

# OBDMATE

## User's Manual



# 1. Safety Precautions and Warnings

**To prevent personal injury or damage to vehicles and/or the scan tool, read this instruction manual first and observe the following safety precautions at a minimum whenever working on a vehicle:**

- Always perform automotive testing in a safe environment.
- Do not attempt to operate or observe the tool while driving a vehicle. Operating or observing the tool will cause driver distraction and could cause a fatal accident.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands , tools, test equipment, etc. away from all moving or hot engine parts.
- Operate the vehicle in a well ventilated work area: Exhaust gases are Poisonous.
- Put blocks in front of the drive wheel s and never leave the vehicle unattended while running tests.
- Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs . These components create hazardous voltages when the engine is running.
- Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
- Keep a fire extinguisher suitable for gasoline/chemical/electrical fires nearby.
- Don't connect or disconnect any test equipment while the ignition is on or the engine is running.
- Keep the scan tool dry, clean, free from oil/water or grease. Use a mild detergent on a clean cloth to clean the outside of the scan tool, when Necessary.

## **2. General Information**

### **2.1 On-Board Diagnostics (OBD) II**

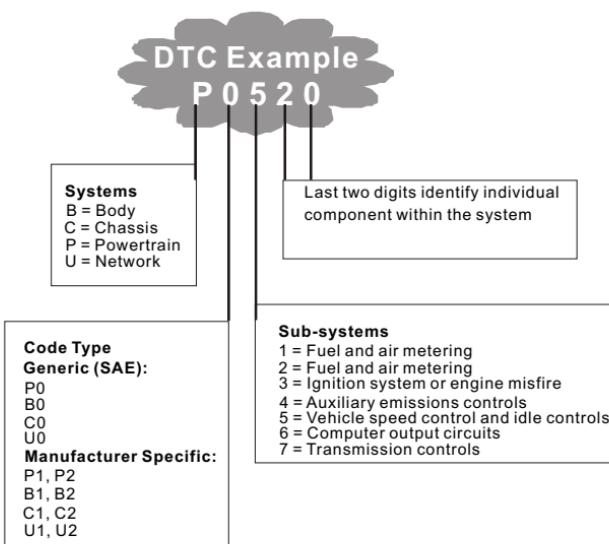
The first generation of On-Board Diagnostics (called OBD I) was developed by the California Air Resources Board (CARB) and implemented in 1988 to monitor some of the emission control components on vehicles. As technology evolved and the desire to improve the On-Board Diagnostic system increased, a new generation of On-Board Diagnostic system was developed. This second generation of On-Board Diagnostic regulations is called "OBD II".

The OBD II system is designed to monitor emission control systems and key engine components by performing either continuous or periodic tests of specific components and vehicle conditions. When a problem is detected, the OBD II system turns on a warning lamp (MIL) on the vehicle instrument panel to alert the driver typically by the phrase "Check Engine" or "Service Engine Soon". The system will also store important information about the detected malfunction so that a technician can accurately find and fix the problem. Here below follow three pieces of such valuable Information:

- 1) Whether the Malfunction Indicator Light (MIL) is commanded 'on' or 'Off';**
- 2) Which, if any, Diagnostic Trouble Codes (DTCs) are stored;**
- 3) Readiness Monitor status.**

### **2.2 Diagnostic Trouble Codes (DTCs)**

OBD II Diagnostic Trouble Codes are codes that are stored by the on-board computer diagnostic system in response to a problem found in the vehicle. These codes identify a particular problem area and are intended to provide you with a guide as to where a fault might be occurring within a vehicle. OBD II Diagnostic Trouble Codes consist of a five-digit alphanumeric code. The first character, a letter, identifies which control system sets the code. The other four characters, all numbers, provide additional information on where the DTC originated and the operating conditions that caused it to be set. Below is an example to illustrate the structure of the digits:

