

Your Ref: SNM24D204642  
Our Ref: CS/CTI24080282/J

20 August 2024

**M/s China Taiping Insurance (Singapore) Pte. Ltd.**

3 Anson Road #16-00  
Springleaf Tower  
Singapore 079909  
(Motor Claims Department)

**TECHNICAL INVESTIGATION REPORT OF FIRE INCIDENT INVOLVING THE  
INSURED VEHICLE SLA 3862L ON 16 AUGUST 2024**

1. We refer to your letter dated 19 August 2024 and the instructions therein.
2. Our analysis, comments and opinions with respect to the cause of fire to the insured vehicle SLA 3862L (herein referred to as “**Insured Vehicle**”) are set out below.

**Inspection of the Insured Vehicle**

3. The Insured Vehicle was physically inspected on 19 August 2024 at the premises Ding Auto Pte Ltd located at 60 Jalan Lam Huat, Carros Centre, #06-46, Singapore (737869).
4. A static inspection was carried out to the Insured Vehicle where the following general information was first recorded:-

Vehicle Registration No.	: SLA 3862L
Make / Model	: HYUNDAI / DM SANA FE 2.2 CRDI AT 4WD SR
Chassis No	: KMHSU81XSGU584178
Year of Registration	: February 2016
Mileage	: N.A (battery melted)

5. The Insured Vehicle was observed to have sustained severe fire damage all around. Its engine compartment and interior compartment were completely burnt. Rust had accumulated all over the Insured Vehicle as a result of exposure to environmental condition for a period of time.
6. The fire had resulted in extensive damage to the engine compartment of the Insured Vehicle. Most of the components inside the engine compartments were found to be severely burnt and/or melted as a result of the fire. See photos 1 – 7 below.



**Photo 1** shows the general view of the frontal portion of the Insured Vehicle at the time of our inspection. The Insured Vehicle was observed to have sustained extensive fire damage all around. Its engine compartment and interior compartment were completely burnt. Rust had accumulated all over the Insured Vehicle as a result of exposure to environmental condition for a period of time.



**Photo 2** shows the general view of the rear portion of the Insured Vehicle at the time of our inspection. The Insured Vehicle was observed to have sustained extensive fire damage all around. Its engine compartment and interior compartment were completely burnt. Rust had accumulated all over the Insured Vehicle as a result of exposure to environmental condition for a period of time.



**Photo 3** shows the general view of the right body of the Insured Vehicle at the time of our inspection. The Insured Vehicle was observed to have sustained extensive fire damage all around. Its engine compartment and interior compartment were completely burnt. Rust had accumulated all over the Insured Vehicle as a result of exposure to environmental condition for a period of time.



**Photo 4** shows the general view of the left body of the Insured Vehicle at the time of our inspection. The Insured Vehicle was observed to have sustained extensive fire damage all around. Rust had accumulated all over the Insured Vehicle as a result of exposure to environmental condition for a period of time.





**Photo 5** shows the interior compartment of the Insured Vehicle, which was significantly affected by the fire.



**Photo 6** shows a general view of the engine compartment of the Insured Vehicle at the time of our inspection. Most of the components inside the engine compartment were found to be severely burnt and/or melted as a result of the fire.

7. At the time of physical inspection of the Insured Vehicle, we had found aftermarket 20- inch alloy rims. All these fitted components were not the standard type for the Insured Vehicle. See photo 7 below.



**Photo 7** shows the non-standard rim found to be fitted on the Insured Vehicle at the time of our inspection. The 20- inch alloy rims fitted on the Insured Vehicle were not the standard type for the Insured Vehicle.

### **Investigation and Technical Analysis**

8. For this particular case, the fire appears to have originated within the engine compartment of the Insured Vehicle, somewhere around the front centre portion of the engine compartment. This can be determined from the greenish residue that was found on several stretches of burnt original factory fitted wirings mainly around the right rear portion of the engine compartment. The presence of greenish residue indicates internal heating of copper wires, a sign of an electrical short circuit occurring. The greenish residue is normally left behind from oxidation as a result of chemical reaction involving the copper wires. This physical evidence would appear to suggest that the cause of fire to the Insured Vehicle could have possibly been due to electrical in nature. See photos 8 - 10 below.





**Photo 8** shows the burnt wirings around the front centre portion of the engine compartment which is near to the vicinity where the fire to the Insured Vehicle had likely started (circled).



**Photo 9** shows a closer view of the wirings with greenish residue found around the front centre portion of the engine compartment of the Insured Vehicle (red arrows). The presence of such greenish residue suggests occurrence of an electrical short circuit.



**Photo 10** shows a close up view of the wirings with greenish residue found around the front centre portion of the engine compartment of the Insured Vehicle (red arrow). The presence of such greenish residue suggests occurrence of an electrical short circuit.

9. From the Police Report E/20240816/7029, which was made by Mr Yeo Cheng Tee (herein referred to as **“Mr Yeo”**), we note that the fire to the Insured Vehicle had started at a time when Mr Yeo was driving his passenger from Woodlands Road and going towards Pemimpin Road.
10. We managed to speak to Mr Yeo on 20 August 2024 where we were able to gather further information regarding the incident as well as information pertaining to the history of the Insured Vehicle.

