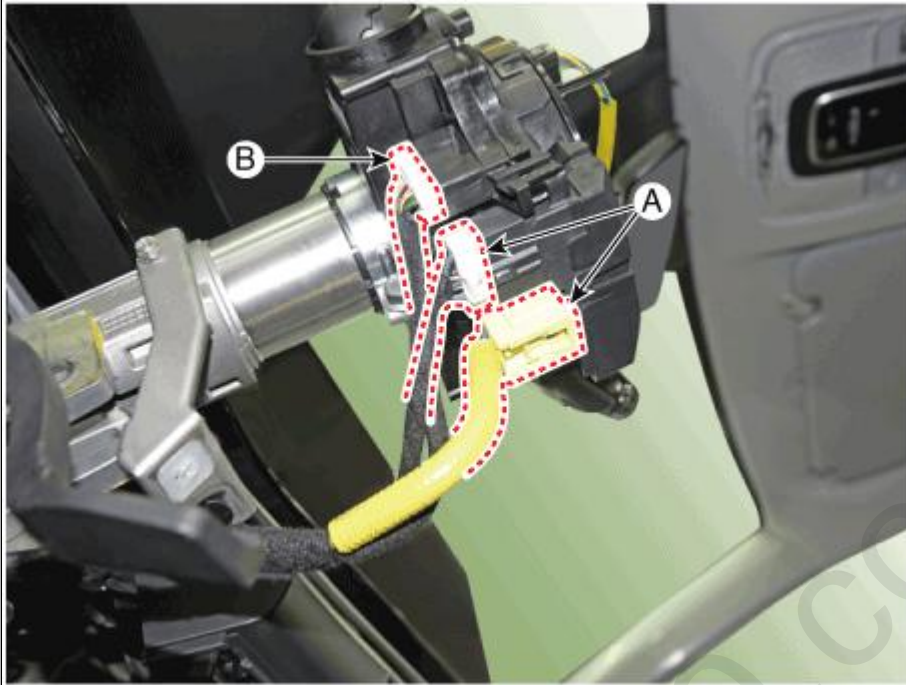
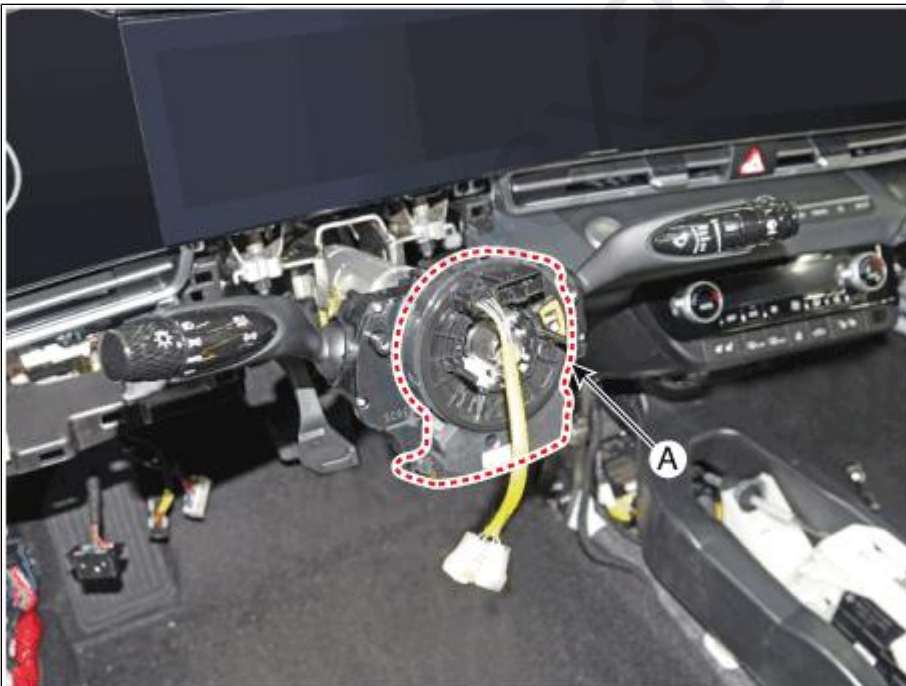


