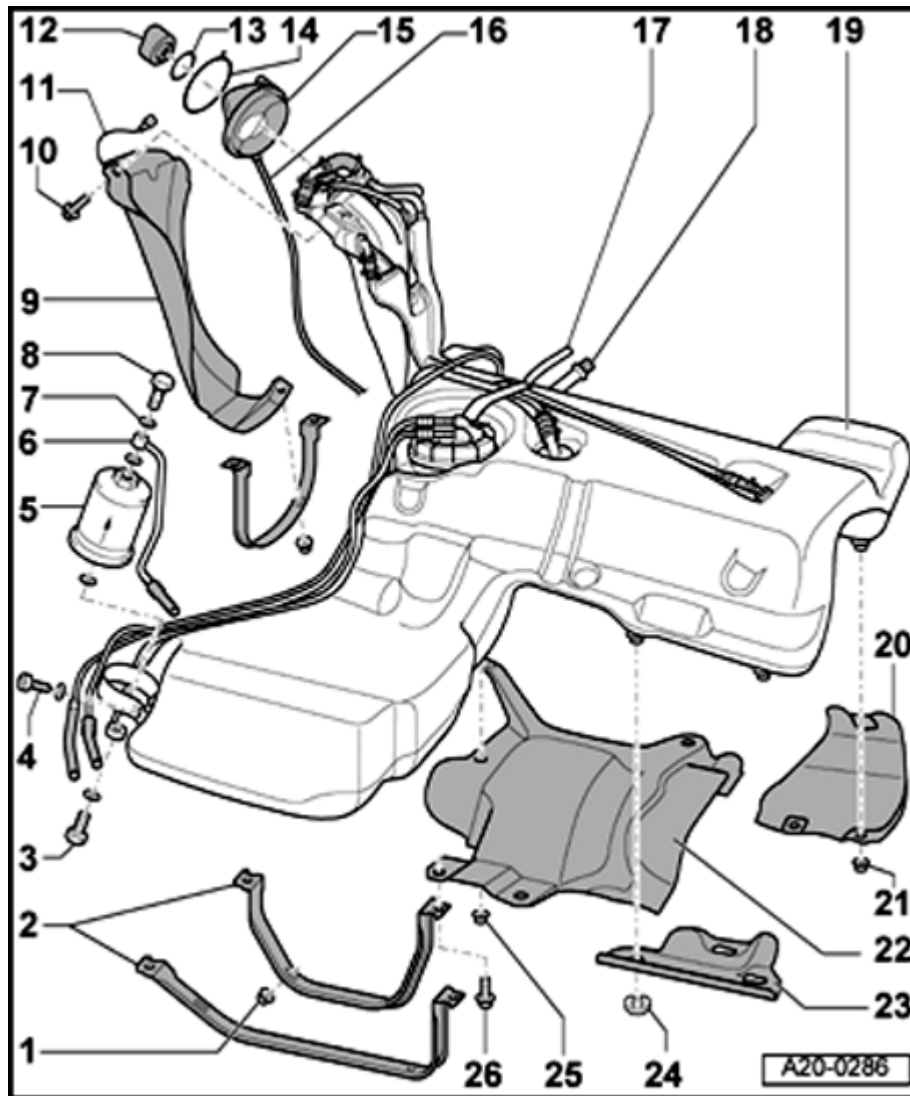
Fuel supply system, servicing (vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine)

Fuel tank assembly, component overview

Note:

- ◆ *Checking fuel pump relay and triggering:*

⇒ *Repair Manual, Fuel Injection & Ignition, Repair Group 24*
- ◆ *Secure all hose connections using spring clamps.*
- ◆ *VAG1921 pliers are recommended for installing spring clamps*
- ◆ *Always replace sealing rings and gaskets during installation work.*
- ◆ *Always refer to the Parts Catalog for availability of individual items in an assembly.*

**1 - Plastic nut**

◆ 2 Nm

- Lightly twist on to fasten fuel tank clamp bands

- Tighten nut after tightening clamp bands

2 - Clamp bands

◆ Removing and installing ⇒ [Page 20-69](#)

- Note different lengths

- Note installation orientation

3 - Banjo bolt M14

◆ 30 Nm

4 - 1.2 Nm**5 - Fuel filter**

◆ Location: Arrow points in direction of flow.

6 - Supply line

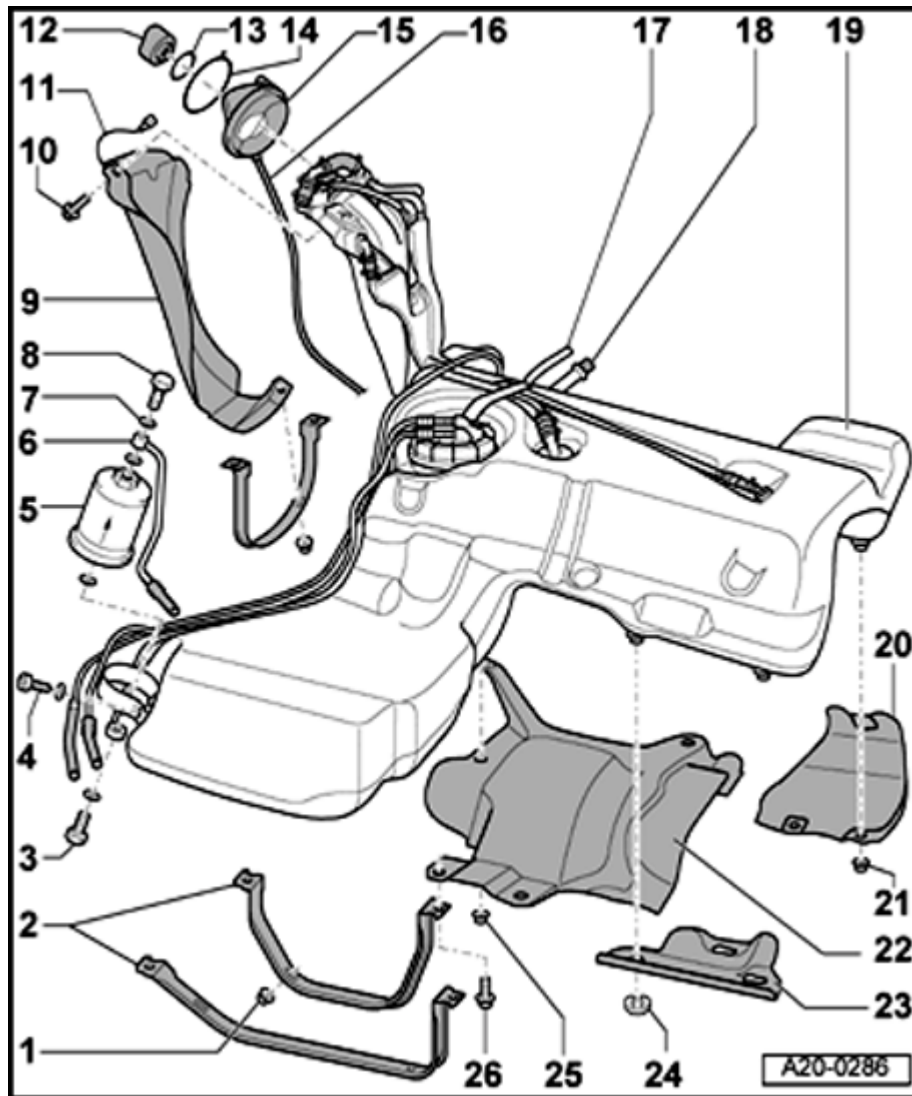
◆ To fuel supply on fuel distributor

7 - Sealing ring

- Replace

8 - Banjo bolt M12

◆ 20 Nm

**9 - Protector plate**

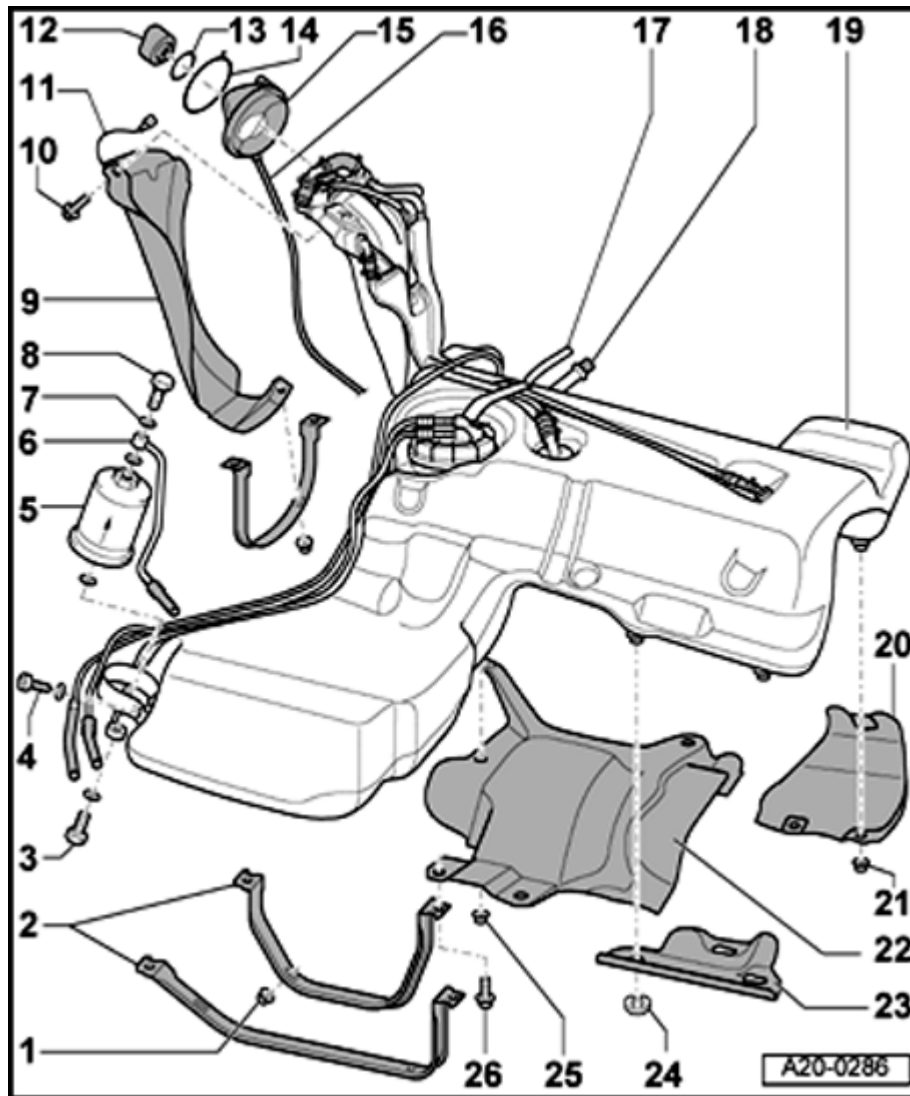
- ◆ For fuel filler neck
- ◆ With Ground connection
 - Before installing a mounting screw (item 10) ensure that screw eye of Ground connection fits tightly

10 - 25 Nm**11 - Ground connection**

- ◆ Location ⇒ Fig. ⇒ [1](#) , ⇒ [Page 20-58](#)
 - Ensure tight fit of metal ring on fuel filler neck
 - Check chamfer on protective plate (Item 9).
 - After installation, check continuity between metal ring on fuel filler neck and chassis Ground: must be approx. 0 Ω

12 - Cover**13 - Gasket**

- Replace if damaged.



