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Our Ref : CI/EQI23001431/D

08 February 2023

**EQ Insurance Company Limited**

5 Maxwell Road #17-00  
Tower Block MND Complex  
Singapore 069110

**DAMAGE CONSISTENCY REPORT OF INCIDENT INVOLVING SGW 1670E  
AND SHB 161M ON 07 MARCH 2022**

1. I refer to your request dated 05 January 2023 to comment on the consistency of damage to the motor taxi SHB 161M; and if consistent, whether the extent of damage can possibly cause bodily injury to the occupant(s) seated inside the motor taxi SHB 161M.
2. The following documents were provided to me for my review and consideration in the preparation of this report: -
  - a) Singapore Police Report T/20220323/2017 of the driver of the motor car SGW 1670E (herein referred to as "**Motor Car**"), where amongst other information, the circumstance of incident was described;
  - b) Singapore Accident Statement of the driver of the motor taxi SHB 161M (herein referred to as "**Motor Taxi**"), where amongst other information, the circumstance of incident was described in the Singapore Police Report F/20220307/2097 that was attached;
  - c) 08 coloured photographs taken at the incident location;
  - d) Copy of Vehicle Damage Inspection Report of the Motor Taxi dated 28 March 2022 by LKK Auto Consultants Pte Ltd, including 40 coloured photographs of the Motor Taxi taken at the time of inspection;
  - e) A 25sec video recording of the incident taken from the CCTV camera onboard the Motor Taxi.
3. I now set out below my detailed analysis and findings.

**Nature of Incident**

4. From the Police Report of the driver of the Motor Taxi, it was stated that on 07 March 2022 at about 1929hrs, he was dropping off a passenger at 220 Jalan Sultan Road when the Motor Car, which was in front of the Motor Taxi reversed and collided onto the front bumper of the Motor Taxi.
5. The Police Report of the driver of the Motor Car had stated that the Motor Car was reversing into a parallel parking lot along Jalan Sultan when the Motor Taxi, which was behind the Motor Car, swerved head in into the lot. The rear portion of the Motor Car lightly tapped onto the Motor Taxi's front number plate. Upon alighting to check, there was no damage to the Motor Car and the Motor Taxi.
6. For this report, I will not be dealing with the issue of whether there was contact or not between the Motor Car and the Motor Taxi at the material time. The Police Reports had already established that there was contact.

**Video Recording**

7. The video recording of the incident was taken from a recording device that was mounted onto the front windscreen, slightly towards the left from the centre of the Motor Taxi. The recording was provided to me in a single recording and had showed the events just before the incident, the incident itself and the immediate events after the incident. The length (duration) of the video recording was 25secs. The images seen from this video recording were all captured directly from the recording device that was mounted onto the front windscreen of the Motor Taxi.
8. From the video recording, the Motor Taxi could be seen initially following behind the Motor Car. Both the Motor Car and the Motor Taxi then came to a stop, straddling the left most and second left lane of the roadway. The Motor Taxi stopped about one car length behind the Motor Car. Thereafter, the Motor Car begun reversing at an angle, attempting to parallel park into the empty space along the left most lane. The video recording also showed that the Motor Car was not reversing at a fast speed.

9. At about the 14sec mark of the video recording, the rear right portion of the Motor Car came into very close proximity to the front left portion of the Motor Taxi. It remained stationary at this position before moving forward about 2secs later to stop further in front of the Motor Taxi. Based on my observations, there was no obvious jerk or shaky image captured by the recording device during this 2secs. In other words, the recording device that was mounted directly onto a body part (front windscreen) of the Motor Taxi did not shake when the Motor Car was seen to be very close to the Motor Taxi. Screenshot below shows the 14sec mark of the video recording.



**Screenshot** shows the 14sec mark of the video recording. The rear right portion of the Motor Car came into very close proximity to the front left portion of the Motor Taxi. The Motor Car remained stationary at this position before moving forward about 2secs later and coming to a stop further in front of the Motor Taxi. Based on my observations, there was no obvious jerk or shaky image captured by the recording device during this 2secs.

10. Since the recording device was mounted directly onto a body part of the Motor Taxi, the lack of any obvious jerk or shaky image captured by the recording device would indicate that the Motor Taxi did not shake or jerk. This suggests that the contact from the Motor Car was very slight and minimal. To put things into perspective, the impact force arising from the Motor Car's contact was not significant enough to cause the Motor Taxi to shake or jerk.

## Damage

11. The Motor Taxi was inspected by LKK Auto Consultants Pte Ltd on 08 March 2022, a day after the incident. Basing on the photographs taken at the time of inspection, I note that the Motor Taxi had sustained damage at its front left portion. Marks of grazing nature and distortion were seen at the left side of the front bumper. The front number plate was also bent. The area of damage to the Motor Taxi corresponds to the area where the Motor Car came into very close proximity as shown in the screenshot above.
12. Basing on the Vehicle Damage Inspection Report of the Motor Taxi dated 28 March 2022 by LKK Auto Consultants Pte Ltd, body parts of the Motor Taxi that were assessed to be damaged and recommended to be replaced were the front bumper, which was indicated as distorted and the front number plate, which was indicated as bent. The front bumper grille, front bumper lower grille, front bumper reinforcement, front bumper sponge, front bumper left side moulding, front left fog lamp and front left headlamp amongst others were all indicated as not necessary, which would mean that these body parts were undamaged and re-usable. See photo 1 – 4 below.



