

Enform 2.0 Dynamic Navigation Map Update Process

Service Category Audio/Visual/Telematics

Section Navigation/Multi Info Display

Market USA

Toyota Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2018	LC500, LC500H, LS500, LS500H, NX300, NX300H, RC F, RC300, RC350	
2019	ES300H, ES350, LC500, LC500H, LS500, LS500H, NX300, NX300H, RC F, RC300, RC350, UX200, UX250H	
2020	ES300H, ES350, LC500, LC500H, LS500, LS500H, NX300, NX300H, RC F	

REVISION NOTICE

December 21, 2021 Rev2:

- The Required Tools & Equipment section has been updated.

May 13, 2021 Rev1:

- The Required Tools & Equipment section has been updated.
- The title has been updated.

Any previous printed versions of this bulletin should be discarded.

SUPERSESION NOTICE

The information contained in this bulletin supersedes Service Bulletin No. L-SB-0020-19.

- The Required Tools & Equipment, Dynamic Navigation Update, and Embedded Navigation Update sections have been updated.

Service Bulletin No. L-SB-0020-19 is obsolete and any printed versions should be discarded.

Enform 2.0 Dynamic Navigation Map Update Process

Introduction

Some 2018 – 2020 model year Lexus vehicles equipped with the Enform™ 2.0 Navigation System require a Special Service Tool (SST) USB flash drive to update the map, points of interest, and system software. The SST is used with applicable vehicles to deliver the update; however, the process for generating license keys differs from previous generations.

Before attempting to perform a map update, the head unit's expiration date must be checked. If the expiration date is still valid, a license key may be generated without the use of an activation card number. Updating the maps without the use of an activation card number is considered an Embedded Navigation Update (refer to pg. 10) and performing this process does not extend the duration of telematic map services. If the head unit's expiration date is expired or will expire within the next 90 days, it should be recommended to the customer to purchase an activation number. Utilizing an activation number will initiate a Dynamic Navigation Update (refer to pg. 4). This Dynamic Navigation Update will perform the Embedded Navigation Update and provide telematic map services for a period of two years from the day that the Dynamic Navigation Update is performed.

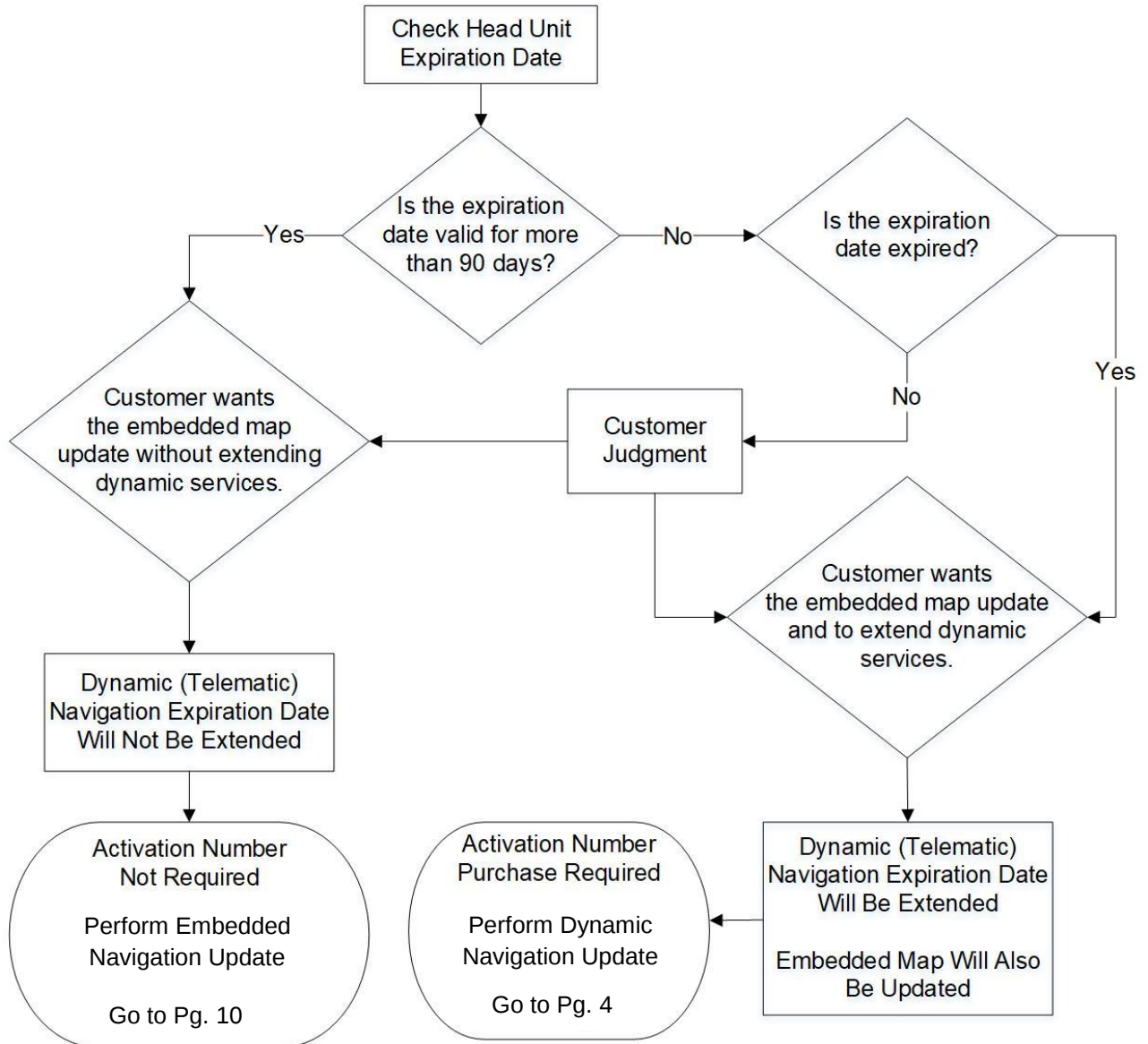
Activation card numbers are provided in an activation card number pamphlet available through the normal parts ordering system. Follow the process in this bulletin to perform the update.

