

# **Technical Service Bulletin**

GROUP	NUMBER
CAMPAIGN	16-01-028-2
DATE	MODEL(S)
JULY 2016	2016 TUCSON (TL)

SUBJECT:

HOOD SAFETY HOOK CATCH REPLACEMENT AND CLUSTER UPDATE (RECALL 145)

This TSB supersedes TSB# 16-01-028-1 with updated cluster control logic software that helps minimize the ROM ID selection options based on cluster type during a MANUAL update. Certain steps of the service procedure have been revised.

### \* IMPORTANT

### \*\*\* Dealer Stock and Retail Vehicles \*\*\*

As required by federal law, dealers must not deliver new vehicles for sale or for lease to customers until all open recalls have been performed. Dealers must also perform all open recalls on used vehicles, demo and rental vehicles prior to placing them into customer use and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the service department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

**Description:** On some 2016 Tucson (TL) vehicles, due to the tolerance stack-up between the secondary hood latch and catch mechanisms, the secondary hood latch can potentially disengage from the catch while driving **if the primary hood latch is released**. The condition may result in obscuring the driver's vision and increase the risk of crash.

This bulletin describes the procedure to replace the hood safety hook catch bracket and update the cluster control logic described in the TSB.



Limited Ultimate Supervision



SE, Eco, Sport, Limited Standard Applicable Vehicles: Certain 2016 MY Tucson (TL) vehicles.

### **Parts Information:**

Part Name	Part Number	Description	Qty
HOOD SAFETY HOOK CATCH	81150- D3010QQH		1/ KIT

### **ROM ID Table**

Model Year	Cluster	Part Number	Old ROM ID (S/W Version)	New ROM ID (S/W Version)	
	TL CLUSTER SUPER VISION	94011-D3160	1.01	1.02	
			2.00	2.05	
	(Limited w/Ultimate Pkg)	94011-D3161	2.01, 2.02	2.05	
2016	TL CLUSTER STANDARD  (SE, Eco, Sport, Limited w/Std Pkg)	94001-D3170 94001-D3180	9.00	9.01	
			1.01	1.02	
			2.00	2.05	
			2.01,2.02	2.04	

### **GDS** Information:

Event #	Description
406	TL CLU CONTROL LOGIC IMPROVEMENT

# **Warranty Information:**

Op. Code	Operation	Op. Time
61C033R0	Hood Safety Hook Catch Replacement and Cluster Upgrade	0.3 M/H

NOTE: Submit Claim on Campaign Claim Entry Screen

TSB #: 16-01-028-2 Page 2 of 14

#### **Service Procedure:**

# **NOTICE**

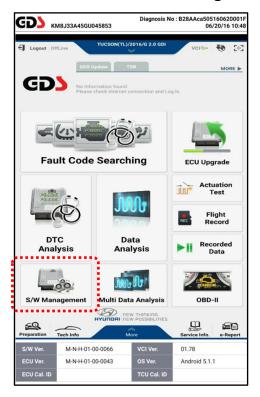
This Service Procedure is performed using PC-based GDS, or GDS-mobile. For update information and general precautions, please refer to TSBs #15-GI-001 and #15-GI-002.



Prior to performing the cluster update, it is important to check and write down the cluster part number and software version. This step is important, in case the GDS loses communication with the cluster during an update. The software version noted can be used during Manual update by selecting the appropriate ROM ID.

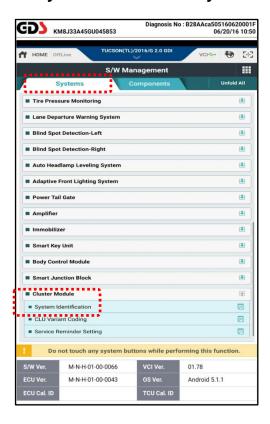
### Cluster Part Number and Software Version Check using GDS Mobile:

1. Launch the GDS Mobile screen and select **S/W Management**.

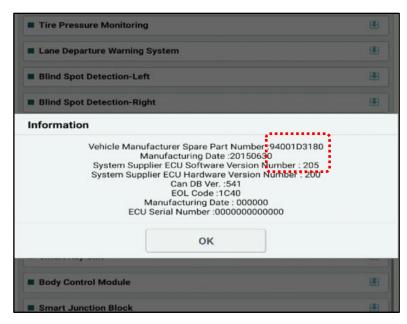


TSB #: 16-01-028-2 Page 3 of 14

2. Select Cluster Module under Systems and click on System Identification.



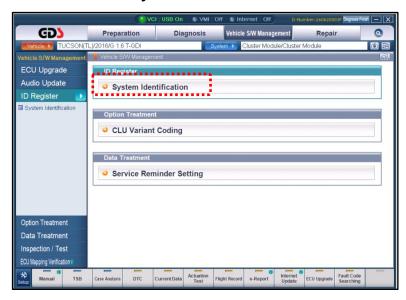
 Note down the Cluster Part Number and Software Version Number (ROM ID) and use the ROM ID Table on Page 2 to determine the appropriate Software Number (ROM ID) for the update.



