



Nissan X-Trail
Standard Safety Equipment

2021



Adult Occupant



91%

Child Occupant



90%

Vulnerable Road Users



70%

Safety Assist



95%

SPECIFICATION

Tested Model	e-POWER e-4ORCE 2-row
Body Type	- 5-door SUV 2-row
Year Of Publication	2021
Kerb Weight	1599kg
VIN From Which Rating Applies	- all X-Trails
Class	Large Off-Road

General comments

The Nissan X-Trail shares much of its structure with the Qashqai, tested in 2021. Additional tests have been done where necessary but, otherwise, the results of the Qashqai have been used for this assessment.

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	✘
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	✘	✘	✘
SIDE CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✘
Side pelvis airbag	✘	✘	✘
Centre Airbag	●	—	—
CHILD PROTECTION			
Isofix/i-Size	—	✘	●
Integrated CRS	—	✘	●
Airbag cut-off switch	—	●	—
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

OTHER SYSTEMS	
Active Bonnet	✘
AEB Vulnerable Road Users	●
AEB Pedestrian - Reverse	●
AEB Car-to-Car	●
Speed Assistance	●
Lane Assist System	●

Note: Other equipment may be available on the vehicle but was not considered in the test year.

- Fitted to the vehicle as standard
 ● Fitted to the vehicle as part of the safety pack
○ Not fitted to the test vehicle but available as option or as part of the safety pack
 ✘ Not available
 — Not applicable

ADULT OCCUPANT

Total 34.7 Pts / 91%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Frontal Impact 14.1 / 16 Pts

Mobile Progressive Deformable Barrier Full Width Rigid Barrier

Lateral Impact 16.0 / 16 Pts

Side Mobile Barrier Side Pole Far-Side Excursion Occupant Interaction

Rear Impact 3.5 / 4 Pts

Rear Seat Front Seat

ADULT OCCUPANT

Total 34.7 Pts / 91%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Rescue and Extrication		1.0 / 2 Pts
Rescue Sheet	Available, ISO compliant	
Advanced eCall	Available	
Multi Collision Brake	Not available	

Comments

The passenger compartment of the X-Trail remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. Nissan demonstrated that a similar level of protection would be provided to occupants of different sizes and to those sitting in different positions. Analysis of the deceleration of the impact trolley during the test, and analysis of the deformable barrier after the test, revealed that the X-Trail would be a moderately benign impact partner in a frontal collision. In the full width rigid barrier test, protection of the chest of the rear passenger was rated as marginal, based on readings of chest compression. All other critical body areas were rated as good or adequate. In both the side barrier test and the more severe side pole impact, protection of all critical body regions was good and the X-Trail scored maximum points in this part of the assessment. Limitation of occupant excursion - the extent to which the occupant is flung to the other side of the vehicle in a side impact - was rated as adequate. The X-Trail has a centre airbag as a counter-measure against occupant to occupant injuries in side impacts. In Euro NCAP's test, the airbag performed well, with protection of the heads of the front seat occupants. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric assessment of the rear seats also indicated good whiplash protection. The X-Trail has an advanced eCall system to alert the emergency services in the event of a collision, but no system to prevent secondary impacts.

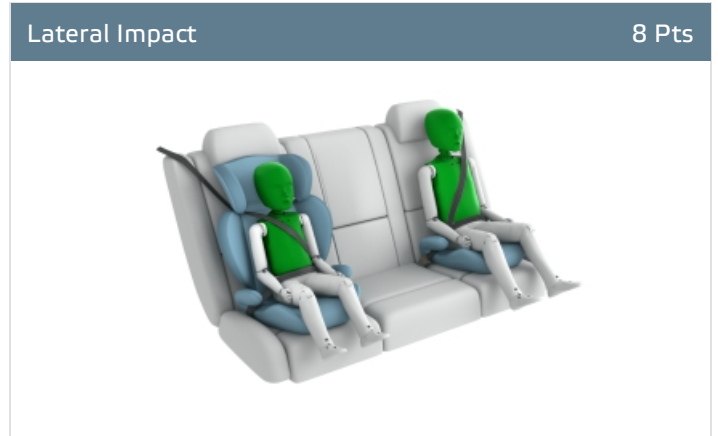
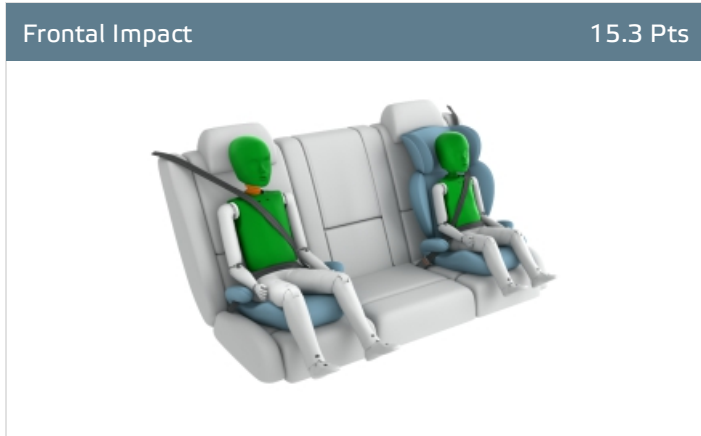
CHILD OCCUPANT

