

09V-418

Campaign No. 2010040002, June 2010

TO: ALL AUTHORIZED SPRINTER COMMERCIAL VEHICLE DEALERS

SUBJECT: **Models 903 and 904, Model Years 2002 and 2003**
Replace Engine Intake Manifold

This Recall Campaign has been initiated because Daimler AG (DAG), the manufacturer of Sprinter vehicles, has determined that the engine intake manifold may develop corrosion in the Exhaust Gas Recirculation (EGR) portion of the engine intake manifold due to the high-sulfur content of certain diesel fuel. This situation could lead to exhaust gas leakage onto the fuel return line and/or dash panel silencer pad. If hot exhaust gases come into contact with either of these components, there is a potential for a fire in the engine compartment. Dealer will remedy this condition by replacing the engine intake manifold.

Note:

Please refer Dodge Sprinter vehicles to a Dodge Sprinter dealer for campaign repairs.

Attached is a sample copy of a letter which owners of the affected vehicles will receive.

Prior to performing this Recall Campaign:

- Please check VMI to determine if the vehicle is involved in the Campaign and if it has been previously repaired.
- Please **review the entire Recall Campaign** bulletin and follow the repair procedure exactly as described.

Please note that Recall and Service Campaigns **do not expire** and may also be performed on a vehicle with a vehicle status indicator.

Approximately 10,681 vehicles are involved.

Order No. V-RC-2010040002

This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Records.

Procedure

CAUTION!

- When disconnecting high pressure fuel line connectors (9, Figure 3) from fuel line fittings, **BE CAREFUL NOT TO BREAK THE CONNECTORS** (refer to WIS: AR47.25-P-1000-01A).
- Note location and size of cable ties when removing. Replace with only new cable ties.

1. Disconnect negative battery cable and cover negative battery terminal.
2. Remove nuts (arrows, Figure 1), remove bolt (A) then remove heat shield (B).

Note:

Nut located at rear of heat shield is not shown.

3. Drain coolant from lower radiator hose:

Warning!

Risk of injury to skin and eyes suffering scalding from contact with hot coolant spray. Do not open cooling system unless coolant temperature is below 90° C; refer to WIS: AS20.00-Z-0001-01A.

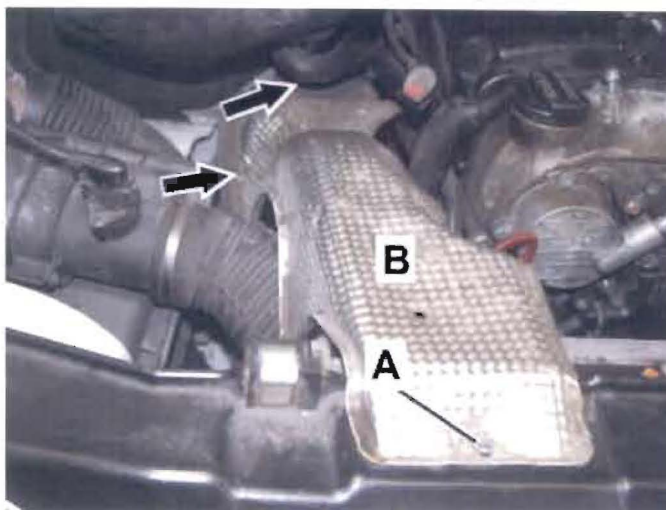


Figure 1

- Remove hose clamp (arrow, Figure 2) from lower radiator hose (A)
- Disconnect hose (A) then drain coolant into clean drain pan (reuse coolant on reassembly).

Note:

Check coolant strength. If coolant requires replacement, this cannot be claimed under this campaign.

4. Disconnect harness connector (B, Figure 2) on turbo intake hose.

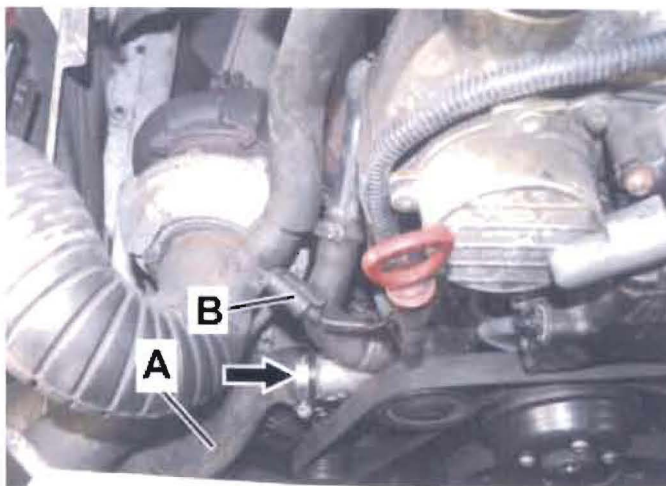


Figure 2

5. Remove cabin air filter; refer to WIS: AP83.00-D-8381FA.

Note (regarding above WIS instructions):

Do not replace cabin filter. Replacement of cabin filter is not covered under this campaign.

