

**Classification:**

AT13-020b

**Reference:**

ITB13-055b

**Date:**

April 26, 2017

## CVT / TCM CALIBRATION DATA "WRITE" PROCEDURE

This bulletin has been amended. APPLIED VEHICLES has been updated. SERVICE INFORMATION has been amended. A REPAIR TABLE has been added. Procedural steps have been added to SERVICE PROCEDURE. Discard all previous versions of this bulletin.

**APPLIED VEHICLES:** 2013 JX35 (L50)  
2014 – 2017 QX60 (L50)

**APPLIED VIN / DATE:** 2013 JX35 – vehicles built after 5N1AL0M(\* \*)DC 343902 / March 26, 2013  
2014 – 2017 QX60 - ALL

**APPLIED TRANSMISSION:** CVT  
**NOTE:** Does not apply to QX60 Hybrid.

### SERVICE INFORMATION

The Service Procedure (starting on page 2) in this bulletin contains the steps to perform TCM Calibration Data "Write" Procedures. These procedures are used when a complete CVT assembly is replaced, a CVT control valve (valve body) is replaced, or a Transmission Control Module (TCM) is replaced.

- Refer to **REPAIR OVERVIEW** on page 2. This is a quick reference to determine which procedures need to be performed.

**NOTE:** The following information may be helpful when performing the TCM Calibration Data "Write" Procedures:

- When starting the calibration "write" procedure in CONSULT-III (C-III) plus, and after selecting START under Work Support, the C-III plus screen may only blink.  
If this occurs, close ASIST (if open), and then select Start again.
  - If there is still no change: reboot the CONSULT PC, keep ASIST closed, and then restart this procedure from step 1.
  - If error "STOPPED, no comm. with ECU" shows when trying to write calibration data, verify that the vehicle is in Park (P).

Infiniti 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 Infiniti retailer to determine if this applies to your vehicle.

## REPAIR OVERVIEW

PROCEDURE	VALVE BODY REPLACEMENT	TCM REPLACEMENT	CVT ASSEMBLY REPLACEMENT
Erase/Write Calibration Data	Required	Not needed	Required
Save/Write Calibration Data	Not needed	Required	Not needed
G-Sensor Learning	Not needed	Required	Not needed
Clutch Point Learning	Required	Required	Not needed
Select Learning	Required	Required	Required

## SERVICE PROCEDURE

**IMPORTANT:** If replacing the TCM only, skip to page 14:

SAVE / WRITE CALIBRATION DATA WHEN REPLACING THE TCM.

## ERASE / WRITE CALIBRATION DATA WHEN REPLACING CVT or VALVE BODY

### NOTE:

- Use the following steps when a CVT assembly, or valve body is replaced.
- Also use the following steps if the TCM was replaced with a CVT assembly or valve body.

### Before starting, make sure:

- ASIST on the CONSULT PC has been freshly synchronized to the current date.
  - All C-III plus software updates (if any) have been installed.
1. Obtain the calibration file disc (**provided with the new CVT or valve body**).
  2. Match the numbers on the disc with the new CVT or new valve body and QR label.
    - See pages 3 and 4 for number matching examples.

If a complete CVT is being replaced; match the following number (calibration file)

- Disc (CD) provided with the new CVT.

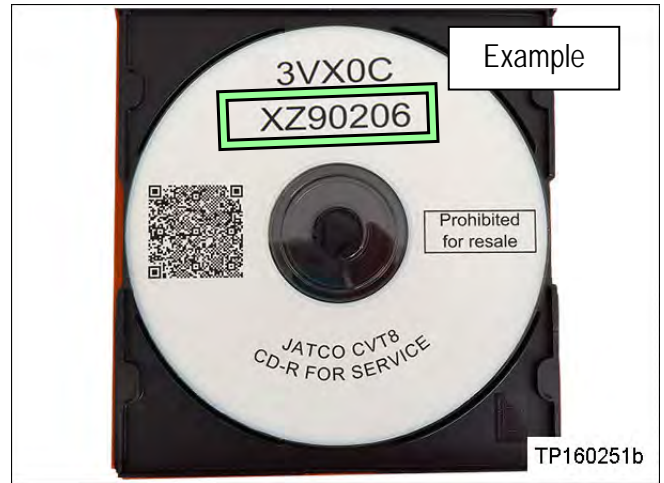


Figure A

- QR label on the new CVT.

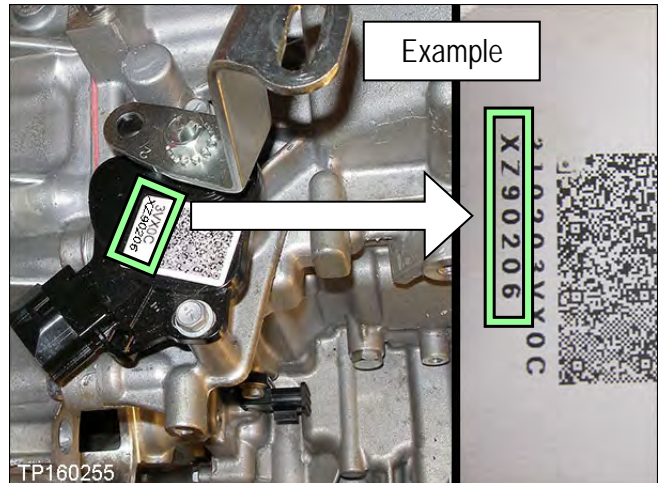


Figure B

- Calibration file number on the CVT case or label.

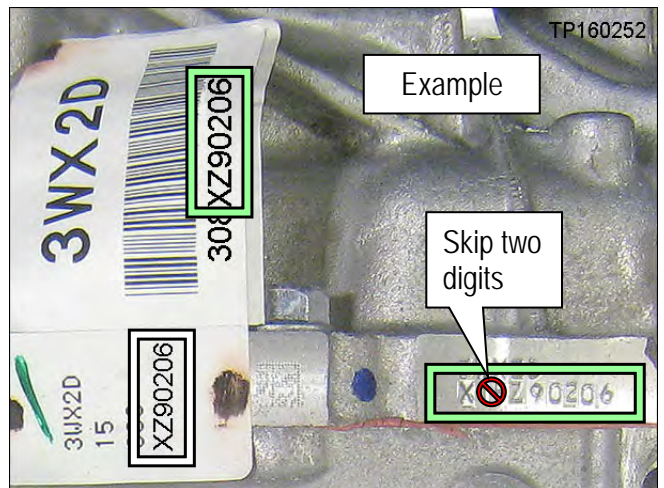


Figure C

**IMPORTANT:** All three of the above numbers must be the same (they must match).

If a new valve body is being replaced; match the following number (calibration file)

- Disc (CD) provided with the new valve body.

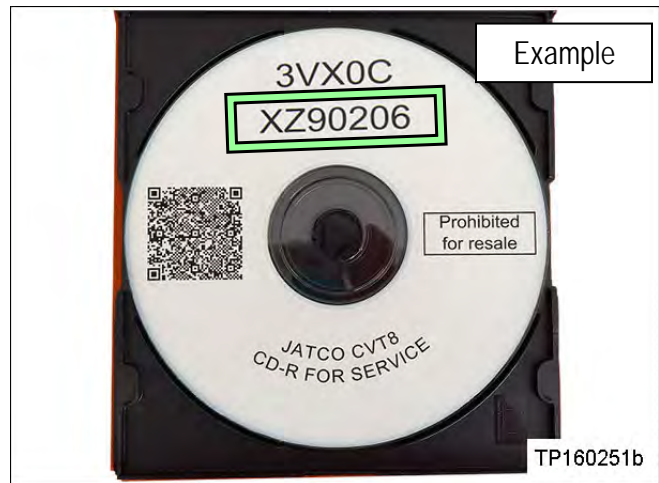


Figure D

- QR label provided with the new valve body.