14 - Locking ring

15 - Rubber cap

16 - Overflow hose

17 - Bleed line

- ◆ Between EVAP canister and EVAP canister purge regulator valve N80

18 - Bleed line

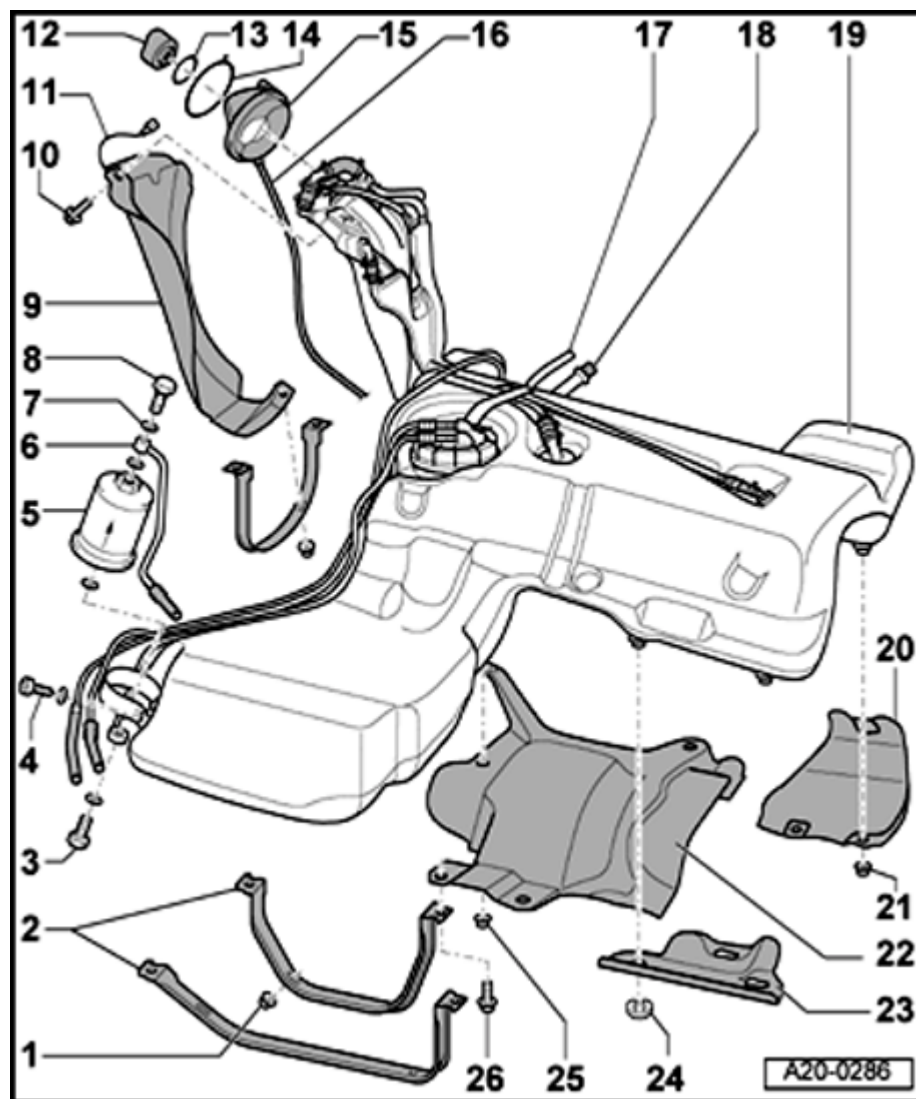
- ◆ Between the bleed valve on fuel filler neck and EVAP canister

19 - Fuel tank

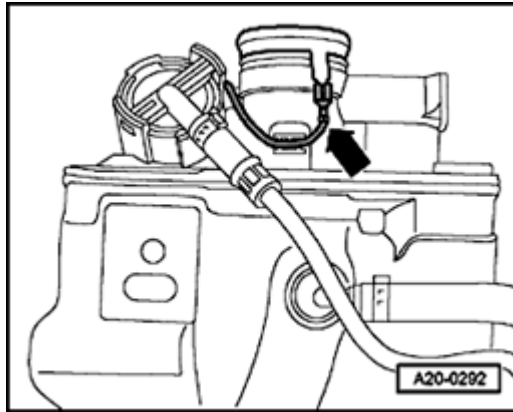
- ◆ Removing and installing ⇒ [Page 20-69](#)

20 - Heat shield

- ◆ For fuel tank
- ◆ Fastened on rear edge of fuel tank with adhesive tape



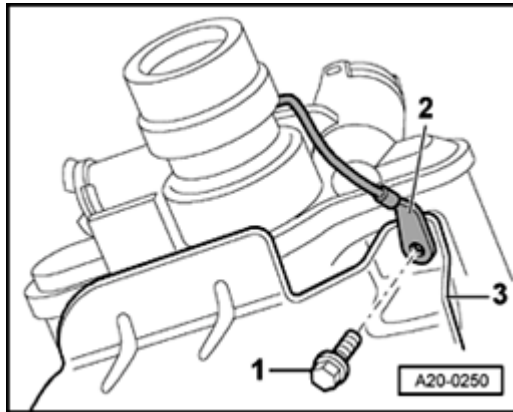
- 21 - Plastic nut**
◆ 2 Nm
- 22 - Carrier plate**
- 23 - Heat shield**
◆ For fuel filler neck
- 24 - Mounting clamp**
- Ensure tight fit
- 25 - Plastic nut**
◆ 2 Nm
- 26 - 25 Nm**



A

Fig. 1 Ground connection, installed position

- Route the Ground connection -Arrow-, as shown in illustration.
- Ensure Ground connector fits tightly on filler neck Ground clamp.



A

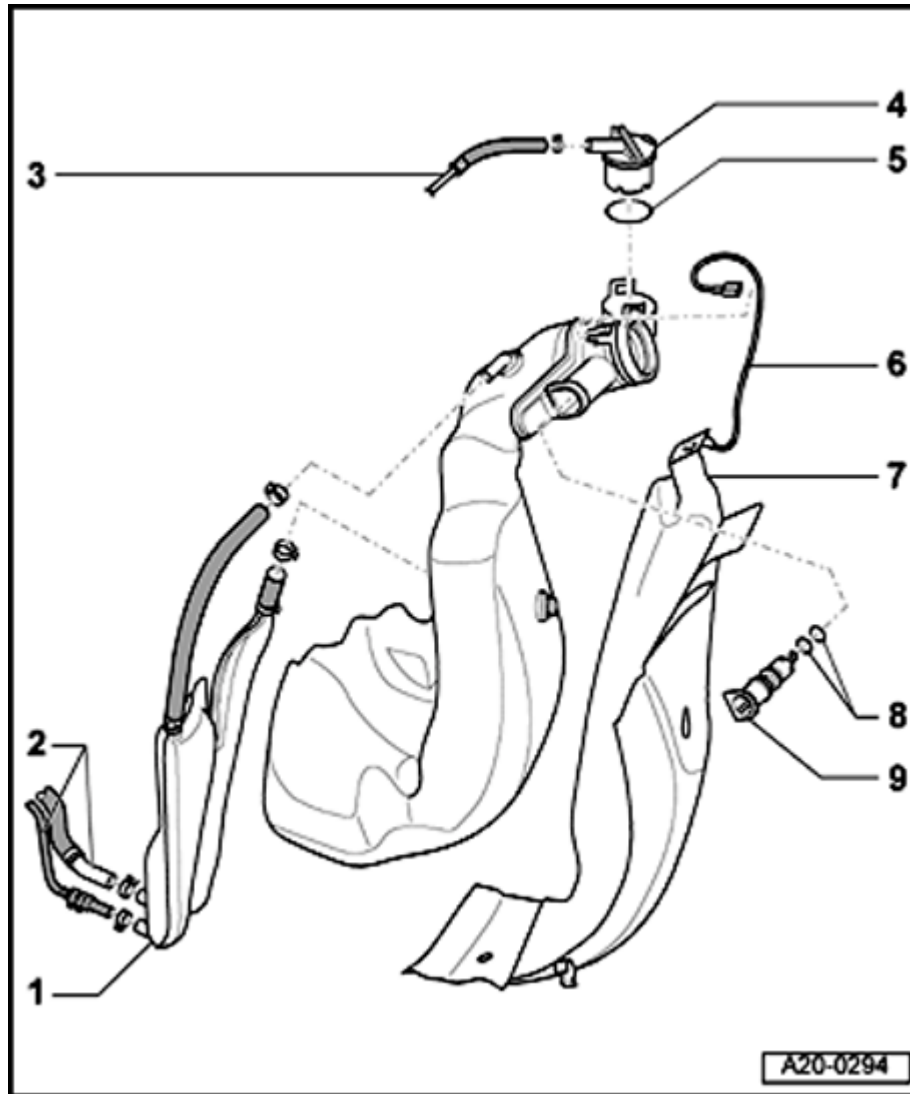
Fig. 2 Ground connection, installed position, cont.

- Before threading in screw -1-, ensure tight fit of screw eye -2- on fuel filler neck protection plate Ground -3-.

CAUTION!

After installation, check for continuity between Ground clamp on filler neck and chassis Ground.

♦ **Specification: approximately 0 Ω.**



Fuel filler neck, component overview (vehicles without ORVR)

Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

1 - Expansion tank

- Attach wires to expansion tank using adhesive tape

2 - Bleed lines

- ◆ To connector line at top of fuel tank

3 - Bleed line

- ◆ To EVAP canister

4 - Gravity valve

- ◆ Removing: unclip upward out of the filler neck

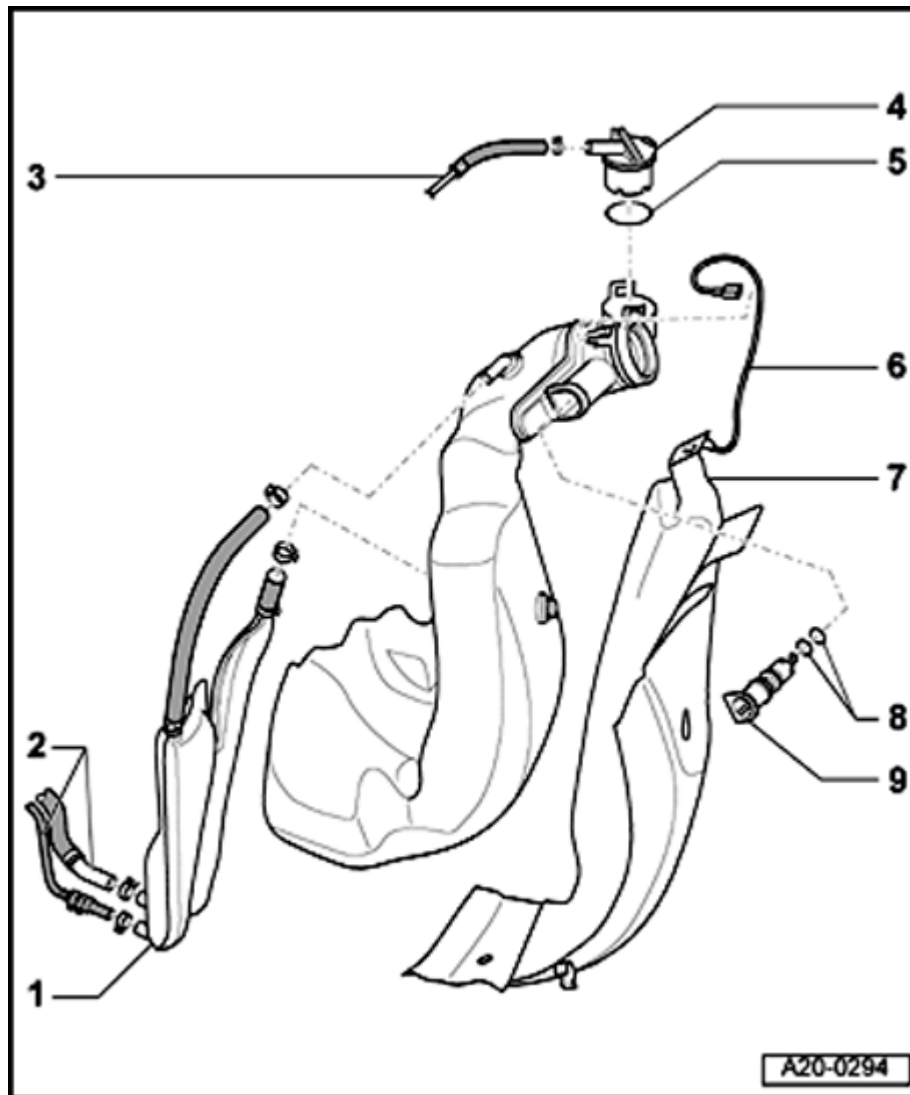
- Check valve for flow:

Valve vertical: Flow

Valve tipped 45 ° : No Flow

5 - O-ring

- Replace



6 - Ground connection

- ◆ Location ⇒ Fig. ⇒ [1](#) , ⇒ [Page 20-58](#)
 - Ensure tight fit of metal ring on fuel filler neck
 - Check chamfer on protective plate (item 7).
 - After installing, check continuity between metal ring on fuel filler neck and chassis Ground using multimeter, specified value: approx. 0 Ω

7 - Protector plate

- ◆ For fuel filler neck
- ◆ With Ground connection
 - Ensure Ground screw is tight before threading in mounting screw (item 10 ⇒ [Page 20-55](#))

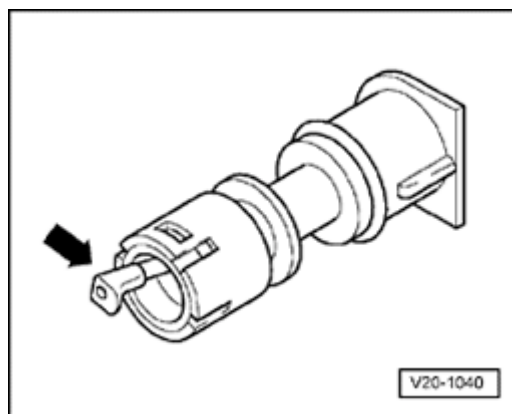
8 - O-rings

- Replace

9 - Bleed valve

- ◆ Removing, installing, checking ⇒ Fig. ⇒ [1](#) , ⇒ [Page 20-61](#)

