

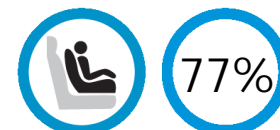
Tesla Model S

Model S 85kWh electric drivetrain, LHD

2014 ★★★★★



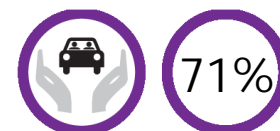
ADULT OCCUPANT



CHILD OCCUPANT



PEDESTRIAN



SAFETY ASSIST

DETAILS OF TESTED CAR

SPECIFICATIONS

Tested model	Model S 85kWh electric drivetrain, LHD
Body type	4 door saloon
Year of publication	2014
Kerb weight	2100kg
VIN from which rating applies	5YJSA7H1XEFPXXXXX

SAFETY EQUIPMENT

Frontal airbags	Driver (Dual Stage), Passenger (Dual Stage)
Pre-tensioners	Driver (dual), Passenger (dual)
Load-limiters	Driver, Passenger
Knee airbags	None
Side airbags	Head (front and rear), Thorax/Pelvis (front only)
Front head restraints	Passive
Passenger airbag switch	Manual switch
iSize Seats	2nd row (outboard)
Integrated child restraint	Two integrated CRS, optional
Active Pedestrian Protection	deployable bonnet, Standard
Seatbelt Reminder	Driver, Passenger, Rear
Electronic Stability Control	ESC, Standard, Always On
Speed Assistance Systems	Intelligent, warning only, Standard
Lane Support	Lane departure warning, Standard
Autonomous Braking	None, Not Available
Other	Not applicable

Safety equipment is standard across the model range unless stated otherwise

ADULT OCCUPANT

Total 31 pts | 82%

CRASH TEST PERFORMANCE

FRONT OFFSET

14,4 pts



Driver



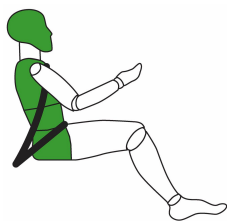
Passenger

SIDE CAR

8 pts

SIDE POLE

6,3 pts



Side car



Side pole

FRONT OFFSET

HEAD

Driver airbag contact	stable
Passenger airbag contact	unstable

CHEST

Passenger compartment	stable
Windscreen Pillar rearward	none
Steering wheel rearward	none
Steering wheel upward	none
Chest contact with steering wheel	none

UPPER LEGS, KNEES AND PELVIS

Stiff structures in dashboard	none
Concentrated loads on knees	none

LOWER LEGS AND FEET

Footwell Collapse	none
Rearward pedal movement	Brake - 6.362mm
Upward pedal movement	Brake - 12.941mm

SIDE

Head protection airbag	Yes
Chest protection airbag	Yes

WHIPLASH PROTECTION

FRONT, REAR SEATS

2,7 pts



Front seats



Rear seats

HEAD RESTRAINT

Seat description	Standard, leather, 8 way electric
Head restraint type	Passive
Front geometric assessment	2 pts

TESTS

- High severity	2,6 pts
- Medium severity	2,3 pts
- Low severity	2,3 pts

AEB CITY

0 pts

System name	Not applicable
Fitment	Not available



CHILD OCCUPANT

Total 38 pts | 77%

CRASH TEST PERFORMANCE

18 MONTH OLD CHILD

Restraint Takata Mini
Facing rearward facing
Installation ISOFIX and Supportleg



PERFORMANCE **12 pts**

FRONTAL IMPACT

Head forward movement protected
Head acceleration good
Chest load good

SIDE IMPACT

Head containment protected
Head acceleration good

3 YEAR OLD CHILD

Restraint Takata Midi
Facing rearward facing
Installation ISOFIX and Supportleg



PERFORMANCE **12 pts**

FRONTAL IMPACT

Head forward movement protected
Head acceleration good
Chest load good

SIDE IMPACT

Head containment protected
Head acceleration good

CHILD SAFETY FEATURES AND CRS INSTALLATION CHECK



Isifix

Safety features score **3 pts**
Installation check score **10,8 pts**

Pass Install without problem
Partial Fail Install with care
Fail Safety critical problem
Exempt Installation not allowed

