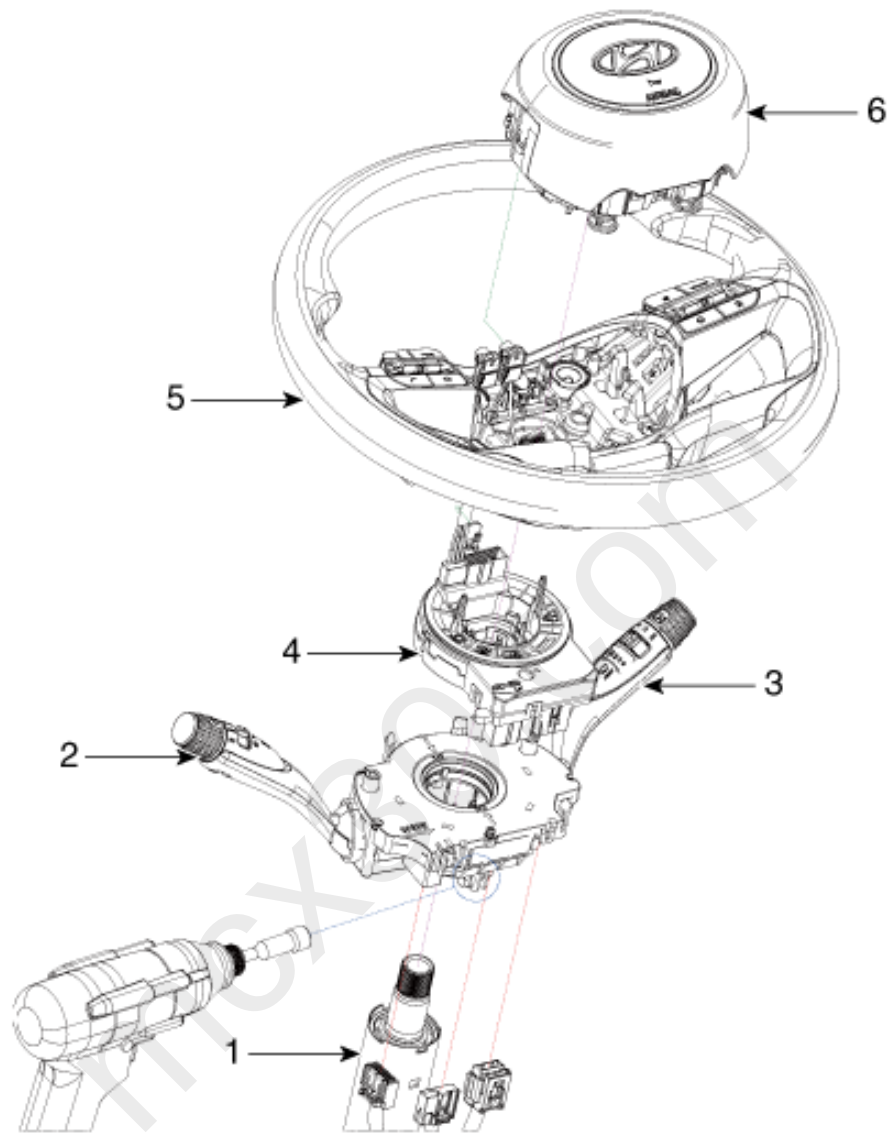




- 1. Steering column
- 2. Lighting switch
- 3. Wiper switch

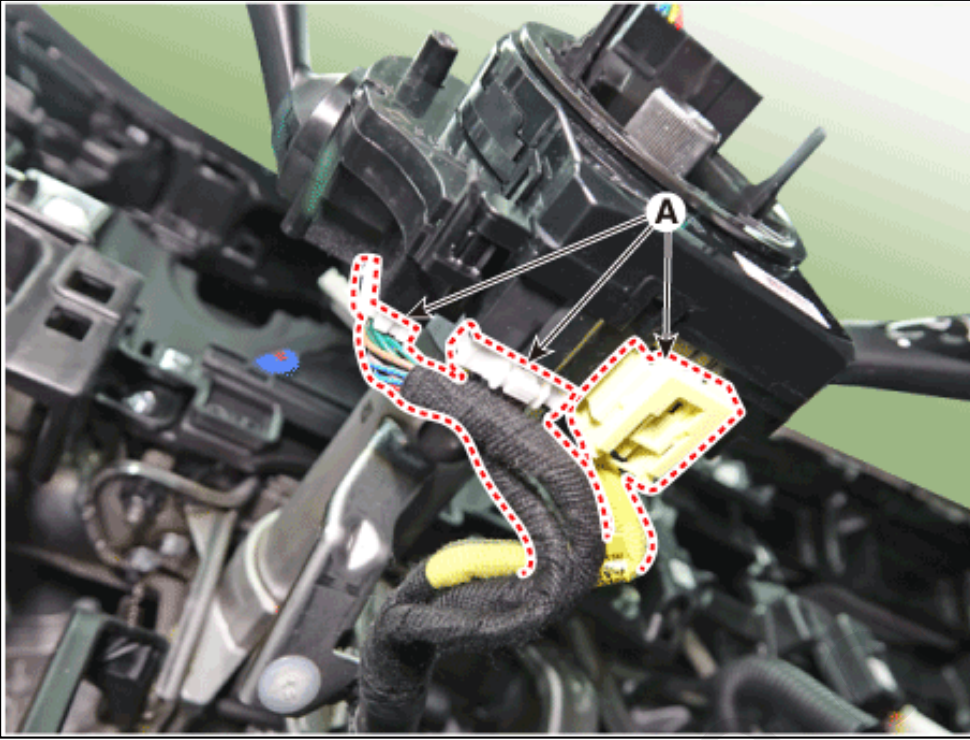
- 4. Clock spring
- 5. Steering wheel
- 6. Driver airbag (DAB)

Specifications

Items		Specifications
Rated voltage		DC 12V
Operating temperature range		-22 to +176°F (-30°C to +80°C)
Rated load	Dimmer & passing switch	High : 0.2A (Relay load) Low : 0.2A (Relay load) Passing : 0.2A (Relay load)
	Lighting switch	Lighting : 0.2A (Relay load) (High, Low, Auto)
	Turn signal switch	6.6A
	Fog lamp switch	0.2A (Relay load)
	Wiper & mist switch	Low : 4.5A (Motor load) High : 4.5A (Motor load) Intermittent : 0.25mA Lock : Max. 28A (Motor load) Washer : 4.0A (Motor load)
	Rear wiper & washer	Wiper : 1.0A (Relay load) Washer : 4.0A (Motor load)

