

KIA CARNIVAL

JANUARY 2021 - ONWARDS
ALL VARIANTS



ANCAP

SAFETY

TESTED
2021



RATING YEAR	2021
VEHICLE TYPE	People Mover
ENGINE TYPE	Petrol / Diesel
BUILT FROM	November 2020
ON SALE FROM	January 2021
SERIES	KA4
AIRBAGS	Dual frontal, side chest, side head, driver knee

The Kia Carnival was introduced in Australia and New Zealand in January 2021. This ANCAP safety rating applies to all variants.

Dual frontal, side head-protecting airbags (first, second & third rows), and side chest-protecting airbags (first row), and a driver knee airbag are standard. A centre airbag to minimise occupant injury in a far-side impact crash is not available.

Autonomous emergency braking (Car-to-Car, Vulnerable Road User and Junction Assist) as well as a lane support system with lane keep assist (LKA), lane departure warning (LDW) and emergency lane keeping (ELK), and an advanced speed assistance system (SAS) are standard on all variants.



90%

ADULT OCCUPANT PROTECTION



88%

CHILD OCCUPANT PROTECTION



68%

VULNERABLE ROAD USER PROTECTION



82%

SAFETY ASSIST

RATING APPLICABILITY

VARIANT	BODY TYPE	ENGINE	DRIVETRAIN	AUS	NZ
Kia Carnival S	People Mover	3.5 litre petrol	2WD	✓	-
Kia Carnival Si	People Mover	3.5 litre petrol	2WD	✓	-
Kia Carnival SLi	People Mover	3.5 litre petrol	2WD	✓	-
Kia Carnival Platinum	People Mover	3.5 litre petrol	2WD	✓	-
Kia Carnival S ♦	People Mover	2.2 litre diesel	2WD	✓	-
Kia Carnival Si	People Mover	2.2 litre diesel	2WD	✓	-
Kia Carnival SLi	People Mover	2.2 litre diesel	2WD	✓	-
Kia Carnival Platinum	People Mover	2.2 litre diesel	2WD	✓	-
Kia Carnival EX	People Mover	2.2 litre diesel	2WD	-	✓
Kia Carnival Deluxe	People Mover	2.2 litre diesel	2WD	-	✓
Kia Carnival Premium	People Mover	2.2 litre diesel	2WD	-	✓

ADULT OCCUPANT PROTECTION



90%

34.54 POINTS
OUT OF 38

The passenger compartment of the Kia Carnival remained stable in the frontal offset (MPDB) test. Dummy readings indicated ADEQUATE protection for the upper and lower legs of the driver and upper legs of the passenger. Protection was GOOD for all other critical body regions. The front structure of the Kia Carnival presented a low-moderate risk to the occupants of an oncoming (collision partner) vehicle in this test, and a moderate 2.04 point penalty for compatibility was applied.

In the full width frontal test, GOOD protection was offered to all critical body regions of both the driver and rear passenger except the neck and chest of rear passenger where protection was ADEQUATE.

In the side impact and oblique pole tests, protection offered to all critical body regions was GOOD and maximum points were scored in both tests.

Prevention of occupant excursion (movement towards the other side of the vehicle) in the far side impact tests was assessed as GOOD for the vehicle-to-vehicle side impact (MDB) scenario, and ADEQUATE in the vehicle-to-pole scenario. A centre airbag to prevent contact between the heads of front seat occupants in side impacts is not available.

A Rescue Sheet, providing information for first responders in the event of a crash, is available for all rated variants.

FRONTAL OFFSET (MPDB)#	5.98 (out of 8)
FULL WIDTH FRONTAL#	7.78 (out of 8)
SIDE IMPACT#	6.00 (out of 6)
OBLIQUE POLE#	6.00 (out of 6)
WHIPLASH PROTECTION	3.78 (out of 4)
FAR SIDE IMPACT	3.00 (out of 4)
RESCUE & EXTRICATION	2.00 (out of 2)

Scaled scores. Total test scored out of 16.00 points.

