MEEC TOOLS 014145 OBD-II-EOBD+CAN Fault Code Reader Instruction Manual

Contents

MEEC TOOLS 014145 OBD-II-EOBD+CAN Fault Code Reader

SAFETY INSTRUCTIONS

- Carry out testing and inspection of vehicles only in a safe working environment and in safe conditions.
- Never attempt to use or read the product while manoeuvring the vehicle – risk of fatal or serious personal injury.
- Wear safety glasses that comply with the requirements of ANSI.
- Work outdoors or in a well ventilated area – risk of personal and/or fatal injury from inhalation of exhaust fumes.
- Apply the parking brake. If the vehicle has an automatic gearbox put it in P (parking), if it has a manual gearbox put it in neutral.
- Work outdoors or in a well ventilated area – risk of personal and/or fatal injury from inhalation of exhaust fumes.
- Pay attention to moving parts (fan, auxiliary drive etc.) when the engine is running – risk of serious personal injury.
- Internal combustion engines get very hot when they are switched on – risk of burn injury.
- The engine and ignition must be switched off when connecting or disconnecting the test equipment, otherwise the test equipment or electronics in the vehicle can be damaged. Switch off the ignition before connecting the fault code reader to, or disconnecting it from, the Data Link Connector (DLC).
- Fuel and battery fumes are highly flammable. Keep sparks, hot objects and naked flames away from the battery, fuel system and fuel fumes to minimise the risk of explosion. Do not smoke near the vehicle when testing is in progress.

SYMBOLS

	Read the instructions.
CE	Approved in accordance with the relevant directives.
	Recycle discarded product in accordance with local regulations.

TECHNICAL DATA

- **Display:** 128 X 64 px
- **Backlight:** Yes
- **Adjustable contrast:** Yes
- **Ambient temperature, in use:** Oto 60°C
- **Ambient temperature, storage:** -20 to 70°C
- **Power supply:** 8-18 V
- **Size:** 725 x 70 x 22 mm

DESCRIPTION ABOUT FAULT CODES

The OBD II system stores fault codes (Diagnostic Trouble Codes, OTC) in the vehicle's computer system. The fault codes provide information on the type of fault and where and in which conditions the fault occurred, which simplifies fault tracing and correction. The OBD II codes consist of a 5 character alphanumeric string. The first character is a letter that indicates which control system has caused the fault. The following four characters are digits that provide supplementary information on where and in which conditions the fault code was generated. See example below.

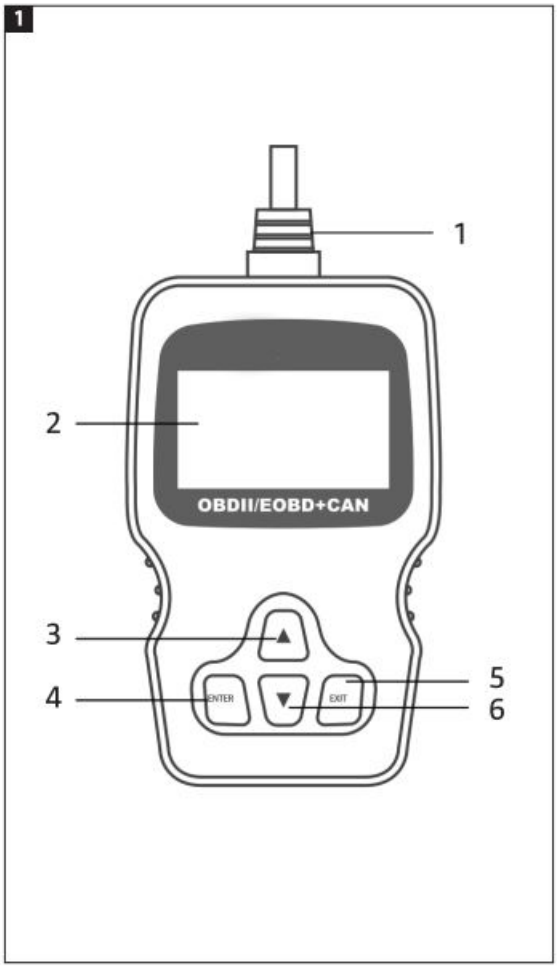
Fault code: POS20

Pos.	Category	Description
P	System	B = Body C = Chassis P = Powertrain U = Network

0	Code type	Generic (SAE): P0 B0 C0 U0
	Manu-facturer	P1, P2 B1, B2 C1, C2 U1, U2
5	Subsystem	1 = Fuel supply and air system 2 = Ignition system or engine fault 3 = Emission control 4 = Speed control and idling 5 = Vehicle computer outputs 6 = Transmission control
20	Component	Both the last digits, in this case **20**, indicate which component in the system the fault code refers to.

