

# RVICE BULLETIN Reference:

Classification:

Date:

EL18-039b

NTB19-002b

# 2018-2020 ARMADA AND PATHFINDER; **DISPLAY CONTROL UNIT SERVICE INFORMATION**

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

APPLIED VEHICLES: 2018-2020 Armada (Y62) 2018-2020 Pathfinder (R52)

# SERVICE INFORMATION

If the Display Control Unit (DCU) needs to be replaced on an **APPLIED VEHICLE** for any reason, follow the steps in the SERVICE PROCEDURE to:

- Place the order with DENSO.
- Configure the Multi AV system.

#### NOTE:

- > The original DCU must be installed in the vehicle while performing part of this procedure. DO NOT remove the original DCU until instructed.
- The need to contact TECH LINE to obtain DCU order approval has been eliminated. Contact TECH LINE if diagnostic assistance is needed.
- This process does not apply to 2017 Armada vehicles since it uses a different system.

Nissan 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

#### **IMPORTANT: Before starting, make sure:**

- Your ASIST station has been synchronized (updated) to the current date.
- All CONSULT-III plus (C-III plus) software updates have been installed.

#### Parts of the Procedure

- PART 1: Take Preliminary Steps Prior to Ordering a DCU / Order a DCU
- PART 2: Record Multi AV Configuration Values of Original DCU / Replace DCU
- PART 3: Configure Multi AV System
- PART 4: Manually Configure Multi AV System (if needed)

#### PART 1: Take Preliminary Steps Prior to Ordering a DCU / Order a DCU

While not required, Nissan recommends using the following preliminary steps along with any other necessary diagnosis for non-warranty repairs.

- 1. Duplicate and verify the customer's concern if possible. If duplication is not possible, gather as much information about the issue as possible from the service advisor/writer or customer.
- 2. Check for any connected devices (phone, iPod, MP3 player, etc.) or determine if a connected device is present during the concern. Gather model and software version information if possible.

**NOTE:** TECH LINE can be contacted IF technical assistance is needed with diagnosis and repairs.

#### Order an Exchange DCU from DENSO

NOTE: In most cases, an exchange DCU will be ordered. A new DCU is required only if:

- The vehicle has not yet been sold.
- The customer requests a new DCU on a non-warranty repair.
- The exchange DCU is not available.
- Insurance claim replacement.

After steps 1 and 2 have been completed, <u>your parts department will order the</u> <u>replacement exchange DCU</u> as instructed below.

- 3. Go to the Denso-Ten website (<u>https://www.f10ncs.com</u>), and login with your username and password.
  - If you do not have a login username and password (first time users), call Denso-Ten tech line (1-800-237-5413, Mon Fri: 7:00am 4:00pm PT) to obtain a login username and password.
- 4. Select Orders > Place An Order.

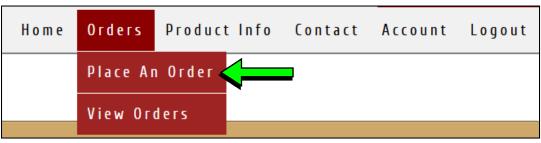


Figure 1

- 5. Enter the **Dealer contact information**, **vehicle information**, and **warranty status information**.
- 6. Select **Next**.

Step 1	Step 2 Step 3	Step 4	Step 5
Ship to Address:	Contact Name: Department: (choose one)	Customer Na Repair Order	
Date: 06-18-2019	Email:	Repair Order	Date:
Vehicle Make: (choose one) (choose one) Nissan Infiniti	Alternate Dealer Phone or Fax: Date of First Use/Warranty Start Date:	Mileage: VIN (17 chara	cters):
Populate all fiel	ds (if vehicle is not yet sold please call 1-800-237-5413)	Customer Da (choose on Warranty	e) -
		For service parts wa	e)

