

# ANCAP Safety Rating

## MAZDA MX-5 (September 2015 - onwards)



Mazda MX-5

### This ANCAP safety rating applies to:

Make / Model	Mazda MX-5
Year Range	September 2015 - onwards
Variants*	All
Vehicle Type	Sports Car

The tested model of Mazda MX-5 was introduced in Australia and New Zealand in mid-2015. This ANCAP safety rating applies to all variants.

Dual frontal, side chest and side head-protecting airbags are standard. Advanced seat belt reminders are fitted to both front seats. A full list of safety features and technologies can be viewed within the *Safety Features & Technologies* table on page 2 of this report.

### Injury Outcomes.

#### Frontal Offset Driver



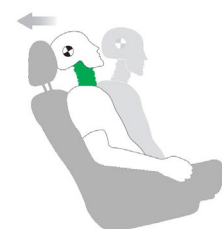
#### Passenger



#### Side Impact & Pole# Driver



#### Whiplash Protection Driver



# Head protection only.

### Test Results Summary.

Airbags	Dual Frontal, Side, Head
Frontal Offset Test	14.20 (out of 16)
Side Impact Test	16.00 (out of 16)
Pole Test	2 (out of 2)
Whiplash Protection	Good
Pedestrian Protection	Good
ESC	Standard
Seat Belt Reminders	3.0 (out of 3)*
Overall Score	35.20 (out of 37)
ANCAP Safety Rating	★★★★★
Rating Year^	2016

\* 2-seater vehicle. Seat belt reminders available for both seats. Maximum score awarded, scaled to 3 out of 3 points.

### Occupant Protection.

#### Frontal Offset Test

Each body region is scored out of 4 points

Head / neck:	3.00 points
Chest:	4.00 points
Upper legs:	4.00 points
Lower legs:	3.20 points

The passenger compartment held its shape well in the frontal offset test. Pedal and steering wheel displacements were well controlled. The driver's head contacted the A-pillar during the crash and then contacted the steering wheel through the airbag. Passenger contact with the airbag was stable. All doors remained closed during the crash. After the crash, both doors could be opened with normal effort.

#### Side Impact Test

Each body region is scored out of 4 points

Head:	4.00 points
Chest:	4.00 points
Abdomen:	4.00 points
Pelvis:	4.00 points

Good protection was provided for the driver in the side impact test. The side airbags performed well.

#### Pole Test

Scored out of 2 points

Score:	2.00 points
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The MX-5 was eligible for a side pole test because it has side head-protecting (combo) airbags. There was good head protection for the driver in the side pole test.

#### Whiplash Protection Test

Whiplash protection is assessed to the RCAR Protocol

Geometric test:	Good
Dynamic test:	Good
Overall whiplash rating:	Good

### Pedestrian Protection.

#### Pedestrian Test

Scored out of 36 points

Adult & child head impacts: 21.72 points  
 Upper leg impacts: 6.00 points  
 Lower leg impacts: 6.00 points

This vehicle scored 33.72 out of 36 points (Good). The MX-5 provided mostly good protection for pedestrians and achieved a commendable score. The active bonnet worked well to reduce the risk of head injury over most of the bonnet however there was some marginal head protection at the front and along the side of the bonnet. (v8)

#### Child and adult head impact



#### Adult leg impact (upper and full legforms)



### Score Deductions.

#### Deductions from frontal offset test scores

Head / neck: -1.00 point (unstable airbag contact for driver)  
 Chest: No deductions  
 Upper legs: No deductions  
 Lower legs: No deductions

#### Deductions from side impact test score

Head / neck: No deductions  
 Chest: No deductions  
 Upper legs: No deductions  
 Lower legs: No deductions

#### Deductions from pole test score

Head: No deductions

### Safety Features & Technologies.

Descriptions of each of these safety features and safety assist technologies (SAT) and detail on fitting requirements for each star rating level can be found at [ancap.com.au](http://ancap.com.au).