20-61



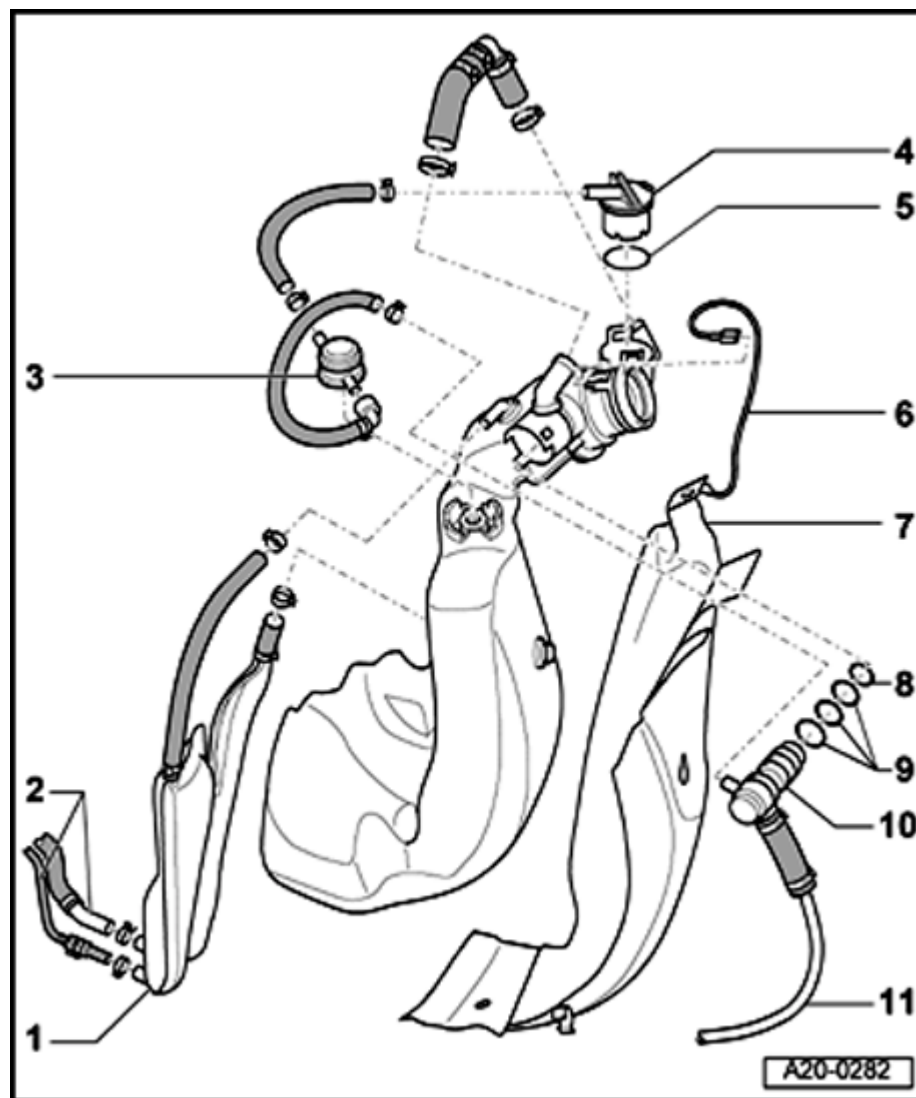
A

Fig. 1 Bleed valve removing, installing, checking

- To remove, unclip valve from side of filler neck.

- Lever in rest position: Valve closed
- Lever pressed in direction of arrow: Valve open

20-62



Fuel filler neck, component overview (vehicles with ORVR)

Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

1 - Expansion tank

- Secure wires to expansion tank using adhesive tape

2 - Bleed lines

- ◆ To connector line at top of fuel tank

3 - Tank protection valve

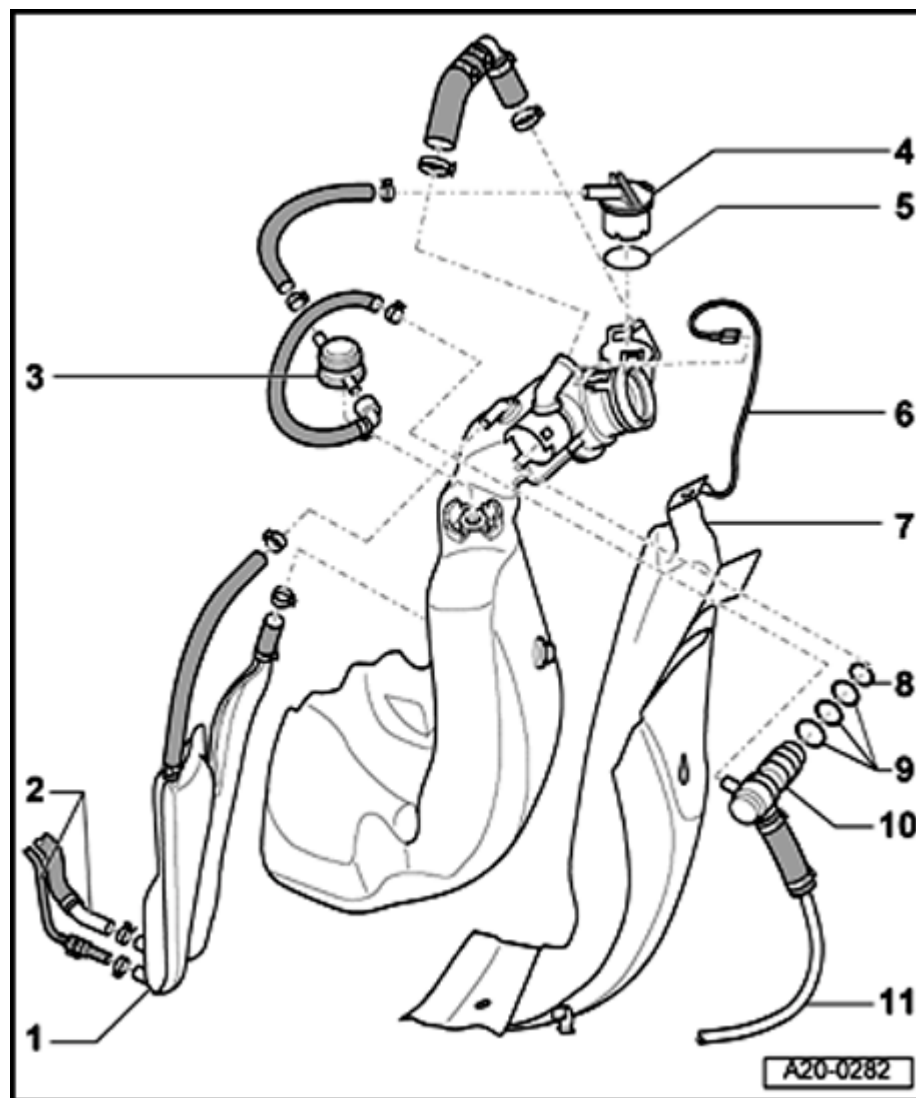
- ◆ Clipped to fuel filler neck
- ◆ Ventilates fuel tank for pressure compensation

4 - Gravity valve

- ◆ To remove valve, unclip upward out of the filler neck
- Check valve for flow:
Valve vertical: Flow
Valve tilted 45 ° : No Flow

5 - O-ring

- Replace



6 - Ground connection

◆ Location ⇒ Fig. ⇒ [1](#) , ⇒ [Page 20-58](#)

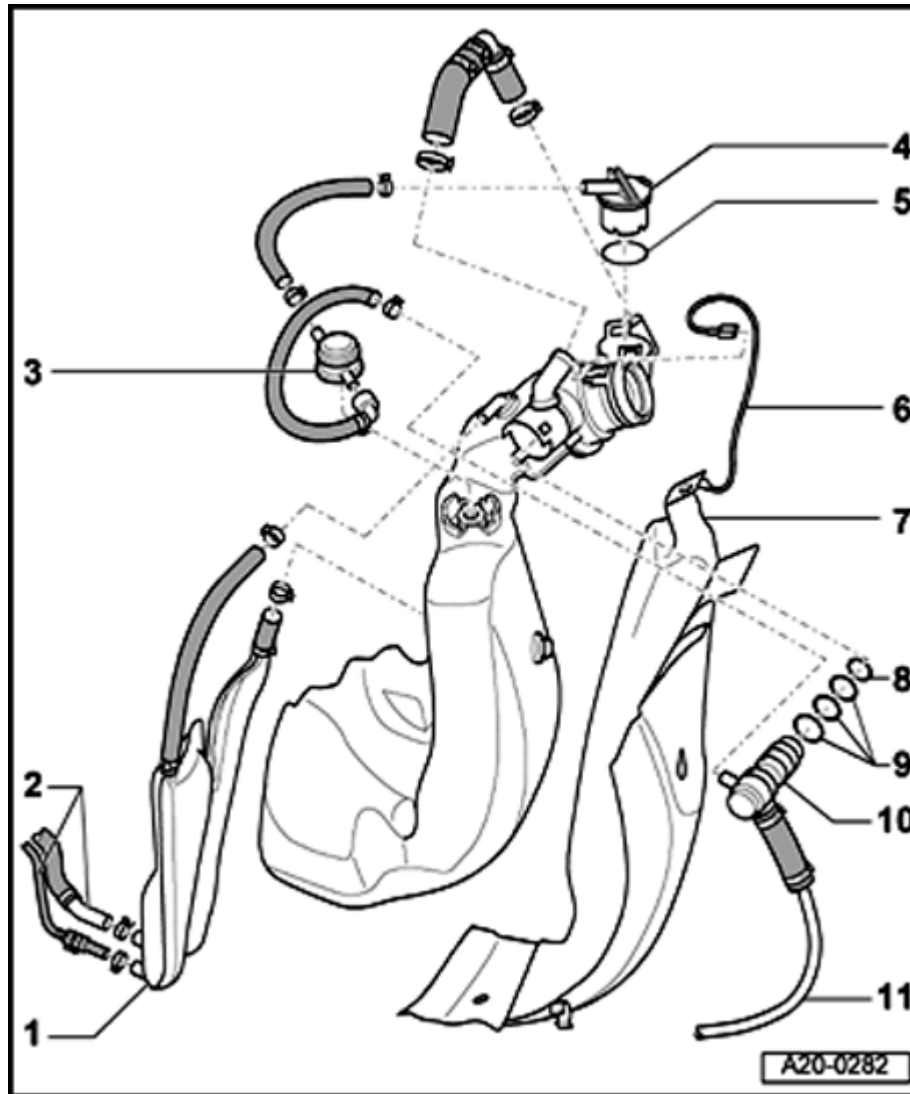
- Ensure tight fit of metal ring on fuel filler neck
- Check chamfer on protective plate (item 7).
- After installing, check continuity between metal ring on fuel filler neck and chassis Ground point. Specified value: approx. 0 Ω

7 - Protective plate

- ◆ For fuel filler neck
- ◆ With Ground connection
 - Before threading in mounting screw (item 10 ⇒ [Page 20-55](#)) check for tight fit on screw eye of Ground connection

8 - Sealing ring

- ◆ Installed position: Sealing lip points to fuel filler neck



9 - O-rings

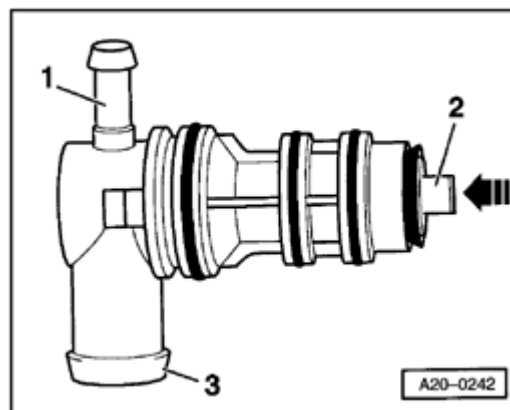
- ◆ Different sizes
- Replace

10 - Bleed valve

- ◆ Removing, installing, checking ⇒ Fig. ⇒ [1](#),
⇒ [Page 20-65](#)

11 - Bleed line

- ◆ To EVAP canister



A

Fig. 1 Bleed valve removing, installing, checking**Requirement**

- ◆ Fuel tank removed.
- To remove, unclip valve from side of filler neck.
- Close off filler neck by hand -3-.
- Blow into filler neck -1-
- Button -2- pressed in direction of arrow: Flow
- Button -2- in OFF direction: NO Flow.

Fuel tank, draining

Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

WARNING!

Fire hazard! Do NOT have anything in the area that can ignite gasoline!

Observe Safety measures ⇒ [Page 20-1](#) .

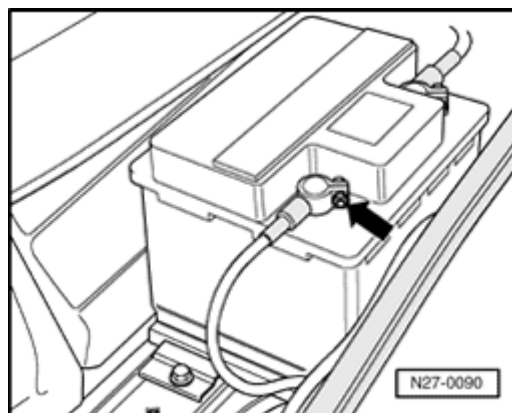
Observe Rules of cleanliness ⇒ [Page 20-4](#) .

Required equipment

- ◆ FM 3000 fuel storage cart (or equivalent)

CAUTION!

Obtain the radio Anti-theft code from the customer before disconnecting the Battery Ground strap.

