



SERVICE BULLETIN

Classification: AT18-001	Reference: NTB18-015	Date: February 16, 2018
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2016-2018 TITAN XD; VEHICLE WILL NOT MOVE AND/OR A/T OIL TEMP LIGHT FLASHING

APPLIED VEHICLES: 2016-2018 Titan XD (A61)
APPLIED ENGINE: Cummins 5.0L V8 Diesel
APPLIED TRANSMISSION: 6AT – RE6R01A

IF YOU CONFIRM

The customer reported the following:

While driving in conditions where wheel slip can occur (such as dirt, sand, mud, snow/ice, etc.), or while driving/sitting in traffic at slow speeds or idle:

- The red A/T Oil Temp lamp began flashing,



And/or

- Vehicle would not move (the engine felt like it had no power),

And

- Vehicle operation returned to normal when the engine/transmission was allowed to cool.

ACTION

1. Compare the vehicle's current TCM part number to the part number listed in **Table A** on page 7.
2. If the current TCM part number matches a part number listed in **Table A**, follow the instructions in **Table A**.

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.

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.

SERVICE PROCEDURE

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.
- The CONSULT PC is connected to the internet (Wi-Fi, or cable).
- No DTCs are stored.

TCM Reprogramming

1. Connect the plus Vehicle Interface (plus VI) to the vehicle.

CAUTION: Make sure the plus VI is securely connected. If the plus VI connection is loose during reprogramming, the process will be interrupted and the TCM may be damaged.

2. Connect the AC Adapter to the CONSULT PC.

CAUTION: 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.

3. Connect the GR8, set to “Power Supply” mode, to the vehicle battery.

CAUTION: Be sure the GR8 is connected securely to the battery. Make sure the battery voltage stays between 12.0V and 15.5V during reprogramming. If the battery voltage goes out of this range during reprogramming, the TCM may be damaged.

4. Turn OFF all external Bluetooth® devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI.

CAUTION: Make sure to turn OFF all external Bluetooth® devices. If Bluetooth® signal waves are within range of the CONSULT PC and the VI during reprogramming, reprogramming may be interrupted and the TCM may be damaged.

5. Turn the ignition ON with the engine OFF.

- **The engine must not start or run during the reprogramming procedure.**

6. Turn OFF all vehicle electrical loads such as exterior lights, interior lights, HVAC, blower, rear defogger, audio, NAVI, seat heater, steering wheel heater, etc.

IMPORTANT: Make sure to turn OFF all vehicle electrical loads. Make sure the battery voltage stays between 12.0V and 15.5V during reprogramming. If the battery voltage goes out of this range during reprogramming, the TCM may be damaged.

7. Turn ON the CONSULT PC.

8. Confirm the plus VI is recognized.
 - The **Serial No.** will display when the plus VI is recognized.
9. Select **Re/programming, Configuration**.

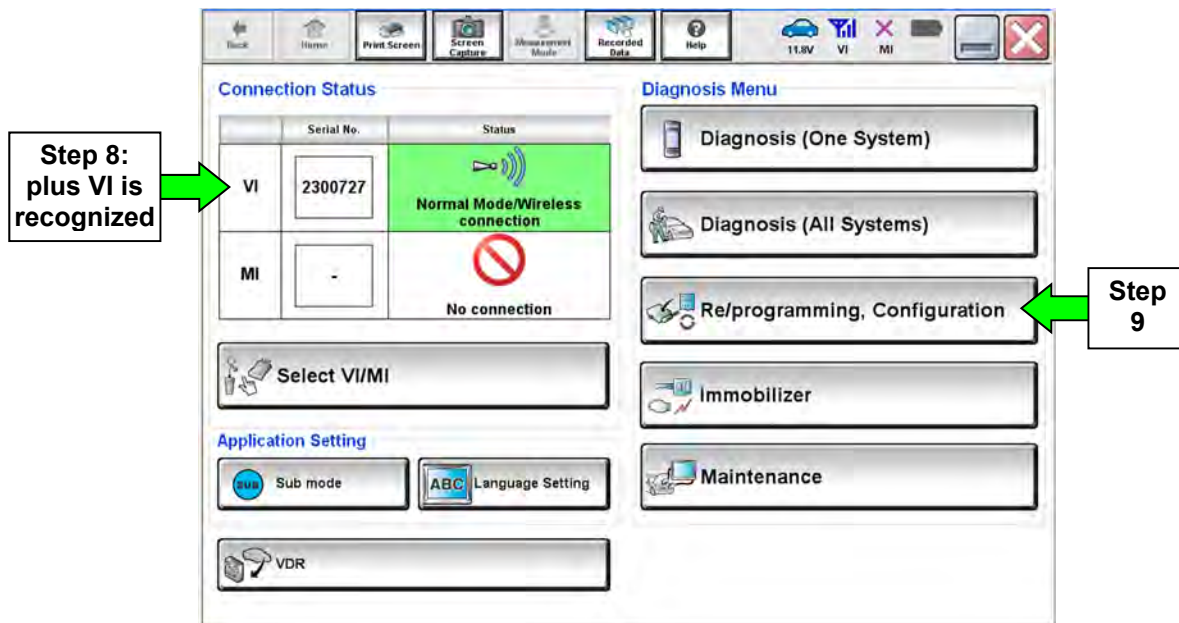


Figure 1

10. Use arrows (if needed) to view and read all precautions.
11. Check the box confirming the precautions have been read.
12. Select **Next**.

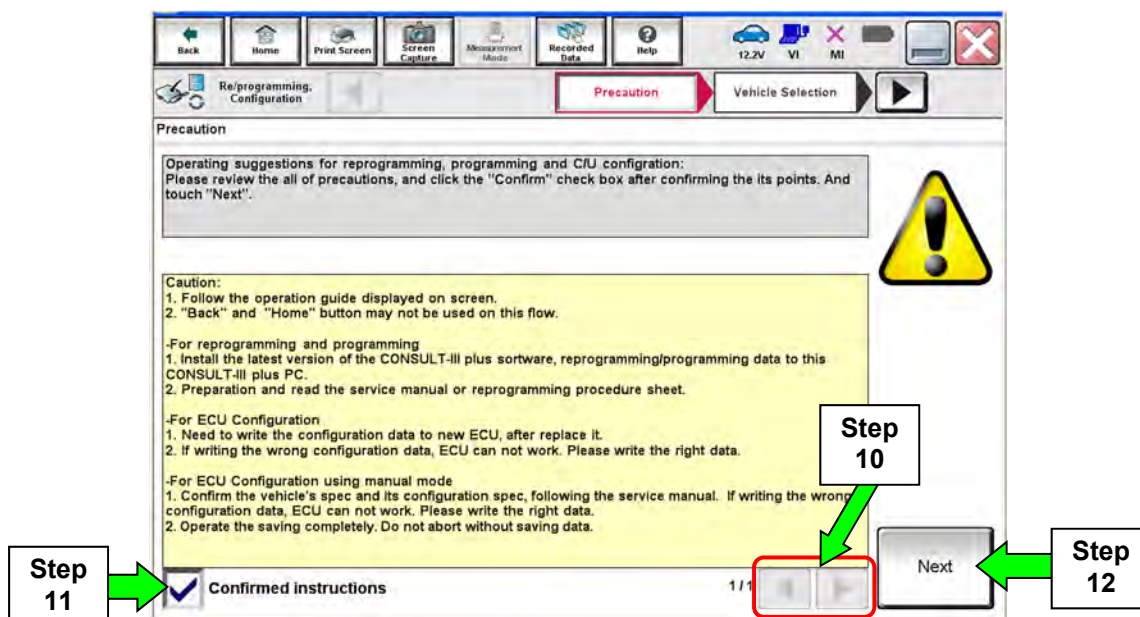


Figure 2

13. Select **Nissan**, **Vehicle Name**, and then the correct **Model Year**.

- If the screen in Figure 3 does not display, skip to step 14.

