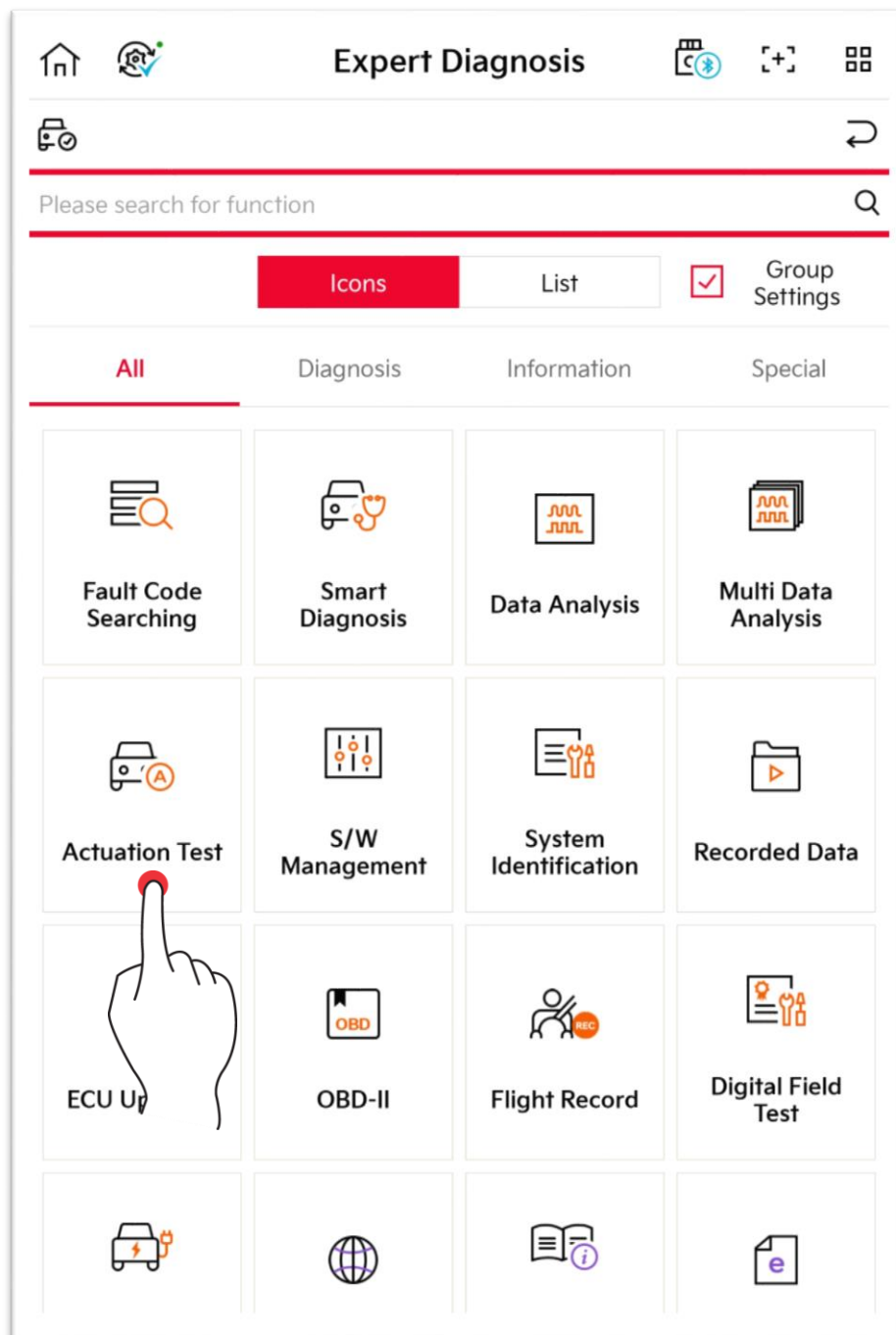


Expert Diagnosis - Actuation Test

This is a function of performing forced self-driving and stopping various actuators installed on vehicles through a control module, which can inspect the normal driving status of parts.



