

Service

Category Audio/Visual/Telematics

Section	Navigation/Multi Info Display	Market USA	Lexus Supports ASE Certification
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#### Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2011 - 2012	CT200H	
2010 - 2012	ES350, HS250H, IS F, IS250, IS250C, IS350, IS350C, RX350, RX450H	
2010 - 2011	GS350, GS450H, GS460	
2010 - 2013	GX460	
2012	LFA	
2007 - 2012	LS460	
2008 - 2012	LS600H, LX570	
2010	SC430	

#### SUPERSESSION NOTICE

The information contained in this bulletin supersedes SB No. L-SB-0083-13.

• The Parts Information and Required Tools & Equipment sections have been updated.

Service Bulletin No. L-SB-0083-13 is Obsolete and ANY printed versions should be discarded. Be sure to review the entire content of this bulletin before proceeding.

#### Introduction

Lexus models equipped with Hard Disk Drive (HDD) Navigation require a Special Service Tool and follow a unique process for updating the map, points of interest, and system software. Instead of individual DVDs installed into the vehicle, ALL map data is uploaded directly to the HDD system.

Map data will be released annually through the direct shipment of 2 map data DVDs to each dealership service manager. The annual map data release MUST then be installed onto the Navigation Update Tool. Individual map updates are then loaded into vehicles with special map security keys. These keys are available through the normal parts ordering system. Keys are loaded onto the Navigation Update Tool through a PC or Techstream unit using software found on the Technical Information System (TIS).

### Introduction (Continued)

Follow the procedures listed in this bulletin to:

- Identify the current version of map data on the vehicle and on the Navigation Update Tool.
- Load map data onto the Navigation Update Tool.
- Load map security key(s) onto the Navigation Update Tool.
- Connect the Navigation Update Tool to the vehicle and update the map/system data to the latest version.

### NOTE

- In order to perform the procedures outlined in this bulletin, you MUST have completed the setup procedure in Service Bulletin No. <u>L-SB-0072-14</u>, "HDD Navigation Program Setup."
- Before performing this procedure, disconnect ALL other USB peripheral and external storage devices (i.e., USB thumb drives, hard drives, cameras, mice, etc.).
- For additional details, refer to the applicable Navigation Update Tool Operating Manual on the Technical Information System (TIS): *Diagnostics Tools & Equipment Navigation Reference Documents:* 
  - Windows 7/8 Navigation Update Tool Operating Manual
  - Windows XP Navigation Update Tool Operating Manual

#### Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
N/A	Not Applicable to Warranty	I	-	_	-

### **Parts Information**

PART N	UMBER		οτν
PREVIOUS	NEW		GII
PT219-HDDG5-08 PT219-HDDG5-09 PT219-HDDG5-10 PT219-HDDG5-11 PT219-HDDG5-12 PT219-HDDG5-13 PT219-HDDG5-14 PT219-HDDG5-15	PT219-HDDG5-16	Generation 5 HDD Map Key	1
PT219-HDDG6-09 PT219-HDDG6-10 PT219-HDDG6-11 PT219-HDDG6-12 PT219-HDDG6-13 PT219-HDDG6-14 PT219-HDDG6-15	PT219-HDDG6-16	Generation 6 HDD Map Key	1

#### **Required Tools & Equipment**

REQUIRED EQUIPMENT	PART NUMBER	QTY
PC with Windows <sup>®</sup> XP, Windows <sup>®</sup> 7, or Windows <sup>®</sup> 8 Operating System	-	1
Generation 5 HDD Disc	00241-G5V16-SSTDK	1
Generation 6 HDD Disc	00241-G6V16-SSTDK	1

# NOTE

For additional Map Discs, order from the Materials Distribution Center (MDC) through *Dealer Daily – Parts – Dealer Support Material Orders*.

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Navigation Update Tool Kit*	<u>95079-00003-KIT</u>	1
GR8 Battery Diagnostic Station*	00002-MCGR8	1

\* Essential SST.

#### NOTE

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

#### **Version Verification**

**Checking for Map Data Version on Navigation Update Tool** 

#### WARNING

DO NOT attempt to install Navigation Map Data prior to performing the "Navigation System Firmware Improvement" bulletin.

- L-SB-0081-13: Generation 5
- L-SB-0082-13: Generation 6
- 1. Open the Navigation Programs Installer.

#### NOTE

- When properly installed, the Navigation Programs Installer icon will be found on the Techstream desktop.
- If the application is NOT properly installed, refer to Service Bulletin No. L-SB-0072-14, "HDD Navigation Program Setup."
- 2. Click Version Check on the "Navigation Update Tool Main Menu".



# Figure 2.

Figure 1.