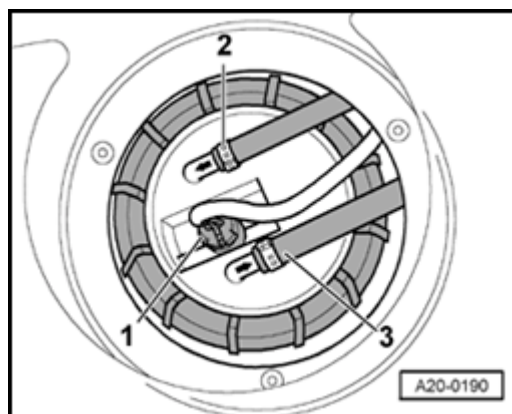


A

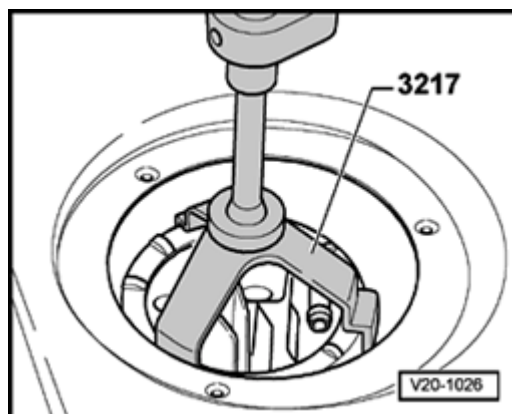
- Disconnect Battery Ground strap.
 - Ensure that ignition is switched OFF.
- Remove cover from fuel filler neck.
- Empty as much fuel as possible through the filler neck.
- Remove connector flange cover under luggage compartment trim.

WARNING!

Fuel system is under pressure! Before opening, place clean cloths around the connections to be opened. Carefully loosen the connections to relieve pressure.



- A**
- Mark return line -2-, supply line -3- and remove cover flange.
 - Unlatch and disconnect 4-pin harness connector -1-.



- A**
- Unscrew union nut using 3217 wrench.
 - Remove cover flange and sealing ring from fuel tank opening.
 - Pump remaining fuel through the flange opening.

Fuel tank assembly, removing and installing

Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

WARNING!

Fire hazard! Do NOT have anything in the area that can ignite gasoline!

Observe Safety measures ⇒ [Page 20-1](#) .

Observe Rules of cleanliness ⇒ [Page 20-4](#) .

Required special tools, testing equipment and auxiliary equipment

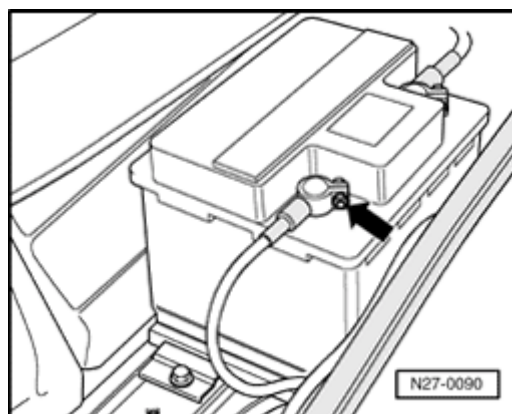
- ◆ VAG1359/2 Universal holder

- ◆ VAG1383 A Engine and transmission jack

Removing

CAUTION!

Obtain the radio Anti-theft code from the customer before disconnecting the Battery Ground strap.



A

- Disconnect Battery Ground strap.
 - First ensure that ignition is switched OFF.
- Open fuel tank cover briefly and close again.
- If necessary, drain fuel tank using fuel cart ⇒ [Page 20-66](#) .

WARNING!

Empty the fuel tank before removing it! If it is not empty, the weight and sloshing fuel could lead to injury, component damage or possible fuel spillage.

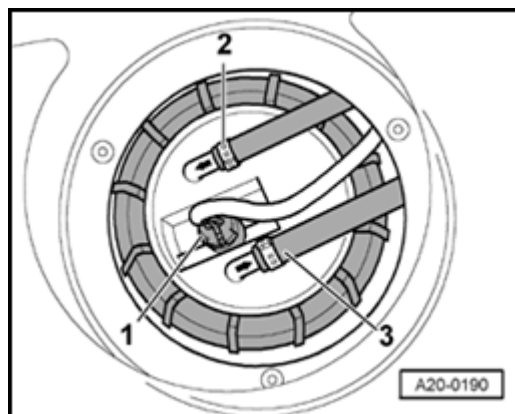
Note:

For weight reasons, fuel tank must be empty before removing.

- Remove rear axle.

⇒ [Repair Manual, Suspension, Wheels, Steering, Repair Group 42](#)

- Remove connector flange cover under luggage compartment trim.



A

- Unlatch and disconnect 4-pin harness connector -1-.

Note:

Return line -2- and supply line -3- remain connected.

- Clean area around fuel filler neck.
- With fuel filler cap removed, pry out clamp ring on rubber seal (around filler neck).
- Push rubber seal through and toward the inside.
- Remove right rear wheel house liner.



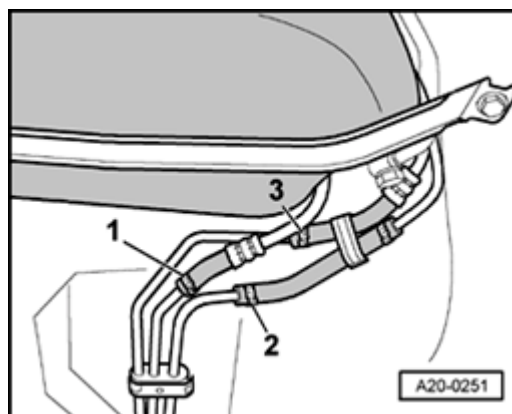
A

- Remove screw -1- for fuel filler neck, Ground connection -2- and

protective plate -3- under the wheel house shell.

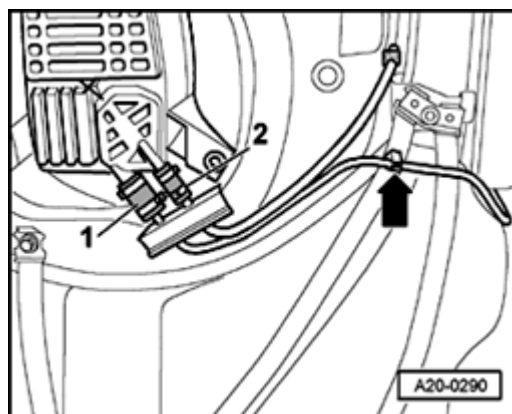
WARNING!

Fuel system is under pressure! Before opening, place clean cloths around the connections to be opened. Carefully loosen the connections to relieve pressure.



A

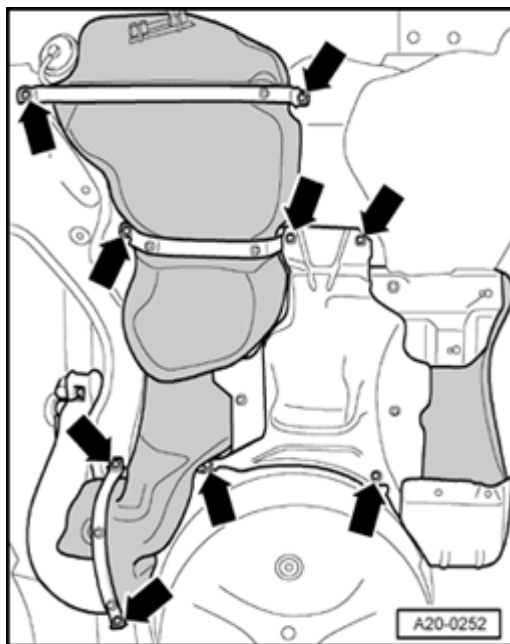
- From bottom of vehicle, mark supply line -1-, return line -3- and bleed line to EVAP canister and disconnect -2-.
- Remove the EVAP canister cover near bottom of spare wheel well ⇒ [Page 20-130](#) .



A

- Loosen hose connections -1- and -2- on bleed lines.
- Unclip line from bracket -arrow-.
- Place VAG1383A engine and transmission jack under the fuel tank for support.
- Mark installed position of the clamp bands.

20-73



A

- Disconnect clamp bands and carrier plate -arrows-.
- Lower fuel tank.

Note:

Ensure that the bleed line stays clipped to the fuel tank during fuel tank removal.

Installing

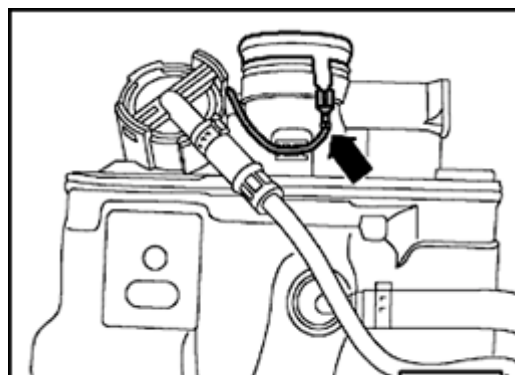
Installation is performed in the reverse order of removal, during installation note the following:

CAUTION!

Always refer to the latest parts catalog to ensure that you use original equipment fuel hose clamps.

Note:

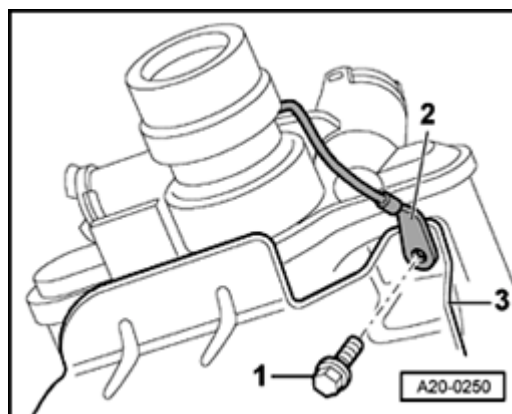
- ◆ *Secure all hose connections using spring clamps:*
- ◆ *VAG1921 Hose clamp pliers are recommended for installing spring clamps.*
- ◆ *Always replace sealing rings and gaskets during installation work.*



A

- Ensure that Ground connection -arrow- connects to metal ring on filler neck.
- Check Ground wire routing.

- Loosely fasten clamp bands and carrier plate to fuel tank.
- Position fuel tank on floor pan complete with clamp bands and carrier plate using VAG1383 A engine transmission jack.

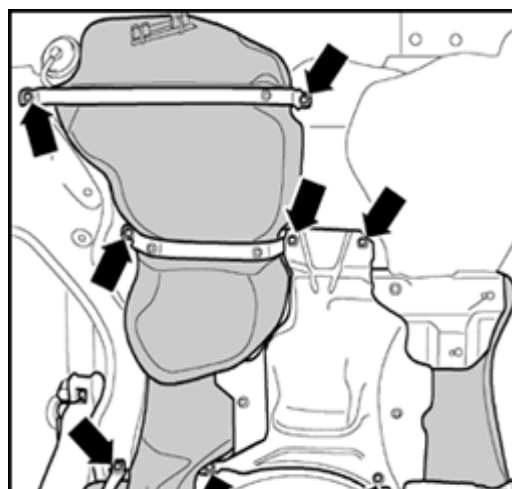


A

- Before threading in mounting screw -1- ensure tight fit (chamfer) of screw eye -2- on protective plate Ground connection -3- for fuel filler neck.

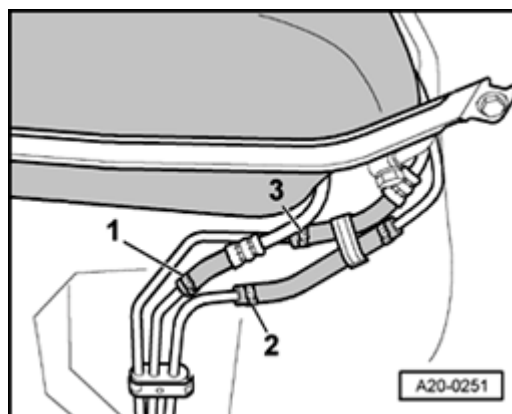
CAUTION!

Ensure that Ground connection is surrounded with a protective shield and connector on fuel filler neck is securely attached.
Installed position ⇒ Fig. ⇒ 1 , ⇒ Page 20-58 .



A

- Screw the clamp bands and carrier plate tight -arrows-.
- Tighten plastic nuts on clamp bands and carrier plate.



A

- Connect lines according to markings:
- 1 - Supply line
- 2 - Bleed line to EVAP canister
- 3 - Return line
- Re-connect fuel pump and sender for fuel gauge harness connectors.

CAUTION!

After installation, check for continuity between Ground clamp on filler neck and chassis Ground.

◆ Specification: approximately 0 Ω.

