

2004-05 ENGINE

Engine And Gear Box Suspension - Repair Instructions - Z4

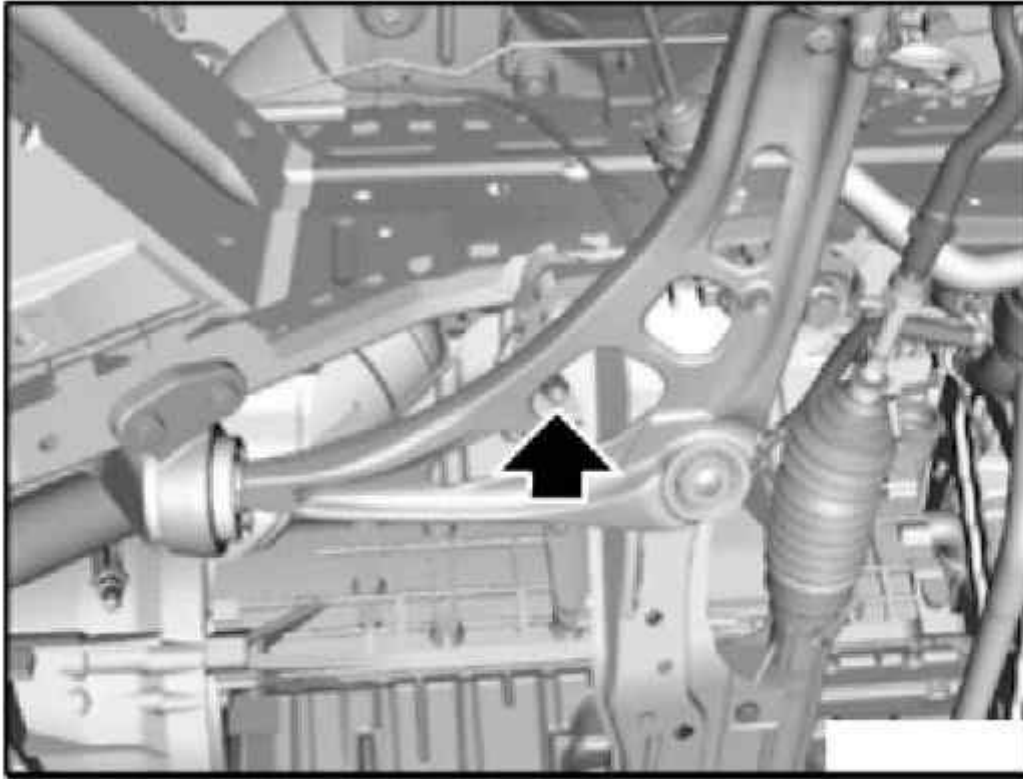
ENGINE SUSPENSION

22 11 001 REPLACING RIGHT ENGINE MOUNT (M54)

Necessary preliminary tasks:

- Secure engine in installation position.
- Release engine mounts on left and right from above.
- Remove reinforcement plate. Refer to **51 71 374 REMOVING AND INSTALLING/REPLACING REPLACING REINFORCEMENT PLATE ON FRONT AXLE SUPPORT** .
- Remove underbody protection. Refer to **51 47 490 REMOVING AND INSTALLING/REPLACING FRONT UNDERBODY PROTECTION** .

Unfasten nut.



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Fig. 1: Removing Engine Mount

Courtesy of BMW OF NORTH AMERICA, INC.