FRONTAL OFFSET (MPDB) (50km/h)



DRIVER

Head / neck:	4.00 pts
Chest:	4.00 pts
Upper legs:	2.90 pts
Lower legs:	3.11 pts
Deductions:	-1.00 (variable contact)

FRONT PASSENGER

Head / neck:	4.00 pts
Chest:	4.00 pts
Upper legs:	3.00 pts
Lower legs:	4.00 pts
Deductions:	-1.00 (variable contact)

COMPATIBILITY

Deductions:	-2.04 pts
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FULL WIDTH FRONTAL (50km/h)



DRIVER

Head:	4.00 pts
Neck:	4.00 pts
Chest:	4.00 pts
Upper legs:	4.00 pts
Deductions:	Nil

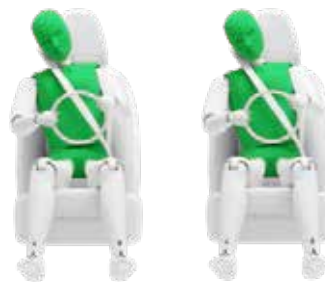
REAR PASSENGER

Head:	4.00 pts
Neck:	3.79 pts
Chest:	3.32 pts
Upper legs:	4.00 pts
Deductions:	Nil

RESCUE & EXTRICATION

Rescue Sheet	●	No penalty
Door Opening	●	No penalty
Multi-Collision Braking	●	1.00 pt
Advanced eCall	✗	1.00 pt default

SIDE IMPACT OBLIQUE POLE



SIDE IMPACT (MDB) (60km/h)

Head:	4.00 pts
Chest:	4.00 pts
Abdomen:	4.00 pts
Pelvis:	4.00 pts
Deductions:	Nil

OBLIQUE POLE (32km/h)

Head:	4.00 pts
Chest:	4.00 pts
Abdomen:	4.00 pts
Pelvis:	4.00 pts
Deductions:	Nil

FAR SIDE IMPACT



SIDE IMPACT (MDB)

Head:	4.00 pts
Neck:	4.00 pts
Chest & Abdomen:	4.00 pts
Pelvis:	No penalty

OBLIQUE POLE

Head:	2.00 pts
Neck:	2.00 pts
Chest & Abdomen:	2.00 pts
Pelvis:	No penalty

OCCUPANT-TO-OCCUPANT

Head contact:	[NOT ASSESSED] No centre airbag
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WHIPLASH (REAR IMPACT) PROTECTION



Driver / front passenger:	2.97 pts
Rear passenger:	0.81 pts

CHILD OCCUPANT PROTECTION



88%

43.52 POINTS
OUT OF 49

In the frontal offset and side impact tests, protection of the 10 year and 6 year dummies was GOOD for all critical body regions and maximum points were scored.

The Kia Carnival is fitted with lower ISOFix anchorages and top tether anchorages for all seating positions in the second row and outboard seats in the third row. Top tether anchorages and ISOFix anchorages are not available in the centre seating position in the third row. Installation of child restraints in the third row centre position is therefore not recommended.

Installation of typical child restraints available in Australia and New Zealand showed most child restraints could be accommodated in most rear seating positions, however one of the selected Type A convertible seats could not be correctly installed in rearward-facing mode using the ISOfix anchorages in the outboard seats of the second and third rows. Care is also required when installing one of the forward-facing convertible seat using the ISOfix anchorages in the third row positions.

DYNAMIC TEST (FRONT)	16.00 (out of 16)
DYNAMIC TEST (SIDE)	8.00 (out of 8)
RESTRAINT INSTALLATION	11.52 (out of 12)
ON-BOARD SAFETY FEATURES	8.00 (out of 13)

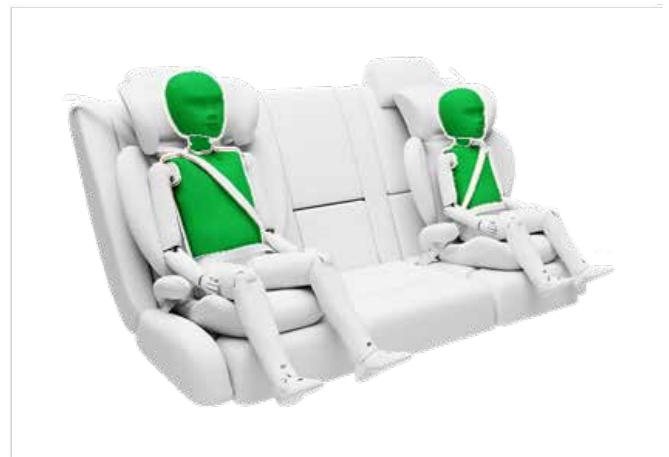
FRONTAL OFFSET (MPDB) (50km/h)



6 YEAR OLD

10 YEAR OLD

SIDE IMPACT (60km/h)



10 YEAR OLD

6 YEAR OLD

ON-BOARD SAFETY FEATURES

FEATURE	FRONT PASSENGER	2nd ROW OUTBOARD	2nd ROW CENTRE	3rd ROW OUTBOARD	3rd ROW CENTRE
ISOFix	×	●	●	●	×
Integrated child restraints	×	×	×	×	×
Top tether anchorage	×	●	●	●	×
Airbag disabling	×	-	-	-	-

● FITTED TO TEST CAR AS STANDARD ● NOT FITTED TO TEST CAR BUT AVAILABLE AS AN OPTION × NOT AVAILABLE - NOT APPLICABLE

GOOD ADEQUATE MARGINAL WEAK POOR

NOTE: The child restraints fitted to vehicles tested by Euro NCAP are relevant to the European market. For Australasian consumers, this information should be used as a guide to vehicle features only. The Child Restraint Evaluation Program (CREP) provides an independent assessment on the safety of Australasian child restraints - see www.childcarseats.com.au.