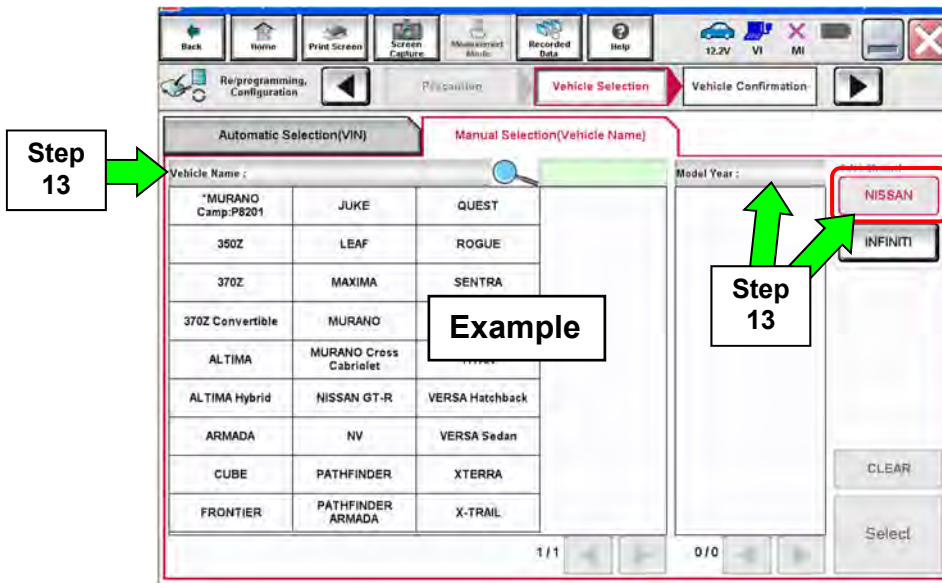


Figure 3

14. Make sure **VIN or Chassis #** matches the vehicle VIN.

15. If the correct VIN is displayed, select **Confirm**.

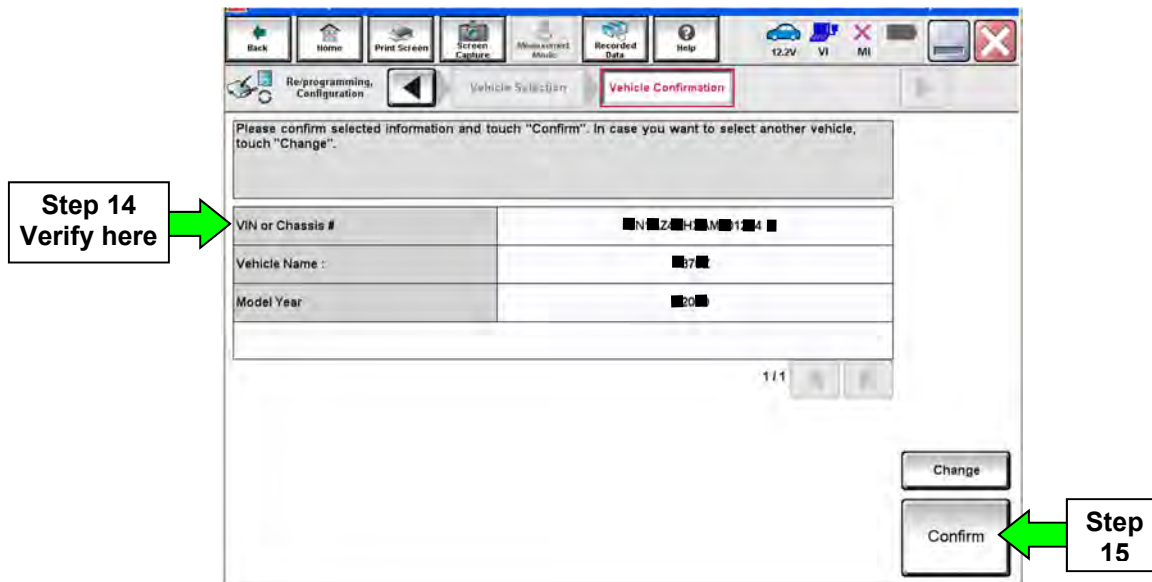


Figure 4

16. Select **Confirm**.

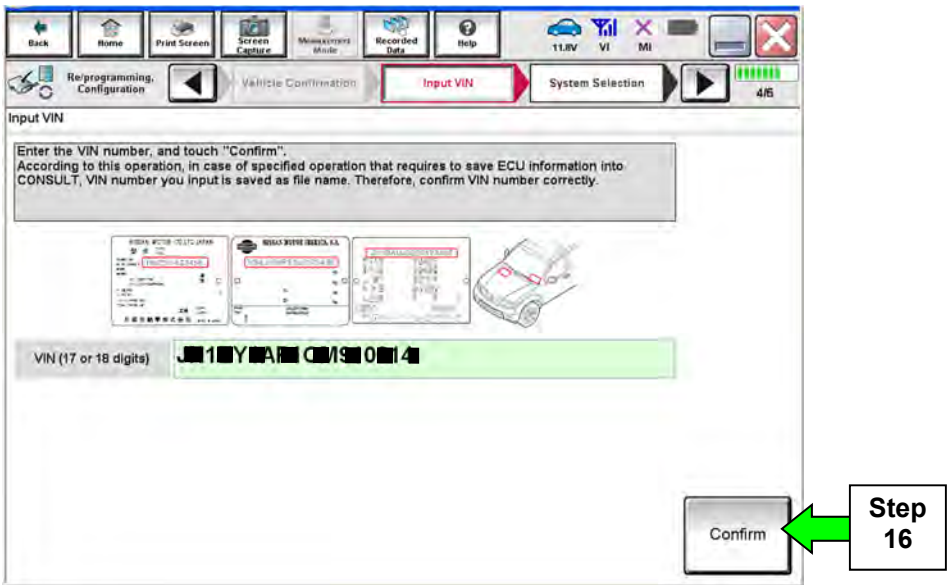


Figure 5

17. Select **TRANSMISSION** on page 2.

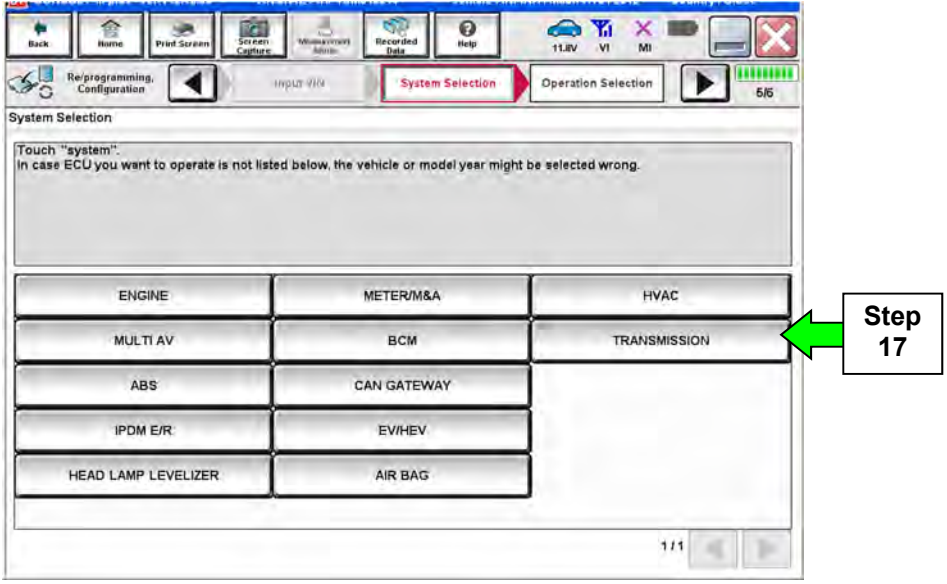


Figure 6

18. Select Reprogramming.

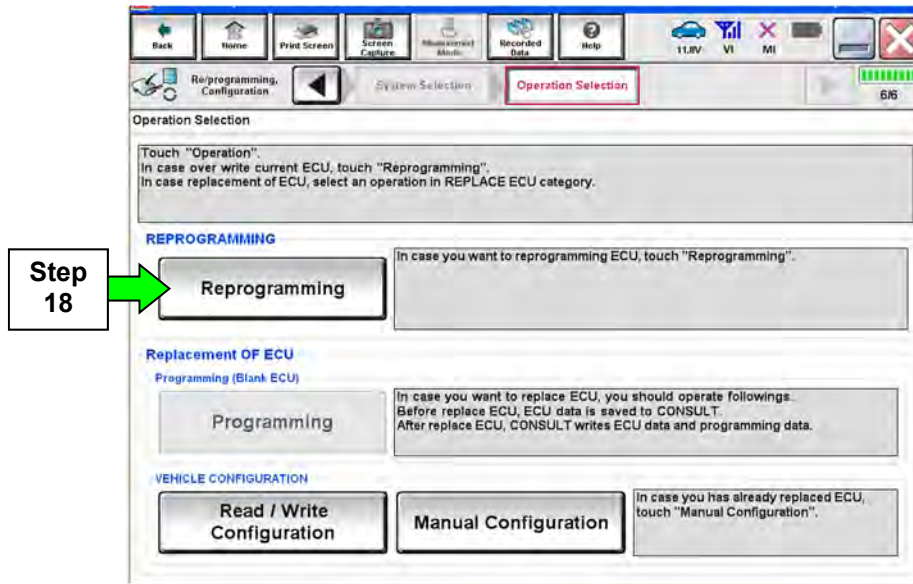


Figure 7

19. When you get to the screen shown in Figure 8, confirm TCM reprogramming applies as follows.

- Find the TCM Part Number and write it on the repair order.