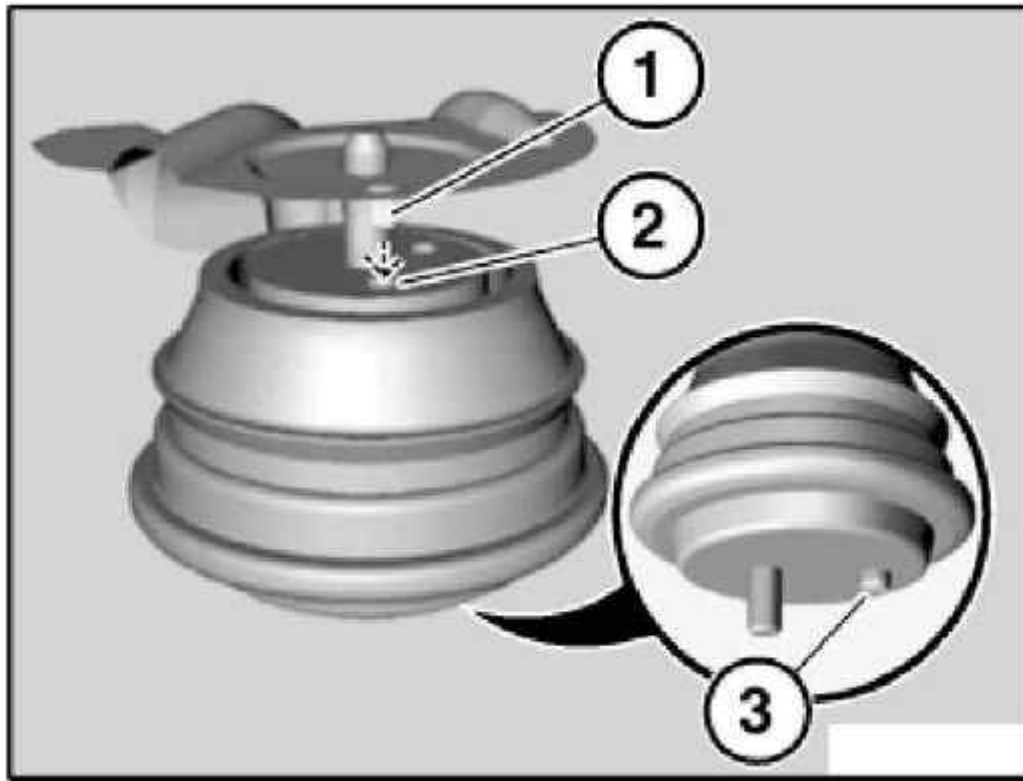
Tightening torque, 22 11 1AZ. Refer to **ENGINE AND GEARBOX SUSPENSION - TIGHTENING TORQUES** .

Remove right engine support arm from engine block. Refer to **22 11 100 REPLACING RIGHT ENGINE SUPPORT ARM (M54)** .

Remove engine mount.

Installation:

Fit heat shield for engine mount.



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Fig. 2: Fitting Heat Shield

Courtesy of BMW OF NORTH AMERICA, INC.

Lug (1) of heat shield must rest in corresponding bore (2) of engine mount.

Installation position of engine mount predetermined by locating pin (3). Pin (3) is in direction of travel at front.

22 11 011 REPLACING LEFT ENGINE MOUNT (M54)

Necessary preliminary tasks:

- Secure engine in installation position.
- Release engine mounts on left and right from above.

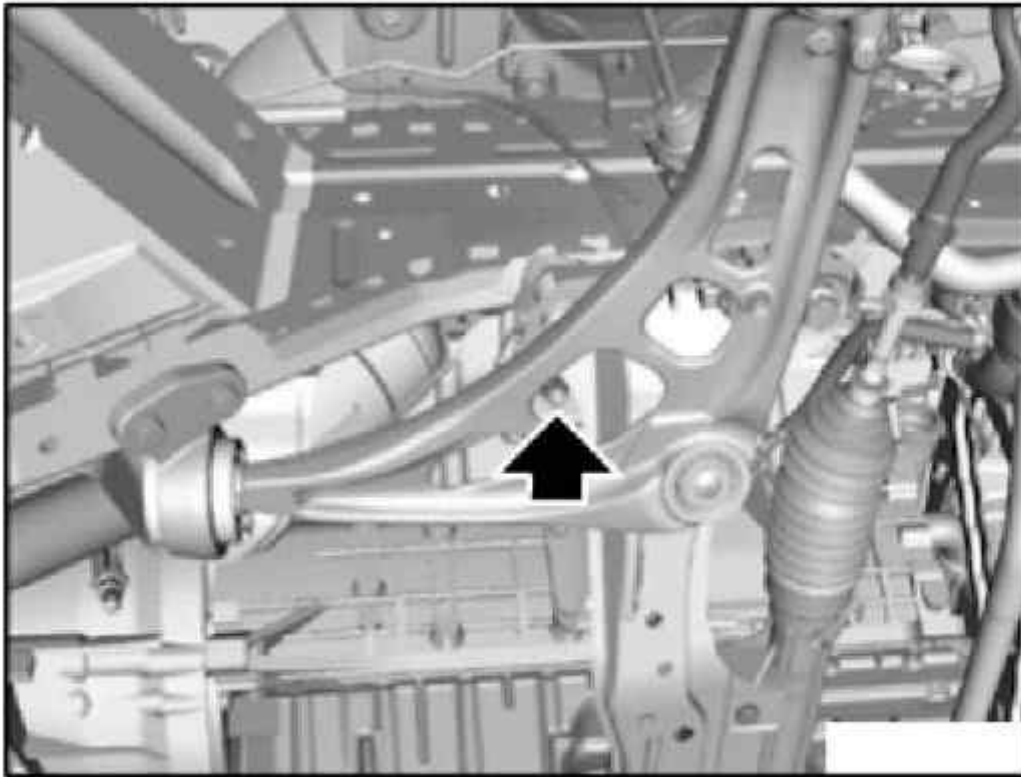
Tightening torque, 22 11 1AZ. Refer to **ENGINE AND GEARBOX SUSPENSION - TIGHTENING TORQUES**.

