MEEC TOOLS 015177 OBD-II-Volvo Fault Code Reader Instruction Manual

MEEC TOOLS 015177 OBD-II-Volvo Fault Code Reader Instruction Manual

Contents

1 SAFETY INSTRUCTIONS
2 SYMBOLS
3 TECHNICAL DATA
4 DESCRIPTION
5 ABOUT THE PRODUCT
6 ABOUT FAULT CODES
7 USE
8 SUPPORT AND FUNCTIONS
9 FUNCTIONAL DESCRIPTION
10 NOTE
11 SYSTEM SCAN
12 MANUAL SELECT
13 SPECIAL FUNCTIONS
14 OBDII SYSTEM
15 ERASURE OF FAULT CODES
16 ERASURE OF FAULT CODES
17 I/M READINESS
18 DATA STREAM
19 VEHICLE INFORMATION
20 SETTINGS
21 Instructions
22 UNIT OF MEASURE
23 BACKGROUND COLOUR
24 FEEDBACK OF TEST RESULT
25 DEVICE INFORMATION
26 UPPDATING
27 Documents / Resources
27.1 References
28 Related Posts

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

TECHNICAL DATA

- **Display:** (2.4″) 320 x 240 px
- **Backlight:** Yes
- **Adjustable contrast:** Yes
- **Ambient temperature, in use:** 0 to 60°C
- **Ambient temperature, storage:** –20 to 70°C
- **Power supply:** 8 – 18 V
- **Size:** mm

DESCRIPTION

1. Backlit display
2. Up arrow button to browse up
3. Left arrow button to browse to left
4. Button to acknowledge selection/step
5. Right arrow button to browse to right
6. Down arrow – to browse down
7. Button to cancel selection/step, or to step back in the menus

FIG. 1

ABOUT THE PRODUCT

Fault code reader for Volvo models. A useful diagnostic tool with support for on-board diagnostics 2 (OBD-II). Reads vehicle information, resets fault codes and has smart diagnostic tools and special functions to turn off warning indicators for oil pressure, parking brake (EPB), battery (BMS) and electronic throttle control (ETC). Supplied in protective case with carry strap.

ABOUT FAULT CODES

The OBD II system stores fault codes (Diagnostic Trouble Codes, DTC) 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.

USE

CONNECTION

1. Activate ignition.
2. Localise the 16-pin diagnostics connector (DLC).
3. Connect the fault code reader.

SUPPORT AND FUNCTIONS

- The product supports the protocols KWP, CAN and UDS.
- The product supports all OBDII/EOBD protocols: VPW, PWM, ISO, KWP 2000 and CAN.
- The product supports the following Volvo models:

Model	Year
850	1992 – 1997
960	1991 – 1997
C30	2007 – 2013
S40	1996 – 2012
V40	1996 – 2004
V40	2013 – 2018
XC40	2018 – 2019
V50	2004 – 2012
S60	2001 – 2019
S60L	2019 –
V60	2011 –
XC60	2009 – 2019
C70 Cabriolet	1998 – 2005
C70 Coupé	1998 – 2002
C70	2006 – 2013
S70	1997 – 2000
V70	1997 – 2016
V70 XC/XC70	1997 – 2007
V70 XC/XC70	2001 – 2007
XC70	2008 – 2016
S80	1999 – 2016
S90	1997 – 1998
S90	2017 – 2019
S90L	2018 – 2019
V90	1997 – 1998
V90	2017 – 2019
V90 Cross Country	2017 – 2019
XC90	2003 – 2019

FUNCTIONAL DESCRIPTION

Vehicle ID

Start image

FIG. 2

1. Press the OK button on the main menu For Volvo.
   FIG. 3
2. Press Identify the Vehicle. Select Menu

- Identify the Vehicle
- Manual Select

FIG. 4

The following display image is shown.]

FIG. 5

Press System Scan. The following display images are shown.

FIG. 6

NOTE

The option System Scan checks faulty systems and shows the number of faults. The option Manual Select checks all supported systems.