Actuation Test

It displays Actuation Test Item supported on the selected vehicle and operates the selected actuator manually.

The screenshot displays the 'Actuation Test' interface. At the top, there's a header with navigation icons and the title 'Actuation Test'. Below the header, a 'Data Analysis (159)' section shows a table of sensor data. A red box highlights this table. Below the table are four buttons: 'Stop', 'Data Capture', 'Clear Data', and 'Selective Display'. The bottom section, titled 'Actuation Test', contains a table of test items. A red circle with the number '1' points to the first item, 'Engine Check Lamp(MIL)'. Below this table is a large 'Start' button, which is pointed to by a red circle with the number '2'.

Sensor Name	Value	Unit	Link Up
Battery Voltage	12.0	V	
Battery Voltage after IG Key	12.0	V	
Actual Engine Speed	0	RPM	
Target Idle RPM	820	RPM	
Pressure Sensor(MAP) Signal Voltage	0.0	V	
Intake Manifold Pressure	100.0	hPa	

Test Items (25)	Condition	Duration	Result
Engine Check Lamp(MIL)	IG. ON/ ENG.OFF	Until Stop Button	
Canister Shut Off Valve(Optional)	IG. ON/ ENG.OFF	Until Stop Button	
Fuel Pump Relay	IG. ON/ ENG.OFF	Until Stop Button	
A/C Compressor Relay	IG. ON/ ENG.OFF	Until Stop Button	
Immobilizer Lamp(Optional)	IG. ON/ ENG.OFF	Until Stop Button	

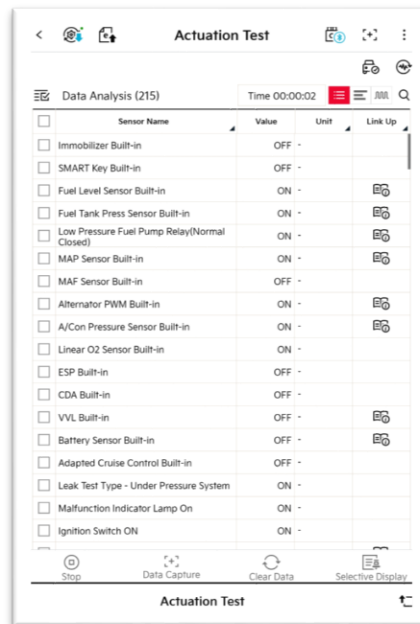
Start

Data Analysis Mode

It displays the input/output value of sensor data when the user performs Actuation Test

Text Mode

This indicates the sensor data as text format.



