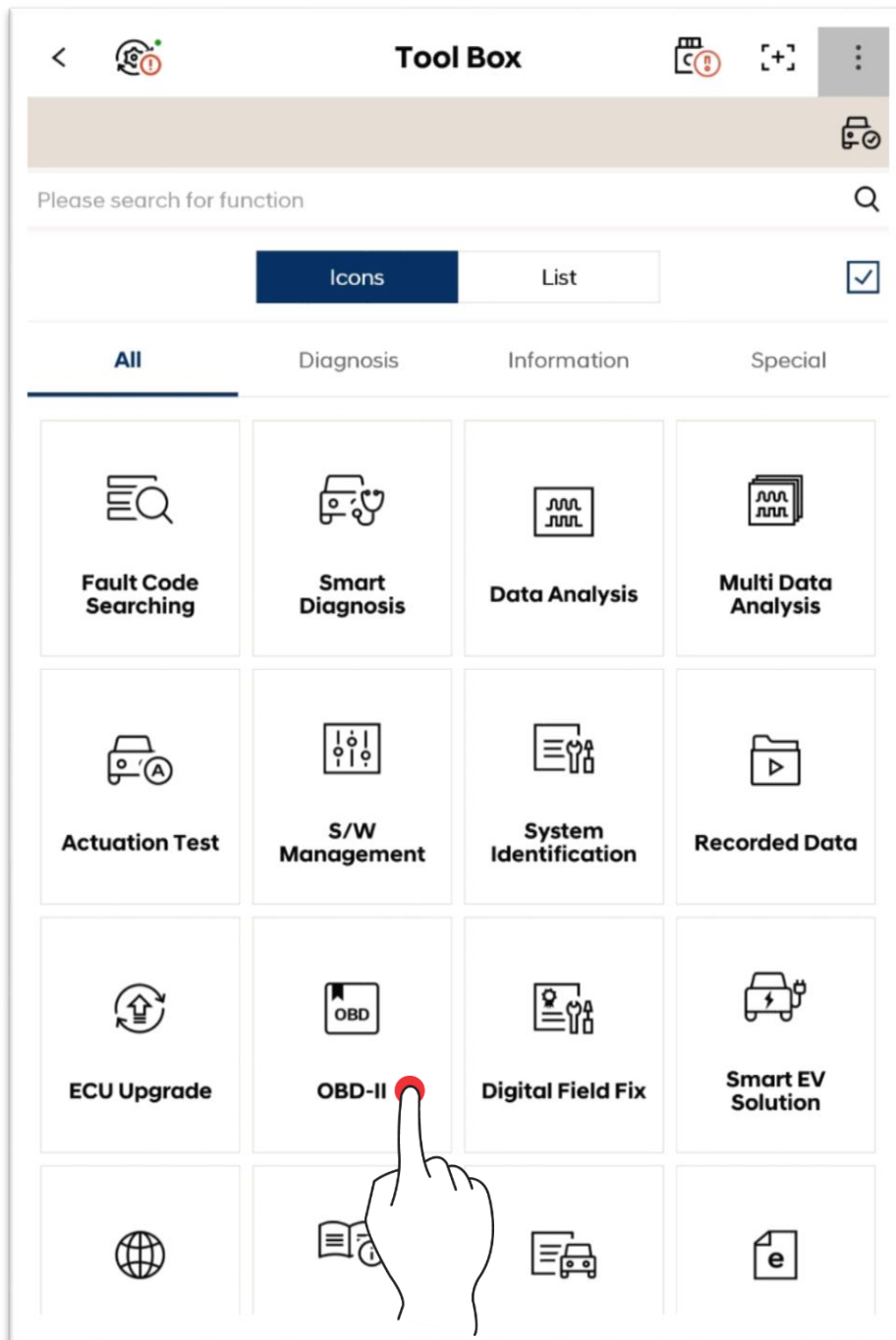


Tool Box - OBD-II

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



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.

Spread/fold

Item(26)	Value
Number of DTC	0
Malfunction Indicator Lamp(MIL)	OFF
Misfire Monitoring	COMPLETED
Fuel System Monitoring	NOT COMPLETED
Comprehensive Component Monitoring	COMPLETED
Catalyst Monitoring(NMHC)	COMPLETED
Heated Catalyst Monitoring	NOT COMPLETED
EVAP System Monitoring	NOT COMPLETED
Secondary Air System Monitoring	NOT APPLICABLE
Gasoline Particulate Filter Monitoring	NOT APPLICABLE
Oxygen Sensor Monitoring	NOT COMPLETED
Oxygen Sensor Heater Monitoring	NOT COMPLETED
EGR and/or VVT System Monitoring	NOT COMPLETED
Number of DTC	0
Malfunction Indicator Lamp(MIL)	OFF
Misfire Monitoring	NOT APPLICABLE
Fuel System Monitoring	NOT APPLICABLE

Arrangement

Item(26)	Module ID	Value	Unit
Number of DTC	E8	0	-
Malfunction Indicator Lamp(MIL)	E8	OFF	-
Misfire Monitoring	E8	COMPLETED	-
Fuel System Monitoring	E8	NOT COMPLETED	-
Comprehensive Component Monitoring	E8	COMPLETED	-
Catalyst Monitoring(NMHC)	E8	NOT COMPLETED	-
Heated Catalyst Monitoring	E8	NOT APPLICABLE	-
EVAP System Monitoring	E8	NOT COMPLETED	-
Secondary Air System Monitoring	E8	NOT APPLICABLE	-
Gasoline Particulate Filter Monitoring	E8	NOT APPLICABLE	-
Oxygen Sensor Monitoring	E8	NOT COMPLETED	-
Oxygen Sensor Heater Monitoring	E8	NOT COMPLETED	-
EGR and/or VVT System Monitoring	E8	NOT COMPLETED	-
Number of DTC	E9	0	-
Malfunction Indicator Lamp(MIL)	E9	OFF	-
Misfire Monitoring	E9	NOT APPLICABLE	-
Fuel System Monitoring	E9	NOT APPLICABLE	-

View type setting

- View the entire items
- View only fixed items

Current Data

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

Spread/fold

Item(48)	Value
Fuel system "A" status	OPEN LOOP
Fuel system "B" status	-
Calculated Load Value	0.0
Engine Coolant Temperature	-40
Short Term Fuel Trim-Bank1	0.0
Short Term Fuel Trim - Bank 3	Not Supported.
Long Term Fuel Trim-Bank1	0.0
Long Term Fuel Trim - Bank 3	Not Supported.
Intake Manifold Absolute Pressure	0
Engine RPM	0
Vehicle Speed Sensor	0
Ignition Timing Advance for 1 Cylinder	6
Intake Air Temperature	-40
Absolute Throttle Position Sensor	Not Used.
Oxygen Sensor Location	B1S1
Oxygen Sensor-Bank1/Sensor2	420
Short Term Fuel Trim-Bank1/Sensor2	Not Used.

View type setting

Item(48)	Module ID	Value	Unit
<input type="checkbox"/> Fuel system "A" status	E8	OPEN LOOP	-
<input type="checkbox"/> Fuel system "B" status	E8	-	-
<input type="checkbox"/> Calculated Load Value	E8	0.0	%
<input type="checkbox"/> Engine Coolant Temperature	E8	-40	°C
<input type="checkbox"/> Short Term Fuel Trim-Bank1	E8	0.0	%
<input type="checkbox"/> Short Term Fuel Trim - Bank 3	E8	Not Supported.	%
<input type="checkbox"/> Long Term Fuel Trim-Bank1	E8	0.0	%
<input type="checkbox"/> Long Term Fuel Trim - Bank 3	E8	Not Supported.	%
<input type="checkbox"/> Intake Manifold Absolute Pressure	E8	0	kPa
<input type="checkbox"/> Engine RPM	E8	0	RPM
<input type="checkbox"/> Vehicle Speed Sensor	E8	0	km/h
<input type="checkbox"/> Ignition Timing Advance for 1 Cylinder	E8	6	°
<input type="checkbox"/> Intake Air Temperature	E8	-40	°C
<input type="checkbox"/> Absolute Throttle Position Sensor	E8	Not Used.	%
<input type="checkbox"/> Oxygen Sensor Location	E8	B1S1	-
<input type="checkbox"/> Oxygen Sensor-Bank1/Sensor2	E8	420	mV
<input type="checkbox"/> Short Term Fuel Trim-Bank1/Sensor2	E8	Not Used.	%