NOTE: This is the current TCM Part Number (P/N).

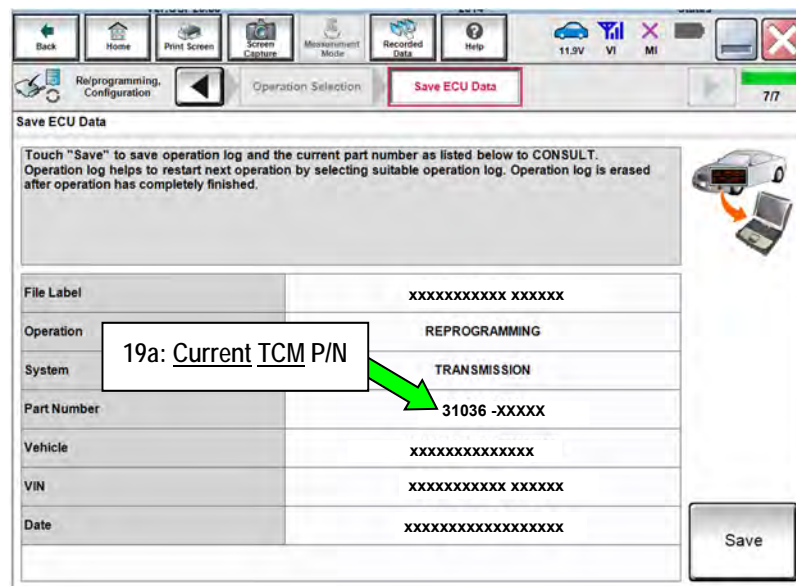


Figure 8

- Compare the P/N you wrote down to the numbers in the **Current TCM Part Number** column in **Table A** on the next page.
 - If there is a match, follow the instructions in **Table A**.
 - If there is not a match, TCM reprogramming does not apply.

Table A

Current <u>TCM</u> Part Number: 31036 -	Instructions
EZ02B, EZ02D, EZ03B, EZ03D	1. Complete TCM Reprogramming. 2. Perform Transmission Calibration.
EZ04B, EZ04D, EZ05B, EZ05D, EZ06B, EZ06D	1. Complete TCM Reprogramming.