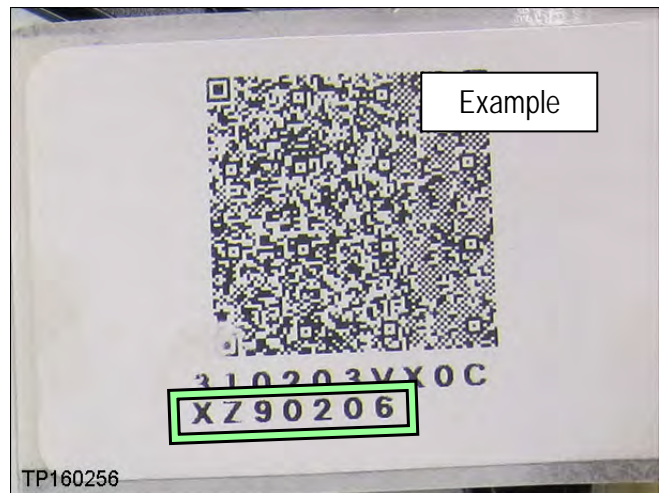


Figure E

- Calibration file number on the valve body.

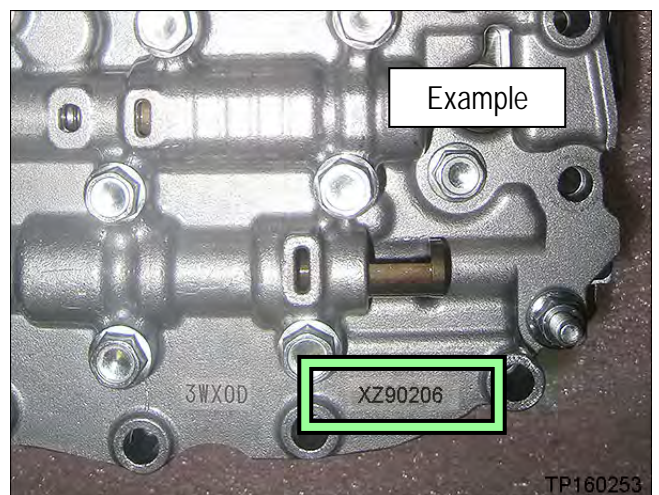


Figure F

**IMPORTANT:** All three of the above numbers must be the same (they must match).

3. Connect the external disc drive to the CONSULT PC.

**NOTE:** Use the external disc drive provided with the C-III plus kit.

4. Load the CD into the external disc drive.

5. Connect the CONSULT PC to the vehicle with the plus VI, and then open / start C-III plus.

- Make sure ASIST and other programs are closed.

6. After the plus VI is recognized, select **Diagnosis (All Systems)**.

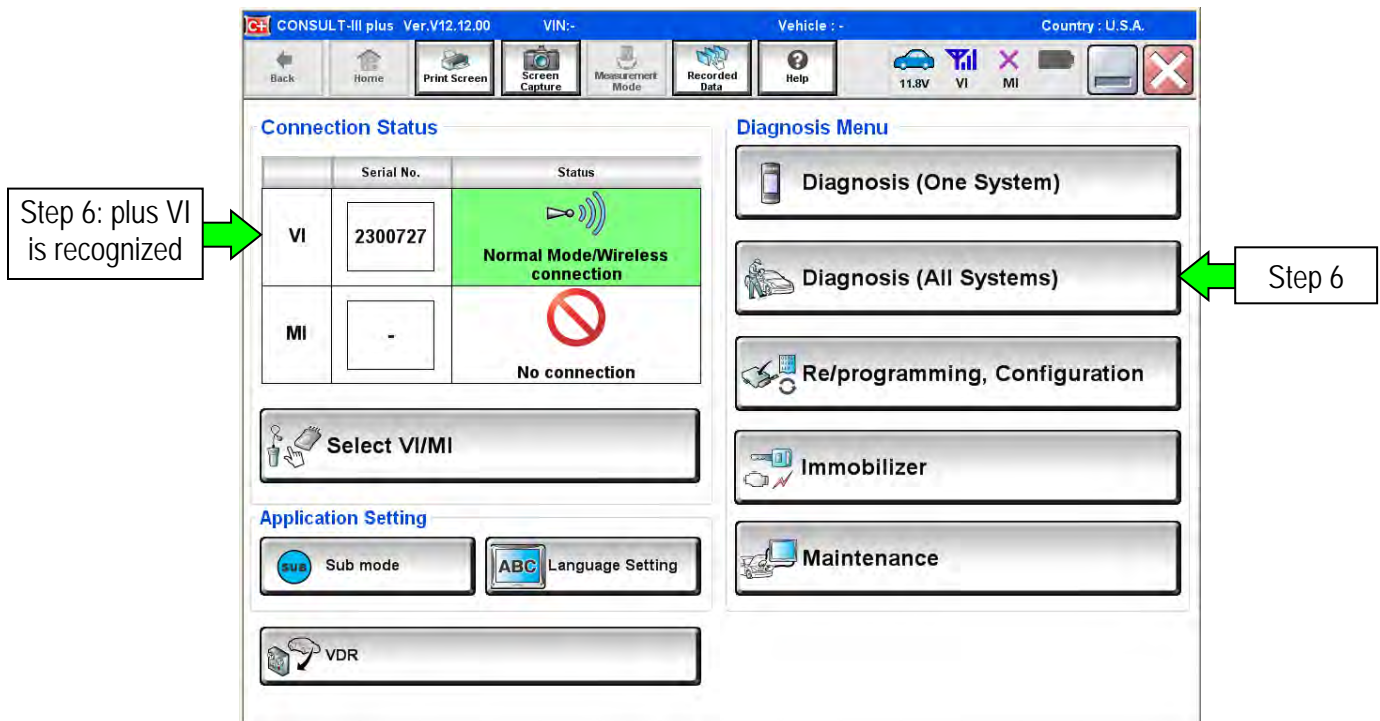


Figure 1

7. Navigate C-III plus to **TRANSMISSION > Work Support**.

8. Select the scroll arrow shown Figure 2.

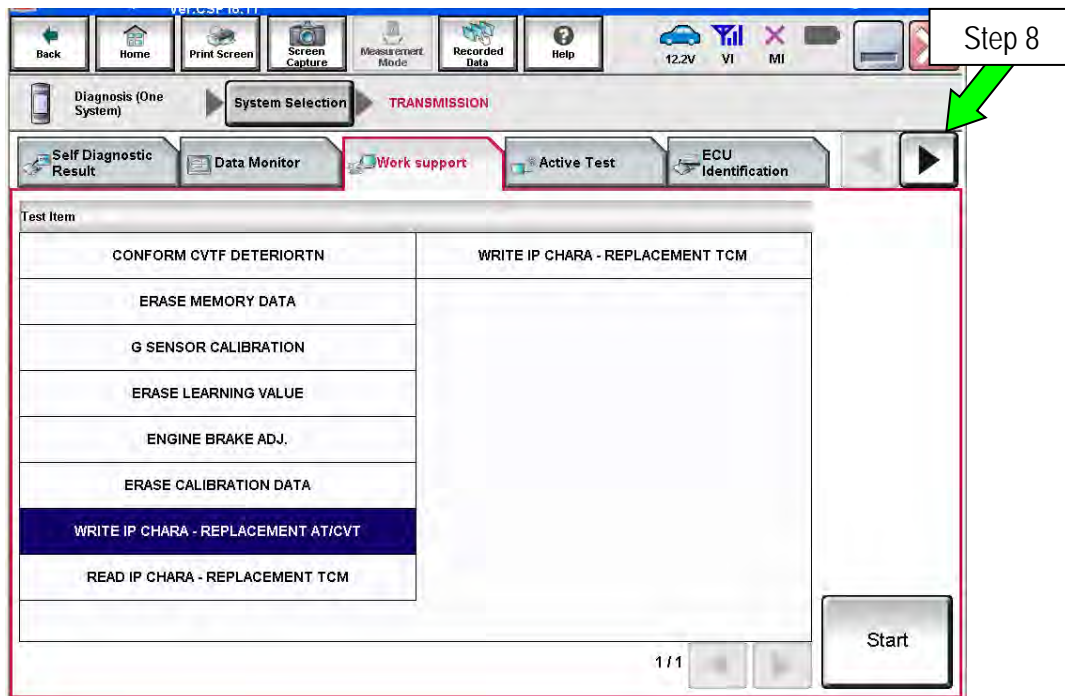


Figure 2

9. Print a copy of the screen shown in Figure 3 and attach it to the repair order.

**NOTE:**

- Make sure to print page 1 of 7 (1 / 7).
- This screen print is used for warranty documentation.