Total 44.3 Pts / 90%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Crash Test Performance based on 6 & 10 year old children

23.3 / 24 Pts



Restraint for 6 year old child: *Britax Römer KidFIX I-Size*
 Restraint for 10 year old child: *Graco Junior Maxi Booster*

Safety Features

9.0 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center	3rd row outboard *
Isofix	✘	●	✘	✘
i-Size	✘	●	✘	✘
Integrated CRS	✘	✘	✘	✘

* Third row seats available as option

● Fitted to test car as standard
 ○ Not on test car but available as option
 ✘ Not available

CRS Installation Check

12.0 / 12 Pts

- Install without problem
- Install with care
- Safety critical problem
- ✗ Installation not allowed

■ i-Size CRS

Maxi Cosi 2way Pearl & 2wayFix (i-Size)



Maxi Cosi 2way Pearl & 2wayFix (i-Size)



BeSafe iZi Kid X2 i-Size (i-Size)



Britax Römer TriFix2 i-Size (i-Size)



BeSafe iZi Flex FIX i-Size (i-Size)




■ ISOFIX CRS

BeSafe iZi Combi X4 ISOfix (ISOFIX)



Cybex Solution Z i-Fix (ISOFIX)



 CHILD OCCUPANT

Total 44.3 Pts / 90%

■ Universal Belted CRS

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyFix (Belt)



Britax Römer King II LS (Belt)



Cybex Solution Z i-Fix (Belt)



CHILD OCCUPANT

Total 44.3 Pts / 90%

	Seat Position					
	Front	2nd row			3rd row	
	PASSENGER	LEFT	CENTER	RIGHT	LEFT	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (i-Size)	—	●	—	●	—	—
Maxi Cosi 2way Pearl & 2wayFix (i-Size)	—	●	—	●	—	—
BeSafe iZi Kid X2 i-Size (i-Size)	—	●	—	●	—	—
Britax Römer TriFix2 i-Size (i-Size)	—	●	—	●	—	—
BeSafe iZi Flex FIX i-Size (i-Size)	—	●	—	●	—	—
BeSafe iZi Combi X4 ISOfix (ISOFIX)	—	●	—	●	—	—
Cybex Solution Z i-Fix (ISOFIX)	—	●	—	●	—	—
Maxi Cosi Cabriofix (Belt)	●	●	●	●	●	●
Maxi Cosi Cabriofix & EasyFix (Belt)	●	●	✘	●	●	●
Britax Römer King II LS (Belt)	●	●	●	●	●	●
Cybex Solution Z i-Fix (Belt)	●	●	●	●	●	●

- Install without problem
- Install with care
- Safety critical problem
- ✘ Installation not allowed
- Not available

Comments

In the frontal offset test, protection of the neck of the 10 year dummy was rated as marginal, based on readings of tensile forces. Otherwise, protection of all critical body areas was good or adequate for both the 6 and 10 year dummies in both dynamic crash tests. The front passenger airbag is automatically disabled when a rearward-facing child restraint is put in that seating position. Tests showed that the system worked robustly and the system was rewarded. All of the child restraints for which the X-Trail is designed could be properly installed and accommodated in the car.

