**Technical Bulletin**

# SERVICE BULLETIN

| Classification: | Reference: | Date: |
|---|---|---|
| AT16-008 | NTB16-085 | August 25, 2016 |

# ENHANCED DIAGNOSTIC LOGIC FOR CVT

**APPLIED VEHICLES:**  2015-2016 Pathfinder (R52) **with V6 engine only**
2015-2016 Altima Sedan (L33) **with V6 engine only**
2015-2016 Quest (E52)
2015-2016 Murano (Z52)
2016-2017 Maxima (A36)

## IF YOU CONFIRM

The customer reports a transmission judder (shake, shudder, single or multiple bumps or vibration).

**NOTE:** A new diagnostic logic has been established to enhance the diagnostic process by storing diagnostic trouble codes (DTCs) on Applied Vehicles.

The new DTCs are:

**P17F1** (CVT_JUDDER [C/U INSPECTION])
**P17F0** (CVT_JUDDER [T/M INSPECTION])

## ACTION

1. Refer to page 4, step 6 in the **SERVICE PROCEDURE** to confirm this bulletin applies to the vehicle you are working on.

2. If this bulletin applies, reprogram the **TCM** (Transmission Control Module).

**SERVICE PROCEDURE**

**NOTE:**

- Most instructions for reprogramming with C-III plus are displayed on the CONSULT PC screen.

- If you are not familiar with the reprogramming procedure, *click here*. This will link you to the "CONSULT-III plus Reprogramming" general procedure.

<div style="border:1px solid black;">

**CAUTION:**

- Connect the GR8 to the vehicle battery set to "power supply" mode.
  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 plus VI. If Bluetooth® signal waves are within range of the CONSULT PC or plus VI during reprogramming, reprogramming may be interrupted and the TCM may be damaged.

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1. Connect the CONSULT PC to the vehicle to begin the reprogramming procedure.

2. Start C-III plus.

3. Wait for the plus VI to be recognized.

   - The serial number will display when the plus VI is recognized.

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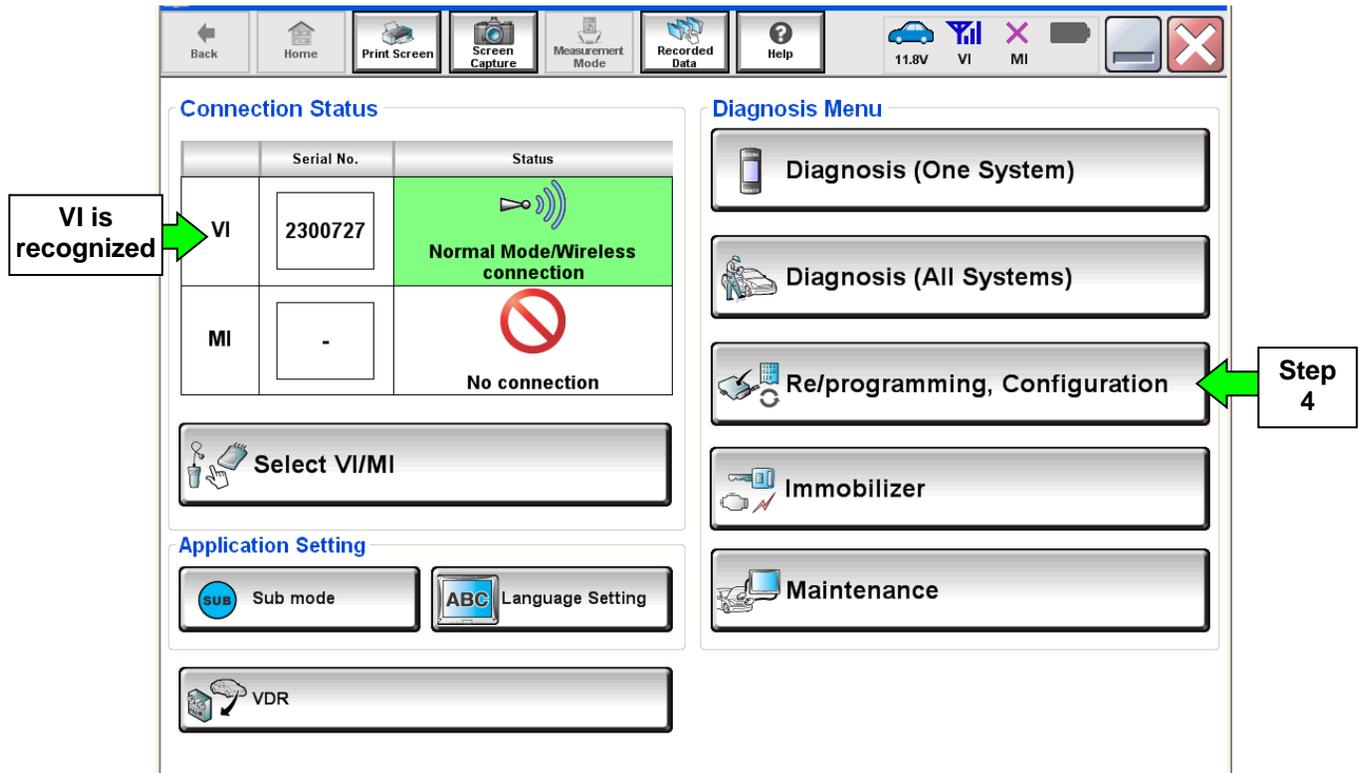


