Classification:	Reference:	Date:
RS17-015a	ITB17-006a	July 28, 2017

2017 QX30; AIR BAG DIAGNOSIS SENSOR UNIT REPLACEMENT

> This bulletin has been amended. Changes have been made on pages 1 and 2.
> No other changes have been made. Please discard previous versions of this bulletin.

APPLIED VEHICLES: 2017 QX30 (H15)

SERVICE INFORMATION

If the Air Bag Diagnosis Sensor Unit needs to be replaced in an Applied Vehicle for any reason, follow the procedures in this bulletin to ensure all required steps are performed before and after replacement.

> **IMPORTANT:** Confirm the items below before starting the procedure in this bulletin.
>
> • Make sure your ASIST has been synchronized to the current date, and all CONSULT-III plus (C-III plus) upgrades have been installed.
>
> • The C-III plus version must be 65.6 or higher.

Parts of the Air Bag Diagnosis Sensor Unit Replacement Procedure

    PART 1: Save ECU Data

    PART 2: Replace Air Bag Diagnosis Sensor Unit

    PART 3: Programming

    PART 4: Write Configuration

    PART 5: Learn Key Number

    PART 6: Lock ECU

    PART 7: Erase DTCs

NOTE: Zero Point Reset is <u>not</u> required after Air Bag Diagnosis Sensor Unit replacement. This is different than what is instructed in the Electronic Service Manual (ESM). The ESM will be updated at a later date.

AIR BAG DIAGNOSIS SENSOR UNIT REPLACEMENT PROCEDURE

PART 1
Save ECU Data

1. Connect the CONSULT PC to the vehicle with the plus VI.

2. Turn the vehicle ignition ON.

3. Open / start C-III plus.

4. Wait for the plus VI to be recognized.

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

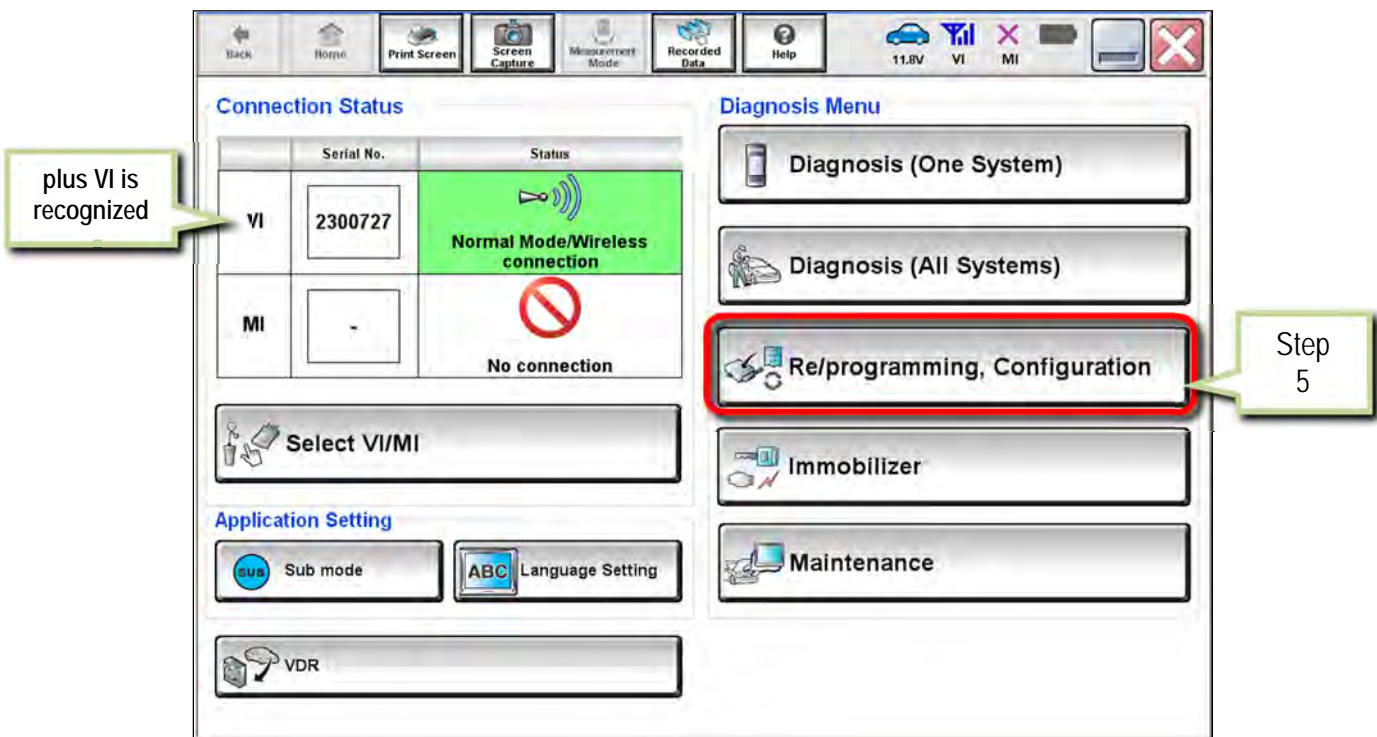5. Select **Re/programming, Configuration**.

Figure 1

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

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

8. Select **Next**.
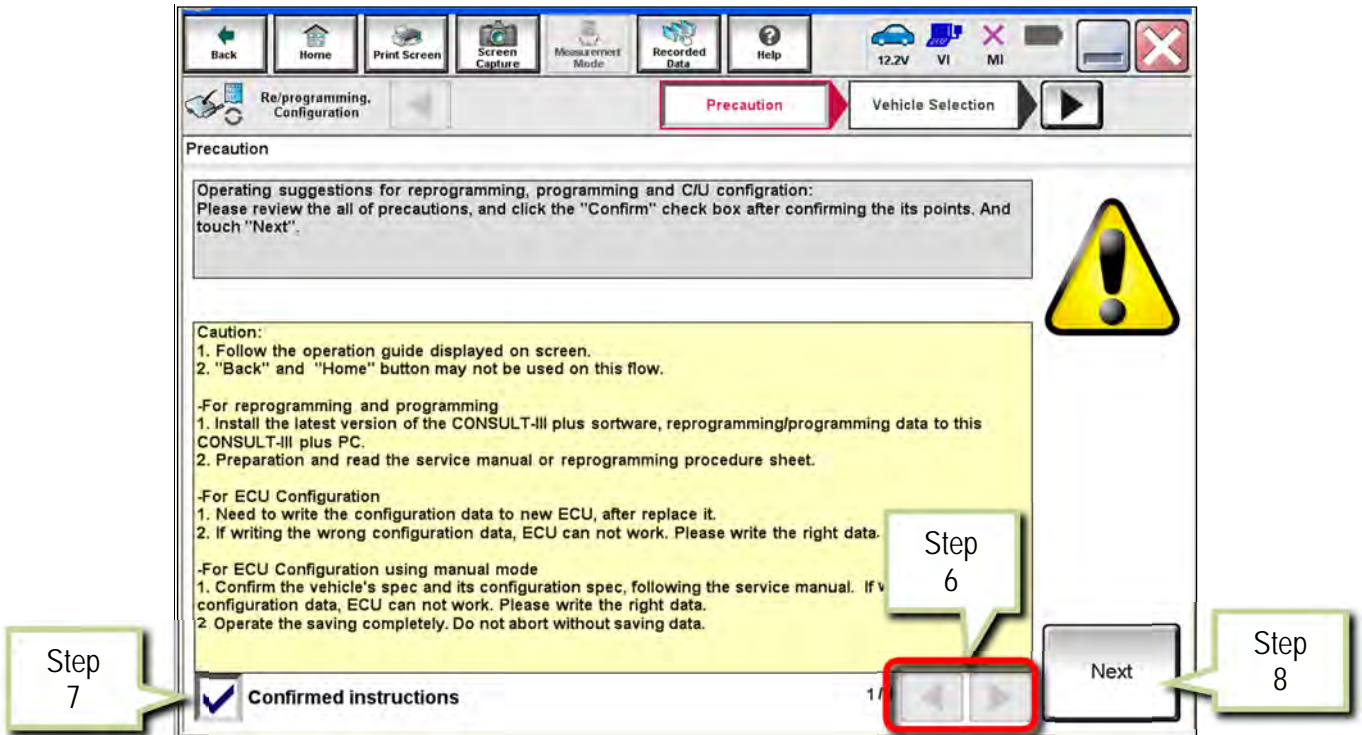
Figure 2

9. If the screen in Figure 3 displays, select **Automatic Selection(VIN)**.

   - If the screen in Figure 3 does not display, skip to step 10.

Figure 3

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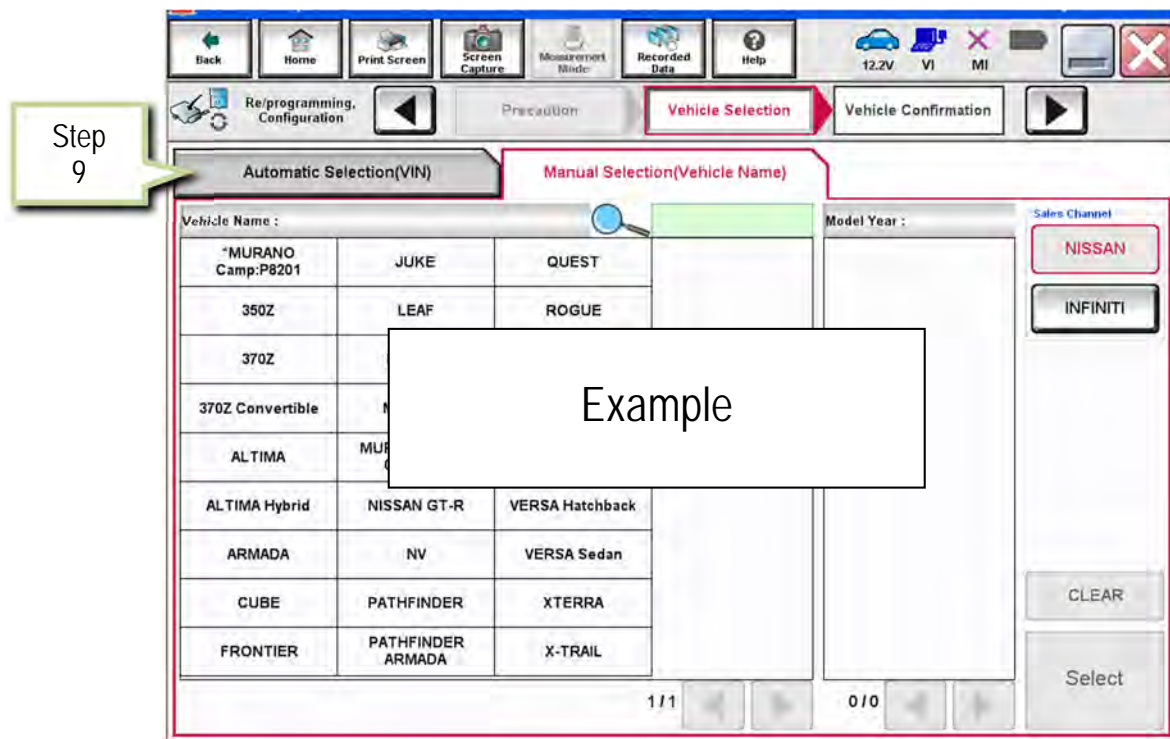
10. Make sure **VIN or Chassis #** matches the vehicle VIN.
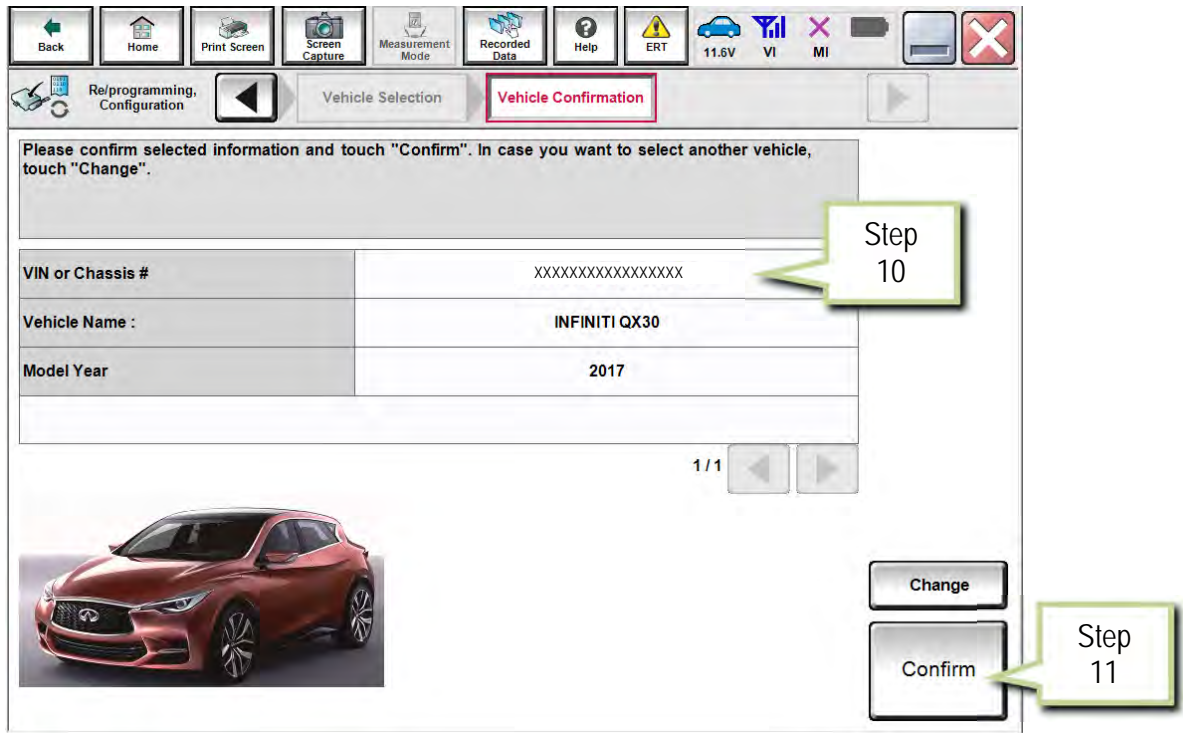
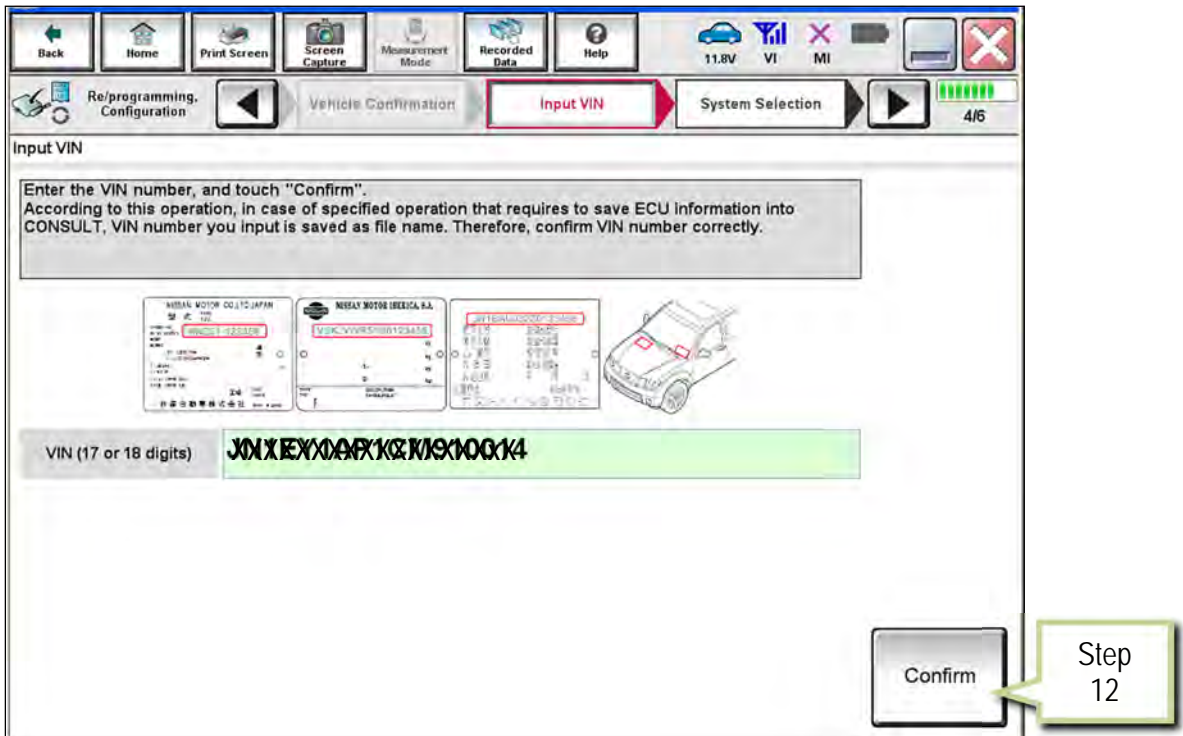11. Select **Confirm**.

Figure 4

12. Select **Confirm**.

Figure 5

13. Select **USA/CANADA Dealers** in the drop down menu, then select **OK**.

NOTE:

- The screen in Figure 6 will only appear during the first login on a CONSULT PC. Future logins with same CONSULT PC will display the screen in Figure 7 only.

- If the screen shown in Figure 6 does not display, proceed to step 14.

