




























# Rear Impact (Whiplash)

Whiplash injuries are common in rear impacts. While the mechanisms by which the injuries are caused are not fully understood, it is known that seat and head restraint design can influence the risk of injury. Euro NCAP assesses the geometry of the restraint in relation to the head and tests the seats in three severities of impact – high, medium and low – using a dummy specially designed for rear impacts. Seats at the top of the table are likely to offer better protection than those at the bottom.




































Examples of seats rated Good, Marginal and Poor

[Films](#) | [Pictures](#)

	Make and model	Seat description	Head restraint type		Score
	<a href="#">Opel / Vauxhall Astra</a> (2009)	Standard, cloth, 2 way manual adjust	Reactive		3.7
	<a href="#">Skoda Yeti</a> (2009)	Standard, cloth 4 way manual adjust	Passive		3.6
	<a href="#">Volvo XC60</a> (2008)	Single control manual, continuous adjustment.	Passive		3.5
	<a href="#">Kia Sorento</a> (2009)	Cloth, single control 4 way manual, continuous adjustment	Reactive		3.5
	<a href="#">Kia Venga</a> (2010)	Standard, cloth, 2 way manual adjust	Reactive		3.4
	<a href="#">Alfa Romeo Giulietta</a> (2010)	Standard cloth 6 way manual	Reactive		3.4
	<a href="#">Alfa Romeo MiTo</a> (2008)	Single control manual, continuous adjustment	Reactive		3.3
	<a href="#">Toyota Avensis</a> (2009)	Standard, cloth trim	Reactive		3.3
	<a href="#">VW Golf</a> (2008)	Single control manual, continuous adjustment.	Passive		3.3
	<a href="#">BMW 5 Series</a> (2010)	Standard, cloth 6 way electric/manual	Active		3.3
	<a href="#">VW Scirocco</a> (2009)	Standard cloth, 6 way manual adjust	Passive		3.3
	<a href="#">Audi Q5</a> (2009)	Single control manual, continuous adjustment	Passive		3.3
	<a href="#">Kia Soul</a> (2009)	Single control manual, continuous adjustment	Reactive		3.3
	<a href="#">Volvo V70</a> (2009)	Standard Seat, Leather, 6 way, Manual	Fixed		3.3
	<a href="#">Volvo C30</a> (2009)	Standard Seat, Cloth, 6 way, Manual	Fixed		3.2

	<a href="#">Audi A4</a> (2008)	Single control manual, continuous adjustment.	Passive		3.2
	<a href="#">Honda CR-Z</a> (2010)	6 way, manual, cloth	Reactive		3.1
	<a href="#">Saab 9-5</a> (2009)	Standard, cloth, 6 way adjust	Reactive		3.1
	<a href="#">Chevrolet Cruze</a> (2009)	Standard cloth, 4 way manual adjust	Passive		3.1
	<a href="#">Honda Insight Hybrid</a> (2009)	standard, cloth trim, 4 way manual adjust	Reactive		3.1
	<a href="#">Suzuki Swift</a> (2010)	Standard cloth, 6 way manual	Passive		3.1
	<a href="#">Opel/Vauxhall Insignia</a> (2008)	Single control electric, continuous adjustment	Reactive		3.1
	<a href="#">VW TIGUAN</a> (2009)	Single control manual, continuous adjustment	Passive		3.0
	<a href="#">Hyundai ix35</a> (2010)	Standard cloth, 4 way manual	Reactive		3.0
	<a href="#">Renault Koleos</a> (2008)	Single control manual, continuous adjustment	Passive		2.9
	<a href="#">Chevrolet Spark</a> (2009)	Standard cloth, 2 way manual adjust	Passive		2.8
	<a href="#">Honda Jazz</a> (2009)	Single control manual, continuous adjustment	Passive		2.8
	<a href="#">Citroen C4</a> (2010)	4 way, manual, cloth	static		2.8
	<a href="#">Subaru Legacy</a> (2009)	Cloth trim, continuous electric adjust	Passive		2.8
	<a href="#">Infiniti FX</a> (2009)	Premium, leather, 10 way electric adjust	Reactive		2.8
	<a href="#">Nissan Cube</a> (2010)	Standard, cloth, 6 way manual adjust	reactive		2.7
	<a href="#">Hyundai i20</a> (2009)	Single control manual, continuous adjustment	Reactive		2.7
	<a href="#">Toyota iQ</a> (2009)	Standard, cloth trim	Passive		2.7
	<a href="#">VW Polo</a> (2009)	Standard, cloth trim, manual adjust	Passive		2.6

