



**SsangYong Tivoli**  
Standard Safety Equipment

2016



Adult Occupant



82%

Child Occupant



62%

Pedestrian



65%

Safety Assist



43%

## SPECIFICATION

Tested Model	SsangYong Tivoli diesel, LHD
Body Type	- 5 door SUV
Year Of Publication	2016
Kerb Weight	1400kg
VIN From Which Rating Applies	- all Tivolis from February 2018
Class	Small Family Car

### General comments

The rating for the SsangYong Tivoli was first published in 2016. At that time, autonomous emergency braking was sold as an option, as part of a safety pack, and Euro NCAP published two ratings: one with only standard equipment and another with the safety pack. Since February 2018, the content of the safety pack - AEB City, AEB Inter-urban and AEB Pedestrian - has been made standard equipment and the rating has been changed to reflect this change.

## SAFETY EQUIPMENT

	Driver	Passenger	Rear
<b>FRONTAL CRASH PROTECTION</b>			
Frontal airbag	●	●	✘
Belt pretensioner	●	●	✘
Belt loadlimiter	●	●	●
Knee airbag	○	✘	✘
<b>SIDE CRASH PROTECTION</b>			
Side head airbag	●	●	●
Side chest airbag	●	●	✘
Side pelvis airbag	●	●	✘
<b>CHILD PROTECTION</b>			
Isofix	—	✘	●
Integrated CRS	—	✘	✘
Airbag cut-off switch	—	●	—
<b>SAFETY ASSIST</b>			
Seat Belt Reminder	●	●	●
<b>OTHER SYSTEMS</b>			
Active Bonnet (Hood)	✘		
AEB Pedestrian	●		
AEB City	●		
AEB Inter-Urban	●		
Speed Assistance System	○		
Lane Assist System	○		

**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 31.3 Pts / 82%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

**Frontal Offset Deformable Barrier** 6.6 Pts

Passenger                      Driver

**Frontal Full Width** 3.8 Pts

Rear Passenger                      Driver

**Whiplash Rear Impact** 2 Pts

Front seat                      Rear seat

**Lateral Impact** 15.9 Pts

Car                      Pole

**AEB City** 3

Performance: ■ Good

 ADULT OCCUPANT

Total 31.3 Pts / 82%

## Comments

The passenger compartment of the Tivoli remained stable in the offset deformable frontal impact. Dummy readings indicated good protection of the knees and femurs of the driver and passenger. SsangYong showed that a similar level of protection would be provided to occupants of different sizes and to those sat in different positions. Readings of chest compression indicated marginal protection of that body region. In the full-width rigid barrier test, protection of the driver was good except for the chest, protection of which was adequate. However, proper retention of the rear dummy failed, allowing excessive forward movement and protection of the head was rated as poor. As a result, the Tivoli lost all points for that dummy. SsangYong are investigating the cause of the failure. In the side barrier impact, the Tivoli scored maximum points with good protection of all critical body areas. Even in the more severe side pole test, protection of the chest was adequate and that of other critical body areas was good. Tests on the front seats and head restraints demonstrated good protection against whiplash injuries in the event of a rear-end collision. A geometric assessment of the rear seats indicated marginal whiplash protection. From February 2018, the Tivoli has an autonomous emergency braking system as standard equipment. This system operates at low speeds, typical of city driving, where many whiplash injuries are caused. The system scored maximum points in Euro NCAP's tests, with full avoidance at all speeds when tested against a stationary car.

