

Your Ref : M574771 7 December 2018

Our Ref : CS/MSG18021682/N

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 INCIDENT INVOLVING SKT 842B AND SLD 2244L ON 25 OCTOBER 2018

- 1. We refer to your letter dated 30 November 2018 and the instructions therein to comment on the damage consistency of the motor car SKT 842B involved in the captioned accident, in particular to establish whether there was possibly contact between the front of the motor car SLD 2244L and the rear of motor car SKT 842B; and if there was contact, whether the damage on the frontal portion of the motor car SLD 2244L 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 car SKT 842B (herein referred to as "**Nissan**"), where amongst other information, the circumstances of accident was described together with 19 coloured photographs of the Nissan at the time of reporting;
 - b) Singapore Accident Statement of the driver of the motor car SLD 2244L (herein referred to as "Mercedes"), where amongst other information, the circumstances of accident was described together with 10 coloured photographs of the Mercedes at the time of reporting;
 - c) 2 coloured photographs taken at the accident scene by the driver of the Nissan:
 - d) 2 coloured photographs taken at the accident scene by the driver of the Mercedes;
 - e) 32 coloured photographs taken during our inspection of the Nissan;
 - f) 46 coloured photographs taken during our inspection of the Mercedes.



- 3. In preparation of this report, we had conducted a physical inspection of the Nissan and thereafter height measurements of the frontal portion of the Nissan. A physical inspection of the Mercedes and thereafter height measurements of the frontal portion of the Mercedes, both collectively referred herein as "Involved Motor Cars", was also carried out.
- 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 Nissan, Mr Yeuh Heng Boon Colin, (herein referred to as "Mr Yeuh") on 25 October 2018 at 0706 hours he was travelling along the KPE tunnel. The driver of the vehicle in front of him (herein referred to as "VW") braked suddenly. Mr Yeuh managed to stop the Nissan but the vehicle behind him rear- ended the Nissan, causing the Nissan to move forward and hit the VW.
- 7. The Singapore Accident Statement of the driver of the Mercedes, Ms Teresa Joseph (herein referred to as "Ms Teresa") on the other hand, had stated that at the aforementioned date and time, she was travelling along the KPE tunnel behind the Nissan when she saw the Nissan hit the rear portion of the VW. Ms Teresa immediately pressed the brakes and stopped very close behind the Nissan. She alighted and spoke to Mr Yeuh briefly as Mr Yeuh was busy speaking to the driver of the VW. Ms Teresa took some photos and gave her number to Mr Yeuh. Mr Yeuh asked for Ms Teresa's IC which she gave but Mr Yeuh did not exchange his particulars with Ms Teresa. Mr Yeuh told Ms Teresa that he would send her a picture of his IC later. As Ms Teresa was rushing to drop her children at school, Ms Teresa left the accident scene shortly after.



8. Ms Teresa stated that the driver of the VW did not speak to her as he noticed there was no damage between the Nissan and the Mercedes. Later that day, Ms Teresa received an email from Mr Yeuh which consisted of a private settlement form. Ms Teresa stated that Mr Yeuh instructed her to sign the form and transfer the settlement amount of \$200 to his account. Ms Teresa again asked for Mr Yeuh's IC and suggested to meet so that she could sign the form and hand over the money to Mr Yeuh in person but Mr Yeuh refused. She felt uncomfortable hence she called her insurance agent who instructed her to go to an authorized MSIG workshop and get the Mercedes assessed. She met Mr Grant Chong who assisted her in making the insurance report and took the reporting photos. Ms Teresa added that she felt uneasy in dealing with Mr Yeuh as he was adamant in not sharing his personal particulars with her. Hence Ms Teresa decided to make an insurance report.

Physical Inspection of the Nissan

- 9. The Nissan was physically inspected on 6 December 2018 at the premises of Mova Automotive located at Block 1007 Bukit Merah Lane 3, #01-03, Singapore 159721.
- 10. The mileage recorded was 131, 212km.
- 11. At the time of our inspection, we note that the Nissan had sustained a slight impact directly onto its rear portion. Closer examination had showed a gap between the boot lid weather strip and rear bumper at the centre portion, indicating that the rear bumper reinforcement and possibly the rear end panel had been pushed slightly inwards. We also observed paint scratch marks around the centre portion of the rear bumper. However we also noted that there was no obvious misalignment of the rear bumper at its corner edges. See photos 1 6 below.

