Technical Bulletin

SERVICE BULLETIN

Classification:	Reference:	Date:
EC20-032	NTB21-002	January 6, 2021

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

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.
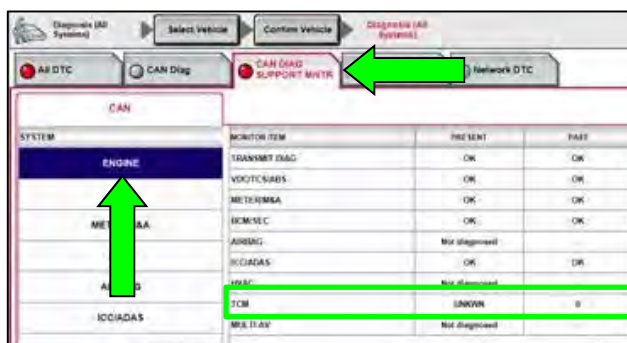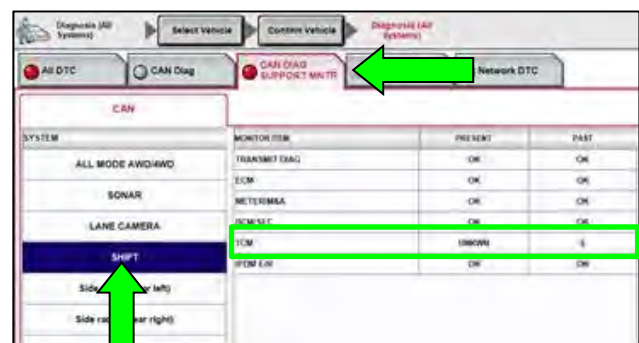

Figure 1

Figure 2

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.

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 **does not apply**. 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 12.0V or rises above 15.5V during reprogramming, the TCM may be damaged.

- Be sure to turn OFF all vehicle electrical loads.
  If a vehicle electrical load remains ON, the TCM may be damaged.

- 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 the TCM may be damaged.

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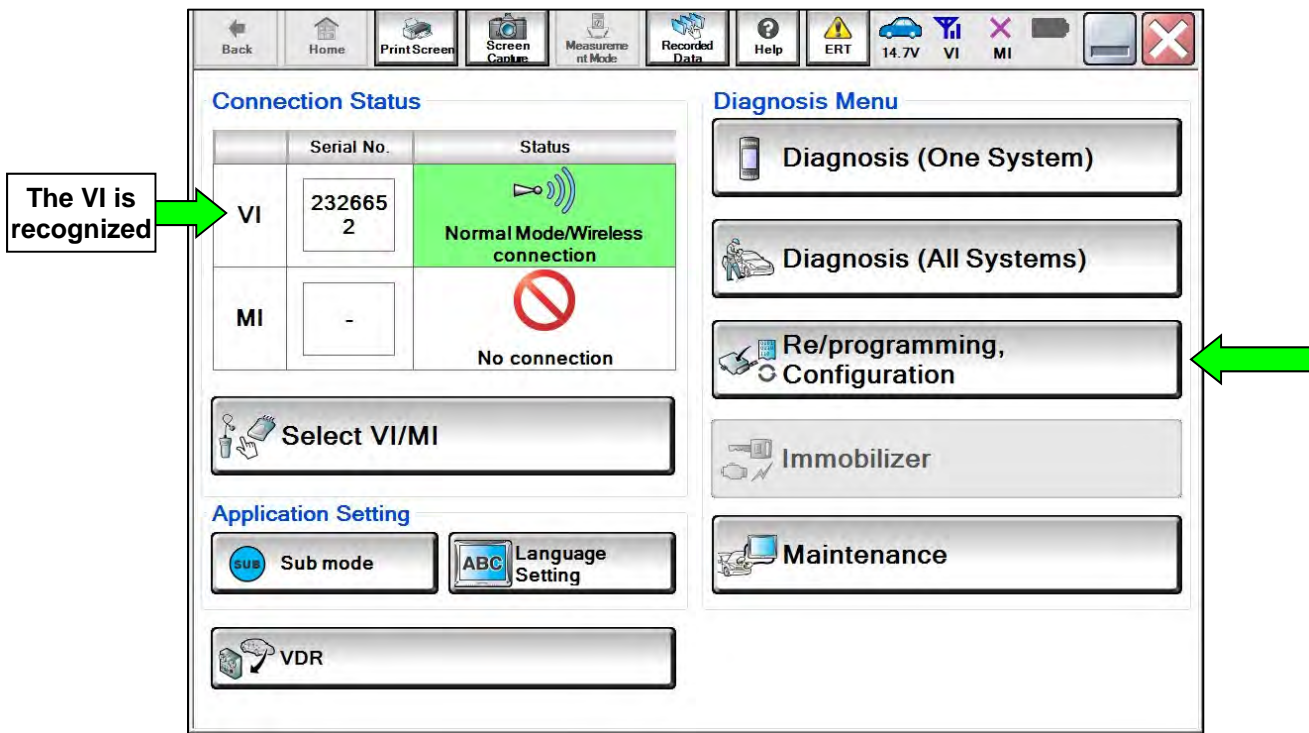
5. Select **Re/programming, Configuration**.

