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SERVICE BULLETIN

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March 7, 2018

# **TELEMATICS SERVICE INFORMATION**

This bulletin has been amended. Changes have been made throughout. It is necessary to read the revised procedure(s) in entirety to properly perform the action(s). Please discard previous versions of this bulletin.

APPLIED VEHICLES: 2013 JX35 (L50) 2013 M37/M56 and M35 Hybrid (Y51) 2013 QX56 (Z62) 2014-2018 Q50 and Q50 Hybrid (V37) 2017-2018 Q60 (V37) 2014-2018 Q70 and Q70 Hybrid (Y51) 2017-2018 QX30 (H15) 2019 QX50 (J55) 2014-2017 QX60 and QX60 Hybrid (L50) 2018 QX60 (L50) 2014-2018 QX80 (Z62)

Vehicles equipped with factory Navigation system

# SERVICE INFORMATION

The Applied Vehicles are equipped with a wireless communication device called a Telematics Communication Unit (TCU). With an active Infiniti Connection<sup>®</sup> or Infiniti InTouch Services<sup>™</sup> subscription, 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.

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.

#### Sections in this bulletin:

• Turning ON the TCU During PDI (2013-2017 Applied Vehicles ONLY) – Page 3

**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<sup>®</sup> or Infiniti InTouch Services<sup>™</sup>. Should this occur, the "Turning ON the TCU During PDI" process will need to be performed again.

- Turn ON TCU Page 4
- TCU Replacement Page 10
- SOS Light Diagnosis Information Page 23

# Overview of required steps for TCU replacement:

- 1. Save the VIN DATA using CONSULT-III Plus (C-III plus).
- 2. Write down the SIM ID number from the original TCU.
- 3. Remove the original TCU from the vehicle.
- 4. Write down the IMEI from the original TCU and replacement TCU.
- 5. Install the replacement TCU in the vehicle.
- 6. Write the VIN DATA using C-III plus.
- 7. Some models: perform Manual TCU Configuration.
- 8. Write down the SIM ID number from the new TCU.
- 9. Some models: register the Intelligent Keys.
- 10. Turn ON the TCU
- 11. Deactivate (unregister) the original TCU, and activate (register) the replacement TCU by calling 1-800-334-7858.
- 12. Check TCU cellular reception.

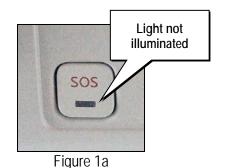
# TURNING ON THE TCU DURING PDI

#### 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 1a).

**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 the next page.
- 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<sup>®</sup> or Infiniti InTouch Services<sup>™</sup> for the SOS light to be illuminated and for Infiniti Connection<sup>®</sup> or Infiniti InTouch Services<sup>™</sup> to be enabled.
    - > Refer to SOS Light Diagnosis Information on page 23.
- 3. Perform steps to Check TCU Cellular Reception see page 7.
- 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<sup>®</sup> or Infiniti InTouch Services<sup>™</sup>. Should this occur, the "Turning ON the TCU During PDI" process will need to be performed again.

## TURN ON TCU

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

- 5. Select Diagnosis (One System).
- CONSULT-III plus Ver.15.11.00 VIN: Vehicle Country : U.S.A Print Scree Screen 12.0V VI MI () Help Recorded du Back Home **Connection Status** Diagnosis Menu Serial No. Status Diagnosis (One System) **∞**))) VI 2300727 Normal Mode/Wireless connection Step Diagnosis (All Systems) 5  $\bigcirc$ MI -92 Re/programming, Configuration No connection Select VI/MI Immobilizer Application Setting Dintenance Sub mode ABC Language Setting VDR

Figure 1b

ack Rome Print Screen	Screen Capture Mode Record	ded Help	
Diagnosis (One System) System	em Selection		
NISSAN/INFINITI	Rena	ult	X-Badge
Group	All system	s 🔻	
SONAR	POP UP HOOD	IM C/U	PTC HEATER
LANE CAMERA	AUTO BACK DOOR	Step	TELEMATICS
ADAPTIVE LIGHT	Diag Data Recorder		EMCM
AUTO SLIDE DOOR RIGHT	4WAS(FRONT)	SIDE RADAR LEFT	SVT
CAN GATEWAY	E-SUS	MULTI DISPLAY	BSW
SHIFT	ACCELE PEDAL ACT	SIDE RADAR RIGHT	AVM
EV/HEV	HV BATTERY	CHARGER	CIU
			2/3

Figure 2b

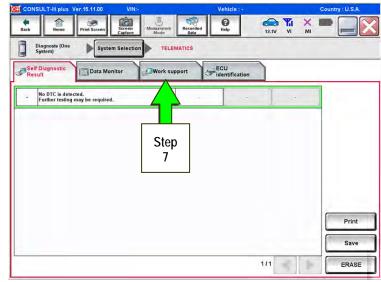


Figure 3b

6. Select Telematics.

7. Select Work Support.

- 8. Select TCU ACTIVATE SETTING.
- 9. Select Start.

