



2 Description and Operation

⇒ ["2.1 Fuel Tank with Attachments and Fuel Filter", page 130](#)

⇒ ["2.2 Electronic Power Control Components", page 133](#)

⇒ ["2.3 EVAP System Components", page 134](#)

2.1 Fuel Tank with Attachments and Fuel Filter



Note

Make sure the supply or return lines do not come into contact with the fuel tank after all work on the fuel pump or the fuel gauge (transfer of pump noise).

1 - Union Nut

- ☐ 80 Nm
- ☐ Use Wrench - Ring Nut - 3217- to remove and install

2 - Return Line

- ☐ Secure with spring type clamps
- ☐ Check for secure fit
- ☐ Blue
- ☐ From fuel distributor. Refer to ⇒ [Fuel Injection and Ignition; Rep. Gr. 24; Removal and Installation](#)

3 - Connector

- ☐ Black, 4-pin
- ☐ For Sender for Fuel Level Sensor - G- and Transfer Fuel Pump - G6-

4 - Flange

- ☐ Note installation position at fuel tank. Refer to ⇒ [Fig. "Installation Position of Fuel Pump Flange", page 132](#)
- ☐ Marking "V" and "R" on underside for supply and return line

5 - Supply Hose

6 - Return Hose

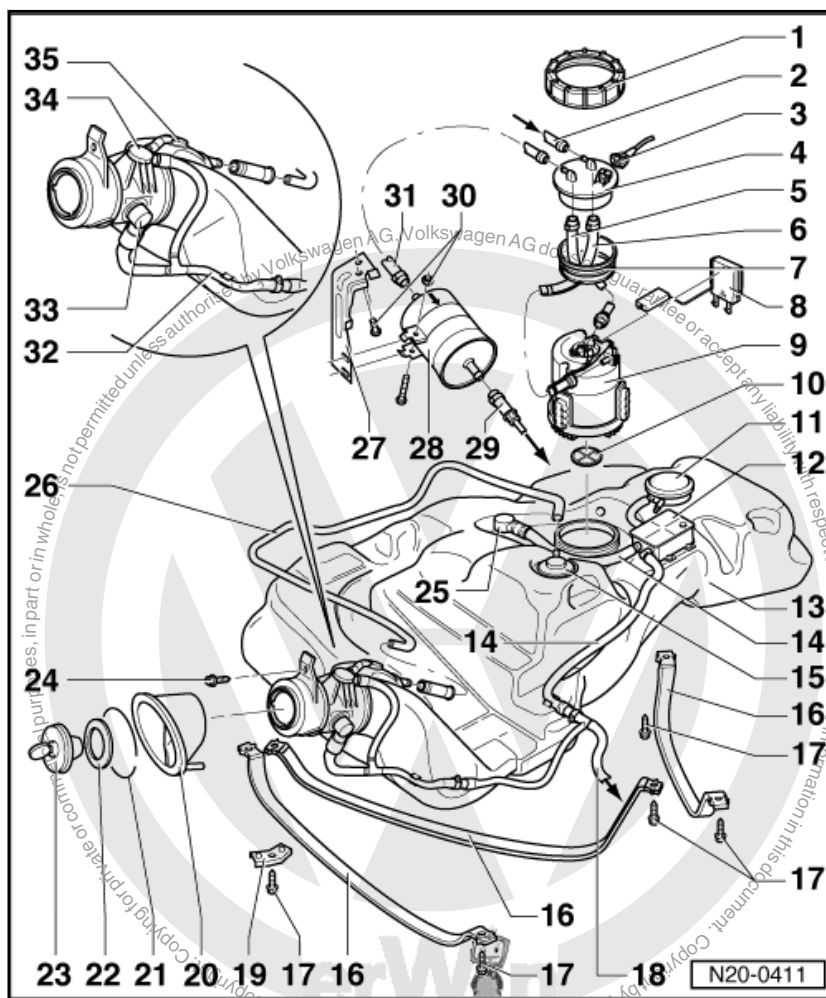
7 - Seal

- ☐ Coat with fuel when installing
- ☐ Replace if damaged

8 - Fuel Level Sensor - G-

9 - Fuel Pump

- ☐ With Fuel Level Sensor - G-
- ☐ Removing and installing. Refer to ⇒ ["4.1 Fuel Pump", page 155](#)