Figure 2

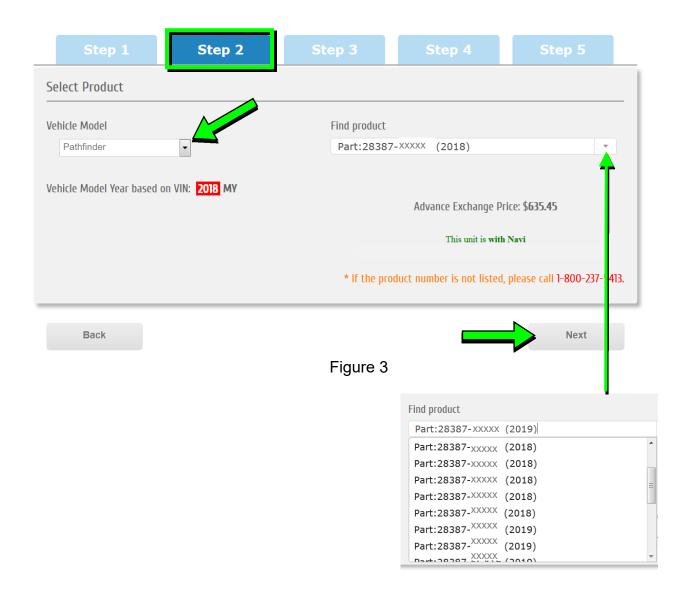
Next

# 7. Select the vehicle model and original DCU part number.

• The DCU part number can be found on the label on the back of the DCU, or with C-III plus by going to **Diagnosis (One System)** > **MULTI AV** > **ECU Identification**.

**NOTE:** The replacement DCU you receive may have a different part number than the original DCU.

#### 8. Select Next.



- 9. Populate the **Customer Complaint field**, choose a **symptom** from the drop down menu, and select an option for each displayed question.
- 10. Select Next. Enter customer complaints here Step 3 Customer Complaint (Please provide as much detail as possible) Symptom: (choose one) • Did you duplicate customer cor plaint? Does vehicle have Extended Warranty? Do you have Nissan TECHLINE (NNA) Case Number? O Yes None O Yes <sup>∞</sup>N₀ Coodwill NNA O No O Goodwill Dealer Extended Warranty Contract NNA NNA Case Number: C Extended Warranty Contract 3rd Party (same as out of warranty) (choose one) Ŧ Policy: (choose one) Poor Appearance No or improper operation High/low/uneven operating effort Noise Next Correct part not installed Part(s) missing Figure 4 Poor Bluetooth audio
- 11. Select the conditions under which the symptoms occurred.
- 12. Select Next.

Step 1	Step 2	Step 3	Step 4	Step 5
When problem first occurred? (choose one)	occur?	did the problem	How often doe occur? (choose one)	s problem
Weather when problem occurred?	Conditio	ons when the problem d?	Cabin Tempera problem occurr	ture when the red?
occurred? (choose one)		rd? iose one)	problem occurr (choose one)	red?
Back				Next
		Figure 5		

