

Your Ref : 6838593563SG 22 March 2022

Our Ref : CI/AIG22002313/D

#### AIG Asia Pacific Insurance Pte Ltd

78 Shenton Way #09-16 AIG Building Singapore 079120 (Motor Claims Department)

# AUTOMOBILE TECHNICAL INVESTIGATION REPORT OF INCIDENT INVOLVING SMA 5189Y AND SJG 6036C ON 17 OCTOBER 2021

- I refer to your email dated 22 December 2021 and the request therein to comment on whether the damage sustained to the motor car SMA 5189Y (herein referred to as "Third Party Vehicle") was consistent and caused by contact from your insured vehicle SJG 6036C (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 18 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 23 pages, where amongst other information, the circumstance of incident was described;
  - c) Letter of Demand dated 02 December 2021 consisting of 44 pages, where amongst other document, the Vehicle Inspection Report of the Third Party Vehicle by C L Appraiser Pte Ltd was attached;
  - d) Photographs showing the damaged Third Party Vehicle taken by LKK Consultants Pte Ltd on 21 October 2021;
  - e) A 34 second video footage showing the events at the material time, extracted from the front and rear recording devices that were mounted on the Third Party Vehicle.



- 3. In preparation of this report, I had conducted a physical inspection of the Insured Vehicle on 12 January 2022. Height measurement of the Insured Vehicle and the Third Party Vehicle (using a similar make and model vehicle) were also carried out. 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 Police Report T/20211017/2057 describing the circumstance of the incident.
- 6. On 17 October 2021 at about 1435hrs, the Third Party Vehicle was along Tampines Avenue 5 making a left turn onto Tampines Avenue 6. It came to a stop due to a cyclist cycling across the road. The Insured Vehicle, which was travelling behind the Third Party Vehicle, had collided into the rear bumper of the Third Party Vehicle, at the rear right side. The Insured Vehicle then drove off. The incident was captured by the in-car-camera fitted at 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 had stated in the Police Report that the Insured Vehicle was travelling behind the Third Party Vehicle on the extreme left lane of Tampines Avenue 5. The Third Party Vehicle, which was intending to make a left turn, slowed down and eventually came to a stop as there were pedestrians crossing the road. The Insured Vehicle was also brought to a stop without any impact onto the Third Party Vehicle. After which, the Insured Vehicle drove off straight, continuing its intended route.

#### **Damages**

 The Third Party Vehicle was physically inspected by LKK Auto Consultants Pte Ltd on 21 October 2021. Upon review of the photographs taken, I note that the Third Party Vehicle had sustained damage that was confined to its rear right portion.



10. The rear bumper was seen to be distorted with a vertical indention at the area below the rear bumper right reflector. The lower right corner area of the rear bumper was also dented/distorted. The rear right taillamp was cracked at the area adjacent to where the rear bumper aligns with the rear right fender. Overall, the aforesaid damages are all damages that arose from direct contact with an object(s). See photo 1 – 4 below.



**Photo 1** shows the rear right portion 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 right portion. Direct contact damage was seen at 3 areas at the rear right portion. The rear bumper was distorted with a vertical indention below the rear bumper right reflector; the lower right corner of the rear bumper was dented/distorted; the rear right taillamp was cracked at the area where the rear bumper aligns with the rear right fender. The aforesaid damage areas are highlighted by the red arrows with close up shown in the below photographs.



**Photo 2** shows a close up view of the vertical indentation (arrowed) that was seen on the rear bumper of the Third Party Vehicle at the time of physical inspection by LKK Auto Consultants Pte Ltd. This was at the area below the rear bumper right reflector. This damage arose from direct contact with an object(s).



**Photo 3** shows a close up view of the dent/distortion (circled) that was seen on the lower right corner area of the Third Party Vehicle's rear bumper at the time of physical inspection by LKK Auto Consultants Pte Ltd. The vertical indention at the area below the rear bumper right reflector is also highlighted by the rear arrows. Both these damages arose from direct contact with an object(s).



**Photo 4** shows a close up view of the crack (circled) that was seen on the Third Party Vehicle's rear right taillamp at the time of physical inspection by LKK Auto Consultants Pte Ltd. The crack was observed to be at the area where the rear bumper aligns with the rear right fender. This damage arose from direct contact with an object(s).