- Remove reinforcement plate. Refer to **51 71 374 REMOVING AND INSTALLING/REPLACING**

REPLACING REINFORCEMENT PLATE ON FRONT AXLE SUPPORT .

- Remove underbody protection. Refer to **51 47 490 REMOVING AND INSTALLING/REPLACING FRONT UNDERBODY PROTECTION .**

Unfasten nut.



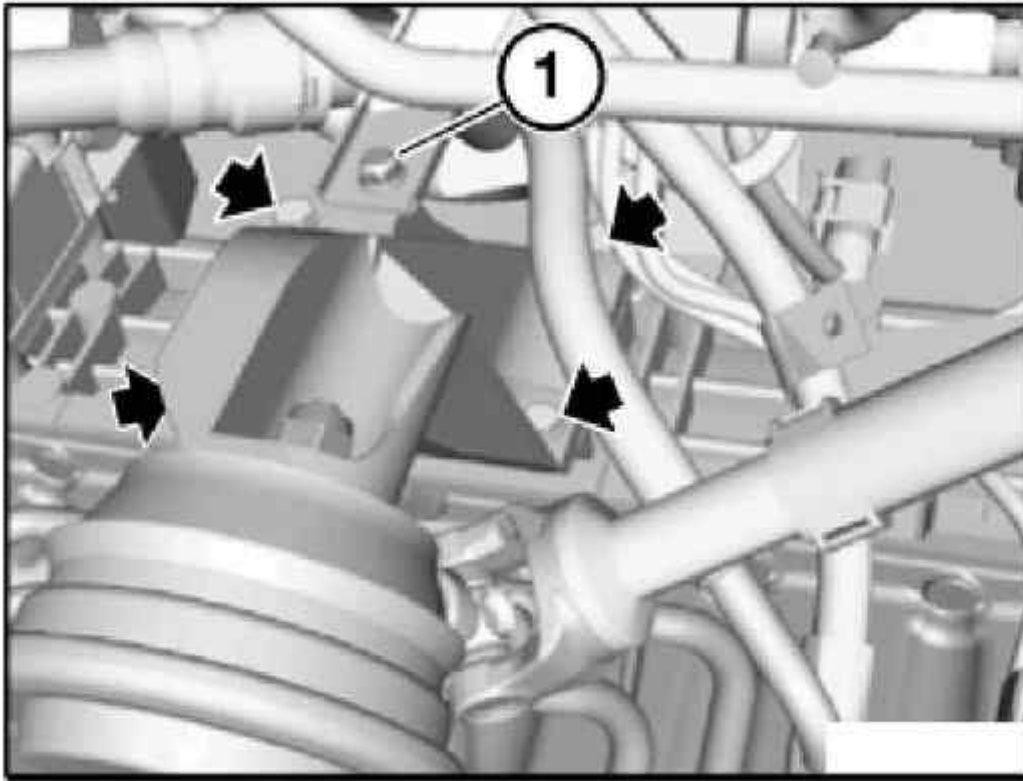
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Fig. 3: Locating Nut

Courtesy of BMW OF NORTH AMERICA, INC.

Tightening torque, 22 11 1AZ. Refer to **ENGINE AND GEARBOX SUSPENSION - TIGHTENING TORQUES .**

Partially release screws from engine support arm to engine block until engine support arm can be tilted upwards.