NOTE

Map data is released once each year through the shipment of an SST USB flash drive to each dealer. The SST MUST be stored in the SST cabinet to ensure it can be easily found.

Enform 2.0 Dynamic Navigation Map Update Process

Introduction (continued)



Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
N/A	Not Applicable to Warranty	—	—	—	—

Enform 2.0 Dynamic Navigation Map Update Process

Parts Information

PART NUMBER	PART NAME	QTY
86271-HDD09-00	NAV ACN Card V.20.00	1

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
USB Drive Navigation Update – AWTEC*	TLAW-SD017-21F	1

*Essential SST.

NOTE

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

Dynamic Navigation Update

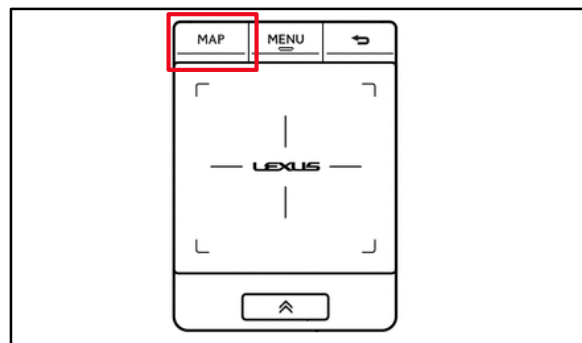
1. Search TIS for ANY available firmware updates for the selected model and model year. Complete the firmware update(s) BEFORE installing the map data.
2. Cycle the ignition ON (Engine/Hybrid/EV system OFF).

NOTE

- Vehicles WITHOUT Smart Key system:
Turn the ignition key to the ON position.
- Vehicles WITH Smart Key system:
Press the Engine Start/Stop button two times with the brake pedal released.

3. Select the MAP button on the touch pad.

Figure 1.

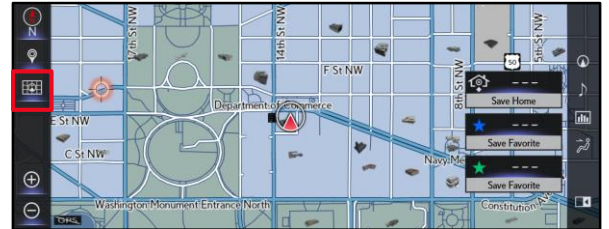


Enform 2.0 Dynamic Navigation Map Update Process

Dynamic Navigation Update (continued)

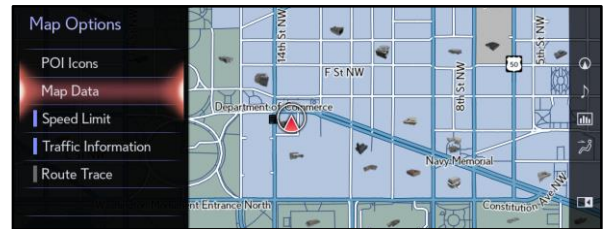
4. Select the Map Options icon on the navigation screen.