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Photo 1 shows the general view of the rear portion of the Nissan upon our inspection. The damage to the Nissan was observed to be confined to its rear portion, at the centre portion (circled).



Photo 2 shows upon closer examination, we noted a gap between the boot lid weather strip and rear bumper at the centre portion (circled).

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Photo 3 shows a closer view of the gap between the boot lid weather strip and rear bumper at the centre portion, indicating that the rear bumper reinforcement and possibly the rear end panel of the Nissan had been pushed slightly inwards (circled).



Photo 4 shows a close up view of the paint scratch marks found on the centre portion of the Nissans' rear bumper (circled).

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Photo 5 shows a closer view of the left corner edge of the rear bumper of the Nissan. We observed that there was no misalignment at the corner edges (arrowed).



Photo 6 shows a closer view of the right corner edge of the rear bumper of the Nissan. We observed that there was no misalignment at the corner edges (arrowed).

Physical Inspection of the Mercedes

- 12. The Mercedes was physically inspected on 30 November 2018 at the office premises of the owner of the Mercedes located at 31 Scotts Rd, Singapore 228225.
- 13. The mileage recorded was 198, 742km.
- 14. At the time of our inspection, we observed faint whitish distortion marks on the top centre portion of the Mercedes's front number plate frame. We also observed that there were no dents or cracks on its front number plate. However we noted that there was no obvious misalignment of the rear bumper at its corner edges. See photos 7 5 below.



Photo 7 shows the general view of the front portion of the Mercedes at the time of our inspection. We observed faint whitish distortion marks on the top centre portion of the Mercedes's front number plate frame. We also observed that there were no dents or cracks on its front number plate



Photo 8 shows a closer view of the faint whitish distortion marks on the top centre portion of the Mercedes's front number plate frame (circled). We also observed that there were no dents or cracks on its front number plate.

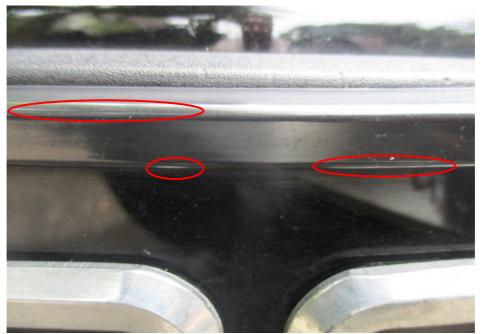


Photo 9 shows a close up view of the faint whitish distortion marks on the top centre portion of the Mercedes's front number plate frame (circled). We also observed that there were no dents or cracks on its front number plate.



Photo 10 shows a closer view of the left corner edge of the front bumper of the Mercedes. We observed that there was no misalignment at the corner edges (arrowed).



Photo 11 shows a closer view of the right corner edge of the front bumper of the Mercedes. We observed that there was no misalignment at the corner edges (arrowed).

Accident Scene Photographs

- 15. For this case, we managed to obtain several photographs taken at the accident scene. 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 Nissan.
- 16. The front centre portion of the Mercedes was observed to be directly in contact with the rear centre portion of the Nissan. It would appear that the most significant damage to the Mercedes that could possibly have been a result of contact with the rear portion of the Nissan was the front number plate frame of the Mercedes. This is also taking into consideration that the rear bumper is the most protruded body part at the rear portion of the Nissan where in the event of any contact, it will be the first body part that will come into contact with the front number plate of the Mercedes. See photos 12 16 below.



Photo 12 shows a front view of the position of the Involved Motor Cars after the accident. The Mercedes was observed to be directly behind the Nissan.

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Photo 13 shows a rear view of the position of the Involved Motor Cars post-accident. The Mercedes was observed to be directly behind the Nissan.

