

# DA-ST512 (Diesel Exhaust Fluid Application) User's Manual

# **Diesel Exhaust Fluid Application**

This application allows the Diesel Exhaust Fluid (DEF or AdBlue®) level to be constantly monitored, and displays the amount required to refill the tank. It also provides service functions related to the DEF tank and Selective Catalyst Reduction (SCR) system, as described below.

## **Diesel Exhaust Fluid Process**

On starting the application the main menu displays the following options -

**Exhaust fluid level** - Displays the current DEF tank level and refill required.

**Reset SCR start inhibit** - Allows vehicle to be restarted if the DEF tank is empty.

**Reset SCR quality monitor** - Resets Selective Catalyst Reduction quality monitoring.

**Prime and pressure test** - Used to prime and pressure test the SCR system.

**Injector pump replacement** - To be run after replacing the SCR injection pump.

**Level sensor replacement** - To be run after replacing the DEF tank level sensor.

Select one of the above options to perform the procedure required. Each option is described in more detail below.

#### **Exhaust fluid level**

A bar graph displayed on the left of the screen indicates the current DEF tank fluid level, which is read every 1sec and updated. The bar graph is in percentage units, where 0% means the tank is empty and 100% means it is at the required maximum fill level for the vehicle.

On the right of the screen the maximum tank level, current tank level and amount of refill required are displayed in litres. The current level is also displayed as a percentage.

NOTE - If the vehicle is a Jaguar XE with manual transmission the operator will be asked if the engine has a lower power output of 163PS. This is because the DEF tank in this particular vehicle has a smaller capacity.

#### **Reset SCR start inhibit**

This routine will reset the start inhibit if set, allowing the engine to be restarted when the DEF tank is completely empty. It will also reset the mileage timer which indicates the distance remaining till the diesel exhaust fluid runs out.

## **Reset SCR quality monitor**

This routine will reset the long and short term monitoring of the diesel exhaust fluid quality. If poor quality fluid is detected a fault will be logged and a MIL light activated, so this option can be used to clear this fault down after refilling the tank.

#### Prime and pressure test

This routine will prime and then pressure test the SCR system following a first fill. It is intended to be run after fitting a new tank and filling it with diesel exhaust fluid for the first time.

NOTE - This test requires the engine to be running and may take up to 7 minutes to complete.

#### Injector pump replacement

This routine will reset the DEF pump offset calibration and learned values following replacement of the pump.

#### Level sensor replacement

This routine will reset the DEF volume measurement using sensed tank level following replacement of the level sensor.

### **General Procedure**



Please ensure the vehicle is in a safe working mode prior to exercising the following procedure.

- The trigger is for the operator to switch on the vehicle ignition. If this is not currently on, then you will be asked to turn it on and to press '**OK**' when this has been done.
- On detecting the ignition state, the process starts to run and the message '**Please wait**' is displayed on the screen.
- Once the process has successfully completed and all instructions followed correctly a message "PROCEDURE COMPLETE" will be displayed. Pressing the 'OK' button to return to the main application menu.

**Note:** If the process fails for whatever reason, a failure message will be displayed. At this time the process should be repeated ensuring that all conditions for the process have been met.

• To abort the procedure press the 'X' button on the keypad at any time.

## **Diesel Exhaust Fluid Year Updates**

The software associated with the Diesel Exhaust Fluid application is updated periodically to increase it's coverage for new JLR vehicles and model year updates. You can check for these updates by connecting your device to a PC via the supplied USB cable, and launching the DA App Hub. This tool will connect to the Diagnostic Associates file server and check to see if a newer version of the Diesel Exhaust Fluid application is available to download.

## **Diesel Exhaust Fluid Supported JLR Vehicles**

The following JLR vehicles and associated model years are supported by the Diesel Exhaust Fluid application at the time this user manual was produced. To obtain an up-to-date version of this table you should visit the Diagnostic Associates website.

Supported JLR Vehicles  Diesel Exhaust Fluid					
Discovery Sport	Yes	Yes	Yes	Yes	Yes
Discovery	-	Yes	Yes	Yes	Yes
Evoque	-	Yes	Yes	Yes	-
Range Rover Velar	-	-	Yes	Yes	Yes
Range Rover Sport	-	Yes	Yes	Yes	Yes
Range Rover	-	Yes	Yes	Yes	Yes
XJ	-	Yes	Yes	Yes	Yes
XF	-	Yes	Yes	Yes	Yes
XE	-	Yes	Yes	Yes	Yes
E-Pace	-	-	Yes	Yes	Yes
F-Pace	-	Yes	Yes	Yes	Yes

(Yes) - Covered for MY (where an SCR system is fitted): (-) - N/A