Classification:

SERVICE BULLETIN

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Dat

EL12-0130 ITB12-0110 October 8, 2019

Reference:

TELEMATICS SERVICE INFORMATION

This bulletin has been amended. See AMENDMENT HISTORY on the last page.

Please discard previous versions of this bulletin.

APPLIED VEHICLES: 2013 JX35 (L50) 2017-2019 QX30 (H15)

2013 M37/M56 and M35 Hybrid (Y51) 2019 QX50 (J55)

2013 QX56 (Z62) 2014-2020 QX60 (L50)

2014-2019 Q50 (V37) 2014-2018 QX60 Hybrid (L50)

2014-2018 Q50 Hybrid (V37) 2014-2019 QX80 (Z62)

2017-2019 Q60 (V37) 2014-2019 Q70 (Y51)

2014-2018 Q70 Hybrid (Y51)

APPLIED SYSTEMS: Vehicles equipped with factory Navigation system

See ITB19-029 for models built after those listed above for a different Service Procedure.

SERVICE INFORMATION

The Applied Vehicles are equipped with a wireless communication device called a Telematics Communication Unit (TCU). With an active Infiniti Connection® or Infiniti InTouch Services™, the TCU communicates with the Infiniti Data Center to provide various security and convenience services.

This bulletin contains important service procedures that <u>must</u> be performed properly in order to set-up and maintain the telematics system for the Applied Vehicles.

- A table has been provided on the next page that lists the model- and year-specific steps required to successfully configure a TCU after it has been replaced.
- A check OFF sheet has been provided on page 21 to print and check off steps as they are performed. Please staple the completed Check OFF Sheet to the repair order.

Infiniti Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Infiniti retailer to determine if this applies to your vehicle.

REQUIRED ACTIONS BY MODEL AND YEAR

IMPORTANT: After TCU replacement (steps 1-14):

- If all of the steps below are not completed, telematics services will not operate properly.
- Follow all of the model/year specific steps in this bulletin and use the Check OFF Sheet provided at the end of this bulletin (page 21).
- If the TCU is replaced and the steps were not followed, the warranty claim will be denied.

| ORDER OF COMPLETION | | 1st | 2nd | 3rd | 4th | 5th |
|------------------------|-----------|-----------|------------------|--------------------|----------------|--------------------------|
| Model | Year | Write VIN | Configure TCU | Register I-Keys | Turn ON TCU | Register TCU with SXM |
| JX35 | 2013 | ✓ | | | ✓ | ✓ |
| M37/M56 and M35 Hybrid | 2013 | ✓ | | | ✓ | ✓ |
| QX56 | 2013 | ✓ | | | ✓ | ✓ |
| | 2014-2015 | ✓ | | | ✓ | ✓ |
| Q50 and Q50 Hybrid | 2016-2018 | ✓ | ✓ | ✓ | ✓ | ✓ |
| Q50 | 2019 | ✓ | | ✓ | ✓ | ✓ |
| 0/0 | 2017-2018 | ✓ | ✓ | ✓ | ✓ | ✓ |
| Q60 | 2019 | ✓ | | ✓ | ✓ | ✓ |
| 070 107011111 | 2014-2017 | ✓ | | | ✓ | ✓ |
| Q70 and Q70 Hybrid | 2018 | ✓ | ✓ | | ✓ | ✓ |
| Q70 | 2019 | ✓ | ✓ | | ✓ | ✓ |
| QX30 | 2017-2019 | ✓ | ✓ | | ✓ | ✓ |
| QX50 | 2019 | ✓ | ✓ | ✓ | ✓ | ✓ |
| 0//0 - 10//0111-11 | 2014-2016 | ✓ | | | ✓ | ✓ |
| QX60 and QX60 Hybrid | 2017-2018 | ✓ | | ✓ | ✓ | ✓ |
| QX60 | 2019-2020 | ✓ | | ✓ | ✓ | ✓ |
| 0,400 | 2014-2017 | ✓ | | | ✓ | ✓ |
| QX80 | 2018-2019 | ✓ | ✓ | ✓ | ✓ | ✓ |

TABLE OF CONTENTS:

