# Kia EV9

Standard Safety Equipment

2023

Adult Occupant: 84%

Child Occupant: 88%

Vulnerable Road Users: 76%

Safety Assist: 83%

## SPECIFICATION

| | |
|---|---|
| Tested Model | Kia EV9 4x4, LHD |
| Body Type | - 5 door SUV |
| Year Of Publication | 2023 |
| Kerb Weight | 2550kg |
| VIN From Which Rating Applies | - all EV9s |
| 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 | | | |
| Isofix/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 33.6 Pts / 84%

GOOD | ADEQUATE | MARGINAL | WEAK | POOR

### Frontal Impact — 12.7 / 16 Pts

Mobile Progressive Deformable Barrier

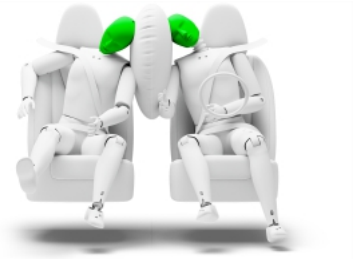
Full Width Rigid Barrier

### Lateral Impact — 15.3 / 16 Pts

Side Mobile Barrier

Side Pole

Far-Side Excursion



Occupant Interaction

### Rear Impact — 3.1 / 4 Pts

Rear Seat

Front Seat

## ADULT OCCUPANT

Total 33.6 Pts / 84%

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 EV9 remained stable in the frontal offset test. Dummy numbers showed good protection of the knees and femurs of both the driver and passenger. Kia showed that a similar level of protection would be provided to 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 EV9 would be a moderately benign impact partner in a frontal collision. In the full-width rigid barrier test, protection the rear passenger's chest was rated as marginal, based on readings of compression. Otherwise, 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 and the EV9 scored maximum points in this part of the assessment. In the more severe side pole impact, dummy readings of rib compression indicated marginal chest protection. 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 EV9 has a counter-measure to mitigate against occupant to occupant injuries in such impacts and this performed well in Euro NCAP's test. 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 EV9 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. Kia demonstrated that if the car entered water the doors, if locked, could be opened within two minutes of power being lost but not that electric windows would remain functional long enough to allow occupants to escape.

## CHILD OCCUPANT

Total 43.2 Pts / 88%

GOOD | ADEQUATE | MARGINAL | WEAK | POOR

### Crash Test Performance based on 6 & 10 year old children — 24.0 / 24 Pts

**Frontal Impact — 16 Pts**

**Lateral Impact — 8 Pts**

Restraint for 6 year old child: *Cybex Solution T i-Fix*
Restraint for 10 year old child: *Graco Junior*

### Safety Features — 7.3 / 13 Pts

| | Front Passenger | 2nd row outboard | 2nd row center | 3rd row outboard |
|---|---|---|---|---|
| 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 | |
| | Airbag ON | Airbag OFF | Left | center | Right | Left | Right |
| | ✗ | ✗ | ● | ✗ | ● | ● | ● |

● Easy ● Difficult ● Safety critical ✗ Not allowed

Airbag ON — Rearward facing restraint installation not allowed — Airbag OFF

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## CHILD OCCUPANT

Total 43.2 Pts / 88%

| 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

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## CHILD OCCUPANT

Total 43.2 Pts / 88%

### 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 Kia EV9 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 EV9 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. All of the child restraint types for which the EV9 is designed could be properly installed and accommodated in the car.

## VULNERABLE ROAD USERS

Total 48.4 Pts / 76%

GOOD | ADEQUATE | MARGINAL | WEAK | POOR

### VRU Impact Protection

26.9 / 36 Pts

| | |
|---|---|
| Pedestrian & Cyclist Head | 12.1 Pts |
| Pelvis | 1.3 Pts |
| Femur | 4.5 Pts |
| Knee & Tibia | 9.0 Pts |

### VRU Impact Mitigation

21.5 / 27 Pts

| | |
|---|---|
| System Name | Forwards Collision-Avoidance Assist (FCA) |
| Type | Auto-Brake with Forward Collision Warning |
| Operational From | 10 km/h |

PERFORMANCE |

### AEB Pedestrian

5.6 / 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

6.8 / 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 48.4 Pts / 76%

GOOD ADEQUATE MARGINAL WEAK POOR

## Cyclist Dooring Prevention

0.8 / 1 Pts

| Scenario | |
|---|---|
| Dooring a passing cyclist | warning" |

## AEB Motorcyclist

5.3 / 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 at the base of the windscreen and on the stiff windscreen pillars. Protection of the pelvis was mostly poor but that of the femur and of the knee and tibia was at good at all test locations. The autonomous emergency braking (AEB) system of the Kia can respond to vulnerable road users as well as to other vehicles. The system performed adequately in tests of its response to pedestrians. A system to protect those behind the car when it is reversing is available as an option, and was not included in this assessment. The AEB system scored highly in tests of its reaction to cyclists, including 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.

# SAFETY ASSIST

Total 15.0 Pts / 83%

GOOD | ADEQUATE | MARGINAL | WEAK | POOR

## Speed Assistance

2.3 / 3 Pts

| | |
|---|---|
| System Name | Manual Speed Limit Assist (MSLA) / Intelligent Speed Limit Assist (ISLA) |
| Speed Limit Information Function | Camera & Map, subsigns supported |
| Speed Limitation Function | Intelligent ACC (accurate to 5km/h) |

## Occupant Status Monitoring

2.5 / 3 Pts

### Seatbelt Reminder

0.8 / 1 Pts

| Applies To | Front and rear seats, including third row | | |
|---|---|---|---|
| Warning | Driver Seat | Front Passenger(s) | Rear Passenger(s) |
| Visual | ● | ● | ● |
| Audible | ● | ● | ● |
| Occupant Detection | – | ● | ● |

● Pass ● Fail – Not available

### Driver Monitoring

1.7 / 2 Pts

| | |
|---|---|
| System Name | In-Cabin-Camera (ICC) system |
| Type | Direct eye monitoring |
| Operational From | 30 km/h |
| Fatigue | Drowsiness, Microsleep and Sleep |
| Distraction | Long & Short Distraction and Phone Use |

# SAFETY ASSIST

Total 15.0 Pts / 83%

## Lane Support

3.0 / 3 Pts

| | |
|---|---|
| System Name | Lane Keeping Assist (LKA) |
| Type | LKA and ELK |
| Operational From | 60 km/h |
| **PERFORMANCE** | |
| Emergency Lane Keeping | GOOD |
| Lane Keep Assist | GOOD |
| Human Machine Interface | GOOD |

## AEB Car-to-Car

7.3 / 9 Pts

| | |
|---|---|
| System Name | Forward Collision-Avoidance Assist (FCA) |
| Type | Autonomous emergency braking |
| Operational From | 10 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

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## SAFETY ASSIST

Total 15.0 Pts / 83%

### Comments

Overall, the autonomous emergency braking (AEB) system of the Kia EV9 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 scored well, detecting a broad range of driver distraction as well as 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 160kW | EV9 RWD | 4 x 2 | ✓ | ✓ |
| 5 door SUV | electric 160kW+160kW | EV9 AWD* | 4 x 4 | ✓ | ✓ |

* Tested variant

## Annual Reviews and Facelifts

| Date | Event | Outcome | |
|---|---|---|---|
| December 2023 | Rating Published | 2023 ★★★★★ | ✓ |