



Your Ref : 549528  
Our Ref : CS/MSG18002984/N

25 May 2018

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

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Hong Leong Building  
Singapore 048581  
(Motor Claims Department)

**AUTOMOBILE TECHNICAL INVESTIGATION REPORT OF ACCIDENT  
INVOLVING SFT 4381Y AND SKM 2228Z ON 9 FEBRUARY 2018**

1. We refer to your letter dated 15 May 2018 and the instructions therein to comment on the damage consistency of the motor car SFT 4381Y involved in the captioned accident, in particular to establish whether there was possibly contact between the left front portion of the motor car SFT 4381Y and the left front portion of motor car SKM 2228Z; and if there was contact, whether the damage on the left front portion of the motor car SFT 4381Y 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 Police Report and Accident Statement of the driver of the motor car SFT 4381Y (herein referred to as "**Toyota**"), where amongst other information, the circumstances of accident was described together with 10 coloured photographs of the Toyota at the time of reporting;
  - b) Singapore Accident Statement of the driver of the motor car SKM 2228Z (herein referred to as "**BMW**"), where amongst other information, the circumstances of accident was described together with 10 coloured photographs of the BMW at the time of reporting;
  - c) 11 coloured photographs of the damage to the Toyota taken during the Pre- Repair Survey by LKK Auto Consultants Pte. Ltd.;
  - d) 4 post-accident photographs taken by a witness of the accident.

3. In preparation of this report, we had conducted a physical inspection and thereafter height measurements of the left front portion of the Toyota. We had also conducted a physical inspection and thereafter height measurements of the left front portion of the BMW; both collectively referred herein as **"Involved Motor Cars"**. 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 Police Report and Accident Statement of the driver of the Toyota, Mr Chan Yew Wai (herein referred to as **"Mr Chan"**), he had parked the Toyota at the basement carpark of Thomson Plaza on 9 February at 1920 hours. He then went for dinner with his family. When they returned to the Toyota at 2150 hours, Mr Chan noticed a note on the front windscreen. It was left by someone along with the contact number who witnessed the driver of a BMW bearing registration number SKM 2228Z hitting the Toyota while trying to exit the parking lot. Mr Chan inspected the Toyota and noticed a slight dent and deep scratches on the front bumper. The front number plate was cracked. The left front wheel rim was scratched and had a blue paint mark. Later that night, Mr Chan's daughter, Ms Chan Yu Xuan called the witness who informed her that the BMW had collided into the front and left front portion of the Toyota, causing damages to the Toyota. The driver of the BMW was having difficulties reversing out of the parking lot. The witness forwarded Mr Chan several photographs which she had taken of the accident. Mr Chan is unsure if there is any security camera at the accident location. The in-vehicle recording device of the Toyota was not working at the material time of accident.
6. The Singapore Accident Statement of the driver of the BMW, Ms Yong Fong Peng (herein referred to as **"Ms Yong"**) on the other hand, had stated that on 9 February 2018 at 2130 hours she was reversing out of the parking lot which was in the middle of 2 parked vehicles. She mentioned that she had to repeatedly manoeuvre the BMW due to the lack of clearance between the parked vehicles. She noticed a lady taking photographs of the BMW. Ms Yong asked her husband and owner of the BMW, Mr Tay Chong Kam who was waiting outside the parking lot if she had hit any vehicle. He told Ms Yong that he did not hear any sound or see any damage to the other parked vehicles. Ms Yong was surprised that she received a 3rd party insurance claim.

### **Physical Inspection of the Toyota**

7. The Toyota was physically inspected on 22 May 2018 at the premises of LKK Auto Consultants Pte. Ltd. located at 51 Ubi Avenue 1, #01/02-25, Paya Ubi Industrial Park, Singapore 408933. The mileage of the Toyota recorded at the time of our inspection was 206,070km.
8. At the time of our inspection, the Toyota was observed to have sustained relatively minor impact damage at its left frontal portion. The left front portion of the front bumper was observed to be grazed. Graze marks were also found on the left front tyre fender. Its front number plate was observed to be cracked.
9. In general, the physical condition found on the Toyota indicates that it had sustained an impact directly onto its left frontal portion. This impact was relatively light as we did not observe any obvious misalignment at the corner edges of the front bumper, adjacent to the front fenders. See photos 1 – 9 below.



**Photo 1** shows the general left view of the front of the Toyota at the time of our inspection. Its left frontal portion was observed to have sustained relatively minor impact damage, which had affected its front bumper and front number plate.



**Photo 2** shows the cracked front number plate of the Toyota (circled). This was towards the left side of the front number plate.



