

# Navigation System Firmware Improvement

**Service Category** Audio/Visual/Telematics

**Section** Navigation/Multi Info Display

**Market** USA

Lexus Supports  
ASE Certification 

## Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2011 – 2012	CT200H	
2010 – 2012	ES350, HS250H, IS F, IS250, IS250C, IS350, IS350C, LS460, LS600H, LX570, RX350, RX450H	
2010 – 2011	GS350, GS450H, GS460	
2010 – 2013	GX460	
2012	LFA	
2010	SC430	

### REVISION NOTICE

#### April 9, 2013 Rev2:

- 2013 model year CT 200h has been removed from the bulletin.

#### November 2, 2012 Rev1:

- Applicability has been updated to include 2013 model year vehicles.
- Required Tools & Equipment section has been updated.

Any previous printed versions of this bulletin should be discarded.

## Navigation System Firmware Improvement

### Introduction

**NOTE**  
**Do NOT perform a map update until this bulletin has been performed.**

Certain 2010 – 2013 model year Lexus models may exhibit one or more of the following conditions:

- Steering wheel volume controls are intermittently inoperative.
- Navigation system region code intermittently will reset to region US9.
- XM NavTraffic® will not function properly after renewing XM traffic subscription.
- Slow response from Bluetooth® address book voice commands.
- Black screen condition after shifting from Reverse to Park.
- Air conditioning screen may not appear when changing blower speed.
- iPod® scrolling speed is slow.
- Display constantly shows "Calculating" on right side of screen while driving on freeway.
- Slow response at times from navigation system even at startup.
- GPS coordinates shown instead of destination address.
- Display locks up and appears unresponsive after periods of time.
- Touch screen (if equipped) functions are slow to respond.

Navigation firmware has been updated to allow updating map to version 10.1 or later. Updated navigation system software has also been developed to remedy these conditions. Use the following procedure to address these conditions.

### Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
EL9014	Navigation OS Update	0.3	86271-0E010	87	74

**APPLICABLE WARRANTY**

- This repair is covered under the Lexus Comprehensive Warranty. This warranty is in effect for 48 months or 50,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

**NOTE**  
 This should be a labor claim only since navigation software is downloaded from TIS.

## Navigation System Firmware Improvement

### Required Tools & Equipment

REQUIRED EQUIPMENT	SUPPLIER	PART NUMBER	QTY
Techstream 2.0*	ADE	TS2UNIT	1
TIS Techstream		TSPKG1	
Techstream Lite		TSLITEDLR01	

**NOTE**

- Only ONE of the Techstream units listed above is required.
- Software version 8.10.021 or later is required.
- Additional Techstream units may be ordered by calling Approved Dealer Equipment (ADE) at 1-800-368-6787.

REQUIRED EQUIPMENT	QTY
PC with Windows® XP Operating System	1

**NOTE**

Only a Windows® PC with the XP operating system can be used for this update. The Navigation Program Installer does NOT support Windows® Vista or Windows® 7 operating systems.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Navigation Update Tool Kit*	<u>95079-00002-KIT</u>	1
GR8 Battery Diagnostic Station*	<u>00002-MCGR8</u>	1

**NOTE**

Additional SSTs may be ordered by calling 1-800-933-8335.

\* Essential SST.

## Navigation System Firmware Improvement

### Repair Procedure

#### Loading Map Firmware onto Navigation Update Tool

**NOTE**

Navigation Update Tool **MUST** have the latest "Navigation Program Installer" before performing this bulletin. For installation procedure, refer to Service Bulletin No. [L-SB-0101-12](#), "HDD Navigation Program Setup".

1. Turn on Techstream.
2. Log into Technical Information System (TIS).
3. Download the appropriate *Vehicle Navigation Software Update* from TIS.
  - A. Click on the *TIS* tab.
  - B. Click on the *Diagnostics* tab.
  - C. Click on the *Tools & Equipment* tab.
  - D. Click on the *Navigation Update Tool* tab under "Tools".
  - E. Click on the appropriate *Vehicle Navigation Software Update* under "Available Software Updates".

**NOTE**

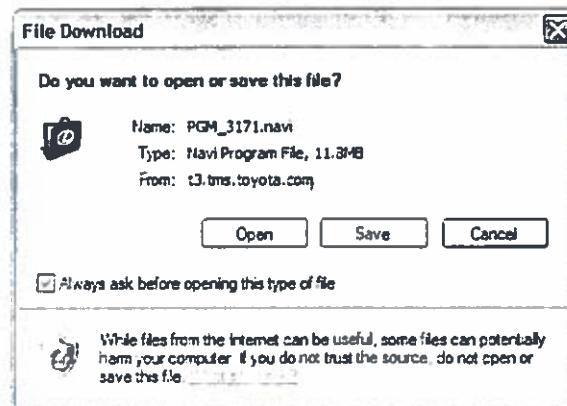
If the TIS division is **NOT** set to Lexus (under the *My Account* area), the Navigation Update Tool tab will **NOT** display. Navigation Update is a Lexus **ONLY** TIS option at this time.