13. Check all symptoms that apply for each component.

# 14. Select **Review**.

eck all that apply)		
Shared Functions	Radio	Bluetooth Hands Free Phone
No Sound Noise/Static No Power Changes Node Changes Volume Automatically (Without User Input) Volume does not change No Illumination No Display	AM HD Radio All Stations Fades in and Out Sound Distorted Electrical Noise	Unable to pair  Loses Connection  Sound Distorted/Not Clear  Caller does not hear driver  Driver does not hear caller  Does not make automatic connection  Must re-pair after ignition key cycling  Does not transmit Phone Book  Noise/Static
To Disputy     T	<ul> <li>Dectrical Noise</li> <li>Noisy</li> <li>Weak Sound</li> <li>No Sound</li> <li>Song Title and Artist not shown</li> <li>XM Service (account active)</li> <li>Other</li> </ul>	<ul> <li>Noise/Static</li> <li>No Sound</li> <li>Other</li> </ul>
Bluetooth-Audio/AUX	USB Audio/AUX	CD Player
Unable to pair Loses Connection Does not connect automatically No Sound No Play Skips Other	<ul> <li>Unable to pair device</li> <li>Unable to connect automatically</li> <li>Loses Connection</li> <li>No Play</li> <li>No Sound</li> <li>Other</li> </ul>	<ul> <li>MP3/WMA/AAC</li> <li>Purchased CD</li> <li>Specific disc</li> <li>Error Code</li> <li>No Eject</li> <li>Ejects by itself</li> <li>No Loading</li> <li>No Play</li> <li>No Sound (won't play CD)</li> <li>Skips</li> <li>Other</li> </ul>
Navigation (ECU)	Display	Other functions
<ul> <li>Unable to read disc</li> <li>Map does not appear</li> <li>Will not boot up</li> <li>Resets by itself</li> <li>Vehicle position icon drifts</li> <li>Vehicle icon rotates</li> <li>Vehicle icon does not match driven road</li> <li>GPS icon does not appear</li> <li>Route guidance inoperative / inaccurate</li> <li>Does not detect speed pulse from vehicle</li> <li>Other</li> </ul>	<ul> <li>No Display</li> <li>No Color</li> <li>Bright or Dark Spot (pixel)</li> <li>Contrast in Coloring</li> <li>Lines in Screen</li> <li>Display does not change (frozen)</li> <li>Day/Night Mode does not change</li> <li>Rearview and AVM do not display image</li> <li>Out of Sync (Horizontal/Vertical)</li> <li>Cosmetic Blemishes on the screen</li> <li>Touch screen does not respond</li> <li>All blank/black</li> <li>All white</li> <li>Poor Focus</li> <li>Drifts</li> <li>Diagnostic Codes displayed</li> <li>Other</li> </ul>	<ul> <li>Does not transit to APPS (Applications</li> <li>Does not play Internet Radio</li> <li>Intermittent Internet Radio audio</li> <li>APPS tab not displayed when 'AUDIO button is pressed</li> <li>Wrong / Inaccurate results when Search</li> <li>Other</li> </ul>

15. Confirm all of the information displayed is accurate, and then select **submit order**.

#### NOTE: Changes <u>cannot</u> be made once an order has been submitted.

• If changes are needed, select **Cancel and Edit** to return to the form.

Please verify the information you have entered prior t	w and Submit Order to submitting your order. Please remember changes are permitted	once your order has been placed no
Shipping and Contact Information:	Customer Information:	
XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX	XXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXXX	
Product Information: Mod <sup>,</sup> Pathfinder Part Number: 28387- <sup>XXXXX</sup>	Description:	Click here to make changes
submit order	XXXXXX	Cancel and Edit

Figure 7

16. After **sumbit order** is selected, a confirmation page and number will display. If needed, select **View My Order**, **Submit a New Request**, or **Printer Friendly Page**.

Tracking Your Order	Viewing your order	Please Note:
Please use your confirmation number to track your order. Please print or save this number for your records to be able to track your order at a ater time.	You may view/print your order by clicking the link below: View My Order	Any modification to your order cannot be done at this time. If you wish to change your shippin address, please call 1-800-237-5413
our confirmation number is XXXXXXXXXXXX	Submit a New Request         To place a new order, click the link below.         Submit a New Request	(Monday to Friday 7:00am to 5:00pm PT) Printer Friendly Page

# NOTE:

• To view order status and shipping/tracking information at a later date, select **View Orders** on the Denso-Ten website and select the applicable order.

		Нo	me Or	ders	Produ	ct Info	Contact	Account	Logout	
			PI	ace Ar	n Order					
			Vi	ew Or	ders 🧹	1				
	L					Figur	e 9			-
	Placed Orders ▼ entries								Search:	
		n 🙏	Order Date		Cen Number	Status	♦ Shipping Date	Shipping Carrier	Treaking	Ordered By
Show 10 View	entries     Confirmation	Ŧ				Status			Tracking	

17. After the order is submitted, DENSO will email a confirmation to your parts department stating the order has been placed.