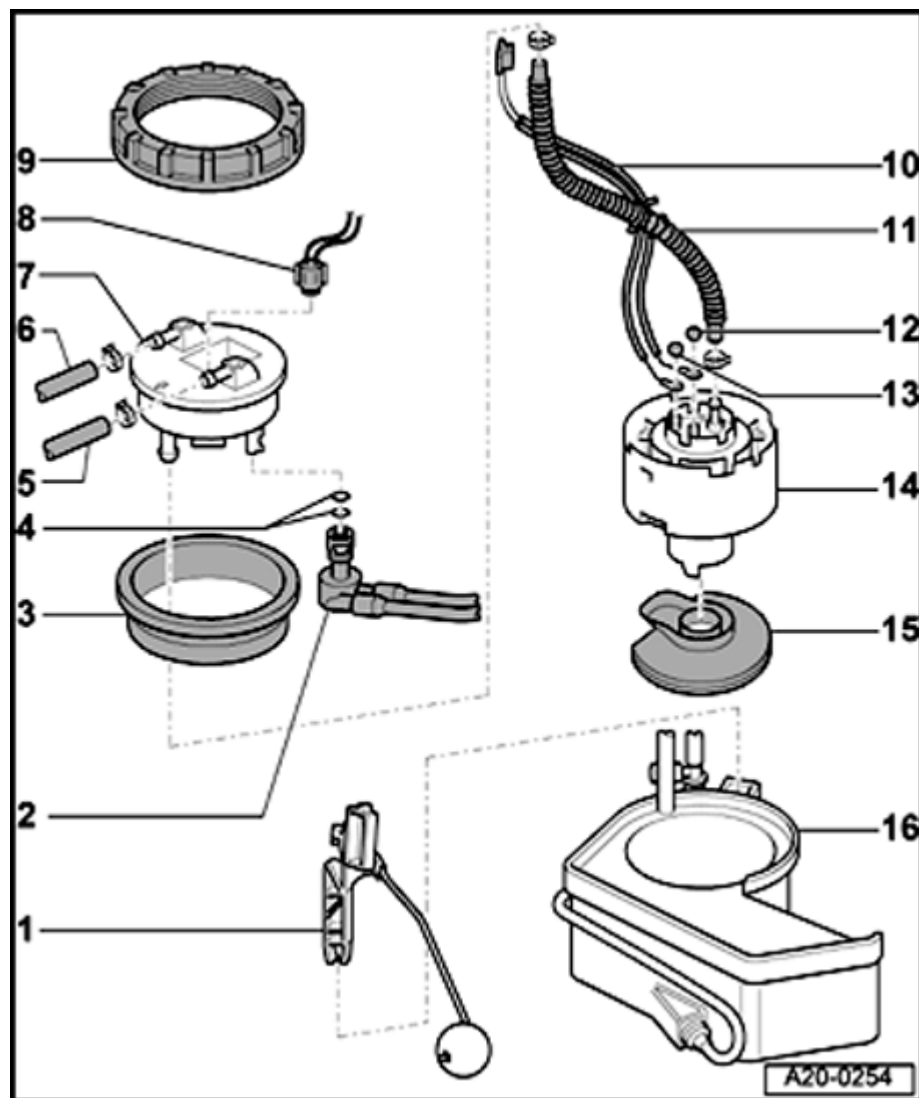
- Connect Ground strap to Battery with ignition OFF.
- After connecting Battery, input radio anti-theft code

⇒ *Radio operating instructions*

- Run door windows up to the stop using window switches.
- Operate all window switches again for at least 1 second in "closed" position to activate automatic up/down.
- Re-set the clock.

Tightening torques

| Component | Nm |
|---|-----------|
| Clamp bands and/or carrier plate (for fuel tank) on chassis | 25 Nm |
| Clamp bands on fuel tank | 2 Nm |
| Carrier plate on fuel tank | 2 Nm |
| Cover on spare wheel well | 10 Nm |



Fuel supply unit and sender for fuel gauge -G, component overview

Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

1 - Sender for fuel gauge -G

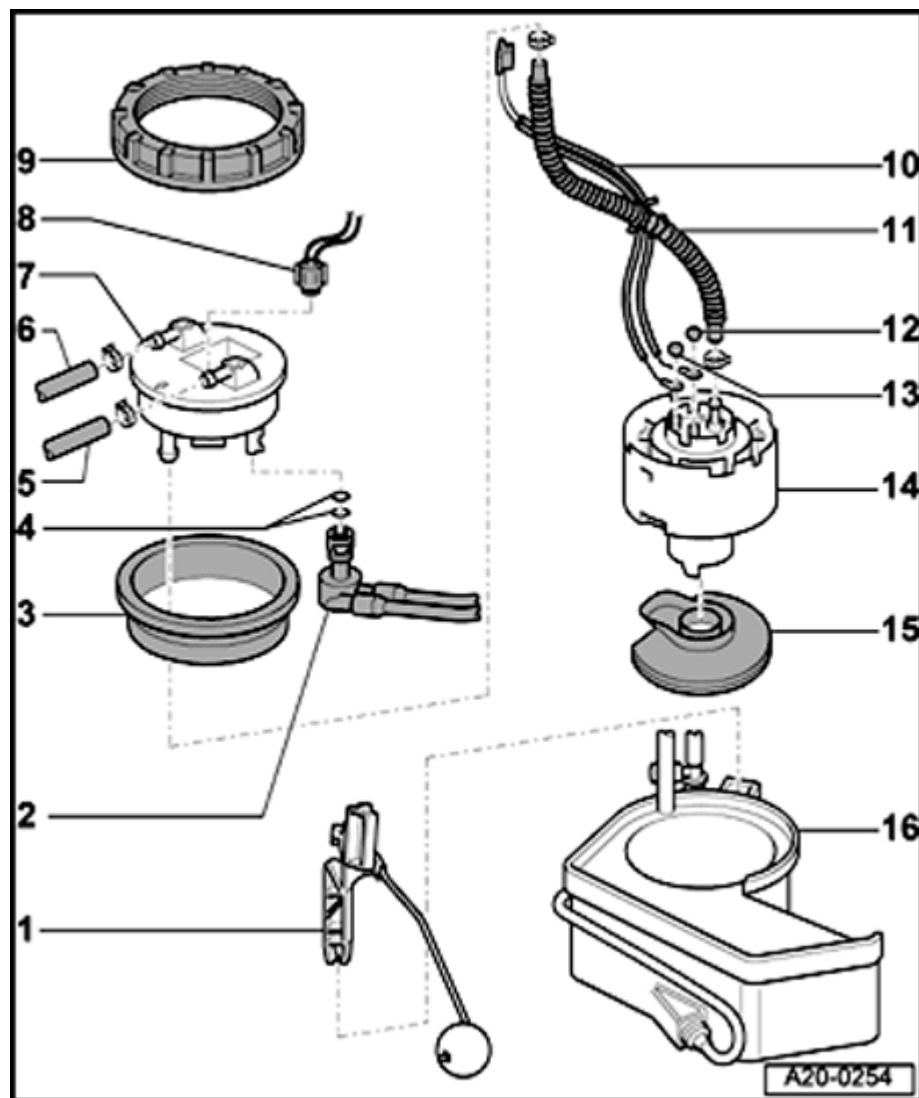
- ◆ Float is cube-shaped
 - Check resistance values: ⇒ [Page 20-99](#)
- ◆ Removing and installing: ⇒ [Page 20-101](#)

2 - Return line

- ◆ With fuel pump
- ◆ On inside of cover flange
- ◆ Removing and installing ⇒ [Page 20-104](#)
- ◆ Disconnecting: press unlatch buttons on connector piece

3 - Sealing ring

- Replace
- ◆ Installing: insert dry into fuel tank opening



4 - O-rings

- Always replace.
- Check installation position

5 - Return line

- ◆ From fuel distributor
- Mark before removal
- Note direction of arrow on flange

6 - Supply line

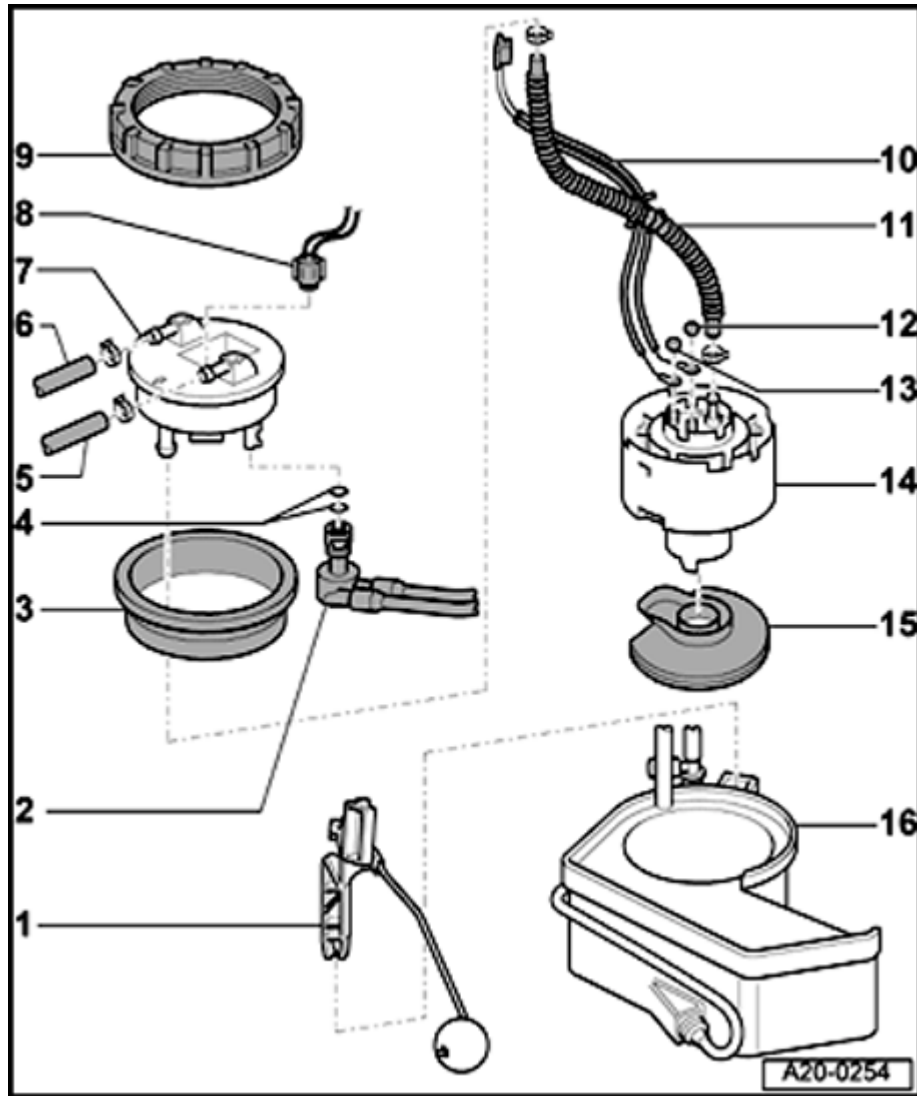
- ◆ To fuel distributor
- Mark before removing
- Note direction of arrow on flange

7 - Cover flange

- ◆ Removing and installing ⇒ [Page 20-91](#)
- ◆ Location: Note arrow marking ⇒ [Page 20-97](#)

8 - Harness connector

- ◆ For fuel Pump and sender for fuel gauge - G



9 - Union nut

- ◆ 60 Nm

10 - Wiring

- ◆ To fuel pump
- Attach with fuel resistant cable ties (item 11)

11 - Supply line

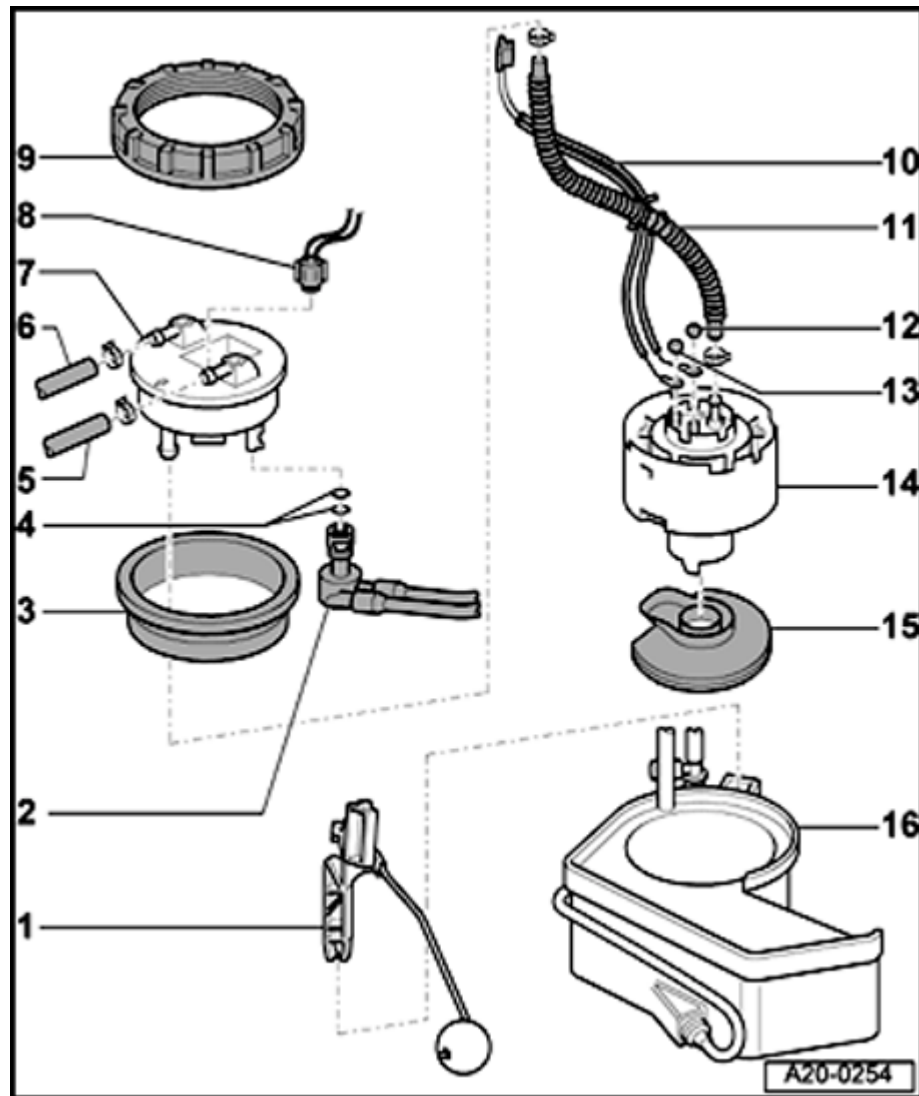
- ◆ Fuel pump/surge housing
- ◆ Location ⇒ [Page 20-95](#)

12 - Nut M4

- ◆ 1.5 Nm
- Install toothed washer beneath.

