



TECHNICAL SERVICE BULLETIN

Classification:	Reference:	Date:
DA22-004A	NTB22-073A	January 24, 2023

REAR AUTOMATIC BRAKING WARNING LIGHT ILLUMINATED AND/OR DTC C1B56-04 AND/OR C1B56-97 STORED IN THE ADAS CONTROL UNIT

This bulletin has been amended. See **AMENDMENT HISTORY** on the last page.
Please discard previous versions of this bulletin.

APPLIED VEHICLES: 2019-2022 Altima (L34)

IF YOU CONFIRM

The customer states the rear automatic braking (RAB) warning light is illuminated, with "Malfunction See Owner's Manual" appearing in the vehicle information display,

AND/OR

DTC C1B56-04 (SONAR CIRCUIT) and/or C1B56-97 (SONAR CIRCUIT) is stored in the ADAS Control Unit.



Figure 1

ACTION

Reprogram and configure the Sonar Control Unit using the **SERVICE PROCEDURE** in this bulletin, 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.

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

Sonar Control Unit Reprogramming

IMPORTANT: Before starting, make sure:

- ASSIST on the CONSULT PC has been synchronized (updated) to the current date.
- All CONSULT-III plus (C-III plus) software updates (if any) have been installed.
- The CONSULT PC is connected to the internet via a cable or Wi-Fi.
 - You will be required to enter your username and password during the procedure.
 - If you do not know your username and password, contact your service manager.
- A screen print for warranty documentation can be done from the CONSULT PC during this service procedure while still connected to the vehicle.
- No diagnostic trouble codes (DTCs) are stored.
 - Use C-III plus to perform Self Diagnosis for all systems.
 - If there are any DTCs, other than **C1B56-04** and/or **C1B56-97**, diagnose, perform repairs, and erase DTC **before** continuing.

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

- Make sure to use the correct VI for the CONSULT.

NOTICE

Make sure the VI is securely connected. If the VI connection is loose during reprogramming, the process will be interrupted and the control unit may be damaged.

2. Connect the AC Adapter to the CONSULT PC.

NOTICE

Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and the control unit may be damaged.

3. Connect a battery maintainer or smart charger set to reflash mode or a similar setting.

NOTICE

To avoid damage to the control unit, ensure a battery maintainer or smart charger is connected. The battery voltage must be between 12.0V and 15.5V during reprogramming.

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

NOTICE

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 control unit may be damaged.

- Turn the ignition ON with the engine OFF.

NOTICE

To avoid damage to the control unit, the engine must not start or run during the reprogramming procedure.

- Turn OFF all vehicle electrical loads such as exterior lights, interior lights, HVAC, blower, rear defogger, audio, NAVI, seat heater, steering wheel heater, etc.
- Turn ON the hazard warning lamps.
- Turn ON the CONSULT PC.
- Start C-III plus.
- If prompted, select **USA/CANADA Dealers** from the drop down menu, and then select **OK**.
- Login using your NNAnet credentials.

IMPORTANT: If not prompted to enter your username and password, the CONSULT PC may not be connected to Wi-Fi. Close C-III plus, confirm the CONSULT PC is connected to Wi-Fi, and then reopen C-III plus.

- Wait for the VI to be recognized.
 - The serial number will display when the VI is recognized.

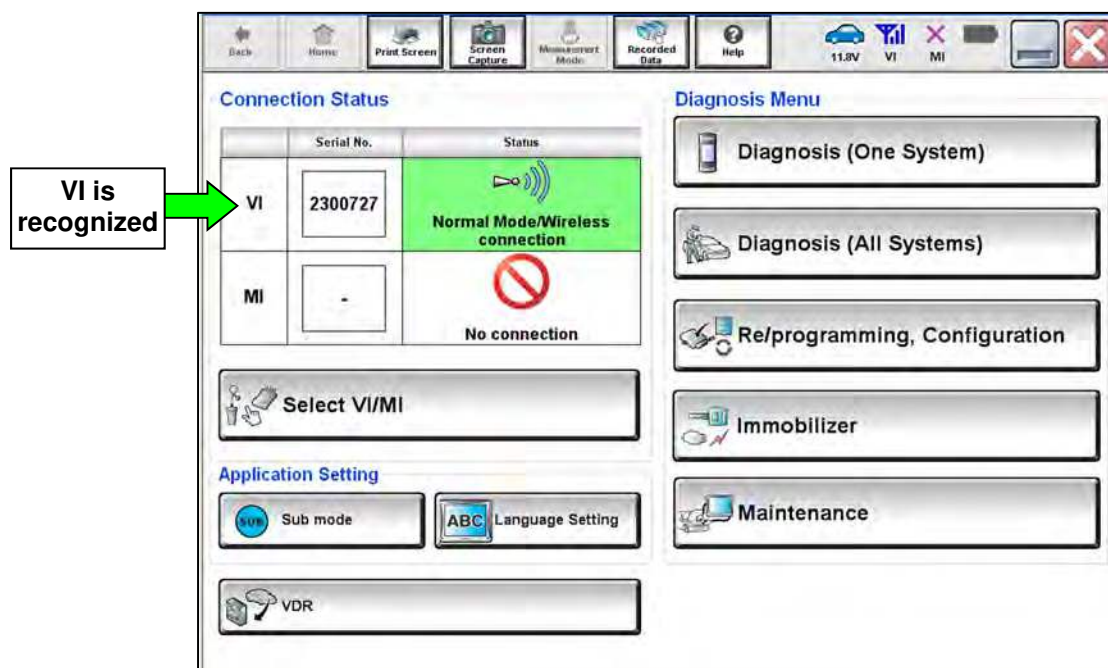


Figure 2

13. Select **Diagnosis (One System)**.

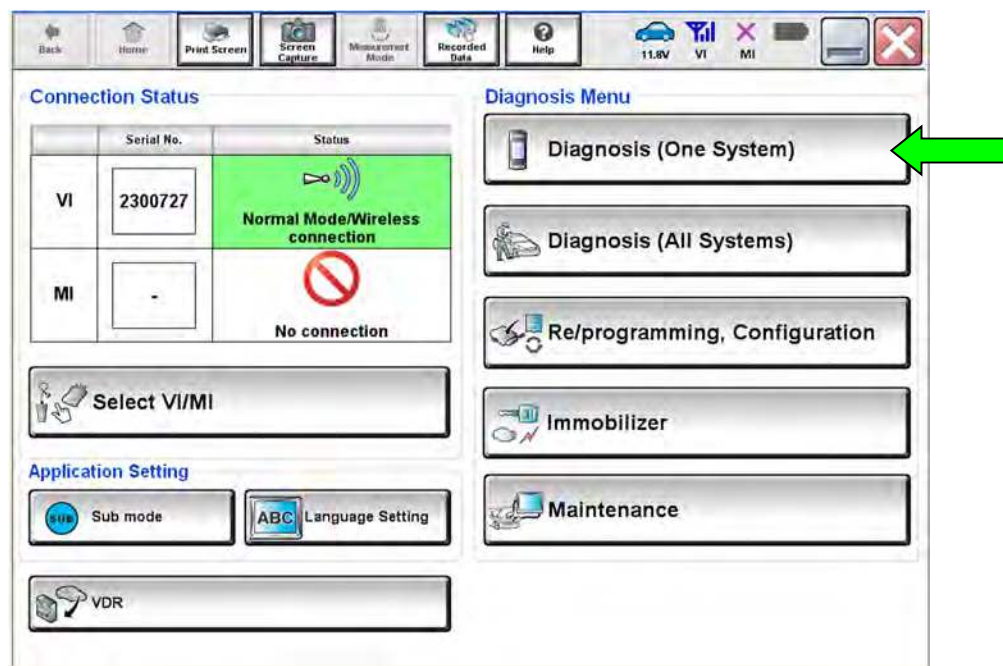


Figure 3

14. Select **SONAR**.

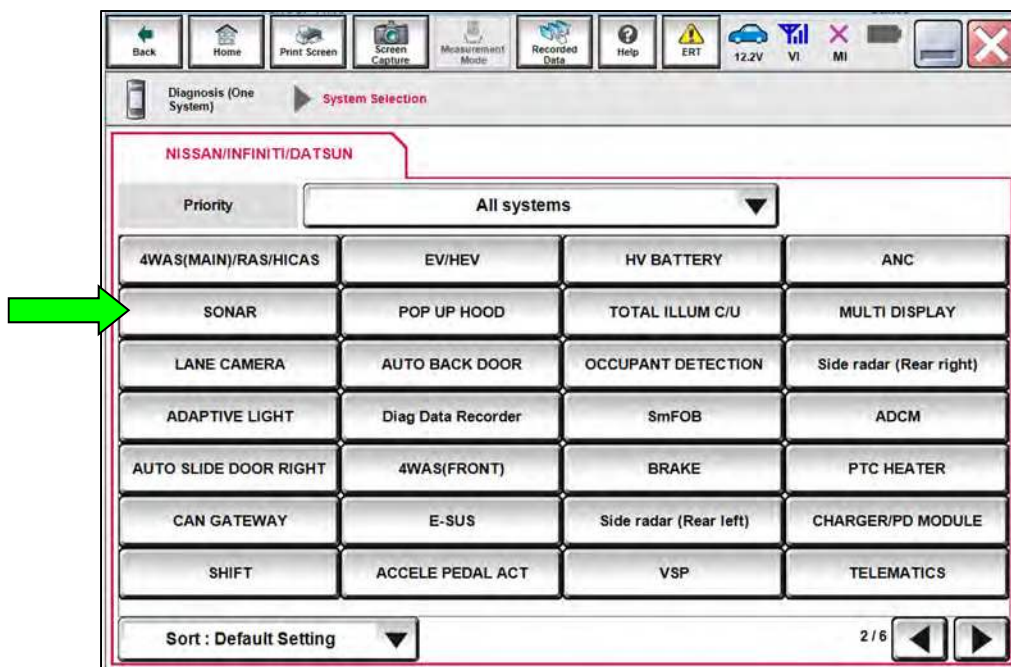


Figure 4

15. Select **ECU Identification**.
16. Confirm the current **SOFTWARE #** (Figure 5).
 - If the **SOFTWARE #** is “L139”, this bulletin does not apply. See the Electronic Service Manual (ESM) for further diagnostic information.
 - If the **SOFTWARE #** is not “L139”, proceed to step 17 on page 6.

