

Classification:

Reference:

Date:

EC12-029

NTB12-094

November 9, 2012

2013 GT-R; LACK OF POWER AND SPARK KNOCK WITH 91 OCTANE FUEL

APPLIED VEHICLE: 2013 GT-R (R35)

IF YOU CONFIRM

Spark knock and/or lack of power,

and

91 AKI (Anti-Knock Index) number (Research octane number 96) is the highest octane fuel in your area.

NOTE: Use unleaded premium gasoline with an octane rating of at least 93 AKI (Anti-Knock Index) number (Research octane number 98) to maximize vehicle performance. If premium gasoline of at least 93 AKI number (Research octane number 98) is not available, you may use unleaded premium gasoline with an octane rating of at least 91 AKI number (Research octane number 96), but you may notice a decrease in performance. Do not use gasoline with an octane rating lower than 91 AKI (Research octane number 96).

ACTION

- 1. Refer to 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 ECM.

NOTE: This reprogram will minimize the decrease in performance when using fuel with 91 AKI number (Research octane number 96), and will not affect maximum performance when using unleaded premium gasoline with an octane rating of at least 93 AKI number (Research octane number 98).

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 gualified 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.

CLAIMS INFORMATION

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

| DESCRIPTION | PFP | OP CODE | SYM | DIA | FRT |
|---------------------------------|-----|---------|-----|-----|-----|
| Reprogram Engine Control Module | (1) | DE97AA | ZE | 32 | (2) |

(1) Reference the Repair Order and use the <u>current</u> ECM P/N written down in step 6 of the **SERVICE PROCEDURE** as the PFP.

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

SERVICE PROCEDURE

- Make sure your CONSULT-III plus (C-III plus) has been freshly synchronized/updated.
- 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 (C-III plus) ECM Reprogramming" general procedure.

Preparation for Reprogramming

- Take the vehicle for a 10 minute drive in order to meet the following Idle Air Volume Learn (IAVL) conditions:
 - Engine coolant temperature: 70 -100°C (158 - 212°F)
 - Battery voltage: More than 12.9V (At idle)
 - Transmission: Warmed up



Figure A

NOTE:

- After ECM reprogramming is complete, you will be required to perform Throttle Valve Closed Position, Idle Air Volume Learn (IAVL), and Accelerator Closed Position.
- The above conditions are required for the IAVL to complete.

CAUTION:

- Connect a battery charger to the vehicle battery. If the vehicle battery voltage drops below <u>12.0V or above 15.5V</u> during reprogramming, <u>the ECM may be damaged</u>.
- Be sure to turn OFF all vehicle electrical loads.
 If a vehicle electrical load remains ON, <u>the ECM may be damaged</u>.
- Be sure to connect the AC Adapter. If the CONSULT PC battery voltage drops during reprogramming, the process will be interrupted and the ECM may be damaged.
- Turn off all external Bluetooth[®] devices (e.g., cell phones, printers, etc.) within range of the CONSULT PC and the VI. If Bluetooth[®] signal waves are within range of the CONSULT PC during reprogramming, reprogramming may be interrupted and <u>the ECM may be damaged</u>.
- 1. Connect the CONSULT PC to the vehicle to begin the reprogramming procedure.
- 2 Open ASIST on the CONSULT PC and start C-III plus.
- 3. Wait for the plus VI to be recognized / connected.
 - The serial number will display when the plus VI is recognized / connected.
- 4. Select Re/programming, Configuration.

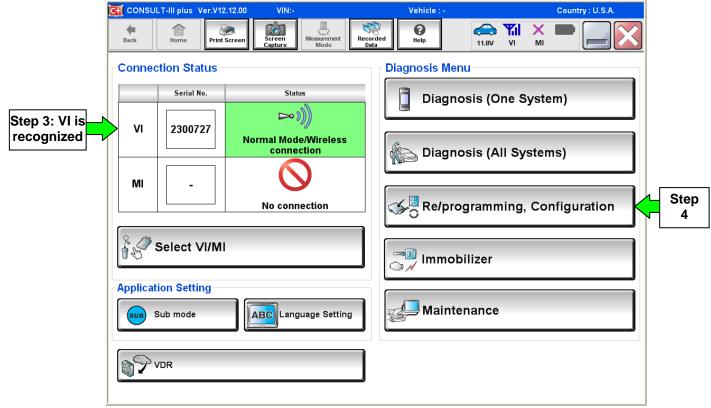


Figure 1

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

IMPORTANT:

During the initial "Reprogramming Confirmation" set-up, if you get this screen (Figure 3):

- 1. Select **Delete**, then
- 2. Select Other Operation, then
- 3. Continue with the reprogramming procedure.