Figure 1

5. Follow the on-screen instructions and navigate the C-III plus to the screen shown in Figure 2 on the next page.

6. When you get to the screen shown in Figure 2, confirm this bulletin applies as follows.

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

   **NOTE:** This is the <u>current</u> TCM Part Number (P/N).
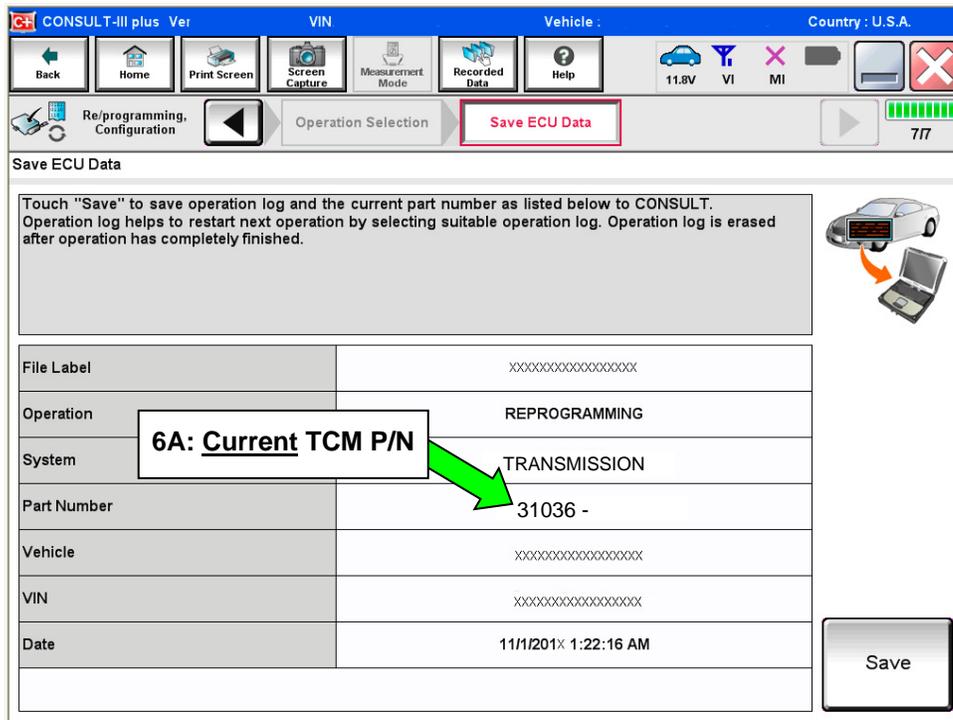


Figure 2

   B. 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 <u>match</u>, this reprogramming <u>applies</u>. Continue with the reprogramming procedure.

