

# TECHNICAL SERVICE BULLETIN

Classification: Reference: Date: AN19-045D ITB19-029D November 1, 2022

# TELEMATICS (IVC) SERVICE INFORMATION

This bulletin has been amended. See AMENDMENT HISTORY on the last page. Discard all previous versions of this bulletin.

**APPLIED VEHICLES:** 2020-2023 Q50 (V37)

> 2020-2022 Q60 (CV37) 2020-2023 QX50 (J55) 2022-2023 QX55 (FJ55) 2022-2023 QX60 (L51)

2020-2023 QX80 (Z62)

APPLIED SYSTEMS: Vehicles equipped with factory telematics system

#### HINT:

- If the client experiences Wi-Fi hotspot related concerns only, DO NOT replace the TCU. Have the client contact the AT&T Support line at 1 (888) 719-7242.
- See ITB12-011 for models built before those listed above.

#### SERVICE INFORMATION

The APPLIED VEHICLES are equipped with a wireless communication device called a Telematics Communication Unit (TCU). The TCU communicates with the Infiniti Data Center to provide various security and convenience services.

This bulletin contains important service procedures that must be performed properly in order to set-up and maintain the telematics system for the APPLIED VEHICLES.

- An **Order of Completion** table has been provided on the next page that lists the steps required to successfully configure a TCU after it has been replaced.
- A CHECK-OFF SHEET has been provided on page 16. Print and check off steps as they are completed. 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.

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# **REQUIRED ACTIONS**

**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 steps in this bulletin and use the CHECK-OFF SHEET provided at the end of this bulletin (page 16).
- If the TCU is replaced and the steps were not followed, the warranty claim will be denied.

	1st	2nd	3rd
	Configure TCU	Write VIN	Register Intelligent Keys
ORDER OF COMPLETION	✓	✓	✓

#### TCU REPLACEMENT

**HINT:** Each TCU is registered to a specific Vehicle Identification Number (VIN). TCUs cannot be "swapped" between vehicles. Once a TCU is registered to a vehicle, the TCU cannot be used in another vehicle.

#### **IMPORTANT:**

- During this procedure, Intelligent Key Registration must be performed. You <u>MUST</u> have ALL client keys collected.
- The new/replacement TCU must come from Nissan North America parts supply.
- TCU configuration is required after replacement. Refer to step 15 on page 6.

#### NOTICE

Configuration must be completed prior to performing the **Write the VIN to the TCU** procedure. If performed prior to configuration, the TCU may not function properly and might need replacement. The warranty claim will be denied if this is not followed correctly.

• The Write the VIN to the TCU procedure must be performed after the new/replacement TCU is installed in the vehicle.

### NOTICE

Perform the following before saving the VIN data and configuration to prevent damage to the TCU.

- Connect the AC Adapter to the CONSULT PC.
- Connect the CONSULT PC to the Internet via Wi-Fi or a network cable.
- Ensure ASIST on the CONSULT PC has been synchronized (updated) to the current date and all C-III plus software updates (if any) have been installed.
- Turn OFF all external Bluetooth® devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI. If Bluetooth® signal waves are within range of the CONSULT PC or VI during reprogramming, the reprogramming may be interrupted.
- Turn OFF all vehicle electrical loads.
- Turn ON the hazard warning lights.
- Connect a battery maintainer or smart charger, set to reflash mode or a similar setting, to ensure the battery voltage stays between 12.0 V and 15.5 V.

# Save VIN Data from Original TCU

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

5. Select **Diagnosis** (One System).

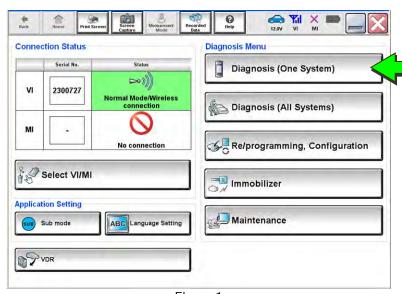


Figure 1

6. Select IVC.

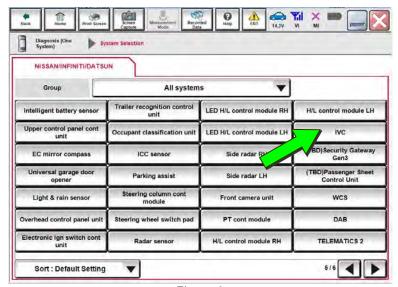


Figure 2

7. Select **Work Support**.

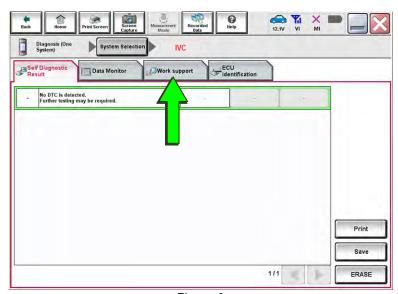


Figure 3

8. Select **SAVE VIN DATA**.

9. Select Start.



HINT: If the VIN data cannot be saved, skip to step 12 on page 6. (You will be instructed to manually enter the VIN at step 26.)

11. Select End.

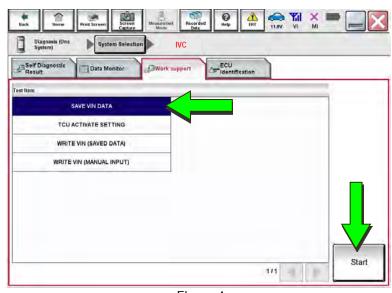


Figure 4

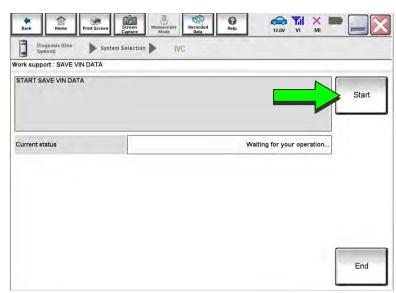


Figure 5

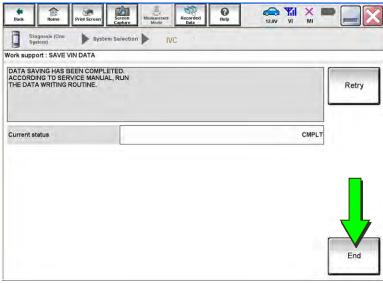


Figure 6

# Remove the Original TCU

- 12. Remove the TCU from the vehicle.
  - Refer to the ESM: DRIVER INFORMATION & MULTIMEDIA > AUDIO VISUAL & NAVIGATION SYSTEM > REMOVAL AND INSTALLATION > TCU

# Install the New TCU

- 13. Write down the part number listed on the new/replacement TCU (Figure 7).
  - The TCU part number will be needed later in this bulletin.
- 14. Install the new/replacement TCU into the vehicle.
  - Refer to the ESM: DRIVER
    INFORMATION & MULTIMEDIA > AUDIO
    VISUAL & NAVIGATION SYSTEM >
    REMOVAL AND INSTALLATION > TCU

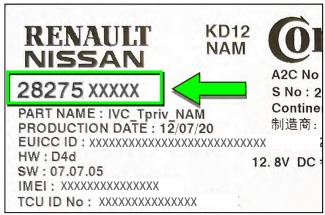


Figure 7

# Configure the TCU

15. Select Re/programming, Configuration.

**HINT:** C-III plus screens for steps 16-18 are not shown.

- 16. Read the precautions on C-III plus screen, and then select **Next**.
- 17. Select the model and model year.
- 18. Select **Select**, and then select **Confirm**.

