

Our Ref : CS/C3-000124110301/N

15 November 2024

Tribecar

51 Ubi Avenue 1

#03-30

Singapore 408933

MECHANICAL INSPECTION REPORT OF MOTORCYCLE FBP 3260M

1. We refer to your request on 13 November 2024 to conduct a physical inspection of a motorcycle bearing registration number FBP 3260M (herein referred to as “**Motorcycle**”), which was involved in a non- fatal road traffic accident on 25 October 2024.
2. The objective of the inspection is to determine if there was any possible mechanical failure to the Motorcycle that may have contributed to the accident.
3. Following the request, we had carried out a physical inspection of the Motorcycle on 14 November 2024 at the premises of Tribecar, 51 Ubi Avenue 1, #03-30, Singapore 408933. We now set out below our observations and comments with respect to this inspection.

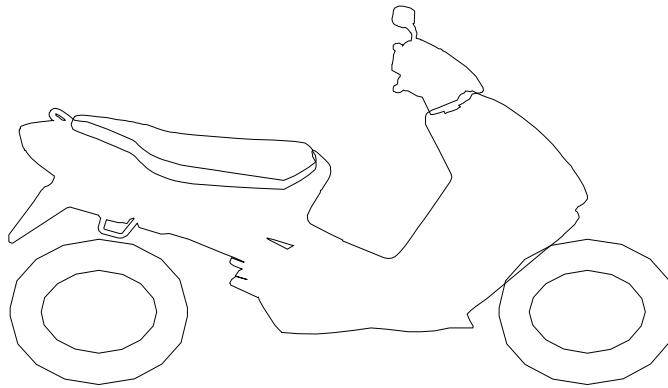
General Condition

4. The mileage of the Motorcycle at the time of our inspection was 97, 571km.
5. The Motorcycle had sustained damages all around. Body parts that were found to have been damaged include its headlight, head cowling, steering stem, front cowling, front mudguard, left handlebar grip, left side mirror, centre inner cowling, side cowlings, right front footrest, right pillion footrest, rear side covers and right side cover, amongst others.

Tyres and Wheel Rims

6. The condition of the 2 tyres of the Motorcycle was observed to be in serviceable condition. We did not observe any tear, burst mark(s) and/or punctured hole(s) on the sidewalls as well as across the tread of the 2 tyres. Both the tyres were observed to be sufficiently inflated for vehicular operation.

7. The tyre brand, tyre size and remaining tread depth of the 2 tyres were recorded as follows:-



Michelin 80/90 - 17 (3mm)

Michelin 70/90 - 17 (3mm)

8. The 2 tyres were wrapped around alloy wheel rims. At the time of our inspection, we did not observe any visible damage on the front and rear wheel rim of the Motorcycle. See photos 1 – 20 below.



Photo 1 shows the speedometer gauge of the Motorcycle where the mileage recorded at the time of our inspection was 97, 571km (circled).



Photo 2 shows a general view of the rear portion of the Motorcycle at the time of our inspection. The Motorcycle had sustained damages all around.



Photo 3 shows a general view of the frontal portion of the Motorcycle at the time of our inspection. The Motorcycle had sustained damages all around.



Photo 4 shows a general view of the right body of the Motorcycle at the time of our inspection. The Motorcycle had sustained damages all around.



Photo 5 shows a general view of the rear portion of the Motorcycle at the time of our inspection. The Motorcycle had sustained damages all around. Body parts that were found to have been damaged include its headlight, head cowl, steering stem, front cowl, front mudguard, left handlebar grip, left side mirror, centre inner cowl, side cowls, right front footrest, right pillion footrest, rear side covers and right side cover, amongst others.



Photo 6 shows a closer view of the grazed headlight (arrowed) of the Motorcycle at the time of our inspection.



Photo 7 shows a closer view of the grazed head cowl of the Motorcycle (arrowed) at the time of our inspection.



