

TOYOTA VIOS (2023)



 Variant G	 Year Built 2023
 Model Year 2023	 Vehicle Category SEDAN
 Engine Capacity 1.5 L	 Kerb Mass 1035 kg
 No. of Airbags 6	 Test Lab 

TESTED VARIANT ORIGIN **MALAYSIA** FOR **MALAYSIA**

OTHER ASEAN PRODUCTION (ALL VARIANTS) **THAILAND** FOR **BRUNEI, INDONESIA, LAOS, CAMBODIA**

ADULT OCCUPANT PROTECTION



FRONTAL IMPACT

14.56

SIDE IMPACT

6.64

HEAD PROTECTION TECHNOLOGY

7.00

TOTAL

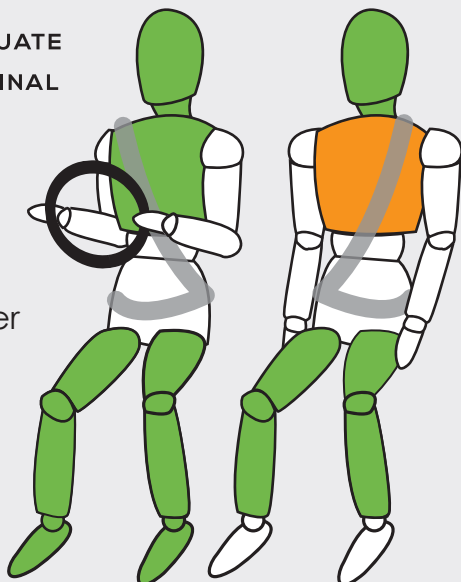
28.20

FRONTAL IMPACT



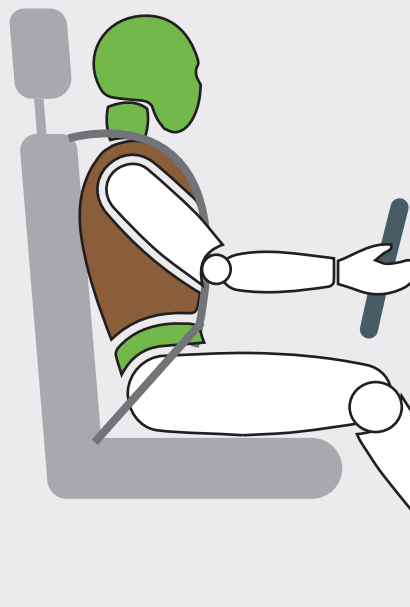
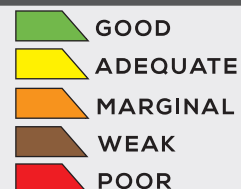
DRIVER

PASSENGER



No Modifier

SIDE IMPACT



No Modifier

Data acquired from the test dummy showed there was marginal protection to the passenger's chest. Overall, the vehicle's frontal occupant compartment remained stable in the frontal offset test.

There was weak protection given to the driver's chest during the side impact test.

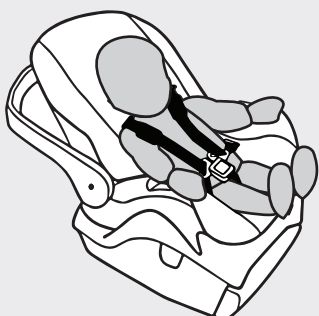
SAFETY ITEMS (PASSIVE)

ITEMS		REGION	ASEAN
Airbags	Driver		Standard on all variants
	Passenger		Standard on all variants
	Side (2)		Available as standard or optional
	Curtain (2)		Available as standard or optional
	Knee		Not available
Seatbelts	Retractor Pre-tensioner & Load Limiter for Driver		Standard on all variants
	Retractor Pre-tensioner & Load Limiter for Passenger		Standard on all variants