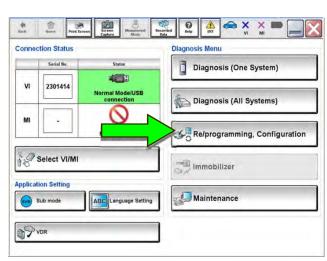


Figure 8

19. Select IVC.

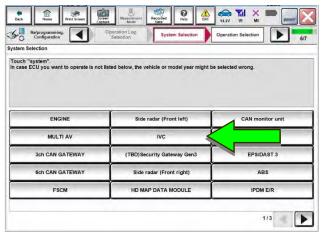


Figure 9

20. Select After ECU Replacement under VEHICLE CONFIGURATION.

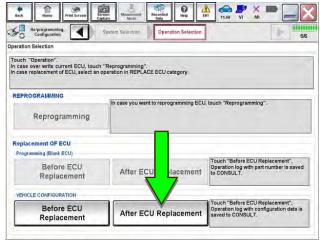


Figure 10

21. Select Manual selection.

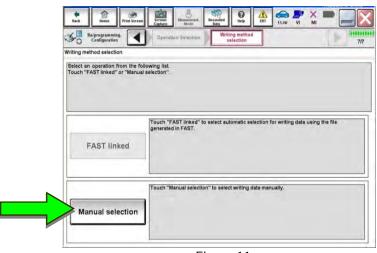


Figure 11

# 22. Use the chart below to select the applicable **Type ID**.

VEHICLE	SYSTEM	TYPE ID
2020-2021 Q50	All	28277-6HM1B
2022-2023 Q50	All	28277-6HN0B
2020-2021 Q60	All	28277-5DV2C
2022 Q60	All	28277-5DV1C
2020-2021 QX50	All	28277-5NY0A
2022-2023 QX50	With Remote Engine Start	28277-9CM0A
2022-2023 QA30	Without Remote Engine Start	28277-9CM0E
2022-2023 OX55	With Remote Engine Start	28277-5VG0A
2022-2023 QA33	Without Remote Engine Start	28277-5VG4A
2022-2023 QX60	All	282A2-6SA1A
2020-2021 QX80	All	28277-6JR1A
2022-2023 QX80	All 28277-6JS0A	

**HINT:** If C-III plus automatically selects the Type ID, there will be no options shown under **Type ID** (see Figure 12). Skip to step 24.

- 23. Select **Next** (not shown).
- 24. Select **OK**.

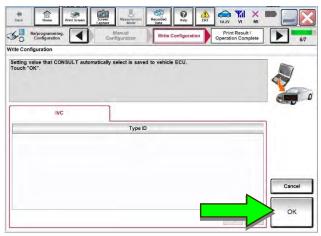


Figure 12

# Write the VIN to the TCU

- 25. Navigate to IVC Work support.
  - Refer to steps 1-7 on pages 3-4.
- 26. Select WRITE VIN (SAVED DATA).

HINT: If VIN DATA could not be saved in step 10, skip to Manually Enter VIN Data (if needed) on page 17.

- 27. Select Start.
- 28. Select Start.



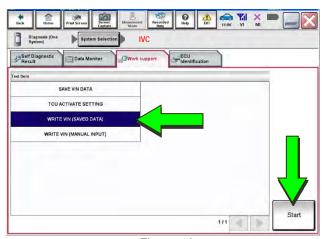


Figure 13

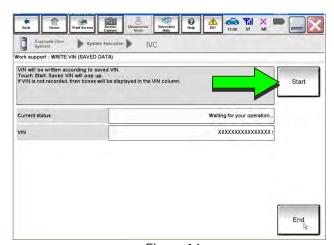


Figure 14

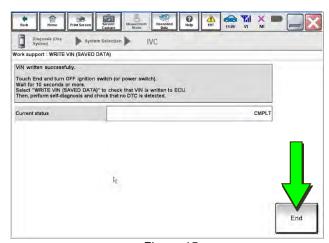


Figure 15

- 30. Review the TCU part number written down in step 13.
  - If the part number <u>is</u> 28275-5SN0B, 28275-5SN0F, or 28275-5SN4B:
    - Skip to Verify Telematics Function (if needed), beginning on page 13.
  - If the part number is not 28275-5SN0B, 28275-5SN0F, or 28275-5SN4B:
    - Perform Confirm Network Initial Settings (if needed), below.

