

# Tool Box - OBD-II

OBD-II mode is used to display generic vehicle powertrain diagnostic data.

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	lcons	List	$\checkmark$
All	Diagnosis	Information	Special
Fault Code Searching	ि रु Smart Diagnosis	M. M. Data Analysis	Multi Data Analysis
Actuation Test	ا ہٰ ا ۲ ا ب S/W Management	System Identification	Recorded Data
ECU Upgrade	OBD-II	Flight Record	Digital Field Fix
توریخی Smart EV Solution	GSW Web	Service Information	<b>Preparation</b>

## **Monitoring Status**

It indicates overall monitoring status on each module of the vehicle depending on OBD– II method. It indicates the status based on each item such as number of fault codes and warning light status, etc.

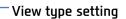
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Shi san joja	I←I Monitor Status (1/)	M Readiness) Since I	DTCs Cleared			
	Readiness Test		item(13)	Value		
	Monitor Status (I/M Re			0		
	Monitor Status (I/M Re		in Indicator Lamp(MIL)	LUT_ERR		
	Current Data	Misfire Mor		LUT_ERR		
	Freeze Frame	1m	n Monitoring	LUT_ERR		
		/	tive Component	LUT_ERR		
	<ul> <li>Monitoring Test Res</li> </ul>		itoring(NMHC)	-		
	Oxygen Sensor Monito		alyst Monitoring	-		
	Oxygen Sensor Monito		ern Monitoring	-		
		-/ ·	Air System Monitoring	-		
	Catalyst Monitor-Bank	Gasoline Pa Monitoring	articulate Filter	-		
			nsor Monitoring	-		
	Purge Flow Monitor		nsor Heater Monitoring			
	Oxygen Sensor Heater	Monitoring	r VVT System	-		
	Oxygen Sensor Heater					
	Misfire Monitor Genera					
	Misfire Cylinder1 Data					
	Misfire Cylinder2 Data					
	Misfire Cylinder3 Data					
	Misfire Cylinder3 Data		-11 <u>Č</u>	© ∑ ∷ 		
	Misfre Cylinder3 Data Misfre Cylinder4 Data	OBD-		Ēo		
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	Midfre Cylinder3 Data Midfre Cylinder4 Data	OBD M Readiness) Since D	DTCs Cleared Module ID Value E8 0	€o ₹o Unit -	└────────────────────────────────────	View the entire items
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## **Current Data**

It indicates the current sensor data and actuator based on OBD-II method.

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ead/fold		←I Current Data		
		<ul> <li>Readiness Test</li> </ul>	item(42)	Value
		Monitor Status (I/M Readiness)	) S Fuel system "A" status	LUT_ERR
		Monitor Status (I/M Readiness)	TI Fuel system "B" status	LUT_ERR
		— Current Data	Calculated Load Value	0.0
		<ul> <li>Freeze Frame</li> </ul>	Engine Coolant Temperature	-40
		- DTC	Short Term Fuel Trim-Bank1	0.0
		Monitoring Test Res	Short Term Fuel Trim - Bank 3	Not Supported
		Oxygen Sens	Term Fuel Trim-Bank1	0.0
		Oxygen Sen	erm Fuel Trim - Bank 3	Not Supported
		Catalyst Monito	Manifold Absolute Pressure	9
		VVT Monitor Banki	ne RPM	0
		Purge Flow Monitor	hicle Speed Sensor	0
			tion Timing Advance for 1	0
		Oxygen Sensor Heater Monitor	Intake Air Temperature	-40
	-	Oxygen Sensor Heater Monitor	Absolute Throttle Position Sensor	Not Used.
		Misfire Monitor General Data	Oxygen Sensor Location	LUT_ERR
		Misfire Cylinder1 Data	Oxygen Sensor-Bank1/Sensor2	420
		Misfire Cylinder2 Data	Short Term Fuel Trim-Bank1/ Sensor2	Not Used.
		Misfire Cylinder3 Data	OBD Requirement	-
		Misfire Cylinder4 Data	Time Since Engine Start	0