   - If there is <u>not a match</u>, this bulletin does not apply.

**Table A**

| Model | Model Year | Current TCM Part Number Before Reprogramming: 31036 - |
|---|---|---|
| Pathfinder with V6 engine | 2015 | 9PB0A, 9PB0B, 9PB0C, 9PB0E, 9PB3A |
| | 2016 | 9PF0A, 9PF1A, 9PF1B |
| Altima with V6 engine | 2015 | 9HP0A, 9HP0B, 9HP0C |
| | 2016 | 3TF0A, 3TF0B |
| Murano | 2015 | 5AA0A, 5AA0D, 5AA0E 5AA1A, 5AA2A |
| | 2016 | 5AG0A, 5AG0B |
| Quest | 2015 | 4AY0A |
| | 2016 | 6AX0A, 6AX0B |
| Maxima | 2016 | 4RA0A, 4RA0B, 4RA0C, 4RA0D |
| | 2017 | 9DD0A |

7. 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 3 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. This bulletin does not apply.
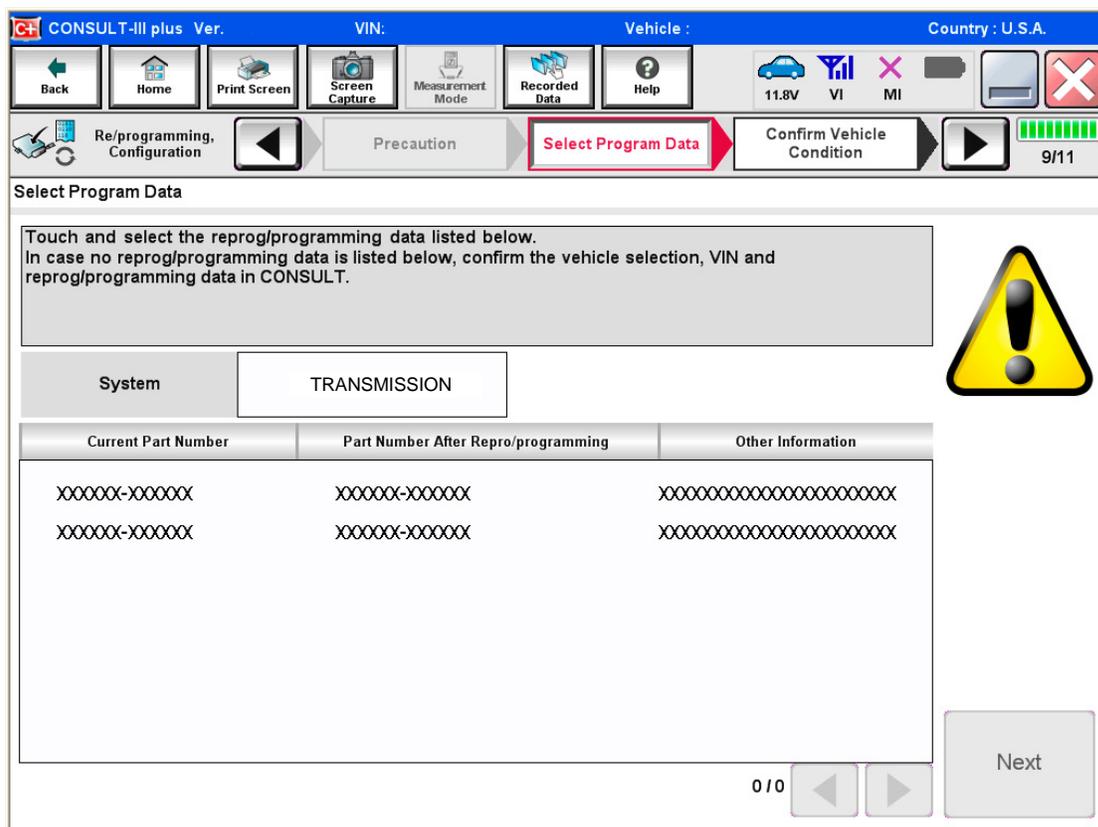


Figure 3

**IMPORTANT:** If C-III plus locks up or freezes at this point or displays "cannot complete reprogramming, the CONSULT PC is set up with User Rights. Reprogramming can be completed with Administrator log in", the TOUGHBOOK settings need to be changed so that Users have full access rights. See your Dealership's IT System Administrator for details.