88%

43.52 POINTS
OUT OF 49

CHILD RESTRAINT INSTALLATION*

CHILD RESTRAINT (CRS) TYPE [^]		FRONT ROW	2nd ROW			3rd ROW			
		PASSENGER	LEFT	CENTRE	RIGHT	LEFT	CENTRE	RIGHT	
BELTED	TYPE A	Rearward facing capsule	×	●	●	●	●	×	●
	TYPE A	Rearward facing with harness - convertible (Model A)	×	●	●	●	●	×	●
		Rearward facing with harness - convertible (Model B)	×	●	●	●	●	×	●
	TYPE B	Forward facing with harness - convertible (Model A)	×	●	●	●	●	×	●
		Forward facing with harness - convertible (Model B)	×	●	●	●	●	×	●
	TYPE E	Booster - 4 to 8 years	×	●	●	●	●	×	●
TYPE F	Booster - 4 to 10 years	×	●	●	●	●	×	●	
ISOFIX	TYPE A	Rearward facing capsule	×	●	●	●	●	×	●
	TYPE A	Rearward facing with harness - convertible (Model A)	×	●	●	●	●	×	●
		Rearward facing with harness - convertible (Model B)	×	●	●	●	●	×	●
	TYPE B	Forward facing with harness - convertible (Model A)	×	●	●	●	●	×	●
		Forward facing with harness - convertible (Model B)	×	●	●	●	●	×	●

* Installation of each child restraint is assessed separately in each position. Installation of multiple restraints has not been assessed and may not be possible.

[^] The above list of child restraints has been selected to provide a general indication of the rated vehicle's ability to accommodate various CRS types. ANCAP does not endorse or recommend any one CRS brand or model, nor does it rate the safety of child restraints.



68%

36.91 POINTS
OUT OF 54

The bonnet of the Kia Carnival provided GOOD or ADEQUATE protection to the head of a struck pedestrian over most of its surface, with some WEAK and POOR results recorded along the front of the bonnet and on the stiff windscreen pillars. Protection of the pelvis was mixed, with areas of GOOD and POOR performance, while the bumper provided GOOD protection to pedestrians' legs.

The autonomous emergency braking (AEB) system is capable of detecting and reacting to vulnerable road users such as pedestrians and cyclists.

The AEB system offered ADEQUATE performance in tests of its effectiveness in pedestrian test scenarios, with GOOD performance recorded in many daylight and night-time scenarios. The AEB system does not react to vulnerable road users in reverse (AEB Backover) or turning scenarios. In cyclist test scenarios, the AEB system offered ADEQUATE performance.

HEAD IMPACTS	15.95 (out of 24)
UPPER LEG IMPACTS	2.60 (out of 6)
LOWER LEG IMPACTS	6.00 (out of 6)
AEB - Pedestrian (forward)	5.80 (out of 7)
AEB - Pedestrian (backover)	0.00 (out of 2)
AEB - Cyclist	6.56 (out of 9)

AUTONOMOUS EMERGENCY BRAKING (PEDESTRIAN, CYCLIST & BACKOVER)

SYSTEM NAME: Forward Collision - Avoidance Assist
TYPE: Autonomous emergency braking with forward collision warning
OPERATIONAL FROM: 5-85 km/h
DESCRIPTION: System functions in the daytime and night

AUTONOMOUS EMERGENCY BRAKING - PEDESTRIAN														
TEST SCENARIO	AEB + FCW		FORWARD								BACKOVER			
	Adult walking along road		Adult crossing towards kerb (50%)		Adult crossing from kerb (25%)		Adult crossing from kerb (75%)		Child running (obstructed)		Adult crossing side road, vehicle turning		Adult walking behind reversing vehicle	Adult standing behind reversing vehicle
	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	NIGHT	DAY	DAY
PERFORMANCE	GOOD	GOOD	GOOD	POOR	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD	POOR	POOR	POOR	POOR
	ADEQUATE													

