



OBD II System Tester 9615

This Supplement contains new functions and notes.

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Functions that displayed Custom Data Lists will only display the Entire Data List for the vehicle under test.

NOTE: *If you get an Operating Error message, make sure the DLC adapter cable is securely attached, and the ignition key is ON, then try again. If the problem remains, refer to **Section 4: On-Line Help and Trouble-Shooting Tips** of the original OBD II System Tester manual.*

Pending Codes (*New Function*)

The Pending Codes function executes the same commands as the Continuous Test function. They are called different names to accommodate the terminology mechanics use. Refer to the Continuous Test function in the OBD II System Tester manual. Selecting either function will produce the same results.

```
OBDII Function Menu
1)Read Codes
2)Pending Codes
3)Erase Codes
```

```
6)Record Data
7)Playback Data
8)O2 Monitor Test
9)Continuous Test
```

Erase Codes (*Following Note Added*)

NOTE: *If you choose "No", a Command Cancelled message appears. "Hard" codes, i.e. codes that can only be removed by repairing the faults that are causing trouble codes, will remain in the vehicle's PCM memory until the condition is repaired.*

View Data (Following Note Added)

NOTE: *Multiple Responses to a PID Request - Vehicles equipped with more than one on-board computer, for example a PCM and TCM (Transmission Control Module), can respond with multiple results to a data parameter. In View Data, the OBD II Tester identifies the modules with their manufacturer assigned names such as \$10 or \$1F by blinking the module name near the end of the PID name. A PID that receives multiple responses, such as Engine (RPM), which would normally show only as one Engine, will show on two lines.*

Record Data (New Function)

The Record Data function is used to record vehicle Parameter Identification Data (PIDs) while the vehicle is parked or being driven. This function is mainly used for diagnosing intermittent driveability problems that cannot be diagnosed by any other method. For example, if your vehicle sometimes loses power while going up steep hills, then you should start a recording as soon as your vehicle reaches the base of the hill. The OBD II System Tester records the supported PIDs in Frames at various time intervals. The first 5 Frames are recorded prior to the start time (0.0 seconds) Once started, Frames will be recorded for 8 to 35 seconds; the number of Frames depends on the vehicle's data rate and quantity of PIDs. The Record Data function allows you to diagnose an intermittent problem by analyzing data leading up to the problem, during the problem, and possibly after the problem, depending on problem duration.

Select Record Data from the OBD II Function Menu and press the ENTER key. The Pick Trigger Method menu is displayed next. Select either Manual Trigger or Trigger on Codes then press the ENTER key.

```
6)Record Data      F
7)Playback Data    II
8)O2 Monitor Test  !!
9)Continuous Test  #
```

```
Pick Trigger Method
1)Manual Trigger
2)Trigger On Codes
```

If the memory is full from a previous recording, it must be erased before recording more data. To erase memory and continue, select YES and press the ENTER key and then the Pick Trigger Method options will display. Otherwise, select NO and press the ENTER key to return to the OBD II Function Menu.

The OBD II System Tester initializes by establishing the time intervals and then recording the first five Frames of data. When done, the system tester is ready to record data. To cancel this function, press the BACK key to return to the OBD II Function Menu.

```
**INITIALIZING**
PRETRIG FRAME: -5

Press BACK to Exit
```

If Manual Trigger was selected, then the OBD II System Tester will start recording when the ENTER key is pressed. If Trigger on Codes was selected, then the tester will automatically start recording when a trouble code is set in the vehicle's on-board computer. Press the BACK key to cancel and return to the OBD II Function Menu.

```
**Ready To Record**
Press ENTER Anytime
To Start Recording.
Stops Automatically
```

```
Waiting For Trouble
Code To Trigger The
Start Of Recording.
BACK To Exit
```

CAUTION! *Never operate the OBD II System Tester and drive your vehicle at the same time. Always have one person drive the vehicle while a helper operates the tester.*

The tester records for a time of varying duration. Remember, your recording will consist of 5 Frames of data prior to the start of the recording, and a number of Frames after depending on the number of PID. All applicable PIDs will be recorded.

The recording progress is displayed for the duration of the recording. You can record all the frames or press the ENTER key any time to stop recording.

Next, You will be asked if you want to play back the recording now. If you answer "YES," then the Playback Data function will display, Answering "NO" returns you to the OBD II Function Menu.

```
**Recording Data**  
FRAME: 1 Of 30  
  
Press ENTER to Stop
```

```
Playback Recording?  
  <Yes>           No
```

Playback Data (New Function)

The Playback Data function is used to playback a recording. This function is very similar to View Data. The only difference is that View Data is a real time viewing of vehicle's PIDs, while Playback Data is a viewing of previously recorded ones.