10. Select Start.

- 11. Select **ON** to turn ON the TCU.
- 12. Make sure Current status is ON.
- 13. Select END.

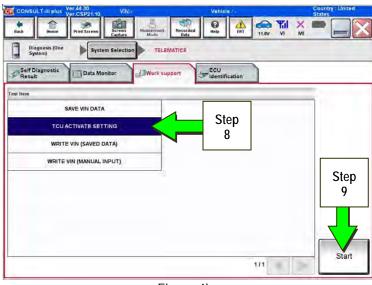


Figure 4b

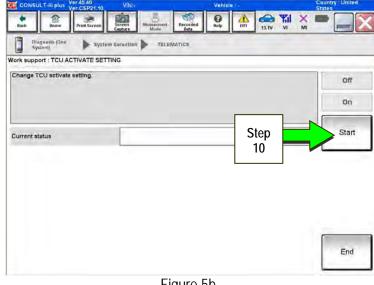


Figure 5b

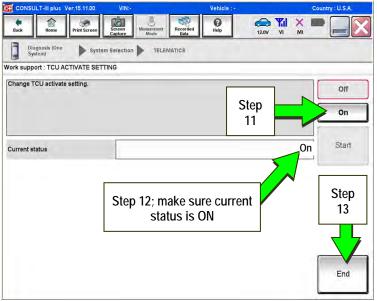
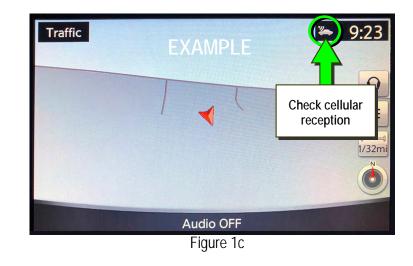


Figure 6b

# Check TCU Cellular Reception

**NOTE:** It may take up to 3 minutes for the vehicle icon to turn white after the ignition is turned ON.

1. Check TCU cellular reception.



## Example of good reception



Figure 2c

## Example of no/poor reception



Figure 3c

2. Press the NAVI or DEST button.





Figure 5c

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

**NOTE:** If none of the above options are displayed, proceed to step 4.

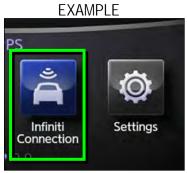


Figure 6c

4. Select Connected Search.



Figure 7c

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



Figure 8c

6. Confirm the POI location displays.



Figure 9c

- 7. If the "Connected Search" does not complete successfully:
  - 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<sup>®</sup> or Infiniti InTouch Services<sup>™</sup> for the SOS light to be illuminated and for Infiniti Connection<sup>®</sup> or Infiniti InTouch Services<sup>™</sup> to be enabled.

# TCU REPLACEMENT

NOTE:

- Each TCU is registered to a specific Vehicle Identification Number (VIN). <u>TCUs cannot be "swapped"</u> <u>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.

2016-2017 Q50/Q50 Hybrid	2019 QX50
2017-2017 Q60	2018 Q50/Q50 Hybrid *
2017-2018 QX60/QX60 Hybrid	2018 Q60 *
2018 QX80 with remote engine start (button on key fob)	

- The new/replacement TCU must come from Nissan North America parts supply.
- Some vehicles require Manual TCU Configuration after replacement. Refer to step 21 on page 16.
- The VIN MUST be written to the replacement TCU after installation.
- \* Intelligent Key Registration is required for certain vehicles ONLY. To determine if your vehicle applies, see step 12 on page 13 and locate the TCU ID number (Figure 7d). If the TCU ID number begins with "2047", all customer keys must be collected for registration.