Actuation Test

Data Analysis (215) Time 00:00:02

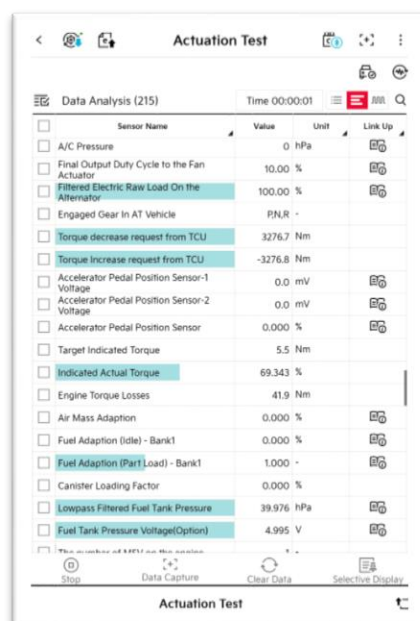
<input type="checkbox"/>	Sensor Name	Value	Unit	Link Up
<input type="checkbox"/>	Immobilizer Built-in	OFF	-	
<input type="checkbox"/>	SMART Key Built-in	OFF	-	
<input type="checkbox"/>	Fuel Level Sensor Built-in	ON	-	
<input type="checkbox"/>	Fuel Tank Press Sensor Built-in	ON	-	
<input type="checkbox"/>	Low Pressure Fuel Pump Relay(Normal Closed)	ON	-	
<input type="checkbox"/>	MAP Sensor Built-in	ON	-	
<input type="checkbox"/>	MAF Sensor Built-in	OFF	-	
<input type="checkbox"/>	Alternator PWM Built-in	ON	-	
<input type="checkbox"/>	A/Con Pressure Sensor Built-in	ON	-	
<input type="checkbox"/>	Linear O2 Sensor Built-in	ON	-	
<input type="checkbox"/>	ESP Built-in	OFF	-	
<input type="checkbox"/>	CDA Built-in	OFF	-	
<input type="checkbox"/>	VVL Built-in	OFF	-	
<input type="checkbox"/>	Battery Sensor Built-in	OFF	-	
<input type="checkbox"/>	Adapted Cruise Control Built-in	OFF	-	
<input type="checkbox"/>	Leak Test Type - Under Pressure System	ON	-	
<input type="checkbox"/>	Malfunction Indicator Lamp On	ON	-	
<input type="checkbox"/>	Ignition Switch ON	ON	-	

Stop Data Capture Clear Data Selective Display

Actuation Test

Bar Graph Mode

This indicates the sensor data as a bar graph format.



Actuation Test

Data Analysis (215) Time 00:00:01

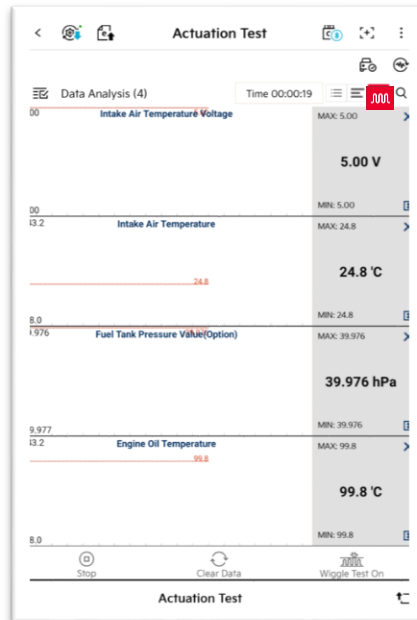
<input type="checkbox"/>	Sensor Name	Value	Unit	Link Up
<input type="checkbox"/>	A/C Pressure	0	hPa	
<input type="checkbox"/>	Final Output Duty Cycle to the Fan Actuator	10.00	%	
<input type="checkbox"/>	Filtered Electric Raw Load On the Alternator	100.00	%	
<input type="checkbox"/>	Engaged Gear in AT Vehicle	PNR	-	
<input type="checkbox"/>	Torque decrease request from TCU	3276.7	Nm	
<input type="checkbox"/>	Torque Increase request from TCU	-3276.8	Nm	
<input type="checkbox"/>	Accelerator Pedal Position Sensor-1 Voltage	0.0	mV	
<input type="checkbox"/>	Accelerator Pedal Position Sensor-2 Voltage	0.0	mV	
<input type="checkbox"/>	Accelerator Pedal Position Sensor	0.000	%	
<input type="checkbox"/>	Target Indicated Torque	5.5	Nm	
<input type="checkbox"/>	Indicated Actual Torque	69.343	%	
<input type="checkbox"/>	Engine Torque Losses	41.9	Nm	
<input type="checkbox"/>	Air Mass Adaption	0.000	%	
<input type="checkbox"/>	Fuel Adaption (Idle) - Bank1	0.000	%	
<input type="checkbox"/>	Fuel Adaption (Part Load) - Bank1	1.000	-	
<input type="checkbox"/>	Canister Loading Factor	0.000	%	
<input type="checkbox"/>	Lowpass Filtered Fuel Tank Pressure	39.976	hPa	
<input type="checkbox"/>	Fuel Tank Pressure Voltage(Optional)	4.995	V	

