

1 - Bolt, 20 Nm

3 - Washer (only for the front bolt)

To replace reservoir, remove the following parts:

- Left front section of front wheel housing liner --> **66 - EXTERIOR EQUIPMENT**
- Left air filter -->
 - **24 - MULTIPORT FUEL INJECTION (MFI)** for 4.2 LITER V8 4V FUEL INJECTION AND IGNITION, ENGINE CODE(S): BVJ
 - **24 MULTIPORT FUEL INJECTION (MFI)** for 4.2 LITER V8 5V FUEL INJECTION & IGNITION, ENGINE CODE(S): BFM
 - **24 - MULTIPORT FUEL INJECTION (MFI)** for 5.2 LITER 10-CYL. 4V FUEL INJECTION IGNITION, ENGINE CODE(S): BSM
 - **24 FUEL INJECTION SYSTEM** for 6.0 LITER 12-CYL. 4V FUEL INJECTION AND IGNITION, ENGINE CODE(S): BSB
- Bring lock carrier into the service position --> **50 - BODY - FRONT** .

Insert the reservoir in the bracket

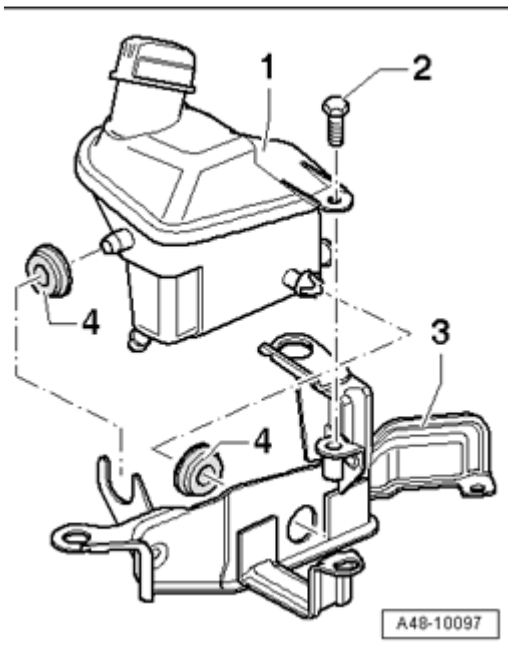


Fig. 755: Reservoir, Bolt, Bracket & Rubber Bushings
 Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Insert reservoir - 1 - with rubber bushings - 4 - into bracket - 3 -.
- Tighten the bolt - 2 - to 9 Nm.

Power Steering Pump, 10-Cylinder, Checking Delivery Pressure

Power Steering Pump, 10-Cylinder, Checking Delivery Pressure

Special tools, testers and auxiliary items required

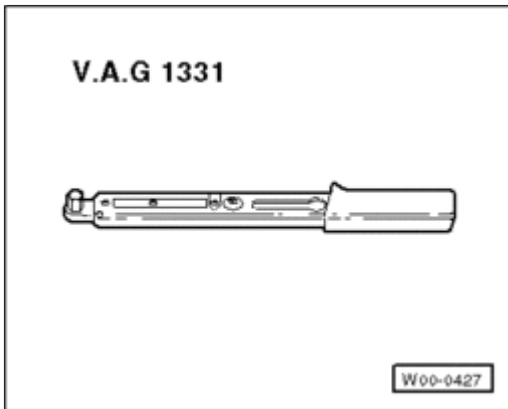


Fig. 756: Torque Wrench V.A.G 1331

Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Torque wrench V.A.G 1331

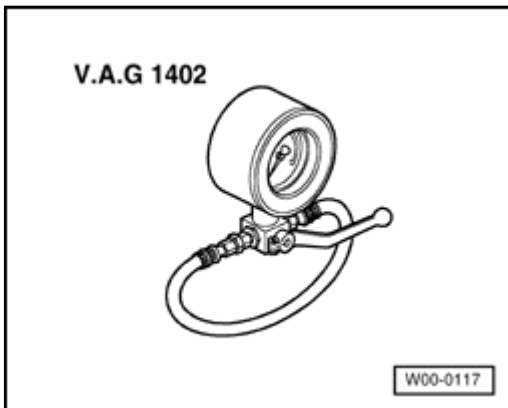


Fig. 757: Power Steering Test Unit V.A.G 1402

Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Power steering test unit V.A.G 1402

