



Inspection

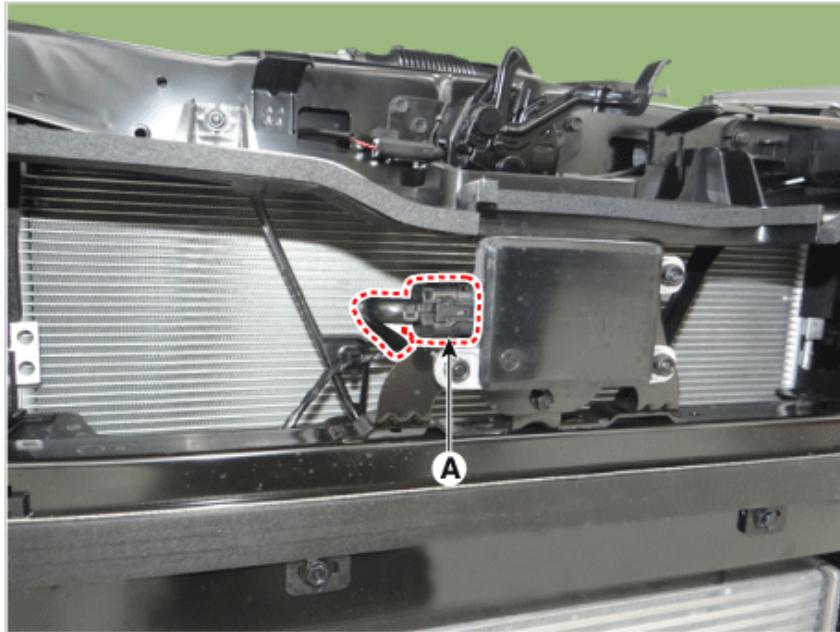
The Forward Collision-Avoidance Assist (FCA) system switch is incorporated in the cluster under the User Setting Menu (USM), it allows the driver to Enable or Disable the FCA system. The FCA system (state) is ON by default and does not return to the previous driver settings with the next ignition cycle.

If the ESP function is turned OFF, the FCA function is turned OFF as well.

Removal

FCA Radar

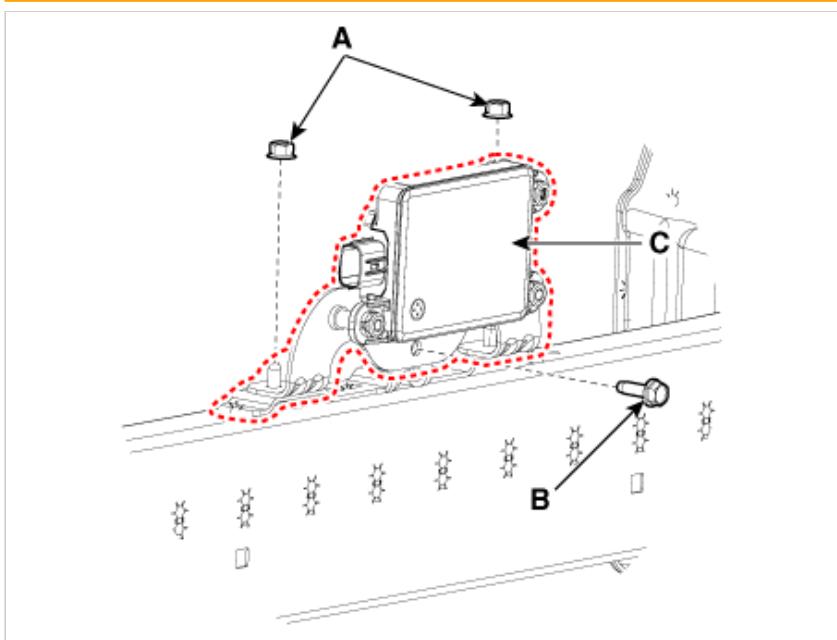
1. Turn ignition switch OFF and disconnect the negative (-) battery cable.
2. Remove the front bumper assembly.
(Refer to Body - "Front bumper assembly")
3. Disconnect the FCA radar connector (A).



4. Loosen the FCA radar nuts (A) and bolt (B) and then remove the FCA radar (C).

Tightening torque:

(A,B) : 9.8 - 11.8 N·m (1.0 - 1.2 kgf·m, 7.2 - 8.7 lb·ft)



Lane Keeping Assist (LKA) Unit

FCA, contrary to SCC w/ S&G has to work on a stationary car so the system uses the Fusion Target system to combine radar and camera.

1. Turn ignition switch OFF and disconnect the negative (-) battery cable.

2. Remove the lane keeping assist (LKA) unit.

(Refer to Body Electrical Syste - "Lane keeping assist (LKA) Unit")

Installation

FCA Radar

1. Install in the reverse order of removal.

2. Perform FCA(Smart cruise control system) variant coding.

The screenshot shows the 'S/W Management' interface with the 'Components' tab selected. The list of systems includes:

- Engine Control
- Automatic Transaxle
- ABS/ESC
- SCC/AEB
 - System Identification
 - Variant Coding
 - Radar Sensor Alignment (SCC/AEB)
- Airbag(Event #1)
- Airbag(Event #2)
- Occupant Detection Sensor
- Air Conditioner
- Motor Driven Power Steering
- Tire Pressure Monitoring System(High Type)
- Tire Pressure Monitoring System(Low Type)
- Parking Guide System
- Immobilizer

A red dashed box highlights the 'Variant Coding' item under the SCC/AEB section. At the bottom of the interface, a yellow warning box contains the text: 'Do not touch any system buttons while performing this function.'

S/W Management



• AEB Variant Coding

Purpose	To initialize the Autonomous Emergency Braking(AEB) ECU.
Enable Condition	1.Engine Off 2.Ignition Switch On
Concerned Component	Smart Cruise Control(SCC) Unit
Concerned DTC	C1702
Fail Safe	Warning Lamp On
Etc	-

OK



Do not touch any system buttons while performing this function.

S/W Management

■ Variant Coding

● [SCC Variant Coding]

[Data Write]

1. Select the item to modify.
2. Select the value in combo box.
3. Press **[OK]** button.
4. IG Key off and on after the test end.

Item	Setting Value
Drivetrain Option :	4WD
Transmission Option :	AT
Driver Seat Position :	LHD
SCC Enable Option :	ENABLE
NAVI SCC Option :	DISABLE
HDA Option :	DISABLE
AEB Enable Option :	ENABLE

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

3. Perform the smart cruise control system (SCC w/ S&G) unit radar alignment.
 (Refer to Engine Electrical System - "Smart cruise control (Stop & Go) unit-radar")

Lane keeping assist (LKA) Unit

1. Install in the reverse order of removal.
2. Perform Service Point Target Auto Calibration (SPTAC).
 (Refer to Body Electrical System - "Lane keeping assist (LKA)")