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ŀ≯	Current Data		i≡ 1.00	t <mark>ē</mark> o ₹
	Item(42)	Module ID	Value	Unit
	Fuel system "A" status	E8	LUT_ERR	-
	Fuel system "B" status	E8	LUT_ERR	-
	Calculated Load Value	E8	0.0	%
	Engine Coolant Temperature	E8	-40	'C
	Short Term Fuel Trim-Bank1	E8	0.0	%
	Short Term Fuel Trim - Bank 3	E8	Not Supported.	%
	Long Term Fuel Trim-Bank1	EB	0.0	%
	Long Term Fuel Trim - Bank 3	E8	Not Supported.	%
	Intake Manifold Absolute Pressure	E8	9	kPa
	Engine RPM	EB	0	RPM
	Vehicle Speed Sensor	E8	0	km/h
	Ignition Timing Advance for 1 Cylinder	E8	0	1.1
	Intake Air Temperature	EB	-40	'C
	Absolute Throttle Position Sensor	E8	Not Used.	%
	Oxygen Sensor Location	E8	LUT_ERR	
	Oxygen Sensor-Bank1/Sensor2	EB	420	mV
	Short Term Fuel Trim-Bank1/Sensor2	E8	Not Used.	%
	OBD Requirement	E8	-	-
-l	Time Since Engine Start	E8	0	Sec



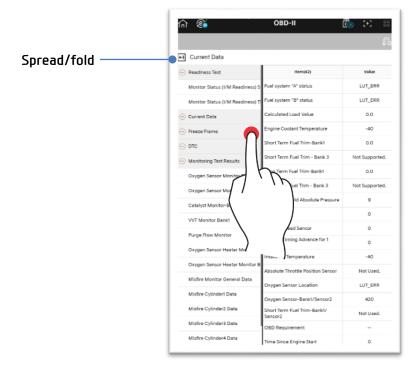
- List
- Graph
- View the entire items
- View only fixed items

## Fault Situation Data

It indicates the sensor data value stored in ECU at the time when a fault code is generated.

## DTC

It indicates the fault codes stored in ECU.

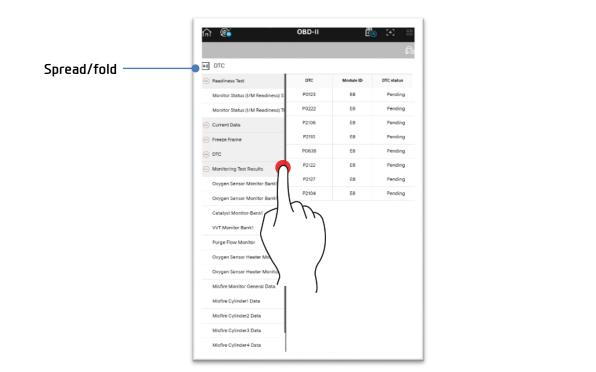


DTC	Description	Module ID	DTC status		
P0123 Throttle/Ped	dal Position Sensor/Switch "A" Circuit High	E8	Pending		
P0222 Throttle/Ped	dal Position Sensor/Switch "B" Circuit Low	E8	Pending		
P2106 Throttle Actu	tuator Control System - Forced Limited Powe	er E8	Pending		
P2110 Throttie Actu	tuator Control System - Forced Limited RPM	E8	Pending		
P0638 Throttle Actu	tuator Control Range/Performance Bank 1	E8	Pending		
P2122 Throttle/Ped Input	dal Position Sensor/Switch "D" Circuit Low	E8	Pending		
P2127 Throttle/Ped Input	dal Position Sensor/Switch "E" Circuit Low	E8	Pending		
P2104 Throttle Actu	tuator Control System - Forced Idle	E8	Pending		

## **Monitoring Test Results**

Monitoring test performs monitoring of operating status of each sensor related to exhaust gases, and its results accordingly.

\* It may not be supported depending on the type of vehicle.



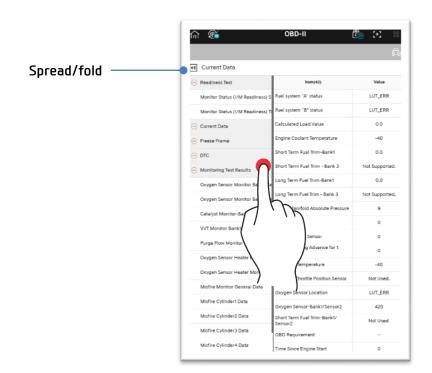
➡ Vehicle Information			·
item(4)	Module ID	Value	
/IN(Vehicle Identification Number)	E8	Nat Used.	
CALID(Calibration Identifications)	E8	QED4P84L	
CALID(Calibration Identifications)	E9	Not Supported.	
CVN(Calibration Verification Numbers)	E8	116D150B	

View type setting

- List
- Graph
- View the entire items
- View only fixed items

## Vehicle Information

It indicates information on the vehicle.



