HDD Navigation Map Update Process

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, 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Service Bulletin No. L-SB-0083-13 is Obsolete and ANY printed versions should be discarded.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).

HDD Navigation Map Update Process

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. L-SB-0072-14, "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	–	–	–	–

HDD Navigation Map Update Process

Parts Information

PART NUMBER		PART NAME	QTY
PREVIOUS	NEW		
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® XP, Windows® 7, or Windows® 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*	95079-00003-KIT	1
GR8 Battery Diagnostic Station*	00002-MCGR8	1

* Essential SST.

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

HDD Navigation Map Update Process

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
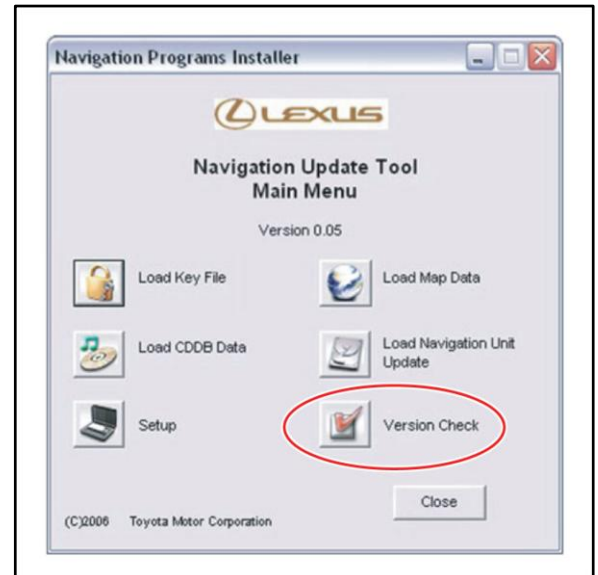
1. Open the *Navigation Programs Installer.*

   > **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."***

Figure 1.

2. Click *Version Check* on the "Navigation Update Tool Main Menu".

Figure 2.

HDD Navigation Map Update Process

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.
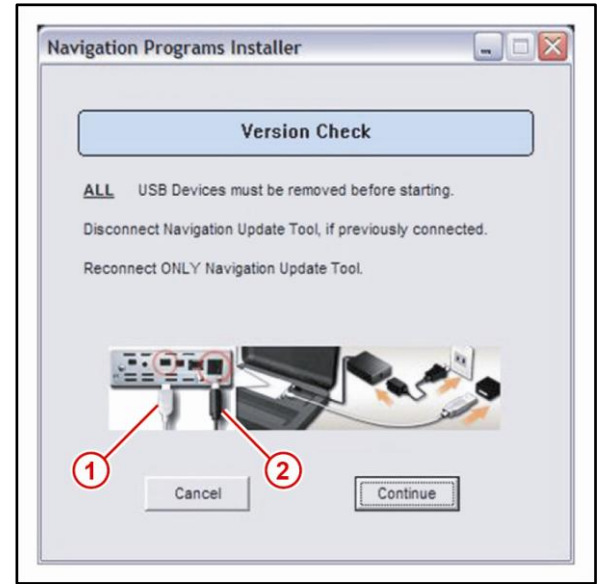
1	To PC
2	To A/C Power

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.
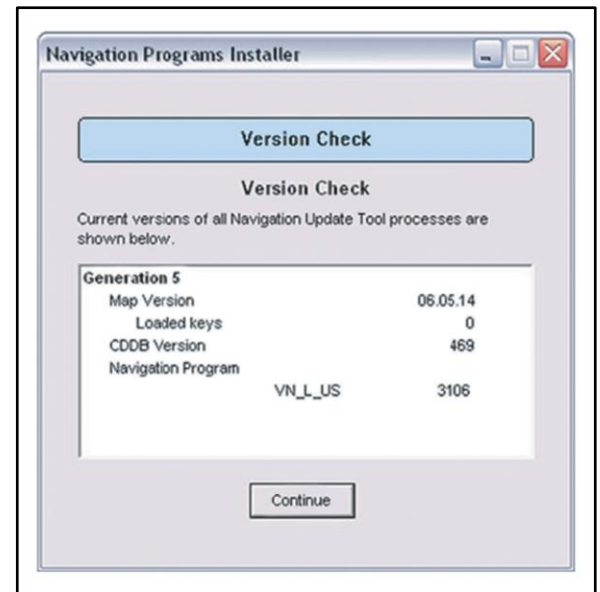
HDD Navigation Map Update Process

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.