# 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).

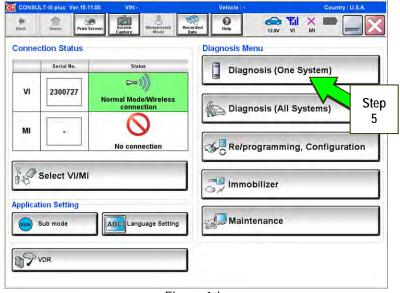


Figure 1d

Diagnosis (One System)	em Selection		
NISSAN/INFINITI	R	lenault	X-Badge
Group	All syste	ems 🔻	
SONAR	POP UP HOOD	TOTAL ILLUM C/U	PTC HEATER
LANE CAMERA	AUTO BACK DOOR		TELEMATICS
ADAPTIVE LIGHT	Diag Data Recorder	Step	ЕМСМ
UTO SLIDE DOOR RIGHT	4WAS(FRONT)		SVT
CAN GATEWAY	E-SUS	MULTI DISPLAY	BSW
SHIFT	ACCELE PEDAL ACT	SIDE RADAR RIGHT	AVM
EV/HEV	HV BATTERY	CHARGER	CIU

Figure 2d

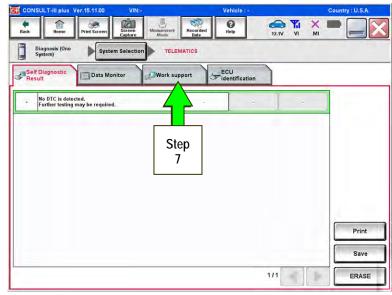


Figure 3d

6. Select Telematics.

7. Select Work Support.

- 8. Select SAVE VIN DATA.
- 9. Select Start.

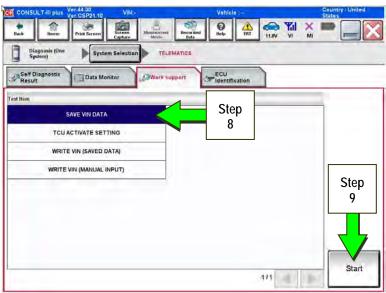


Figure 4d

() Help 12.0V VI MI 10 Diagnosis (One System) System Selection TELEMATICS Work support : SAVE VIN DATA START SAVE VIN DATA Step Start 10 Current status Waiting for your operation. End

Figure 5d

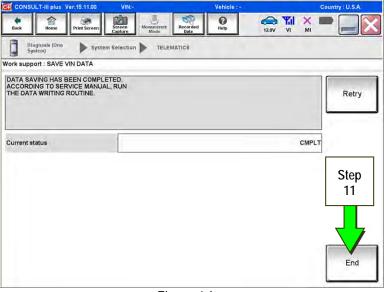


Figure 6d

10. Select Start.

NOTE: If the VIN data cannot be saved, you will have to manually enter the VIN later in this procedure.

11. Select End.

## Write Original SIM ID Number on the Repair Order

- 12. Write the original SIM ID number on the repair order.
  - a. Navigate C-III plus to the screen shown in Figure 7d.

Diagnosis (One System) > TELEMATICS > ECU Identification

b. Locate the SIM ID number and write it on the repair order as "Original SIM ID".

Back Image: Print Screen Image: Screen Image: Print Screen   Diagnosis (One System) System Selection TEL   Self Diagnostic Result Image: Data Monitor Image: Work selection	
ECU PART NUMBER	2827545 FL XXX
UNIT ID	¥884833841421
TCUID	204XX260X927
SIMID	3660N17642X8122XX3247
V.I.N	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
	SIM ID number
	1/1

Figure 7d

#### Remove the Original TCU

- 13. Remove the TCU from the vehicle. Refer to the Electronic Service Manual (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 14 must be performed <u>AFTER</u> the original TCU is removed from the vehicle and <u>BEFORE</u> the replacement TCU is installed.

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



#### Install the New TCU

15. 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 Data

- 16. Connect C-III plus and navigate to Telematics Work support.
  - Refer to steps 1-7 on pages 10-11.

17. Select WRITE VIN (SAVED DATA).

NOTE: If VIN DATA could not be saved in step 10, proceed to Manually Enter VIN Data on page 19.