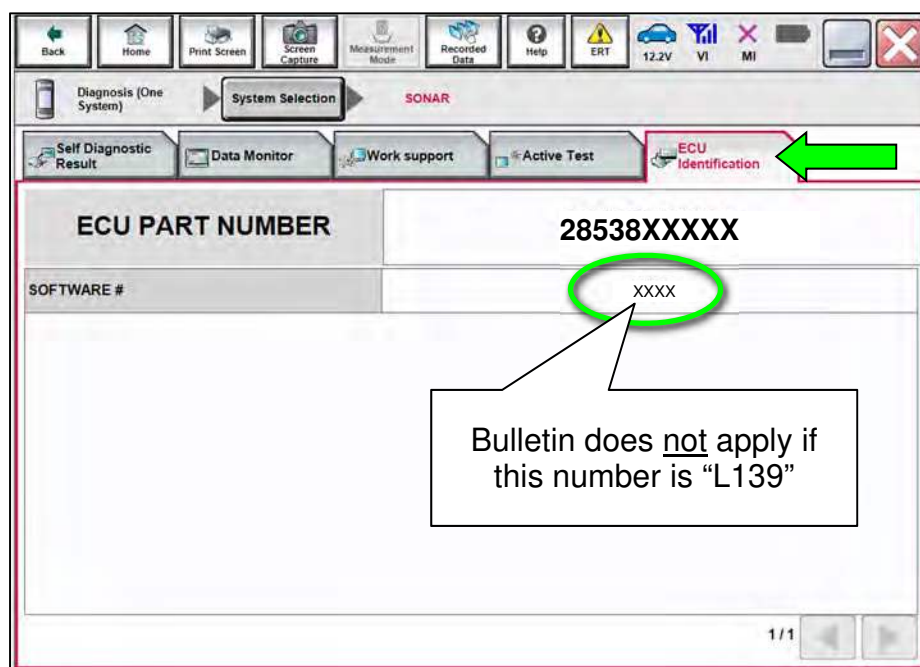


Figure 5

17. Select **Home**.

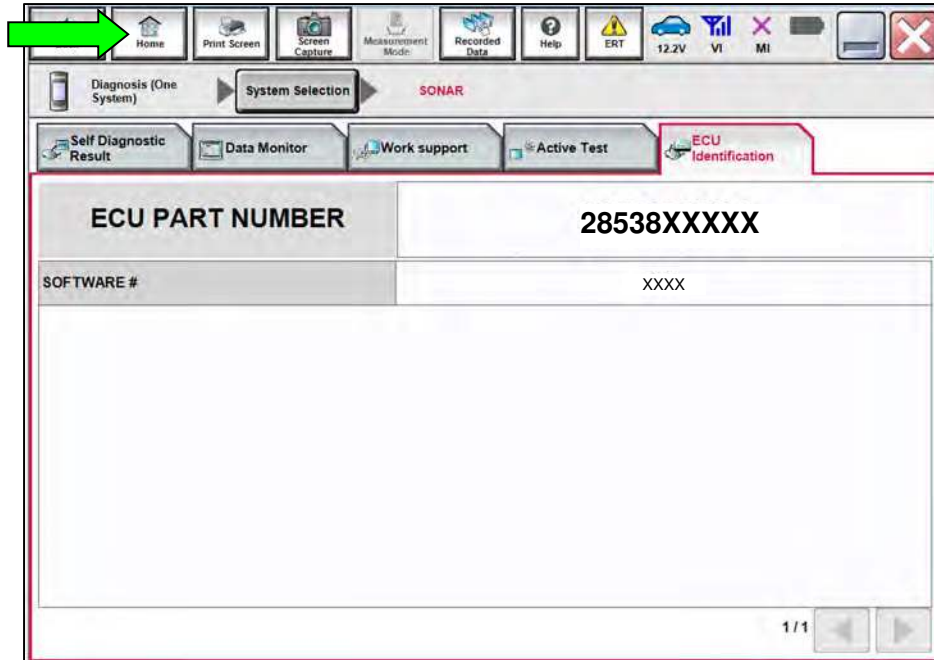


Figure 6

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

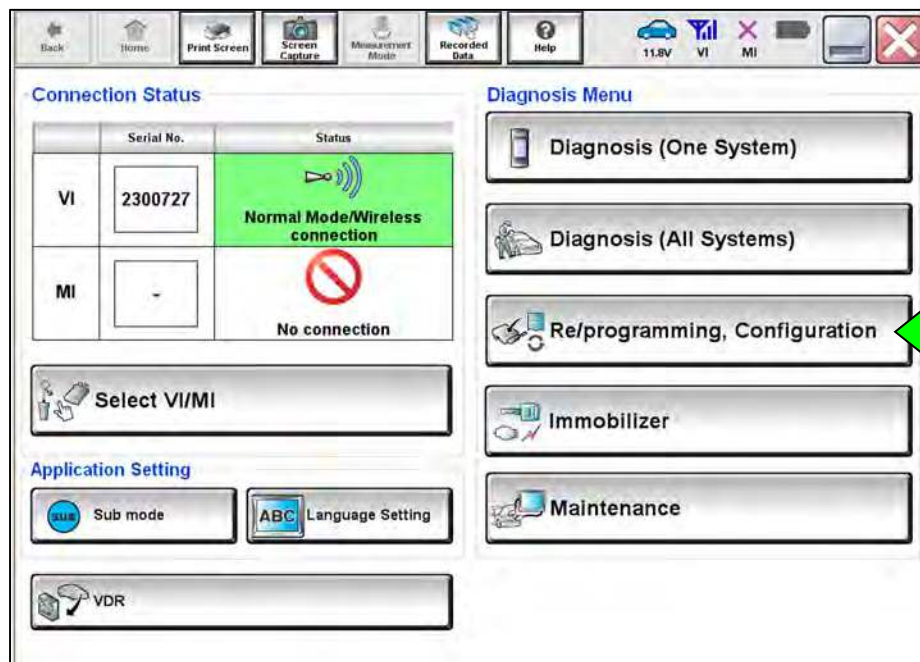


Figure 7

19. Use the arrows (if needed) to view and read all precautions.
20. Check the box confirming the precautions have been read.
21. Select **Next**.