10. Select scroll arrow shown Figure 3.

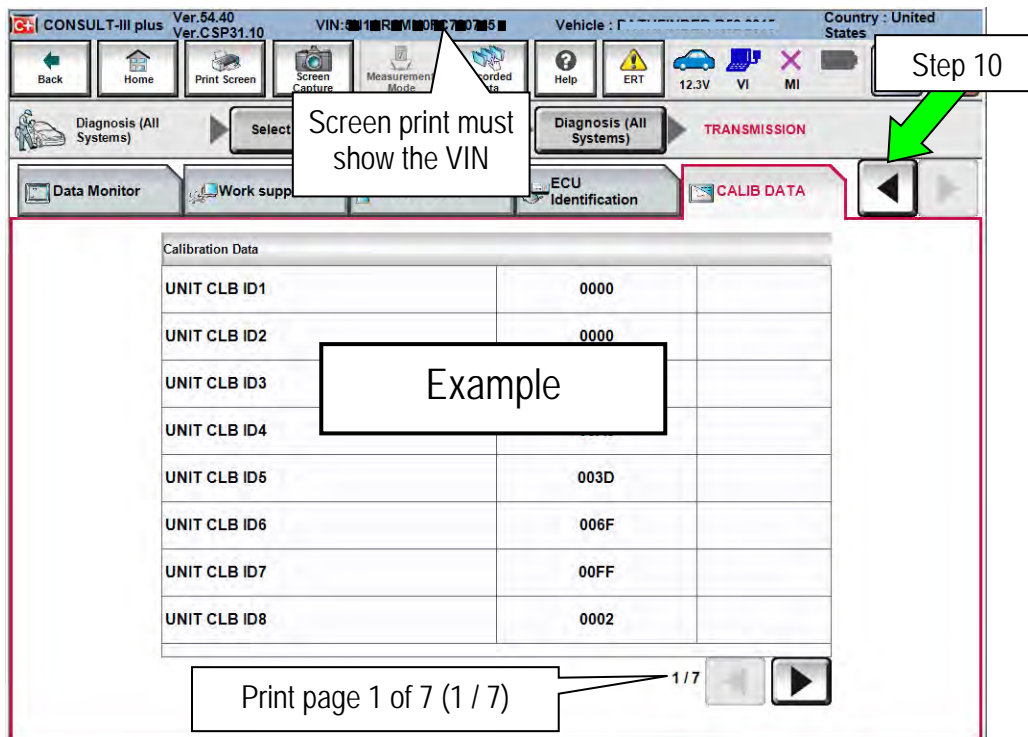


Figure 3

11. Select **WRITE IP CHARA – REPLACEMENT AT/CVT**, and then select **Start**.

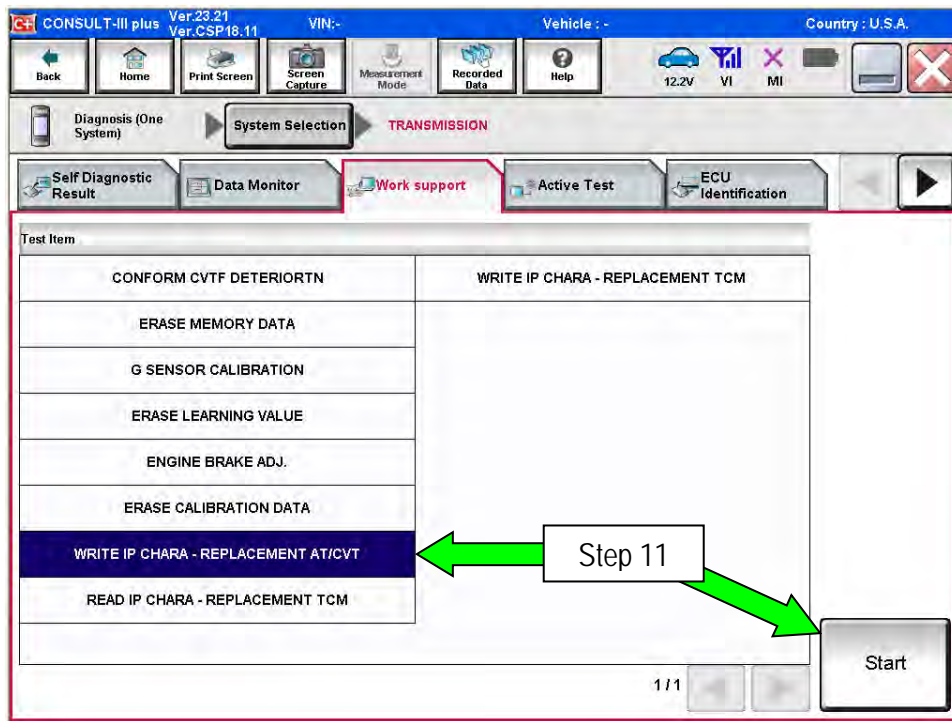


Figure 4

**IMPORTANT:** When starting the calibration “write” procedure in C-III plus, and after selecting **Start** under **Work Support**, the C-III screen may only blink.

- If this occurs, confirm ASIST is closed, and then perform step 11 above.
  - If there is still no change: Reboot the CONSULT PC, keep ASIST closed, and then restart this procedure from step 1.
  - If error “STOPPED, no comm. with ECU” shows when trying to write calibration data, verify that the vehicle is in Park (P).

