

ERVICE BULLETIN Classification:

EL10-044f

Reference:

Date: December 10, 2015

# 2011-2016 LEAF; TELEMATICS SERVICE INFORMATION

NTB10-135f

This bulletin has been amended to include configuration procedure for 2016 LEAF TCU. Please discard all previous versions.

**APPLIED VEHICLES:** 2011-2016 LEAF (ZE0)

#### SERVICE INFORMATION

This bulletin contains important service procedures that must be performed in order to set-up and maintain the Nissan LEAF Telematics system.

See the Telematics Overview, below, and the Bulletin Overview starting on page 2 for more information.

**NOTE**: Detailed Telematics system information outside the scope of this bulletin can be found in the AV-Audio Visual & Navigation System section of the Electronic Service Manual (ESM).

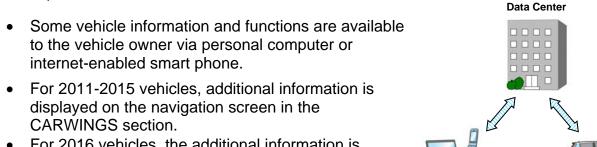
#### **TELEMATICS OVERVIEW**

**IMPORTANT:** New LEAF nomenclature has been introduced; CARWINGS<sup>sm</sup> has been changed to "NissanConnect<sup>sm</sup> EV". 2011-2015 vehicles will still use the term CARWINGS in the onboard settings menu and 2016 vehicles will use the term NissanConnect Services.

The Nissan LEAF is equipped with a wireless communication device called a Telematics Communication Unit (TCU).

The connection between the TCU and the Data Center, along with an active NissanConnect EV or NissanConnect Mobile Apps subscription, allows for various services. Availability is dependent on vehicle model, trim level, packaging, and/or options.

For example:



• For 2016 vehicles, the additional information is displayed on the navigation screen in the NissanConnect Services section.

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.

#### **BULLETIN OVERVIEW**

#### **During Pre-Delivery Inspection (PDI):**

- The TCU is OFF when delivered to the dealership and will need to be turned ON during PDI.
- Use CONSULT-III plus (C-III plus) to turn ON the TCU.
- See Turning ON the TCU During PDI on page 4 for detailed instructions.

#### When replacing a TCU:

- If the TCU requires replacement for any reason:
  - 1. Turn OFF the original TCU using C-III plus.
  - 2. Save the VIN DATA using C-III plus.
  - 3. Remove the original TCU from the vehicle.
  - 4. <u>Deactivate (unregister) the original TCU</u> by calling Nissan LEAF TCU Replacement Support.
  - 5. <u>Activate (register) the replacement TCU</u> by calling Nissan LEAF TCU Replacement Support.
  - 6. Install the replacement TCU in the vehicle.
  - 7. Write the VIN DATA using C-III plus.
  - 8. For **2016 model year only**, Perform "After ECU Replacement" and manually input TCU configuration.
  - 9. Turn ON the replacement TCU using C-III plus.

10. Resend the NissanConnect EV/CARWINGS User ID and Password.

- Each TCU is registered to a specific Vehicle Identification Number (VIN). TCUs cannot be "swapped" between vehicles.
- The replacement TCU must come from Nissan North America parts supply.

- Contact Nissan LEAF TCU Replacement Support at 1-800-922-1528 to deactivate the original TCU and activate the replacement TCU.
- See When a TCU Needs to be Replaced on page 10 for detailed instructions.

#### After replacing an Audio/Visual (A/V) Control Unit:

- After a replacement A/V control unit has been installed, the NissanConnect EV/CARWINGS User ID and Password must be entered into the new A/V control unit.
- The vehicle owner was provided with this information during the initial NissanConnect EV/CARWINGS registration.
- See After A/V Control Unit Replacement Enter NissanConnect EV/CARWINGS User ID and Password on page 19 for detailed instructions.

## **Turning ON the TCU During PDI**

- 1. Connect the C-III plus VI to the vehicle.
- 2. Set the parking brake.
- 3. Push the vehicle power switch twice to READY mode.
- 4. Launch C-III plus on the CONSULT PC.
- 5. Select Diagnosis (One System).

