TECHNICAL SERVICE BULLETIN

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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: 2023 Altima (L34) 2021-2022 Armada (Y62) 2022-2023 Frontier (D41) 2021-2023 Kicks (P15) 2021-2023 Maxima (A36) 2022-2023 Pathfinder (R53) 2021-2023 Rogue (T33) 2021-2022 Sentra (B18) 2020-2023 Titan/Titan XD (A61) 2023 Z (Z34)

HINT: If the customer experiences Wi-Fi hotspot related concerns only, <u>DO NOT</u> replace the TCU. Have the customer contact the AT&T Support line at 1 (888) 719-7242.

SERVICE INFORMATION

The **APPLIED VEHICLES** that come equipped with a factory installed SOS switch, located near the overhead map lamp, also come equipped with a wireless communication device called a Telematics Communication Unit (TCU). With an active NissanConnect® Services subscription, the TCU communicates with the Nissan 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/in-vehicle communications (IVC) system, for the vehicles listed under **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 21. Print and check off steps as they are completed. **Staple the completed check-off sheet to the repair order.**

Nissan 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 Nissan dealer to determine if this applies to your vehicle.

REQUIRED ACTIONS

IMPORTANT: After TCU replacement (steps 1-17):

- If all of the steps in this bulletin are not completed, telematics services <u>will not</u> operate properly.
- Follow all of the steps in this bulletin and use the check-off sheet provided on page 21.
- If the TCU is replaced and the steps are not followed, the warranty claim will be denied.

ORDER OF COMPLETION	1ST	2ND	3RD		
	CONFIGURE TCU	WRITE VIN	REGISTER INTELLIGENT KEYS		
	✓	✓	✓		

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 customer Intelligent Keys collected.
- The new/replacement TCU must come from Nissan North America parts supply.
- TCU configuration is required after replacement. Refer to step 18 on page 7.

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.

HINT: The warranty claim will be denied if this is not followed correctly.

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 the Original TCU

- 1. Set the parking brake.
- 2. Connect the VI to the vehicle.
- 3. Turn the ignition ON, with the engine OFF.
- 4. Confirm that the CONSULT PC is connected to Wi-Fi.
- 5. Launch C-III plus.
- 6. If prompted, select **USA/CANADA Dealers** from the drop down menu, and then select **OK.**
- 7. Login using your NNAnet credentials.

IMPORTANT: If not prompted to enter your username and password, the CONSULT PC may not be connected to Wi-Fi. Close C-III plus, confirm the CONSULT PC is connected to Wi-Fi, and then reopen C-III plus.

- 8. Wait for the VI to be recognized.
 - The serial number will display when the VI is recognized.
- 9. Select **Diagnosis (One System)**.



Figure 1

▲ ← ↑ ★ ● **a** ۲ Screen () Help Diagnosis (One System) System Selection NISSAN/INFINITI/DATSUN • Group All systems Trailer recognition control unit Intelligent battery sensor LED H/L control module RH H/L control module LH Upper control panel cont unit Occupant classification un LED H/L control module LH IVC (TBD)Security Gateway Gen3 ICC senso Side radar RH EC mirror compass Universal garage door (TBD)Passenger Sheet Control Unit Parking assist Side radar LH Steering column cont module wcs Light & rain sensor Front camera unit Overhead control panel unit Steering wheel switch pac PT cont module DAB Electronic ign switch cont TELEMATICS 2 Radar senso H/L control module RH ▼ 5/6 Sort : Default Setting

10. Select IVC.



11. Select Work Support.



Figure 3

12. Select **SAVE VIN DATA**, and then select **Start**.



13. Select Start.

HINT: If the VIN data cannot be saved, skip to step 15 on page 6. (You will be instructed to manually enter the VIN at step 55 on page 22.)