Figure 6

14. Enter your **NNAnet.com Username** & **Password**, then select **Submit**.

Figure 7

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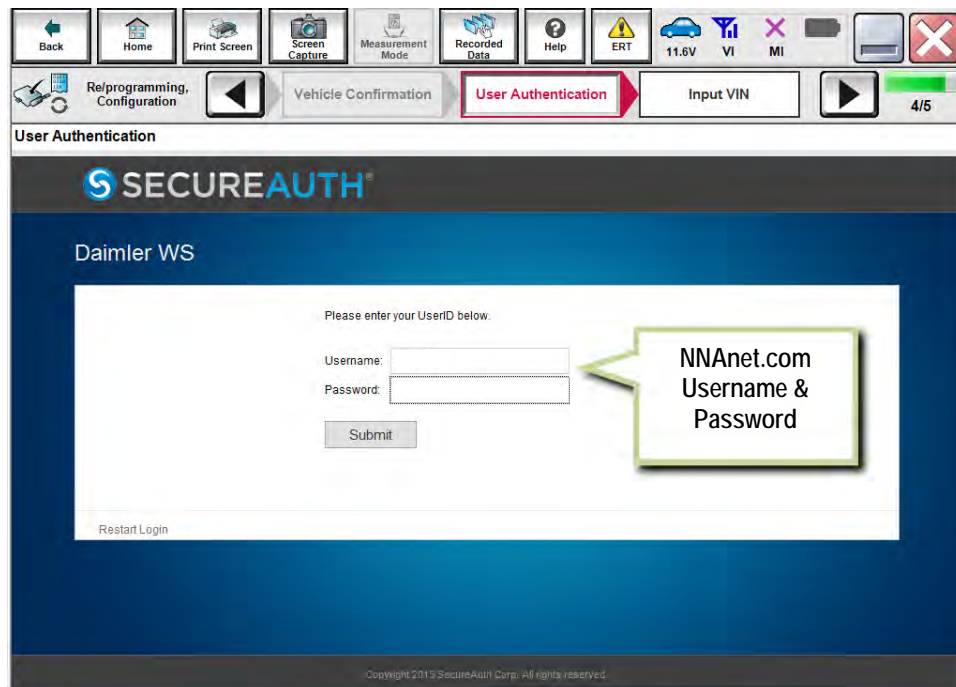
15. Select **AIR BAG**.
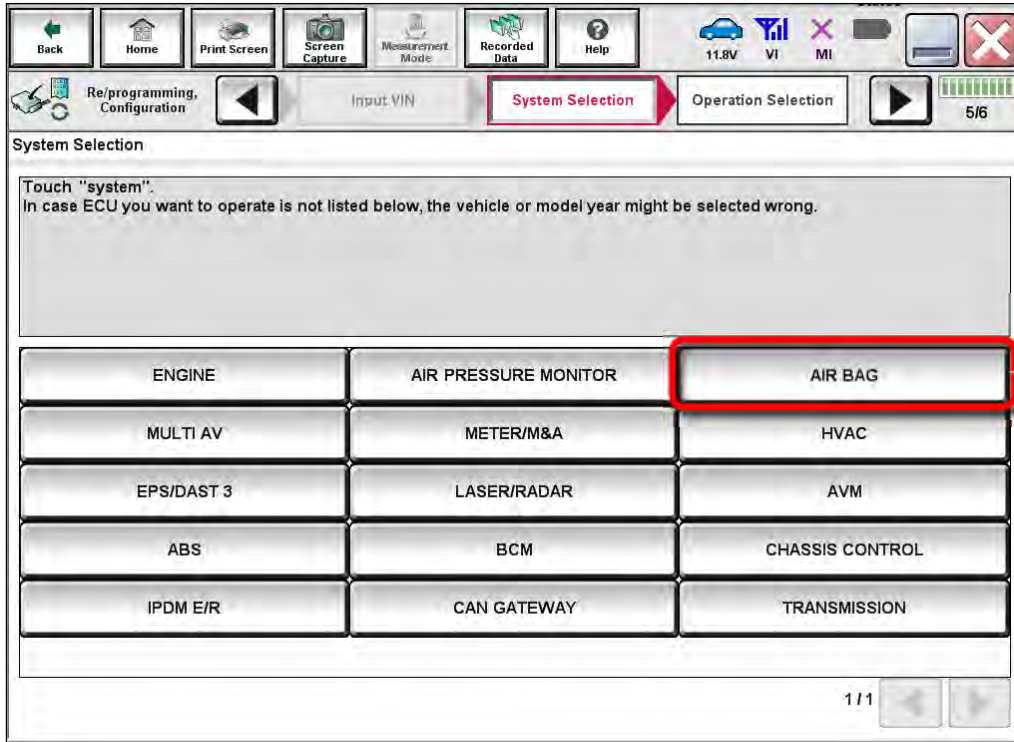
Figure 8

16. Select **Before ECU Replacement**.
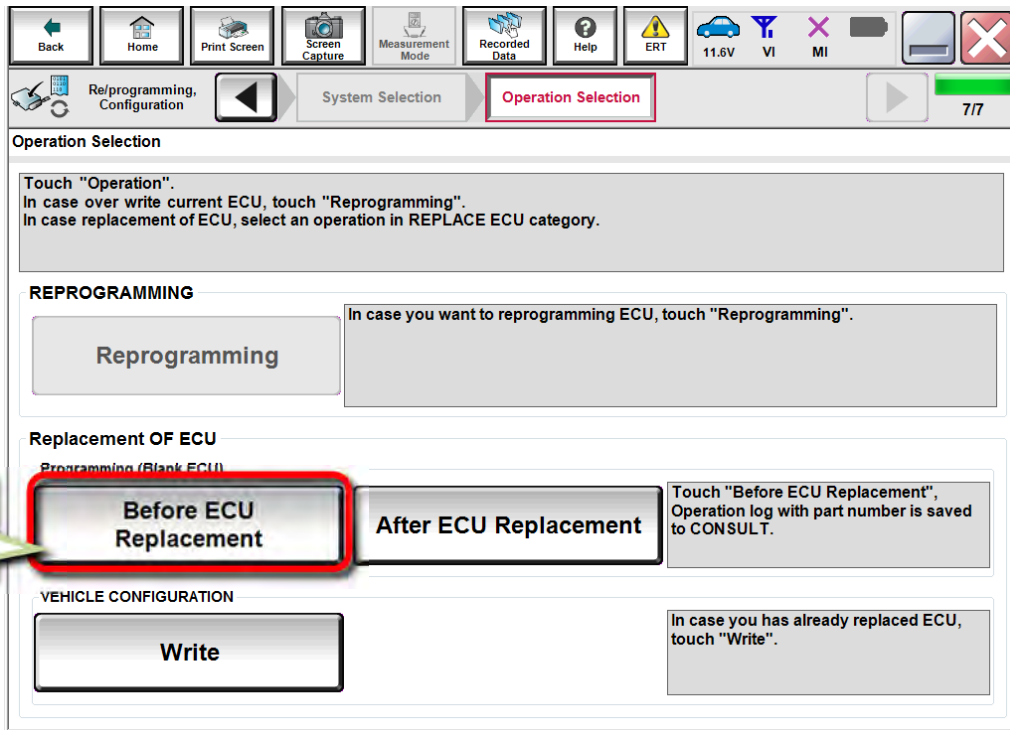
Figure 9

17. Select **Save**.
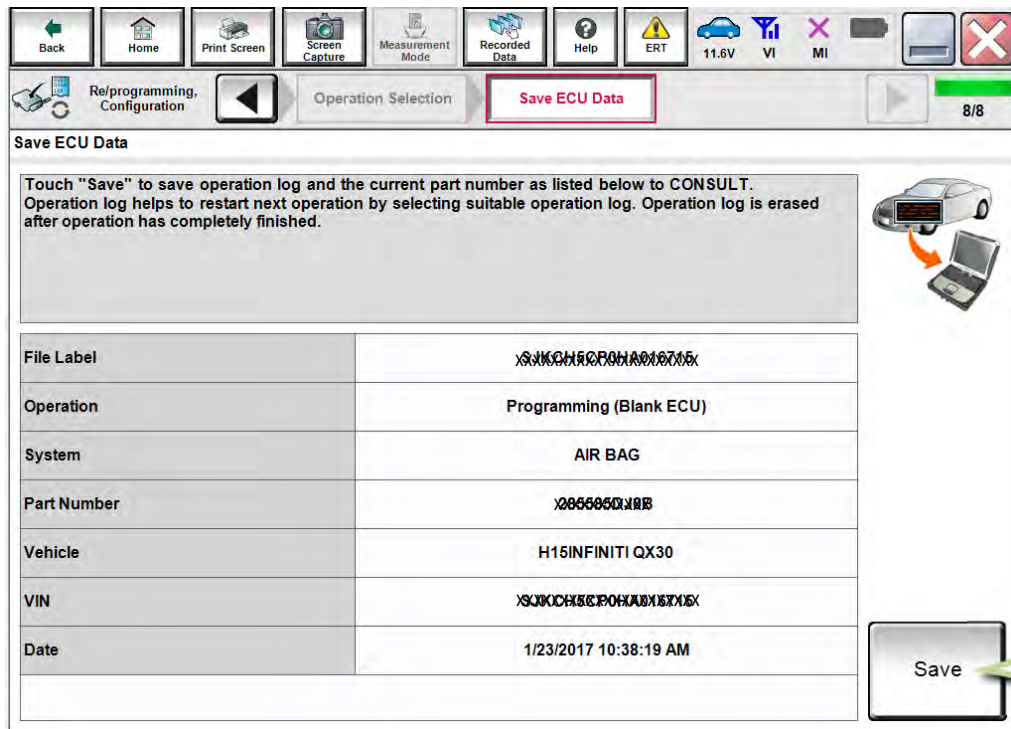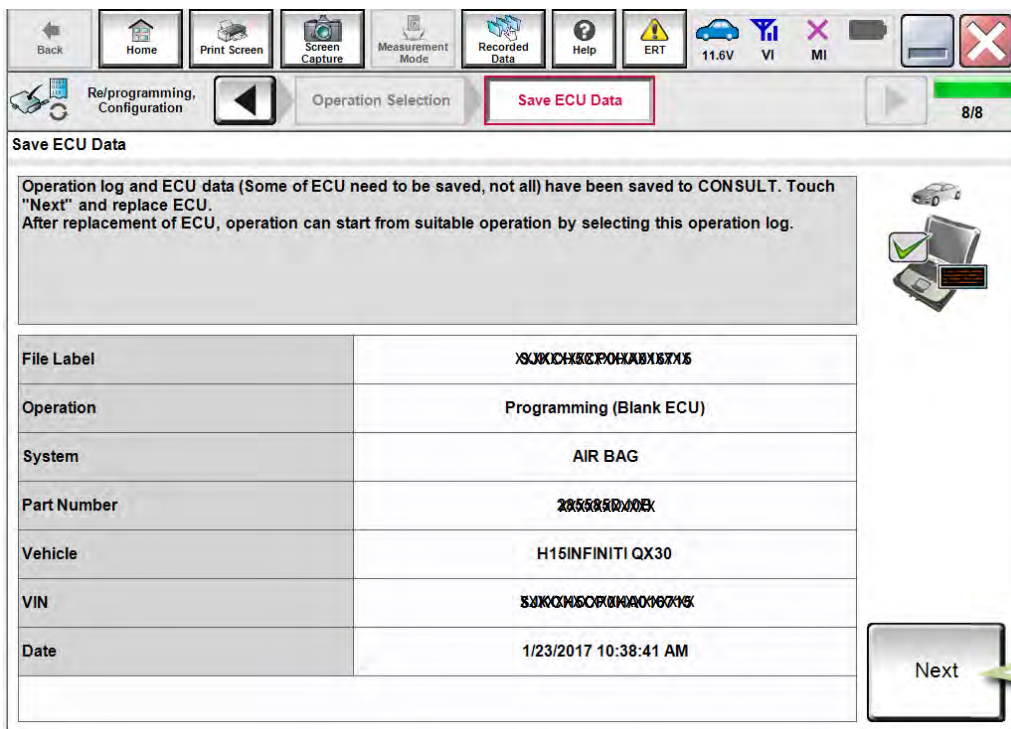

Figure 10

18. Select **Next**.

Figure 11

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PART 2
Replace Air Bag Diagnosis Sensor Unit

19. Replace the Air Bag Diagnosis Sensor Unit as instructed in the applicable (ESM).

- Refer to section **SRC** > **DIAGNOSIS SENSOR UNIT** > **Removal and Installation**.

PART 3
Programming

NOTE: If steps 1-18 (Save ECU Data) were unsuccessful or were not performed before the Air Bag Diagnosis Sensor Unit was replaced, proceed to **Program the Air Bag Diagnosis Sensor Unit Using FAST-Link** on page 22.

20. Connect the GR8 to the 12V battery and select ECM Power Supply Mode.

21. Perform steps 1-15 beginning on page 2.

22. Select **After ECU Replacement**.
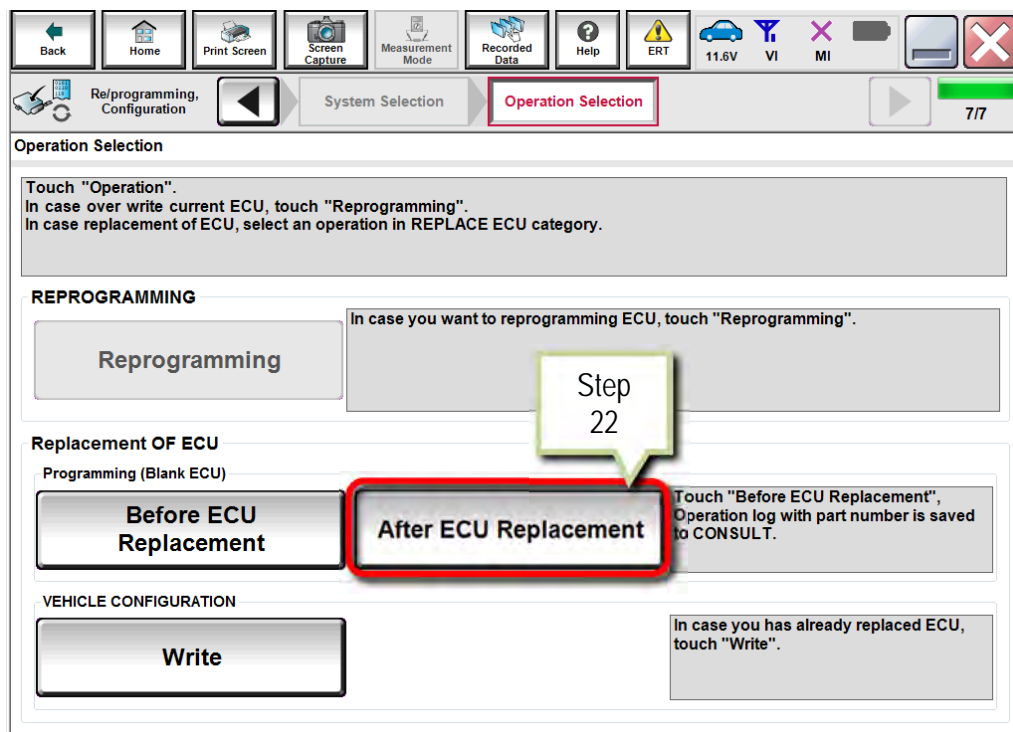
Figure 12

23. Select the appropriate Operation Log (VIN) in the **Saved Data List**. Use arrows, if needed.

- The appropriate Operation Log is VIN-specific, with the Operation displayed as **Programming (Blank ECU)** and the System displayed as **AIR BAG**.
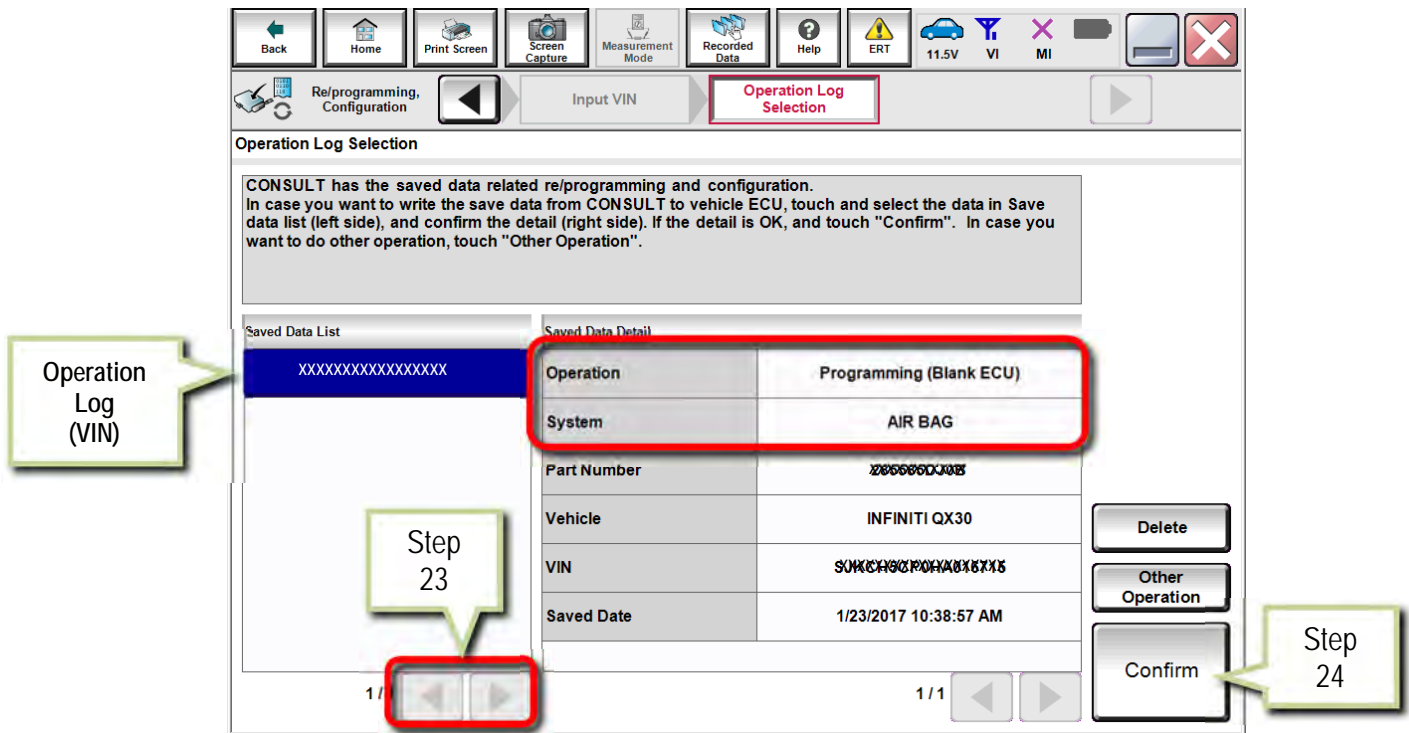
24. Select **Confirm**.

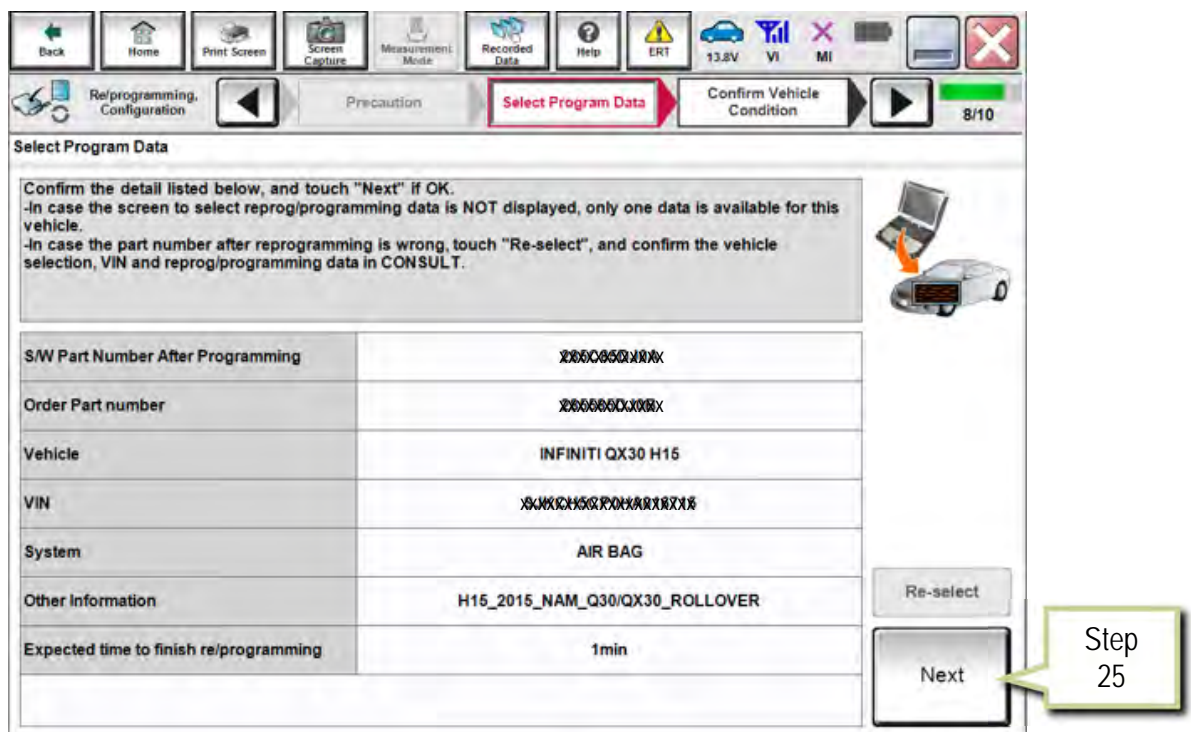Figure 13

25. Select **Next**.

Figure 14

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 programming.
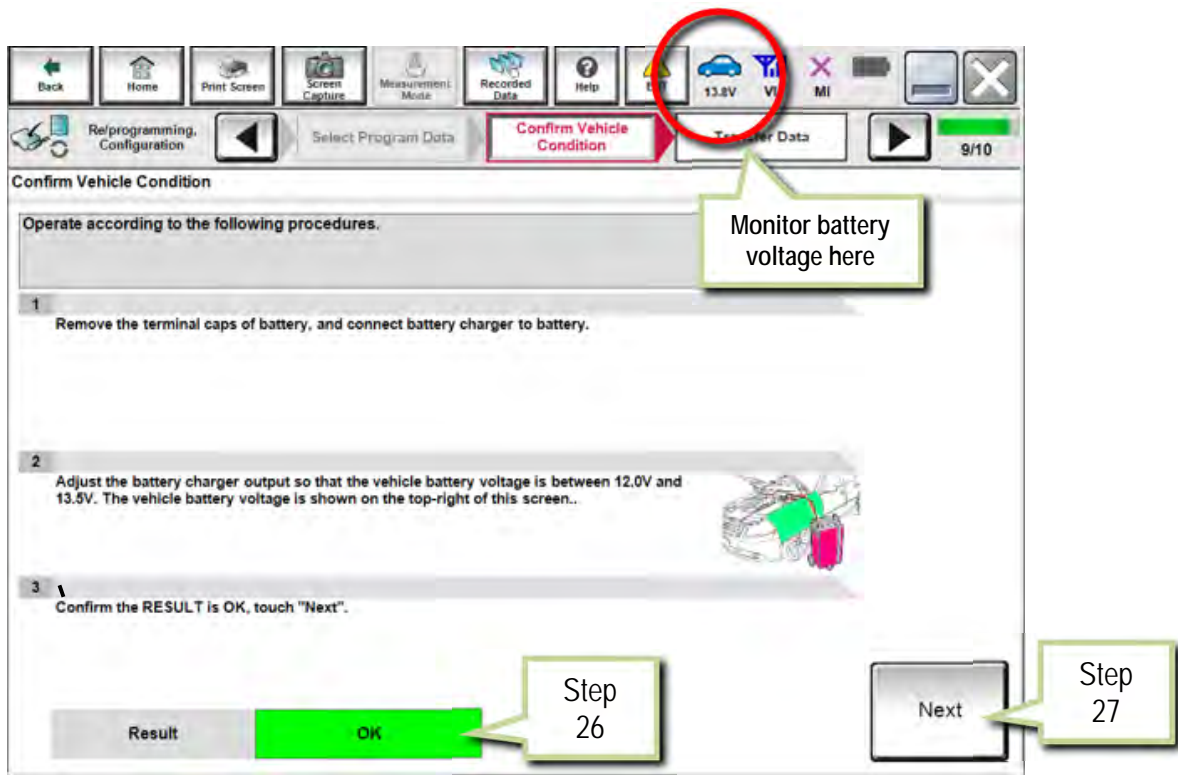
Figure 15

28. Select **Start**.
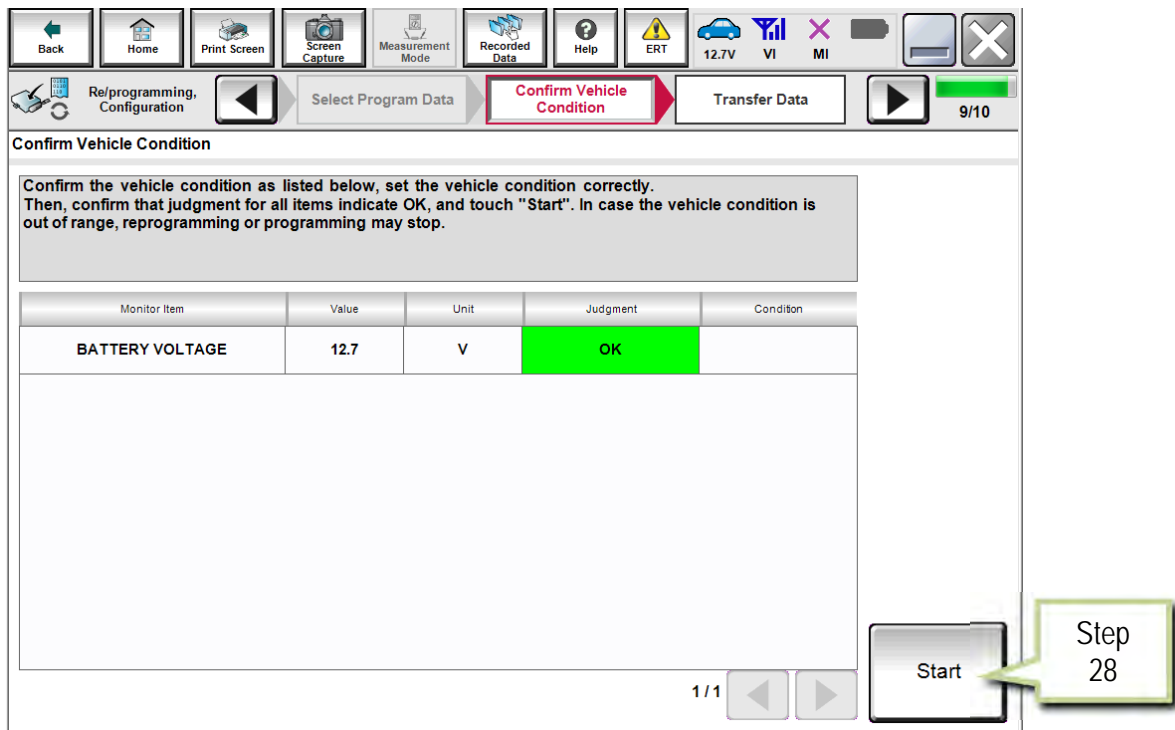
Figure 16

29. Select **Next**.
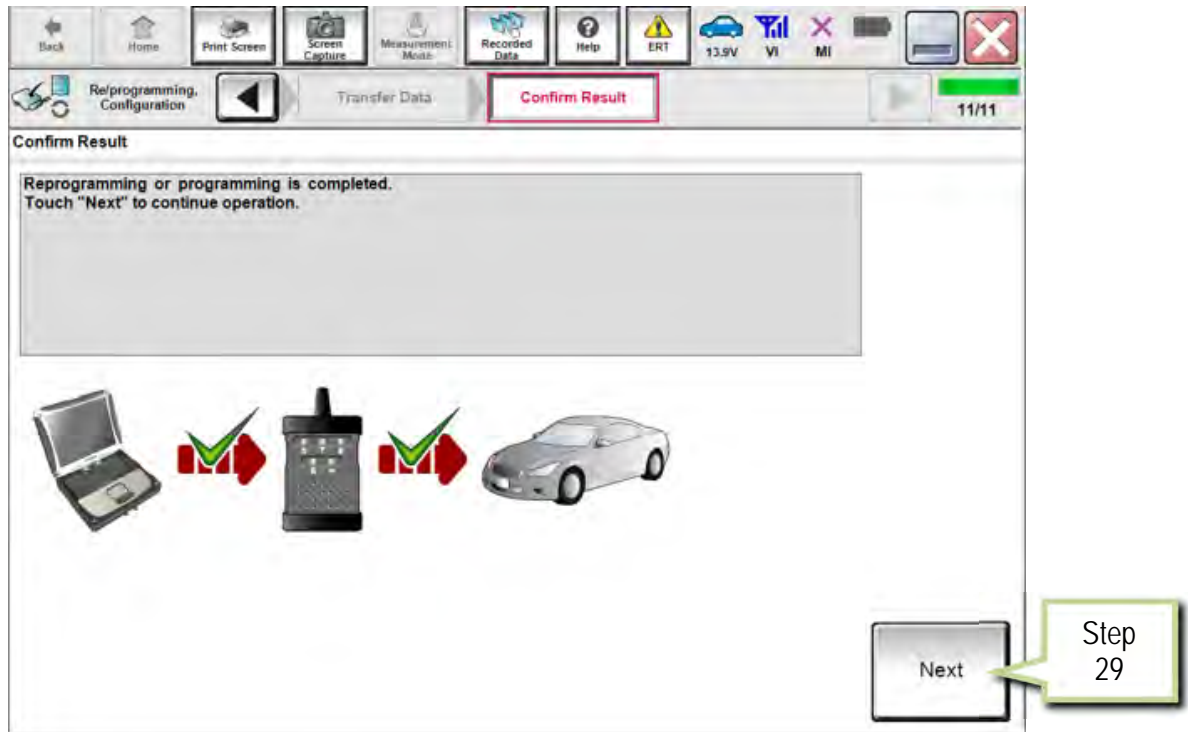
Figure 17

30. Erase DTCs.

- Follow the on-screen instructions to cycle the vehicle ignition switch status.
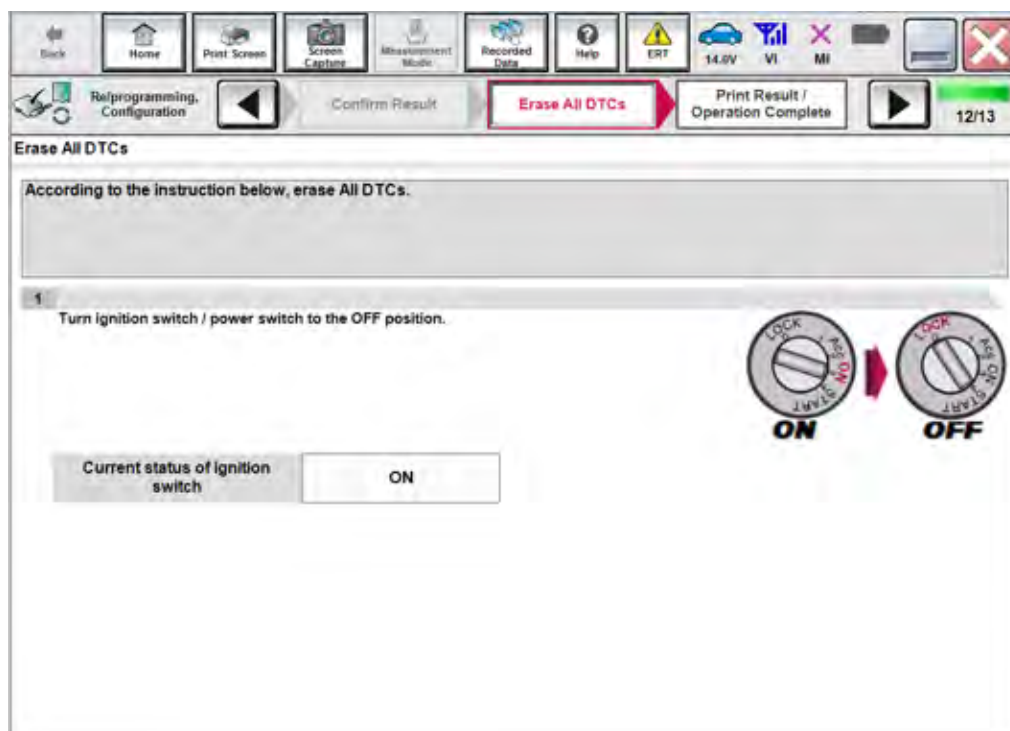
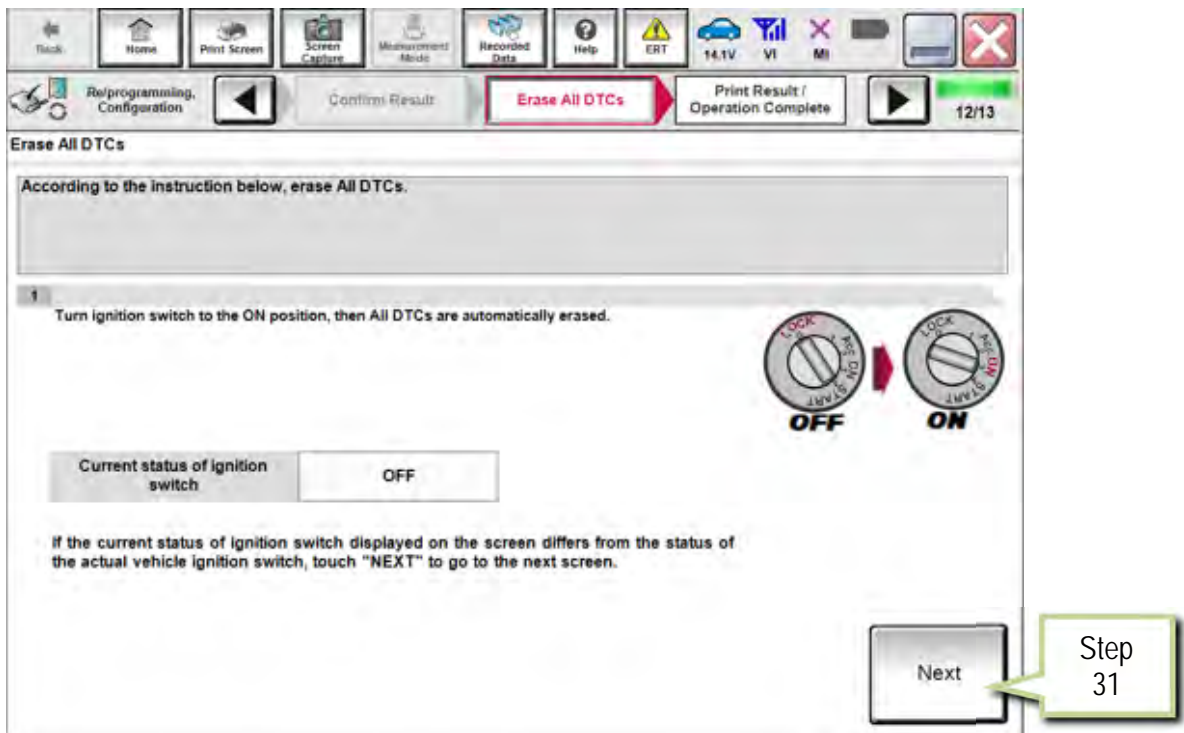- See Figure 18 below, and Figure 19 on the next page.

Figure 18

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31. Select **Next**.

Figure 19

32. Select **Print**.

33. Print a copy of this screen (Figure 20) and attach it to the repair order for warranty documentation.
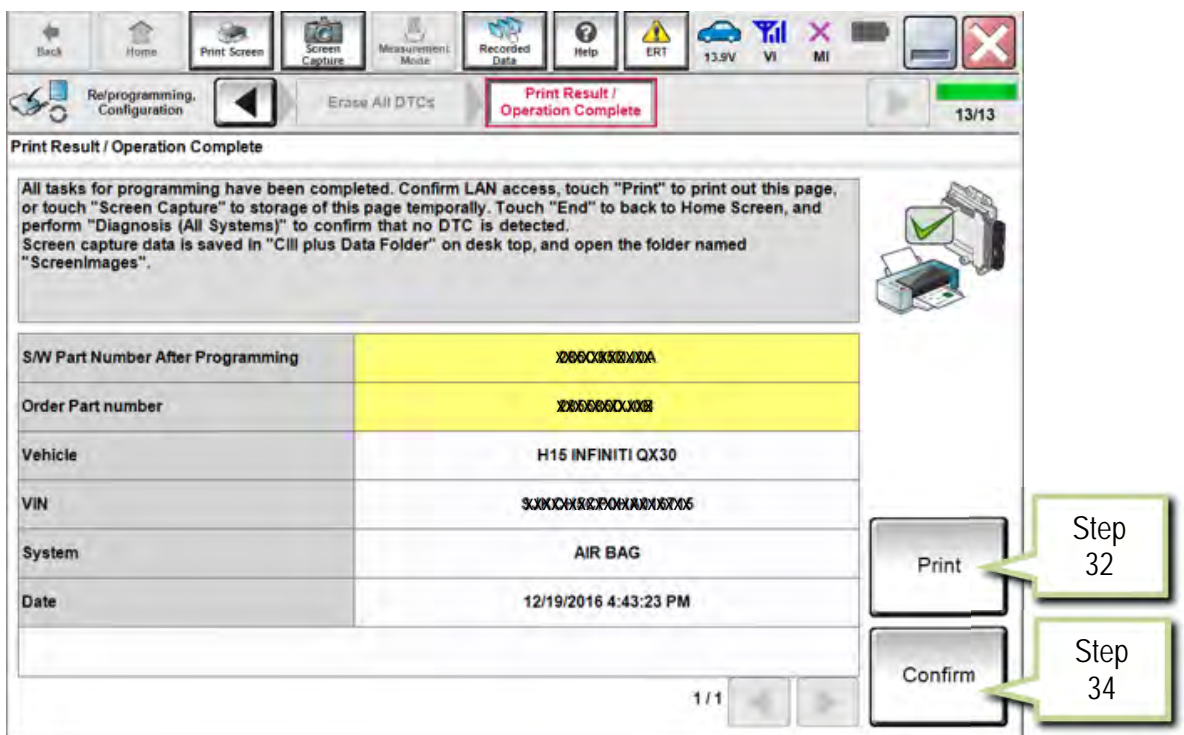
34. Select **Confirm**.

