

Your Ref: SMW 3446C  
Our Ref : CI/III22000209/P

6<sup>th</sup> January 2022

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

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

**TECHNICAL INVESTIGATION REPORT OF WARRARTY CLAIM INVOLVING  
THE INSURED VEHICLE SMW 3446C ON 8<sup>th</sup> November 2021**

1. We refer to your letter dated 27<sup>th</sup> December 2021 and the instructions therein.
2. Our analysis, comments and opinions with respect to the cause of abnormalities to the insured vehicle SMW 3446C (herein referred to as “**Insured Vehicle**”) are set out below.

**Inspection of the Insured Vehicle**

3. The Insured Vehicle was physically inspected on 6<sup>th</sup> January 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.	: SMW 3446C
Make / Model	: MERCEDES BENZ C200 AMG LINE M-HYBRID
AUTO	
Chassis No	: WDD2050772R465020
Year of Registration	: JUNE 2019
Mileage	: 35,834KM

5. The complaint on the Insured Vehicle was noted be to a faulty engine crankshaft pulley as it broke while driving and the vehicle had lost its driving ability at the material time. The recommendation by the workshop to was to replace the crankshaft, pulley and its related components in the engine unit. The vehicle was observed to be unaffected by any signs of accident. The engine unit removed from the Insured Vehicle and dismantled to inspect for detailed damages See photos 1 – 13 below.



**Photo 1** shows the mileage of the Insured Vehicle recorded at the time inspection at 35,834KM



**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.



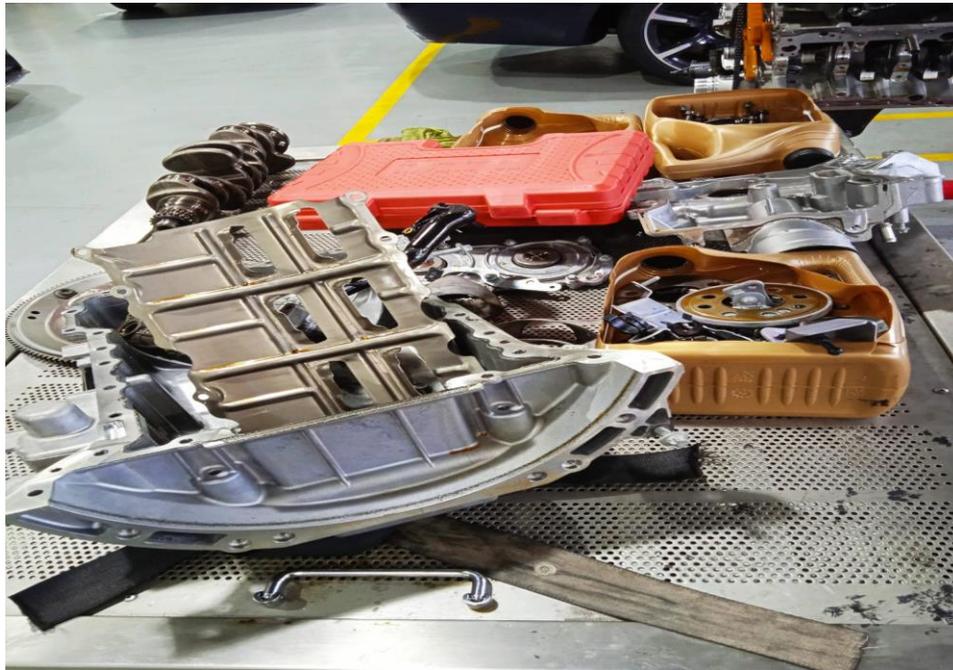
**Photo 4** shows the general view of the engine underside portion of the Insured Vehicle at the time of our inspection. The engine underside compartment is observed to be unaffected and by any signs of accident.