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| • | TCU Replacement page 4 |
| • | Check OFF Sheet page 21 |
| • | Manually Enter VIN Data page 22 |
| • | SOS Light Diagnosis Information |
| | NOTE: If the green SOS light is OFF, or has turned OFF, the vehicle may no longer be in Dealer Dem Mode and SXM has disabled all services. The vehicle will need to be enrolled for customer use. Do NOT replace the TCU. |

• Turning ON the TCU During PDI (2013-2017 Applied Vehicles ONLY)..... page 24

NOTE: If the "Turning ON the TCU During PDI" procedure is not followed correctly, the vehicle cannot be used in Dealer Demo mode or enrolled in Infiniti Connection® or Infiniti InTouch Services™. Should this occur, the "Turning ON the TCU During PDI" procedure will need to be performed again.

TCU REPLACEMENT

NOTE:

- Each TCU is registered to a specific Vehicle Identification Number (VIN). <u>TCUs cannot be "swapped" between vehicles</u>. Once a TCU is registered to a vehicle, the TCU cannot be used in another vehicle.
- During this procedure, Intelligent Key Registration must be performed for the vehicles listed in this table. You <u>MUST</u> have ALL customer keys collected.

| 2016-2019 Q50 | 2017-2020 QX60 |
|----------------------|-----------------------|
| 2016-2018 Q50 Hybrid | 2017-2018 QX60 Hybrid |
| 2017-2019 Q60 | 2018-2019 QX80 |
| 2019 QX50 | |

- The new/replacement TCU must come from Nissan North America parts supply.
- Some vehicles require **TCU Configuration** after replacement. Refer to step 20 on page 9.
- The VIN MUST be written to the replacement TCU after installation.
- The replacement TCU must be registered with SXM.

Save VIN Data

- 1. Set the parking brake.
- 2. Connect the C-III plus VI to the vehicle.
- 3. Turn the ignition ON.
- 4. Launch C-III plus on the CONSULT PC.

5. Select Diagnosis (One System).

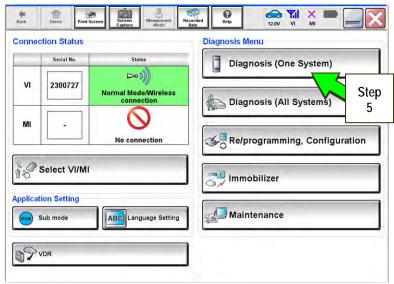


Figure 1

6. Select **Telematics**.

NOTE: If the VIN data cannot be saved, proceed to step 12 on page 7. You will be instructed to manually enter the VIN at step 16.

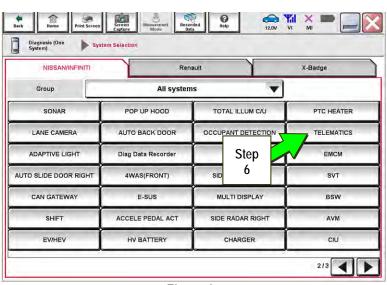


Figure 2

7. Select Work Support.

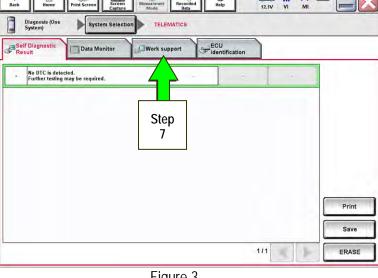


Figure 3

8. Select SAVE VIN DATA.



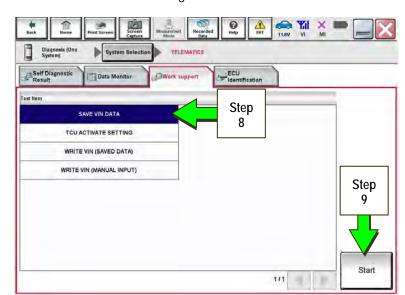


Figure 4

10. Select Start.

NOTE: NOTE: If the VIN data cannot be saved, proceed to step 12 on page 7. You will be instructed to manually enter the VIN at step 16.

