



Your Ref : 590729/IT
Our Ref : CS/MSG19006816/D

11 June 2019

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 SMJ 3582K AND SHB 8319Z ON 13 APRIL 2019**

1. I refer to your letter dated 07 May 2019 and the instructions therein to comment on whether the damage sustained to the rear portion of the motor taxi SHB 8319Z (herein referred to as "Third Party Vehicle") was consistent and caused by contact from the frontal portion of your insured vehicle SMJ 3583K (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 Insured Vehicle, where amongst other information, the circumstance of accident was described;
 - b) Police report G/20190508/7042 lodged by the owner of the Insured Vehicle;
 - c) Singapore Accident Statement lodged by the driver of the Third Party Vehicle, where amongst other information, Police report T/20190415/2041 describing the circumstance of accident was attached;
 - d) 22 coloured photographs showing the Third Party Vehicle before repair and after repair taken by LKK Auto Consultants Pte Ltd;
 - e) 02 coloured photographs taken at the incident scene, provided by the driver of the Third Party Vehicle.
3. In preparation of this report, I had conducted a physical inspection of the Insured Vehicle. Height measurements of the frontal portion of the Insured Vehicle and the rear portion of a similar make and model vehicle as the Third Party Vehicle were also carried out.

4. The information gathered during the course of my investigations and information gathered from the documents provided, were then technically analyzed. My findings and analysis are set out below.

Nature of Incident

5. From the Police report lodged by the driver of the Third Party Vehicle, the Third Party Vehicle was stationary at a traffic junction when he felt an impact from the rear, causing the Third Party Vehicle to jerk forward. The Insured Vehicle had hit the rear portion of the Third Party Vehicle.
6. The driver of the Insured Vehicle had stated in his Singapore Accident Statement that the Insured Vehicle was stopped at a traffic junction due to red traffic light signal. He shifted the transmission gear to neutral mode and did not realize that the Insured Vehicle was sliding forward at extremely slow motion until the front number plate was just about to touch the rear portion of the Third Party Vehicle. No damage was found on the rear portion of the Third Party Vehicle.
7. The Police report lodged by the owner of the Insured Vehicle contain description of the incident as related to her by the driver of the Insured Vehicle. In this Police report, it was also stated that the front number plate of the Insured Vehicle had contacted the rear portion of the Third Party Vehicle. However, there was no damage to both the Insured Vehicle and the Third Party Vehicle.

Third Party Vehicle

8. The Third Party Vehicle was physically inspected by LKK Auto Consultants Pte Ltd on 17 April 2019. From the photographs taken, I note what appears to be a vertical indentation and 2 distorted marks at the centre area of the rear bumper. The left side and right side of the rear bumper were also observed to have been detached from the holding brackets, with the mountings at the left side of the rear bumper broken.
9. The photographs attached in the Singapore Accident Statement of the driver of the Third Party Vehicle, which were taken at the time of reporting on 15 April 2019 (about 2 days after the accident) had showed similar nature/extent of damage as at the time of inspection by LKK Auto Consultants Pte Ltd. See photo 1 - 6 below.



Photo 1 shows a general view of the rear left portion of the Third Party Vehicle at the time of inspection by LKK Auto Consultants Pte Ltd. The left side of the rear bumper (arrowed) was detached from its holding bracket.



Photo 2 shows the mounting area at the left side of the rear bumper broken (circled and arrowed)



Photo 3 shows a general view of the rear right portion of the Third Party Vehicle at the time of inspection by LKK Auto Consultants Pte Ltd. The right side of the rear bumper (arrowed) was detached from its holding bracket.



Photo 4 shows a closer view of the right side of Third Party Vehicle's rear bumper, which was detached from its holding bracket.



Photo 5 shows a closer view of the vertical indentation that was observed on the rear bumper of the Third Party Vehicle. This was at the centre area of the rear bumper.



