GENERAL INSPECTION

Before and after servicing the EPS system, perform the troubleshooting and test procedure as follows. Compare the system condition with normal condition in the table below and if abnormal symptom is detected, perform necessary remedy and inspection.

Test condition	Normal condition: Motor must not supply steering assist.		
	Symptom	Possible cause	Remedy
IG Off	Motor supplies steering assist.	ASP is not calibrated.	Perform the ASP calibration using a scan tool.
		IG power supplies	Inspect the IG power supply line.

Test condition	Normal condition: Motor must not supply steering assist, Warning lamp is illuminated.		
	Symptom	Possible cause	Remedy
IG On/Engine Off	Motor supplies steering assist.	ASP is not calibrated.	Perform the ASP calibration using a scan tool.
		EMS CAN signal is not received.	Inspect the CAN line.
	Warning lamp is not illuminated.	Cluster fault	Inspect the cluster and cluster harness.

Test condition	Normal condition: Motor supplies steering assist, Warning lamp is not illuminated.		
	Symptom	Possible cause	Remedy
IG On/Engine On	Warning lamp is illuminated and motor does not supply steering assist.	EPS (Hot at all times) and IG power supply fault	Inspect the connector and harness for EPS (Hot at all times) and IG power supply line.
		DTC is detected by system.	Perform the self test using a scan tool and repair or replace.
	Warning lamp is illuminated and motor supplies steering assist.	ASP is not calibrated.	Perform the ASP calibration using a scan tool.
		CAN communication between EPS and cluster is fault.	Inspect the CAN line.

ASP: Absolute Steering Position
CAN: Controller Area Network
EMS: Engine Management System

⚠ CAUTION

The following symptoms may occur during normal vehicle operation and if there is no EPS warning light illumination, the EPS system is not malfunctioning.

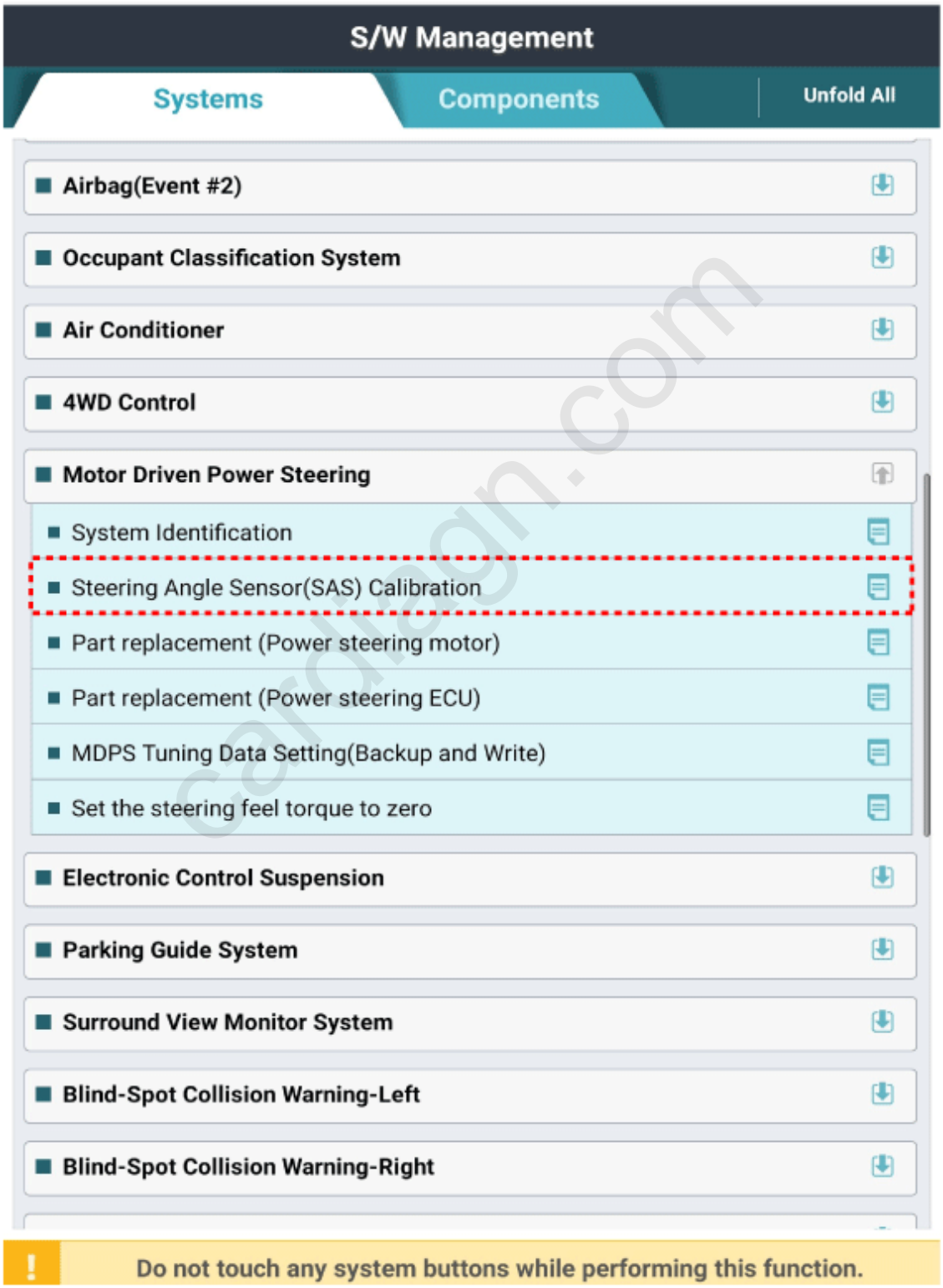
- After switching the ignition on, the steering wheel becomes heavier for about 2 seconds to perform EPS system diagnostics, and then returns to normal steering condition.
- When switching on or off the ignition, the EPS relay noise may occur, which is considered normal.
- If the vehicle is steered in stationary or low speed driving condition, motor noise may occur, which is considered normal.