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Fig. 4: Releasing Screws

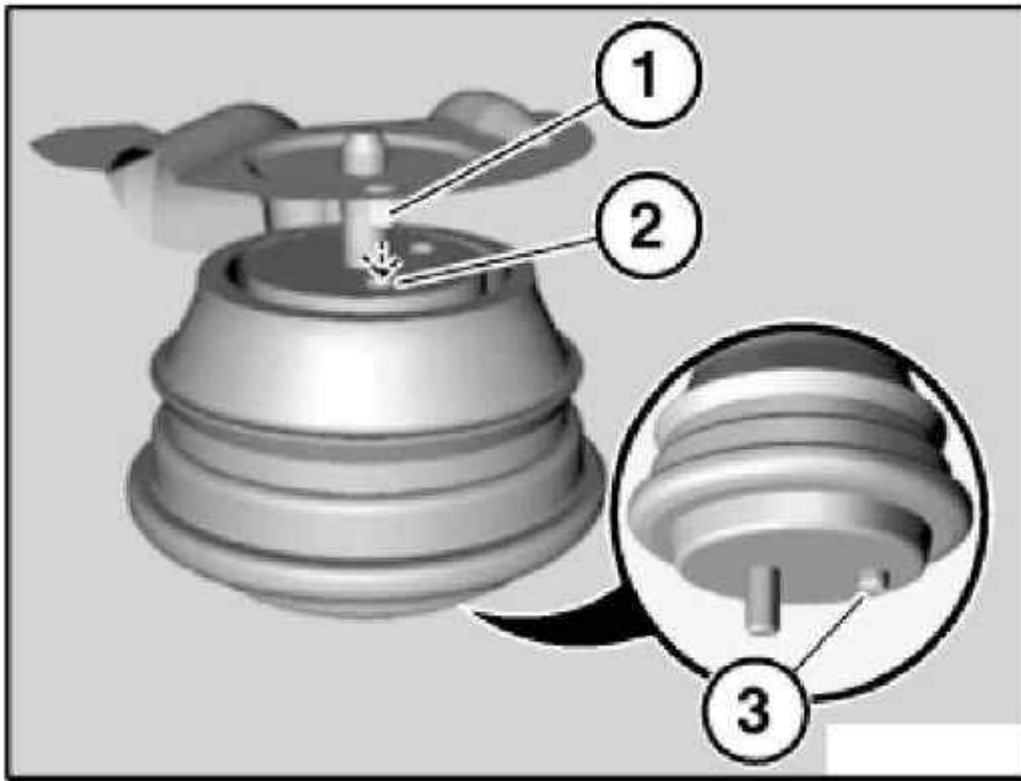
Courtesy of BMW OF NORTH AMERICA, INC.

Tightening torque, 22 11 3AZ. Refer to **ENGINE AND GEARBOX SUSPENSION - TIGHTENING TORQUES** .

Remove engine mount.

Installation:

Installation position of engine mount predetermined by locating pin (3). Pin (3) is in direction of travel at front.



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Fig. 5: Identifying Locating Pin

Courtesy of BMW OF NORTH AMERICA, INC.

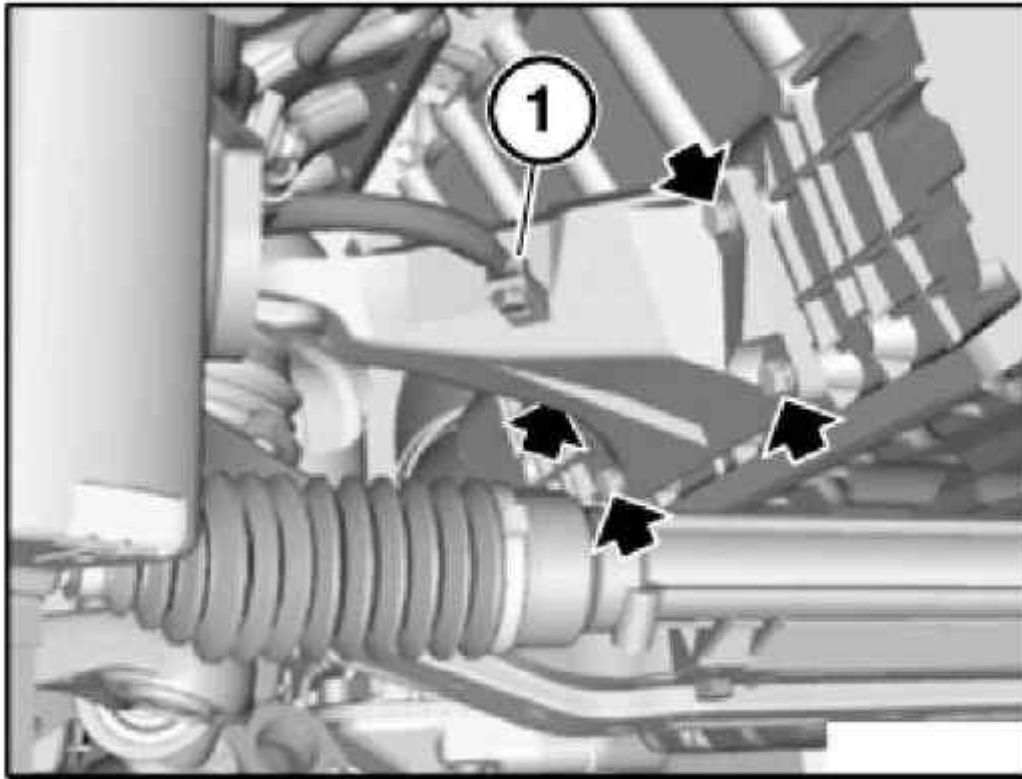
Heat shield is only present on right engine mount!