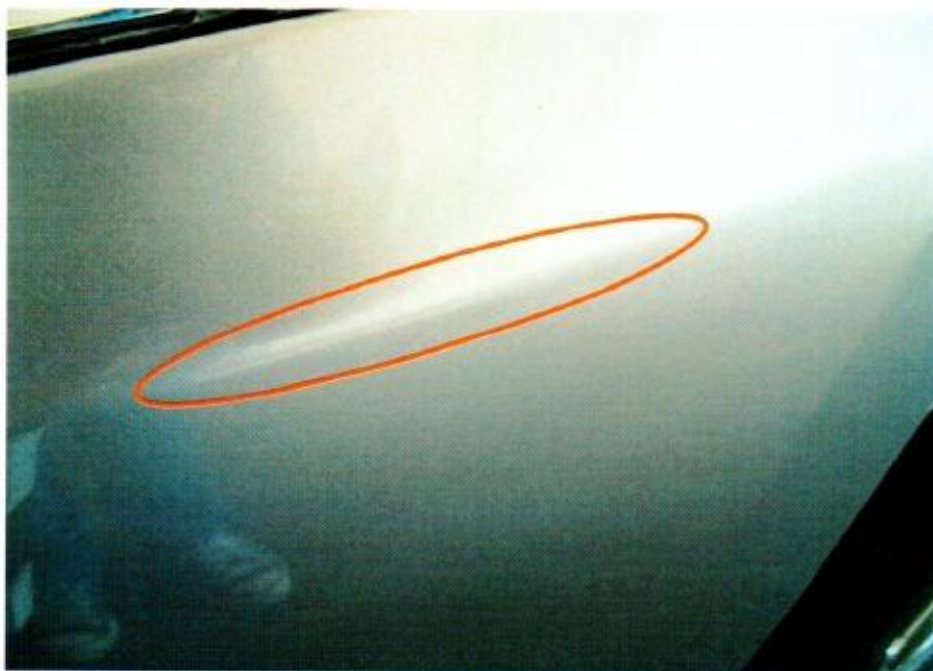
**Photo 3** shows the graze marks found on the left portion of the Toyota's front bumper (circled).



**Photo 4** shows a close up view of the graze marks found on the left portion of the Toyota's front bumper (circled).



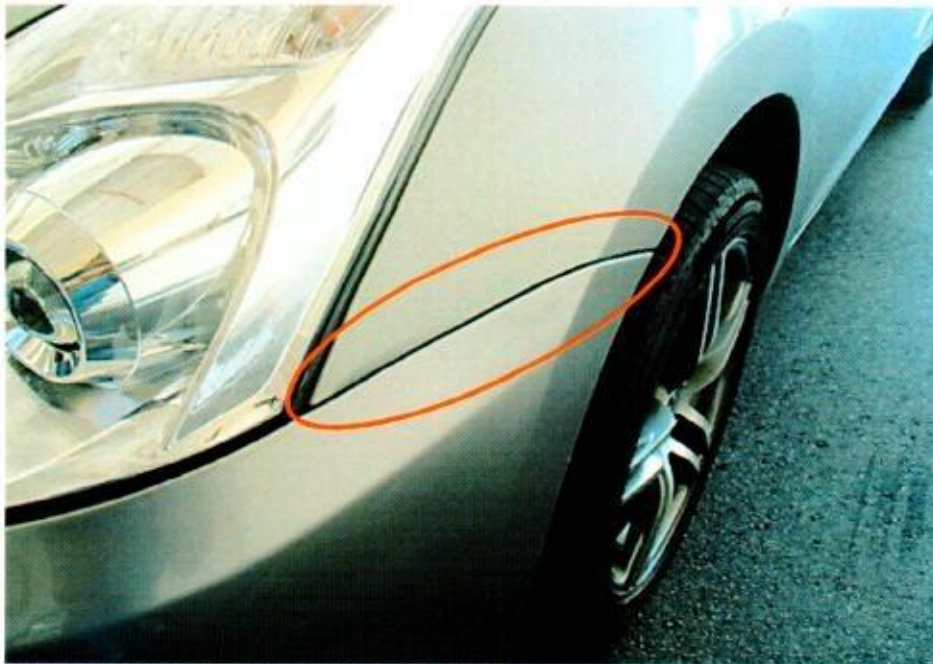
**Photo 5** shows a close up view of the graze marks found on the lower left portion of the Toyota's front bumper (circled).



**Photo 6** shows a close up view of the graze marks found on the left portion of the Toyota's front bumper (circled).



**Photo 7** shows a close up view of the graze marks found on the Toyota's left front tyre fender (circled).



**Photo 8** shows no obvious misalignment at the corner edges of the Toyota's front bumper, adjacent to its front left fender (circled). This would indicate that the impact onto the frontal portion of the Toyota was relatively light.