- 1 Intake manifold
- 2 Coolant hose
- 3 Bolt
- 4 Cable duct of engine wiring harness
- 5 Engine wiring harness
- 6 Connector
- 7 Support
- 8 Coolant hose
- 9 Fuel line
- 10 Fuel hose
- 11 Bolt
- 12 Fuel pressure sensor
- 13 Connector
- 14 Connector
- 15 Charge air pipe
- 16 Bolt
- 17 Gasket
- 18 Bolts
- 19 Fuel hoses
- 20 Bolt
- 21 Bracket
- A O-ring
- B Hose clamp
- C Bolt
- D Bolt
- E Auxiliary water pump
- F Hose clamp
- G Bolts
- H Water level sensor connector

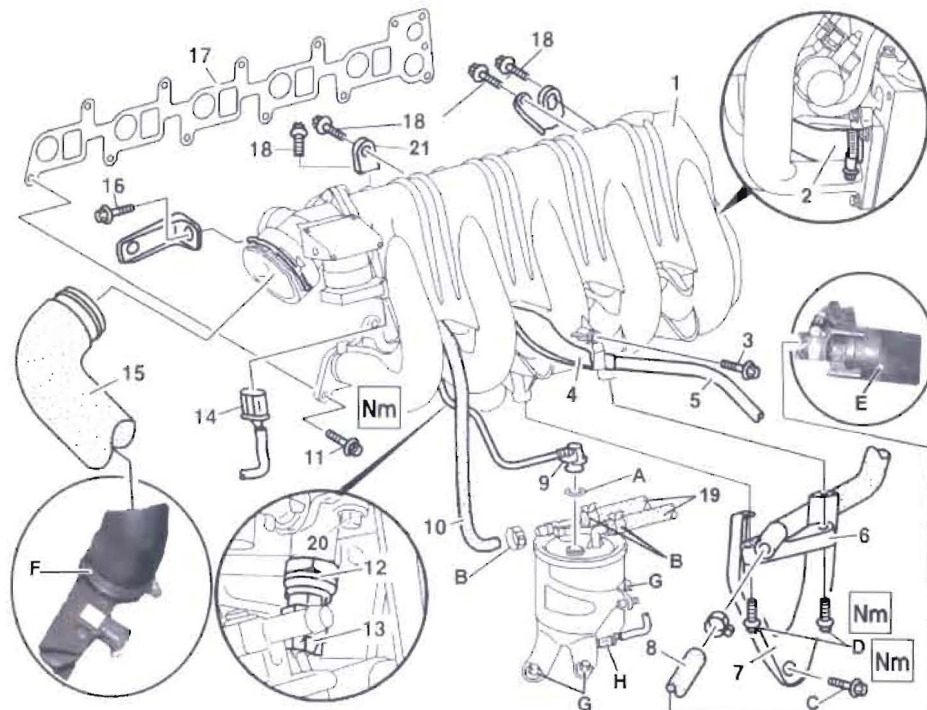


Figure 3

6. Remove mixing chamber (A, Figure 26) refer to WIS: AR09.20-D-1320B.

Note:

Remove hose clamp (F, Figure 3) then remove charge air pipe (15, Figure 3).

7. Remove cover over injectors (A, Figure 8); refer to WIS: AR01.20-D-5015NA.
8. Remove bolts (18, Figure 3) and remove bracket (21, Figure 3).
9. Remove injector fuel lines; refer to WIS: AR07.16-D-1080NA (do not replace).

Note: (Regarding above WIS Instructions AR07.16-D-1080NA):

Special tool number 611 589 00 03 00 (socket wrench) is not available in the US. Use special tool number: 000 589 77 03 00 (crowfoot wrench, 14 mm) to remove/reinstall injector lines.



Figure 4

10. Disconnect connectors (arrows, Figure 4) from fuel injectors.
11. Disconnect connector (A, Figure 4) from camshaft sensor.
12. Remove bolt (B, Figure 4).
13. Remove bolt (3, Figure 3).
14. Disconnect connector (5, Figure 5) from pressure regulator valve.
15. Disconnect connector (4, Figure 5) from rail pressure sensor.

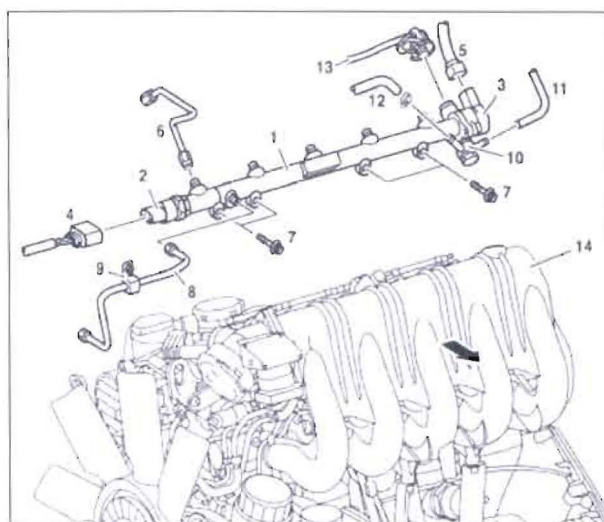


Figure 5

16. Disconnect engine coolant temperature sensor connector (2, Figure 6) (do **not** remove sensor).

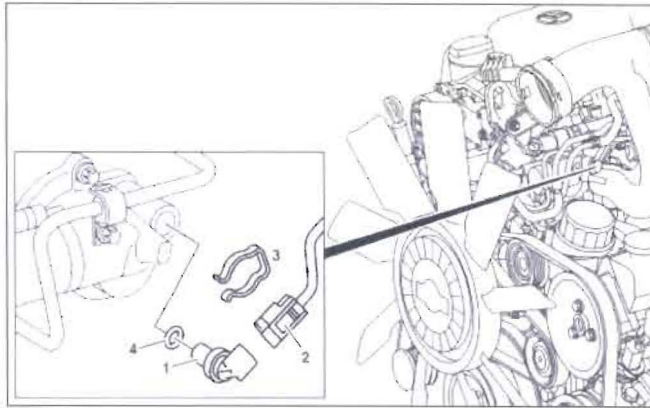


Figure 6 (shown with sensor removed)