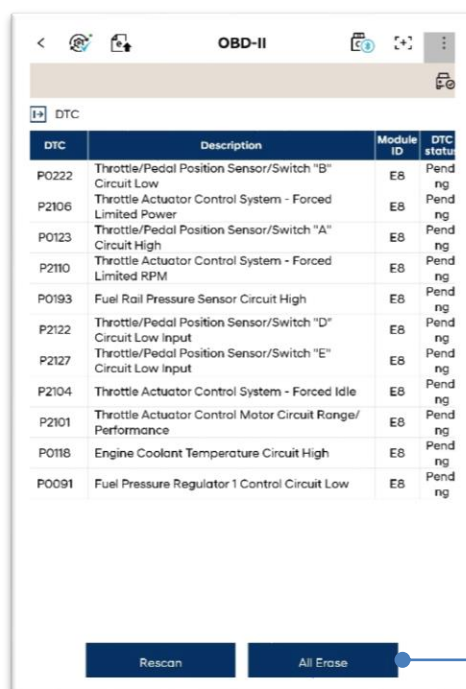
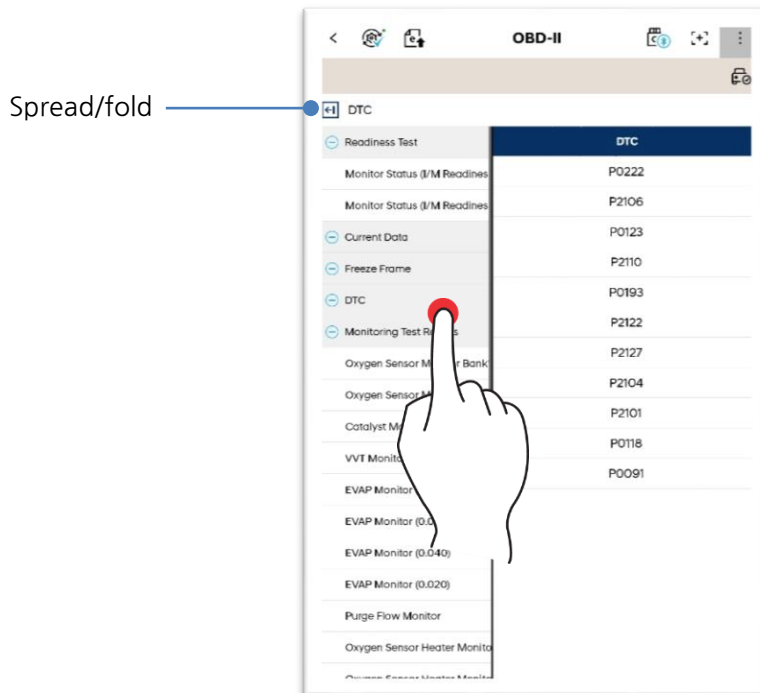
- List
- Graph
- View the entire items
- View only fixed items

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.