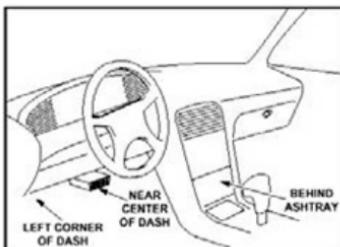


**Figure 1-2: Explanation of a diagnostic trouble code.**

## 2.3 Location of the Data Link Connector (DLC)

The DLC (Data Link Connector or Diagnostic Link Connector) is the standardized 16-cavity connector where diagnostic scan tools interface with the vehicle's on-board computer. The DLC is usually located 12 inches from the center of the instrument panel (dash), under or around the driver's side for most vehicles. If the Data Link Connector is not located under the dashboard, a label should be there revealing its location. For some Asian and European vehicles, the DLC is located behind the ashtray and the ashtray must be removed to access the connector. If the DLC cannot be found, refer to the vehicle's service manual for the location.

**Figure 1-3: The DLC connector (left) can be found in the area of the car interior seen at right (black arrow).**



## **2.4 OBD II Readiness Monitors**

Readiness Monitors are indicators used to find out if all of the emissions components have been evaluated by the OBD II system. They are running periodic tests on specific systems and components to ensure that they are performing within allowable limits.

currently, there are eleven OBD II Readiness Monitors (or I/M Monitors) defined by the U.S. Environmental Protection Agency (EPA). Not all monitors are supported by all vehicles and the exact number of monitors in any vehicle depends on the motor vehicle manufacturer's emissions control strategy.

**Continuous Monitors** – Some of the vehicle components or systems are continuously tested by the vehicle's OBD II system, while others are tested only under specific vehicle operating conditions. The continuously monitored components listed below are always ready:

- 1. Misfire**
- 2. Fuel System**
- 3. Comprehensive Components (CCM)**

Once the vehicle is running, the OBD II system is continuously checking the above components, monitoring key engine sensors, watching for engine misfire, and monitoring fuel demands.

**Non-Continuous Monitors** – Unlike the continuous monitors, many emissions and engine system components require the vehicle to be operated under specific conditions before the monitor is ready. These monitors are termed non-continuous monitors and are listed below:

- 1. EGR System - exhaust Gas Recirculation for reducing greenhouse gasses.**
- 2. O2 Sensors - monitor and adjust air/fuel mixture.**
- 3. Catalyst - reduces exhaust emissions.**
- 4. Evaporative System - monitors the integrity of the fuel tank system.**
- 5. O2 Sensor Heater - brings O2 sensor to correct operating temperature.**
- 6. Secondary air - reduces exhaust emissions.**
- 7. Heated Catalyst - brings catalyst to correct operating temperature.**
- 8. A/C system - monitors system for freon leaks.**

## 2.5 OBD II Monitor Readiness Status

OBD II systems must indicate whether or not the vehicle's PCM's monitoring has completed testing on each emission component. Components that have been OBD II tested will be reported as "OK". The purpose of recording readiness status is to allow inspectors to determine if the vehicle's OBDII system has tested all the emissions systems. This is handy to know before bringing vehicle to a state emissions testing facility.

The powertrain control module (PCM) sets a monitor to "OK" after an appropriate drive cycle has been performed. The drive cycle that enables a Monitor and sets readiness codes to "OK" varies for each individual monitor. Once a monitor is set as "OK", it will remain in this state. A number of factors, including erasing of diagnostic trouble codes (DTCs) with a code reader or a disconnected battery, can result in Readiness Monitors being set to "INC" (incomplete). Since the three continuous monitors are constantly evaluating, they will be reported as "OK" all of the time. As long as there are no DTCs stored in memory, the vehicle is running in accordance with the OBD II guidelines. If testing of a particular supports non-continuous monitor has not been completed or not tested, the monitor status will be reported as "INC" (incomplete).

In order for the OBD monitor system to become ready, the vehicle should be driven under a variety of normal operating conditions. These operating conditions may include a mix of highway driving and stop and go, city type driving, and at least one overnight-off period. For specific information on getting your vehicle's OBD monitor system ready, please consult your vehicle owner's manual.