# PART 2: Record Multi AV Configuration Values of Original DCU / Replace DCU

- 18. Prepare the vehicle:
  - Make sure the shift selector is in Park and the parking brake is set.
  - Connect a battery maintainer or smart charger set to reflash mode or a similar setting.
  - Connect the plus VI to the vehicle.
  - Launch C-III plus on the CONSULT PC.
  - Turn the ignition ON. **DO NOT** start the engine.

19. Select Re/programming Configuration.

-	Serial No.	Status	Diagnosis (One System)
VI	2300090	Normal Mode/Wireless connection	Diagnosis (All Systems)
MI	•	No connection	Re/programming, Configuration
8	Select VI/MI		Immobilizer
-	tion Setting Sub mode	ABC Language Setting	Maintenance

Figure 11

20. Read the Precautions.

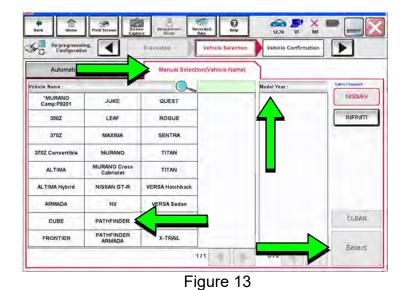
When finished, click in the **Confirmed instructions** box to insert a check mark, and then select **Next**.

Back	Home Print Screen	Screen Capture	mert Recorded Help	13.4V VI MI	•
S Re/pro	ogramming, figuration		Precaution	Vehicle Selection	
recaution	-		-		
	the all of precautio		iming and C/U configration: onfirm" check box after confir	ming the its points. And	
Precaution	ns				$\langle \mathbf{i} \rangle$
		splayed on screen. ay not be used on t	the Base		
1. Install the la CONSULT-III	plus PC.	CONSULT-III plus s	ortware, reprogramming/progr ogramming procedure sheet.	amming data to this	
-For ECU Cor 1. Need to wri 2. If writing th	ite the guratio	n data to new ECU, tion data, ECU can i	after replace it. not work. Please write the righ	nt data.	
-For ECU Con 1. Confirm th configure 2. Open	ta, ECU can not			ual. If writing the wrong	Next
	rmed instruction	-			ivext



21. Select the Manual Selection (Vehicle Name) tab, and then select the Vehicle Name and Model Year.

**NOTE:** If the screen shown in Figure 13 does not display, proceed to step 24.



22. Select Select.

- 23. Confirm the correct **Vehicle Name** and **Model Year** are displayed.
  - When finished, select **Confirm**.

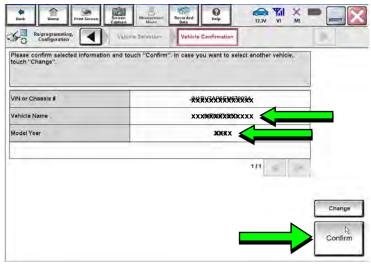


Figure 14

- 24. After System Call completes, confirm the correct Vehicle Identification Number (VIN) is displayed.
  - When finished, select **Confirm**.

**NOTE:** If the VIN displayed is incorrect, input the correct VIN. When finished, select **Confirm**.

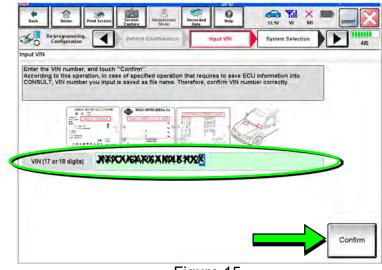


Figure 15

NISSAMINEINITI	Rena	ult	X-Badge
Group	All system	s 🔻	
ENGINE	TRANSMISSION	BAC	DIU
	MULTIAV	SUB METER	AUTO SLIDE DOOR
METER/M&A	EHS/PKB	CONVERTIBLE ROOF	PRECRASH SEATBEL
BCM	MOTOR CONTROL	HEAD LAMP LEVELIZER	AUTO DRIVE POS.
AIR BAG	EPS/DAST 3	e-4WD	ALL MODE AWD/4WD
ICC/ADAS	IPDM E/R	LASER/RADAR	DIFF LOCK
HVAC	AIR PRESSURE MONITOR	INTELLIGENT KEY	4WAS(MAIN)/RAS/HICA

