LEXUS
Technical Service Information Bulletin

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
2019 - 2022	ES300H, ES350, UX200, UX250H	
2022	GX460, RC300, RC350	
2021 - 2022	IS300, IS350	
2018 - 2021	LC500, LC500H, LS500, LS500H, NX300, NX300H	
2021	LC500C	
2018 - 2022	RC F	
2018 - 2020	RC300, RC350	
2020 - 2022	RX350, RX450H	

SUPERSESSION NOTICE

The information contained in this bulletin supersedes Service Bulletin No. L-SB-0043-20.

- **Applicability has been updated to include 2021 – 2022 model year Lexus vehicles.**
- **The Introduction section has been updated.**

Service Bulletin No. L-SB-0043-20 is obsolete, and any printed versions should be discarded

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Enform 2.0 Dynamic Navigation Map Update Process

Introduction

Some 2018 – 2022 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 expiration date of the dynamic subscription (stored in the head unit), must be checked. If the expiration date has not passed, a license key may be generated without the purchase of an activation card number (ACN). Updating the map without the use of an ACN is considered an Embedded Navigation Update (refer to pg. 10) and performing this update does not extend the subscription to dynamic map services. If the subscription period has expired, or is expiring within the next 90 days, it should be recommended to the customer to purchase an ACN. Utilizing an ACN, will initiate the Dynamic Navigation Update (refer to pg. 4). This Dynamic Navigation Update will perform the embedded navigation update and provide dynamic map services for a period of two years from the date that the Dynamic Navigation Update is performed.
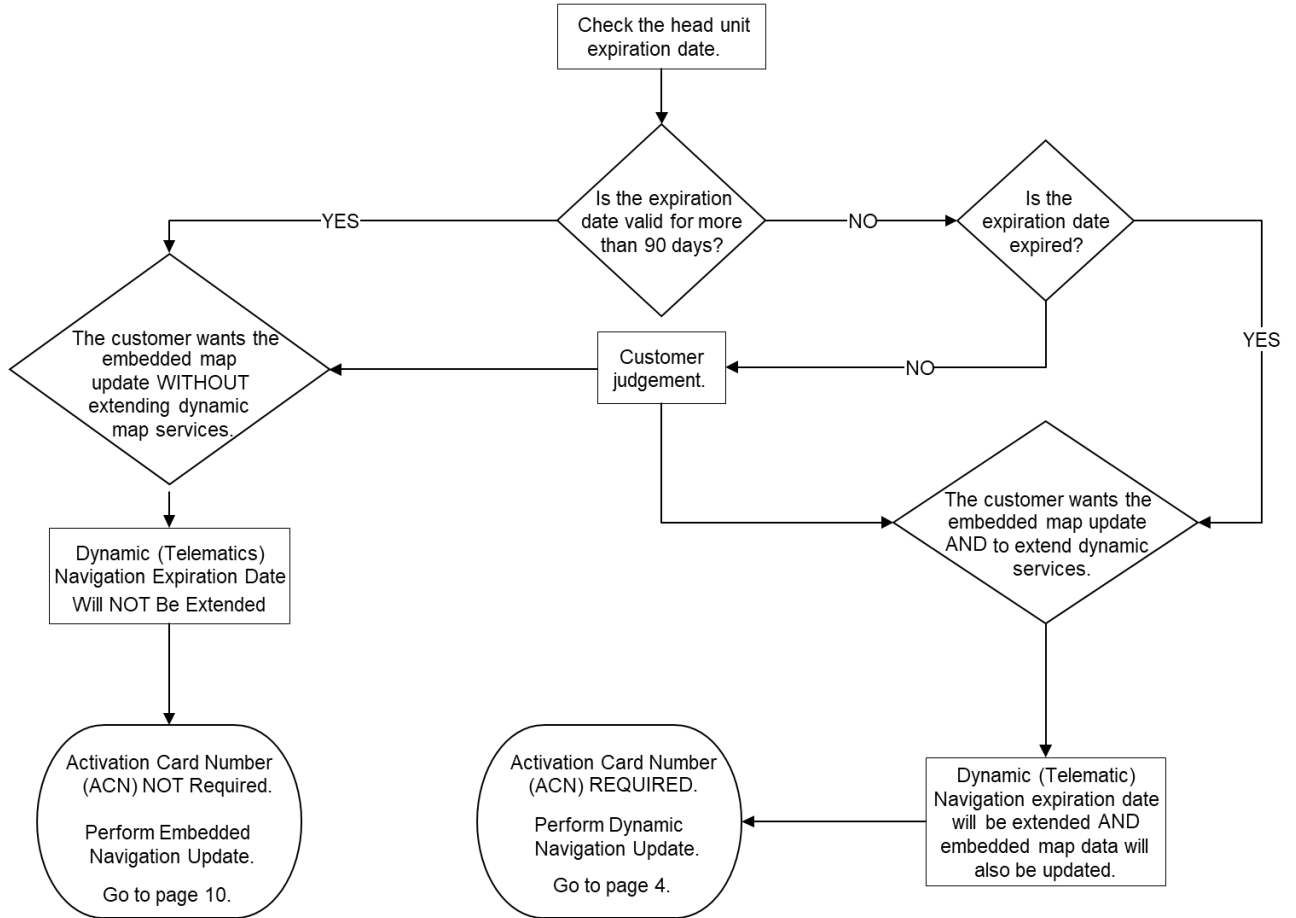
ACNs are provided in a pamphlet available through the normal parts ordering system. Follow the process in this bulletin to perform the update.