**Photo 1** shows a general view of the frontal portion of the Motor Taxi at the time of inspection by LKK Auto Consultants Pte Ltd. The Motor Taxi was observed to have sustained damage at its front left portion (circled). The area of damage to the Motor Taxi corresponds to the area where the Motor Car came into very close proximity.





**Photo 2** shows a closer view of the damaged area of the Motor Taxi at the time of inspection by LKK Auto Consultants Pte Ltd. The Motor Taxi was observed to have sustained damage at its front left portion. Marks of grazing nature was observed at the left side of its front bumper (circled). It was further observed that the front number plate was bent (arrowed).



**Photo 3** shows a closer view of the marks of grazing nature that was observed at the left side of the Motor Taxi's front bumper.



**Photo 4** shows a closer view of the bent front number plate of the Motor Taxi at the time of inspection by LKK Auto Consultants Pte Ltd.

13. Given the extent of physical damage seen on the Motor Taxi and its body parts that were assessed to be damaged and recommended to be replaced, it would not be unreasonable to say that the Motor Taxi was exposed to a relatively light/minor impact force from the Motor Car that did not dissipate beyond the front bumper of the Motor Taxi.
14. As for the Motor Car, the driver did not lodge a Singapore Accident Statement of the incident. Photographs of the Motor Car that will be attached in the Singapore Accident Statement is hence not available. I did physically inspect the Motor Car on 05 January 2023, but any observations gathered during this inspection may not be accurate to provide analysis into the Motor Car's physical condition immediately after the incident given the long gap between the incident date and my inspection date. For the purpose of this report, the photographs of the Motor Car that were taken at the incident location were relied on.
15. The photographs that were taken at the incident scene appears to show that the Motor Car's rear bumper was dented at the right side. A scratch mark was also seen on the lower part of the rear bumper, nearer to the centre of the Motor Car. The area of damage to the Motor Car also corresponds to the area where it came into very close proximity with the Motor Taxi. See photo 5 below.



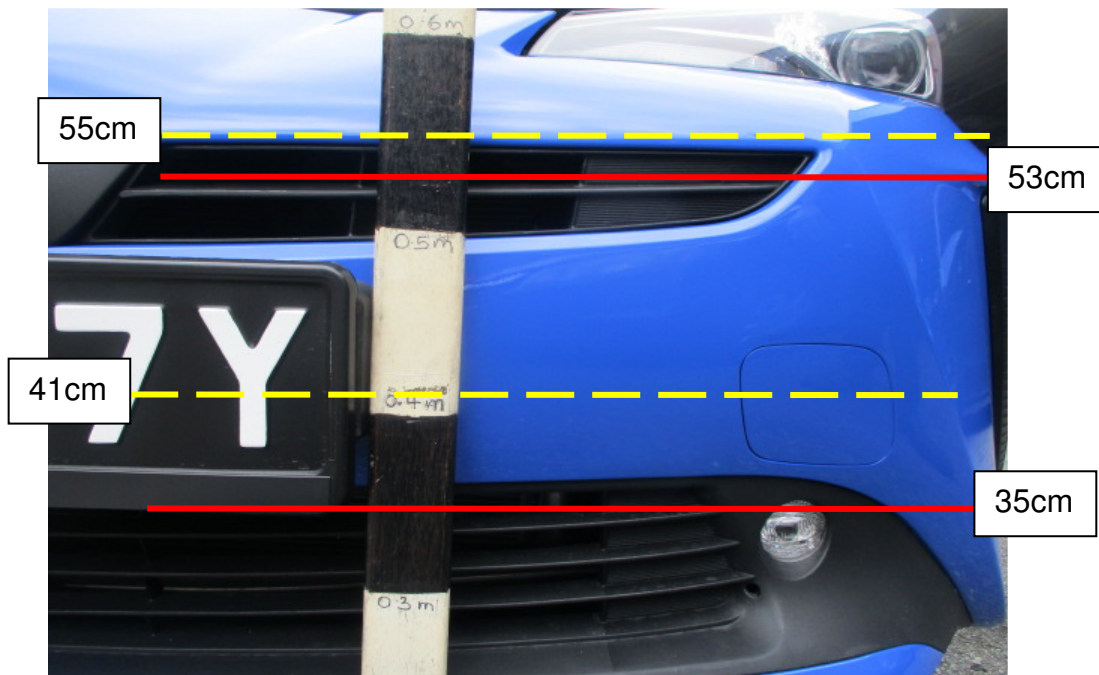
**Photo 5** shows the Motor Car at the incident location. My examination of the photographs taken at the incident location appears to show that the Motor Car's rear bumper was dented at the right side (circled). This was established by taking reference from the contour line design of the rear bumper highlighted by the red arrow, which was pushed inwards as compared to the same line outside of the red circle. A scratch mark (yellow arrow) was also seen on the lower part of the rear bumper, nearer to the centre of the Motor Car. Overall, the area of damage to the Motor Car corresponds to the area where it came into very close proximity with the Motor Taxi.