Figure 16

3 會 () Help × 4 Back ...... Configuration • System Selection Operation Selectio ъ 717 **Operation Selection** Touch "Operation". In case over write current ECU, touch "Reprogramming". In case replacement of ECU, select an operation in REPLACE ECU category REPROGRAMMING In case you want to reprogramming ECU, touch "Reprogramming" Reprogramming Replacement OF Program ming (Bla Touch "Before ECU Replacement", Operation log with part number is saved to CONSULT. ECU Befor After ECU Replacement Rep ent VEHICLE CONFIG Touch "Before ECU Replacement", Operation log with configuration data is saved to CONSULT. Before ECU After ECU Replacement Replacement

Figure 17

# 25. Select MULTI AV.

• Use the scroll arrows if needed.

26. Select Before ECU Replacement.

- 27. Confirm **Setting Value** (current configuration) and write it down.
  - The current configuration can also be printed with the Print Screen button or Screen Capture button.
  - Use the scroll arrows if more than one page of information is available.

**NOTE:** Configurable options will differ. Your screen may look different.

Reference and the configuration of the current vehicle specification information.	Write down / print this information	to save this	8/8
in case of no items listed below		ettog Volue	
DESTINATION	Un	ited States	_
NAVIGATION		WITH	
DP (LANE DEPARTURE PREVEN	TION)	On	
HYBRID	FR	TYPE 4WD	
	NOR	NE/AVM ph3	
CAMERA SYSTEM			

28. Select Save.

**NOTE:** If the configuration data cannot be saved, replace the DCU as instructed in the applicable Electronic Service Manual (ESM), and then proceed to page 15, **PART 4: Manually Configure the Multi AV System** (if needed).

29. Select End.

Configuration	Replan # EGU Save ECU Data	8/8
ave ECU Data		
to back to Home Screen. And refer to S	n (Configuration data) have been saved to CONSULT. Touch "End" Service Manual, and replace ECU. guration" on Home Screen to continue to write configuration.	
File Label	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
Vehicle	XXXXXXXXXXXXXXX	
	MULTIAV	
System	MULTIAV	
	XXXXXXXXXXXX	
Type ID	10001011	
System Type ID Saved Date	XXXXXXXXXXXXXXX	_

Figure 19

- 30. Replace the DCU as instructed in the applicable ESM.
  - Refer to the ESM, section DRIVER INFORMATION & MULTIMEDIA > AUDIO, VISUAL & NAVIGATION SYSTEM > NISSANCONNECT > REMOVAL AND INSTALLATION > DISPLAY CONTROL UNIT > Removal and Installation.

# PART 3: Configure Multi AV System

- 31. Perform steps 18-24 again before performing step 32.
- 32. When you get to the screen shown in Figure 20, select **Confirm**.

Configuration	Valuate Confirmation	Operation Log Selection	1
eration Log Selection			
ata list (left side), and confirm the rant to do other operation, touch '	data from CONSULT to vehic e detail (right side). If the detail 'Other Operation''.	nfiguration, le ECU, touch and select the data in Save l is OK, and touch "Confirm". In case you	
aved Data List	Saved Data Detail	-	
1NMALIZARGANMO0488.X	Operation	Operation VEHICLE CONFIGURATION	
	System		
	Part Number	255/5×2×25A	
	Vehicle	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Delete
	VIN	XMAXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Other
	Contraction of the second s	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Operation
	Saved Date		the second secon

Figure 20

- 33. If the screen in Figure 21 appears, skip to page 17, step 43.
- 34. If the screen in Figure 21 does not appear, go to step 35.