8. When the screen in Figure 4 displays, reprogramming is complete.

   **NOTE:** If the screen in Figure 4 does <u>not</u> display (indicating that reprogramming did not complete), refer to the information on the next page.

9. Disconnect the battery charger from the vehicle.

10. Select **Next**.
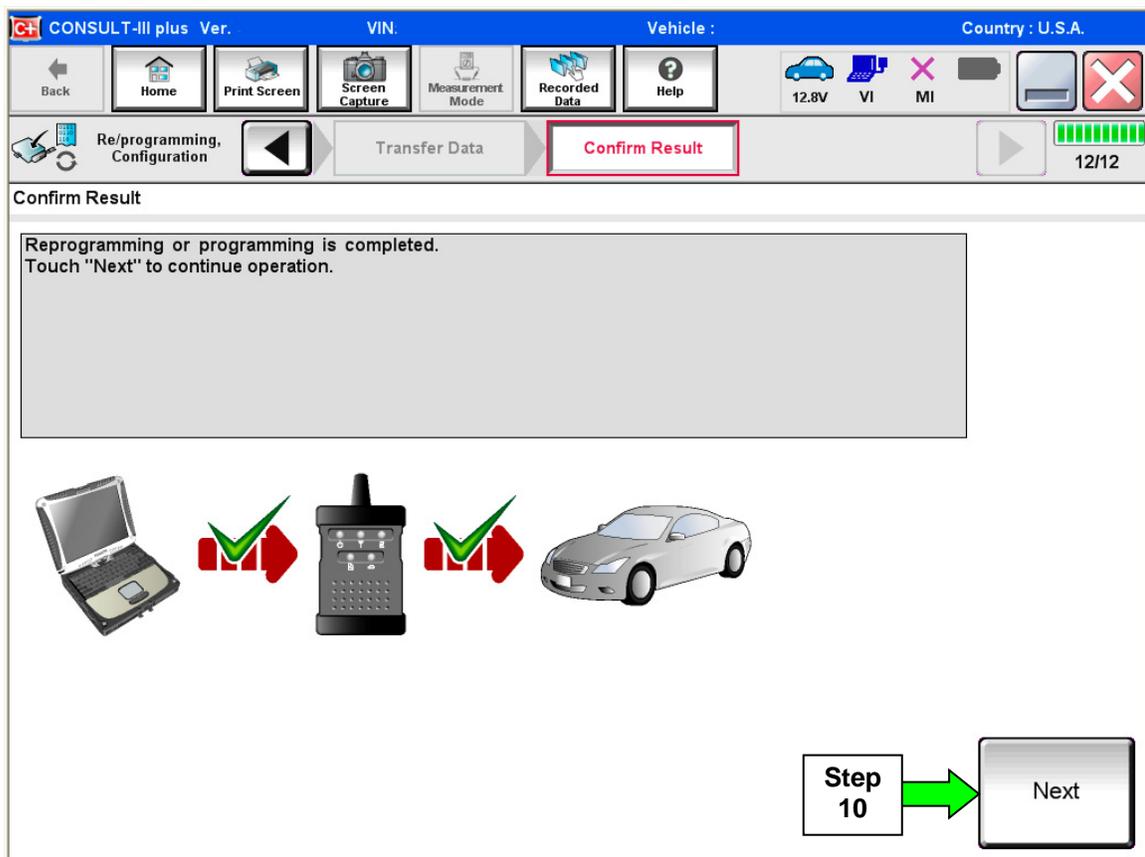


Figure 4

**NOTE:**

- In the next step (page 9), you will perform **Erase All DTCs**.
- DTC erase is required before C-III plus will provide the final reprogramming confirmation report.

