

Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2014 Nissan Versa Note Service and Repair Manual

Go to manual page

DESCRIPTION

There are many operating conditions that lead to the malfunction of "charging system" components. If such conditions are understood, trouble shooting can be faster and more accurate.

Key points of interview			
What	Vehicle and parts		
When	Date, Frequencies		
Where	Road conditions		
How	Operating conditions, Weather conditions		
What happened	Symptom		

In general, the way customers explanation of symptom differs from person to person, so it is important to fully understand the symptom and condition by conducting sufficient interviews.

Use "Diagnostic Work Sheet" to systematize all the information for troubleshooting.

- If there is a problem with the vehicle, use "Diagnostic Work Sheet A".
- Use "Diagnostic Work Sheet B" for problems related to charging, such as "cannot charge", "charging stops halfway", or "warning lamp turns on after charging".

PNOTE:

Overlapping multiple conditions may cause DTC to be detected.

DIAGNOSTIC WORKSHEET A

DIAGNOSTIC WORKSHEET A (RELATED THE VEHICLE)

		Diagnostic Work	Sh	eet A	
Customer nome		License plate No.		Date of first registration	
Customer name		Model			
Repair order issue date		VIN		Mileage	km or mile

Question	Group		Information from the customer
Vehicle condition at malfunction occurred	R/Q/N/O	□READY® □Quick char	ge(Q) □Normal charge(N) □Others(O)
Symptom		\Box "READY" not enable \Box	Poor drivability Shock Vibration
		□Driving impossible □Fi	xed shift position \Box Poor shift \Box Poor braking
		□Poor acceleration □Poo	r electricity consumption \Box switch malfunction \Box Warning lamp ON
		□Others	
	R	()
		Details of symptom	
		Information display indication	
		Electricity consumption	km(mile)/kw
		Li-ion battery charge level	/

Question	Group		Information from the customer				
		□Charging unable □Char	rging discontinued □Slow charging				
		□Poor timer charging □P	oor remote charging □Immediate charging unable				
		□Others					
	Q/N	()				
		Details of symptom					
		Quick charger monitor indication					
		$\Box A/C$ inoperative $\Box Poor$	A/C □Dead 12 V battery				
	0	□Others					
	Ū	()				
		Details of symptom					
		□Not applicable □ordina	ry road □Highway □Mountain pass □Rough road				
	P /0	\Box Level road \Box Uphill \Box D	Downhill □Left/right turn				
	R/O	□Others					
		()				
Location/status of occurrence		□Start of charge □During	□Start of charge □During charge □After stop charging				
	Q/N/O	□During standby of timer charging □During timer charging □At the end of timer charging					
		□During remote charging					
		□Others					
		()				
	R	 At the system startup During driving with a stopping 	During READY (Vehicle stopped) At start During acceleration constant speed During coasting During braking Right before				
		□ Right after stopping □	During POWER OFF operation $\Box A/C ON \Box$ During shift change				
Driving condition		□ Others					
)				
		Vehicle speed	km/h (MPH)				
		Accelerator pedal opening angle	/ 8				
			□ Not applicable				
		Quick charger maker	□ Applicable				
Quick charge		Location					
	Q	Model maker					
		Serial No.					
		Setting					
		Others					
			□ Genuine				
EVSE	Ν	Manufacturer	□ Others				
			()				

Question	Group		Information from the customer			
		□Not applicable □ App	licable			
		Location				
Wall outlet	Ν	Voltage	V			
		Breaker	А			
		Other information				
Li-ion battery	0.000	🗆 Not applicable 🗆 Appli	cable			
remaining energy	Q/N/O	()		
Shift position/operation	R	$\Box P \Box R \Box N \Box D \Box ECO \Box When operating (\Rightarrow)$				
Weather condition		🗆 Not applicable 🗆 Appli	cable			
		Weather				
		Temperature	°C			
Occurrence frequency	R/Q/N/O	□ All the time □ Once □ : □ Others	Sometimes (times in the past)			
		()		
		□ POWER OFF □ Remo	val of 12V battery terminal □Shift lever operation			
Timing of recovery from malfunction		\Box During driving \Box REA	DY			
		□ Others				
		()		
[REMARKS]						

DIAGNOSTIC WORKSHEET B (RELATED THE CHARGING)

Pointed out concerns from the customer. Select from below (Multiple choices available).

1) Wh	at are the symptoms?	2) What timing does concern occur?	3) initial confirmation	4) Vehicle settings
Normal	□ Normal charge will not start (Unable to		1) How often did this concern occurs?	1) Has the timer been used for charging?
churge	start)		□Always □Sometimes □Once	used for charging.
	□ Normal charge stops during charging		2) Did Charging Device display any failure messages?	□Yes □No □Don't know
	□ After normal charge		□Yes □No □Don't know	2) Has remote control been used for
	(EV system		3) Please list a model and maker of Charging Device.	charging?
	warning lamp) turns ON	A : Normal Charge Use Normal charging		□Yes □No □Don't know
	\Box During normal	station with cable	□Don't know	3) Has immediate charge conducted by
	charge (EV		4) Does same concern occur with different Charging Device?	turning ON the immediate charge SW?
	turns ON		□Yes □No	
	□ Unable to disconnect the charge connector		□Don't know/ Different charging Device not used	⊔Yes ⊔No ⊔Don't know
	from the normal charge port		1) How often did this concern occurs?	4) Has Charging Device been