	<a href="#">Lancia Delta</a> (2008)	Single control manual, continuous adjustment	Reactive		2.6
	<a href="#">Mazda 3</a> (2009)	Standard cloth, 4 way manual adjust	Reactive		2.5
	<a href="#">Mercedes E-Class</a> (2010)	Standard, fabric, 6 way adjust	Active		2.5
	<a href="#">BMW X1</a> (2010)	Standard, cloth, 2 way manual adjust	Passive		2.5
	<a href="#">Subaru Impreza</a> (2009)	Standard, cloth trim	Passive		2.5
	<a href="#">BMW X3</a> (2008)	Single control manual, continuous adjustment.	Proactive		2.4
	<a href="#">Seat Exeo</a> (2010)	Cloth, 6 way manual adjust	Passive		2.4
	<a href="#">Mercedes GLK</a> (2010)	Standard cloth, 8 way electric	Active		2.4
	<a href="#">Renault Grand Scenic</a> (2009)	Standard cloth, continuous manual adjust	Passive		2.4
	<a href="#">Renault Kangoo</a> (2008)	Single control manual, continuous adjustment.	Passive		2.4
	<a href="#">Citroen C4 Picasso</a> (2009)	Standard cloth 4 way manual adjust	Passive		2.4
	<a href="#">Renault Megane</a> (2008)	Single control manual, continuous adjustment.	Passive		2.4
	<a href="#">Honda Civic</a> (2009)	Standard seat, cloth, 4 way manual	Reactive		2.3
	<a href="#">Honda Accord</a> (2008)	Single control manual, continuous adjustment.	Reactive		2.3
	<a href="#">Suzuki Alto</a> (2009)	Standard, no adjustment	Fixed, passive		2.3
	<a href="#">Skoda Superb</a> (2008)	Single control manual, continuous adjustment	Passive		2.2
	<a href="#">Hyundai i30</a> (2008)	Single control manual, continuous adjustment	Reactive		2.2
	<a href="#">Toyota Verso</a> (2010)	Standard, cloth, 6 way manual	Reactive		2.2
	<a href="#">Ford Fiesta</a> (2008)	Single control manual, continuous adjustment	Passive		2.2

	<a href="#">Citroen DS3</a> (2009)	Standard cloth, 4 way manual adjust	Passive		2.2
	<a href="#">Mercedes Benz C Class</a> (2009)	Standard, fabric, 6 way adjust	Active		2.1
	<a href="#">Toyota Prius</a> (2009)	Standard cloth, continuous manual adjust	Passive		2.1
	<a href="#">Mazda 6</a> (2009)	Standard, cloth trim	Passive		2.1
	<a href="#">Mitsubishi Lancer</a> (2009)	Standard, cloth trim	Passive		2.0
	<a href="#">Seat Ibiza</a> (2008)	Single control manual, continuous adjustment.	Passive		2.0
	<a href="#">Peugeot 5008</a> (2009)	Standard cloth, 4 way manual adjust	Passive		1.9
	<a href="#">Peugeot 3008</a> (2009)	Single control manual, continuous adjustment	Passive		1.9
	<a href="#">Toyota Urban Cruiser</a> (2009)	Standard cloth, 6 way manual adjust	Reactive		1.9
	<a href="#">Peugeot 308</a> (2009)	Standard cloth, 4 way manual adjust	Passive		1.6
	<a href="#">Dacia Sandero</a> (2008)	Single control manual, notched adjustment.	Passive		1.6
	<a href="#">Daihatsu Cuore</a> (2008)	No height adjustment.	Passive		1.1
	<a href="#">Citroen Berlingo</a> (2008)	Single control manual, notched adjustment.	Passive		1.0
	<a href="#">Citroen Nemo</a> (2010)	Standard, cloth, 4 way manual	passive		1.0
	<a href="#">Hyundai i10</a> (2008)	No height adjustment	Passive		0.9
	<a href="#">Citroen C3</a> (2009)	Standard cloth, continuous manual adjust	Passive		0.9
	<a href="#">Citroen C5</a> (2008)	Single control manual, continuous adjustment.	Passive		0.6
	<a href="#">Citroen C5</a> (2009)	Single control manual, continuous adjustment.	Passive		0.6
	<a href="#">Ford Kuga</a> (2008)	Single control manual, continuous adjustment	Passive		0.4



[Citroen C3 Picasso](#) (2009)

Standard, cloth trim

Passive



0.3



[Mazda CX-7](#) (2010)

Standard, leather 6 way electric

Passive



0.0



[Peugeot 308CC](#) (2008)

Single control manual, continuous adjustment.

Passive



0.0



[Peugeot 308CC](#) (2009)

Single control manual, continuous adjustment.

Passive



0.0



[Daihatsu Terios](#) (2008)

Single control manual, continuous adjustment

Passive



0.0



[Suzuki Splash](#) (2008)

Single control manual, continuous adjustment

Passive



0.0