12. Select OK.

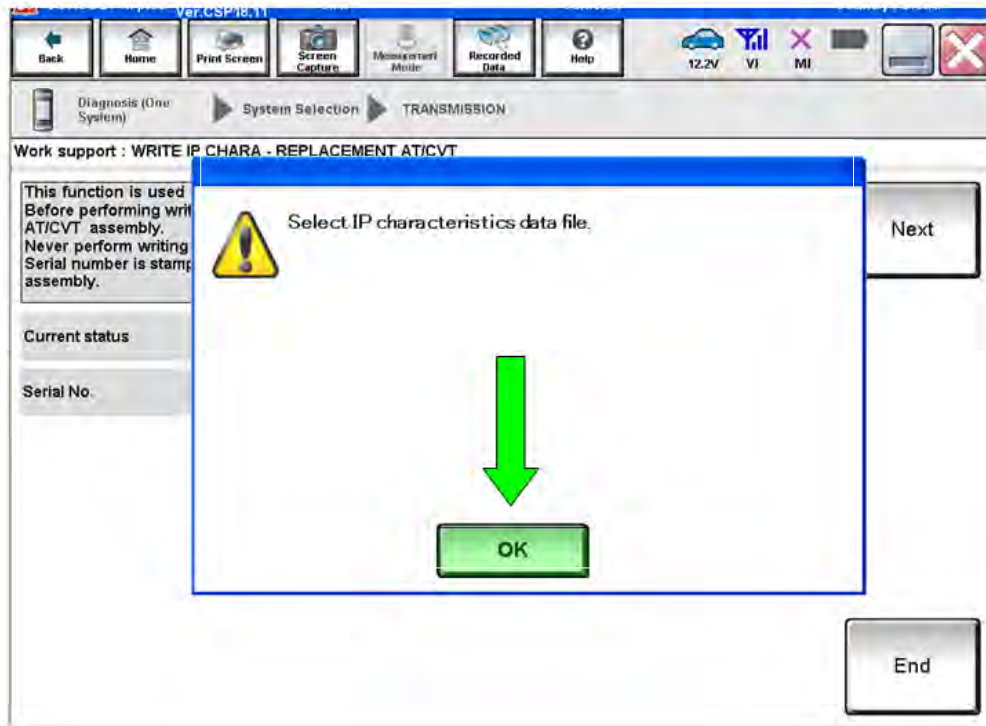


Figure 5

13. Select My Computer.

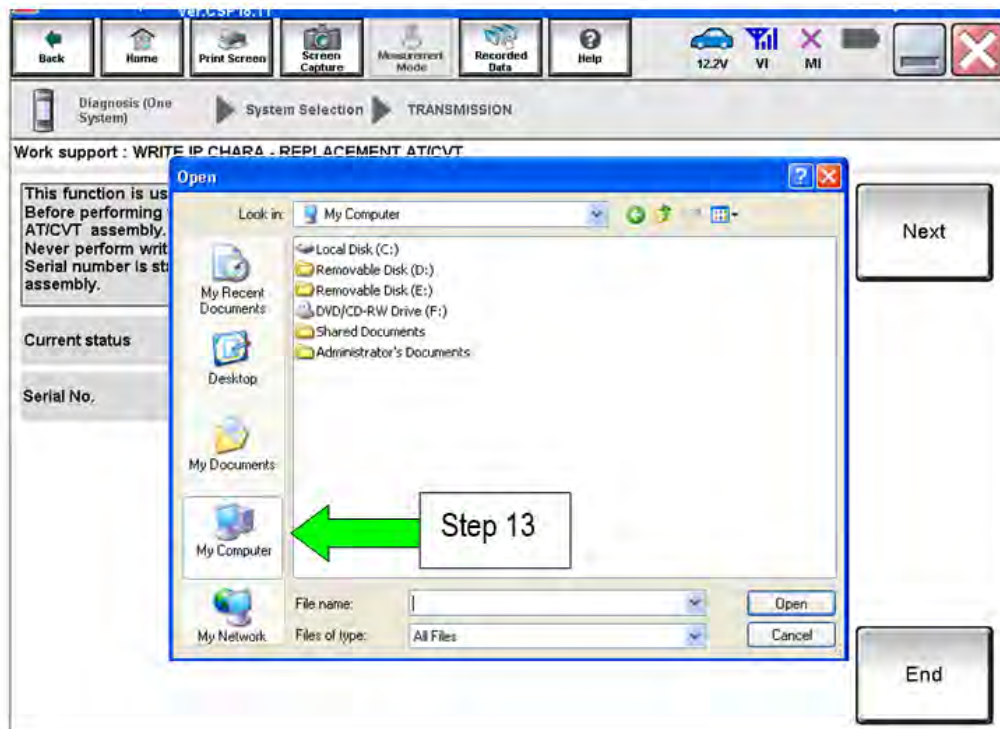


Figure 6



14. Select DVD/CD-RW Drive (F:)

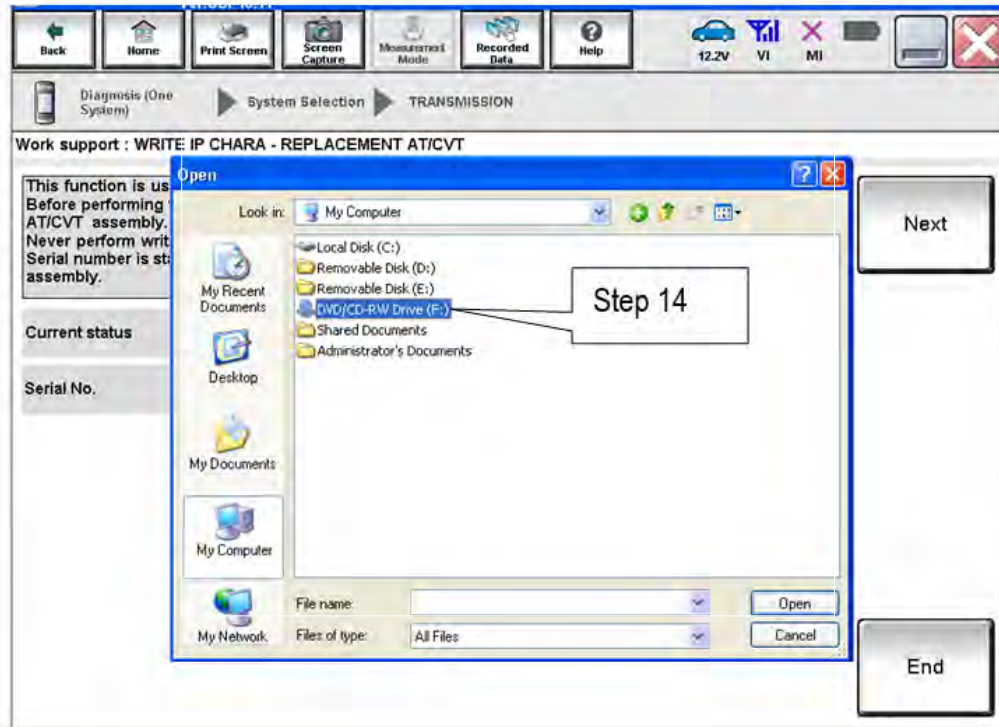


Figure 7

15. Highlight the File and then select **Open**.

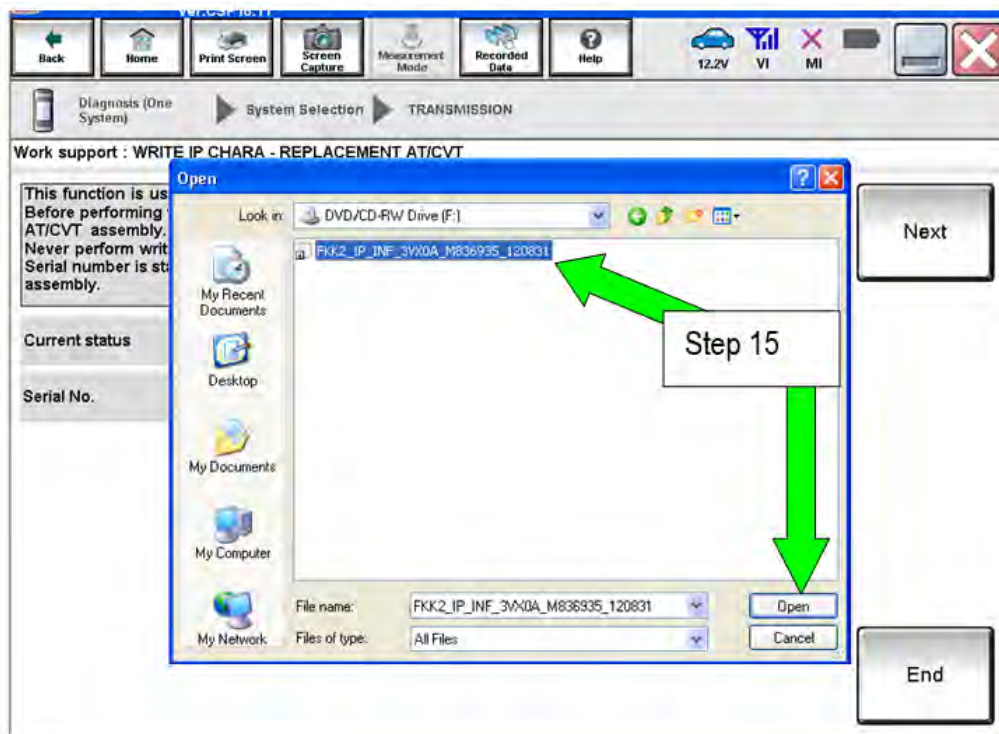


Figure 8

16. Verify that the serial number (calibration file number) matches the numbers from step 2 on page 2 (see Figures on pages 3 and 4).

- If the numbers do not match, contact TECH LINE.

17. Select Next.

**NOTE:** If error message “Stopped, No Comm with ECU” is displayed, confirm that the vehicle is in Park.

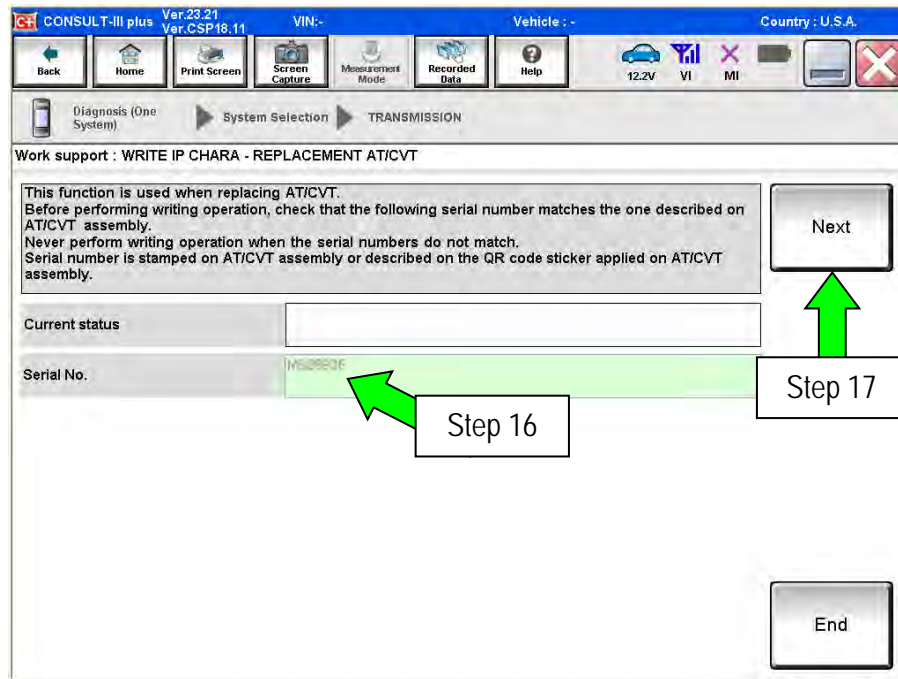


Figure 9

18. Before selecting Start, follow the directions in Figure 10.

- **Do not** follow the directions on the C-III plus screen.