**Photo 9** shows no obvious misalignment at the corner edges of the Toyota's front bumper, adjacent to its front right fender (circled). This would indicate that the impact onto the frontal portion of the Toyota was relatively light.

10. Our comparison of the condition of the Toyota at the time of our inspection with the photographs of the Toyota that were taken by the witness after the accident had showed similar condition, which was discussed earlier in paragraph 8 & 9, on the frontal portion of the Toyota immediately post- accident. See photos 10 & 11 below of the Toyota taken by the witness at the accident scene.



**Photo 10** shows the condition of the Toyota's front number plate as depicted in the photographs that were taken by the witness post- accident. The same crack towards the left side of the front number plate was observed (circled).



**Photo 11** shows the condition of the Toyota's front bumper as depicted in the photographs that were taken by the witness post- accident. The same graze marks on the lower left portion of the front bumper were observed (circled).

### **Physical Inspection of the BMW**

11. The BMW was physically inspected on 21 May 2018 at the home premises of Ms Yong located at 19 Merryn Road, Singapore 298468. The mileage recorded was 38,905km.
12. At the time of our inspection, we note that there were graze marks on the left portion of the front bumper as well as on the left fog lamp cover. We also found relatively minor paint cracks on the left portion of the front bumper, adjacent to the left fog lamp cover as well as below the left headlight.
13. The paint cracks on the left portion of the front bumper were a result of load/force pressing onto the front bumper, inwards. This load/force was significant as we did observe a misalignment at the left corner edge of the front bumper. See photos 12 - 18 below.



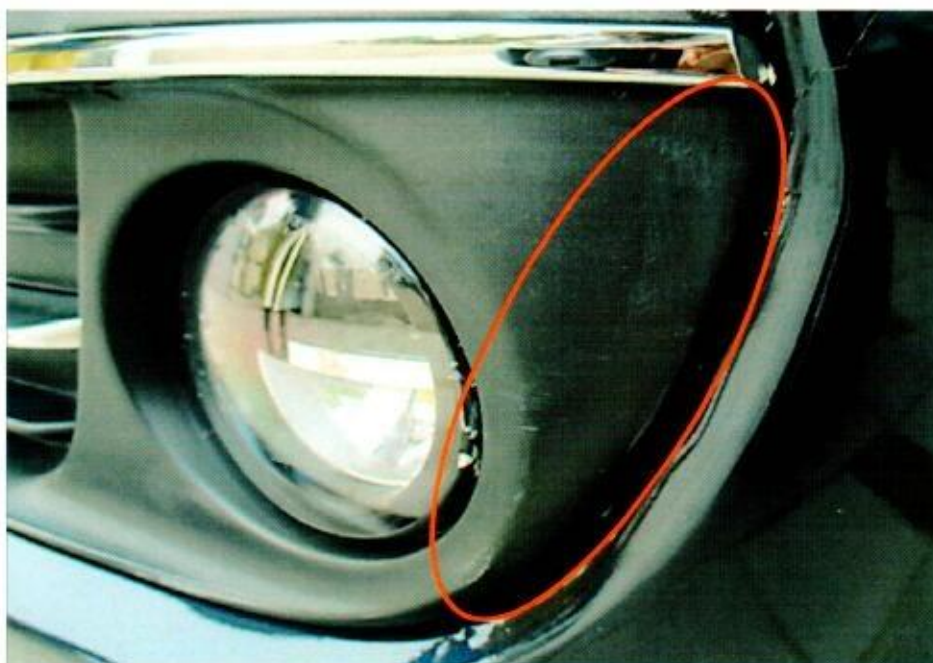
**Photo 12** shows the general left view of the front of the BMW at the time of inspection. Its front portion was observed to have sustained relatively minor impact damage, which had affected its front bumper only.



**Photo 13** shows upon closer inspection, we note that there were graze marks on the left portion of the front bumper as well as on the left fog lamp cover (circled). We also found relatively minor paint cracks on the left portion of the front bumper, adjacent to the left fog lamp cover as well as below the left headlight (arrowed).



**Photo 14** shows a close up view of the graze marks found on the left portion of the front bumper (circled).



**Photo 15** shows a close up view of the graze marks found on the left fog lamp cover of the BMW (circled).



**Photo 16** shows a close up view of the relatively minor paint crack on the left portion of the front bumper, adjacent to the left fog lamp cover (circled).



**Photo 17** shows a close up view of the relatively minor paint crack on the left portion of the front bumper, below the left headlight (circled).



**Photo 18** shows a misalignment at the left corner edge of the BMW's front bumper (circled). The paint cracks on the left portion of the front bumper were a result of load/force pressing onto the front bumper, inwards. This load/force was significant, causing the misalignment.