Safety Feature / Safety Assist Technology	Availability
Seat belts (three-point, lap/sash) for all forward-facing seats	S
Seat belt pretensioners (front)	S
Seat belt pretensioners (rear outboard)	-
Intelligent seat belt reminder (driver)	S
Intelligent seat belt reminder (front passenger)	S
Intelligent seat belt reminder (2 <sup>nd</sup> row seats)	-
Airbag - Frontal (driver)	S
Airbag - Frontal (passenger)	S
Airbag - Side, chest protection (front seats)	S
Airbag - Side, chest protection (2 <sup>nd</sup> row seats)	-
Airbag - Side, head protection (front seats)	S
Airbag - Side, head protection (2 <sup>nd</sup> row seats)	-
Airbag - Knee (driver)	X
Airbag - Knee (front passenger)	X
Head restraints for all seats	S
Adaptive cruise control (ACC)	X
Antilock braking system (ABS)	S
Autonomous emergency braking (AEB)	
- City	X / S <sup>^</sup>
- Interurban	X / S <sup>^</sup>
- Vulnerable road user	X / S <sup>^</sup>
Automatic headlights	O
Automatic high beam	X
Blind spot monitoring (BSM)	X
Daytime running lights (DRL)	V / S <sup>^</sup>
Electronic brakeforce distribution (EBD)	S
Electronic stability control (ESC)	S
Emergency brake assist (EBA)	S
Emergency stop signal (ESS)	S
Hill launch assist	S
Lane support system (LSS)	X
Pre-crash systems	S
Reversing collision avoidance	O / S <sup>^</sup>
Speed assistance - automatic/intelligent speed limiting (ISA)	X
Speed assistance - manual speed limiting	X
Speed assistance - speed sign recognition & warning	X / S <sup>^</sup>
Tyre pressure monitoring system (TPMS)	S

S = Standard on all variants.  
 O = Optional on base variant. May be standard on higher variants.  
 V = Not available on base variant but standard or optional on higher variants.  
 X = Not available on any variant.  
 ^ = Available on vehicles built from September 2018.

These specifications are subject to change. Please check with the manufacturer for the latest specifications.

**Injury Values & Measurements.**

Body Region	Frontal offset test at 64 km/h (v5.1)		Side impact test at 50 km/h (v5.1)
	Driver	Passenger	Driver
<b>Head</b>			
HIC	322.00	203.00	264.00
Acceleration (g for 3ms)	54.60	33.20	71.60
<b>Neck</b>			
Shear (kN)	0.54	0.56	-
Tension (kN)	1.04	1.19	-
Extension (Nm)	9.70	8.90	-
<b>Chest</b>			
Acceleration (g for 3ms)	-	-	-
Compression (mm)	20.80	18.20	18.80
Viscous criterion (m/s)	0.06	0.08	0.11
<b>Abdomen</b>			
Force (kN)	-	-	0.67
<b>Pelvis</b>			
Force (kN)	-	-	1.50
<b>Upper legs</b>			
Femur force left (kN)	1.12	0.37	
Femur force right (kN)	0.90	0.31	
Knee displacement left (mm)	0.00	0.35	
Knee displacement right (mm)	0.03	0.14	
<b>Lower legs</b>			
Force left (kN)	2.61	1.48	
Force right (kN)	2.70	1.70	
Index (upper / lower) left	0.58 / 0.40	0.25 / 0.10	
Index (upper / lower) right	0.47 / 0.49	0.25 / 0.13	
<b>Intrusion Measurements*</b>			
<b>Steering column</b>			
Forward (mm)	6		
Upward (mm)	25		
Sideways (mm)	40		
<b>Pedals</b>			
Clutch - rearward (mm)	44		
Clutch - upward (mm)	44		
<b>A-Pillar</b>			
Rearward (mm)	23		

+ Steering column and pedal movements are measured relative to the driver's seat.

\* **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 extending a rating to additional variants of a model. For further information about the application of ANCAP safety ratings to model variants, see the ANCAP Variant Policy.

^ **Rating Year:** The Rating Year denotes the year requirements against which a vehicle has been assessed. The Rating Year is determined by ANCAP and may be based on the year in which a new vehicle model is first launched into the Australian and/or New Zealand markets; the year in which the vehicle was tested (if tested by Euro NCAP); or, for vehicles which hold an existing ANCAP safety rating, the year in which the rating was updated (or earlier applicable year).

**Assessment Details.**

Tested Make / Model	Mazda MX-5
Tested Vehicle(s) Built	2016
Tested Body Type	Roadster
Tested Vehicle Kerb Weight	1010 kg
Tested Vehicle Engine	1.5 litre
Tested By	ANCAP
Assessed By	ANCAP
Document Reference	MX5_15
Document Created / Revised	1 June 2016
Rating Published	June 2016 / Annual Review (2020)



Frontal offset test at 64km/h