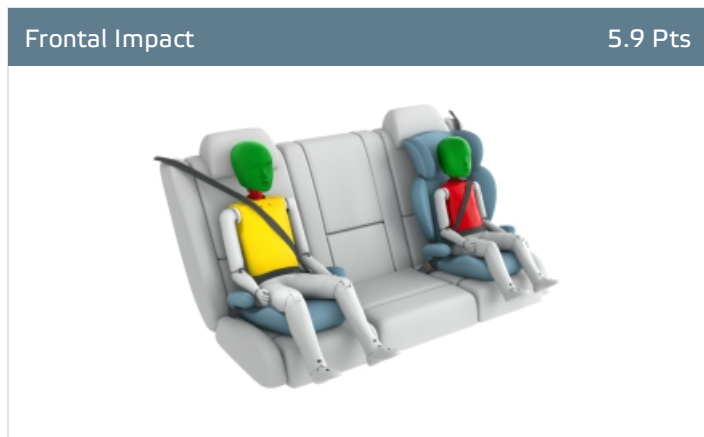
**CHILD OCCUPANT**

Total 30.4 Pts / 62%

GOOD ADEQUATE MARGINAL WEAK POOR

Crash Test Performance based on 6 & 10 year old children

13.9 Pts



Restraint for 6 year old child: *Romer KidFix XP*  
 Restraint for 10 year old child: *Graco Junior*

Safety Features

5 Pts

	Front Passenger	2nd row outboard	2nd row center
Isofix	✗	●	✗
i-Size	✗	●	✗
Integrated CRS	✗	✗	✗

● Fitted to test car as standard    ○ Not on test car but available as option    ✗ Not available

CRS Installation Check

11.5 Pts

● Install without problem    ○ Install with care    ● Safety critical problem    ✗ Installation not allowed

■ i-Size CRS



**CHILD OCCUPANT**

Total 30.4 Pts / 62%

■ **ISOFIX CRS**

Maxi Cosi Cabriofix & FamilyFix (ISOFIX)



BeSafe iZi Kid X3 ISOfix (ISOFIX)



Römer Duo Plus (ISOFIX)



Römer KidFix XP (ISOFIX)



■ **Universal Belted CRS**

Maxi Cosi Cabriofix (Belt)



Maxi Cosi Cabriofix & EasyBase2 (Belt)



Römer King II LS (Belt)



Römer KidFix XP (Belt)



CHILD OCCUPANT

Total 30.4 Pts / 62%

	Seat Position			
	Front	2nd row		
	PASSENGER	LEFT	CENTER	RIGHT
Maxi Cosi 2way Pearl & 2wayFix (rearward) (iSize)	□	●	□	●
Maxi Cosi 2way Pearl & 2wayFix (forward) (iSize)	□	●	□	●
BeSafe iZi Kid X1 i-Size (iSize)	□	●	□	●
Maxi Cosi Cabriofix & FamilyFix (ISOFIX)	□	●	□	●
BeSafe iZi Kid X3 ISOfix (ISOFIX)	□	●	□	●
Römer Duo Plus (ISOFIX)	□	●	□	●
Römer KidFix XP (ISOFIX)	□	●	□	●
Maxi Cosi Cabriofix (Belt)	●	●	●	●
Maxi Cosi Cabriofix & EasyBase2 (Belt)	●	●	●	●
Römer King II LS (Belt)	●	●	●	●
Römer KidFix XP (Belt)	●	●	●	●

● Install without problem    
 ● Install with care    
 ● Safety critical problem    
 ✘ Installation not allowed

Comments

In the frontal offset test, protection of the 10 year dummy's neck was rated as poor, based on dummy readings of neck tensile forces. Similarly, decelerations in the chest of the 6 year dummy indicated poor protection of this body region. In the side impact, both dummies were properly restrained and protected. The front passenger airbag can be disabled to allow a rearward facing child restraint to be used in that seating position. However, the information provided to the driver regarding the status of the airbag did not meet Euro NCAP's requirements and the system was not rewarded. All of the restraint types for which the Tivoli is designed could be properly installed and accommodated. The user manual states that the front passenger seat is not suitable for iSize restraints and the Tivoli lost points for those restraints in that seating position.

