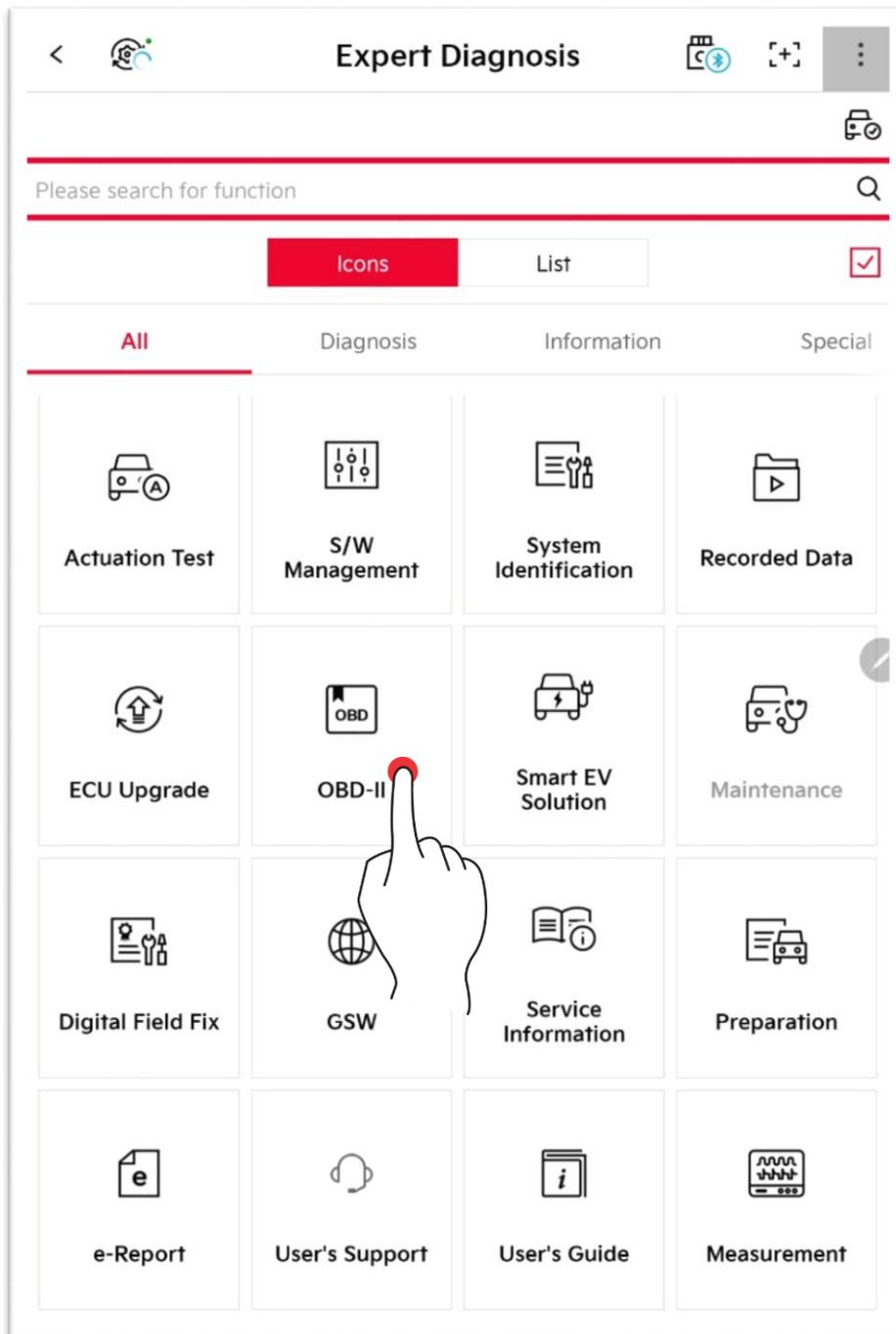


## OBD-II

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

Monitor Status (I/M Readiness) Since DTCs Cleared

Readiness Test	Item(26)	Value
Monitor Status (I/M Readiness)	Number of DTC	0
Monitor Status (I/M Readiness)	Malfunction Indicator Lamp(MIL)	OFF
Current Data	Misfire Monitoring	COMPLETED
Freeze Frame	Fuel System Monitoring	NOT COMPLETED
DTC	Comprehensive Component Monitoring	COMPLETED
Monitoring Test Results	Catalyst Monitoring(NMHC)	NOT COMPLETED
Oxygen Sensor Monitoring	Heated Catalyst Monitoring	NOT APPLICABLE
Oxygen Sensor Monitoring	EVAP System Monitoring	NOT COMPLETED
Catalyst Monitor-Bank1	Secondary Air System Monitoring	NOT APPLICABLE
VVT Monitor Bank1	Gasoline Particulate Filter Monitoring	NOT APPLICABLE
EVAP Monitor (Cap Off)	Oxygen Sensor Monitoring	NOT COMPLETED
EVAP Monitor (0.090)	Oxygen Sensor Heater Monitoring	NOT COMPLETED
EVAP Monitor (0.040)	EGR and/or VVT System Monitoring	NOT COMPLETED
EVAP Monitor (0.020)	Number of DTC	0
