

Your Ref : 639105 07 April 2022

Our Ref : CI/MSG22003272/D

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 SNA 9130C AND SKP 5353J ON 29 NOVEMBER 2021

- I refer to your email dated 15 December 2021 and the request therein to comment on whether the damage sustained to the motor car SNA 9130C (herein referred to as "Third Party Vehicle") was consistent and caused by contact from your insured vehicle SKP 5353J (herein referred to as "Insured Vehicle").
- 2. The following documents were provided to me for my review and consideration in the preparation of this report:
 - a) Singapore Accident Statement lodged by the driver of the Third Party Vehicle consisting of 11 pages, where amongst other information, the circumstance of incident was described;
 - b) Singapore Accident Statement lodged by the driver of the Insured Vehicle consisting of 15 pages, where amongst other information, the circumstance of incident was described;
 - c) Photographs showing the damaged Third Party Vehicle taken by LKK Consultants Pte Ltd on 30 November 2021;
 - d) A 15 second video footage showing the events before the incident, extracted from the front recording device that was mounted on the Insured Vehicle;
 - e) A 60 second video footage showing the events after the incident, extracted from the front recording device that was mounted on the Insured Vehicle.



- 3. In preparation of this report, I had conducted a physical inspection of the Insured Vehicle on 17 December 2021. Height measurements of the Insured Vehicle and the Third Party Vehicle were also carried out. The measurements obtained were thereafter technically analyzed in conjunction with the relevant information gathered from review of the provided documents.
- 4. The following paragraphs sets out my findings and analysis.

Nature of Incident

- 5. The Singapore Accident Statement lodged by the driver of the Third Party Vehicle had amongst other information contained a description of the circumstance of incident.
- 6. On 29 November 2021 at about 1020hrs, the Third Party Vehicle was travelling along CTE towards AYE. Before the Bukit Timah exit, the driver felt an impact from the rear of the Third Party Vehicle. Upon alighting, he realized that the Insured Vehicle had collided onto the rear of the Third Party Vehicle.
- 7. The Singapore Accident Statement lodged by the driver of the Insured Vehicle had amongst other information also contained a Police Report T/20211029/2048 describing the circumstance of incident.
- 8. The driver of the Insured Vehicle stated in the Police Report that the Insured Vehicle was travelling behind the Third Party Vehicle along CTE when the Third Party Vehicle suddenly stopped. He applied the brake and the Insured Vehicle stopped close to the Third Party Vehicle, not knowing if there was contact between the Insured Vehicle and the Third Party Vehicle. Upon alighting, he noted that there was no damage to the Insured Vehicle. He also noted that the Third Party Vehicle had slight dents from a previous collision and one of the dent showed two orange colour parts. There were no fresh visible damages, silver or light coloured marks on the Third Party Vehicle.

Damages

9. The Third Party Vehicle was physically inspected by LKK Auto Consultants Pte Ltd on 30 November 2021. Upon review of the photographs taken, I note that the Third Party Vehicle had sustained damage that was confined to its rear portion, slightly to the left of the centre. The rear bumper, rear bumper lower spoiler, rear bumper grille, rear centre top panel, rear taillamps, rear left exhaust tip and engine hood were amongst the body parts that were damaged. Refer to photo 1 – 8 below for details of the damage.

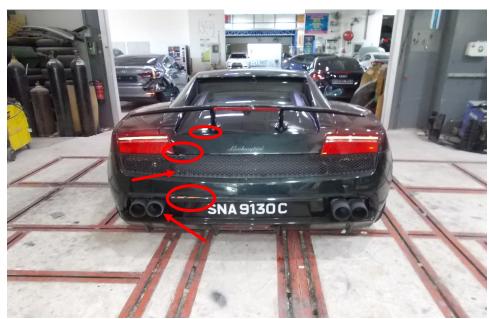


Photo 1 shows the rear body of the Third Party Vehicle at the time of physical inspection by LKK Auto Consultants Pte Ltd. The Third Party Vehicle was observed to have sustained damage that was confined to its rear portion, slightly to the left of the centre. Damage was seen on the rear bumper, rear bumper lower spoiler, rear bumper grille, rear left exhaust tip, rear centre top panel, rear taillamps and engine hood. The damage areas are highlighted by the red arrows and red circles with close up shown in the below photographs.