(C) LE	EXUS
Navigation Main	Update Tool Menu
Versi	on 0.05
Load Key File	Load Map Data
Load CDDB Data	Load Navigation Unit Update
Setup (	Version Check
	Citrus

### **Version Verification (Continued)**

### Checking for Map Data Version on Navigation Update Tool (Continued)

- 3. Connect the Navigation Update Tool.
  - A. Make sure the USB cable is secured in both the PC and the Navigation Update Tool USB ports.
  - B. Confirm that the Navigation Update Tool is powered correctly.
  - C. Turn power ON.
  - D. Click Continue.

#### Figure 3.

1	To PC
2	To A/C Power

4. Compare the map version with the map version shown on TIS.

#### NOTE

- If the map version on the Navigation Update Tool is the same as shown on the DVD, then go to the *"Security Key Load"* section in this bulletin.
- If the map version on the Navigation Update Tool is NOT the same as shown on the DVD, then go to the *"Tool Load"* section in this bulletin.

#### Figure 4.

Version Check		
١	/ersion Check	
Current versions of all Na hown below.	vigation Update Too	ol processes are
Generation 5		
Map Version		06.05.14
Loaded keys		0
CDDB Version		469
Navigation Program		
	VN_L_US	3106

# **Version Verification (Continued)**

### Checking for Map Data Version on Vehicle HDD Navigation System (Generation 5)

1. Cycle the ignition ON (Engine/Hybrid/EV system OFF).

#### NOTE

- Vehicles WITHOUT Smart Key system: Turn the ignition key to the "ON" position.
- Vehicles WITH Smart Key system: Press the "ENGINE START/STOP" switch 2 times with the brake pedal released.
- 2. From the multi-information display, select *I Agree*.

#### Figure 5.



3. Press the MENU button.

#### Figure 6.



#### **Version Verification (Continued)**

### Checking for Map Data Version on Vehicle HDD Navigation System (Generation 5) (Continued)

4. From the multi-information display, select *HDD Data*.

#### Figure 7.



5. Compare the map data version on the navigation system to that on the Navigation Update Tool.

#### NOTE

- If the map version on the navigation system is the same as shown on the Navigation Update Tool, then the vehicle does NOT need the update.
- If the map version on the navigation system is NOT the same as shown on the Navigation Update Tool, then go to the *"Tool Load"* section in this bulletin.

#### Figure 8.

ADD Data	5
Map data :ver.0	6.1
CDDB :ver.8	40 12/2005
Please contact a dealer update availability and p	for pricing.
CDDB Update	
LL District	Covered Area

# **Version Verification (Continued)**

### Checking for Map Data Version on Vehicle HDD Navigation System (Generation 6)

1. Cycle the ignition ON (Engine/Hybrid/EV system OFF).

#### NOTE

- Vehicles WITHOUT Smart Key system: Turn the ignition key to the "ON" position.
- Vehicles WITH Smart Key system: Press the "ENGINE START/STOP" switch 2 times with the brake pedal released.
- 2. Press the INFO/PHONE button.

#### Figure 9.



3. From the multi-information display, select *Map Data.* 

#### Figure 10.



### **Version Verification (Continued)**

# Checking for Map Data Version on Vehicle HDD Navigation System (Generation 6) (Continued)

4. Compare the map data version on the navigation system to that on the Navigation Update Tool.

#### NOTE

- If the map version on the navigation system is the same as shown on the Navigation Update Tool, then the vehicle does NOT need the update.
- If the map version on the navigation system is NOT the same as shown on the Navigation Update Tool, then go to the *"Tool Load"* section in this bulletin.



# Tool Load

# NOTE

There are 3 separate processes used to update the map data on the vehicle:

- Loading the map data onto the Navigation Update Tool
- Loading the map data security key onto the Navigation Update Tool
- Loading the map data into the vehicle HDD Navigation System
  - 1. Generation 5
  - 2. Generation 6

If the map version on the Navigation Update Tool is the same as shown on TIS, then go to the *"Security Key Load"* section in this bulletin.

If the map version on the Navigation Update Tool is NOT the same as shown on TIS, then follow the instructions below.

# Tool Load (Continued)

Loading Map Data onto Navigation Update Tool

#### NOTE

Before performing this procedure, disconnect ALL other USB peripheral and external storage devices (i.e., USB thumb drives, hard drives, cameras, mice, etc.).

1. Open the Navigation Programs Installer.

#### NOTE

- When properly installed, the Navigation Programs Installer icon will be found on the Techstream desktop.
- If the application is NOT properly installed, refer to Service Bulletin No. <u>L-SB-0072-14</u>, "HDD Navigation Program Setup."
- Ø

Navigation Programs Installer

# Figure 13.

Figure 12.