- ☐ Check fuel pump. Refer to ⇒ [“3.1 Fuel Pump, Checking”, page 137](#)
- ☐ Clean strainer if dirty
- 10 - Filter Strainer**
 - ☐ Clean strainer if dirty
- 11 - Combination Valve**
 - ☐ Vacuum protection valve
 - ☐ For leak diagnostic test
- 12 - Expansion Tank**
 - ☐ Filler ventilation
- 13 - Fuel Tank**
 - ☐ When removing, support using Engine/Gearbox Jack - VAG1383A-
 - ☐ Removing and installing. Refer to ⇒ [“4.2 Fuel Tank”, page 157](#)
- 14 - Vent Line**
 - ☐ For filler ventilation
- 15 - Gravity Valve**
 - ☐ Operating ventilation
 - ☐ Cannot be removed, only replace together with fuel tank
- 16 - Tension Strap**
 - ☐ Note varying lengths
- 17 - Bolt**
 - ☐ 25 Nm
- 18 - To pressure retaining valve at EVAP canister**
- 19 - Bracket**
 - ☐ For tension straps
- 20 - Rubber Top**
- 21 - Tensioning Ring**
- 22 - Gasket**
 - ☐ When damaged, only replace together with sealing cap.
- 23 - Cap**
- 24 - Bolt**
 - ☐ 4 Nm
- 25 - Gravity Valve**
 - ☐ For filler ventilation
 - ☐ Cannot be removed, only replace together with fuel tank
- 26 - Vent Line**
 - ☐ Operating ventilation
- 27 - Bracket**
 - ☐ For fuel filter
- 28 - Fuel Filter**
 - ☐ Installation position: Arrow points in direction of flow
- 29 - Supply Line**
 - ☐ Secure with spring type clamps
 - ☐ Check for secure fit
 - ☐ Black
 - ☐ To fuel supply line at fuel distributor. Refer to ⇒ Fuel Injection and Ignition; Rep. Gr. 24 ; Removal and Installation



30 - Bolts

- ☐ 6 Nm

31 - Supply Hose

32 - Vent Line

- ☐ Operating ventilation

33 - Check-Valve

34 - 2-Way Valve

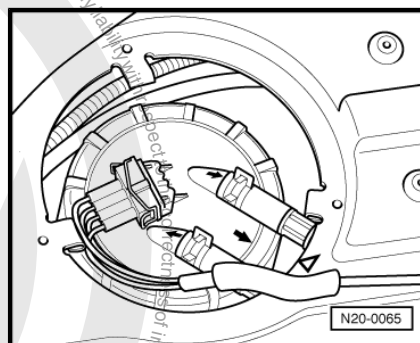
- ☐ Cannot be removed, only replace together with fuel tank

35 - Expansion Tank

- ☐ For ventilation line
- ☐ Cannot be removed, only replace together with fuel tank

Installation Position of Fuel Pump Flange

Marking on flange must align with marking on fuel tank.