> **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)

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                        ┌─────────────────────┐
                        │ Check the head unit │
                        │  expiration date.   │
                        └──────────┬──────────┘
                                   │
                                   ▼
                            ◇ Is the expiration
        ◀──────YES────────   date valid for more ──NO──▶  ◇ Is the
        │                     than 90 days?               expiration date
        ▼                                                 expired?
  ◇ The customer wants the                                │            │
    embedded map          ◀──── ┌──────────────┐ ◀──NO────┘            YES
    update WITHOUT              │   Customer    │                       │
    extending dynamic          │  judgement.   │                       │
    map services.              └──────────────┘                        │
        │                              │                               │
        ▼                              │                               ▼
  ┌──────────────────────┐            │              ◇ The customer wants the
  │ Dynamic (Telematics) │            └──────────────▶  embedded map update
  │ Navigation Expiration│                               AND to extend dynamic
  │ Date Will NOT Be     │                               services.
  │ Extended             │                                      │
  └──────────┬───────────┘                                      ▼
             │                                    ┌──────────────────────────┐
             ▼                                    │ Dynamic (Telematic)      │
  ╭──────────────────────╮  ╭──────────────────╮ │ Navigation expiration    │
  │ Activation Card      │  │ Activation Card   │◀│ date will be extended AND│
  │ Number (ACN) NOT     │  │ Number (ACN)      │ │ embedded map data will   │
  │ Required.            │  │ REQUIRED.         │ │ also be updated.         │
  │                      │  │                   │ └──────────────────────────┘
  │ Perform Embedded     │  │ Perform Dynamic   │
  │ Navigation Update.   │  │ Navigation Update.│
  │                      │  │                   │
  │ Go to page 10.       │  │ Go to page 4.     │
  ╰──────────────────────╯  ╰──────────────────╯
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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*	TLAWSD017-22F	1

*Essential SST.

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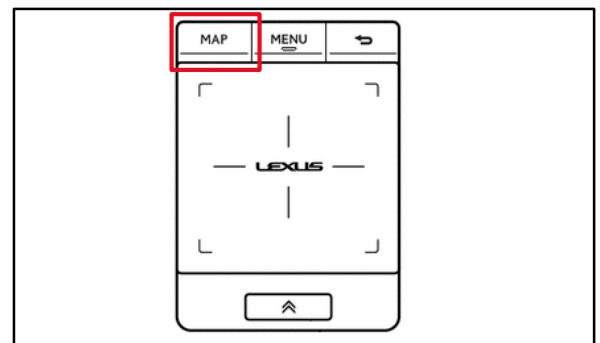
Dynamic Navigation Update

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.
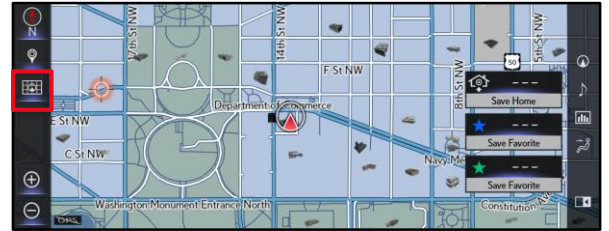
Figure 2.