Purge Flow Monitor	Malfunction Indicator Lamp(MIL)	OFF
Oxygen Sensor Heater Monitor	Misfire Monitoring	NOT APPLICABLE
Oxygen Sensor Heater Monitor	Fuel System Monitoring	NOT APPLICABLE
Misfire Monitor General Data	Comprehensive Component Monitoring	COMPLETED
	Catalyst Monitoring(NMHC)	NOT APPLICABLE

Arrangement

Monitor Status (I/M Readiness) Since DTCs Cleared

Item(26)	Module ID	Value	Unit
Number of DTC	E8	0	-
Malfunction Indicator Lamp(MIL)	E8	OFF	-
Misfire Monitoring	E8	COMPLETED	-
Fuel System Monitoring	Default	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	-
Comprehensive Component Monitoring	E9	COMPLETED	-
Catalyst Monitoring(NMHC)	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.
OBD Requirement	OBD II
Time Since Engine Start	0

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

View type setting

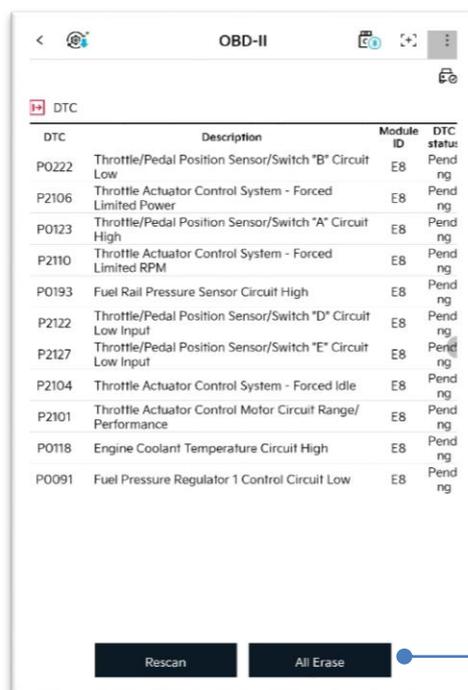
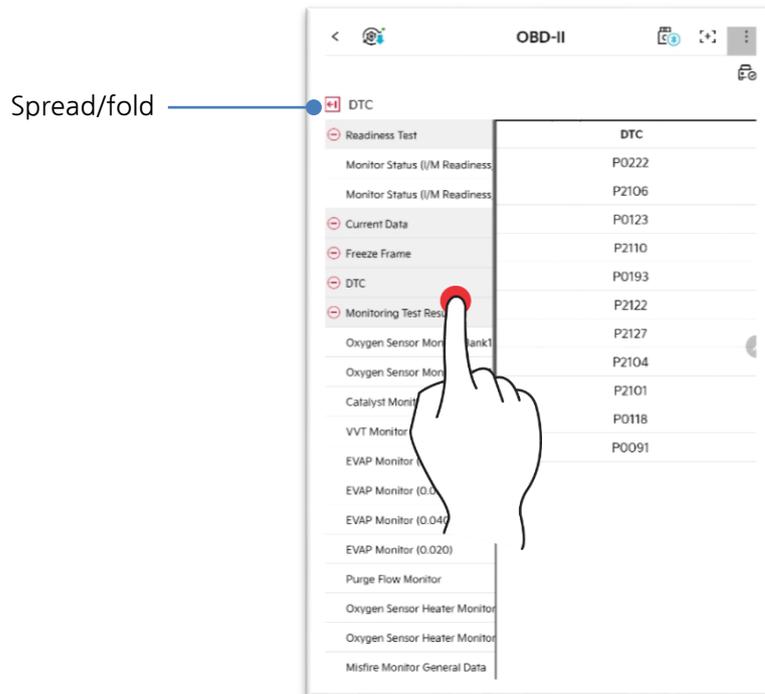
- List
- Graph
- View the entire items
- View only fixed items