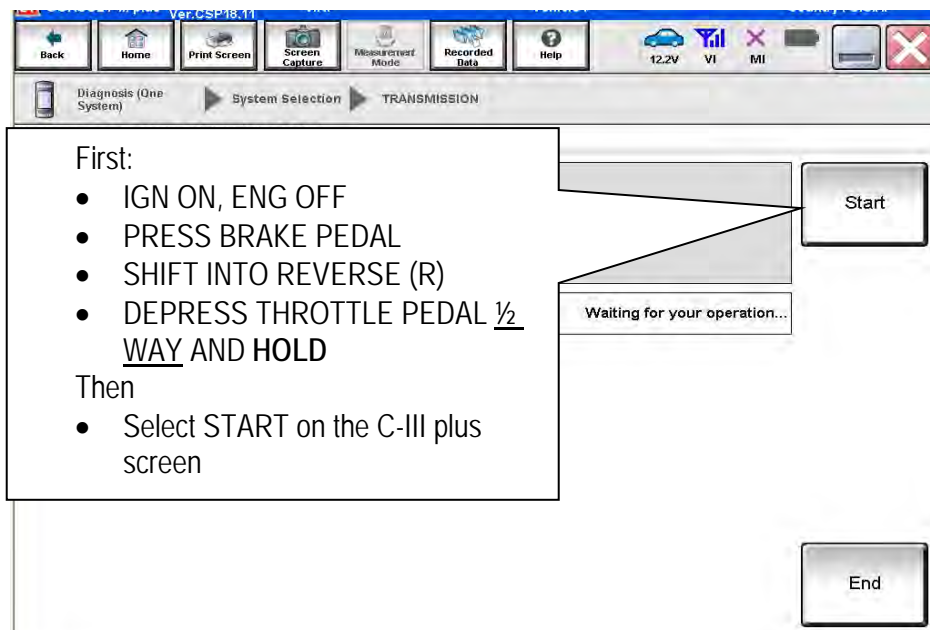


Figure10

19. Follow the on screen instructions.

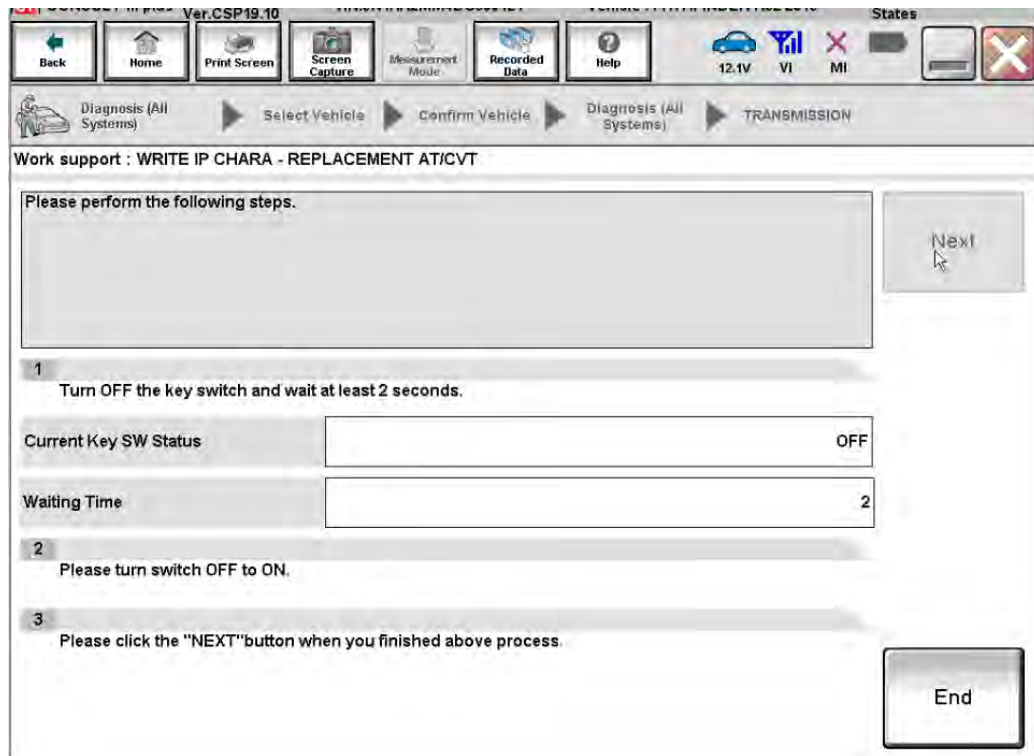


Figure 11

20. Follow the on screen instructions.

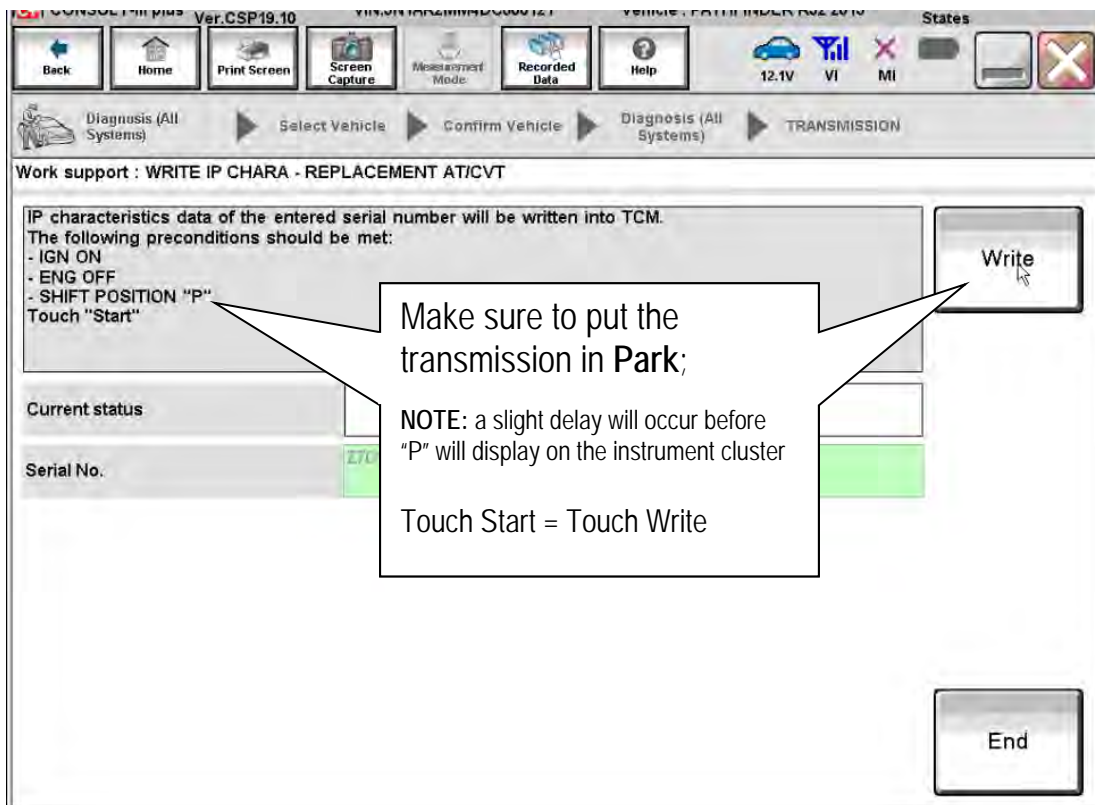


Figure 12

21. After Complete, select **End**.

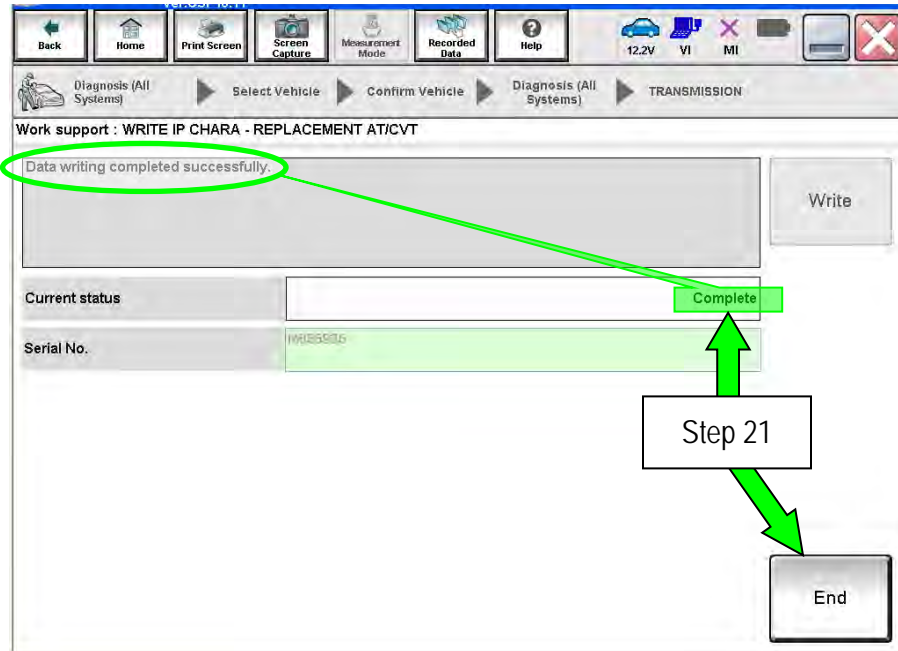


Figure 13

22. Select **Home** to return to the screen shown in Figure 1, page 5.

23. Perform steps 6 – 9, starting on page 5.

24. Attach the second screen print to the repair order.

**NOTE:** Screen prints are used for warranty documentation.

25. Clear any DTCs that may have set.

**NOTE:** Any DTCs that will not clear are not covered by this bulletin. Refer to the appropriate Service Manual for further diagnostic information.

26. If the valve body was replaced, perform CLUTCH POINT LEARNING under "Transmission Work Support" in C-III plus.

- Follow the steps for CLUTCH POINT LEARNING exactly as presented in C-III plus.
- If the procedure is not performed correctly, the vehicle may not move when the CVT is placed in gear.
  - If this condition occurs, cycle the ignition OFF/ON, and then perform CLUTCH POINT LEARNING again.

27. If the CVT assembly was replaced, do not perform CLUTCH POINT LEARNING.

28. Perform Select Learning (Drive / Reverse Learning):

- a. Set the parking brake.
- b. Start the engine, and then wait five (5) seconds.
- c. Move the shift selector to the N position and hold more than two (2) seconds, and then move it to the D position and wait for transmission engagement.
- d. Repeat step 28c ten times.
- e. Move the shift selector to the N position and hold for more than two (2) seconds, and then move it to the R position and wait for transmission engagement.
- f. Repeat step 28e ten times.
- g. Move the shift selector to the P position, and then turn the ignition OFF.

29. Test drive the vehicle.

**END**

## SAVE / WRITE CALIBRATION DATA WHEN REPLACING THE TCM

### NOTE:

- The following steps are used **only** if the TCM is replaced.
- If the CVT or valve body is being replaced, go back to page 2.
- **Before starting, make sure:**
  - ASIST on the CONSULT PC has been freshly synchronized to the current date.
  - All C-III plus software updates (if any) have been installed.

### Save Calibration Data Before TCM Replacement

1. Connect the CONSULT PC to the vehicle.
2. Open / start C-III plus.
  - Make sure ASIST and other programs are closed.
3. Wait for the plus VI to be recognized.
  - The serial number will display when the plus VI is recognized.
4. Select **Diagnosis (One System)**.