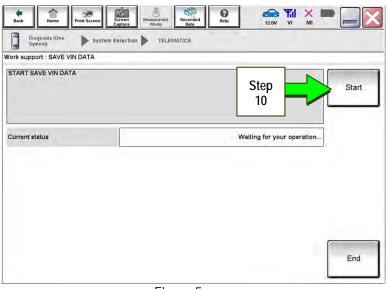


Figure 5

11. Select End.

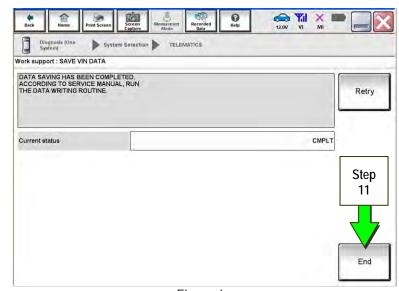


Figure 6

Remove the Original TCU

- 12. Remove the TCU from the vehicle. Refer to the ESM for removal information.
 - For PDF ESM: section AV–Audio, Visual & Navigation System
 - For Web ESM: DRIVER INFORMATION & MULTIMEDIA > AUDIO VISUAL & NAVIGATION SYSTEM > REMOVAL AND INSTALLATION > TCU

Step 13 must be performed <u>AFTER</u> the original TCU is removed from the vehicle and <u>BEFORE</u> the replacement TCU is installed.

- 13. Write down the following information:
 - VIN.
 - International Mobile
 Equipment Identity Number
 (IMEI) of the <u>original TCU</u>.
 This number is located on the TCU.
 - IMEI Number of the <u>replacement TCU</u>. This number is located on the TCU.

LABEL ON TCU

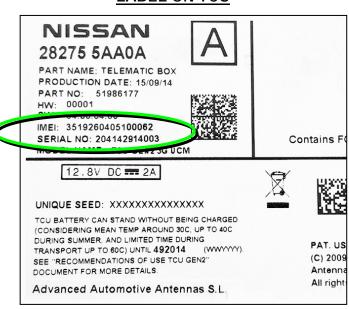


Figure 7

Install the New TCU

- 14. Install the new / replacement TCU into the vehicle. Refer to the ESM for installation information.
 - For PDF ESM: section AV-Audio, Visual & Navigation System
 - For Web ESM: DRIVER INFORMATION & MULTIMEDIA > AUDIO VISUAL & NAVIGATION SYSTEM > REMOVAL AND INSTALLATION > TCU

Write VIN to TCU

- 15. Connect C-III plus and navigate to Telematics Work support.
 - Refer to steps 1-7 on pages 4-6.
- 16. Select WRITE VIN (SAVED DATA).

NOTE: If VIN DATA could not be saved in step 10, proceed to **Manually Enter VIN Data** on page 22.

17. Select Start.

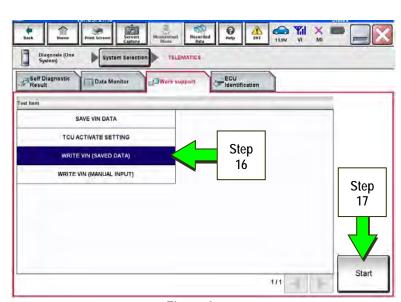


Figure 8

18. Select Start.

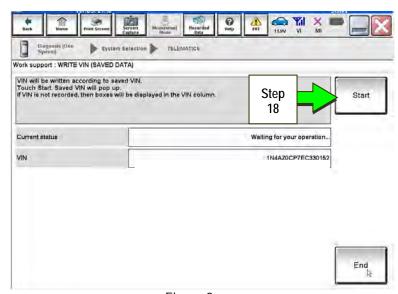


Figure 9

19. Select End.

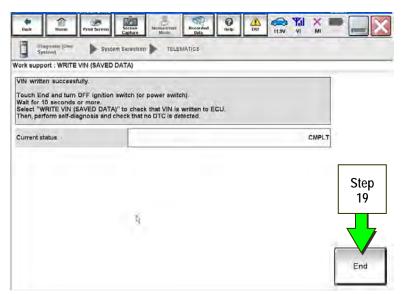


Figure 10

20. Is the vehicle in the table below?

• YES: Proceed to step 21.

• NO: Proceed to step 31 on page 12.

| 2016-2018 Q50 * | 2017-2018 Q60 |
|------------------------|----------------|
| 2016-2018 Q50 Hybrid * | 2017-2019 QX30 |
| 2018-2019 Q70 | 2019 QX50 |
| 2018 Q70 Hybrid | 2018-2019 QX80 |

^{*} For 2018 vehicles, TCU Configuration is needed only if the TCU ID number begins with "2047" (see Figure 17 on page 12).