SYSTEM SCAN

1. Select System Scan and mark ECM “Engine Control Module”. The following display image is shown. **FIG. 7**
2. Select Version Information. The following display image is shown. **FIG. 8**
3. Select Read Fault Codes. The following display image is shown. **FIG. 9**
4. Select Erase Fault Codes and press the OK button to confirm the question “Erase fault codes. Are you sure?” The following information is shown on the display ” Fault codes erased. Wait 10 seconds. Switch off the ignition and switch on again. Read fault codes to verify”. **FIG. 10**
5. Select Read Datastream and press the OK button. Select View all Items and press the OK button. **FIG. 11**
6. Select View all Items and press the OK button. The following display image is shown. **FIG. 12**
7. Select Select Items and press the OK button. **FIG. 13**
8. The following display image is shown. **FIG. 14**

NOTE:
The option Read Datastream is only available for the engine, transmission, anti-lock brake system (ABS), central electronic module (CEM) and airbags.

MANUAL SELECT

Select Manual Select. All supported systems are shown on the display. Select the system to be tested. Select year of manufacture for the vehicle and press the OK button to go to the selected menu.

FIG. 15

On this display there are the options System Scan, Manual Select and Special Functions.

- A system scan of the vehicle can be run with the System Scan option.
- With the option Manual Select, you choose which system to scan.
- The option Special Functions shows which special functions the product supports for the vehicle. **FIG. 16**

SPECIAL FUNCTIONS

Select Oil Reset. Special functions include resetting after an oil change and BMS, EPB and ETC resetting. **FIG. 17**

Example

The following is an example of resetting after an oil change and ETC resetting.

Oil Reset

Select Oil Reset. Follow the steps on the display images.

- Resetting the Service Reminder
- Reset the SRI for CEM
- Reset the SRI for DIM
- Ignition On
- The SRL (Service Reminder Lamp) Resetting Finished

FIG. 18

ETC reset

Select ETC reset. The conditions below must be met to match the throttle unit and accelerator pedal

- Ignition on, engine not started.
- No fault codes in the engine control unit.
- All power consumers switched off.
- Coolant temperature higher than 85°C.
- Accelerator pedal fully released. **FIG. 19**

Press Adaption Of The Throttle Unit. Follow the steps on the display images. Confirm with OK or cancel with ESC.

FIG. 20

- Ignition on
- Check if any fault codes (diagnostic trouble codes) are stored. o Diagnostic Trouble Codes must be stored.

FIG. 22

- **NOTE:** When all the basic conditions are met the ignition must be switched on for at least 30 seconds before the adaptation can start. Adaptation takes about 10 seconds.

FIG. 23

Adaptation

- Ignition off
- Ignition on
- Parameter reading
- Check that the following conditions for adaptation of the throttle unit are met

FIG. 24

Adaptation of the throttle unit is met.

1. Engine switched off and ignition on.
2. Battery voltage higher than 10 V.
3. Accelerator pedal fully released.
4. Vehicle stationary

FIG. 25

(no vehicle speed signal)

Engine coolant temperature (ECT) from 5 to 100°C.
Intake air temperature (IAT) higher than 5°C

FIG. 26

Battery voltage: 0 V
Intake air temperature: 27°C
Coolant temperature: 48°C
Adaptation of the throttle unit: not OK

FIG. 27

- Adaptation of the throttle unit in progress: yes Press ESC to exit the function.
  FIG. 28
- Adaptation of the throttle unit: OK
- Adaptation of the throttle unit in progress: no **FIG. 29**

OBDII SYSTEM

Reading of fault codes

1. Use the up and down button to mark Read Codes in the diagnostic menu and press OK to confirm. **FIG. 30**

2. The fault codes and their significance are shown in the display. Generic Current O2 sensor circuit low voltage bank 1, sensor 3