Caution for ASP (Absolute Steering Position) calibration or EPS type recognition

- Check that the battery is fully charged before ASP calibration or EPS type recognition.
- Be careful not to disconnect any cables connected to the vehicle or scan tool during ASP calibration or EPS type recognition.
- After completing the ASP calibration or EPS type recognition, switch off the ignition and wait for several seconds. Then, start the engine to confirm normal operation of the vehicle.

ASA Calibration

1. Select "Steering Angle Sensor (SAS) Calibration".
2. Proceed with the test according to the screen instructions.



English

S/W Management

• **Steering Angle Sensor(SAS) Calibration**

Purpose	To calibrate steering angle value on the Electric Power Steering(EPS) ECU to actual steering angle value of vehicle.
Enable Condition	1.Engine Off 2.Ignition Switch On
Concerned Component	Electric Power Steering(EPS) ECU, Steering Angle Sensor(SAS)
Concerned DTC	C1261
Fail Safe	Warning Lamp On
Etc	Perform this function whenever EPS ECU is replaced or works were done on EPS system.

OK

! Do not touch any system buttons while performing this function.

English

S/W Management

Steering Angle Sensor(SAS) Calibration

[Steering Angle Sensor(SAS) Calibration]

This function is used to calibrate steering angle values inputted in EPS ECU and in an actual vehicle respectively by making the values the same.

Perform this function when you replace EPS ECU or do work related to EPS.

1. Ignition On

2. Engine Stop

Turn the steering wheel to straight ahead position and

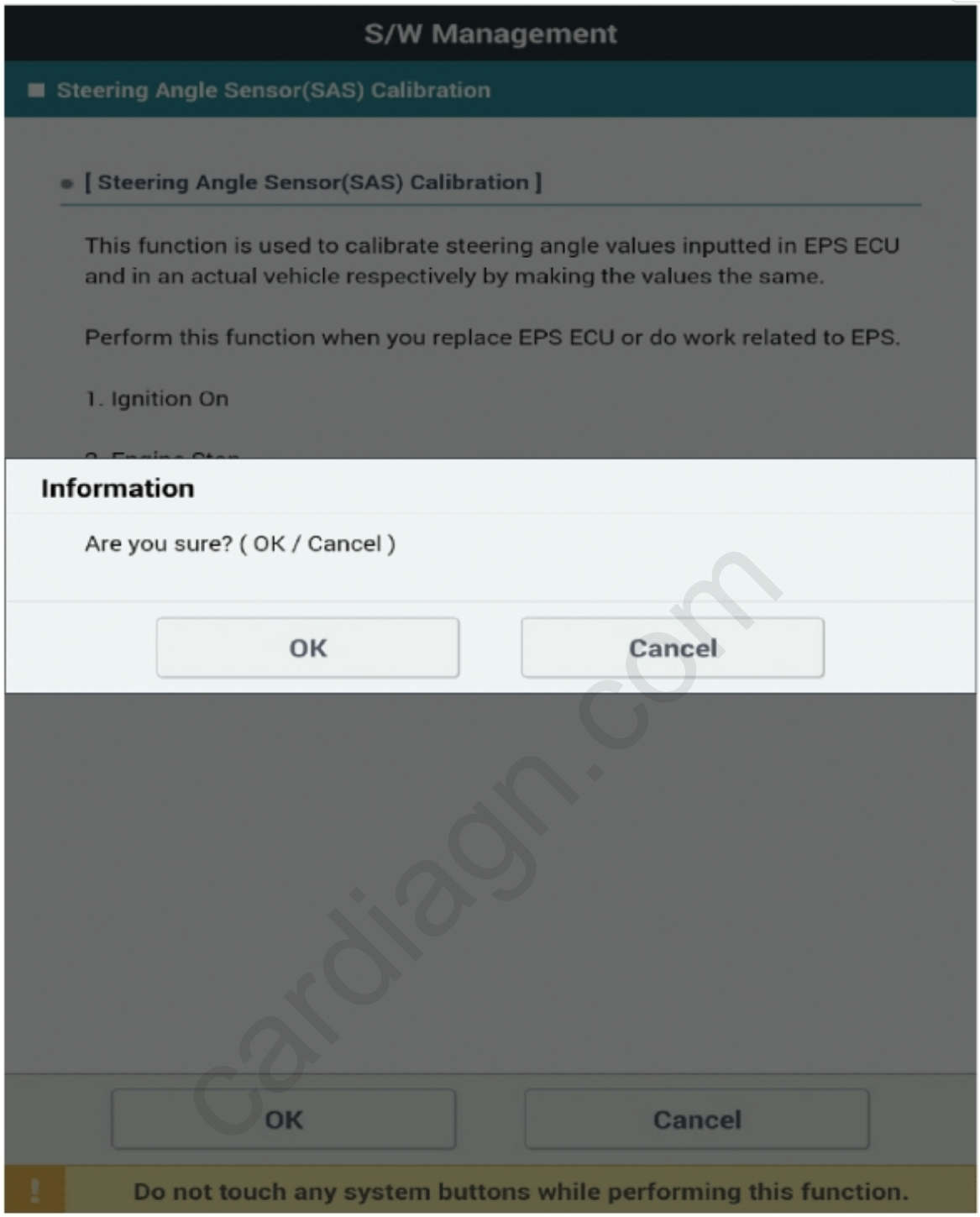
press [OK] button.

Press [Cancel] button to exit.