Figure 2.



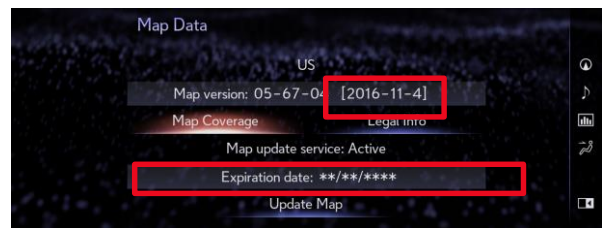
5. Select Map Data on the Map Options menu.

Figure 3.



6. Record the old map date (YYYYMMDD) and expiration date from the navigation screen.

Figure 4.



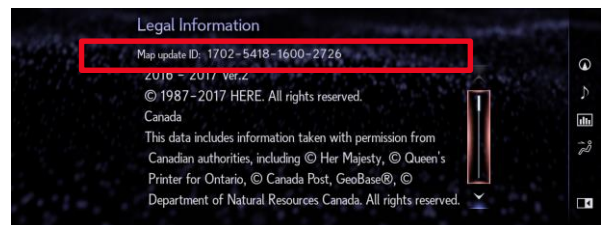
7. Select Legal Info.

Figure 5.



8. Record the map update ID.

Figure 6.



Enform 2.0 Dynamic Navigation Map Update Process

Dynamic Navigation Update (continued)

9. Log into TIS.
10. Log into the Navigation Update Wizard.
 - A. Select the TIS tab.
 - B. Select the Diagnostics tab.
 - C. Select the Navigation tab.
 - D. Re-enter your password.
 - E. Select Login.
11. Select AWTEC from the Select Navigation Manufacturer dropdown menu.
12. Enter the vehicle's VIN and head unit expiration date.

NOTE

It is recommended to perform a Dynamic Navigation Update under the following conditions:

- The expiration date is expired.
- The expiration date will expire in 90 days or less.
- The customer would like to continue the dynamic navigation system for a period of two years from the date of the update.

13. Enter the activation card number from the inside of the pamphlet (obtained from the parts department).
14. Select Submit.

Figure 7.

Navigation Update Wizard

Receive a License Key

Once an Activation Card is purchased, proceed with the navigation update wizard to obtain a license key.

The license key allows the user to update the map in a navigation unit within the customer's vehicle. Note that one license key allows for one navigation map update.

Re-enter your Password below to proceed with the Navigation Map Update Request form.

Password:

Figure 8.

Please complete the following fields to receive a license key.

Dealer Code: 35682
 Dealer Name: Toyota City
 Technician Name: John Smith
 *Select Navigation Manufacturer: ☒
 VIN:
 *Expiration Date:

Figure 9.

Navigation Update Wizard

Please complete the following fields to receive a license key.

Dealer Code: 35682
 Dealer Name: Toyota City
 Technician Name: John Smith
 Navigation Manufacturer: AWTEC
 *Activation Card Number:
 *USB Stick P/N:
 *Map Update ID: - - -
 *Old Map Version:
 *VIN:
 *Repair Order/Parts Invoice Number:
 *Expiration Date:

(*) - Indicates Required Field(s)

Enform 2.0 Dynamic Navigation Map Update Process

Dynamic Navigation Update (continued)

15. Enter the navigation data into the Navigation Update Wizard form.
 - A. Select the correct USB part number (found on the SST packaging, starts with "TLAW").
 - B. Input the map update ID into TIS (without hyphens).
 - C. Input the old map date into TIS using the following format: YYYYMMDD (without hyphens).
 - D. Enter the VIN.
 - E. Enter the repair order number.
 - F. Enter the expiration date.
 - G. Select Submit.

Figure 10.

16. Check off each item AFTER confirming that it is correct. If ANY of the information is incorrect, select the back button.
17. Select Confirm.

Figure 11.

18. Note the license key that is generated. (It is recommended to print this page.)

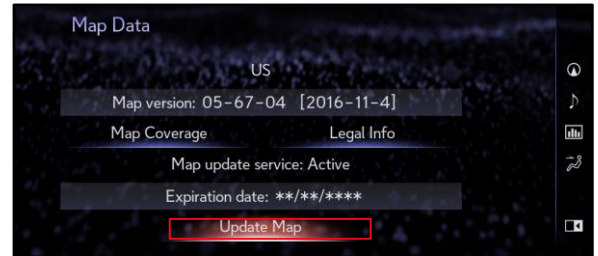
Figure 12.