22 11 100 REPLACING RIGHT ENGINE SUPPORT ARM (M54)

Necessary preliminary tasks:

- Remove right engine mount. Refer to **22 11 001 REPLACING RIGHT ENGINE MOUNT (M54)** .

Release grounding strap (1) from engine support arm.



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Fig. 6: Removing Right Engine Support Arm
Courtesy of BMW OF NORTH AMERICA, INC.

Remove right engine support arm from engine block.

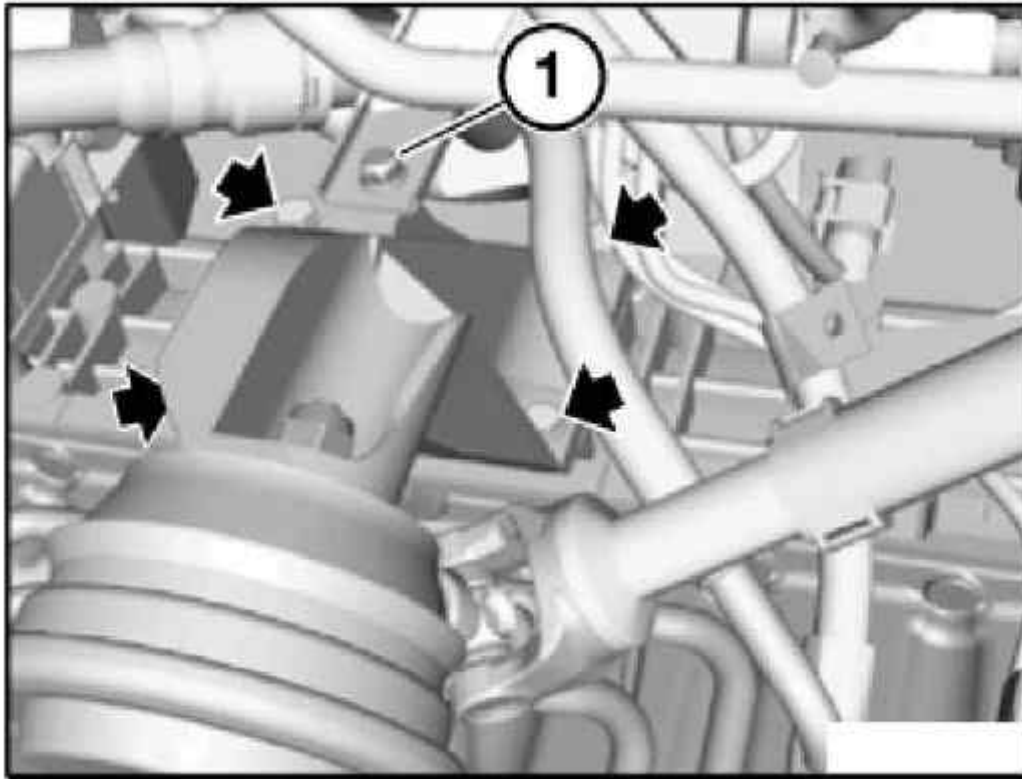
Tightening torque, 22 11 3AZ. Refer to **ENGINE AND GEARBOX SUSPENSION - TIGHTENING TORQUES** .