AUTONOMOUS EMERGENCY BRAKING - CYCLIST					
TEST SCENARIO	FCW	FORWARD			
	Cyclist travelling along road (25%)	Cyclist crossing from kerb (obstructed)	Cyclist travelling along road (50%)	Cyclist crossing (nearside)	Cyclist crossing (farside)
	DAY	DAY	DAY	DAY	DAY
PERFORMANCE	GOOD	MARGINAL	GOOD	GOOD	MARGINAL
	ADEQUATE				

PEDESTRIAN IMPACT TEST (40 KM/H)





82%

13.25 POINTS
OUT OF 16

The Kia Carnival is fitted as standard with a range of safety assist features including autonomous emergency braking (AEB) and a lane support system (LSS) with lane keep assist (LKA) and emergency lane keeping (ELK) functionality.

Tests of the AEB (Car-to-Car) system showed GOOD performance with collisions avoided or mitigated in all scenarios. Overall, effectiveness of the AEB (Car-to-Car) system performance was rated as GOOD.

Overall performance of the Lane Support System was GOOD, with ADEQUATE performance recorded in ELK scenarios, and GOOD performance in LKA scenarios.

A speed assistance system (SAS) is also standard. This system identifies the local speed limit and allows the driver to set the speed accordingly.

A seat belt reminder system is fitted to all seating positions except the centre seat of the second row. Occupancy detection is only available for the front passenger and the second row outboard seating positions.

A driver drowsiness monitor system is fitted as standard.

OCCUPANT STATUS

- Seat belt reminders 1.17 (out of 2)
- Driver monitoring 1.00 (out of 1)

SPEED ASSISTANCE SYSTEMS 2.38 (out of 3)

LANE SUPPORT SYSTEMS 3.25 (out of 4)

AEB - Car-to-Car 3.46 (out of 4)

AEB - Junction Assist 2.00 (out of 2)

LANE SUPPORT SYSTEMS (LSS)

SYSTEM NAME: Lane Following Assist
OPERATIONAL FROM: 60-200 km/h

EMERGENCY LANE KEEPING (ELK)											
TEST SCENARIO	Oncoming vehicle	Overtaking vehicle (GVT at 72 km/h)		Overtaking vehicle (GVT at 80 km/h)		Road edge			Solid line		
		UNINTENTIONAL	INTENTIONAL	UNINTENTIONAL	INTENTIONAL						
PERFORMANCE	GOOD	WEAK	WEAK	WEAK	WEAK	MARGINAL	GOOD	GOOD	GOOD	GOOD	GOOD
ADEQUATE											

LANE KEEP ASSIST (LKA)				
TEST SCENARIO	Dashed Line		Solid Line	
PERFORMANCE	GOOD	GOOD	GOOD	GOOD
GOOD				

HUMAN MACHINE INTERFACE (HMI)		
FUNCTION	Lane Departure Warning (LDW)	PASS
	Blind Spot Monitoring (BSM)	PASS



82%

13.25 POINTS
OUT OF 16

AUTONOMOUS EMERGENCY BRAKING (CAR-TO-CAR)

SYSTEM NAME: Forward Collision - Avoidance Assist
 TYPE: Autonomous emergency braking with forward collision warning
 OPERATIONAL FROM: 5-180 km/h
 DESCRIPTION: Defaults ON for every journey

HUMAN MACHINE INTERFACE (HMI)		
FUNCTION	Supplementary warning	[NOT FITTED]
	Restraint activation / dynamic retractors	[NOT FITTED]

AUTONOMOUS EMERGENCY BRAKING - CAR-TO-CAR									
TEST SCENARIO	Driving towards a stationary car					TEST VEHICLE SPEED	Turning across the path of oncoming vehicle		
	-50% OFFSET	-75% OFFSET	100% OFFSET	75% OFFSET	50% OFFSET		TARGET VEHICLE SPEED		
	30 KM/H			45 KM/H			55 KM/H		
AEB (10-50 km/h)						10 KM/H			
FCW (30-80 km/h)						15 KM/H			
PERFORMANCE	GOOD					20 KM/H			
							GOOD		

AUTONOMOUS EMERGENCY BRAKING - CAR-TO-CAR										
TEST SCENARIO	Toward car braking lightly		Toward car braking heavily		Driving towards a slower moving car*					
	12m HEADWAY	40m HEADWAY	12m HEADWAY	40m HEADWAY						
	AEB (10-50 km/h)									
FCW (50*-80 km/h)										
PERFORMANCE	GOOD									

OCCUPANT STATUS

WARNING TYPE	DRIVER	FRONT PASSENGER	REAR PASSENGERS
Occupant Detection	-	●	●/✗
Seat Belt Reminder (Visual)	●	●	●
Seat Belt Reminder (Audible)	●	●	●
Driver Monitoring	●	-	-