<b>æ</b> Back	Home Prin	t Screen Canture	Measureme nt Mode	Recorded Data	<b>?</b> Help	13.3		X MI				
Conne	ection Statu	S			Diagnosi	s Menu -						r
	Serial No.	Stat	0		📋 Dia	agnosis	(One	Sys	tem)	Ľ	1	Step
VI	230000 2	Normal Mod conne	e/Wireless		Dia	agnosis	(All S	Syste	ms)			5
м	-	No conr	nection		Re	/progra	mmin		,			
R.C.	Select VI/	ML			⊶∎ ⊖ ∕∕ Im	mobilize	۶r					
	ation Setting Sub mode		guage ing		A Ma	iintenan	се					
87	VDR									TP100957	e	

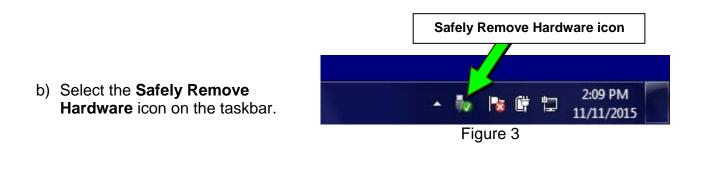
Figure 1

**NOTE:** If **Diagnosis (One System)** is grayed out and not available to select:

a) Minimize the C-III plus screen.

Diagnosis Menu
Diagnosis (One System)
Diagnosis (All Systems)
Re/programming, Configuration
Immobilizer
Maintenance

Figure 2



c) Select Eject SCR243\_PCMCIA Smart\_Card\_Reader

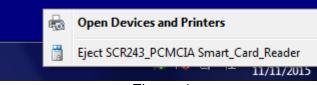
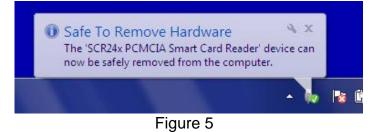


Figure 4

d) Wait for the **Safe To Remove Hardware** message to appear.



- e) Disengage/pop-out the C-III Card Adapter with Immobilizer Card by pressing the ejector button.
- f) Maximize the C-III plus screen.

## Diagnosis (One System)

should now be available to select.

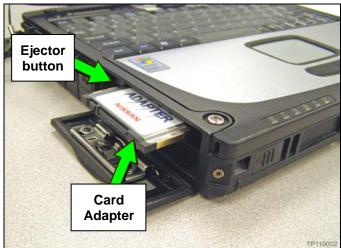


Figure 6

6. Select **TELEMATICS** on page 2 of the all systems list.

Back Borne Print Screen	Screen Capture	ded Help 13.1V										
Diagnosis (One System) System Selection												
NISSAN/INFINITI Renault X-Badge												
Group	All system	s 🔻										
LANE CAMERA	AUTO BACK DOOR	OCCUPANT DETECTION	NATS IMMU									
ADAPTIVE LIGHT	Diag Data Recorder	BRAKE	SMART ENTRANCE									
AUTO SLIDE DOOR RIGHT	4WAS(FRONT)	sii Step	AIR LEVELIZER									
CAN GATEWAY	E-SUS		REARVIEW CAMERA									
SHIFT	ACCELE PEDAL ACT	CT_R	S/BLIND CAMERA									
EV/HEV	HV BATTERY	TELEMATICS	ACTIVE ENG MOUNT									
POP UP HOOD	TOTAL ILLUM C/U	SVT	ASCD									
TP100958			2/3									

Figure 7

7. Select Work support.

Image: Back	
Diagnosis (One System Selection TELEMATICS	
Self Diagnostic Data Monitor Work support	
No DTC is detected. Further testing may be required.	
Step	
7	
	Print
	Save
1/1	ERASE