22 11 110 REPLACING LEFT ENGINE SUPPORT ARM (M54)

Necessary preliminary tasks:

- Remove left engine mount. Refer to **22 11 011 REPLACING LEFT ENGINE MOUNT (M54)** .

Release screw (1).



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Fig. 7: Removing Left Engine Support Arm
Courtesy of BMW OF NORTH AMERICA, INC.

Tightening torque, 22 Nm.

Remove left engine support arm from engine block.

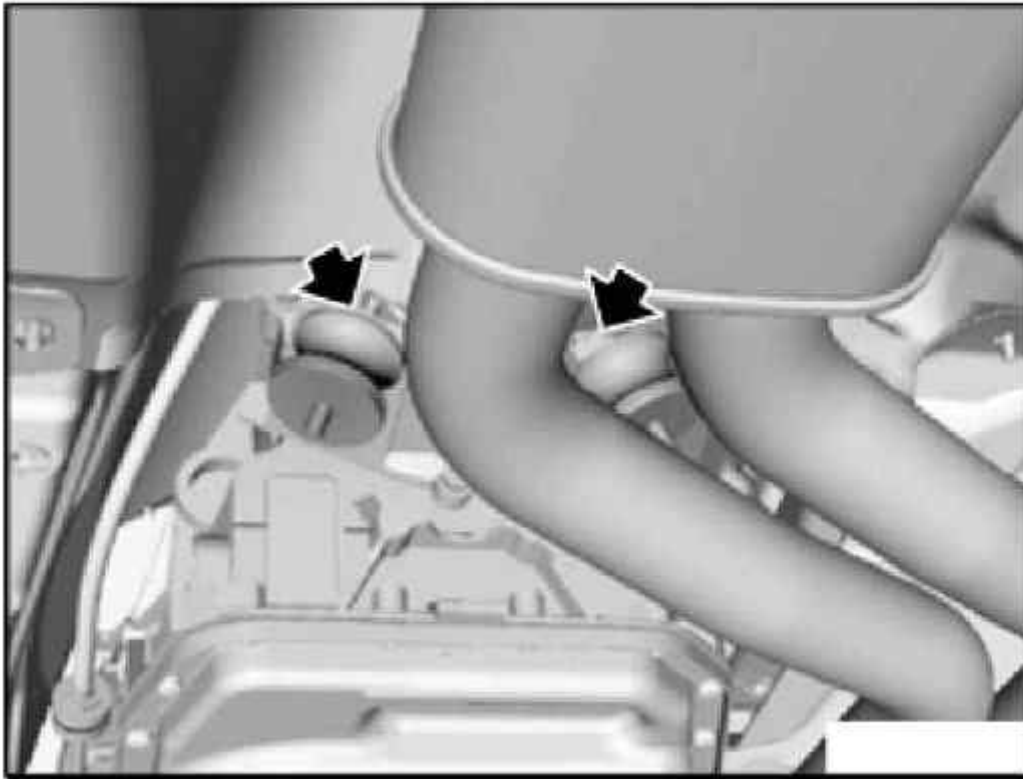
Tightening torque, 22 11 3AZ. Refer to **ENGINE AND GEARBOX SUSPENSION - TIGHTENING TORQUES** .

TRANSMISSION SUSPENSION

22 32 001 REPLACING RUBBER MOUNT FOR TRANSMISSION MOUNTING (M54)

Remove cross-member for transmission mounting. Refer to **22 32 050 REPLACING CROSS-MEMBER FOR TRANSMISSION MOUNTING (M54)** .

Release nuts (1).