9/25

Configure TCU

21. Select Re/programming, Configuration.

NOTE: C-III plus screens for steps 22-24 are not shown.

- 22. Read the precautions on C-III plus screen and then select **Next**.
- 23. Select the model and model year.
- 24. Select **Select**, and then select **Confirm**.

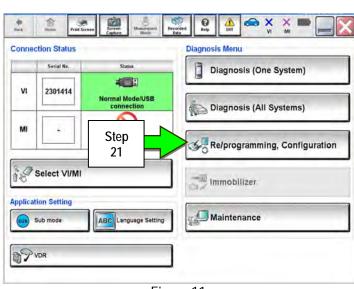


Figure 11

ITB12-0110

25. Select **TELEMATICS**.

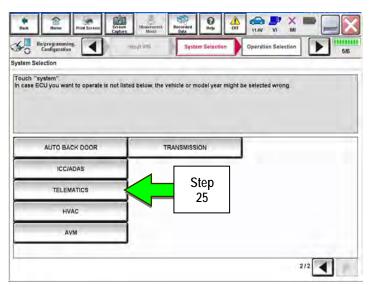


Figure 12

26. Select After ECU Replacement.

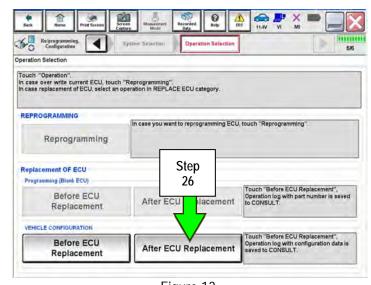


Figure 13

- 27. Select Manual selection.
- 28. Select the applicable Type ID:

For 2016-2018 Q50 and Q50 Hybrid:

28277-1HK0A

For 2018 Q70 and Q70 Hybrid:

28277-5UV0A

For 2019 Q70:

28277-6FL2A

For 2017-2018 Q60:

28227-5CA2A

For 2017-2019 OX30:

28277-5DA2A

For 2019 QX50:

28277-6FL1B

For 2018-2019 QX80:

28277-6FL1C

NOTE: If C-III plus automatically selects the Type ID, there will be no options shown under Type ID and Figure 15 will not display. Skip to step 30.

- 29. Select Next.
- 30. Select OK.

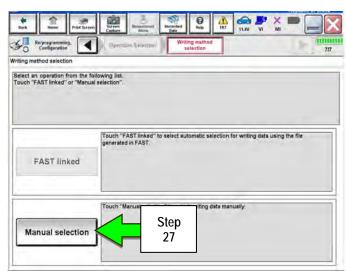


Figure 14

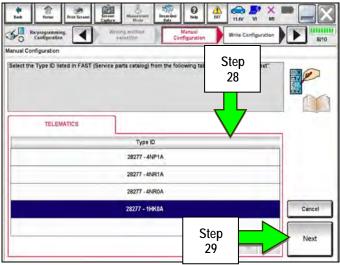


Figure 15

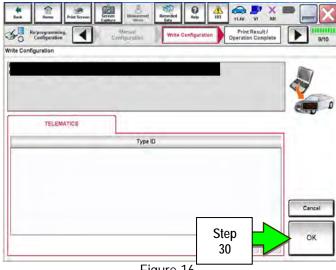


Figure 16

Write New SIM ID Number on the Repair Order

- 31. Write the new SIM ID number on the repair order.
 - a. Navigate C-III plus to the screen shown in Figure 17.Diagnosis (One System) > TELEMATICS > ECU Identification
 - b. Locate the SIM ID number and write it on the repair order as "New SIM ID".