20. Select **Save**.

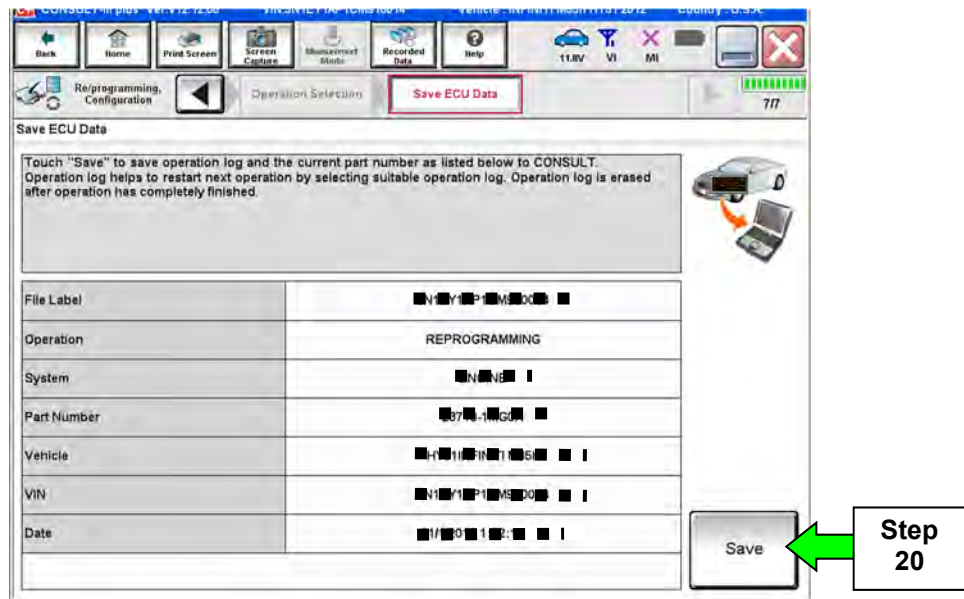


Figure 9

21. Use arrows (if needed) to view and read all precautions.

22. Check the box confirming the precautions have been read.

23. Select **Next**.

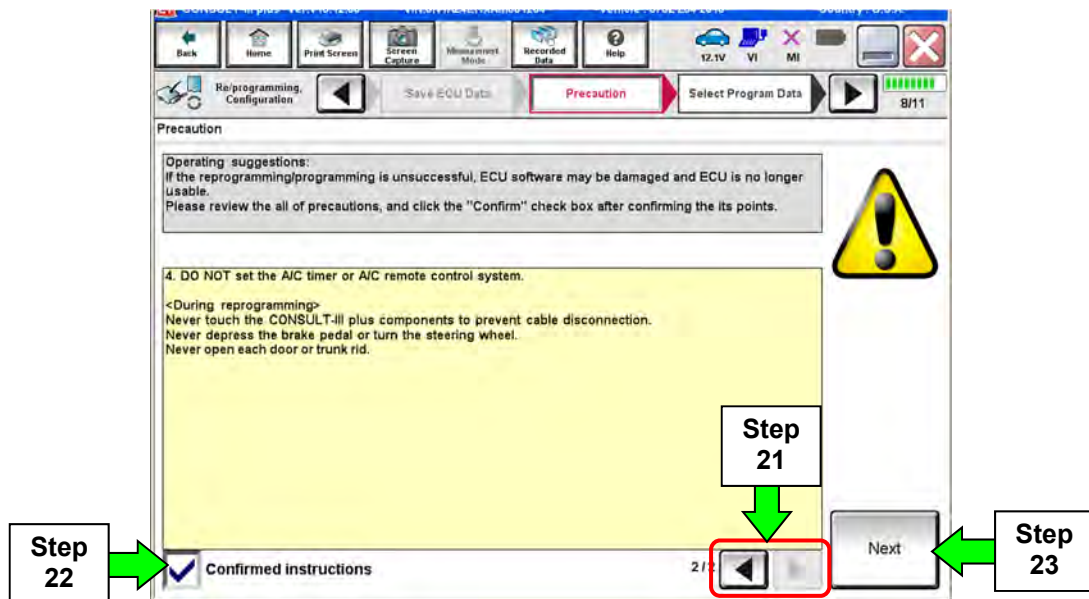


Figure 10

24. Read the **Current Part Number** and **Part Number After Reprogramming**. They should be different.

25. Select **Next**.

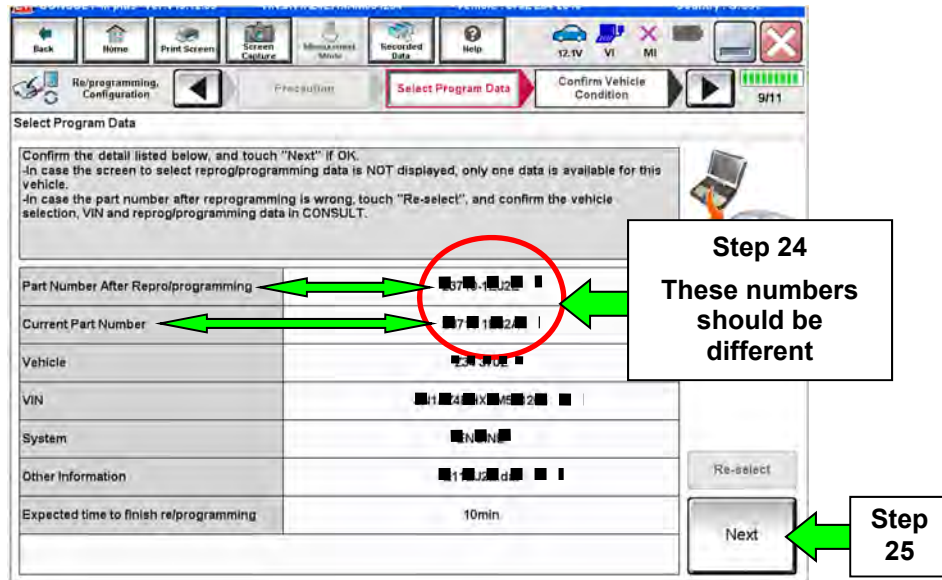


Figure 11

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 12 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 blank (no reprogramming listed), it means there is no reprogramming available for this vehicle. Close C-III plus and refer back to ASIST for further diagnosis.

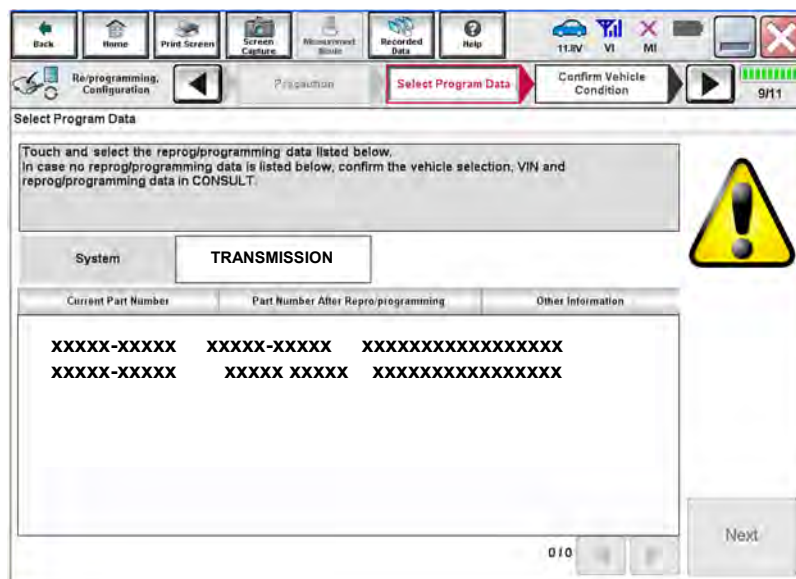


Figure 12

26. Make sure **OK** is highlighted **green** (battery voltage must be between **12.0** and **15.5 Volts**).

27. Select **Next**.

IMPORTANT: Battery voltage must stay between **12.0** and **15.5 Volts** during reprogramming or ECM reprogramming may be interrupted and ECM may be damaged.

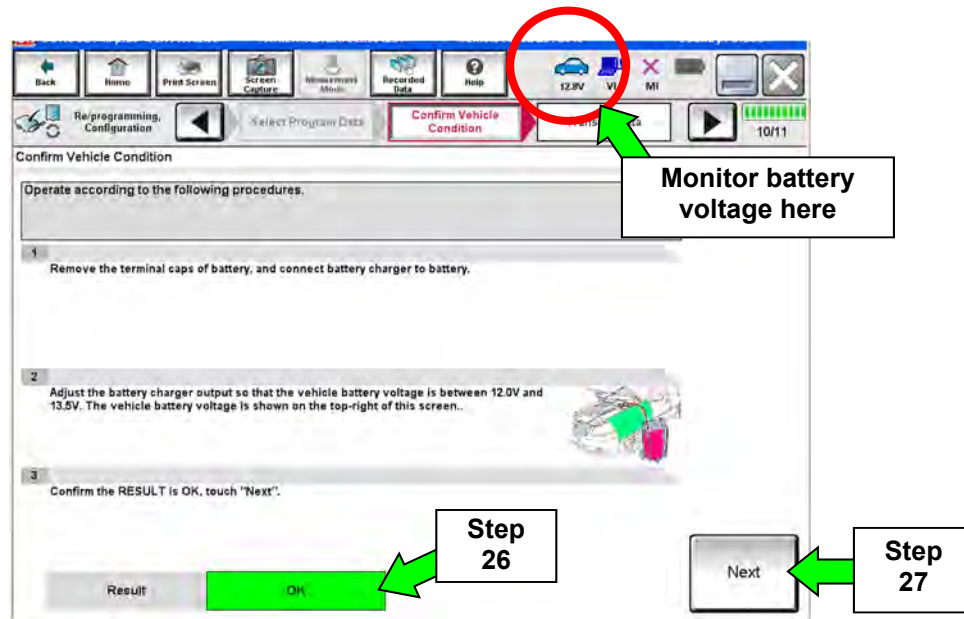


Figure 13

28. Change the ignition to **ACC mode**.

- Make sure the IGN status judgement changes to **OK**. See Figure 15.

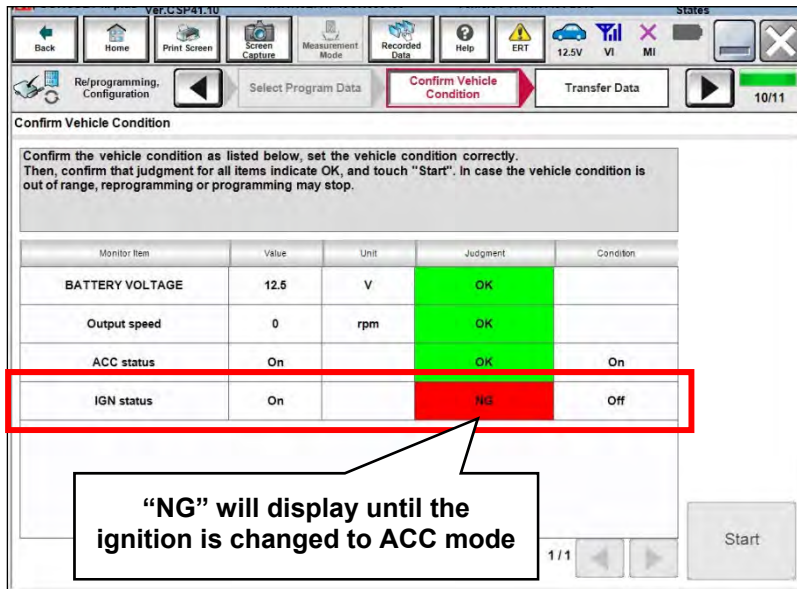


Figure 14

NOTE: In the next step, the reprogramming process will begin when **Start** is selected.

29. Select **Start**.

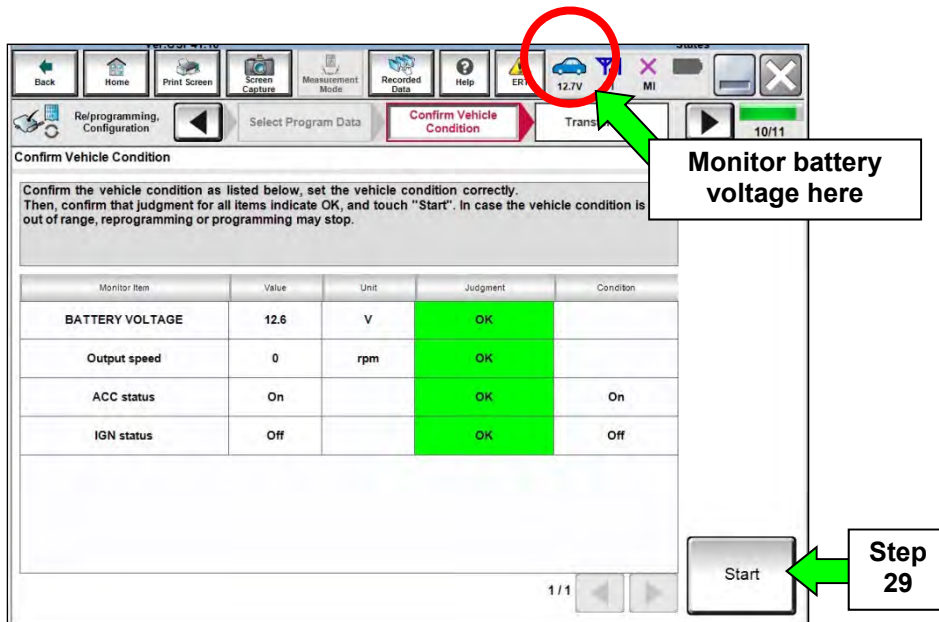


Figure 15

- If a screen display asking for “Please select your user group”, select USA/CANADA Dealers.
- Before reprogramming will start, you will be required to enter your User Name and Password.
 - 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.

