

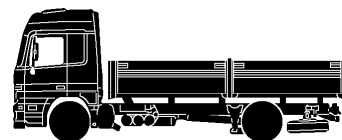


Mercedes-Benz

service information

This preliminary information is not subject to updating and hence shall not be archived.

The current version will be available in WIS online in approximately two days, in WIS offline it will be introduced with the update 05/2011




Group 14

SI14.40-W-0015A

29.03.2011

SI14.40-W-0015A	Service Information: Changes to maintenance, filling, repair and design of pressure reservoir in pump module	29.3.11
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ENGINE 457.9, 541.9, 542.9, 902.9, 926.9 with CODE (MS4) BlueTec 4
ENGINE 457.9, 541.9, 542.9, 902.9, 926.9 with CODE (MS5) BlueTec 5
ENGINE 900.9, 902.9, 924.9, 925.9, 926.9 with CODE (MS4) BlueTec 4
ENGINE 900.9, 902.9, 924.9, 925.9, 926.9 with CODE (MS5) BlueTec 5

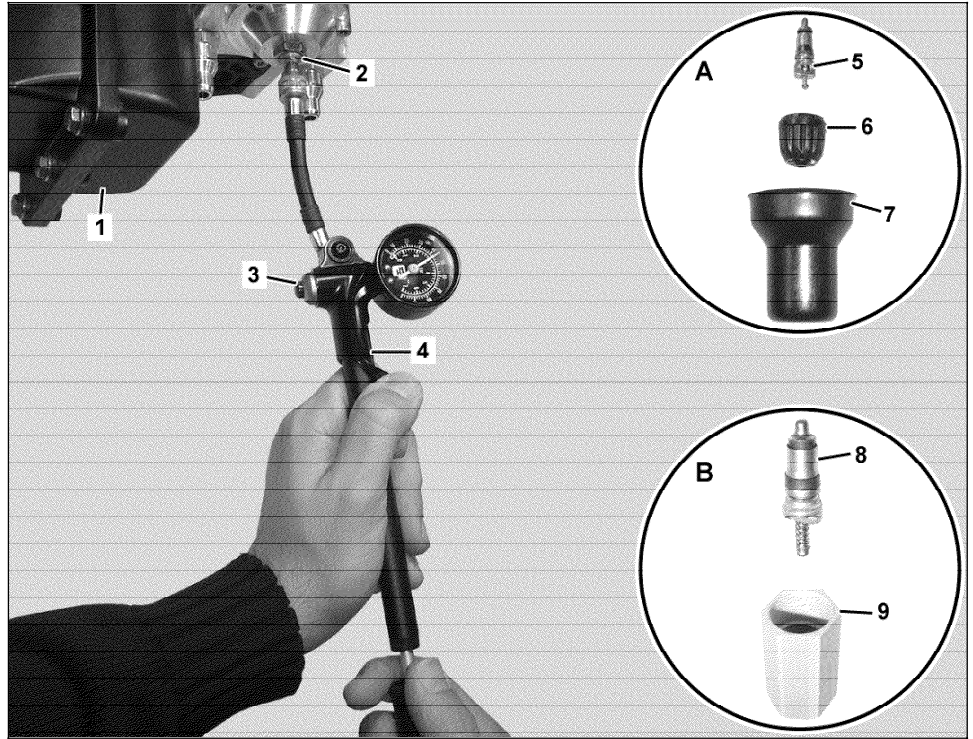
- 1 Pump module
- 2 Filler connection for pressure reservoir
- 3 Drain button
- 4  Pump

a Previous version

- 5 Valve element
- 6 Valve cap
- 7 Protective cap

B New version

- 8 Valve element
- 9 Valve cap (with seal)





W14.40-1527-06

Change to pressure reservoir of pump module

Since 03/2010 a revised pressure reservoir has been available through the GLC. This is equipped with a modified valve element (8) and a modified valve cap (9) with inner seal; apart from this the reservoir bladder is filled with silicon pellets.

New filling and testing method

Feedback from the workshop has revealed that the current method of filling the pressure reservoir in the workshops often leads to a faulty result. This is why a  pump (4) has been created as a special tool, with which filling or testing of the actual pressure can be easily and reliably performed. The  pump (4) has been available since 02/2011.

New work instructions have been compiled for the filling and testing procedure, which must be adhered to.