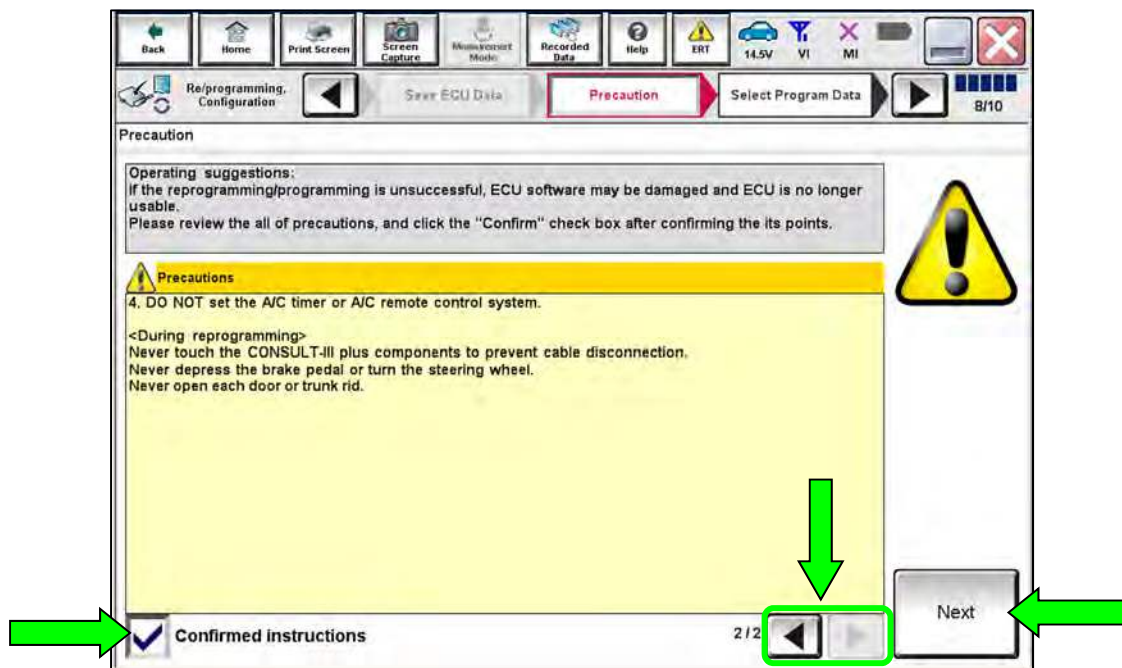


Figure 8

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

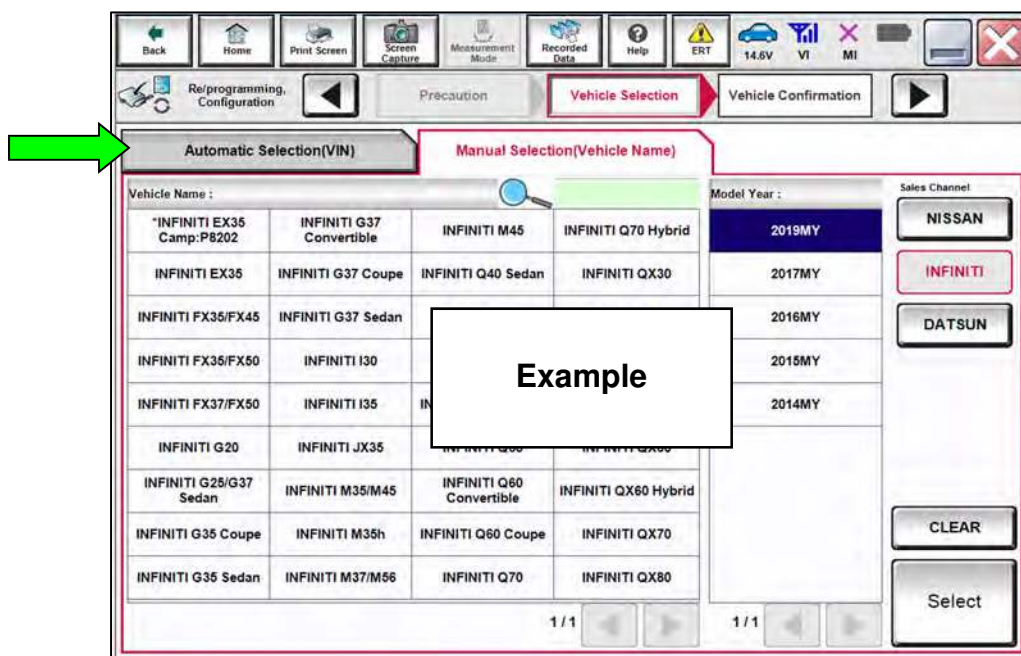


Figure 9

23. Confirm the **VIN or Chassis #** matches the vehicle's VIN.
24. Select **Confirm**.

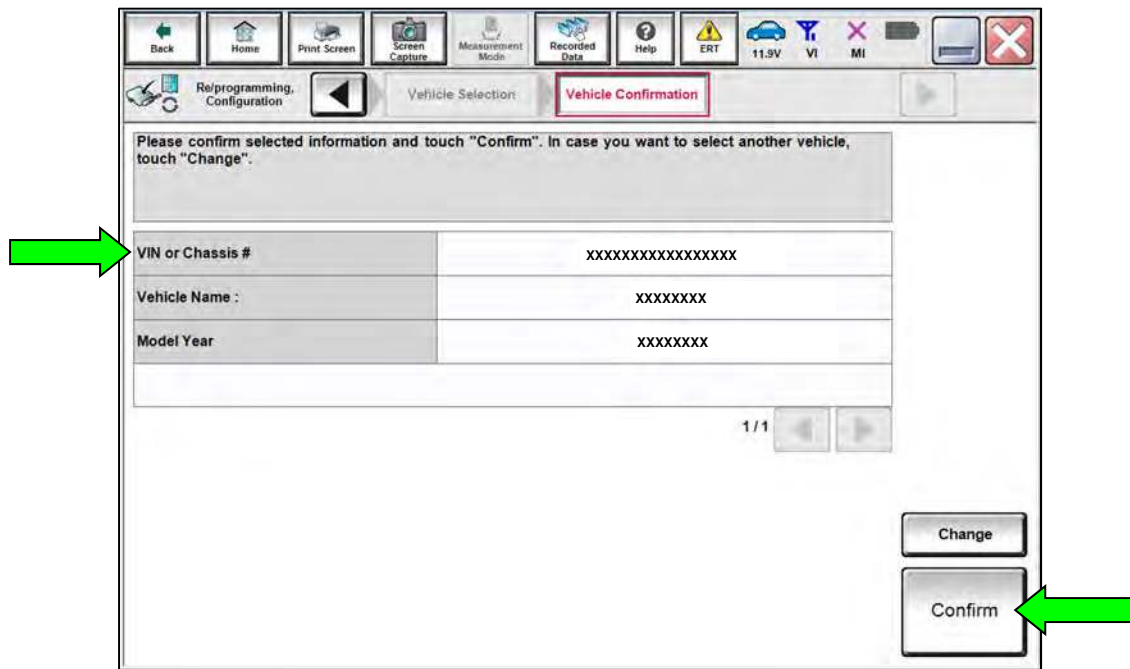


Figure 10

25. Select **Confirm**.

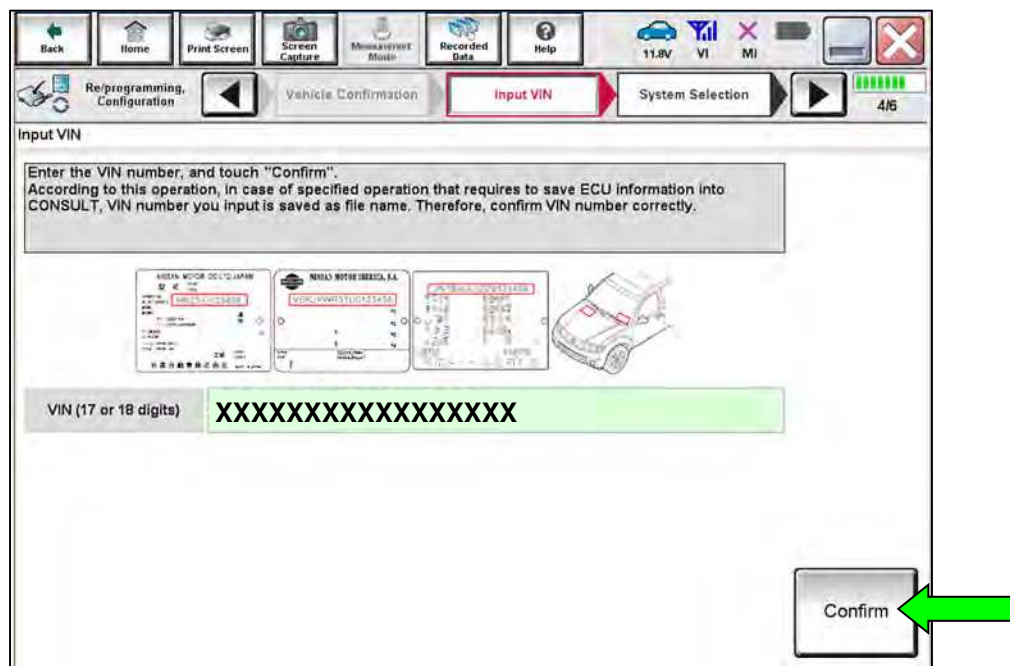


Figure 11

26. Select **SONAR**.

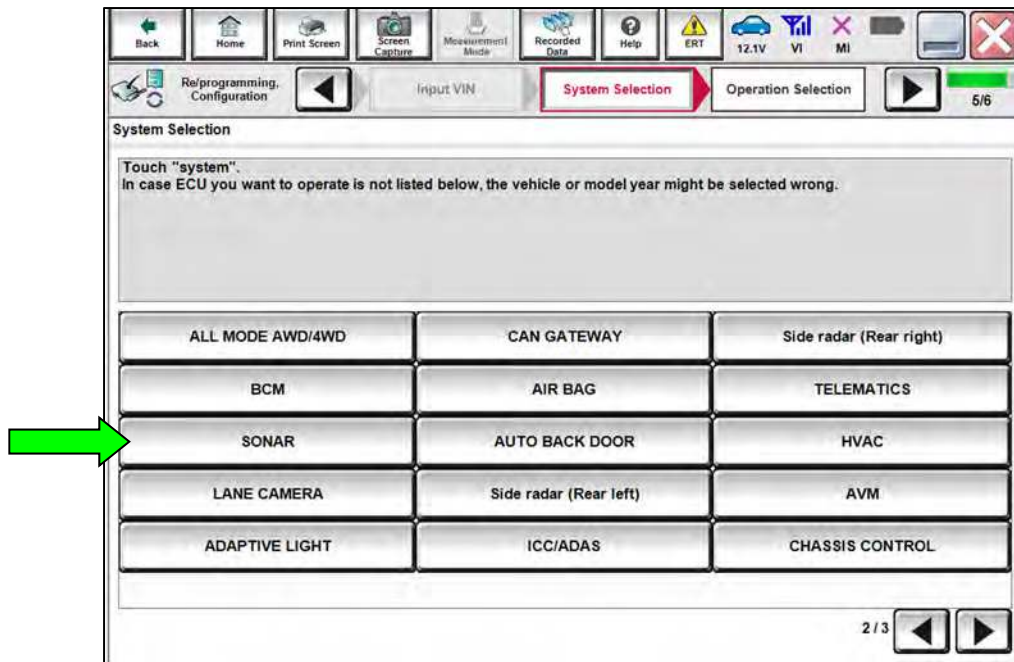


Figure 12

27. Select **Reprogramming**.

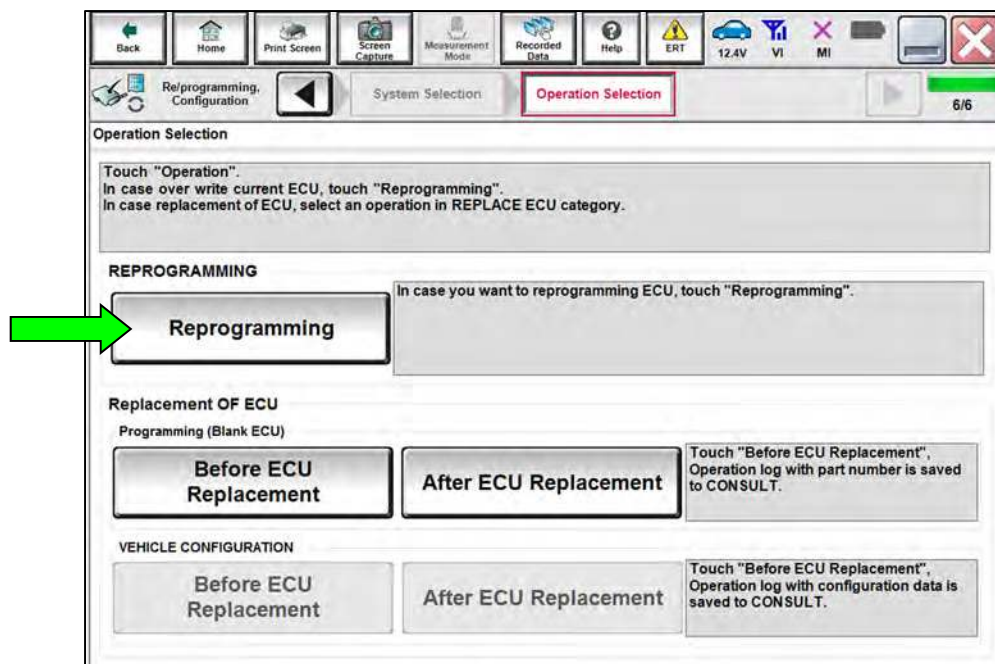


Figure 13

28. When you get to the screen shown in Figure 14, confirm that a reprogram is available as follows:

A. Find the Sonar Control Unit **Part Number** and write it on the repair order.

HINT: This is the current part number (P/N).

Save ECU Data

Touch "Save" to save operation log and the current part number as listed below to CONSULT. Operation log helps to restart next operation by selecting suitable operation log. Operation log is erased after operation has completely finished.