**TCM Recovery**

**Do not disconnect 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 5:**

- 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.
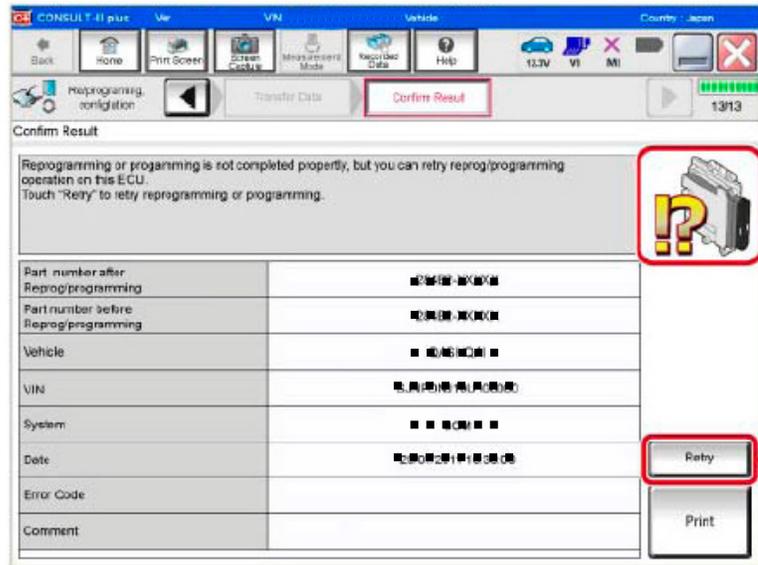


Figure 5

**If reprogramming does not complete and the "X" icon displays as shown in Figure 6:**

- 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 / plus VI cables are securely connected.

- All C-III plus updates are installed.

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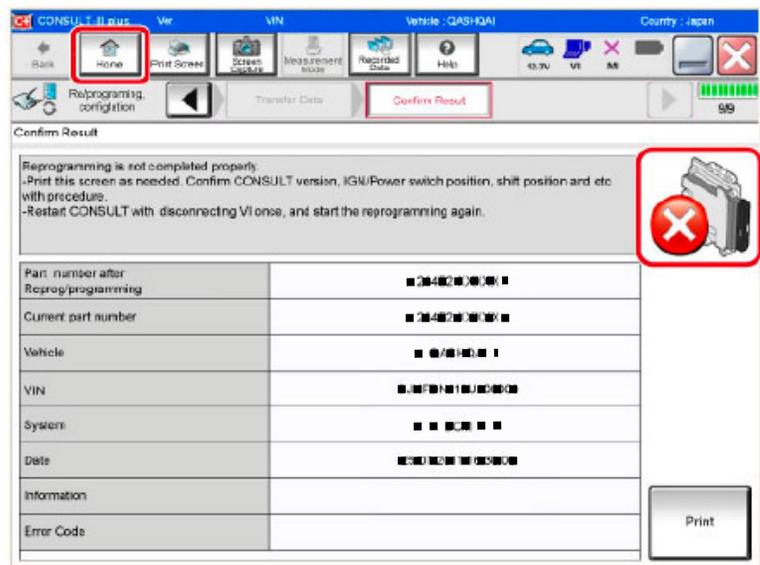