5. Select Map Data on the Map Options menu.

Figure 3.
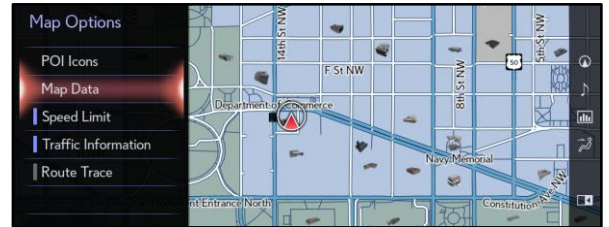
6. Record the old map date (YYYYMMD) and expiration date from the navigation screen.

Figure 4.
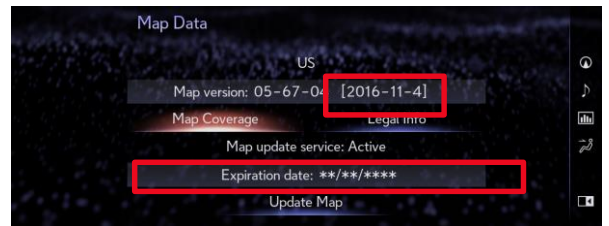
7. Select Legal Info.

Figure 5.

8. Record the map update ID.

Figure 6.
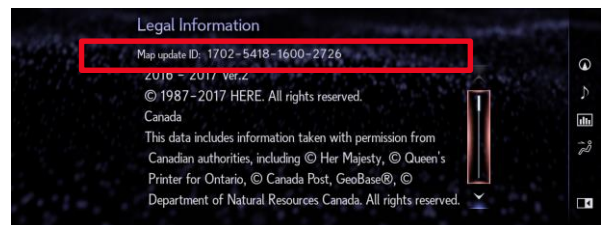
Enform 2.0 Dynamic Navigation Map Update Process

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.

Figure 7.

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

12. Enter the vehicle's VIN and head unit expiration date, then select Submit.

Figure 8.

> **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).
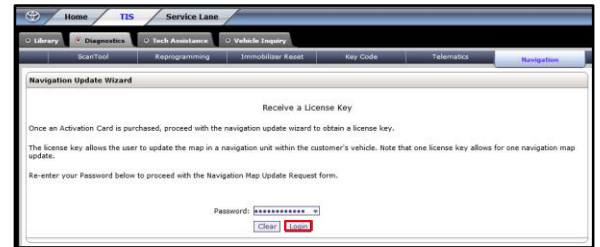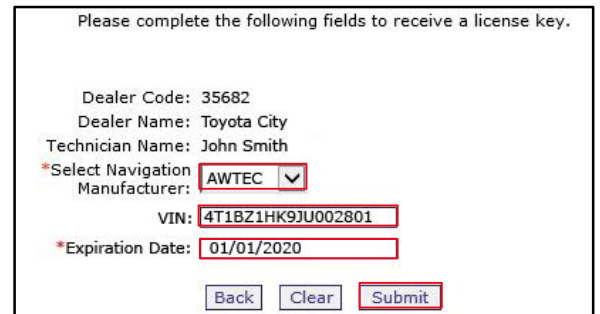
Figure 9.

Enform 2.0 Dynamic Navigation Map Update Process

Dynamic Navigation Update (continued)

14. 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: YYYYMMD (without hyphens).

    D. Enter the VIN.

    E. Enter the repair order number.

    F. Enter the expiration date.

    G. Select Submit.

Figure 10.
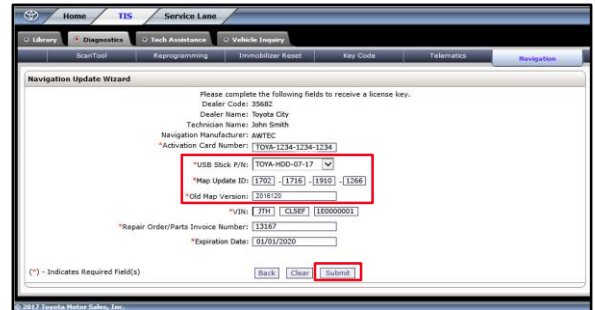
15. Check off each item AFTER confirming that it is correct. If ANY of the information is incorrect, select the back button.

Figure 11.

16. Select Confirm.

    > **NOTE**
    >
    > If ANY of the navigation data is entered incorrectly, the update will NOT complete successfully, and it is possible a NEW ACN will be required.

