E46 (3 Series) US specification models only

SITUATION

BMW has proposed a settlement of a class action lawsuit involving the rear axle carrier. Under the proposed settlement, owners/lessees of 1999 2006 model year E46 (3 series) vehicles may request to have his/her vehicle inspected to determine if any damage to the rear axle carrier support is present.

Under certain circumstances, a fracture in the steel body structure could form in the area around one of the rear axle carrier mounting points. As a result, a distinct clicking noise can be heard from the area of the rear axle carrier during certain driving conditions. Specifically, the noise may be heard during load reversals on the rear axle, such as when starting from a stop, engaging forward or reverse gears, or when rapidly changing gears.

If a customer of one of these vehicles requests to have his or her vehicle inspected to determine whether any damage is present, it will be performed at no cost to him or her. If the inspection reveals that repairs are necessary, they should be performed per the procedures referenced in <u>SI B41 04 08</u>.

CAUSE

To determine whether any damage is present around the left rear axle carrier mounting point

CORRECTION

Depending on production dates and severity, one of the following will be performed:

- 1. Inspection only no damage, all production periods
- 2. Inspection and reinforcement of the rear axle carrier support with structural epoxy less severe damage, vehicles up to 10/2004
- 3. Inspection and replacement of the rear axle carrier support more severe damage, all production periods, or any damage on vehicles produced from 10/2004.

PROCEDURE

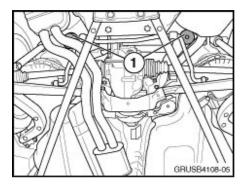
During the following inspection, if any damage is noted, a clear digital photo must be taken of the area and then printed and included with the vehicle file. The date stamp feature on the camera should be switched on.

Before the following inspection is performed, the warranty history for the vehicle should be checked to ensure the inspection has not already taken place. Inspecting the car for a second time will result in a denied warranty claim.

Inspection:

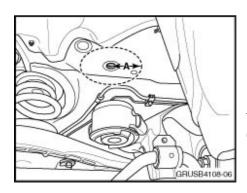
- 1. Place the vehicle on a lift and raise it enough to access the area around the rear axle carrier.
- 2. Visually inspect the suspension of the vehicle and determine whether it has been modified. If any non-OEM suspension parts or non-OEM wheels and tires are installed, the local market representative should be contacted prior to any repairs being performed.
- 3. Visually inspect for collision damage that may be the cause of the crack in the rear axle carrier support. If such collision damage is found, the local market representative should be contacted prior to any repairs being performed.
- 4. Support the rear differential using a workshop jack and support fixture (Special Tool 33 4 420).

- 5. Convertibles only: remove the V-strut.
- 6. Remove the 2 rear axle carrier mounting bolts (the 2 rear mounting points).
- 7. Slowly lower the workshop jack in order to lower the rear of the rear axle carrier. (The rear axle carrier will pivot on the front bushings.) This step is required to properly inspect for small cracks located above the bushing, as well as to properly measure the length of a crack, if one is present.



8. Both rear bushings (1) should separate from the rear axle support by several inches. The rear axle carrier should only be lowered under its own weight and should not be forced down, or damage to other components could result.

9. Use a wire brush to remove any debris from the area of the body under and around the left rear bushing.



10. Inspect the left rear axle support on the body of the car. The area to be inspected is a radius of A=6 inches from the center of the bolt hole for the bushing. Most fractures that occur will start at a weld point and grow outward.

- 11. If no cracks are present, no repairs are necessary. Continue to step 15.
- 12. If any fractures and/or cracks are visible, measure their lengths.
- 13. If the crack measures 20mm or less and the car was produced up to 10/2004, it will require a repair. Refer to SI B41 04 08 Procedure A Structural Epoxy.
- 14. If the crack measures more than 20mm or if any length crack exists on a car from 10/2004, it will require a replacement of the rear axle carrier. Refer to <u>SI B41 04 08</u> Procedure B Replace Rear Axle Support.
- 15. Resecure the rear axle carrier to the vehicle. Inspect the original bolts and replace them if they are damaged or heavily corroded.

NOTE: Performing this inspection does not require that a wheel alignment be performed.

For technical assistance with this inspection, please contact your Regional Technical Engineer.

PARTS INFORMATION

Part NumberDescriptionQuantity33 32 6 760 361Carrier bolts if damaged2 if necessary

WARRANTY INFORMATION

Covered under the terms of the associated proposed class action lawsuit settlement outline in SI B41 02 09.

Defect Code: 41 00 93 85 00

Labor Operation:	Labor Allowance:	Description:
00 54 254	6 FRU	Work time required to perform rear axle carrier
		support inspection
+00 54 943	5 FRU	Work time required to perform rear axle carrier
		support inspection

^{*}Main Work - use this labor operation number when this is the only repair being performed, or if this is the main repair when performed along with other repairs at the same time. If this is not the main repair, refer to KSD for the associated (+) labor operation code.

Claiming any parts under warranty that were not required for the above noted inspection, such as worn or damaged suspension components will result in a denied warranty claim.