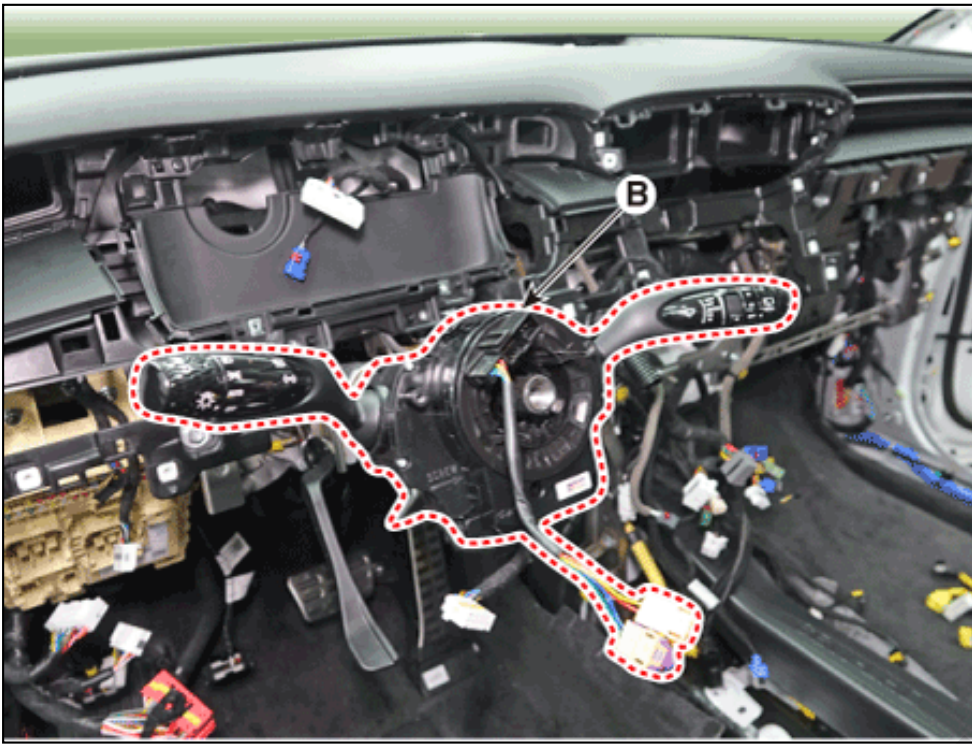
Removal

1. Disconnect the negative (-) battery terminal.
2. Remove the clock spring.
(Refer to Restraint - "Driver Airbag(DAB) and Clock Spring")
3. Disconnect multifunction switch assembly connector (A).



4. Remove the multifunction switch assembly (B) after loosening the clamp (A).





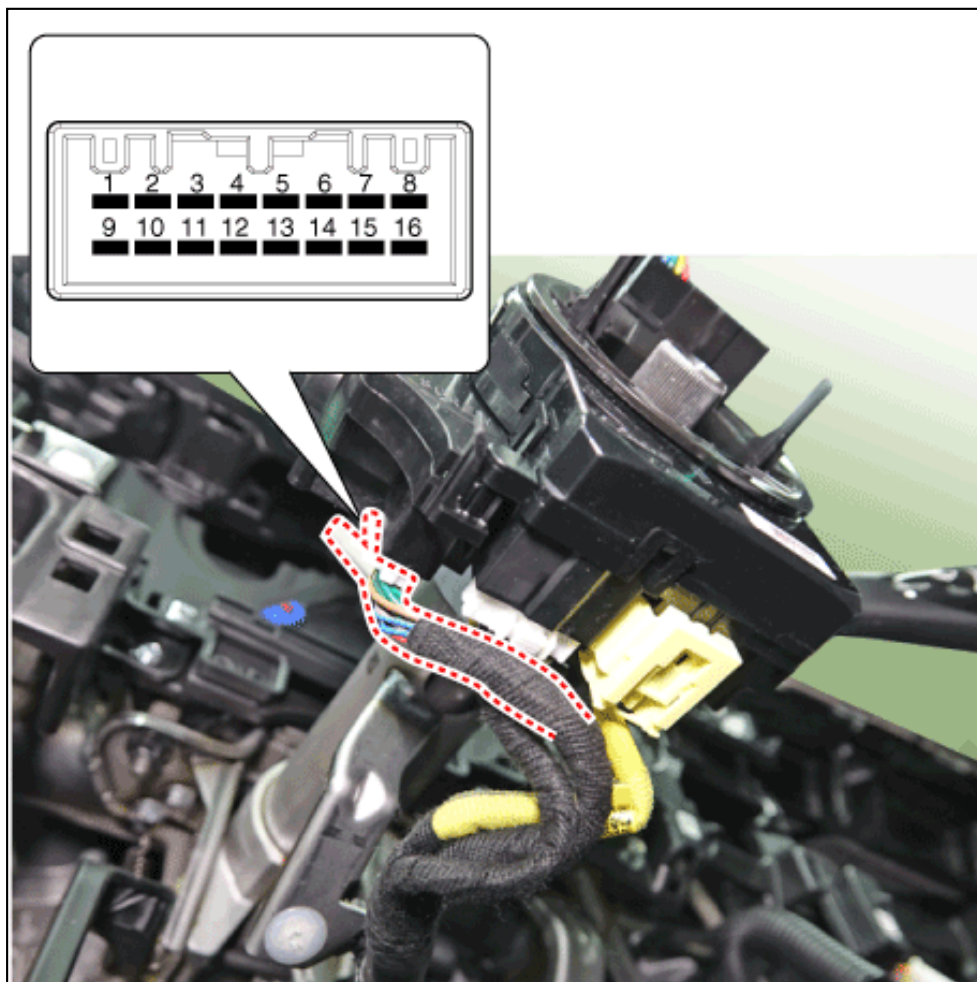
Installation

1. Install the multifunction switch assembly.
2. Install the steering column upper and lower shrouds.
3. Install the steering wheel.
4. Connect the negative (-) battery terminal.

