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## **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 (ARB) 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 of "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 consists 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 set. Here below is an example to illustrate the structure of the digits:







or “Complete”, it will remain in this state. A number of factors, including erasing of diagnostic trouble codes (DTCs) with a scan tool or a disconnected battery, can result in Readiness Monitors being set to “Not Ready”. Since the three continuous monitors are constantly evaluating, they will be reported as “Ready” all of the time. If testing of a particular supported non-continuous monitor has not been completed, the monitor status will be reported as “Not Complete” or “Not Ready.”

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

**Power-train Control Module (PCM)** -- OBD II terminology for the on-board computer that controls engine and 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) that identify which section of the emission control system has malfunctioned.

**Enabling Criteria** -- Also termed Enabling Conditions. They are the vehicle-specific events or 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 Data 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.

## 2.7 OBD II Modes of Operation

Here is a basic introduction to the OBD II communication protocol.

**Mode byte:** The first byte in the stream is the mode number. There are 10 modes for diagnostic requests. The first byte in the response data bytes is this same number plus 64. For example, a mode 1 request would have the first data byte = 1, and the response would have the first data byte = 65. Here is a brief description of the modes:

**Mode \$01 – Identifies the Powertrain information and shows current data available to the scan tool.** This data includes: DTC set, status of on-board tests, and vehicle data such as engine RPM, temperatures, ignition advance, speed, air flow rates, and closed loop status for fuel system.















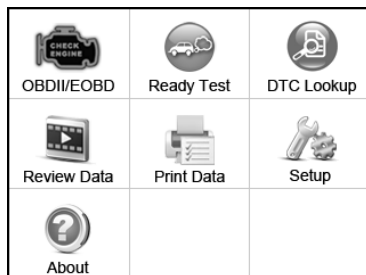


Figure 3.1

- From **DTC Lookup** screen, use the **LEFT/RIGHT** button to move to the desired character, use the **UP/DOWN** button to change selected digit/character and press the **OK** button to confirm. (Figure 3.2)

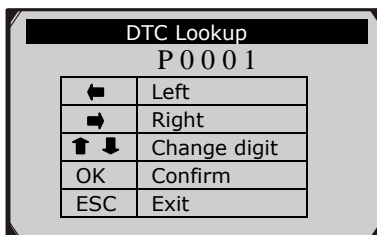


Figure 3.2

- View the DTC definition on screen. When DTC definition covers more than one screen, use the **LEFT/RIGHT** button or **UP/DOWN** button to view additional information on previous/next screens.
  - For manufacturer specific codes, you 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 “**Please refer to vehicle service manual!**”
  - For code breaker information, you need to press the “**?**” **Help** button.





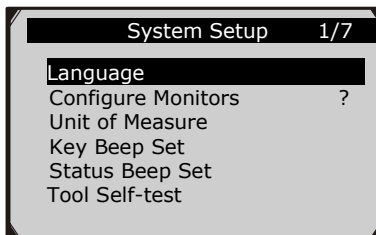


Figure 3.3

## Language Setup

- *English is the default language.*
- 1) From **System Setup** screen, use the **UP/DOWN** scroll button to select **Language**, and press the **OK** button.
  - 2) Use the **UP/DOWN** scroll button to select the desired language and press the **OK** button to save your selection and return to previous screen. We provide three language options currently.

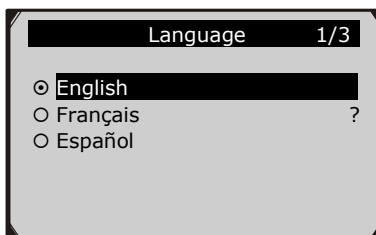


Figure 3.4

## Configure Monitors

From **System Setup** screen, use the **UP/DOWN** scroll button to select **Configure Monitors**, and press the **OK** button.

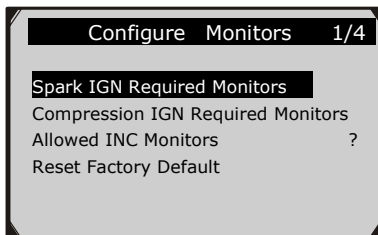


Figure 3.5

In this menu, you could configure the monitors required to test spark ignition and compression ignition, the number of monitors to pass diagnosis, and restore the default settings.