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.
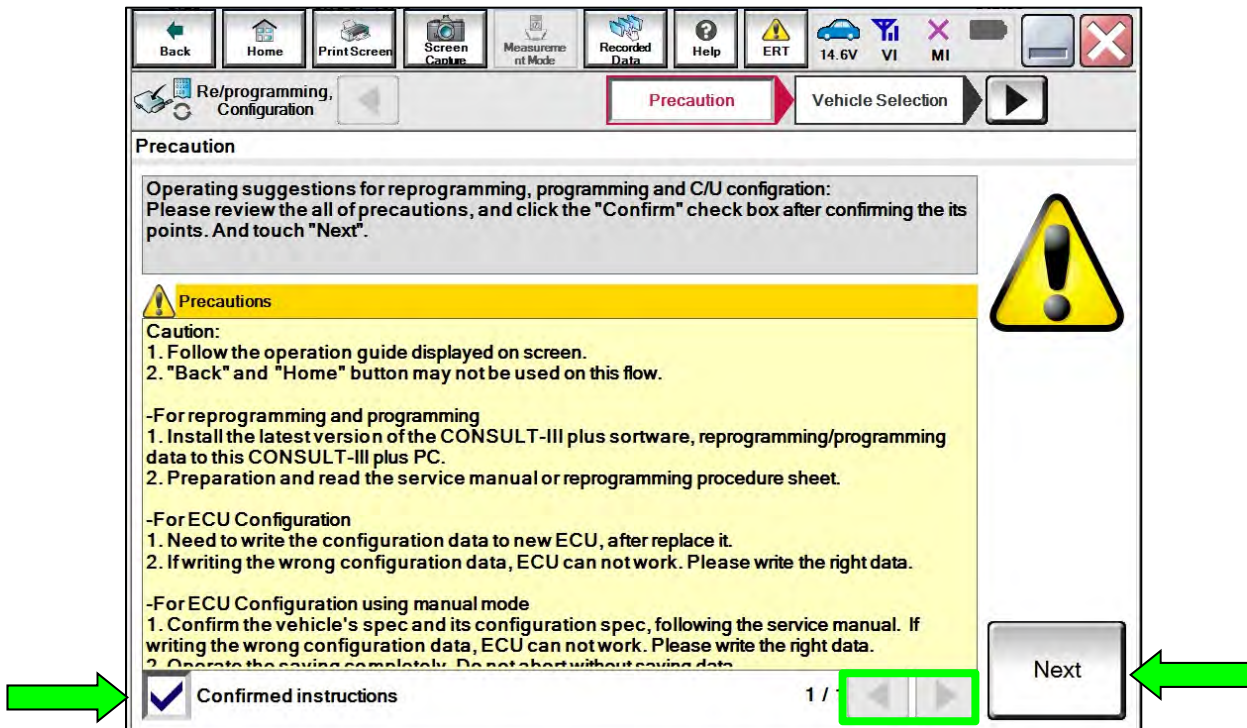