Figure 8

#### 8. Select TCU ACTIVATE SETTING.

#### 9. Select Start.

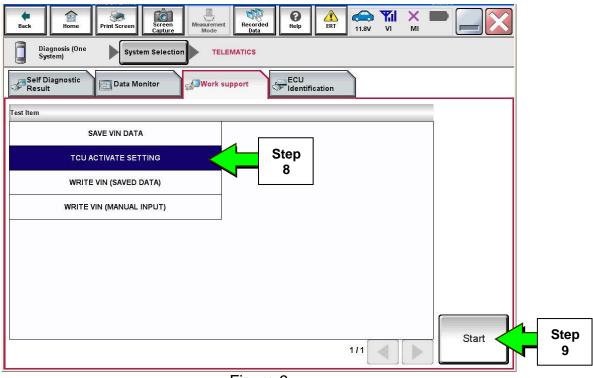


Figure 9

#### 10. Select Start.

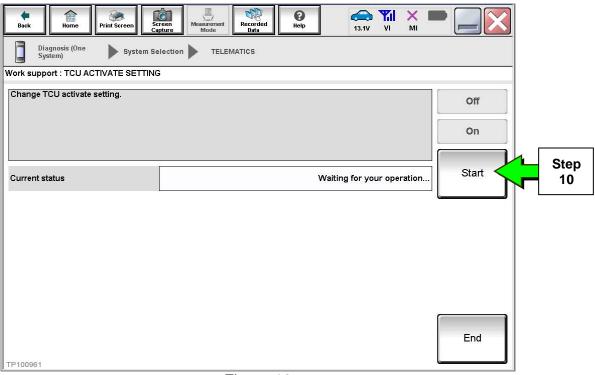


Figure 10

- 11. Select **On** to turn ON the TCU.
- 12. Select End.

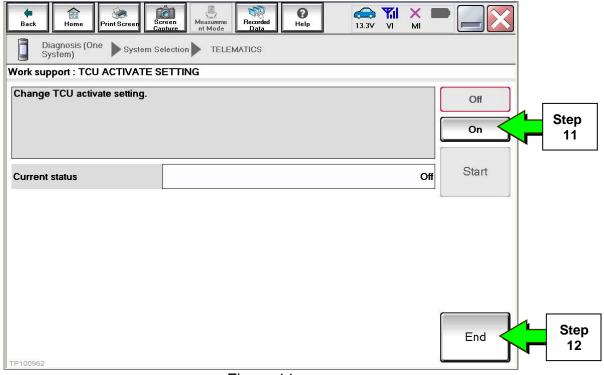


Figure 11

#### 13. Select Start.

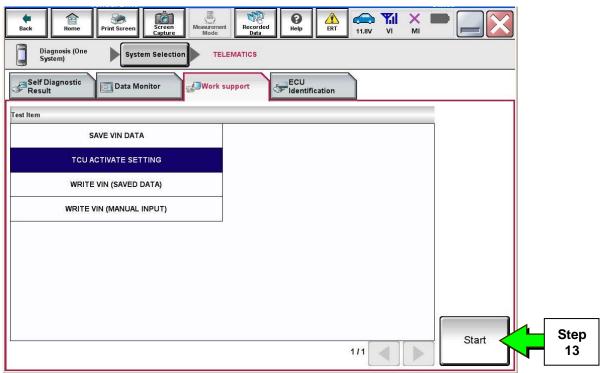


Figure 12

#### 14. Select Start.

Back Home Print Screen St	Messurement Apture Mode Recorded Data	(13.1V VI MI		
Diagnosis (One System) System Se	election TELEMATICS			
Work support : TCU ACTIVATE SETTING	G			
Change TCU activate setting.			Off	
			On	
Current status		Waiting for your operation	Start Start	Step 14
			End	
TP100961	<b>F</b> inute <b>4</b> 0			

Figure 13

15. Confirm "**On**" is displayed in the **Current status** field.

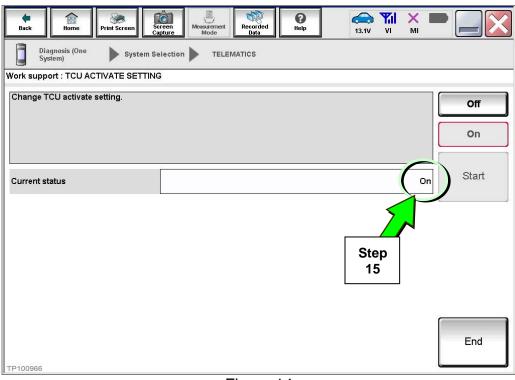


Figure 14

16. Reinsert the C-III Card Adapter with Immobilizer Card, if removed.

## When a TCU Needs To Be Replaced

#### NOTE:

- Each TCU is registered to a specific VIN. TCUs cannot be "swapped" between vehicles.
- The replacement TCU must come from Nissan North America parts supply.
- 1. Turn OFF the TCU using C-III plus.
  - Perform steps 1-15 of the **Turning ON the TCU During PDI** procedure starting on page 4.

