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.

2004 NISSAN XTerra OEM Service and Repair Workshop Manual

Go to manual page

SIEMD-7307256

1. CHECK ACC POWER SUPPLY FOR POWER STEERING CONTROL MODULE

1. Pull the parking brake switch.

NOTE:
Check to make sure that the parking brake switch indicator is turned ON.

2. Power switch OFF.

3. Get out of the vehicle and close all doors.

4. Wait 65 seconds or more.

NOTE:
- **Check to make sure that the parking brake switch indicator is turned OFF.**
- **If the rear brake calipers are hot, wait up to an hour until parking brake switch indicator on the switch turns OFF. Once indicator on the switch turns OFF, move to next step.**

5. Disconnect power steering control module harness connector.

6. Check voltage between power steering control module harness connector terminals and ground.

WITHOUT PROPILOT ASSIST 2.0

+		—	**Voltage**
Power steering control module			
Connector	**Terminal**		
F20	4	Ground	Approx. 0 V

WITH PROPILOT ASSIST 2.0

+		—	**Voltage**
Power steering control module			
Connector	**Terminal**		
F25	8	Ground	Approx. 0 V

7. Power switch ON.

CAUTION:
Never set the vehicle to READY.

8. Check voltage between power steering control module harness connector and ground.

WITHOUT PROPILOT ASSIST 2.0

+		—	**Voltage**
Power steering control module			
Connector	**Terminal**		
F20	4	Ground	10.5 – 16 V

WITH PROPILOT ASSIST 2.0

+		—	Voltage
Power steering control module			
Connector	**Terminal**		
F25	8	Ground	10.5 – 16 V

Is the inspection result normal?

YES>>

GO TO 3.

NO>>

GO TO 2.

2. CHECK ACC POWER SUPPLY CIRCUIT FOR POWER STEERING CONTROL MODULE

1. Pull the parking brake switch.

NOTE:
Check to make sure that the parking brake switch indicator is turned ON.

2. Power switch OFF.
3. Get out of the vehicle and close all doors.
4. Wait 65 seconds or more.

NOTE:
- **Check to make sure that the parking brake switch indicator is turned OFF.**
- **If the rear brake calipers are hot, wait up to an hour until parking brake switch indicator on the switch turns OFF. Once indicator on the switch turns OFF, move to next step.**

5. Check the 5A fuse (#38).
6. Check continuity between power steering control module harness connector and the fuse block (J/B).

WITHOUT PROPILOT ASSIST 2.0

Power steering control module		Fuse block (J/B)		Continuity
Connector	**Terminal**	**Connector**	**Terminal**	
F20	4	E57	73	Existed

WITH PROPILOT ASSIST 2.0

Power steering control module		Fuse block (J/B)		Continuity
Connector	**Terminal**	**Connector**	**Terminal**	
F25	8	E57	73	Existed

Is the inspection result normal?

YES>>

Perform the trouble diagnosis for ACC power supply circuit.

NO>>

Repair / replace harness, connector, or fuse.

3. CHECK 12V BATTERY POWER SUPPLY FOR POWER STEERING CONTROL MODULE

1. Pull the parking brake switch.

NOTE:
Check to make sure that the parking brake switch indicator is turned ON.

2. Power switch OFF.

3. Get out of the vehicle and close all doors.

4. Wait 65 seconds or more.

NOTE:
- **Check to make sure that the parking brake switch indicator is turned OFF.**
- **If the rear brake calipers are hot, wait up to an hour until parking brake switch indicator on the switch turns OFF. Once indicator on the switch turns OFF, move to next step.**

5. Check voltage between power steering control module harness connector terminals and ground.

WITHOUT PROPILOT ASSIST 2.0

+		—	**Voltage**
Power steering control module			
Connector	**Terminal**		
F5	7	Ground	10.5 – 16 V

WITH PROPILOT ASSIST 2.0

+		—	**Voltage**
Power steering control module			
Connector	**Terminal**		
F26	3	Ground	10.5 – 16 V
F27	1		

6. Power switch ON.

CAUTION:
Never set the vehicle to READY.

7. Check voltage between power steering control module harness connector terminals and ground.

WITHOUT PROPILOT ASSIST 2.0

+		—	**Voltage**
Power steering control module			
Connector	**Terminal**		
F5	7	Ground	10.5 – 16 V

WITH PROPILOT ASSIST 2.0

+		—	Voltage
Power steering control module			
Connector	**Terminal**		
F26	3	Ground	10.5 – 16 V
F27	1		

Is the inspection result normal?

YES>>

GO TO 5.

NO>>

GO TO 4.

4. CHECK 12V BATTERY POWER SUPPLY CIRCUIT FOR POWER STEERING CONTROL MODULE

1. Pull the parking brake switch.

NOTE:
Check to make sure that the parking brake switch indicator is turned ON.

2. Power switch OFF.
3. Get out of the vehicle and close all doors.
4. Wait 65 seconds or more.

NOTE:
- **Check to make sure that the parking brake switch indicator is turned OFF.**
- **If the rear brake calipers are hot, wait up to an hour until parking brake switch indicator on the switch turns OFF. Once indicator on the switch turns OFF, move to next step.**

5. Check the 100A fusible link (#H).
6. Check continuity between power steering control module harness connector and the battery terminal with fusible link.

WITHOUT PROPILOT ASSIST 2.0

Power steering control module		**Battery terminal with fusible link**		**Continuity**
Connector	**Terminal**	**Connector**	**Terminal**	
F5	7	E136	6	Existed

WITH PROPILOT ASSIST 2.0

Power steering control module		**Battery terminal with fusible link**		**Continuity**
Connector	**Terminal**	**Connector**	**Terminal**	
F26	3	E136	6	Existed
F27	1	B21	1	Existed

Is the inspection result normal?