18. Select Start.

19. Select Start.

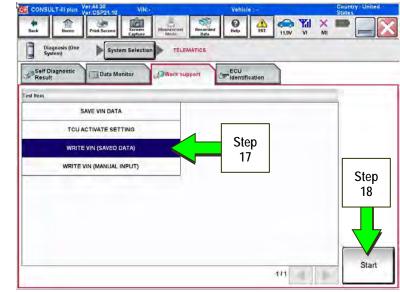


Figure 9d

ULT-III plus Records O 合 1 Yil Ten A ENT × 1 Dinunasis (One System) 🕨 System Belection 🕨 TELEMATICS Work support : WRITE VIN (SAVED DATA) VIN will be written according to saved VIN. Touch Start Saved VIN will pop up. If VIN is not recorded, then boxes will be displayed in the VIN column. Step Start 19 Current status Waiting for your operation. VIN End

Figure 10d

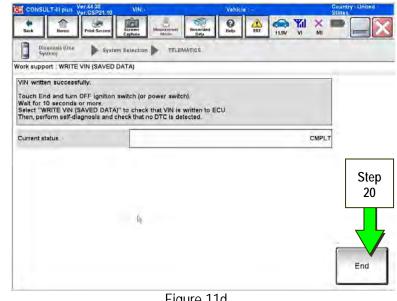


Figure 11d

20. Select End.

#### Manual TCU Configuration (some vehicles)

- 21. If needed, perform Manual TCU Configuration.
  - The vehicles listed in this table require Manual TCU Configuration.
  - This process MUST be performed <u>before</u> TCU registration/activation.

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

\* For these vehicles, Manual TCU Configuration is needed only if the TCU ID number (see Figure 12d) begins with "2047".

- If the vehicle you are working on <u>is listed</u> in the above table, go to page 20 and perform Manual TCU Configuration. Then return to step 22, below.
- If the vehicle you are working on <u>is not listed</u> in the above table, go to step 22, below.

#### Write New SIM ID Number on the Repair Order

- 22. Write the new SIM ID number on the repair order.
  - a. Navigate C-III plus to the screen shown in Figure 12d.

Diagnosis (One System) > TELEMATICS > ECU Identification

 Locate the SIM ID number and write it on the repair order as "<u>New</u> SIM ID".

ECU PART NUMBER	XXXXXXXXXXXX
UNIT ID	100KX02N000KXX
TCUID	2007#38029029
SIMID	C DECKYXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
V.I.N	HANNOX2M NGX XXXXH

Figure 12d

#### Intelligent Key Registration (some vehicles)

23. If needed, perform Intelligent Key registration for <u>all</u> customer keys.

• The vehicles listed in this table <u>require</u> Intelligent Key registration.

2016-2017 Q50/Q50 Hybrid	2019 QX50
2017-2017 Q60	2018 Q50/Q50 Hybrid *
2017-2018 QX60/QX60 Hybrid	2018 Q60 *
2018 QX80 with remote engine start (button on key fob)	

- 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 if Intelligent Key registration is not completed.

\* Intelligent Key Registration is needed only if the TCU ID number (see Figure 12d) begins with "2047".

#### Turn On the TCU

24. Turn ON the TCU.

• Refer to TURN ON TCU on page 4.

#### Before performing step 25 on the next page, make sure:

- New / replacement TCU is installed in the vehicle.
- WRITE SAVE DATA has been completed.
- If needed, Manual TCU Configuration has been performed. This must occur before proceeding.
- 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 original and replacement TCU is written on the repair order.

#### TCU Registration / Activation

25. 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 7.

#### NOTE:

- The TCU will not be able to communicate with the Infiniti Data Center if step 25 is not completed.
- 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

- 26. Perform steps to Check TCU Cellular Reception see page 7.
- 27. Turn the ignition OFF.

# Manually Enter VIN Data

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.

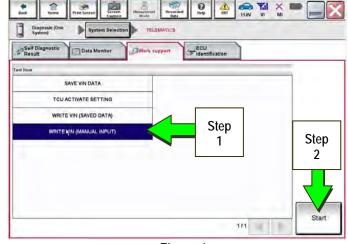


Figure 1e

- 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.

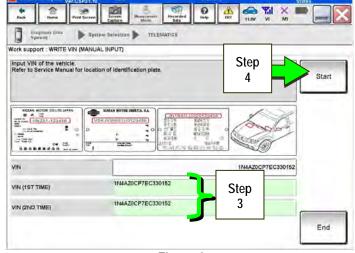


Figure 2e

0 1 a Systim) D System Selection D TELEMATICE Work support : WRITE VIN (MANUAL INPUT) VIN written successfully. "End" and turn OFF ignition switch (or po r 10 seconds or more. Retty at VIN is written to ECU. form self-diagnosis and o ck that no DTC is d READ VIN -123456 ----100 -.... 14 Step 5 VIN End

Figure 3e

- 5. Select End.
- 6. Return to step 21 on page 16.

