

**HYUNDAI**NEW THINKING.
NEW POSSIBILITIES.**Technical Service Bulletin**

GROUP

CAMPAIGN

NUMBER

13-01-047

DATE

NOVEMBER, 2013

MODEL(S)

EQUUS (VI)

SUBJECT:

**LDWS UPDATE – MIL ON WITH DTC C1702, C2721
(SERVICE CAMPAIGN TR3)***** IMPORTANT******* Dealer Stock Only *****

All Dealers must perform this Service Campaign on all affected vehicles prior to customer retail delivery.

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

Description: This bulletin provides information related to the 14MY Equus (VI FL) 5.0L Lane Departure Warning System (LDWS) software update. Certain Equus vehicles may display a malfunction indicator lamp illuminated with the following LDWS system-related DTC(s):

- C1702: Variant Coding Error
- C2721: Camera Not Calibrated

*** NOTE**

In case C1702, C2721 DTC(s) are displayed (Previous ROM ID is X90), please perform LDWS Variant Coding and LDWS Reference Point Calibration in sequence in the Vehicle S/W Management function.

*** NOTE**

If LDWS Variant Coding and LDWS Reference Point Calibration are needed, a GDS pop up message will be displayed.

Applicable Vehicles: 14MY EQUUS (VI FL) 5.0L

Applicable vehicle production date range: From May 2, 2013 ~ October 21, 2013

*** NOTE**

To verify the vehicle is affected, be sure to check the version of the vehicle's control unit ROM ID. Reference the ROM ID Information Table mentioned on the next page before attempting to update the control unit software.

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

SUBJECT: LDWS UPDATE - (SERVICE CAMPAIGN TR3)

ROM ID Information Table:

Model	System	LDWS ECU P/N	ROM ID	
			Previous	New
Equus (VI FL)	LDWS	95890-3N970	190	291
			X90	X91→291

Warranty Information:

Model	Op Code	Op Name	Op Time
Equus (VI FL)	30C063R1	LDWS UPDATE	0.3 M/H

NOTE: Submit Claim on Campaign Claim Entry Screen

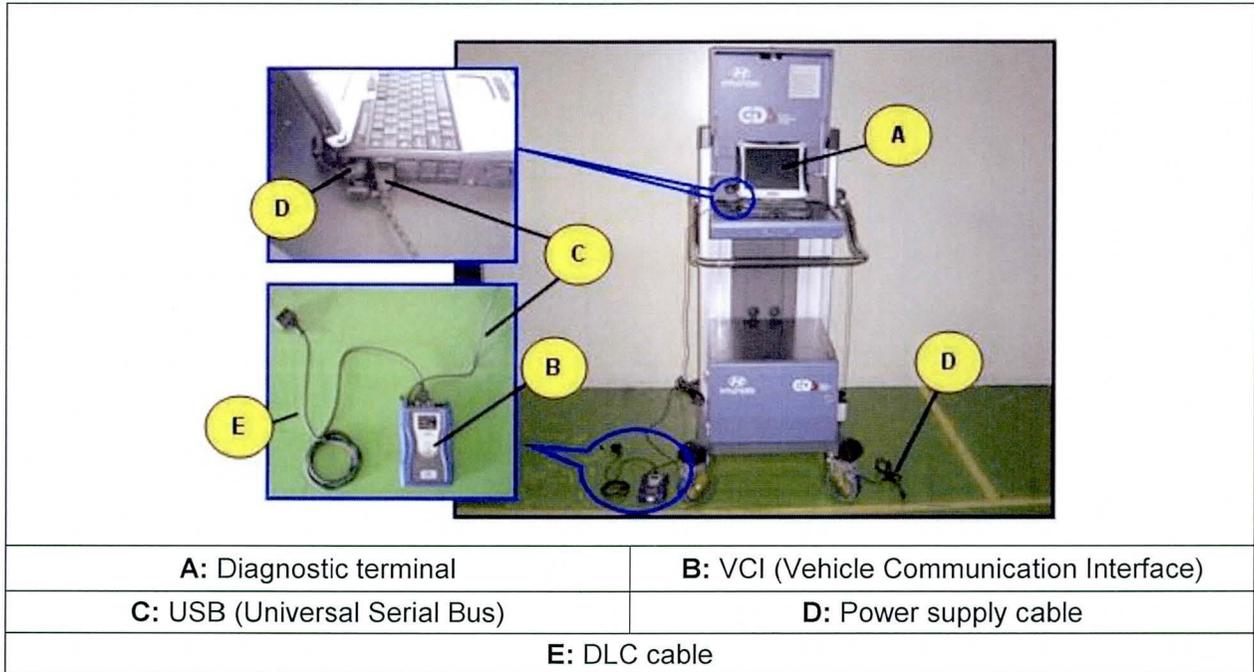
ECM UPDATE PROCEDURE

Cautions during the ECM update:

 **CAUTION**

1. Make sure the vehicle's battery has a reasonable charge. If the vehicle has been in storage for days, run the engine to ensure an adequate battery charge state for reliable update results.
2. Turn off all lamps (do not leave head lamp switch in auto mode) and all accessories (including heater, A/C, blower, radio, seat warmer, defroster, etc.). This prevents the battery from being discharged during the update.
3. Perform the update with the ignition switch in the ON position.
4. Be careful not to disconnect any cables connected to the vehicle or scan tool during the update.
5. Do not start the engine during the update.
6. Do not turn off the ignition switch during the update.

I. GDS Installation Procedure:



1. Connect the power supply cable to the diagnostic terminal.

*** NOTE**

If attempting to perform the update with the power supply cable disconnected from the diagnostic terminal, make certain that the diagnostic terminal is charged enough for the update. If not, the update may fail in progress. Therefore, it is strongly recommended to connect the power supply cable to the diagnostic terminal during the update procedure.

2. Connect the USB cable between the VCI and the diagnostic terminal.

*** NOTE**

When performing the update using the GDS, wireless communication between the VCI and the diagnostic terminal is NOT available. Therefore, be sure to connect the USB cable between the VCI and the diagnostic terminal.

3. Connect the 16-pin DLC cable from the VCI into the vehicle's 16-pin connector under the driver's side instrument panel.

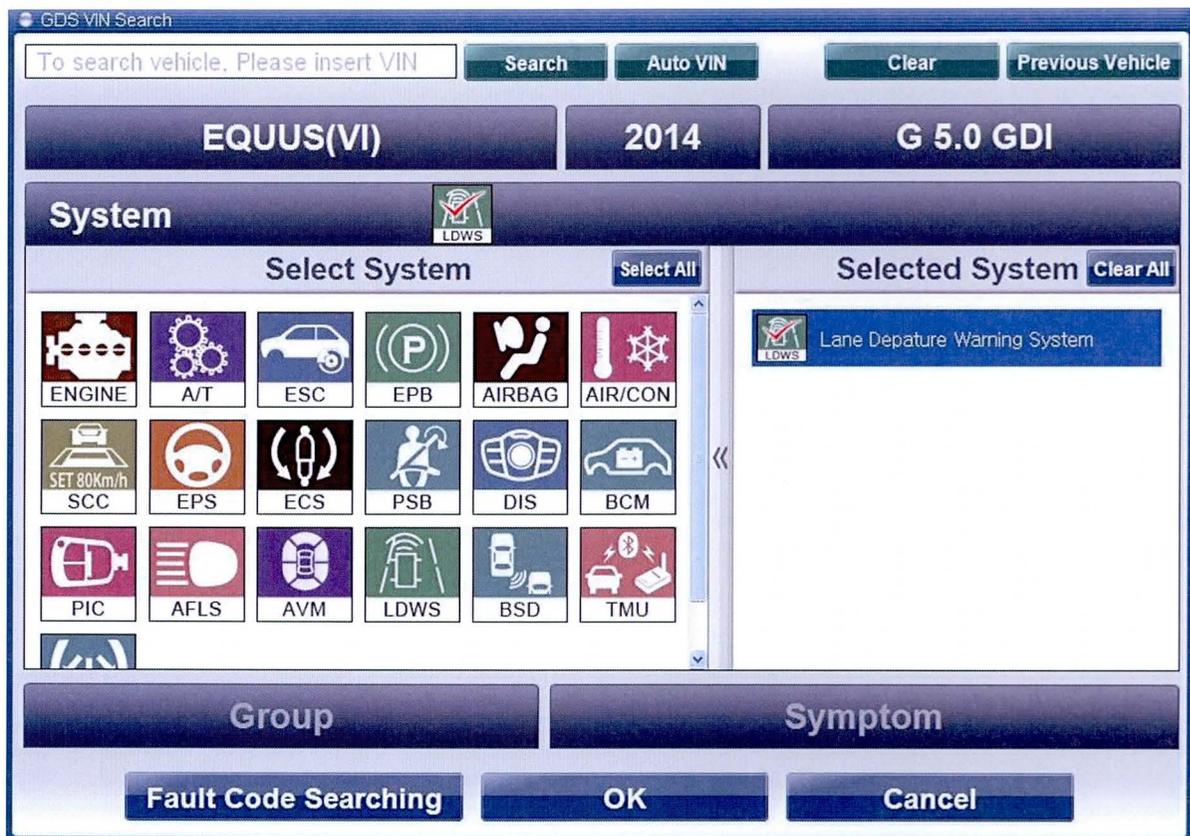
SUBJECT:

LDWS UPDATE - (SERVICE CAMPAIGN TR3)

- Turn on the VCI and diagnostic terminal with the ignition key in the **ON** position.
For push button start, push the start button twice **without** depressing the brake pedal.

*** NOTE****Do not start the engine during this step.****II. Automatic Update Procedure Using the GDS**

- Choose **VIN** or **ECU Update** on the initial screen.
- Enter the vehicle information by pressing the **VIN Auto Detect** button, entering the vehicle's VIN or selecting the vehicle model, model year, engine/fuel type. Select **LDWS** as the system and then click **OK**.



- Select **ECU Update** on the initial screen after entering the vehicle information.

4. Select **Auto Mode** then **LDWS** in the left **ECU Update** column.
5. Read **Preparation** and click **OK**.
6. The GDS will read the vehicle's ROM ID.
7. After the **Current ROM ID** is displayed, select the **Update Event**, "**320.VI FL 5.0 LDWS UPDATE**".
8. After clicking the **Update button**, read **Information** then click **OK**.
9. The vehicle battery voltage is checked to make sure it is at least 12 volts to ensure reliable update results. Click **OK** if the results indicate **Voltage is OK**.

*** NOTE**

If voltage is below 12 volts, click **Cancel** and then run the engine to ensure an adequate battery charge state for reliable update results.

10. The Update will begin and progress of the update will appear on the bar graph.
11. Update will occur until 100% is reached on the bar graph. Turn the ignition key **OFF** for 10 seconds, place it back in the **ON** position and then click **OK** to continue according to **Information** displayed on the screen.
12. Click **OK** on the final screen, which indicates the update is complete.
13. Check if any incidental Diagnostic Trouble Codes (DTC) have been created by the update and clear the DTC(s) present.

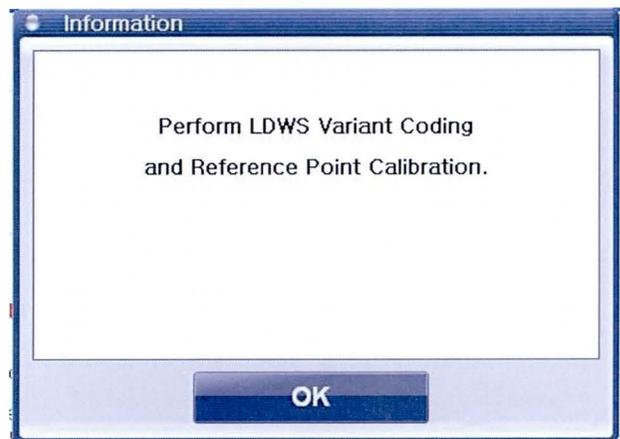
*** NOTE**

In the case that C1702, C2721 DTC are displayed (Previous ROM ID is X90), please perform LDWS Variant Coding and LDWS Reference Point Calibration in sequence in the Vehicle S/W Management function. Steps for the process begin on the next page.