### 1) Spark IGN Required Monitors

From **Configure Monitors** screen, use the **UP/DOWN** scroll button to select **Spark IGN Required Monitors**, and press the **OK** button.

The monitors for spark ignition engines show as below:

Spark IGN Required Monitors			
✓	MIS	✓	EVAP
✓	FUEL	✓	AIR
✓	CCM	✓	O2S
✓	CAT	✓	HTR
✓	HCAT	✓	EGR

### 2) Compression IGN Required Monitors

From **Configure Monitors** screen, use the **UP/DOWN** scroll button to select **Compression IGN Required Monitors**, and press the **OK** button.

The monitors for compression ignition engines show as below:



- 2) From **Unit of Measure** screen, use the **UP/DOWN** scroll button to select the desired unit of measurement. (Figure 3.6 )

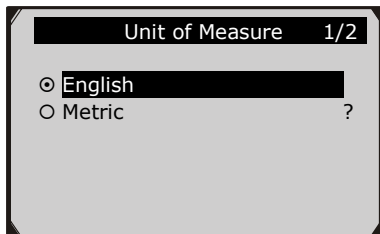


Figure 3.6

- 3) Press the **OK** button to save your selection and return to previous menu.

### Key Beep Set

This function allows you to turn on/off the build-in speaker for key pressing.

- *The default setting is Beep On.*

- 1) From **System Setup** screen, use the **UP/DOWN** scroll button to select **Key Beep Set** and press the **OK** button.
- 2) From **Key Beep Set** menu, use the **UP/DOWN** scroll button to select **Beep ON** or **Beep OFF** to turn on/off the beep.

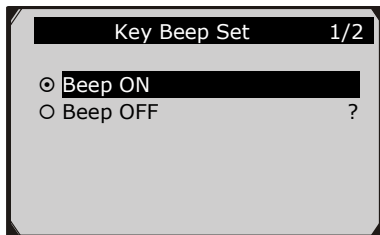


Figure 3.7

- 3) Press the **OK** button to save your selection and return to previous menu.

## **Status Beep Set**

- *The default setting is Beep On.*

This function allows you to turn on/off the build-in speaker for the LEDs in diagnostic testing. Different audio tone corresponds to different LED lamp. This function is invaluable when working in bright areas where LED illumination alone is not sufficient.

- 1) From **System Setup** screen, use the **UP/DOWN** scroll button to select **Status Beep Set** and press the **OK** button.
- 2) From **Status Beep Set** menu, use the **UP/DOWN** scroll button to select **Beep ON** or **Beep OFF** to turn on/off the beep.

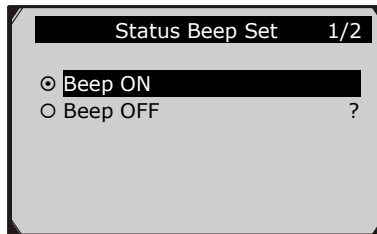


Figure 3.8

- 3) Press the **OK** button to save your selection and return to previous menu.

## **Tool Self-test**

The Tool Self-test function checks if the display, LED lamps and keyboard are working properly.

### **A. Display test**













- ✓ Turn the ignition off and wait for about 10 seconds. Turn the ignition back to on and continue the testing.

## **Scan tool doesn't power up**

If the scan tool won't power up or operates incorrectly in any other way, you need to do the following to check up:

- ✓ Check if the scan tool's OBD II connector is securely connected to the vehicle's DLC;
- ✓ Check if the DLC pins are bent or broken. Clean the DLC pins if necessary.
- ✓ Check vehicle battery to make sure it is still good with at least 8.0 volts.

## **LED lamps not working**

If you turn on the scan tool and perform the I/M Readiness test but the LED lamps are not working, there may be several possible causes, including bad connection and ignition off. In this case, follow these steps to check the scan tool.

- Make sure the OBD II cable is connected to the DLC securely.
- Verify the ignition key is in the KOER position.
- Run the **LED Test** in the **System Setup** menu. (*see 3.8 System Setup*). If the scan tool did not pass this test, there is a problem with the LED lamp. Please contact Autel Tech Support or your local selling agent.

## 4. Review Data

The **Review Data** function allows viewing of data from last test recorded by the scan tool.