#### NOTE:

- > Instead of selecting "On" in step 11, select "Off."
- > In step 15, confirm the current status is displayed as "Off."
- > After step 15, select End.

#### 2. Select SAVE VIN DATA.

3. Select Start.

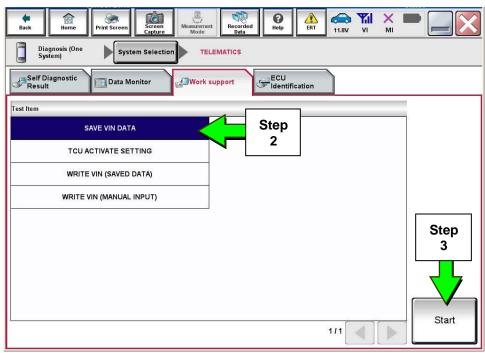


Figure 15

## 4. Select Start.

**NOTE:** If the VIN data cannot be saved, you will have to manually enter the VIN later in this procedure.

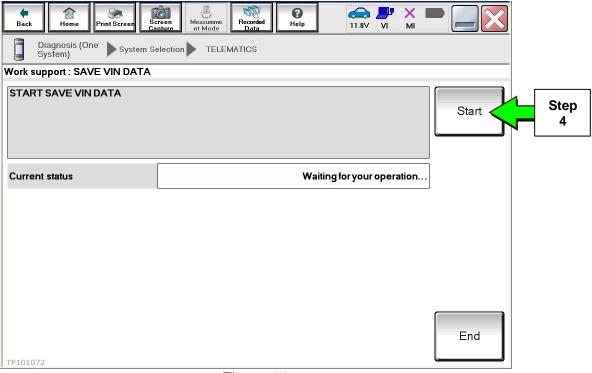


Figure 16

## 5. Select End.

Back Home Print Screer	election TELEMATICS	11.8V VI MI	
Work support : SAVE VIN DATA			
DATA SAVING HAS BEEN COM ACCORDING TO SERVICE MAN THE DATA WRITING ROUTINE.	IUAL, RUN	Retry	
Current status		COMPLETE	
TP101073		End	Step 5

Figure 17

- 6. Remove the TCU from the vehicle.
  - Refer to the ESM, section AV Audio Visual & Navigation System, for removal information.

Steps 7 and 8 must be performed <u>AFTER</u> the original TCU is removed from the vehicle and <u>BEFORE</u> the replacement TCU is installed.

- 7. Collect and have ready the following information:
  - a) VIN.
  - b) International Mobile Equipment Identity Number (IMEI) of the <u>original TCU</u>. This number is located on the TCU.
  - c) IMEI Number of the <u>replacement TCU</u>. This number is located on the TCU.
  - d) Serial Number of the <u>replacement TCU</u>. This number is located on the TCU.

	N TCU	
2011-2015 LEAF	2016 LEAF	
283B0_3NA0	NISSAN R	
TYPE NUMBER: GNOV1	28275 5AA0B	
IC ID: 2807E – GNOV1 FCC ID: LHJGNOV1	PRODUCTION DATE: 02:06:15 PART NO: 51986177 HW: 00001	
Model no: ADN025146110	IMEI: 014148000075342 SERIAL NO: 204152300511 JCM	Contains FCC ID: N7NAR8550
HW: 2514 SW: 06.12 MARKET SYMBOL	12.8V DC == 2A	2 12
IMEI: 35219904000XXXX Serial no: 9900XXXX Assembled in Mexico	TOU BATTERY CAN STAND WITHOUT BEING CHARGED (CONSIDERING MEAN TEMP AROUND 30C UP TO 40C DURING SUMMER, AND LIMITEO TIME OURNED TRANSPORT UP TO 60C) UKTL 172016 (WWYYY) SEE "RECOMBENT FOR MORE DETAILS	PAT. US7.148.850 ET ALT. (C) 2009 Advanced Automotive Antennas, S.L.
Ontinental Assembled in Maxico 26.Apr.2010	Advanced Automotive Antennas S.L.	All rights reserved.
	Figure 1	19

Figure 18

8. Call Nissan LEAF TCU Replacement Support at **1-800-922-1528**. (Hours of operation are listed at the bottom of the page.)