## 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.

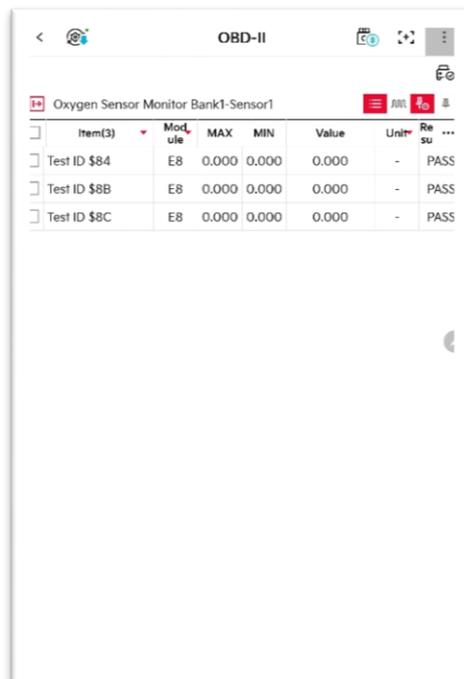
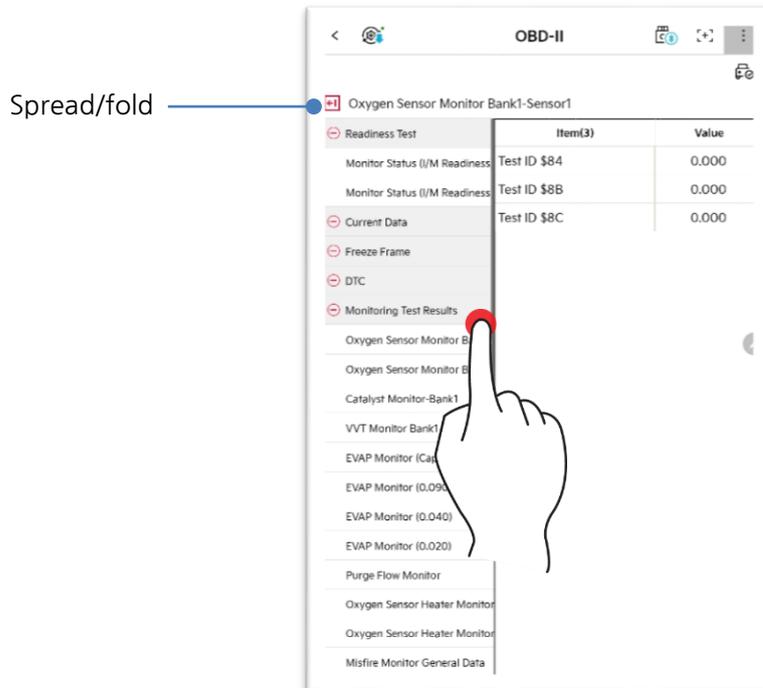


Remove all fault codes

## 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.



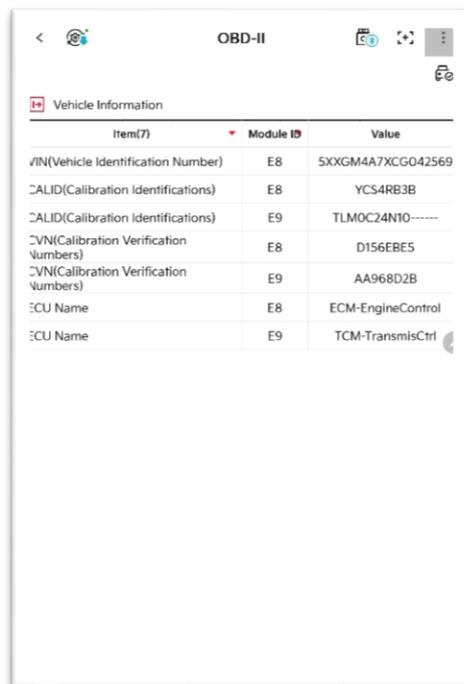
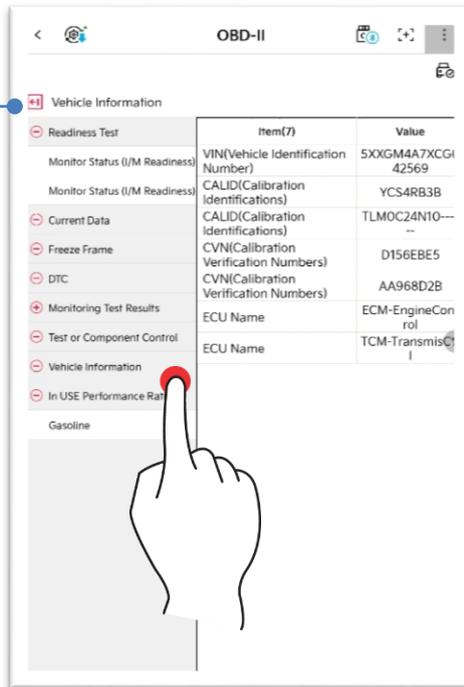
View type setting

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

# Vehicle Information

It indicates information on the vehicle.

Spread/fold



## 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	...	E8	0
Oxygen Sensor Monitor Completion Counts Bank2	E8	0	Count
Oxygen Sensor Monitor Conditions Encountered	...	E8	0
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