	SEAT POSITION							
	FRONT		2nd ROW			3rd ROW		
	CENTER	RIGHT	LEFT	CENTER	RIGHT	LEFT	CENTER	RIGHT
Maxi Cosi Cabriofix (Seatbelt)	N/A	Pass	Pass	Pass	Pass	N/A	N/A	N/A
Römer King Plus (Seatbelt)	N/A	Pass	Pass	Pass	Pass	N/A	N/A	N/A
Römer Duo Plus (ISOFIX)	N/A	Exempt	P Fail	Exempt	P Fail	N/A	N/A	N/A
Römer KidFix (Seatbelt)	N/A	Pass	Pass	Pass	Pass	N/A	N/A	N/A
Maxi Cosi Cabriofix and EasyFix (Seatbelt)	N/A	Pass	Pass	Pass	Pass	N/A	N/A	N/A
Maxi Cosi Cabriofix and EasyFix (ISOFIX)	N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A
BeSafe iZi Kid X3 ISOfix (ISOFIX)	N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A
Maxi Cosi Pearl and Familyfix (ISOFIX)	N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A
Römer KidFix (ISOFIX)	N/A	Exempt	Exempt	Exempt	Exempt	N/A	N/A	N/A
Takata Mini (ISOFIX)	N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A
Takata Midi (ISOFIX)	N/A	Exempt	Pass	Exempt	Pass	N/A	N/A	N/A

SAFETY ASSIST

Total 9 pts | 71%

SPEED ASSISTANCE SYSTEM 2,3 pts

Standard	
Speed Information	PASS
Speed Assistance (Intelligent)	Pass

ELECTRONIC STABILITY CONTROL (ESC) 3 pts

- ESC	Meets requirements
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SEATBELT REMINDER 3 pts

- driver and passenger	Pass
- rear	Pass

LANE SUPPORT SYSTEMS 1 pts

Standard	
Lane departure warning	Meets requirements

PEDESTRIAN

Total 24 pts | 66%



HEAD	13,9 pts
PELVIS	4,1 pts
LEG	5,8 pts



COMMENTS

Adult occupant

The passenger compartment remained stable in the frontal impact. Readings from the passenger dummy indicated good protection of all body areas except the head. Analysis of the dummy kinematics showed that the airbag on the passenger side had 'bottomed out' i.e. there was insufficient inflation to prevent the head flattening the airbag and coming into contact with the facia, through the airbag material. Tesla investigated the issue and found an error in the airbag calibration software supplied by the vendor. Euro NCAP has been informed that this error has been corrected in all vehicles supplied to customers. Although the calculated injury parameters were not hazardous, protection of the passenger head was penalised and rated as adequate. Dummy readings indicated good protection of the knees and femurs of the driver and passenger. Tesla showed that a similar level of protection would be provided to occupants of different sizes and to those sat in different seating positions. In the side barrier test, the Model S scored maximum points with good protection of all body regions. In the more severe side pole test, dummy measurements of rib compressions indicated marginal protection of the chest. Protection against whiplash injury in the event of a rear-end collision was rated as good for the front and rear seats.

Child occupant

The Model S scored maximum points for its protection of the child dummies in the dynamic tests. Both dummies were seated in rearward-facing restraints and showed good protection in the frontal impact. In the side impact, both dummies were properly contained within the protective shells of their restraints, minimising the risk of head contact with parts of the vehicle interior. The front passenger airbag can be disabled through the user menu, allowing a rearward-facing restraint to be used in that seating position. However, the interface is not clear in all languages about the actions being taken to set the airbag status and the system was not rewarded. All of the restraints for which the car is designed could be properly installed and accommodated with the exception of the Group I universal restraint in the rear outboard seats. While the seat could be installed, the seat cushioning made engagement of the ISOFIX probes difficult. Integral child restraints are available as an optional third row in the Model S.

Pedestrian

The Tesla is equipped with an 'active' bonnet. When the system detects that a pedestrian has been struck, actuators lift the bonnet to provide greater clearance to hard structures underneath. Tesla showed that the system detects all statures robustly over a range of speeds and the car was tested with the bonnet in the deployed position. Protection was adequate or marginal over most of the surface of the bonnet with poor results recorded only at the base of the windscreen and on the stiff screen pillars. The bumper offered predominantly good protection to pedestrians' legs while the front edge of the bonnet gave good results towards the centre of the car but poor results at the outside edges.

Safety assist

Electronic stability control is standard equipment on the Model S. A seatbelt reminder is standard for the front and rear seats, as is a lane departure warning system that met Euro NCAP's requirements. The Model S has a speed assistance system that can recognise the local speed limit and issue a warning to the driver when that limit is exceeded. The Model S is not equipped with an autonomous emergency braking system.