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2nd July 2021

M/s AIG Asia Pacific Insurance Pte. Ltd.
78 Shenton Way #09-16
CHARTIS Building
Singapore 079120
(Motor Claims Department)

AUTOMOBILE TECHNICAL INVESTIGATION REPORT OF ACCIDENT INVOLVING SLJ 9098P AND SMK 2953A ON 4 JUNE 2021

1. We refer to your letter dated 7 June 2021 and the instructions therein to comment on the damage consistency of the motor car SLJ 9098P involved in the captioned accident, in particular to establish whether there was possibly contact between the front portion of motor car SLJ 9098P and rear portion of the motor car SMK 2953A; and if there was contact, whether the damage on the rear portion of motor car SMK 2953A is consistent to the accident.

2. The following documents were provided to us for our review and consideration in the preparation of this report:

    a) Singapore Accident Statement and Singapore Police Report of the driver of the motor car SLJ 9098P (herein referred to as **"Mercedes"**), where amongst other information, the circumstances of accident was described;

    b) Singapore Accident Statement and Singapore Police Report of the driver of the motor car SMK 2953A (herein referred to as **"Toyota"**), where amongst other information, the circumstances of accident was described together with 14 coloured photographs of the Mercedes at the time of reporting ;

    c) Vehicle Damage Inspection Report of the Toyota by LKK Auto Consultants Pte. Ltd. including 25 coloured photographs;

    d) 23 coloured photographs taken during our inspection of the Toyota.

e) 84 coloured photographs taken during our inspection of the Mercedes.

f) Video recordings taken from the recording device in the Toyota

3. In preparation of this report, we had conducted height measurements of the rear portion of the Toyota (using a similar make and model). We had also conducted a physical inspection and thereafter height measurements of the front portion of the Mercedes; both collectively referred herein as **"Involved Motor Vehicle"**.

4. An analysis of all the available documents and information gathered was subsequently carried out.

5. We now set out below our detailed findings and analysis.

Nature of Accident

6. From the Singapore Accident Statement of the driver of the Toyota, David Koh (herein referred to as **"David"**) he was driving his Car along Bishan Street 13 and was stationary at the traffic light Junction, where he felt an impact and realized that his vehicle was rear ended. David then proceeded to make a Police report on the day itself and the insurance report on the 7th June 2021.

7. The Singapore Accident Statement of the driver of the Mercedes, Ms CHEUNG OI LIN, CECILIA (herein referred to as **"Cecilia"**) on the other hand, had stated that she was driving along Bishan Street 13 right behind Toyota and she mentioned that she had come to a stop behind the Toyota at the traffic light junction. Prior to stopping, the driver of Toyota alighted the vehicle and claimed that her vehicle had collided into the rear of his Toyota. However, she alighted to check on both Involved Motor Vehicle and saw no damage or paint transfer to her vehicle but noticed several rusty spots on the rear of the Toyota. She also mentioned that there was also some space between her vehicle and the Toyota vehicle.

Damage to the Car

8. From the Vehicle Damage Inspection Report of Toyota by LKK Auto Consultants Pte. Ltd., we note that the Toyota had sustained damage onto its rear bumper portion. The main body part(s) listed as damaged in the report was the rear bumper and this was depicted in the photographs that were attached in the aforesaid report.

9. Examination of these photographs showed the rear bumper had been damaged. It was also noted that there were paint crack marks and dents on the rear bumper of Toyota. However there was neither a dislodgement nor misalignment of the rear bumper at the rear portion of Toyota See photos 1 – 7 below.

Photo 1 shows the general view of the rear portion of Toyota at the time of inspection. The rear bonnet and bumper had been damaged. It was also noted that there were paint crack marks and dents (circled) on the rear bumper of Toyota.

Photo 2 shows a close up view of the rear portion of the Toyota. We noted that there were dent marks on the rear bonnet and rear bumper (arrowed).

Photo 3 shows a close up view of the rear portion of the Toyota. We noted that there were dent marks on the rear bonnet (circled).

Photo 4 shows a close up view of the rear portion of the Toyota. We noted that there were dent and paint crack marks on the rear bumper (circled).

Photo 5 shows a close up view of the rear portion of the Toyota. We noted that there were paint dent and crack marks on the tow hook cap of the rear bumper (circled).

Photo 6 shows a close up view of the rear portion of the Toyota. We noted that there were paint crack marks on the rear bumper (circled).

Photo 7 shows a close up view of the rear portion of the Toyota. We note that there was neither dislodgement nor misalignment of the rear bumper at the rear portion (circled) of Toyota.

Physical Inspection of the Mercedes

10. The Mercedes was physically inspected on 29th June 2021 at the premises of Ms. Cecilia's residence, at 11 Robey Crescent, 546288. The mileage recorded was 36,926km.

11. Based on the circumstances of the accident as iterated by Cecilia, we are of the opinion that the point of contact of Mercedes would be at its front portion since Mercedes was behind Toyota at the mentioned point of collision. At the time of our inspection, we observed that there were no dents or cracks on its front number plate of the Mercedes. However, we observed the Mercedes to have multiple groups of scratch marks at the left corners of its front bumper. We also observed that there was neither a dislodgement nor misalignment of the front bumper at the front portion of the Mercedes. See photos 8- 15 below.

Photo 8 shows the general view of the front portion of Mercedes at the time of our inspection.

Photo 9 shows a close up view of the Mercedes front number plate. There were no cracks or dents observed.

Photo 10 shows a general view of the Mercedes front portion. We observed multiple groups of scratch marks on the left corners of its front bumper (circled).

Photo 11 shows a close up view of the Mercedes front portion. We observed multiple groups of scratch marks on the left corners of its front bumper (circled).

Photo 12 shows a close up view of the Mercedes front portion. We observed multiple groups of scratch marks on the left corners of its front bumper (circled).