2. Click *Load Map Data* on the "Navigation Update Tool Main Menu".



# Tool Load (Continued)

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

- 3. Connect the Navigation Update Tool.
  - A. Make sure the USB cable is secured in both the PC and the Navigation Update Tool USB ports.
  - B. Confirm that the Navigation Update Tool is powered correctly.
  - C. Turn power ON.
  - D. Click Continue.

#### Figure 14.

Load Key File	
USB Devices must be removed bet	ore starting.
connect Navigation Update Tool, if previ	ously connected.
onnect ONLY Navgation Update Tool.	
	-
(2) _	

1	To PC
2	To A/C Power

4. Insert the map disk 1 into the CD/DVD-ROM drive and click *Continue*.

#### Figure 15.

	Load I	Map Data	
Insert Map	Disk 1 into DVD D	rive.	
	<		
	1		

### Tool Load (Continued)

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

5. Allow the map data to copy onto the PC hard drive (requires about 30 minutes).

#### If necessary:

- Insert the additional map disk as instructed into the CD/DVD-ROM drive.
- Allow the additional map data to copy onto the PC hard drive (requires about 30 minutes).

#### Figure 16.

Г

vigation I	Programs Installer	
	Load Map Data	
Map Data	is copying to the PC.	
Do not tur	n off PC or Navigation Update Tool.	
	Copying	
	10.3 MB of 3494.0 MB	
100	Please Wait	
	Transfer Rate - 3.00 MB/sec Time Remaining - 00: 19: 21	

6. Verify the correct version of map data, then click *Continue* to load map data onto the Navigation Update Tool.

#### Figure 17.

Load M	ap Data
Preparing to install Map Data onto	Navigation Update Tool.
The following Map Data will be lo	aded:
Generation No.	Map Version
05	06.05.14
Press Continue t	o Load Map Data
Canad	Continue

# **Tool Load (Continued)**

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

7. Map data will then copy to the Navigation Update Tool (requires about 15 minutes).

#### Figure 18.

ngatio	n Programs installer	
	Load Map Data	
Map Da	ata is copying to the Navigation Update Tool.	
Do not	turn off PC or Navigation Update Tool.	
	Copying	
	90.1 MB of 7522.0 MB	
	Please Wait	
	Transfer Rate - 12.00 MB/sec Time Remaining - 00: 10: 19	

8. Verify the map data is loaded onto the Navigation Update Tool and can now be used to update the vehicle.

#### Figure 19.

	Load Map Data
tap Data uploade	d to the Navigation Update Tool successfully.
ne Navigation Up	date Tool is ready to update vehicle.
ess Continue to	return to Main Menu.
	Continue

#### Security Key Load

#### NOTE

- In order to load the map data onto the vehicle's navigation system, you MUST load a security key EACH time.
- The Navigation Update Tool will hold up to 10 security keys. One key is required per vehicle update.
- Storing keys on the Navigation Update Tool is NOT recommended.
- Map data MUST be loaded onto the Navigation Update Tool before a Key File can be loaded.
- Before performing this procedure, disconnect ALL other USB peripheral and external storage devices (i.e., USB thumb drives, hard drives, cameras, mice, etc.).
- 1. Open the Navigation Programs Installer.

2. Click Load Key File on the "Navigation

Update Tool Main Menu".

Figure 20.



#### Figure 21.

Navigation Programs I	nstaller	_	
C	)LE	xue	5
Navi	gation Main	Update Menu	Tool
	Version	n 0.05	
Load Key File	)	e	Load Map Data
Load CDDB Det	a	2	Load Navigation Unit Update
Setup		M	Version Check
(C12006 Toyota Meter Com	ration		Close

# الكرية L-SB-0086-16

# **HDD Navigation Map Update Process**

# Security Key Load (Continued)

- 3. Connect the Navigation Update Tool.
  - A. Make sure the USB cable is secured in both the PC and the Navigation Update Tool USB ports.
  - B. Confirm that the Navigation Update Tool is powered correctly.
  - C. Turn power ON.
  - D. Click Continue.

#### Figure 22.



1	То РС
2	To A/C Power

4. Connect USB Key File and click Continue.

#### Figure 23.



# Security Key Load (Continued)

5. Click *Load* to continue.

#### Figure 24.

Load Key Fi	le
Generation	5
lavigation Update Tool can hold up to 10	Key Files per generation.
oaded Key Files:	0
Available Key File Slots:	10
Press Load to install a Key File onto the N	lavigation Update Tool.

