



BYD TANG
Standard Safety Equipment

2023



Adult Occupant



87%

Child Occupant



87%

Vulnerable Road Users



80%

Safety Assist



73%

SPECIFICATION

Tested Model	BYD TANG 'Flagship',LHD
Body Type	- 5 door SUV
Year Of Publication	2023
Kerb Weight	2630kg
VIN From Which Rating Applies	- all TANGs
Class	Large SUV

SAFETY EQUIPMENT

	Driver	Passenger	Rear
FRONTAL CRASH PROTECTION			
Frontal airbag	●	●	✘
Belt pretensioner	●	●	●
Belt loadlimiter	●	●	●
Knee airbag	✘	✘	✘
LATERAL CRASH PROTECTION			
Side head airbag	●	●	●
Side chest airbag	●	●	✘
Side pelvis airbag	●	●	✘
Centre Airbag	●	✘	—

	Driver	Passenger	Rear
CHILD PROTECTION			
Isifix/i-Size	—	●	●
Integrated CRS	—	✘	✘
Airbag cut-off switch	—	●	—
Child presence detection	—	●	●
SAFETY ASSIST			
Seat Belt Reminder	●	●	●

SAFETY EQUIPMENT (NEXT)

OTHER SYSTEMS	
Active Bonnet	✘
AEB Vulnerable Road Users	●
AEB Pedestrian - Reverse	●
Cyclist Dooring Prevention	●
AEB Motorcyclist	●
AEB Car-to-Car	●
Speed Assistance	●
Lane Assist System	●
Fatigue / Distraction Detection	●

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 35.1 Pts / 87%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Frontal Impact 14.5 / 16 Pts

Mobile Progressive Deformable Barrier Full Width Rigid Barrier

Lateral Impact 14.7 / 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 35.1 Pts / 87%

GOOD ADEQUATE MARGINAL WEAK POOR

Rescue and Extrication		2.5 / 4 Pts
Rescue Sheet	Available, ISO compliant	
Advanced eCall	Available	
Multi Collision Brake	Available	
Submergence Check	Non-compliant	

Comments

The passenger compartment of the TANG remained stable in the frontal offset test. Dummy numbers showed good protection of all critical body areas for both the driver and front seat passenger. BYD showed good protection would be provided to the knees and femurs of 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 TANG would be a moderately benign impact partner in a frontal collision. In the full-width rigid barrier test, protection of all critical body areas was good or adequate for both the driver and the rear passenger. In the side barrier test, protection of all critical body areas was good. In the more severe side pole impact, protection was good or adequate for all critical parts of the body. Control of excursion (the extent to which a body is thrown to the other side of the vehicle when it is hit from the far side) was adequate. The TANG has a counter-measure to mitigate against occupant to occupant injuries in such impacts. However, in Euro NCAP's test, the heads of the driver and passenger hit each other and protection was rated as poor. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric analysis of the rear seats also indicated good whiplash protection. The TANG has an advanced eCall system which alerts the emergency services in the event of a crash. The car also has a system which applies the brakes after an impact, to avoid secondary collisions. BYD demonstrated that if the car entered water, the doors, if locked, could be opened within two minutes of power being lost but did not demonstrate the duration for which windows would remain functional.

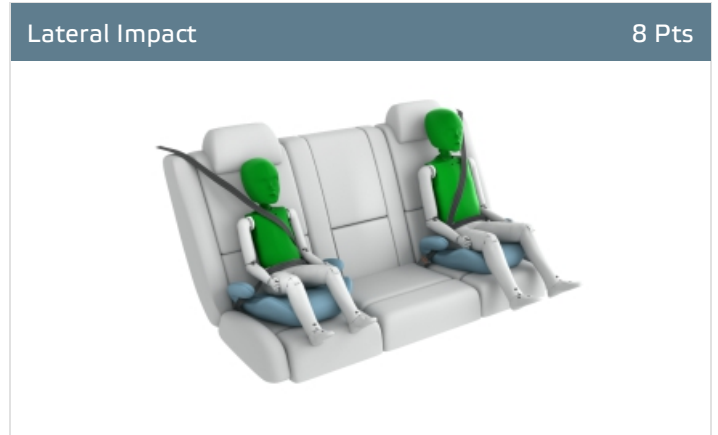
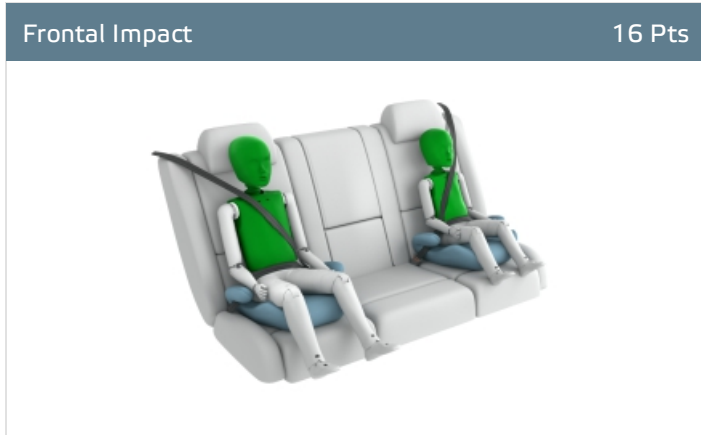
CHILD OCCUPANT

