

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 X-Trail (T30) OEM Service and Repair Workshop Manual

Go to manual page

Terminal No.		D 1.1	Condition	Value	
(Wire Color)		Description			
+	_	Signal name	Input/Output		
(GR)					





The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item	Condition		Display value
	Vehicle to READY	Not steering	Approx. 0 Nm
Steering torque		Right turn	Negative value (Nm)
		Left turn	Positive value (Nm)
Demanded motor current	Vehicle to	Not steering	0.5 A or less
Demanded motor current	READY	Right or left turn	100 A or less
Assist level	Vehicle to REAL	ΟΥ	99%*1
	Vehicle stopped		Approx. 0 kph
Vehicle speed for control			indication on speedometer*2
	While driving		(inside of ±10%)
		EPS system: Normal	No error
Electric power steering warning	Vehicle to READY	EPS system: Not used	Error 1
waimig		EPS system: Malfunction	Error 2
		Not steering	Approx. 0 Nm
Demanded assistance torque	Vehicle to READY	Right turn	Negative value (Nm)
107420		Left turn	Positive value (Nm)
	Vehicle to READY	Not steering	Approx. 0 A
Measured motor current		Right or left turn	Displays consumption current of EPS motor
ECU temperature	Auto ACC ON or vehicle to READY		Displays temperature of power steering control module
Battery voltage	Auto ACC ON		10.5 - 16 V
Rack end learning status	Auto ACC ON	RES (steering turning angle) learning completed	Complete
(Right)		RES (steering turning angle) learning	Incomplete
Rack end learning status	Auto ACC ON	RES (steering turning angle) learning completed	Complete
(Left)		RES (steering turning angle) learning	Incomplete
	Vehicle stopped		Approx. 0 kph
Vehicle speed			indication on speedometer*2
	While driving		(inside of ±10%)
	Vehicle to READY	Traction motor: Stopping	Stop
		Traction motor: Waiting for drive	Reserved
Engine status		Traction motor: Driving	Running
		Traction motor: Starting	Stating
	Vehicle to READY	Parking assist: Inactive	Inactive
Parking assist status		Parking assist: Active	Active

Monitor item	Condition		Display value
I and been assist status	Vehicle to READY	LDW/LDP: Inactive	Inactive
Lane keep assist status		LDW/LDP: Active	Active
ProPILOT status	Vehicle to	ProPILOT: Inactive	Inactive
PIOPILOT Status	READY	ProPILOT: Active	Active

^{*1:} Normally displays 99%. In case of an excessive stationary steering, the assist curvature gradually falls. However, it returns to 99% when left standing.



^{*2:} It is not a malfunction, though it might not be corresponding just after power switch ON.

Refer to Fail-Safe.



<u>Protection Function</u>.



Priority	DTC
	U2140-87 Controller area network communication error (Engine control module)
	U2148-87 CAN communication error brake control unit
	U214E-87 CAN communication error combination meter
	U214F-87 CAN communication error (BCM)
1	U2152-87 CAN communication error advanced driver assistant systems control unit
	U2154-87 CAN communication error multimedia interface unit
	U2156-87 CAN communication error steering angel sensor
	U215B-87 CAN communication error (IPDM E/R)
	U2176-87 CAN communication error (chassis control module/steering angle sensor)
2	• C1601-16 Battery voltage
	C1601-17 Battery voltage
	• C1604-96 TORQUE SENSOR
	C1608-43 Control unit
	C1608-46 Control unit
	C1608-49 Control unit
3	C1608-52 Control unit
	• C1608-54 Control unit
	C1615-4B Control unit over heat
	• C1624-00 Signal connector
4	
•	C161A-82 Anti-lock braking system
	C161A-83 Anti-lock braking system
	C161A-86 Anti-lock braking system
	C161B-82 Anti-lock braking system
	C161B-83 Anti-lock braking system
	C161B-86 Anti-lock braking system
	C161C-82 Steering angle sensor system
	C161C-83 Steering angle sensor system
	C161C-86 Steering angle sensor system
	C161E-82 Anti-lock braking system
	C161E-83 Anti-lock braking system
	C161E-86 Anti-lock braking system

Priority	DTC	
	C161F-86 AV system	
	C1620-82 Chassis control system	
	C1620-83 Chassis control system	
	C1621-86 Body control module system	
	C1622-86 Body control module system	
	C1623-86 Engine control module system	
	C162A-87 Advanced Driver Assistance System	
	• C1632-86 VDC system	
	C1633-86 Vehicle dynamics control system	
	C1634-86 Steering angle sensor system	
	• C1636-87 AV system	
	C163A-64 Advanced Driver Assistance System	
	C163A-82 Advanced Driver Assistance System	
	C163A-83 Advanced Driver Assistance System	
	C163A-86 Advanced Driver Assistance System	
	C163D-86 Advanced Driver Assistance System	
	C163E-86 ADAS system	
	U0076-00 Control module communication Bus D Off	
5		
	U1321-55 Configuration data error	

1. CHECK THE ILLUMINATION OF THE ELECTRIC POWER STEERING WARNING LAMP

Check that the electric power steering warning lamp turns ON when power switch ON. Then, electric power steering warning lamp turns OFF after set the vehicle to READY.

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Perform trouble diagnosis. Diagnosis Procedure.



1. PERFORM SELF-DIAGNOSIS

(H)With CONSULT

1. Pull the parking brake switch.



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.



- 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. Power switch ON.
- 6. Perform self-diagnosis for "EPS/DIRECT ADAPTIVE STEERING 3".

Is any DTC detected?

YES>>

Check the DTC. DTC Index.

NO>>

GO TO 2.

2. CHECK TERMINALS AND HARNESS CONNECTORS

Check the power steering control module terminals for damage or loose connection with harness connector.

Is the inspection result normal?

YES>>

Replace the power steering control module. <u>RDE-001825016</u>.

NO>>

Repair/replace harness, connector or terminal.