17. Disconnect vacuum line connector (arrow, Figure 7) from vacuum pump.



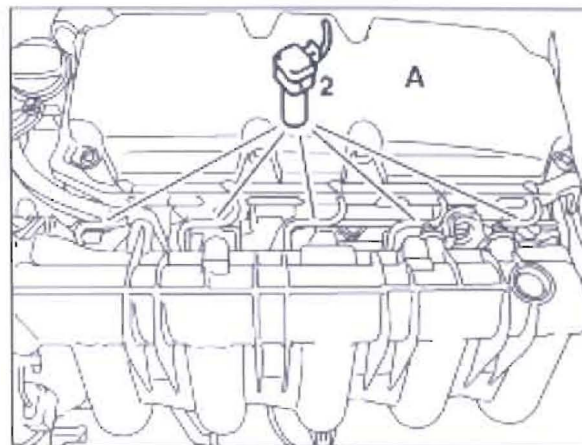
Figure 7

18. Disconnect glow plug connectors (2, Figure 8) from glow plugs for cylinders 1-4.

Note:

Leave last glow plug connector (for cylinder 5) connected for now (it will be disconnected later).

- 19 Remove hose clamp then and disconnect coolant hose (8, Figure 3) from connector (6, Figure 3) then disconnect other end of hose from auxiliary water pump (E, Figure 3).



(2 Glow plug connector, A Cover)

Figure 8

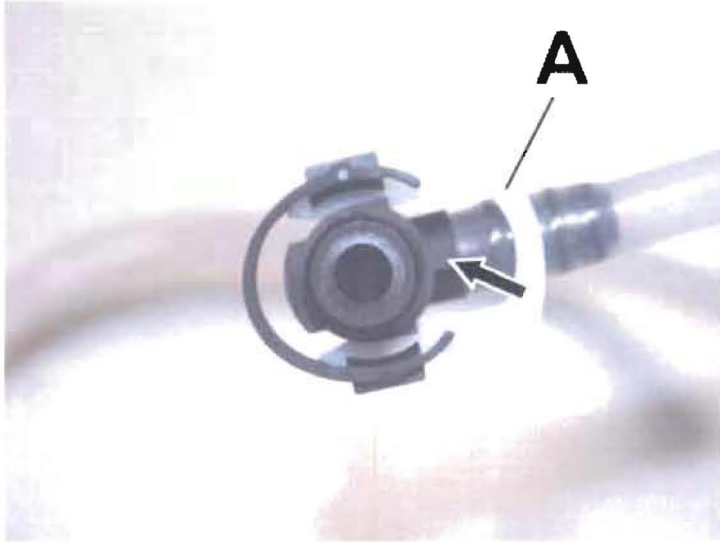


Figure 9 (release arm A shown in installed position.)

20. Remove fuel filter with bracket:

⚠ WARNING!

Risk of explosion caused by fuel igniting, **risk of poisoning** caused by inhaling and swallowing fuel and **risk of injury** to eyes and skin caused by contact with fuel. No fire, sparks, open flames or smoking. Pour fuel only into suitable and appropriately marked containers. Wear protective clothing when handling fuel. Refer to WIS: AS47.00-Z-0001-01A.

- Remove hose clamps (B, Figure 3) and discard then disconnect fuel hoses (10, 19, Figure 3).
- Disconnect fuel line (9, Figure 3) refer to WIS: AR47.25-P-1000-01A

Note:

- Pay attention to operation of release arm (A, Figure 9) on fuel line.
- After pushing release arm to **release** position use a small blade (pocket) screw driver to release the fuel line connector from the fuel filter fitting as follows:
Place screw driver blade between the fitting and the flat spot (arrow, Figure 9) on the fuel line connector, then turn the screw driver blade approx. 90 ° while pulling up on the connector.

⚠ CAUTION!: DO NOT pry on any other part of the fuel line connector or use any other tool then described to release connector from fitting or BREAKAGE of connector may result.

- Capture released fuel (e.g., shop rags etc).
- Install **new** fuel line O-ring (A, Figure 3) on fuel line (9, Figure 3).
- Install **new** fuel filter hose clamps (B, Figure 3).
- In the event of fuel line breakage during removal, fuel line replacement is **not** covered under this campaign. Refer to applicable WIS documents for fuel line replacement instructions in this event.
- Remove 3 bolts (G, Figure 3).
- Disconnect water level sensor connector (H, Figure 3) under fuel filter.
- Remove fuel filter with bracket from engine compartment (do not replace filter, replacement of fuel filter is not covered under this campaign).

21. Remove bolt (C, Figure 3) and 2 bolts (D, Figure 3). then remove bracket (7, Figure 3)

Note:

Torque bolts (C, Figure 3) to 20 Nm and bolts (D, Figure 3) to 14 Nm on reassembly.

