

Your Ref : 2212658304SG  
Our Ref : CI/AIG22003024/N

22 March 2022

**M/s AIG Asia Pacific Insurance Pte. Ltd.**

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

**TECHNICAL INVESTIGATION REPORT OF FIRE INCIDENT INVOLVING THE  
INSURED VEHICLE SLR 7575A ON 15 MARCH 2022**

1. We refer to your letter dated 17 March 2022 and the instructions therein.
2. Our analysis, comments and opinions with respect to the cause of fire to the insured vehicle SLR 7575A (herein referred to as “**Insured Vehicle**”) are set out below.

**Inspection of the Insured Vehicle**

3. The Insured Vehicle was physically inspected at the premises of Borneo Motors (herein referred to as “**BM**”) located at 2 Pandan Crescent, Singapore 128461.
4. A static inspection was carried out to the Insured Vehicle where the following general information was recorded:-

|                          |                            |
|--------------------------|----------------------------|
| Vehicle Registration No. | : SLR 7575A                |
| Make / Model             | : TOYOTA VIOS 1.5 E (AUTO) |
| Chassis No               | : MR2B23F3101211362        |
| Year of Registration     | : October 2020             |
| Mileage                  | : N.A. (battery melted)    |

5. The Insured Vehicle was noted to have sustained fire damage that was confined to its frontal portion. The entire engine compartment of the Insured Vehicle was observed to be severely burnt while the interior compartment was observed to be severely affected by the fire.
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 support panel, front grille, headlamps, front windscreen, front wheel rims, front fenders and front tyres, amongst others. See photos 1 – 7 below.



**Photo 1** shows the general view of the rear portion of the Insured Vehicle at the time of our inspection. The rear portion of the Insured Vehicle was relatively unaffected by the fire.



**Photo 2** shows the closer view of the left front body of the Insured Vehicle at the time of our inspection. The fire damage to the Insured Vehicle was confined to its frontal portion. Its front windscreen, front bumper, front bonnet, front support panel, front grille, left headlamp, left front wheel rim, left front fender and left front tyre were amongst the body parts that were found to have been affected by the fire.





**Photo 3** shows the general view of the frontal portion of the Insured Vehicle at the time of our inspection. The fire damage to the Insured Vehicle was confined to its frontal portion. The entire engine compartment of the Insured Vehicle was observed to be severely burnt while the interior compartment was observed to be severely affected by the fire.



**Photo 4** shows the closer view of the right front body of the Insured Vehicle at the time of our inspection. The fire damage to the Insured Vehicle was confined to its frontal portion. Its front windscreen, front bumper, front bonnet, front support panel, front grille, right headlamp, right front wheel rim, right front fender and right front tyre were amongst the body parts that were found to have been affected by the fire.



**Photo 5** shows the general view of the front windscreen of the Insured Vehicle at the time of our inspection. The fire damage to the front windscreen was extensive.



**Photo 6** shows the engine compartment of the Insured Vehicle at the time of our inspection. The entire engine compartment of the Insured Vehicle was observed to be severely burnt. Most of the parts inside the engine compartment were found to be burnt and/or melted as a result of the fire.





**Photo 7** shows the interior compartment of the Insured Vehicle, which was severely affected by the fire.

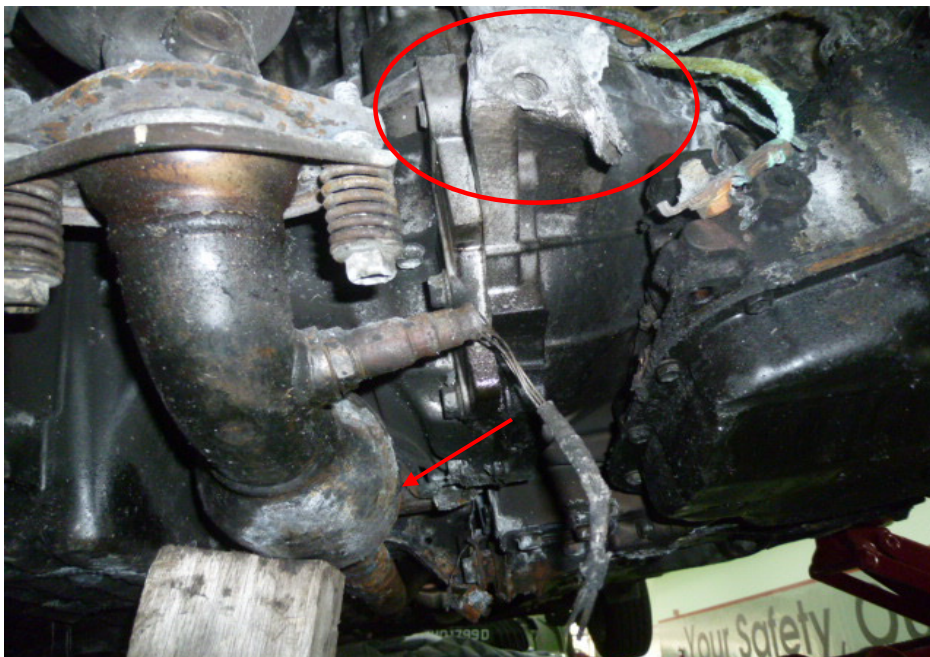
7. At the time of inspection, we did not find any unusual skeletal remains which could have suggested that there was possible modification(s) on the Insured Vehicle.

### **Investigation and Technical Analysis**

8. Based on the circumstances for this particular case, the fire appears to have originated from the exterior portion of the front undercarriage of the Insured Vehicle, somewhere around the engine compartment. This can be determined basing on the area where the extent of fire damage was most severe, the circumstances of the fires' origin at the material time of incident and also the high heat intensity burn marks (whitish burn marks) that were found on the exterior surface of the undercarriage. These whitish burn marks are a result of exposure to prolong heat intensity. Rust would normally start to develop around these areas soon after a fire as the prolonged exposure to high heat intensity usually causes the bare steel/metal material of the body parts to be exposed to natural environmental condition. The rust that had developed around the front undercarriage, in the immediate vicinity of where these whitish burn marks were found, would also support our findings of where the fire to the Insured Vehicle had originated. See photos 8 & 9 below.



**Photo 8** shows the fire damage at the exterior portion of the front undercarriage of the Insured Vehicle. The high heat intensity burn marks (whitish burn marks) found on the exterior surface of its engine components (circled) and rust that had developed on the front undercarriage (arrowed) indicates that the fire to the Insured Vehicle had originated from the exterior of the Insured Vehicle.



**Photo 9** shows a closer view of the high heat intensity burn marks (whitish burn marks) found on the exterior surface of its engine components (circled) and rust that had developed on the front undercarriage (arrowed) indicating that the fire to the Insured Vehicle had originated from the exterior of the Insured Vehicle.

9. From the Singapore Police Report No. G/20220316/2028 and Accident Statement, which was made by Ms Ng Weiling (herein referred to as “**Ms Ng**”), who informed us that on 15 March 2022 at about 1130 hours, she had picked up her husband from work at Orchard Road and was headed home to Serangoon North. She was driving the Insured Vehicle along CTE (SLE). As she approached the Braddell exit, she noticed a van in front of her had avoided an object which looked like a cardboard box on the road. She was unable to react in time and had driven over the box. She mentioned that the Insured Vehicle was functioning with no issues and there were no warning lights displayed on the dashboard after driving over the box. However soon after, there was a burning smell coming from the interior compartment of the Insured Vehicle followed by smoke emitting from the front bonnet. She also mentioned that other motorists had started honking at her. Ms Ng stopped along the road shoulder of the expressway near lamp post 328. She switched off the engine and alighted to inspect the Insured Vehicle together with her husband.
10. They noticed that the front undercarriage of the Insured Vehicle was on fire. Ms Ng immediately called 995. The SCDF arrived in less than 10 minutes after EMAS Recovery Services. The police were last to arrive. The fire was extinguished in about 5 minutes. Ms Ng and her husband assisted the SCDF in their preliminary investigations. She mentioned that firefighters had pulled out remnants of the box from the front undercarriage of the Insured Vehicle after the fire was put out. Ms Ng informed us the remnants appeared to be a piece of a cardboard box and foam padding
11. Ms Ng called her friend who made towing arrangements after the SCDF had left the incident scene. The tow truck arrived in 1 hour. The Insured Vehicle was towed to BM. Ms Ng lodged a police report at the Tampines Neighbourhood Police Centre the following day, on 16 March at 1110 hours. She made an insurance report at BM later that same day at 1717 hours.