Photo 13 shows a close up view of the Mercedes front portion. We observed multiple groups of scratch marks on the left corners of its front bumper (circled).

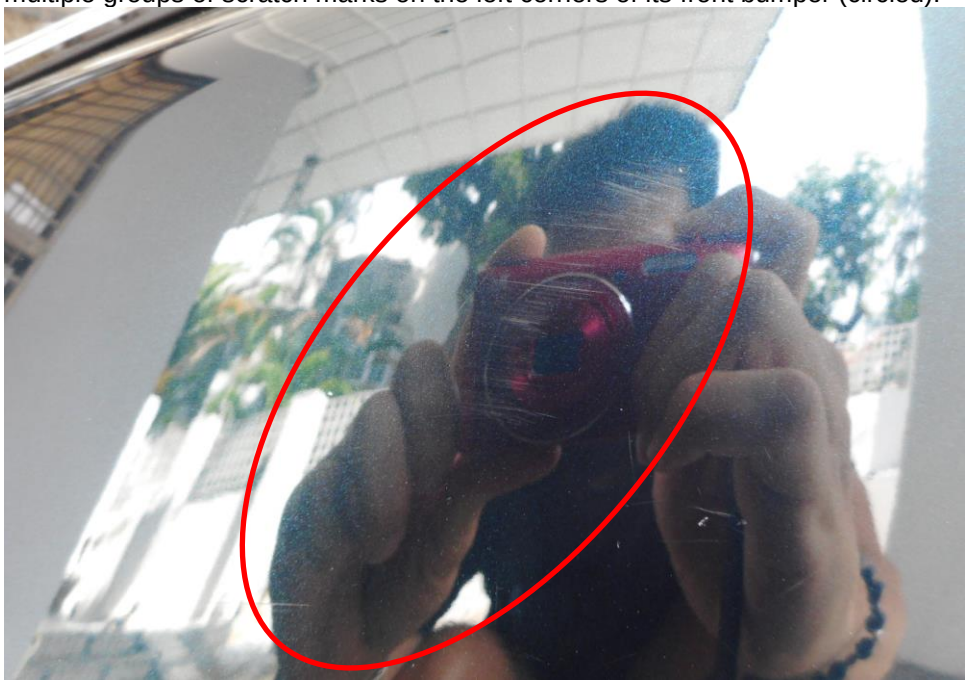


Photo 14 shows a close up view of the Mercedes front portion. We observed multiple groups of scratch marks on the left corners of its front bumper (circled).

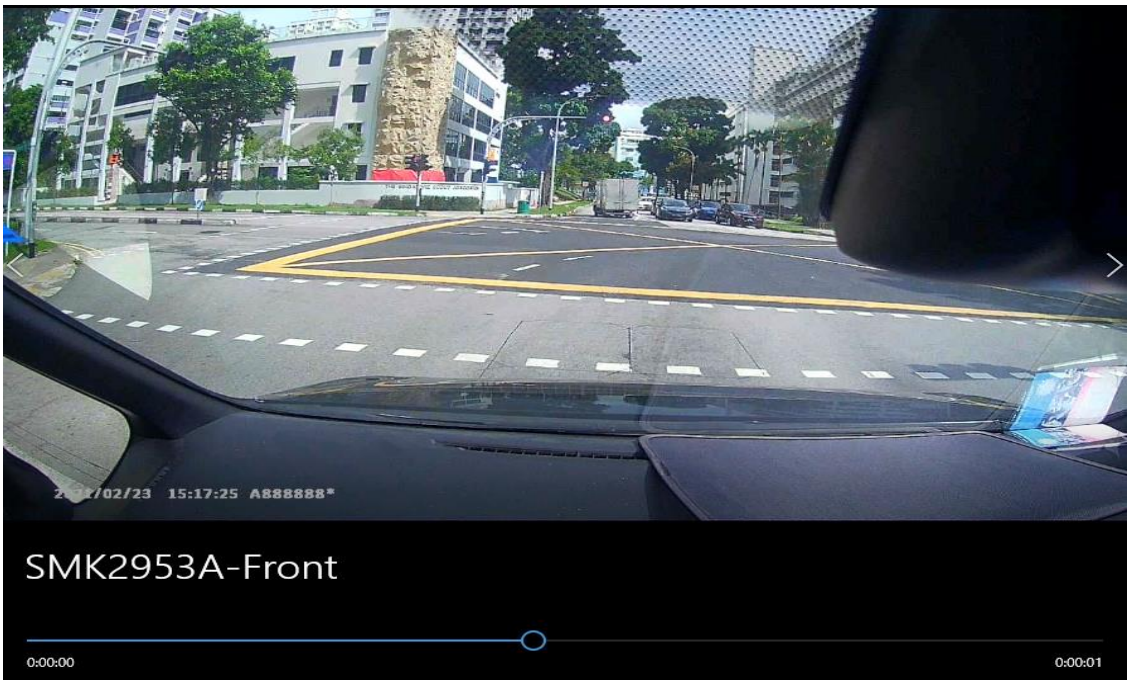
Photo 15 shows a close up view of the front portion of the Mercedes. We note that there was neither dislodgement nor misalignment of the front bumper at the front portion (circled) of Mercedes.