Photo 2 shows a close up view of the damage to the rear bumper and rear bumper lower spoiler (circled) of the Third Party Vehicle at the time of physical inspection by LKK Auto Consultants Pte Ltd. What appears to be impact marks were also seen to the rear left exhaust tip (arrowed) of the Third Party Vehicle. These damages are a result of direct contact with an object(s).



Photo 3 shows another view of the damage to the Third Party Vehicle's rear bumper and rear bumper lower spoiler (circled) at the time of physical inspection by LKK Auto Consultants Pte Ltd. The damage to the rear bumper grille of the Third Party Vehicle is shown by the red arrow.



Photo 4 shows a close up view of the damage (circled) that was seen on the Third Party Vehicle's rear bumper grille at the time of physical inspection by LKK Auto Consultants Pte Ltd. This damage arose from direct contact with an object(s).



Photo 5 shows the misalignment between the rear centre top panel and the rear left taillamp of the Third Party Vehicle at the time of physical inspection by LKK Auto Consultants Pte Ltd. The rear centre top panel appears to be bent inwards at the area (circled) adjacent to the rear left taillamp.



Photo 6 shows the damage to the rear left taillamp of the Third Party Vehicle at the time of physical inspection by LKK Auto Consultants Pte Ltd. This was after the front bumper grille was removed. The mounting loop of the rear left taillamp was observed to be broken (circled). The heat shield for the rear left exhaust was also observed to be bent (arrowed). These damages are induced damages.



Photo 7 shows the damage to the rear right taillamp of the Third Party Vehicle at the time of physical inspection by LKK Auto Consultants Pte Ltd. This was after the front bumper grille was removed. The mounting loop of the rear right taillamp was observed to be broken (circled). This damage is an induced damage.

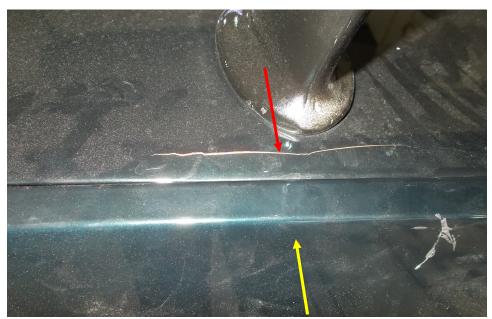


Photo 8 shows a close up view of the damage that was seen on the Third Party Vehicle's engine hood at the time of physical inspection by LKK Auto Consultants Pte Ltd. Paint crack (red arrow) was observed on the top surface area of the engine hood. This indicates a movement inwards of the rear centre top panel (yellow arrow). In other words, the rear centre panel of the Third Party Vehicle was exposed to a direct impact force that pushed it inwards. The engine hood, which fits above the rear centre top panel, was the resisting influence. This caused the edge of the engine hood to bend, leading to the paint on the top surface of the engine hood to crack. This damage is an induced damage.



- 10. For the Insured Vehicle, I had physically inspected it on 17 December 2021. My physical inspection had primarily focused on the front right portion of the Insured Vehicle. This was because the contact, if any, would have occurred at the Insured Vehicle's front right portion, if basing on the events seen in the video footage, which will be discussed upon later in paragraph 15 below.
- 11. Upon close examination, I had observed a relatively faint grazed mark on the Insured Vehicle's front bumper, at the area below the front right headlamp. A semi-circular imprint mark was also seen on the front bumper, at the area towards the right side of the Insured Vehicle's front number plate. See photo 9 11 below.



Photo 9 shows a general view of the front right body of the Insured Vehicle at the time of my physical inspection on 17 December 2021. My inspection of the Insured Vehicle had primarily focused on its front right portion. This was because the contact, if any, would have occurred at the front right portion of the Insured Vehicle. Upon close examination, I had found a relatively faint grazed mark and a semi-circular imprint mark on the right side of the Insured Vehicle's front bumper, which are highlighted by the red arrows with close up shown in the below photographs.

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Photo 10 shows a close up view of the relatively faint grazed mark that I had observed on the Insured Vehicle's front bumper, at the area below the front right headlamp.



Photo 11 shows a close up view of the semi-circular imprint mark that was found on the front bumper of the Insured Vehicle, at the area towards the right side of the front number plate.



- 12. For completeness, the damages that I had observed on the front bumper of the Insured Vehicle at the time of my physical inspection on 17 December 2021 were also vaguely seen in the photographs that were attached in the Singapore Accident Statement that was lodged by the driver of the Insured Vehicle. The photographs were taken at the time when the Singapore Accident Statement was lodged on 07 December 2021, about 10 days before my inspection of the Insured Vehicle.
- 13. Note that the photographs were all general view without any close up view. A zoomed in view of the Insured Vehicle's front left portion, extracted from the set of photographs that were attached in the Singapore Accident Statement lodged by the driver of the Insured Vehicle, is shown below.



