

Your Ref: xsjqbaucrZ  
Our Ref : CI/III22011065/P

28<sup>th</sup> November 2022

**M/s India International Insurance Pte. Ltd.**

64 Cecil Street #04, #05  
IOB Building  
Singapore 049711

**TECHNICAL INVESTIGATION REPORT OF WARRANTY CLAIM INVOLVING  
THE INSURED VEHICLE SMX 2594J ON 17<sup>th</sup> October 2022**

1. We refer to your letter dated 17<sup>th</sup> October 2022 and the instructions therein.
2. Our analysis, comments and opinions with respect to the cause of abnormalities to the insured vehicle SMX 2594J (herein referred to as “**Insured Vehicle**”) are set out below.

**Inspection of the Insured Vehicle**

3. The Insured Vehicle was physically inspected on 17<sup>th</sup> October 2022 at the premises of AutoSprint Pte Ltd located at 24 Leng Kee Rd, #07-01, Singapore 159096
4. A physical inspection was carried out to the Insured Vehicle where the following general information was recorded:-

Vehicle Registration No.	: SMX 2594J
Make / Model	: MERCEDES BENZ C200 AMG LINE M-HYBRID AUTO
Chassis No	: W1K2050772R581704
Year of Registration	: JAN 2021
Mileage	: 38,442KM

5. The complaint on the Insured Vehicle was noted be an error and warning message light regarding the electronic 48V battery Systems (ISG) for the integrated starter generator system and there is difficulty in starting up the engine of the Insured Vehicle. There is a recommendation by the workshop to replace 48V battery and its electric DC converter unit. The vehicle was observed to be unaffected by any signs of accident.

6. Prior to our inspection, the workshop had informed us that they had already conducted check of the components and the electrical systems of the steering rack and pinion system and visually all components were intact without any damage and however, the issue was still present during our inspection of the Insured Vehicle. See photos 1 – 9 below.



**Photo 1** shows the mileage of the Insured Vehicle recorded at the time inspection at 38,442KM



**Photo 2** shows the general view of the front portion of the Insured Vehicle at the time of our inspection. The Insured Vehicle is observed to be unaffected by any signs of accident.



**Photo 3** shows the general view of the engine portion of the Insured Vehicle at the time of our inspection. The engine compartment is observed to be unaffected by any signs of accident.





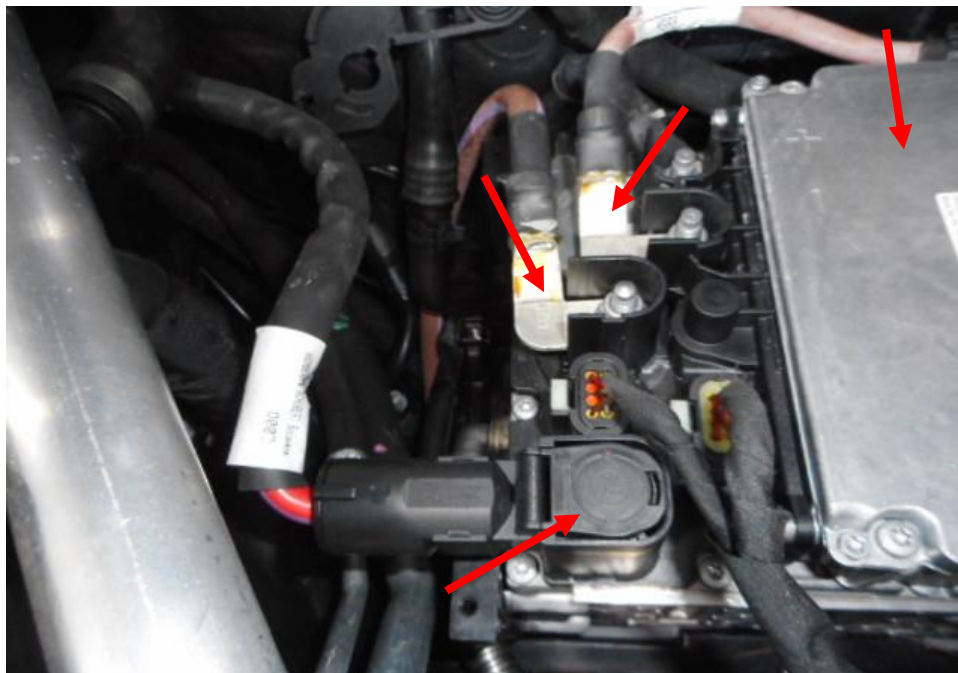
**Photo 4** shows the chassis number of the Insured Vehicle at the time of our inspection.