### **Incident Scene Photographs**

12. We were able to obtain from Ms Ng, photographs of the Insured Vehicle which were taken during and after the fire was put out. In general, the information that could be gathered from these photographs had corresponded to the events that were related to us by Ms Ng. The photographs had showed the Insured Vehicle on fire and similar extent of damage and burn pattern to the Insured Vehicle as per what we had observed during our physical inspection of the Insured Vehicle.



13. Our closer examination of these photographs revealed that remnants of the cardboard box and foam padding were pulled out from the front undercarriage of the Insured Vehicle by firefighters after the fire was put out. Apart from the aforesaid, there was no further notable information that could be gathered from these photographs. See photos 10 - 12 below.

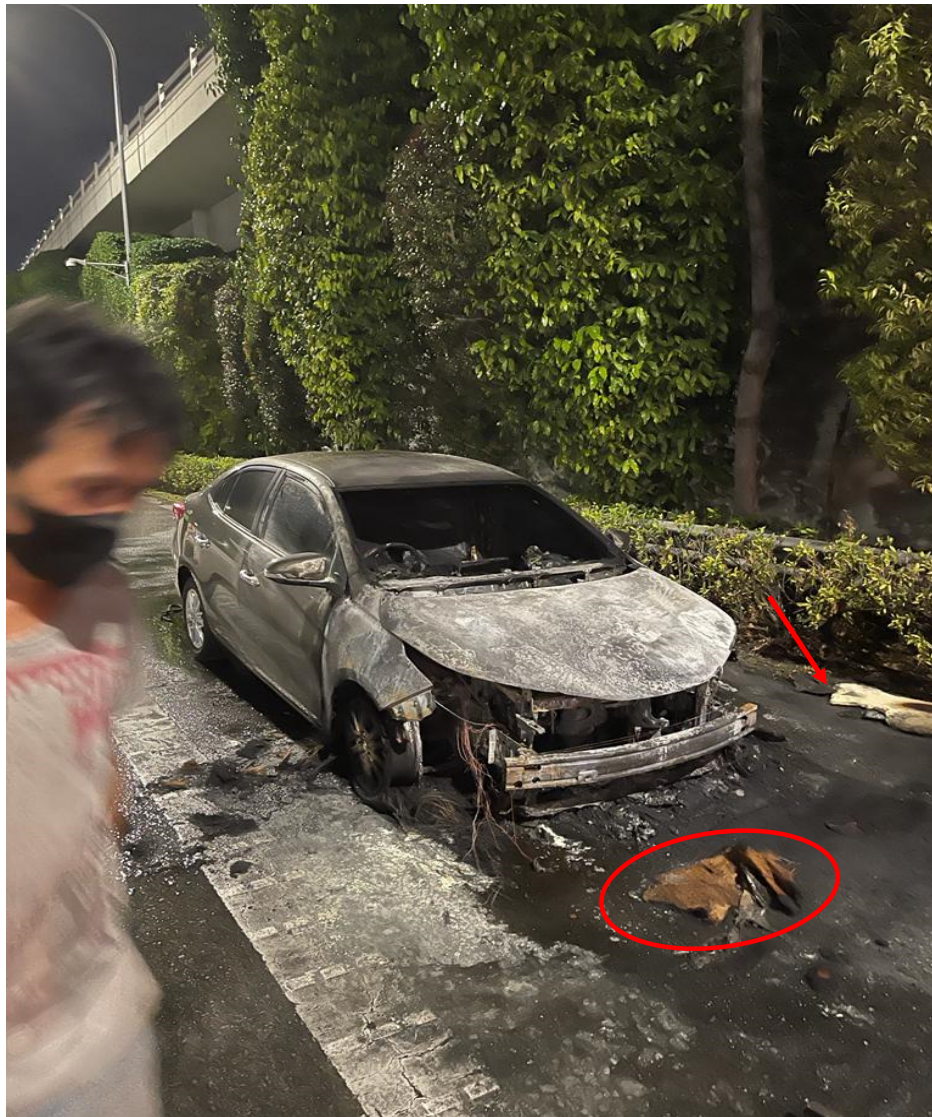


**Photo 10** shows the Insured Vehicle on fire before the arrival of the SCDF. In general, the information that could be gathered from this photograph had corresponded to the events that were related to us by Ms Ng which is the fire had started from the frontal portion of the Insured Vehicle (arrowed) and that EMAS Recovery Services were first to arrive at the incident scene (circled).





**Photo 11** shows the SCDF conducting preliminary investigations after putting out the fire on the Insured Vehicle. In general, the information that could be gathered from this photograph had corresponded to the events that were related to us by Ms Ng which is the fire had started from the front undercarriage of the Insured Vehicle (arrowed).



**Photo 12** shows the Insured Vehicle at the incident location after the fire was extinguished by the SCDF. Ms Ng mentioned that remnants of the cardboard box (circled) and foam padding (arrowed) were pulled from the front undercarriage of the Insured Vehicle by firefighters during their preliminary investigation. The extent of damage and burn pattern to the Insured Vehicle was also observed to be similar to what we had observed during our physical inspection of the Insured Vehicle.

