

## Seatbelt Reminder & Anti-Seatbelt Reminder Device: “Antara Dua Darjat”

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### EDITORIAL

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“Antara Dua Darjat” is a classic Malay movie written, directed, and acted by Malaysia’s legendary artist Tan Sri P. Ramlee. Loosely translated into English as “Between Two Classes”, this 1960 film chronicles the social class differences between two families; hence leading to endless misery. The author does not intend to elaborate on the two ‘social classes’ as depicted in the film, and would rather discuss ‘the two classes’ in the vehicle safety scenario in Malaysia; so that the latter can be deliberated and resolved in the best manner. Malaysia is one of the countries that is known for its strict compliance with the international vehicle safety standards. Malaysia has been a member country of the WP29 since 2006. In short, all vehicles to be registered in this country must pass the Vehicle Type Approval (VTA) process. We are proud that to date, Malaysia has ratified over 100 UN Regulations (Abdul Wahab et al., 2017).

Further, Malaysia through MIROS is also a secretariat to ASEAN NCAP which was established in December 2011, in partnership with Global NCAP (Abu Kassim et al., 2017). ASEAN NCAP is one of the ten NCAPs in the world and has produced over 100 results and is an important reference to all automobile manufacturers in the Southeast Asia region.

The issue that the author wants to highlight revolves around the use of the Seatbelt Reminder (SBR). The SBR is a safety device specifically designed to remind vehicle drivers or passengers to wear their safety belt (Ariffin et al., 2014). The SBR will provide a warning by emitting a sound that will ‘compel’ the driver or passenger to wear the safety belt. We are all aware that wearing a safety belt can definitely reduce road traffic injuries in the event of a collision. According to an Autoliv study, the seatbelt reduces fatality by 45 % (Autoliv, n.d.). Working in tandem with airbags in a road crash, the seatbelt provides occupants with an added sense of safety and can protect from potential further injury. Studies have shown that driver and passenger interactions with the SBR system have led to a significant decrease in the percentage of “unbelted trips”, “driving time spent unbelted”, and the time taken to fasten a seatbelt in response to SBR (Young et al., 2008; Ariffin et al., 2014).

Although it is uncertain when the SBR technology was first introduced in the country, the device was basically put into place after the law on wearing a seatbelt was implemented. In Malaysia, the law on the use of front safety belts was enacted in 1978. As for the use of rear passenger safety belts, Malaysia enacted such a law in 2009 (Jawi et al., 2016). Meanwhile,

Malaysia again “re-enforced” the law on the use of the rear seatbelt for the second time in 2020 along with the use of the child safety seat (Paiman et al., 2019).

Since 2012, ASEAN NCAP has regulated that every 5-star car is required to have SBR for both the driver and front passenger (Abu Kassim et al., 2017). In 2017, ASEAN NCAP revamped the system, where only cars with SBR for all passenger seats would be able to score full points (6) and had the chance to reach 5-star rating. However, the SBR for rear passengers did not require ‘detection’; as did the SBR for the driver and front passenger. In the imminent future, beginning in 2021, only cars with SBR with detection will earn full marks for ASEAN NCAP ratings 2021-2025. Such is the importance of SBR as adjudged by the government through the Road Transport Department (RTD/JPJ) and ASEAN NCAP as a reminder to the consumers.

Before turning to the “Anti-SBR” device, the author wishes to draw the reader’s attention towards the fact that the seatbelt wearing rate is still not at the satisfactory level (Jawi et al., 2016; Oxley et al., 2018). While the usage of the seatbelt is still far from satisfactory, another device which can be viewed as Anti-SBR has now come to the fore (Isa et al., 2017). In general, the device is divided into two types: (i) the first being a seatbelt clip, which if used, will prevent SBR from sounding the warning (Figure 1 (a)); and (ii) the seatbelt extender, where it can be connected to a normal seatbelt (Figure 1 (b)). Hence the user has the opportunity to fasten or not fasten the seatbelt, as and when is needed. The question is, can this seatbelt extender function as a seatbelt? Both of these devices are available at the local department stores for as little as MYR 2 (roughly USD 0.50).

To determine the outcome of using the Anti-SBR device, a crash test was performed on the 21<sup>st</sup> of October 2019 at the MIROS PC3 crash lab (Figure 1 (c)). At a speed of 50 km/h, the seatbelt extender in the crash-tested car unbuckled and the seatbelt failed to work properly. It is also apparent that the injury to the dummy’s chest (due to steering wheel impact) was serious and could lead to death.



**Figure 1:** (a) Seatbelt clip; (b) seatbelt extender; (c) crash test for Anti-SBR

Thus, the choice one makes between the SBR and the Anti-SBR device can lead to significant results in terms of road traffic deaths. Even when driving a 5-star vehicle, if the driver or passenger chooses the Anti-SBR device over the SBR, the risk of death and serious injury is significantly high. Hence, the author would like to urge the authorities to consider the

best way forward by: (1) preventing the sale of the Anti-SBR device (consumerism); or (2) banning the use of the Anti-SBR device (traffic enforcement).

Nevertheless, the use of Anti-SBR device is not the biggest issue involving the divide in class in vehicle safety in Malaysia. Other big things are still needed in the domestic automotive ecosystem; for example, the absence of End-of-Life Vehicle (ELV) implementation to prevent unsafe vehicles from being driven on the road is yet to be addressed. Every day, car manufacturers in the ASEAN region produce 5-Star vehicles, yet in Malaysia, we still allow for unsafe vehicles to ply our roads. Isn't that also a glaring difference between the two classes?

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