# SERVICE BULLETIN

Classification:

NISSAN

Reference:

Date:

AN10-044H

NTB10-135H

March 10, 2021

# 2011-2017 LEAF; TELEMATICS SERVICE INFORMATION

This bulletin has been amended. The APPLIED VEHICLES section has been revised. No other changes have been made. Please discard all previous versions of this bulletin.

APPLIED VEHICLES: 2011-2017 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 2016-2017 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:

- Some vehicle information and functions are available to the vehicle owner via personal computer or internet-enabled smart phone.
- For 2011-2015 vehicles, additional information is displayed on the navigation screen in the CARWINGS section.
- For 2016-2017 vehicles, the additional information is displayed on the navigation screen in the NissanConnect Services section.



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.

#### **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 **2016-2017 model years 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>H</b> Back	Home Print	Screen Me Canture n	easureme at Mode	<b>P</b> Help	(13.3V	Yil VI	X D		
Conne	ction Statu	S	D	iagnosis	Menu —				-
	Serial No.	Status		Dia	gnosis (	One	System	) 🗸	Step
VI	230000 2	Normal Mode/V connectio	Vireless	Dia	anosis (,	All S'	vstems	ſ	5
МІ	-	No connect	tion	Re. Co	program	nming	],		
Select VI/MI			<sup>∽n</sup> ∎ ⊃ ∕/ Imr	nobilizer					
Application Setting           Sub mode             Sub mode			age	den Ma	intenanc	e			
VDR									

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 Home Print Screen	Screen Capture	ded Help 13.1V	VI M 🗭 📃 🔀		
Diagnosis (One System) Sys	Diagnosis (One System Selection System)				
NISSAN/INFINITI	Rena	ault	X-Badge		
Group	All system	s 🔻			
LANE CAMERA	AUTO BACK DOOR	OCCUPANT DETECTION			
ADAPTIVE LIGHT	Diag Data Recorder	BRAKE	SMART ENTRANCE		
AUTO SLIDE DOOR RIGHT	4WAS(FRONT)	sit Step	AIR LEVELIZER		
CAN GATEWAY	E-SUS	SID 6 T	REARVIEW CAMERA		
SHIFT	ACCELE PEDAL ACT		S/BLIND CAMERA		
EV/HEV	HV BATTERY	TELEMATICS	ACTIVE ENG MOUNT		
POP UP HOOD	TOTAL ILLUM C/U	SVT	ASCD		
2/3 2/3 D					

Figure 7

7. Select Work support.

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



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.



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.

LABEL ON TCU				
2011-2015 LEAF 283B0_3NA0	2016-2017 LEAF			
TYPE NUMBER: GNOV1 IC ID: 2807E – GNOV1 FCC ID: LHJGNOV1 Model no: ADN025146110 HW: 2514 SW: 06.12 IMEI: 35219904000XXXX Serial no: 9900XXXX Serial no: 9900XXXX Serial no: 9900XXXX Market symbol B B B B B B B B B B B B B	28275 5AA0B PART NAME: TELEMATIC BOX PRODUCTION DATE: 02/06/15 PART NO: 51986177 HW: 00001 IMEI: 014148000075342 SERIAL NO: 204152300511			
	12.8V DC == 2A         Tou Battery can stand without Being Charged (considering Maan temp around soc up to 40c During Symmer, and Limited Time During TRANSPORT up to 80c) until 172016 (WWYYYY), See "recommendations of use tou Geng" Document for More Details.         Advanced Automotive Antennas S.L.			
	Figure 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 Year's Day Christmas Eve: 7AM – 7PM New Year's 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.

