



NTB21-002

January 6, 2021

Date:

2020 FRONTIER; TCM COMMUNICATION ERROR CAUSING A **NO START CONDITION**

APPLIED VEHICLES: 2020 Frontier (D40) **APPLIED TRANSMISSION:** 9 Speed A/T (GE9R01A)

IF YOU CONFIRM

EC20-032

The customer states the engine will not crank and will not start. (The incident may be intermittent.)

And

There is a U0101 DTC (Lost Comm TCM) in the Engine Control Unit (ECU) and/or Shifter Control Unit (SCU). This DTC may be in a PAST or CURRENT status.

Or

The TCM shows "UNKWN" in the **PRESENT** column or "0" in the **PAST** column under the CAN DIAG SUPPORT MNTR tab within the ECU (ENGINE) or the SCU (SHIFT) in CONSULT-III plus (C-III plus). See Figure 1 and Figure 2.

AN DTC O CAN DING	CAN CAND	Release DTC		ALDTC Q CAN Diag	GALIÓAD SUPPORT MNTR	Network D1	nc)
CAN				CAN			
TEM	MONITON ITEM	PRESENT	PART	SYSTEM	MONITOR /118	PREMAR	PART
ENGINE	TRANSMET INAD	08	06	ALL MODE AWD/MOD	TRANSART DAG	04	04
	VOCITOSARS	08	OW.		ECM.	OK.	04
	ME TE REMEA	OK-	OK	BONAR	METERIMAN	08.	ÓN.
MET AA	IRCMINEC	OK	OK -	LANE CAMERA	JACAN SEC	08	06
	AREAG	Not stageosed			TON	LINKOWN	
1	INCIADAS	OK	DM	SHIFT	IPON CAR	09	.06
AL D	HAR.	Not ellaportunat		Side y latty			
C. M. AL	TCM	LINKWN					
ICCIADAS	MR.8.11 ASP	Not diagnoard		Side rac ear right)			

Nissan Bulletins are intended for use by gualified 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.

ACTION

1. Confirm the current TCM part number.

NOTE: If the Park indicator is not seen in the Driver Information Center (DIC) and C-III plus does not display the current TCM part number after a 2 minute wait with the ignition ON, engine OFF, this TSB <u>does not apply</u>. Refer to the ESM for further diagnostic information.



Figure 3

2. Reprogram the TCM, if applicable.

IMPORTANT: The purpose of ACTION (above) is to give you a quick idea of the work you will be performing. You MUST closely follow the entire SERVICE PROCEDURE as it contains information that is essential to successfully completing this repair.

SERVICE PROCEDURE

Confirm the current TCM part number

IMPORTANT: Before starting, make sure:

- ASIST on the CONSULT PC has been synchronized (updated) to the current date.
- All C-III plus software updates (if any) have been installed.

NOTICE

- Connect a battery maintainer or smart charger set to reflash mode or a similar setting. If the vehicle battery voltage drops below <u>12.0V or rises above 15.5V</u> during reprogramming, <u>the TCM may be damaged</u>.
- Be sure to turn OFF all vehicle electrical loads.
 If a vehicle electrical load remains ON, <u>the TCM may be damaged</u>.
- Be sure to connect the AC Adapter.
 If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and the TCM may be damaged.
- 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, reprogramming may be interrupted and <u>the TCM may be damaged</u>.
- 1. Connect a battery maintainer/smart charger to the vehicle.
- 2. Connect the VI to the vehicle.
- 3. Start C-III plus.
- 4. Wait for the VI to be recognized.
 - The serial number will display when the VI is recognized.

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

	Connection Status		Diagnosis Menu
	Serial No.	Status	Diagnosis (One System)
The VI is recognized	VI 232665 2	الله الحمالي المحمد المحمد محمد المحمد المحمد المحمد المحمد المحم المحمد المحمد	Diagnosis (All Systems)
	MI	No connection	Re/programming,
	Select VI/M	I	Immobilizer
	Application Setting Sub mode	Language Setting	Maintenance
	VDR		

Figure 4

6. Check the box to confirm the precaution instructions have been read, and then select **Next**.

NOTE: Use the arrows (if needed) to view and read all the precautions.