## 2.6 OBD II Definitions

**Powertrain Control Module (PCM)** – the OBD II terminology for the on-board computer that controls the engine and the drive train.

**Malfunction Indicator Light (MIL)** – Malfunction Indicator Light (Service Engine Soon, Check Engine) is a term used for the light on the instrument panel. It is to alert the driver and/or the repair technician that there is a problem with one or more of vehicle's systems and may cause emissions to exceed federal standards. If the MIL illuminates with a steady light, it indicates that a problem has been detected and the vehicle should be serviced as soon as possible. Under certain conditions, the dashboard light will blink or flash. This indicates a severe problem and flashing is

intended to discourage vehicle operation. The vehicle onboard diagnostic system can not turn the MIL off until necessary repairs are completed or the condition no longer exists.

**DTC** – Diagnostic Trouble Codes (DTC) these identify which section of the emission control system has malfunctioned.

**Enabling Criteria** – Also termed Enabling Conditions. They are the vehicle-specific events of conditions that must occur within the engine before the various monitors will set, or run. Some monitors require the vehicle to follow a prescribed “drive cycle” routine as part of the enabling criteria. Drive cycles vary among vehicles and for each monitor in any particular vehicle.

**OBD II Drive Cycle** – A specific mode of vehicle operation that provides conditions required to set all the readiness monitors applicable to the vehicle to the “ready” condition. The purpose of completing an OBD II drive cycle is to force the vehicle to run its onboard diagnostics. Some form of a drive cycle needs to be performed after DTCs have been erased from the PCM’s memory or after the battery has been disconnected. Running through a vehicle’s complete drive cycle will “set” the readiness monitors so that future faults can be detected. Drive cycles vary depending on the vehicle and the monitor that needs to be reset. For vehicle specific drive cycle, consult the vehicle’s Owner’s Manual.

**Freeze Frame Data** – When an emissions related fault occurs, the OBD II system not only sets a code, but also records a snapshot of the vehicle operating parameters to help in identifying the problem. This set of values is referred to as Freeze Frame Date and may include important engine parameters such as engine RPM, vehicle speed, air flow, engine load, fuel pressure, fuel trim value, engine coolant temperature, ignition timing advance, or closed loop status.

### 3. Using the Scan Tool

#### 3.1 Tool Description - OBDMATE



1. **LCD DISPLAY** – Indicates test results. 2.8" TFT 262K true color, 320\*240 QVGA LCD display
2. **ENTER BUTTON** – Confirms a selection (or action) from a menu.
3. **EXIT BUTTON** – Cancels a selection (or action) from a menu or returns to the menu. It is also used to setup system, exit DTC Lookup screen.

**4. LEFT SCROLL BUTTON** – When looking up Datastream.

If Datastream display more than one screen. Or turn page up or down when more than one page is displayed.

**5. RIGHT SCROLL BUTTON** – When looking up Datastream.

If Datastream display more than one screen. Or turn page up or down when more than one page is displayed

**6. UP SCROLL BUTTON** – Moves up through menu and submenu items in menu mode. When more than one screen of data is retrieved, moves up through the current screen to the previous screens for additional data.

**7. DOWN SCROLL BUTTON** – Moves down through menu and submenu items in menu mode. When more than one screen of data is retrieved, moves down through the current screen to next screens for additional data.

**8. HELP BUTTON** – Provides help information when pressed.

**9. OBD II CONNECTOR** – Connects the scan tool to the vehicle's Data Link Connector (DLC).

## **3.2 Specifications**

- 1) Display: 2.8" TFT 262K true color, 320\*240 QVGA LCD display
- 2) Operating Temperature: 0 to 50°C (32 to 140 F°)
- 3) Storage Temperature: -20 to 70°C (-4 to 158 F°)
- 4) External Power: 8.0 to 18.0 V power provided via vehicle battery
- 5) Dimensions:

<b>Length</b>	<b>Width</b>	<b>Height</b>
132 mm (5.21")	86 mm (3.38")	20 mm (0.8")
- 6) Weight: 0.26kg (0.57lb)

## **3.3 Accessories Included**

- 1) User's Manual -- Instructions on tool operations.