CHILD OCCUPANT PROTECTION	DYNAMIC TEST	VEHICLE BASED	INSTALLATION	CHILD DETECTION	TOTAL
	24.00	8.00	10.43	0.00	42.43

DYNAMIC TEST ASSESSMENT



18-MONTH-OLD CHILD		3-YEAR-OLD CHILD	
Restraint	: Joyson Safety i-Size MIDI	Restraint	: Joyson Safety i-Size MIDI
Facing	: Rearward Facing	Facing	: Rearward Facing
Installation	: ISOFIX & Supportleg	Installation	: ISOFIX & Supportleg
			
Frontal Impact : 8.00		Frontal Impact : 8.00	
Side Impact : 4.00		Side Impact : 4.00	
Total Performance : 12.00		Total Performance : 12.00	

CRS INSTALLATION ASSESSMENT

CRS	DIRECTION	SEAT POSITION						
		FRONT	2ND ROW			3RD ROW		
		PASSENGER	LEFT	CENTRE	RIGHT	LEFT	CENTRE	RIGHT
Peg-Perego Primo Viaggio SL	Rwd	EXEMPT	PASS	PASS	PASS	N/A	N/A	N/A
Joie Stages	Rwd	EXEMPT	PASS	FAIL	PASS	N/A	N/A	N/A
Joie Stages	Fwd	PASS	PASS	FAIL	PASS	N/A	N/A	N/A
Combi Buon Junior Air	Fwd	PASS	PASS	FAIL	PASS	N/A	N/A	N/A
Maxi Cosi Cabriofix + Family Fix	Rwd	EXEMPT	PASS	EXEMPT	PASS	N/A	N/A	N/A
Joie Every Stage Fx	Fwd	EXEMPT	PASS	EXEMPT	PASS	N/A	N/A	N/A
Joie Every Stage Fx	Rwd	EXEMPT	PASS	FAIL	PASS	N/A	N/A	N/A
Maxi Cosi Titan Pro	Fwd	EXEMPT	PASS	EXEMPT	PASS	N/A	N/A	N/A
Britax KidFix 2 R	Fwd	PASS	PASS	FAIL	PASS	N/A	N/A	N/A
Joyson Safety Systems i-Size MIDI*	Rwd	EXEMPT	PASS	EXEMPT	PASS	N/A	N/A	N/A
Joyson Safety Systems i-Size MIDI*	Rwd	EXEMPT	PASS	EXEMPT	PASS	N/A	N/A	N/A

PASS : Install without problem, FAIL : Safety critical problem, EXEMPT : Installation not allowed, N/A : Not available

*Manufacturer's selection

SAFETY ASSIST		EFFECTIVE BRAKING & AVOIDANCE 6.00	SEATBELT REMINDERS 4.50	AUTONOMOUS EMERGENCY BRAKING 3.96	ADVANCED SATs 2.42	TOTAL 16.88
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ITEMS	ASEAN
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Effective Braking & Avoidance
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Anti-lock Braking System	Standard on all variants
Electronic Stability Control	Standard on all variants

Seatbelt Reminders

Driver	Standard on all variants
Front Passenger	Standard on all variants
Rear Passengers	Standard on all variants
Rear Seat Occupant Detection	Not available

Autonomous Emergency Braking

City	Available as standard or optional
Inter-Urban	Available as standard or optional
Pedestrian	Available as standard or optional

Advanced Safety Assist Technologies
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Lane Departure Warning System	Available as standard or optional
Forward Collision Warning System	Available as standard or optional
Lane Keep Assist	Available as standard or optional

AUTONOMOUS EMERGENCY BRAKING ASSESSMENT
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ASEAN NCAP is introducing the Autonomous Emergency Braking (AEB) system functionality assessment in its new 2021-2025 protocol. In the protocol, ASEAN NCAP assessed the functionality and effectiveness of AEB City (C2C rear stationary) and AEB Inter-Urban (C2C rear moving) systems fitted inside the vehicle in performing emergency braking at several speeds against another preceeding vehicle. Both the AEB City and Inter-Urban systems are equipped either as standard or optional fitment in the Toyota Vios accross all variants. In this assessment, ASEAN NCAP confirms the technologies have functioned according to the ASEAN NCAP requirements.