13 - Nut M5

- ◆ 2 Nm
- Install toothed washer beneath.



14 - Fuel supply unit

- ◆ Removing and installing ⇒ [Page 20-91](#)
- Fuel pump electrical checks ⇒ [Page 20-82](#)
- Residual pressure, checking:

⇒ *Repair Manual, Fuel Injection & Ignition, Repair Group 24*

15 - Fuel strainer

- ◆ Connected to fuel supply unit
- ◆ Can not be replaced individually
- Clean if dirty

16 - Surge housing lower section

- ◆ Installed in fuel tank
- ◆ Can not be removed

Fuel pump, electrical checking

**Vehicles with all wheel drive and 1.8 ltr. turbo
or 2.8 ltr. engine**

Required special tools, testing equipment and auxiliary equipment

- ◆ VAG1348/3A Remote control using
VAG1348/3-2 adaptor cable

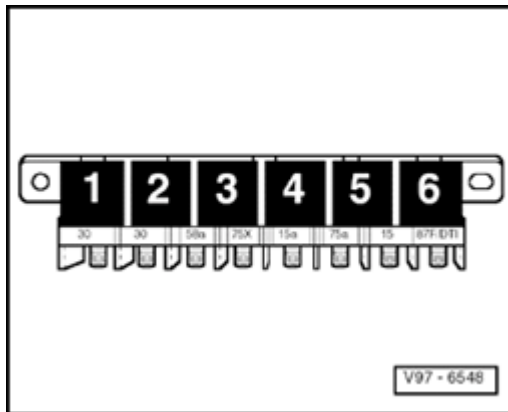
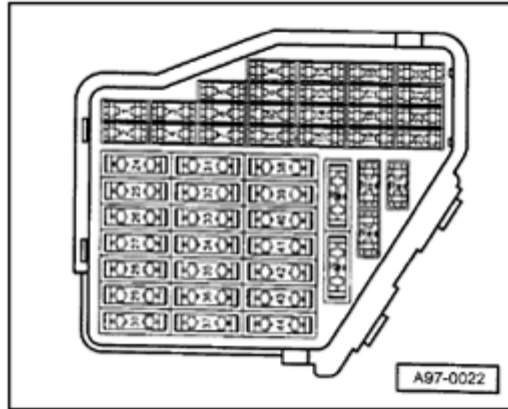
- ◆ Fluke 83 multimeter (or equivalent)

- ◆ VW 1594A adaptor kit

Test requirements

- Battery Voltage: 12 Volts minimum

- Fuse 28 OK



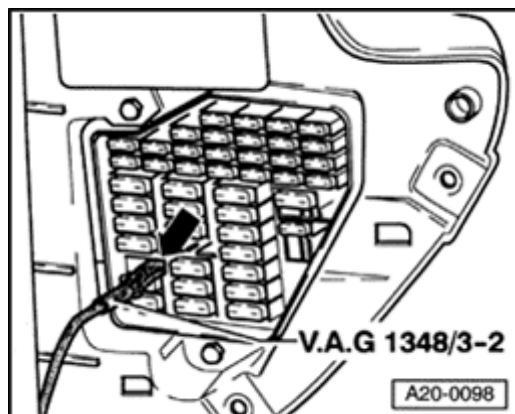
- Relay 6 in Fuse / Relay panel OK

- Fuel filter OK

- Ignition switched OFF.

Test sequence

- Open fuse box cover on left side of instrument panel.
- Remove fuse 28 from fuse panel.
 - Left row, 5Th fuse from top



A

- Connect remote control VAG1348/3A on right side of fuse socket 28 using VAG1348/3-2 adaptor wire -arrow-.
- Connect clamp to Battery +.
- Press remote control switch.
 - Fuel pump when running must be audible.

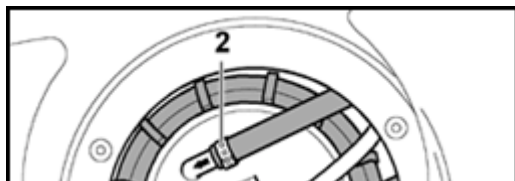
Note:

The fuel pump runs very quietly. Avoid ambient background noise as much as possible during fuel pump checks.

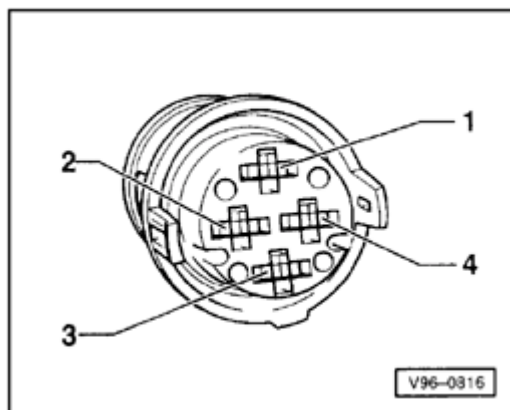
If pump running noise is not audible

- Remove connector flange cover under luggage compartment trim.
- Unlatch and disconnect 4-pin harness connector -1-.
 - Unlatch and disconnect 4-pin harness connector -1-.

A



20-85



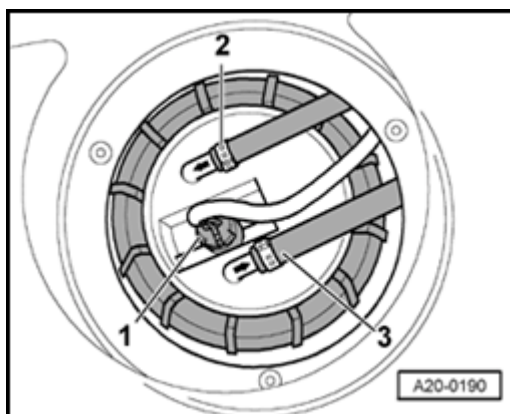
- A
- Switch Fluke 83 multimeter to 20 Volt range
 - Connect multimeter between terminals 1 (green/yellow) and 4 (brown) of harness connector using jumper wires from VW 1594 adaptor kit.
 - Press remote control switch continuously and read Voltage.
 - ◆ Specification: approx. Battery Voltage.

If specified value obtained but no audible sound from pump

- Remove cover flange as follows

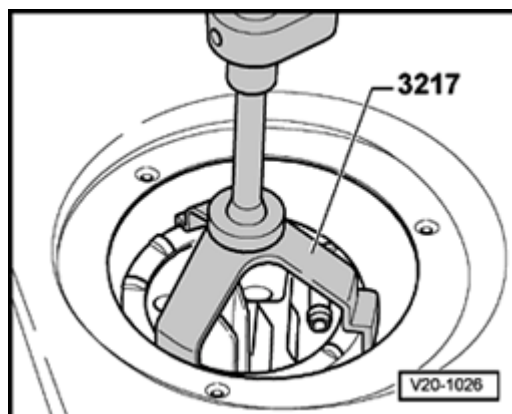
WARNING!

Fuel system is under pressure! Before opening, place clean cloths around the connections to be opened. Carefully loosen the connections to relieve pressure.

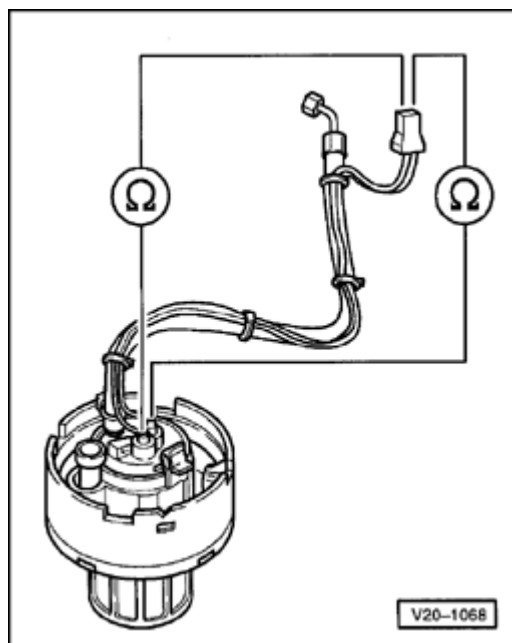


- A
- Mark return line -2- and supply line -3- and remove from cover flange.

20-86



- A
- Unscrew union nut using wrench 3217.
 - Take cover flange and sealing ring out of the fuel tank opening.



- A
- Check wiring between flange and fuel pump for continuity.

If wiring OK

- Fuel pump faulty, replace ⇒ [Page 20-91](#) .
- Fuel supply unit, installing ⇒ [Page 20-96](#) .

Fuel pump delivery volume, checking

Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

Required special tools, testing equipment and auxiliary equipment

- ◆ VAG1348/3A Remote control with VAG1348/3-2 adaptor cable

- ◆ Calibrated measuring container

Test requirements

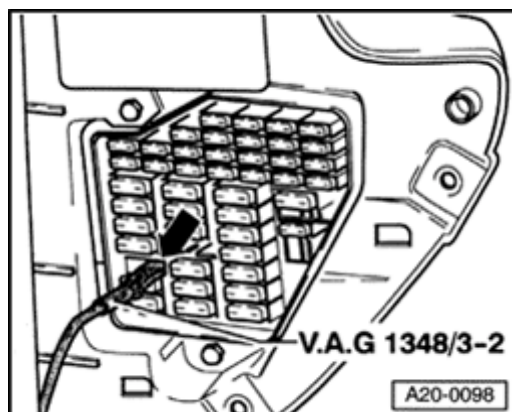
- ◆ Battery Voltage: 12 Volts minimum

- ◆ Fuel filter OK

- ◆ Ignition switched OFF.

Test sequence

- Open fuse panel cover on left side of instrument panel.
- Remove fuse 28 from fuse panel (left row, 5Th fuse from top)

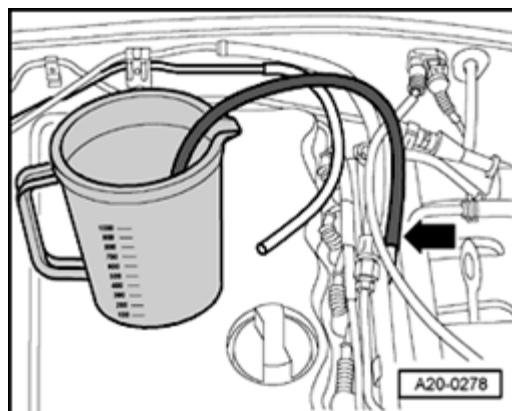


A

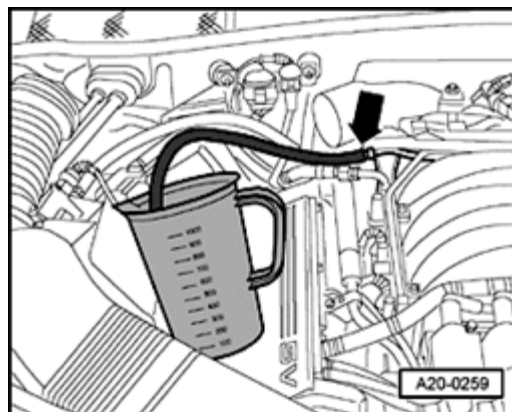
- Connect VAG1348/3A remote control to right terminal of fuse 28 using VAG1348/3-2 adaptor cable -arrow-.
- Connect tester clamp to Battery +.
- Remove fuel filler cap.
- Remove engine cover.

WARNING!

Fuel system is under pressure! Before opening, place clean cloths around the connections to be opened. Carefully loosen the connections to relieve pressure.

Vehicles with 1.8 ltr. turbo engine**A**

- Disconnect fuel return hose from connection on fuel distributor line.
- Connect auxiliary hose -arrow- to distributor line and place in a measuring container.