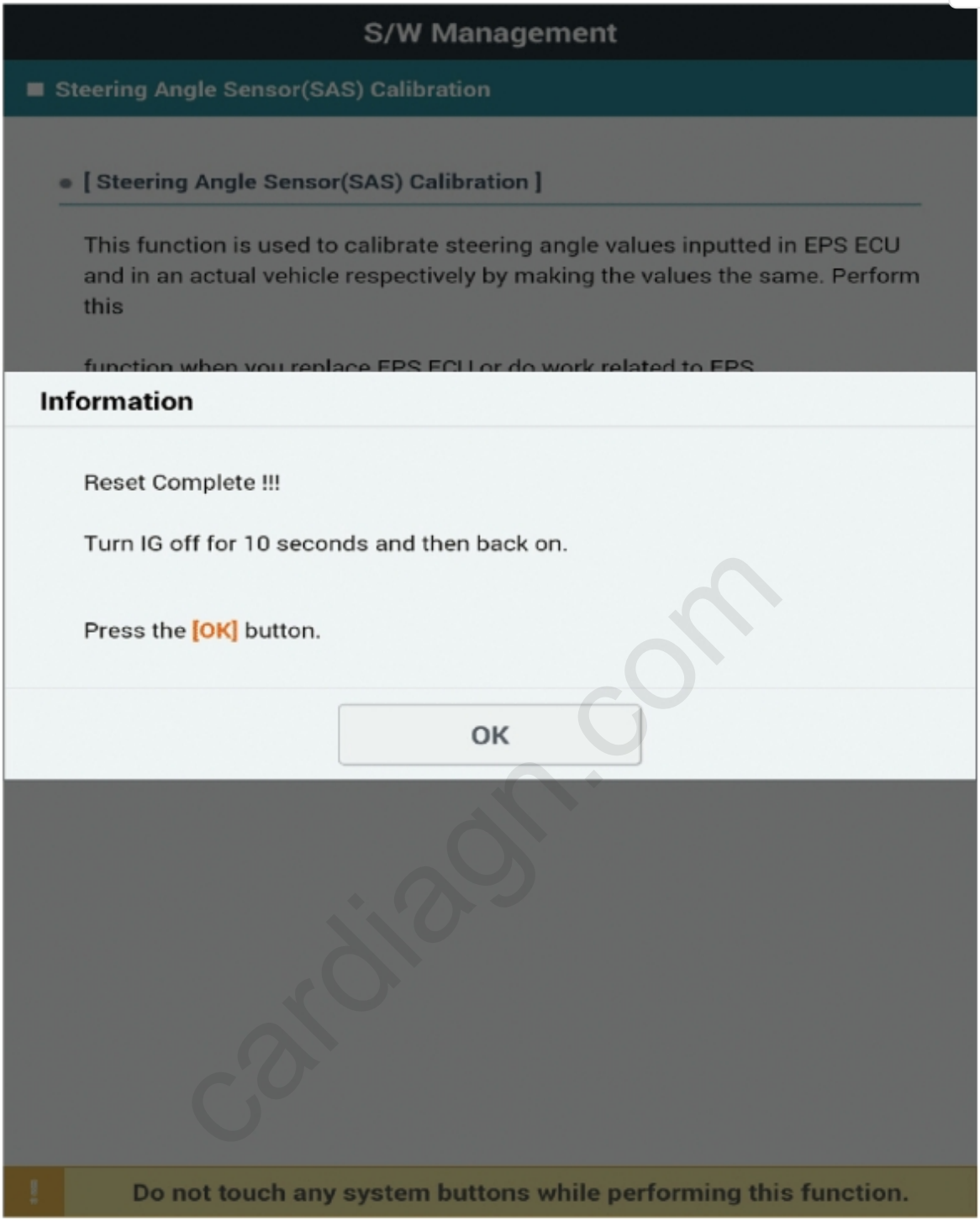
OK Cancel

! Do not touch any system buttons while performing this function.