Video Recording

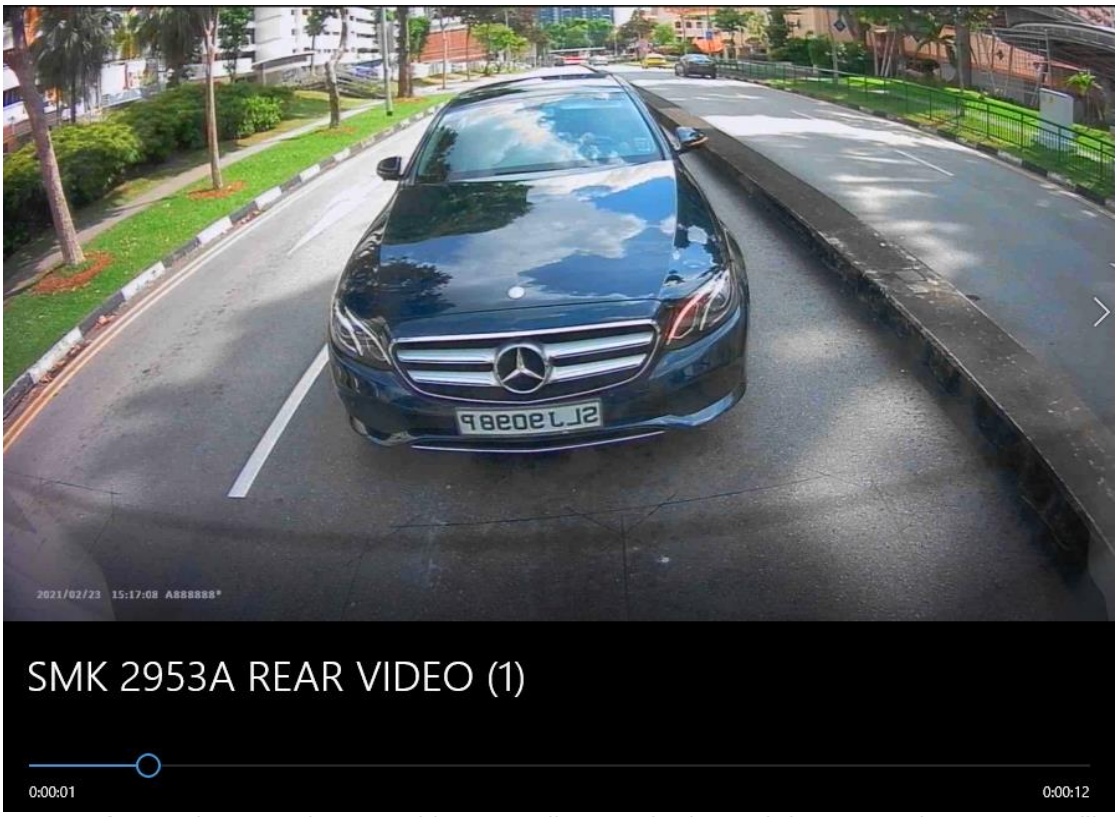
12. The video recording that was provided to us in preparation of this report was taken from a recording device that was mounted onto the front and rear windscreen of Toyota. The recording was provided to us had showed the events before the accident and the accident itself. The length (duration) indicated in the video recordings from the front recording was of 1 second and the rear recording of 13 seconds.

13. From the rear video recording, Mercedes could be seen driving behind Toyota. From the front view video showing the front footage, at 1 second mark of the video recording, we noticed a jerk on the Toyota, however we are in view that the jerk was caused by the closing of door after driver had alighted from the Toyota.

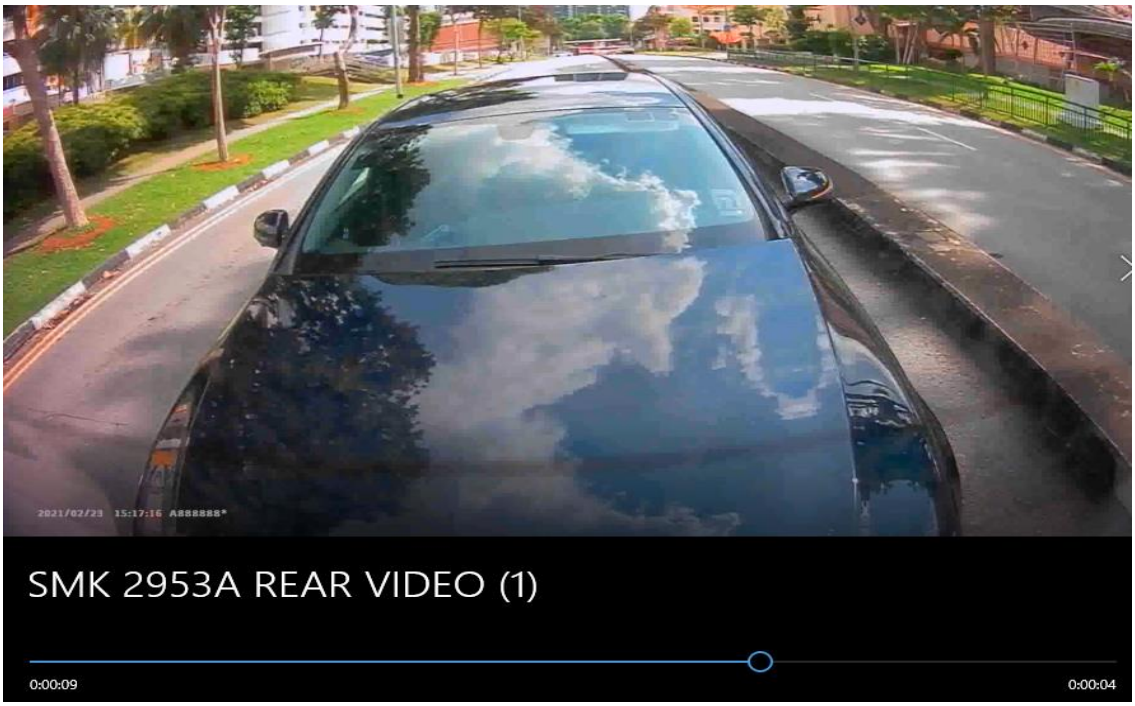
14. From the rear footage we had noted that Mercedes was travelling behind the stationary Toyota and at 8 to 9 second mark we noticed a jerk on the Toyota and this is where the Mercedes had driven into the rear of the Toyota and where the said collision might have taken place. We have also notice that the Mercedes at attempted to reverse the vehicle at the 11 to 13 second mark. However one would have to view the recordings to see and hear the movements and audio warnings. See screenshot 1 to 4 below.