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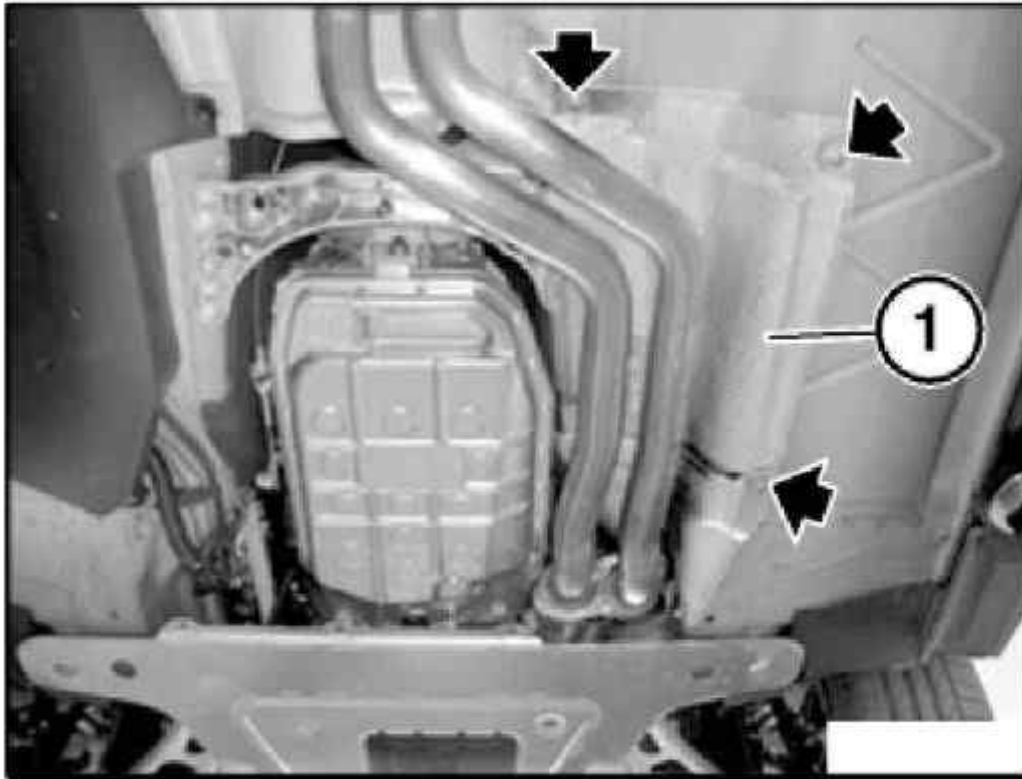
Fig. 8: Releasing Nuts

Courtesy of BMW OF NORTH AMERICA, INC.

Tightening torque 22 32 3AZ. Refer to **ENGINE AND GEARBOX SUSPENSION - TIGHTENING TORQUES** .

22 32 050 REPLACING CROSS-MEMBER FOR TRANSMISSION MOUNTING (M54)

Release metal nuts.



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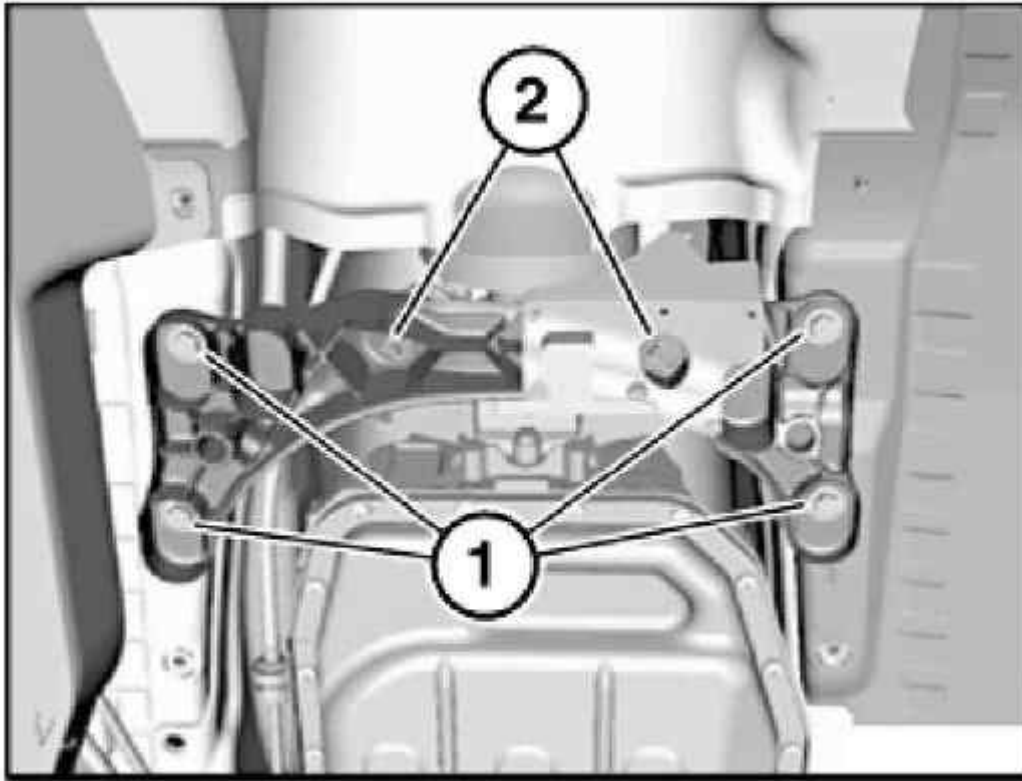
Fig. 9: Removing Heat Shield