 **VULNERABLE ROAD USERS**

Total 38.2 Pts / 70%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

Pedestrian

22.8 / 36 Pts



Head Impact	14.2 Pts
Pelvis Impact	2.6 Pts
Leg Impact	6.0 Pts

Vulnerable Road Users


15.3 / 18 Pts

System Name	Intelligent Emergency Braking (IEB)
Type	Auto-Brake with Forward Collision Warning
Operational From	10 km/h

 VULNERABLE ROAD USERS

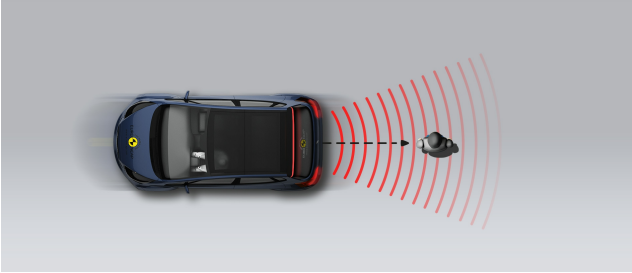
Total 38.2 Pts / 70%

AEB Pedestrian

 7.0 / 9 Pts

■ Day time

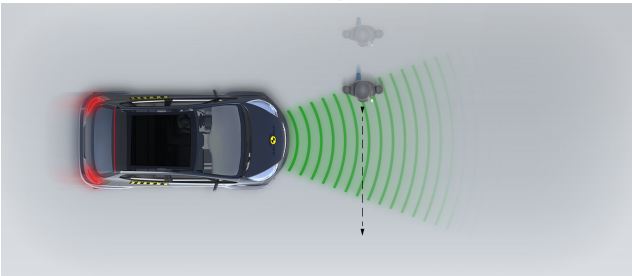
Vehicle reversing into standing pedestrian



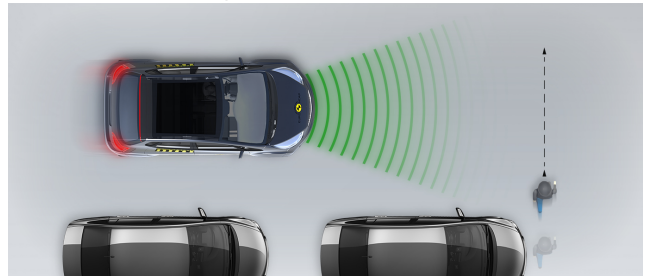
Pedestrian crossing a road into which a car is turning