2.2 Electronic Power Control Components

1 - Connector

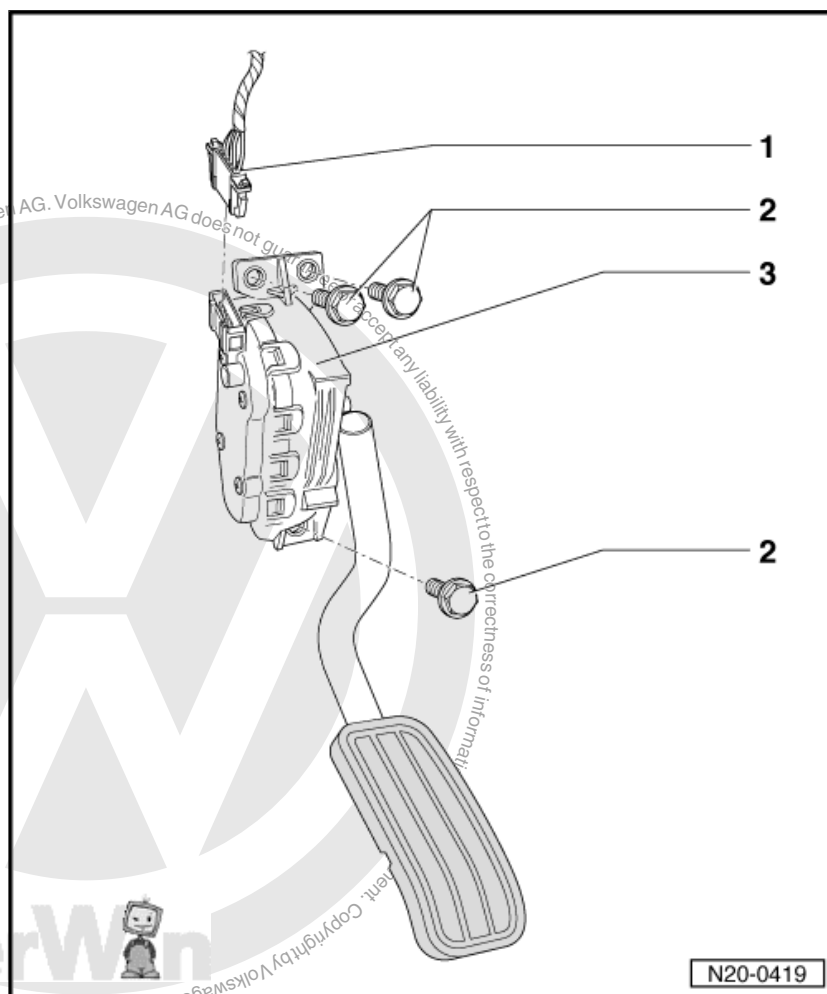
- ☐ Black, 6-pin

2 - Bolt

- ☐ 10 Nm

3 - Accelerator Pedal Position Sensor - G79- and Accelerator Pedal Position Sensor 2 - G185-

- ☐ Not adjustable.
- ☐ Throttle Position (TP) sensor communicates driver's intentions to Engine Control Module (ECM)
- ☐ Checking. Refer to ["3.2 Throttle Position Sensor, Checking", page 141](#)





2.3 EVAP System Components



Note

- ◆ Components marked with * are checked via On Board Diagnostic (OBD). Refer to ➤ Fuel Injection and Ignition; Rep. Gr. 01; Diagnosis and Testing
- ◆ Components marked with ** are tested via output Diagnostic Test Mode (DTM). Refer to ➤ Fuel Injection and Ignition; Rep. Gr. 01; Diagnosis and Testing

1 - Intake Manifold

2 - EVAP Canister Purge Regulator Valve 1 - N80- */**

- ☐ With engine at operating temperature, valve is activated (pulsed) via Motronic Engine Control Module - J220-
- ☐ Installation position: Arrow points in direction of flow
- ☐ Checking activation. Refer to ➤ Fuel Injection and Ignition; Rep. Gr. 01; Diagnosis and Testing
- ☐ Checking function. Refer to ➤ "3.3 EVAP Canister Purge Regulator Valve N80. Checking", page 143

3 - Test Connection

- ☐ Location. Refer to ➤ Fig. "Test Connection", page 136

4 - Gravity Valve

- ☐ For filler ventilation
- ☐ Cannot be removed, only replace together with fuel tank