Stop Data Capture Clear Data Selective Display

Actuation Test

Graph Mode

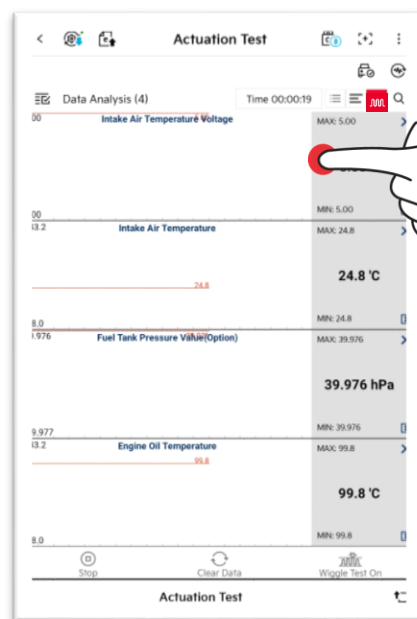
This indicates a selected sensor data as a graph format.



Graph Mode - Function Button

Wiggle Test On / Off


When Wiggle Test function is switched ON, the user can configure a desired data maximum/minimum value, and receive a notification if the sensor value exceeds or falls below the standard value.

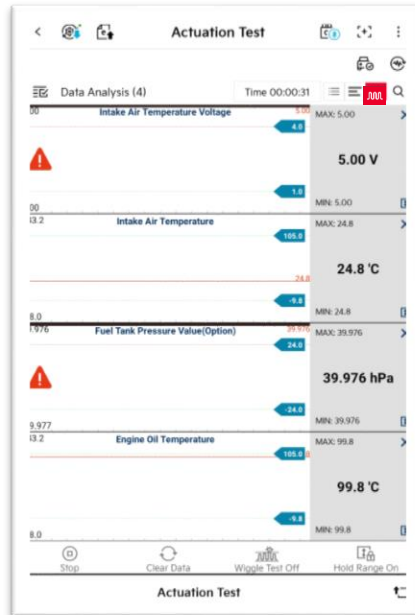


Configure the value by dragging the cursor.


Wiggle Test On - Hold Range On

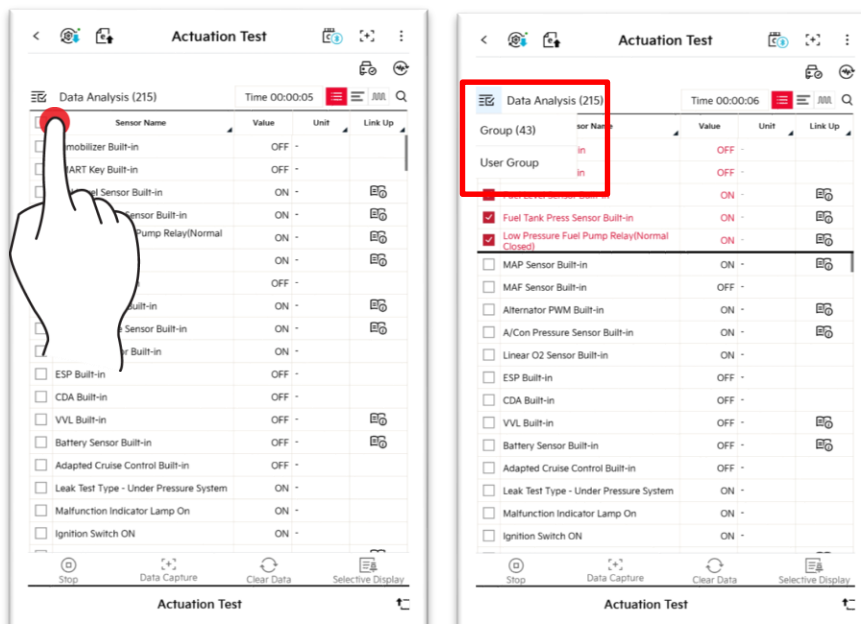
If Hold Range is switched ON, it only shows the sensor values that exceed or fall below the standard value.

 If you mute or volume is low, you may not hear an audible alarm.



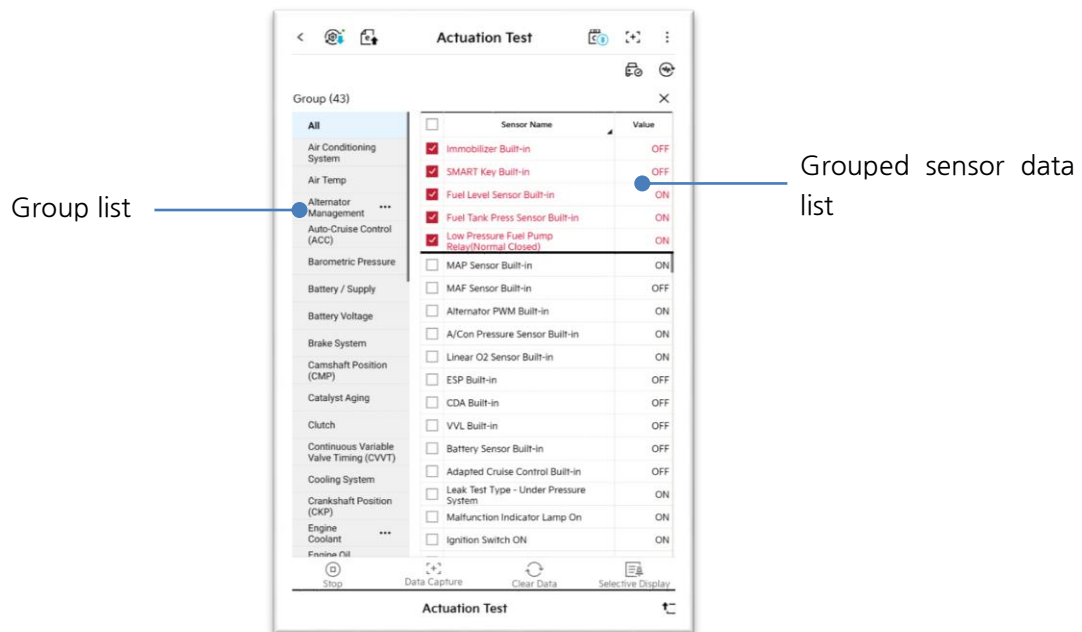
Group/User Group

Through  button on the top-left corner, the user can use Group/User Group function.



Group

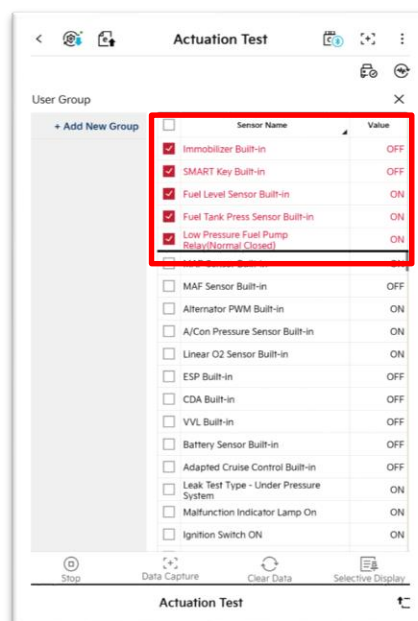
It forms a group of sensor data items to express only relevant data.



