

SI B16 02 10 Fuel Supply Systems

March 2010 Technical Service

SUBJECT Proper Diesel Exhaust Fluid (DEF) Level in SCR Reservoirs

MODEL

E70 and E90 with M57Y

SITUATION

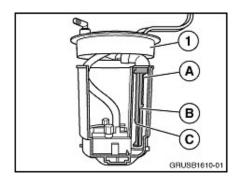
When checking the levels of the SCR system with ISTA/D, the active tank level reading shows 66%.

CAUSE

Level measurement strategy of the SCR system

INFORMATION

The level sensors in the passive and active SCR tanks do not continuously measure the DEF level. There are defined measurement points in the level sensor that the DDE control module uses to calculate the DEF level.



If the DEF level in the active tank (1) is above the full point (A) of the level sensor, the fluid level reading will be at 100% (full). Once the DEF level is below the full point of the level sensor, but still above the warning point (B), the level reading will be 66%. The warning scenario displayed to the customer will start to count down the mileage to "no start condition" when the DEF level is below the warning point (B), and above the empty point (C) of the sensor.

RECOMMENDATION

Do not overfill the SCR system. Filling the tanks up to the top of their respective filler necks will cause the DEF to leak out of the tank's vent system, and will possibly damage the tanks and internal components. All active and passive tanks are filled to the correct level at the factory. A tank level reading of 66% on a new vehicle requires no further action.

Note: Consult <u>SI B16 03 10</u> if a low exhaust fluid warning is displayed in a new vehicle with low mileage (5,000 miles or less).

DEF Fill Capacities

| E70 | Capacity (Service) | Capacity (New Part) |
|---------|---|-----------------------------------|
| Active | 5.5 liters | 5.7 liters |
| Passive | 15.8 liters | 16.0 liters |
| | | |
| | Capacity (Service) | Capacity (New Part) |
| Active | Capacity (Service) 7.4 liters | Capacity (New Part) 7.6 liters |

WARRANTY INFORMATION For information only

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