Configuration	Precaution	Vehicle Selection	
recaution			
Operating suggestions for reprogrammi	a programming and C/U config	ation.	
Please review the all of precautions, an			\land
ooints. And touch "Next".			
Precautions			
aution:			
. Follow the operation guide displayed o			
"Back" and "Home" button may not be	used on this flow.		
For reprogramming and programming			
For reprogramming and programming . Install the latest version of the CONSI	LT-III plus sortware, reprogram	ming/programming	
. Install the latest version of the CONS lata to this CONSULT-III plus PC.			
. Install the latest version of the CONS			
. Install the latest version of the CONSI lata to this CONSULT-III plus PC. Preparation and read the service mar For ECU Configuration	ual or reprogramming procedure		
. Install the latest version of the CONSI lata to this CONSULT-III plus PC. Preparation and read the service mar For ECU Configuration . Need to write the configuration data to	ual or reprogramming procedure	sheet.	
. Install the latest version of the CONSI lata to this CONSULT-III plus PC. Preparation and read the service mar For ECU Configuration	ual or reprogramming procedure	sheet.	
. Install the latest version of the CONSI lata to this CONSULT-III plus PC. Preparation and read the service mar For ECU Configuration . Need to write the configuration data to If writing the wrong configuration data	ual or reprogramming procedure new ECU, after replace it. ECU can not work. Please writ	sheet.	
. Install the latest version of the CONSI lata to this CONSULT-III plus PC. Preparation and read the service mar For ECU Configuration . Need to write the configuration data to . If writing the wrong configuration data For ECU Configuration using manual mo . Confirm the vehicle's spec and its cor	ual or reprogramming procedure new ECU, after replace it. ECU can not work. Please writ fe iguration spec, following the se	sheet. e the right data. rvice manual. If	
. Install the latest version of the CONSI lata to this CONSULT-III plus PC. Preparation and read the service mar For ECU Configuration . Need to write the configuration data to . If writing the wrong configuration data For ECU Configuration using manual mo . Confirm the vehicle's spec and its cor writing the wrong configuration data, EC	ual or reprogramming procedure new ECU, after replace it. ECU can not work. Please writ de figuration spec, following the se J can not work. Please write the	sheet. e the right data. rvice manual. If right data.	
. Install the latest version of the CONSI lata to this CONSULT-III plus PC. Preparation and read the service mar For ECU Configuration . Need to write the configuration data to . If writing the wrong configuration data For ECU Configuration using manual mo . Confirm the vehicle's spec and its cor	ual or reprogramming procedure new ECU, after replace it. ECU can not work. Please writ de figuration spec, following the se J can not work. Please write the	sheet. e the right data. rvice manual. If right data.	Vext

Figure 5

7. Select Automatic Selection(VIN).

Configuration	ng,	Precaution	Vehicle Selection	Vehicle Confirmation	
Automatic Se	election(VIN)		tion(Vehicle Name)		
hicle Name :				Model Year :	Salès Channel
*MURANO Camp:P8201	JUKE	QUEST			NISSAN
350Z	LEAF	ROGUE			INFINITI
370Z	MAXIMA	SENTRA			
370Z Convertible	MURANO	TITAN			
ALTIMA	MURANO Cross Cabriolet	TITAN			
ALTIMA Hybrid	NISSAN GT-R	VERSA Hatchback			
ARMADA	NV	VERSA Sedan			-
CUBE	PATHFINDER	XTERRA			CLEAR
FRONTIER	PATHFINDER	X-TRAIL			Select

Figure 6

8. Allow the C-III plus to perform automatic VIN selection.



Figure 7

9. Confirm the VIN or Chassis # is correct, and then select Confirm.

Back Home Print Screen	Measurame nt Mode Recorded Data Pelp ERT 14.7V	
Configuration	vehicle Confirmation	
Please confirm selected information vehicle, touch "Change".	and touch "Confirm". In case you want to se	electanother
VIN or Chassis #	X00880CXXXXX089CXXXX	
Vehicle Name :	FRONTIER	
ModelYear	2020MY	
	1/1	4
		Change
		Confirm

Figure 8

10. Allow the System call to be performed.

Back Home P	int Screen Carber Measureme nt Mode Recorded Data Pelp A. 70 VI MI	
Configuration	Vehicle Selection Vehicle Confirmation	
Please confirm sele vehicle, touch "Chai	System Call	
	System call performing Please wait	
VIN or Chassis #		
Vehicle Name :		
ModelYear		
	73%	
	Cancel	
	Change	
	Confirm	

Figure 9

11. Confirm the VIN is correct for the vehicle, and then select **Confirm**.



Figure 10

12. Select TRANSMISSION.

	out VIN System Selection	Operation Selection
Selection		
i "system". e ECU you want to operate is not listed	below, the vehicle or model year might t	e selected wrong.
r		
ENGINE	METER/M&A	HVAC
MULTI AV	BCM	TRANSMISSION
ABS	CAN GATEWAY	
IPDM E/R	EV/HEV	
IPDM E/R HEAD LAMP LEVELIZER	EV/HEV AIR BAG	

Figure 11

13. Select Reprogramming.

Operation Selection		
Touch "Operation". In case over write current ECU, touch In case replacement of ECU, select an		
REPROGRAMMING	In case you want to reprogramming ECU	I touch "Deare gramming"
	In case you want to reprogramming ECU	, touch Reprogramming .
Reprogramming		
Reprogramming		
Replacement OF ECU		
Replacement OF ECU Programming (Blank ECU)		Touch "Before ECU Replacement",
Replacement OF ECU	After ECU Replacement	Touch "Before ECU Replacement", Operation log with part number is sa to CONSULT.
Replacement OF ECU Programming (Blank ECU) Before ECU	After ECU Replacement	Touch "Before ECU Replacement", Operation log with part number is sa to CONSULT.

Figure 12

14. Find the TCM Part Number and write it on the repair order, and then select Save.NOTE: This is the current Part Number (P/N).

Re/programming, Configuration	Operation Selection Save ECU Data
ave ECU Data	8/8
	g and the current part number as listed below to CONSULT. operation by selecting suitable operation log. Operation log is erased hed.
File Label	MANDER KKX KARJERAK
Operation	REPROGRAMMING
System	тсм
	XXXXXXXXXX
Part Number	
Part Number /ehicle	FRONTIER
	FRONTIER XXXXXXXXXXXXXX

Figure 13

- 15. Compare the Part Number you wrote down in step 14 on page 8 to the numbers in the **Current TCM Part Number** column in Table A below.
 - If there is a <u>match</u>, continue to step 16 to continue the reprogramming procedure.
 - If there is <u>not a match</u>, reprogramming is <u>not needed</u>. Refer to the ESM for further diagnostic information.

Table A

MODEL YEAR	CURRENT TCM PART NUMBER BEFORE
	REPROGRAMMING: 31039 -
2020	9BT1B, 9BT1C, 9BT1E
2020	9BT3B, 9BT3C, 9BT3E

Reprogram the TCM

16. Follow the on-screen instructions to navigate C-III plus and reprogram the TCM.

NOTE: In some cases, more than one new P/N for reprogramming is available.

- If more than one new P/N is available, the screen in Figure 14 displays.
- Select and use the reprogramming option that does <u>not</u> have the message "Caution! Use ONLY with NTBXX-XXX".
- If you get this screen and it is <u>blank</u> (no reprogramming listed), it means there is no reprogramming available for this vehicle.

Back Home Print	t Screen Capture Mode	Recorded Data	11.8V VI MI	-
Configuration	Precaution	Select Program Data	Confirm Vehicle Condition	9/11
Select Program Data				
	rog/programming data listed be ming data is listed below, conf in CONSULT. TRANSMISSION		VIN and	
Current Part Number	Part Number After Rep	_l ro/programming	Other Information	
x00000X-X00000X	x00000x-x00000x x00000x-x00000x		000000000000000000000000000000000000000	
			0/0	Next

Figure 14

17. Select USA/CANADA Dealers from the drop down menu, and then select OK.



Figure 15

- 18. Login using your NNAnet credentials.
 - The CONSULT PC must be connected to the Internet (Wi-Fi or cable).
 - If you do not know your User Name and Password, contact your service manager.

Beck		
NNA Federation	and the second second	1
	Please enter your UperiD below. Unemanne Passwort Passavind Stabrint	
Restart Logen		Stand

Figure 16

19. Select **Next**, and then proceed to step 20 on page 13.

NOTE: When the screen in Figure 17 displays, reprogramming is complete. If the screen in Figure 17 does <u>not</u> display (indicating that reprogramming did <u>not</u> complete), refer to the information on the next page.