Figure 5

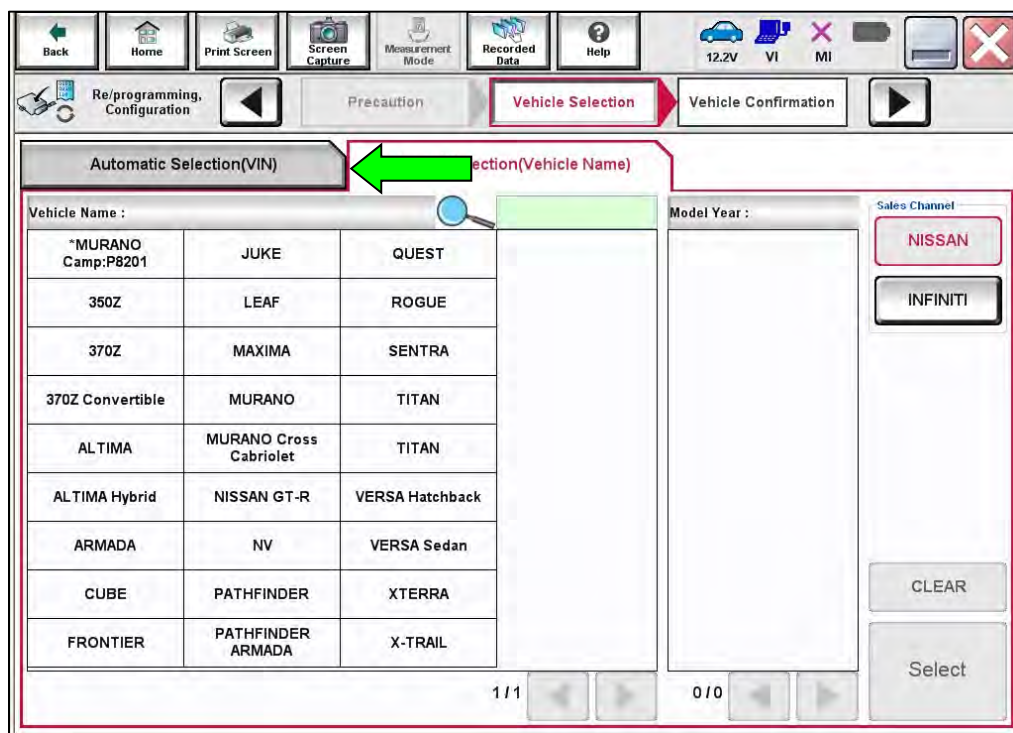NTB21-002

7. Select **Automatic Selection(VIN)**.

Figure 6

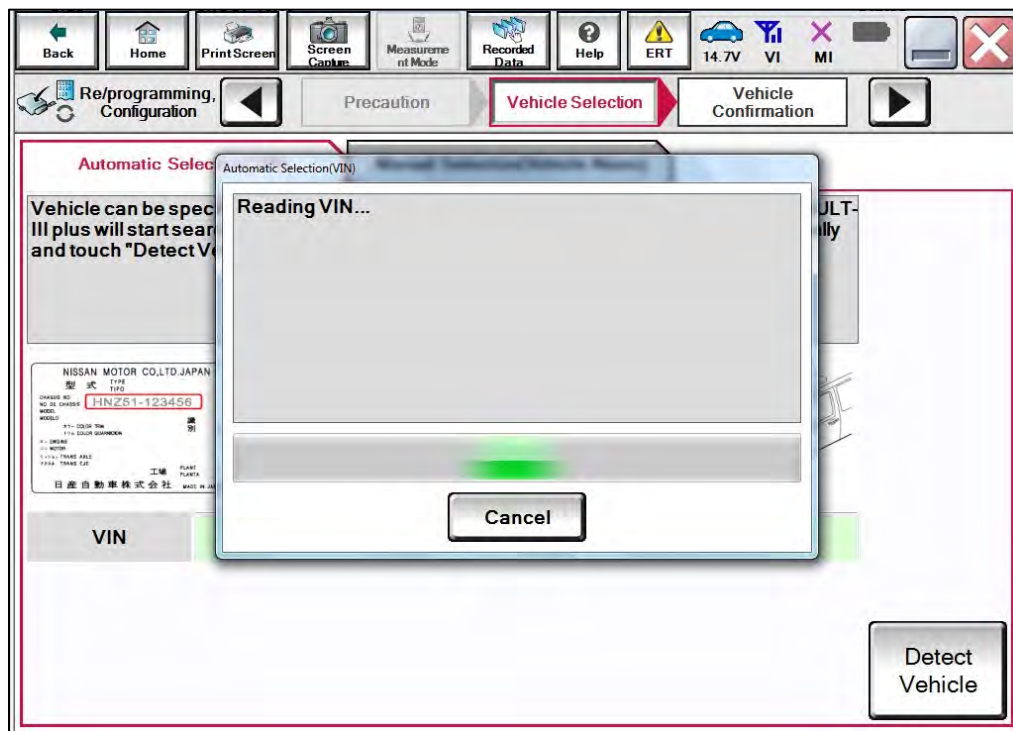8. Allow the C-III plus to perform automatic VIN selection.

Figure 7

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

Figure 8

10.   Allow the System call to be performed.

Figure 9

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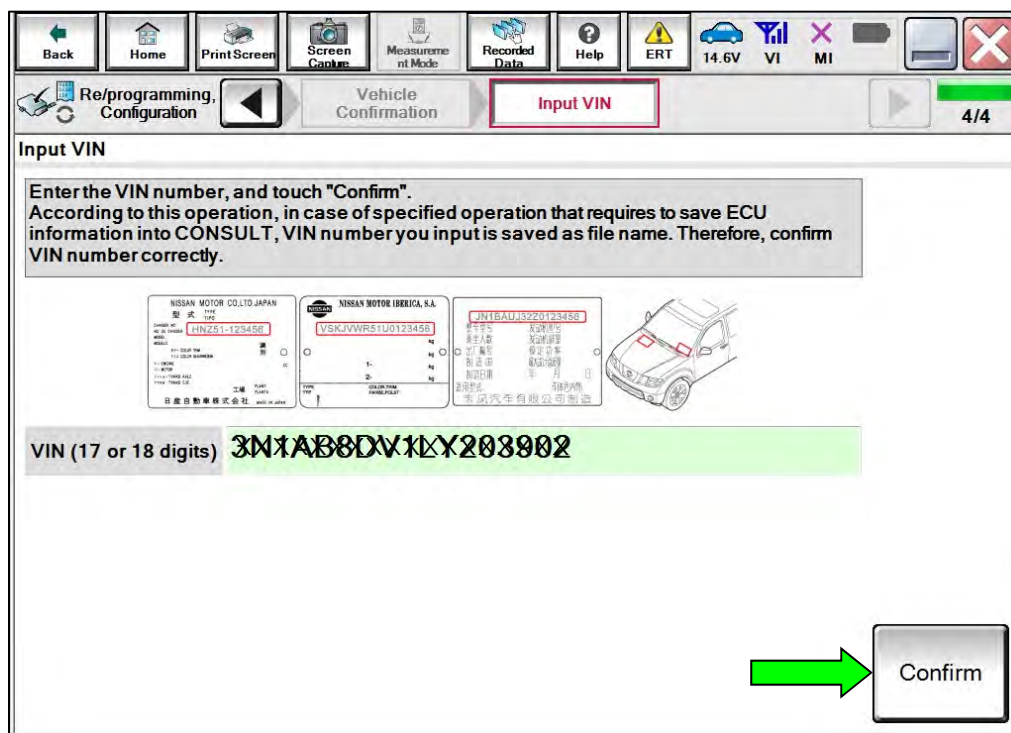