Removal

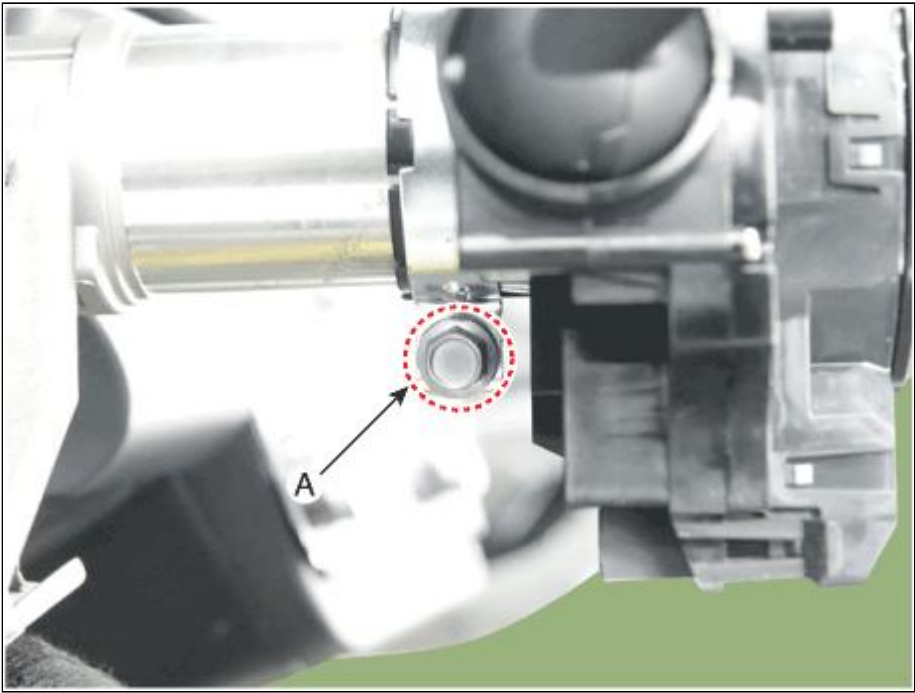
1. Disconnect the negative (-) battery terminal.
2. If it is necessary to remove multifunction switch assembly, remove the steering wheel.
(Steering System - "Steering Wheel")
3. Remove the steering column upper shrouds.
(Refer to Body - "Steering Column Shroud Panel")
4. Disconnect the clock spring connector (A) and multifunction switch connector (B).