To view the PIDs recorded in the **Record Data** function, select **Playback Data** from the OBD II Function Menu. If a recording does not exist in the OBD II System Tester's memory, then the message "No Recording Present, Please Make Recording First" will display. The **Record Data** function must be performed in order to play back the data. Press the BACK key to return to the OBD II Function Menu and select **Record Data** to make a recording.

```
5)View Freeze Data  
6)Record Data      ii  
7)Playback Data    !!  
8)O2 Monitor Test  #
```

```
No Recording Present  
Please Make  
Recording First
```

If recorded data exists, the PIDs, Frame number and Time are displayed. On the Playback Data screen, lines 1-3 are used to display the vehicle's PIDs. Use the UP/DOWN arrow keys to scroll through the PID list. The end of the list is reached when only the UP arrow is displayed at the right of line 3. The PID list scrolls line-by-line and will not wrap around to the beginning.

```
MIL STATUS      ON  
ABSLT TPS(%)    0.0  
CALC LOAD(%)    22.4!!  
FRAME: 1        TM: 4.4
```

NOTE: Multiple-response PIDs (see **View Data**) are displayed with their module address in one frame and their measurement values in the next frame. Use the LEFT/RIGHT arrow key to alternate between the frames to identify the PIDs and their measurement values.

Use the LEFT/RIGHT arrow key to move through the Frame/Time index. Frame 0/Time 0.0 is the trigger point; where the recording was started by either Manually Triggering or by Triggering On Codes. Frames -5 to -1 contain data prior to the trigger point.

NOTE: After reaching the last time interval, the system tester will "wrap" to the first time interval recorded. The **Time** display will change from a positive to the first negative number viewed. This is normal. The LEFT/RIGHT arrow may be used to scroll through all time intervals.

A Frame is a "snapshot" of engine operating conditions at a certain time. The relationship between the Frame index and the Time index are based on the vehicle's on-board computer data rate and the number of PIDs being read. Remember, not all OBD II vehicles use the same data stream (communication protocol), data rates (baud) and the same number of PIDs. For this reason, not all vehicles will start and end with the same Frame number. The Frame number increases every time data is transmitted from the vehicle to the OBD II System Tester. The intervals when this occurs increases for slower data rates and larger PID lists. Frame 0 occurs at the trigger point, Time 0.0. Thus, negative and positive Frame numbers contain data before and after the trigger point, respectively.

NOTE: *Some vehicles will wait 3 to 4 minutes after the driveability problem first occurs before storing a trouble code in the vehicle's on-board computer. If you selected "Trigger On Codes" when you made your recording, you might not see any drastic change in data parameters before and after the trigger point. In cases like this, it is better to manually trigger the start of the recording when the driveability symptom is first observed.*

When you have finished playing back a recording, press the BACK key to return to the OBD II Function Menu.

O2 Monitor Test (Following Note Added)

NOTE: *This is NOT an on-demand test. The O2 sensors are not tested when this menu selection is made. The O2 sensors were tested at an earlier time when engine operating conditions were correct.*

I/M Readiness (New Function)

The purpose of the I/M (Inspection and Maintenance) Readiness function is to display the current status of emissions-related systems required by OBD II regulations. The operation of emission-related systems and components are verified using monitors. . The scan tool will display the condition of vehicle's OBD II Monitors. Monitors are used by the vehicle's PCM to check the proper operation of systems and components as well as identifying out-of-range values. The PCM may perform a special test on a system or component to complete its monitor. A vehicle may have to be operated under certain conditions for the monitor test to be performed. If the vehicle's PCM loses power or the Erase Codes function has been performed, then the status of the monitors will be reset.

To view the status of supported monitors, select I/M Readiness from the OBD II Function Menu and press the ENTER key.

```
OBDII Function Menu
10>Non-contin Test
11>On-Board Systems
12>I/M Readiness
```

A message will state whether the "On-Board Readiness Tests are Complete" or "Not All Supported On-Board Tests are Complete. Press the down arrow key to view the monitor list with their status. Use the vehicle service manuals for detailed information on required emissions-related monitors and their status.

```
On-Board Readiness
Tests Are Complete.
```

```
Use !! To View Test
```

```
Not All Supported
On-Board Readiness
Tests Are Complete.
Use !! To View Test
```

The monitor list consists of the OBD II monitor name followed by the monitor's condition. A monitor that is not supported by the test vehicle will have "n/a" after it. A monitor that has been completed will be followed by "OK". If a monitor has not been completed "inc" will be displayed after the name. Use the UP/DOWN arrow keys to scroll through the list. Press the BACK key to return to the OBD II Function Menu.

```
Misfire Monitor      OK
Fuel System Mon      inc
Comp Component       n/a!!
Catalyst Mon         n/a
```

One or more modules drops the communication link (New)

When the OBD II System Tester initially links to the vehicle, it builds a list of all OBD II compliant computer modules. If in the course of scanning the vehicle, a module drops the link, a message will display.

Answering YES will continue operation without the lost module. Answering NO will try to restore the communication links to get all modules back to an active status.

```
One or More Modules
Lost. Continue
Without Them?
<Yes>      No
```