**Photo 5** shows the chassis number of the Insured Vehicle at the time of our inspection.



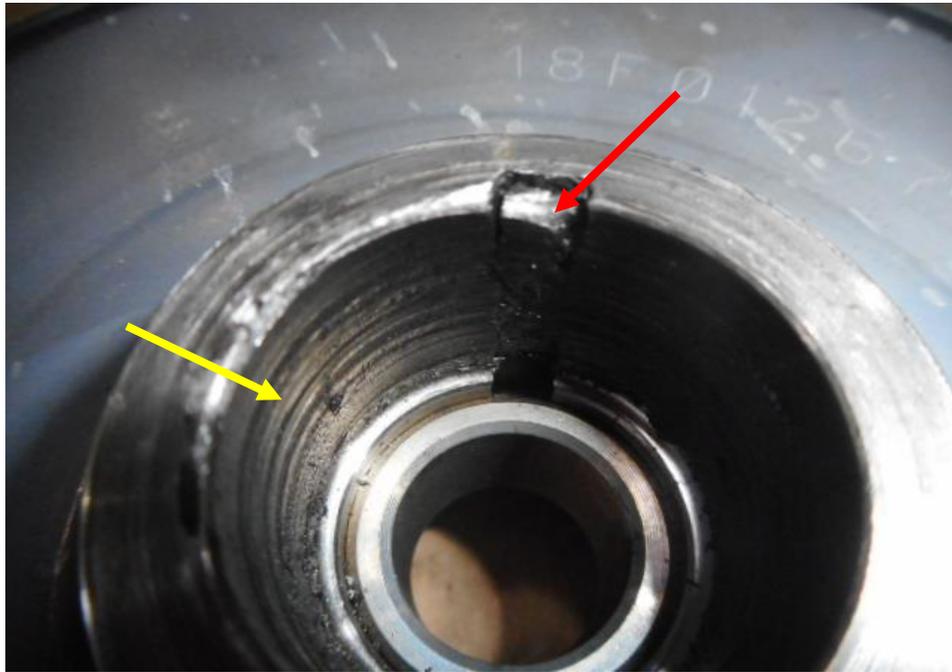
**Photo 6** shows the engine unit portion of the Insured Vehicle at the time of our inspection. The engine unit is observed to be taken out of the Insured Vehicle and dismantled.



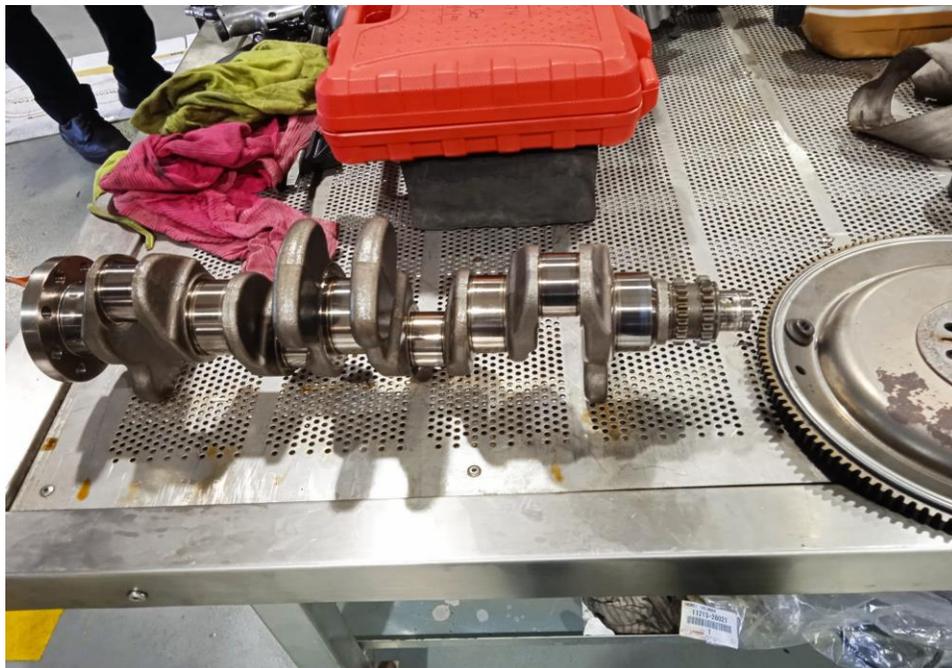
**Photo 7** shows the engine unit portion of the Insured Vehicle at the time of our inspection. The engine unit is observed to be taken out of the Insured Vehicle and dismantled.