ERASURE OF FAULT CODES

1. Use the up and down button to mark [Erase fault codes] in the diagnostic menu and press OK to confirm. **FIG. 32**
2. A warning message with request for confirmation is shown. Press OK to confirm or ESC to cancel. **FIG. 33**
3. Switch on the ignition, but do not start engine, and press the OK utton to continue.
4. Emission related fault codes have been erased. **FIG. 34**

ERASURE OF FAULT CODES

1. Use the up and down button to mark [Erase fault codes] in the diagnostic menu and press OK to confirm. **FIG. 32**
2. A warning message with request for confirmation is shown. Press OK to confirm or ESC to cancel. **FIG. 33**
3. Switch on the ignition, but do not start engine, and press the OK button to continue.
4. Emission related fault codes have been erased. **FIG. 34**

I/M READINESS

Use the up and down button to mark I/M Readiness in the diagnostic menu and press OK to confirm

- Read Codes
- Erase Codes
- I/M Readiness
- Data Stream
- Vehicle Information

FIG. 35

DATA STREAM

Use the up and down button to mark Data Stream in the diagnostic menu and press OK. **FIG. 36**

- View All Items
- Select Items

FIG. 37

- Fuel system 1 status
- Fuel system 2 status
- Calculated load value

- Engine coolant temperature
- Short term fuel trim, bank 1 **FIG. 38**

VEHICLE INFORMATION

Mark the item Vehicle Information and press OK to show vehicle information, for example the Vehicle Identification Number, VIN, Calibration ID, CID, and Calibration Verification Number, CVN. **FIG. 39**

SETTINGS

Language

Select the item Language. Choose between English, French, German, Spanish, Russian, Portuguese, Swedish, Finnish, Norwegian, Danish and Italian for the user interface.

- Language
- Instructions
- Unit of measure
- Background colour
- Feedback of test result
- Device information **FIG. 40**

Instructions

Select item Instructions

- Language
- Instructions
- Unit of measure
- Background colour
- Feedback of test result
- Device information

FIG. 41

UNIT OF MEASURE

Select the item Unit of Measure. Select unit Metric or Imperial.

- Language
- Instructions
- Unit of measure
- Background colour
- Feedback of test result
- Device information

FIG. 42

BACKGROUND COLOUR

Select the item Skin Style. Choose between Sky Gray or Gem Blue in the next view.

- Language
- Instructions
- Unit of measure
- **Background colour**
- Feedback of test result
- Device information

FIG. 43

FEEDBACK OF TEST RESULT

1. In the case of impossible test results or other problems using the product the test results can be sent to the manufacturer with the feedback function. Select the item Feedback The Test Result. The following is shown on the display:

- Automatic recording is ready, perform the related functions that require feedback.
- After the execution, disconnect the car, connect to the computer via USB.

FIG. 44

Example

Fault when registering change of battery: Mark the option Registry Battery Change and register the battery change again (this step is very important)

NOTE

The product must be connected to the vehicle for the above step

Disconnect the product from the vehicle when the battery change is registered.
Connect the product to a computer with a USB cable, transfer the data and create a feedback file (an upgrade file must first be downloaded from the AUTOPHIX website to the computer). **FIG. 45**

Select item Update.exe. The following display image is shown

FIG. 46

Click on Feedback

FIG. 47

Send the file feedback. bin to **support@autophlx.com**

DEVICE INFORMATION

Select the item Device Information. The following display image is shown.

FIG. 48

UPPDATING

1. Download the updating software at www. autophlx.com.
2. Connect the p **FIG. 49**

   FIG. 49
3. The updating software is only supported by Windows 7, 8 and 10. Windows 8 and 10 can run the updating software directly, but a drive routine must be installed for Windows 7. Follow the instructions
4. Click on the file driver.
5. Click on install driver.bat to install the drive routine.
6. Click on Update.exe. **FIG. 50**

Documents / Resources

	**MEEC TOOLS 015177 OBD-II-Volvo Fault Code Reader** [pdf] Instruction Manual 015177, OBD-II-Volvo Fault Code Reader, Fault Code Reader, OBD-II-Volvo Code Reader, Code Reader, Reader

References

- **Jula â€“ products for home and garden**