Hyundai HB20 drops to one star adult safety after audit test

The New Car Assessment Programme for Latin America and the Caribbean, Latin NCAP, has performed an audit test on the replacement of one of the best selling cars in Brazil: The New Hyundai HB20. The result of the audit tests shows that the protection to the chest of the adult occupant offers lower performance than in the original tests, worryingly it exceeded biomechanical thresholds for the body in the side impact test.

Latin NCAP tested the Hyundai New HB20 in 2019, manufactured in Brazil and with two airbags, achieving four stars for adult occupant and three stars for child occupant protection. According to the requirements of the assessment protocols, Latin NCAP has the right to audit any sponsored test at any time.

Latin NCAP decided to perform an audit test on the HB20 and it showed lower side impact protection to the adult chest than the same model tested in September 2019. Consequently, the adult safety rating was downgraded to one star after it showed one biomechanical parameter in levels higher than allowed in Latin NCAP causing the chest colour to turn red (poor protection) in the side impact. In Latin NCAP protocols 2016 – 2019, under which the model was assessed, a red critical body region limits the result to no more than one star.

Latin NCAP will announce the first 2020 results under the new assessment protocols later this month.

Q&A with Alejandro Furas, Latin NCAP Secretary General

How surprising is this audit result from Hyundai?

It is surprising and disappointing for a car manufacturer like Hyundai, that leads in safety in global markets, to be characterized by such a poor safety performance in Latin America. The HB20 is a direct competitor of the New Chevrolet Onix, that replaces the best-selling car in Brazil. The New Onix offers better performance, five stars protection for adults and children, 6 airbags, Electronic Stability Control and pedestrian protection as standard safety equipment. It is possible to produce popular five stars cars in Brazil, it is for the Brazilians then to question Hyundai why Brazilians are being treated as second class citizens while other manufacturers such as Chevrolet are offering to Latin Americans, the same basic safety as customers in other global markets.

What are the main differences found in the performance of the HB20s tested in 2019 and the one audited in 2020?

Latin NCAP did not find differences in the construction of both cars, but both performances are not the same. In fact, structure deformation looks the same, with similar internal deformation and impact points on the dummy. We have noticed a different deceleration pulse under the same testing conditions and a slightly different behavior of the internal door panel during the crash. Safety systems should not show such variations from test to test. It raises serious questions about Hyundai’s side impact protection strategy for the HB20.

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What was Hyundai’s reaction?

Latin NCAP asked Hyundai if they could explain the difference in performance. Latin NCAP also encouraged Hyundai to improve the audited car, and to develop a more robust safety approach to the system already in the car. Hyundai has still not reacted to Latin NCAP’s comments at the time of this publication.

Whose responsibility is it and is there any way this could be prevented?

Monitoring to prevent these kinds of fluctuations in production quality are the responsibility of the manufacturer. Under more robust regulatory frameworks that pushes car manufacturers to reinforce the quality control and monitoring, these variations are easily detected. Governments are responsible for establishing robust regulatory frameworks and support local NCAPs following UN recommendations for the Decade of Action for Road Safety heading to 2030.

Hyundai HB20 (2 airbags)
Read full test report
Watch crash test video
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About Latin NCAP
The Latin New Car Assessment Programme (Latin NCAP) was launched in 2010 to develop a regional system of independent crashworthiness and safety rating across Latin America and Caribbean (LAC). Latin NCAP replicates similar consumer testing programmes developed over the last thirty years in North America, Europe, Asia and Australia, and which have proved to be very effective in improving the safety of motor vehicles. Since 2010 Latin NCAP has published the results of more than one hundred and thirty cars, all results available at www.latinn-cap.com/results.

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Latin NCAP is an Associate member of Global NCAP and supports the United Nations Decade of Action for Road Safety and the Stop the Crash Partnership.

More info: www.latinn-cap.com