5. Remove the clock spring (A).



6. Loosen the clamp (A) and remove the multifunction switch assembly (A).



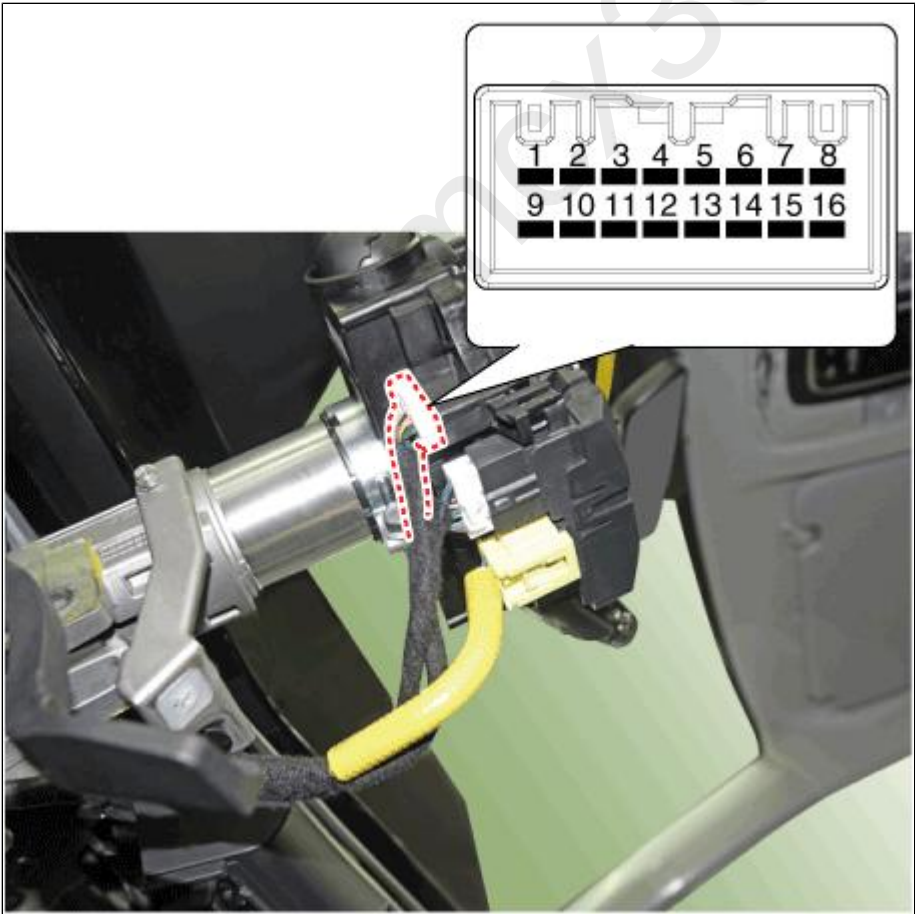
Installation

1. Install the multifunction switch.
2. Install the clock spring and steering wheel.
3. Install the steering column upper and lower shrouds.
4. Install the steering wheel.

Inspection (With Diagnostic tool)

Windshield Wiper/Washer Switch Inspection

1. Check for continuity between the terminals in each switch position as shown below.



Deiscription	Switch	Resistance Value (Ω , $\pm 3.5\%$)
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Wiper switch signal	MIST	330
	OFF	∞
	INT (AUTO)	800
	Low	1800
	High	5700
Front wiper INT volume	Volume 1 (Fast)	330
	Volume 2	690
	Volume 3	1310
	Volume 4	2610
	Volume 5	7310
Fog lamp switch	OFF	∞
	Front	910
	Rear	2910
Turn signal lamp switch	OFF	∞
	L/C_LH	910
	T_SIG_LH	2910
	L/C_RH	910
	T_SIG_RH	2910
Head lamp Passing / High beam switch	OFF	∞
	Passing	910
	Dimmer	2910
Light Switch	OFF	680
	Auto	1680
	Tail lamp	5580
	Head lamp(Low)	∞