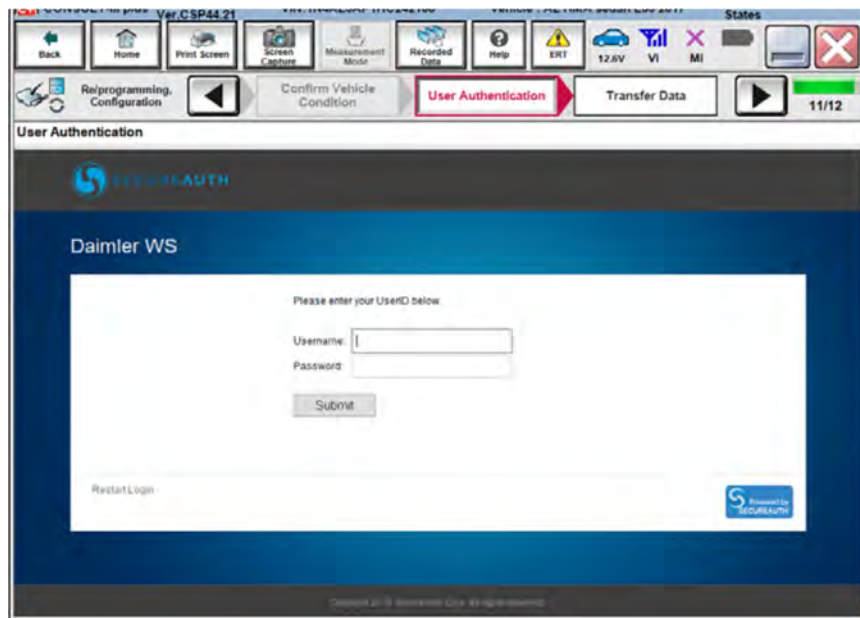


Figure 16

30. Wait for both progress bars to complete.

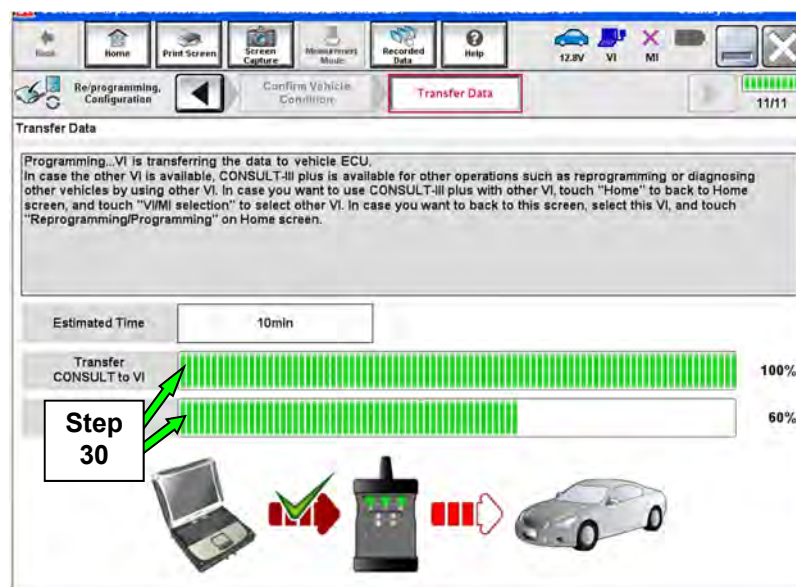


Figure 17

31. When the screen in Figure 18 displays, reprogramming is complete.

NOTE: If the screen in Figure 18 does not display (indicating that reprogramming did not complete), refer to **TCM Recovery** on the next page.

32. Disconnect the GR8 (battery charger) from the vehicle.

33. Select **Next**.

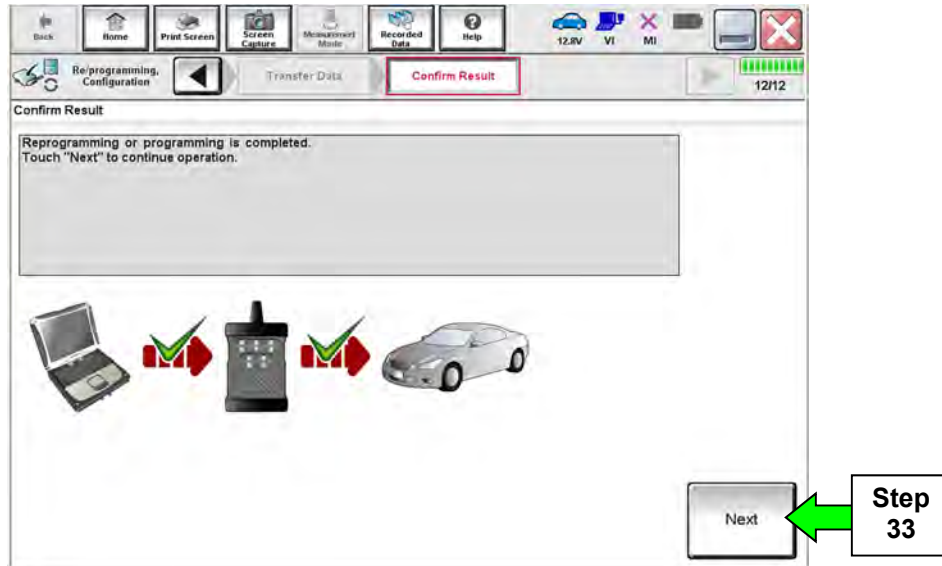


Figure 18

34. Follow the on-screen instructions and change the ignition to **ON mode**.

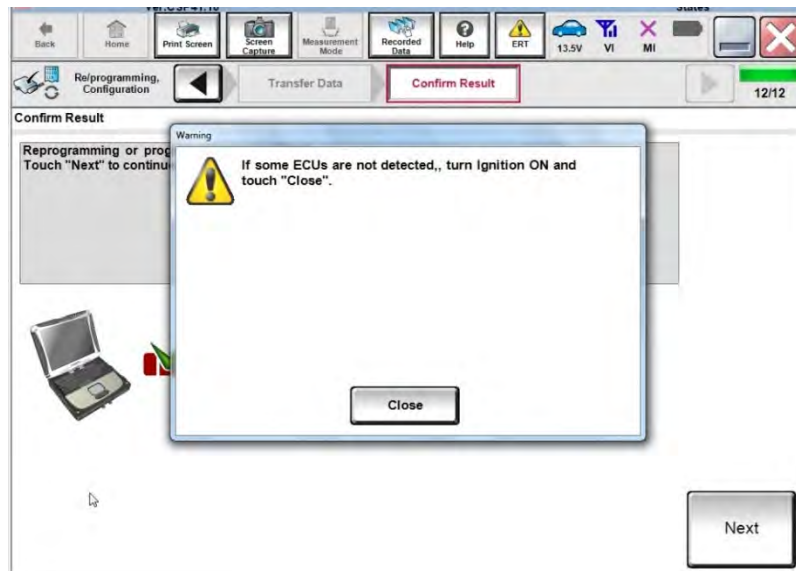


Figure 19

NOTE:

- In the next step (page 15), you will perform DTC erase.
- This operation is required before C-III plus will provide the final reprogramming confirmation report.

TCM Recovery

Do not disconnect the plus 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 20:

- Check battery voltage (12.0 - 15.5 V).
- Ignition is ON, engine 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.