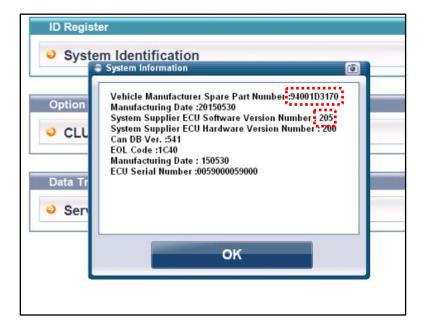
TSB #: 16-01-028-2 Page 4 of 14

### **Cluster Part Number and Software Version Check using PC GDS:**

- 1. From the ECU Upgrade screen, select MANUAL MODE and click Next.
- Select CLU for System, and click OK.
- 3. Select ID Register and then click System Identification.



4. Note down the Cluster Part Number and Software Version Number (ROM ID) and use the ROM ID Table on Page 2 to determine the appropriate Software Number (ROM ID) for the update.



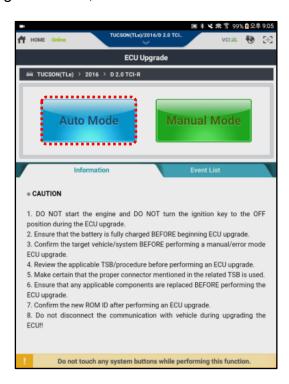
TSB #: 16-01-028-2 Page 5 of 14

### **GDS Mobile Procedure: AUTO MODE**

1. Select 'ECU Upgrade' on the initial screen of GDS mobile after entering the vehicle information.



2. Starting from the ECU Upgrade menu, select AUTO MODE.



TSB #: 16-01-028-2 Page 6 of 14

3. Select CLU system, and click ID Check.



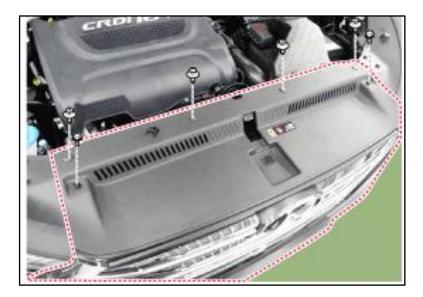
4. Select **Event #406. TL CLU CONTROL LOGIC IMPROVEMENT.** Current ROM ID will be displayed along with update ROM ID. Verify ROM IDs according to the ROM ID Table on page 2. Click **Upgrade** to continue.



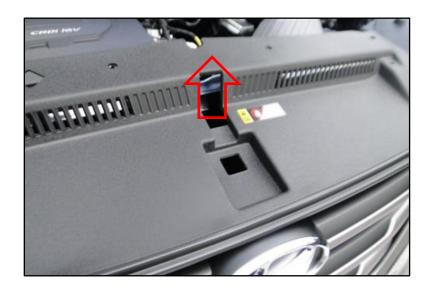
Note: As system is updating, conduct the hood catch replacement on page 8-9.

TSB #: 16-01-028-2 Page 7 of 14

- 1) See pages11-12 for PC-Based GDS Procedure: AUTO MODE
- 2) See pages 12-13 for PC-Based GDS Procedure: MANUAL MODE
- 3) See pages 13-14 for GDS Mobile Procedure: MANUAL MODE
- 5. Open the hood. Remove the clips and bolts on the radiator grille upper cover.



6. Lift up the radiator grille upper cover to access the hood catch mounting bolts.



TSB #: 16-01-028-2 Page 8 of 14

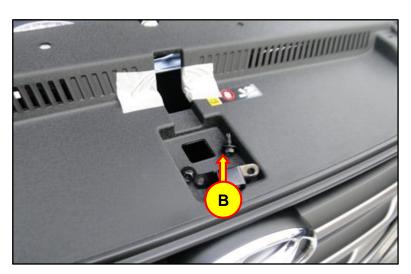
7. Apply the masking tape (A) around the radiator grille upper cover to prevent any scratches. Loosen the two hood catch mounting bolts inside the hole.

## **Tightening Torque:**

a. ~ 11.8 Nm (0.8 ~ 1.2 kgf.m, 5.8 ~ 8.7 lb-ft)



8. Remove the hood safety hook catch (B) and install the replacement hood safety hook catch. Reinstall all the removed parts in reverse order of removal. Remove the masking tape.