6. Allow the Key File to copy onto the Navigation Update Tool (requires about 5 seconds).

#### Figure 25.

		Load Key File
Key File	is being loaded	to the Navigation Update Tool.
Do not ti	urn off PC or Na	avigation Update Tool.
1	WARNING -	Do not disconnect Navigation Update Too from PC.
		Please Wait
	Require	ed time: Approx. 5 seconds

# L-SB-0086-16

# **HDD Navigation Map Update Process**

# Security Key Load (Continued)

7. Verify the Key File is loaded onto the Navigation Update Tool and can now be used to update the vehicle.

#### NOTE

- The Navigation Update Tool will hold up to 10 security keys. One key is required per vehicle update.
- Storing keys on the Navigation Update Tool is NOT recommended.

Figure 26.

Load Key Fil	e
Generation	5
Key File uploaded to the Navigation Updat	e Tool successfully.
Press Continue to return to the Main Menu	l.
Loaded Key Files:	1
Available Key File Slots:	9
DISCONNECT MAP UPD DO NOT INSERT NEW KEY UNT	ATE KEY IL INSTRUCTED
Continue	

Vehicle Loading

#### NOTE

- The map data security key MUST be loaded onto the Navigation Update Tool before map data can be loaded to the vehicle.
- Prior to connecting to the vehicle you MUST disconnect the Navigation Update Tool from the PC.
- Connect the GR8 Battery Diagnostic Station to the vehicle prior to beginning the process to ensure constant battery voltage.

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# **HDD Navigation Map Update Process**

# Vehicle Loading (Continued)

Loading Map Data onto Vehicle HDD Navigation System (Generation 5)

### NOTE

Prior to connecting to the vehicle you MUST disconnect the Navigation Update Tool from the PC.

- 1. Connect the Navigation Update Tool to the vehicle.
  - A. Make sure the IEEE 1394 cable is secured in both the Navigation Update Tool and the vehicle connector.
  - B. Confirm the Navigation Update Tool is powered correctly.





1	Navigation Update Tool
2	To A/C Adaptor Power Supply
3	IEEE 1394 Vehicle Exchange Cable
4	To Vehicle-Side Connection Point

2. Cycle the ignition ON (Engine/Hybrid/EV system OFF).

### NOTE

- Vehicles WITHOUT Smart Key system: Turn the ignition key to the "ON" position.
- Vehicles WITH Smart Key system: Press the "ENGINE START/STOP" switch 2 times with the brake pedal released.

### Vehicle Loading (Continued)

### Loading Map Data onto Vehicle HDD Navigation System (Generation 5) (Continued)

3. From the multi-information display, select *I Agree.* 

5. From the multi-information display, select

Figure 28.



4. Press the MENU button.

HDD Data.

#### Figure 29.



#### Figure 30.



# Vehicle Loading (Continued)

# Loading Map Data onto Vehicle HDD Navigation System (Generation 5) (Continued)

6. Select Map Data Update.

#### Figure 31.



#### Figure 32.



#### Figure 33.



7. Select *I Agree*.

8. Allow map data to copy (requires about 25 minutes).

# Vehicle Loading (Continued)

Loading Map Data onto Vehicle HDD Navigation System (Generation 5) (Continued)

9. Select OK.

### Figure 34.



10. Disconnect the Navigation Update Tool from the vehicle.

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# **HDD Navigation Map Update Process**

# Vehicle Loading (Continued)

Loading Map Data onto Vehicle HDD Navigation System (Generation 6)

### NOTE

Prior to connecting to the vehicle you MUST disconnect the Navigation Update Tool from the PC.

- 1. Connect the Navigation Update Tool to the vehicle.
  - A. Make sure the IEEE 1394 cable is secured in both the Navigation Update Tool and the vehicle connector.
  - B. Confirm the Navigation Update Tool is powered correctly.





1	Navigation Update Tool
2	To A/C Adaptor Power Supply
3	IEEE 1394 Vehicle Exchange Cable
4	To Vehicle-Side Connection Point

2. Cycle the ignition ON (Engine/Hybrid/EV system OFF).

#### NOTE

- Vehicles WITHOUT Smart Key system: Turn the ignition key to the "ON" position.
- Vehicles WITH Smart Key system: Press the "ENGINE START/STOP" switch 2 times with the brake pedal released.

# Vehicle Loading (Continued)

# Loading Map Data onto Vehicle HDD Navigation System (Generation 6) (Continued)

3. Press the INFO/PHONE button.

#### Figure 36.



- 4. From the multi-information display, select *Map Data.*
- Figure 37.



# Vehicle Loading (Continued)

### Loading Map Data onto Vehicle HDD Navigation System (Generation 6) (Continued)

5. Select Map Data Update.

#### Figure 38.



6. Select I Agree.

Allow map data to copy (requires about 25 minutes).

#### Figure 39.



#### Figure 40.



# Vehicle Loading (Continued)

Loading Map Data onto Vehicle HDD Navigation System (Generation 6) (Continued)

8. Select OK.

#### Figure 41.



9. Disconnect the Navigation Update Tool from the vehicle.