Courtesy of BMW OF NORTH AMERICA, INC.

Remove heat shield (1).

Support transmission with hydraulic lifter.

Unfasten nuts (2).



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Fig. 10: Removing Transmission Cross-Member
Courtesy of BMW OF NORTH AMERICA, INC.

Release screws (1) and remove transmission cross-member.

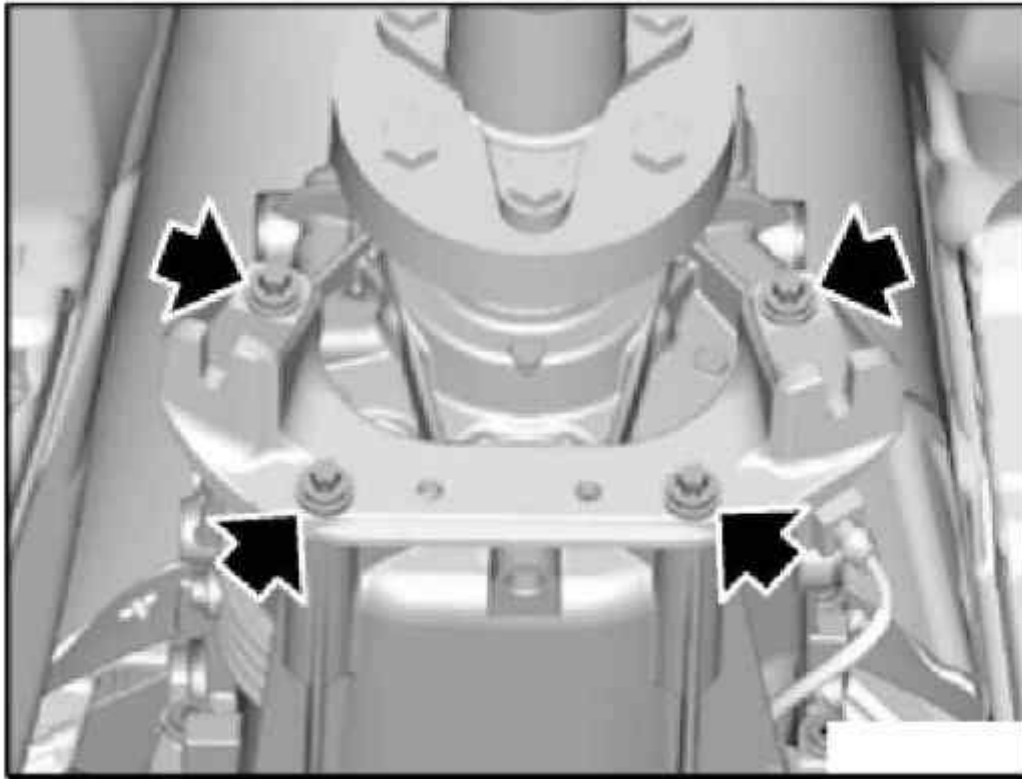
Tightening torque, screws (1): 22 32 4AZ.

Tightening torque, nuts (2): 22 32 3AZ.

22 32 055 REMOVING AND INSTALLING/REPLACING TRANSMISSION SUPPORT BLOCK

Replace rubber mounts for transmission mounting. Refer to **22 32 001 REPLACING RUBBER MOUNT FOR TRANSMISSION MOUNTING (M54)** .

Remove transmission support block from transmission.



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Fig. 11: Removing Transmission Support Block
Courtesy of BMW OF NORTH AMERICA, INC.

Installation:

Tightening torque 22 32 2AZ. Refer to **ENGINE AND GEARBOX SUSPENSION - TIGHTENING TORQUES** .