NOTE: If reprogramming does not complete, this screen can display for reprogramming recovery. Do not select Delete if this screen displays during reprogram recovery.

| CONSULT-III plus Ver.V12.12.00 | VIN:JN1AJ0HR9BM850664 | Vehicle : INFINITI EX35 J50 2012 | Country : U.S.A. | | |
|---|--|----------------------------------|------------------|--|--|
| Back Home Print Screen | icreen apture Mode Recorded Data | Help XI X 12.9V VI MI | | | |
| Re/programming, Configuration | Vehicle Confirmation | peration Log Selection | | | |
| Operation Log Selection | | | | | |
| CONSULT has the saved data related re/programming and configuration. In case you want to write the save data from CONSULT to vehicle ECU, touch and select the data in Save data list (left side), and confirm the detail (right side). If the detail is OK, and touch "Confirm". In case you want to do other operation, touch "Other Operation". | | | | | |
| Saved Data List | Saved Data Detail | | | | |
| jr 14j0 pr95m850664 | Operation | REPROGRAMMING | | | |
| | System | ENGINE | | | |
| | Part Number | 26710-1 UW/9B | | | |
| | Vehicle | n finitiek 95 | Delete | | |
| | VIN | JINA AJO H FIOR M950664 | Other | | |
| | Saved Date | 2011/09/05 15:53:36 | Operation | | |
| | | 1/1 | Confirm | | |

Figure 1A

- 6. When you get to the screen shown in Figure 2, confirm this bulletin applies as follows.
 - A. Find the ECM **Part Number** and write it on the repair order.

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

| CONSULT-III plus Ver VI | 1 | Vehicle ; | | | Country : U.S.A. |
|---|----------------------|----------------------|---|--------|------------------|
| Back Image: Back | Measurement. Mode | Recorded Data | | | |
| Re/programming, Configuration | ration Selection | Save ECU Data | | | 7/7 |
| Save ECU Data | | | | | |
| Touch "Save" to save operation log and t Operation log helps to restart next operati after operation has completely finished. | | | | erased | |
| File Label | | ********* | | | |
| Operation | | REPROGRAMMING | | | |
| System 6A: <u>Current</u> E | | ENGINE | | | |
| Part Number | | 23710 | | | |
| Vehicle | xxxxxxxxxxxxxxxxxxx | | | | |
| VIN | xxxxxxxxxxxxxxxxxx | | | | |
| Date | | 11/1/201× 1:22:16 AM | И | | Save |
| | | | | | |

Figure 2

- B. Compare the P/N you wrote down to the numbers in the **Current ECM Part Number** column in **Table A**.
 - If there is a <u>match</u>, this bulletin <u>applies</u>. Continue with the reprogramming procedure.
 - If there is <u>not a match</u>, this bulletin <u>does not apply</u>. Close C-III plus and refer to ASIST for further diagnostic information.

Table A

| Model | Current <u>ECM</u> Part Number |
|-----------|--------------------------------|
| 2013 GT-R | 23710 -KJ12A |

7. Follow the on-screen instructions to navigate C-III plus and reprogram the ECM.

NOTE:

- In some cases, more than one new P/N for reprogramming is available.
 - > In this case, the screen in Figure 3 displays.
 - Select and use the reprogramming option that <u>does not</u> 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. Close C-III plus and refer back to ASIST for further diagnosis.

| 💽 CONSULT-III plus Ver. | VIN: | Vehicle : | | Country : U.S.A. |
|----------------------------------|---|--|--|------------------|
| Back Home Prin | t Screen Capture Mode | Recorded Help | 11.8V VI MI | - |
| Re/programming, Configuration | Precaution | Select Program Data | Confirm Vehicle Condition | 9/11 |
| Select Program Data | | | | |
| | rog/programming data listed b nming data is listed below, con in CONSULT. | | and | |
| System | ENGINE | | | |
| Current Part Number | Part Number After Re | pro/programming O | ther Information | |
| xxxxxxx | XXXXXX-XXXXXXX | xxxxxxxxx | xxxxxxxxxxxxxxxxx | |
| XXXXXX-XXXXXX | XXXXXXX-XXXXXXX | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX | |
| | | | | |
| | | | 0/0 | Next |

Figure 3

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

NOTE: If the screen in Figure 4 does <u>not</u> display (reprogramming does <u>not</u> complete), refer to the information on page 8.

- 9. Disconnect the battery charger from the vehicle.
- 10. Select Next.

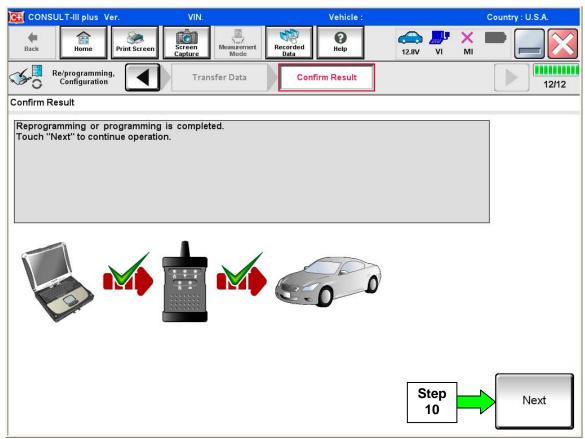


Figure 4

NOTE:

- In the next steps on page 9, you will perform Throttle Valve Closed Position, Idle Air Volume Learn, Accelerator Closed Position, and DTC erase.
- These operations are required before C-III plus will provide the final reprogramming confirmation report.

Do not disconnect plus VI or shut down C-III plus if reprogramming does not complete.

If reprogramming does <u>not</u> 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 <u>retry</u> and follow the on screen instructions.
- <u>"Retry" may not go through on</u> <u>first attempt and can be</u> <u>selected more than once</u>.

| | VN | Untide | County - apon |
|---|-------------------------|--------------------------------|-------------------|
| Back Hore Print Screen | attan attan attan | соца | 12.3V VI MI 🗮 🥅 🔀 |
| Sonigation | Translat Data | Corlim Resul | 1313 |
| Confirm Result | | | |
| Reprogramming or programming is not operation on his ECU. Touch "Reny" to reny reprogramming. | | ut you can refry reprog | |
| Part number after Reprog/programming | | 25482-XXXX | CX |
| Part number before | | 28482-XXXXX | |
| Reprog/programming | | 20402-00.00 | ~ |
| Reprog/programming Vehicle | | QASHQAI | |
| | | | |
| Vehicle | | QASHQAI | |
| Vehicle | | QASHQAI SJNFDNJ10U10 | |
| Vehicle Ville System | | QASHQAI SJNFDNJ10U10 BCM | |

Figure 5

If reprogramming does <u>not</u> 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 / VI cables are securely connected
- All C-III plus updates are installed
- Select <u>Home</u>, and restart the reprogram procedure from the beginning.

| CONSULT-IL BUS Ver | VIN. | Vehicle : CLASHQAI | County : Japan |
|---|-------------------------|-----------------------|----------------|
| Ball Hone Print Screer | Street Heassenert | Recorded Help 0.5 | e 🐙 💥 🖿 🔜 🔀 |
| Rubrogramitig. | Transfer Data | Confirm Result | 99 |
| Confirm Result | | | |
| Reprogramming is not completed -Print this screen as needed. Com with procedure. -Restart CONSULT with disconre- | firm CONSULT version, K | 전 집안에 집안 집안 없는 것이 같아. | ifion and etc |
| Part number after Reprog/programming | | 284E2-XXXXX | |
| Current part number | | 284B2-XXXXX | |
| Vehicle | | QASHQAI | |
| VIN | | SJNFDNJ10U100000 | |
| System | | BCM | |
| Date | | 25/07/2011 16:30:00 | |
| Information | | | |
| Error Code | | | Print |
| | | | |

Figure 6

11. Follow the on-screen instructions to perform the following:

- Throttle Valve Closed Position
- Idle Air Volume Learn (IAVL)

NOTE:

- Listed below are common conditions required for IAVL to complete.
- $\circ~$ If IAVL does not complete within a few minutes, a condition may be out of range.
 - Engine coolant temperature: 80 -100° C (176 212°F)
 - Battery voltage: More than 12.9V (At idle)
 - Selector lever: P or N
 - > Electric load switch: OFF (Air conditioner, headlamp, rear window defogger)
 - Steering wheel: Neutral (Straight-ahead position)
 - Vehicle speed: Stopped
 - Transmission: Warmed up
- Accelerator Pedal Close Position Learning
- Erase DTCs

Continue to the next page.

- 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**.

| CONSULT-III plus Ver VIN: | Vehicle : | Country : U.S.A. | | | |
|---|--|-----------------------|--|--|--|
| Back Home Print Screen Capture | Messurement Mode Recorded Data Help 14.3V | VI MI | | | |
| Configuration | se All DTCs Print Result / Operation Complete | 18/18 | | | |
| 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 temporally storage of this page. Touch "Screen Capture", and save it. Screen capture data is in "CIII plus Data Folder" on desk top, and open the folder named "ScreenImages". | | | | | |
| | ep 23710 3 23710 | | | | |
| Vehicle | ***** | | | | |
| VIN | ***** | | | | |
| System | ENGINE | Step | | | |
| Date | 11/3/201× 2:10:21 AM | | | | |
| | 1/1 | Step 15 Confirm | | | |

Figure 7

16. Close C-III plus.

- 17. Turn the ignition OFF.
- 18. Disconnect the plus VI from the vehicle.
- 19. Test drive the vehicle; 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 ECM reprogramming are not covered by this bulletin.