### **Accident Scene Photograph and Technical Analysis**

14. For this case, based on the nature of damages to the left front portion of the Toyota, it would appear that the point of contact between the Involved Motor Cars would be the left front portion of the BMW and the left front portion of the Toyota as the BMW was reversing out of the parking lot whilst the Toyota was parked. The impact may have been caused by the left front portion of the BMW grazing against the left front portion of the parked Toyota, causing the graze marks on the left front portion of the Involved Motor Cars.
15. The witness had provided Mr Chan a photograph of the Involved Motor Cars taken at the accident scene after the BMW had reversed out of the parking lot. Upon closer examination of the accident scene photograph, we noticed the same graze marks on the lower left portion of the BMW that we observed during our physical inspection. See photo 19 below.

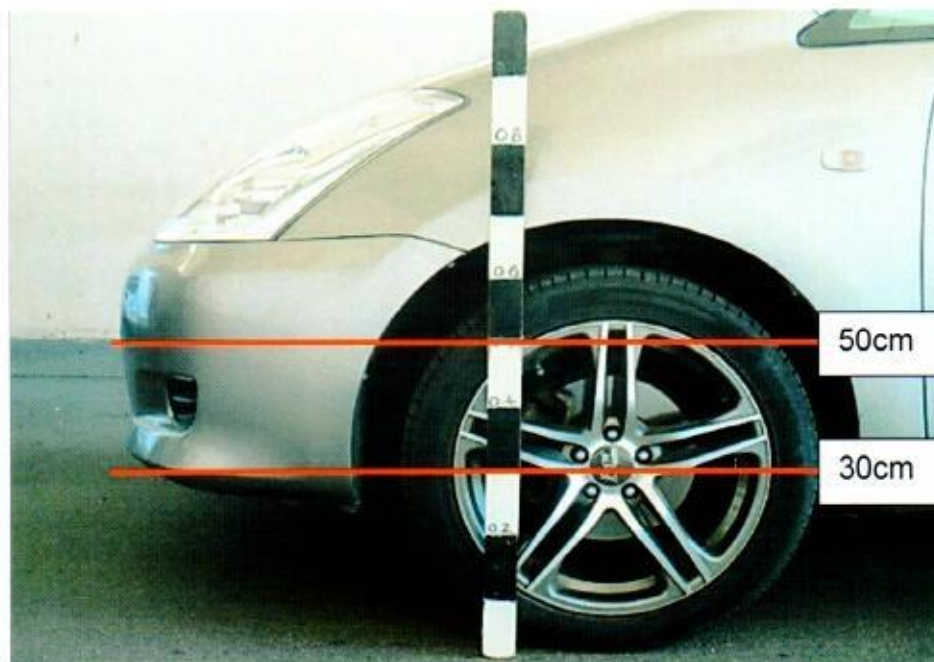


**Photo 19** shows the Involved Motor Cars at the accident scene after the BMW had reversed out of the parking lot. Upon closer examination, we noticed the same graze marks on the lower left portion of the BMW's front bumper that we observed during our physical inspection (circled)

### Height Measurement

16. We had conducted a height configuration test to determine whether the damages observed on the left front portion of the Toyota corresponds to the damage observed on the left front portion of the BMW.

17. In order to determine this, we had measured the height above ground level of the left front portion of the Toyota, at the area where the graze marks were found. We had thereafter compared this measured height against the left front portion of the BMW. See photos 20 & 21 below.



**Photo 20** shows the height measurement being conducted on the left front portion of the Toyota. The graze marks on the left front portion of the Toyota were between the height ranges of 30cm to 50cm above ground level.



**Photo 21** shows the height measurement being conducted on the left front portion of the BMW. The paint graze marks on the left portion of the front bumper and paint crack adjacent to the left fog lamp cover of the BMW are within the 30cm to 50cm range.

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

- a) the graze marks on the left front portion of the Toyota were between the height ranges of 30cm to 50cm above ground level;
- b) the paint graze marks on the left portion of the front bumper and paint crack adjacent to the left fog lamp cover of the BMW are within the 30cm to 50cm range;
- c) the height measurements appear to support the findings of possible contact between the left front portion of the Toyota and the left front portion of the BMW.

## **Conclusion**

19. 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 left front portion of the Toyota and the left front portion of the BMW at the material time of accident.
20. The impact force from the contact was relatively minor and had occurred as the BMW was reversing out of the parking lot whilst the Toyota was parked. The impact resulted in a slight contact of grazing nature between the left front portion of the Toyota and the left front portion of the BMW, causing significant permanent damage to both vehicles.
21. Both damages are corresponding to their respective heights and are consistent to their nature of contact. Furthermore the pattern of the graze marks observed on the left front portion of the Toyota corresponds to the pattern of the paint graze marks observed on the left front portion of the BMW.



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