

# MAZDA BT-50

OCTOBER 2020 - JULY 2022

ALL VARIANTS EXCLUDING 'THUNDER'



## ANCAP

SAFETY

TESTED  
2020



**RATING YEAR**  
**VEHICLE TYPE**  
**ENGINE TYPE**  
**AIRBAGS**

2020

Utility

Diesel

Dual frontal, centre, side chest,  
side head, driver knee



The Mazda BT-50 was introduced in Australia and New Zealand in October 2020. This ANCAP safety rating applies to all variants excluding the Thunder. The safety performance of the Thunder variant has not yet been assessed.

The ANCAP safety rating of the Mazda BT-50 is based on testing of its shared platform, the Isuzu D-MAX. ANCAP was provided with technical information which showed that the test results achieved by the D-MAX also apply to the BT-50.

Dual frontal, side chest-protecting and side head-protecting (curtains) and a driver knee airbag are standard. A centre airbag which provides added protection to front seat occupants in side impact crashes is also standard on all variants.

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



**83%**

ADULT OCCUPANT  
PROTECTION



**89%\***

CHILD OCCUPANT  
PROTECTION



**67%**

VULNERABLE ROAD USER  
PROTECTION



**84%**

SAFETY  
ASSIST

## RATING APPLICABILITY

VARIANT	BODY TYPE	ENGINE	DRIVETRAIN	AUS	NZ
MAZDA BT-50 Single Cab XS	Utility	1.9 litre diesel	4x2	✓	-
MAZDA BT-50 Single Cab XT	Utility	3.0 litre diesel	4x2 / 4x4	✓	-
MAZDA BT-50 Freestyle Cab XT	Utility	3.0 litre diesel	4x2 / 4x4	✓	-
MAZDA BT-50 Dual Cab XS	Utility	1.9 litre diesel	4x2 / 4x4	✓	-
MAZDA BT-50 Dual Cab XT	Utility	3.0 litre diesel	4x2 / 4x4	✓	-
MAZDA BT-50 Dual Cab XTR	Utility	3.0 litre diesel	4x2 / 4x4	✓	-
MAZDA BT-50 Dual Cab GT	Utility	3.0 litre diesel	4x4	✓	-
MAZDA BT-50 Dual Cab SP	Utility	3.0 litre diesel	4x4	✓	-
MAZDA BT-50 Single Cab GSX	Utility	3.0 litre diesel	4x2 / 4x4	-	✓
MAZDA BT-50 Freestyle Cab GSX	Utility	3.0 litre diesel	4x2 / 4x4	-	✓
MAZDA BT-50 Freestyle Cab GTX	Utility	3.0 litre diesel	4x4	-	✓
MAZDA BT-50 Double Cab GSX	Utility	3.0 litre diesel	4x2 / 4x4	-	✓
MAZDA BT-50 Double Cab GTX	Utility	3.0 litre diesel	4x2 / 4x4	-	✓
MAZDA BT-50 Double Cab Limited	Utility	3.0 litre diesel	4x2 / 4x4	-	✓
MAZDA BT-50 Double Cab Takami	Utility	3.0 litre diesel	4x4	-	✓
MAZDA BT-50 Thunder	Utility	3.0 litre diesel	4x4	✗	-

✓ COVERED BY THIS RATING

✗ NOT COVERED BY THIS RATING

◆ TESTED VARIANT

- NOT APPLICABLE

\* APPLIES TO DUAL CAB VARIANTS ONLY

PAGE 1 OF 8

# ADULT OCCUPANT PROTECTION



83%

31.86 POINTS  
OUT OF 38

The passenger compartment of the Mazda BT-50 remained stable in the frontal offset (MPDB) test. Protection of the driver chest and upper legs was MARGINAL. Protection was ADEQUATE for the passenger chest, and both driver and passenger lower legs. GOOD protection was offered to all other critical body regions.

The MPDB test provides an insight into vehicle compatibility (the risk presented to other vehicles in a frontal crash). The front structure of the Mazda BT-50 presented a higher risk to the occupants of an oncoming vehicle in this test, and the maximum 4 point penalty was applied.

In the full width frontal test, protection was MARGINAL for the chest of the rear passenger with GOOD protection offered to all other critical body regions for both the driver and rear passenger.

