

Your Ref: M1906193

Our Ref: CS/TMI19014180/D

29 August 2019

Tokio Marine Insurance Singapore Ltd 20 McCallum Street #09-01

Tokio Marine Centre Singapore 069046 (Motor Claims Department)

TECHNICAL INVESTIGATION REPORT OF FIRE INCIDENT INVOLVING THE INSURED VEHICLE SMK 422D ON 11 AUGUST 2019

- I refer to your request dated 15 August 2019.
- My analysis, comments and opinions with respect to the cause of fire to the insured vehicle SMK 422D (herein referred to as "Insured Vehicle") are set out below.

Inspection of the Insured Vehicle

- The Insured Vehicle was physically inspected on 15 August 2019 at the premise of M/s Prime Auto Claims Service Pte Ltd, No. 6 Benoi Place, Singapore 629927.
- A static inspection was carried out to the Insured Vehicle where the following general information was recorded: -

Vehicle Registration No.

: SMK 422D

Make / Model

: Honda Freed Hybrid 7-Seater 1.5G Auto

Chassis No

: GB71079239

Year of Registration

: 2019 (March)

Mileage

: N.A (battery melted)

- The Insured Vehicle was noted to have sustained severe fire damage at its frontal portion. The engine compartment and interior compartment of the Insured Vehicle were observed to be extensively burnt.
- 6. The fire had resulted in the body parts at the frontal portion of the Insured Vehicle to be burnt. This had included its front bumper, front bonnet, front fenders, front support panel, front grille, front headlamps and front windscreen amongst others. Almost all the parts inside the engine compartment were burnt to char. The front dashboard, roof upholstery and seats amongst others, inside the interior compartment were burnt and/or melted. See photo 1 4 below.





Photo 1 shows a general view of the front left body of the Insured Vehicle at the time of inspection. The Insured Vehicle was noted to have sustained severe fire damage at its frontal portion Its front bumper, front bonnet, front grille, front headlamps, front windscreen and front fenders were amongst the body parts that were found to have been affected as a result of the fire.



Photo 2 shows the engine compartment of the Insured Vehicle at the time of inspection. The entire engine compartment of the Insured Vehicle was observed to be severely burnt. Almost all the parts inside the engine compartment were burnt to char.





Photo 3 shows the interior compartment of the Insured Vehicle, which had also sustained severe damage of fire nature. The front dashboard, roof upholstery, carpet and seats amongst others, inside the interior compartment were burnt and/or melted



Photo 4 shows the rear left body of the Insured Vehicle. Exteriorly, the body panels at the rear of the Insured Vehicle were unaffected, apart from a shattered rear windscreen.



7. From what I was able to observe, the skeletal remains inside the engine compartment and inside the interior compartment appear to suggest that there was no modification(s) and/or additionally fitted electronic and/or electrical component(s) on the Insured Vehicle.

Circumstance of Incident

- 8. From the Police Report T/20190812/2058, which was made by one Osman Bin Dupree (herein referred to as "Mr Osman"), I note that the fire to the Insured Vehicle had started at a time when he was driving the Insured Vehicle. Whilst moving off from stationary, his eyes closed due to feeling slightly sleepy. When he opened his eyes shortly after, the Insured Vehicle had already mounted the kerb on the left side of the roadway. The Insured Vehicle collided into an electrical box and caught fire.
- 9. A detailed statement pertaining to the incident was provided by Mr Osman on 27 August 2019 to M/s Ajax Adjusters & Surveyors Pte Ltd. This statement was made available to me for review. Relevant and key information gathered from the statement are appended in the below paragraphs.
- 10. According to Mr Osman, the Insured Vehicle is registered to M/s Comfort Limousine Services Pte Ltd. He has been renting the Insured Vehicle since April 2019. Mr Osman uses the Insured Vehicle for private hire services (Grab). There has not been any mechanical issue with the Insured Vehicle since taking possession of the Insured Vehicle till the date of this incident.
- 11. On 11 August 2019 at about 2340hrs, Mr Osman was driving the Insured Vehicle along the extreme left lane of Punggol East in the direction of KPE. He stopped the Insured Vehicle at the signalized junction of Punggol East and Punggol Drive due to red traffic signal. When the traffic signal turned green, he drove the Insured Vehicle into the junction. According to Mr Osman, halfway into the junction, he dozed off. The next moment, when he opened his eyes, he realized that the Insured Vehicle had mounted the road kerb, along the left side of the roadway. He applied the brakes but was unable to stop the Insured Vehicle from colliding into an electrical box near lamppost 56.
- 12. After the collision, Mr Osman noticed a large spark coming from the front left side of the Insured Vehicle's front bonnet, followed by an explosion. Thereafter, fire started off from the front left portion of the Insured Vehicle. Ms Osman tried to reverse the Insured Vehicle but was unsuccessful. He then turned the ignition off and alighted from the Insured Vehicle.



13. The fire, which had started off at the front left portion of the Insured Vehicle, had engulfed the Insured Vehicle in flames. SCDF officers arrived and extinguished the fire. The Insured Vehicle was eventually arranged to be towed to 6 Benoi Place. Mr Osman did not take any photographs at the incident scene.