Photo 8 shows a closer view of the cracked front mudguard of the Motorcycle (arrowed) at the time of our inspection.



Photo 9 shows a closer view of the missing left side mirror and left handlebar grip of the Motorcycle (arrowed) at the time of our inspection.



Photo 10 shows a closer view of the cracked front cowling of the Motorcycle at the time of our inspection (arrowed).



Photo 11 shows a closer view of the cracked left cowling of the Motorcycle at the time of our inspection (arrowed).



Photo 12 shows a closer view of the cracked centre inner cowling of the Motorcycle at the time of our inspection (arrowed).



Photo 13 shows the bent right front footrest (arrowed) of the Motorcycle at the time of our inspection.



Photo 14 shows a closer view of the cracked left rear side cover of the Motorcycle at the time of our inspection (arrowed).



Photo 15 shows a closer view of the grazed right cowling of the Motorcycle (arrowed) at the time of our inspection.



Photo 16 shows the cracked right rear side cover (arrowed) of the Motorcycle at the time of our inspection.

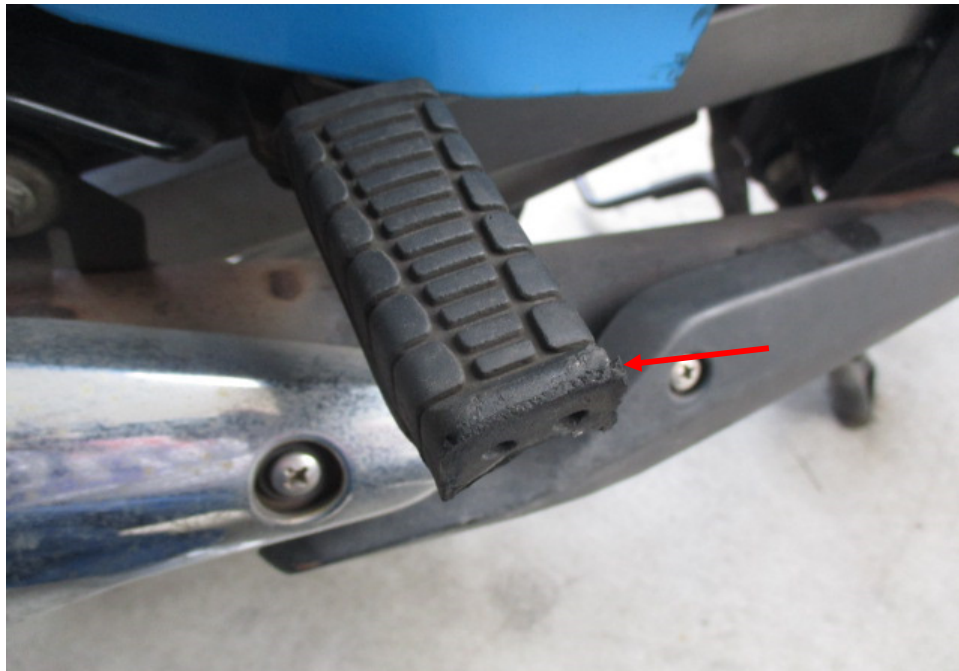


Photo 17 shows the grazed right pillion footrest (arrowed) of the Motorcycle at the time of our inspection.



Photo 18 shows the cracked right side cover (arrowed) of the Motorcycle at the time of our inspection.



Photo 19 shows the condition of the Motorcycle's front tyre. The front tyre was observed to be in serviceable condition with remaining tread depth of approximately 3mm. There was no tear, burst mark(s) and/or punctured hole(s) on the sidewalls as well as across the tread of the front tyre. The front tyre was also observed to be sufficiently inflated for vehicular operation.



Photo 20 shows the condition of the Motorcycle's rear tyre. The rear tyre was observed to be in serviceable condition with remaining tread depth of approximately 3mm. We did not observe any tear, burst mark(s) and/or punctured hole(s) on the sidewalls as well as across the tread of the rear tyre. The rear tyre was also observed to be sufficiently inflated for vehicular operation.