Photo 12 shows a zoomed in view of the relatively faint grazed mark and semi-circular imprint mark on the right side of the Insured Vehicle's front bumper (arrowed). This was at the time when the Singapore Accident Statement was lodged by the driver of the Insured Vehicle on 07 December 2021, which was 10 days before my inspection of the Insured Vehicle on 17 December 2021.

Video Footages

14. The video footages that were provided to me in preparation of this report were taken from the recording device that was mounted on the front windscreen of the Insured Vehicle. The video footage showing the events before the incident was 15 seconds in duration while the video footage showing the events after the incident was 60 seconds in duration. The images seen from these video footages were all captured directly from the recording device.

15. Upon analyzing the video footage showing the events before the incident, I note the occurrence of contact between the Insured Vehicle and the Third Party Vehicle at the 10:32:01 time stamp mark. Basing on the positioning of the Insured Vehicle and the Third Party Vehicle, the contact had occurred between the front right portion of the Insured Vehicle and the rear left portion of the Third Party Vehicle. See photo 13 below, which is a screenshot extracted directly from the video footage showing the events before the incident.



Photo 13 shows screenshot extracted from the video footage that was taken from the recording device that was mounted on the front windscreen of the Insured Vehicle. This was at the 10:32:01 time stamp mark where I note the occurrence of contact between the Insured Vehicle and the Third Party Vehicle. Basing on the positioning of the Insured Vehicle and the Third Party Vehicle at this time stamp, the contact had occurred between the front right portion of the Insured Vehicle and the rear left portion of the Third Party Vehicle.

16. My analysis of the video footages had also produced other notable information, which will be discussed upon later in my report.

Discussion, Comments & Opinions

17. Having established from the video footage provided that there was contact between the Insured Vehicle and the Third Party Vehicle, the paragraphs below now sets out my analysis into whether the damages to the Third Party Vehicle (shown in photograph 1 to 8 above) were caused by contact from the Insured Vehicle. This was done by first measuring the height above ground level of the damages seen on the Third Party Vehicle and thereafter co-relating the measured height with the height above ground level of the Insured Vehicle's frontal portion.



- 18. For clarity, the registration number of the Third Party Vehicle, SNA 9130C, was replaced with SNE 6767P at the time of my height measurement on 18 February 2022. The chassis number shown on SNE 6767P was checked and verified to be the same chassis number as the Third Party Vehicle.
- 19. My findings from the height measurements carried out revealed that the damage to the body parts of the Third Party Vehicle within the height range of 36cm to 57cm above ground level are damage that arose from contact with the Insured Vehicle. In this aspect, the Third Party Vehicle's rear bumper, rear bumper lower spoiler and rear left exhaust tip, shown in photograph 2 above, are parts damaged as a result of contact from the Insured Vehicle. See photo 14 & 15 below.

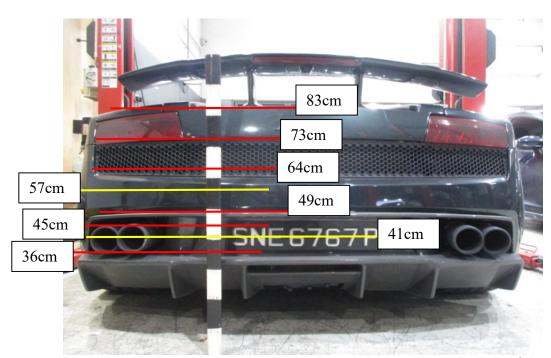


Photo 14 shows height measurement being carried out to the rear portion of the Third Party Vehicle. This was on 18 February 2022. Basing on the height as shown in the photograph, the damage to the body parts of the Third Party Vehicle (refer to photograph 1 – 8 above) was between 36cm to 83cm above ground level. However, upon comparing the height above ground level of the damage to the Insured Vehicle (refer to photograph 15 below), I note that the damage that are within the height range of 36cm to 57cm above ground level of the Third Party Vehicle are damage that arose from the contact with the Insured Vehicle. Note: red lines are height above ground level of the damage to the Insured Vehicle.