- 2) **USB cable** – Used to upgrade the scan tool.

### Updating the OBDMATE

- a. Attach the USB cable.
- b. Click on Software Update for OBDMATE and follow on-screen instructions.

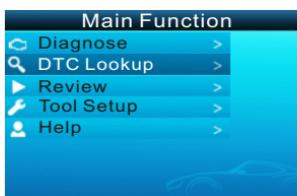
**USB update cable attached to the tool.**



### 3.4 DTC Lookup

The DTC Lookup function is used to search for definitions of Code stored in the built-in Code library.

- 1) From the **Main Menu**, use the **UP/DOWN** scroll button to select the **Code Lookup** and press the **ENTER** button.



- 2) From the **Code Lookup** menu, use the **LEFT/RIGHT** button to move to the desired character, use the **UP/DOWN** button to change the selected digit/character and press the **ENTER** button to confirm.
- 3) View the DTC definition on screen. When the DTC definition covers more than one screen, use the **LEFT/RIGHT** button to view additional information on previous/next screen(s).
- *For manufacturer specific codes, you'll need to select a vehicle make on an additional screen to look for DTC definitions.*
  - *If definition could not be found (SAE or Manufacturer Specific), the scan tool displays "DTC definition not found! Please refer to vehicle service manual!"*
- 4) To exit to the Main Menu, press the **EXIT** button.

## 3.5 Review

This function is used to review the recorded Data Streams, DTC, and Freeze Frame. Select Review in the Main Menu and press Enter and the screen will display the interface as shown below:



## 3.6 Tool /Setup

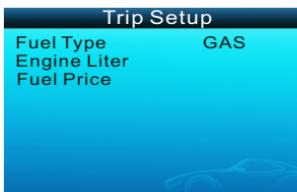
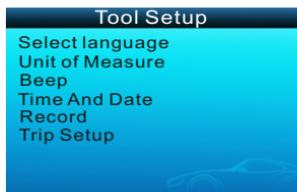
The scan tool allows you to make the following adjustments and settings:

- 1) **Select Language:** Selects the desired language.
- 2) **Unit of Measure:** Sets the unit of measure to English or Metric When Enter this item selct ,Press **ENTER** can display Last Select use **LEFT\RIGHT** Change the Unit. When sure the unit ,Press **ENTER** Button can save and exit this item selct.
- 3) **Beep Set:** Turns **ON/OFF** beep.

4) **Time And Date:** Set time and date.

5) **Record:** ON/OFF the Record.

## 6) Trip Setup



**PRESS ENTER Button FOR SELECT Fuel TYPE. USE LEFT/RIGHT  
BUTTON Select**

**NOTICE :There are GAS\LPG\HYBRID\DISESEL A\DISESEL B  
TYPE fuel for select**

**DISESELa and DISESELb do not refer to different types of diesel fuel.  
They only affect the way fuel consumption is computed and are select  
based on the way the vehicle computer reports its sensor information  
Based Most diesel vehicles use DIESEL a.**

**DO the following to determine Which your diesel vehicle uses:**

- 1:choose Diesel a
- 2:Warm up the engine and idle in neutral or park.
- 3:Note the GPH /LPH value use the throttle to raise the engine RPM to about 1500 RPM

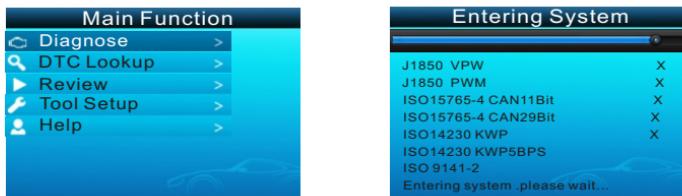
If the GPH/LPH have increases .you have a **Diesel a** vehicle.