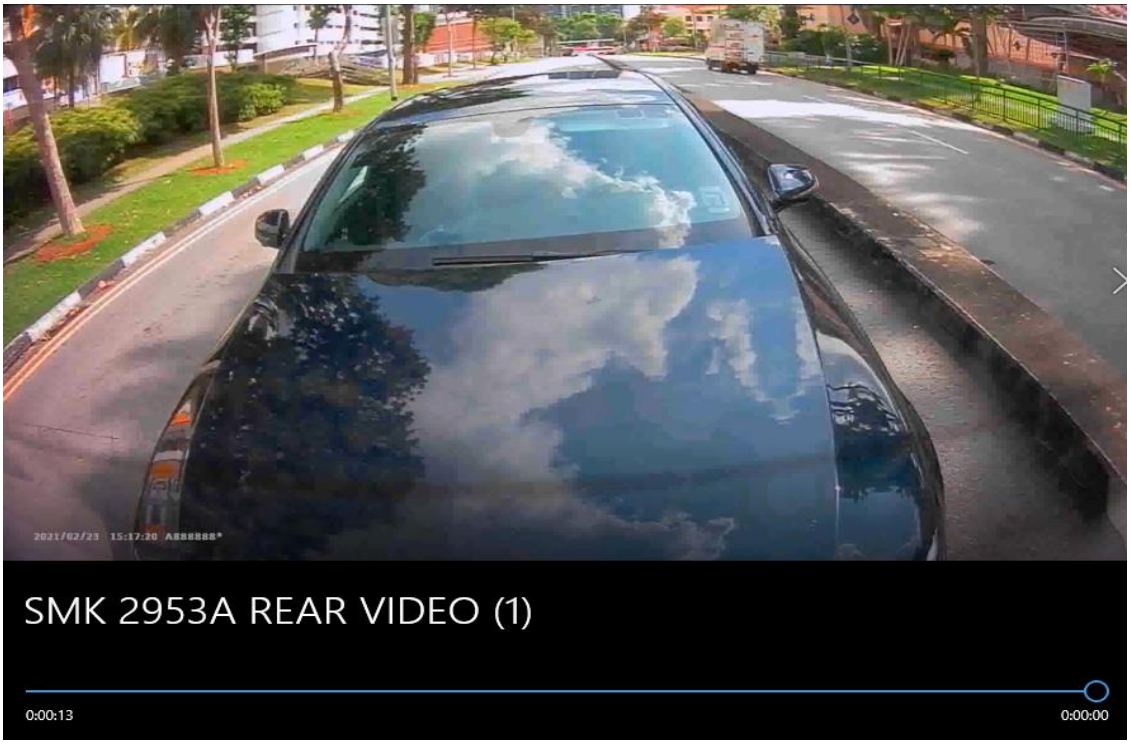
Screenshot 1 shows at the 1 second mark of the front video recording, we had noted that there was a jerking movement on the Toyota. However, we are in view that the jerk was caused by the closing of door after the driver of the Toyota had alighted the vehicle. However one would have to view the recordings to see and hear the movements and audio warnings.



Screenshot 2 shows at the rear video recording, we had noted that Mercedes was travelling behind Toyota when the Toyota was stationary.



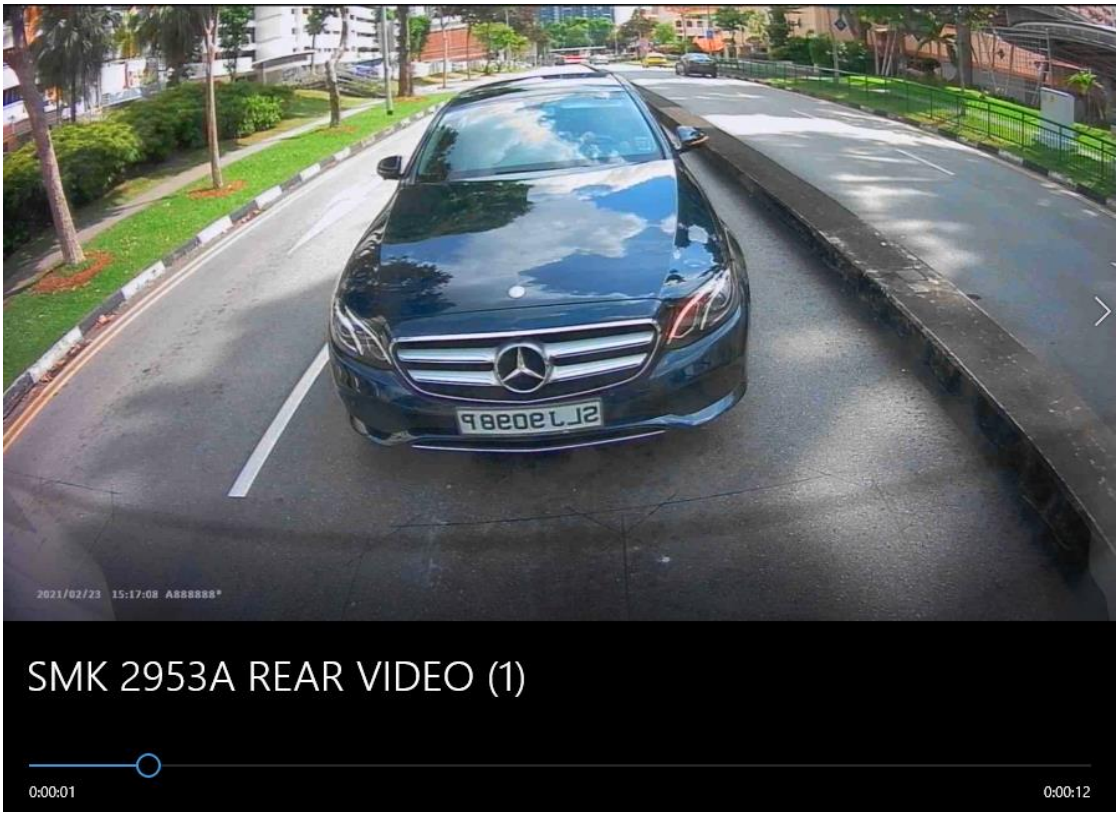
Screenshot 3 shows at the 8 to 9 second mark we noticed a jerk on the Toyota and this is where the Mercedes had driven into the rear of the Toyota and where the said collision might have taken place. However one would have to view the recordings to see and hear the movements and audio warnings.