4. Click *Open* to begin the download.

**NOTE**

The file is large and may take up to 10 minutes to download.

Figure 1.



## Navigation System Firmware Improvement

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### Repair Procedure

#### Loading Map Firmware onto Navigation Update Tool (Continued)

5. Once the file is downloaded, prepare the vehicle for use with the Navigation Update Tool. Cover the GPS antenna in a manner where GPS satellite tracking is NOT present during the navigation software update process.

**HINT**

Park vehicle in a structure that blocks the GPS signal, or cover the GPS antenna with a metal panel.

6. Connect the Navigation Update Tool to the PC using the USB cable.
  - A. Make sure the USB cable is secured in both the PC and Navigation Update Tool USB ports.
  - B. Confirm the Navigation Update Tool is powered correctly.
  - C. Turn the power ON.
  - D. Click *Continue*.
7. Verify that both the Transfer Mode Display light (green) and Power Supply Display light (blue) are lit, then click *Continue*.

Figure 2.



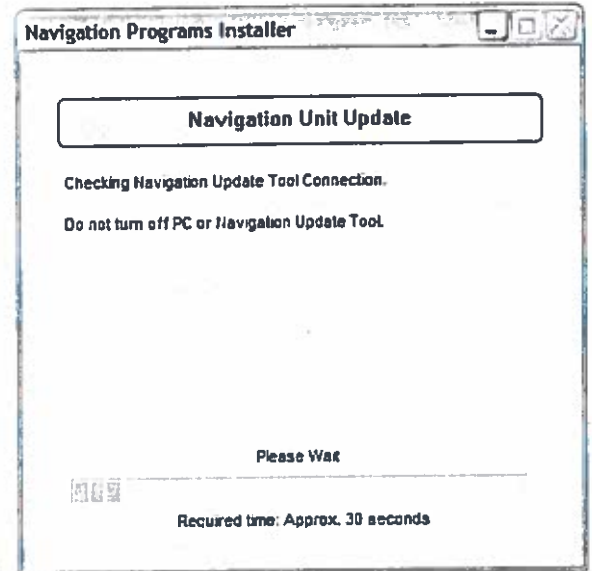
## Navigation System Firmware Improvement

### Repair Procedure

#### Loading Map Firmware onto Navigation Update Tool (Continued)

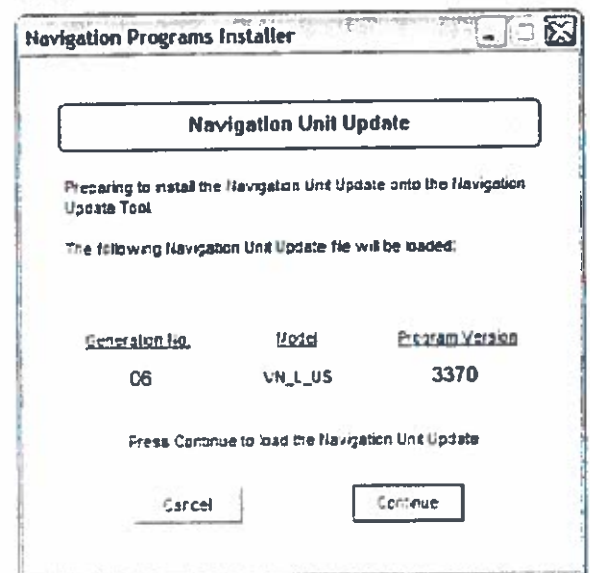
8. The software will perform a connection check with the Navigation Update Tool. In the event an error is shown, please recheck the USB connection.

Figure 3.



9. Navigation Firmware is ready to be loaded onto the Navigation Update Tool, click *Continue*.

Figure 4.



## Navigation System Firmware Improvement

### Repair Procedure

#### Loading Map Firmware onto Navigation Update Tool (Continued)

- Navigation Firmware will now load onto the Navigation Update Tool.

Figure 5.



- Once the Navigation Firmware is successfully loaded onto the Navigation Update Tool, click *Continue* to finish the installer.

Figure 6.



- Disconnect the navigation tool from the PC.