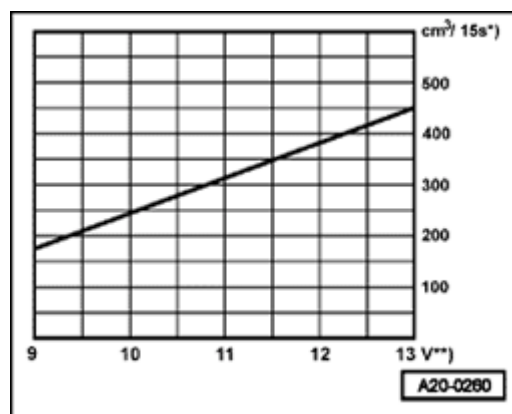
Vehicles with 2.8 ltr. engine**A**

- Disconnect fuel return hose from the hose connection on the fuel distributor line.
- Connect auxiliary hose -arrow- to distributor line and place in a measuring container.

All vehicles

- Operate remote control for 15 seconds.

- Keep button depressed continuously



- Compare delivered quantity to specified value.

*) Minimum supply quantity $\text{cm}^3/15 \text{ s}$

**) Voltage across fuel pump with engine off and pump running (approx. 2 Volts less than Battery Voltage).

Fuel supply unit, removing and installing

Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

Observe Safety measures ⇒ [Page 20-1](#) .

Observe Rules of cleanliness ⇒ [Page 20-4](#) .

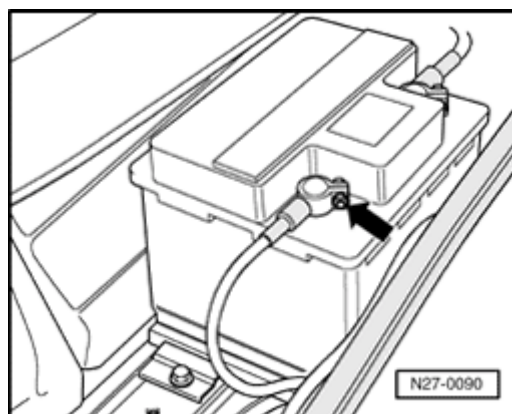
Required special tools, testing equipment and auxiliary equipment

- ◆ FM 3000 fuel cart (or equivalent)
- ◆ 3217 Union nut wrench
- ◆ 3307 fuel pump wrench
- ◆ VAG1275 Hose clamp pliers

Removing

CAUTION!

Obtain the radio Anti-theft code from the customer before disconnecting the Battery Ground strap.



A

- Disconnect Battery Ground strap with ignition switched OFF.
- Open fuel tank cover briefly and close again.
- If necessary, drain fuel tank using fuel cart ⇒ [Page 20-66](#) .

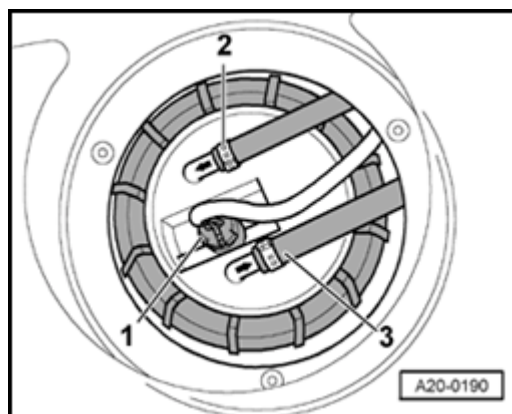
Note:

The fuel tank must not be filled to more than $\frac{1}{3}$ maximum.

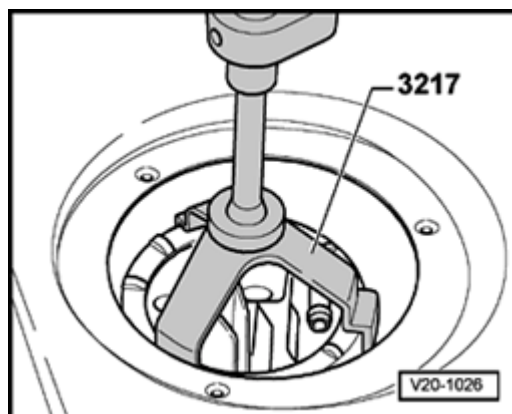
- Remove connector flange cover under luggage compartment trim.

WARNING!

Fuel system is under pressure! Before opening, place clean cloths around the connections to be opened. Carefully loosen the connections to relieve pressure.

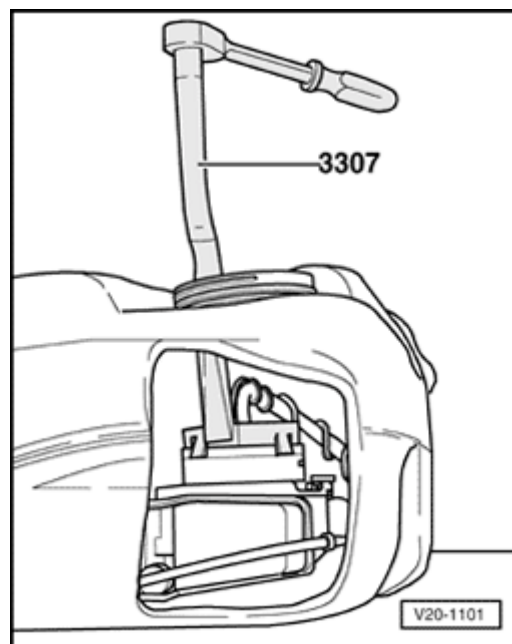


- A**
- Mark return line -2- and supply line -3- and disconnect from cover flange.
 - Unlatch and disconnect 4-pin harness connector -1-.



- A**
- Unscrew union nut using 3217 wrench .
 - Remove cover flange and sealing ring from fuel tank opening.
 - Disconnect fuel level display harness connector on inside of flange cover.
 - Disconnect return line on inside of cover flange (press unlatching buttons).

20-94



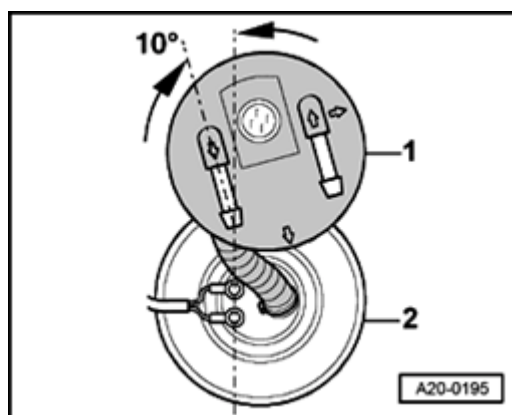
A

- Insert 3307 wrench through fuel tank opening and place over the inner section of the surge housing.
- Using 3307 wrench, turn inner section of surge housing approx. 15° to the left up to the stop and withdraw fuel pump assembly complete with the inner housing section.

Cover flange and surge housing inner section, pre-assembling

If cover flange and supply unit were separated

- Pre-assemble parts ⇒ [Page 20-78](#) .



A

- Angle position, cover flange to inner section of surge housing: 10°
- Press together clamps for supply line (between pump and cover flange) with VAG1275 pliers.
- Attach wiring to fuel pump.
 - M4: 1.5 Nm
 - M5: 2 Nm

Note:

Install a toothed washer beneath each nut.

- Attach wiring with fuel-resistant cable ties.

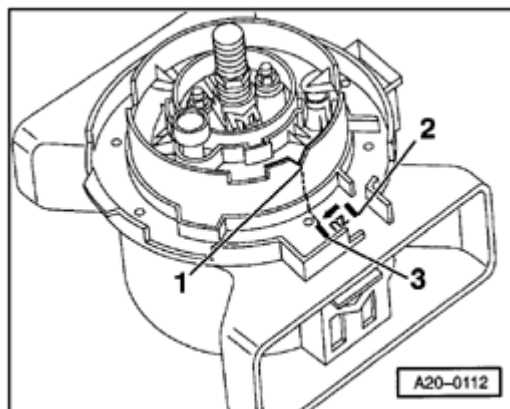
Installing

Installation is performed in the reverse of removal, when installing, note the following:

CAUTION!

Always refer to the latest parts catalog to ensure that you use original equipment fuel hose clamps.

- Install surge housing inner section, supply hose and cover flange in the fuel tank.



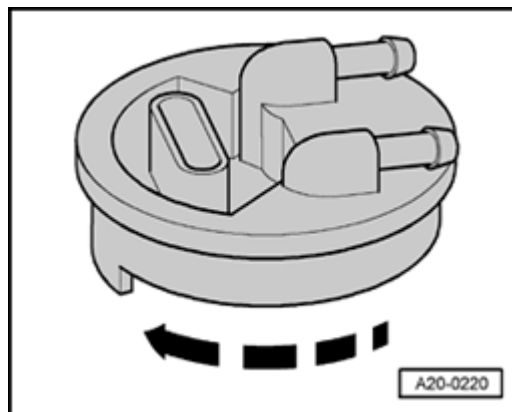
A

- Place inner section of surge housing into outer section of surge housing in tank such that notch -1- on inner section of surge housing matches mark -2- on outer section of surge housing.
 - The inner section of the surge housing can be audibly pressed downward.
- Attach 3307 pump wrench and turn surge housing inner section to the right approx. 15° (up to the stop).
 - Notch -1- will then be in front of mark -3- (bayonet closure)

Note:

For clarity, the surge housing outer and inner sections are shown in the illustration without the fuel tank.

20-97

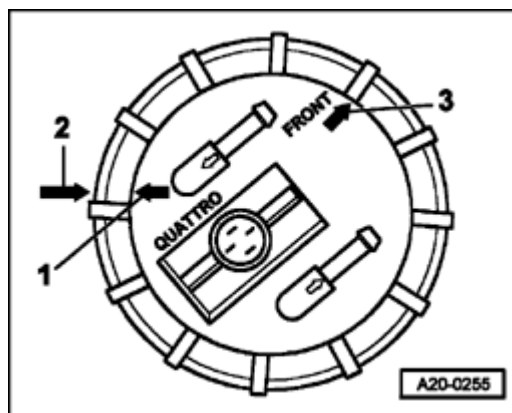


A

- When installing, turn cover flange in direction of arrow to the right as shown in the illustration.
- Connect the return line inside on the cover flange.

Note:

- ◆ Always use new O-rings.
- ◆ Lubricate O-rings with fuel or coat with lubricant.
- ◆ Install new cover flange gasket (dry) in fuel tank opening.
- Wrap sender for fuel gauge wire once around the supply line (in fuel tank) and install on cover flange.

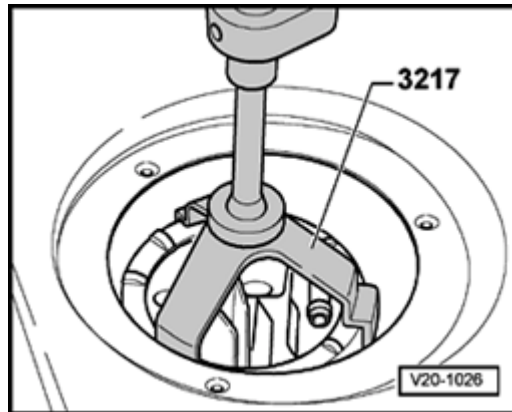


A

- Attach cover flange to fuel tank
 - Vehicles with all wheel drive: arrow 1 must be opposite arrow 2

Note:

- Arrow 3- only applies to vehicles with front-wheel drive.



A

- Tighten union nut with 3217 wrench.
 - 60 Nm
- Connect wiring and harness connector.

Note:

Ensure that fuel hoses fit tightly.

- Connect Battery Ground strap with ignition switched OFF.
- After connecting Battery, input radio anti-theft code

⇒ *Radio operating instructions*

- Run door windows up to stop using electric window lifters.
- Operate all window lifters again for at least 1 second in "closed" position to activate automatic up/down.
- Set the clock.

Sender for fuel gauge -G, checking

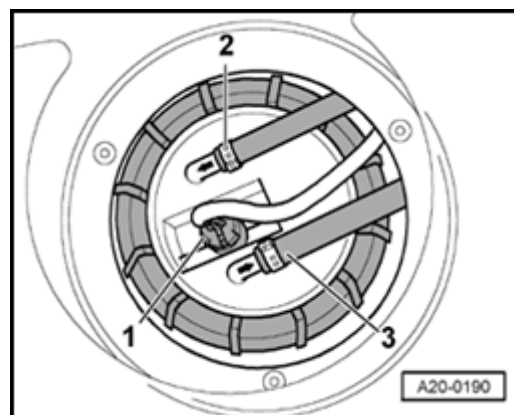
Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

Required special tools, testing equipment and auxiliary equipment

◆ Fluke 83 multimeter

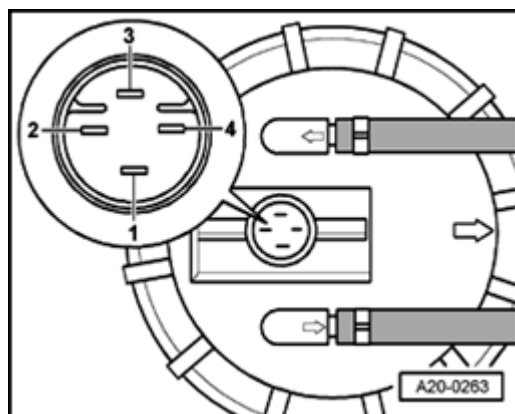
◆ VW 1594 Adaptor kit

- Remove connector flange cover under luggage compartment trim.