English



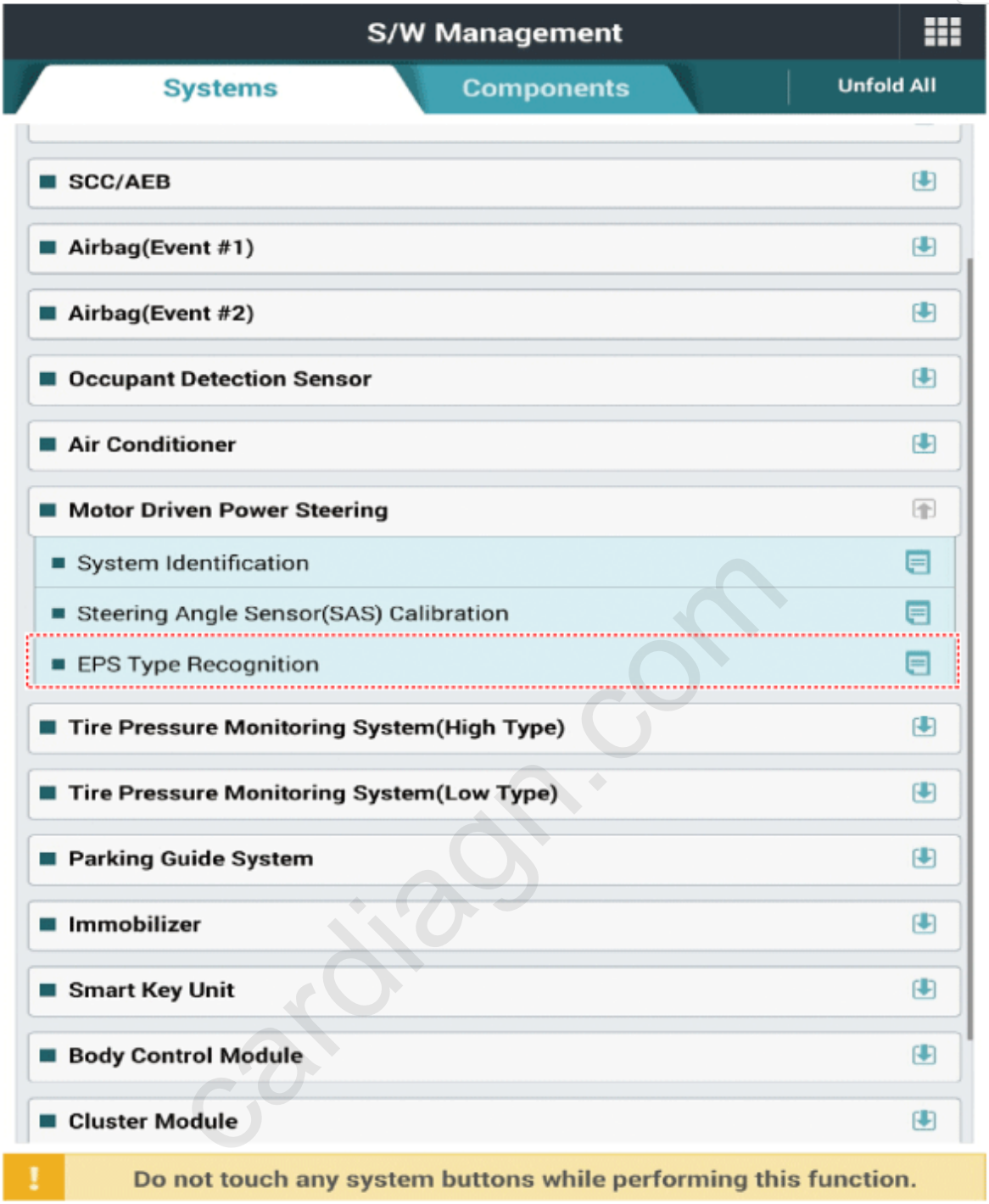
English



EPS Type Recognition Procedure

1. Select "EPS Variant Coding".
2. Proceed with the test according to the screen instructions.

English



English

S/W Management

EPS Type Recognition

[EPS Type Recognition]

This function is used for loading accurate EPS type into the EPS control module.