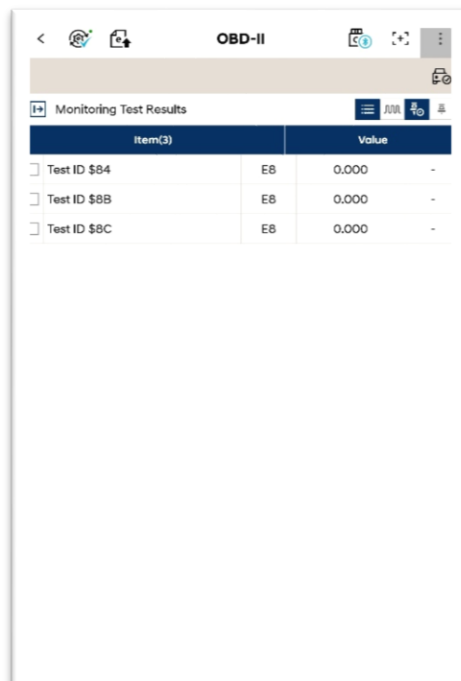
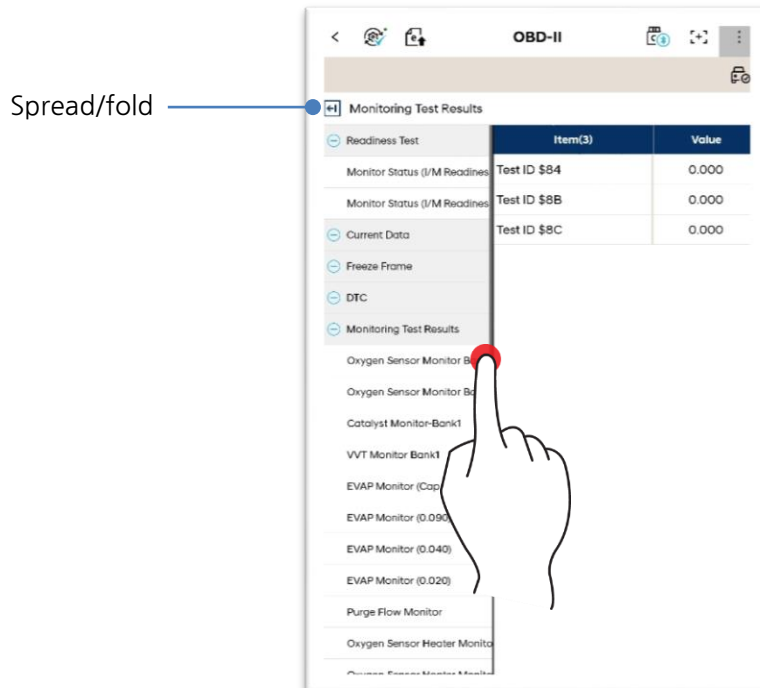


Remove all fault codes

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.



View type setting

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

Vehicle Information

It indicates information on the vehicle.

Spread/fold

The screenshot shows a mobile application interface for OBD-II diagnostics. The 'Gasoline' menu is collapsed, and a hand icon with a red dot indicates the 'Spread/fold' action. The table below shows the data for the expanded 'Gasoline' menu.

Item(28)	Value
OBD Monitoring Conditions	0
Ignition Counter	0
Catalyst Monitor Completion Counts-Bank1	0
Catalyst Monitor Conditions	0
Catalyst Monitor Completion	0
Oxygen Sensor Monitor Completion Counts Bank1	0
Oxygen Sensor Monitor Conditions	0
Oxygen Sensor Monitor Completion Counts Bank2	0
Oxygen Sensor Monitor Conditions	0
EGR and/or VVT Monitor Completion	0
EGR and/or VVT Monitor Conditions	0
Air Monitor Completion Counts	0
Air Monitor Conditions	0
EVAP Monitor Completion Counts	0
EVAP Monitor Conditions	0
Secondary Oxygen Sensor Monitor	0

The screenshot shows the 'Gasoline' menu expanded into a detailed table. The table has four columns: Item(28), Module ID, Value, and Unit. A 'Capture' button is visible at the bottom.

Item(28)	Module ID	Value	Unit
OBD Monitoring Conditions Encountered Counts	E8	0	Count
Ignition Counter	E8	0	Count
Catalyst Monitor Completion Counts-Bank1	E8	0	Count
Catalyst Monitor Conditions Encountered Counts-Bank1	E8	0	Count
Catalyst Monitor Completion Counts-Bank2	E8	0	Count
Catalyst Monitor Conditions Encountered Counts-Bank2	E8	0	Count
Oxygen Sensor Monitor Completion Counts Bank1	E8	0	Count
Oxygen Sensor Monitor Conditions Encountered	E8	0	Count
Oxygen Sensor Monitor Completion Counts Bank2	E8	0	Count
Oxygen Sensor Monitor Conditions Encountered	E8	0	Count
EGR and/or VVT Monitor Completion Condition Counts	E8	0	Count
EGR and/or VVT Monitor Conditions Encountered Counts	E8	0	Count
Air Monitor Completion Condition Counts	E8	0	Count
Air Monitor Conditions Encountered Counts	E8	0	Count
EVAP Monitor Completion Condition Counts	E8	0	Count
EVAP Monitor Conditions	E8	0	Count