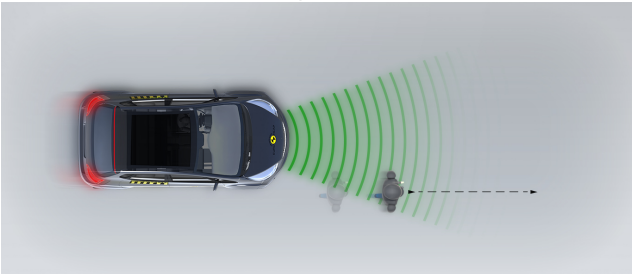
Adult crossing the road



Child running from behind parked vehicles

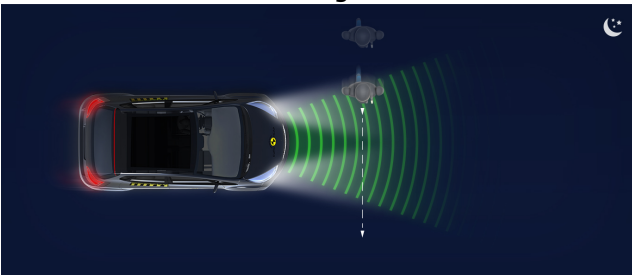


Adult along the roadside

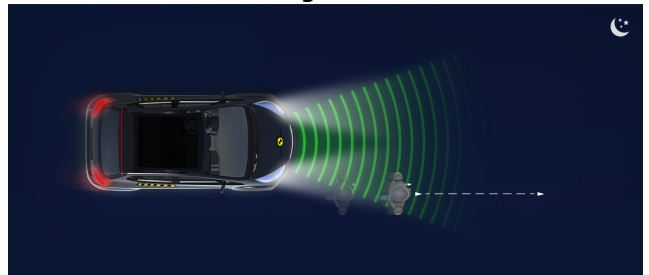


■ Night time

Adult crossing the road




Adult along the roadside

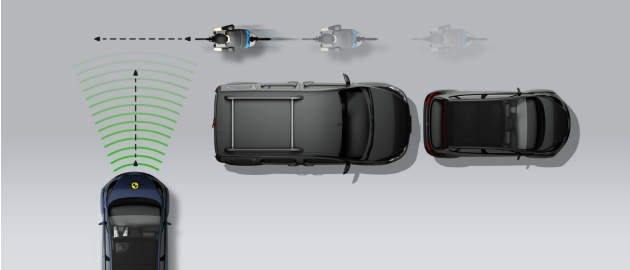



VULNERABLE ROAD USERS

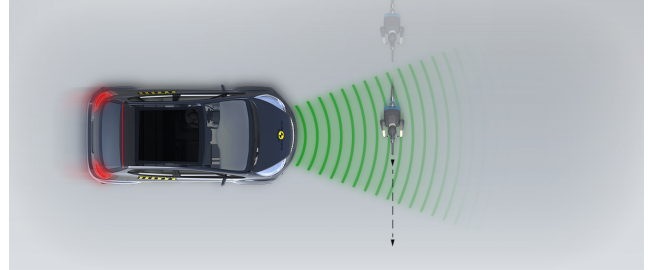
Total 38.2 Pts / 70%

AEB Cyclist

8.3 / 9 Pts

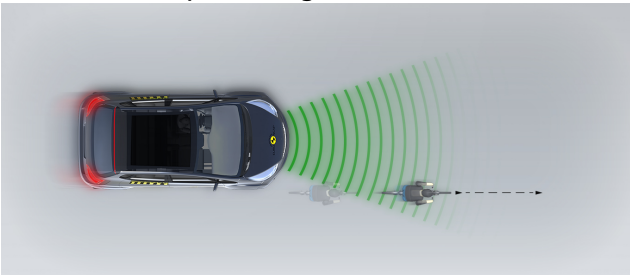
Cyclist from nearside, obstructed view



Approaching a crossing cyclist



Cyclist along the roadside

**Comments**

The protection offered by the bonnet to the head of a struck pedestrian was predominantly good or adequate. The bumper provided good protection to pedestrian's legs at all test positions. However, protection of the pelvis was mixed, with areas of good and poor protection. The X-Trail's autonomous emergency braking (AEB) system detects vulnerable road users like pedestrians and cyclists, as well as other vehicles. In tests of the system's response to such road-users, performance was rated as good, with collisions avoided or mitigated in most test scenarios. The AEB system includes, as standard, the functionality to operate when the vehicle is in reverse, to avoid collisions with those behind the car. However, only systems with the optional reversing camera, not included in this assessment, fully meet Euro NCAP's requirements.

SAFETY ASSIST

Total 15.2 Pts / 95%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Speed Assistance ■ 2.5 / 3 Pts

System Name	Speed Limiter/Traffic Sign Recognition
Speed Limit Information Function	Camera based, subsigns supported
Speed Limitation Function	System advised (accurate to 5km/h)

Occupant Status Monitoring ■ 3.0 / 3 Pts

> Seatbelt Reminder ■ 2.0 / 2 Pts

Applies To	Front and rear seats		
	Driver Seat	Front Passenger(s)	Rear Passenger(s)
Warning			
Visual	●	●	●
Audible	●	●	●
Occupant Detection	—	●	●

● Pass
 ● Fail
 — Not available

> Driver Monitoring ■ 1.0 / 1 Pts

System Name	Driver Attention Alert
Type	steering input
Operational From	60 km/h

SAFETY ASSIST

Total 15.2 Pts / 95%

Lane Support

4.0 / 4 Pts

System Name	Intelligent Lane Intervention (ILI)	
Type	LKA and ELK	
Operational From	60 km/h	
PERFORMANCE		
Emergency Lane Keeping		GOOD
Lane Keep Assist		GOOD
Human Machine Interface		GOOD

AEB Car-to-Car

5.7 / 6 Pts

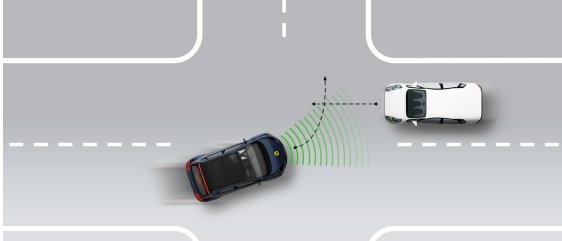
Type	Autonomous emergency braking and forward collision warning	
Sensor Used	camera and radar	