If the GPH/LPH drop or stays the same ,you have a **Diesel b** vehicle.

## 4. OBD II Diagnostics

**CAUTION: Don't connect or disconnect any test equipment with ignition on or engine running.**

- 1) Turn the ignition off.
- 2) Locate the vehicle's 16-pin Data Link Connector (DLC).
- 3) Plug the scan tool cable connector into the vehicle's DLC.
- 4) Turn the ignition on. Engine can be off or running.
- 5) Press **ENTER** to enter **Main Menu**. Use the **UP/DOWN** scroll button to select **Diagnostics** from the menu.



- 6) Press **ENTER** to confirm.

- **If the scan tool fails to communicate with the vehicle's ECU (Engine Control Unit), a "LINKING ERROR!" message shows up on the display.**
  - Verify that the ignition is ON;
  - Check if the scan tool's OBD II connector is securely connected to the vehicle's DLC;
  - Verify that the vehicle is OBD II compliant;
  - Turn the ignition 'off' and wait for about 10 seconds. Turn the ignition back to 'on' and repeat the procedure from step 5.

### 4.1 Read codes

- **Stored codes are also known as "hard codes" or "permanent codes". These codes cause the control module to illuminate the malfunction indicator lamp (MIL) when an emission-related fault occurs.**
- **Pending Codes are also referred to as "maturing codes" or "continuous monitor codes". They indicate problems that the control module has detected during the current or last driving cycle, but are not considered**

**serious, yet. Pending Codes will not turn on the malfunction indicator lamp (MIL). If the fault does not occur within a certain number of warm-up cycles, the code clears from memory.**

- 1) Select **Diagnose** in Main Menu and press **ENTER**, the screen will display Monitor Status interface as following figure:

Monitor Status	
MIL Status	ON
DTCs in this ECU	87
Readiness Supported	8
Readiness Complete	5
Readiness Not Supported	3
Datastream Supported	66
Ignition	Spark
Protocol Type	VPW

- 2) Press **ENTER** to back to the Main Menu of Diagnostic, the screen will display as following figure :

Diagnositc Menu	
Read Codes	
Erase Codes	
I/M Readiness	
Data Stream	
Freeze Frame	
O2 Sensor Test	
On-Board Monitoring	
Evap System Test	

#### 4.2.1 Read Codes

- 1) Select **Read Codes** and press **ENTER** in Diagnostic Menu. If there are some codes, the screen will display the codes as shown below:

Read Codes	
Current DTCs	(\$03)
Pending DTCs	(\$07)
Permanent DTCs	(\$0A)

2) According to the above figure to select different item by pressing **UP** or **DOWN** and press **ENTER** to confirm.

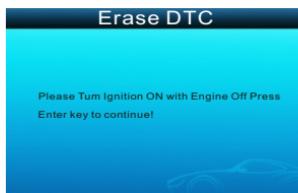
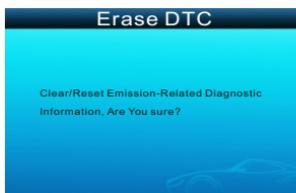


3) You can use **DOWN** key to view the next code.

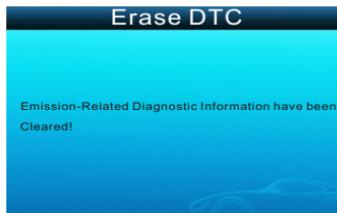
After viewing all the codes, you can press **EXIT** to return to the Diagnostic menu.