HDD Navigation Map Update Process

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.

HDD Navigation Map Update Process

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.

HDD Navigation Map Update Process

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.**

Figure 11.

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.**

HDD Navigation Map Update Process

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. L-SB-0072-14, *"HDD Navigation Program Setup."***

Figure 12.

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

Figure 13.

HDD Navigation Map Update Process

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.
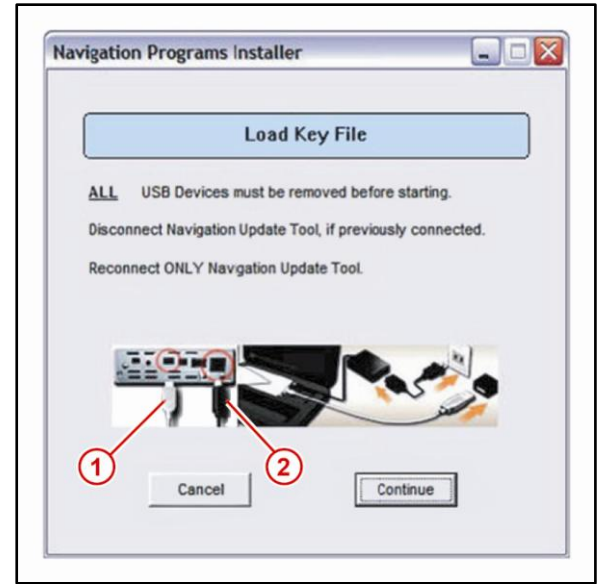
1	To PC
2	To A/C Power

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

Figure 15.

HDD Navigation Map Update Process

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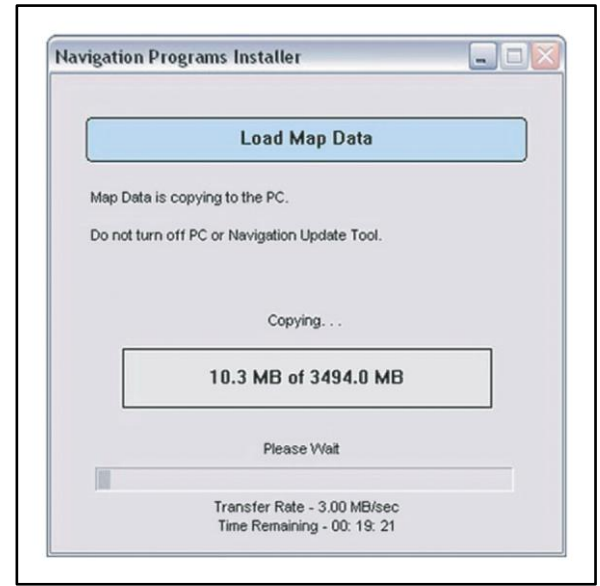
6. Verify the correct version of map data, then click *Continue* to load map data onto the Navigation Update Tool.