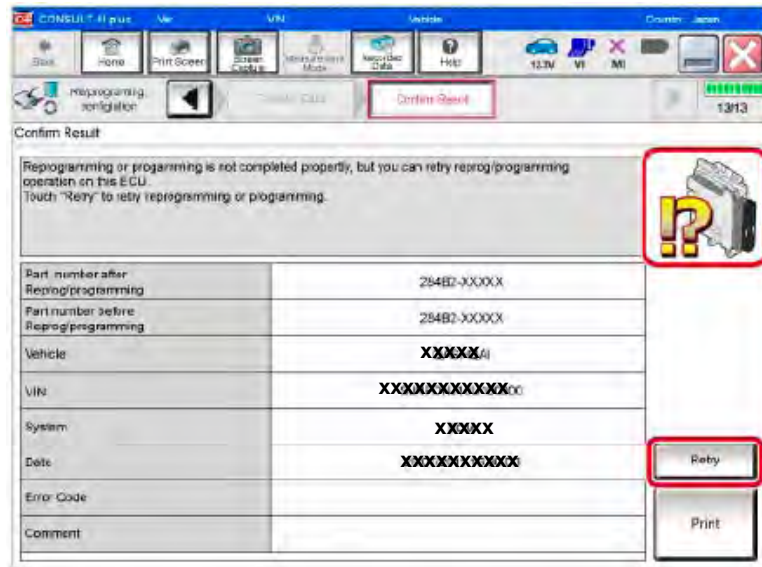


Figure 20

If reprogramming does not complete and the “X” icon displays as shown in Figure 21:

- Check battery voltage (12.0 - 15.5 V).
- CONSULT A/C adapter is plugged in.
- Ignition is ON, engine 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.**

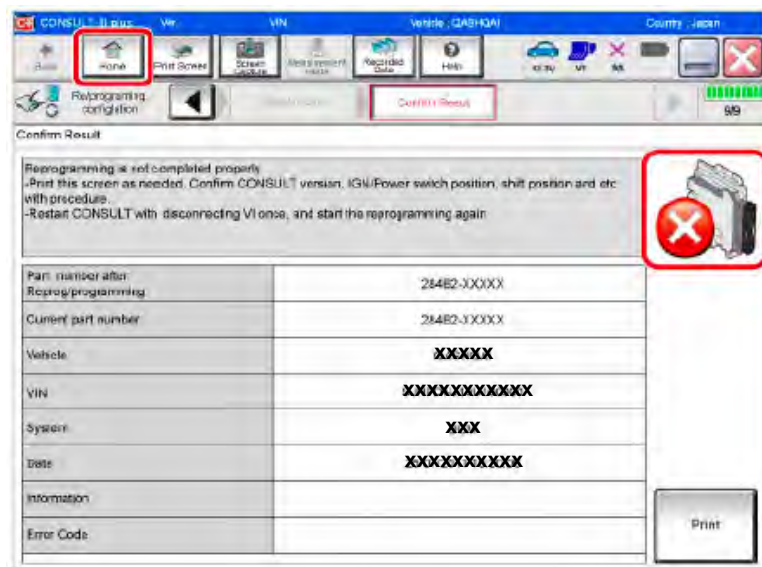


Figure 21

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

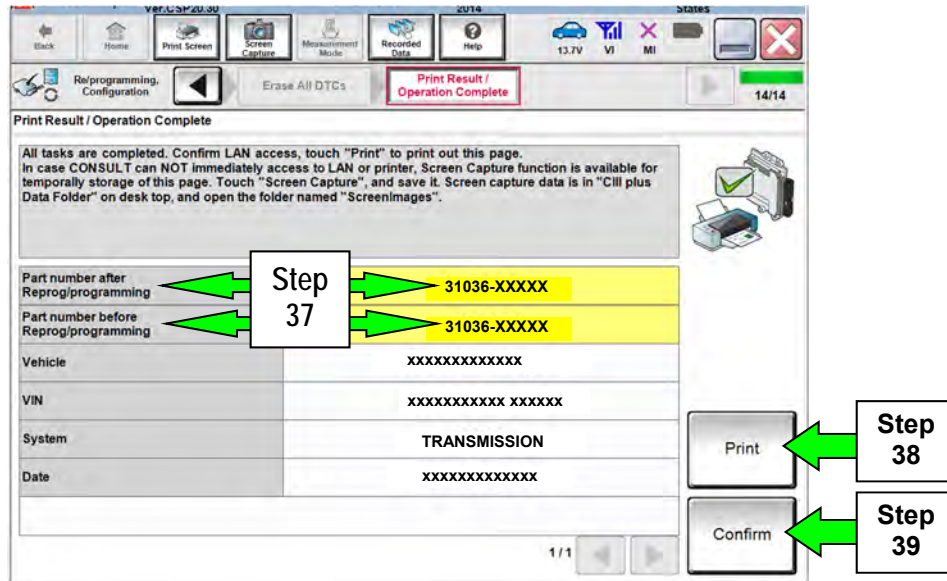


Figure 22

Continue to the next page.

Transmission Calibration (If needed)

NOTE: Before continuing, refer to page 7 to confirm Transmission Calibration is required.

1. Make sure the transmission is warm.
 - It may be helpful to take the vehicle for a drive (approximately 10 minutes) to warm the transmission.
2. Confirm the transmission fluid level is correct.
 - Follow the procedure for Checking the AT Fluid Level in the Electronic Service Manual (ESM), section **TM-Transaxle & Transmission**.
3. Set the parking brake.
4. Chock the wheels.
5. Connect the CONSULT PC to the vehicle with the plus VI.
6. Start the engine.
7. Turn the A/C system OFF.
8. Start CONSULT-III plus (C-III plus).

