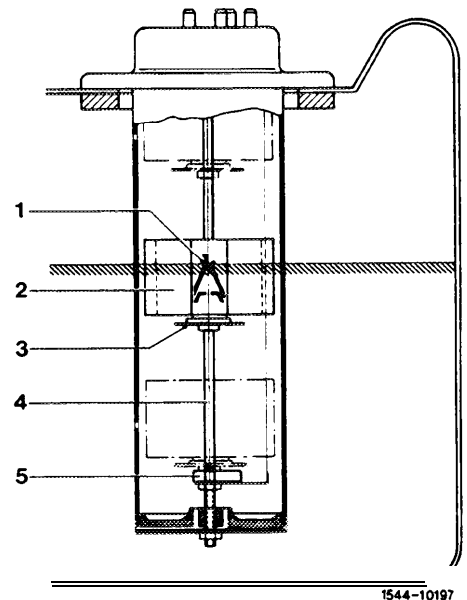


47 Fuel system

	Job No.
Operation of immersion tube transmitter for fuel readout	47-020
Operation of fuel tank positive and negative venting	030
Removal and installation of fuel tank	100
Removal and installation of immersion tube transmitter	120

When fuel level drops, the slide contact (1) on float (2) of immersion tube transmitter increases the resistance value, voltage is reduced and the indicating needle in instrument will therefore move back.

When fuel level drops still further, the reserve warning contact (5) in immersion tube transmitter, which switches to reserve warning lamp, is closed.



- 1 Slide contact
- 2 Float
- 3 Contact plate
- 4 Guide and contact rod
- 5 Reserve warning contact

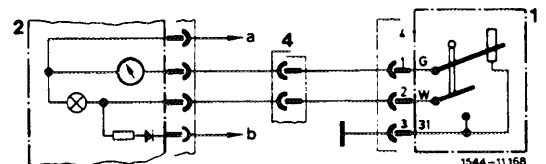
1544-10197

The reserve warning contact lights up with ignition switched on (control function). Lamp will go out the moment the engine starts, provided there is more fuel in fuel tank than the reserve.

Note: During control function, the reserve warning lamp lights weaker, for reserve stronger.

Check fuel readout (54-269).

- 1 Immersion tube transmitter
- 2 Fuel gauge
- 4 Cable connector
- a To terminal 15
- b To terminal 61



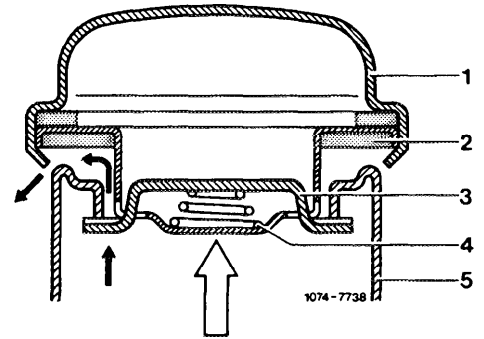
1544-11168

47-030 Operation of fuel tank positive and negative venting

Closing cap

At a gauge pressure of 100-300 mbar the fuel evaporation vapors can escape through closing cap.

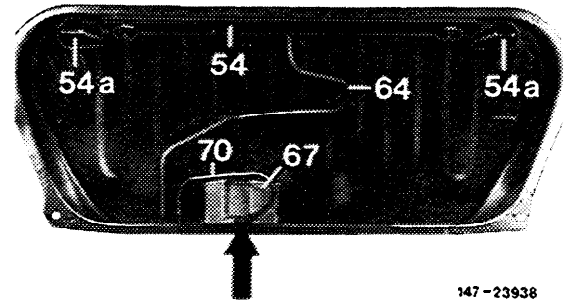
- 1 Closing cap
- 2 Sealing ring
- 3 Closing clip
- 4 Compression spring
- 5 Filler neck



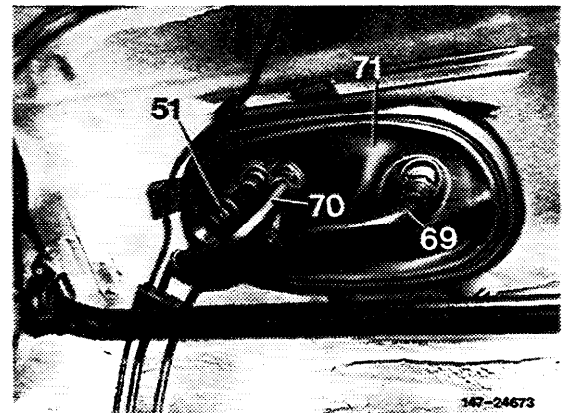
Vent system

The vent system comprises a central tube (54) with one check vessel (54a) each at ends. The vent line (64) runs from central tube downward through fuel tank. The vent valve is plugged on at end of vent line (64).