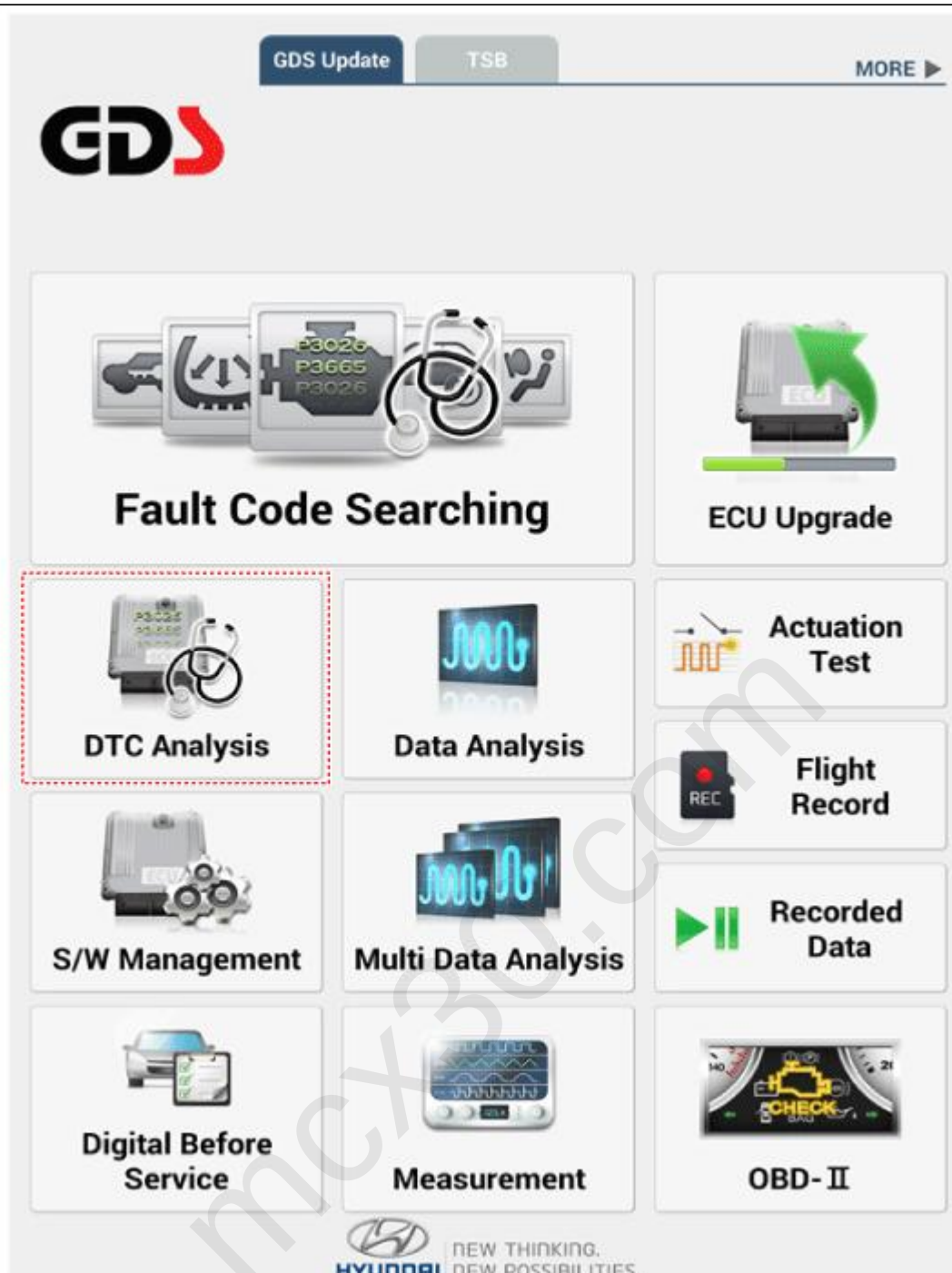
Inspection (With Diagnostic tool)

1. In the body electrical system, failure can be quickly diagnosed by using the vehicle diagnostic system (Diagnostic tool).