YES>>

Perform the trouble diagnosis for power supply circuit.

NO>>

Repair / replace harness, connector, or fusible link.

5. CHECK POWER STEERING CONTROL MODULE GROUND CIRCUIT

Check continuity between power steering control module harness connector and ground.

WITHOUT PROPILOT ASSIST 2.0

Power steering control module		—	Continuity
Connector	Terminal		
F5	8	Ground	Existed

WITH PROPILOT ASSIST 2.0

Power steering control module		—	Continuity
Connector	Terminal		
F26	4	Ground	Existed
F27	2		

Is the inspection result normal?

YES>>

GO TO 6.

NO>>

Repair / replace harness or connector.

6. CHECK TERMINAL

1. Pull the parking brake switch.

NOTE:
Check to make sure that the parking brake switch indicator is turned ON.

2. Power switch OFF.
3. Get out of the vehicle and close all doors.
4. Wait 65 seconds or more.

NOTE:
- **Check to make sure that the parking brake switch indicator is turned OFF.**
- **If the rear brake calipers are hot, wait up to an hour until parking brake switch indicator on the switch turns OFF. Once indicator on the switch turns OFF, move to next step.**

5. Check power steering control module terminals for damage or loose connection with harness connector.
6. Check fuse block (J/B) terminals for damage or loose connection with harness connector.
7. Check battery terminal with fusible link terminals for damage or loose connection with harness connector.

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Repair / replace harness, connector, or terminal.

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

RDE-001932306

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision.

Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:
Always observe the following items for preventing accidental activation.

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.**
- **Improper repair, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see “SRS AIR BAG”.**
- **Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:
Always observe the following items for preventing accidental activation.

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition/power switch ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the ignition/power switch OFF, disconnect the 12V battery or batteries, and wait at least 3 minutes before performing any service.**

RDE-001932309

OPERATION PROHIBITION

WARNING:

- **Parts with strong magnet is used in this vehicle.**
- **Technicians using a medical electric device such as pacemaker must never perform operation on the vehicle, as magnetic field can affect the device function by approaching to such parts.**

NORMAL CHARGE PRECAUTION

WARNING:

- **If a technician uses a medical electric device such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator, the possible effects on the devices must be checked with the device manufacturer before starting the charge operation.**
- **As radiated electromagnetic wave generated by PDM (Power Delivery Module) at normal charge operation may affect medical electric devices, a technician using a medical electric device such as implantable cardiac pacemaker or an implantable cardioverter defibrillator must not approach motor room [PDM (Power Delivery Module)] at the hood-opened condition during normal charge operation.**

PRECAUTION AT TELEMATICS SYSTEM OPERATION

WARNING:

- **If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.**
- **The electromagnetic wave of TCU might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), when using the service, etc.**
- **If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of TCU might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before TCU use.**

PRECAUTION AT INTELLIGENT KEY SYSTEM OPERATION

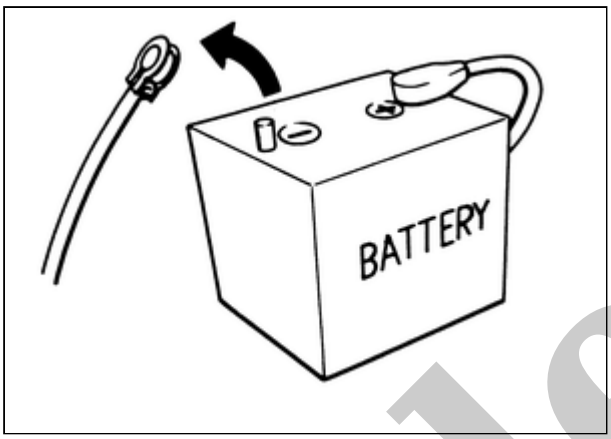
WARNING:

- **If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.**
- **The electromagnetic wave of Intelligent Key might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), at door operation, at each request switch operation, or at engine starting.**
- **If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of Intelligent Key might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before Intelligent Key use.**

Precautions for Removing Battery Terminal

RDE-001932307

- With the adoption of Auto ACC function, ACC power is automatically supplied by operating the Intelligent Key or remote keyless entry or by opening/closing the driver side door. In addition, ACC power is supplied even after the ignition switch is turned to the OFF position, i.e. ACC power is supplied for a certain fixed time.
- When disconnecting the 12V battery terminal, turn off the ACC power before disconnecting the 12V battery terminal, observing “How to disconnect 12V battery terminal” described below.



RDE-001932307-01-EF289H

NOTE:
ECU may be active for several minutes after the power switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- Disconnect 12V battery terminal according to the following steps. Even when the power switch is OFF, the 12V battery automatic charge control may automatically start.
- **CAUTION:**
  Do not remove the battery during the update as the software update cannot be completed normally if the battery is removed during the software update.

WORK PROCEDURE

1. Open the hood (LHD models) or the back door (RHD models).
2. Check that charge cable (including EVSE) is not connected to the charge port.

NOTE:
If charge cable (including EVSE) is connected, the air conditioning system may be automatically activated by the timer A/C function.

3. Turn the power switch OFF → ON → press the power switch for at least 2 seconds to turn the high voltage system OFF, and then check that the charging status indicator is not illuminated.

NOTE:
When the high voltage system is turned ON, the charging status indicator blinks green with a frequency of 1 second.

4. Get out of the vehicle. Close all doors {except the hood (LHD models) or the back door (RHD models)}.
5. Check that the combination meter turns OFF and wait for 5 minutes or more.

CAUTION: