

VS-23/Bahl

Baugruppe/Group: 41

weltweit
all countries

Datum/Date:
10/2003
Update: 12/2003
Update: 04/2004

41 03 03 (025)

Fractures on rear-axle support E46

Situation:

In isolated cases, fractures may occur on the rear-axle support. In most cases, the rear left support is affected. In isolated cases the front right support may also be affected.

These fractures could result in noises from the area of the rear compartment/rear axle.

Fractures may be caused by extreme loads due to strong load shifts, especially in operation in diving schools, trailer towing, an extreme sporty driving style or if non-approved sport suspension systems are installed.

Affected vehicles:

E46

Manufacturing period: start of series production until February 2000

Procedure:

In case of customer complaint or during inspection, check the rear-axle support for fractures and if necessary fill the area of the rear-axle support with foam. It may be necessary to fit a repair part first.

Following a major repair, the customer must be given a declaration that the vehicle has not depreciated in value as a result of the repair and that the repair was not performed as the result of an accident. (Please refer to Enclosure 1)

Proceed as follows when examining and performing the repair:

1. Position vehicle on lifting platform.
2. Check the area of the rear left rear-axle support for fractures. Fractures may emanate from welding points (please refer to figure 1).
If no fractures can be found, continue troubleshooting or the inspection.

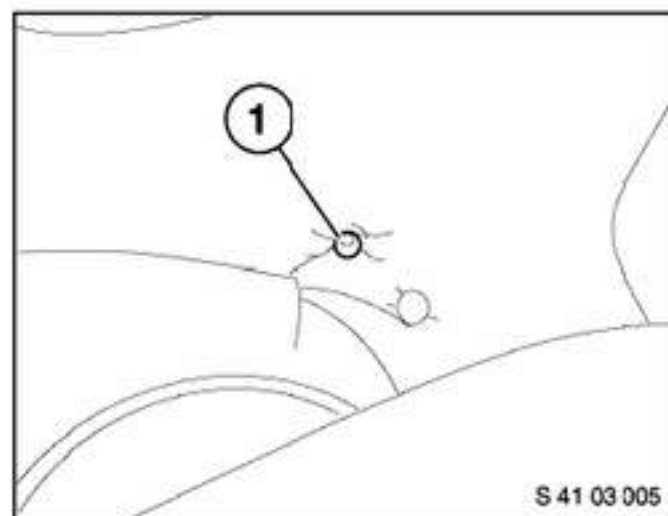


Figure 1

S 41 03 005

3. In case of severe damage with fractures greater than 20 mm, continue with point 6.
If minor fractures are found, the rear axle must be lowered slightly. Continue with step 4.

4. **Important!**

When lowering the rear axle, take care to ensure that the cable for the tilt alarm sensor is not damaged.

- Loosen the two rear-axle bolts.
- Lower the rear axle by approx. 10 cm.
- Check the rear-axle support for fractures again.

5. If fractures smaller than 20 mm are found, continue with point 7. If larger fractures are found, continue with point 6.

6. If fractures larger than 20 mm are present:

- Install the repair part. Please refer to Repair Instructions "Replacing rear-axle support", RA 41 11 400
- Adjust the rear axle
- Perform wheel alignment

Important

Photographic documentation must be compiled prior to performing the repair measures described in point 6. These photos are to be filed in the vehicle records as evidence.

7. If fractures smaller than 20 mm are found, or after the repair part has been fitted, fill the rear-axle member with foam in the area of the rear left rear-axle support.

Note:

The procedure described below is applicable to a single version. Account must be taken for vehicle-specific differences according to prevailing circumstances.

To do this, proceed as follows:

- Remove the floor trim in the luggage compartment.
- Prepare holes for injecting cavity foam and structuring foam as follows (see Fig.2).

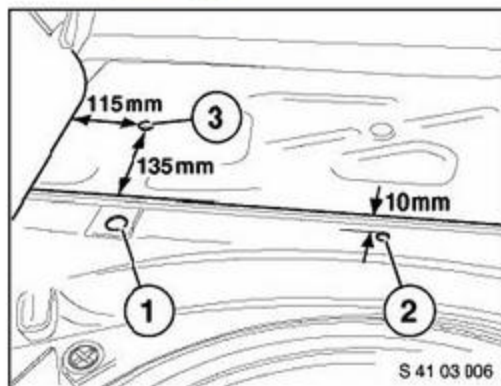


Figure 2

- Hole (1) is already present and is sealed with a plug
- Drill hole (2) in the middle between hole (1) and the corresponding hole on the right-hand side of the vehicle:
Used a 10 mm stepped drill bit.

- Hole (3) is already present and is covered by the anti-vibration liner.
Expose the hole using suitable tools.

Important.

Use disposable gloves to prevent contact with the skin!

Note:

Before injecting the cavity foam, fill the hose with a trial injection.

c) Inject cavity foam into holes (2) and (3) as follows.

- Hole (2):
Insert hose approx. 120 mm (under hole (2) there is a reinforcement plate with hole already present - the hose must also be fed through this hole).

Inject cavity foam for approx. 1 second (press through once). Pull the hose approx. 3 cm back while injecting.
- Hole (3):
Inject cavity foam for approx. 0.5 second.

Note:

To make it easier to work with the structuring foam, preheat the structuring foam to approx. 60°C, e.g. in a water bath.

- d) After approx. 10 minutes waiting period, inject the structuring foam from both cartridges into hole (1) using special tool 41 3 010.
Below this hole, there is another hole through which the hose must also be fed.
Verification of order: Special tool 41 3 010 was dispatched directly to the workshops by the company Cartool and can also be ordered from Cartool using the number stated.
- e) Remove any protruding structuring foam from the holes and seal these with plugs.
- f) Reassemble the vehicle and allow the foam to harden for 24 hours.

Important

**The vehicle must not be driven during the hardening period
(may only be pushed)**

Parts:

	Description:	Part number:	Quantity:
Fit rear-axle member repair part:			
	Rear-axle member repair part	41 11 7 000 246	1
	Noise insulating material, rear floor	51 48 8 204 055	1

Noise insulating material, luggage compartment floor	51 48 8 204 049	1
Anti-vibration liner	51 48 8 165 271	1
Anti-vibration liner for luggage compartment recess	51 48 8 160 470	1
Small parts as required		

Fill rear-axle support with foam:

Cavity foam	83 42 9 410 694	1
Structuring foam	83 42 0 307 530	1
Plug, 10 mm	51 71 1 906 001	1
Plug, 12 mm	07 14 7 127 539	1

Reimbursement:

Material and labour costs incurred can be claimed through the usual warranty channels subject to current warranty terms.

If the paintwork is performed by a BMW dealer, net material costs for paintwork, cavity coating and underbody protection can be reimbursed using reimbursement code 04.

If the paintwork is outsourced, i.e. contracted to an outside paintshop, net costs can be reimbursed as outside payment for paintwork using reimbursement code 03.

Direct and indirect costs (loan vehicle, costs for subsequent official inspection, etc.) may be reimbursed through warranty at net price using the appropriate reimbursement code. Documentation should be filed in the vehicle records.

Defect code

41 11 91 01 00

This defect code is not contained in the official Defect Code Catalogue but has been included in the system, thus enabling warranty claims to be processed.

Within the framework of a visit to the workshop -
Fill rear-axle member with foam in area of rear-axle support.

Job number

00 54 847

Labour

9 FRUs

In case of order without additional repair work -
Fill rear-axle member with foam in area of rear-axle support:

Job number

00 54 196

Labour

11 FRUs

Within the framework of a visit to the workshop -
Fit rear-axle member repair part and fill rear-axle member with foam in area of rear-axle support (paintwork outsourced):

Job number	00 54 848
Labour	361 FRUs for Type Code No. AL11 (for other models, please refer to KSD-CD) In case of order without additional repair work - Fit rear-axle member repair part and fill rear-axle member with foam in area of rear axle support (paintwork outsourced):
Job number	00 54 197
Labour	363 FRUs for Type Code No. AL11 (for other models, please refer to KSD-CD) Within the framework of a visit to the workshop - Fit rear-axle member repair part, paint and fill and rear-axle member with foam in area of rear-axle support:
Job number	00 54 849
Labour	386 FRUs for Type Code No. AL11 (for other models, please refer to KSD-CD) In case of order without additional repair work - Fit rear-axle member repair part, paint and fill rear-axle member with foam in area of rear axle support:
Job number	00 54 198
Labour	387 FRUs for Type Code No. AL11 (for other models, please refer to KSD-CD)
Warranty type	1
Warranty stage	1 (within vehicle warranty) 2 (outside vehicle warranty)

A claim for reimbursement can be made under one of the above job numbers only.