# **Confirm Network Initial Settings (if needed)**

31. Select Diagnosis (One System).

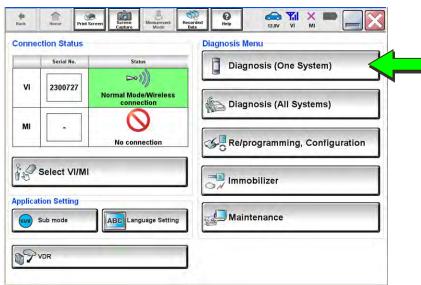


Figure 16

32. Select IVC.

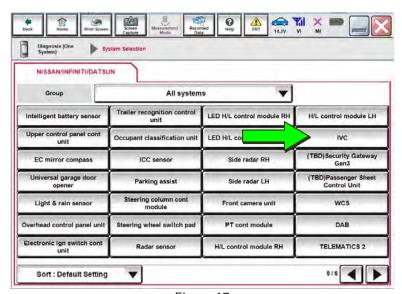


Figure 17

33. Select Work Support.

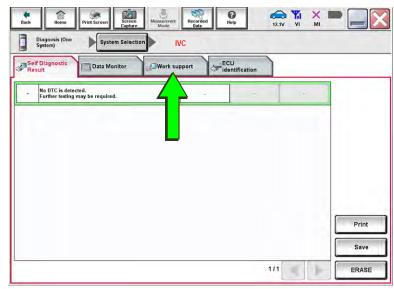


Figure 18

34. Select **Network initial settings**.

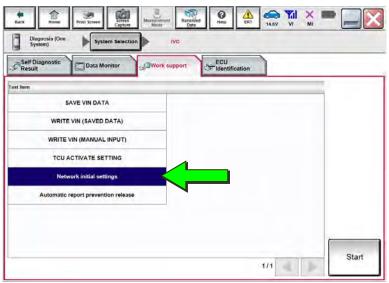


Figure 19

35. Select **Start**.

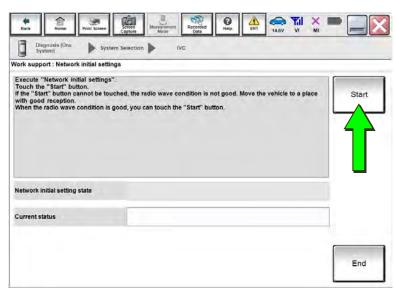


Figure 20

36. Check the **Network initial setting state** field (Figure 21).

HINT: It may take up to 15 minutes for the result described below to display.

- If the result is "100%":
  - a. Confirm "Completed" displays in the Current status field.
  - b. Select End.
  - c. Skip to Intelligent Key Registration on page 15.

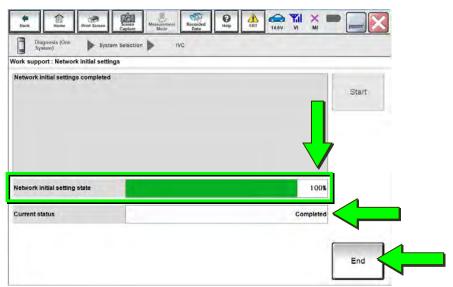


Figure 21

- If the result is "0":
  - a. Confirm the VIN is written correctly.
  - b. Skip to Verify Telematics Function (if needed), beginning on page 13.

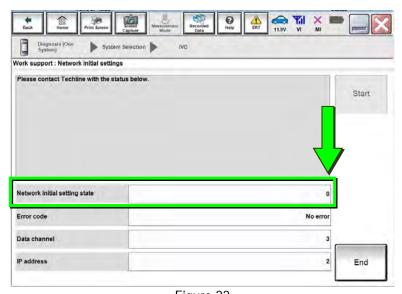


Figure 22

- If the result is a number between 1 and 5:
  - a. Wait 24 hours and then perform steps 31-36 again.
    - o If a number between 1 and 5 displays again, contact the Infiniti Owner Services call center at (855) 444-7244, between the hours of 8am and 7pm Central Standard Time (CST), Monday through Friday.

During the call, the agent will request the following:

 Owner name, retailer name, retailer code, and retailer employee name and contact information.

# **Verify Telematics Function (if needed)**

- 37. Turn the vehicle OFF and wait for 10 minutes.
- 38. Connect a battery maintainer or smart charger, set to reflash mode or a similar setting.
- 39. Turn the ignition ON with the engine OFF.
- 40. Turn the hazard warning lights ON and wait for 15 minutes.
- 41. Turn the vehicle OFF and wait for 10 minutes.
- 42. Turn the ignition ON with the engine OFF and wait for 15 minutes.
- 43. Press the **Destination** button.