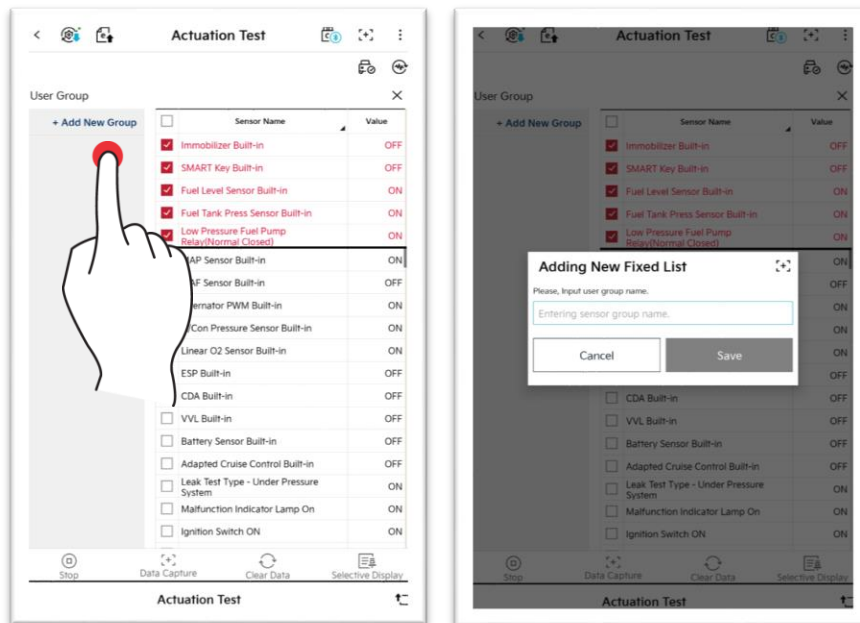
User Group

The user can form or edit a group of desired sensor data items.

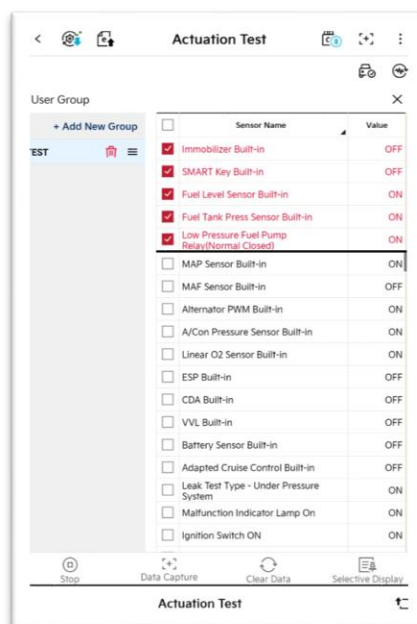
1. In User Group screen, select the sensor data items to be grouped.






2. Once selection of items is made, form a group through ‘Add a New Group’.



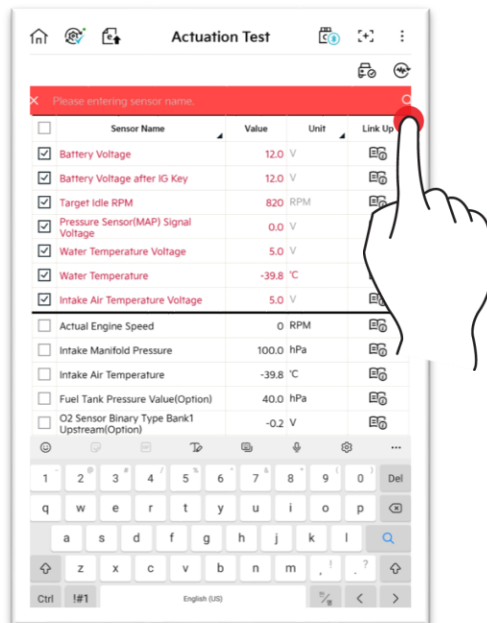
3. The group formation is completed.




		You can delete the formed group.
		You can change the group order.