A

- Unlatch and disconnect 4-pin harness connector -1-.



A

- Measure resistance at terminals -2- and -3- on cover flange

| Sensor | Tank full | Tank empty |
|--------------------------|-------------|--------------|
| Sender for fuel gauge -G | 40 Ω | 280 Ω |

Note:

- ◆ If fuel level falls between "Tank full" and "Tank empty", resistance value between the two specified values must be displayed.
- ◆ If 0 Ω or ∞ Ω is displayed there is an open or closed circuit in tank wiring.
- ◆ To check "Tank full" or "Tank empty" resistance values; remove sender for fuel gauge -G \Rightarrow [Page 20-101](#) and swing sensor float to top or bottom stop.

Sender for fuel gauge -G, removing and installing

Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

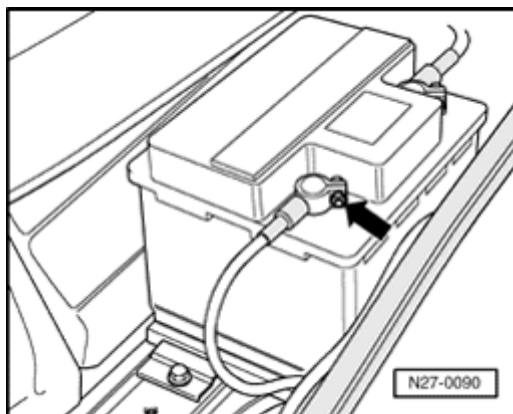
Observe Safety measures ⇒ [Page 20-1](#) .

Observe Rules of cleanliness ⇒ [Page 20-4](#) .

Removing

CAUTION!

Obtain the radio Anti-theft code from the customer before disconnecting the Battery Ground strap.



A

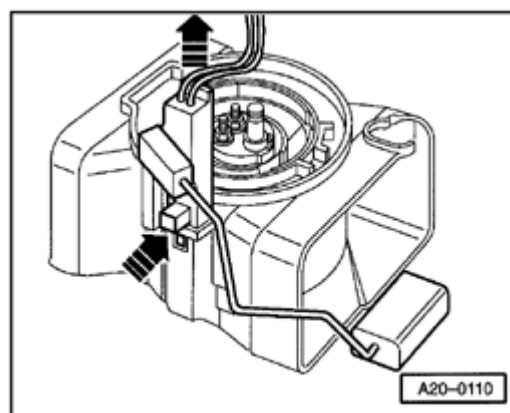
- Disconnect Battery Ground strap with ignition switched OFF.
- Open fuel tank cover briefly and close again.
- If necessary, drain fuel tank using fuel cart ⇒ [Page 20-66](#) .

Note:

Fuel tank must not be filled higher than $\frac{1}{3}$ maximum.

- Fuel supply unit, removing ⇒ [Page 20-91](#) .

- Carefully pull cover flange out and put to the side with supply line connected.
- Disconnect harness connector for fuel level display on inside of cover flange.



- A
- Pull sensor out of surge housing in fuel tank while simultaneously pressing latching tab -arrow-.

Note:

- ◆ *Illustration shows sensor and surge housing for vehicles with Front-Wheel Drive.*
- ◆ *For clarity, the surge housing illustration is shown without tank.*

Installing

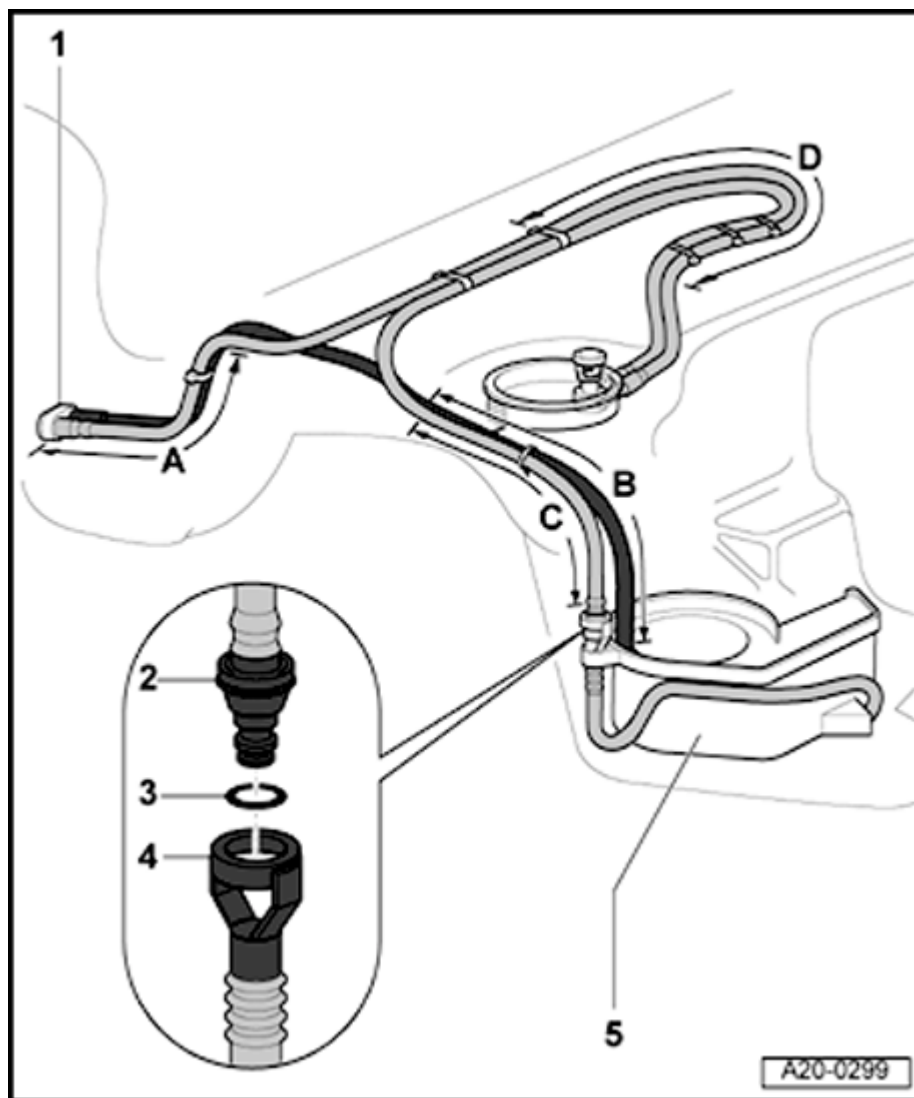
Installation is performed in reverse order, when performing, note the following:

- Install sender for fuel gauge in guide on surge housing outer section and press down until it engages ⇒ [Page 20-97](#) .
- Connect battery Ground strap with ignition switched OFF.
- After connecting battery, input radio anti-theft code

⇒ *Radio operating instructions*

- Operate door windows up to the stop using window switches.
- Operate all window lifters again for at least 1 second in the "closed" position to activate the automatic up/down.
- Set the clock.

20-104



Fuel pump, removing and installing

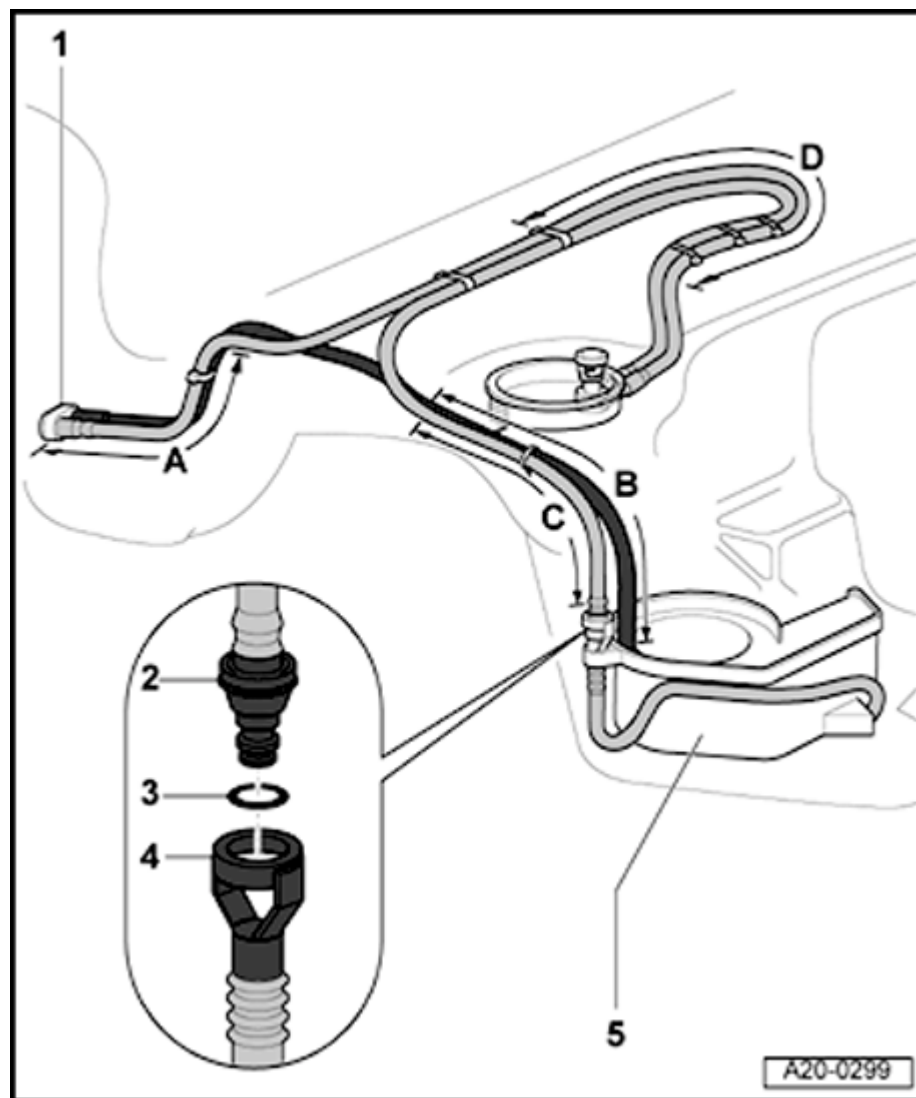
Vehicles with all wheel drive and 1.8 ltr. turbo or 2.8 ltr. engine

Observe Safety measures ⇒ [Page 20-1](#) .

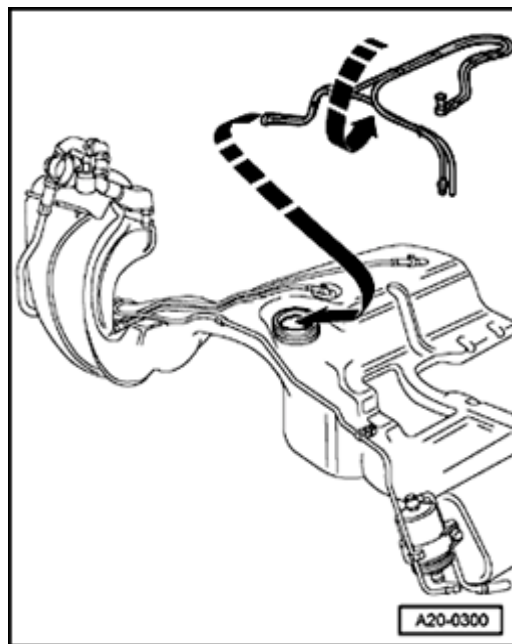
Observe Rules of cleanliness ⇒ [Page 20-4](#) .

Note:

- ◆ The following steps describe fuel pump installation. Removal is the reverse of the installation steps.
- ◆ Fuel pump lines -1- may not be kinked. Replace kinked fuel lines and immediately dispose of old parts.
- Replace O-ring -3-.
- Install fuel supply unit ⇒ [Page 20-91](#) .
- Install sender for fuel gauge ⇒ [Page 20-101](#) .



- Vacuum booster -1-, installed position
- Location -A- slide through the flange lock opening.
- Location A in fuel tank, slide in direction of filler neck while turning approx. 1 additional turn to the left ⇒ Fig. ⇒ [1](#) , ⇒ [Page 20-106](#) .
- Location B, place (black wire) in fuel tank but do not yet fasten in surge housing 5.
- Location C (white wire) place in fuel tank, but do not yet fasten in hose coupling 4.
- Location D place in fuel tank. Ensure it comes to rest above the thick fuel filler hose in the fuel tank.
- Attach black wire to surge housing 5.
- Connect white wire 2 to hose coupling 4.



A

Fig. 1 Fuel pump, installing

- Turn fuel pump in direction of filler neck, into fuel tank, approx. 1 turn to the left-arrows-.