	reen Mode Recorded Help E Mode Data Help E System Selection Operation Selection	RT 15.0V VI MI
eration Selection		, , , , , , , , , , , , , , , , , , , ,
'ouch "Operation". n case over write current ECU, touch n case replacement of ECU, select an o		
Reprogramming	In case you want to reprogramming ECU	, touch "Reprogramming",
t.		
Replacement OF ECU Programming (Blank ECU)		
	After ECU Replacement	Touch "Before ECU Replacement", Operation log with part number is saved to CONSULT.
Before ECU	After ECU Replacement	Operation log with part number is saved

35. Select OK.

#### After performing Step 35:

- If an error message <u>does not</u> display, proceed to page 19, step 47.
- If an error message <u>does</u> display, proceed to PART 4: Manually Configure the Multi AV System (if needed), below.

rite Configuration		
-blowing setting value for each item are seved to vehicle Confirm setting value for each items, if OK, touch "OK" to s	ECU: ave them to vehicle ECU.	2
Binis	Satting Value	
DESTINATION	United States	
AVIGATION	WITH	
DP (LANE DEPARTURE PREVENTION)	On	
IYBRID	Off	_
CAMERA SYSTEM	NONE/AVM ph3	Cancel
	WITHOUT	ок
	1/2	OK
F	igure 22	

#### PART 4: Manually Configure the Multi AV System (if needed)

**NOTE:** If the screen in Figure 23 is not displayed, click on the **Home** icon.

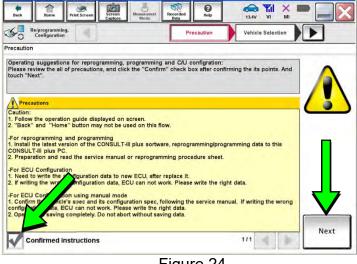
36. Select **Re/programming Configuration**.

VI 2300090 Normal Mode Wireless connection Diagnosis (Al	ne System)
VI 2300090 Normal Mode/Wireless	and Waterson V
Diagnosis (Al	Systems)
MI - No connection	ing, Configuration
Select VI/MI	K
Sub mode	

Figure 23

37. Read the **Precautions**.

When finished, click in the **Confirmed instructions** box to insert a check mark, and then select **Next**.





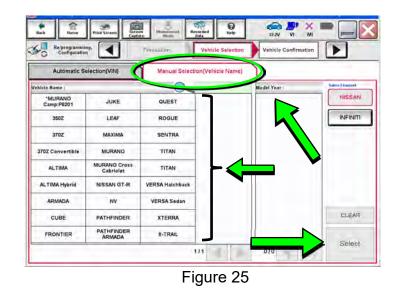
 Select the Manual Selection (Vehicle Name) tab, and then select the Vehicle Name and Model Year.

**NOTE:** If the screen shown in Figure 25 does not display, skip to the next page, step 41.

39. Select Select.

40. Confirm the correct **Vehicle Name** and **Model Year** are displayed.

When finished, select Confirm.



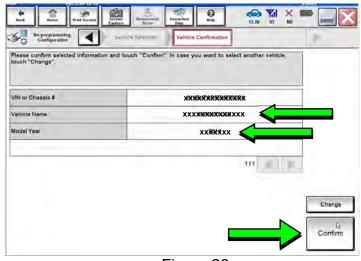
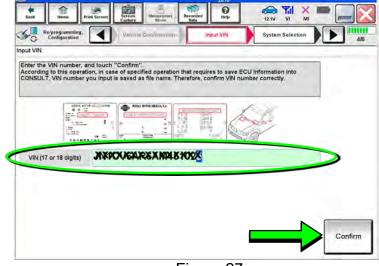


Figure 26

41. Confirm the correct VIN is displayed.

When finished, select Confirm.

**NOTE:** If the VIN displayed is incorrect, input the correct VIN. When finished, select **Confirm**.





#### 42. Select MULTI AV.

• Use the scroll arrows if needed.