The steadying bowl (67) is installed on vehicles with gasoline injection engines only.



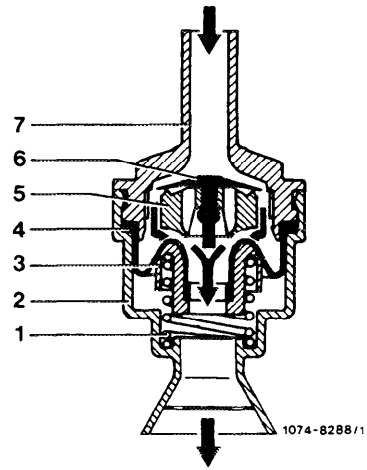
- 51 Vent valve
- 69 Suction hose
- 70 Return hose
- 71 Gasket



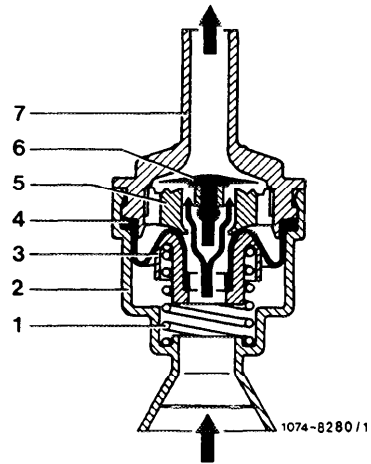
The vent valve permits establishing a pressure of 30-50 mbar in fuel tank. With a vacuum in fuel tank, the vent opens at I-I 6 mbar vacuum.

Vent valve opened at overpressure (gauge pressure)

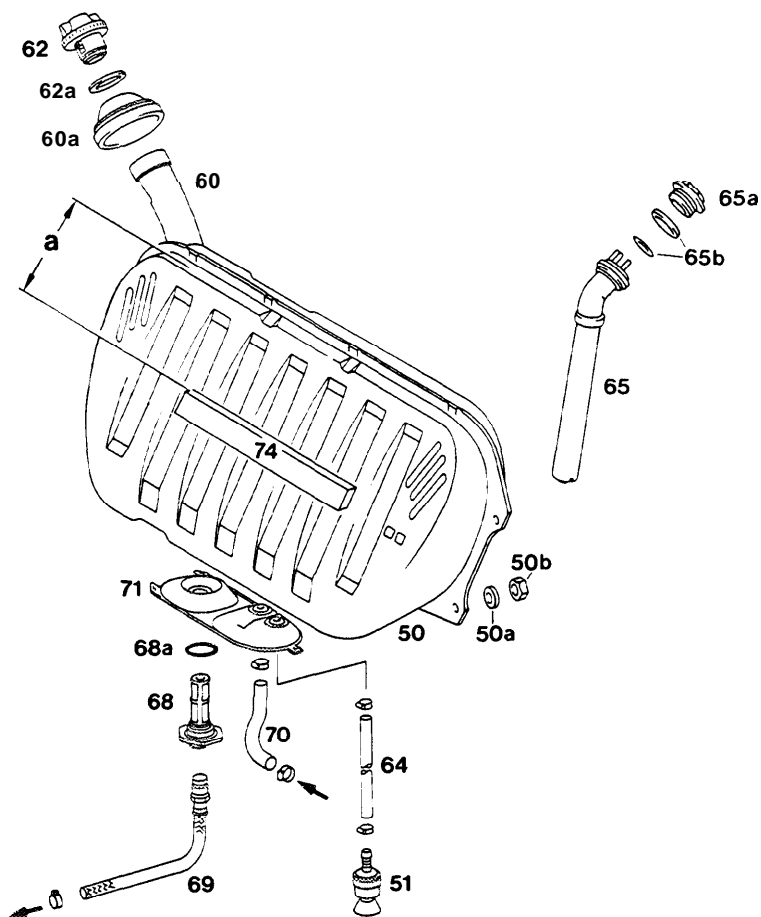
- 1 Compression spring
- 2 Valve housing
- 3 Spring retainer
- 4 Negative vent valve
- 5 Valve plate
- 6 Positive vent valve
- 7 Connection



Vent valve opened at underpressure (vacuum)



