

EPA Requirements for SCR Systems

In March of 2007, the EPA issued a letter containing guidelines for the design and operation of SCR systems to be used on vehicles. Among these guidelines were a requirement that the SCR system be tamper-proof to prevent operation of the vehicle without fully functioning emissions controls in place, or with a fluid other than urea in the tank.

Urea Solution

DPF

HEST

Urea Solution lamp added to already complex EPA07 package

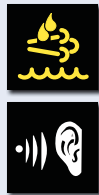
Although not final, EPA vehicle compliance requirements indicate vehicles will have to be equipped with sophisticated sensors to detect NOx in exhaust. If the sensors detect that there is a bad urea solution or no urea is available, there will be four progressive stages of warning and vehicle response.

UREA = FUEL

You can think of urea as a fuel because without it the vehicle cannot run legally and must shut down, rendering the vehicle useless to the customer.

1

With a low urea level, a warning light will appear which should be augmented by an audible warning.



2

Next, the engine will de-rate and the driver will feel a power loss.



3

As the issue progresses, vehicle speed would be limited well below typical operating levels.



4

Finally, when the vehicle is shut down, there will be a no start condition.

Without Urea, the Vehicle WILL NOT RUN

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