 SAFETY ASSIST

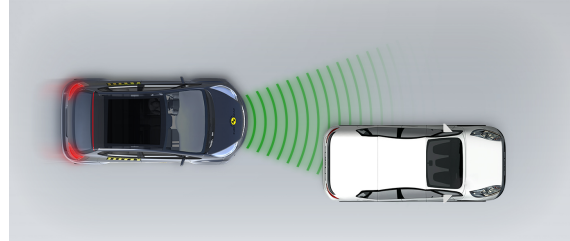
Total 15.2 Pts / 95%

■ Autobrake function only

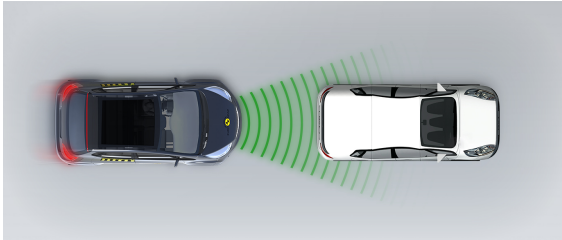
Car turning across the path of an oncoming car



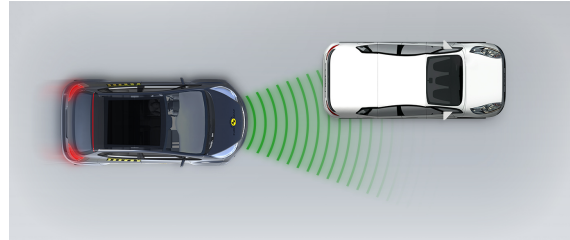
Approaching a stationary car



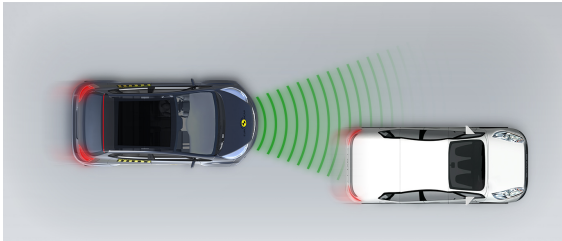
Approaching a stationary car



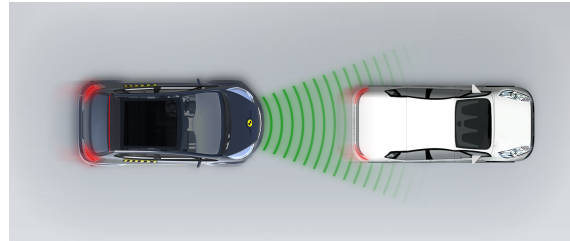
Approaching a stationary car



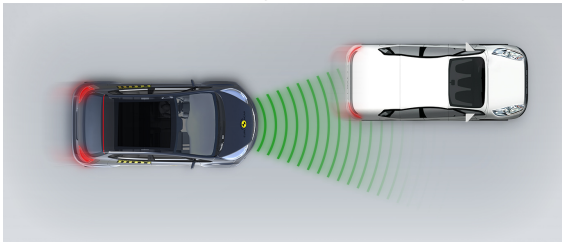
Approaching a slower moving car



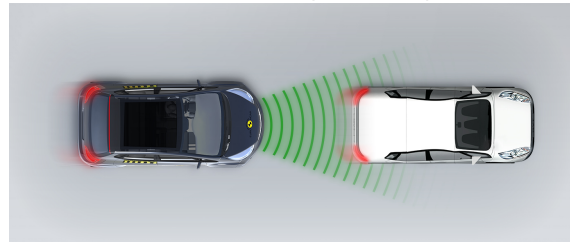
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car

