

# Strength Tester - Urea (AdBlue®)

## AdBlue® DEF Tester Instructions

AdBlue® is the registered trademark for AUS32 (Aqueous Urea Solution 32.5%) and is used in a process called selective catalytic reduction (SCR) to reduce emissions of oxides of nitrogen from the exhaust of diesel engine motor vehicles. It is also referred to as DEF (Diesel Exhaust Fluid).

It is a 32.5% solution of high-purity urea in demineralised water that is clear, nontoxic and safe to handle. However, it can be corrosive for some metals and must be stored or transported using the correct materials.

The Laser 7240 has been designed to allow the DEF to be tested for urea strength. In order for the diesel engine emissions system to function correctly the strength of the DEF solution must be maintained at 32.5% urea; over time the strength of the solution can change by (a) evaporation causing the water component of the solution to reduce, or (b) contamination. Either of these can cause variations in DEF quality and strength which will be flagged up by the engine's on board diagnostic system (DEF warning light).

The Laser 7240 is extremely easy to use and displays a clear pass or fail result regardless of the temperature of the sample.

### Applications:

The Laser 7240 is suitable for all diesel-engined vehicles (commercial or passenger) that use DEF.

### Instructions:

The following instructions are for guidance only - please refer to the manufacturer's service data or vehicle handbook.

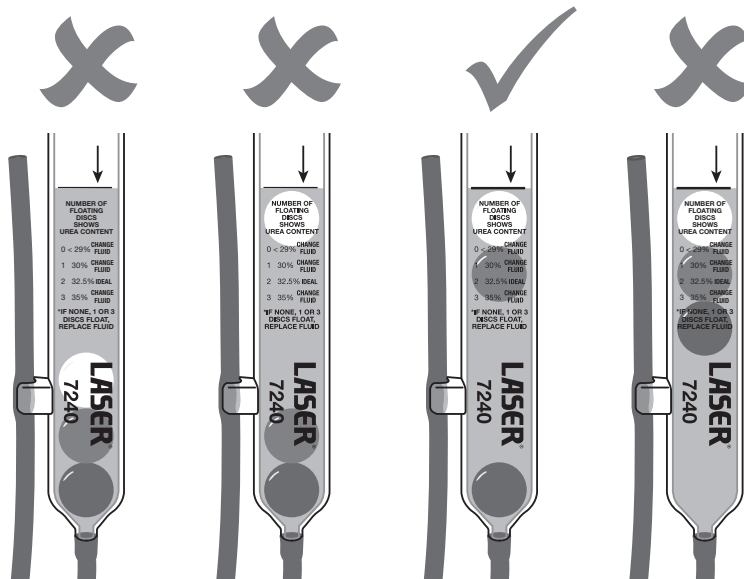
On passenger cars and light commercial vehicles locate the AdBlue / DEF filler cap. Refer to the manufacturer's vehicle handbook if necessary.

On HGV vehicles locate the AdBlue®/DEF tank; if a sample cannot be taken from the filler cap, locate the tank drain cock and release some DEF into a suitable clean container.

Place the black neoprene tube of the Laser 7240 tester into the AdBlue®/DEF tank or the container; squeeze the blue bulb to draw DEF into the tester and fill to the line marked on the front of the tester.

Refer to diagram: place the neoprene tube into the holding clip on the side of the tester - ensure the end of the tube is above the fluid level.

Look at the number of suspended discs; if two are floating the DEF has the correct concentration of urea and water. No discs floating, one or three discs floating indicates poor or contaminated DEF - drain, flush system and replace with fresh DEF.



### Precautions:

- Wear eye and hand protection.
- Refer to the manufacturer's documentation for location of AdBlue®/DEF tank and their recommended DEF testing procedure.
- Always flush tester after each use with clean water.
- Keep your AdBlue®/DEF tank tightly sealed to prevent evaporation and contamination.
- The selective catalytic reduction (SCR) system will recognise solutions other than DEF and this will be flagged up by the engine's on board diagnostic system (DEF warning light).

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