- 1) Use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Review Data** from **Main Screen**, and press the **OK** button. (Figure 3.1)
- 2) Use the **UP/DOWN** scroll button to select the desired item from **Review Data** menu, and press the **OK** button. (Figure 4.1 )

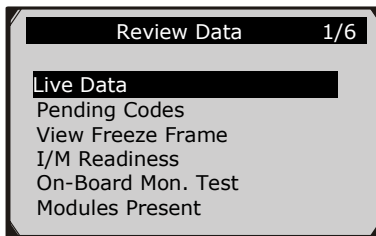


Figure 4.1

- If no data from previously tested vehicle is recorded, only **Modules Present** data containing module ID and protocol type can be reviewed. (Figure 4.2)

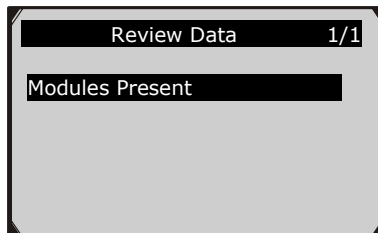


Figure 4.2

- Diagnostics results can be reviewed from this list only when any trouble code is detected in previous tests.







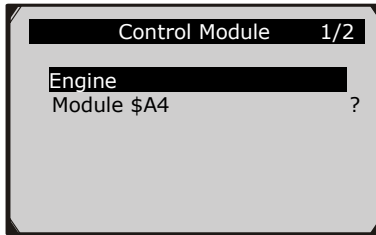


Figure 5.3

- Use the **UP/DOWN** scroll button to select a module and press the **OK** button.

## 5.1 Reading Codes

- ◆ *Reading Codes can be done with the key on engine off (KOEO) or with the key on engine running (KOER).*
- ◆ *Stored Codes are also known as “hard codes”, which are fault codes, or trouble codes that have been stored in the vehicle computer memory because the faults have reoccurred for more than a specified amount of key-cycles. These codes will cause the control module to illuminate the malfunction indicator light (MIL) when 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.*
- ◆ *Permanent Codes are DTCs that are "confirmed" and are retained in the non-volatile memory of the computer until the appropriate monitor for each DTC has determined that the malfunction is no longer present and is not commanding the MIL on. Permanent DTC shall be stored in non-volatile memory and may not be erased by any diagnostic services or by disconnecting power to ECU.*



- 1) Use **UP/DOWN** scroll button to select **Read Codes** from **Diagnostic Menu** and press **OK** button.

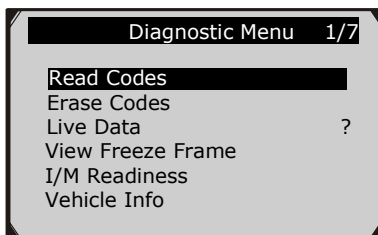


Figure 5.4

- 2) Use the **UP/DOWN** scroll button to select **Stored Codes** or **Pending Codes** from the **Read Codes** menu and press the **OK** button.

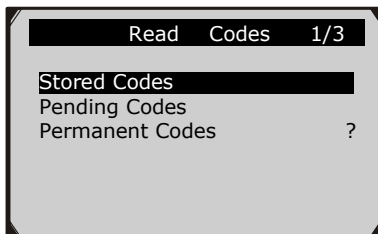


Figure 5.5

- If there is not any Diagnostic Trouble Code, the display indicates "**No (pending) codes are stored in the module!**" Wait a few seconds or press any key to return to previous screen.

***NOTE: Permanent Codes function is available for merely vehicles supporting the CAN protocols.***

- 3) View DTCs and their definitions on screen.

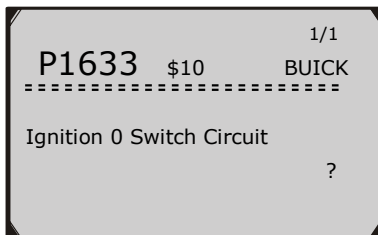


Figure 5.6

- 4) If more than one DTC is found, use the **LEFT/RIGHT** scroll button to check all the codes.
  - If retrieved DTCs contain any manufacturer specific or enhanced codes, a “**Manufacturer specific codes are found! Press any key to select vehicle make!**” message comes up prompting you to select vehicle manufacturer to view DTC definitions. Use **UP/DOWN** scroll button to select manufacturer and then press **OK** button to confirm.