Enform 2.0 Dynamic Navigation Map Update Process

Dynamic Navigation Update (continued)

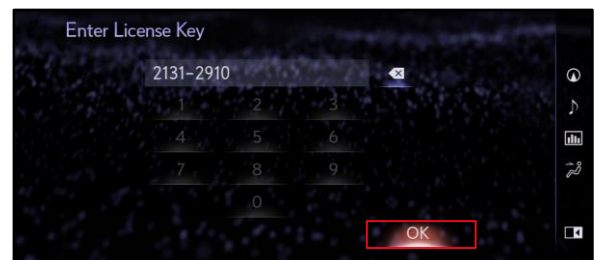
19. Insert the USB flash drive SST into the USB port of the vehicle (usually located under the navigation head unit, in the center console/armrest, or glove box).
20. Select Update Map on the Map Data screen.

Figure 13.



21. Select Yes.
22. Enter the license key from step 18.
23. Select OK.

Figure 14.



Enform 2.0 Dynamic Navigation Map Update Process

Dynamic Navigation Update (continued)

24. The head unit software MUST be updated first. Figure 15 will display during the update.

If the head unit software is already updated, Figure 17 will display. If Figure 17 displays, continue to step 25.

NOTE

Navigation map data will load when this process completes.

- A. Allow the update to complete.

NOTE

This process will take approximately 10 minutes.

- B. The head unit will prompt to cycle the ignition. Cycle the ignition OFF, then ON (Ready OFF/Engine OFF) when prompted.

NOTE

Do NOT remove the USB flash drive during this process.

25. After completing the head unit software update, the Map Update screen will display, and the navigation map update will begin automatically.

NOTE

This process will take approximately 45 minutes.

26. When prompted, remove the USB flash drive from the vehicle's USB port.
27. The map update is complete.
28. Verify navigation operation.

Figure 15.



Figure 16.

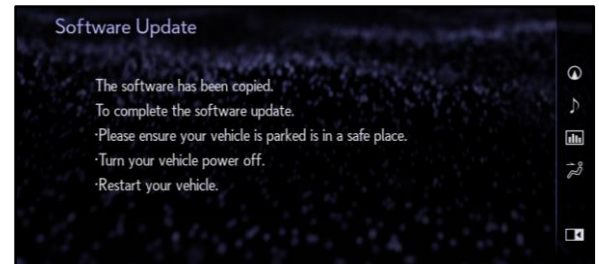


Figure 17.

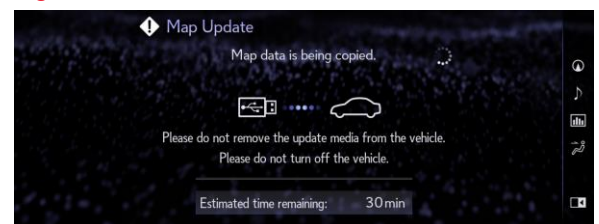
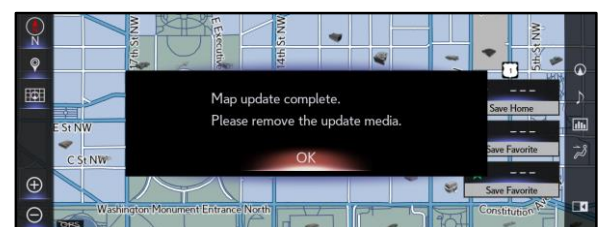


Figure 18.



Enform 2.0 Dynamic Navigation Map Update Process

Embedded Navigation Update

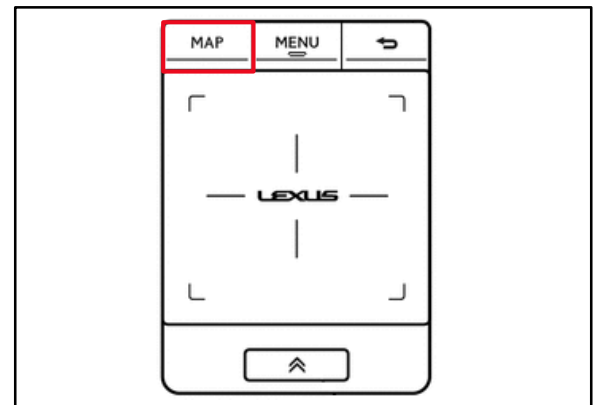
1. Search TIS for ANY firmware updates that are available for the selected model and model year. Complete the firmware update(s) BEFORE installing the map data.
2. Cycle the ignition ON (Engine/Hybrid/EV system OFF).