Figure 10

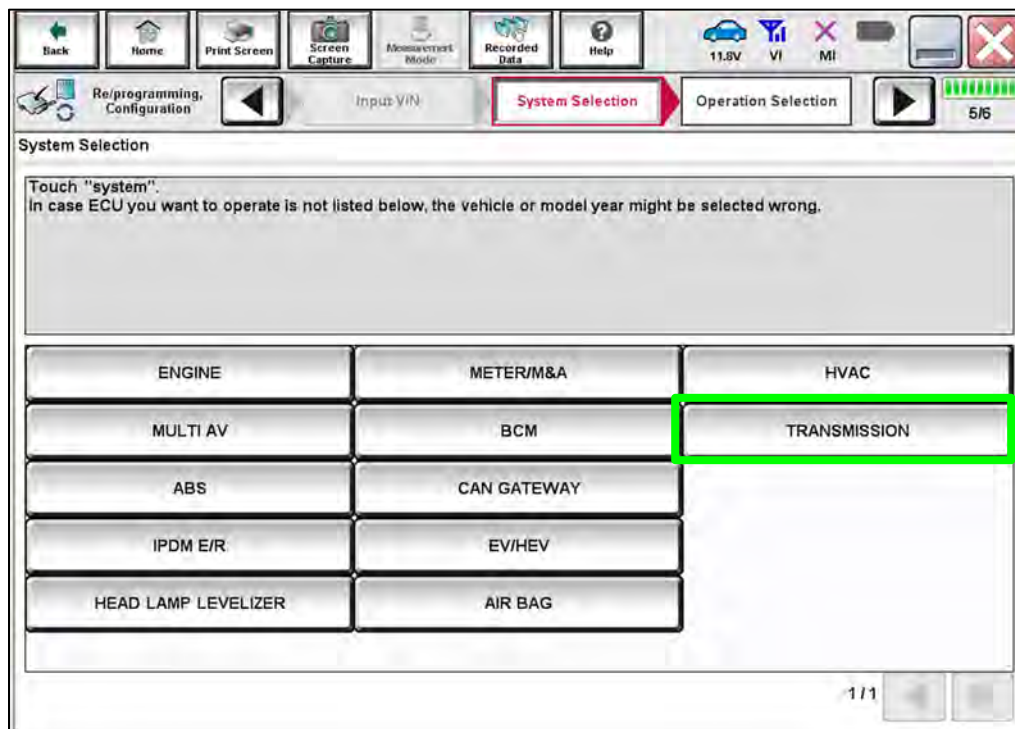12. Select **TRANSMISSION**.
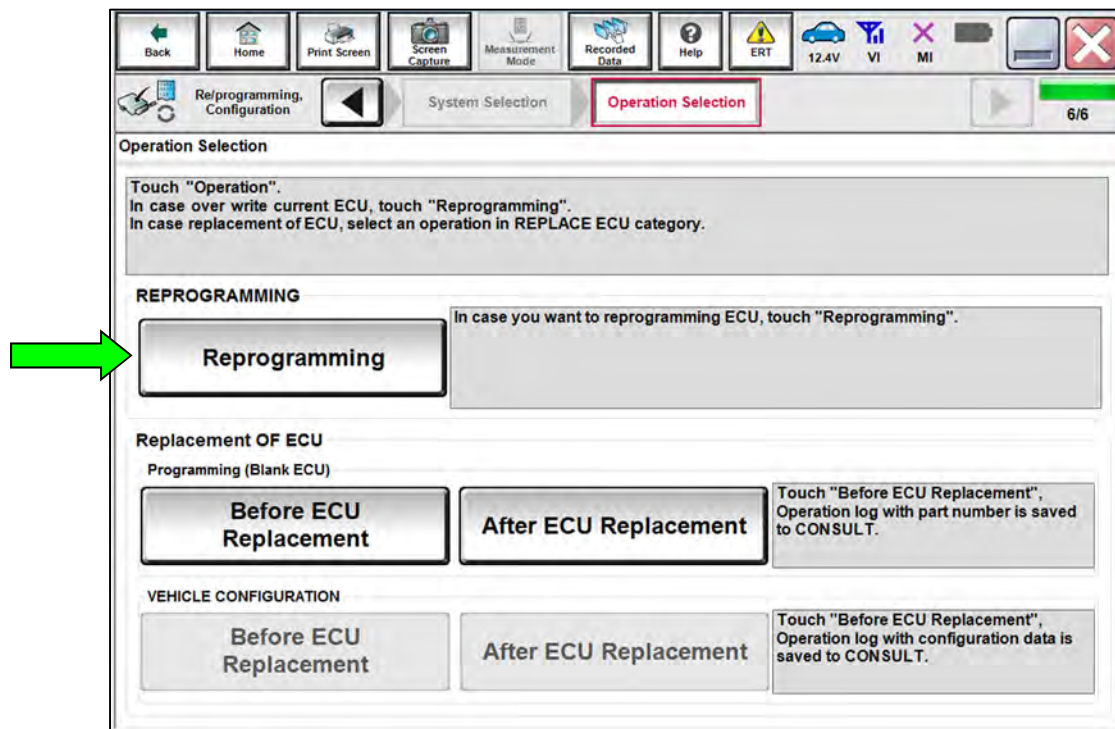