Screenshot 4 shows at the 11 to 13 second mark from the rear recordings, we noticed that the Mercedes had attempted to reverse. However one would have to view the recordings to see and hear the movements and audio warnings.

Technical Analysis

15. For this case, from the video recordings of the Toyota taken at the material time of accident. It shows the position of the Involved Motor Cars at the accident location. The Mercedes was observed to be directly behind the rear of the Toyota. In the event of any contact, the front number plate of the Mercedes would have come into contact with the rear centre portion of the Toyota as the front number plate was the most protruded body part at the frontal portion of the Mercedes. See screenshot below.



Screenshot shows the position of the Involved Motor Cars at the material time of accident. The Mercedes was observed to be directly behind the rear of the Toyota. In such a position, the front number plate of the Mercedes would have come into contact with the rear centre portion of the Toyota as the front number plate was the most protruded body part at the frontal portion of the Mercedes.

Height Measurement

16. We had conducted a height configuration test to determine whether the damage observed on the rear portion of Toyota could have possibly been caused by the front portion of Mercedes. In order to determine this, we had measured the height above ground level of the damaged area on the rear portion of Toyota. We had thereafter compared this measured height against the front portion of Mercedes. See photos 16 -25 below.

Photo 16 shows the general view of the height measurement being conducted on the rear portion of Toyota. The height above ground level of where the dent and crack marks were found to the rear bonnet and rear bumper of the Toyota was at 60cm; 47cm, 42cm and 40cm respectively.

Photo 17 shows a general view of the height measurement being conducted on the front portion of Mercedes. The scratch marks found on the front bumper left corner was measured to be at 58cm to 60cm, 41cm to 56cm and 23cm to 28cm above ground level.

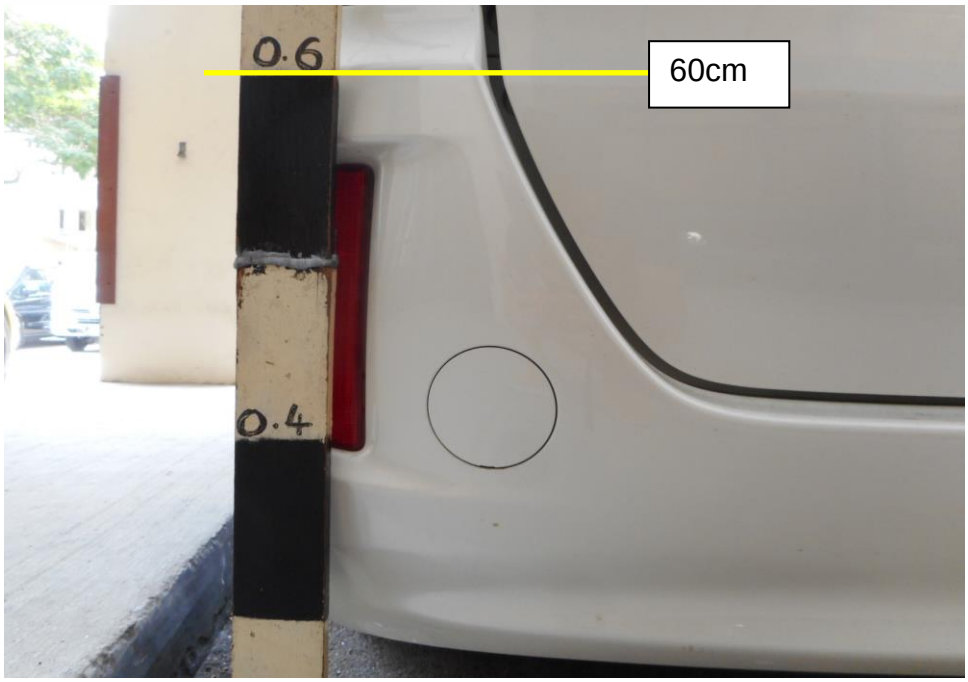


Photo 18 shows the close up view of the height measurement being conducted on the rear portion of Toyota. The height above ground level of where the dent marks were found on the rear bonnet of the Toyota was at 60cm.