Damage to the screws during disassembly

Feedback to the workshops has also revealed that when disassembling the pressure reservoir the screws tear off in isolated instances.

For this reason, the screws were changed in 04/2010. The new screws are to be used when mounting the pressure reservoir.

Change to maintenance interval for pressure reservoir

With immediate effect the maintenance of the pressure reservoir in the pump module (1) must be performed annually. In future, during maintenance work the valve element (8) and valve cap (9) are to be removed. Pressure reservoirs in their current version will also be populated with the new version of the valve element (8) and valve cap (9), which is then replaced on an annual basis.

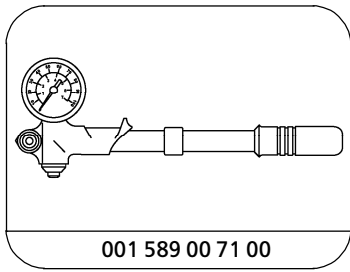
The new maintenance interval applies for both the current and the new version of the pressure reservoir.

The maintenance sheets in the WIS have been updated accordingly. The maintenance booklets included in the vehicle are to be altered in handwriting by the workshop:

- At "Once annually (J1)" add the "Fill pressure reservoir" item added.
- At "Every 3 years (J3)" delete "Fill pressure reservoir" item.

For vehicles that have been delivered since 11/2010, the maintenance booklet has already been adapted.

	Test, fill and, if necessary, adjust pressure reservoir of pump module		Page 3
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Pump

Parts ordering notes

Part no.	Designation	Quantity
A 000 142 01 06	Pressure reservoir	1
A 000 997 05 23	Repair kit (valve cap and element)	1
N000000 007087	Bolt (coated)	3

AR14.40-W-2051A	Check pressure reservoir for pump module, charge, adjust if necessary	25.3.11
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ENGINES 457.9, 541.9, 542.9, 902.9, 926.9 with CODE (MS4) BlueTec 4
ENGINES 457.9, 541.9, 542.9, 902.9, 926.9 with CODE (MS5) BlueTec 5
ENGINES 900.9, 902.9, 924.9, 925.9, 926.9 with CODE (MS4) BlueTec 4
ENGINES 900.9, 902.9, 924.9, 925.9, 926.9 with CODE (MS5) BlueTec 5

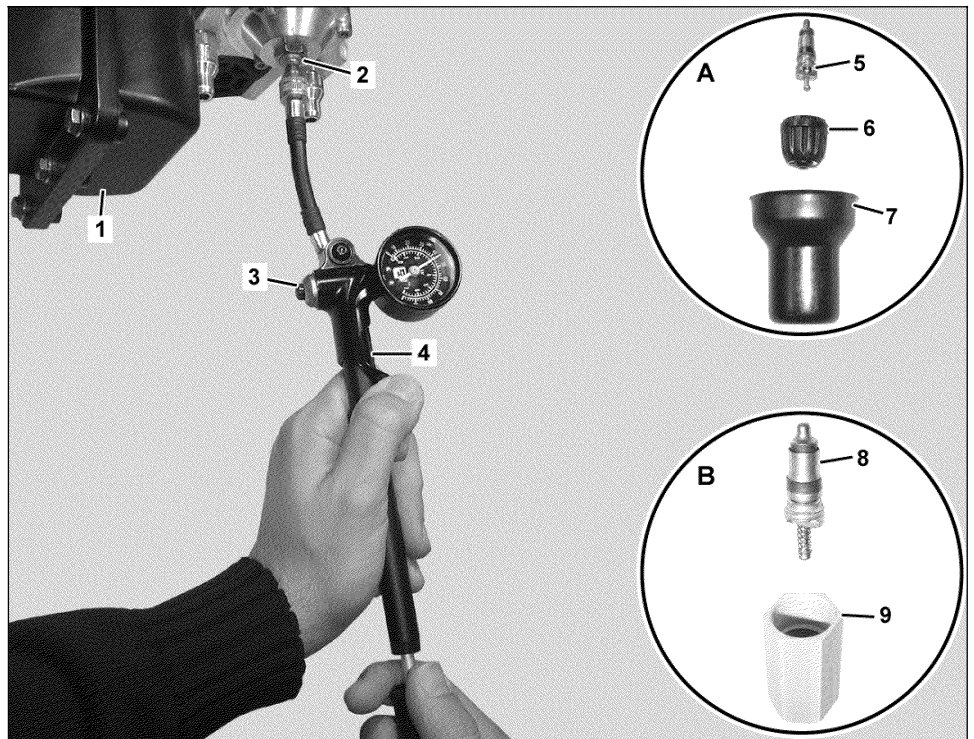
- 1 Pump module
- 2 Pressure reservoir filler connection
- 3 Drain knob
- 4  Pump

a Previous version



- 5 Valve
- 6 Valve cap
- 7 Protective cap







B New version






- 8 Valve element
- 9 Valve cap (with seal)