Image: Back         Image: Back	
Diagnosis (One System) System Selection TELEMATICS	
Self Diagnostic Data Monitor	
Test Item	
SAVE VIN DATA	
TCU ACTIVATE SETTING	
WRITE VIN (SAVED DATA) Step	
WRITE VIN (MANUAL INPUT)	
1/1 Start	Step 12
Figure 20	_

# 13. Select Start.

Back Home Print Screen	reen hure Mode Recorded Data	11.9V VI MI	-		
Diagnosis (One System) System Selection TELEMATICS					
Work support : WRITE VIN (SAVED DAT	A)				
VIN will be written according to saved VIN. Touch Start. Saved VIN will pop up. If VIN is not recorded, then boxes will be displayed in the VIN column.					
Current status	Wait	ting for your operation			
VIN					
			End		

Figure 21

# 14. Select End.

Back Horne Print Screen	reen Mode Recorded Data				
Diagnosis (One System) System Se	TELEMATICS				
Work support : WRITE VIN (SAVED DAT	A)				
VIN written successfully. Touch End and turn OFF ignition switch (or power switch). Wait for 10 seconds or more. Select "WRITE VIN (SAVED DATA)" to check that VIN is written to ECU. Then, perform self-diagnosis and check that no DTC is detected.					
Current status		CMPLT			
	Ν				
	ν <u>ς</u>				
		End Step 14			

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.



Figure 24



18. Select End.

Figure 25

19. Is the vehicle a 2016-2017 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.
- 2016-2017 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.
- 2016-2017 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.
  - 2016-2017 LEAF first select Settings on the touch screen (Figure 35).





Figure 35

- 2. Select CARWINGS or NissanConnect Services:
  - 2011-2015 LEAF select CARWINGS (Figure 36) and then CARWINGS Settings.
  - 2016-2017 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.

	n in	SBACK	5	Sign in	*	9:20
Sen	d ID and password	Step 5	2	Send ID and password		
User ID	XXXXXX		User ID	XXXXXX		
Password	****		Password	****		
Clear ID and password			Clear ID and pa	assword		
2011-2015 LEAF	and Password	TP100970	2016-2017 LEA	se Sensitive		
	Figure 42			Figure 43		

# Manual TCU Configuration (2016-2017 model years only)

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 or 2017 model year.
- 4. Select Select and then Confirm.
- 5. Select TELEMATICS.

Back	Home	Screen Capture Mode				
Conne	ction Status		Diagnosis Menu			
	Serial No.	Status	Diagnosis (One System)			
VI VI	2301414	<b>1</b>				
		Normal Mode/USB connection	🚵 Diagnosis (All Systems)			
MI	<b>_</b>		L Same			
		Step	Re/programming, Configuration			
0 14						
10	Select VI/M		Immobilizer			
Applicat	tion Setting					
SUB :	Sub mode	ABC Language Setting	Maintenance			
2	VDR					

Figure 44



Figure 45



6. Select After ECU Replacement.

- 10. Select OK.
- 11. Proceed to step 21 on page 17 to sign in to TCU with customer's User ID and Password.

Help 🚗 🍠 X 11.4V VI MI Ô 50 Re/programm Configuration 4 717 iting method selection Select an operation from the following list. Touch "FAST linked" or "Manual selection". Touch "FAST linked" to select automatic selection for writing data using the file generated in FAST FAST linked Touch "Man ing data manually Step Manual selection 7





Figure 48



8. Select 28277-4NP0A.

7. Select Manual selection.

9. Select Next.

# AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
December 23, 2010	NTB10-135	Original bulletin published
January 5, 2011	NTB10-135A	Bulletin amended to add note about disengaging C-III plus card adapter if screen options grayed out
December 22, 2011	NTB10-135B	Bulletin amended to include 12MY vehicles
September 23, 2013	NTB10-135C	Bulletin amended to include 13MY vehicles
January 29, 2015	NTB10-135D	Bulletin amended to include 14&15MY and update some screen captures
November 11, 2015	NTB10-135E	Amended to add 2016 model year and update Figures
December 10, 2015	NTB10-135F	Amended to included configuration for 2016 TCU
January 17, 2018	NTB10-135G	APPLIED VEHICLES section has been revised
March 10, 2021	NTB10-135H	Classification number updated