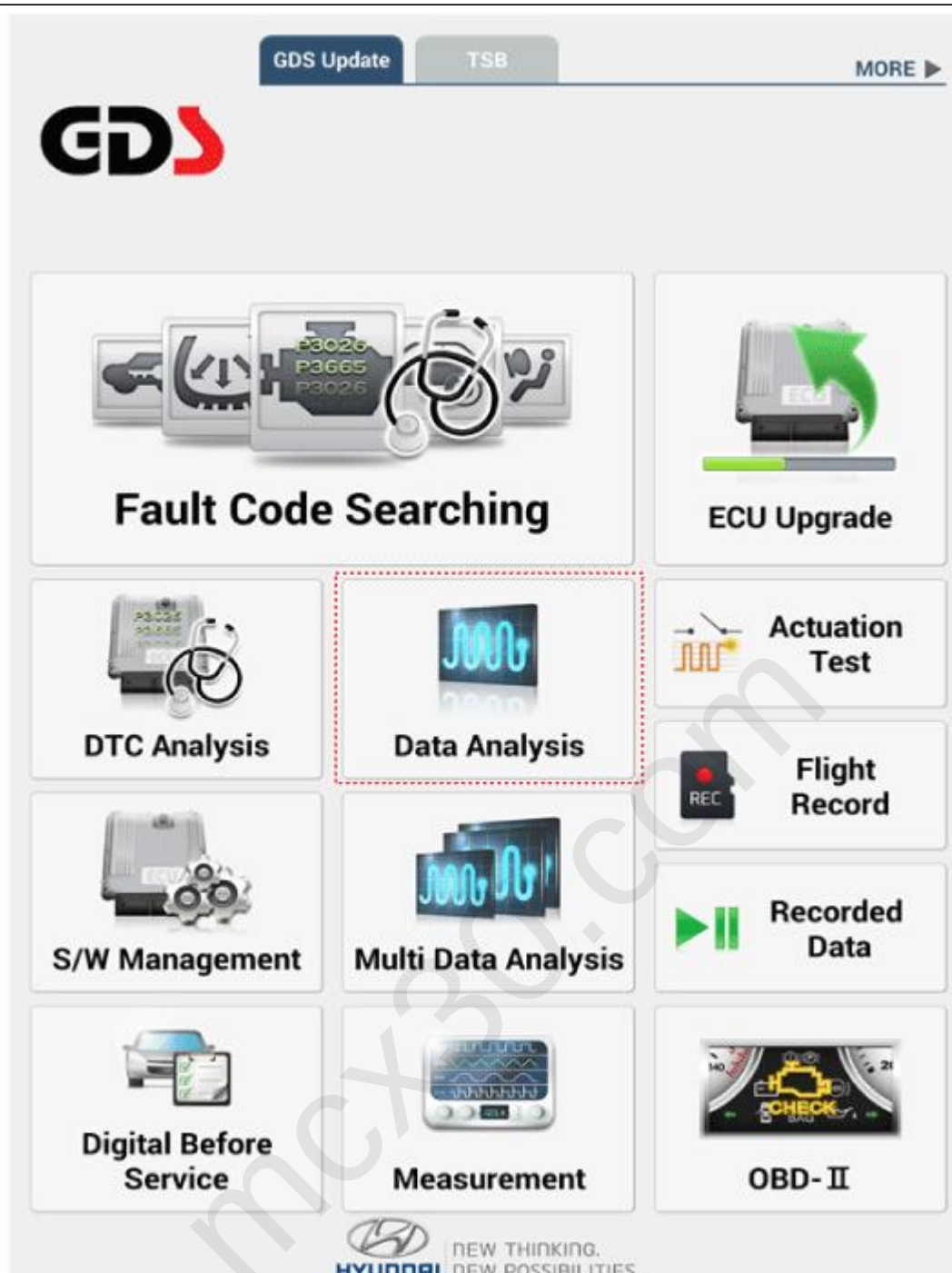
The diagnostic system (Diagnostic tool) provides the following information.

- (1) Fault Code Searching : Checking failure and code number (DTC)
- (2) Data Analysis : Checking the system input/output data state
- (3) Actuation test : Checking the system operation condition
- (4) S/W Management : Controlling other features including system option setting and zero point adjustment

2. If diagnose the vehicle by Diagnostic tool, select "DTC Analysis" and "Vehicle".



3. If check current status, select the "Data Analysis" and "Car model".



4. Select the 'IBU_BCM' to search the current state of the input/output data.

Vehicle Selection



PREV

AUTO
VIN



RESET

SANTAFE(SM)		
SANTAMO(M2)		D 2.2 TCL-R

System Selection



• System

IBU-BCM

OK

Data Analysis			
Stop Graph Selective Display Actuation Test			
Sensor Name(67)	Value	Unit	Link Up
Head Lamp Escort	ON	-	
Rear Wiper Option Setting	ON	-	
Welcome Mirror or Light (Enable on Door Unlock)	ON	-	
Welcome Mirror or Light (Enable on Driver Approach)	ON	-	
Battery Voltage Monitoring Input	11.6	V	
Light Switch Voltage(Voltage Divided)	2.0	V	
Head Lamp High Switch Voltage(Voltage Divided)	5.0	V	
Fog Lamp Switch Voltage(Voltage Divided)	5.0	V	
Front Wiper Switch Voltage(Voltage Divided)	2.2	V	
Wiper INT Volume Voltage(Voltage Divided)	2.8	V	
Rear Wiper Switch Voltage(Voltage Divided)	5.0	V	
ACC Input Voltage	0.00	V	
Ignition 1 Voltage	0.00	V	
Ignition 2 Voltage	0.00	V	
ACC	OFF	-	
IGN1	OFF	-	
IGN2	OFF	-	
Security LED	ON	-	
PAS Switch/RPAS OFF Switch	OFF	-	
PAS Indicator/RPAS OFF Indicator	OFF	-	

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 ☐ 1
 ☐ 2
 ☐ 3
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 ☐ 5 Excellent Value