Capture

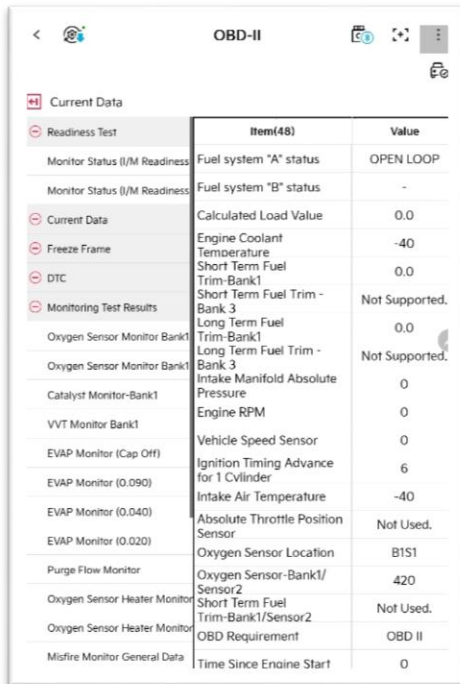
In Use Performance Ratio

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.

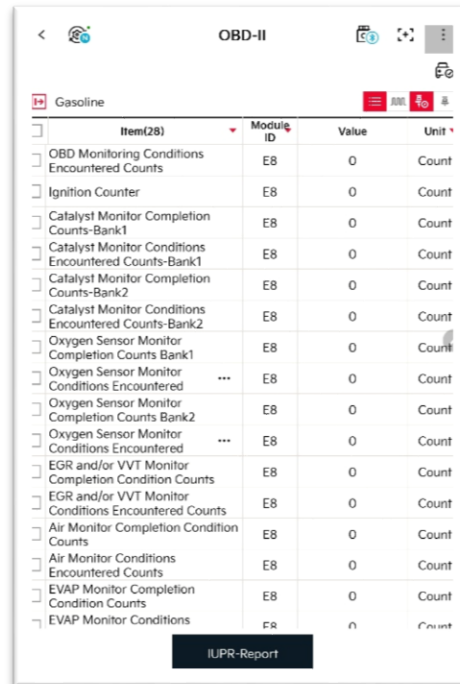
In addition, the user can also check number of abnormal operations of the system under a designated condition.

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)



Item(48)	Value
Fuel system "A" status	OPEN LOOP
Fuel system "B" status	-
Calculated Load Value	0.0
Engine Coolant Temperature	-40
Short Term Fuel Trim-Bank1	0.0
Short Term Fuel Trim - Bank 3	Not Supported.
Long Term Fuel Trim-Bank1	0.0
Long Term Fuel Trim - Bank 3	Not Supported.
Intake Manifold Absolute Pressure	0
Engine RPM	0
Vehicle Speed Sensor	0
Ignition Timing Advance for 1 Cylinder	6
Intake Air Temperature	-40
Absolute Throttle Position Sensor	Not Used.
Oxygen Sensor Location	B1S1
Oxygen Sensor-Bank1/Sensor2	420
Short Term Fuel Trim-Bank1/Sensor2	Not Used.
OBD Requirement	OBD II
Time Since Engine Start	0



Item(28)	Module ID	Value	Unit
OBD Monitoring Conditions Encountered Counts	E8	0	Count
Ignition Counter	E8	0	Count
Catalyst Monitor Completion Counts-Bank1	E8	0	Count
Catalyst Monitor Conditions Encountered Counts-Bank1	E8	0	Count
Catalyst Monitor Completion Counts-Bank2	E8	0	Count
Catalyst Monitor Conditions Encountered Counts-Bank2	E8	0	Count
Oxygen Sensor Monitor Completion Counts Bank1	E8	0	Count
Oxygen Sensor Monitor Conditions Encountered	...	0	Count
Oxygen Sensor Monitor Completion Counts Bank2	E8	0	Count
Oxygen Sensor Monitor Conditions Encountered	...	0	Count
EGR and/or VVT Monitor Completion Condition Counts	E8	0	Count
EGR and/or VVT Monitor Conditions Encountered Counts	E8	0	Count
Air Monitor Completion Condition Counts	E8	0	Count
Air Monitor Conditions Encountered Counts	E8	0	Count
EVAP Monitor Completion Condition Counts	E8	0	Count
EVAP Monitor Conditions	E8	0	Count