

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



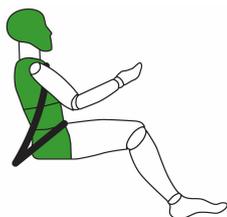
Passenger

SIDE CAR

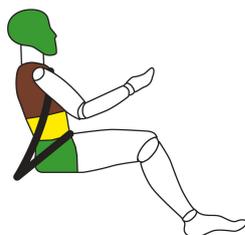
8 pts

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 |
|-------|--------------------|

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.