17. 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)

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 13.
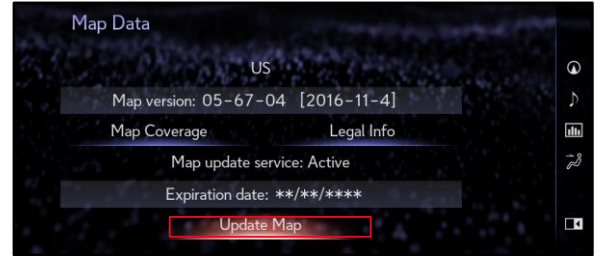
20. Select Yes.

21. Enter the license key from step 17.

Figure 14.

22. Select OK.
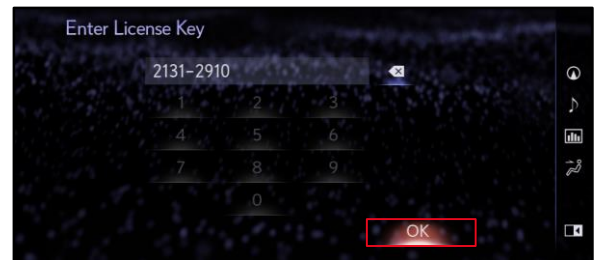
Enform 2.0 Dynamic Navigation Map Update Process

Dynamic Navigation Update (continued)

23. 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 24.

    > **NOTE**
    >
    > Navigation map data will load when this process completes.

    Figure 15.

A. Allow the update to complete.

    > **NOTE**
    >
    > This process will take approximately 10 minutes.

    Figure 16.

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.

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 17.

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

26. The map update is complete.

27. Verify navigation operation.
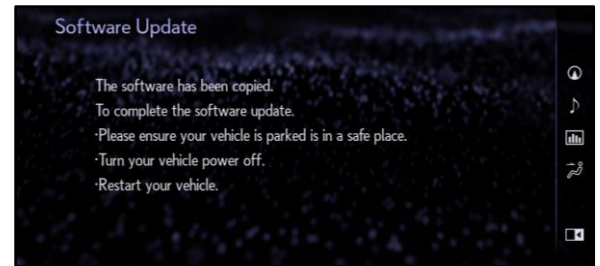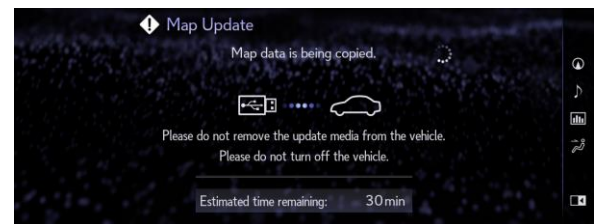
    Figure 18.
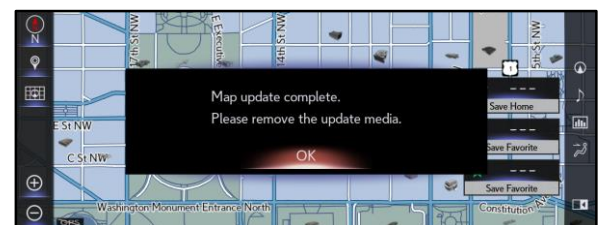
Enform 2.0 Dynamic Navigation Map Update Process

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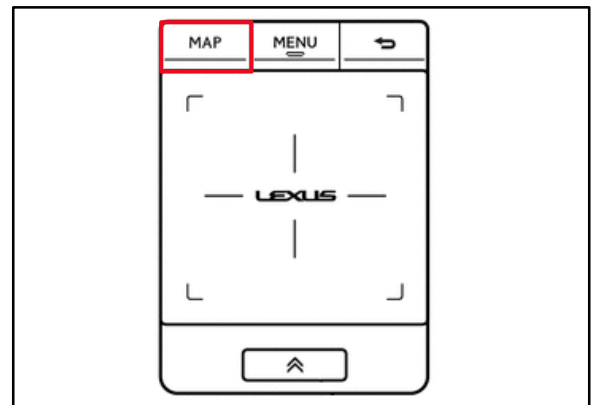
4. Press the Map Options icon on the navigation screen.

   Figure 20.
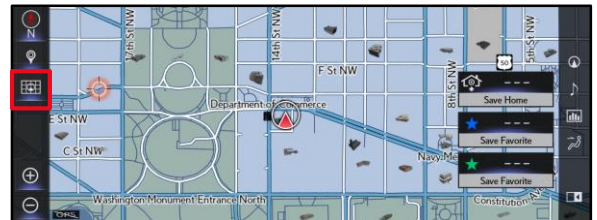
5. Select Map Data on the Map Options menu.