11. Mr Yeo who is a registered private hire driver for Tada Singapore Pte Ltd, had just started his work on the 16 August 2024 at approximately 1230hrs. Mr Yeo had picked up his first passenger at Woodlands Road and was headed towards Pemimpin Road which is the drop off point for his passenger at the time. Upon reaching the traffic light junction of Ang Mo Kio Avenue 1 & Ang Mo Kio Avenue 2 a passer by on a motorcycle had pulled up beside Mr Yeo and had informed him of a fire to the Insured Vehicle. Mr Yeo immediately switched off the engine of the Insured Vehicle and opened up the front engine bonnet to check on the fire, upon opening the front engine bonnet Mr Yeo had noticed flames emitting from the front centre compartment of the Insured Vehicle's engine. Mr Yeo then told his passenger to evacuate the Insured Vehicle and both Mr Yeo and his passenger hurriedly evacuated to a safe spot away from the burning vehicle. Mr Yeo called for SCDF assistance as firefighters and Police had arrived at the incident scene shortly after. No ambulance was called as nobody had suffered any injury. There was also no damage to any government property. The fire was extinguished within 10 minutes.
12. Mr Yeo mentioned that he had called his tow truck driver and made towing arrangements. The tow truck arrived at approximately 1430hrs and the Insured Vehicle was towed to Ding Auto PTE LTD. Mr Yeo made the insurance report on the day of incident 16 August 2024 at Ding Auto PTE LTD at 1709 hours.
13. Mr Yeo mentioned that he had not experienced any other mechanical problems with the Insured Vehicle till the day of the incident. He also mentioned that there were neither warning lights displayed nor was there an abnormal rise in temperature throughout the period he was driving the Insured Vehicle.
14. With regards to the history of the Insured Vehicle, we were able to gather from Mr Yeo that the Insured Vehicle was purchased pre-owned from a dealer 2 years ago by Mr Yeo who is the registered owner and only driver of the Insured Vehicle.
15. Pertaining to the maintenance aspect, Mr Yeo sends the Insured Vehicle for periodical servicing. He provided us with his latest servicing record on 31 July 2024. Refer to invoice 1 below.



# TAX INVOICE

INVOICE NO.	2407518
DATE	31/7/2024
MODEL	HYUNDAI SANTAFE

**CALL US**  
**CELINE 9144 5781**



**HENGHUI PTE LTD**  
**FINZEO CAR**  
60 Jalan Lam Huat  
Marros Centre #03-57  
Singapore 737869

→ SLA3862L

**BILL TO**

[illegible]

GST Registration no. : 201622798W  
All prices are subject to GST Charges  
PAYNOW Co.Reg.No.: 201622798W



BANK TRANSFER OCRC 601567118001

Total Before GST	\$ 302.50
GST 9%	\$ 27.23
Total After GST	\$ 329.73

**Invoice 1** shows the last servicing package done on the Insured Vehicle on 31 July 2024 at HENGHUI PTE LTD which included the changing of engine oil, engine oil filter, automatic transmission fluid and rear brake pads replacement. (red arrows).

### **Incident Scene Photographs**

16. We were able to obtain photos from Mr Yeo of the Insured Vehicle on fire as well as photos which they had 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 Mr Yeo. See photo 11 - 13 below.



**Photo 11** shows the Insured Vehicle bursting into flames shortly before the arrival of the SCDF.





**Photo 12** shows the Insured Vehicle engulfed in flames shortly before the arrival of the SCDF.



**Photo 13** shows the SCDF fire fighters (red arrows) extinguishing the fire to the Insured Vehicle.

17. Our checks with both local and international bodies and associations had revealed that at the time of writing this report, there was two manufacturer recall on 6 September 2022 for the Anti-Lock Brake System (ABS) module. And on 10 July 2017 for the hood upper latch cable. However, both the recall was rectified. See search result from LTA below.

1

2

## Vehicle Recall Details

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

Owner ID Type Singapore NRIC	Owner ID 584I
Vehicle No. SLA3862L	Make/Model HYUNDAI/ DM SANTA FE 2.2 CRDI AT 4WD SR
Engine No.: D4HBFU314177	Chassis No.: KMHSU81XSGU584178

## Recall Details

**Recall No.: R2022091186**

Manufacturer Recall Date:

06 Sep 2022

Estimated Completion Year of Recall:

2024

Brief Description (As Provided by Motor Dealer):

Affected vehicles are equipped with Anti-Lock Brake System (ABS) modules that could malfunction internally and cause an electrical short circuit over time.

Date Rectified:

16 Feb 2023

Hotline Information:

ISMAIL BIN TAIB at 64735588

RACHEL YOW at 64735588

For more details, contact KOMOCO MOTORS PTE LTD



<b>Recall No.: R2017070416</b>	
Manufacturer Recall Date: <b>10 Jul 2017</b>	Estimated Completion Year of Recall: <b>2024</b>
Brief Description (As Provided by Motor Dealer): <b>Hood upper latching cable may corrode.</b>	Date Rectified: <b>19 Sep 2017</b>
Hotline Information: <b>CALVIN KAN CHEE KIN at 64735588</b> <b>ISMAIL BIN TAIB at 64735588</b>	
For more details, contact KOMOCO MOTORS PTE LTD	

### **Conclusion**

18. 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 of electrical in nature. For this particular case, the fire had originated along the wirings inside the engine compartment, somewhere around the front centre portion of the engine compartment. The wirings were original factory fitted wirings of the Insured Vehicle.
19. At the time of inspection, we did not find any unusual skeletal remains which could have suggested that there was possible modification(s) and/or additionally fitted electronic and/or electrical component(s) on the Insured Vehicle.
20. We found the Insured Vehicle to be fitted with 20- inch alloy rims. The tyre rims fitted do not require prior approval from LTA.
21. Although the aftermarket alloy rims fitted on the Insured Vehicle were not the standard type for the Insured Vehicle, we are of the view that these parts did not cause and/or contribute to the fire incident.

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

**Elton Seet***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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