	□ Breaker of the	B : Normal Charge Use	□Always □Sometimes □Once	connected correctly?					
	□ Others	and normal charging station with EV socket-	2) Did Charging Device display any failure messages?	□Yes □No □Don't know					
		outlet	□Yes □No □Don't know	5) When starting the					
			3) Please list a model and maker of Charging Device.						
			□	□Ves □No □Don't					
			□Don't know	know					
			4) Does same concern occur with different Charging Device?	6) Was Li-ion battery fully charged when					
			□Yes □No						
			□Don't know/ Different charging Device not used	know					
			1) How often did this concern occurs?						
			□Always □Sometimes □Once						
			2) Did same concern occur when Normal charge was conducted at different place?						
			□Yes □No □Don't know						
			3) Was EVSE used for charging NISSAN genuine EVSE?						
			□Yes □No □Don't know						
			4) Using NISSAN genuine EVSE, what type of EVSE was used?						
			(Type (Model No.) is stated on the backside of EVSE control box)						
		NISSAN EVSE	5) Did LED lights illuminated normally while using NISSAN genuine EVSE?						
			□Yes □No □Don't know						
		2	6) Using other than NISSAN genuine EVSE, did any warning lights etc., displayed?						
			□Yes □No □Don't know/Not used						
			7) Using other than NISSAN genuine EVSE, please list maker of the EVSE.						
			Ω						
			□Don't know						
Quick	□ Unable to quick	□ Quick charge	1) How often did this concern occurs?	1) When starting the					
charge	charge		□Always □Sometimes □Once	charge, was the power SW on the					
	□ Quick charge stops during charging		2) Did quick charger display any irregularities?	vehicle OFF? □Yes □No □Don't					
	\Box After quick charge		□Yes □No □Don't know	know					
	(EV system) warning lamp) turns		3) Did charge connector of the quick charger had any irregularities?	2) Was Li-ion battery fully charged when concern occurred?					
	ON		□Yes □No □Don't know	□Ves □No □Don't					
	•								

	During quick charge	4) Does same concern occur with different quick charger?	
	(EV system warning lamp) turns	□Yes □No □Don't know	
	ON	5) Please list maker of Quick Charger.	
	□ Others		
		□Don't know	
5) Desci	ribe where the above conc	rn occurred in details (Ex. At home, On freeway XX, XX freeway XX se XX shopping mall parking lot etc.)	rvice/parking area,
	6) When and I	w did you realize the concern? Describe in details within your memory	
Date: 20	(YY)/ (MM) / (DD). Time	Approx.	

DTC CONFIRMATION

Detected DTCs

 \Box None

□ Detected * Fill-in the DTC code on below list or attach result of CONSULT all diagnosis.

Unit	HEV/HV	Counter	PD Module	Counter	HV Battery	Counter	Motor Control	Counter	CPLC	Counter	DCDC	Counter	Counter
DTC													
DIC													

Description

When replacing CPLC, the following procedures must be performed.

Work after replacement

Vehicle specification needs to be written with CONSULT because it is not written after replacing the CPLC.

PNOTE:

For details the operation, refer to "CONSULT Operation Manual".

1. WRITING VEHICLE SPECIFICATION

(B) With CONSULT

Perform writing vehicle specification to CPLC according to "Replace ECU" in CONSULT Operation Manual.

>>

WORK END

Symptom Table

Charge by EVSE is composed of three factors, which are vehicle, EVSE and power supply outlet and it is necessary to determine which factor is causing the concerns.



①Power outlet for normal charge②EVSE③Vehicle
--

1. Symptom confirmation procedure

Perform the following procedure with each combination of patterns to check the status of the indicator lamp (LED) on the control box (EVSE) and the DTC.

Complianon patterns for commining symptom (venicle, LvSL and power ouner)

Pattern 1	 Outlet that is confirmed to operate normally (power outlet) Customer's EVSE Customer's vehicle
Pattern 2	 Outlet that is confirmed to operate normally (power outlet) EVSE that is confirmed to operate normally Customer's vehicle

Pattern 3	• Outlet that is confirmed to operate normally (power outlet)
	Customer's EVSE
	• Vehicle that is confirmed to operate normally

- 1. Turn power switch ON.
- 2. Erase "self-diagnostic result." using CONSULT.
- 3. Turn OFF the charging timer.

WNOTE:

In case of malfunction on timer charge setting, confirm from the symptoms.

- 4. Turn power switch OFF.
- 5. Connect the EVSE plug to the power outlet and confirm the illumination of the control box indicator lamp (LED). (Charge connector is not connected to normal charge port.)

CAUTION:

- Check that the plug is connected to the power outlet correctly.
 - Check that breaker of the power outlet and the hand switch is not OFF.
- 6. Connect the charge connector to the normal charge port and confirm the illumination of the control box indicator lamp (LED).

CAUTION:

- Confirm that charge connector has been connected to the normal charge port correctly. (All the charge indicator lamp will turn ON for approx. 30 seconds.)
- Confirm that Li-ion battery is not fully charged. (All the charge indicator lamp will turn ON for approx. 5 minutes)
- Confirm that charging timer is not set. [Charge indicator lamp will repeatedly turn ON from the driver's seat side. (It will turn OFF after approx. 5 minutes).]
- Confirm that power supply position is not ON.
- Confirm that 12V battery is not discharged.
- Confirm that normal charge connector & quick charge connector are not connected at same time.
- 7. Disconnect the charge connector.
- 8. Turn power switch ON.
- 9. Perform "all self-diagnostics" using CONSULT. When DTC is detected, perform diagnosis of the corresponding DTC.
- 10. Turn power switch OFF.
- 11. Disconnect the EVSE plug from the power outlet.

CAUTION:

Be sure to unplug it once you change the combination.