14. Our checks with both local and international bodies and associations had 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 that may possibly be related to fire being originated from the exterior of the Insured Vehicle. See search result from LTA below.



**Vehicle Recall Details**

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

|  |  |
|--|--|
| Owner ID Type<br><b>Singapore NRIC</b>               | Owner ID<br><b>651I</b> ←                      |
| Vehicle No.<br><b>SLR7575A</b> ←                     | Make/Model<br><b>TOYOTA/ VIOS 1.5 E (AUTO)</b> |
| Engine No.:<br><b>2NR5457691</b>                     | Chassis No.:<br><b>MR2B23F3101211362</b>       |
| Recall Details:<br><b>No Recall Detail records</b> ← |  |

**Conclusion**

15. Having investigated and technically analysed the damages of burnt nature to the Insured Vehicle, we are of the view that the cause of fire to the Insured Vehicle was likely due to external factor from the cardboard box that was stuck under the front undercarriage of the Insured Vehicle.
16. The cause of fire being due to the cardboard box is also supported by our examination of the incident scene photographs where we had found the remnants of the cardboard box and foam padding which were pulled out from the front undercarriage of the Insured Vehicle by firefighters after the fire was extinguished.
17. There was no modification(s) or additional electronic and/or electrical component(s) fitted on the Insured Vehicle at the time of our inspection of the Insured Vehicle.

18. At the time of writing this report, there was also no manufacturer recall of similar make and model vehicle as the Insured Vehicle that could possibly be related to this particular incident.

**Muhd Nazril***Senior Technical Investigator***Ang Bryan Tani***AMSOE, AMIRTE, AFF SAE, M.MATAI, AFF.Inst.AEA**Senior Technical Investigator**Technical Investigation & Reconstructionist (SAE-A)*

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