   Figure 21.
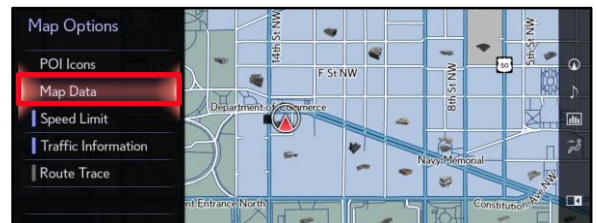
Enform 2.0 Dynamic Navigation Map Update Process

Embedded Navigation Update (continued)

6. Record the old map date (YYYYMMD) 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.

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.

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: YYYYMMD (without hyphens).

    D. Enter the VIN.

    E. Enter the repair order number.

    F. Enter the expiration date.

    G. Select Submit.

Figure 28.

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.

Figure 29.

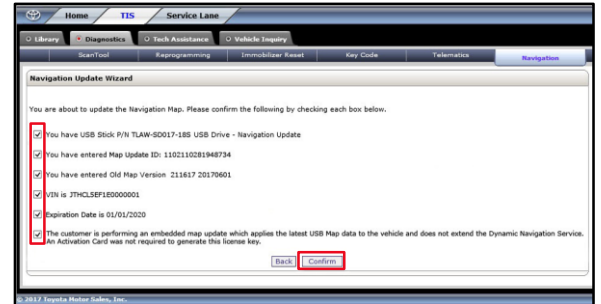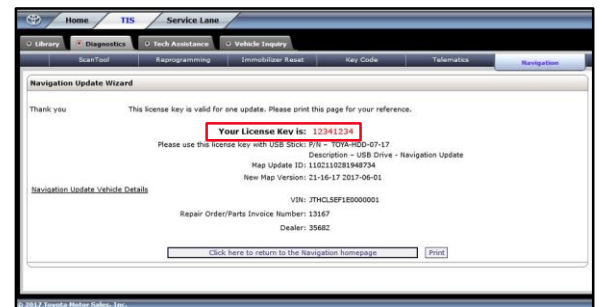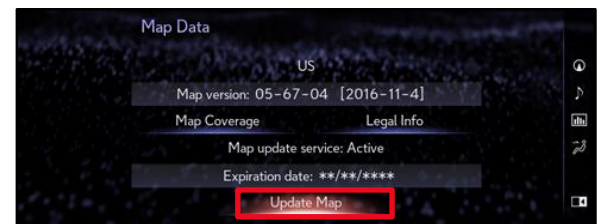17. Note the license key that is generated. (It is recommended to print this page.)

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).

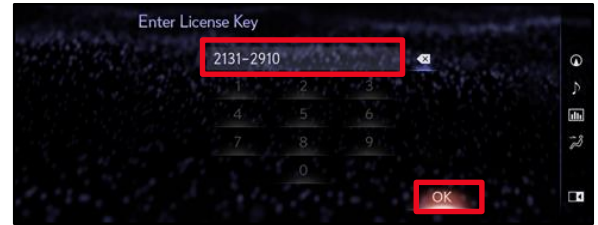19. Select Update Map on the Map Data screen.

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.

Figure 32.

22. Select Ok.

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 35 will display. If Figure 35 displays, continue to step 24.

    > **NOTE**
    >
    > Navigation map data will load when this process completes.
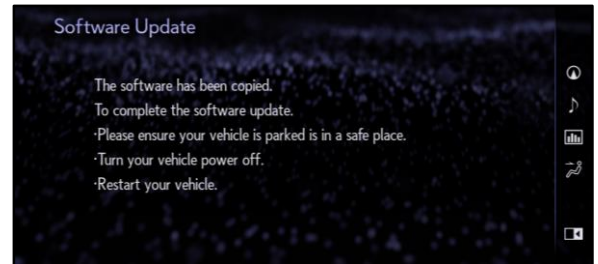
Figure 33.

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.

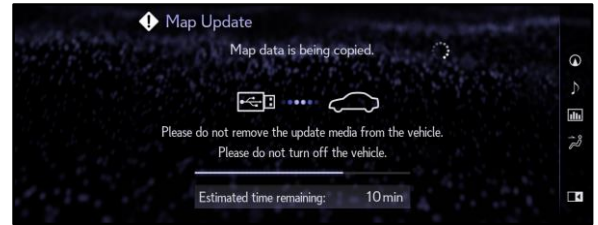## Enform 2.0 Dynamic Navigation Map Update Process

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.