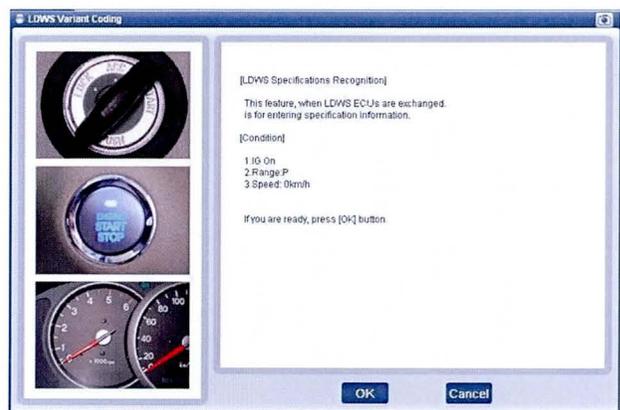
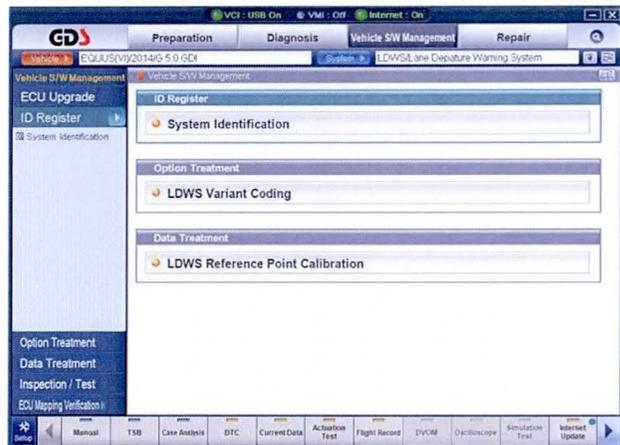
SUBJECT:

LDWS UPDATE - (SERVICE CAMPAIGN TR3)

If LDWS Variant Coding and LDWS Reference Point Calibration are needed, the GDS pop up message to the right will be displayed.