TSB #: 16-01-028-2 Page 9 of 14

9. ECU upgrading graph will display in two parts. After ECU Upgrading...(2/2) reaches 100%, turn the ignition **OFF** for 10 seconds, then back **ON** again. Click **OK** to continue.



- 10. Click **OK** after "ECU Upgrade is successfully finished" message is displayed.
- 11. Click Yes to search for fault codes in all systems. Clear any DTCs found.



12. Start the engine to confirm proper operation of the vehicle.

TSB #: 16-01-028-2 Page 10 of 14

### PC-Based GDS Procedure: AUTO MODE

- 1. From the ECU Upgrade screen, select AUTO MODE and click Next.
- 2. Select **CLU** (cluster) for System, and click **OK**.



 ROM ID will be read and displayed. Confirm current and latest ROM IDs are applicable to the vehicle according to the ROM ID Table on page 2. Select event # 406. TL CLU Control Logic Improvement, then click Next.



- 4. After confirming USB cable is connected between VCI and laptop PC, and that the vehicle's battery has adequate charge, the update will begin. After update progress reaches 100%, turn the ignition **OFF** for 10 seconds, then back **ON** again.
- Update completion confirmation window will be displayed.

TSB #: 16-01-028-2 Page 11 of 14

- 6. Check for any incidental diagnostic trouble codes (DTCs) and clear any present.
- 7. Start the engine to confirm proper operation of the vehicle.

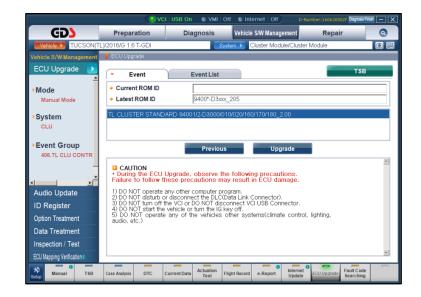
### PC-Based GDS Procedure: MANUAL MODE

- 1. From the ECU Upgrade screen, select **MANUAL MODE** and click **Next**.
- Select CLU for System, and click OK.
- 3. Using the **ROM ID Table** on Page 2, determine the appropriate Software Number (ROM ID) for the update.
- 4. Select the applicable event (#406. TL CLU Control Logic Improvement) and click Next.



5. Select the cluster part number displayed by the GDS and then click **Upgrade**.

<u>Note:</u> The cluster part number and the VIN are identified and registered in the GDS while attempting the AUTO update process.



TSB #: 16-01-028-2 Page 12 of 14

6. A prompt for password will be displayed. Input the password according to the table below.



CLUSTER TYPE	PART NUMBERS	<b>Software Version</b>	PASSWORD
TL CLUSTER SUPER VISION	94011-D3160	1.01	3050
	94011-D3160 94011-D3161	2.00 2.01 2.02	3051
TL CLUSTER STANDARD	94001-D3170 94001-D3180	9.00	3052
		1.01	3053
		2.00	3054
		2.01, 2.02	3055

- 7. After confirming the USB cable is connected between VCI and laptop PC, and that the vehicle's battery has adequate charge, the update will begin. After update progress reaches 100%, turn the ignition **OFF** for 10 seconds, then back **ON** again.
- 8. Update completion confirmation window will be displayed.
- 9. Check for any incidental diagnostic trouble codes (DTCs) and clear any present.
- 10. Start the engine to confirm proper operation of the vehicle.

### **GDS Mobile Procedure: MANUAL MODE**

- 1. Using the **ROM ID Table** on Page 2, determine the appropriate Software Number (ROM ID) for the update.
- Starting from the ECU Upgrade menu, select MANUAL MODE.

TSB #: 16-01-028-2 Page 13 of 14

3. Select CLU system, Event #406. TL CLU CONTROL LOGIC IMPROVEMENT. Then select the cluster part number displayed by the GDS and click Upgrade.

<u>Note:</u> The cluster part number and the VIN are identified and registered in the GDS while attempting the AUTO update process.



4. Input the appropriate password according to the ROM ID table on page 13 and then click OK.



- 5. Read the caution note, click **OK** to continue.
- 6. ECU Upgrading graph will display in two parts. After ECU Upgrading...(2/2) reaches 100%, turn the ignition **OFF** for 10 seconds, then back **ON** again. Click **OK** to continue.
- 7. Click **OK** after "ECU Upgrade is successfully finished" message is displayed.
- 8. Click **Yes** to search for fault codes in all systems. Clear any DTCs found.
- 9. Start the engine to confirm proper operation of the vehicle.

TSB #: 16-01-028-2 Page 14 of 14