Figure 20

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35. Perform steps 5-15 beginning on page 2.
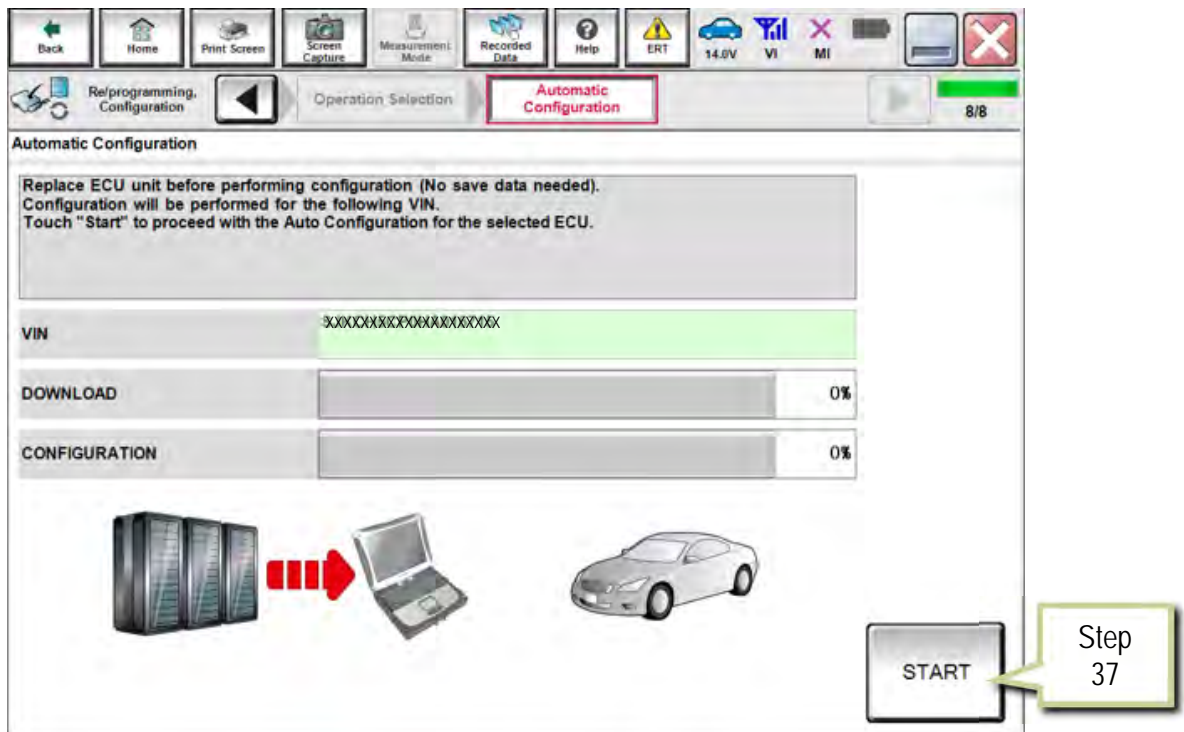
36. Select **Write**.
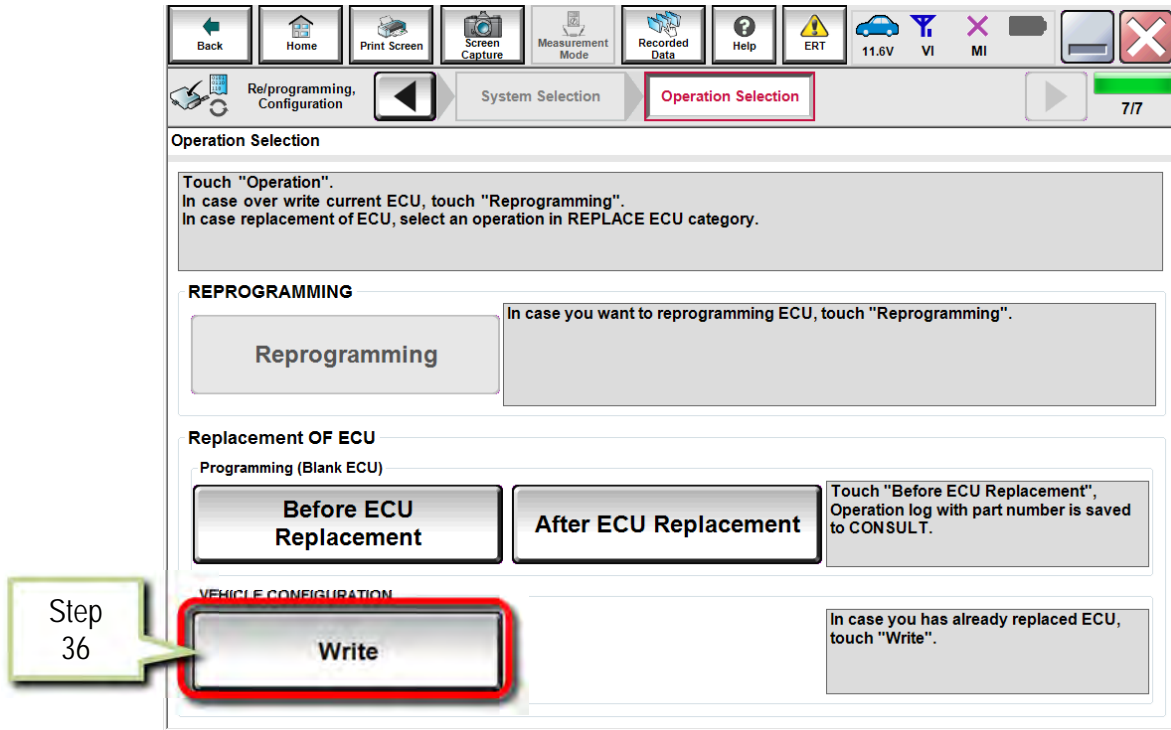
Figure 21

37. Select **Start**.

Figure 22

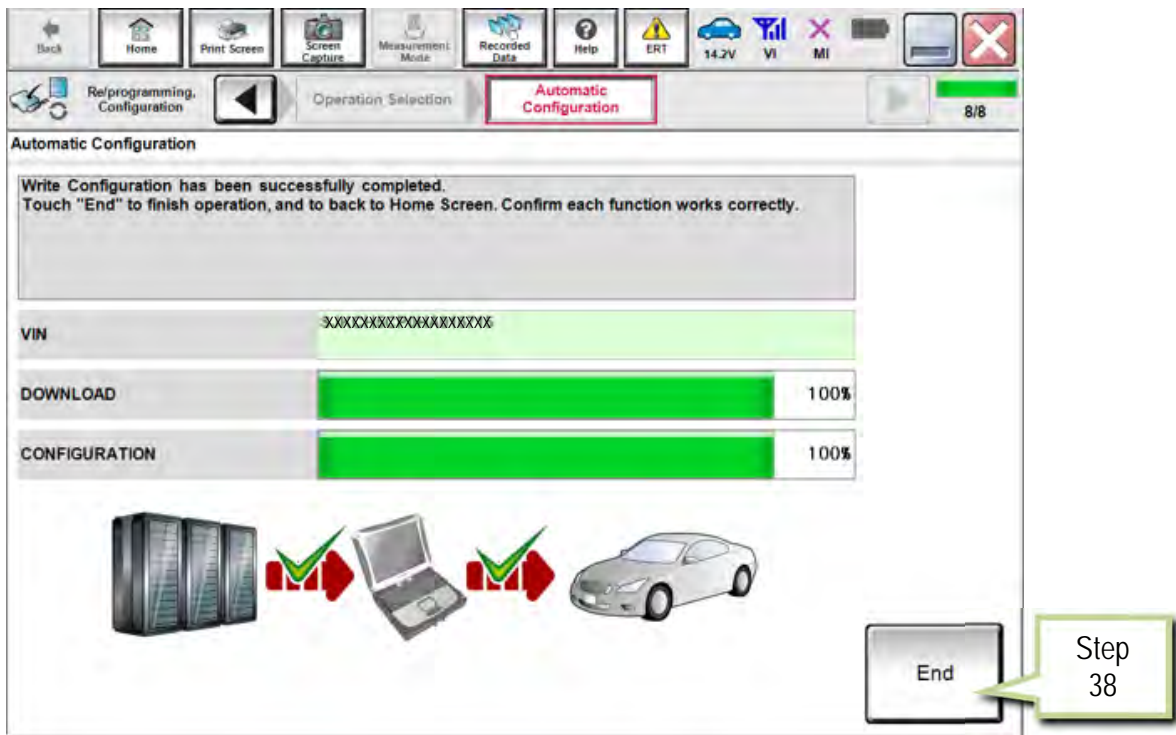38. Select **End** when configuration is complete.

Figure 23

PART 5
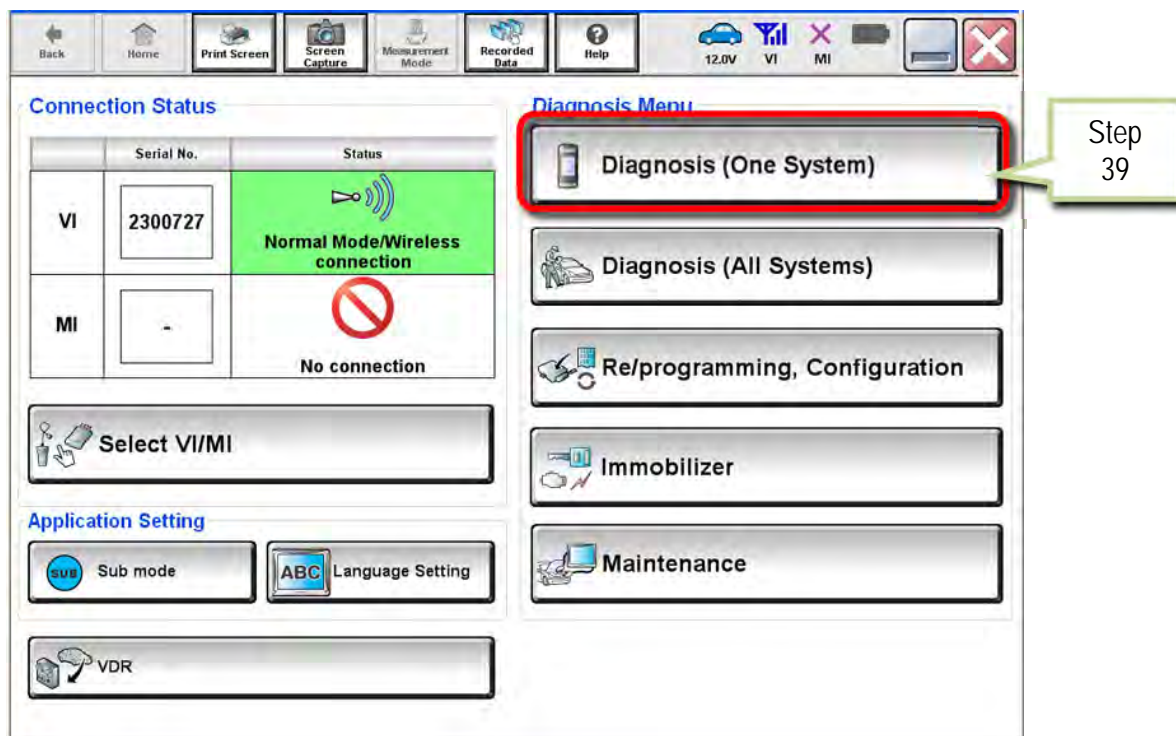**Learn Key Number**

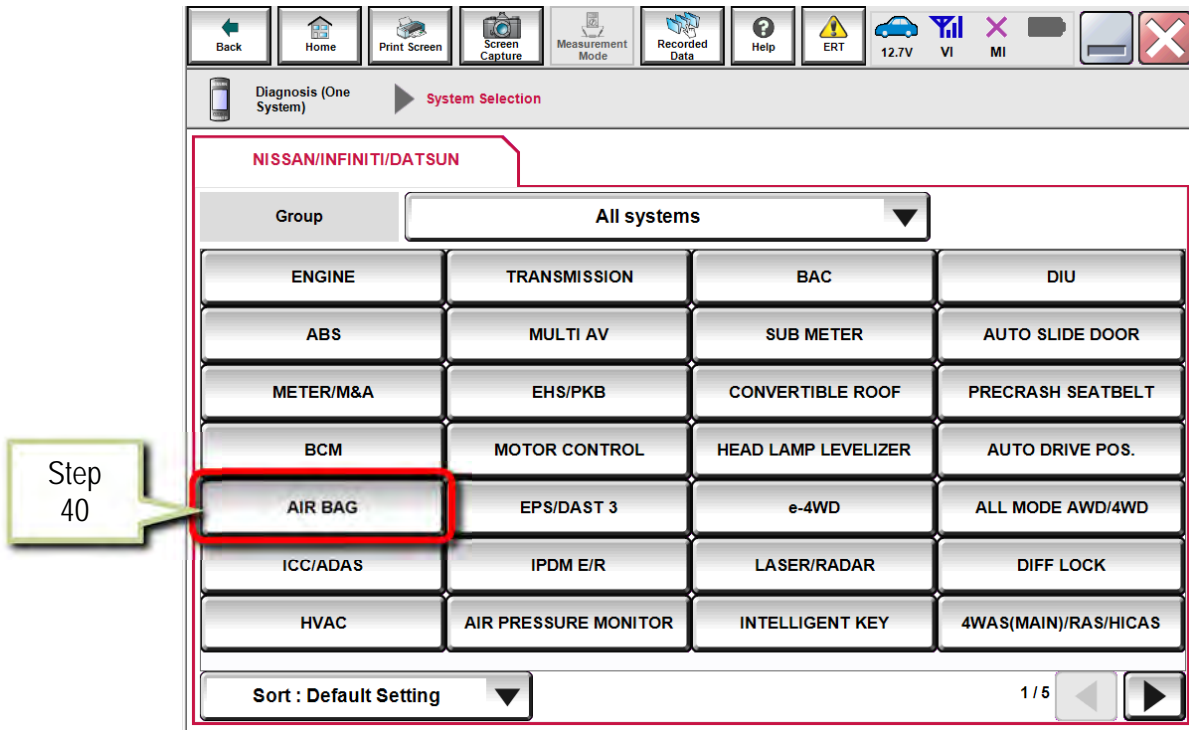39. Select **Diagnosis (One System)**.

Figure 24

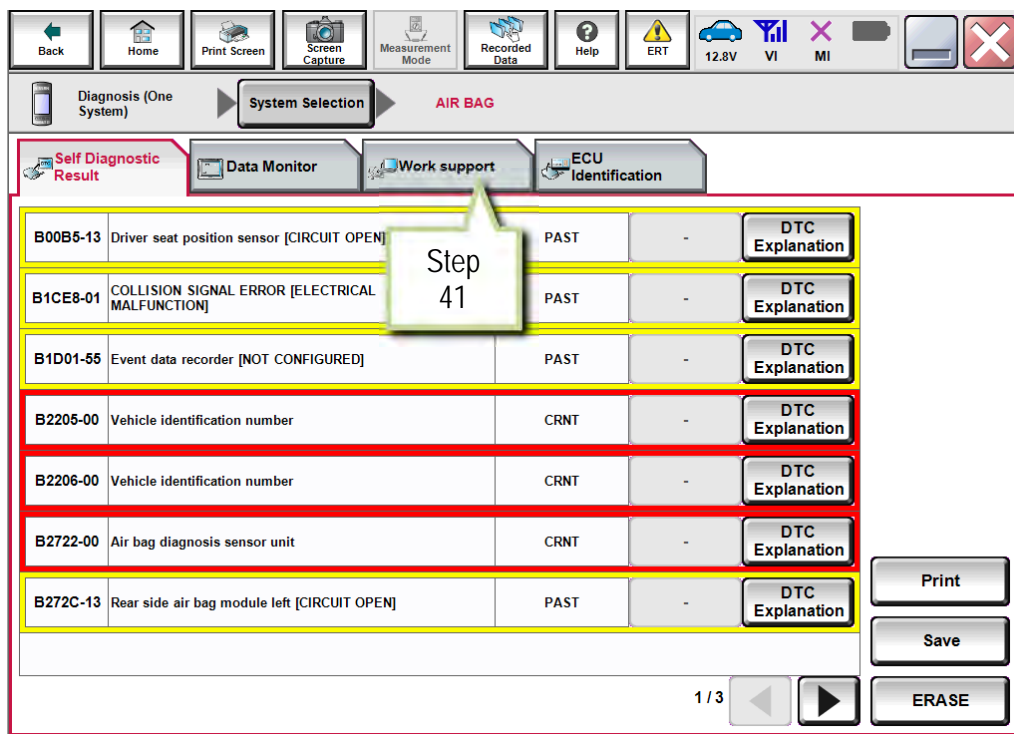40. Select **AIR BAG**.

Figure 25

41. Select **Work Support**.

Figure 26

42. Select **Learn key number**.
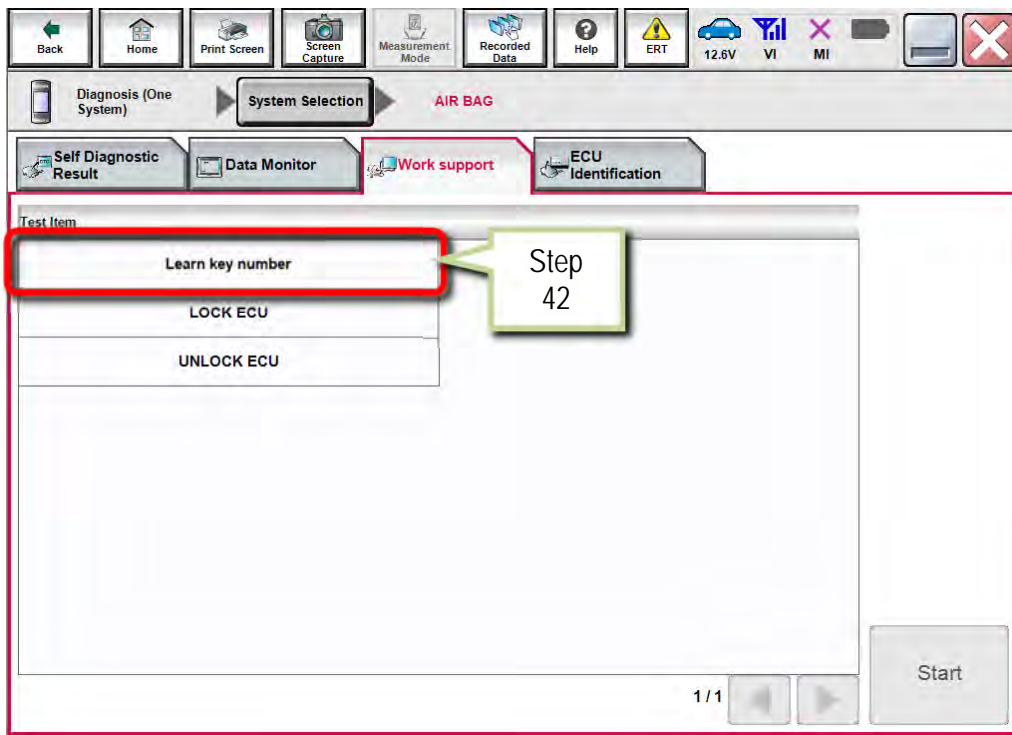
Figure 27

43. Select **Start**.

Figure 28

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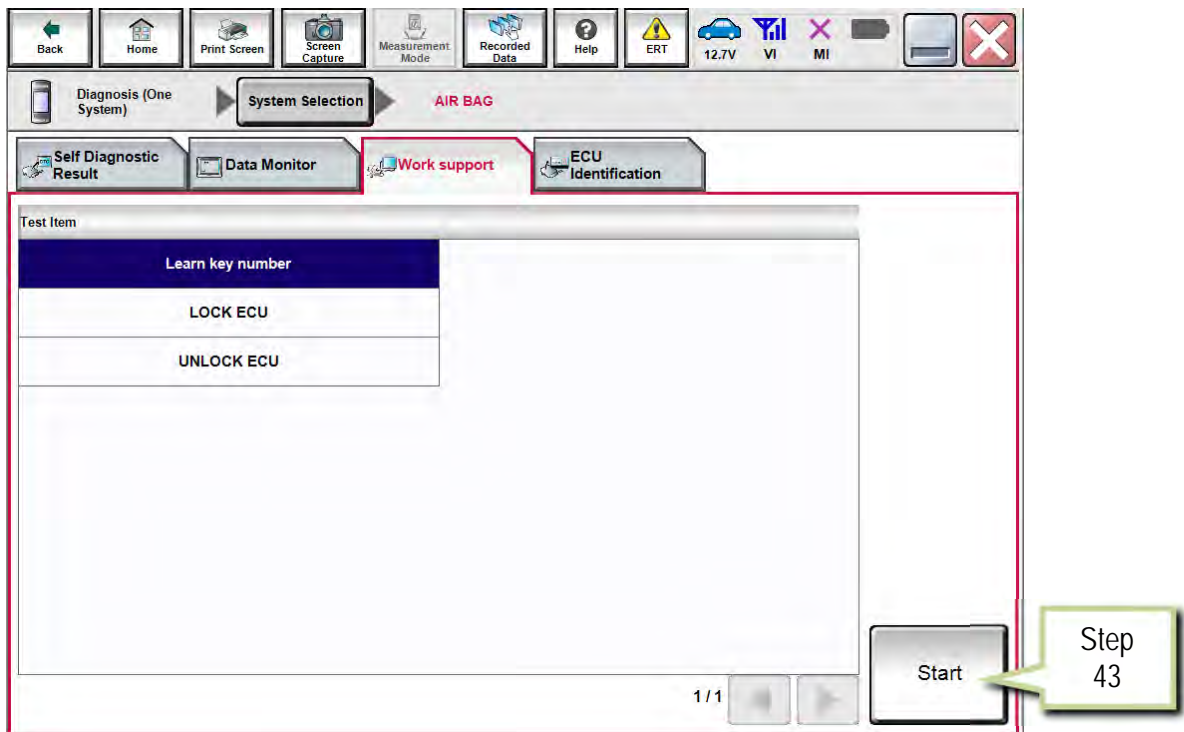
44. Once **COMPLETED** displays, select **End**.