#### 4.2.2 Erase Codes

1) Select **Erase Codes**, the screen will display the interface as shown below. Press **ENTER** to erase DTC's, and the screen will display the interface as shown below:



2) According to the above figure to press **ENTER** and the screen will display the interface as shown on the next page:



**Notes:**

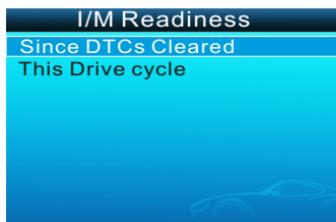
- **Before performing this function, make sure to retrieve and record the trouble codes.**
- **After clearing, you should retrieve trouble codes once more or turn ignition on And retrieve codes again. If there are still some trouble codes in the system, please troubleshoot the code using a factory diagnosis guide, then clear the code and recheck.**

#### 4.2.3 I/M Readiness

I/M refers to Inspection and Maintenance that is legislated by the Government to meet federal clean-air standards. I/M Readiness indicates whether or not the various emissions-related systems on the vehicle are operating properly and are ready for Inspection and Maintenance testing.

The purpose of the I/M Readiness Monitor Status is to indicate which of the vehicle's Monitors have run and completed their diagnosis and testing (as described in Chapter 2.5), and which ones have not yet run and completed testing and diagnosis of their designated sections of the vehicle's emissions System. The I/M Readiness Monitor Status function also can be used (after repair of a fault has been performed) to confirm that the repair has been performed correctly, and/or to check for Monitor Run Status.

Select **I/M Readiness** and press **ENTER**, the screen will display the interface as shown below:



You can use **UP DOWN** button to select and press **ENTER**, the screen will display the interface as shown below:

I/M Readiness		
Misfire monitor	N/A	
Fuel system monitor	N/A	
Comprehensive component monitor	INC	
Catalyst monitor	OK	
Heated catalyst monitor	OK	
Evaporative system monitor	N/A	
Oxygen sensor monitor	OK	
Secondary air system monitor	N/A	
Oxygen sensor heater monitor	OK	
EGR and/or VVT system monitor	INC	

You can use **LEFT or RIGHT scroll button** to view other data of vehicle. Press **EXIT** to return to Diagnostic Menu.

N/A means not available on this vehicle, INC means incomplete or not ready, OK means Completed or Monitor Ok.

#### 4.2.4 Data Stream

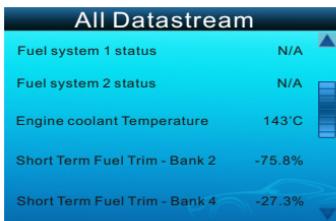
Press **UP** or **DOWN** button to select **Data Stream** in Main Menu interface and then press **ENTER** button to confirm, the screen will display the interface as shown below:



As shown in Figure select ECU and press **ENTER** button, the screen will display the interface as shown below:

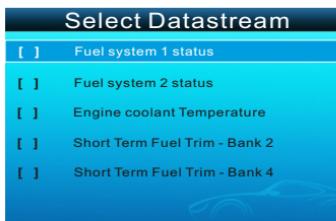


Select **View All Items** and press **ENTER** button, the screen will display the interface as shown below:



You can use **LEFT** or **RIGHT scroll button** to view other data streams. Press **EXIT** to return to Diagnostic Menu.

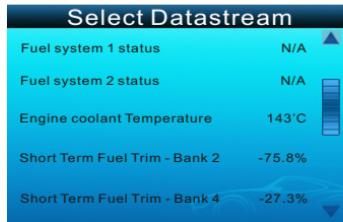
Select **select Items** in Data stream menu and press **ENTER**, the screen will display the interface as shown below:



You can use **UP** or **DOWN** button to select data stream items, and press **LEFT** or **RIGHT scroll button** to turn page, the screen will display the interface as shown on the next page:

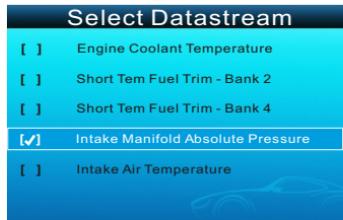


After selected items and press **ENTER**, the screen will display the interface as shown below:

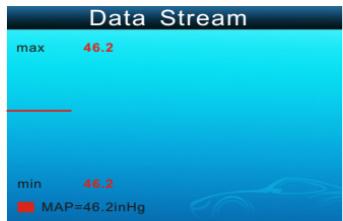


Press **EXIT** to return to Diagnostic Menu.