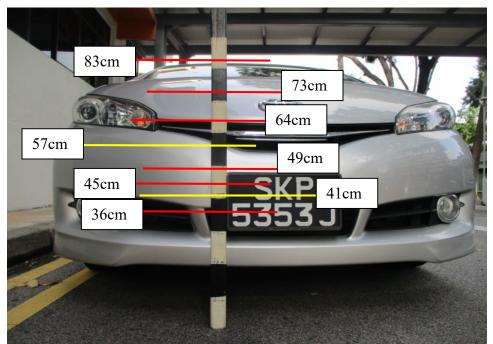


Photo 15 shows height measurement being carried out to the frontal portion of the Insured Vehicle. This was at the time of my physical inspection on 17 December 2021. The damage to the Insured Vehicle (refer to photograph 9 to 11 above) was between 41cm to 57cm above ground level. Note: red lines are height above ground level of the damage to the Third Party Vehicle and yellow lines are height above ground level of the damage to the Insured Vehicle.

- 20. In light of the findings from the height measurements that were carried out, it would appear to me that the damage to the body parts of the Third Party Vehicle that are above the height of 57cm above ground level is not related to this particular incident involving the Insured Vehicle. This finding is further supported by the photograph showing the damaged Third Party Vehicle that was taken by the driver of the Insured Vehicle after the incident and; also from the video footage showing the events after the incident.
- 21. The photograph taken by the driver of the Insured Vehicle was attached in his Singapore Accident Statement. The photograph had showed the Third Party Vehicle's rear bumper and rear bumper lower spoiler misaligned, which was in the same damage condition as seen in photograph 2 and 3 above. However, upon my close examination of this photograph, I note that the damage to the rear bumper grille, shown in photograph 3 and 4 above, did not exist at the time when the photograph was taken by the driver of the Insured Vehicle. See photo 16 below.



Photo 16 shows the photograph of the damaged Third Party Vehicle that was taken by the driver of the Insured Vehicle after the incident. The damage to the rear bumper grille, shown in photograph 3 and 4 above, was located around the area highlighted by the red circle. Upon close examination of this photograph, the damage on the Third Party Vehicle's rear bumper grille that was seen in photograph 3 and 4 above, was not seen around the area highlighted by the red circle.

22. Also, my analysis of the video footages showing the events after the contact from the Insured Vehicle appears to show no paint crack on the top surface area of the Third Party Vehicle's engine hood immediately after the occurrence of contact from the Insured Vehicle. The paint crack that was shown in photograph 8 above was not seen in the images captured by the recording device. See photo 17 & 18 below, which are screenshots extracted directly from the video footages showing the Third Party Vehicle after the contact from the Insured Vehicle.



Photo 17 shows screenshot extracted from the video footage taken from the recording device that was mounted on the front windscreen of the Insured Vehicle. This was at the 10:32:02 time stamp mark, immediately after the occurrence of contact from the Insured Vehicle. The paint crack at the engine hood, shown in photograph 8 above, was located around the area highlighted by the red arrow. Upon close examination of the images captured by the recording device (after the contact had occurred), the paint crack that was shown in photograph 8 above, was not seen around the area highlighted by the red arrow.

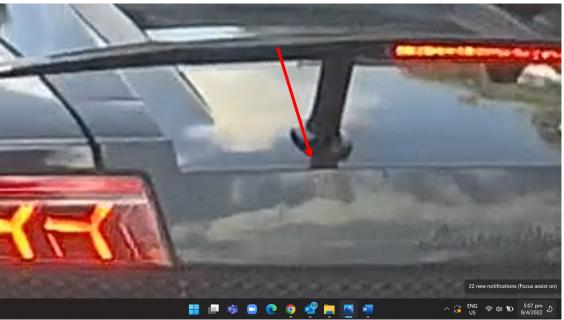


Photo 18 shows a zoomed in view of photograph 17 above. The paint crack at the engine hood, shown in photograph 8 above, was not seen around the area highlighted by the red arrow. The reflection of the top spoiler stand onto the engine hood was not distorted, which would indicate that there was no crack line(s) on the top surface area of the Third Party Vehicle's engine hood.



- 23. In addition, as seen in photograph 13 above, at the time of contact from the Insured Vehicle, the rear taillamps and rear top panel of the Third Party Vehicle was not obscured from view by the body of the Insured Vehicle. This would indicate that no body part at the frontal portion of the Insured Vehicle had come into direct contact with the rear taillamps and rear top panel of the Third Party Vehicle.
- 24. For completeness, the damage that was seen on the rear left lower portion of the Third Party Vehicle, shown in photograph 2 above, was similarly seen on the Third Party Vehicle in the images captured by the recording device after the incident. See photo 19 below, which is a screenshot extracted directly from the video footage showing the Third Party Vehicle driving off after the contact from the Insured Vehicle.