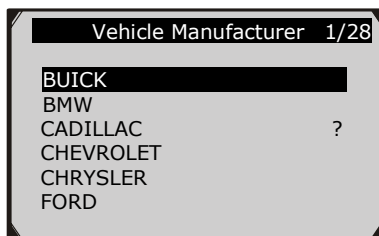


Figure 5.7

- If the manufacturer of your vehicle is not listed, use the **UP/DOWN** scroll button to select **Other** and press the **OK** button.

## 5.2 Erasing Codes

**CAUTION:** Erasing the Diagnostic Trouble Codes may allow the scan tool to delete not only the codes from the vehicle’s on-board computer, but also “Freeze Frame” data and manufacturer specific

*enhanced data. Further, the I/M Readiness Monitor Status for all vehicle monitors is reset to Not Ready or Not Complete status. Do not erase the codes before the system has been checked completely by a technician.*

*NOTE: Erasing codes does not mean that trouble codes in ECU have been eliminated completely. As long as there is fault with the vehicle, the trouble codes keeps on presenting.*

◆ *This function is performed with key on engine off (KOEO). Do not start the engine.*

- 1) Use the **UP/DOWN** scroll buttons to select **Erase Codes** from **Diagnostics Menu** and press the **OK** button. (Figure 5.4)
- 2) A warning message comes up asking for your confirmation.

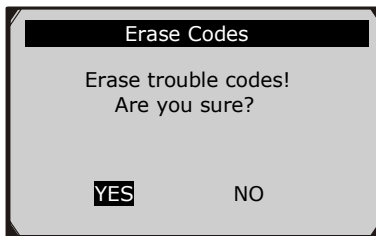


Figure 5.8

- If you do not want to proceed with erasing codes, press **ESC** button or use **LEFT/RIGHT** scroll button to select **NO** to exit. A message of **“Command Cancelled!”** show ups. Wait a few seconds or press any key to return to **Diagnostic Menu**.
- 3) Press the **OK** button to confirm.
    - If the codes are cleared successfully, an **“Erase Done!”** confirmation message shows on the display.







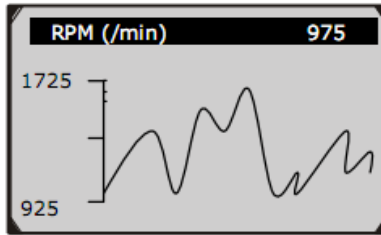


Figure 5.15

- 3) Press the **ESC** button to return to previous menu.

### Viewing Custom Data Set

- 1) To view customized PID data, use the **UP/DOWN** scroll button to select **Custom Data Set** from **View Data** menu and press the **OK** button. (Figure 5.13)
- 2) Observe on-screen instructions.

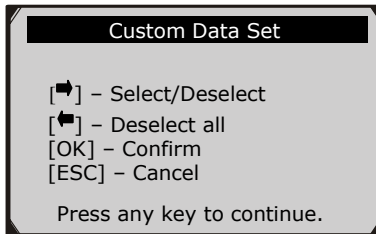


Figure 5.16

- 3) Use the **RIGHT** button to deselect/select data parameters, and use the **UP/DOWN** scroll button to move up and down. Selected parameters are marked with solid squares.





Live Data		4
DTC_CNT	0	
FUELSYS2	0L	
ETC(°C)	-40	?
SHRTFT1 (%)	99.2	

Figure 5.19

- 5) Use the **ESC** button to return to previous menu.

## Recording Data

The **Record Data** function allows recording vehicle modules' **Parameter Identification (PID)** data to help diagnose intermittent vehicle problems. A recording includes 5 frames of live data before trigger event and several frames after trigger event.

There are two trigger modes used to record data:

- A. Manual Trigger** - allows user to press the **OK** button to start recording.
- B. DTC Trigger** - automatically records PID data when a fault that causes a DTC to set is detected by vehicle.

**CAUTION: DO NOT try to drive and operate the scan tool at the same time! Always have another person operate the scan tool while driving.**

To record live data, use the **UP/DOWN** scroll button to select **Record Data** from **Live Data** menu and press the **OK** button. (Figure 5.12)

### **Recording Complete Data Set**

- 1) To record complete set of live data, use the **UP/DOWN** scroll button to select **Complete Data Set** from **Record Data** menu and press the **OK** button.