Inspection

Multifunction Switch Inspection

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



Switch	Switch position	Resistance (Ω , $\pm 3.5\%$)
Front wiper switch	MIST	330
	OFF	∞
	INT (AUTO)	800
	LOW	1800
	HIGH	5700
Front wiper intermittent volume	Volume 1	330
	Volume 2	690
	Volume 3	1310
	Volume 4	2610
	Volume 5	7310
Rear wiper switch	OFF	∞
	LOW	910
	HIGH	2910
Fog lamp switch	OFF	∞
	Front foglamp	910
	Rear foglamp	2910

Turn signal switch	OFF	∞
	Rear bumper left	910
	Left	2910
	Rear bumper right	910
	Right	2910
Dimmer & Passing switch	OFF	∞
	Passing	910
	Dimmer	2910
Light switch	OFF	680
	AUTO / DRL	1680
	Tail lamp	5580
	Low beam	∞

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.

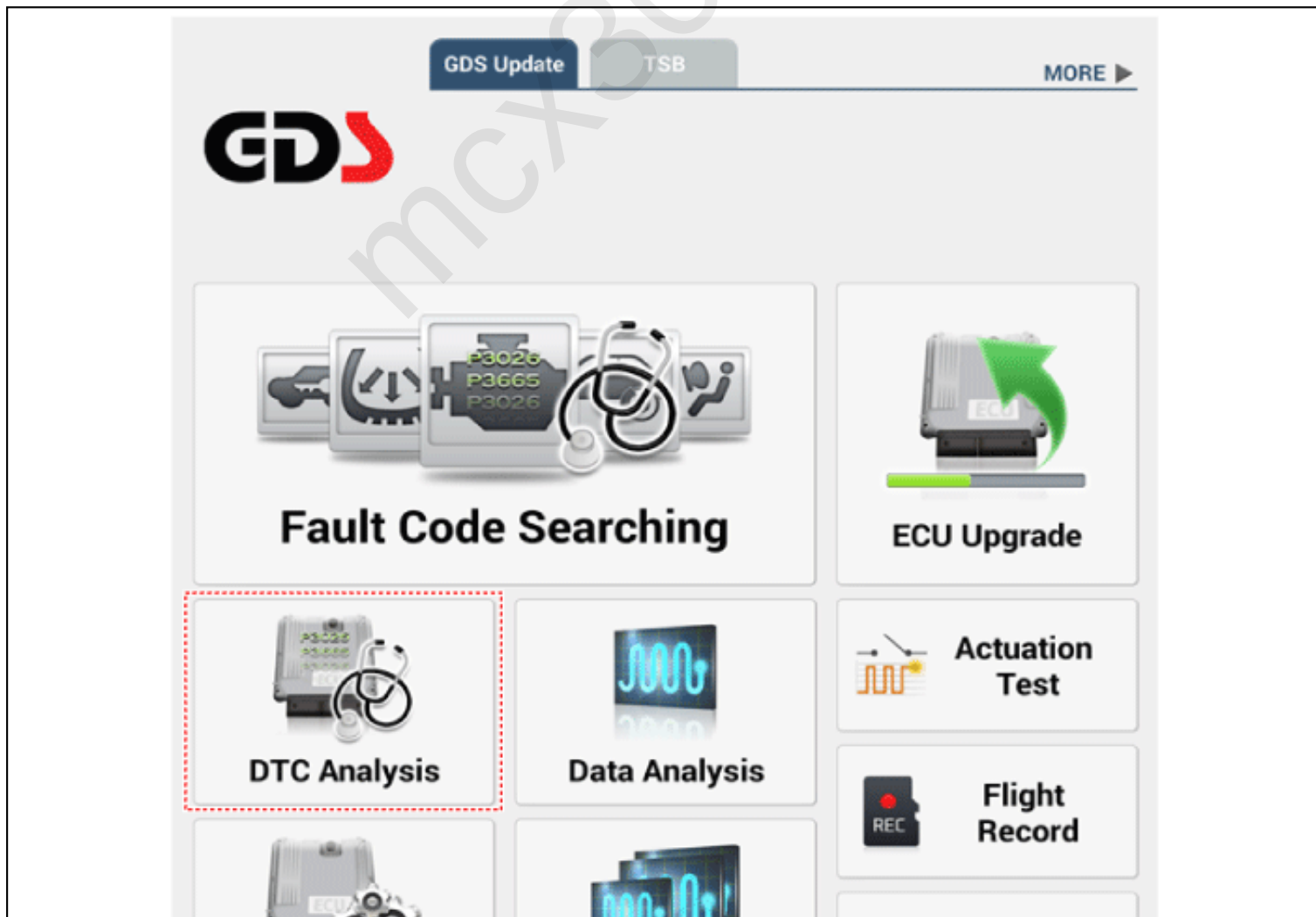
(1) Fault Code Searching : Checking failure and code number (DTC)