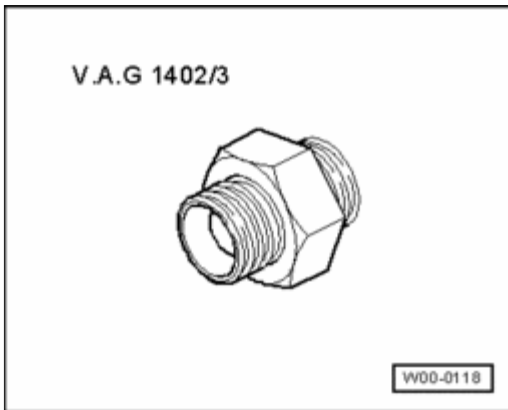


Fig. 758: Adapter V.A.G 1402/3
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Adapter V.A.G 1402/3

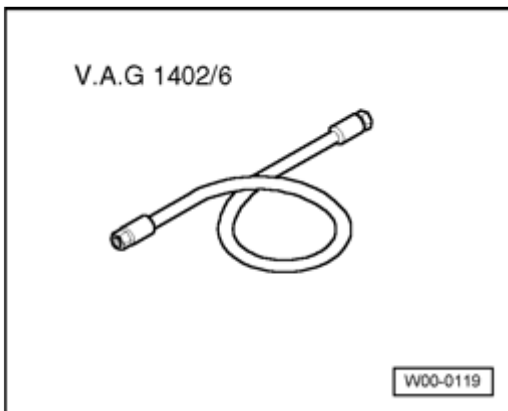


Fig. 759: Adapter Set V.A.G 1402/6
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Adapter set V.A.G 1402/6

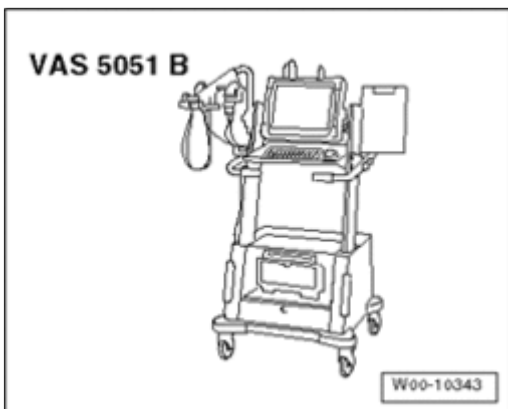


Fig. 760: Vehicle Diagnostic, Testing And Information System VAS 5051 B With Corresponding Diagnostic Cable

Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Vehicle Diagnostic, Testing and Information System VAS 5051 B with corresponding diagnostic cable.

NOTE:

- **Pressure line cannot be clamped in area of line connection.**
- **Connection of power steering test unit V.A.G 1402 is performed with open pressure line.**
- **The pressure test is done with several connectors disconnected from electrical or electronic components. After the pressure test, connect the vehicle diagnosis, testing and information system VAS 5051 B , check the DTC memory and erase any codes stored as a result of the pressure test.**

Test Prerequisites

- Sealing of system
- Hoses/lines are not kinked or constricted

Checking

- Place vehicle on hoist --> **Positioning Vehicle on Hoist and Wheels.**
- Remove left front headlamp. Standard --> **HALOGEN HEADLAMPS** or HID --> **HID HEADLAMPS** .

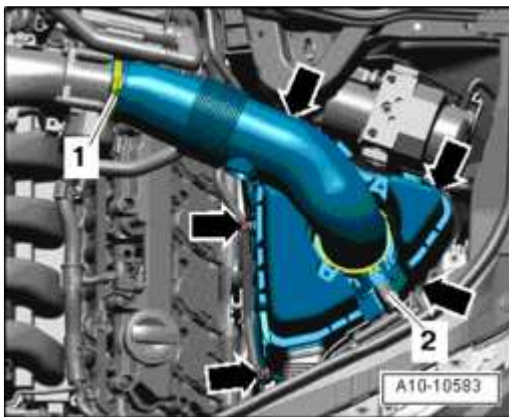


Fig. 761: Mass Air Flow (MAF) Sensor 2 G246 Electrical Connector, Intake Manifold Air Duct Hose & Air Filter Housing Bolts

Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Disconnect connector - **2** - on mass air flow sensor 2 G246.
- Remove air guide hose - **1** - from intake manifold.
- Remove screws - **arrows** -. Remove air filter housing upper section.