16. For completeness, I did not find any dent to the Motor Car's rear bumper at the time of my inspection. This is because the rear bumper may have naturally returned back to its original shape due to the elasticity of the thermoplastic material that it is constructed of. I did however find a faint scratch mark on the Motor Car's rear bumper, which appears to be the same scratch mark on the rear bumper that was seen in the photographs taken at the incident location. This would indicate to me that no repair work was carried out to Motor Car, the rear bumper fitted on the Motor Car at the time of my inspection was the same rear bumper at the time of incident.
17. Since there was no repair work carried out to the Motor Car, it would not be unreasonable to also say that the Motor Car, like the Motor Taxi, was exposed to a relatively light/minor impact force at the time of contact.



## Consistency of Damage

18. In order to verify the consistency of damage to the Motor Taxi, I had carried out height measurements of the Motor Car and the Motor Taxi. For the Motor Taxi, a similar make and model was used. The measurements had mainly focused on the height above ground level of the damaged area on the Motor Car and the Motor Taxi. Measurements obtained were thereafter compared in order to determine whether the damage seen to the Motor Taxi was caused by the Motor Car.
19. The height above ground level of the Motor Taxi's damaged area (refer to photograph 1 & 2 above) was between 35cm to 53cm. The height above ground level of the Motor Car's damaged area (refer to photograph 5 above) was between 41cm to 55cm. The Motor Car's damaged area was within the height above ground level of the Motor Taxi's damaged area. The damage to the Motor Taxi is hence consistent and caused by the Motor Car. See photo 6 & 7 below.



**Photo 6** shows height measurement being conducted on a similar make and model vehicle as the Motor Taxi. The height above ground level of the Motor Taxi's damaged area (refer to photograph 1 & 2 above) was approximately 35cm to 53cm. The height above ground level of the Motor Car's damaged area (refer to photograph 5 above) was between 41cm to 55cm, as highlighted by the yellow dotted lines. Measurements of the Motor Car are shown in photograph 7 below.





**Photo 7** shows height measurement being conducted on the Motor Car. The height above ground level of the Motor Car's damaged area (refer to photograph 5 above) was approximately 41cm to 55cm. The Motor Car's damaged area was within the height above ground level of the Motor Taxi's damaged area (refer to photograph 1 & 2 above).

### **Bodily Injury**

20. Having established that the damage to the Motor Taxi is consistent and caused by the Motor Car, the following paragraphs discusses the second part of your request ie whether the extent of damage can possibly cause bodily injury to the occupant(s) seated inside the Motor Taxi.
21. Earlier in paragraph 9 and paragraph 10, I had commented that there was no obvious jerk or shaky image seen from the video recording, and that the lack of any obvious jerk or shaky image would indicate that the impact force from the Motor Car's contact was very slight and minimal, not significant enough to cause the Motor Taxi to shake or jerk. The extent of damage seen to the Motor Taxi also suggests very slight and minimal nature of contact.
22. To put into context the impact force required to shake the Motor Taxi, one can take the example of a reasonably able-bodied person exerting a force onto the body panels of the motor car by way of using his/her palms to press onto the body panels and releasing the press in a quick multiple continued motion that is akin to rocking the motor vehicle. Such example is commonly seen at petrol stations in Malaysia where drivers can often be seen shaking/rocking their motor cars during re-filling of petrol.

23. Co-relating the aforesaid example with this particular case, it would not be unreasonable to say that the impact force onto the Motor Taxi arising from the contact from the Motor Car was less than a person physically rocking the Motor Taxi given that there was no shaking/rocking/jerking of the Motor Taxi. Correspondingly, occupant(s) seated on the Motor Taxi at the material time will not be subjected to any sudden vigorous/violent/awkward etc movement of their body to possibly cause bodily injury.

24. To add on, occupant(s) seated on motor cars that are being physically rocked will, in all likelihood, find themselves not getting injured from such situations, more so for this particular case, when there was not even any obvious jerk or shaky image seen from the video recording.

## Conclusion

25. Having analyzed the information/evidence gathered for this case, I am of the opinion that there was contact between the rear right portion of the Motor Car and the front left portion of the Motor Taxi. The Motor Car was reversing whilst the Motor Taxi was stationary at the material time of contact.

26. Height measurements of the Motor Taxi's damaged area and the Motor Car's damaged area revealed that the damage to the Motor Taxi is consistent and caused by the Motor Car.

27. The impact force from the Motor Car's contact was very slight and minimal, which did not cause the Motor Taxi to shake or jerk. Correspondingly, occupant(s) seated inside the Motor Taxi will not experience any sudden vigorous/violent/awkward etc movement of their body that could possibly result in bodily injury.



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