Total 43.0 Pts / 87%

● GOOD
 ● ADEQUATE
 ● MARGINAL
 ● WEAK
 ● POOR

Crash Test Performance based on 6 & 10 year old children

24.0 / 24 Pts



Restraint for 6 year old child: *Britax Römer Kidfix i-Size*
 Restraint for 10 year old child: *Graco Booster Basic*

Safety Features

7.0 / 13 Pts

	Front Passenger	2nd row outboard	2nd row center
Isofix	●	●	✘
i-Size	●	●	✘
Integrated CRS	✘	✘	✘
Top tether	●	●	●
Child Presence Detection	●	●	●

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

CRS Installation Check

12.0 / 12 Pts

i-Size	Seat Position						
	Front		2nd row			3rd row	
			Left	center	Right	Left	Right
	●	●	●	✘	●	✘	✘

● Easy
 ● Difficult
 ● Safety critical
 ✘ Not allowed
✘ Airbag ON
 Rearward facing restraint installation not allowed
 Airbag OFF

Version 051223

CHILD OCCUPANT

Total 43.0 Pts / 87%

Isofix	Seat Position						
	Front		2nd row			3rd row	
			Left	center	Right	Left	Right
	●	●	●	✘	●	●	●
	✘	●	●	✘	●	●	●
	●	●	●	✘	●	●	●
	●	●	●	✘	●	●	●
	●	●	●	✘	●	●	●
	✘	●	●	✘	●	●	●


● Easy
● Difficult
● Safety critical
✘ Not allowed

Airbag ON Rearward facing restraint installation not allowed
 Airbag OFF

Seatbelt Attached	Seat Position						
	Front		2nd row			3rd row	
			Left	center	Right	Left	Right
	✘	●	●	●	●	●	●
	●	●	●	●	●	●	●
	●	●	●	●	●	●	●
	●	●	●	●	●	●	●
	●	●	●	✘	●	●	●
	✘	●	●	✘	●	●	●

● Easy
● Difficult
● Safety critical
✘ Not allowed

Airbag ON Rearward facing restraint installation not allowed
 Airbag OFF

 CHILD OCCUPANT

Total 43.0 Pts / 87%

Comments

In both the frontal offset and side barrier tests, good protection was provided to all critical body areas for both child dummies, and the BYD TANG scored maximum points in this part of the assessment. The front passenger airbag can be disabled to allow a rearward-facing child restraint to be used in that seating position. Clear information is provided to the driver regarding the status of the airbag and the system was rewarded. The TANG is equipped with 'child presence detection', a system which issues a warning when it recognises that a child or infant has been left in the car. However, BYD could not demonstrate that the system met Euro NCAP's requirements and it was not rewarded. All of the child restraint types for which the TANG is designed could be properly installed and accommodated in the car.

