

Your Ref: S0M02LR8
Our Ref: CS4/ASM20005192/P

23rd April 2020

M/s AXA Insurance Pte. Ltd.

8 Shenton Way #24-01
AXA TOWER
Singapore 068811
(Motor Claims Department)

**TECHNICAL INVESTIGATION REPORT OF FIRE INCIDENT INVOLVING THE
INSURED VEHICLE GBC 7891J ON 9th April 2020**

1. We refer to your request dated 14th April 2020.
2. Our analysis, comments and opinions with respect to the cause of fire to the insured vehicle GBC 7891J (herein referred to as "**Insured Vehicle**") are set out below.

Inspection of the Insured Vehicle

3. The Insured Vehicle was physically inspected on 14th April 2020 at the premises of Borneo Motors. (herein referred to as "**Borneo Motors**") located at 2 Pandan Crescent, Singapore 128462.
4. A static inspection was carried out to the Insured Vehicle where the following general information was recorded:-

Vehicle Registration No.	: GBC 7891J
Make / Model	: TOYOTA DYNA 150(M)
Chassis No	: JTFAT35Y30K202581
Year of Registration	: 2013 (OCTOBER)
Mileage	: N.A. (wiring affected)

5. The Insured Vehicle was noted to have sustained fire damage that was confined to its interior and rear portion. The fire damage was observed to be most severe at its front portion. The front and rear portion was affected by the fire.

6. The front cabin, interior compartment and front windscreen were amongst the body parts that were burnt and/or partially melted as a result of the fire. See photos 1 – 10 below.



Photo 1 shows the front view of the Insured Vehicle at the time of our inspection. The fire damage to the Insured Vehicle was confined to its front cabin, interior compartment and rear portion.



Photo 2 shows the general view of the interior compartment of the Insured Vehicle. The entire windscreen and the interior compartment have been badly burnt by the fire.



Photo 3 shows the close up view of the interior compartment of the Insured Vehicle. The interior compartment have been badly burnt by the fire.



Photo 4 shows the right side of the Insured Vehicle at the time of our inspection. The fire damage to the Insured Vehicle was confined to its rear portion and interior compartment. The right rear cabin panel, handle railings and rear portion of the driver side door were amongst the parts that were observed to have been affected by the fire.



Photo 5 shows the close up view of the right side of the Insured Vehicle at the time of our inspection. The fire damage to the Insured Vehicle was confined to its rear portion and interior compartment. The right rear cabin panel and handle railings were amongst the parts that were observed to have been affected by the fire.



Photo 6 shows the left side of the Insured Vehicle at the time of our inspection. The fire damage to the Insured Vehicle was confined to its rear portion and interior compartment. The right rear cabin panel, handle railings and rear portion of the driver side door were amongst the parts that were observed to have been affected by the fire.



Photo 7 shows the battery unit of the Insured Vehicle at the time of our inspection. The battery unit and the battery terminal was unaffected by the fire damage to the Insured Vehicle.



Photo 8 shows the engine compartment of the Insured Vehicle at the time of our inspection. The front cabin of the Insured Vehicle was not able to be lifted due to the damage it sustained from the fire, however visually the engine unit looks to be intact and was unaffected by the fire.



Photo 9 shows a closer view of the rear portion of the Insured Vehicle at the time of our inspection. The entire rear goods compartment, rear cabin panel, and sustained severe visible fire damage.



Photo 10 shows a closer view of the rear goods compartment of the Insured Vehicle at the time of our inspection. The rear cabin was significantly burnt and/or melted as a result of the fire. We also found remnants of burned sand paper, cardboard and various other items in the rear goods compartment.

7. At the time of our inspection of the Insured Vehicle, we did not find any additionally fitted electronic and/or electrical component(s) on the Insured Vehicle. There was also no modification(s) found fitted on the Insured Vehicle.

Investigation and Technical Analysis

8. For this particular case, the fire appears to have originated from the exterior of the Insured Vehicle, at the rear portion. This was determined basing on the area where the extent of fire damage was most severe which was at the rear goods compartment portion of the Insured Vehicle which metal plates and also the high heat intensity burn marks (whitish burn marks) that were found on the exterior surface of the back portion of the front cabin. These whitish burn marks are a result of exposure to prolonged 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 on the exterior surface of the back portion of the front cabin, at the immediate vicinity where these whitish burn marks were found, would also support our findings of where the fire to the Insured Vehicle had originated.

9. The fire originating from the exterior of the Insured Vehicle is further supported by the lack of visible fire damage to the interior of the engine compartment, which had contained more combustible materials (flammable fluids amongst others). See photos 11 & 12 below.



Photo 11 shows the fire damage at the rear portion of the Insured Vehicle. The high heat intensity burn marks (whitish burn marks) found on the exterior surface of the back portion of the front cabin (circled) and rust that had developed on the sides (red arrows) indicates that the fire to the Insured Vehicle had originated from the exterior of the Insured Vehicle. Indicating that the fire may have started from the rear goods compartment portion of the Insured Vehicle. This is also taking into consideration that there was no extensive fire damage at the interior of its engine compartment. Refer to photo 8 above.