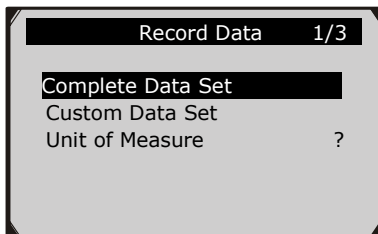


Figure 5.20

- 2) Use the **UP/DOWN** scroll button to select a trigger mode and press the **OK** button.

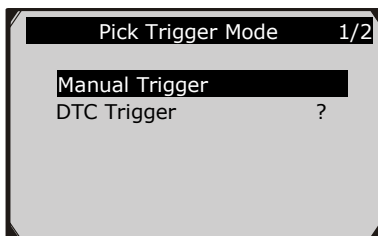


Figure 5.21

- If data from previously tested vehicle is not erased, data from current test will be stored in a temporary cache.
- 3) Use the **UP/DOWN** scroll button to select a memory location and press the **OK** button.

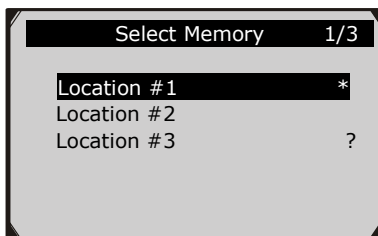


Figure 5.22











- 4) Use the **LEFT/RIGHT** button to view PIDs of next or previous frames.

6 of 135 frame		
DTC_CNT	0	4
FUELSYS1	OL	
FUELSYS2	N/A	
<b>LOAD_PCT(%)</b>	<b>0.0</b>	<b>?</b>
ETC(°C)	-40	
SHRTFT1(%)	99.2	

Figure 5.30

## 5.4 Viewing Freeze Frame Data

**Freeze Frame Data** allows the technician to view the vehicle's operating parameters at the moment a DTC (Diagnostic Trouble Code) is detected. For example, the parameters may include engine speed (RPM), engine coolant temperature (ECT), or vehicle speed sensor (VSS) etc. This information will aid the technician by allowing the parameters to be duplicated for diagnostic and repair purposes.

- 1) To view freeze frame data, use the **UP/DOWN** scroll button to select **View Freeze Frame** from **Diagnostic Menu** and press the **OK** button. (Figure 5.4)
- 2) Wait a few seconds while the scan tool validates the PID MAP.
- 3) If retrieved information covers more than one screen, use the **DOWN** scroll button, as necessary, until all the data have been shown up.



View Freeze Frame 2	
DTCFRZF	P1633
<b>FUELSYS1</b>	<b>OL</b>
FUELSYS2	--
LOAD_PCT (%)	0.0 ?
ECT(°C)	-40
SHRTFT1 (%)	99.2

Figure 5.31

- If there is no freeze frame data available, an advisory message “**No freeze frame data stored!**” shows on the display.
- 4) If you want to view full name of a PID, use the **UP/DOWN** scroll button to select the PID, and press the **HELP** button.

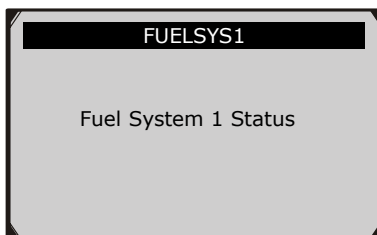


Figure 5.32

- 5) Press **ESC** button to return to previous screen.

## 5.5 Retrieving I/M Readiness Status

**I/M Readiness function is used to check the operations of the Emission System on OBD2 compliant vehicles. It is an excellent function to use prior to having a vehicle inspected for compliance to a state emissions program.**

***CAUTION - By clearing trouble codes you also clear the readiness status for the individual emission system readiness tests. In order to reset these monitors, the vehicle must be driven through a***









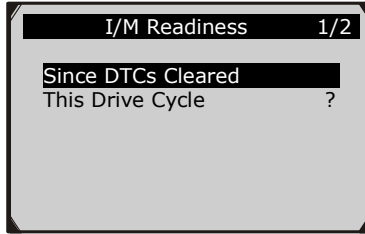


Figure 5.34

- 4) Use the **UP/DOWN** scroll button, as necessary, to view the status of the MIL light (“**ON**” or “**OFF**”) and the following monitors.