Figure 6

11. Follow the on-screen instructions to **Erase All DTCs**.

12. When the entire reprogramming process is complete, the screen in Figure 7 will display.

13. Verify the before and after part numbers are different.

14. Print a copy of this screen (Figure 7) and attach it to the repair order for warranty documentation.

15. Select **Confirm**.
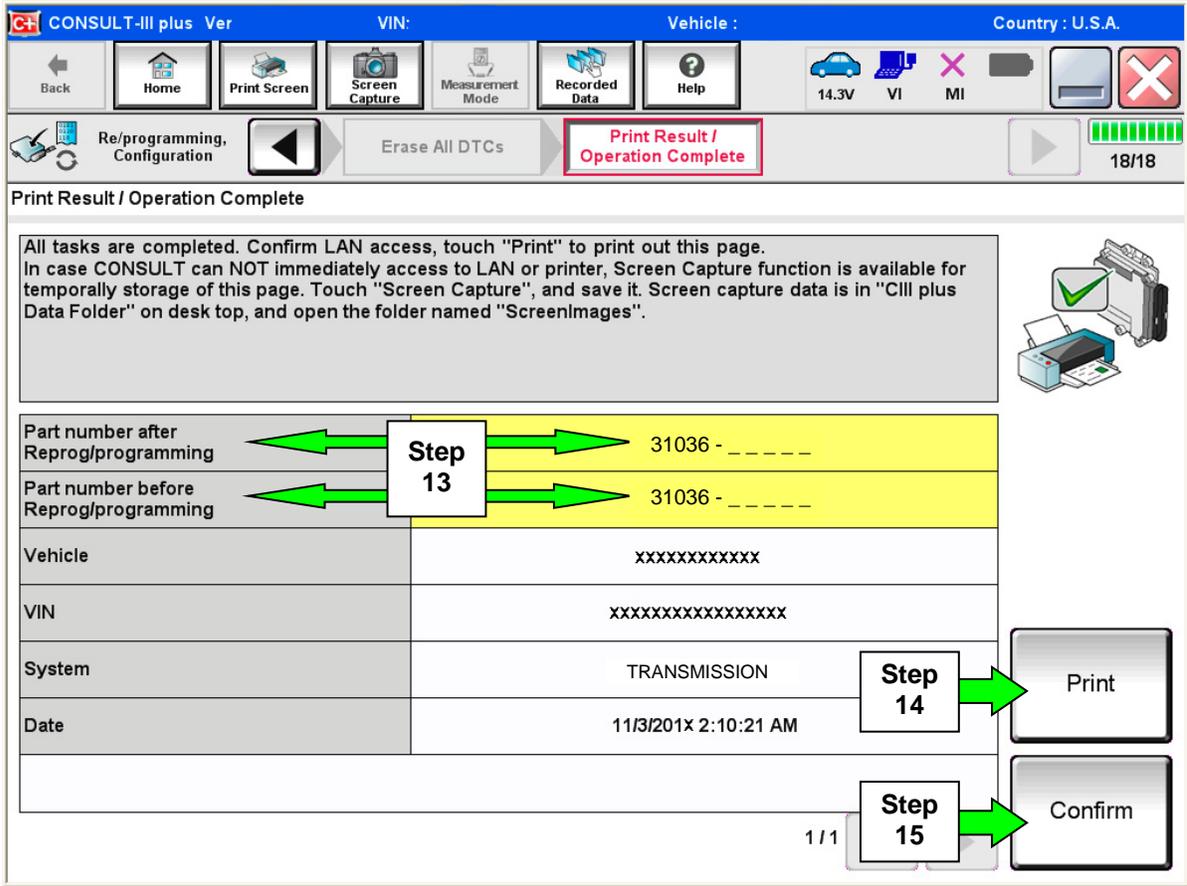


Figure 7

16. Close C-III plus.

17. Turn the ignition OFF.

18. Disconnect the plus VI from the vehicle.

**NOTE:** The Information below is provided as Service Information and is not part of the Service Procedure in this bulletin.

**DTC detection drive pattern for P17F0 / P17F1**

- This new diagnostic logic will monitor conditions in the CVT while the customer is operating their vehicle in their usual daily drive patterns.

- Figure 8, on the next page, illustrate conditions under which judder can be reproduced.

- Specific drive conditions that can be used to test for judder (shake, shudder, single or multiple bumps or vibration) are:

1. Slowly accelerate from a stop (zero mph), applying only slight accelerator pedal **(0% - 10% throttle opening)** until 40 mph is reached.

   - During acceleration, torque converter engagement (full lock up) can occur between 20-35 mph.

2. Prior to torque converter lock up, slowly modulate accelerator pedal:

   A. Decrease accelerator pedal pressure slowly, approaching a closed throttle position.

   B. Smoothly and slowly reapply accelerator pedal pressure back to approximately 10% throttle opening.

**IMPORTANT:**

- Slight grade (climbing hill) may aid in performing the above drive conditions.

- DTC detection logic will require three events before storing a DTC.