Figure 17.
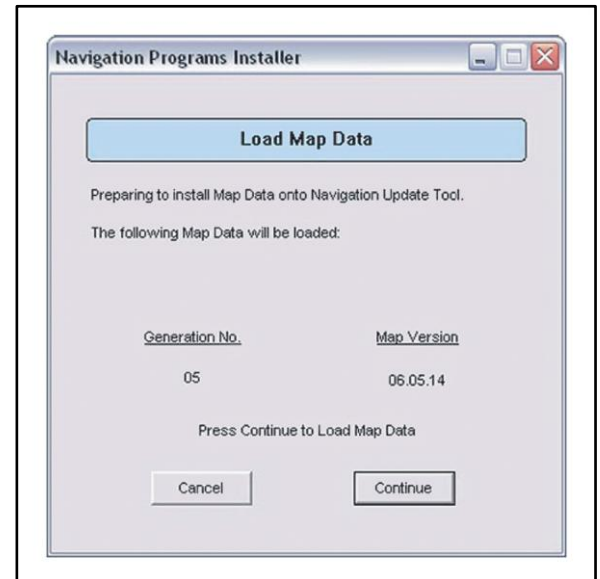
HDD Navigation Map Update Process

Tool Load (Continued)

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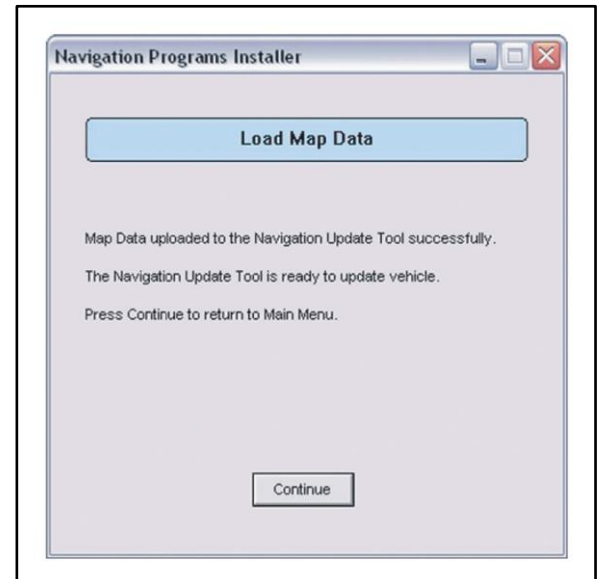
7. Map data will then copy to the Navigation Update Tool (requires about 15 minutes).

Figure 18.
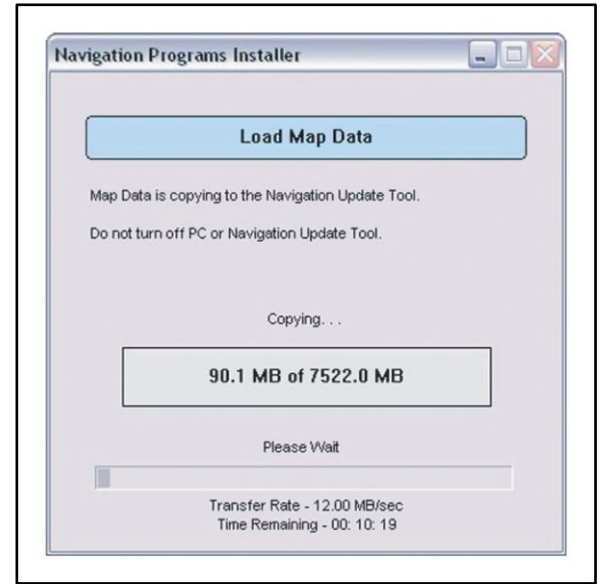
8. Verify the map data is loaded onto the Navigation Update Tool and can now be used to update the vehicle.

Figure 19.

HDD Navigation Map Update Process

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 Main Menu".
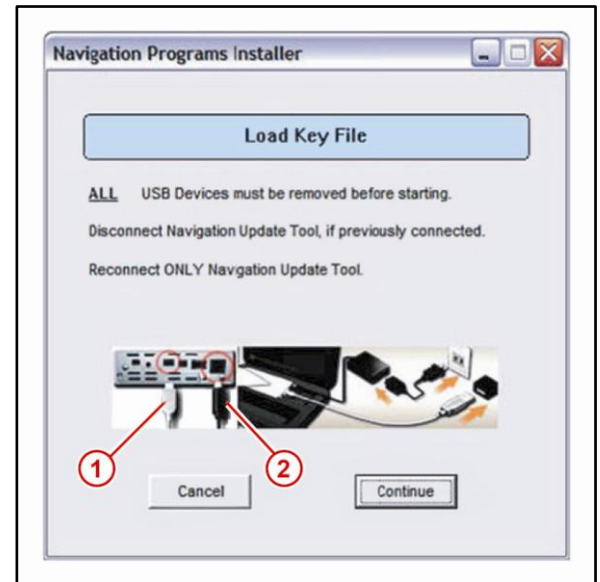
Figure 21.