47-I 00 Removal and installation of fuel tank



1473 - 11139

50	Fuel tank	.....	Pump off fuel (item 2)
50a	Washer, 4 each	.....	Use large washers (risk of tearing)
50b	Nut, 4 each	.....	21 Nm
51	Vent valve		
60	Filler neck		
60a	Sealing sleeve	.....	Pay attention to correct seat
62	Closing cap		
62a	Sealing ring		
64	Vent line		
65	Immersion tube transmitter		
65a	Sealing flange	.....	39 Nm
65b	Sealing rings	.....	Renew
68	Fuel filter	.....	Clean, check for re-use, 39 Nm
68a	Sealing ring	.....	Renew
69	Feed line	.....	Check for reuse, 28 Nm
70	Return line	.....	Check for re-use
71	Gasket	.....	Pay attention to correct seat on rear floor
74	Damping shim	.....	Item 9a
a	190 + 5 mm		

Filling capacities in liters

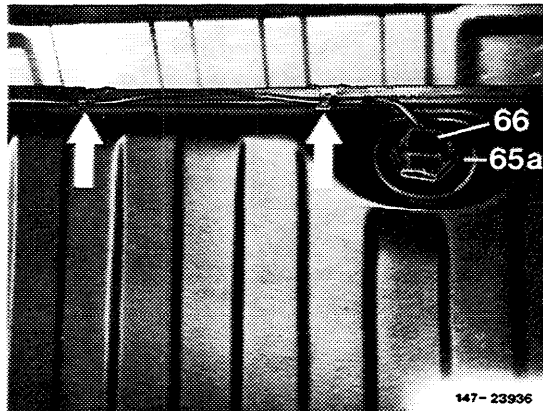
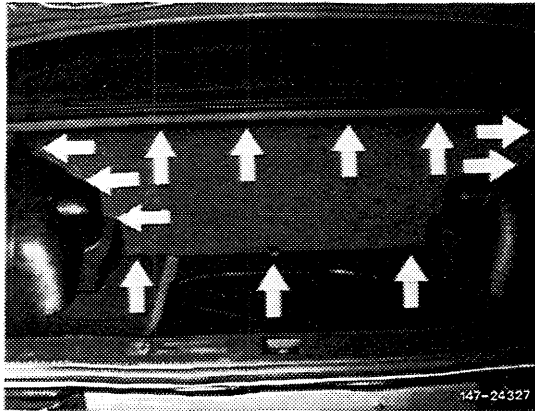
Full readout	approx. 55
Warning lamp — reserve	approx. 7.5

Attention!

When removing fuel tank, pay attention to safety rules.

Removal

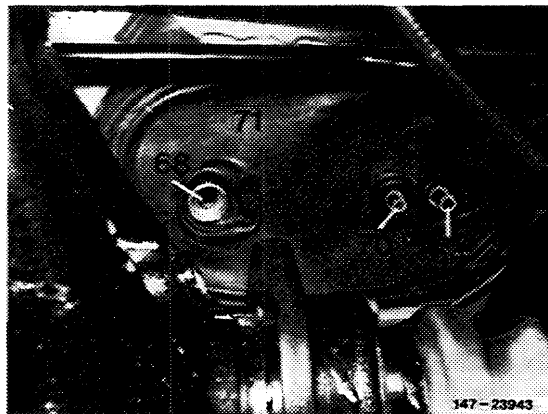
- 1 Disconnect ground connecting line on battery.
- 2 Drain fuel tank. Carefully pump off fuel, so that no residue remains in fuel tank.
- 3 Loosen or disengage lining for fuel tank first below, then laterally and then on top (arrows). Remove trunk mat for this purpose.
- 4 Pull coupling (66) for fuel gauge from immersion tube transmitter. Disengage cable harness on holding clamps (arrows).



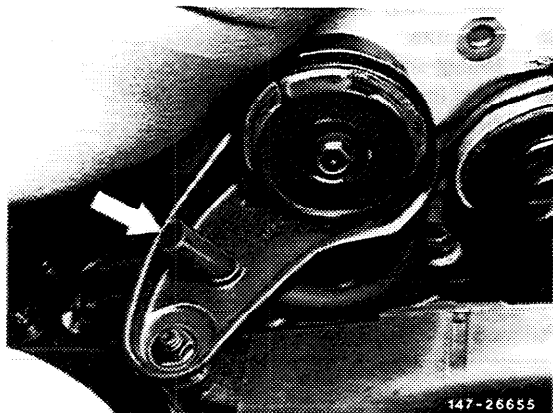
- 5 Loosen all connections on fuel tank and pull gasket (71) from pipe connection and fuel filter.

Note: Catch residual fuel, close lines and connections.