W14.40-1527-06

	Removing		
 BT	pressure reservoir for pump module altered		Page 7
1.1	Remove protective cap (7) and valve cap (6) on pressure reservoir filler connection (2)	Previous version	

1.2	Remove valve cap (9)	New version	
2	Connect up pump (4) on pressure reservoir filler connection (2)	 Pump	001 589 00 71 00
	Checking		
3	Read off pressure on pump pressure gauge (4)	<p> Charge pressure reservoir if necessary or adjust pressure.</p> <p>Engine 457.9</p> <p>Engine 541.9, 542.9</p> <p>Engines 900.9, 902.9, 924.9, 925.9, 926.9</p>	<p>BE14.40-N-1001-02B</p> <p>BE14.40-N-1001-02A</p> <p>BE14.40-N-1001-02C</p>
4	Charge pressure reservoir if necessary or adjust pressure.	<p> The pressure is increased through pumping while the pressure is reduced through pressing many times on the drain knobs (3).</p> <p>Set prescribed pressure to about 0.2 bar higher since there is a slight pressure loss of about this order of magnitude on technical grounds which is unavoidable when separating the pump (4) from the pressure reservoir filler connection (2).</p> <p>The pressure reservoir must always be charged if this was removed, installed or replaced, or the whole pump module (1) was replaced. This is because it is not charged on delivery, either for an individual delivery or when in the pump module (1).</p> <p>Engine 457.9</p> <p>Engine 541.9, 542.9</p> <p>Engines 900.9, 902.9, 924.9, 925.9, 926.9</p>	<p>BE14.40-N-1001-02B</p> <p>BE14.40-N-1001-02A</p> <p>BE14.40-N-1001-02C</p>
5	Remove pump (4)		
6	Check pressure drop again in pressure reservoir	<p> Only if the pump module (1) or the pressure reservoir was not replaced, and at the earliest 5 min after disassembly of the pump (4).</p> <p>The pressure in the pressure reservoir must be checked again for pressure drop test at the earliest 5 min after disassembly of the pump (4). See operation steps 2 and 3.</p> <p>Engine 457.9</p> <p>Engine 541.9, 542.9</p> <p>Engines 900.9, 902.9, 924.9, 925.9, 926.9</p> <p>If the pressure drop is roughly only the normal pressure loss which occurs when disconnecting the  pump (4), then:</p> <p style="text-align: center;">↓</p> <p>Proceed with step 7.</p> <p>If a significantly greater pressure loss is recognizable then the pressure reservoir must be replaced:</p> <p style="text-align: center;">↓</p> <p>Engine 457.9</p>	<p>BE14.40-N-1001-02B</p> <p>BE14.40-N-1001-02A</p> <p>BE14.40-N-1001-02C</p> <p>AR14.40-W-2008B</p>

		Engine 541.9, 542.9 Engine 900.9, 902.9, 924.9, 925.9, 926.9, except in model 949 Engine 926.9 in model 949	AR14.40-W-2008A AR14.40-W-2008C AR14.40-W-2008R
	Install		
7	Install valve cap (9)	 If there is still a valve cap (6) and protective cap (7) on pump module (1) in the old version a valve cap (9) in a new version must be installed. The new valve cap (9) possesses an inner seal and is installed without a protective cap (7).  Engine 457.9  Engine 541.9, 542.9  Engines 900.9, 902.9, 924.9, 925.9, 926.9	BA14.40-N-1055-02B BA14.40-N-1056-02A BA14.40-N-1055-02C

Check values for exhaust aftertreatment, Blue Tec

Number	Designation	Engine 457.9 with code MS4 or MS5
BE14.40-N-1001-02B	Specified value for operating pressure of pressure reservoir	bar 3.2 (± 0.2)

Check values for exhaust aftertreatment, Blue Tec

Number	Designation	Engines 541.9, 542.9 with code MS4 or MS5
BE14.40-N-1001-02A	Specified value for operating pressure of pressure reservoir	bar 3.2 (± 0.2)

Check values for exhaust aftertreatment, Blue Tec

Number	Designation	Engines 900.9, 902.9, 924.9, 925.9, 926.9 with code MS4 or MS5
BE14.40-N-1001-02C	Specified value for operating pressure of pressure reservoir	bar 3.2 (± 0.2)

 **Exhaust aftertreatment**

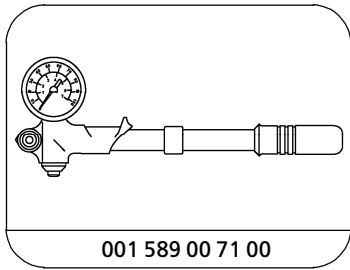
Number	Designation	Engine 457.9 with code MS4 or code MS5
BA14.40-N-1055-02B	Valve cover on pressure reservoir	Nm 2

Nm Exhaust aftertreatment

Number	Designation	Engine 541.9 with code MS4 or code MS5	Engine 542.9 with code MS4 or code MS5
BA14.40-N-1056-02A	Valve cover on pressure reservoir	Nm 2	2

Nm Exhaust aftertreatment

Number	Designation	Engine 900.9, 902.9, 924.9, 925.9, 926.9 with code MS4 or code MS5
BA14.40-N-1055-02C	Valve cover on pressure reservoir	Nm 2



Pump

BT14.40-W-0003-01A	pressure reservoir for pump module altered		
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ENGINES 457.9, 541.9, 542.9, 902.9, 926.9 with CODE (MS4) BlueTec 4

ENGINES 457.9, 541.9, 542.9, 902.9, 926.9 with CODE (MS5) BlueTec 5

ENGINES 900.9, 902.9, 924.9, 925.9, 926.9 with CODE (MS4) BlueTec 4

ENGINES 900.9, 902.9, 924.9, 925.9, 926.9 with CODE (MS5) BlueTec 5

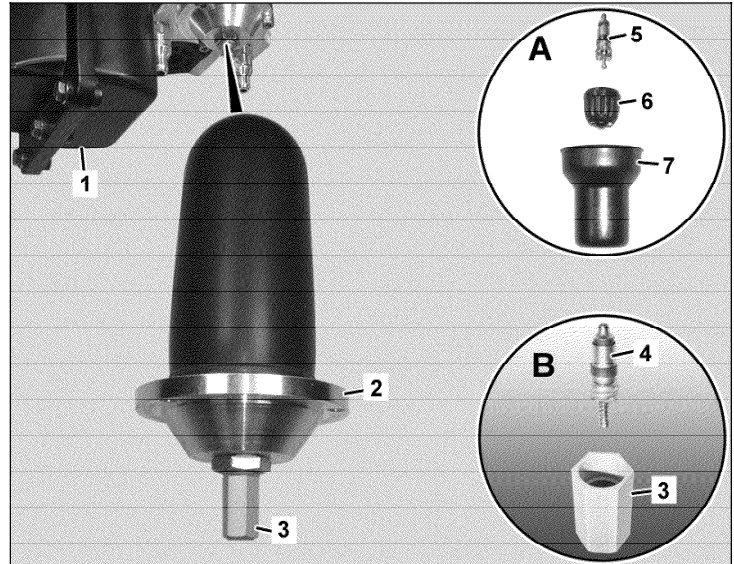
- 1 Pump module
- 2 Pressure reservoir

A Previous version

- 5 Valve element
- 6 Valve cap
- 7 Protective cap

B New version

- 3 Valve cap (with inner seal)
- 4 Valve element



W14.40-1534-11

A pump module (1) with a modified pressure reservoir (2) has been installed in series since about 04/2010, which has also been supplied as a replacement part over the GLC since 03/2010. The pressure reservoir (2) is fitted with a modified valve element (4) and a modified valve cap (3) with an inner seal.

The reservoir bladder for the pressure reservoir (2) has recently been filled with silicone pellets for improved emergency running characteristics. Altered bolts are also used to fasten the pressure reservoir (2).