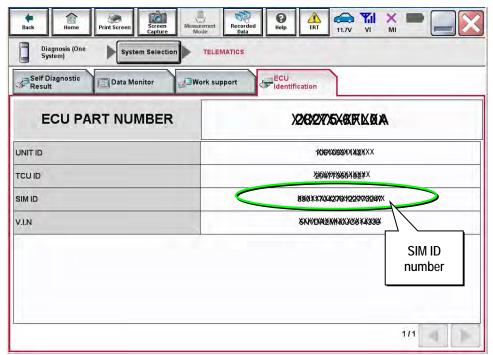


Figure 17

Intelligent Key Registration (some vehicles)

- 32. If needed, perform Intelligent Key registration for <u>all</u> customer keys.
 - The vehicles listed in this table <u>require</u> Intelligent Key registration.

| 2016-2019 Q50 | 2017-2020 QX60 |
|----------------------|-----------------------|
| 2016-2018 Q50 Hybrid | 2017-2018 QX60 Hybrid |
| 2017-2019 Q60 | 2018-2019 QX80 |
| 2019 QX50 | |

- Refer to the C-III plus operations manual for key registration instructions.
- If the vehicle you are working on is not listed in the above table, key registration is not needed.

NOTE: The Remote Engine Start and Stolen Vehicle Locator features (if so equipped) will not function if Intelligent Key registration is not completed, and DTC B130C will be stored.

Turn ON TCU

33. Make sure the vehicle is **not** in shipping mode (shipping mode = extended storage switch pulled OUT).

If needed, use the following steps to confirm the vehicle is **not** in shipping mode:

- a. Make sure the ignition is OFF.
- b. Open the driver's door and leave it open.
- c. Locate the interior fuse panel and remove the cover.
- d. Push the white extended storage switch IN.
- e. Turn the ignition ON.
- f. Turn the ignition OFF.
- g. Wait at least 2 seconds, and then turn the ignition ON.
- h. Make sure the extended storage warning message is not displayed in the combination meter/display.
- 34. Connect the C-III plus VI to the vehicle.
- 35. Set the parking brake and confirm the ignition is ON.
- 36. Launch C-III plus on the CONSULT PC.
- 37. Select Diagnosis (One System).

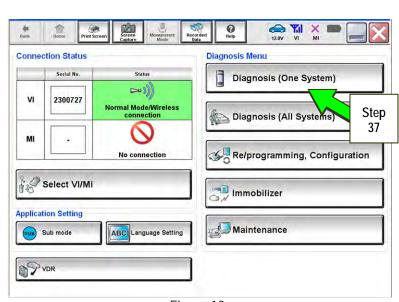


Figure 18

38. Select Telematics.

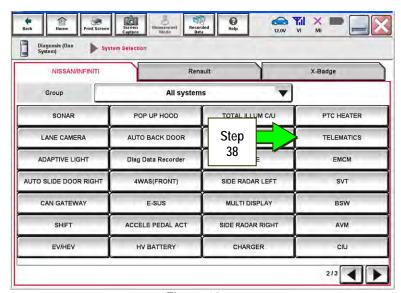


Figure 19

39. Select Work Support.

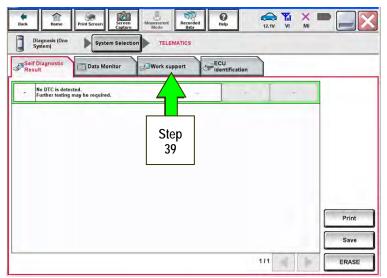


Figure 20

- 40. Select TCU ACTIVATE SETTING.
- 41. Select Start.

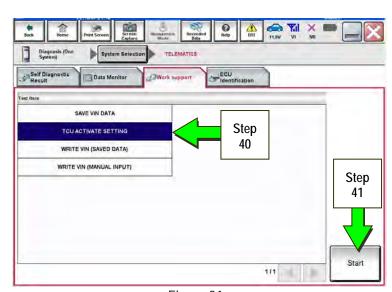


Figure 21

42. Select Start.

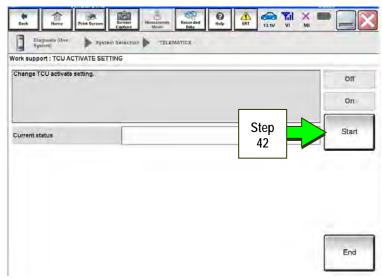


Figure 22

- 43. Select **On** to turn ON the TCU.
- 44. Make sure Current status is On.
- 45. Select END.

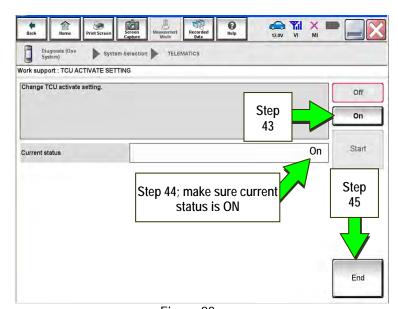


Figure 23

TCU Registration

The following items must first be completed before calling Infiniti Customer Care (SXM), or services may not function properly:

- New / replacement TCU is installed in the vehicle.
- WRITE VIN (SAVED DATA) has been completed.
- If needed, Manual TCU Configuration has been performed.
- If needed, all customer Intelligent Keys have been registered.
- The TCU is turned ON.
- IMEI number for original and replacement TCU is written on the repair order.
- SIM ID number for the replacement TCU is written on the repair order.
- 46. Call Infiniti Customer Care at **1-800-334-7858**. Listen for additional applicable prompts. Hours of operation are listed below.

During this call:

- You will be asked for your name, dealership name, and all of the information collected.
- The agent will unregister the original TCU and register the replacement TCU. If needed, the agent will
 call back to confirm TCU registration has completed.
- The vehicle may need to be moved outside if the cellular connection is not strong enough. See **Check TCU Cellular Reception** on page 18.

NOTE:

- The TCU will not be able to communicate with the Infiniti Data Center if step 46 is not completed.
- After registration, it may take up to 48 hours for services to be functional.
- TCU registration does not enroll the customer in Infiniti Connection® or Infiniti InTouch Services™.

Infiniti Customer Care (1-800-334-7858) – Hours of Operation (Central Time Zone)

Monday – Friday: 7AM – 10PM

Saturday: 8AM – 5PM

Special Holiday Hours:

Closed Thanksgiving, Christmas, and New Year's Day

Christmas Eve: 7AM – 7PM New Year's Eve: 7AM – 7PM

Check TCU Cellular Reception

- 47. Select Diagnosis (One System) and then TELEMATICS.
- 48. Select **Data Monitor** and then **Cellular level**.
- 49. Select START.

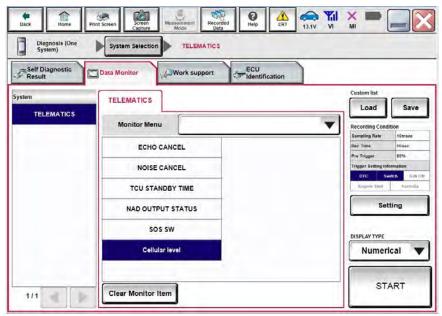


Figure 24

- 50. Check the **Cellular level** and confirm that it is "GOOD".
- 51. If the Cellular level is MARGINAL or LOW, move the vehicle to an area with a good signal.

NOTE: The **Cellular level** constantly updates. Safely relocate the vehicle until a "GOOD" **Cellular level** is received.

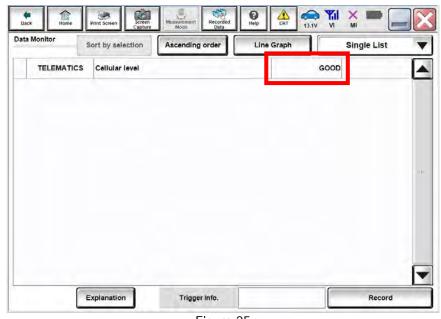


Figure 25

52. Press the **NAVI** or **DEST** button.



Figure 26



Figure 27

53. Select Infiniti Connection, Infiniti InTouch Services, or Destination Menu.

NOTE: If none of the above options are displayed, proceed to step 54.



Figure 28

54. Select Connected Search.



Figure 29

55. Enter a POI (Point of Interest) location, and select "OK" or "Search".

Example: "Starbucks"

EXAMPLE



Figure 30

56. Confirm the POI location displays.

EXAMPLE



Figure 31

- 57. If the "Connected Search" does not complete successfully:
 - If TCU registration with SXM has just been performed, please allow up to 48 hours and try again.
 - For an unsold vehicle, call Infiniti Customer Care at 1-800-334-7858.
 - If the vehicle has been sold, the customer will need to be enrolled in Infiniti Connection® or Infiniti InTouch Services™ for the SOS light to be illuminated and for Infiniti Connection® or Infiniti InTouch Services™ to be enabled. Refer to SOS Light Diagnosis Information on page 23.
- 58. Turn the ignition OFF.

CHECK OFF SHEET

IMPORTANT:

- If all of the steps below are not completed, telematics services will not operate properly.
- Follow all of the steps in this bulletin and use the Check OFF Sheet provided below.
- If the TCU is replaced and the steps were not followed, the warranty claim will be charged back to the dealer.
- Please staple the completed Check OFF Sheet to repair order.

Perform the following if TCU the has been replaced:

- Complete the Applied Vehicle-specific Action in the order listed.
- Check OFF the Action as performed.

| | CHECK BOX | APPLIED VEHICLES | ACTION |
|---|--------------|---|---------------------------------|
| 1 | | All Vehicles | Write VIN to TCU (1) |
| 2 | | 2016-2018 Q50 * 2016-2018 Q50 Hybrid * 2018-2019 Q70 2018 Q70 Hybrid 2017-2018 Q60 2017-2019 QX30 2019 QX50 2018-2019 QX80 | Configure TCU (2) |
| 3 | | 2016-2019 Q50 2016-2018 Q50 Hybrid 2017-2019 Q60 2019 QX50 2017-2020 QX60 2017-2018 QX60 Hybrid 2018-2019 QX80 | Register Intelligent Key (3) |
| 4 | | All Vehicles | Turn ON TCU (4) |
| 5 | | All Vehicles Register TCU with SXM (5) | |

- (1) Refer to page 8, step 15, Section Write VIN to TCU
- (2) Refer to page 9, section Configure TCU
- (3) Refer to page 13, step 32, Section Intelligent Key Registration
- (4) Refer to page 14, section Turn ON TCU
- (5) Refer to page 17, section TCU Registration
 - Model year 2018 vehicles with TCU ID that begins with "2047"

Manually Enter VIN Data (if needed)

This is needed <u>ONLY</u> if automatic "SAVE VIN DATA" or "WRITE VIN (SAVED DATA)" did not complete correctly.

- 1. Select WRITE VIN (MANUAL INPUT).
- 2. Select Start.

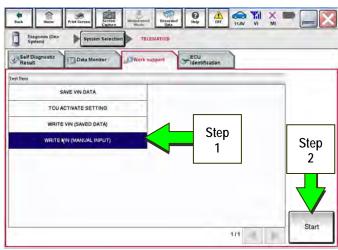


Figure 1a

- 3. Enter the VIN.
 - a) Touch the **VIN (1ST TIME)** input field and type in the VIN.
 - b) Touch the **VIN (2ND TIME)** input field and type in the VIN again.
- 4. Select Start.

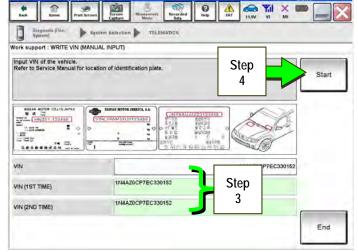


Figure 2a

5. Select End.

Return to step 20 on page 9.

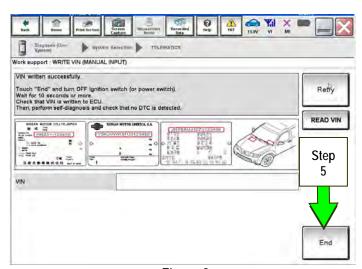


Figure 3a

SOS Light Diagnosis Information (if needed)

NOTE: Dealer Demo Mode will expire after 2 months from the vehicle build date. All services will be disabled, including the SOS light. Do NOT replace the TCU.

Perform the steps below if the SOS light <u>is not</u> illuminated.

- 1. With the vehicle in an area of known good cellular reception, use C-III plus to confirm the TCU is turned ON.
- Light not illuminated

Figure 4a

- 2. Go to https://owners.infinitinusa.com/iowners/vinlookup/dealervinlookup.
- 3. Enter the VIN.

Vehicle is shown as not enrolled:

• The customer is not enrolled in Infiniti Connection® or Infiniti InTouch Services™. Have the customer enroll and then confirm the SOS light illuminates.

NOTE: It may take up to 48 hours for the services to be activated and the SOS light to illuminate after enrollment is completed.

"VIN not found" displays:

The vehicle needs to be registered in the Infiniti Owner Portal and enrolled in Infiniti Connection®
or Infiniti InTouch Services™. Have the customer register and enroll; and then confirm the SOS
light illuminates.