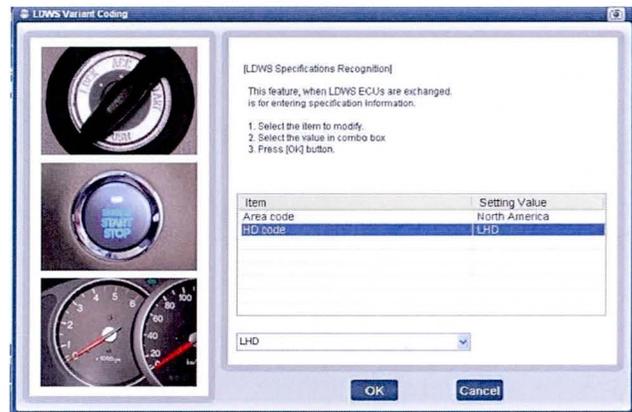


1. Select LDWS Variant Coding.

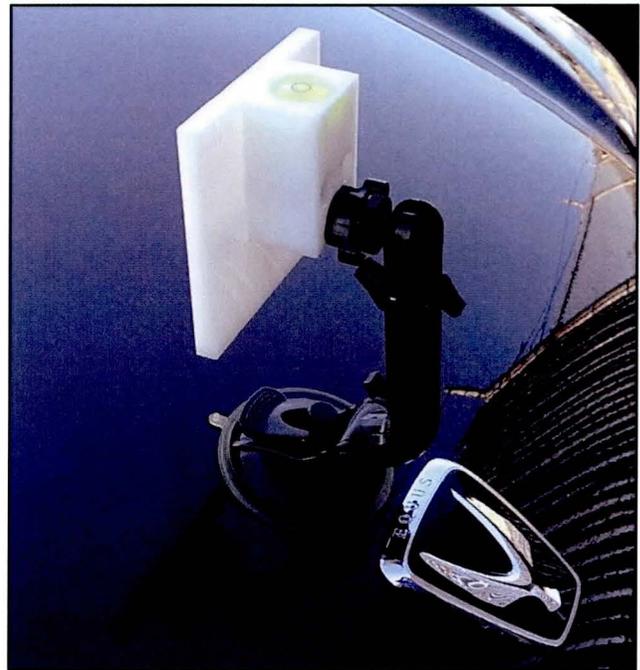


★ NOTE

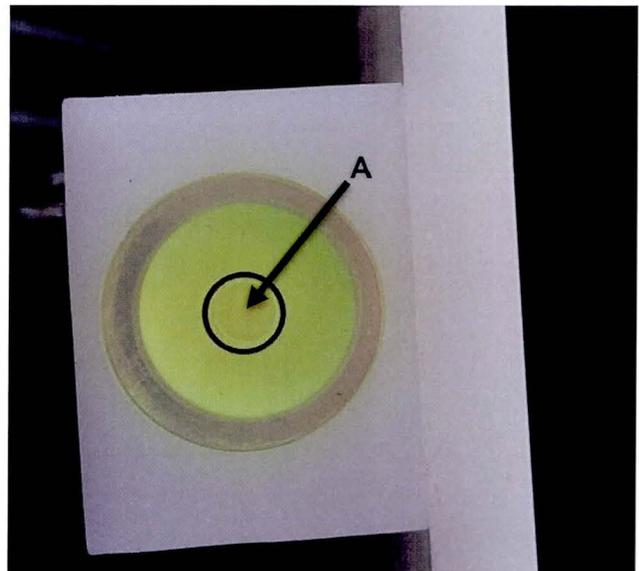
For LDWS Reference Point Calibration, a calibration target is needed. (Refer to Calibration Procedure of Shop manual.)



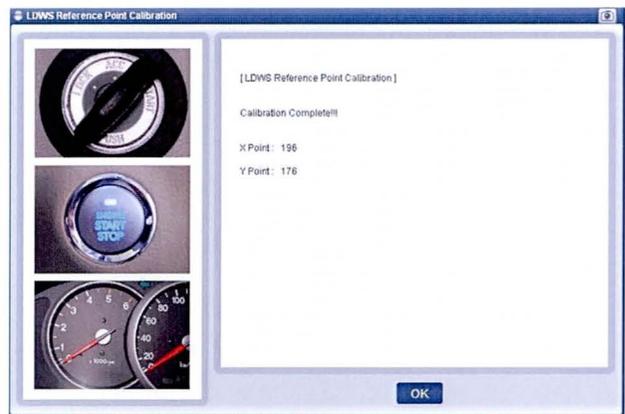
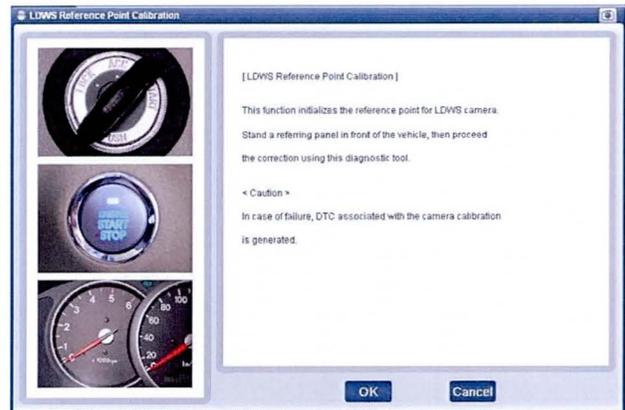
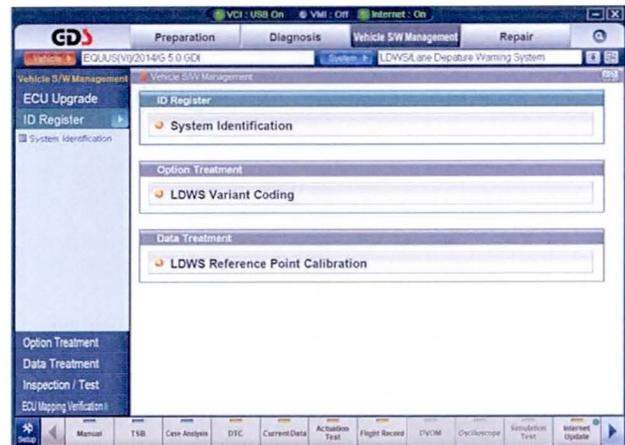
2. Install the calibration target jig (P/N 09890-3N100) on the hood. Align the center of the target jig directly above the hood emblem.