Fig. 762: Air Duct, Bolts, Air Filter Housing & Air Flap Vacuum Hose
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Remove air duct - **1** -.
- Remove screws - **arrows** -.
- Pull air filter housing upper section up slightly and remove vacuum hose - **2** -.
- Remove air filter housing lower section.

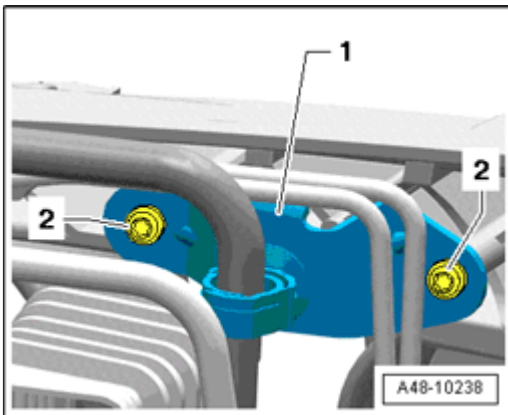


Fig. 763: Line Bracket & Bolts
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Remove bolts - **2** - from line bracket - **1** -.

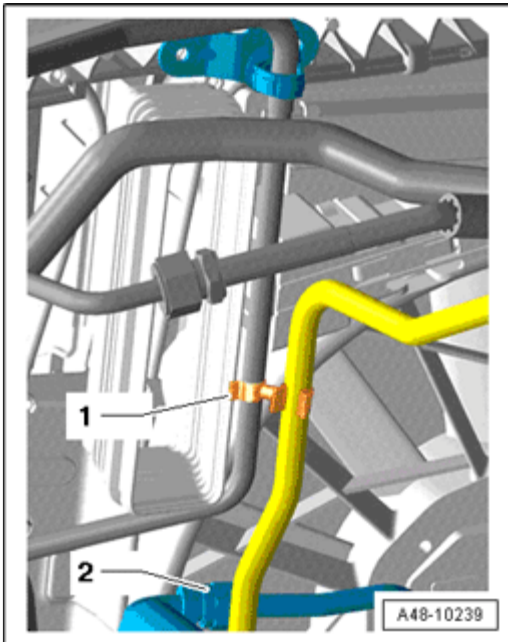


Fig. 764: Refrigerant Line Clip & Line Connection
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Remove clip - 1 - from refrigerant line.
- Place several cloths under separation point to absorb escaping hydraulic oil.
- Disconnect line connection - 2 -.

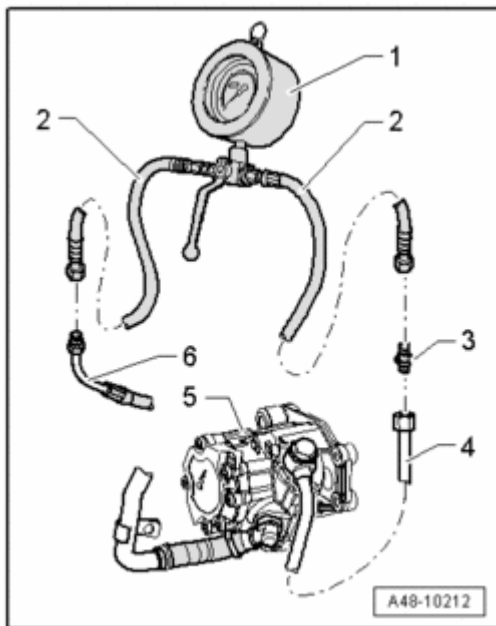


Fig. 765: Installing Power Steering Test Unit V.A.G 1402 After Disconnecting Pressure Line
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Install power steering test unit V.A.G 1402 after disconnecting pressure line, as shown in illustration.

