

Your Ref : 542842  
Our Ref : CS/MSG18000094/N-1

12 January 2017

**M/s MSIG Insurance (Singapore) Pte Ltd**

16 Raffles Quay #24-01  
Hong Leong Building  
Singapore 048581  
(Motor Claims Department)

**AUTOMOBILE TECHNICAL INVESTIGATION REPORT OF ACCIDENT  
INVOLVING SHB 7549H AND SKN 6672S ON 27 DECEMBER 2017**

1. We refer to your letter dated 8 January 2018 and the instructions therein to comment on the damage consistency of the motor taxi SHB 7549H involved in the captioned accident, in particular to establish whether there was possibly contact between the rear right portion of the motor taxi SHB 7549H and the front left portion of the motor car SKN 6672S; and if there was contact, whether the damage on the rear right portion of the motor taxi SHB 7549H 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 of the driver of the motor taxi SHB 7549H (herein referred to as "**Taxi**"), where amongst other information, the circumstances of accident was described;
  - b) Singapore Accident Statement of the driver of the motor car SKN 6672S (herein referred to as "**Mazda**"), where amongst other information, the circumstances of accident was described together with 6 coloured photographs of the Mazda at the time of reporting;
  - c) 8 coloured photographs of the damage to the Taxi taken during the Pre-Repair Survey by LKK Auto Consultants Pte. Ltd.;
  - d) 95 coloured photographs taken during the physical inspection of the Mazda;
  - e) 8 coloured post-accident photographs taken by the driver of the Mazda.

3. In preparation of this report, we had conducted height measurements of the rear portion of the Taxi (using a similar make and model). We had also conducted a physical inspection and thereafter height measurements of the front portion of the Mazda; both collectively referred herein as **"Involved Motor Vehicles"**. An analysis of all the available documents and information gathered was subsequently carried out.
4. We now set out below our detailed findings and analysis.

#### Nature of Accident

5. From the Singapore Accident Statement of the driver of the Taxi, Ms Wang Hui-Lih (herein referred to as **"Ms Wang"**) on 27 December 2017 at approximately 0849 hours was driving along the 3rd lane of Bishan Road, intending to enter the taxi stand on the 4th lane. She signalled her intention to turn left and checked for oncoming vehicles. She suddenly felt an impact at the rear of the Taxi. She alighted to check and realized that the front portion of the Mazda had rear-ended into the Taxi.
6. The Singapore Accident Statement of the driver of the Mazda, Ms Mak Ya Ting (herein referred to as **"Ms Mak"**) however had stated that on the accident date time and location, she had signalled her intention to switch to the 1st lane from the 3rd lane. She had seen the driver of the Taxi attempting to change lanes and that there was no vehicle in front of the Taxi. However, she mentioned that the driver of the Taxi had suddenly stopped the Taxi in front of the Mazda instead of proceeding to switch lanes. This caused Ms Mak to brake abruptly before the Mazda collided with the Taxi. She did not feel any impact. The driver of the Taxi stayed in the Taxi and only alighted after Ms Mak horned at her. Both drivers took photos at the accident location before moving their vehicles to the side of the road to check for damages. They did not notice any scratches or dents on both vehicles and none of them were injured. They exchanged particulars before going their separate ways.

### Damage to the Taxi

7. From our examination of the photographs taken during the Pre- Repair Survey conducted by LKK Auto Consultants Pte. Ltd. about 7 days after the accident, we observed paint graze marks above and around the rear right bumper reflector of the Taxi. However we also noted that the rear bumper was not misaligned at its right corner edge. See photos 1 - 3 below.



**Photo 1** shows a rear view of the Taxi at the time of the Pre- Repair Survey conducted by LKK Auto Consultants Pte. Ltd. which was taken about 7 days after the accident. We observed paint graze marks above and around the rear right bumper reflector of the Taxi (circled). However we also noted that the rear bumper was not misaligned at its right corner edge (yellow arrows).





**Photo 2** shows a closer view of the lower right portion of the rear bumper of the Taxi. We observed paint graze marks above (circled) and around (yellow arrows) the rear right bumper reflector of the Taxi.



**Photo 3** shows a close up view of the lower right portion of the rear bumper of the Taxi. We observed paint graze marks above (circled) and around (yellow arrows) the rear right bumper reflector of the Taxi.

### Physical Inspection of the Mazda

8. The Mazda was physically inspected on 11 January 2018 at the premises of the Agility building which is located at 7 Toh Tuck Link, Singapore 596227.
9. The mileage recorded was 108, 452km.
10. At the time of our inspection, we note that the Mazda had sustained a slight impact directly onto the left portion of its front bumper. Closer examination had showed faint paint scratch marks above the front left air vent. We also noted that the front bumper was slightly misaligned at its left corner edge. See photos 4 - 9 below.