9. When the plus VI is recognized, select **Diagnosis (One System)**.

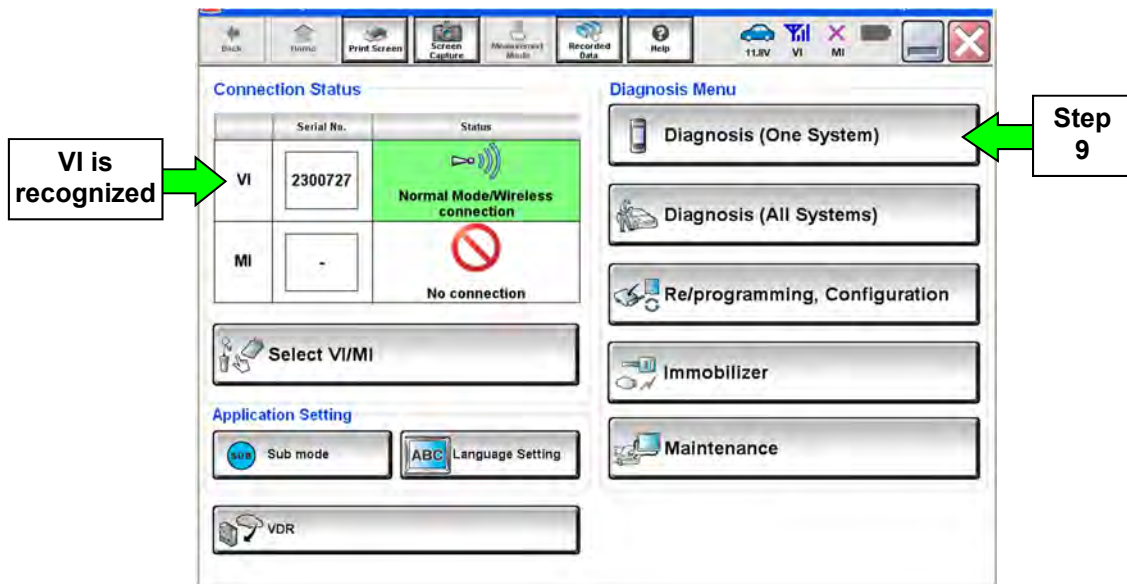


Figure 23

10. Navigate C-III plus to **Transmission > Work support** (see Figure 24).

11. Select **Transmission adjustment**.

12. Select **Start**.

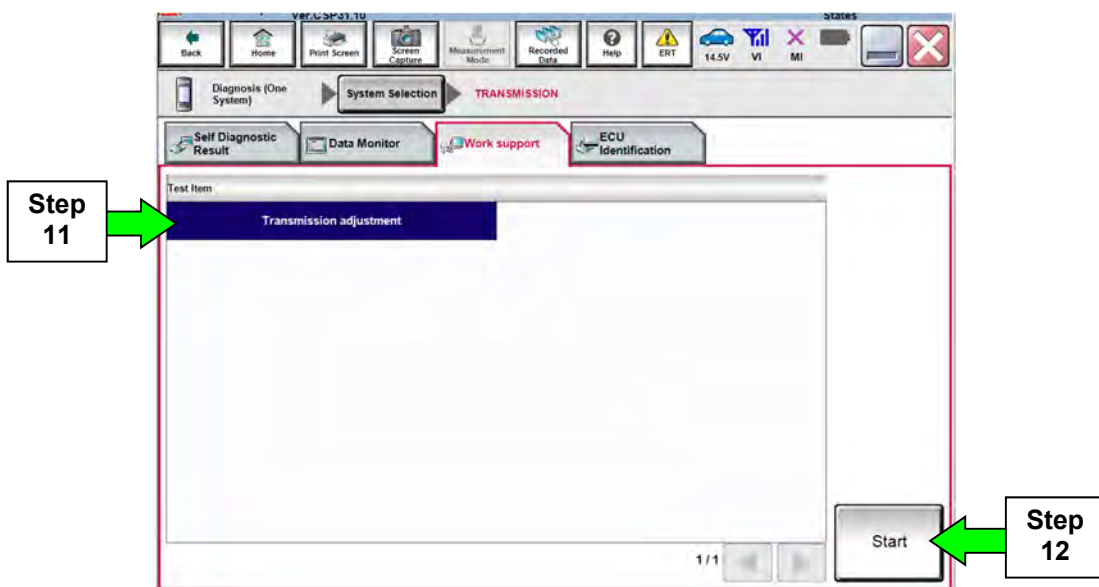


Figure 24

NOTE:

- While performing the Transmission Adjustment procedure, a screen like the one in Figure 25 will display.
- Review the call outs in Figure 25 explaining the information on this screen.
- This information will be helpful as you perform the Transmission Adjustment procedure.
- While C-III plus is performing automatic adjustments, you will hear and feel the transmission changing gear position.

The screenshot shows a diagnostic tool interface for Transmission Adjustment. At the top, there are navigation buttons: Back, Home, and Print Screen. Below these are icons for a car, a signal strength indicator, a battery level indicator, and a close button. The main title is "Work support : Transmission adjustment".

Instructions for current step or action:

If the procedure stops or is interrupted, the action needed to continue the procedure will be displayed here.

Scroll to see all instructions for current step or action.

Four adjustment procedures will be performed. Satisfy the following conditions during adjustment.
- Output speed: 0 rpm - Brake switch: ON
- Transmission fluid temperature: 50°C (122°F) - 90°C (194°F)
To next page.

Current status: Waiting

MONITOR

Shift position	P
Transmission fluid temp	49 °C
Output speed	0 rpm
Engine speed (control)	625 tr/min
Brake switch (control)	Off

Figure 25

Arrows will turn blue indicating procedure progress.

The interface includes a "Start" button on the right and an "End" button at the bottom right. A progress indicator shows "1 / 2" with left and right arrow buttons. A status bar at the bottom features a sequence of steps: "Press 'Start'" (with a blue arrow), "P ⇄ D", "Engine speed 1500rpm" (with a downward arrow), "D ⇄ R", "Engine speed 1500rpm" (with a downward arrow), "R ⇄ P", and "Press 'End'".

NOTE: There are 4 adjustment procedures within the Transmission Adjustment.

First Adjustment Procedure

13. Confirm the following conditions (refer to the C-III plus screen):

- Shift position: D
- Transmission fluid temperature: 75°C (167°F) – 90°C (194°F)
- Output speed: 0 RPM
- Engine speed (control): 600 tr/min (RPM) or more
- Brake switch (control): ON

14. When the above conditions are met, select **Start**.

- Current status will change from Waiting to **EXECUTING**.

NOTE: If current status indicates EXECUTING, wait (about 3 minutes) for the first adjustment procedure to complete.

15. Wait for the first adjustment procedure to complete (about 3 minutes).

- When complete, current status will change to **Waiting**.

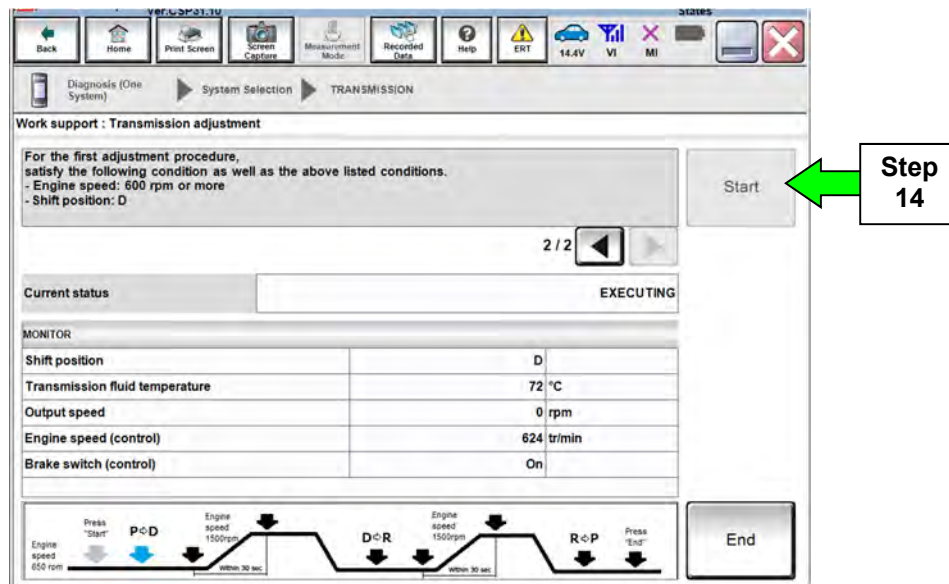


Figure 26

Second Adjustment Procedure

16. Confirm the following conditions (refer to the C-III plus screen):

- Shift position: D
- Transmission fluid temperature: 75°C (167°F) – 90°C (194°F)
- Output speed: 0 RPM
- Engine speed (control): 1,250 – 1,750 tr/min (RPM)
- Brake switch (control): ON

17. When the above conditions are met:

- Current status will change from Waiting to **EXECUTING**.
- **Keep the RPM about 1,500** so that when the RPM drops, caused by transmission shifts, it will not interrupt the procedure.
- If the procedure is interrupted, follow the on screen instructions (which includes turning the ignition OFF and back ON), and then start from the beginning (step 13).

NOTE: Keeping the rpm in the correct range is a bit challenging, and may take a few tries (practice) to get it right.

18. Wait for the second adjustment procedure to complete.

- When complete, current status will change to **Waiting**.

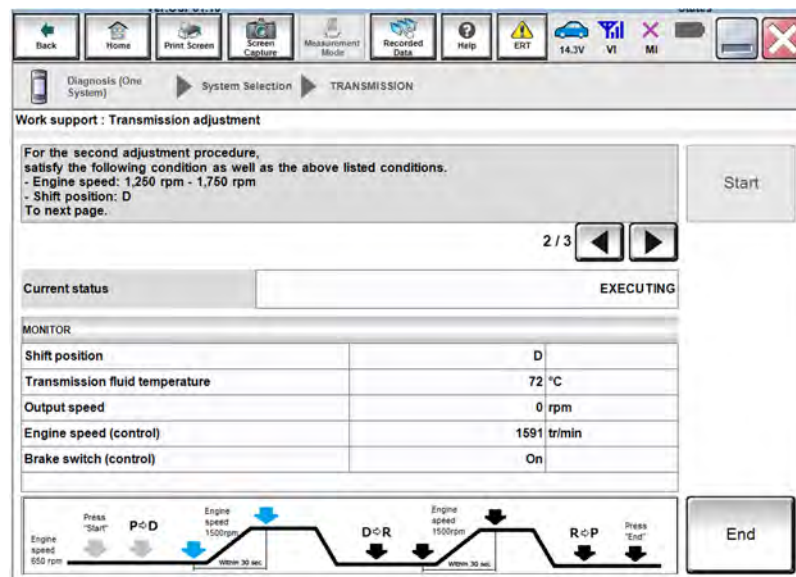


Figure 27

Third Adjustment Procedure

19. Confirm the following conditions (refer to the C-III plus screen):

- Shift position: **R**
- Transmission fluid temperature: 75°C (167°F) – 90°C (194°F)
- Output speed: 0 RPM
- Engine speed (control): 600 tr/min (RPM) or more
- Brake switch (control): ON

20. When the above conditions are met:

- Current status will change from Waiting to **EXECUTING**.