Engine & Drive Train

9. Upon examination of the Motorcycle's engine area, we had observed that the various engine related parts and components were intact with no visible damage. There was also no sign(s) or indication(s) of fluid leak observed around the engine area of the Motorcycle.
10. The gear train which rotates the rear wheel of the Motorcycle was found to be intact without any misalignment. It was also adequately lubricated for operating purposes. See photos 21 – 24 below.



Photo 21 shows the left side of the engine of the Motorcycle at the time of our inspection. The various engine related parts and components were found to be intact with no visible damage. There was also no sign(s) or indication(s) of fluid leak observed around the left engine area of the Motorcycle.



Photo 22 shows the right side of the engine of the Motorcycle at the time of our inspection. The various engine related parts and components were found to be intact with no visible damage. There was also no sign(s) or indication(s) of fluid leak observed around the right engine area of the Motorcycle.



Photo 23 shows the gear train (arrowed) of the Motorcycle, which was observed to be intact with no misalignment. It was also adequately lubricated for operating purposes. The gear train rotates the rear wheel of the Motorcycle.



Photo 24 shows the closer view of the gear train (arrowed) of the Motorcycle, which was observed to be intact with no misalignment. It was also adequately lubricated for operating purposes.

Steering System & Braking System

11. For this case, we were not able to conduct any test(s) on the steering system of the Motorcycle due to the damage to its steering stem. The steering stem was observed to be bent most likely as a result of the accident.
12. The brake system of the Motorcycle was of a semi-hydraulic type, where hydraulic (brake fluid) pressure controls the brake for the front wheel while the brake for the rear wheel is controlled by mechanical means (cables and springs). Our visual examination of the various components in the brake system, like the brake disc, brake caliper, drum, brake lever and brake foot pedal, revealed all to be intact and without damage. There was also no leakage of brake fluid observed along the front brake hose. This was from the respective front brake fluid reservoir to the front brake caliper of the Motorcycle. The brake fluid for the front brake was found to be of sufficient level for operating purposes. However we were unable to remove the front brake reservoir cover to determine if the brake fluid was contaminated as the accident had caused the head cowl to be deformed. We were unable to access the front brake reservoir cover. There was no visible tear or cut observed on the connecting hoses and cables.
13. Static brake tests conducted on the Motorcycle had appeared to indicate that the front brake system of the Motorcycle was in serviceable condition. There was some resistance felt (spongy like feel) upon pressing the front brake lever. This would indicate that there's no leakage of pressure/vacuum in the front brake system. See photos 25 – 30 below.



Photo 25 shows the steering stem of the Motorcycle. The steering stem was observed to be bent most likely as a result of the accident (arrowed). We were hence not able to conduct any tests on the steering system of the Motorcycle.



Photo 26 shows a close up view of the bent steering stem of the Motorcycle most likely as a result of the accident (arrowed). We were hence not able to conduct any tests on the steering system of the Motorcycle.