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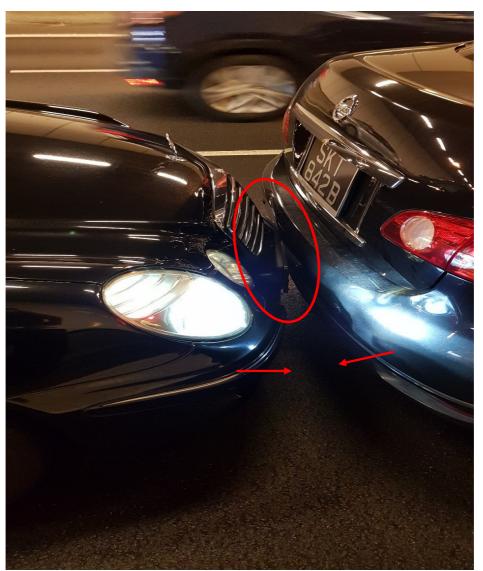


Photo 14 shows a right side view of the final position of the Involved Motor Cars at the accident location. The front centre portion of the Mercedes was observed to be directly in contact with the rear centre portion of the Nissan (circled). It can be observed that there was no contact between the rear right portion of the Nissan and the front right portion of the Mercedes (arrowed).

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Photo 15 shows the position of the Mercedes post- accident. Ms Teresa mentioned that she had reversed the Mercedes post- accident.



Photo 16 shows the position of the Nissan after the accident. The paint scratch marks on the centre portion of the rear bumper can be seen (circled). However there was no deformity observed on the rear bumper of the Nissan as there was no distortion of the reflected objects.

Technical Analysis

- 17. Our analysis of the documents that were made available to us in preparation of this report, and our observations following the physical inspections of the Involved Motor Cars would appear to suggest that the front number plate frame of the Mercedes had contacted onto the rear bumper of the Nissan. Reasons for which are set out below.
- 18. Firstly, the gap between the boot lid weather strip and rear bumper at the centre portion of the Nissans' rear bumper was caused by an object pushing the rear bumper slighly inwards. Secondly, the paint scratch marks on the centre portion of the Nissans' rear bumper were caused by an object pressing against the Nissan's rear bumper. If one was to consider the faint whitish distortion marks that were observed on the top centre portion of the Mercedes' number plate frame, it would then appear that these damages found on the centre portion of the Nissan's rear bumper were caused by the top centre portion of the Mercedes's front number plate frame.

19. Although there was no obvious crack or break on the front number plate frame of the Mercedes at the time of our inspection, it could be due to the impact force arising from the contact being not significant enough to have stretched pass the material strength of the front number plate frame. In this aspect, one would have to consider the material stiffness of the Mercedes's front number plate frame, which is constructed of hard plastic, against the thermoplastic (soft plastic) material of the Nissan's rear bumper.

Height Measurement

20. We had conducted a height configuration test to determine whether the damage observed on the rear portion of the Nissan could have possibly been caused by the frontal portion of the Mercedes. In order to determine this, we had measured the height above ground level of the damaged area on the rear bumper of the Nissan. We had thereafter compared this measured height against the frontal portion of the Mercedes. See photos 17 & 18 below.



Photo 17 shows the height measurement being conducted on the rear portion of the Nissan. The height above ground level of the centre portion of the rear bumper of the Nissan, at the area where the paint scratch marks were found was measured to be approximately 44cm.



Photo 18 shows the height measurement being conducted on the frontal portion of the Mercedes. The body part at 44cm above ground was the top portion of the Mercedes' front number plate frame where the faint whitish distortion marks were found.

- 21. 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 centre portion of the rear bumper of the Nissan, at the area where the paint scratch marks were found was measured to be approximately 44cm;
 - b) the body part at 44cm above ground was the top portion of the Mercedes' front number plate frame where the faint whitish distortion marks were found;
 - e) the height measurements appear to support the findings of possible contact between the rear portion of the Nissan and the front portion of the Mercedes. The damage observed on the rear bumper of the Nissan was a result of this contact and corresponds to the damage observed on the front portion of the Mercedes.



Conclusion

- 22. Having investigated and technically analyzing the material evidence available at the time of writing this report, we are of the opinion that the damages sustained to the rear portion of the Nissan were likely to be caused by the front portion of the Mercedes as a result of the contact at the material time of accident.
- 23. The impact force from the contact was relatively minor and had occurred when the Mercedes rear-ended the Nissan while coming to a stop. The damage to the rear bumper of the Nissan was caused by the front number plate frame of the Mercedes. Upon contact, the front bumper and front number plate of the Mercedes had compressed against the rear bumper of the Nissan, creating the paint scratch marks and more significantly the gap between the boot lid weather strip and centre portion of the Nissan's rear bumper.
- 24. Both damages are corresponding to their respective heights and are consistent to their nature of contact.

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