5 - Return Line

6 - Fuel Rail with Fuel Injectors

7 - Supply Line

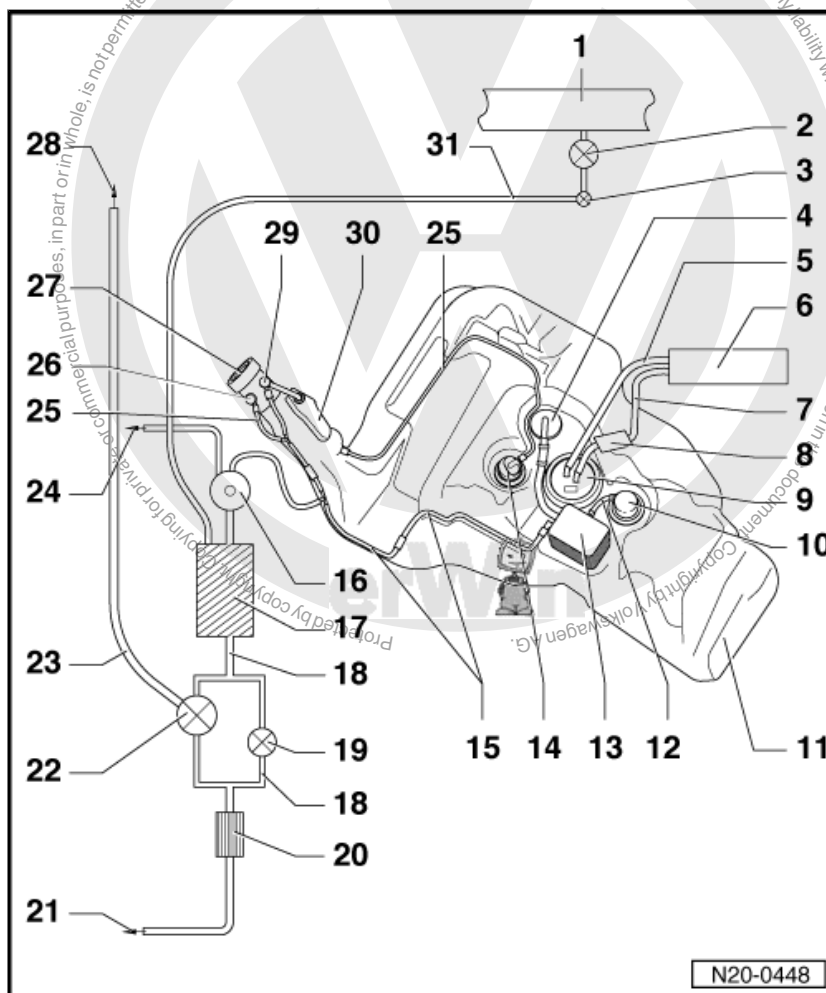
8 - Fuel Filter

- ☐ Installation position: Arrow points in direction of flow

9 - Fuel Pump

10 - Combination Valve

- ☐ Vacuum protection valve
- ☐ For leak diagnostic test





11 - Fuel Tank

12 - Leak Diagnostic Line

13 - Expansion Tank

- ☐ Filler ventilation

14 - Gravity Valve

- ☐ Operating ventilation
- ☐ Cannot be removed, only replace together with fuel tank

15 - Vent Line

- ☐ Filler ventilation

16 - Pressure Retention Valve

- ☐ Clipped in at EVAP canister

17 - EVAP Canister

- ☐ Location: connected at left longmember

18 - Vent Line

19 - EVAP Canister Purge Regulator Valve 2 - N115-

- ☐ During leak diagnostic, valve is activated via Motronic Engine Control Module - J220-
- ☐ Secured at EVAP canister with bracket
- ☐ Checking function. Refer to ⇒ ["3.5 EVAP Canister Purge Solenoid Valve N115, Checking", page 151](#)

20 - Air Filter for Leak Detection Pump (LDP)

21 - Intake Line

- ☐ Clipped into left longmember

22 - Leak Detection Pump - V144- */**

- ☐ Location: behind fuel tank at left longmember
- ☐ Checking. Refer to ⇒ ["3.6 Leak Detection Pump, Checking", page 153](#)

23 - Vacuum Line

24 - Vent Line

- ☐ Into environment
- ☐ Clipped into left longmember

25 - Vent Line

- ☐ Operating ventilation

26 - Check-Valve

- ☐ For leak diagnostic test: Sealing cap/filler tube

27 - Cap

28 - To engine

29 - 2-Way Valve

- ☐ Cannot be removed, only replace together with fuel tank

30 - Expansion Tank

- ☐ For ventilation line
- ☐ Cannot be removed, only replace together with fuel tank

31 - Flush Line

- ☐ To test connection/solenoid valve 1 in engine compartment



Test Connection

Test connection -arrow- with green protective cap. Damage leads to leaks and malfunction recognition of EVAP system.