File Label	XXXXXXXXXXXXX
Operation	REPROGRAMMING
System	SONAR
Part Number	28538XXXXX
Vehicle	XXXXXXXXXXXXX
VIN	XXXXXXXXXXXXX
Date	XXXXXXXXXXXXX

Save

Figure 14

B. Compare the part number you wrote down to the part numbers in **Table A**.

- If there is a match, continue with the reprogramming procedure.
- If there is not a match in **Table A**, this bulletin does not apply. See the ESM for further diagnostic information.

Table A

MODEL	CURRENT SONAR CONTROL UNIT PART NUMBER: 28538-
Altima	6CA2A, 6CA3A, 6CA3B

29. Select **Save**.

Touch "Save" to save operation log and the current part number as listed below to CONSULT.
Operation log helps to restart next operation by selecting suitable operation log. Operation log is erased after operation has completely finished.

File Label	XXXXXXXXXXXXXX
Operation	REPROGRAMMING
System	SONAR
Part Number	28538XXXXX
Vehicle	XXXXXXXXXXXXXX
VIN	XXXXXXXXXXXXXX
Date	XXXXXXXXXXXXXX

Save

Figure 15

30. Read the precautions on the CONSULT screen, check the box for **Confirmed Instructions**, and then select **Next**. (Screens not shown.)
31. Select **Next**.

Confirm the detail listed below, and touch "Next" if OK.
-In case the screen to select reprog/programming data is NOT displayed, only one data is available for this vehicle.
-In case the part number after reprogramming is wrong, touch "Re-select", and confirm the vehicle selection, VIN and reprog/programming data in CONSULT.

Part Number After Reprogramming	28538-XXXXX
Current Part Number	28538-XXXXX
Vehicle	XXXXXXXXXXXXXX
VIN	XXXXXXXXXXXXXX
System	SONAR
Other information	SONAR ECU
Expected time to finish reprogramming	10min

Re-select

Next

Figure 16

HINT: If you get the screen below and it is blank (no reprogramming listed), it means there is no reprogramming available for this vehicle. Close CONSULT and refer back to the ESM for further diagnosis.

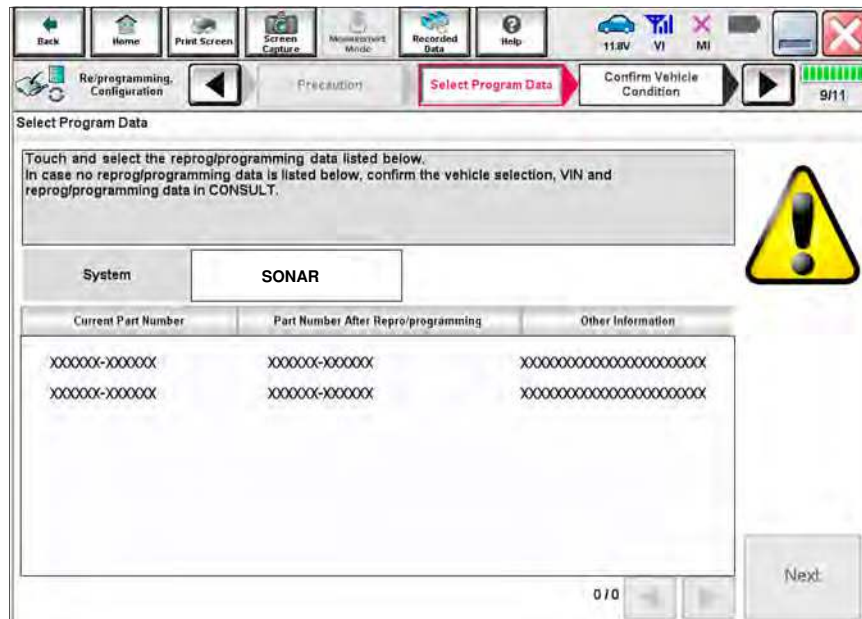


Figure 17

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

NOTICE

To avoid damage to the control unit, ensure a battery maintainer or smart charger is connected. The battery voltage must be between 12.0V and 15.5V during reprogramming.

33. Select **Next**.

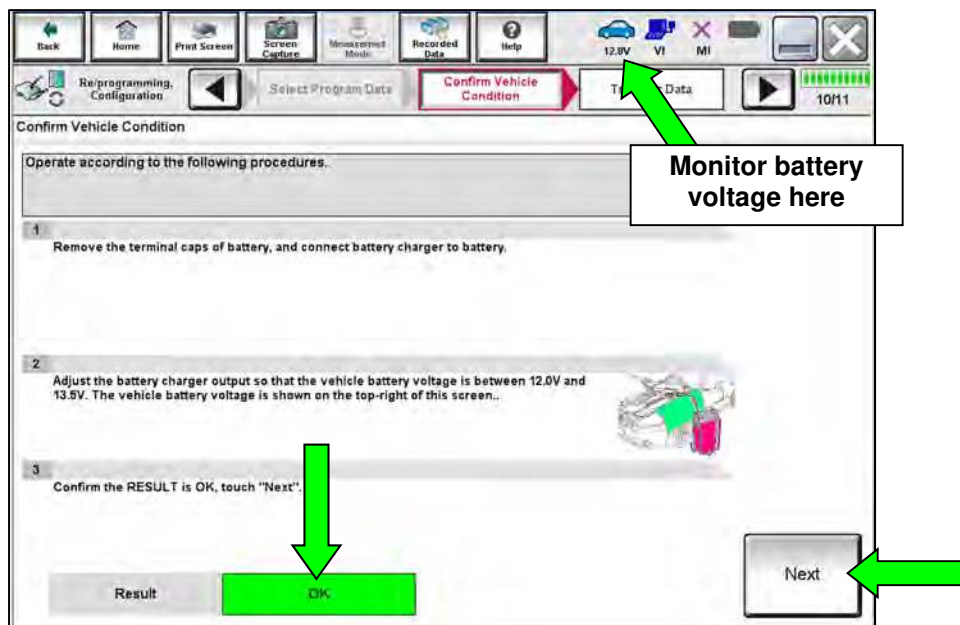


Figure 18

34. Confirm all **Judgment** items are “OK”, and then select **Start**.

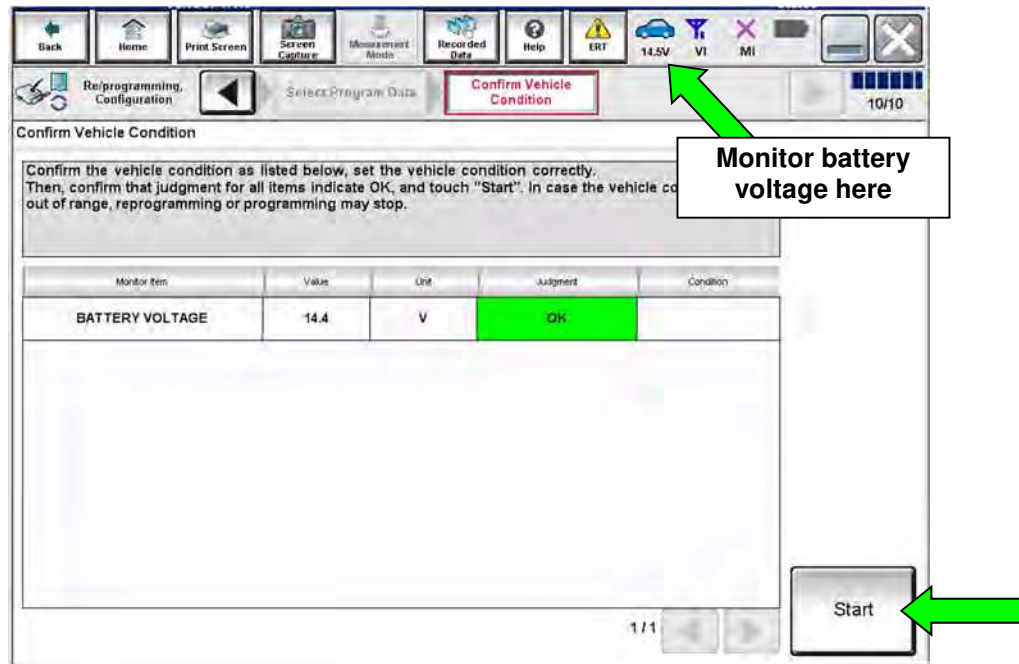


Figure 19

35. Wait for both progress bars to complete (Figure 20).

- When the screen in Figure 21 on page 14 displays, the reprogramming is complete.
- If the screen in Figure 21 does not display (indicating that reprogramming did not complete), refer to **Sonar Control Unit Recovery** on page 15.