Select **View Graphic Items** in Data stream menu and press **ENTER**, the screen Will display the interface as shown below:



You can use **UP** or **DOWN** button to select single data stream items to view item of live data with a graph, and press **ENTER** button, the screen will display the interface as shown below:



Press **EXIT** to return to Diagnostic Menu.

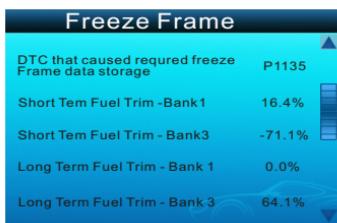
You can view all data stream items or select a certain item of live data with a graph.

## 4.2.5 View Freeze Frame

When an emission-related fault occurs, certain vehicle conditions are recorded by the on-board computer. This information is referred to as freeze frame data. Freeze Data is a snapshot of the operating conditions at the time of an emission -Related fault.

*Note: if DTCs were erased, Freeze Data may not be stored in vehicle memory depending on vehicle.*

Select **Freeze Frame** in main menu interface, the screen will display the interface as shown below:



You can use LEFT/ RIGHT button to view the data. Press EXIT to return to Diagnostic Menu.

## 4.2.6 O2 sensor test

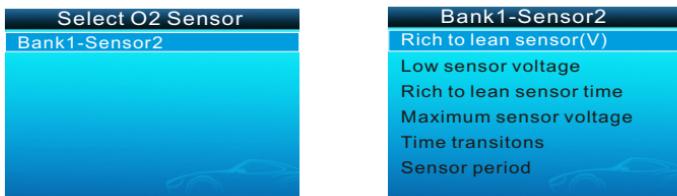
OBD II regulations set by the SAE require that relevant vehicles monitor and test the oxygen (O<sub>2</sub>) sensors to identify problems related to fuel efficiency and vehicle emissions. These tests are not on-demand tests and they are done automatically when engine operating conditions are within specified limits. These test results are saved in the on-board computer's memory.

The O<sub>2</sub> Sensor Test function allows retrieval and viewing of O<sub>2</sub> sensor monitor test results for the most recently performed tests from the vehicle's on-board computer.

**The O<sub>2</sub> Sensor Test function is not supported by vehicles which communicate using a controller area network (CAN). For O<sub>2</sub> Sensor Test results of CAN-equipped vehicles, see chapter "On-Board Mon. Test".**

Select **O2 Sensor Test** in Diagnostic menu and press **ENTER** and the Screen will display as shown below:

Press **ENTER** button, the screen will display as shown below:



#### 4.2.7 On-board monitor test

This function can be utilized to read the results of on-board diagnostic monitoring Tests for specific components/systems.

Select **On-board Monitoring** in main menu and press **ENTER** and the screen will display as shown below:



You can use **UP** or **DOWN** button to select an item and press **ENTER**, the screen will display as shown below:

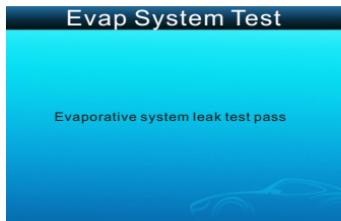
Test \$02 Data	
Component ID	\$5e
Limit Type	Max
Test Value	33733
Minimum Limit	-----
Status	Pass

Press **EXIT** to return to Diagnostic Menu.

## 4.2.8 EVAP System Test

The EVAP test function lets you initiate a leak test for the vehicle's EVAP system. The CReaderVI does not perform the leak test, but signals to vehicle's on-board Computer to initiate the test. Before using the system test function, refer To The vehicle's service repair manual to determine the procedures necessary to stop the test.