BUTTONS AND FUNCTIONS

1. Diagnostics connector (OBD II) – for connection to vehicle computer.
2. 128 x 64 pixels with adjustable cantrast to show test results.
3. Up arrow- to browse up through menu and submenu items in menu mode. If mare than one display image is active the buttan is used ta browse from the display image shawn to the previous display image.
4. ENTER button – to acknowledge selection or steps in menus.
5. EXIT button – to cancel selection or steps in menus, or return to previous menu. The button is also used to exit the fault cade display image.
6. Down arrow- to browse down through menu and submenu items in menu mode. If more than one display image is active the button is used to browse from the display image shown to the next display image.



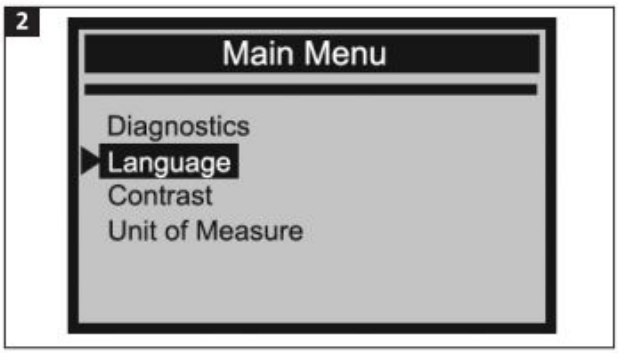
HOW TO USE LANGUAGE

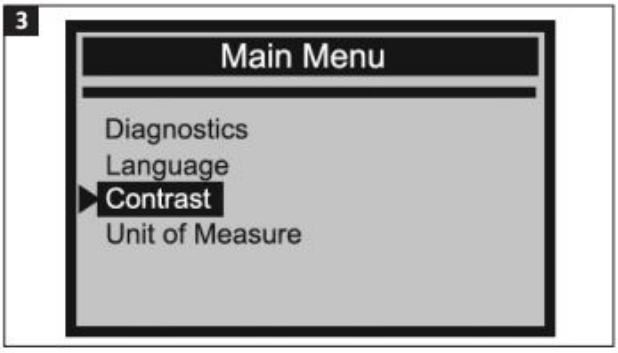
Go to the main menu, browse to Language with the arrow buttons and press the ENTER button to confirm.

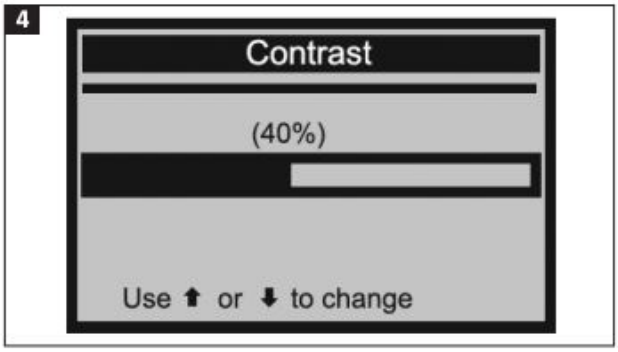
- Main Menu Diagnostics
- Language
- Contrast
- Unit of Measure

CONTRAST

1. Go to the main menu, browse to Contrast with the arrow buttons and press the ENTER button to confirm.
    - Main Menu
    - Diagnostics
    - Language Contrast
    - Unit of Measure
2. Use the arrow buttons to increase or decrease the contrast in the Contrast menu.
3. Press the ENTER button to save the setting and return to the previous menu.







MEASUREMENT UNIT

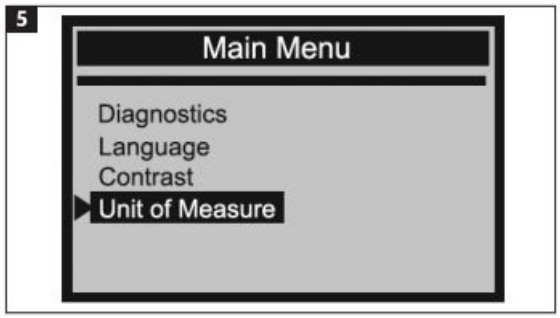
Go to main menu, browse to Unit of Measure with the arrow buttons and press the ENTER button to confirm.

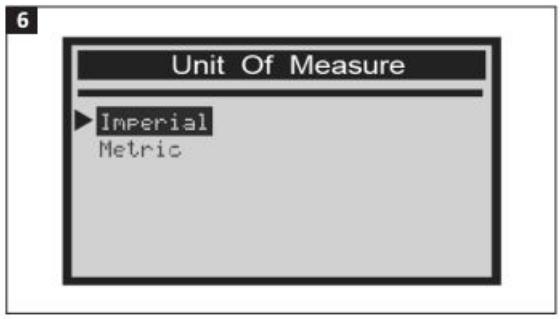
- Main Menu
- Diagnostics
- Language
- Contrast
- Unit of Measure

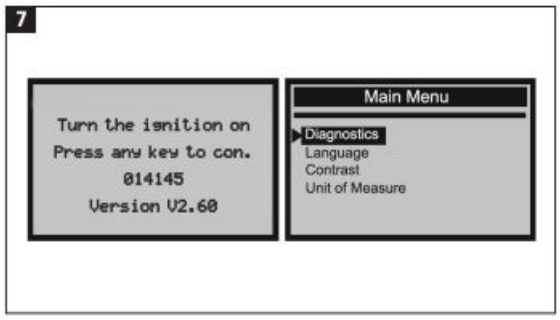
Switch between SI units and imperial units with the respective arrow.

- Unit of Measure
- English (imperial)
- Metric (SI)

Press the ENTER button to save the setting and return to previous menu.







OBD II DIAGNOSIS

NOTE: The engine and ignition must be switched off when connecting or disconnecting the test equipment.

1. Switch off the ignition.
2. Localize the 76-pin diagnostics connector (DLC).
3. Connect the test cable to the diagnostics connector.
4. Switch on the ignition.
5. Press the ENTER button to go back to the main menu. Browse to Diagnostics with the arrow buttons.
6. Press the ENTER button to confirm.

NOTE: If the message LINKING ERROR is shown on the display:

- Check that the ignition is switched on.
- Check that the diagnostics connector on the test equipment is correctly connected to the diagnostics connector in the vehicle.
- Switch off the ignition, wait about 10 seconds and then switch it on and repeat from step 5 above.

READING FAULT CODES

- Stored fault codes are also called permanent fault codes. These fault codes turn on the fault status light (MIL)

when a fault affects emissions.

- Inactive fault codes, also called mature fault codes or continuous fault codes, are generated by faults detected by the control unit during the present or previous cycle, but which are still not considered to be serious. Pending fault codes do not turn on the fault status light and are not stored in the memory.
    - Diagnostic Menu
    - Read Codes
    - Erase Codes
    - Live Data
    - View Freeze Frame
    - 1/M Readiness
    - Vehicle Info.

ERASURE OF FAULT CODES

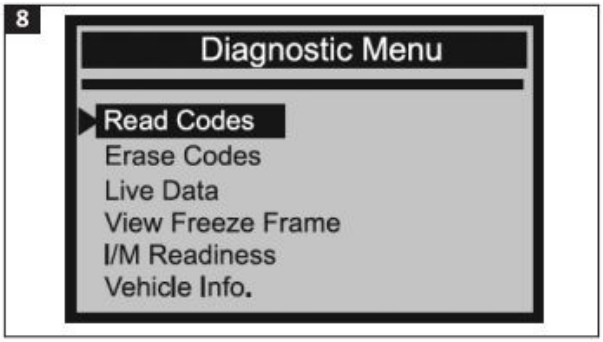
NOTE: The engine and ignition must be switched off when doing this step. Do not start the engine.

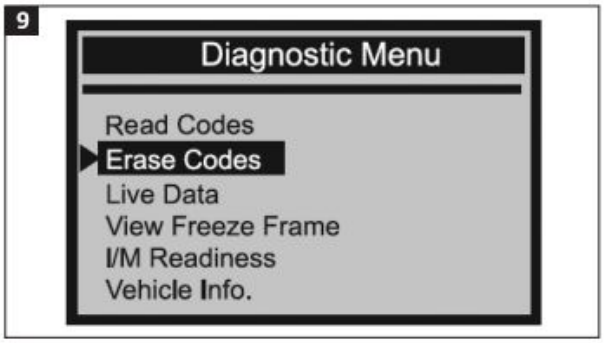
- Read and note the fault codes before doing this step.
- Switch on the ignition again when the fault codes are erased and check if any fault code is generated again. If so, troubleshoot and correct. Erase the fault codes afterwards.
    - Diagnostic Menu
    - Read Codes
    - Erase Codes
    - Live Data
    - View Freeze Frame 1/M Readiness
    - Vehicle Info.

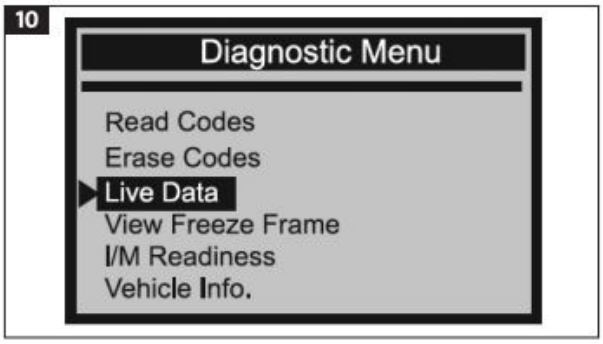
LIVE DATA

The product is a OBD II diagnostic instrument that communicates with the vehicle computer. Data received can be shown in real time with the function Live Data. Both variable values (voltage, revs, temperature, speed etc.) and system status (open/closed circuits, fuel system status etc.) from different sensors, connectors and actuators in the vehicle can be shown. Press ENTER.

- Diagnostic Menu
- Read Codes
- Erase Codes
- Live Data
- View Freeze Frame 1/M Readiness
- Vehicle Info.







FREEZE FRAME

When an emissions-related fault occurs the vehicle computer registers parameters. These parameters are called freeze frame. The parameters shown with View Freeze Frame are a freeze frame of the parameters from the instant the emissions related fault occurred. In some vehicles the freeze frame is not left in the vehicle computer memory if the fault codes have been erased. If an up or down arrow is shown on the display the arrows can be used browse to more parameters (Parameter ID, PID). Press the EXIT button to return to the diagnostic menu.

- Diagnostic Menu
- Read Codes
- Erase Codes
- Live Data
- View Freeze Frame
- 1/M Readiness
- Vehicle Info.

1/M READINESS

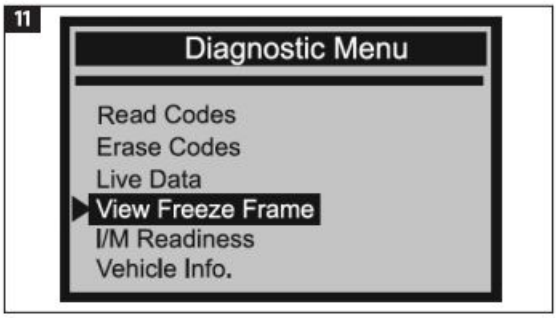
The abbreviation 1/M stands for Inspection and Maintenance and the menu 1/M Readiness indicates whether different emissions related systems in the vehicle are working correctly, so that the vehicle is ready to be inspected. The function 1/M Readiness can also be used to check that corrective maintenance and repairs have been carried out correctly, and/or to check monitoring status.

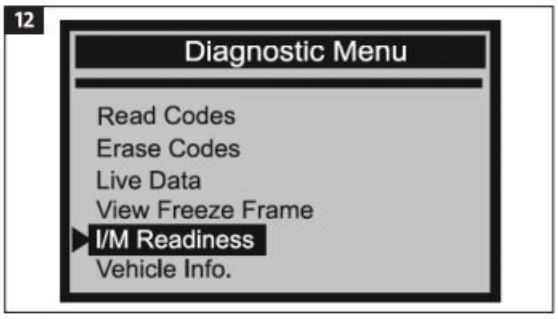
- Diagnostic Menu
- Read Codes
- Erase Codes
- Live Data
- View Freeze Frame
- 1/M Readiness
- Vehicle Info.

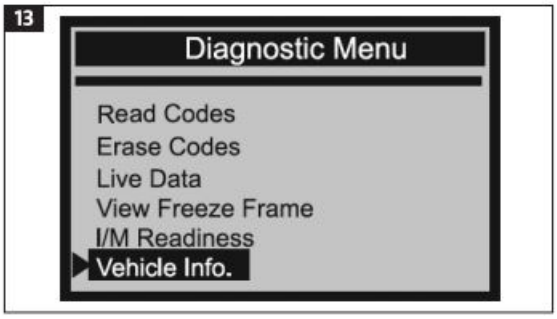
VEHICLE INFO

Mark Vehicle Info. and press ENTER to show vehicle information, for example the Vehicle Identification Number, VIN, Calibration ID, CID, and Calibration Verification Number, CVN.

- Diagnostic Menu
- Read Codes
- Erase Codes
- Live Data
- View Freeze Frame
- 1/M Readiness
- Vehicle Info.







Documents / Resources

MEEC TOOLS 014145 OBD-II-EOBD+CAN Fault Code Reader [pdf] Instruction Manual
014145, OBD-II-EOBD CAN Fault Code Reader