L-SB-0083-13

October 25, 2013



HDD Navigation Map Update Process

Service Category	Audio/Visual/Telematics			
Section	Navigation/Multi Info Display	Market	USA	Lexus Support ASE Certificat

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		

REVISION NOTICE

October 3, 2014 Rev1:

· The entire bulletin has been updated.

Any previous printed versions of this bulletin should be discarded.

SUPERSESSION NOTICE

The information contained in this bulletin supersedes SB No. L-SB-0148-11.

 The Introduction, Parts Information, Required Tools & Equipment, and Version Verification sections have been updated.

Service Bulletin No. L-SB-0148-11 is Obsolete and any printed versions should be discarded. Be sure to review the entire content of this service 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 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.

Rev1

Map Data will be released annually through the direct shipment of two 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).

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	-	-	-	



Rev1

HDD Navigation Map Update Process

Parts Information

PART NUMBER			OTY
PREVIOUS	NEW	PART NAME	
PT219-HDDG5-08 PT219-HDDG5-09 PT219-HDDG5-10 PT219-HDDG5-11 PT219-HDDG5-12 PT219-HDDG5-13	PT219-HDDG5-14	Generation 5 HDD Map Key	1
PT219-HDDG6-09 PT219-HDDG6-10 PT219-HDDG5-11 PT219-HDDG6-12 PT219-HDDG6-13	PT219-HDDG6-14	Generation 6 HDD Map Key	1

Required Tools & Equipment

REQUIRED EQUIPMENT	PART NUMBER	QTY
PC with Windows [®] XP, Windows [®] 7, or Windows [®] 8 Operating System	N/A	1
Generation 5 HDD Disc	00241-G5V14-SSTDK	1
Generation 6 HDD Disc	00241-G6V14-SSTDK	1

NOTE

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

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

NOTE

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

* Essential SST.

Version Verification

Checking for Map Data Version on Navigation Update Tool

Rev1

WARNING

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

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

Figure 1.



Tool Main Menu.

- 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."
- 2. Click Version Check on the Navigation Update





Navigation

Programs

Installer



Figure 3.

Figure 4.

HDD Navigation Map Update Process

Version Verification

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.

11	Version Check
ALL	USB Devices must be removed before starting.
Discor	nect Navigation Update Tool, if previously connected.
Recon	nect ONLY Navigation Update Tool.

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.

١	ersion Check	
N	/ersion Check	
urrent versions of all Na hown below.	vigation Update To	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 Map Data Version on Vehicle HDD Navigation System (Generation 5)

Rev1

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 two 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

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

Rev1

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

Figure 7.



5. Compare the Map Data version on the Navigation Figure 8. 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.



Checking 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 two times with . the brake pedal released.



Version Verification

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

Rev1

2. Press the INFO/PHONE button.



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







Version Verification

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

Rev1

4. Compare the Map Data version on the Navigation Figure 11. 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 three 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.

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.).



Tool Load

Loading Map Data onto Navigation Update Tool (Continued)

Rev1

1. Open the Navigation Programs Installer.

Figure 12.

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."



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

Figure 13.

(L)LE	EXUS
Navigation Main	Update Tool Menu
Versio	on 0.05
Load Key File	Load Map Data
Loed CDDB Date	Load Navigation Unit Update
Setup	Version Check
C)2006 Toyeta Motor Corporation	Close



Tool Load

Loading Map Data onto Navigation Update Tool (Continued)

Rev1

3. Connect the Navigation Update Tool.

Figure 14.

- 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.

	Load Key File
ALL	USB Devices must be removed before starting
Discor	nect Navigation Update Tool, if previously connected.
lecon	nect ONLY Navigation Update Tool
100	

1	To PC
2	To A/C Power

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

Figure 15.

	1	Load Ma	p Data	
Insert Ma	p Disk 1 into	DVD Drive	-	
		0	DVD	



Tool Load

Loading Map Data onto Navigation Update Tool (Continued)

Rev1

5. Allow 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).

		6000	- and
	Load Map Data		
Map Data is co	opying to the PC.		
Do not turn of	PC or Navigation Update Tool.		
	Administration of		
	Copying		
	10.3 MB of 3494.0 MB		
	Please Wait		
18			
	Transfer Rate - 3.00 MB/sec		

 Verify the correct version of Map Data, then click *Continue* to load Map Data onto the Navigation Update Tool.

Figure 17.

Figure 16.

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	to Load Map Data



Tool Load

Loading Map Data onto Navigation Update Tool (Continued)

7. Map Data will then copy to the Navigation Update Figure 18. Tool (requires about 15 minutes).

igation Progra	ms instauer	
(M. EQTER	Load Map Data	
Map Data is copyi	ng to the Navigation Update Tool.	
Do not turn off PC	or Navigation Update Tool.	
	Copying	
	90.1 MB of 7522.0 MB	
	Please Wait	
1	Transfer Rate - 12 00 MB/sec	
	Time Remaining - 00: 10: 19	

 Verify the Map Data is loaded onto the Navigation Update Tool and can now be used to update the vehicle.

Figure 19.

	A CONTRACT OF THE OWNER OF THE OWNER
	Load Map Data
Map Data uplo	aded to the Navigation Update Tool successfully
The Navigation	update Tool is ready to update vehicle.
Press Continue	e to return to Main Menu.



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.

Figure 20.



2. Click Load Key File on the Navigation Update Tool Figure 21. Main Menu.





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.

Rev1

- B. Confirm that the Navigation Update Tool is powered correctly.
- C. Turn power ON.
- D. Click Continue.

igatio	ni Programs nistaner
	Load Key File
ALL	USB Devices must be removed before starting
Discon	nnect Navigation Update Tool, if previously connected.
Recon	nect ONLY Navigation Update Tool

- 2 To A/C Power
- 4. Connect USB Key File and click Continue.

Figure 23.

To PC

1

	Load	Key File	1	
Insert Map Up	date Key into USB	port		
Г		b	-	
	USB	Port on the (Computer	



Rev1

HDD Navigation Map Update Process

Security Key Load (Continued)

5. Click Load to continue.

lavigation Programs Installer	
Load Key File	e
Generation	5
Navigation Update Tool can held up to 10 l	Key Files per generation.
Loaded Key Files:	0
Available Key File Slots:	10
Press Load to install a Key File onto the N	avigation Update Tool.
1	Last 1

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

Figure 25.

	Frograms	iistallei	
		Load Key File	
Key File	is being loaded	d to the Navigation Update T	Jool.
Do not ti	im off PC or N	avigation Update Tool.	
!	WARNING -	Do not disconnect Naviga from PC.	tion Update Tool
	and the local data and	Please Wait	
	Pequir	ed time: Approx 5 seconde	



Figure 26.

HDD Navigation Map Update Process

Security Key Load (Continued)

 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.

Load Key File	
Generation 5	
Key File uploaded to the Navigation Update Tool suc	cessfully.
Press Continue to return to the Main Menu.	
Loaded Key Files:	1
Available Key File Slots:	9
DISCONNECT MAP UPDATE KEY DO NOT INSERT NEW KEY UNTIL INSTRU	CTED

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.

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 two times with the brake pedal released.
- 3. From the multi-information display, select *I Agree*.

Figure 28.





Vehicle Loading

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

4. Press the MENU button.

Figure 29.



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





6. Select Map Data Update.

Figure 31.





Vehicle Loading

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

7. Select I Agree.

Figure 32.



- Allow Map Data to copy (requires about 25 minutes).
- Figure 33.



9. Select OK.

Figure 34.



10. Disconnect the Navigation Update Tool from the vehicle.



Vehicle Loading (Continued)

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

Rev1

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 two times with the brake pedal released.



Vehicle Loading

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

Rev1

3. Press the INFO/PHONE button.

Figure 36.



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







Vehicle Loading

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

Rev1

5. Select Map Data Update.

Figure 38.



6. Select I Agree.

25 minutes).

7. Allow Map Data to copy (requires about

Figure 39.



Figure 40.





Vehicle Loading

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

Rev1

8. Select OK.

Figure 41.



9. Disconnect the Navigation Update Tool from the vehicle.