Select **EVAP System Test** and press **ENTER**, the screen will display the relative information about EVAP system. Some vehicle manufacturers do not allow External devices to control vehicle system. If the car supports this function, it will display as below:



## 4.2.9 Vehicle Info

Select [Vehicle Info] and press **ENTER**, the screen will display the information, such as VIN (Vehicle identification Number), CID (Calibration ID) and CVN (Calibration verification number), as shown below:



Press **EXIT** to return to Diagnostic Menu.

## **4.2.10 Trip Computer .**

**This Function can display Information about the current trip. The following information can be displayed:**

### ***UNIT : Metric***

1. AVerage LPH
2. Average LHK
3. Time(MIN)
4. Distance KM
5. Fuel L
6. Cost
7. Speed KPH
8. Average Speed KPH
9. Instant LPH
10. Instant LHK

### ***UNIT : English***

1. AVerage GPH
2. Average MPG
3. Time(MIN)
4. Distance miles
5. Fuel G
6. Cost
7. Speed MPH
8. Average Speed MPH
9. Instant GPH
10. Instant MPG

### **UNIT:**

#### ***Metric***

LPH-----Liter per hour

LHK-----Liter/100KM

L -----Liter

KPH-----Kilometers per hour

#### ***English***

GPH-----Gallon per hour

MPG-----Miles/Gallon

G -----Gallon

MPH-----Miles per hour

**Miles =1.609 Kilometers**

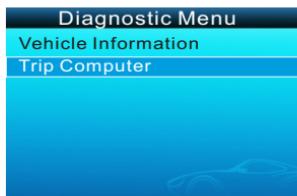
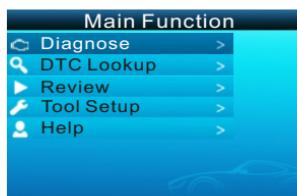
### ***WARNING:***

- ***Do not try to make any adjustment While driving.***
- ***Do not route the cable in a manner which would interfere with the operation of the vehicle controls.***
- ***When first use this function you should setup the Fuel type and Engine liter of your vehicle. (in TOOL Setup menu)***

Set Unit/ Fule type / engine liter/ fuel price In **TOOL SETUP** Menu



Select **Diagnostic** Press **ENTER BUTTON** System Succeed Select **Trip Computer** menu Press **ENTER BUTTON** show as below:



Trip Computer	
Average LPH	1.1
Average LHK	8.6
Time(Min)	30.0
Distance	56.0 Km
Fuel	4.8 L
Cost	40.0
Speed	100.0 KPH
Average Speed	112.0 KPH
Instant LPH	3.1
Instant LHK	9.2

Trip Computer	
Average GPH	0.7
Average MPG	11.0
Time(Min)	20.0
Distance	36.0 Miles
Fuel	2.7 G
Cost	21.0
Speed	100.0 MPH
Average Speed	108.0 MPH
Instant GPH	3.5
Instant MPG	9.2

When finish trip. Check the result Press **EXIT BUTTON** exit Trip computer Mode return the **Diagnostic Menu**.

## **5. Warranty and Service**

### **5.1 Limited One Year Warranty**

THIS WARRANTY IS EXPRESSLY LIMITED TO PERSONS WHO PURCHASE OBDMATE PRODUCTS FOR PURPOSES OF RESALE OR USE IN THE ORDINARY COURSE OF THE BUYER'S BUSINESS.

OBDMATE electronic product is warranted against defects in materials and workmanship for one year (12 months) from date of delivery to the user.

This warranty does not cover any part that has been abused, altered, used for a purpose other than for which it was intended, or used in a manner inconsistent with instructions regarding use. The exclusive remedy for any automotive meter found to be defective is repair or replacement, and OBDMATE shall not be liable for any consequential or incidental damages.

### **5.2 Service Procedures**

If you have any questions, please contact your local store distributor.

If it becomes necessary to return the scan tool for repair, contact your local distributor for more information.