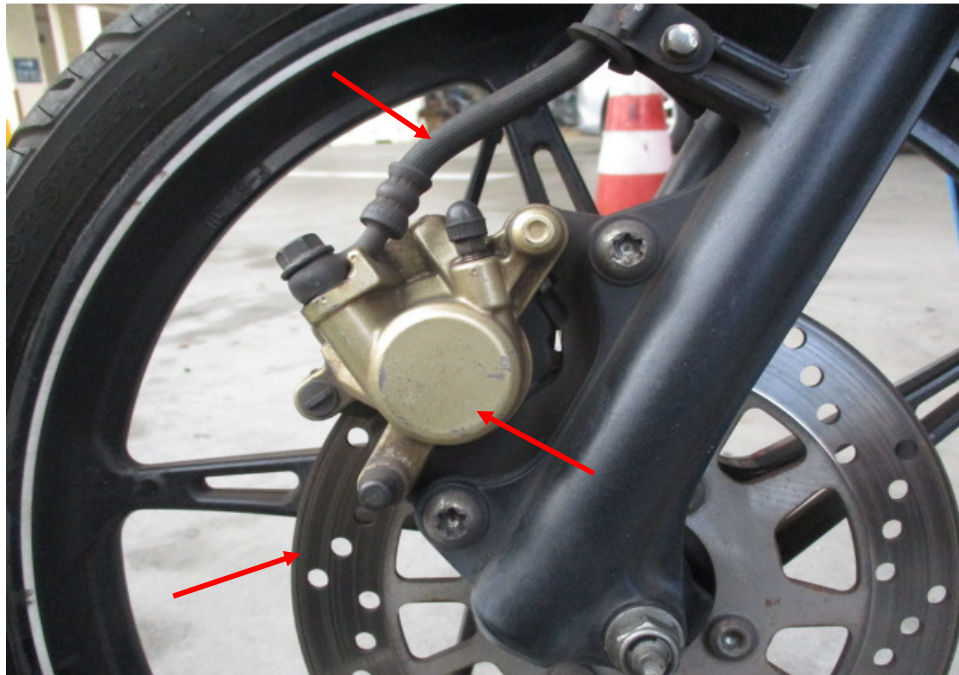


Photo 27 shows a close up view of the front brake caliper, front brake disc and front brake hose (arrowed) of the Motorcycle, which are all part of the components in the hydraulic front brake system of the Motorcycle. Our visual checks of these various components had revealed all to be intact with no visible damage. No leakage of brake fluid was also observed.



Photo 28 shows the brake fluid reservoir for the front brake of the Motorcycle. The brake fluid was found to be of sufficient level for operating purposes (arrowed).



Photo 29 shows the front brake lever being depressed. There was some resistance felt (spongy like feel) upon pressing the front brake lever (arrowed). This would indicate that there is no leakage of pressure/vacuum in the front brake system.



Photo 30 shows the rear wheel of the Motorcycle. The type of brake system for the rear wheel was of a mechanical type, controlled by the brake foot pedal of the Motorcycle. Our checks of the cable (arrowed), spring and drum which are all part of the components in the rear brake system of the Motorcycle reveal all to be intact and without damage.

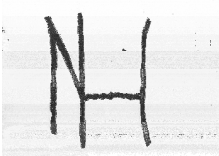
Operational Behaviour of the Motorcycle

14. No operational test to primarily determine whether there was any abnormality to the engine system, transmission system and braking system of the Motorcycle could be conducted as the engine of the Motorcycle could not be started despite several attempts to kickstart the engine as well as damage of its steering stem (most likely as a result of the accident), which had rendered the Motorcycle immobile for the operational tests.

Conclusion

15. For this particular case, we were unable to determine whether there was any possible mechanical failure to the Motorcycle that may have contributed to the accident. This was mainly due to the extent of damage that it had sustained. Its steering system was damaged at the time of our inspection. The braking system of the Motorcycle was observed to be in serviceable condition.
16. The tyres of the Motorcycle were found to be in a serviceable condition. There was no tear, cut or burst mark(s) on the outer and the inner sidewalls as well as across the tread of the tyres. The front and rear tyre were sufficiently inflated for vehicular operation. Both tyres had remaining tread depth of approximately 3mm each.

17. Our findings were based solely on a static and visual inspection of the Motorcycle. No operational test(s) could be carried out to the Motorcycle as its engine could not be started at the time of our inspection despite several attempts to kickstart the engine as well as due to the damage of its steering stem (most likely as a result of the accident), which had rendered the Motorcycle immobile.

**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)*

DISCLAIMER OF LIABILITY TO THIRD PARTIES:- This Report is made solely for the use and benefit of the Client named on the front page of this Report. No liability or responsibility whatsoever, in contract or tort, is accepted to any third party who may rely on the Report wholly or in part. Any third party acting or relying on this Report, in whole or in part, does so at his or her own risk.