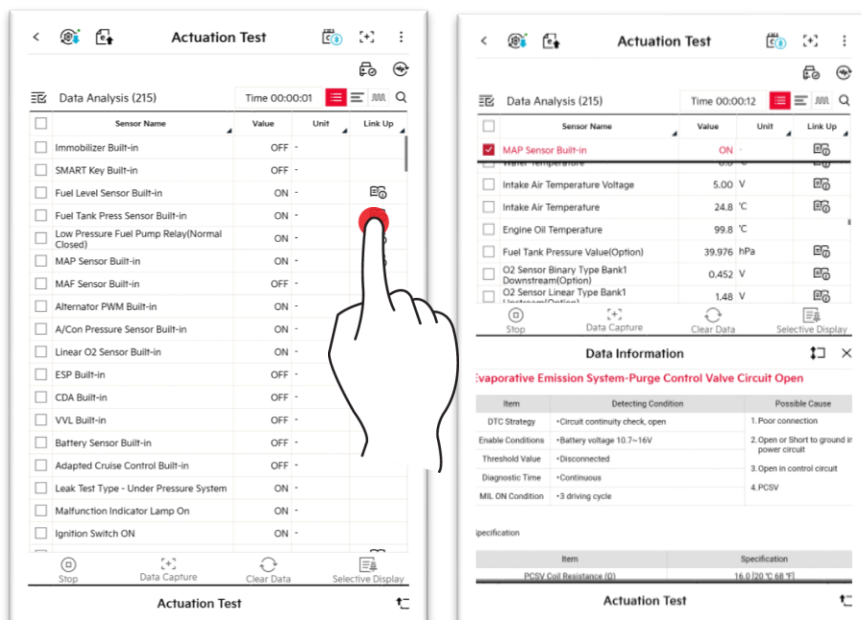
Search

You can search the sensor data by entering a search word and touching .







Link-up


You can check the sensor information of the selected items by touching .

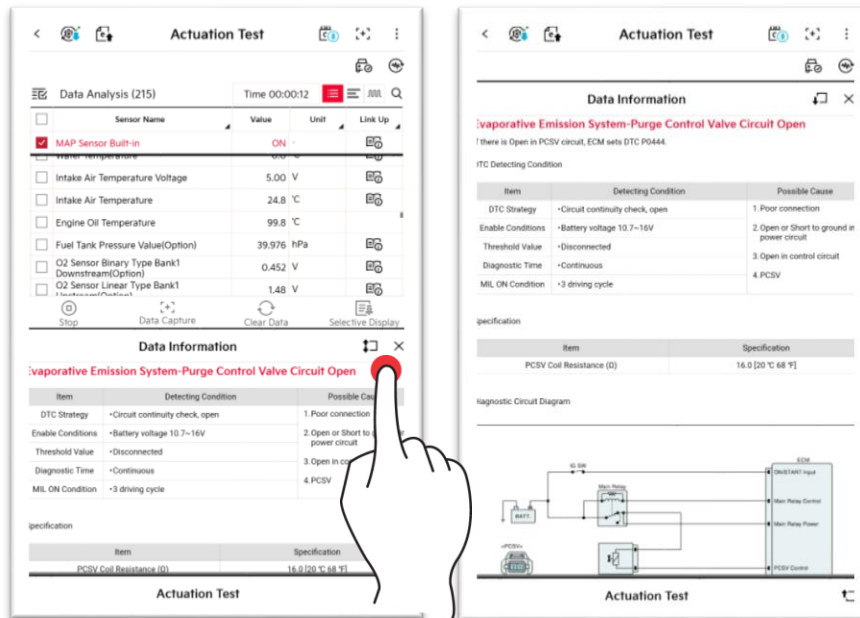


Bottom Function Buttons

 Stop	This function collects sensor data values over a certain period of time, and stops the sensor data values. 'Start' and 'Stop' buttons operate in turn.
 Data Capture	This captures the sensor data screen.
 Clear Data	This initializes the collected sensor data values, and recollects them.
 Selective Display	This only shows the sensor values of the sensor data items, which were selected based on needs. The entire sensor data values are shown when Fixed Output function is turned off.

Screen Control

1. You can spread or fold the screen by dragging  button upwards or downwards.



2. You can maximize/minimize the items in Graph Mode.