Photo 6 shows a closer view of the 2 distorted marks that were also seen at the centre area of the Third Party Vehicle's rear bumper.

Physical Inspection of the Insured Vehicle

10. The Insured Vehicle was physically inspected by me on 10 May 2019. The inspection carried out had primarily focused on the frontal portion of the Insured Vehicle given that the incident was reported to be of a head to rear nature where the Insured Vehicle was behind the Third Party Vehicle at the material time. The Insured Vehicle was relatively brand new with a recorded mileage of 1,663km at the time of my inspection.
11. My visual examination of the frontal portion of the Insured Vehicle revealed a slight bending inwards of its front number plate and front number plate casing, at the left bottom corner area as compared to the same area at the right side, which was in an original curve shape. No other visible damage was observed. See photo 7 – 10 below.



Photo 7 shows a general view of the front left portion of the Insured Vehicle at the time of my inspection. The mileage of the Insured Vehicle at the time of my inspection was recorded to be 1,663km.



Photo 8 shows the front number plate and front number plate casing of the Insured Vehicle slightly bent inwards at a single area (circled). This was at the left bottom corner area.



Photo 9 shows the front number plate and front number plate casing of the Insured Vehicle slightly bent inwards at a single area (circled). This was at the left bottom corner area. Apart from this, I did not observe any other visible damage to the frontal portion of the Insured Vehicle at the time of my inspection.



Photo 10 shows the front number plate and front number plate casing of the Insured Vehicle, at the right bottom corner area (circled) for comparison purposes with the left bottom area that was shown in photograph 9 above. The right side of the front number plate and front number plate casing is in an original curve shape whereas the same area at the left side was bent in comparison.

Technical Analysis

12. The 02 photographs that were taken at the incident scene by the driver of the Third Party Vehicle had showed the frontal portion of the Insured Vehicle in contact with the rear portion of the Third Party Vehicle. From the photographs, it was also seen that the Insured Vehicle was directly behind the Third Party Vehicle, in a relatively straight line.
13. The contact between the Insured Vehicle and the Third Party Vehicle can clearly be established by the compressed surface area of the front bumper, directly below the radiator grille. The compression was caused by a load/force acting directly onto the frontal portion of the Insured Vehicle, pushing the front bumper inwards. See photo 11 below.



Photo 11 shows the Insured Vehicle and the Third Party Vehicle at the incident scene. The inward compression (arrowed) of the Insured Vehicle's front bumper, at the surface area directly below the radiator grille indicates that there was contact between the frontal portion of the Insured Vehicle and the rear portion of the Third Party Vehicle.

14. Since there was contact at the material time, I had sought to verify/determine whether the damage found on the rear portion of the Third Party Vehicle was caused by the contact from the frontal portion of the Insured Vehicle. This was done by measuring the height above ground level of the Insured Vehicle's slightly bent front number plate and front number plate casing and thereafter comparing the measured height with the rear portion of the Third Party Vehicle (using a similar make and model vehicle).
15. I now set out below the findings gathered following the height measurements that were conducted: -
 - a) the height above ground level of the lowest point of damage found on the Insured Vehicle (lower end of the Insured Vehicle's slightly bent front number plate and front number plate casing) was measured to be approximately 40cm above ground level;
 - b) comparing this height with the rear portion of a similar make and model vehicle as the Third Party Vehicle, I note that 40cm above ground level was at the rear bumper, slightly above the curve shape of the rear bumper;
 - c) the bottom of the vertical indentation of the Third Party Vehicle's rear bumper shown in photograph 5 above was slightly above the curve shape of the rear bumper. Since the bottom of the vertical indentation corresponds to the height of the lowest point of damage found on the Insured Vehicle, it can then be determined that the damage to the rear bumper of the Third Party Vehicle (shown in photograph 5 above) was caused by the Insured Vehicle, in particular by the left side of the front number plate and front number plate casing;
 - d) the 2 distorted marks (shown in photograph 6 above) were below the curve shape of the Third Party Vehicle's rear bumper. This area is below the height above ground level of the lowest point of damage that was found on the Insured Vehicle. The 2 distorted marks are hence not a result of this particular incident involving the Insured Vehicle. See photo 12 & 13 below.