- 11. For completeness, my review of the photographs attached in the Vehicle Inspection Report of the Third Party Vehicle by C L Appraiser Pte Ltd had showed same damages to the rear right portion of the Third Party Vehicle as depicted in photograph 2 to 4 above.
- 12. For the Insured Vehicle, I had physically inspected it on 12 January 2022. In terms of commenting on the damage aspect, the set of photographs attached in the Singapore Accident Statement that was lodged by the driver of the Insured Vehicle did not show any visible damage to the exterior body of the Insured Vehicle. I also note that the photographs taken were all general view without any close up view. Purely relying on this set of photographs to comment on the damage aspect may not be an accurate assessment.
- 13. My physical inspection on 12 January 2022, on the other hand, had primarily focused on the front left portion of the Insured Vehicle. This was because the contact, if any, would have occurred at the front left portion if basing on the events seen in the video footage, which will be discussed upon later in paragraph 20 below.

14. Upon close examination, I had observed 2 sets of relatively faint grazed marks on the lower left corner area and upper left corner area of the Insured Vehicle's front bumper. See photograph 5 – 7 below.



**Photo 5** shows a general view of the front left portion of the Insured Vehicle at the time of my physical inspection on 12 January 2022. My inspection had primarily focused on the front left portion of the Insured Vehicle as the contact with Third Party Vehicle, if any, would have occurred at the front left portion of the Insured Vehicle.



**Photo 6** shows the relatively faint grazed marks (circled) that I had observed on the upper left corner area of the Insured Vehicle's front bumper.



**Photo 7** shows the relatively faint grazed marks (circled) that I had observed on the lower left corner area of the Insured Vehicle's front bumper.

# Video Footage

- 15. The video footage that was provided to me in preparation of this report was taken from recording devices that were mounted on the front windscreen of the Third Party Vehicle and the rear windscreen of the Third Party Vehicle. The video footage was 34 seconds in duration with audio recorded from the interior compartment of the Third Party Vehicle. It showed the events before the incident, the incident itself and the immediate events after the incident. The images seen from this video footage were all captured directly from the recording devices.
- 16. Upon analyzing the video footage, I note that the Insured Vehicle was indeed traveling behind the Third Party Vehicle along the extreme left lane of the roadway. The road surface was also seen to be wet at the material time. Upon reaching a signalized T-junction, the Third Party Vehicle turned left and came to a stop to give way to a cyclist who was cycling along the pedestrian crossing, across the roadway that the Third Party Vehicle was turning into. The Third Party Vehicle was stopped in an angled position typically seen when vehicles execute a left turn at a T-junction. Its rear right portion was also seen extended out onto the extreme left lane that it was initially travelling on.



- 17. The Insured Vehicle, approaching from behind the Third Party Vehicle, had emergency braked as it was unable to maneuver away from the extended rear right portion of the Third Party Vehicle due to another vehicle travelling on the lane to its right. The Insured Vehicle stopped with its front left portion in close proximity to the rear right portion of the Third Party Vehicle. Almost simultaneously, a female on board the Third Party Vehicle can be heard asking "what happened" in Mandarin, which appears to be in response to a thud like sound captured by the recording devices. This was at the 7 second mark of the video footage.
- 18. Thereafter, the Third Party Vehicle completed the left turn and the Insured Vehicle moved off, travelling straight. The conversation between the occupants on board the Third Party Vehicle after it turned left was recorded by the recording device and I note that the conversation was centered on whether the Insured Vehicle had contacted onto the Third Party Vehicle. See photo 8 to 13 below, which are screenshots extracted directly from the video footage.



**Photo 8** shows screenshot extracted from the video footage showing the front view and rear view of the Third Party Vehicle's perspective. The Third Party Vehicle was seen making a left turn at a signalized T-junction. The Insured Vehicle (arrowed) was travelling behind the Third Party Vehicle on the same lane.



**Photo 9** shows screenshot extracted from the video footage showing the front view and rear view of the Third Party Vehicle's perspective. This was at the time just before the Third Party Vehicle had stopped to give way to a cyclist who was cycling along the pedestrian crossing, across the roadway that the Third Party Vehicle was turning into. The Third Party Vehicle was stopped in an angled position typically seen when vehicles execute a left turn at a T-junction. Its rear right portion was seen to have extended out onto the extreme left lane that it was initially travelling on.



**Photo 10** shows screenshot extracted from the video footage showing the front view and rear view of the Third Party Vehicle's perspective. This was at the time just before the Insured Vehicle had come to a complete stop. The cyclist cycling across the roadway is highlighted by the red arrow.





**Photo 11** shows screenshot extracted from the video footage showing the front view and rear view of the Third Party Vehicle's perspective. This was at the time when the Insured Vehicle had come to a complete stop. As seen from the video footage, the Insured Vehicle had stopped with its front left portion in close proximity to the rear right portion of the Third Party Vehicle. Almost simultaneously at this point, a female on board the Third Party Vehicle can be heard asking "what happened" in Mandarin, which appears to be in response to a thud like sound captured by the recording devices. This was at the 7 second mark of the video footage.