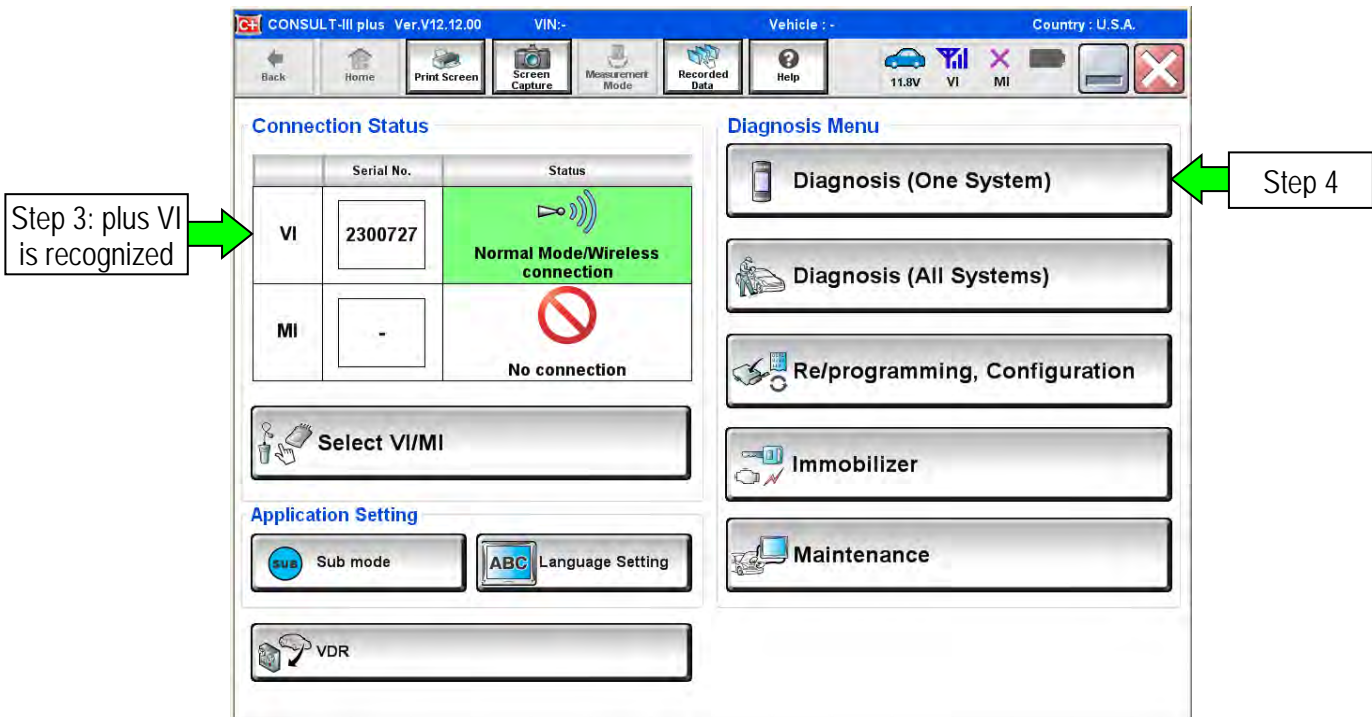


Figure A1

5. Navigate C-III plus to **TRANSMISSION >> Work Support**.

6. Select READ IP CHARA – REPLACEMENT TCM, and then select Start.

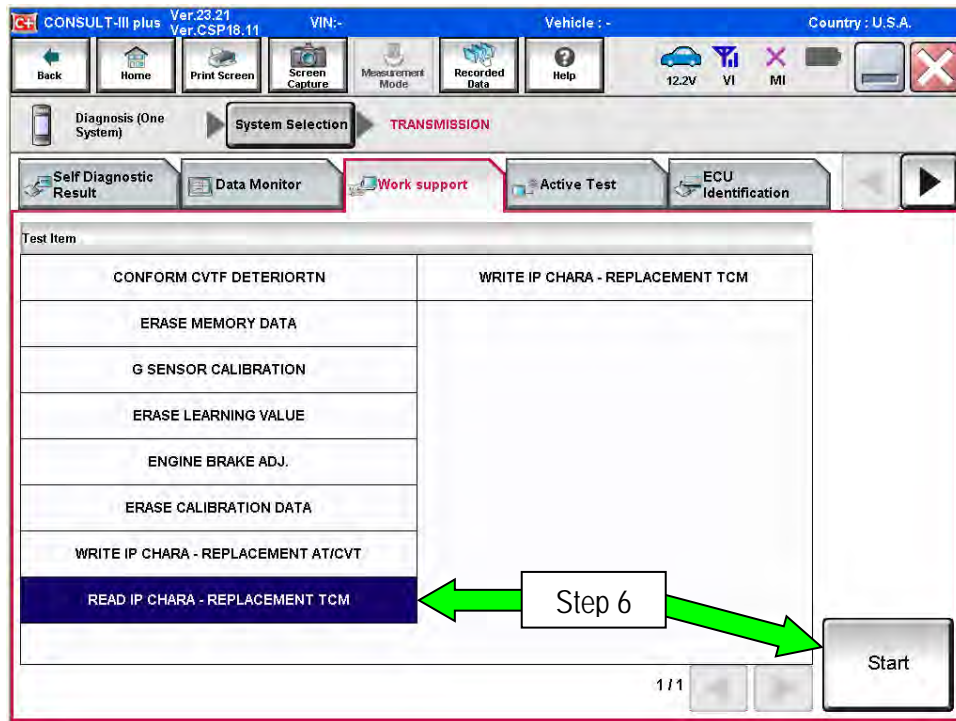


Figure A2

7. Select Start.

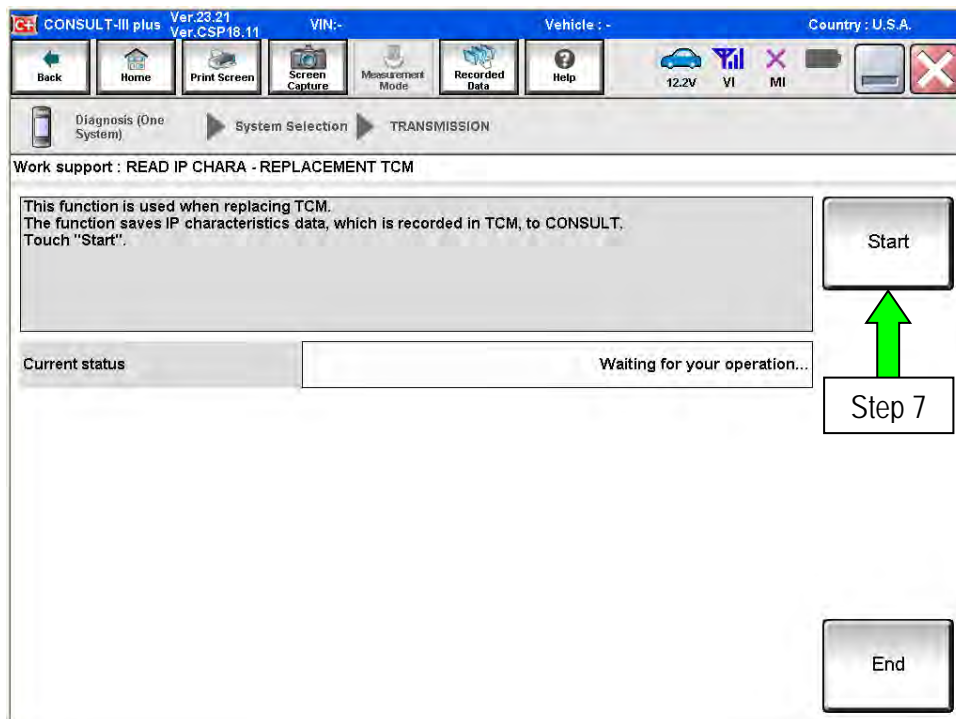


Figure A3

- When the calibration data has been saved to the CONSULT PC, the message “Data saved successfully” will be displayed and **Current status** will indicate **Completed** (see Figure A4).
- Select **End**.

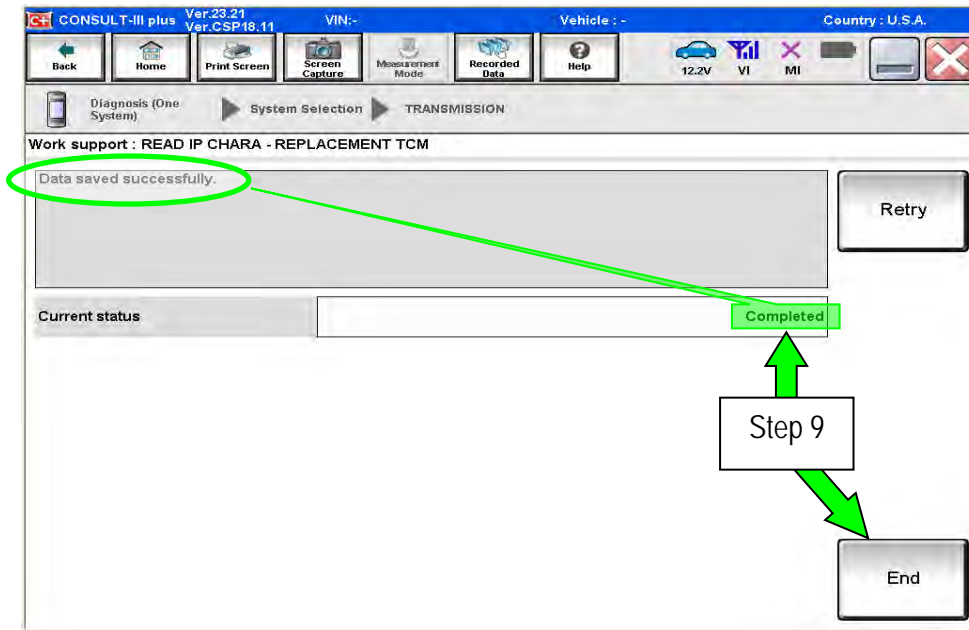


Figure A4

- Replace the TCM.
- After the TCM has been replaced, go to Write Calibration Data After TCM Replacement on the next page.



## Write Calibration Data After TCM Replacement

12. After the TCM has been replaced, select **WRITE IP CHARA – REPLACEMENT TCM**, and then select **Start**.

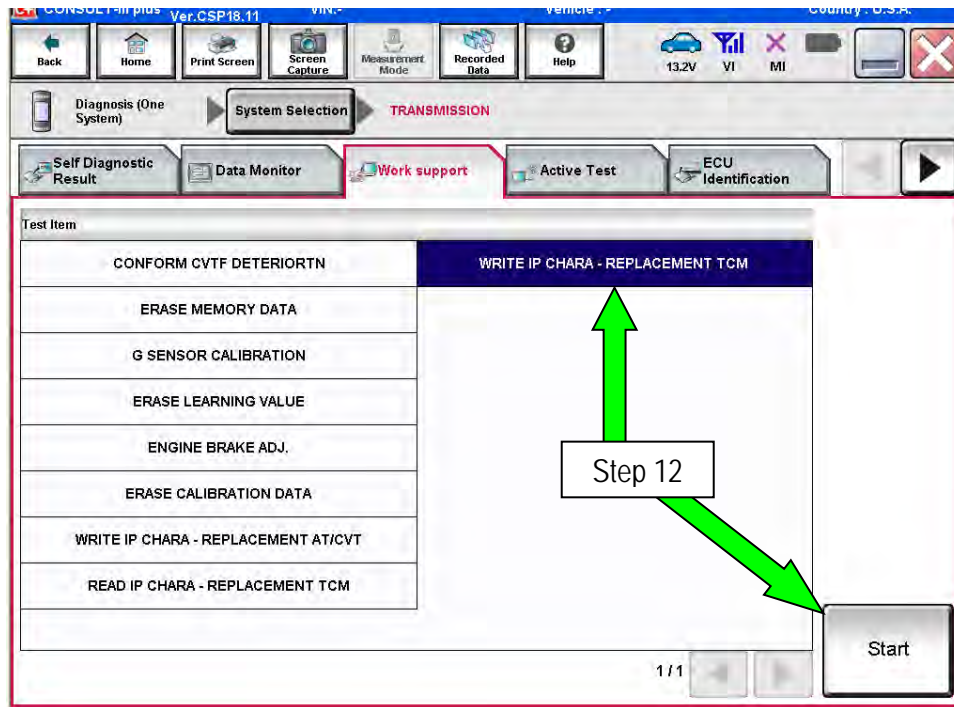


Figure A5

**IMPORTANT:** When starting the calibration “write” procedure in C-III plus, and after selecting **Start** under **Work Support**, the C-III plus screen may only blink.

- If this occurs, confirm ASIST is closed, and then perform step 12 above.
  - If there is still no change: Reboot the CONSULT PC, keep ASIST closed, and then restart the procedure from the beginning.
  - If error “STOPPED, no comm. with ECU” shows when trying to write calibration data, verify that the vehicle is in park (P).

13. Select **Start** again.

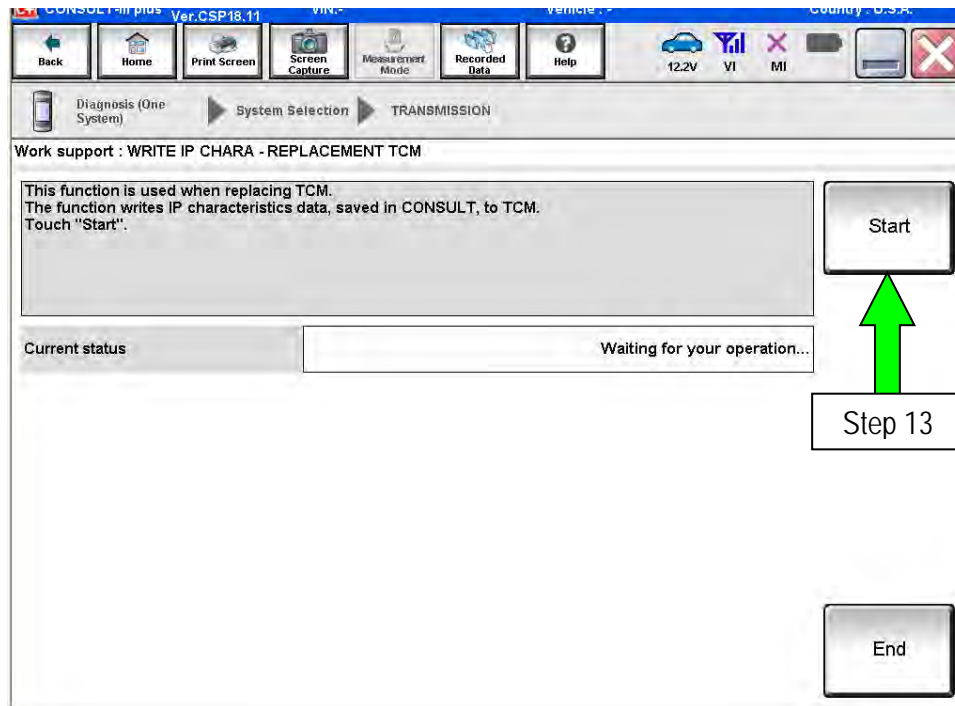


Figure A6

14. Select **Yes**.

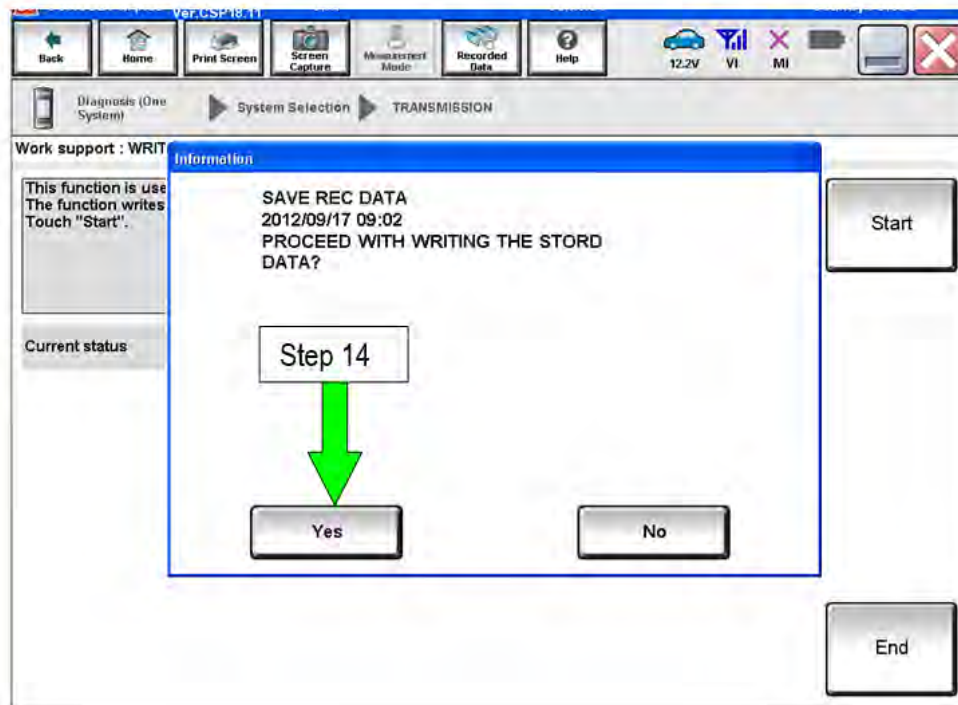


Figure A7

- When the calibration data has been written to the TCM, the message “Data writing completed successfully” will be displayed and **Current status** will indicate **Complete** (see Figure A8).
- After Complete, select **End** to finish.

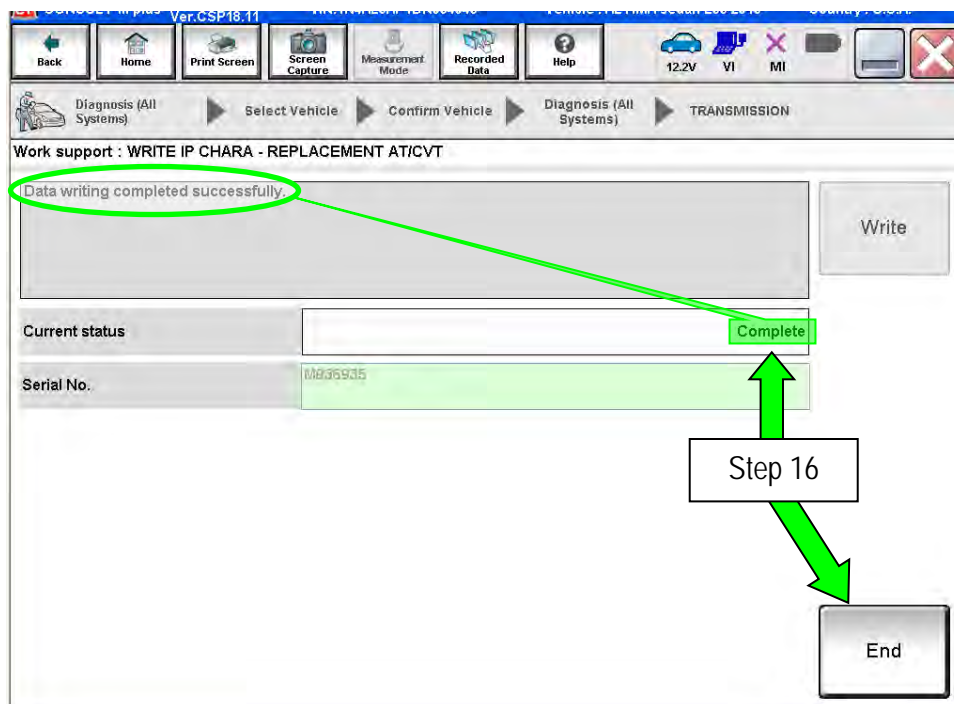


Figure A8

- Clear any DTCs that may have set.

**NOTE:** Any DTCs that will not clear are not covered by this bulletin. Refer to the appropriate Service Manual for further diagnostic information.

- Perform G-Sensor Learning under “Transmission Work Support” in C-III plus.
- Perform CLUTCH POINT LEARNING under “Transmission Work Support” in C-III plus.

**NOTE:** Skip this step if the CVT assembly was replaced.

- Follow the steps for CLUTCH POINT LEARNING exactly as presented in C-III plus.
- If the procedure is not performed correctly, the vehicle may not move when the CVT is placed in gear.
  - If this condition occurs, cycle the ignition OFF/ON, and then perform CLUTCH POINT LEARNING again.

20. Perform Select Learning (Drive / Reverse Learning):

- a. Set the parking brake.
- b. Start the engine, and then wait five (5) seconds.
- c. Move the shift selector to the N position and hold for more than two (2) seconds, and then move it to the D position and wait for transmission engagement.
- d. Repeat step 20c ten times.
- e. Move the shift selector to the N position and hold for more than two (2) seconds, and then move it to the R position and wait for transmission engagement.
- f. Repeat step 20e ten times.
- g. Move the shift selector to the P position, and then turn the ignition OFF.

21 Test drive the vehicle.