**NOTE:** The phone number shown above is for TCU activation and deactivation **ONLY**. <u>The Support Center agent is unable to assist with matters unrelated to TCU activation</u> <u>and deactivation</u>.

During this call:

- You will be asked for your name, dealership name, and all of the information collected in step 7.
- The Support Center agent will deactivate the original TCU and activate the replacement TCU.

**IMPORTANT:** Step 8 MUST be performed to activate the replacement TCU. If it is not performed the TCU will not be able to communicate with the NissanConnect Global Data Center.

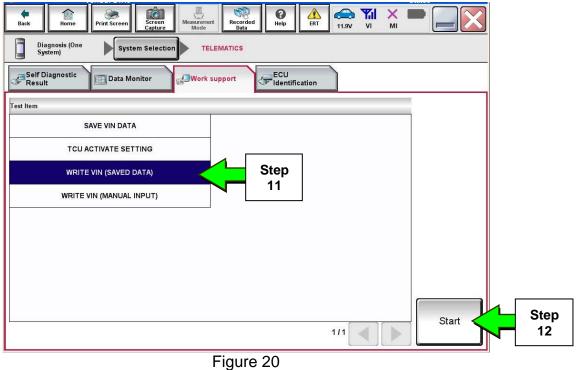
- 9. Install the replacement TCU into the vehicle.
  - Refer to the ESM, section AV Audio Visual & Navigation System, for installation information
- 10. Perform steps 1-7 of the **Turning ON the TCU During PDI** procedure, starting on page 4.

Nissan LEAF TCU Replacement Support – Hours of Operation (Central Time Zone)
Monday – Friday: 7AM – 10PM Saturday: 8AM – 5PM
Special Holiday Hours: Closed Thanksgiving, Christmas, and New Years Day Christmas Eve: 7AM – 7PM New Years Eve: 7AM – 7PM

#### 11. Select WRITE VIN (SAVED DATA).

**NOTE:** If VIN DATA could not be saved in step 4, proceed to **Manually Enter VIN Data** (if needed) on page 16.

#### 12. Select Start.



#### riguit

#### 13. Select Start.

Back Home Drint Screen SC	reen ture Mode Recorded	Per Err 11.9V VI	× = _ ×	
Diagnosis (One System) System Se	lection TELEMATICS			
Work support : WRITE VIN (SAVED DAT	4)			
VIN will be written according to saved Touch Start. Saved VIN will pop up. If VIN is not recorded, then boxes will b			Start	Step 13
Current status		Waiting for your ope	ration	
VIN				
			End	

Figure 21

## 14. Select End.

<b>e</b> Back	Home	Print Screen	Screen Capture	Measurement Mode	Recorded Data	<b>P</b> Help	ERT	11.9V	Yil vi	× MI			$\mathbf{X}$		
	ignosis (One stem)	Syste	m Selection		MATICS										
		VIN (SAVED	DATA)												
	en success	-													
Wait for 1 Select ''W	0 seconds /RITE VIN (	OFF ignition or more. SAVED DATA agnosis and o	)" to check	that VIN is	written to E	ECU.									
										CMDI -	-				
Current st	atus									CMPL	I				
			R												
			'n												
											(			Г	
												End	Y		S
											c				1

Figure 22

15. Proceed to step 19 on page 17.

#### Manually Enter VIN Data (if needed)

#### 16. Select WRITE VIN (MANUAL INPUT).

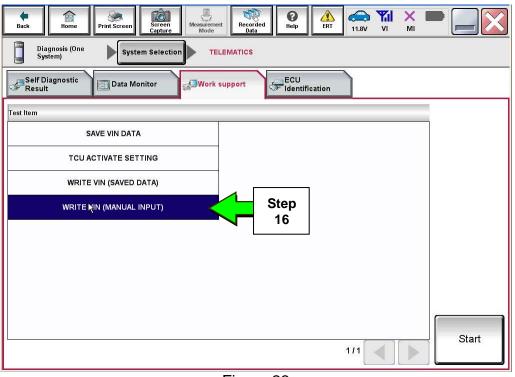
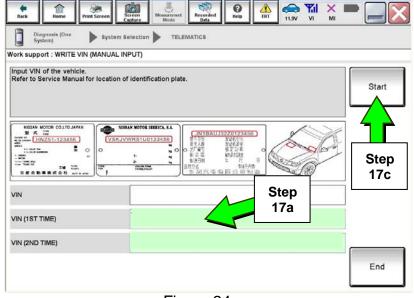


Figure 23

- 17. Enter the VIN.
  - a) Select the VIN (1ST TIME) input field and type in the VIN.
  - b) Select the VIN (2ND TIME) input field and type in the VIN again.
  - c) Select Start.