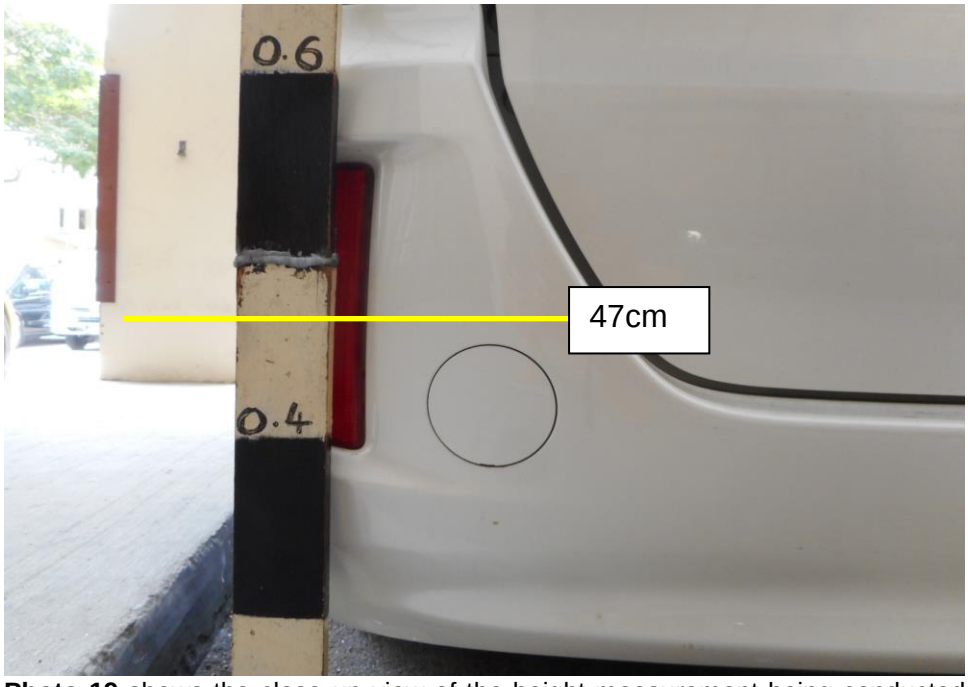


Photo 19 shows the close up view of the height measurement being conducted on the rear portion of Toyota. The height above ground level of where the dent and paint crack marks were found to the rear bumper of the Toyota was at 47cm.

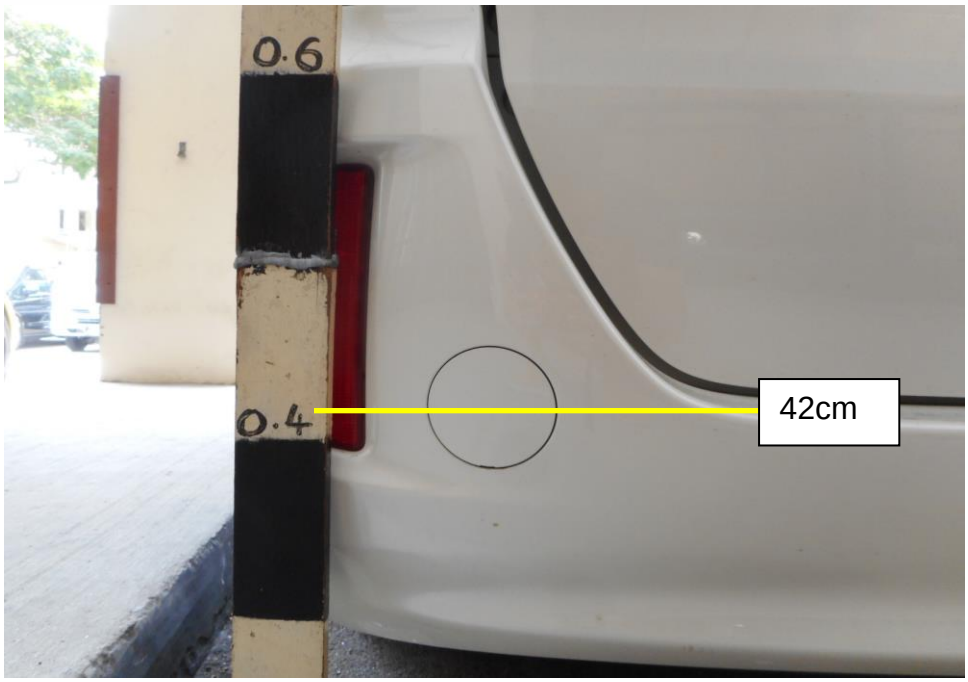


Photo 20 shows the close up view of the height measurement being conducted on the rear portion of Toyota. The height above ground level of where the paint dent crack marks were found to the rear bumper of the Toyota was at 42cm.

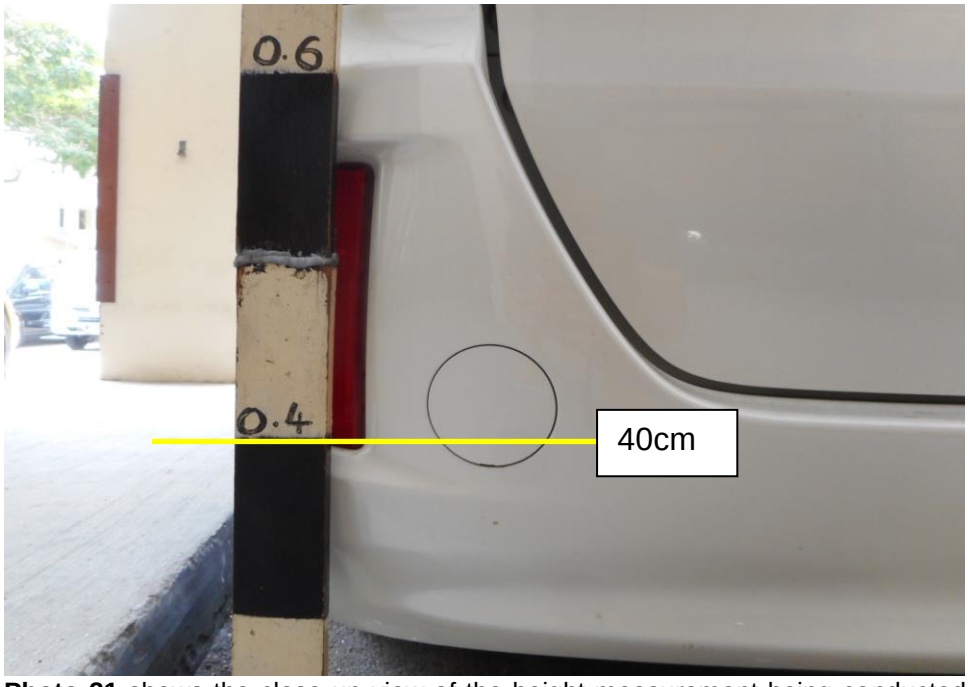


Photo 21 shows the close up view of the height measurement being conducted on the rear portion of Toyota. The height above ground level of where the paint scratch marks were found to the rear bumper tow hook cover of the Toyota was at 40cm.