MOTORCYCLIST SAFETY	BLIND SPOT DETECTION	REAR VISUALIZATION	HEADLIGHT	PEDESTRIAN	ADVANCED MST	TOTAL
	5.33	0.00	1.25	2.00	0.00	8.58

ITEMS	ASEAN	
Blind Spot Detection		
	Nearside	Available as standard or optional
	Offside	Available as standard or optional
Rear Visualization		
	Advanced Rear Visualization	Not available
Headlight		
	Auto High Beam	Available as standard or optional
Pedestrian		
	Pedestrian Protection	Standard on all variants
Advanced Motorcyclist Safety Technology		
	Nil	—

BLIND SPOT DETECTION ASSESSMENT



Starting from the 2017-2020 protocol, ASEAN NCAP had introduced assessment on the functionality of Blind Spot Technology fitted inside the assessed vehicle. ASEAN NCAP continues the assessment under the new Motorcyclist Safety pillar for the new 2021-2025 protocol. The new Toyota Vios is equipped with Blind Spot Detection (BSD) on both sides of the vehicle either as standard or optional fitment across all its variants. In this assessment, ASEAN NCAP confirms the technology has functioned according to the ASEAN NCAP requirements on both sides of the vehicle.



OVERALL RATING

The Toyota Vios is one of the first few models that ASEAN NCAP assessed in the beginning of its establishment. The Vios obtained 4-Star rating for the Adult Occupant Protection (AOP) category in the first assessment and 48% compliance for the Child Occupant Protection (COP) category. The model was then assessed for the second time in 2017 in which it achieved 5-Star under the 2017-2020 protocol. The new Vios underwent ASEAN NCAP assessment for the third time under the current 2021-2025 protocol with the sedan is equipped with standard fitment of Electronic Stability Control (ESC), Anti-lock Braking System (ABS), Seatbelt Reminder System (SBR) for frontal and rear seats occupants and Pedestrian Protection technology across all its variants. Majority of the Vios market is fitted with standard 6 airbags however, one of the markets offers 2 airbags only. Additionally, the sedan offers safety assist technologies either as standard or optional fitment namely Autonomous Emergency Braking (AEB) City, AEB Inter-Urban, AEB Pedestrian, Lane Departure Warning (LDW), Forward Collision Warning (FCW), Lane Keep Assist (LKA), Blind Spot Detection (BSD) on both sides of the vehicle and Auto High Beam (AHB). The Toyota Vios performed well in the assessment where it successfully obtained an overall score of 78.70 points. The totalled score from the four categories—AOP, COP, Safety Assist (SA) and Motorcyclist Safety (MS)—have made the Vios eligible to be awarded with 5-Star ASEAN NCAP rating.

	AOP			COP			SAFETY ASSIST			MS			2021 - 2025 ASEAN NCAP RATING
	Item	Point	Max	Item	Point	Max	Item	Point	Max	Item	Point	Max	
	ODB	14.56	16.00	FRONTAL	16.00	16.00	EBA	6.00	6.00	BSD/BSV	5.33	8.00	5
	SIDE	6.64	8.00	SIDE	8.00	8.00	SBR	4.50	6.00	ARV	-	4.00	
	HPT Evaluation	7.00	8.00	Installation	10.43	12.00	AEB City	1.63	2.50	AHB	1.25	2.00	
				Vehicle Based CPD	8.00	13.00	AEB Inter-Urban	2.33	3.50	Ped. Protection	2.00	2.00	
					-	2.00	Advanced SATs	2.42	3.00	Advanced MST*	-	2.00	
Score		28.20	32.00		42.43	51.00		16.88	21.00		8.58	16.00	OVERALL SCORE
Normalized Score		0.88			0.83			0.80			0.53646		
Weighting		40%			20%			20%			20%		
Weighted Score		35.25			16.64			16.08			10.73		
Maximum Star Rating		5			5			5			5		5

*Bonus Point