## Navigation System Firmware Improvement

### Repair Procedure (Continued)

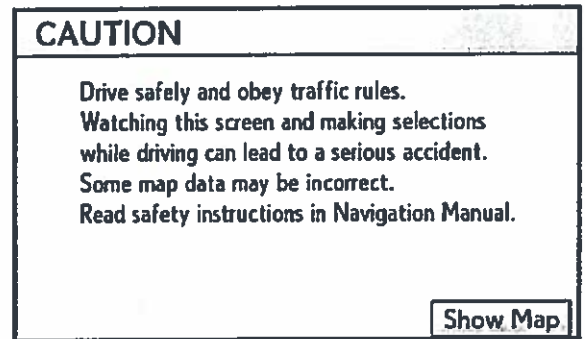
#### Loading Map Firmware into Vehicle Navigation System

**NOTE**

Vehicle ignition should be OFF before starting this procedure.

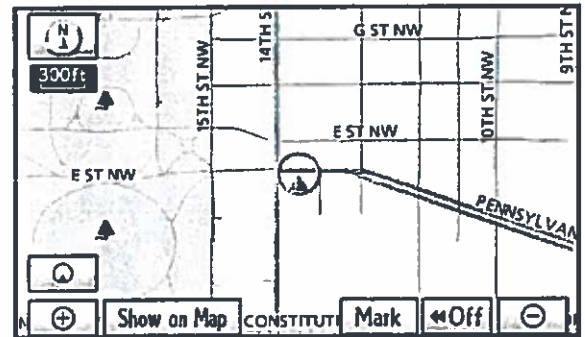
1. Connect the Navigation Update Tool to the vehicle (Tool MUST be disconnected from the PC).
2. Connect the GR8 Battery Diagnostic Station to the vehicle.
3. Turn the Ignition ON (engine OFF) and wait for the *Caution* screen to appear.

Figure 7.



4. Select *Show on Map*.

Figure 8.



5. Hold down the *Menu* button on the Remote Touch interface and turn the light switch from OFF to tail light position 3 or more times until the navigation system enters the diagnostic mode.

For touch screen vehicles (ES 350, IS 250C/350C, GS 350/450h/460, GX 460, LS 460/460L, LS 600hL, LX 570, SC 430):

Press the *INFO* switch and turn the light switch from OFF to tail light position 3 or more times until the navigation system enters the diagnostic mode.



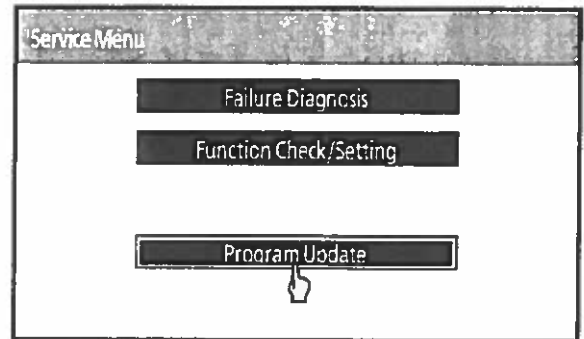
## Navigation System Firmware Improvement

### Repair Procedure

#### Loading Map Firmware into Vehicle Navigation System (Continued)

6. Select the *Program Update* button from the Service Menu.

Figure 9.



7. Select the *OK* button.

**NOTE**

Load time for the program update is between 5 and 15 minutes.

Figure 10.

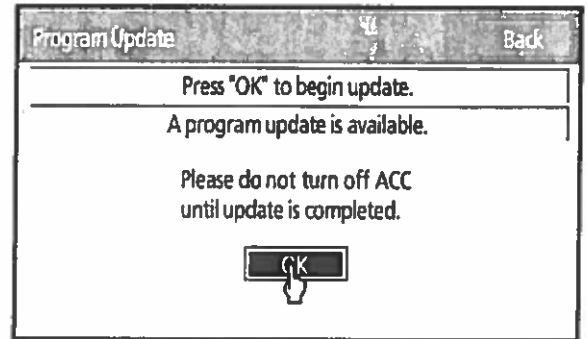
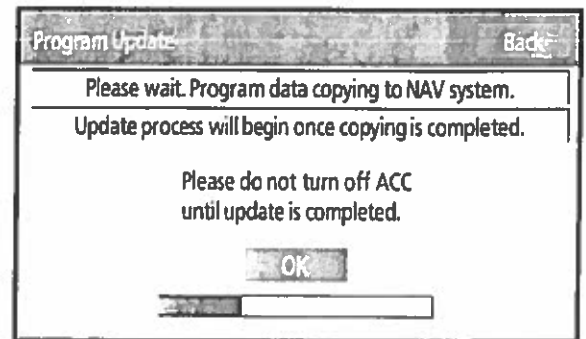


Figure 11.