NISSAN/INFINITI	Rena	uit	X-Badge
Group	All system	5 👻	
ENGINE	TRANSMISSION	BAC	DIU
	MULTIAV	SUB METER	AUTO SLIDE DOOR
METER/M&A	EHS/PKB	CONVERTIBLE ROOF	PRECRASH SEATEEI
ВСМ	MOTOR CONTROL	HEAD LAMP LEVELIZER	AUTO DRIVE POS.
AIR BAG	EPS/DAST 3	e-4WD	ALL MODE AWD/AW
ICCIADAS	IPDM E/R	LASER/RADAR	DIFF LOCK
HVAC	AIR PRESSURE MONITOR	INTELLIGENT KEY	4WAS(MAIN)/RAS/HIC

Figure 28

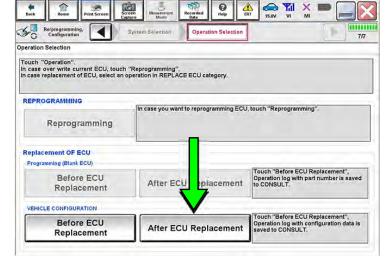


Figure 29

# 43. Select After ECU Replacement.

44. Select Manual selection.

Back Re/programming, Configuration	Prist Screen Screen Capture Made Writing method Selection 985
Vriting method selection	
Select an operation fro Touch "FAST linked" o	m the following list. "'Manual selection".
FAST link	Touch "FAST linked" to select automatic selection for writing data using the file generated in FAST.
Manual selec	Touch "Manual selection" to select writing data manually.

Figure 30

- 45. Use the drop down menus to select the configuration options that were printed or written down in step 27.
  - Use the scroll arrow if more than one page of information is available.

**NOTE:** Configurable options may differ and look different from Figure 31.

46. Confirm the configuration settings displayed under **Setting Value** are correct, and then select **OK**.

Re/programming, Configuration	Manual Configuration	
nual Configuration lentify the correct model and configuration mode with Confi onfirm and/or change setting value for each item, touch "N ake sure to touch "Next" went it the indicated configuration onfiguration, if not, configuration which is set automatically t ermonized.	ext". of brand new BCM is same as the der	irabl
Remo	Setting Value	Y ·
ESTINATION	United States	-
AVIGATION	WITH	<b>T</b>
DP (LANE DEPARTURE PREVENTION)	On	-
YBRID	FR TYPE 4WD	-
AMERA SYSTEM	NONE/AVM ph3	
REDICTIVE COURSE LINE	WITHOUT	
		Next
	1/2	

Re/programming.	Canfirmation of	Print Result /	
rite Configuration	Residue ECI1	Operation Comple	ete 617
			2
Derm		Setting Value	
E C C C C C C C C C C C C C C C C C C C		setting Value United States	
DESTINATION			
DESTINATION VAVIGATION .DP (LANE DEPARTURE PREVEN		United States	
DESTINATION NAVIGATION .DP (LANE DEPARTURE PREVEN		United States WITH	
DESTINATION		United States WITH Dn	Cancel

Figure 32

- 47. Turn the ignition OFF, and then start the engine.
- 48. After starting the engine, wait for about 30 seconds.
- 49. Use C-III plus to erase any codes from the Multi AV system.
  - a. Select Home on the C-III plus screen.
  - b. Select Diagnosis (One System) > Multi AV > Self Diagnosis Results.
  - c. Erase any codes that may be present.
- 50. Close C-III plus and disconnect the plus VI from the vehicle.
- 51. Check that the operation of the DCU and, if equipped, Rear View Monitor camera images (fixed guide lines and predictive course lines) are normal.
- 52. Disconnect the battery maintainer/smart charger from the 12V battery.

#### **AMENDMENT HISTORY**

PUBLISHED DATE	REFERENCE	DESCRIPTION
January 15, 2019	NTB19-002	Original bulletin published
July 26, 2019	NTB19-002a	Order an Exchange DCU from DENSO procedure revised
January 10, 2020	NTB19-002b	APPLIED VEHICLES revised, and the need to contact TECH LINE for DCU order approval has been eliminated