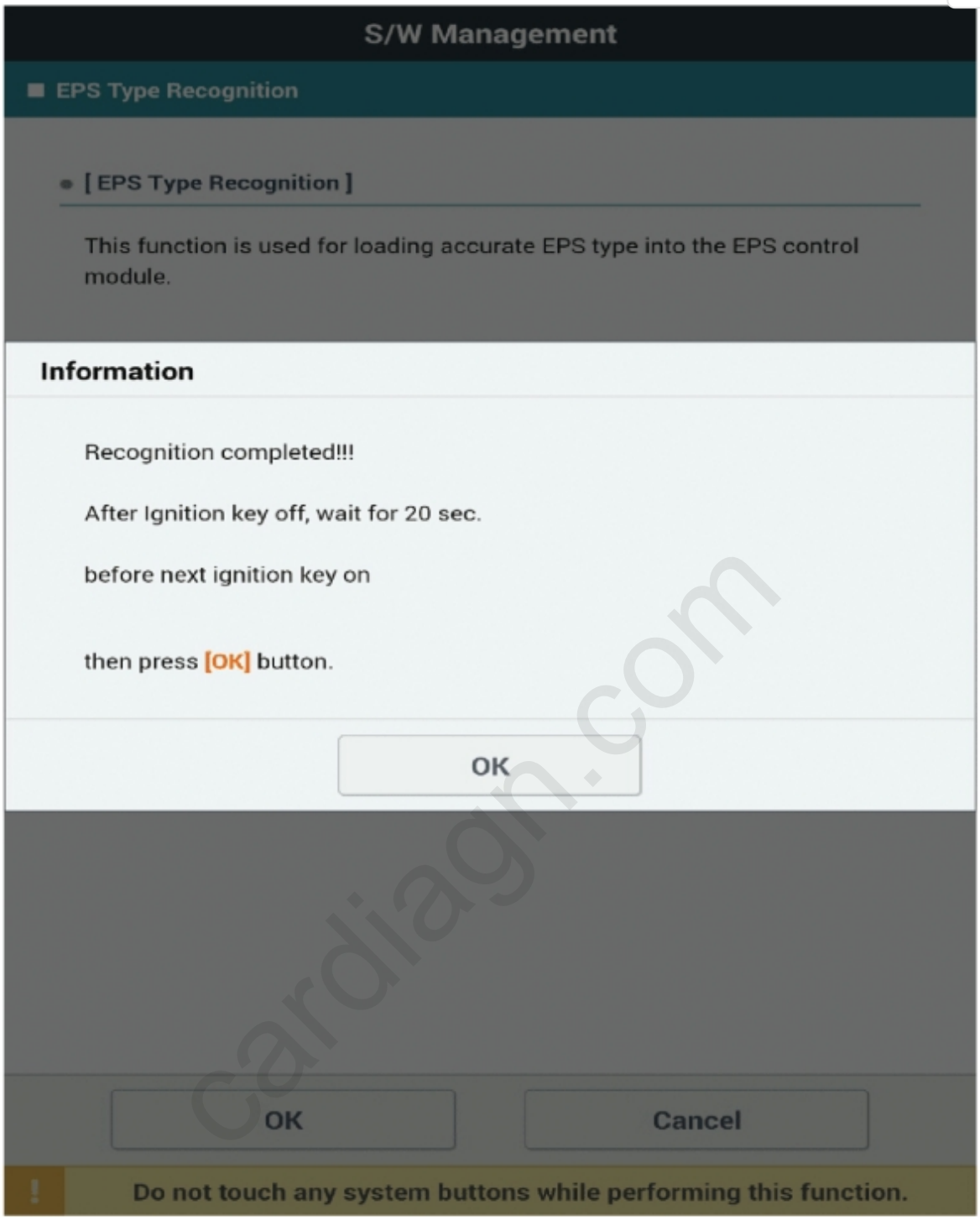
Correctly choose among the areas below and press [OK] button.

CURRENT:

OK Cancel

Do not touch any system buttons while performing this function.

English



*** Thanks for your cooperation for the more quality. Please surely rate this document before closing.**