**Photo 4** shows the general view of the front portion of the Mazda at the time of inspection. We noted that the Mazda had sustained a slight impact directly onto the left portion of its front bumper. Closer examination had showed faint paint scratch marks above the front left air vent (circled). We also noted that the front bumper was slightly misaligned at its left corner edge (arrowed).



**Photo 5** shows a closer view of the left portion of the front bumper of the Mazda at the time of inspection. We observed faint paint scratch marks above the front left air vent (circled).



**Photo 6** shows a closer view of the faint paint scratch marks above the front left air vent of the Mazda (circled).



**Photo 7** shows a close up view of the faint paint scratch marks above the front left air vent of the Mazda (circled).



**Photo 8** shows a close up view of the right corner edge of the front bumper of the Mazda. We observed that there was no misalignment at the corner edges (red arrows).





**Photo 9** shows a close up view of the left corner edge of the front bumper of the Mazda. We observed that there was a slight misalignment at the left corner edge (red arrows).

### Accident Scene Photographs

11. For this case, the Singapore Accident Statement of Ms Mak had contained several photographs taken post- accident. It shows the final position of the Involved Motor Vehicles at the accident scene which corroborates with Ms Mak's statement how the accident occurred.
  
12. Our review of the available accident scene photographs had showed the Mazda to be behind the Taxi. Upon closer examination of these photographs, we observed the same paint graze marks on the lower right portion of the rear bumper of the Taxi as per the Pre- Repair Survey photographs. The final rest position of the Involved Motor Vehicles after the accident and the damages sustained to the Taxi are consistent to the circumstances of the accident, suggesting that there was contact between them. See photos 10 - 13 below.





Photo 10 shows a rear view of the final rest position of the Involved Motor Vehicles post- accident which corroborates with Ms Mak's statement how the accident occurred.



Photo 11 shows a front view of the final rest position of the Involved Motor Vehicles post- accident which corroborates with Ms Mak's statement how the accident occurred. The position of the Involved Motor Vehicles after the accident is consistent to the circumstances of the accident, suggesting that there was contact between them (circled).



**Photo 12** shows a close view of the lower right portion of the rear bumper of the Taxi taken post- accident. We observed the same paint graze marks on the lower right portion of the rear bumper of the Taxi as per the Pre- Repair Survey photographs (circled).



Photo 13 shows a close up view of the paint graze marks on the lower right portion of the rear bumper of the Taxi (circled).

### Height Measurement

13. Notwithstanding the accident scene photographs which had showed contact between the left portion of the front bumper of the Mazda and the lower right portion of the rear bumper of the Taxi, we had conducted a height configuration test to determine whether the damage observed on the left portion of the front bumper of the Mazda corresponds to the damage observed on the lower right portion of the rear bumper of the Taxi.
14. In order to determine this, we had measured the height above ground level of the rear bumper of the Taxi (using a similar make and model) at the area where the paint graze marks were found. We had thereafter compared this measured height against the front bumper of the Mazda, where the faint paint scratch marks were found. See photos 14 & 15 below.





**Photo 14** shows the height measurement being conducted on the rear bumper of the Taxi (using a similar make and model). The height above ground level of the lowest paint graze mark found above the rear right bumper reflector was measured to be approximately 48cm. The height above ground level of the highest paint graze mark found above the rear right bumper reflector was measured to be approximately 55cm.



**Photo 15** shows the height measurement being conducted on the front bumper of the Mazda. The faint paint scratch marks found on the Mazda are within the 48cm to 55cm range.

15. 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 lowest paint graze mark found above the rear right bumper reflector of the Taxi was measured to be approximately 48cm;
- b) the height above ground level of the highest paint graze mark found above the rear right bumper reflector of the Taxi was measured to be approximately 55cm;
- c) the faint paint scratch marks found on the Mazda are within the 48cm to 55cm range;
- d) the height measurements appear to support the findings of possible contact between the front left portion of the Mazda and the rear right portion of the Taxi. The damage observed on the front left portion of the Mazda was a result of this contact and corresponds to the damage observed on the rear right portion of the Taxi;
- e) Our findings are further supported by the accident scene photographs which had showed contact between the Involved Motor Vehicles.

### **Conclusion**

16. Having investigated and technically analyzing the material evidence available at the time of writing this report, we are of the opinion that there was contact between the front left portion of the Mazda and the rear right portion of the Taxi at the material time.
17. The contact was relatively minor and had occurred when the Mazda attempting to switch lanes, resulting in a slight contact of grazing nature between the front left portion of the Mazda and the rear right portion of the Taxi, causing slight visible damage to both vehicles.
18. Both damages are corresponding to their respective heights and are consistent to their nature of contact.

19. The pattern of the faint paint scratch marks observed on the front left portion of the Mazda corresponds to the pattern of the paint graze marks observed on the rear right portion of the Taxi.

**Muhd Nazril**

Technical Investigator

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