<b>e</b> Back	Home	Print Screen	Screen Capture	Moass.remert Mode	Recorded Data	<b>O</b> Help	A ERT	11.9V	<b>Yil</b> vi	<mark>ж</mark> П	•
S S	iagnosis (One ystem) port : WRITE	Syste	m Selection	TELE	EMATICS						
VIN writi Touch " Wait for Check th	ten successi End" and tur 10 seconds nat VIN is wri	fully. m OFF ignitio	n switch (c								Retry
	HNZ51-123456		NESSAN MOTOR I KJVWR51U0 1- 2- 20000100	0	長年登号 長生人群 の 出厂屋町 前 辺 国 教法日期 活用印成	J32Z0123456 安全系たち 安全系たち 安全家の事業 敏定指数 年 月 石 田 四 〇 四 刊 石 田 四 〇 四 刊					READ VIN
VIN											
							5	Step 18			End
				Fi	igure	25					

18. Select End.

19. Is the vehicle a 2016 model year? **YES:** Perform "After ECU Replacement" with C-III plus and manually configure TCU

(refer to page 22 for manual configuration), and then proceed to step 20.

**NO:** Proceed to step 20.

20. Turn ON the TCU.

• Perform the **Turning ON the TCU During PDI** procedure, starting on page 4.

21. Sign in to TCU with customer's User ID and Password:

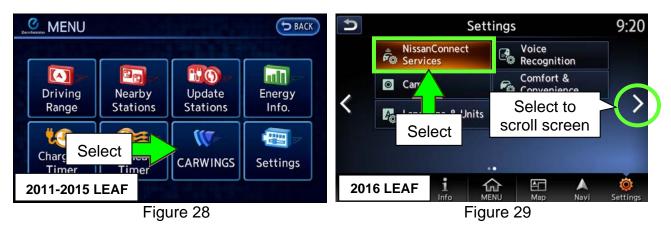
- **2011-2015 LEAF** first press the **Zero Emission button** (Figure 26) on the Multifunction Control Panel.
- 2016 LEAF first select Settings on the touch screen (Figure 27).





## 22. Select CARWINGS or NissanConnect Services:

- 2011-2015 LEAF select CARWINGS (Figure 28) and then CARWINGS Settings.
- 2016 LEAF scroll to screen 2 and then select NissanConnect Services (Figure 29).



23. Select Sign in.



24. Select **Send ID and password** to resend the NissanConnect EV/CARWINGS User ID and Password.

**NOTE:** The NissanConnect EV/CARWINGS User ID and Password already should be entered into the fields. If these fields are blank, perform the **After A/V Control Unit Replacement - Enter NissanConnect EV/CARWINGS User ID and Password** procedure, starting on page 19.



## After A/V Control Unit Replacement - Enter NissanConnect EV/CARWINGS User ID and Password

## NOTE:

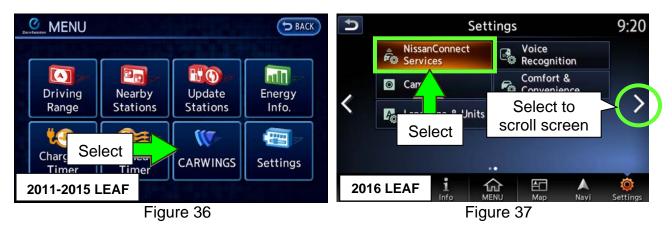
- During this process, the vehicle owner must enter the NissanConnect EV/CARWINGS User ID (PIN) and Password into the new A/V Control Unit. This step is necessary to finalize the repair.
- The owner was provided with the NissanConnect EV/CARWINGS User ID and Password during the initial NissanConnect EV/CARWINGS registration.
- The NissanConnect EV/CARWINGS User ID and Password are different from the www.nissanusa.com/nowners/ account User ID and Password. Make sure the owner understands which User ID and Password is being requested.
- If the owner cannot remember the NissanConnect EV/CARWINGS User ID and Password, inform them it can be viewed in the **Manage Account** area at www.nissanusa.com/nowners/.
- The NissanConnect EV/CARWINGS User ID and Password input fields are case sensitive. Make sure the owner takes note of which letters of the User ID and Password are lowercase and which are uppercase.
- The NissanConnect EV/CARWINGS services will not function until the NissanConnect EV/CARWINGS User ID and Password are entered into the navigation system.
- 1. Sign in to TCU with customer's User ID and Password:
  - **2011-2015 LEAF** first press the **Zero Emission button** (Figure 34) on the Multifunction Control Panel.
  - 2016 LEAF first select Settings on the touch screen (Figure 35).