22. Disconnect connector (arrow, Figure 10) from fuel temperature sensor (A).

(A Fuel rail temp sensor, B Fuel rail - shown with intake manifold removed)

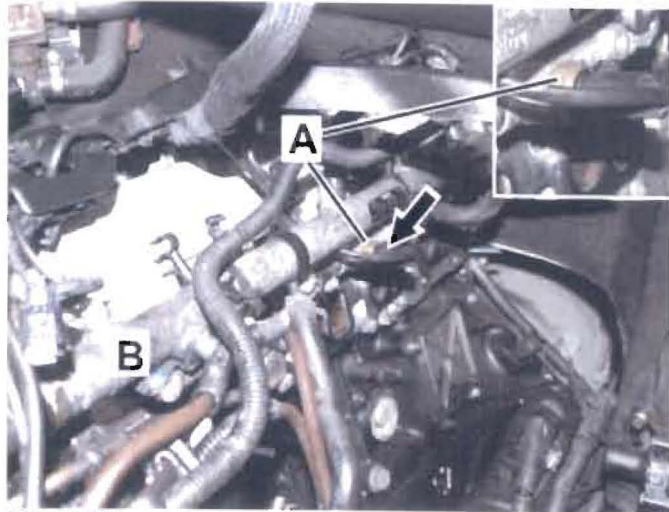


Figure 10

- 23 Remove fuel line connector (2, Figure 11) from fuel pressure sensor (1); refer to WIS: AR47.25-P-1000-01A.

Note:

- Refer also to "Notes" in step 20 regarding disconnecting of fuel line connector from fitting.
- Install **new** O-ring on connector (2) on reassembly.

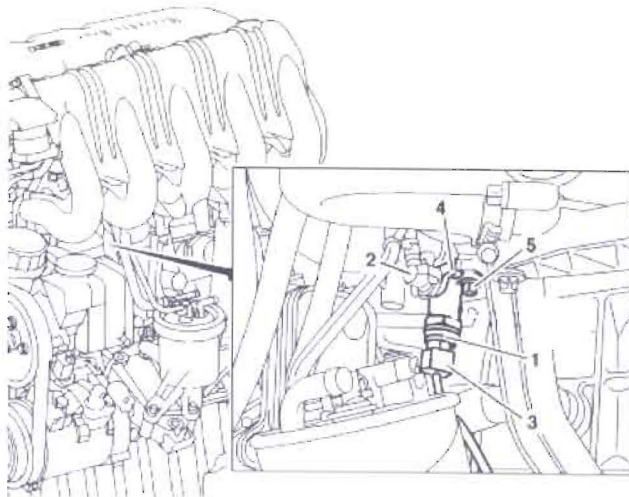


Figure 11

24. Remove fuel filter fuel line (arrow, Figure 12) from pre-delivery pressure pump:

- Disconnect fuel line (A, Figure 12) from pre-delivery pump; refer to WIS: AR47.25-P-1000-01A.
- Disconnect fuel filter fuel line (arrow); refer to WIS: AR47.25-P-1000-01A
- Route fuel line (arrow) out from under coolant hose (B).
- Unclip fuel line (arrow) from mounting clips on engine.
- Pull opposite end of fuel line out through manifold runners (towards right of vehicle) and remove fuel line (arrow).



Figure 12

Note:

- Refer also to “Notes” in step 20 regarding disconnecting of fuel line connector from fitting.
 - Install **new** O-rings on fuel line connectors (A, arrow, Figure 12) on reassembly.
25. Disconnect crank angle sensor connector (A, Figure 13) from back of engine block.

(A, Crank angle sensor connector, B Intake manifold, C Transmission)

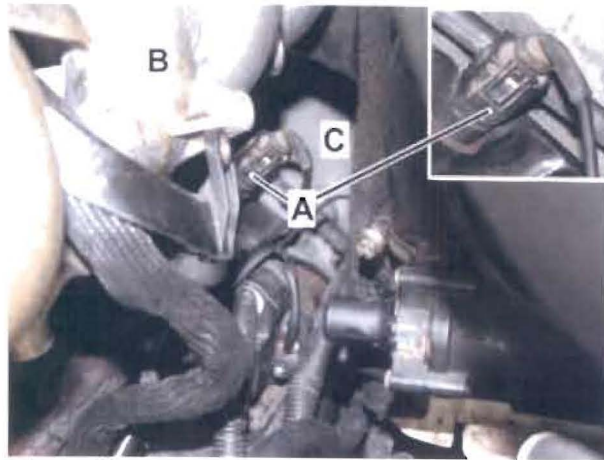


Figure 13

26. Remove nut then remove cable (arrow, Figure 14) from starter solenoid.
27. Disconnect engine sub-harness connector (C, Figure 14) connected to main engine harness connector.

A Intake manifold, B Auxiliary water pump, C connector

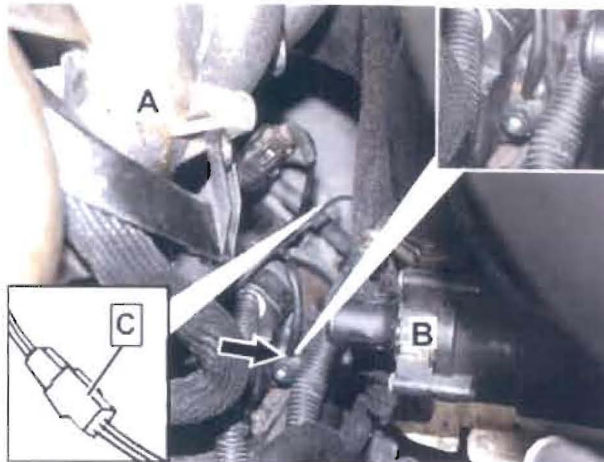


Figure 14

28. Disconnect connector (10, Figure 15) from A/C compressor (1, Figure 15).
29. Disconnect connector (13, Figure 3) at fuel pressure sensor (12 Figure 3).
30. Disconnect glow plug connector (2, Figure 8) from glow plug for cylinder 5.