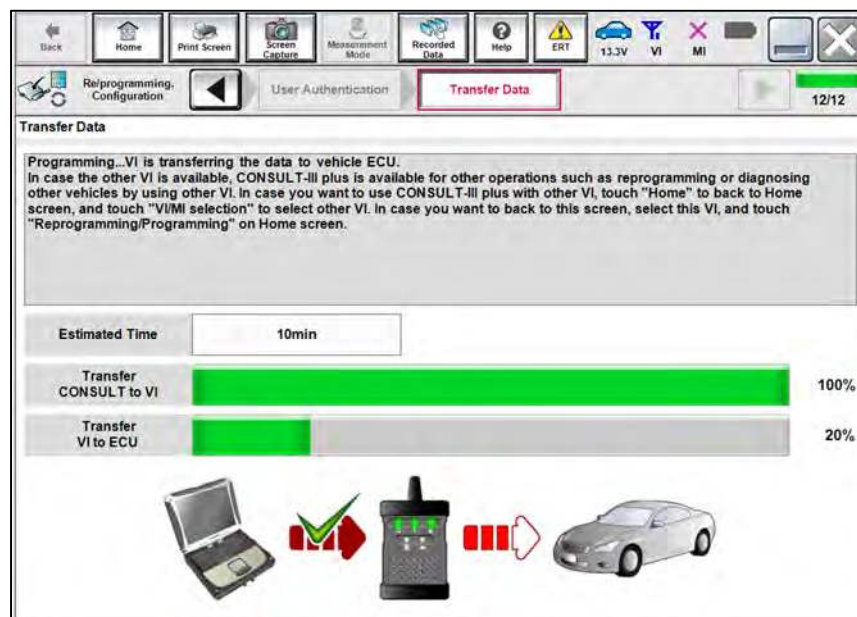


Figure 20

36. Disconnect the battery maintainer or smart charger from the vehicle.
37. Select **Next**.

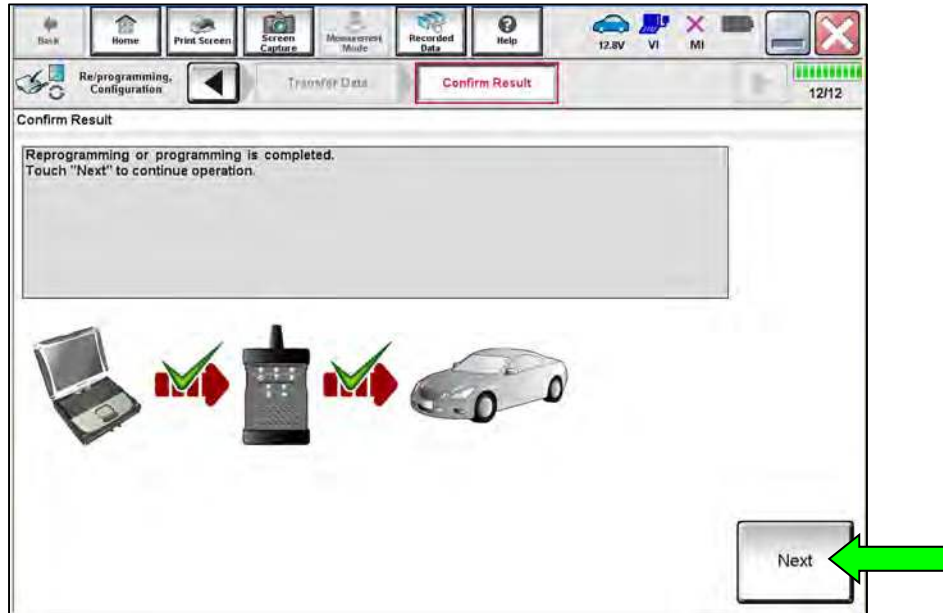


Figure 21

HINT: Additional steps/operations are required before CONSULT will provide the final reprogramming confirmation report. Continue with the reprogramming procedure on page 16.

Sonar Control Unit Recovery

Do not disconnect the VI or shut down CONSULT if reprogramming does not complete.

If reprogramming does not complete and the “!” icon displays, as shown in Figure 22:

- 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.**

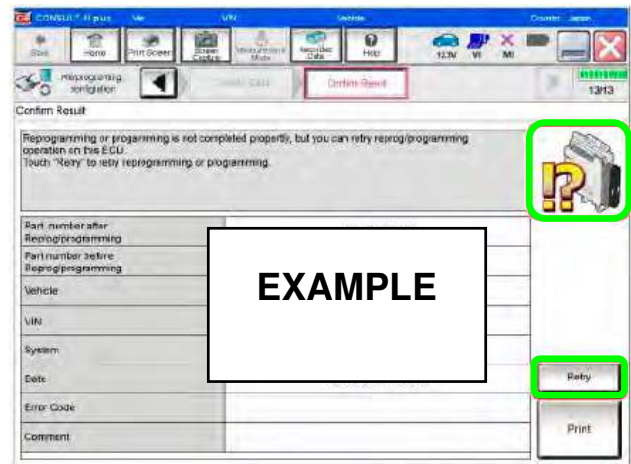


Figure 22

If reprogramming does not complete and the “X” icon displays, as shown in Figure 23:

- 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 CONSULT VI cables are securely connected.
- All C-III plus updates are installed.
- **Select Home, and restart the reprogram procedure from the beginning.**

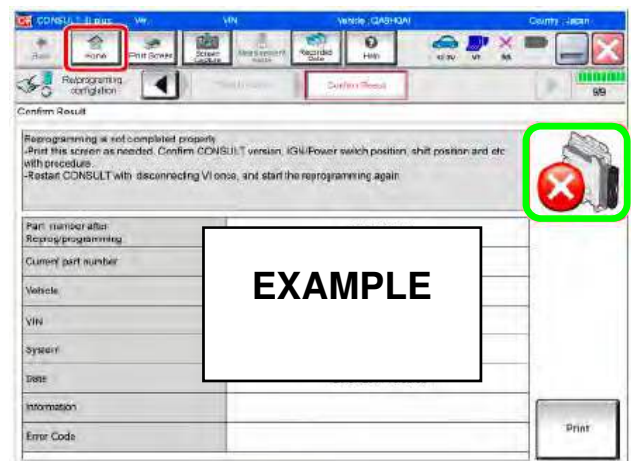


Figure 23

38. Perform **Erase All DTCs** as follows:

- a. Turn the ignition OFF.
- b. Turn the ignition ON.

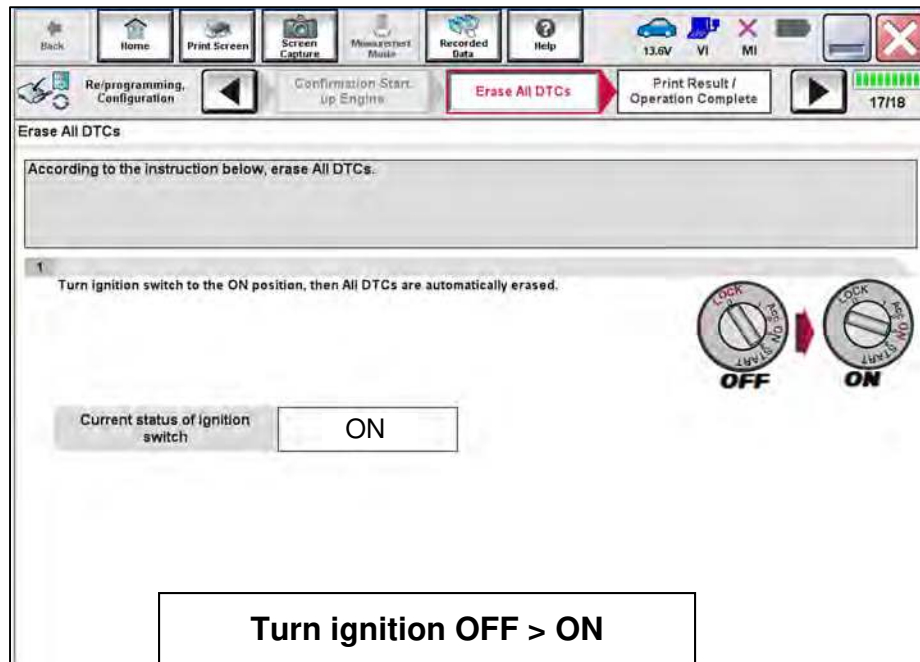


Figure 24

HINT: When the entire reprogramming process is complete, the screen in Figure 25 on page 17 will display.

39. Verify the before and after part numbers **are the same**.

HINT: For this reprogram, the before and after reprogramming part numbers should be the same. This is not an error.

40. Print a copy of the screen below (Figure 25) and attach it to the repair order for warranty documentation.

HINT: If you cannot print the screen:

- Select **Screen Capture**.
- Name the file.
- Save the file in My Documents.
 - A copy of the screen is now saved in the CONSULT PC. It can be retrieved and printed at a later time.

41. Select **Confirm**.

Back Home Print Screen Screen Capture Measurement Mode Recorded Data Help ERT 12.1V VI MI

Reprogramming, Configuration Erase All DTCs Print Result / Operation Complete 15/15

Print Result / Operation Complete

All tasks are completed. Confirm LAN access, touch "Print" to print out this page. In case CONSULT can NOT immediately access to LAN or printer, Screen Capture function is available for temporarily storage of this page. Touch "Screen Capture", and save it. Screen capture data is in "C:\I plus Data Folder" on desk top, and open the folder named "ScreenImages".

Part number after Reprog/programming	28538XXXX
Part number before Reprog/programming	28538-XXXX
Vehicle	XXXXXXXXXXXXXXXXXX
VIN	XXXXXXXXXXXXXXXXXX
System	SONAR
Date	XXXXXXXXXXXXXXXXXX

1/1

Print Other Operation Confirm

These numbers should be the same

Figure 25

42. Select **Home** (screen not shown).

Sonar Control Unit Configuration

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

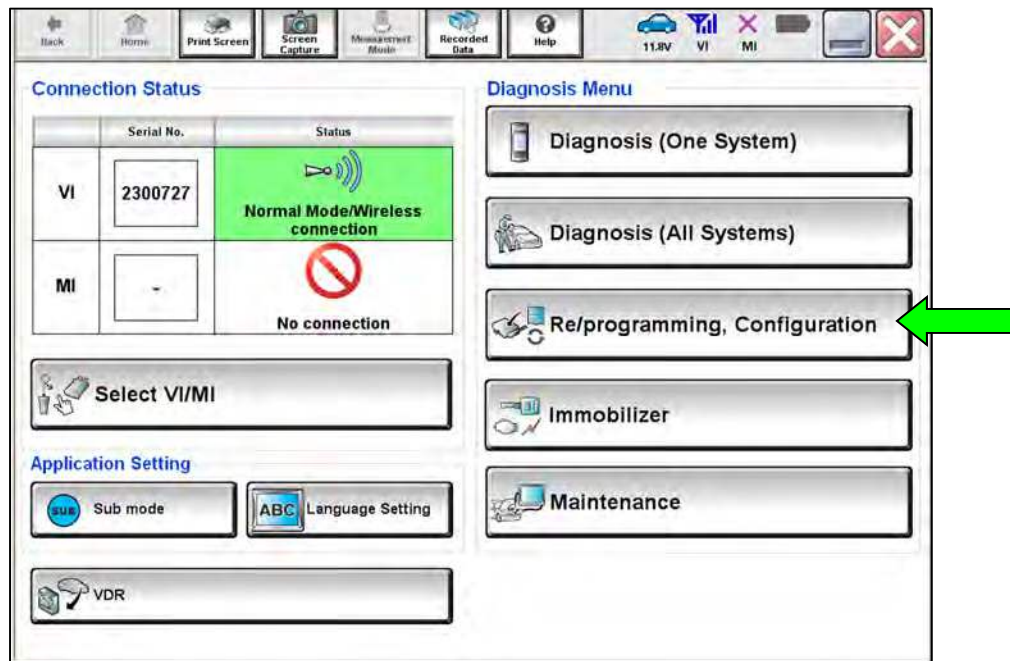


Figure 26

HINT: CONSULT screens for steps 44-47 are not shown.