Figure 11

13. Select **Reprogramming**.

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).
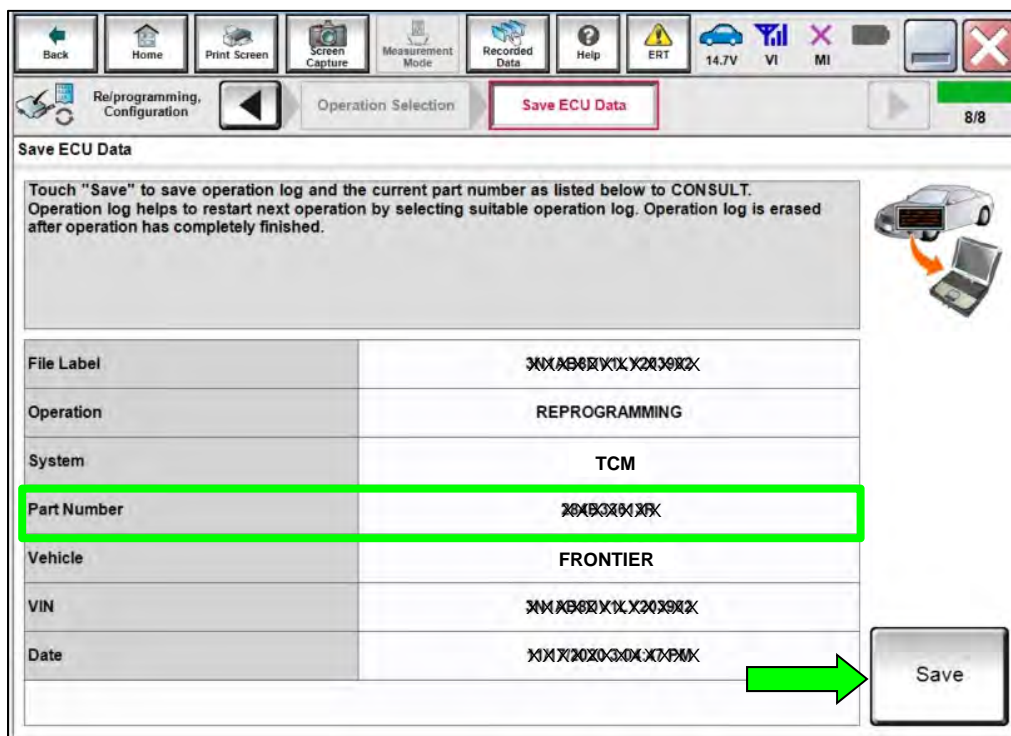

Figure 13

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 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 **not** 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.
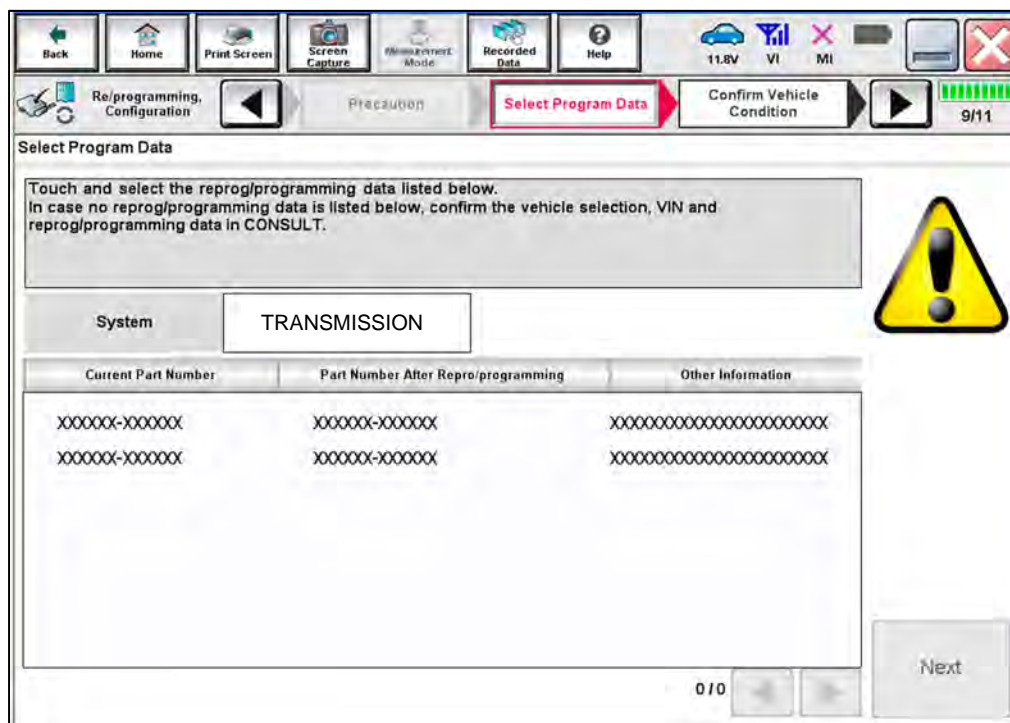

Figure 14

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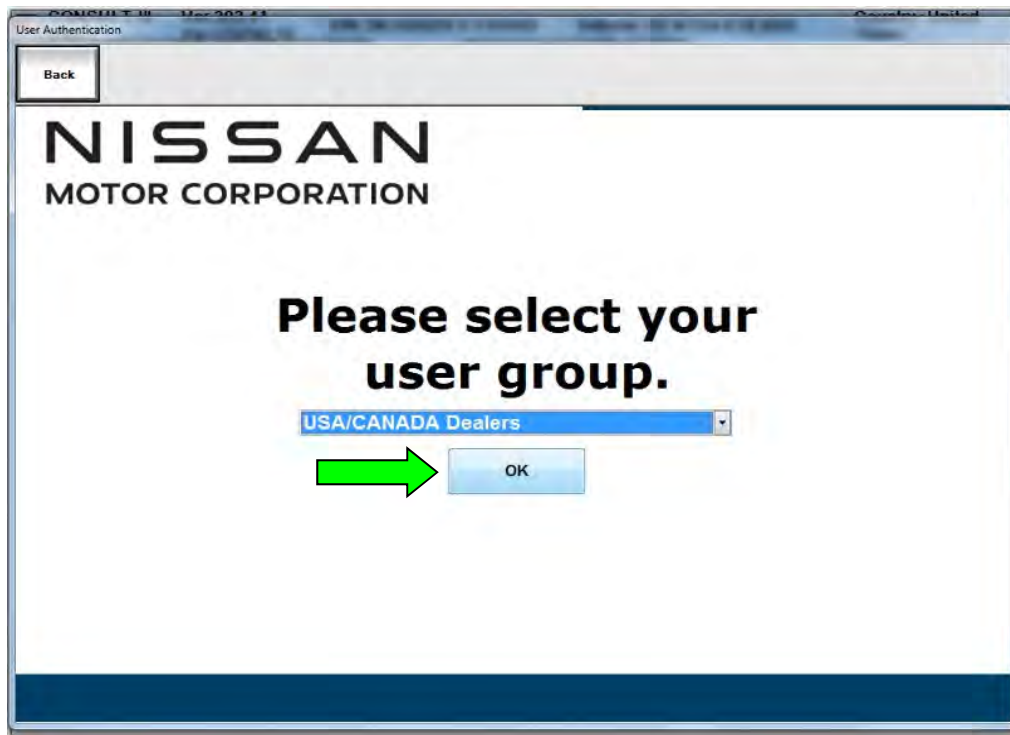

Figure 15

18. Login using your NNAnet credentials.

- The CONSULT PC must be connected to the Internet (Wi-Fi or cable).

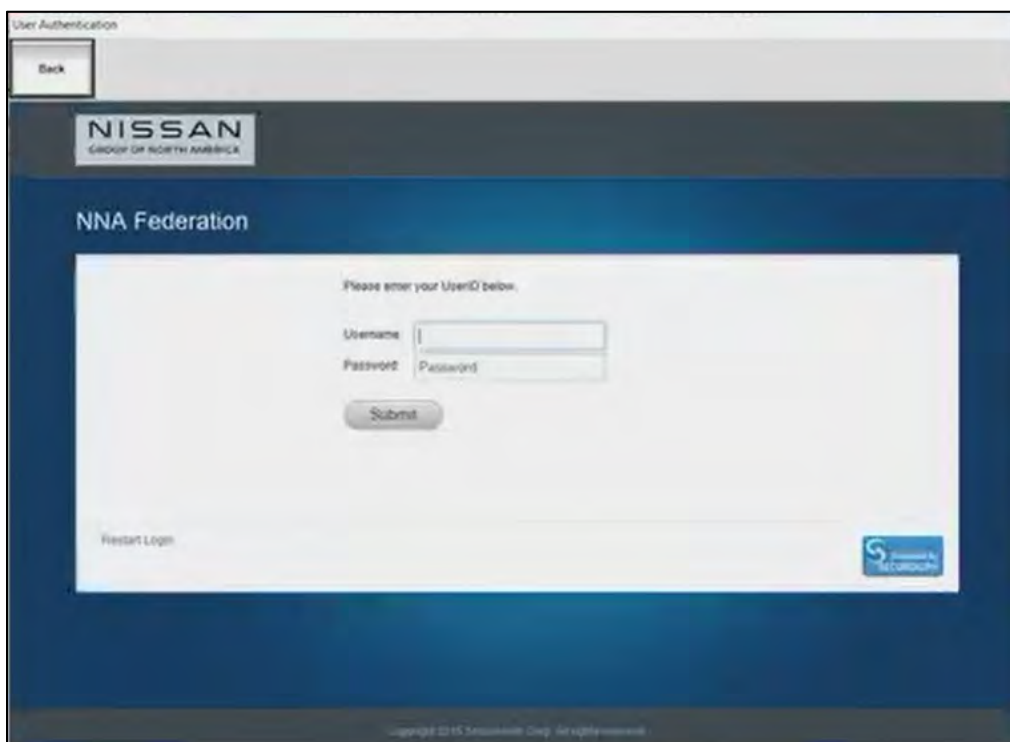- If you do not know your User Name and Password, contact your service manager.

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.
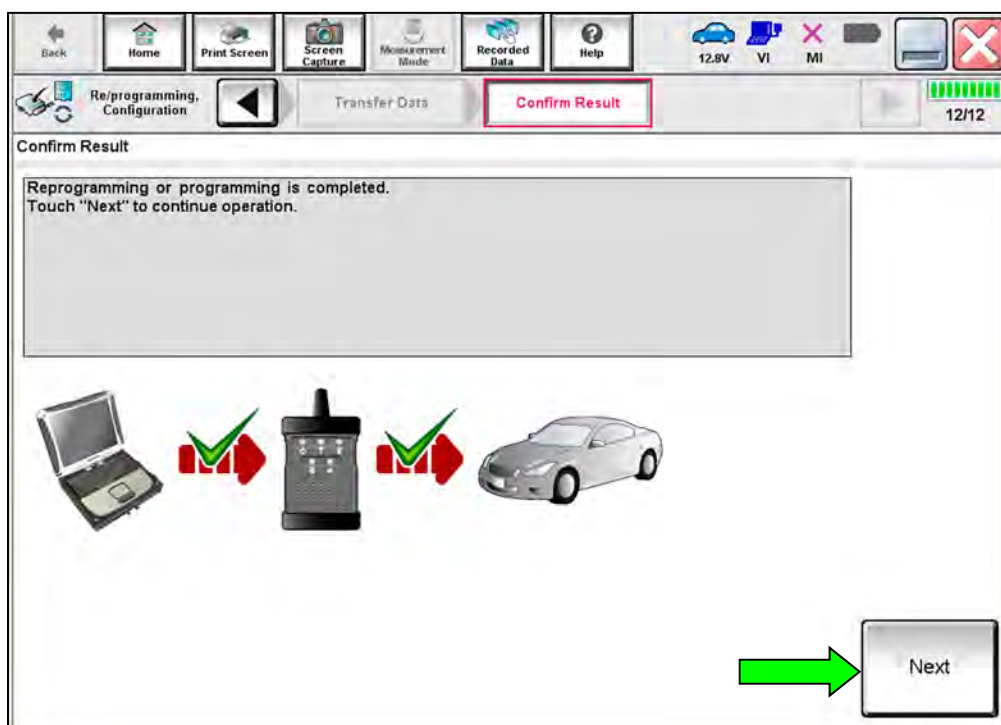

Figure 17

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TCM Recovery:

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

If reprogramming does not 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 retry and follow the on screen instructions.