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	To PC
2	To A/C Power

4. Connect USB Key File and click *Continue.*

Figure 23.

HDD Navigation Map Update Process

Security Key Load (Continued)

5. Click *Load* to continue.

Figure 24.

6. Allow the Key File to copy onto the Navigation Update Tool (requires about 5 seconds).
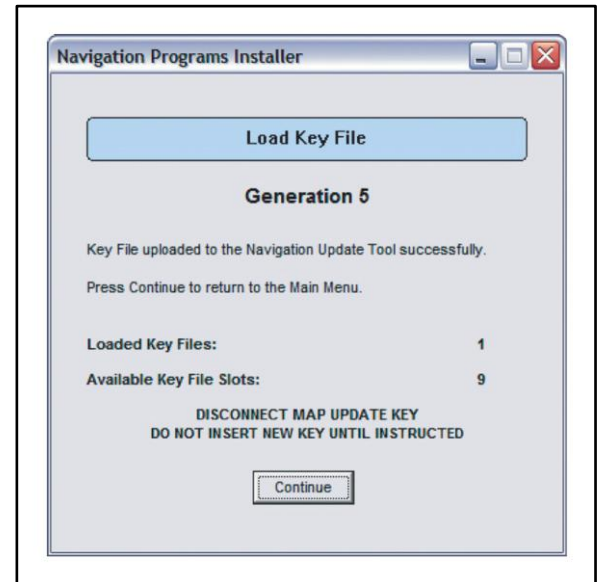
Figure 25.

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.

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.**

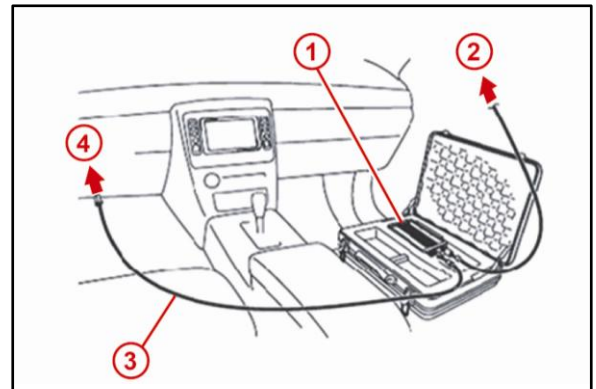# HDD Navigation Map Update Process

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.

Figure 27.

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.**

HDD Navigation Map Update Process

Vehicle Loading (Continued)

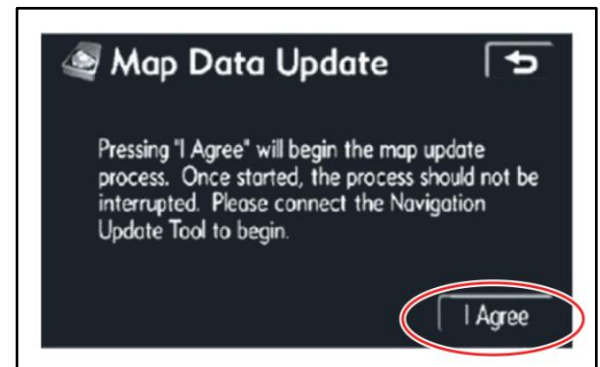   **Loading Map Data onto Vehicle HDD Navigation System (Generation 5) (Continued)**

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

Figure 28.

4. Press the *MENU* button.

Figure 29.

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

Figure 30.