**Photo 5** shows the general view of the 48v battery and its components in the engine compartment portion of the Insured Vehicle at the time of our inspection. The 48v battery and its components is observed to be unaffected and by any signs of accident.



**Photo 6** shows the close up view of the 48v battery and its components (arrowed) in the engine compartment portion of the Insured Vehicle at the time of our inspection. The 48v battery and its components is observed to be unaffected and by any signs of accident.



**Photo 7** shows the close up view of the 48v battery and its components (arrowed) in the engine compartment portion of the Insured Vehicle at the time of our inspection. The 48v battery and its components is observed to be unaffected and by any signs of accident.



**Photo 8** shows the conducted ECU diagnosis of the Insured Vehicle at the time of our inspection. There was an electronic error (arrowed) on the 48v battery integrated starter system (ISG) of the Insured Vehicle.



## Repair Shop

Shop Name:AUTOSPRINT PTE LTD

Address:24 LENG KEE ROAD #07-01/02 Leng Lee AutoPoint, Singapore 159096  
SINGAPORE SINGAPORE

Zip Code:159096

Telephone:69118331 fax62517438

Email:enquiry@autospring.com.sg

SN:989890010977

Test Time:2022-10-03 13:55:17

Technician Name:Alan



## Vehicle Information

Make:Mercedes-Benz

Model:205.077 - C 200 Sedan/C 260 Sedan

VIN:W1K2050772R581704

Odometer:38306 km

Vehicle Software Version:V49.85

Diagnostic Application Version:V7.03.030

Diagnostic path:Automatically Search >48V - Starter-alternator(RSG48V1\_ODX)



## DTC

DTC	Description	State
P061B00	The torque calculation of the control unit has a malfunction._	STORED
P062068	The output for the actuation of the alternator has a malfunction.There is incomplete information.	STORED
P0A1A92	This error code can be ignored and erased.	STORED
P0A5929	The current sensor of electric machine A has a malfunction.There is an invalid signal.	STORED
P0AFA16	The power supply of the high-voltage on-board electrical system is too low.The limit value for electrical voltage has not been attained.	STORED
P0AFA68	The power supply of the high-voltage on-board electrical system is too low.There is incomplete information.	STORED
P0AFB17	The power supply of the high-voltage on-board electrical system is too high.The limit value for electrical voltage has been exceeded.	STORED

**Photo 9** shows the conducted ECU diagnosis of the Insured Vehicle at the time of our inspection. There was an electronic error's related to the high-voltage electrical systems (arrowed) of the 48V battery and the DC converter unit of the Insured Vehicle.

7. 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 abnormalities being originated from the steering system 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 <b>Singapore NRIC</b>	Owner ID <b>159G</b>
Vehicle No. <b>SMX2594J</b> ←	Make/Model <b>MERCEDES BENZ/ C200 AMG LINE M-HYBRID AUTO</b>
Engine No.: <b>26491580037201</b>	Chassis No.: <b>W1K2050772R581704</b> ←
Recall Details: <b>No Recall Detail records</b> ←	

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**Recall details.** Shows the vehicle recall results retrieved from LTA's website. There was no recall on the Insured Vehicle at the time of incident.

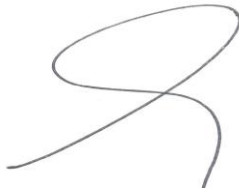


**Conclusion**

8. We did not find any evidence which had suggested that the cause of abnormalities to the Insured Vehicle was due to poor maintenance and/or recurring problem.
9. The recommendation to replace the 48V battery and DC convertor unit at \$5,098.55 is justifiable as all the relevant checks has been conducted.



**Sherwin Beh**  
*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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