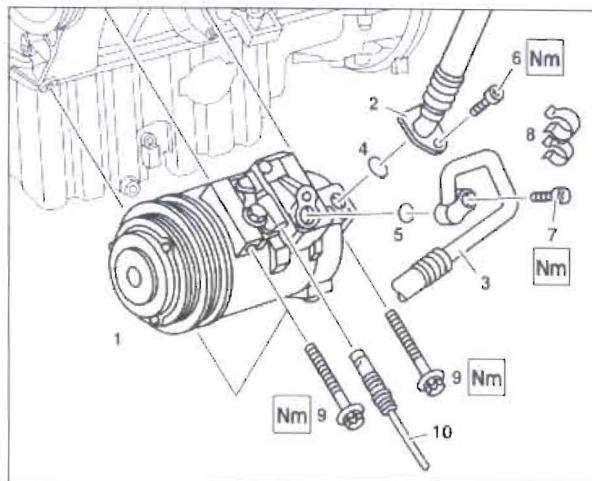


Figure 15

31. Disconnect harness connector (arrow, Figure 16) from oil level sensor in oil pan (A).

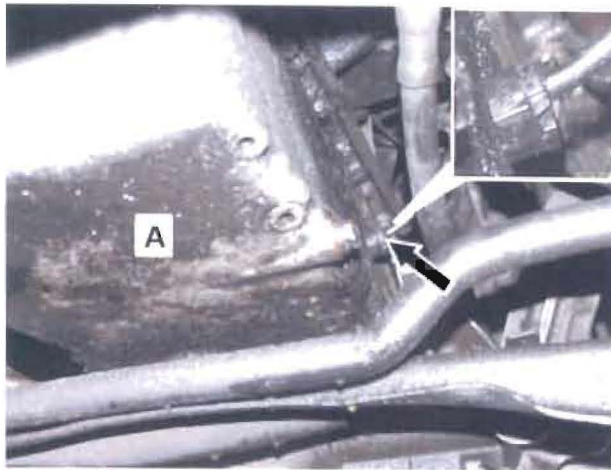


Figure 16

32. Disconnect harness connector (arrow, Figure 17) from high pressure pump (A).

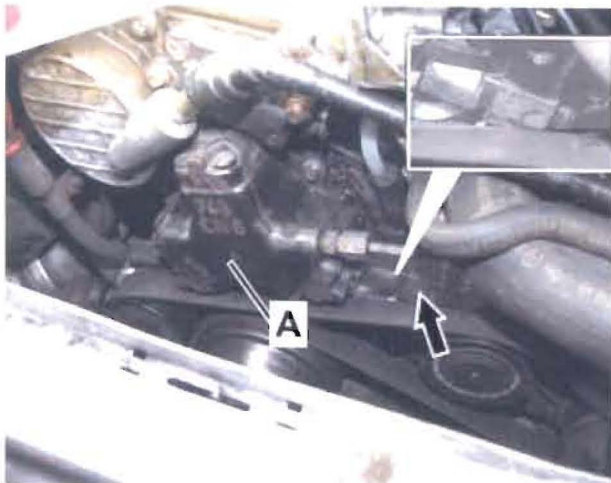


Figure 17

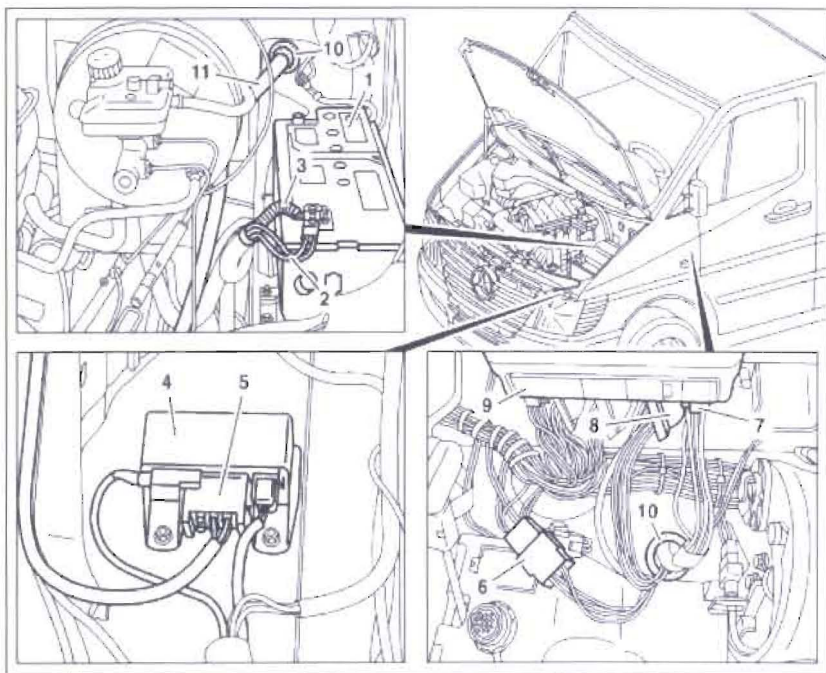


Figure 18

33. Disconnect connector (5, Figure 18) from glow plug relay (4).
34. Disconnect engine wiring harness from CDI control module (located in driver's-side footwell):
 - Disconnect connectors (7, 8, Figure 18) from CDI control module (9).
 - Separate connector (6, Figure 18)
 - Pull engine harness grommet (10, Figure 18) out from bulkhead then route engine wiring harness (11, Figure 18) out from passenger compartment.

35. Remove engine wiring harness:

- Cut cable ties securing engine wiring harness in engine compartment (replace with **new** cable ties on reassembly and install to **same** location on engine harness).
- Carefully pull/route the entire engine harness (2, Figure 19) with harness duct/cover (3) and fuel hose (4) through the intake manifold runners from the right side of the engine.