Step 44
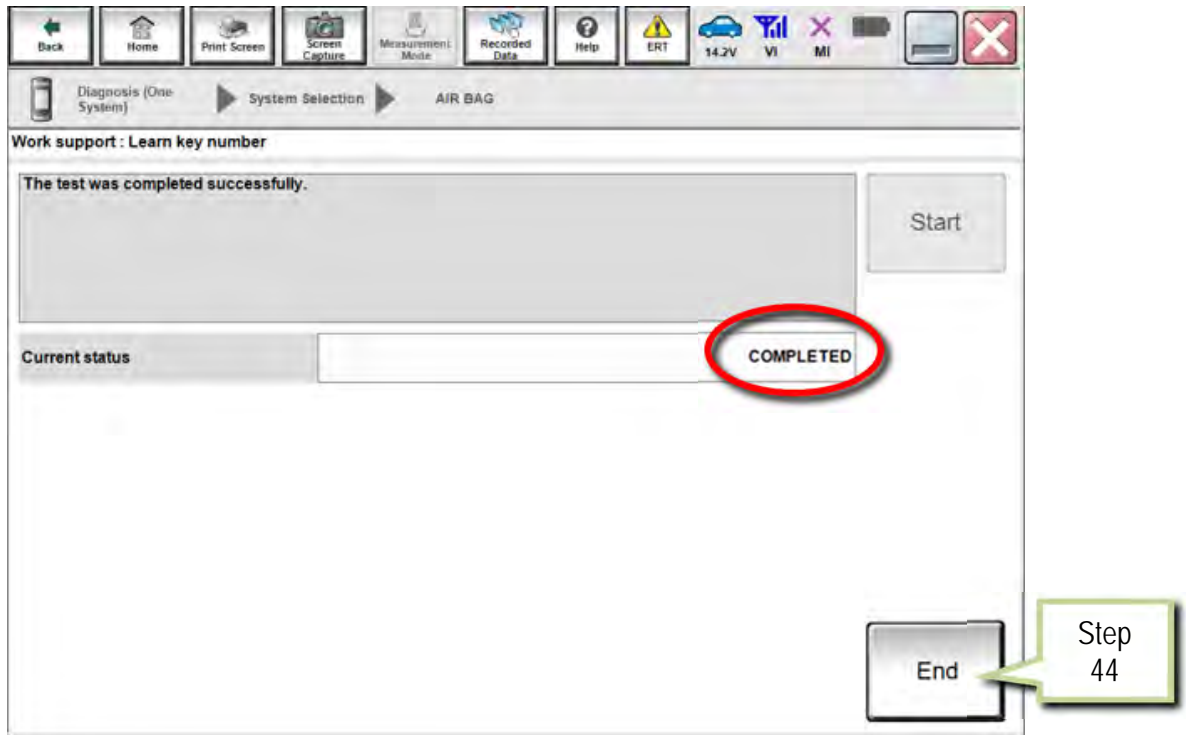
Figure 29

PART 6
Lock ECU

45. Select **LOCK ECU**.

Step 45

Figure 30

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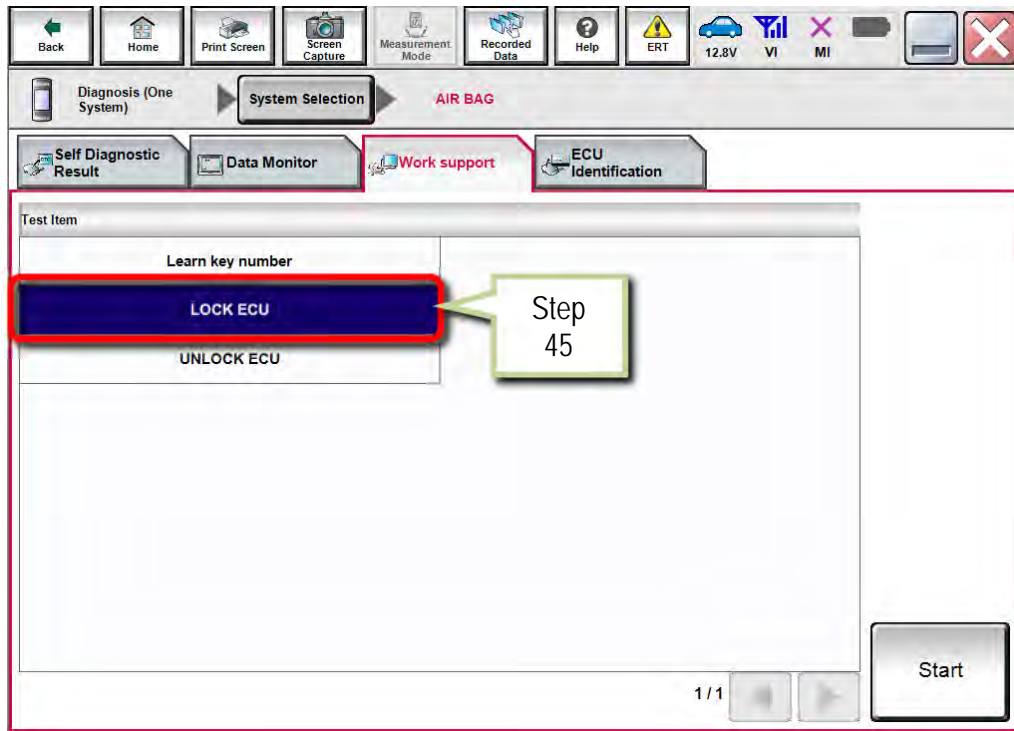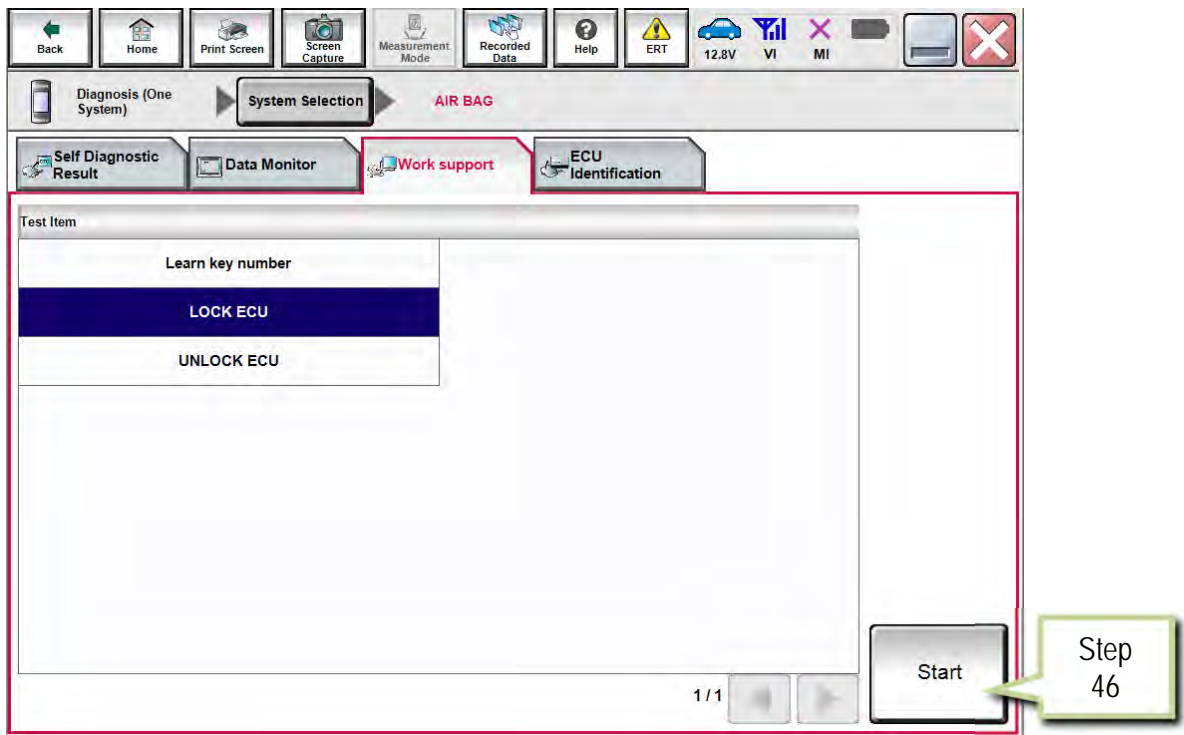
46. Select **Start**.

Figure 31

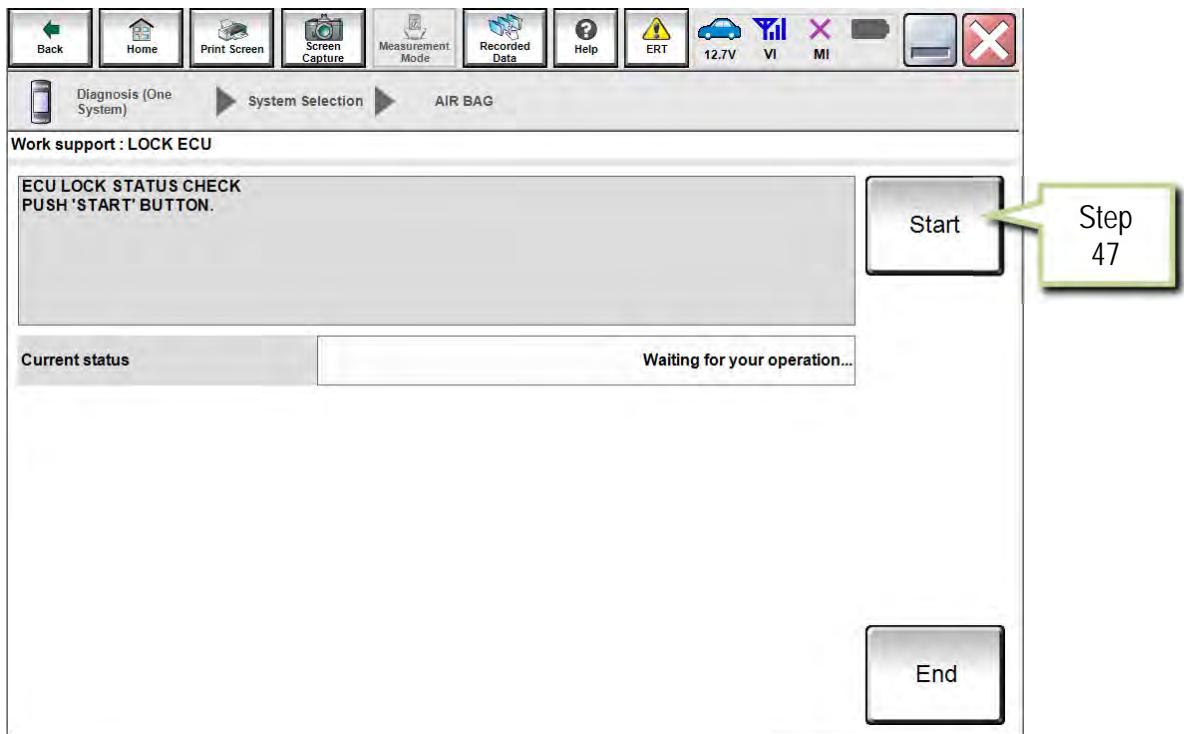47. Select **Start**.

Figure 32

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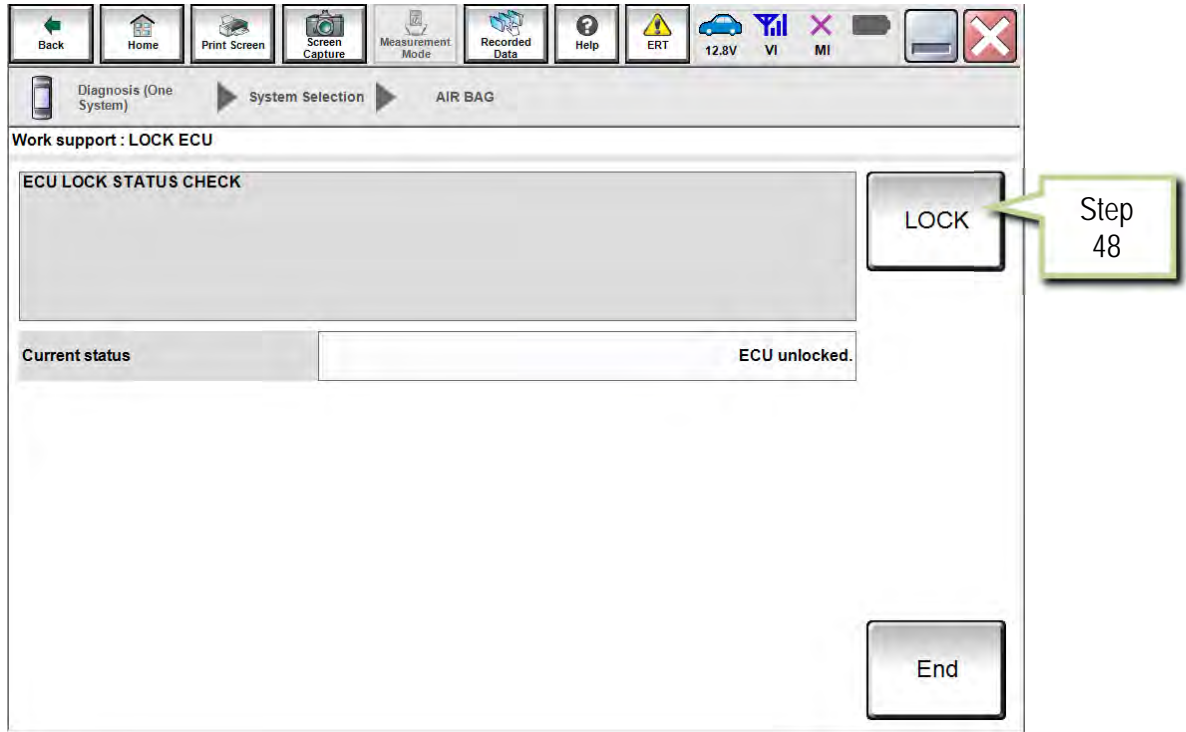48. Select **LOCK**.

Figure 33

49. Once **ECU LOCKED** displays, select **End**.
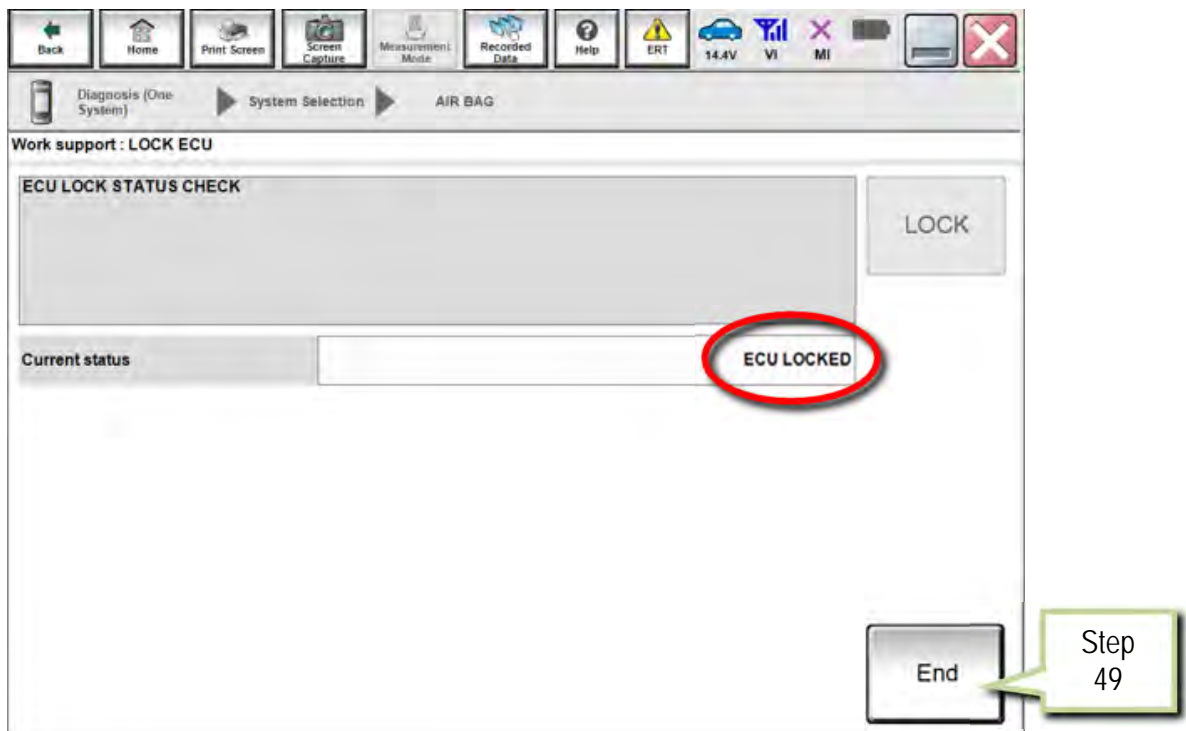

Figure 34

PART 7
Erase DTCs

50. Turn the vehicle ignition OFF.

51. Shut all vehicle doors.

52. Confirm screens (center stack and combination meter) go blank.

53. Allow vehicle to sit or "sleep" for 5 minutes.

54. Turn the vehicle ignition ON.

55. Select **Self Diagnostic Result**.

NOTE: If the screen in Figure 35 is not displayed, perform steps 39 and 40 to access the Self Diagnostic Result tab.
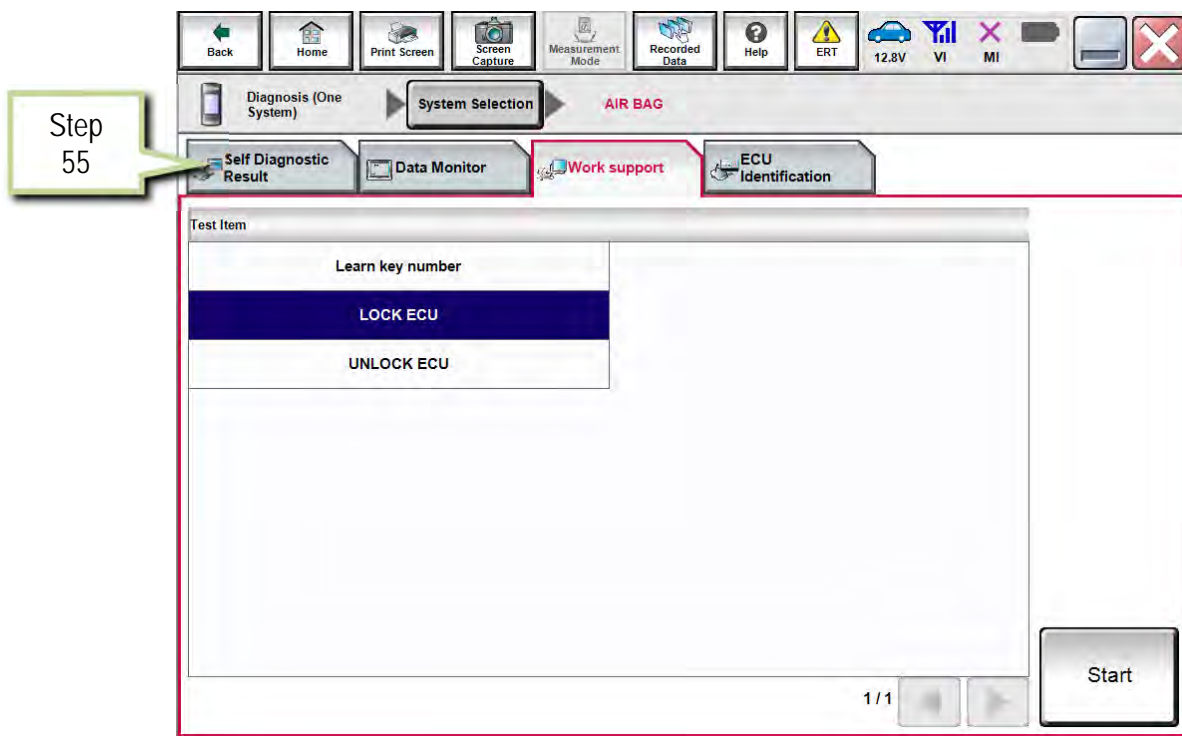

Figure 35

56. Check DTCs.

- If DTCs B2205-00 and B2206-00 are displayed as CRNT, perform steps 50-55 again.