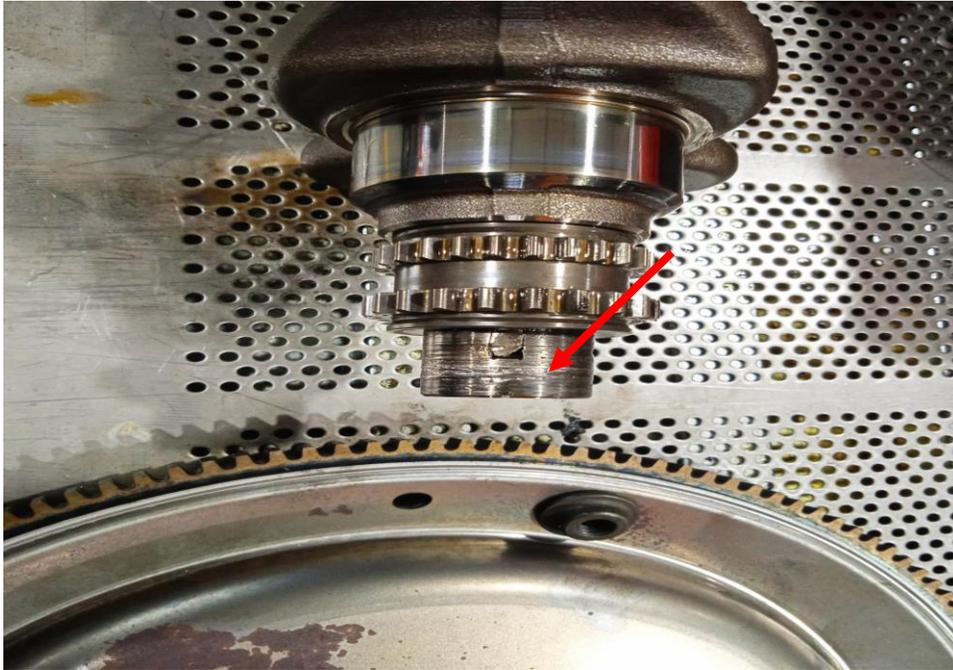
**Photo 8** shows the general view of the crankshaft pulley of the Insured Vehicle at the time of our inspection. The crankshaft pulley was observed to be damaged at the time of inspection.



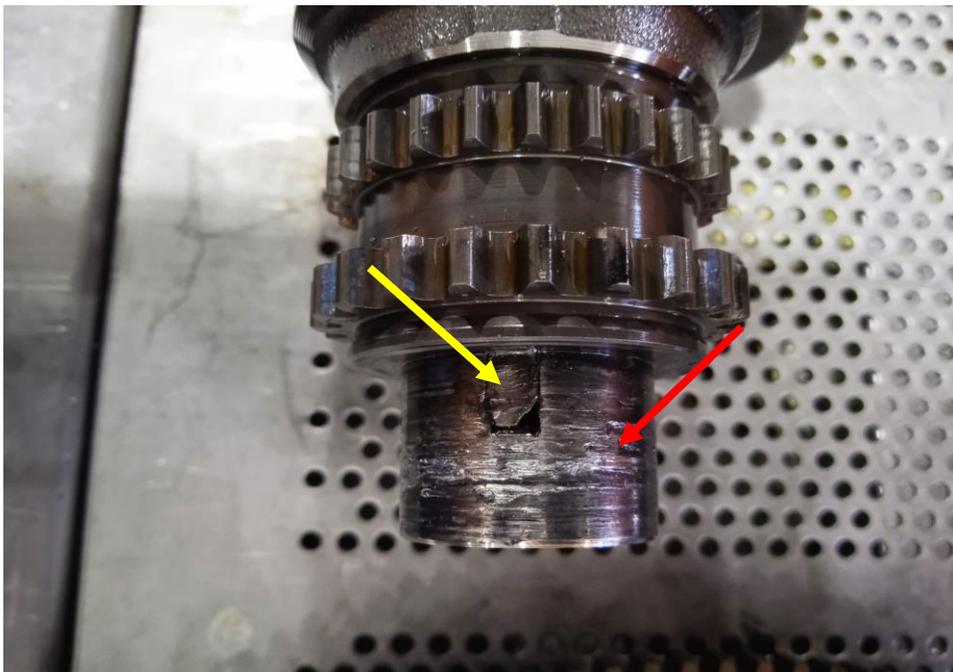
**Photo 9** shows the close up view of the crankshaft pulley of the Insured Vehicle at the time of our inspection. The crankshaft pulley locking pin (red arrow) was observed to be broken and there was damages to the surface (yellow arrow) of the pulley as well at the time of inspection.