For spark ignition engines:

- **MIS** -- Misfire Monitor
- **FUEL** -- Fuel System Monitor
- **CCM** -- Comprehensive Component Monitor
- **EGR** – EGR System Monitor
- **O2S** -- O2 Sensors Monitor
- **CAT** -- Catalyst Monitor
- **EVAP** -- Evaporative System Monitor
- **HTR** -- O2 Sensor Heater Monitor
- **AIR** -- Secondary Air Monitor
- **HCAT** -- Heated Catalyst Monitor

For compression ignition engines:

- **MIS** -- Misfire Monitor
- **FUEL** -- Fuel System Monitor
- **CCM** -- Comprehensive Component Monitor
- **EGR** – EGR System Monitor
- **HCCAT** -- NMHC Catalyst Monitor
- **NCAT** -- NOx Aftertreatment Monitor
- **BP** -- Boost Pressure System Monitor
- **EGS** -- Exhaust Gas Sensor Monitor
- **PM** -- PM Filter Monitor

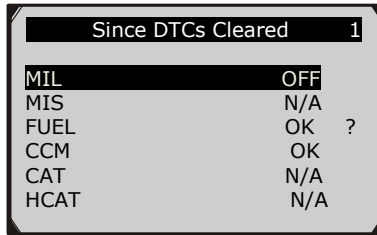


Figure 5.35

- 5) If the vehicle supports readiness test of “**This Drive Cycle**”, a screen of the following displays:

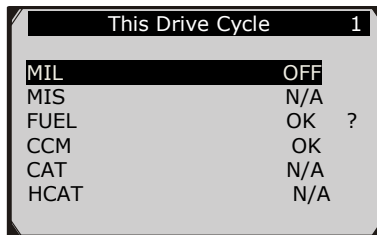


Figure 5.36

- 6) The LEDs and audio tone corresponding to different monitor status will be activated as below.

LED Light	Audio Tone	Beep Interval
Green LED	Two long beeps	2 minutes
Yellow LED	short, long, short beep	2 minutes
Red LED	Four short beeps	2 minutes

- 7) Use the **UP/DOWN** scroll button for more PIDs if additional information is available on more than one page. Or use the **LEFT/RIGHT** scroll button to view PIDs in the previous/next page.









## 6. Ready Test

**This function can be used as a convenient readiness test tool by automotive technicians to determine if the tested vehicle is ready for an emission test. By visual and audible indication, you will learn a vehicle's monitors readiness.**

### 6.1 General Information

Repairs to the emissions-control systems of a 1996 or newer vehicle cause the vehicle's computer (ECU) memory to be cleared. The vehicle must go through a drive cycle to allow the ECU to perform a series of tests to ensure that the repair was successful, and before a state mandated emissions test can be conducted. But how will you know when it is ready?

With this scan tool, you don't have to drive around endlessly and continuously coming back to the repair shop for retest if all required tests by the ECU are completed. And you could also do a quick check of the vehicle to determine if it is ready to receive an emission test without the hassle of connecting your vehicle to the analyzer or having to use a complicated scan tool.

**In the following cases, this function is especially useful.**

- You bought a used car and the check engine light had been cleared to mask potential problems.
- You disconnected the battery for tune-ups and other engine repairs, dead battery replacement, car radio installation and car alarm installation.
- You used a scan tool to clear the DTCs.
- Your car has been sent to repair.

### 6.2 Ready test application

The purpose of this function is to indicate which of the vehicle's monitors have run and completed their diagnosis and testing, and which ones have not yet run and completed testing and diagnosis of their designated sections of the vehicle's emission system. All data shows on one screen, which provides a simple profile of vehicle at a glance, saving diagnosis time and improving technician productivity.

- Use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Ready Test** from **Main Screen** (Figure 6.1), and press the **OK** button.

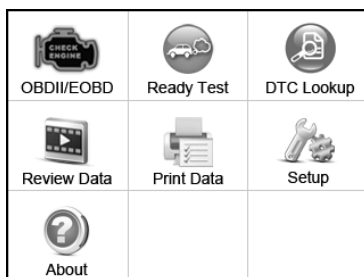


Figure 6.1

### **As post-repair diagnostic tool**

This function can be used (after the vehicle has done any emission-related repairs) to confirm that the repair has been performed successfully.

After repairs, some drive cycles are required to reset the monitoring systems. Drive cycles vary among vehicles and for each monitor in any particular vehicle.

Use the following procedure to check if the repair has been done correctly:

- 1) Connect the scan tool to the vehicle's DLC and erase the DTC(s) from the vehicle's computer memory. (*see 5.2 erasing codes*)

- 2) After the erase procedure is performed, status of most monitors will be changed. Leave the scan tool connected to the vehicle, and select **Ready Test** from **Main Screen**.
- 3) Keep on driving the car till the scan tool notifies you safely with color LEDs and audible tone that the drive cycle has been completed and the vehicle is ready, eliminating drive cycle guesswork and confirming readiness status.
- 4) If the GREEN LED lights and two long beeps are heard, your vehicle is ready and the repair work is confirmed.
- 5) If the RED LED lights, your vehicle is not ready and the repair work is unsuccessful.

### **As pre-check diagnostic tool**

Prior to having a vehicle inspected for compliance to a state emissions test, you could use this function to check the readiness status first by yourself.

- 1) While the scan tool connected to the vehicle, select **Ready Test** from **Main Screen**. Drive the car till the scan tool notifies you safely with color LEDs and audible tone if your vehicle is ready to conduct state emission test.
- 2) If the GREEN LED lights and two long beeps are heard, your vehicle is ready and there is a good possibility that it can be certified.
- 3) If the RED LED lights, your vehicle is not ready and must be repaired before an emissions test can be performed.

***IMPORTANT: If you are driving the vehicle to perform a drive cycle ALONE, please set the Status Beep On (see 3.8 System Setup). By listening to the beep, you will learn when the monitors have run and completed the diagnostic testing. NEVER try to drive and operate the scan tool at the same time!***

*NOTE: This function reads off the real time data of emission-related monitoring systems readiness status. Once the scan tool has finished other operations, for example, clearing trouble codes, the I/M Readiness Monitor Status program resets status of all the monitors to “INC” condition. In order to set these monitors to a Ready status, the vehicle must be driven through a complete drive cycle. Times for reset vary depending on vehicle. Please refer to your vehicle’s service manual for drive cycle information.*


*NOTE: In this function, only ESC button is available. The other buttons are disabled to prevent misoperation.*

### 6.3 LED and Tone Interpretation

Select **Ready Test** from the **Main Screen** and the screen shows as below, including applicable monitors status, MIL state, Ignition type, DTCs (stored one and pending one).

Figure 6.2

If the scan tool is idle, it will show the result immediately. If it is busy, it will wait till the current procedure finished. After viewing the status, press **ESC** button to exit.

 **“OK”** -- Indicates that a particular monitor being checked has completed its diagnostic testing.







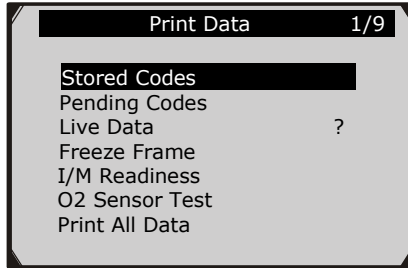


Figure 7.2

- To print all retrieved data, use the **UP/DOWN** scroll button to select **Print All Data** from **Print Data** menu.
- 6) Press the **OK** button to upload data to the computer.
- 7) In the Maxi-Link Tool Kit, you could edit, delete, copy and print the data in the textbox by selecting the icons on the upper right of window.

Print data.

Delete data.

Copy data.



Edit data.

**NOTE:** Data stored in a language different from current system settings of the scan tool will not be printable. Please adjust language settings before printing. A reminder would pop up under such circumstances.

## **8. Warranty and Service**

### **8.1 Limited One Year Warranty**

Autel warrants to its customers that this product will be free from all defects in materials and workmanship for a period of one (1) year from the date of the original purchase, subject to the following terms and conditions:

- 1) The sole responsibility of Autel under the Warranty is limited to either the repair or, at the option of Autel, replacement of the scan tool at no charge with Proof of Purchase. The sales receipt may be used for this purpose.
- 2) This warranty does not apply to damages caused by improper use, accident, flood, lightning, or if the product was altered or repaired by anyone other than the Manufacturer's Service Center.
- 3) Autel shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the scan tool. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
- 4) All information in this manual is based on the latest information available at the time of publication and no warranty can be made for its accuracy or completeness. Autel reserves the right to make changes at any time without notice.