- If DTCs B2205-00 and B2206-00 are displayed as PAST, proceed to step 57.
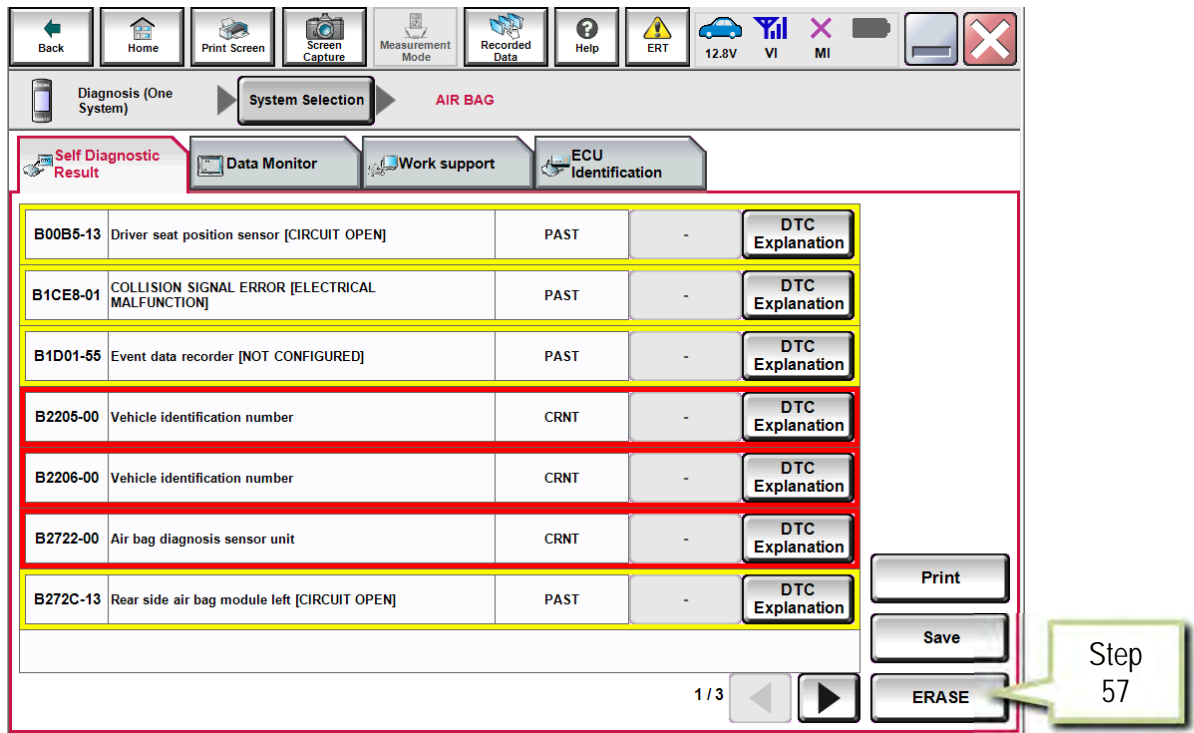

Figure 36

57. Select **ERASE** to clear all DTCs.

58. Select **Home**, then **Diagnosis (All Systems)**.

59. Confirm no DTCs are set.

The Air Bag Diagnosis Sensor Unit Replacement Procedure is complete.

Program the Air Bag Diagnosis Sensor Unit Using FAST-Link

Perform this procedure <u>ONLY IF</u> steps 1-18 (Save ECU Data) beginning on page 2 were unsuccessful or were not performed before the Air Bag Diagnosis Sensor Unit was replaced.

NOTE: FAST is used for the images in this procedure. Other electronic parts catalogs may be different.
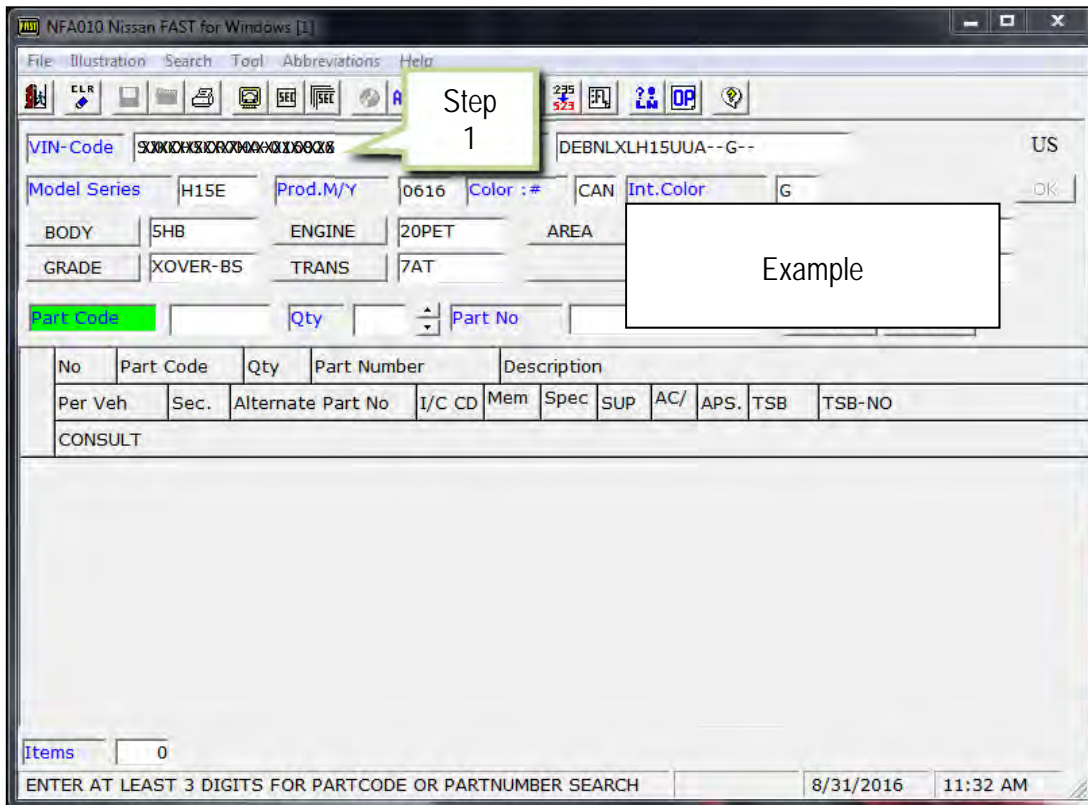
1. Open FAST (or equivalent) and type in the VIN.

Figure 1A

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2. Select **ABC** (word search).

3. Type "**ROM**" into the Input Description search window.
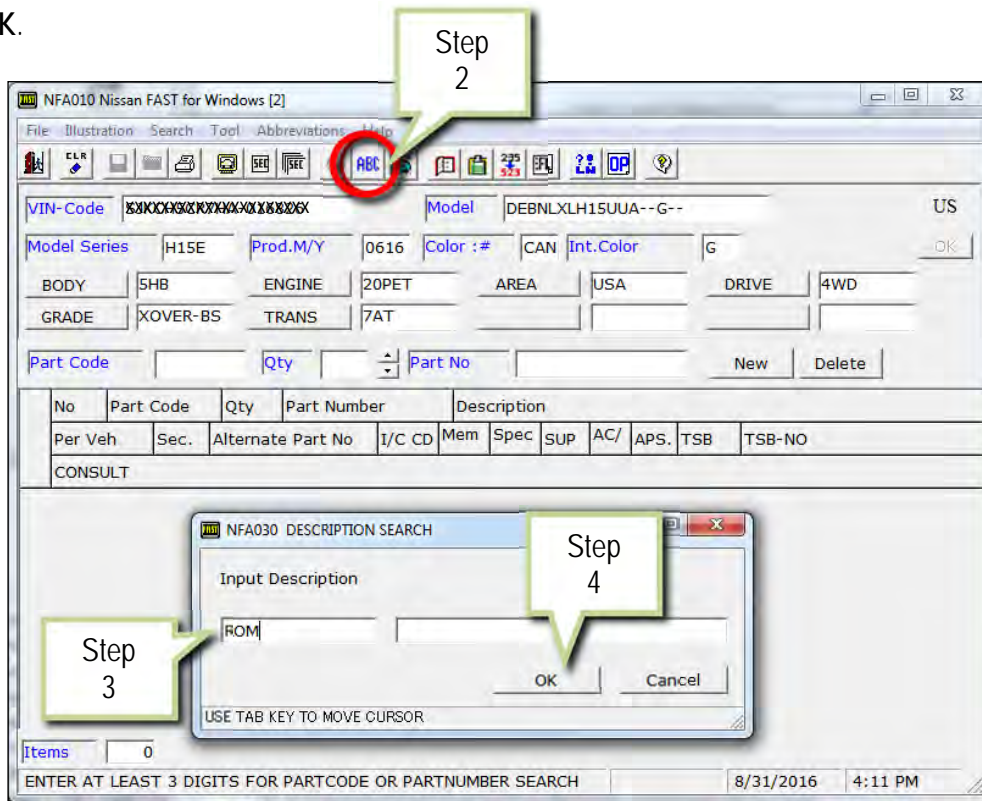
4. Select **OK**.
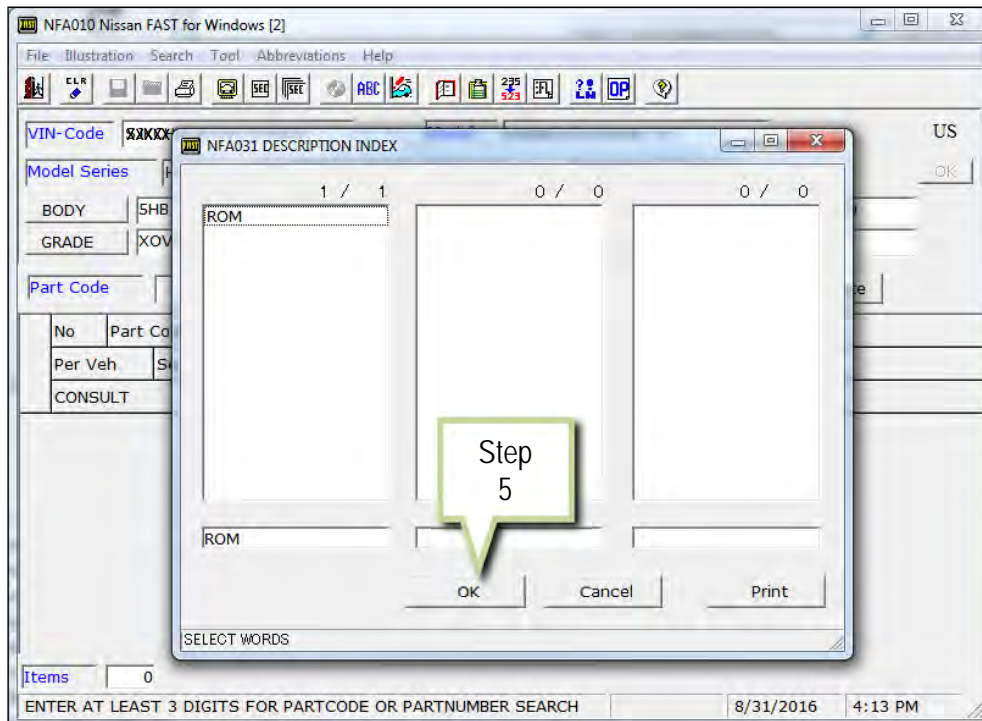

Figure 2A

5. Select **OK**.

Figure 3A

6. Select **ROM-DATA ID, ID FOR PROGRAMMING AIR BAG**.
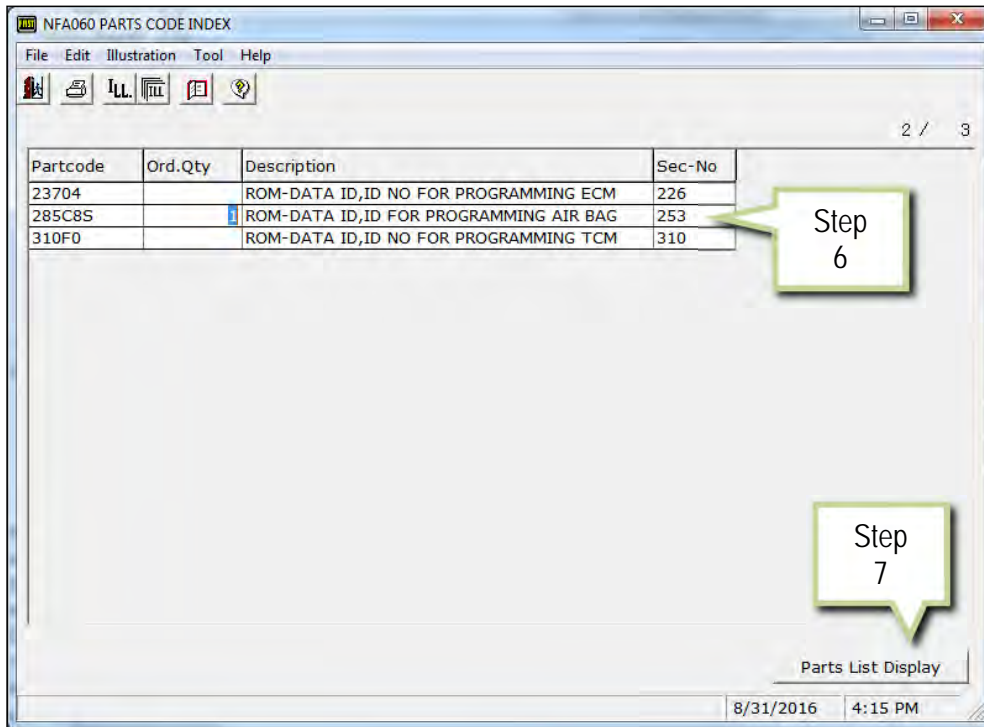
7. Select **Parts List Display**.

Figure 4A

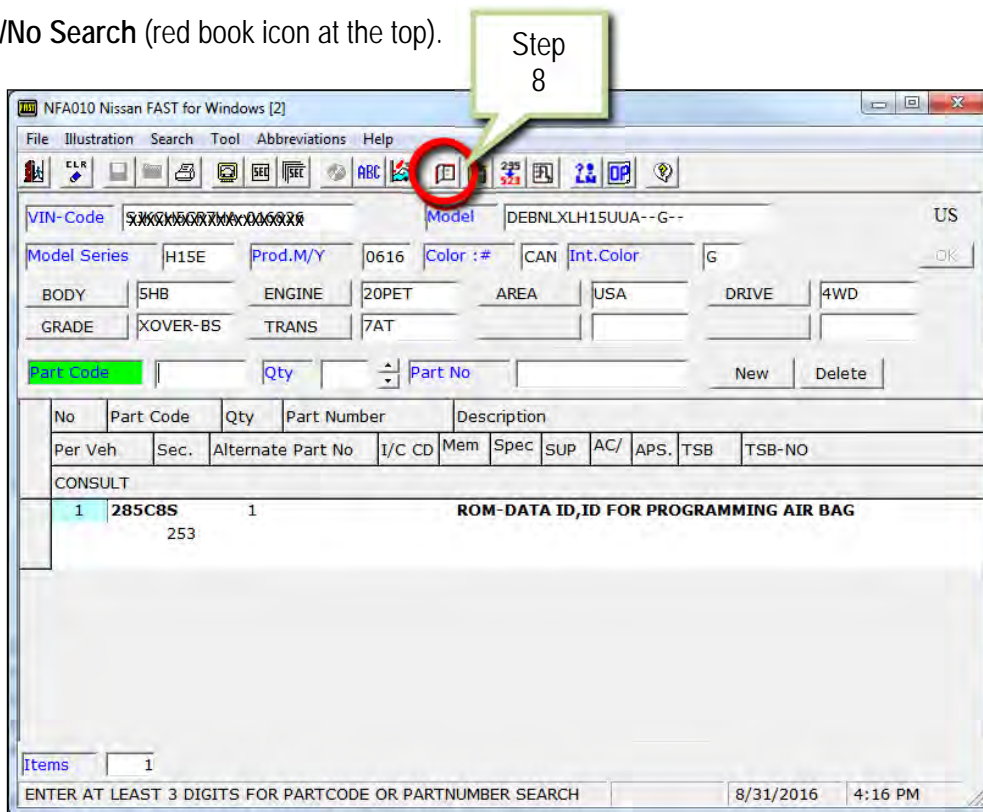8. Select **P/No Search** (red book icon at the top).

