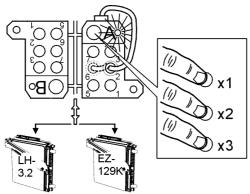
## Volvo Diagnostics Functions



Each of the control modules incorporates Volvo Diagnostics, which continuously monitor the input and output signals. In the event of a fault which affects the exhaust emission levels, the ICM will activate the MIL (Check engine lamp) on the combined instrument. Fault tracing may be carried out either with the ST or by means of the three test modes, which can be accessed through socket 2 (MFI) or 6 (DI) on DLC A. Diagnostic test modes

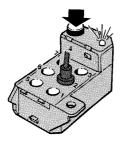
- 1, Displays DTCs (if any)
- 2, Acknowledges component operation
- 3, Operates components in a given, predetermined sequence

### Volvo Diagnostics, MFI

MFI system diagnostics can be accessed through socket 2 on DLC A when the ignition is switched on.

### Diagnostic test mode (DTM) 1

DTM 1 is activated by a brief operation of the test button. The MFI module responds by displaying a DTC as per <u>DTC table</u>.



# **Erasing DTCs**

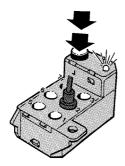
The DTCs may be erased only when all have been displayed at least once and the first DTC has been repeated.

Press the test button for at least 5 seconds. The LED will light 3 seconds after the button has been released. Press the button again for at least 5 seconds.

### Diagnostic test mode (DTM) 2

DTM 2 is activated by two brief operations of the test button on the DLC, causing the LED to flash rapidly. The MFI module will deliver an acknowledgment code on detecting a change in the signals from:

- TP potentiometer, when throttle is moved from CTP (3–3–2)
- TP potentiometer, when throttle is moved



from WOT (3-3-3)

- ICM, when A/C switch is closed (1–1–4)
- Pressostat, when A/C compressor starts (1– 3–4)
- AW 50–42 TCM, when gear selector lever is moved to or from a drive position (1–2–4)
- ICM, when speed signals are transmitted (3– 3–1)

# Diagnostic test mode (DTM) 3

DTM 3 is activated by three brief operations of the test button on the DLC. The MFI module responds by operating the following components, in the order listed:

### Chassis Nos. -30699:

- Injectors, for 10 seconds
- 5-second pause
- IAC valve, for 10 seconds
- 5-second pause

The sequence is repeated three times.

#### Chassis Nos. 30700- and all 5-door:

- Air -pump relay, auxiliary air system for 5 seconds (certain models only).
- 5-second pause
- Solenoid, auxiliary system for 5 seconds (certain models only).
- 5 second pause.
- Injectors for 5 seconds.
- 5 second pause.
- Idling valve for 5 seconds.

The procedure is repeated three times.