44. Read the precautions on the CONSULT screen, check the box for **Confirmed Instructions**, and then select **Next**.
45. Select **Automatic Selection(VIN)**.
46. Select **Confirm**.
47. Select **Confirm** again.

48. Select **SONAR**.

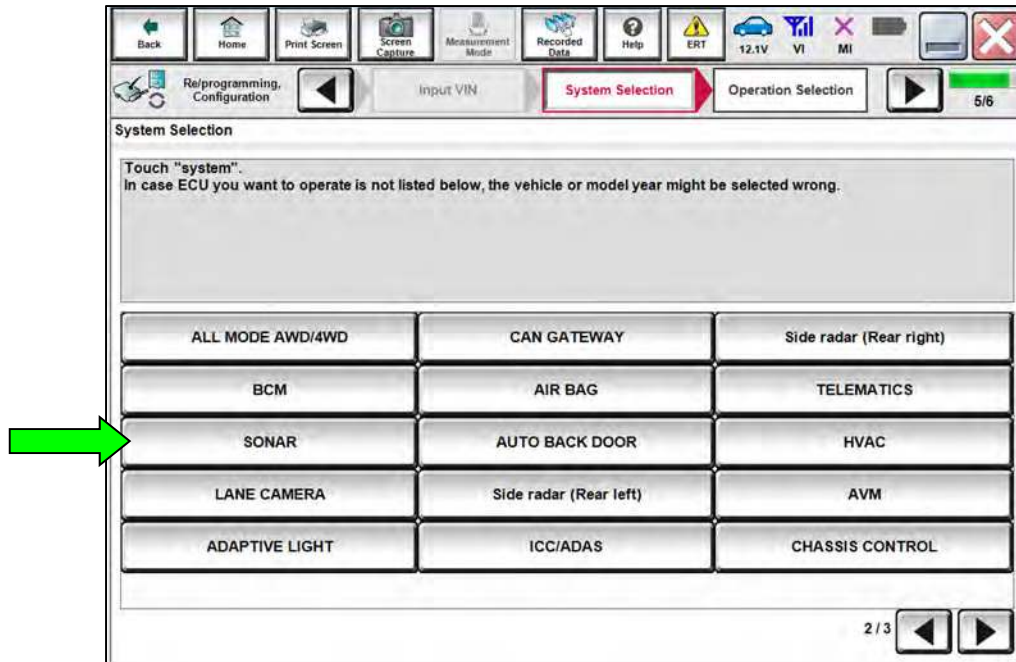


Figure 27

49. Select **After ECU Replacement** under **VEHICLE CONFIGURATION**.

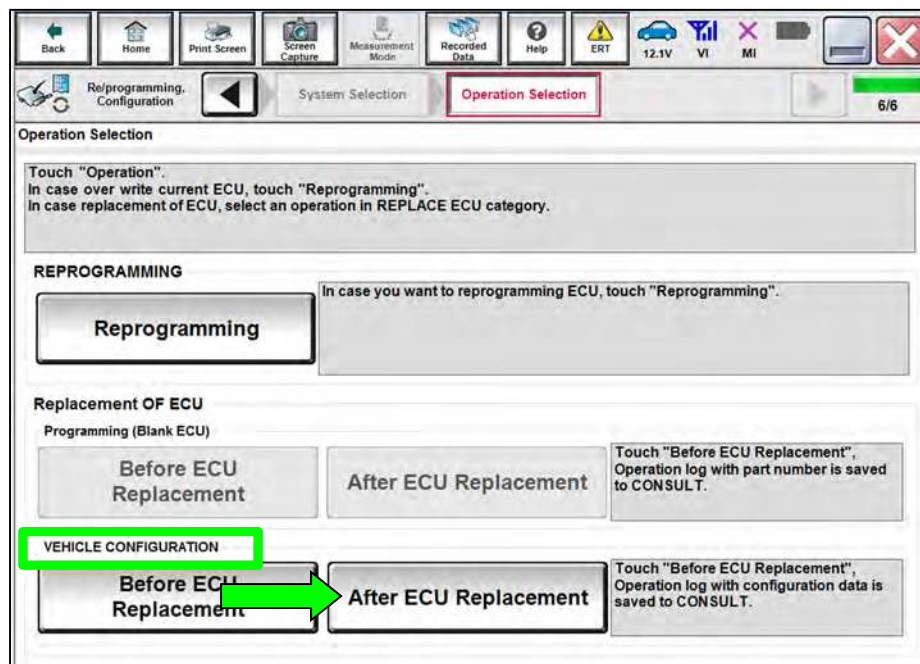


Figure 28

50. Select **Manual selection**.

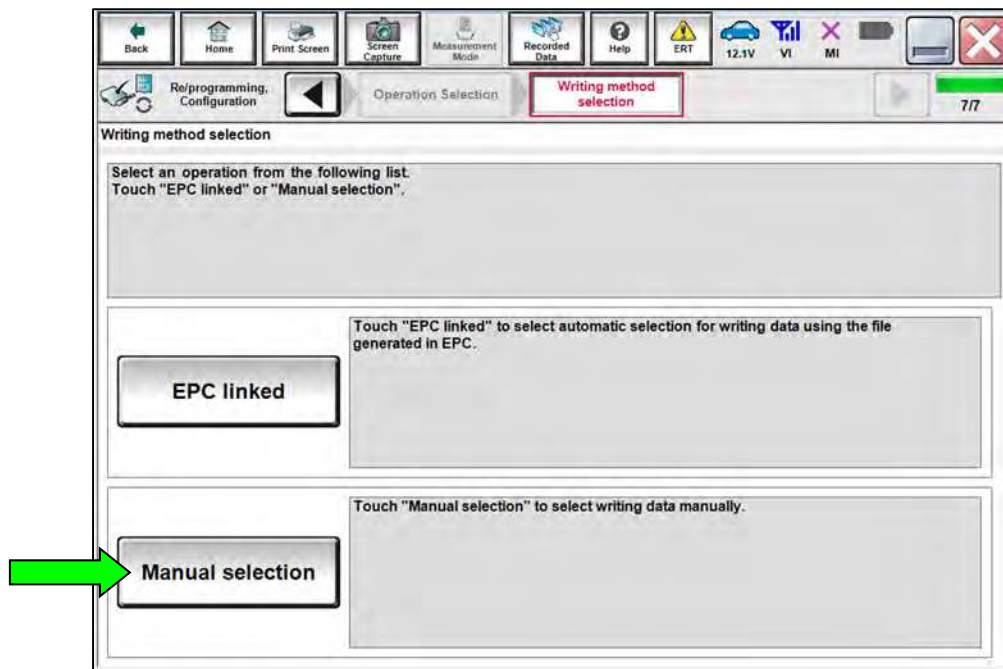


Figure 29

51. Select the applicable **Type ID**.

- Refer to the EPC to determine the applicable **Type ID**.