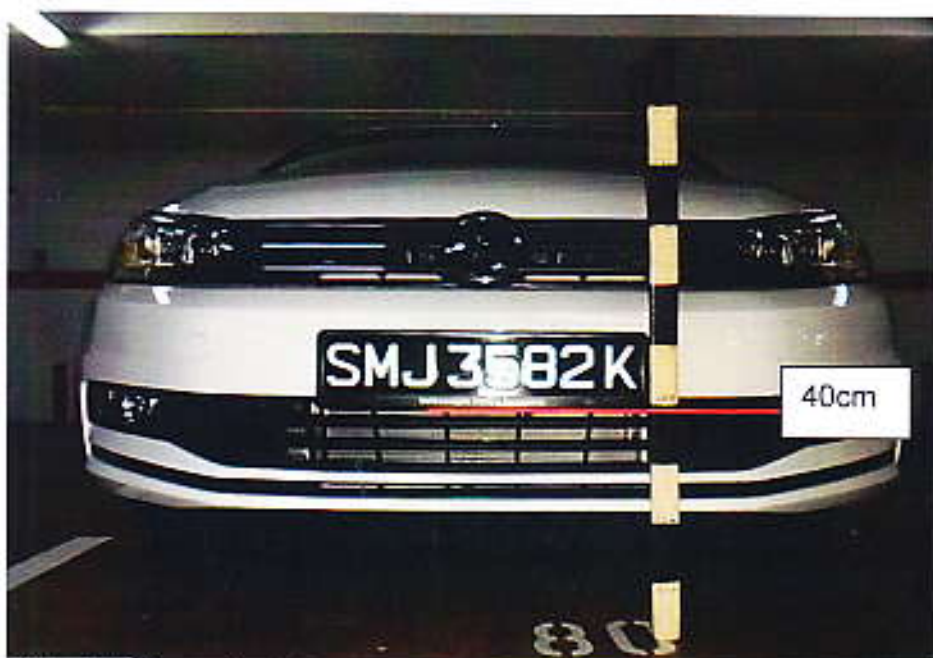


Photo 12 shows the height measurement that was conducted on the frontal portion of the Insured Vehicle. The lower end of the Insured Vehicle's slightly bent front number plate and front number plate casing was approximately 40cm above ground level. This was also the lowest point of damage found on the Insured Vehicle.




Photo 13 shows the height measurement that was conducted on the rear portion of a similar make and model vehicle as the Third Party Vehicle. 40cm above ground level, was at the area slightly above the curve shape of the rear bumper. The bottom of the vertical indentation of the Third Party Vehicle's rear bumper, shown in photograph 5 above, was also slightly above the curve shape of the rear bumper.

16. The findings of the height measurements had indicated that the contact from the frontal portion of the Insured Vehicle had resulted in damage to the rear bumper of the Third Party Vehicle. In general, the extent of damage to the rear bumper indicates that the contact was relatively minor. The force/load arising from this contact was not substantial and did not penetrate/dissipate to other body parts beyond the rear bumper of the Third Party Vehicle. The relatively minor force/load corresponds to the "sliding forward at extremely slow motion" type of contact as described by the driver of the Insured Vehicle in his Singapore Accident Statement

Conclusion

17. 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 frontal portion of the Insured Vehicle and the rear portion of the Third Party Vehicle at the material time. The damage seen on the rear bumper of the Third Party Vehicle is consistent and caused by the Insured Vehicle.
18. The force/load arising from this contact was relatively minor and corresponds to a "sliding forward at extremely slow motion" type of contact as described by the driver of the Insured Vehicle in his Singapore Accident Statement.


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