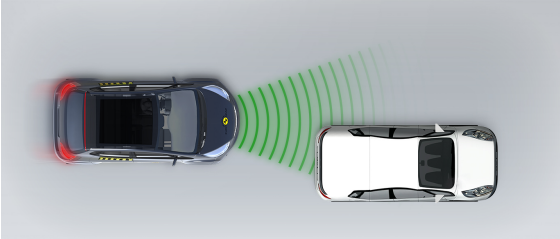


 SAFETY ASSIST

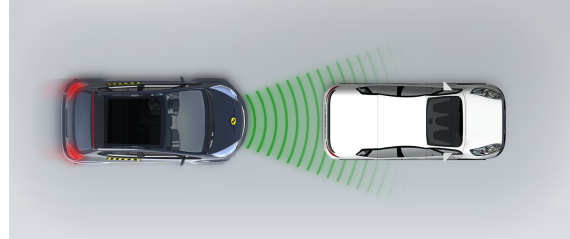
Total 15.2 Pts / 95%

■ Driver reacts to warning

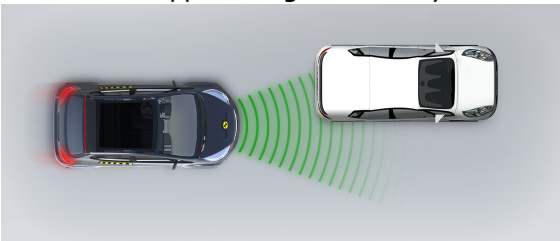
Approaching a stationary car



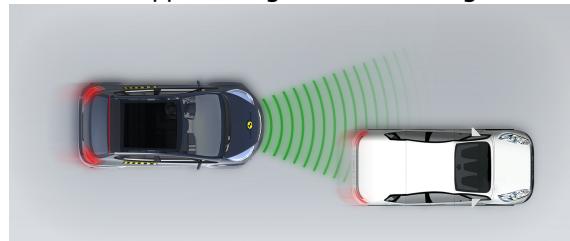
Approaching a stationary car



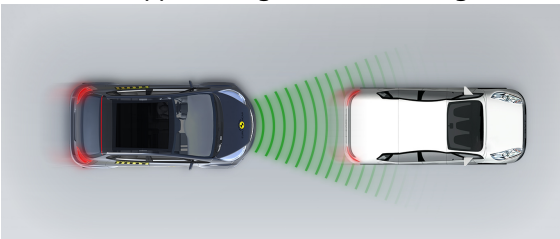
Approaching a stationary car



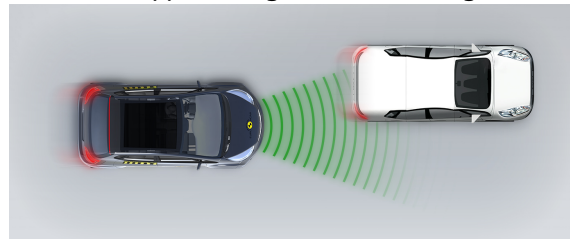
Approaching a slower moving car



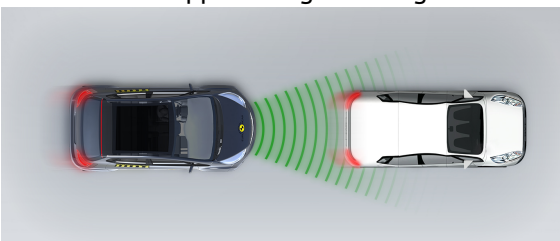
Approaching a slower moving car



Approaching a slower moving car



Approaching a braking car





SAFETY ASSIST

Total 15.2 Pts / 95%

Comments

The X-Trail's autonomous emergency braking (AEB) system performed well in tests of its reaction to other vehicles, with impacts avoided in almost all cases. A seatbelt reminder system, including occupant detection, is standard for all seats and the X-Trail is also equipped with 'Driver Attention Alert', which monitors steering inputs for patterns which are characteristic of a fatigued or inattentive driver. Lane assistance corrects the car's path if it is drifting out of lane and which also intervenes in some more critical situations, and the system scored maximum points in Euro NCAP's tests. A camera based speed assistance system recognises local speed limits, allowing the speed limiter to be set appropriately.

RATING VALIDITY

Variants of Model Range

Body Type	Engine & Transmission	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
5 door SUV	1.5 Petrol e-Power Hybrid	Nissan X-Trail N-Connecta e-POWER 213 - Automatic 4WD e-4ORCE (5-seat or 7-seat) *	4 x 4		
5 door SUV	1.5 Petrol e-Power Hybrid	Nissan X-Trail N-Connecta e-POWER 204 - Automatic 2WD (5-seat)	4 x 2		
5 door SUV	1.5 Petrol e-Power Hybrid	Nissan X-Trail N-Connecta 1.5 VC Turbo MHEV 163 - mCVT 2WD (5-seat or 7-seat)	4 x 2		

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome
November 2022	Rating Published	2021