52. Select **Next**.

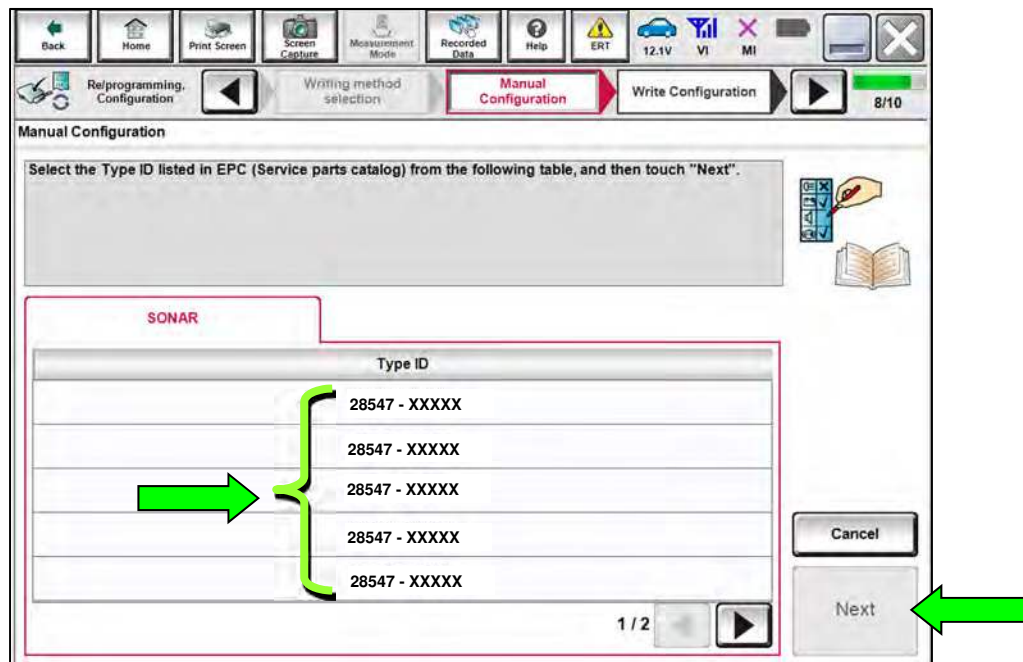


Figure 30

53. Confirm the correct **Type ID** is displayed, and then select **OK**.

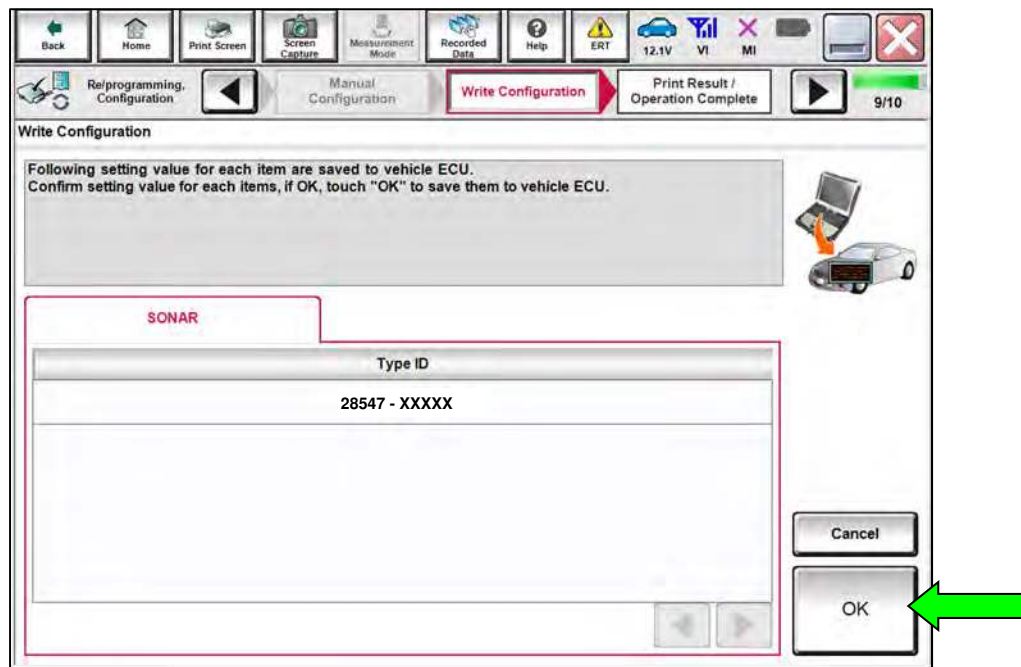


Figure 31

54. Select **End**.

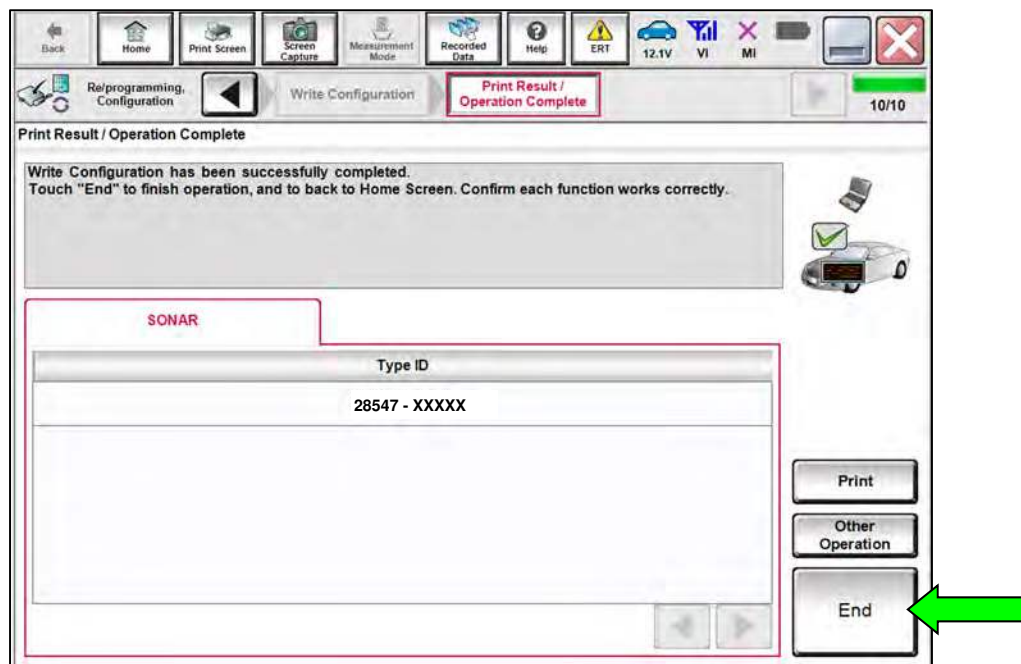


Figure 32

55. Select **Home** (screen not shown).

56. Select **Diagnosis (One System)**.

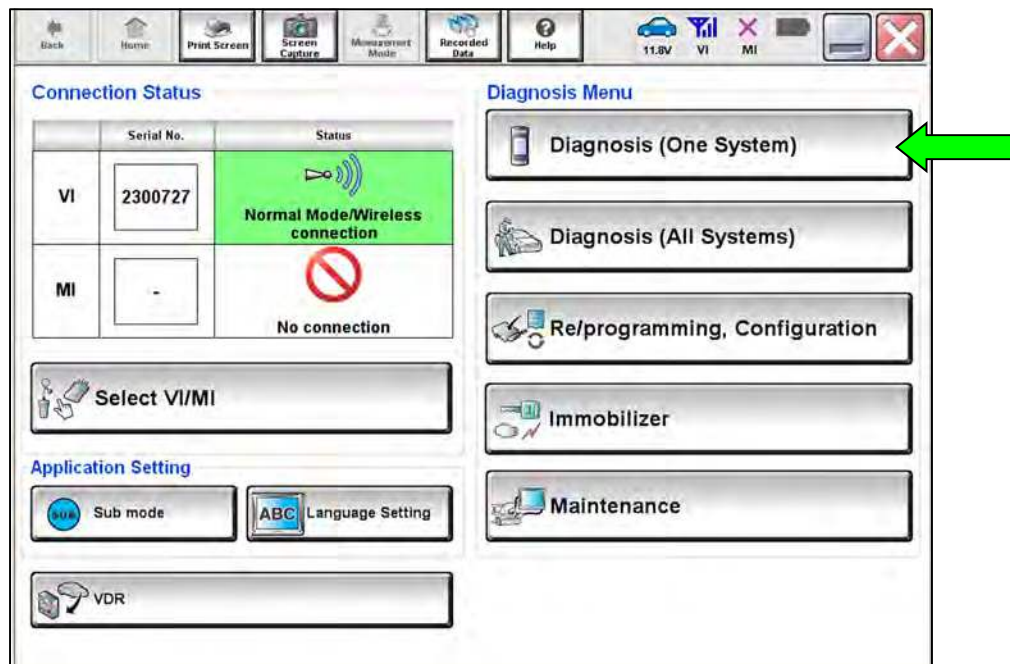


Figure 33

57. Select **SONAR**.

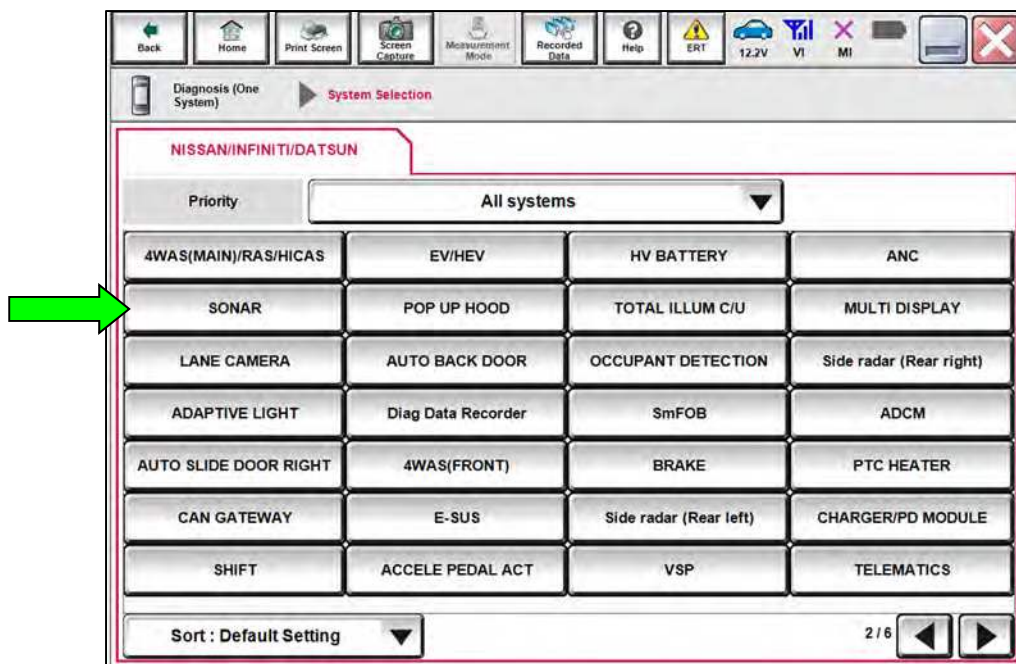


Figure 34

58. Select **ERASE**.

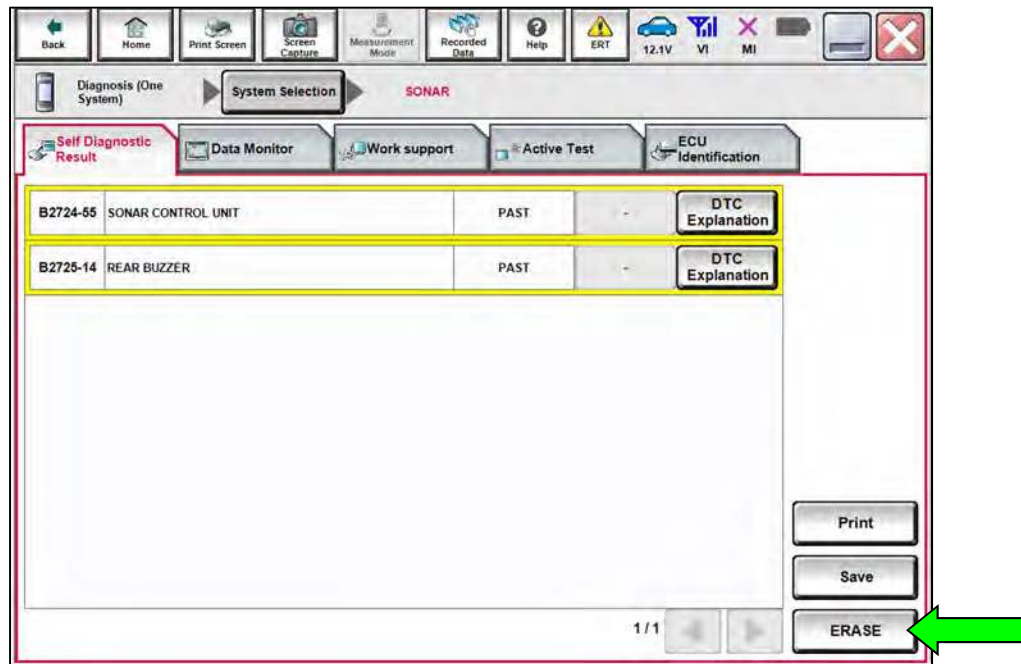


Figure 35

59. Select **ECU Identification**.

60. Confirm the **SOFTWARE #** (Figure 36).

- If the **SOFTWARE #** is "L139", proceed to step 61 on page 24.
- If the **SOFTWARE #** is not "L139", reprogramming did not successfully complete. Go back to step 18 on page 6 and perform the procedure again.