**Photo 12** shows screenshot extracted from the video footage showing the front view and rear view of the Third Party Vehicle's perspective. This was at the time when the Third Party Vehicle started to move off to complete its intended left turn.



**Photo 13** shows screenshot extracted from the video footage showing the front view and rear view of the Third Party Vehicle's perspective. As seen from the video footage, the Third Party Vehicle turned left while the Insured Vehicle drove straight. I note from the video footage that the conversation between the occupants on board the Third Party Vehicle after it had completed its left turn was centered on whether the Insured Vehicle had contacted onto the Third Party Vehicle.

## **Discussion, Comments & Opinions**

- 19. The video footage provided to me appears to indicate that there was contact between the Insured Vehicle and the Third Party Vehicle. The thud like sound and the conversation thereafter between the occupants on board the Third Party Vehicle, which were both recorded audibly by the recording devices that were mounted on the Third Party Vehicle, support the occurrence of a contact.
- 20. The stopped position of the Insured Vehicle and the Third Party Vehicle relative to each other, as seen in the video footage, indicates that the contact had occurred at the side profile of the Insured Vehicle, at its front left portion and the side profile of the Third Party Vehicle, at its rear right portion. The lack of any obvious jerk or shaky image recorded by the recording devices that were mounted on the Third Party Vehicle further indicates that the contact was minimal and slight. Also, the contact can be deemed to be a contact of side swipe in nature given that the contact was at the side profile of both the Insured Vehicle and the Third Party Vehicle.



- 21. Since the contact onto the Third Party Vehicle was of side swipe nature and was minimal and slight, it is unlikely that the occupants on board the Third Party Vehicle will be pushed/jerked abruptly and/or awkwardly whilst seated. This also takes into consideration that there was no jerky/shaky image recorded by the recording devices that were mounted on the Third Party Vehicle at the time of contact. In other words, the occupants on board the Third Party Vehicle are unlikely to sustain any bodily injury.
- 22. Earlier in paragraph 10, I had discussed on the physical damage of the Third Party Vehicle. Following my comments at paragraph 20 above, the distortion with a vertical indention at the area below the Third Party Vehicle's rear bumper right reflector (refer to photograph 2 above) does not seem to be related to this particular incident as the area of this damage was not at the side profile of the Third Party Vehicle. However, the dent/distortion at the lower right corner area of the rear bumper and the crack at the rear right taillamp (refer to photograph 3 & 4 above) are possibly a result of this incident.
- 23. In order to ascertain this, I had measured the height above ground level of these damages (using a similar make and model vehicle) and thereafter, the height measurements obtained were co-related against the side profile of the Insured Vehicle's front left portion. The height of the dent/distortion at the lower right corner of the Third Party Vehicle's rear bumper was measured to be 42cm to 60cm above ground level; the crack at the Third Party Vehicle's rear right taillamp was 93cm above ground level. See photo 14 & 15 below.



**Photo 14** shows height measurement being carried out at the rear right, side profile of a similar make and model vehicle as the Third Party Vehicle.



**Photo 15** shows height measurement being carried out at the rear right, side profile of a similar make and model vehicle as the Third Party Vehicle. The height of the dent/distortion at the lower right corner area of the Third Party Vehicle's rear bumper (refer to photograph 3 above) was measured to be 42cm to 60cm above ground level. The crack at the rear right taillamp (refer to photograph 4 above) of the Third Party Vehicle was 93cm above ground level.

- 24. Comparing the height of 42cm to 60cm and 93cm above ground level with the side profile of the Insured Vehicle's front right portion, I note that the height (51cm) above ground level of the relatively faint grazed marks that I had found on the lower left corner area of the Insured Vehicle's front bumper, when I had physically inspected the Insured Vehicle on 12 January 2022 (refer to photograph 7 above), was within the height range of the dent/distortion at the lower right corner of the Third Party Vehicle's rear bumper.
- 25. As for the crack to the Third Party Vehicle's rear right taillamp, the height (93cm) above ground level of this damage do not fall within any body part of the Insured Vehicle; and it is unlikely to be related to this incident. The height (67cm) above ground level of the relatively faint grazed marks that was found on the upper left corner area of the Insured Vehicle's front bumper (refer to photograph 6 above) also do not fall within the height above ground level of any damaged parts and/or damaged area of the Third Party Vehicle. These grazed marks are hence also unlikely to be related to this incident. See photo 16 below.