Figure 8 below illustrates conditions under which judder can be reproduced.
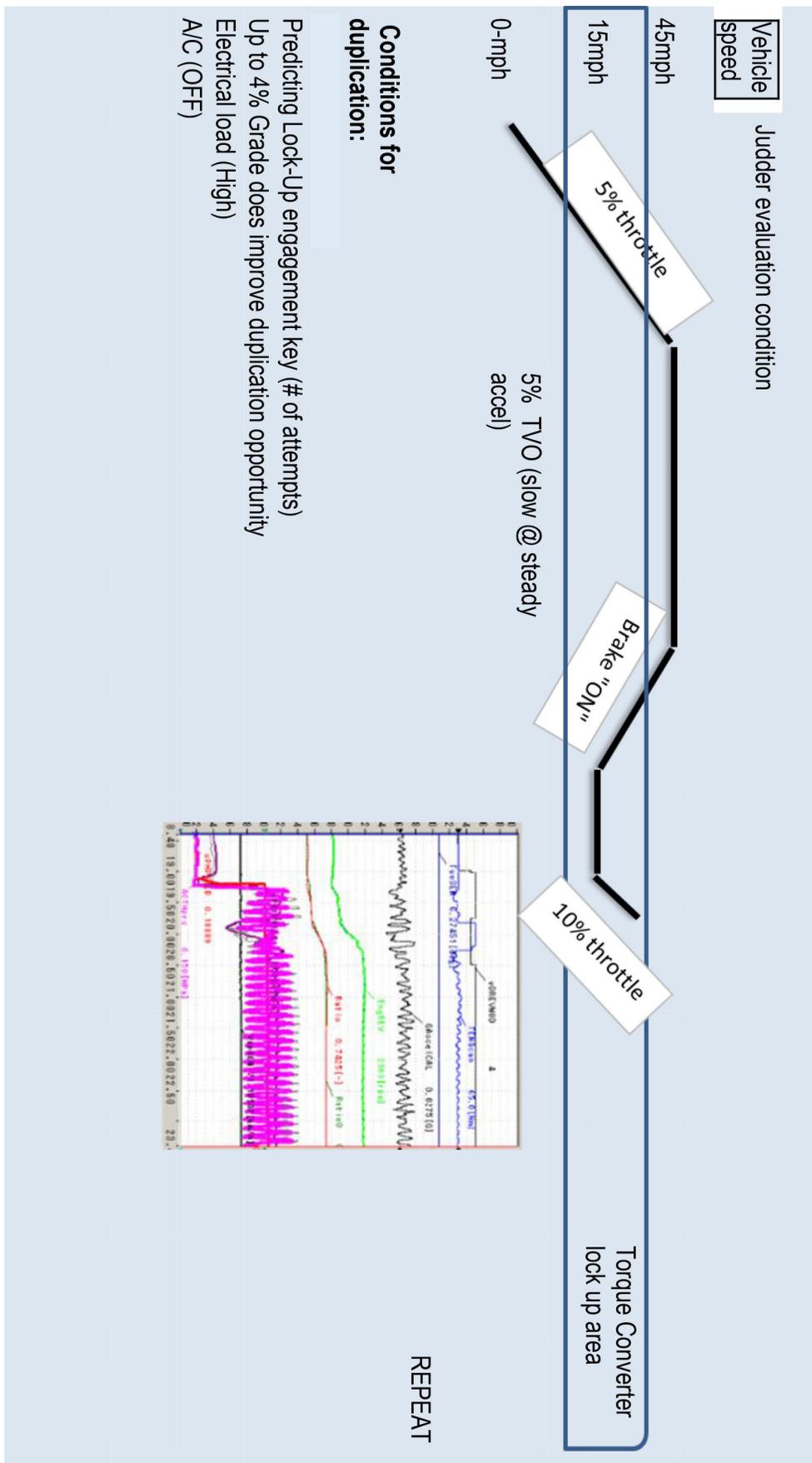


Figure 8

## 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) | JE99AA | ZE | 32 | (2) |

(1) Refer to FAST and use the Transmission Control Module part number (31036-XXXXX) as the PFP.

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