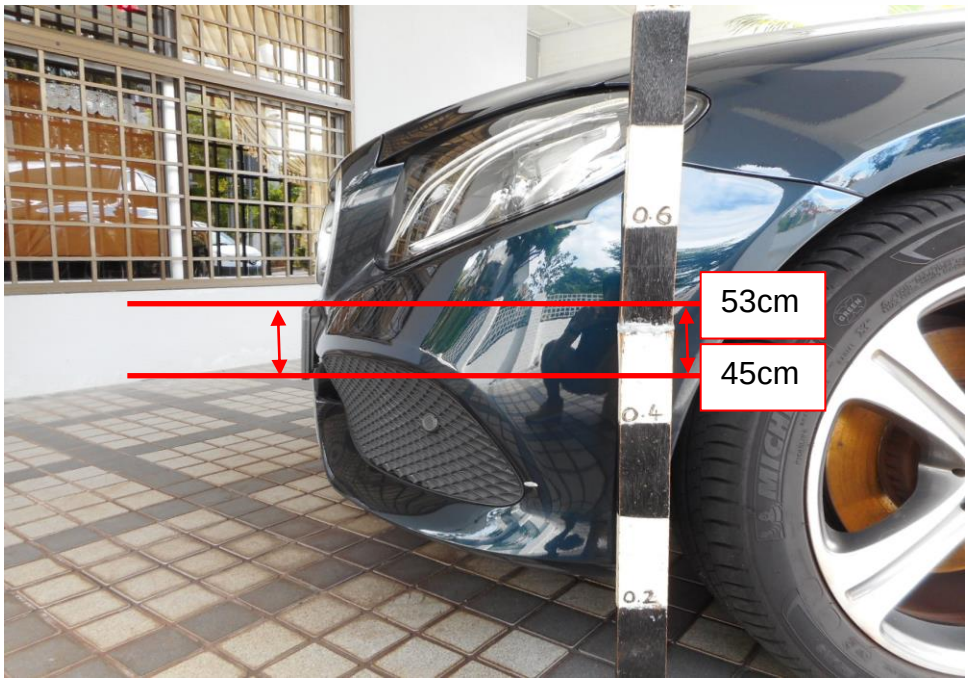


Photo 22 shows the close up view of the height measurement being conducted on the front portion of Mercedes. The front number plate was measured to be between 45cm to 53cm above ground level.

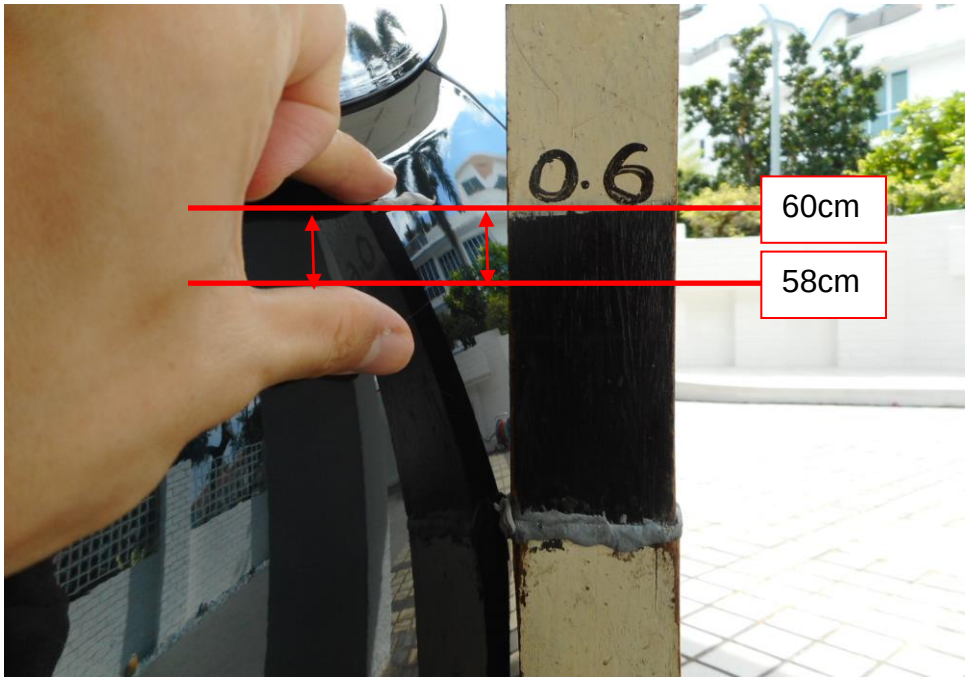


Photo 23 shows the close up view of the height measurement being conducted on the front portion of Mercedes. The scratch marks found on the front bumper left corner was measured to be between 58cm to 60cm above ground level.