Investigation and Technical Analysis

14. Although Mr Osman did not take any photographs whilst at the incident scene, I had however managed to obtain several video recordings and photographs of the incident that were uploaded in the social media website, STOMP. From the photographs, the entire Insured Vehicle could be seen mounted the road kerb, with fire engulfing its frontal portion. Multiple explosion sounds and sparks could also be heard and seen from the video recordings that were uploaded in the website. The link to the article of this incident in STOMP, where the uploaded video recordings could be viewed is indicated below. See photo 5 & 6 below, taken from the website. Link: https://stomp.straitstimes.com/singapore-seen/carcatches-fire-in-punggol-sounds-like-firecrackers-going-off.



Photo 5 shows the Insured Vehicle at the material time of incident with flames engulfing its frontal portion. The Insured Vehicle could also be seen completely mounted the road kerb. Multiple explosion sounds and sparks were heard and seen from video recordings that were uploaded in the social media website, STOMP.



Photo 6 shows the Insured Vehicle after the fire was extinguished. Multiple explosion sounds and sparks, before the fire was extinguished, were heard and seen from video recordings that were uploaded in the social medial website, STOMP.

15.1 visited the incident location on 29 August 2019 and observed that repair/reconstruction works to the electrical box and electrical cables were ongoing. The surrounding grass and vegetation were also burnt. Vehicular debris that were burnt was also found on the burnt grass patch. See photo 7 – 12 below.



Photo 7 shows the signalized junction of Punggol East and Punggol Drive. The Insured Vehicle was initially stationary at this junction due to red traffic signal. It ended up colliding into an electrical box (arrowed) after Mr Osman dozed off when driving the Insured Vehicle into the junction after the traffic signal turned green. The fire to the Insured Vehicle occurred after the collision with the electrical box.





Photo 8 shows a general view of where the electrical box was located. At the time of my visit, repair/re-construction works to the electrical box and electrical cables were ongoing.



Photo 9 shows the signboard that was put up by the contractor pertaining to ongoing repair/re-construction works to the electrical box and electrical cables.





Photo 10 shows a general view of the burnt remains at the location where the electrical box was located. The grass and vegetation surrounding the electrical box were burnt. Vehicular debris that were burnt was also found on the burnt grass patch.



Photo 11 shows a closer view of the burnt remains at the location where the electrical box was located. The grass and vegetation surrounding the electrical box were burnt. Vehicular debris that were burnt was also found on the burnt grass patch.





Photo 12 shows a general view of the burnt remains at the location where the electrical box was located. Repair/re-construction works to the electrical box and electrical cables were ongoing at the time of my inspection.

- 16. Given the circumstance of incident described by Mr Osman, the fire had started after the Insured Vehicle's collision with an electrical box. He first saw a large spark and heard an explosion before seeing flames at the front left portion of the Insured Vehicle. The large spark that Mr Osman saw could be electrical spark(s) from high voltage live electrical power cable(s) in the electrical box, which became dislodged upon collision from the Insured Vehicle.
- 17. The electrical spark(s) created by the dislodged high voltage live electrical power cable(s) could have then either dispersed onto the grass patch and/or onto combustible material of the Insured Vehicle, igniting the fire. The multiple explosion sounds, and sparks heard and seen even after fire had engulfed the frontal portion of the Insured Vehicle, as seen from the video recordings that were uploaded in the social media website, STOMP, corresponds to the presence of electrical sparks at the material time of incident.
- 18. My checks with both local and international bodies and associations revealed that at the time of writing this report, there was no manufacturer recall of similar make and model vehicle as the Insured Vehicle. See search result below obtained from LTA.



Enquiry on Vehicle Recall - Vehicle Specific

*ONLY INFORMATION ON VEHICLE RECALLS SUBMITTED FROM 9 APRIL 2007 IS AVAILABLE

Vehicle Owner Particulars

Owner ID Type:

Company

Owner ID:

380W

Vehicle Details

Vehicle Registration number:

SMK422D -

Make:

HONDA

Vehicle Model:

HUNDA

verticle (viodel:

FREED HYBRID 7-SEATER 1.5G AUTO

Engine No.:

LEB5615335

Chassis No.:

GB71079239

Recall Details

No Recall Detail records

Conclusion

- 19. Having investigated into this matter, I am of the view that the cause of fire to the Insured Vehicle was due to external factor. For this particular case, the fire had occurred after the Insured Vehicle had collided into an electrical box. Electrical sparks from dislodged high voltage live electrical power cable(s) could have then either dispersed onto the grass patch and/or onto combustible material of the Insured Vehicle, igniting the fire.
- 20. My investigations also revealed that at the time of writing this report, there is no manufacturer recall of similar make and model vehicle as the Insured Vehicle.
- 21. From what I was able to observe during my inspection of the Insured Vehicle, there was no skeletal remains inside the engine compartment and inside the interior compartment to suggest that there was modification(s) and/or additionally fitted electronic and/or electrical component(s) on the Insured Vehicle.

Ang Bryan Tani

AMSOE, AMIRTE, AFF SAE, M.MATAI, AFF.Inst.AEA

Senior Technical Investigator

Technical Investigation & Accident Reconstructionist (SAE-A)

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