

PERFORM THE PROCEDURE OUTLINED IN THIS SERVICE INFORMATION ON ALL AFFECTED VEHICLES THE NEXT TIME THEY ARE IN THE SHOP FOR MAINTENANCE OR REPAIRS.

SUBJECT: Oxygen Sensor Wiring Harness Voluntary Recall Campaign No. 98A02

MODEL: E36 with M42 engine (manual transmission only)

Situation: BMW of North America, Inc. has voluntarily initiated a recall campaign which involves the oxygen sensor wiring harness of the affected vehicles.

The potential defect is due to a possible incorrect oxygen sensor harness routing during production.

The oxygen sensor harness may have been mistakenly secured with clips to the exhaust heat shield and/or to a bracket on the transmission housing.

Due to the movement between the vehicle body, transmission and exhaust system the oxygen sensor harness may stretch and break over time causing the check engine light to illuminate and a fault code 70, (oxygen sensor disconnected) to set in the DME.

Affected Vehicles: This Recall Campaign affects E36 318i vehicles with M42 engines produced from 8/94 - 12/95.

The procedure given in this bulletin must be performed on all affected vehicles identified on DCS. (A copy of the letter which will be sent to all affected customers is attached to this S.I.)

In order to determine if a specific vehicle is affected by this recall, it will be necessary to utilize the "Service Menu" of the DCS (Dealer Communication System). Based on the response of the system, either proceed with the corrective action or take no further action.

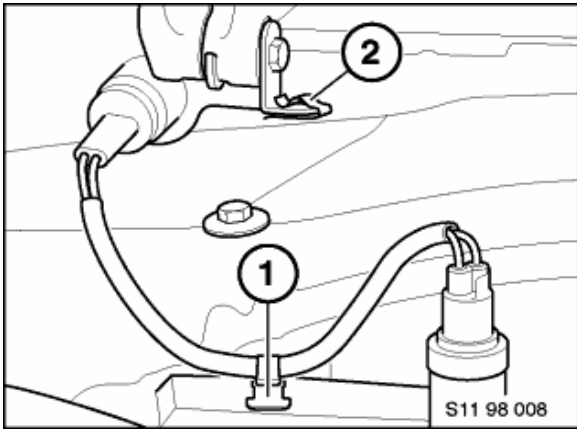
The Chassis Number Ranges listed below are **only** for informational purposes and are not to be considered as the only deciding factor. The affected vehicles are limited to vehicles within these ranges **but not all** of these vehicles are affected by the recall. The final decision is the DCS inquiry.

Model	Chassis Number Ranges
318ti	AM 50002 - AM 54140
318iC	EC 83651 - EC 85962
318i/4	FG 12400 - FG 13909
318i/2	JA 10600 - JA 13318
318i/4	LA 00000 - LA 03132

Correction: Check the oxygen sensor wiring harness for hold down clips. Remove all harness hold down clips, modify the transmission bracket and replace the oxygen sensor if necessary on all affected vehicles.

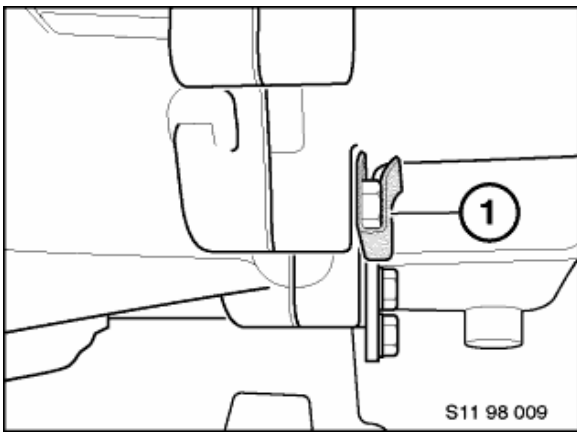
Procedure: -- Read and print out the DME fault codes.

- Troubleshoot and repair DME fault codes other than fault code 70 using the DIS tester instructions as necessary. (Note: Other DME fault code repairs are covered under the terms of the BMW Emissions and New Car Limited Warranties.)
- Check the oxygen sensor harness for hold down clips or any signs (crimped or pinched areas in the sheathing) where a clip or other hold down device may have been installed in the past.
The illustration below shows possible areas where the harness may be fastened with clips: (1) clip on exhaust heat shield, (2) bracket on transmission.