14. Select End.

Back Rome Print Screen Screen	Teen Moder Recorded bats	2.0V VI MI
Work support : SAVE VIN DATA		
DATA SAVING HAS BEEN COMPLETE ACCORDING TO SERVICE MANUAL, R THE DATA WRITING ROUTINE.	D. UUN	Retry
Current status		CMPLT
		End

Figure 6

Remove the Original TCU

- 15. 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

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.

HINT: The warranty claim will be denied if this is not followed correctly.

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





18. Select **Re/programming, Configuration**.

HINT: C-III plus screens for steps 19-21 are not shown.

- 19. Read the precautions on the C-III plus screen, and then select **Next**.
- 20. Select the model and model year.
- 21. Select **Select**, and then select **Confirm**.

H Back	Home Print S	creen Screen Mode Reco	
Conne	ction Status		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
vi	2301414	Normal Mode/USB connection	Diagnosis (All Systems)
MI	-	No d	Re/programming, Configuration
80	Select VI/MI		Immobilizer
Applica sum	tion Setting Sub mode	Language Setting	Maintenance
1	VDR		

Figure 8

Ô SS . 0 14.2V VI . ERT × 50 ◀ Re/programming, Configuration System Select Operation Selection ► System Selection Touch "system". In case ECU you want to operate is not listed below, the vehicle or model year might be selected wrong ENGINE Side radar (Front left) CAN monitor unit PKB MULTI AV IVC 3ch CAN GATEWAY (TBD) Security Gateway Gen3 EPS/DAST 3 6ch CAN GATEWAY Side radar (Front right) ABS FSCM HD MAP DATA MODULE IPDM E/R 1/3

Figure 9

0 ERT 20 Configurati 4 **Operation Selection** 6/6 Operation Selection Touch "Operation". In case over write current ECU, touch "Reprogramming". In case replacement of ECU, select an operation in REPLACE ECU category. REPROGRAMMING In case you want to reprogramming ECU, touch "Reprogram Reprogramming Replacement OF ECU Programming (Blank ECU) Touch "Before ECU Replacement", Operation log with part number is saved to CONSULT. Before ECU After ECU Replacement Replacement VEHICLE CONFIGURATION Touch "Before ECU Replacement", Operation log with configuration data is saved to CONSULT. Configuration

Figure 10

22. Select IVC.

23. Is the vehicle a Rogue?

YES: Select Configuration.

NO: Skip to step 26 on page 9.

24. Select START.

tax Home Print Screen	Captore Becarding Captore State	
Configuration	Server authentication Automatic Configuration	8/8
Automatic Configuration		
Replace ECU unit before perform Configuration will be performed Touch "Start" to proceed with the	ning configuration (No save data needed). for the following VIN. Auto Configuration for the selected ECU.	
VIN	XXXXXXXXXXXX	
DOWNLOAD		0%
CONFIGURATION		0%
		START

Figure 11

25. Select **End** when complete, and then skip to step 31 on page 11.

tione Protection	Image: Control Control Image: Contro Image: Control
Automatic Configuration	8/8
Write Configuration has been so Touch "End" to finish operation,	uccessfully completed. and to back to Home Screen. Confirm each function works correctly.
VIN	XXXXXXXXXXXXXX
DOWNLOAD	1005
CONFIGURATION	1005

Figure 12

26. Select After ECU Replacement.

Back Home Print Screen	Measurement Recorded Data	NT 🚓 🍠 X 📼 🔜 🔀
Sys	stem Selection Operation Selection	6/6
peration Selection		
Touch "Operation". In case over write current ECU, touch "R In case replacement of ECU, select an ope	leprogramming". ration in REPLACE ECU category.	
REPROGRAMMING	In case you want to reprogramming ECU	touch "Reprogramming".
Reprogramming	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Programming (Blank ECU)		
Before ECU Replacement	After ECU lacement	Touch "Before ECU Replacement", Operation log with part number is saved to CONSULT.
VEHICLE CONFIGURATION		