HDD Navigation Map Update Process

Vehicle Loading (Continued)

Loading Map Data onto Vehicle HDD Navigation System (Generation 5) (Continued)
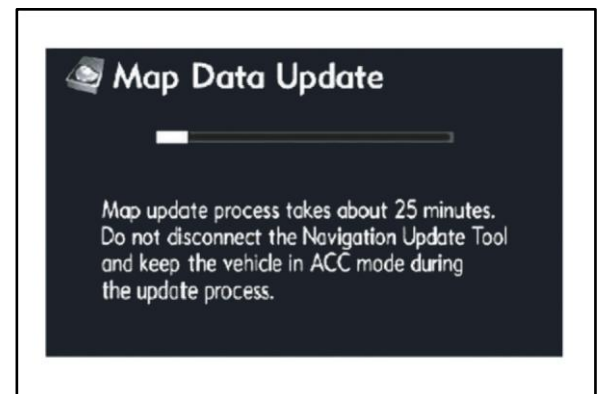
6. Select *Map Data Update.*

7. Select *I Agree.*

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

HDD Navigation Map Update Process

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.

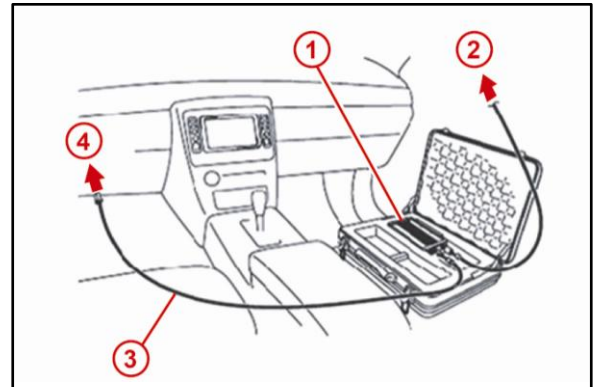# HDD Navigation Map Update Process

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.

Figure 35.

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.**

HDD Navigation Map Update Process

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.

HDD Navigation Map Update Process

Vehicle Loading (Continued)

      Loading Map Data onto Vehicle HDD Navigation System (Generation 6) (Continued)
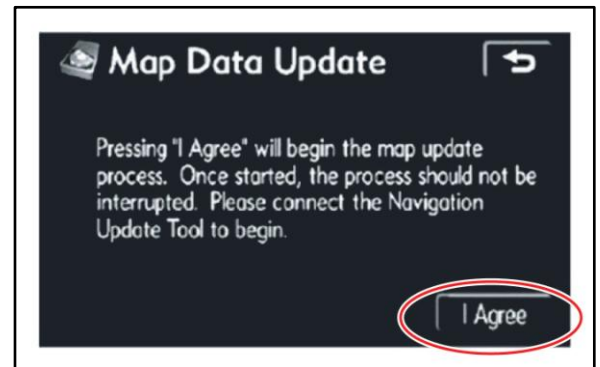
5.   Select *Map Data Update.*

Figure 38.
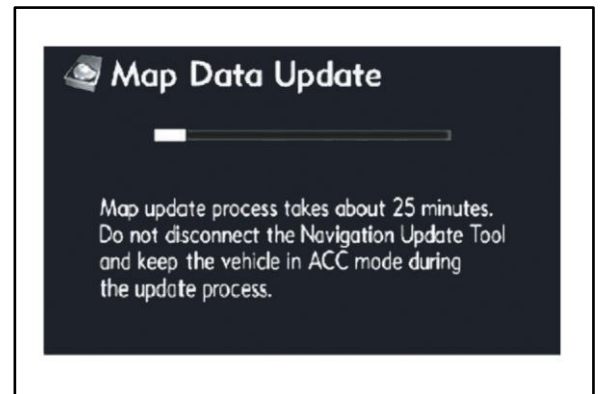

6.   Select *I Agree.*

Figure 39.

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

Figure 40.

HDD Navigation Map Update Process

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.