NOTE

- Vehicles WITHOUT Smart Key system:
Turn the ignition key to the ON position.
- Vehicles WITH Smart Key system:
Press the Engine Start/Stop button two times with the brake pedal released.

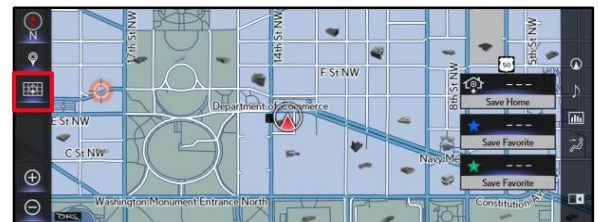
3. Select the MAP button on the touch pad.

Figure 19.



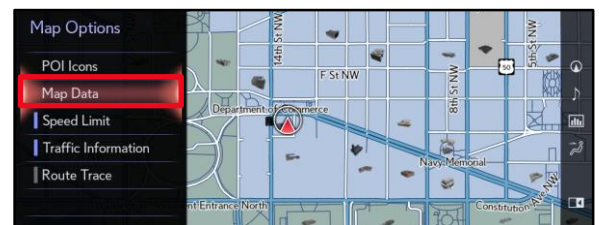
4. Press the Map Options icon on the navigation screen.

Figure 20.



5. Select Map Data on the Map Options menu.

Figure 21.



Enform 2.0 Dynamic Navigation Map Update Process

Embedded Navigation Update (continued)

6. Record the old map date (YYYYMMDD) and expiration date from the navigation screen.

Figure 22.



7. Select Legal Info.

Figure 23.



8. Record the map update ID.

Figure 24.



9. Log into TIS.
10. Log into the Navigation Update Wizard.
 - A. Select the TIS tab.
 - B. Select the Diagnostics tab.
 - C. Select the Navigation tab.
 - D. Re-enter your password.
 - E. Select Login.

Figure 25.



Enform 2.0 Dynamic Navigation Map Update Process

Embedded Navigation Update (continued)

11. Select AWTEC from the Select Navigation Manufacturer dropdown menu.

Figure 26.

Please complete the following fields to receive a license key.

Dealer Code: 35682
 Dealer Name: Toyota City
 Technician Name: John Smith
 *Select Navigation Manufacturer: **AWTEC**
 VIN: 4T1BZ1HK9JU002801
 *Expiration Date: 01/01/2020

12. Enter the vehicle's VIN and head unit expiration date.

NOTE

It is recommended to perform an Embedded Navigation Update under the following conditions:

- The head unit's expiration date is valid and NOT expired.
- The head unit's expiration date will NOT expire in the next 90 days.
- The customer would like to perform an Embedded Navigation Update during the last 90 days. (This process will NOT extend the dynamic navigation system.)

Figure 27.

Navigation Update Wizard

Please complete the following fields to receive a license key.

Dealer Code: 35682
 Dealer Name: Toyota City
 Technician Name: John Smith
 *Select Navigation Manufacturer: **AWTEC**
 VIN: 4T1BZ1HK9JU002801
 *Expiration Date: 01/01/2020

(*) - Indicates Required Field(s)

Back Clear Submit

13. Select Submit.
14. Enter the navigate-on data into the Navigation Update Wizard form. (An activation card number is NOT required.)
 - A. Select the correct USB part number (found on the SST packaging, starts with "TLAW").
 - B. Input the map update ID into TIS (without hyphens).
 - C. Input the old map date into TIS using the following format: YYYYMMDD (without hyphens).
 - D. Enter the VIN.
 - E. Enter the repair order number.
 - F. Enter the expiration date.
 - G. Select Submit.

Figure 28.

Navigation Update Wizard

Please complete the following fields to receive a license key.

Dealer Code: 35682
 Dealer Name: Toyota City
 Technician Name: John Smith
 *Select Navigation Manufacturer: **AWTEC**
 VIN: 4T1BZ1HK9JU002801
 *Expiration Date: 01/01/2020

USB Part # [TLAW-HDD-07-17]
 *Map Update ID [1762] [1716] [1910] [1566]
 *Old Map Version [301630]
 *VIN [9H] [2336F] [E00000001]
 *Repair Order/Parts Invoice Number [13167]
 *Expiration Date [01/01/2020]

(*) - Indicates Required Field(s)

Back Clear Submit

Enform 2.0 Dynamic Navigation Map Update Process

Embedded Navigation Update (continued)

15. Check off each item AFTER confirming that it is correct. If ANY of the information is incorrect, select the back button.