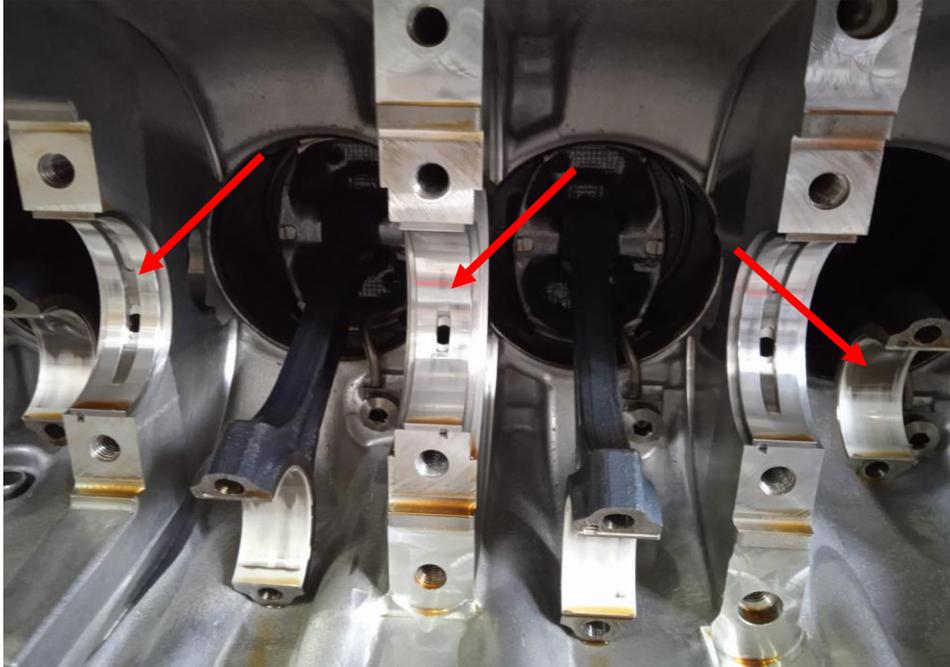
**Photo 10** shows the general view of the crankshaft of the Insured Vehicle at the time of our inspection. The crankshaft where the damaged crankshaft pulley was mounted on was also observed to be damaged at the time of inspection.



**Photo 11** shows the close up view of the crankshaft of the Insured Vehicle at the time of our inspection. The crankshaft where the damaged crankshaft pulley was mounted on was also observed to be damaged at the time of inspection.



**Photo 12** shows the close up view of the crankshaft of the Insured Vehicle at the time of our inspection. On the crankshaft (red arrow) where the damaged crankshaft pulley was mounted on was also observed to be damaged and the other half of the broken locking pin (yellow arrow) was observed to be stuck on the crankshaft at the time of inspection.



**Photo 13** shows the close up view of the crankshaft bearing of the Insured Vehicle at the time of our inspection. On the crankshaft bearing (arrowed) where the crankshaft was mounted on was also observed to be damaged as the damaged crankshaft pulley had caused the unbalanced crankshaft to move in the engine resulting to the damages to the crankshaft bearing at the time of inspection.

6. 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 engine or its crankshaft pulley and components of the Insured Vehicle. See search result from LTA below.

1

2

## Vehicle Recall Details

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

<i>Owner ID Type</i> <b>Singapore NRIC</b>	<i>Owner ID</i> <b>256H</b>
<i>Vehicle No.</i> <b>SMW3446C</b> ←	<i>Make/Model</i> <b>MERCEDES BENZ/ C200 AMG LINE M-HYBRID AUTO</b> ←
<i>Engine No.:</i> <b>26491530059753</b>	<i>Chassis No.:</i> <b>WDD2050772R465020</b>
<i>Recall Details:</i> <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 regarding the engine and crankshaft pulley on the Insured Vehicle at the time of incident.

**Conclusion**

7. 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. And the damaged to the crankshaft pulley locking pin was likely due to material stress which caused it to be broken and lodged in the crankshaft and resulting to the damages to the crankshaft and its components.
8. Our investigations had also revealed that at the time of writing this report, there is no manufacturer recall to similar make and model vehicle as the Insured Vehicle that may possibly be related to this incident.
9. The recommendation to replace the crankshaft pulley, crankshaft and its components at \$3,500 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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