- 2. Select CARWINGS or NissanConnect Services:
  - 2011-2015 LEAF select CARWINGS (Figure 36) and then CARWINGS Settings.
  - 2016 LEAF scroll to screen 2 and then select NissanConnect Services (Figure 37).



3. Select Sign in.



- 4. Have the owner enter the NissanConnect EV/CARWINGS User ID and Password (Figure 40 and Figure 41).
  - Touch the input fields one at a time to enter the information using the onscreen keyboard.
  - The input fields are case sensitive. Example: "HpcWnYE" must be entered as "HpcWnYE" not "HPCWNYE" or "hpcwnye".



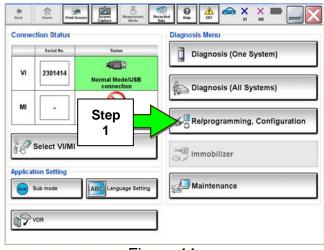
5. Select **Send ID and password** to resend the NissanConnect EV/CARWINGS User ID and Password.

CARWINGS Sign in		🌤 🗢 BACK	D	Sign in	2	9:20
Send	ID and password	Step 5		Send ID and password		
User ID	XXXXXX		User ID	XXXXXX		
Password	****		Password	****		
Clear ID and passv	vord		Clear ID and	password		
011-2015 LEAF	and Password	TP100870	2016 LEAF	are Case Sensitive		
	Figure 42	11100010		Figure 43		

1. Select Re/programming, Configuration.

**NOTE:** Screen shots for steps 2-4 not shown.

- 2. Read the precautions on C-III plus screen and then select **Next**.
- 3. Select LEAF and 2016 model year.
- 4. Select Select and then Confirm.
- 5. Select **TELEMATICS**.





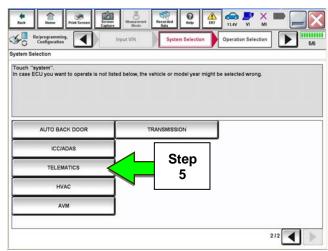


Figure 45

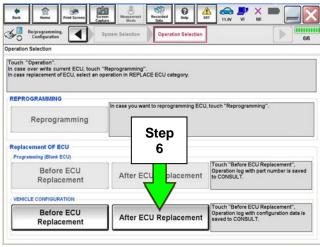


Figure 46

6. Select After ECU Replacement.

Cancel

OK

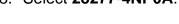
\_\_\_\_\_

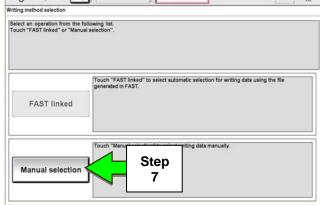
Step 11

- 10. Select OK.
- 11. Proceed to step 20 on page 17 to sign in to TCU with customer's User ID and Password.

- 9. Select Next.
- 8. Select 28277-4NP0A.

7. Select Manual selection.



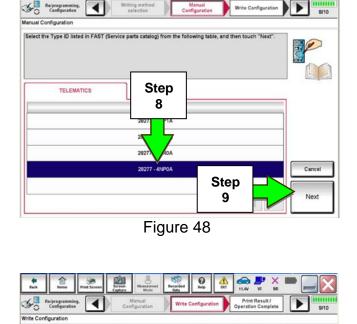


101

4



0



Following setting value for each item are saved to vehicle ECU. Confirm setting value for each items. if OK, touch "OK" to save them to vehicle ECU.

Type ID

Figure 49

TELEMATICS