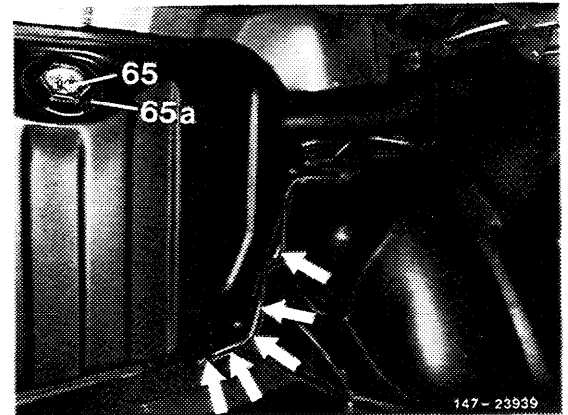
- 64 Vent line
- 68 Fuel filter
- 70 Return line
- 71 Gasket



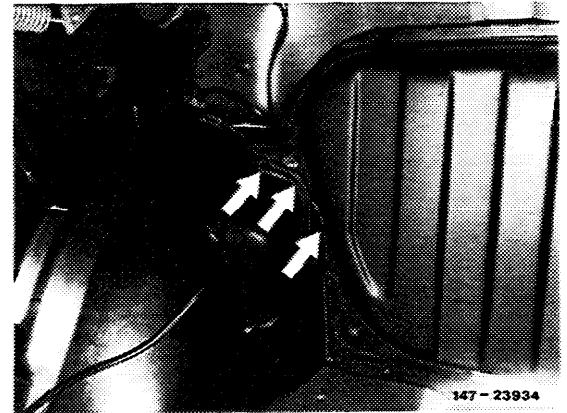
- 6 Slide back drain hose (arrow) for approx. 5 cm.



7 Unscrew fastening nuts for fuel tank and pull out drain hose (arrows) in upward direction in such a manner that hose can be installed behind edge of fuel tank. Slightly lift fuel tank for this purpose.



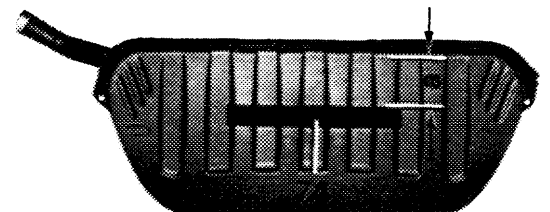
8 Lift fuel tank over side panelling (arrows) at the left.



Installation

9 Install fuel tank in vice versa sequence, paying attention to the following:

a) Check whether damping shims (74) are well fastened on fuel tank. Glue down with MB-Universal Glue, part no. 000 989 92 71, if required.

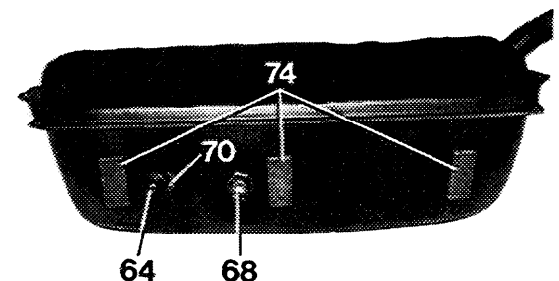


a 190⁺⁵ mm

147-23937

b) Plug on coupling for fuel gauge and check for function. Engage cable harness in holding clamps provided.

c) Check for leaks.



147-24734

47- 120 Removal and installation of immersion tube transmitter

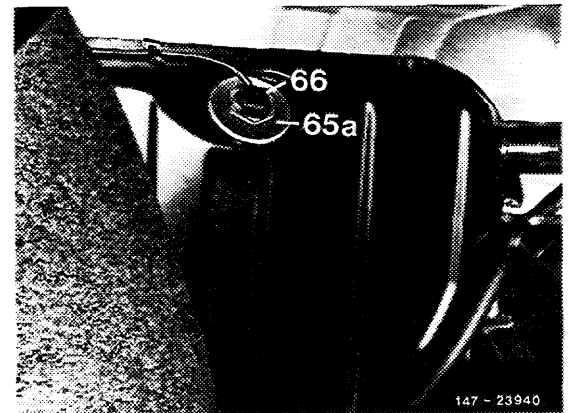
Tightening torque	Nm
Immersion tube transmitter	35-43

Note

Prior to removing immersion tube transmitter, pump off approx. 8 liters fuel from full fuel tank.

Removal

- 1 Loosen or disconnect lining for fuel tank at first below, then laterally and on top.
- 2 Pull coupling (66) for fuel gauge from immersion tube transmitter.
- 3 Unscrew sealing flange (65a).
- 4 Pull out immersion tube transmitter first in upward direction, then toward the rear. Let immersion tube transmitter run empty, if required.



Installation

5 For installation proceed vice versa, paying attention to the following:

- a) Renew both sealing rings (arrows).
- b) Prior to installation of immersion tube transmitter, remove locking pin.
- c) Plug on coupling and check fuel gauge for function.
- d) Insert immersion tube transmitter with lug (arrow) in downward direction into fuel tank.
- e) Tighten sealing flange to 35-43 Nm.
- f) Check for leaks.