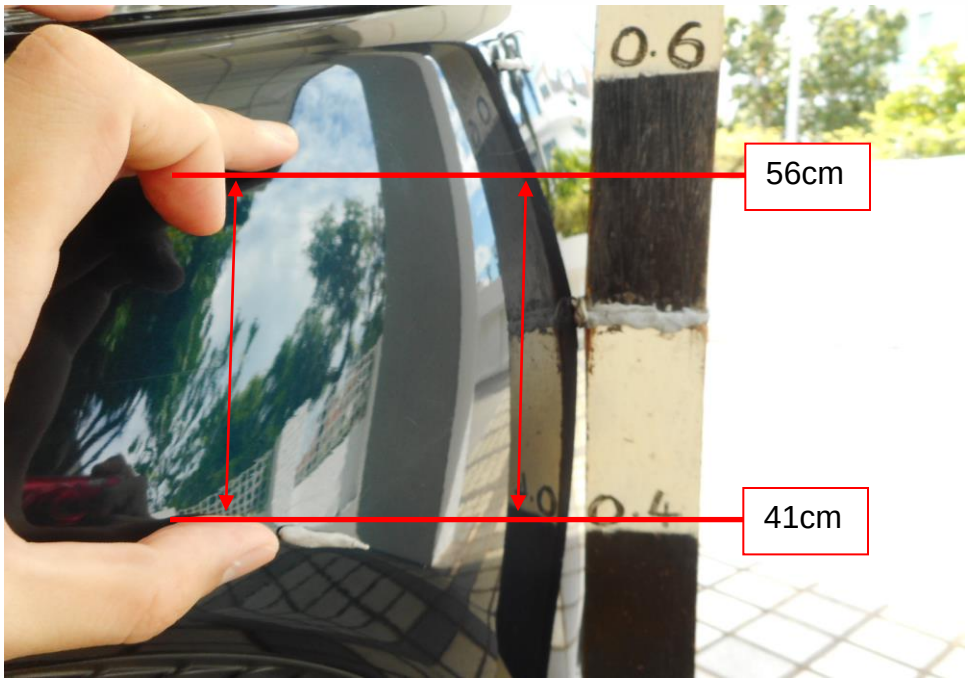


Photo 24 shows the close up view of the height measurement being conducted on the front portion of Mercedes. The scratch marks found on the front bumper left corner was measured to be between 41cm to 56cm above ground level.

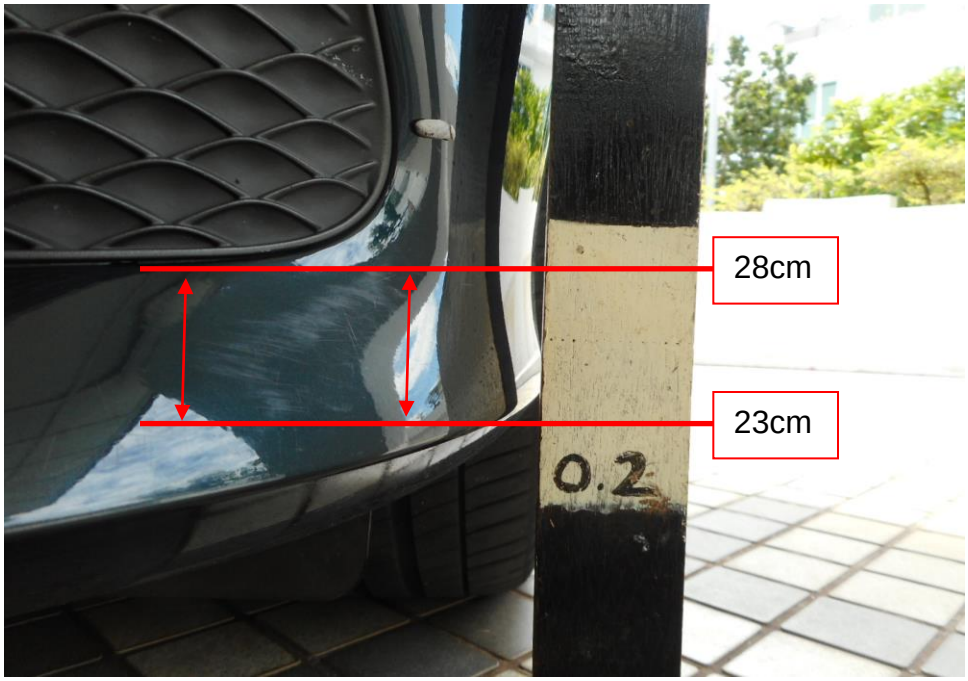


Photo 25 shows the close up view of the height measurement being conducted on the front portion of Mercedes. The scratch marks found on the front bumper left corner was measured to be between 23cm to 28cm above ground level.

17. We now set out below the findings that we had gathered following the height measurements that was conducted:-

a) the height above ground level of the range of damages (which included the dents and crack marks on the rear portion rear bonnet and rear bumper of Toyota) was measured to be at 60cm; 47cm, 42cm and 40cm respectively.

b) the height measurements above ground level of the front number plate on the front portion front bumper of the Mercedes was measured to be at 45cm to 53cm respectively;

c) the height above ground level of the scratch marks that we observed on the front portion front bumper left corner of the Mercedes was measured to be at 58cm to 60cm, 41cm to 56cm and 23cm to 28cm respectively;

d) The height measurements appear to suggest that there was no possible contact between the rear portion of Toyota and the front portion of Mercedes. The damages observed on the rear portion of Toyota was not a result of this contact and does not correspond to the damage observed on the front portion of the Mercedes.

Conclusion

18. Having investigated and technically analyzing the material evidence available at the time of writing this report, we are of the opinion that there was no possible contact between the rear bonnet, rear bumper portion of Toyota and the front number plate and the front bumper left corner portion of the Mercedes.

19. The damages on Toyota as compared to Mercedes is not consistent as the area of damage marks on the Toyota is of a different area as compared to the marks on Mercedes. Refer to photos 2 to 6 for Toyota and photos 9 to 15 of Mercedes above.

20. Both damages are not corresponding to their respective heights and inconsistent to their nature of contact.

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