In the side impact test and the oblique pole test, protection offered to all critical body regions was GOOD and the Mazda BT-50 scored maximum points.

The centre airbag prevented contact between the heads of front seat occupants in side impacts. Prevention of excursion in the far side tests was assessed as ADEQUATE for the vehicle-to-vehicle impact scenario, and MARGINAL in the vehicle-to-pole scenario. The overall performance of the vehicle in far side impacts was assessed as ADEQUATE.

A Rescue Sheet, providing information for first responders in the event of a crash, is available for all rated variants of the BT-50.

## FRONTAL OFFSET (MPDB) (50km/h)



### DRIVER

Head / neck:	4.00 pts
Chest:	1.71 pts
Upper legs:	1.85 pts
Lower legs:	2.89 pts
Deductions:	-1.00 pts (variable contact)

### FRONT PASSENGER

Head / neck:	4.00 pts
Chest:	3.90 pts
Upper legs:	4.00 pts
Lower legs:	3.16 pts
Deductions:	Nil

### COMPATIBILITY

Deductions:	-4.00 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:	4.00 pts
Chest:	2.51 pts
Upper legs:	4.00 pts
Deductions:	Nil

## RESCUE & EXTRICATION

### Multi-Collision Braking



### Rescue Sheet



FRONTAL OFFSET (MPDB) <sup>#</sup>	3.23 (out of 8)
FULL WIDTH FRONTAL <sup>#</sup>	7.63 (out of 8)
SIDE IMPACT <sup>#</sup>	6.00 (out of 6)
OBLIQUE POLE <sup>#</sup>	6.00 (out of 6)
WHIPLASH PROTECTION	3.50 (out of 4)
FAR SIDE IMPACT	3.50 (out of 4)
RESCUE & EXTRICATION	2.00 (out of 2)

<sup>#</sup> Scaled scores. Total test scored out of 16.00 points.

## 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)

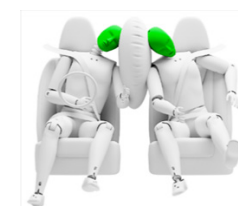
Head:	4.00 pts
Neck:	4.00 pts
Chest & Abdomen:	4.00 pts
Pelvis:	No penalty

### OBLIQUE POLE

Head:	3.00 pts
Neck:	3.00 pts
Chest & Abdomen:	3.00 pts
Pelvis:	No penalty

### OCCUPANT-TO-OCCUPANT

Head contact:	No penalty
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## WHIPLASH (REAR IMPACT) PROTECTION



Driver / front passenger:	2.50 pts
Rear passenger:	1.00 pts



89%

44.00 POINTS  
OUT OF 49

In both the frontal offset (MPDB) and side impact tests, protection was GOOD for all critical body areas for both the 6 year and 10 year child dummies.

The Mazda BT-50 dual cab is fitted with lower ISOFix anchorages and top tether anchorages on the rear outboard seats. Installation of child restraints in the centre seat of the second row (dual cab variants) is not recommended as there is no top tether anchorage for this position.

Installation of typical child restraints available in Australia and New Zealand showed that all of the selected child restraints could be accommodated in each of the rear outboard seating positions in the dual cab and full points were scored for this assessment.

**Installation of child restraints in the single and freestyle cab variants is not recommended as there are no top tether anchorages.**

<b>DYNAMIC TEST (FRONT)</b>	16.00 (out of 16)
<b>DYNAMIC TEST (SIDE)</b>	8.00 (out of 8)
<b>RESTRAINT INSTALLATION</b>	12.00 (out of 12)
<b>ON-BOARD SAFETY FEATURES</b>	8.00 (out of 13)

## FRONTAL OFFSET (MPDB) (50km/h)

## SIDE IMPACT (60km/h)



6 YEAR OLD

10 YEAR OLD



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



## CHILD RESTRAINT INSTALLATION\*

The following applies to dual cab variants only:

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	×	●	×	●	–	–
ISOFIX	TYPE F	Booster - 4 to 10 years	×	●	×	●	–	–
	TYPE A	Rearward facing capsule	×	●	×	●	–	–
		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.