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Vehicle Information		
Readiness Test	item(4)	Value
Monitor Status (I/M Readiness)	Si Number)	Not Used.
Monitor Status (I/M Readiness)	CALID(Calibration Identifications)	QED4P84L
Current Data	CALID(Calibration Identifications)	Not Supported.
Freeze Frame	CVN(Calibration Verification Numbers)	116D150B
DTC		
Monitoring Test Results		
Test or Component Control		
read or component control		
Vehicle Information		

### In Use Performance Ratio

It proceeds the test using all conditions necessary to detect parts of the vehicle or system fault status, etc. in accordance with OBD-II regulation.

In addition, the user can also check number of abnormal operations of the system under a designated condition.

#### Monitoring items specified in OBD-II

- ✓ Catalyst (Catalyst bank1, bank2)
- ✓ Oxygen sensor (Primary oxygen sensor bank1, bank2)
- Evaporative gas leak detecting system
   (Evaporative 0.020" leak detecting system)
- ✓ Exhaust gas recirculation system (EGR system)
- ✓ Secondary air supply system (Secondary air system)

n	1 20	OBD-II	so (*) #
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H	Gasoline		
Θ	Readiness Test	item(29)	Value
	Monitor Status (I/M Readiness) Si	OBD Monitoring Conditions Encountered Counts	0
	Monitor Status (I/M Readiness) Th	Ignition Counter	0
	Current Data	Distance Traveled Since Evap Monitoring Decision	Not Used.
Θ	Freeze Frame	Catalyst Monitor Completion Counts-Bank1	0
0	DTC	Catalyst Monitor Conditions Encountered Counts-Bank1	0
÷	Monitoring Test Results	Catalyst Monitor Completion Counts-Bank2	0
0	Test or Component Control	Catalyst Monitor Conditions Encountered Counts-Bank2	0
0	Vehicle Information	Oxygen Sensor Monitor Completion Counts Bank1	0
	In USE Performance Ratio	Oxygen Sensor Monitor Conditions Encountered Counts Bank1	o
	Gasoline	Oxygen Sensor Monitor Completion Counts Bank2	0
	Gesonie	Oxygen Sensor Monitor Conditions Encountered Counts Bank2	0
		EGR and/or VVT Monitor Completion Condition Counts	0
		EGR and/or VVT Monitor Conditions Encountered Counts	0
		Air Monitor Completion Condition Counts	0
		Air Monitor Conditions Encountered Counts	0
		EVAP Monitor Completion Condition Counts	٥
		EVAP Monitor Conditions Encountered Counts	o
		Secondary Oxygen Sensor Monitor Completion Counts Bank1	0
		Secondary Oxygen Sensor	0

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3	Gasoline			nt 🖡 #
	Item(29)	Module ID	Value	Unit
	OBD Monitoring Conditions Encountered Counts	E8	0	Count
	Ignition Counter	E8	0	Count
	Distance Traveled Since Evap Monitoring Decision	E8	Not Used.	km
	Catalyst Monitor Completion Counts-Bank1	EB	0	Count
	Catalyst Monitor Conditions Encountered Counts-Bank1	E8	0	Count
	Catalyst Monitor Completion Counts-Bank2	EB	0	Count
	Catalyst Monitor Conditions Encountered Counts-Bank2	EB	0	Count
	Oxygen Sensor Monitor Completion Counts Bankl	EB	0	Count
	Oxygen Sensor Monitor Conditions Encountered Counts Bank1	EB	0	Count
	Oxygen Sensor Monitor Completion Counts Bank2	EB	0	Count
	Oxygen Sensor Monitor Conditions Encountered Counts Bank2	EB	0	Count
	EGR and/or VVT Monitor Completion Condition Counts	EB	0	Count
	EGR and/or VVT Monitor Conditions Encountered Counts	EB	0	Count
	Air Monitor Completion Condition Counts	EB	0	Count
	Air Monitor Conditions Encountered Counts	EB	0	Count
	EVAP Monitor Completion Condition Counts	EB	0	Count
	EVAP Monitor Conditions Encountered Counts	E8	0	Count
	Secondary Oxygen Sensor Monitor			-