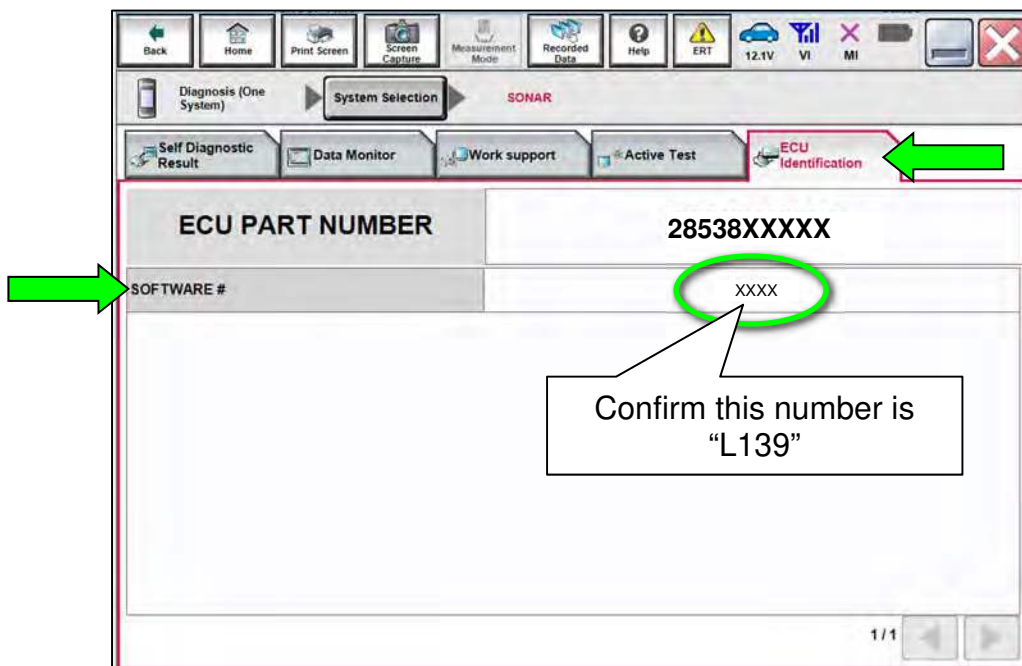


Figure 36

61. Select **Home**.

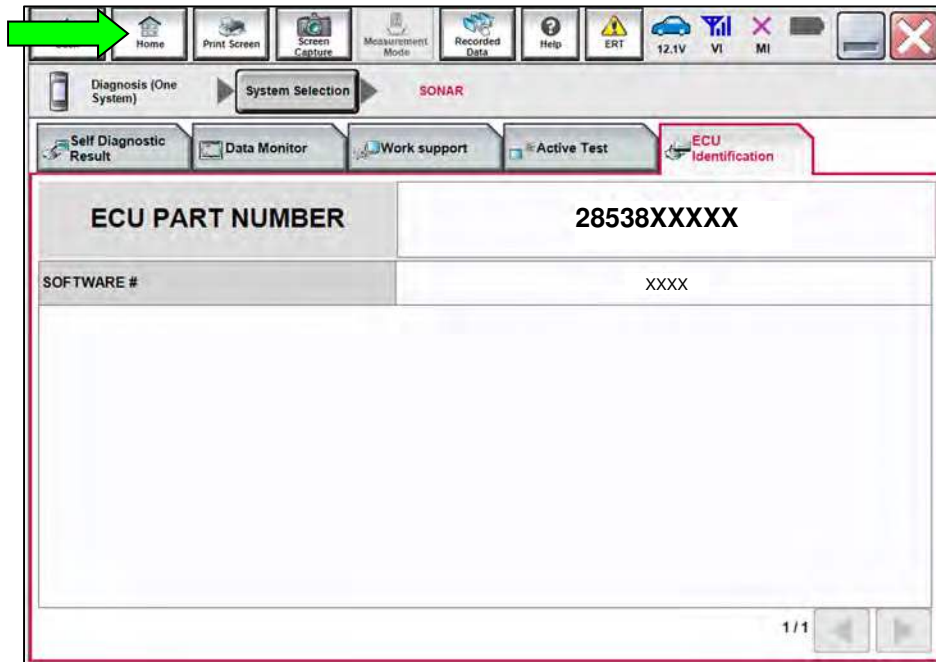


Figure 37

62. Select **Diagnosis (All Systems)**.

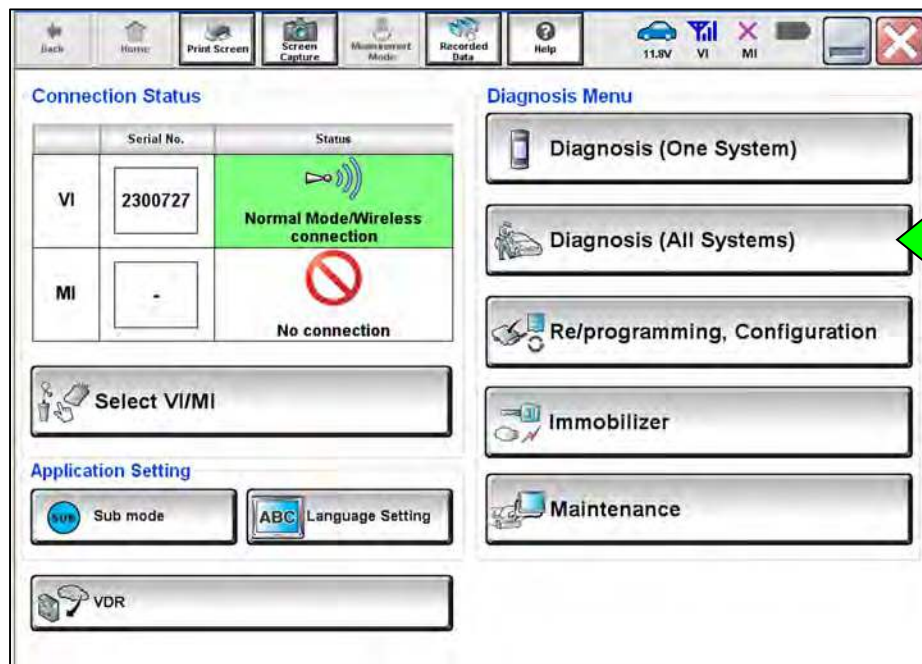


Figure 38

HINT: CONSULT screens for steps 63-65 are not shown.

63. Select **Automatic Selection(VIN)**.
64. Select **Confirm**.
65. Select **Confirm** again.
66. Turn the ignition OFF, and then turn the ignition ON.
67. Select **ERASE**.

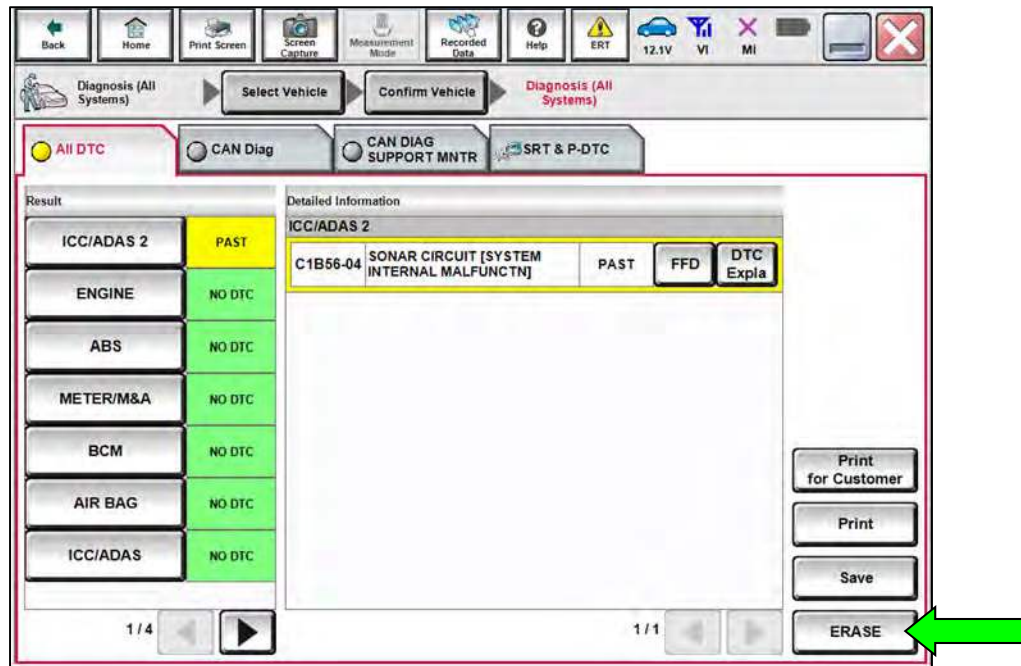


Figure 39

68. Close CONSULT.
69. Turn the ignition OFF.
70. Disconnect the VI from the vehicle.
71. Start the engine.
72. Check that the RAB system setting can be enabled/disabled on the combination meter.
73. Test drive the vehicle and make sure it operates correctly and the MIL is OFF.
 - If the MIL comes ON, go back to the ESM for further diagnostic information.
 - Diagnosis and repairs beyond SONAR reprogramming are not covered by this bulletin.

CLAIMS INFORMATION

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

DESCRIPTION	PFP	OP CODE	SYM	DIA	FRT
Reprogram Sonar Control Unit	(1)	RXC8AA	ZE	32	0.8

(1) Reference the electronic parts catalog and use the Sonar Control Unit (28532-*****) as the Primary Failed Part (PFP).

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
August 17, 2022	NTB22-073	Original bulletin published
January 24, 2023	NTB22-073A	Changes made throughout