67%

36.62 POINTS  
OUT OF 54

The bonnet of the Mazda BT-50 provided GOOD or ADEQUATE protection to the head of a struck pedestrian towards the front of the bonnet, with WEAK or MARGINAL protection towards the rear of the bonnet. Protection of the pelvis was mixed, with a mix of GOOD, ADEQUATE and POOR results.

The bumper scored maximum points for its protection of pedestrians' lower legs, with GOOD results at all test locations.


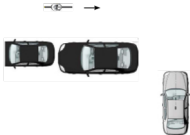






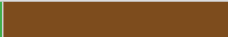

The autonomous emergency braking (AEB) system is capable of detecting and reacting to vulnerable road users, such as pedestrians and cyclists, in both daylight and low light. Testing of this system showed ADEQUATE performance in pedestrian test scenarios and MARGINAL performance in cyclist test scenarios. The AEB system does not react to vulnerable road users when the vehicle is reversing.

HEAD IMPACTS	16.98 (out of 24)
UPPER LEG IMPACTS	4.80 (out of 6)
LOWER LEG IMPACTS	6.00 (out of 6)
AEB - Pedestrian (forward)	4.98 (out of 7)
AEB - Pedestrian (backover)	0.00 (out of 2)
AEB - Cyclist	3.87 (out of 9)

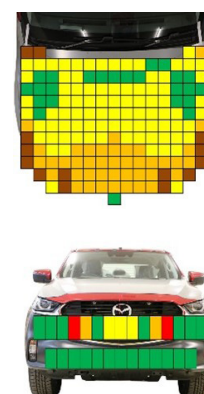
## AUTONOMOUS EMERGENCY BRAKING (PEDESTRIAN, CYCLIST & BACKOVER)

SYSTEM NAME:	Advanced Driver Assistance System (ADAS)
TYPE:	Autonomous emergency braking with forward collision warning
OPERATIONAL FROM:	8-160 km/h
DESCRIPTION:	System functions in the daytime and night

AUTONOMOUS EMERGENCY BRAKING - PEDESTRIAN														
TEST SCENARIO	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				-							-		-	
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					
MARGINAL					

## PEDESTRIAN IMPACT TEST (40 KM/H)





84%

13.49 POINTS  
OUT OF 16

The Mazda BT-50 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. The vehicle prevented collisions with an oncoming vehicle (turning across path) in some speed scenarios. Overall, effectiveness of the AEB Car-to-Car system performance was rated as GOOD.

A lane support system is standard on all variants. Tests of LKA functionality showed GOOD performance and ELK was ADEQUATE, with overall performance classified as ADEQUATE.

A seatbelt reminder system with occupancy detection is fitted to all seating positions.

A speed assistance system (SAS) is also standard on the Mazda BT-50. This system identifies the local speed limit which can be applied through the speed limiter. A driver drowsiness monitor system is fitted as standard.

#### OCCUPANT STATUS

- Seat belt reminders 2.00 (out of 2)
- Driver monitoring 1.00 (out of 1)

**SPEED ASSISTANCE SYSTEMS** 2.40 (out of 3)

**LANE SUPPORT SYSTEMS** 3.50 (out of 4)

**AEB - Car-to-Car** 3.70 (out of 4)

**AEB - Junction Assist** 0.89 (out of 2)

### LANE SUPPORT SYSTEMS (LSS)

**SYSTEM NAME:** Advanced Driver Assistance System (ADAS)  
**OPERATIONAL FROM:** 60-130 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										

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

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



84%

13.49 POINTS  
OUT OF 16

## AUTONOMOUS EMERGENCY BRAKING (CAR-TO-CAR)

SYSTEM NAME: Advanced Driver Assistance System (ADAS)  
 TYPE: Autonomous emergency braking with forward collision warning  
 OPERATIONAL FROM: 8-160 km/h  
 DESCRIPTION: Defaults ON for every journey

HUMAN MACHINE INTERFACE (HMI)		
FUNCTION	Supplementary warning	PASS
	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							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 only
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  
TESTE VEHICLE(S) BUILT  
TESTED BODY TYPE  
TESTED VEHICLE ENGINE  
RATING PUBLISHED  
RATING UPDATED

Isuzu D-MAX & Mazda BT-50  
2020  
Crew / dual cab utility  
3.0 litre diesel  
October 2020  
Dec 2020 / Apr 2021 /  
Dec 2021

### 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.

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