Note:

- **Be careful not to break cable duct/cover (3, Figure 19) when routing engine harness (2, Figure 19) and cable duct/cover (3, Figure 19) through intake manifold runners.**
- Pay attention to routing of wiring harness and fuel hose for ease of reassembly.
- Completely remove engine harness (2) from vehicle.

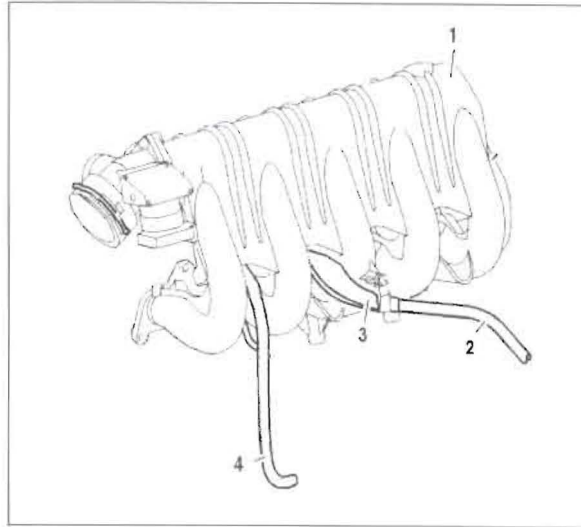


Figure 19

36. Remove intake manifold from engine:

- Remove intake manifold bolts (arrows, Figure 20) securing intake manifold.
- Loosen bolt (A).

Note:

Do not remove bolt (A) at this time.

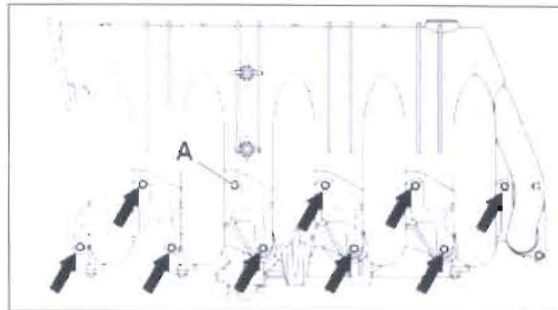


Figure 20

- Loosen hose clamp then detach coolant hose (2, Figure 21) from rear of intake manifold (1) and remove hose with connector (6, Figure 3).
- Remove 2 bolts (arrows, Figure 22) on last intake manifold flange
- Remove bolt (A, Figure 20) and remove intake manifold from engine.
- Remove bolt (20, Figure 3) then remove fuel pressure sensor (12, Figure 3) from manifold.

Note:

Install fuel pressure sensor to new intake manifold.

Note:

Temporarily cover/block (e.g., clean shop rags) cylinder head intake ports to prevent foreign objects from entering engine (**remove prior to reassembly**).

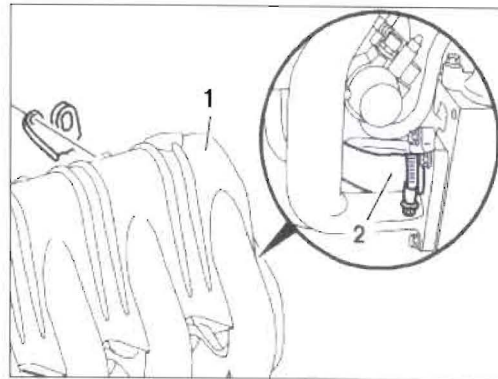


Figure 21

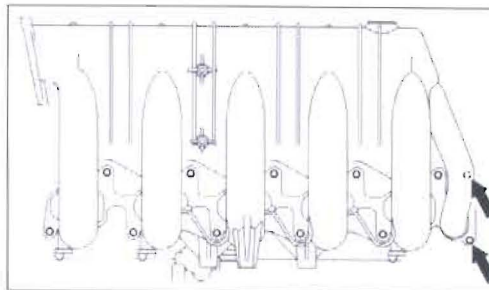


Figure 22

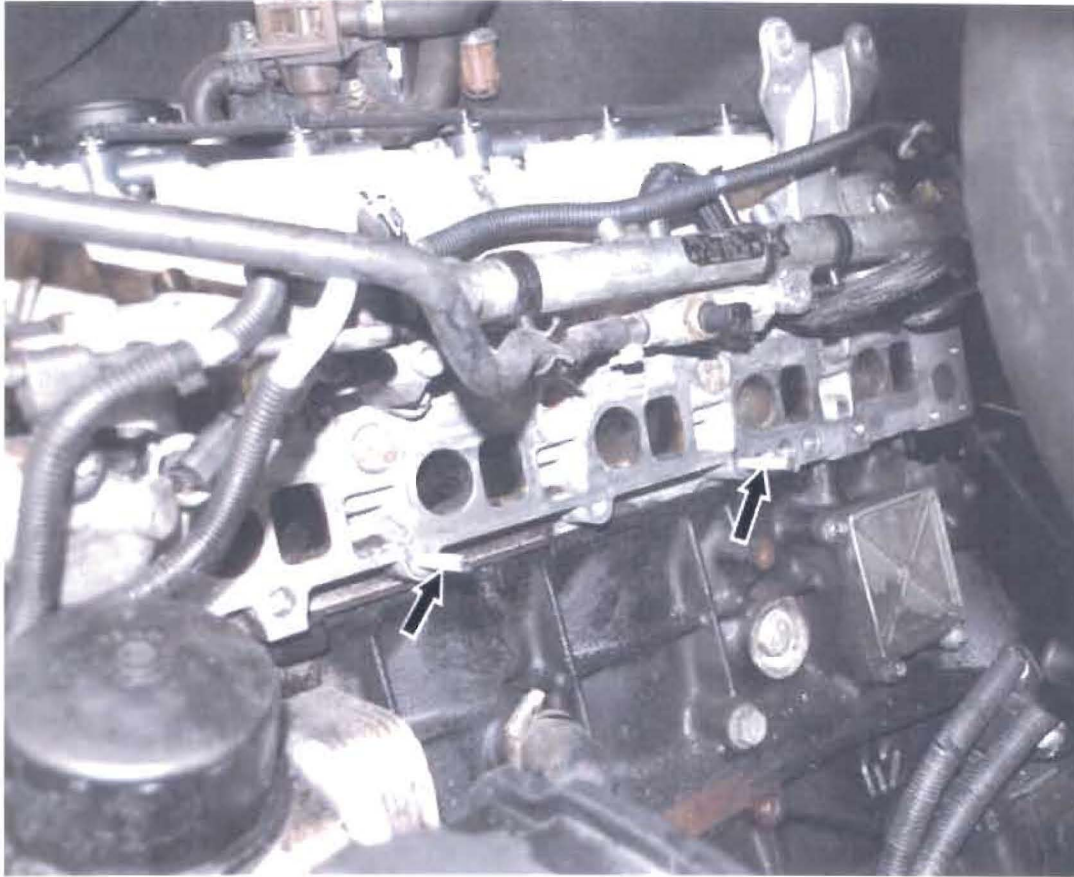


Figure 23

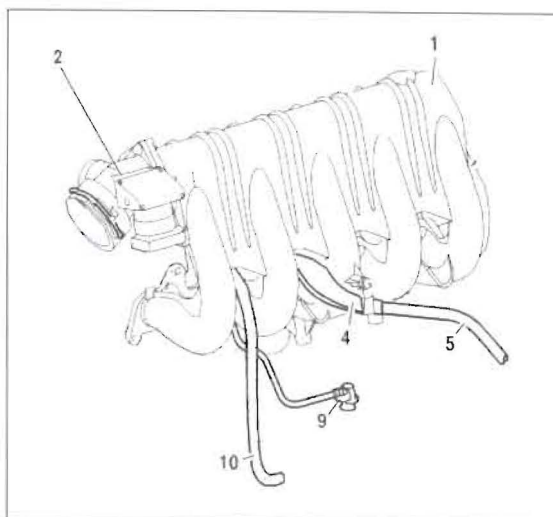
37. Install new intake manifold in reverse order (observe installation **notes** below).

Installation Notes:

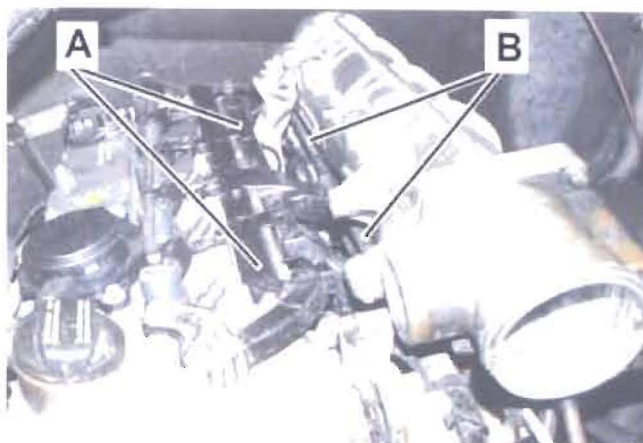
- Clean mating surface of cylinder head.
- **Temporarily** install 2 (M7 x 43) threaded studs (shop supply) (arrows, Figure 23) into intake manifold bolt holes to hold intake manifold gasket in place during reassembly.
- Install intake manifold gasket to studs (arrows, Figure 23).

Installation Notes (continued):

- Route fuel line (9, Figure 24), fuel hose (10, Figure 24), engine harness (5, Figure 24), and harness duct/cover (4, Figure 24) through manifold runners as shown.
- Replace O-rings on fuel line connectors with **new** O-rings (total of 4, one each on all fuel line connectors that were disconnected during disassembly).
- Replace fuel hose clamps (B, Figure 3) on fuel hoses disconnected from fuel filter with **new** clamps (total of 3).

**Figure 24**

- Harness duct/cover assembly (A, Figure 25 and 4, Figure 24) should be routed **below** plastic fuel line (B).
- **Be careful not to break harness duct/cover** (4, Figure 24) when routing through intake manifold runners.
- **Remove** mounting studs (arrows, Figure 23) after installing ("starting") intake manifold bolts (arrows, Figure 26).
- Install intake manifold bolts into bolt holes where mounting studs were installed.

**Figure 25**

- Torque all intake manifold mounting bolts (arrows, Figure 26) to 16 Nm.
- Due to the location of the manifold bolts (arrows, Figure 26) use a 1/4" drive torque wrench to torque bolts. Bolts at rear of manifold will require the use of 1/4" drive universal joint extension with 1/4" drive (straight) extensions to properly torque.
- Install previously removed mixing chamber (A) to new intake manifold refer to WIS: AR09.20-D-1320B.

