



SI B 33 01 08
Rear Axle

March 2008
Technical Service

SUBJECT

E90, E92, E93 M3 - "Clunk Noise" on Load Reversal

MODEL

E90, E92, E93 M3 with S65 engine

SITUATION

The customer may complain of a "drivetrain rattle" or "knocking noise" during a load change, e.g., a 1st to 2nd gearshift at low engine speed, coming from the rear axle area.

INFORMATION

The entire M3 drivetrain is designed for excellent torsional rigidity in order to ensure an instantaneous torque transfer to the rear wheels, without any time lag. Consequently, the flywheel mass and its damping capability have been reduced to a minimum.

Because of this torsional rigidity, the driver receives acoustic feedback on the torque transfer, as is expected in sports cars. Abrupt load changes may also cause a noticeable sound. As described above, this type of "acoustic feedback" is system-related and is not detrimental to the lifetime of the components.

Activation of the "Sport Mode" offers an additional increase in driving dynamics. As a result, acoustic feedback from the power train may be even more pronounced.

WARRANTY INFORMATION

The acoustic feedback characteristic is NOT a symptom of a failure, and does not compromise the long-term reliability of drivetrain components (clutch, transmission, differential, driveshaft, etc.); nor does it adversely affect the performance of the vehicle.

In the case of a complaint, the customer needs to be advised and educated on the design characteristics of the M3 drivetrain system.

No repair attempts for the load reversal "clunk noise" complaint should be initiated, nor will the warranty claims resulting from such repairs be accepted.

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