SPEED ASSISTANCE SYSTEMS (SAS)

SAS FEATURE	DESCRIPTION
Speed Limit Information Function	Camera based
Speed Limitation Function	System advised

● PASS ● FAIL ✗ NOT AVAILABLE - NOT APPLICABLE
 ■ GOOD ■ ADEQUATE ■ MARGINAL ■ WEAK ■ POOR

SAFETY FEATURES & TECHNOLOGIES

FEATURE / TECHNOLOGY~	AVAILABILITY	
	AUS	NZ
Seat belts (three-point) for all forward-facing seats	●	●
Seat belt pre-tensioners (front)	●	●
Seat belt pre-tensioners (rear outboard) - 2nd row	●	●
Seat belt pre-tensioners (rear centre) - 2nd row	✗	✗
Seat belt pre-tensioners (rear outboard) - 3rd row	✗	✗
Intelligent seat belt reminder (driver)	●	●
Intelligent seat belt reminder (front passenger)	●	●
Intelligent seat belt reminder (2nd row seats)	●*	●*
Intelligent seat belt reminder (3rd row seats)	●	●
Airbag - frontal (driver)	●	●
Airbag - frontal (passenger)	●	●
Airbags - side, chest protection (front seats)	●	●
Airbags - side, chest protection (2nd row seats)	✗	✗
Airbags - side, chest protection (3rd row seats)	✗	✗
Airbags - side, head protection (front seats)	●	●
Airbags - side, head protection (2nd row seats)	●	●
Airbags - side, head protection (3rd row seats)	●	●
Airbag - centre	✗	✗
Airbag - knee (driver)	●	●
Airbag - knee (front passenger)	✗	✗
Airbag disabling switch - automatic (front passenger)	✗	✗
Airbag disabling switch - manual (front passenger)	✗	✗
Head restraints for all seats	●	●
Active bonnet	✗	✗
Adaptive cruise control (ACC)	●	●
Anti-lock braking system (ABS)	●	●
Autonomous emergency braking (AEB) - Car-to-Car	●	●
Autonomous emergency braking (AEB) - VRU	●	●
Autonomous emergency braking (AEB) - Backover	✗	✗
Automatic emergency call (eCall)	✗	✗
Blind spot monitor (BSM)	●	●
Child presence alert	●	●
Electronic brakeforce distribution (EBD)	●	●
Electronic data recorder (EDR)	✗	✗
Electronic stability control (ESC)	●	●
Emergency brake assist (EBA)	●	●
Emergency stop signal (ESS)	✗	✗
Fatigue reminder	●	●
Fatigue monitor / detection	●	●
Forward collision warning (FCW)	●	●
ISOFix	●	●
Lane departure warning (LDW)	●	●
Lane keep assist (LKA)	●	●
Pre-crash systems	✗	✗
Rear cross-traffic alert (RCTA)	●	●
Reversing collision avoidance (camera)	●	●
Roll stability system	✗	✗
Secondary / multi-collision brake	●	●
Speed assistance - auto / intelligent speed limiter	●	●
Speed assistance - manual speed limiter	●	●
Speed assistance - speed sign recognition & warning	●	●
Smart (intelligent) key	✗	✗
Vehicle-to-infrastructure communication (V2I)	✗	✗
Vehicle-to-vehicle communication (V2V)	✗	✗

TESTED MAKE / MODEL	Kia Carnival S, RHD
TESTED VEHICLE(S) BUILT	2021
TESTED BODY TYPE	People Mover
TESTED VEHICLE ENGINE	2.2 litre diesel
RATING PUBLISHED	April 2021
RATING UPDATED	n/a

MODEL VARIANTS:

ANCAP safety ratings do not automatically extend to variants that have different body styles, engine configurations, driven wheels or occupant restraint systems (e.g. fewer airbags). In these cases, ANCAP considers technical evidence submitted by manufacturers before deciding on the extension of a rating to additional variants of a model.

RATING YEAR (DATESTAMP):

The Rating Year denotes the year requirements against which a vehicle has been assessed. The Rating Year is determined by ANCAP and, for vehicles rated from 2018, the Rating Year is the year in which the vehicle was tested.

~ Specifications & availability subject to change. Please check with the vehicle manufacturer for confirmation of vehicle specification.

* Except 2nd row centre seating position.

● STANDARD ● OPTIONAL ✗ NOT AVAILABLE
 ● NOT AVAILABLE ON BASE VARIANT BUT STANDARD OR OPTIONAL ON HIGHER VARIANTS