Figure 23

44. Select **Destinations by Google**.

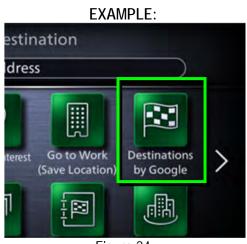


Figure 24

45. Enter a POI (Point of Interest) location, and select **List**.

Example: "Starbucks"

# **EXAMPLE**:

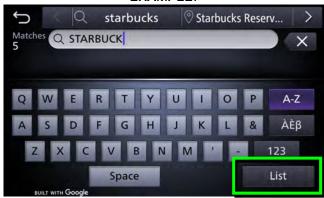


Figure 25

## **EXAMPLE**:

- 46. Confirm the POI location displays (Figure 26).
  - If the POI location does not display, perform steps 37-46 again.
    - o If the POI location does not display after performing steps 37-46



Figure 26

two times, wait 24 hours and then perform steps 37-46 a third time.

 If the POI location does not display after the third attempt, contact the Infiniti Owner Services call center at (855) 444-7244, between the hours of 8am and 7pm Central Standard Time (CST), Monday through Friday.

During the call, the agent will request the following:

➤ Owner name, retailer name, retailer code, and retailer employee name and contact information.

# **Intelligent Key Registration**

47. Perform Intelligent Key registration for  $\underline{all}$  client keys.

• Refer to the C-III plus operations manual for key registration instructions.

### **CHECK-OFF SHEET**

# NOTICE

- If all of the steps below are not completed, telematics services will not operate properly.
- If the TCU is replaced and the steps were not followed, the warranty claim will be charged back to the retailer.

### **IMPORTANT:**

- Follow all of the steps in this bulletin and use the CHECK-OFF SHEET provided below.
- Staple the completed CHECK-OFF SHEET to repair order.

# Perform the following if the TCU has been replaced:

- Complete the actions below in the order listed.
- Check off each action when it is completed.

	CHECK BOX	ACTION
1		Configure TCU (1)
2		Write VIN to TCU (2)
3		Register Intelligent Key (3)

- (1) Refer to page 6, step 15, section Configure the TCU
- (2) Refer to page 9, step 25, section Write the VIN to the TCU
- (3) Refer to page 15, step 47, section Intelligent Key Registration

# Manually Enter VIN Data (if needed)

### NOTICE

If manually entering the VIN, double check that the VIN is correct before saving. Saving the incorrect VIN to the TCU can result in services not working and the TCU may need to be replaced, even after correcting the wrong VIN. The warranty claim will not be paid if this step is not followed.

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

- 48. Select WRITE VIN (MANUAL INPUT).
- 49. Select Start.



- Touch the VIN (1ST TIME) input field and type in the VIN.
- Touch the VIN (2ND TIME) input field and type in the VIN again.
- 51. Select **Start**.



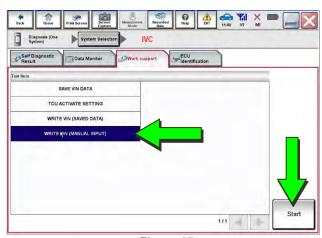


Figure 27

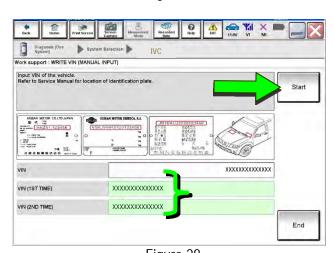


Figure 28

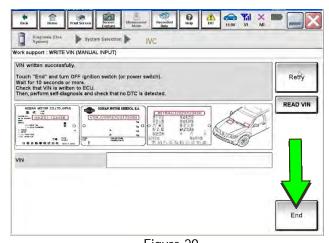


Figure 29

# **AMENDMENT HISTORY**

PUBLISHED DATE	REFERENCE	DESCRIPTION
October 8, 2019	ITB19-029	Original bulletin published
January 27, 2021	ITB19-029A	Added 2021 models to APPLIED VEHICLES and throughout the bulletin
April 21, 2021	ITB19-029B	Changes made throughout
March 3, 2022	ITB19-029C	APPLIED VEHICLES revised, changes made on page 8, and QX55 Vehicles - Verify Infiniti InTouch™ Services Enrollment and Subscriptions (if needed) section removed
November 1, 2022	ITB19-029D	APPLIED VEHICLES and pages 3 and 8 revised