VULNERABLE ROAD USERS

Total 50.9 Pts / 80%

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

VRU Impact Protection

27.2 / 36 Pts



Pedestrian & Cyclist Head	10.5 Pts
Pelvis	4.5 Pts
Femur	4.5 Pts
Knee & Tibia	7.7 Pts

VRU Impact Mitigation

23.8 / 27 Pts

System Name	AEB VRU System
Type	Auto-Brake with Forward Collision Warning
Operational From	4 km/h
PERFORMANCE 	

AEB Pedestrian

6.7 / 9 Pts

Scenario	Day time	Night time
Car reversing into adult or child		—
Adult crossing a road into which a car is turning		—
Adult crossing the road		
Child running from behind parked vehicles		
Adult along the roadside		

— Currently not tested

AEB Cyclist

7.8 / 8 Pts

Scenario	Day time
Approaching cyclist crossing from behind parked parked vehicles	
Turning across path of an oncoming cyclist	
Approaching a crossing cyclist	
Approaching a cyclist along the roadside	

VULNERABLE ROAD USERS

Total 50.9 Pts / 80%

■ GOOD ■ ADEQUATE ■ MARGINAL ■ WEAK ■ POOR

Cyclist Dooring Prevention ■ 0.3 / 1 Pts

Scenario	
Dooring a passing cyclist	information"

AEB Motorcyclist ■ 6.0 / 6 Pts

Scenario	Autobrake function only	Driver reacts to warning
Approaching a stationary motorcyclist	■	■
Approaching a braking motorcyclist	■	■
Turn across the path of an oncoming motorcyclist	■	—

— Currently not tested

Lane Support Motorcyclist ■ 3.0 / 3 Pts

Scenario	Day time
Changing lane across the path of an oncoming motorcyclist	■
Changing lane across the path of an overtaking motorcyclist	■

Comments

Protection of the head of a struck pedestrian or cyclist was predominantly good or adequate, with poor results recorded only on the stiff windscreen pillars and at the base of the windscreen. Protection was predominantly good for the pelvis, femur, knee and tibia. The autonomous emergency braking (AEB) system of the BYD can respond to vulnerable road users as well as to other vehicles. The system performed adequately in tests of its response to pedestrians. The system scored highly in tests of its reaction to cyclists, with some points for dooring, in which the car prevents or warns against door opening if a cyclist is approaching from behind. Similarly, the AEB system performed well in all tests of its response to motorcyclists and scored full points.

SAFETY ASSIST

Total 13.3 Pts / 73%

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR

Speed Assistance ■ 2.5 / 3 Pts

System Name	Traffic Sign Recognition
Speed Limit Information Function	Camera & Map, subsigns supported
Speed Limitation Function	Intelligent ACC (accurate to 5km/h)

Occupant Status Monitoring ■ 1.2 / 3 Pts

> Seatbelt Reminder ■ 1.0 / 1 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 ■ 0.2 / 2 Pts

System Name	Driver Monitoring System
Type	Direct eye monitoring
Operational From	30 km/h
Distraction	Long and Short Distraction

Version 051223

SAFETY ASSIST

Total 13.3 Pts / 73%

Lane Support

3.0 / 3 Pts

System Name	Lane Departure Assist	
Type	LKA and ELK	
Operational From	50 km/h	
PERFORMANCE		
Emergency Lane Keeping		GOOD
Lane Keep Assist		GOOD
Human Machine Interface		GOOD

AEB Car-to-Car

6.6 / 9 Pts

System Name	AEN + FCW	
Type	Autonomous emergency braking and forward collision warning	
Operational From	4 km/h	
Sensor Used	camera and radar	

Scenario	Autobrake function only	Driver reacts to warning
Approaching a car crossing a junction		
Approaching a car head-on		—
Turning across the path of an oncoming car		—
Approaching a stationary car		
Approaching a slower moving car		—
Approaching a braking car		—

— Currently not tested



SAFETY ASSIST

Total 13.3 Pts / 73%

Comments

Overall, the autonomous emergency braking (AEB) system of the BYD TANG performed well in tests of its reaction to other vehicles, including in the head-on test scenarios. A seatbelt reminder system is fitted as standard to the front and rear seats and the driver monitoring system detects driver distraction as well as recognising the signs of fatigue. The lane support system gently corrects the vehicle's path if it is drifting out of lane and also intervenes in some more critical situations. The speed assistance system identifies the local speed limit, and the driver can choose to allow the limiter to be set automatically by the system.

RATING VALIDITY

Variants of Model Range

Body Type	Engine	Model Name/Code	Drivetrain	Rating Applies	
				LHD	RHD
5 door SUV	Electric	BYD TANG *	4 x 4		

* Tested variant

Annual Reviews and Facelifts

Date	Event	Outcome
December 2023	Rating Published	2023