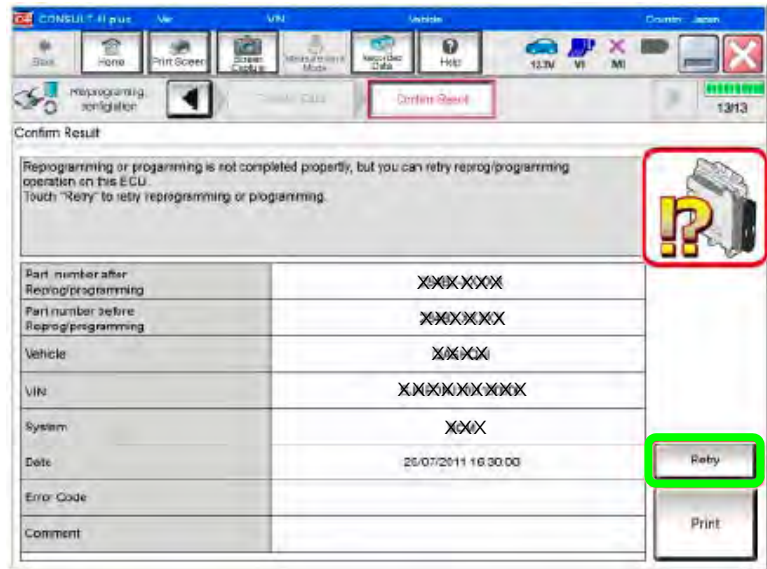- "Retry" may not go through on first attempt and can be selected more than once.

Figure 18

If reprogramming does not 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.

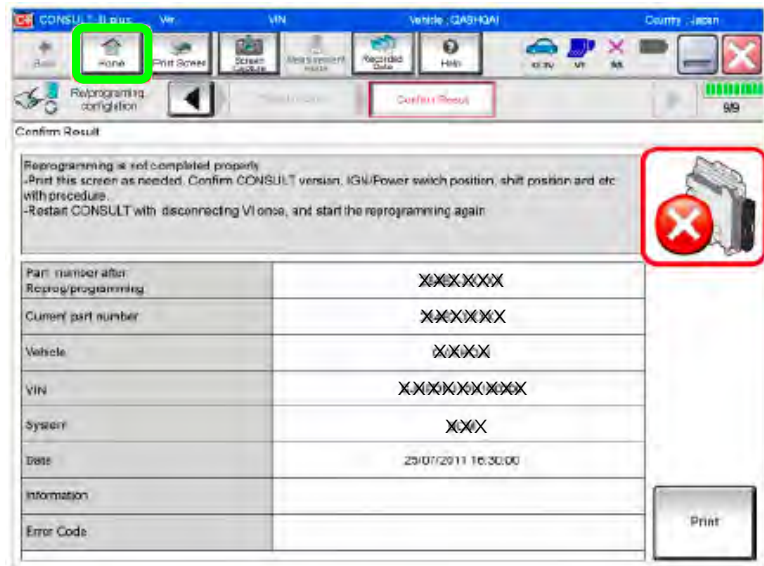- Select Home, and restart the reprogram procedure from the beginning.

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.
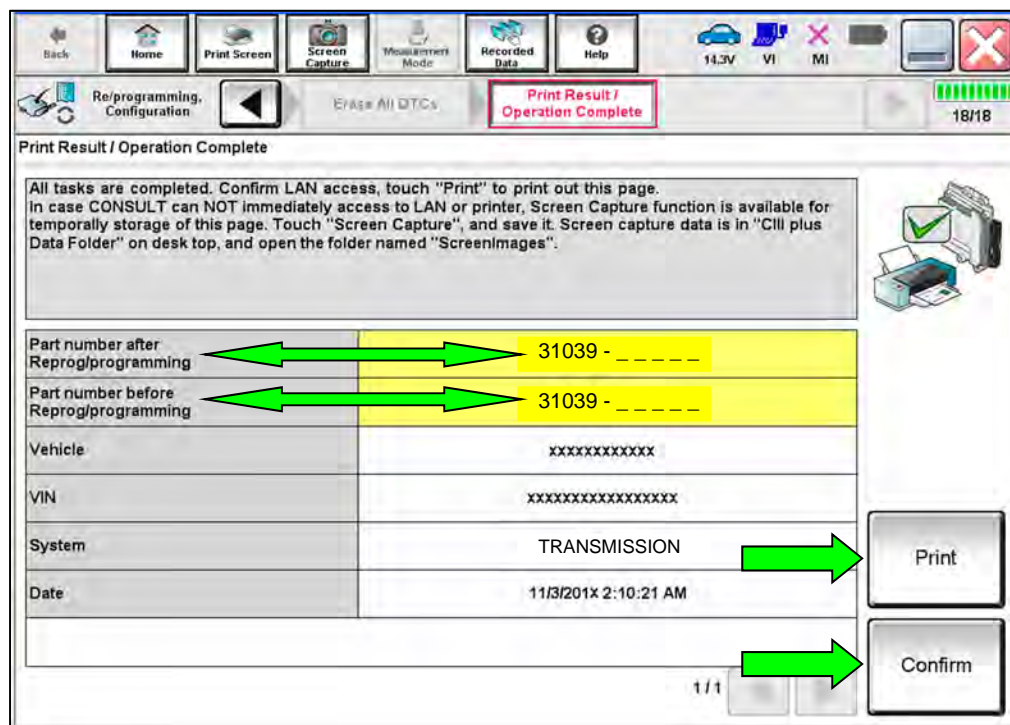
23. Select **Confirm**.

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