NOTE: It may take up to 48 hours for the services to be activated and the SOS light to illuminate after enrollment is completed.

Vehicle is shown as enrolled:

Confirm the customer's Infiniti Connection® or Infiniti InTouch Services™ subscription.

The customer can find this information three ways:

- Log into to the Infiniti InTouch Services[™] portal and locate "Manage Subscription" on the first page.
- Log into the Infiniti InTouch Services[™] mobile app and go to "Vehicle Information" > "Package Info".
- ➤ Call Infiniti Customer Care at 1-800-334-7858.

<u>If the customer is enrolled in the Premium or Premium Plus Package</u>, call TECH LINE for diagnosis.

<u>If the customer is enrolled in the Select Package</u>, the SOS light **is not intended to illuminate**. No further action is needed.

Turning ON the TCU During PDI

NOTE:

- This procedure is for 2013-2017 Applied Vehicles ONLY.
- In most instances, the TCU is ON when delivered to the dealership. See the steps below to determine if the TCU is ON or OFF.
- 1. With the vehicle in an area of known good reception, turn the ignition ON and check whether or not the green light on the SOS button is illuminated (see Figure 5a).

NOTE: It may be difficult to tell if the green light is illuminated if the vehicle is outside in bright sunlight.

- If the green light <u>is</u> illuminated, the process to turn ON the TCU is complete and no further action is needed.
- If the green light <u>is not illuminated</u>, go to Turn ON TCU on page 14.

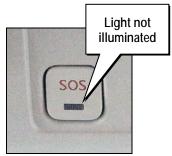


Figure 5a

- 2. After the TCU is turned ON, check whether or not the green light on the SOS button is illuminated.
 - If the green light is still not illuminated, verify the vehicle is unsold.
 - If the vehicle has been sold, the customer will need to be enrolled in Infiniti Connection® or Infiniti InTouch Services™ for the SOS light to be illuminated and for Infiniti Connection® or Infiniti InTouch Services™ to be enabled.
 - Refer to SOS Light Diagnosis Information on page 23.
- 3. Perform steps to Check TCU Cellular Reception see page 18.
- 4 Turn the ignition OFF.
- 5. Pull OUT the extended storage switch to return the vehicle to shipping mode.

NOTE: If the "Turning ON the TCU During PDI" procedure is not followed correctly, the vehicle cannot be used in Dealer Demo mode or enrolled in Infiniti Connection® or Infiniti InTouch Services™. Should this occur, the "Turning ON the TCU During PDI" procedure will need to be performed again.

AMENDMENT HISTORY

| PUBLISHED DATE | REFERENCE | DESCRIPTION |
|--------------------|------------|---|
| March 12, 2012 | ITB12-011 | Original bulletin published. |
| May 30, 2012 | ITB12-011a | Steps 7 and 8 revised. |
| September 4, 2012 | ITB12-011b | APPLIED VEHICLES section revised. |
| September 23, 2013 | ITB12-011c | APPLIED VEHICLES section revised. |
| January 5, 2015 | ITB12-011d | APPLIED VEHICLES section revised, and a statement added to page 1. |
| May 11, 2016 | ITB12-011e | Changes made throughout. |
| August 19, 2016 | ITB12-011f | Information for 2017 QX30 vehicles added. |
| October 20, 2016 | ITB12-011g | Information for 2017 Q50, Q60, Q70, QX60, and QX80 vehicles added. |
| September 28, 2017 | ITB12-011h | Information for several 2018 vehicles added. |
| November 14, 2017 | ITB12-011i | Changes made throughout. |
| January 4, 2018 | ITB12-011j | Changes made to page 15. |
| March 7, 2018 | ITB12-011k | Changes made throughout. |
| September 11, 2018 | ITB12-011I | Required Actions by Model and Year table added to page 2, Check OFF Sheet added to page 21, and information reorganized throughout. |
| January 24, 2019 | ITB12-011m | Information for several 2019 vehicles added. |
| June 24, 2019 | ITB12-011n | Added information to pages 2, 9, 11 and 21 for 2017-2018 Q60 TCU configuration. |
| October 8, 2019 | ITB12-0110 | 2020 QX60 added. |