3. Adjust the target jig until the air bubble (A) is centered within the circle. This adjusts the target vertically.



4. Select LDWS Reference Point Calibration.



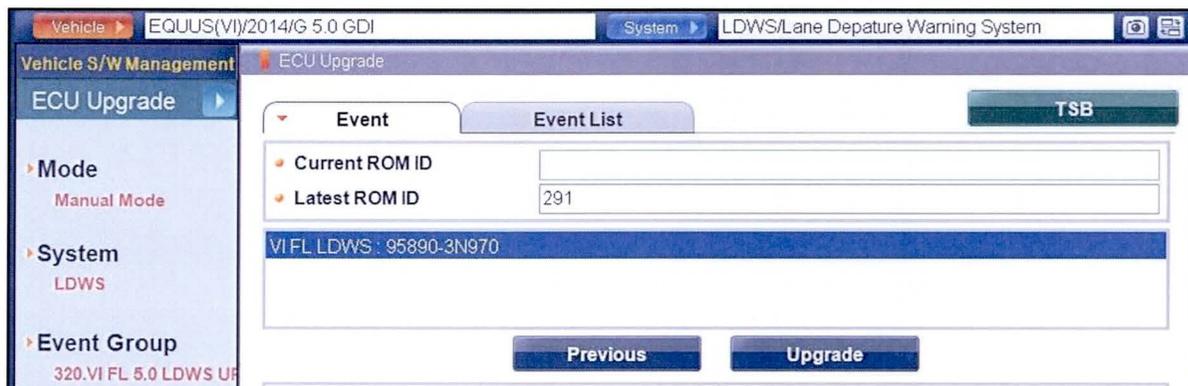
III. Manual Update Procedure Using the GDS

CAUTION

- Manual update should be performed only when automatic update fails.
- If automatic update fails, turn the ignition key OFF for about 10 seconds, then place it back in the ON position to reset the control unit before performing manual update.

SUBJECT: LDWS UPDATE - (SERVICE CAMPAIGN TR3)

1. Within the **ECU Update** screen, select **Manual Mode** in the left column, then select **Update Event #320**. Select the appropriate control unit part number with reference to the ROM ID Information Table on page 2 of this TSB and click **OK**.



2. Enter the appropriate password from the table below and then click **OK**.

Menu	Password
VI FL LDWS : 95890-3N970	3970

3. The vehicle battery voltage is checked to make sure it is at least 12 volts to ensure reliable update results. Click **OK** if the results indicate **Voltage is OK**.

*** NOTE**

If voltage is below 12 volts, click **Cancel** and then run the engine to ensure an adequate battery charge state for reliable update results.

4. Update will begin and progress of the update will appear on the bar graph.
5. Update will occur until 100% is reached on the bar graph. Turn the ignition key **OFF** for 10 seconds, place it back in the **ON** position and then click **OK** to continue according to **Information** displayed on the screen.
6. Click **OK** on the final screen, which indicates update is complete.
7. Check if any incidental DTC have been created by the update and clear the DTC(s) present.