#### Manual TCU Configuration (Some Vehicles)

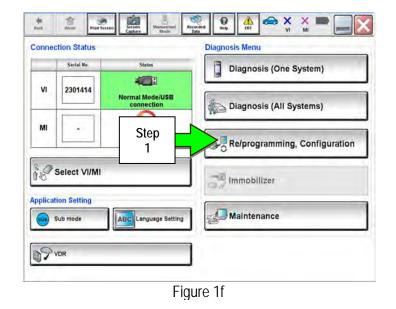
NOTE: This process MUST be performed <u>before</u> TCU registration/activation.

• The vehicles listed in this table require Manual TCU Configuration.

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

\* For these vehicles, Manual TCU Configuration is needed only if the TCU ID number (see Figure 12d) begins with "2047".

1. Select Re/programming, Configuration.



NOTE: C-III plus screens for steps 2-4 are not shown.

- 2. Read the precautions on C-III plus screen and then select Next.
- 3. Select model and model year.
- 4. Select Select, and then Confirm.

## 5. Select TELEMATICS.

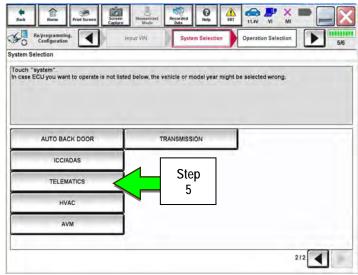


Figure 2f

6. Select After ECU Replacement.

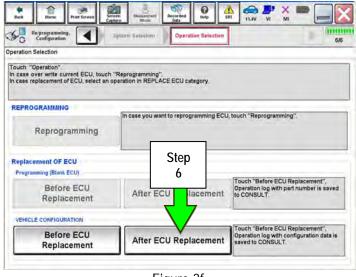


Figure 3f

- 7. Select Manual selection.
- 8. Select the applicable Type ID:

For 2016-2017 Q50 and Q50 Hybrid: 28277-1HK0A

For 2017-2018 Q60:

28277-5CA2A

For 2018 Q70 and Q70 Hybrid: 28277-5UV0A

For 2017-2018 QX30:

28277-5DA2A

For 2019 QX50:

28277-6FL1B

For 2018 QX80:

28277-6FL1C

**NOTE:** If C-III plus automatically selects the Type ID, there will be no options shown under Type ID and Figure 5f will not display. Skip to step 10.

- 9. Select Next.
- 10. Select OK.
- 11. Return to step 22 on page 16.

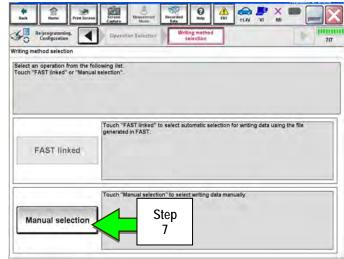


Figure 4f

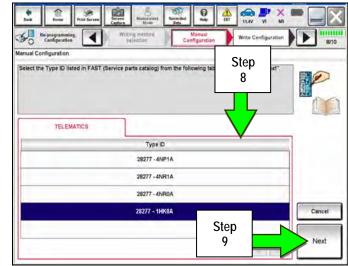


Figure 5f

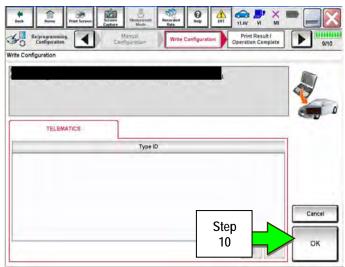


Figure 6f

## SOS LIGHT DIAGNOSIS INFORMATION

Perform the steps below if the SOS light is not illuminated.

- 1. With the vehicle in an area of known good cellular reception, use C-III plus to confirm the TCU is turned ON.
- 2. Go to https://owners.infinitiusa.com/iowners/vinlookup/dealervinlookup.
- 3. Enter the VIN.

## Vehicle is shown as <u>not</u> enrolled:

• The customer is not enrolled in an Infiniti Connection<sup>®</sup> or Infiniti InTouch Services<sup>™</sup> subscription. Have the customer enroll and confirm the SOS light illuminates.

**NOTE:** It may take up to 24 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<sup>®</sup> or Infiniti InTouch Services<sup>™</sup>. Have the customer register and enroll and confirm the SOS light illuminates.

**NOTE:** It may take up to 24 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<sup>®</sup> or Infiniti InTouch Services<sup>™</sup> subscription.

The customer can find this information three ways:

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

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

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