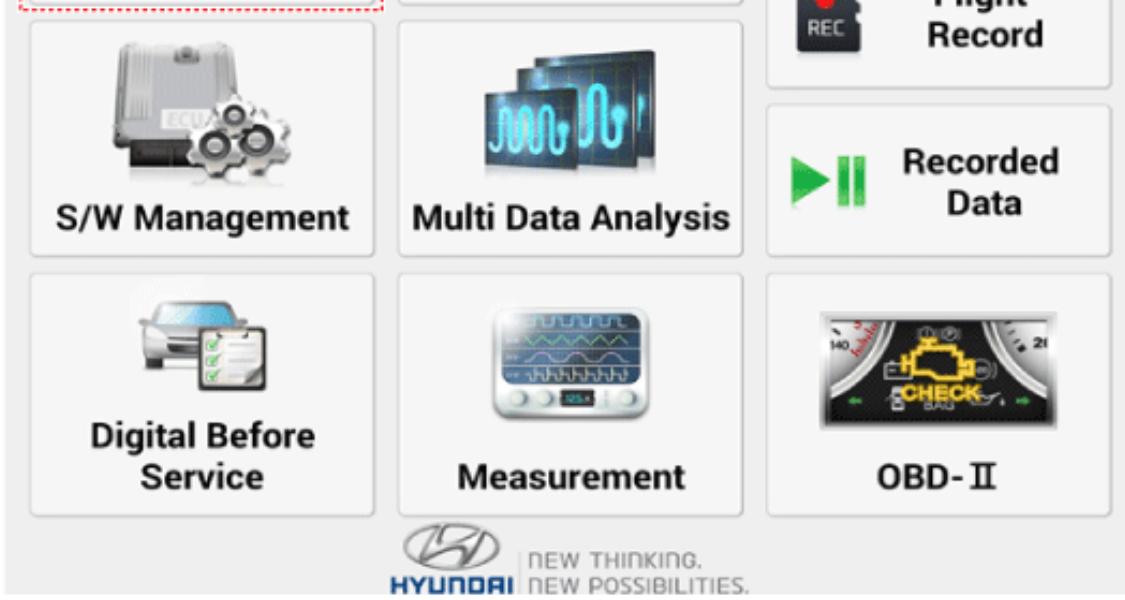
(2) Data Analysis : Checking the system input/output data state

(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".



Digital Before
Service

Measurement

OBD- II



NEW THINKING.
NEW POSSIBILITIES.

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 TCR

System Selection

 ENGINE	 A / T	 ABS/ESP	 FCA	 AIRBAG	 AIRCON
 4WD	 EPS	 RVM	 SVMS	 PA	 BCW
 FR_CMV	 AFLS	 AHLS	 AVN	 CLU	 DDM
 HUD	 IBU-BCM	 IBU-IMMO	 IBU-SMK	 IBU-TPMS	 PSM
 SOS	 Fuel	 SOS	 Fuel	 SOS	 SOS

• 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	-	