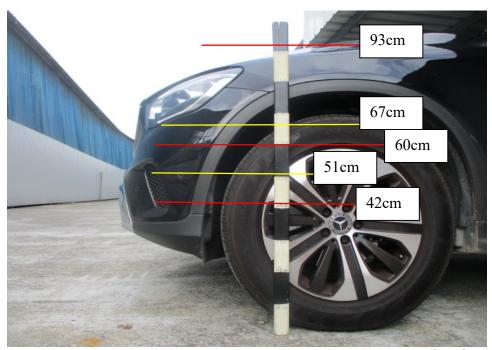


Photo 16 shows height measurement being carried out at the side profile of the Insured Vehicle, at its front left portion. This was at the time of my physical inspection on 12 January 2022. Comparing the height above ground level of the damaged rear bumper (42cm to 60cm) and cracked rear right taillamp (93cm) of the Third Party Vehicle, I note that the height (51cm) above ground level of the relatively faint grazed marks that I had found on the lower left corner area of the Insured Vehicle's front bumper when I had physically inspected the Insured Vehicle on 12 January 2022 (refer to photograph 7 above), was within the height range of the dent/distortion at the lower right corner of the Third Party Vehicle's rear bumper. As for the crack to the Third Party Vehicle's rear right taillamp, the height (93cm) above ground level of this damage do not fall within any body part of the Insured Vehicle.

26. Basing on the height measurements that I had carried out, the dent/distortion at the lower right corner of the Third Party Vehicle's rear bumper was likely to be caused by contact with the Insured Vehicle. The crack to the rear right taillamp of the Third Party Vehicle is not related to this particular incident. In this aspect, using the Vehicle Inspection Report of the Third Party Vehicle by C L Appraiser Pte Ltd that was attached in the Letter of Demand, a reasonable cost of repair to reinstate the Third Party Vehicle is \$850/-. Refer to table below for breakdown of this \$850/-.

 $51\ UBI\ AVE\ 1,\#01\text{-}25\ PAYA\ UBI\ INDUSTRIAL\ PARK, SINGAPORE\ 408933\ \ TEL: (065)\ 62563561\ \ FAX: (065)\ 67414108$ 

QTY	Parts Description (List Items)	Condition	Workshop Estimation (S)	My Revised Estimation (\$)
1	Rear O/S Tailamp	Damaged	485.60	Nil
1	Rear Bumper	Damaged	737.00	737.00
1	Rear Bumper Inner Sponge	Damaged	200.80	Nil
1	Rear Bumper Reinforcement	Damaged	659.20	Nil
1	Rear Bumper Reinforcement Stay	Damaged	135.00	Nil
1	Rear Bumper O/S Side Retainer	Necessary	40.20	Nil
1	Rear O/S Fender	Repair	1269.40	Nil
	Total Parts Cost (List)	Discount 10%		663.30
	Parts Description (Special Nett Items)			
1	Reverse Sensor (1 Set)	Damaged	350.00	Nil
1	Rear Bumper Clips (1 Set)	Necessary	60.00	20.00



S/no	Job Description (Labour Cost)	Workshop Estimation (S)	My Revised Estimation (\$)
1	To Remove, Refit, Replaced Damaged Lamps And Check Up Rear Electrical Wirings	80.00	Nil
2	To Remove And Refit Inner Garnishes, Inner Trim To Assist Repair	120.00	Nil
3	To Apply Undercoating On Repaired And Replaced Panel	80.00	Nil
4	To Provide Labour Charges, Workmanship to Dismantle Above Damaged Parts, Repair Including Cut And Weld etc	1080.00	200.00
5	To Respray Painting Include Polishing And Waxing On The Changed Body Parts, Repaired Portions etc	1000.00	200.00
	Total Labour Cost		400.00
	Total Parts and Labour Costs		1083.30
	Repair Under Lump Sum Basis		850.00

## Conclusion

27. Having investigated and technically analyzing the material evidence available at the time of writing this report, I am of the opinion that in all likelihood, there was contact of side swipe nature between the right rear body of the Third Party Vehicle and the left front body of the Insured Vehicle.



- 28. The lack of any jerky/shaky image recorded by the recording devices that were mounted on the Third Party Vehicle at the time of contact suggests that the contact was minimal and slight.
- 29. Since there was no jerky/shaky image recorded, it would be reasonable to also say that the occupants on board the Third Party Vehicle were not pushed/jerked abruptly and/or awkwardly whilst seated. The occupants on board the Third Party Vehicle are hence unlikely to sustain any bodily injury due to the contact from the Insured Vehicle.
- 30. Taking into consideration the findings of my height measurement, a reasonable cost of repair to reinstate the Third Party Vehicle is \$850/-.



# **Ang Bryan Tani**

AFF SAE-A, AMSOE AMIRTE, MATAI, Aff.Inst.AEA Senior Technical Investigator Technical Investigation & Accident Reconstructionist (SAE-A)

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