Figure 5A
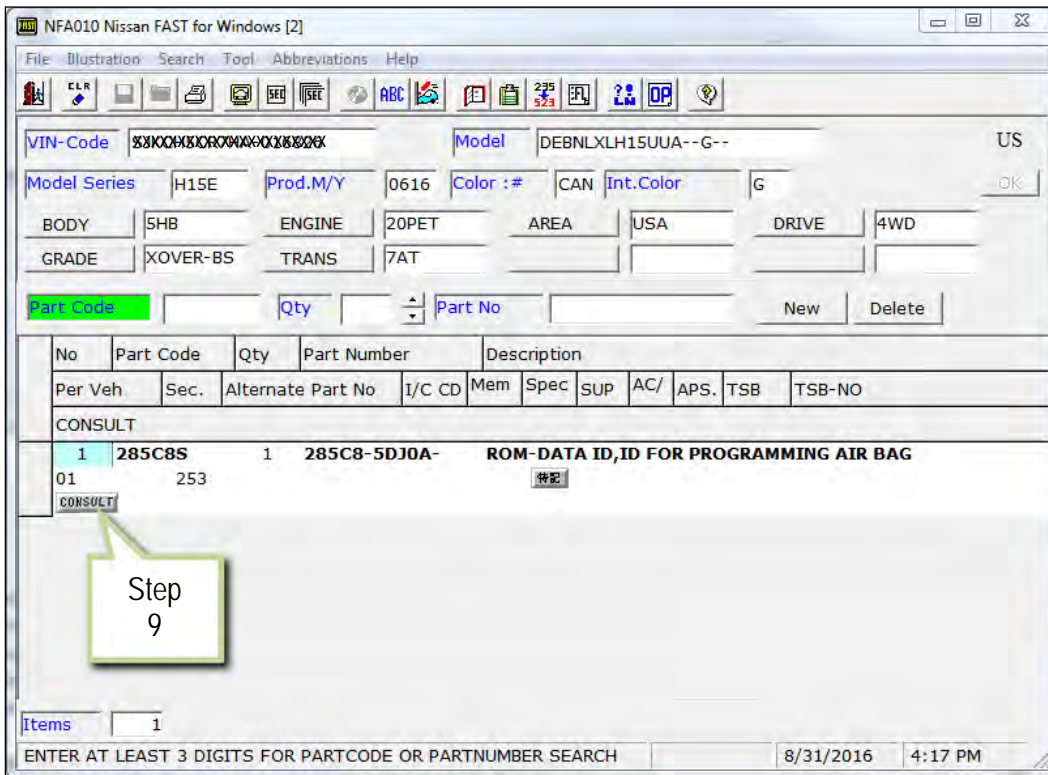
9. Select **CONSULT**.

Figure 6A

10. Load/save the CSV file onto a thumb drive.

- After selecting CONSULT in step 9, a screen showing your computer desktop with the CSV file should display (see Figure 7A.) This is the air bag diagnosis sensor unit part number file to be used for programming.

- Do not change the file name or the file type.

- Load/save this CSV file onto a thumb drive.

    NOTE: It is recommend, at the start, that the thumb drive be blank (all other files erased). This will make it easier to find the file later in this procedure.
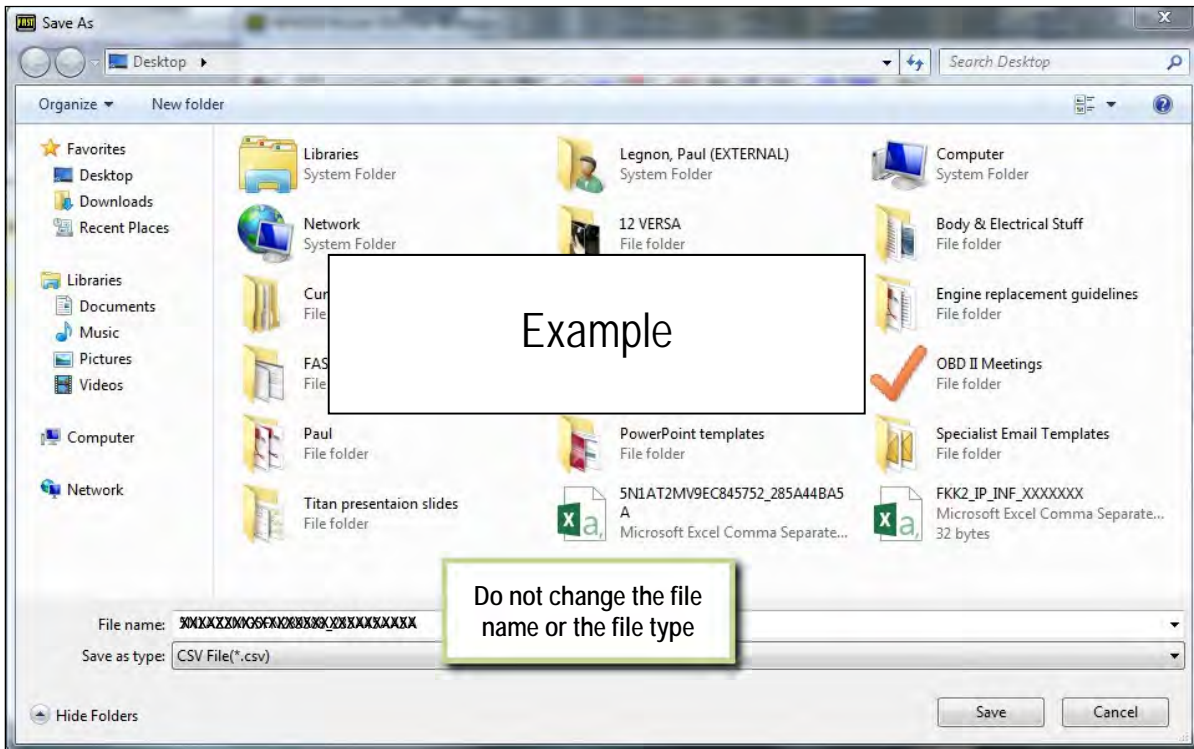

Figure 7A

11. Plug the thumb drive (with the configuration file) into the CONSULT PC.
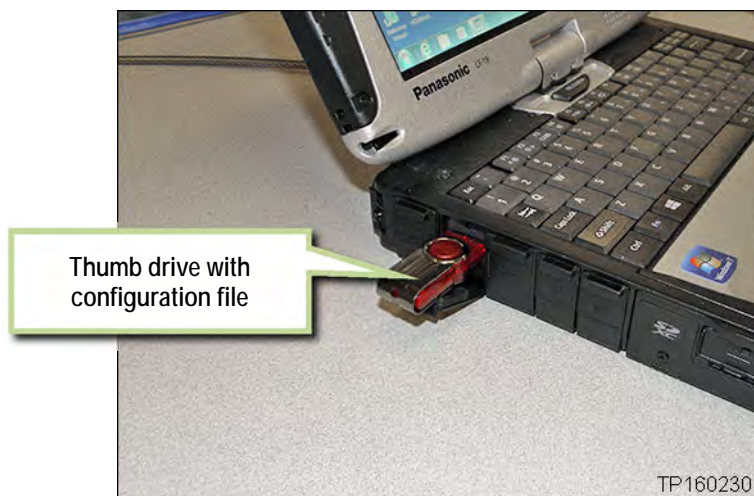

Figure 8A

12. Connect the GR8 to the 12V battery and select ECM Power Supply Mode.

13. Perform steps 1-15 (Save ECU Data) beginning on page 2.

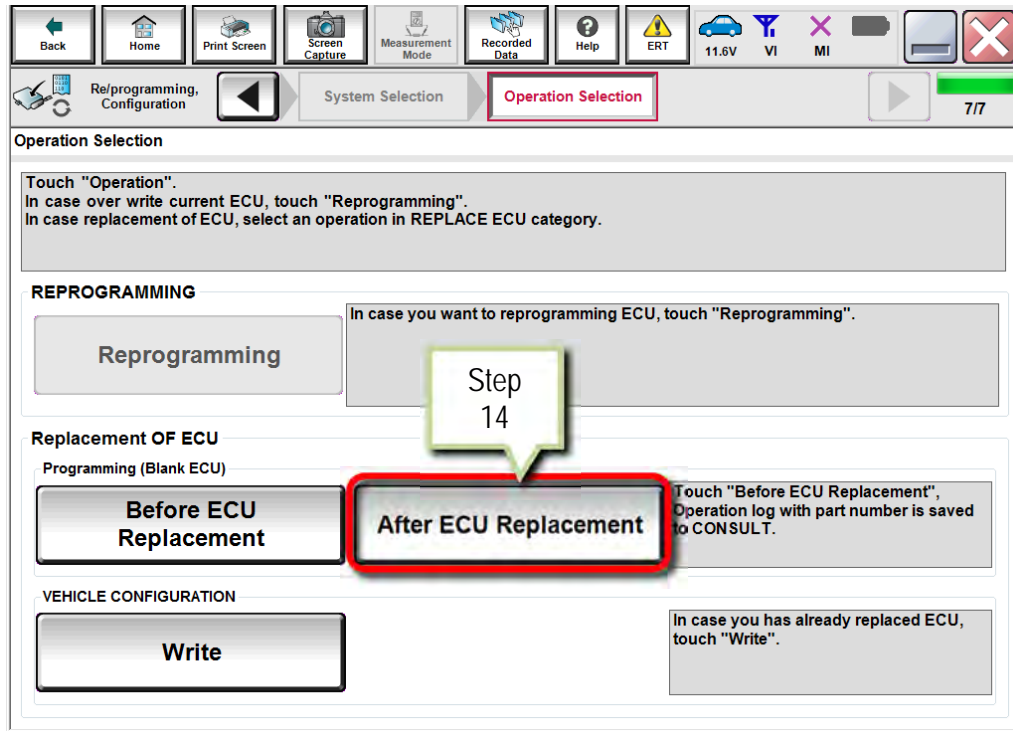14. Select **After ECU Replacement**.
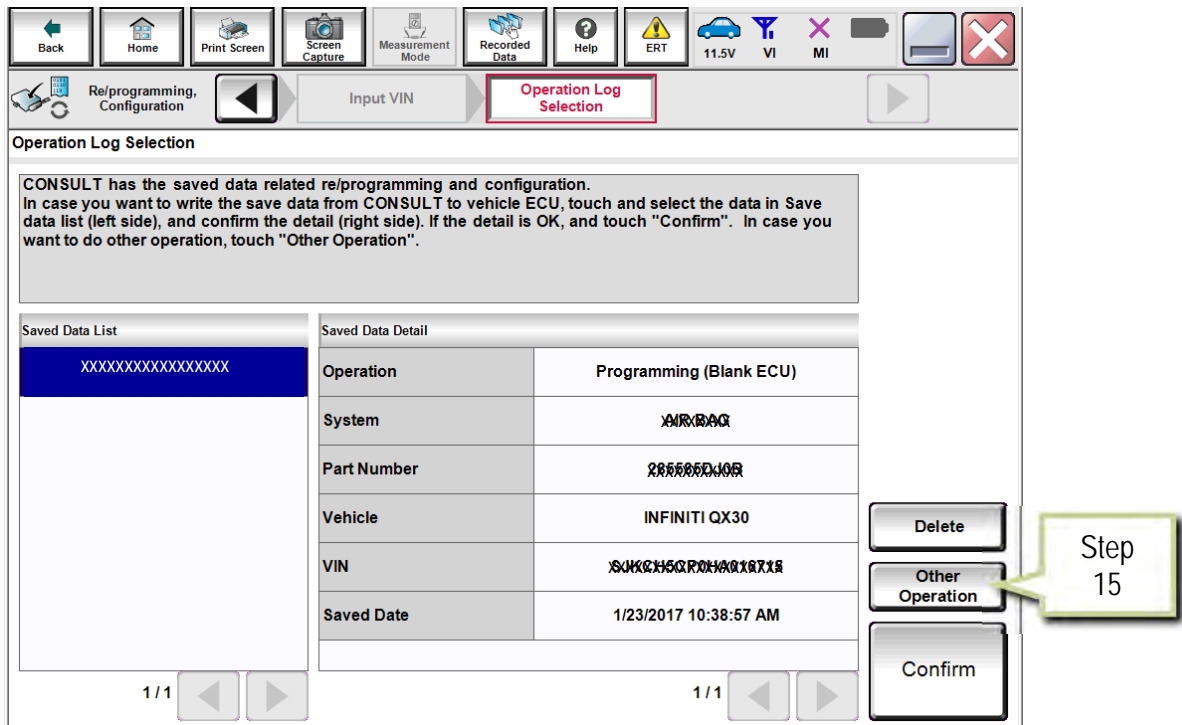

Figure 9A

15. Select **Other Operation**.

Figure 10A

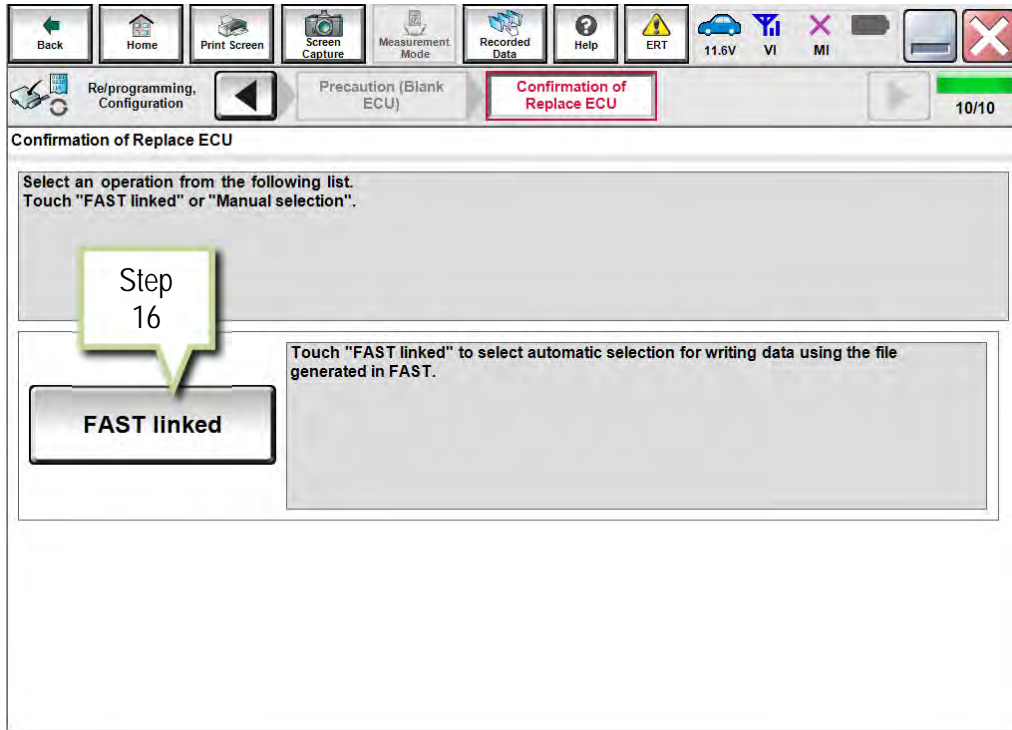ITB17-006a

16. Select **FAST linked**.
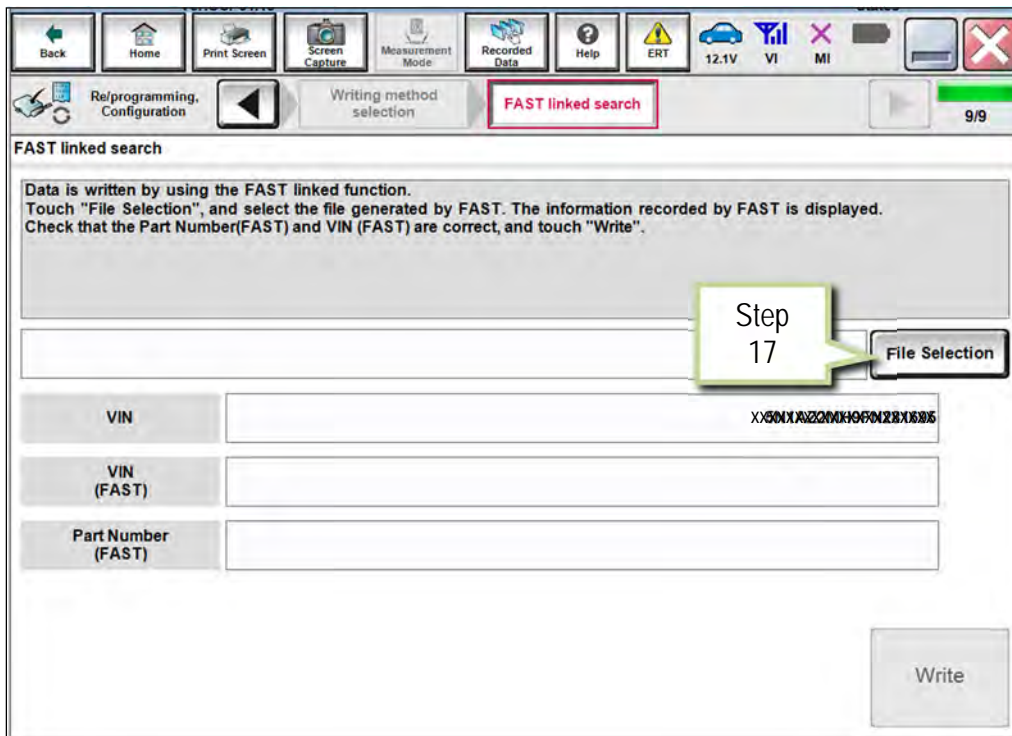

Figure 11A

17. Select **File Selection**.

Figure 12A

18. Navigate your CONSULT PC to the thumb drive and select the configuration file (see example in Figure 13A).

- This will be the file that was loaded onto the thumb drive in step 10.

NOTE:

- Navigating a computer to a file on a thumb drive is a very common function, but can vary depending on the thumb drive and the individual computer set up.