Figure 17

TCM Recovery:

Do not disconnect the VI or shut down C-III plus if reprogramming does not complete.

If reprogramming does <u>not</u> complete and the "!?" icon displays as shown in Figure 18:

- Check battery voltage (12.0 V 15.5 V).
- Ignition is ON, engine is OFF.
- External Bluetooth® devices are OFF.
- All electrical loads are OFF.
- Select <u>retry</u> and follow the on screen instructions.
- <u>"Retry" may not go through on</u> <u>first attempt and can be</u> <u>selected more than once</u>.

CONSULT-IL plus Ver	VIN	Unitide	Comin Jacan
Base Hano Print Scorer	an Made	ridae Hito 133V	и ж 🍽 👝 🕅
Senigator		Contine Resol	13/13
onfirm Result			
Reprogramming or programming is not co peration on the ECU fouch "Reny" to retry reprogramming or		you can retry reprog/programming	R
Part numberafter		XXXXXX	
Reprogramming		AAAAAA	
Part number before		XXXXXX	
Parl number behre Reprog/programming			_
Parl number Defore Reprog/programming Jehicle		хжхжх	
fari number sehre Reprogipregramming Vehicle	-	XXXXXX XXXXX	
fari number sehre leprogiprogramming Jehicle Jilki		XXXXXX XXXXX XXXXXXXXXX	Rety
Rennofhredtamming Parl inumber before Rennofhreigeramming Vehicle Ullo System Date		хжхжх хжжж хжжжжжж хжх	Rety

Figure 18

If reprogramming does <u>not</u> complete and the "X" icon displays as shown in Figure 19:

- Check battery voltage (12.0 V 15.5 V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, engine is OFF.
- Transmission is in Park.
- All C-III plus / VI cables are securely connected.
- All C-III plus updates are installed.
- Select <u>Home</u>, and restart the reprogram procedure from the beginning.

	Aleas areasent Aleasadad Hole Caray V	× =
Reprograming confidence	Confine Resul	
onfirm Rosult		WS
Reprogramming a reticompleted property -Print Nils screen as needed. Confirm CON with precedure. -Restair CONSULT with disconnecting VI of	ISULT version. IGN/Fower switch position, shift position are anse, and start the reprogramming again	ide 🔊
Part number after Reprog/programming	XXXXXX	
Current part number	жжжжх	
238. K		
Vehicle	XXXX	
Vehicle	XXXXXX	_
VIN	*****	
VIN System	хихиххих	

Figure 19

- 20. Follow the on-screen instructions to **Erase All DTCs**.
 - When the entire reprogramming process is complete, the screen in Figure 20 will display.
- 21. Verify the before and after part numbers are different.
- 22. Print a copy of this screen (Figure 20) and attach it to the repair order for warranty documentation.
- 23. Select **Confirm**.

Bach Nome Print Screen Screen	ten Meallamment Recorded Help	14.3V VI MI	
Configuration	ErAss All DTCs Print Result / Operation Complete		18/18
rint Result / Operation Complete			
In case CONSULT can NOT immediately temporally storage of this page. Touch ' Data Folder'' on desk top, and open the	iccess, touch "Print" to print out this page v access to LAN or printer, Screen Capture i "Screen Capture", and save it. Screen captur folder named "ScreenImages".	function is available for	
Part number after Reprog/programming	31039		
Part number before Reprog/programming	31039		
Vehicle	*****		
VIN	******	xxx	
System	TRANSMISSI		Print
Date	11/3/201X 2:10:21	1 AM	100.24

Figure 20

24. Disconnect the battery maintainer/smart charger from the vehicle.

CLAIMS INFORMATION

Submit a Primary Part (PP) type line claim using the following claims coding:

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram A/T Control Unit	(1)	JE99AA	ZE	32	(2)

(1) Reference the electronic parts catalog and use the Valve Control Assy (31705-****) as the Primary Failed Part (PFP).

(2) Reference the current Nissan Warranty Flat Rate Manual and use the indicated Flat Rate Time (FRT).

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
January 6, 2021	NTB21-002	Original bulletin published