Figure 13

27. Select Manual selection.



Figure 14

28. Use the chart below to select the applicable **Type ID**.

VEHICLE	SYSTEM	TYPE ID
2023 Altima	All	28277-9HF0A
2021-2022 Armada	All	28277-6JL0A
2022 2022 Frontier	With Remote Engine Start	28277-9BU0A
2022-2023 FT010er	Without Remote Engine Start	28277-9BU1A
2021 2022 Kieko	With Remote Engine Start	28277-5R00A
2021-2023 NICKS	Without Remote Engine Start	28277-5R00B
2021-2023 Maxima	All	28277-9DL0A
2022 Pathfinder	All	282A2-6TA1A
2023 Pathfinder	All	282A2-6TA2A
2021 2022 Sontro	With Remote Engine Start	28277-6LB0A
2021-2022 Sentra	Without Remote Engine Start	28277-6LB0C
2020-2023	With Remote Engine Start	28277-9FV0A
Titan/Titan XD	Without Remote Engine Start	28277-9FV2A
2023 Z	All	28277-6GP0A

HINT: If C-III plus automatically selects the Type ID, there will be no options shown under **Type ID** (see Figure 15). Skip to step 30.

- 29. Select Next (not shown).
- 30. Select OK.

Back Home I	Vint Screen Screen Mea	Recorded Data	Help ERT	Print Result / Operation Complete	
Write Configuration Setting value that CON: Touch "OK".	SULT automatically select	t is saved to vehicle	ECU.		
I I I I I I I I I I I I I I I I I I I		Type ID			
			[Cancel

Figure 15

Write the VIN to the TCU

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.

HINT: The warranty claim will be denied if this is not followed correctly.

31. Navigate to **IVC Work support**.

• Refer to steps 1-11 on pages 4-5.

32. Select WRITE VIN (SAVED DATA).

HINT: If the VIN DATA could not be saved in step 13, skip to **Manually Enter VIN Data (if needed)** at step 55 on page 22.



33. Select Start.

Figure 16

34. Select Start.

e Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	O Help	ERT	11.9V	Yil Vi	×		×
Diagn System	iosis (One m)	System	n Selection	► IV	'C							
Work support	t : WRITE V	/IN (SAVED [DATA)									
VIN will be v Touch Start If VIN is not	written acc t. Saved VI recorded,1	cording to sa N will pop up then boxes w	ved VIN.). /ill be disp	layed in the	VIN column.						Start	
Current state	us						Waitin	ig for yo	ur ope	ration.		
VIN							XX	xxxx	xxx	xxxx		
											End &	

Figure 17



Figure 18

35. Select End.

- 36. Review the TCU part number written down in step 16.
 - If the part number is 28275-5SN0B, 28275-5SN0F, or 28275-5SN4B:
 - Skip to Verify Telematics Function (if needed), beginning on page 15.
 - 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)

37. Select Diagnosis (One System).

Back	Home	t Screen Capture	Measurement. Mode	Recorded Data	() Help	12		× I		\mathbf{X}	
Connee	ction Status	Sta		D	iagnosis	Menu					
vi	2300727	Normal Mod conne))) le/Wireless action		Dia	gnosis gnosis	(One S	System) /stems)		<u>ک</u> ا	
мі	-	No conr	nection		S Re/	progra	mming	, Confi	guration		
8.0	Select VI/N	11			‴∭ Imn	nobilize	er				
	tion Setting Sub mode		guage Setting		d 🗐 Mai	ntenan	ice				
	VDR]							

Figure 19

38. Select IVC.

Back Rome Print Screen	Screen Capture	ded Help ERT 14.3V							
Diagnosis (One System) Sy	Diagnosis (One System) System Selection								
NISSAN/INFINITI/DATSL	IN								
Group All systems									
Intelligent battery sensor	Trailer recognition control unit	LED H/L control module RH	H/L control module LH						
Upper control panel cont unit	Occupant classification unit	LED H/L co	IVC						
EC mirror compass	ICC sensor	Side radar RH	(TBD)Security Gateway Gen3						
Universal garage door opener	Parking assist	Side radar LH	(TBD)Passenger Sheet Control Unit						
Light & rain sensor	Steering column cont module	Front camera unit	wcs						
Overhead control panel unit	Steering wheel switch pad	PT cont module	DAB						
Electronic Ign switch cont unit Radar sensor H/L control module RH TELEMATICS 2									
Sort : Default Setting 🔻									

Figure 20

39. Select Work Support.



Figure 21

40. Select Network initial settings.



Figure 22

Recorded A 14.6V VI MI () Help + Ê Screen Diagnosis (One System) System Selection IVC Work support : Network initial settings Execute "Network initial settings". Touch the "Start" button. If the "Start" button cannot be touched, the radio wave condition is not good. Move the vehicle to a place with good reception. When the radio wave condition is good, you can touch the "Start" button. Start Network initial setting state Current status End

Figure 23

41. Select Start.

42. Check the Network initial setting state field (Figure 24).

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 and Confirmation on page 18.



Figure 24

- If the result is "0":
 - a. Confirm the VIN is written correctly.
 - b. Skip to Verify Telematics Function (if needed), beginning on page 15.

Back Rime Print Screen Sca Diagnosis (One System) System Se	reen tree Measurement Recorded Data	Help ERT 11.9V		
Work support : Network initial settings				
Please contact Techline with the status	below.			Start
				,
Network initial setting state			0	
Error code			No error	
Data channel			3	
IP address			2	End



- If the result is a number between 1 and 5:
 - a. Wait 24 hours and then perform steps 37-42 again.
 - If a number between 1 and 5 displays again, contact the Nissan Owner Services call center at (855) 426-6628, 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, dealer name, dealer code, and dealer employee name and contact information.

Verify Telematics Function (if needed)

- 43. Turn the ignition OFF, and then wait for 10 minutes.
- 44. Turn the ignition ON with the engine OFF.
- 45. Turn the hazard warning lights ON, and then wait for 15 minutes.
- 46. Turn the ignition OFF, and then wait for 10 minutes.
- 47. Turn the ignition ON with the engine OFF, and then wait for 15 minutes.
- 48. From the **MENU**, select **Info**.



Figure 26

49. Select System Information.



Figure 27

50. Select Software Update.





51. Select Start Software Update.



Figure 29

• "Locating new software..." should display, as shown in Figure 30.



Figure 30



Figure 31



- 52. To confirm telematics functionality, ensure the screen in either Figure 31 or Figure 32, above, is displayed.
 - If the screen matches Figure 31 or Figure 32, the procedure is complete.
 - If the screen matches Figure 33, ("There is no current WI-Fi connection") perform steps 43-52 again.
 - If Figure 33 displays after performing steps 43-52 two times, <u>wait 24 hours</u> and then perform steps 43-52 a third time.
 - If Figure 33 displays after the third attempt, contact the Nissan Owner Services call center at (855) 426-6628,



Figure 33

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, dealer name, dealer code, and dealer employee name and contact information.

Intelligent Key Registration and Confirmation

- 53. Perform Intelligent Key registration for <u>all</u> customer Intelligent Keys.
 - Refer to the C-III plus operations manual for Intelligent Key registration instructions.
- 54. Confirm Intelligent Key registration was successful.
 - a. Select **Diagnosis** (All Systems).

HINT: C-III plus screens for steps 54b - 54c are not shown.

- b. Select Automatic Selection(VIN).
- c. Select Confirm.

Conne	ction Status		Diagnosis Menu				
	Serial No.	Status	Diagnosis (One System)				
VI	2300727						
		Normal Mode/Wireless connection	Diagnosis (All Systems)				
		\bigcirc					
MI		No connection	Reformation				
			Congulation				
Select VI/MI							
Application Setting							
Sub mode			Maintenance				
SUB	Sub mode	Language Setting	Maintenance				

Figure 34

Recorded () Help 12.2V VI MI ۲ Creen e Back ERT d. Select BCM. Select Vehicle Diagnosis (All Systems) Diagnosis (All Systems) Confirm Vehicle CAN DIAG SRT & P-DTC Network DTC CAN Diag Detailed Information ENGINE NO DTC ABS NO DTC METER/M&A NO DTC всм NO DTC AIR BAG NO DTC Print for Custor ICC/ADAS NO DTC Print TRANSMISSION NO DTC Save 1/4 0/0 ERASE

Figure 35

e. Select IMMU.



Figure 36

f. Select Data Monitor.

Image: Constraint of the second sec	-
Diagnosis (All Systems) Select Vehicle Confirm Vehicle Systems) Select Sub- Systems	ВСМ
Result Data Monitor Active Test	
No DTC is detected.	
	Print
	Save
1/1	ERASE

Figure 37

- g. Select TCU ID.
- h. Select START.

Back Home Prin	it Screen Capture Mode Dats Recorded Dats						
Diagnosis (All Select Vehicle Confirm Vehicle Systems) BCM							
Self Diagnostic Data Monitor							
System	BCM(IMMU)	Save					
ABS	Monitor Menu Recording Cor Serving Rule	ndition 10mseo					
METER/M&A	PUSH SW Rec Time Pro Trigger						
ВСМ	DONGLE ID Impger same interval TCU ID TCU ID Electric shift ID registration Setting						
AIR BAG							
HVAC	DISPLAY TYPE						
TRANSMISSION	Nume	rical 🔻					
1/4 Clear Monitor Item							
Figure 38							

i. Check the TCU ID status (Figure 39).

YES: If the status is "Done", no further action is needed. **NO:** If the status is "Yet", clear all DTCs and repeat steps 53-54.

Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	() Help	ERT	12.1V	Yil Vi	× I		
Data Monit	tor	Sort by sele	ection	Ascending	order	Line	Graph			Single	List	
	BCM	TCU ID							Done			
		Explanation	ı	Trigge	r Info.					1	Record	

Figure 39

CHECK-OFF SHEET

IMPORTANT:

- Follow all of the steps in this bulletin and use the check-off sheet provided below.
- Staple the completed check-off sheet to the 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 7, step 18, section **Configure the TCU**.
- (2) Refer to page 11, step 31, section Write the VIN to the TCU.
- (3) Refer to page 18, step 53, section Intelligent Key Registration and Confirmation.

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.

HINT: The warranty claim will be denied if this is not followed correctly.

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

55. Select WRITE VIN (MANUAL INPUT), and then select Start.



Figure 40

- 56. 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.
- 57. Select Start.



Figure 41

Recorded Belp ERT × . 🧼 .0 Diagnosis (One System) System Sel ction) IVC ork support : WRITE VIN (MANUAL INPUT) VIN written successfully. Touch "End" and turn OFF ignition switch (or power switch). Wait for 10 seconds or more. Check that VIN is written to ECU. Then, perform self-diagnosis and check that no DTC is detecte Retry READ VIN OR COLLTD JAPAN NISAN MOTOR COLLEGATION 56 -- DRAN

Figure 42

58. Select End.

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION	
April 6, 2020	NTB20-029	Original bulletin published	
July 6, 2020	NTB20-029A	Changes to page 1 and to steps 34-42	
January 27, 2021	NTB20-029B	Updated APPLIED VEHICLES and added part numbers to step 20	
February 3, 2021	NTB20-029C	Classification number updated	
April 21, 2021	NTB20-029D	Changes made throughout	
March 3, 2022	NTB20-029E	APPLIED VEHICLES revised, changes made on page 10, and Verify NissanConnect® Services Enrollment and Subscriptions (if needed) section removed	
November 1, 2022	NTB20-029F	Changes made to APPLIED VEHICLES and pages 3, 4, and 10; confirmation procedure added to Intelligent Key Registration and Confirmation	