21. Wait for the third adjustment procedure to complete.

- When complete, current status will change to **Waiting**.

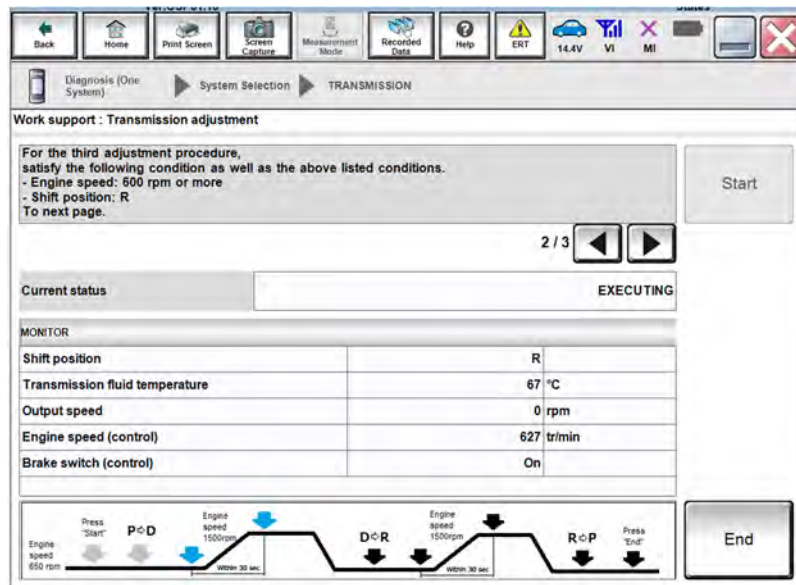


Figure 28

Fourth Adjustment Procedure

22. Confirm the following conditions (refer to the C-III plus screen):

- Shift position: R
- Transmission fluid temperature: 75°C (167°F) – 90°C (194°F)
- Output speed: 0 RPM
- Engine speed (control): 1,250 – 1,750 tr/min (RPM)
- Brake switch (control): ON

23. When the above conditions are met:

- Current status will change from Waiting to **EXECUTING**.
- **Keep the RPM about 1,500** so that when the RPM drops, caused by transmission shifts, it will not interrupt the procedure.
- If the procedure is interrupted, follow the on screen instructions and start from the beginning (step 13).

24. Wait for the fourth adjustment procedure to complete.

- When complete the screen in Figure 30 (next page) will display.

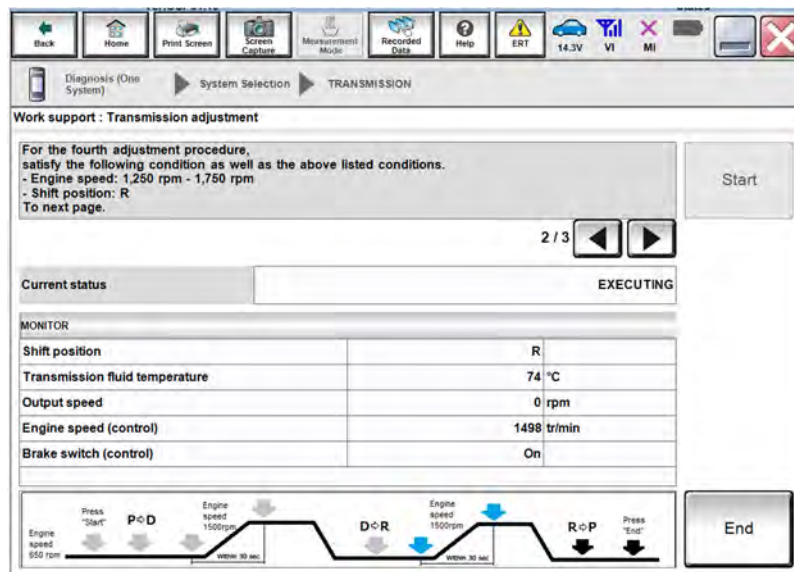


Figure 29

25. When the Transmission Adjustment has completed (see Figure 30), shift the transmission to Park.

26. Turn the ignition OFF.

27. Select **End**.

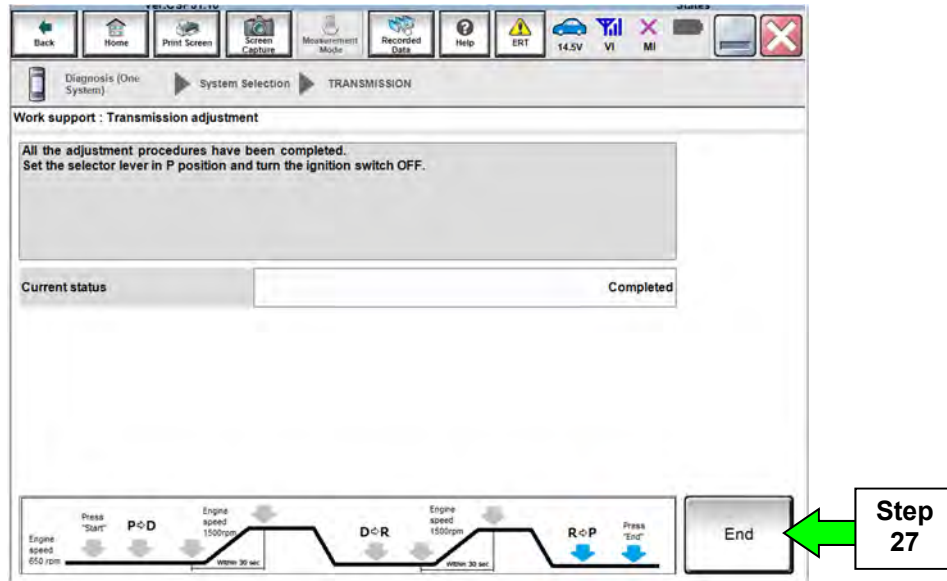


Figure 30

28. Close C-III plus.

29. Disconnect the plus VI from the vehicle.

30. Test drive the vehicle and make sure it operates correctly and the MIL is OFF.

- If the MIL comes ON, go back to ASIST for further diagnostic information.
- Diagnosis and repairs beyond TCM and ECM reprogramming are not covered by this bulletin.

The information on page 25 is provided as Service Information for the customer and is not part of the Service Procedure in this bulletin.

**** Print the last page (25) and provide it to the customer. ****

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram Transmission Control Module	(1)	JX56AA	ZE	32	0.6

(1) Refer to the electronic parts catalog (FAST) and use the TCM assembly part number (31036 - XXXXX) as the Primary Failed Part (PFP).

OR

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram Transmission Control Module and Perform Adjustment	(1)	JX57AA	ZE	32	1.1

(1) Refer to the electronic parts catalog (FAST) and use the TCM assembly part number (31036 - XXXXX) as the Primary Failed Part (PFP).



IMPORTANT INFORMATION FOR THE CUSTOMER

- Completing the transmission adjustment procedure has erased **ALL** of the TCM “adaptive learning values” that have accumulated over time. The transmission will shift differently than it did before this procedure was performed (especially for vehicles that have been driven over 1,000 miles).
- The Aisin 6-speed A/T has the ability to enter into a learning mode once the vehicle meets the following criteria:
 - Make sure there are no warnings in the Meter pertaining to reduced power mode such as low fuel or low DEF.
 - Confirm the vehicle is not in Tow Mode. If in Tow Mode, the vehicle will be prevented from entering into the learn mode.
- Learning takes place with upshifts at steady accelerator positions from 1st gear through 5th gear continuously and repeatedly once the above criteria have been met. Improvements occur during repeated upshifts.