- Remove all clips from the exhaust heat shield, transmission bracket and any other oxygen sensor wiring harness hold down devices (wire ties, etc.).
- If installed, bend the transmission bracket (1) using a pair of pliers up over the bolt head as shown in the illustration below.

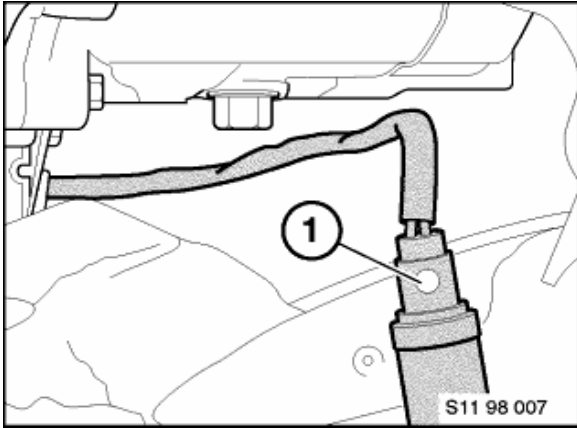
Warning: Do not remove and install the bolt from the transmission housing to remove the bracket since this will lead to transmission oil leaks.



The oxygen sensor must only be replaced if:

- the oxygen sensor harness had any type of fastener (clip, bracket, wire tie, etc.) holding it in place, or
- the oxygen sensor harness sheathing shows any signs (crushed or crimped areas) where it may have been held down / fastened in the past, or

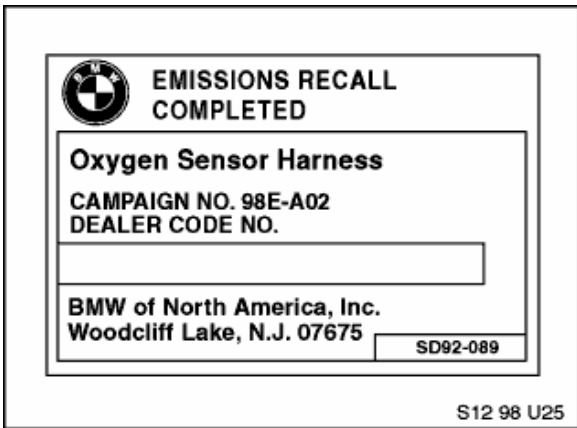
- fault code 70, (oxygen sensor disconnected) is stored in the DME.
Install the new oxygen sensor (1) if necessary, routing the wiring harness as shown in the illustration below. The harness should not contact any other components when routed correctly.
Do not use any hold down clips, wire ties, etc. to fasten the harness.



Part Number	Description	Qty.
11 78 1 247 235	Oxygen Sensor	1

After the vehicle has been checked and corrected, obtain a label (SD 92-089) and with a ball point pen print your dealer code (5 digits) on the Recall Completion Label (see illustration). An initial quantity of labels will be sent to all BMW automotive centers.

Peel the label from its backing and affix it to the left front strut tower (in the engine compartment) next to the Vehicle Emission Control Label.



For California dealers only it is required by the California Code of Regulations that an executed orange "Vehicle Emission Recall - Proof of Correction" certificate (SD92-084 - see illustration) be provided to each customer (for vehicles registered in the state of California) once the recall campaign on their vehicle has been completed.

Vehicle Emission Recall - Proof of Correction

License Number	Make	Year Model	Body Type	Vehicle Identification Number											
Manufacturer _____				Recall Number _____											
The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.															
Dealer's Name _____				Address, City, State and Zip _____											
Date _____				Dealership's Authorized Signature _____											
Return this certificate to DMV <u>only</u> when required - otherwise retain for your records.														SD92-084	

S12 96 U31

Note: Additional labels can be ordered from Product Engineering (a pre-printed order form is enclosed).

Reimbursement for this Recall Campaign will be provided through Campaign Entry.

Special Defect Code: **00 11 21 01 00**

Work Package #1 Read out DME fault codes and check oxygen sensor harness. Oxygen sensor replacement not necessary.

Labor Operation: 00 51 364

Labor Allowance: 5 FRU

Work Package #2 Read out DME fault codes, check oxygen sensor harness and replace oxygen sensor if necessary.

Labor Operation: 00 51 364

Labor Allowance: 5 FRU

Parts Allowance: 11 78 1 247 235 Qty=1