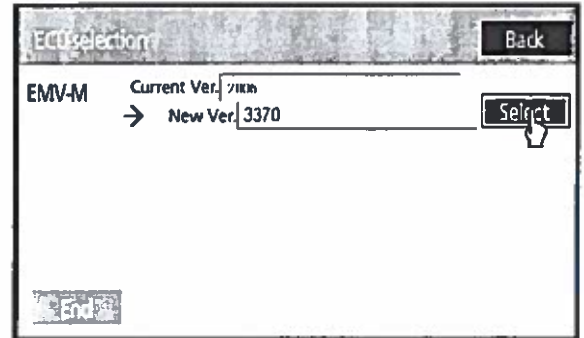
## Navigation System Firmware Improvement

### Repair Procedure

#### Loading Map Firmware into Vehicle Navigation System (Continued)

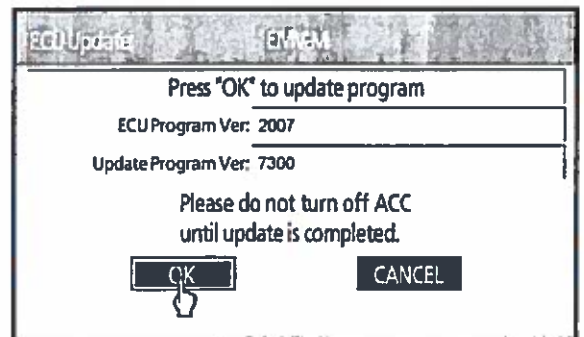
- When the ECU Selection screen appears, confirm the Current version is less than the New version. If yes, then click the *Select* button. If no, then click *End* and go to step 11.

Figure 12.



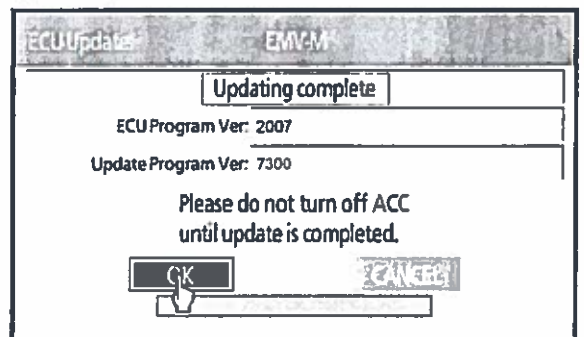
- When EMV-M screen is shown select *OK*.

Figure 13.



- After about 1 minute, if the update was successful the display will indicate "Updating complete" at the top of the screen. Select *OK* to continue.

Figure 14.



## Navigation System Firmware Improvement

### Repair Procedure

#### Loading Map Firmware into Vehicle Navigation System (Continued)

11. Confirm the current version matches one of those shown below. Select *End* to complete the procedure.

MODEL	CURRENT VERSION
HS 250h LFA RX 350 (2010 MY) RX 350 (TMMC, 2011 MY) RX 450h (2010 MY)	C350
CT 200h RX 350 (TMK, 2011 MY) RX 450h (TMK, 2011 MY)	C460
ES 350 IS 250/350 IS 250C/350C IS F GX 460 LS 460/460L LS 600hL LX 570	C760
GS 350 GS 450h GS 460	C850
SC 430	C650

**NOTE**

If Current Version does NOT match one of those listed above, switch the vehicle OFF and start again at step 1 of this bulletin.

Figure 15.

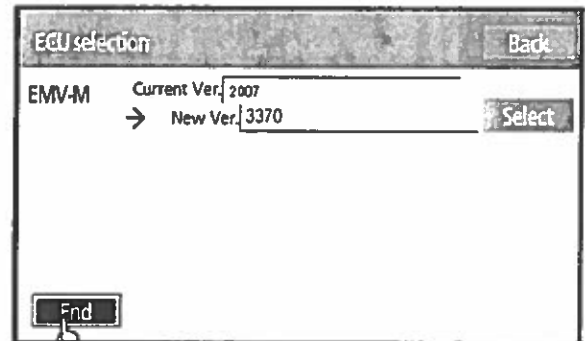
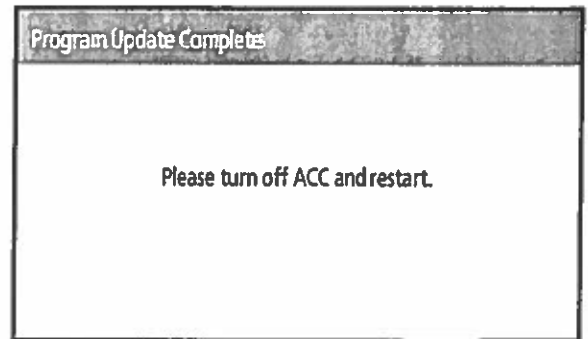


Figure 16.



12. Cycle the ignition OFF to finish the updating procedure.
13. Cycle the ignition ON and confirm normal navigation system operation.
14. Remove items that block the GPS antenna, or move to an area where GPS satellite reception is present.
15. Refer to TIS, "*Diagnostics / Tools & Equipment / Navigation Update Tool / Reference Documents*" for the latest Navigation Map Update bulletin.