Photo 19 shows screenshot extracted from the video footage taken from the recording device that was mounted on the front windscreen of the Insured Vehicle. This was at the 10:34:17 time stamp mark, when the Third Party Vehicle was driving off after the incident. The damage that was seen on the rear left lower portion of the Third Party Vehicle, shown in photograph 2 above, was similarly seen on the same area of the Third Party Vehicle (circled) in the images captured by the recording device after the incident. This damage was not seen on the Third Party Vehicle before the contact (refer to photograph 20 to 22 below).



25. Apart from being able to establish that there was contact between the Third Party Vehicle and the Insured Vehicle, and also being able to assess the damage condition of the Third Party Vehicle after the contact, the video footages provided had also showed that the Third Party Vehicle had braked to a complete stop along the extreme left lane of CTE just before the contact from the Insured Vehicle had occurred. The start of braking to complete stop action (approximately 1 second to 2 second basing on the time stamp of the recording device) was sudden and appears to be without any reasonable cause. See photo 20 - 23 below, which are screenshots extracted directly from the video footage showing the events before the incident.



Photo 20 shows screenshot extracted from the video footage taken from the recording device that was mounted on the front windscreen of the Insured Vehicle. This was at the 10:32:00 time stamp mark, before the occurrence of contact. At this point of the video footage, the Insured Vehicle was seen maneuvering into the extreme left lane of CTE behind the Third Party Vehicle.



Photo 21 shows screenshot extracted from the video footage taken from the recording device that was mounted on the front windscreen of the Insured Vehicle. This was at the 10:32:00 time stamp mark, before the occurrence of contact. The Insured Vehicle was seen maneuvering into the extreme left lane of CTE behind the Third Party Vehicle. At this point of the video footage, the brake lights of the Third Party Vehicle illuminated. Note that the brake lights of the white BMW make motor car that was in front of the Third Party Vehicle was not illuminated. The distance between the Third Party Vehicle and the BMW make motor car was also not close to suggest that the Third Party Vehicle was tailgating the BMW make motor car.



Photo 22 shows screenshot extracted from the video footage taken from the recording device that was mounted on the front windscreen of the Insured Vehicle. This was at the 10:32:01 time stamp mark, before the occurrence of contact. At this point, the Third Party Vehicle came to a complete stop with the insured Vehicle closing in on the Third Party Vehicle. Note that the brake lights of the white BMW make motor car that was in front of the Third Party Vehicle was still not illuminated and the distance between the Third Party Vehicle and the BMW make motor car was also not close. There appears to be no reasonable cause for the Third Party Vehicle to brake to a complete stop.



Photo 23 shows screenshot extracted from the video footage taken from the recording device that was mounted on the front windscreen of the Insured Vehicle. This was at the 10:32:01 time stamp mark, just before the occurrence of contact. At this point of the video footage, the brake lights of the Third Party Vehicle was no longer illuminated. The Third Party Vehicle started to move off slowly just as the contact from the Insured Vehicle occurred. Note the distance between the BMW model motor car and the Third Party Vehicle was relatively wide. There appears to be no reasonable cause for the Third Party Vehicle to brake to a complete stop.

Conclusion

- 26. Having investigated and technically analyzing the material evidence available at the time of writing this report, I am of the opinion that there was contact between the front right portion of the Insured Vehicle and the rear left portion of the Third Party Vehicle.
- 27. The contact between the Insured Vehicle and the Third Party Vehicle had occurred at the height range of 36cm to 57cm above ground level on both vehicles. The rear bumper, rear bumper lower spoiler and rear left exhaust tip of the Third Party Vehicle were damaged as a result of the contact.
- 28. Damage to the body parts of the Third Party Vehicle that are above the height of 57cm above ground level is not related to this particular incident involving the Insured Vehicle. This includes the rear bumper grille, rear top centre panel, rear taillamps and engine hood of the Third Party Vehicle.



29. The video footage taken from the recording device that was mounted on the front windscreen of the Insured Vehicle showed the Third Party Vehicle had braked to a complete stop on the extreme left lane of CTE just before the contact from the Insured Vehicle. The start of braking to complete stop action (approximately 1 second to 2 second) was sudden and appears to be without any reasonable cause.



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