Photo 12 shows the fire damage at the rear portion of the Insured Vehicle. We observed burned and damaged goods at the rear goods compartment of the Insured Vehicle which was (circled).

10. Although the physical damage and burn pattern of the Insured Vehicle had indicated that the fire had originated from the exterior of the Insured Vehicle, we were unable to visit the site where the incident happened as it was on the expressway.
11. However, we managed to speak with Mr Chua Geok Meng (herein referred to as **“Mr Chua”**) Mr Chua was the driver and informed us that Insured Vehicle belongs to AWSTRONG TRADING PTE. LTD. (herein referred to as **“AWSTRONG TRADING”**) where Mr Chua is working as the delivery driver for the company.
12. Mr Chua who informed us that on 9th April 2020 at 1315 hours he, picked up the goods from his office at Cambridge road and had to deliver them to Sembcorp Marine located at Tuas. At the rear cabin of the Insured Vehicle. The office supplies was packed in cartons and stacked at the rear goods cabin of the Insured Vehicle. Mr Chua was travelling along the AYE (Tuas). As he was driving, he smell burning smell in the cabin and subsequently saw smoke emitting from the rear goods compartment thru the rear view mirror, he immediately bought the Insured Vehicle to a stop and alighted the Insured Vehicle. Upon alighting he saw flames engulfing the goods that was placed at rear goods compartment right behind of the front cabin of the Insured Vehicle.

13. Mr Chua retreated to safety and a passing truck driver stopped his vehicle and came to assist and called SCDF for assistance. The SCDF arrived 20 minutes later and took about 10 minutes to extinguish the fire. And had his statement taken by the SCDF officers
14. Mr Chua then called his company and they call AXA insurance hotline and made towing arrangements. The tow truck arrived about half an hour later. The Insured Vehicle was towed to Borneo Motors and Mr Chua made an insurance report at Borneo Motors on 11th April 2020 at 0844 hours.
15. Mr Chua mentioned that he had not experienced any mechanical or electrical/electronic problems with the Insured Vehicle till the day of the incident.
16. Mr Chua mentioned that he is a smoker, however he does not smoke in the Insured Vehicle while driving nor during the material time where the fire incident had happened.
17. With regard to the history of the Insured Vehicle, we were able to gather from Mr Aw, the sales director of the company that the Insured Vehicle was purchased new in October 2013
18. Pertaining to the maintenance aspect, the Insured Vehicle has always gone its periodic servicing and no major components was replaced or repaired.
19. To the best of his recollection, there has not been any major mechanical problem and/or electrical problem with the Insured Vehicle. He did not do any modification(s) and/or additionally fitted any electrical or electronic component(s) to the Insured Vehicle.
20. We understand from the list of delivery items that the Insured Vehicle was carrying on the day of incident, had consist of boxes permanent marker pens, sand paper, plastic tapes & etc. They were all plastic wrapped together and placed on a wooden pallet for the ease of transportation.

21. To our understanding on the day of incident, the Insured Vehicle was travelling under the blazing sun & the contents in the permanent marker pens are highly flammable. The likely cause of fire would be that the heat from the blazing sun had caused a voluntary ignition of the flammable content in the permanent marker pens and burning the sandpaper together with the other combustible materials that was packed together with it. Due to the wind direction and intensity of the fire, it had uncontrollably spread to the front cabin of the Insured Vehicle and causing it to be burned down as well.

Incident Scene Photographs

22. Although we could not visit the site where the incident happened as it was on the expressway, we managed to obtain photograph which were taken by Mr Chua at the incident location. The photograph were taken during the fire on the Insured Vehicle.

23. In general, the information that could be gathered from the photograph had corresponded to the events that were related to us by Mr Chua. Our close examination of these photograph also showed no unusual foreign material(s) and/or object(s) found on the ground in the immediate area of the road where the Insured Vehicle was positioned. See photo 13 below.



Photo 13 shows general view of the Insured Vehicle on fire. In general, the information that could be gathered from this photograph had corresponded to the events that were related to us by Mr Chua, where the fire had started on the Insured Vehicle.

24. 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 Company	Owner ID 900N
Vehicle No. GBC7891J ←	Make/Model TOYOTA/ DYNA 150 MANUAL ←

Engine No.:
1KD2330752

Chassis No.:
JTFAT35Y30K202581

Recall Details:

No Recall Detail records ←

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Conclusion

25. Having investigated and technically analysed the damages of burnt nature to the Insured Vehicle, we are of view that the cause of fire to the Insured Vehicle was likely due to external factors. As it had most probably originated from the flammable goods that was placed at the rear goods portion that had spread onto the front cabin portion of the Insured Vehicle.
26. There was no modification(s) or additional electronic and/or electrical component(s) fitted on the Insured Vehicle at the time of our physical inspection of the Insured Vehicle.
27. 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.

28. SCDF was activated to attend to the fire incident and a fire report pertaining to their findings will likely be forth coming. We have applied for this fire report and will forward a copy of the report once it is made available to us.



Sherwin Beh
Technical Investigator



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