- If you are unsure how to navigate to the file on your thumb drive, ask an associate in your shop who is more familiar with using a computer.
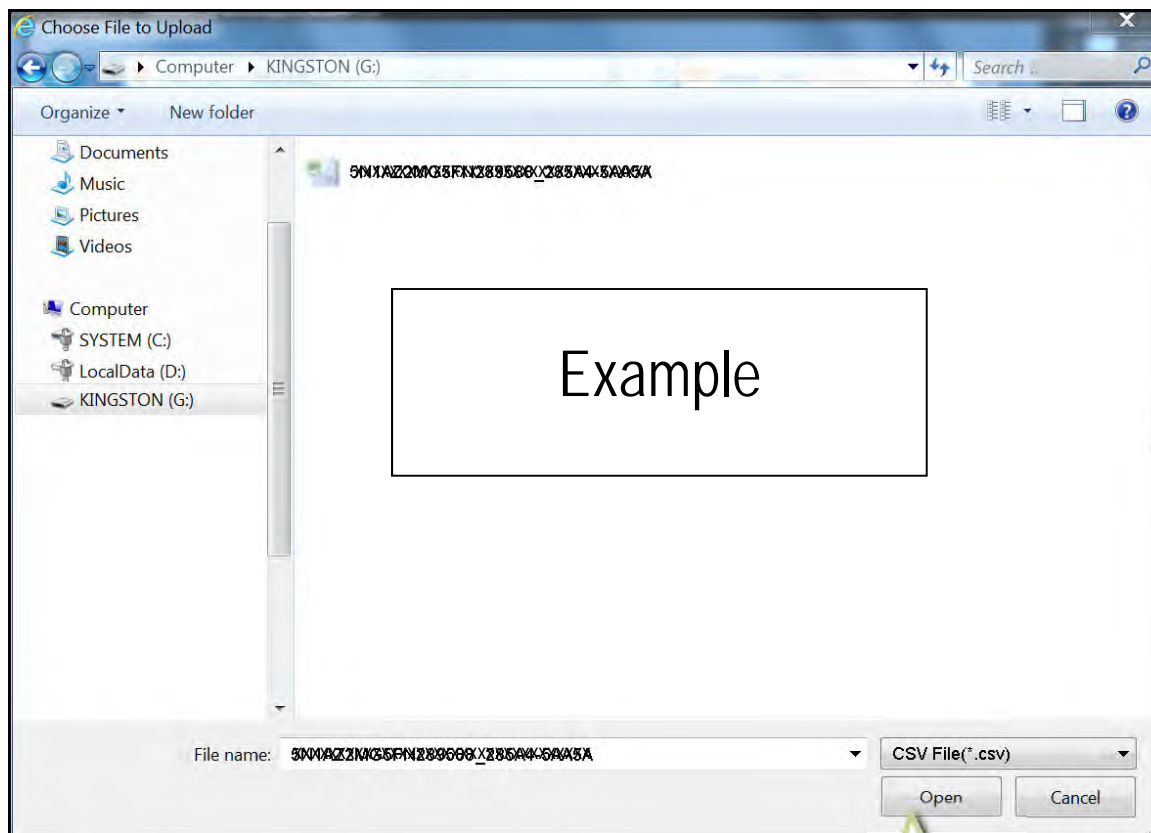
19. Select **Open**.

Figure 13A

Step 19

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

21. Select **Next**.

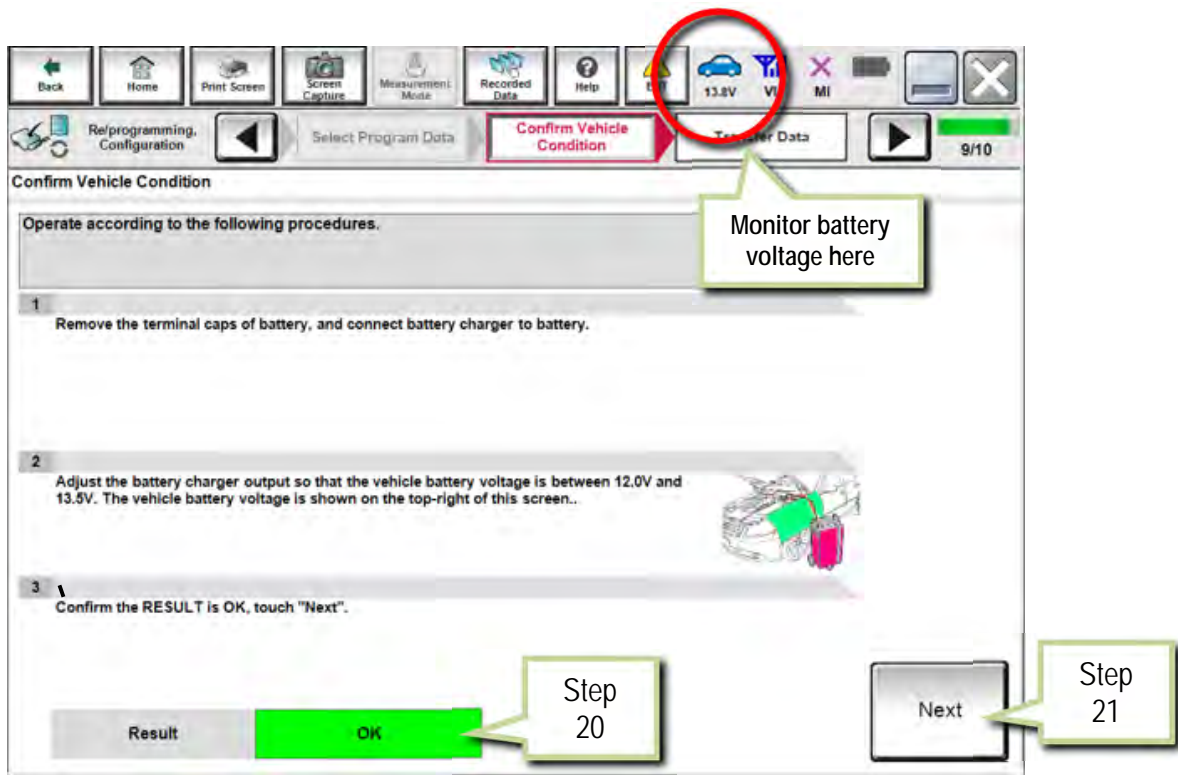> **IMPORTANT:** Battery voltage must stay between **12.0 and 15.5 Volts** during programming.

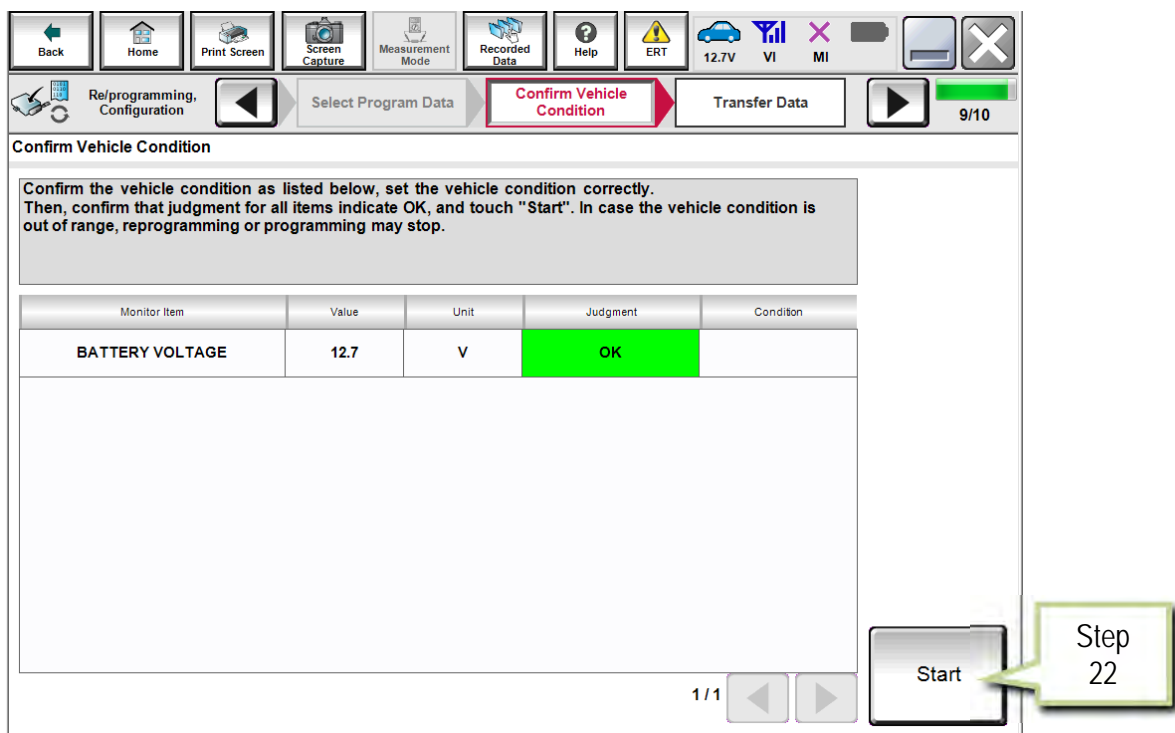Figure 14A

22. Select **Start**.

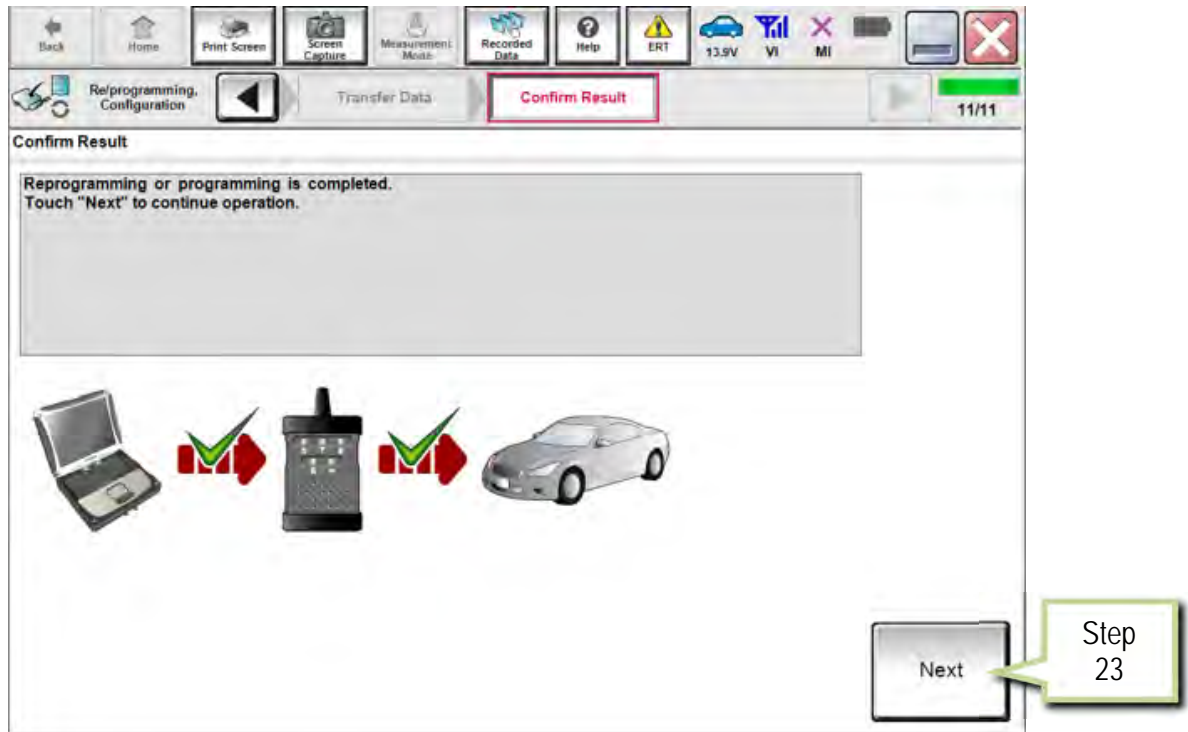

Figure 15A

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23. Select **Next**.

Figure 16A

24. Erase DTCs.

- Follow the on-screen instructions to cycle the ignition switch status.

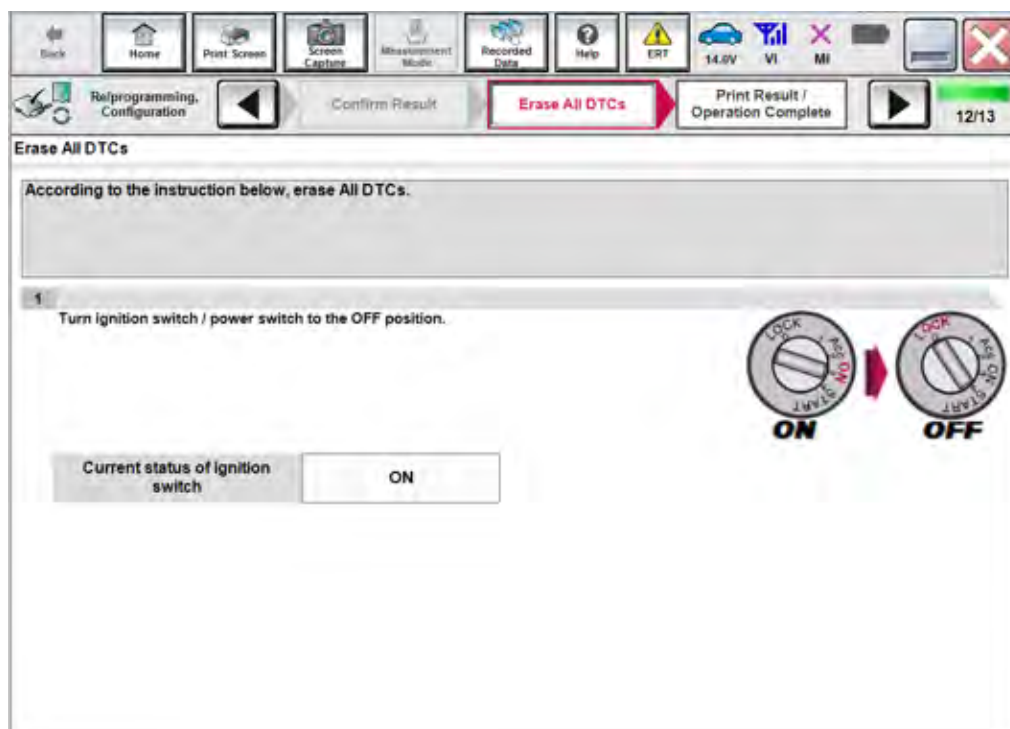- See Figure 17A below, and Figure 18A on the next page.
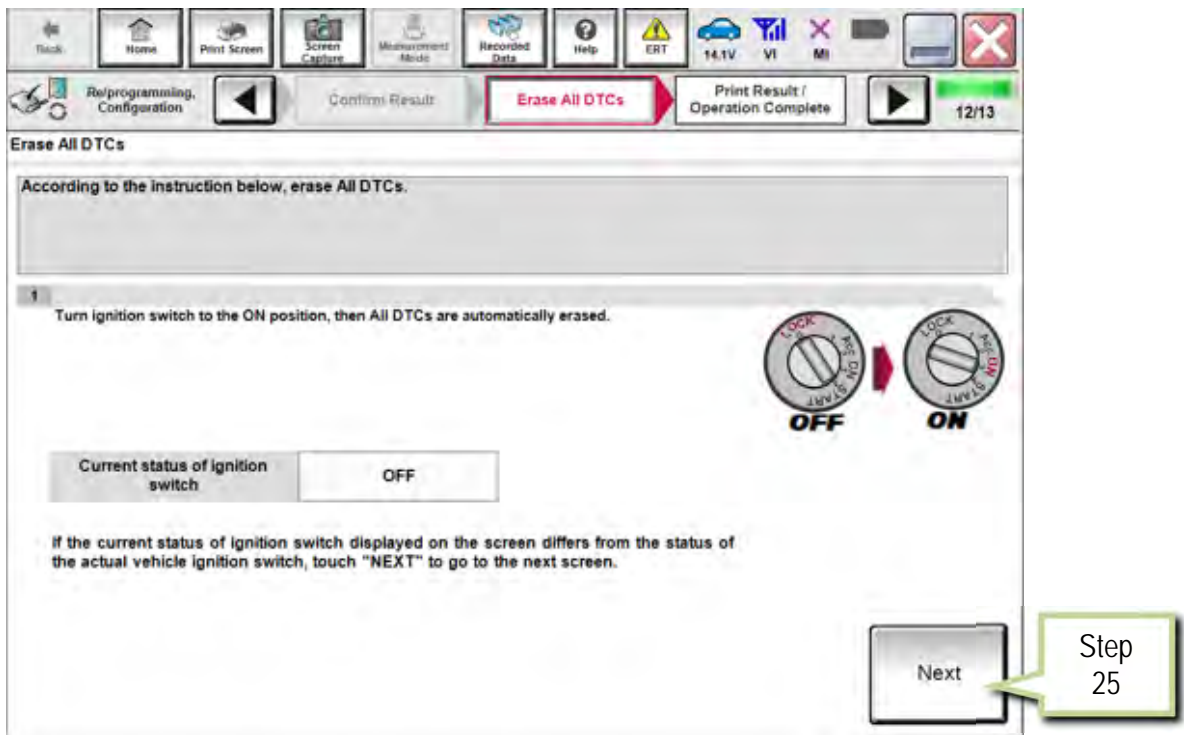

Figure 17A

25. Select **Next**.

Figure 18A

26. Select **Print**.

27. Print a copy of this screen (Figure 19A) and attach it to the repair order for warranty documentation.
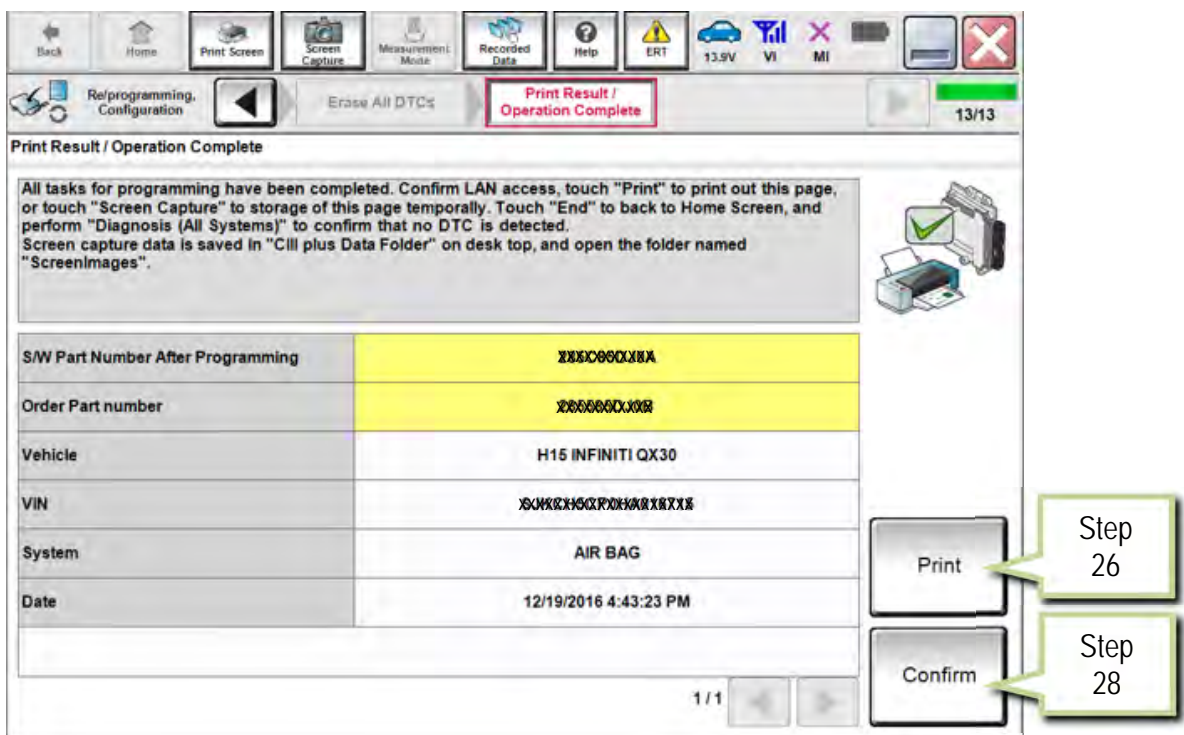
28. Select **Confirm**.

Figure 19A

29. Proceed to page 13 and perform PART 4-7 (Write Configuration, Learn Key Number, Lock ECU, and Erase DTCs) of the Air Bag Diagnosis Sensor Unit Replacement Procedure.

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