16. Select Confirm.

17. Note the license key that is generated.
(It is recommended to print this page.)

Figure 29.

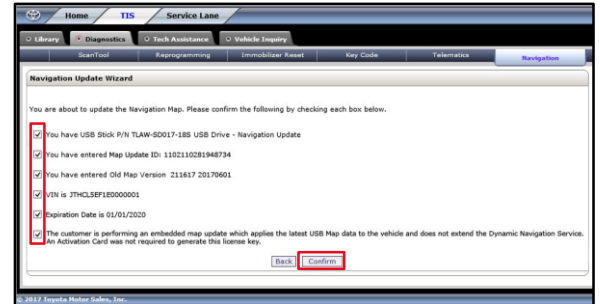
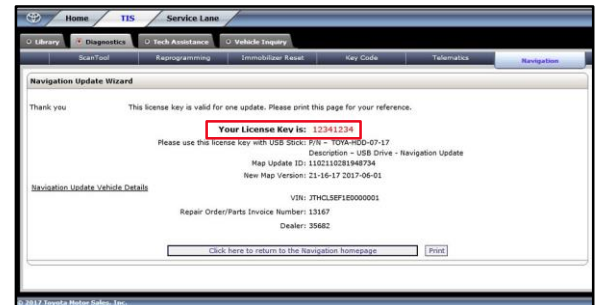


Figure 30.



18. Insert the USB flash drive SST into the USB port of the vehicle (usually located under the navigation head unit, in the center console/armrest, or glove box).

19. Select Update Map on the Map Data screen.

Figure 31.



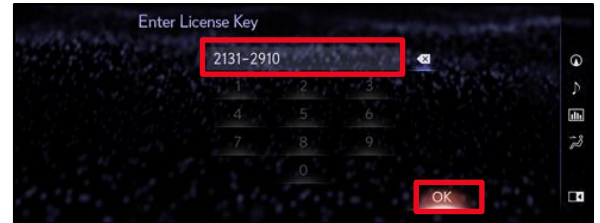
20. Select YES.

Enform 2.0 Dynamic Navigation Map Update Process

Embedded Navigation Update (continued)

21. Enter the license key from step 17.
22. Select Ok.

Figure 32.



23. The head unit software MUST be updated first. Figure 33 will display during this process.

If the head unit software is already updated, Figure 34 will display. If Figure 34 displays, continue to step 24.

NOTE

Navigation map data will load when this process completes.

Figure 33.

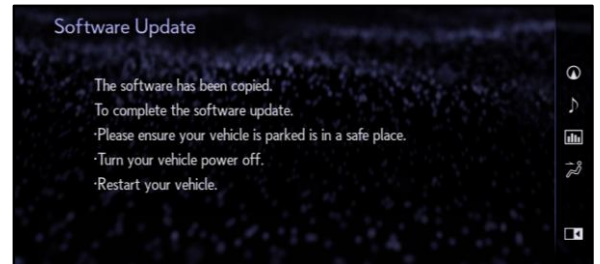


- A. Allow the update to complete.

NOTE

This process will take approximately 10 minutes.

Figure 34.



- B. The head unit will prompt to cycle the ignition. Cycle the ignition OFF, then ON (Ready OFF/Engine OFF) when prompted.

NOTE

Do NOT remove the USB flash drive during this process.

Enform 2.0 Dynamic Navigation Map Update Process

Embedded Navigation Update (continued)

24. After completing the head unit software update, the Map Update screen will display and the navigation map update will begin automatically.

NOTE

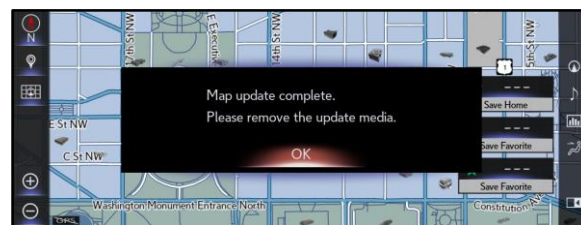
This process will take approximately 45 minutes.

Figure 35.



25. When prompted, remove the USB flash drive from the vehicle's USB port.

Figure 36.



26. The map update is complete.
27. Verify navigation operation.