1. Power steering test unit V.A.G 1402
2. Hose from adapter set V.A.G 1402/6
3. Adapter V.A.G 1402/3
4. Pressurized line
5. Pump
6. Pressurized line

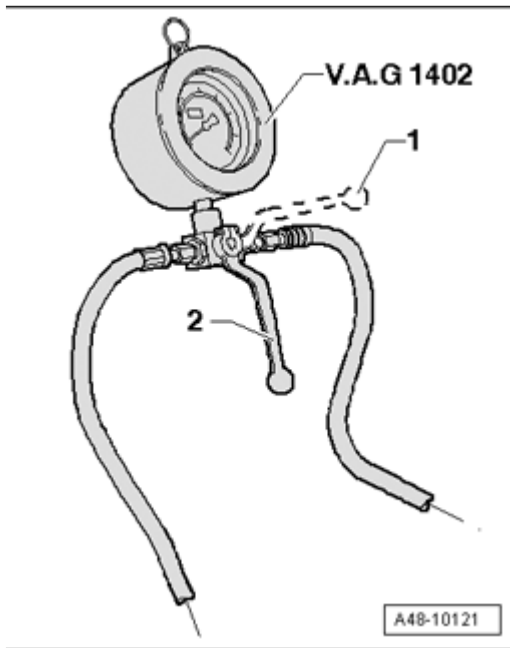


Fig. 766: Ensuring Lever On Pressure Gauge Stands In Open/Closed Position
 Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Ensure lever on pressure gauge stands in position - 2 -.
- Start engine without giving gas.
- Turn steering wheel from lock to lock about 10 times.
- Switch off engine and, if needed, top off hydraulic fluid in reservoir.

NOTE:

- To avoid damage to pump, note the following:
- Pressure gauge shut-off valve must not remained closed longer than 10 seconds during this test.
- Start engine without giving gas and run at idle.
- Read pump pressure immediately after starting at idle speed (have it read by second technician, if necessary).
- Because pressure falls over the course of the test, the highest pressure shown is the decisive measurement

- Now check delivery pressure.

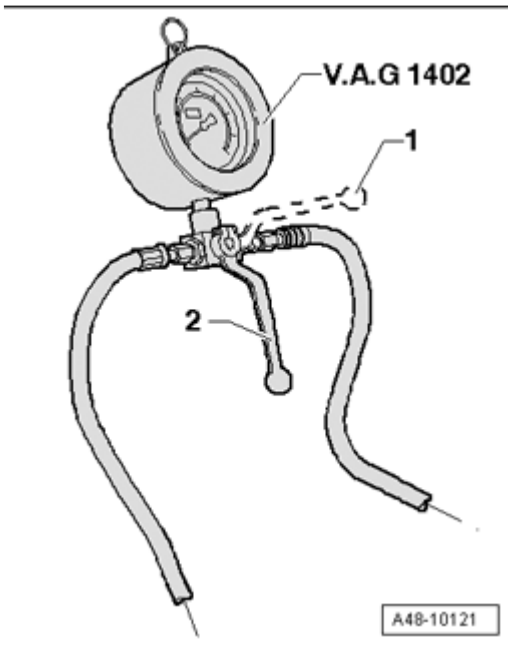


Fig. 767: Ensuring Lever On Pressure Gauge Stands In Open/Closed Position
 Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Start engine and when at idle speed, close shut-off valve - 1 - and read pressure (do not measure longer than 10 seconds).

Specification for delivery pressure: 125 to 130 bar

If specification is not obtained, replace pump --> **Power Steering Pump, 10-Cylinder, Removing and Installing.**

- Switch off engine.
- Remove Power steering test unit V.A.G 1402.
- Bleed steering system --> **Steering System, Bleeding after Reconstructing.**
- Check power steering fluid level --> **Power Steering, V8, Checking Oil Level.**
- Check steering system for leaks --> **Steering System, Checking for Leaks.**
- Install left front headlamp. Standard --> **HALOGEN HEADLAMPS** or HID --> **HID HEADLAMPS** .
- Place vehicle on wheels --> **Positioning Vehicle on Hoist and Wheels.**
- Connect vehicle diagnosis, testing and information system VAS 5051 B , check DTC memory and erase any codes stored as a result of pressure test --> **VAS 5051A, Connecting and Selecting Functions.**
- Calibrate adaptive cruise control --> **Adjustment Procedure Using ACC Setting Device VAS 6190.**

Power Steering Pump, 10-Cylinder, Removing and Installing