**PEDESTRIAN PROTECTION**

Total 27.4 Pts / 65%

■ GOOD   
 ■ ADEQUATE   
 ■ MARGINAL   
 ■ WEAK   
 ■ POOR

Pedestrian Protection	27.4 Pts						
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Head Impact</td> <td style="text-align: right; padding: 5px;">14.5 Pts</td> </tr> <tr> <td style="padding: 5px;">Pelvis Impact</td> <td style="text-align: right; padding: 5px;">2.7 Pts</td> </tr> <tr> <td style="padding: 5px;">Leg Impact</td> <td style="text-align: right; padding: 5px;">6 Pts</td> </tr> </table>	Head Impact	14.5 Pts	Pelvis Impact	2.7 Pts	Leg Impact	6 Pts
Head Impact	14.5 Pts						
Pelvis Impact	2.7 Pts						
Leg Impact	6 Pts						

AEB Pedestrian	4.2 Pts	
System Name	AEBS/FCW	
Type	Auto-Brake with Forward Collision Warning	
Operational From	8 Km/h	
Additional Information	Defaults on for every journey; operates above 40km/h and in low ambient light	
PERFORMANCE   <span style="color: green;">■</span>		
	Autobrake Function	
	<div style="width: 45%; text-align: center;">Avoidance</div> <div style="width: 45%; text-align: center;">Mitigation</div>	
Running Adult crossing from Farside	Collision avoided up to 20 km/h	Impact mitigated up to 45 km/h
Walking Adult crossing from Nearside -25%	Collision avoided up to 30 km/h	Impact mitigated up to 55 km/h
Walking Adult crossing from Nearside -75%	Collision avoided up to 45 km/h	Impact mitigated up to 55 km/h
Running Child from behind parked vehicles	Collision avoided up to 25 km/h	Impact mitigated up to 45 km/h

**Comments**

The protection provided by the bonnet to a pedestrian's head was predominantly good or adequate, with poor results recorded only on the stiff windscreen pillars. The bumper scored maximum points for its protection of pedestrians' legs, with good results recorded at all test locations. However, the protection provided to the pelvis was more mixed, ranging from good to poor. The standard-fit autonomous emergency braking system can detect pedestrians and performed well in Euro NCAP's tests, with collision avoidance or mitigation in several of the test scenarios.



SAFETY ASSIST

Total 5.2 Pts / 43%

GOOD
  ADEQUATE
  MARGINAL
  WEAK
  POOR

Seat Belt Reminder

3 Pts

Applies To	All seats		
	Driver Seat	front passenger(s)	rear passenger(s)
Warning			
Visual	●	●	●
Audible	●	●	●

● Pass
 ● Fail
 — Not available

Lane Support

0 Pts

System Name	0
Operational From	0 km/h
Warning	0
PERFORMANCE	
LDW Confirmation Test	Fail

## SAFETY ASSIST

Total 5.2 Pts / 43%

## AEB Interurban

2.2 Pts

System Name	AEBS/FCW
Type	Forward Collision Warning with Auto-Brake
Operational From	8 Km/h
Additional Information	Default On

## PERFORMANCE |

	Autobrake Function Only	Driver reacts to warning
Operational Speed	8-180 Km/h	8-180 Km/h
Approaching a stationary car	See AEB City	Crash avoided up to 50km/h. Crash speed reduced up to 70km/h.
Approaching a slower moving car	Crash avoided up to 55km/h.	Crash avoided up to 80km/h.
FOLLOWING A CAR AT SHORT DISTANCE		
Car in front brakes gently	Avoidance	Avoidance
Car in front brakes harshly	Mitigation	Mitigation
FOLLOWING A CAR AT LONG DISTANCE		
Car in front brakes gently	Mitigation	Mitigation
Car in front brakes harshly	Avoidance	Avoidance

## Comments

The Tivoli has, as standard, a seatbelt reminder for the front and rear seats. Autonomous emergency braking is, from February 2018, standard equipment and operates at highway speeds. Tests of this functionality demonstrated good performance, with accident avoidance or mitigation in several of the scenarios tested.

## RATING VALIDITY

## Annual Reviews and Facelifts

Date	Event	Outcome
November 2016	Rating Published	2016 