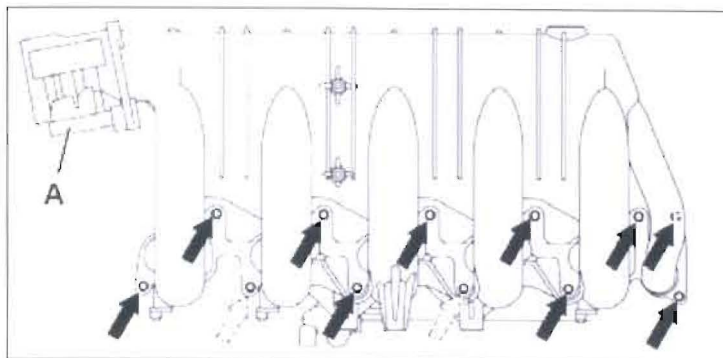
**Figure 26**



Figure 27

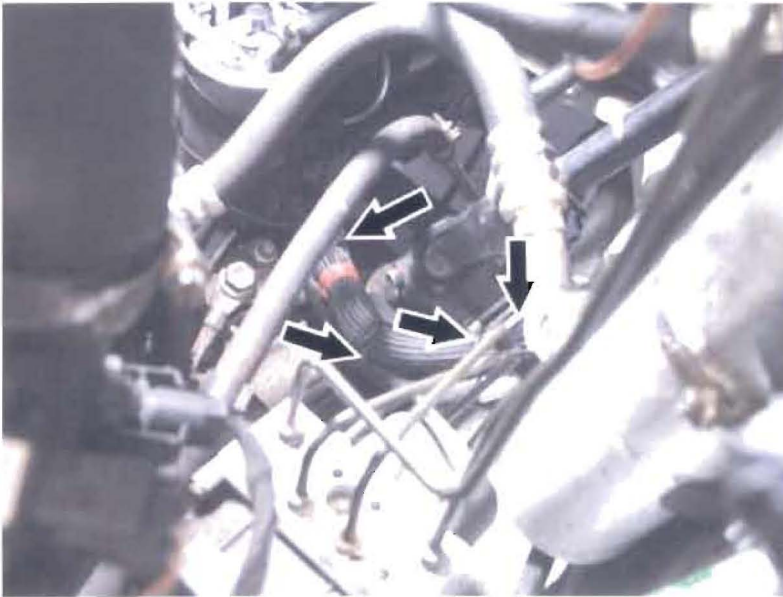


Figure 28

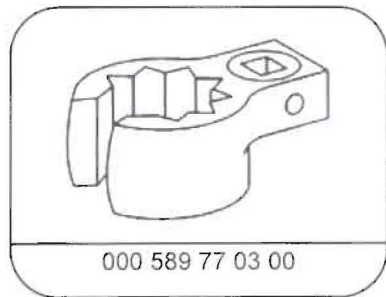
- Install **new** cable ties to **same location** on engine harness. New cable ties should be the **same size** as cable ties removed during disassembly. Please refer to Figures 27 and 28 for location of cable ties (arrows) located near steering linkage.

⚠ CAUTION!

Failure to properly secure harness could lead to damage of cable.

38. Continue reassembly in reverse order.
39. Inspect fuel and cooling systems for leaks: Run engine, switch-off and check for leaks.
40. Code radio, reset clock and reinitialize windows.

Special Tools



Crowfoot Wrench, 14mm

Primary Parts Information

Qty.	Part Name	Part Number	Estimated Replacement Rate
1	Intake manifold kit ^{1) 2)}	Q 1 00 0105	100%
4	Fuel line O-ring	A 601 997 03 45	
3	Hose clamp	N 916 002 01 21 00	
2	Cable strap	A 901 997 01 90	
8	Cable tie	A 002 997 24 90	
2	Cable tie	A 002 997 58 90	
4	Cable tie	A 004 997 98 90	

¹⁾ Intake manifold kit includes: intake manifold, intake manifold gasket, mixing chamber gasket.

²⁾ Gasket part number A611 142 0580, that is packaged in the manifold parts kit, is not required in the US market.

Additional Shop supply hardware

Qty.	Part Name	Part Number
2 (per dealer)	M7 x 43 mm mounting stud *	A 271 990 00 05

* Additional shop supply hardware cannot be claimed under this campaign.

Note:

- Please be aware that only the part number(s) referenced in the Campaign Bulletin is approved for use to repair the vehicle. Repairs performed using any other part(s) will not have been performed in accordance with the campaign. Accordingly, warranty claims submitted with reference to an improper part number(s) will be denied.
- The following allowable labor operation should be used when submitting a warranty claim for this repair:

Warranty Information

Operation: Intake manifold, replace (02-7132)

Damage Code	Operation Number	Labor Time (hrs.)	Model Indicator(s)
14 900 59 7	02-7132	4.9	Not Available ⁽¹⁾

⁽¹⁾ Use vehicle VIN when submitting warranty claim.

NOTE REGARDING CUSTOMER REIMBURSEMENT

Reimbursement to customers for repairs performed prior to this recall.

If the customer already paid to have this recall campaign condition repaired and provides adequate documentation to support their claim of a non-warranty repair of this item, they may be eligible to receive reimbursement.

Requests for reimbursement may include parts, labor, fees and taxes.

Reimbursement is limited to the amount the repair of the intake manifold would have cost if completed by an authorized Mercedes-Benz dealer under this campaign.

Submit a warranty claim, utilizing Damage Code 14 900 59 8 as a sublet, utilizing the sublet code of "SUB." Sublet repairs require dealer text as stated in the Warranty Policies and Procedures Manual. Repair date should be the date that the customer paid for the repair.

Note:

Please note the claim submitted for customer reimbursement will **not** close the campaign (if still open). If the customer is still in possession of the vehicle with an open campaign, please arrange to close the campaign in the usual manner as described in this bulletin.