

Your Ref: TP/IP/16299/2021  
Our Ref : CI/TPD21008296/N

5 August 2021

**Fatal Accident Investigation Team**

Traffic Police Department  
Singapore Police Force  
10 Ubi Avenue 3  
Singapore 408865

**INSPECTION REPORT OF MOTORCYCLE FBH 9173J**

1. We refer to your request dated 11 May 2021 to conduct a physical inspection of a motorcycle bearing registration number FBH 9173J (herein referred to as “**Motorcycle**”), which was involved in a fatal road traffic accident on 31 March 2021.
2. The purpose of this inspection is to primarily 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 2 August 2021 at the premises of Traffic Police vehicle pound, 517 Airport Road Singapore 539942. We now set out below our observations and comments with respect to this inspection.

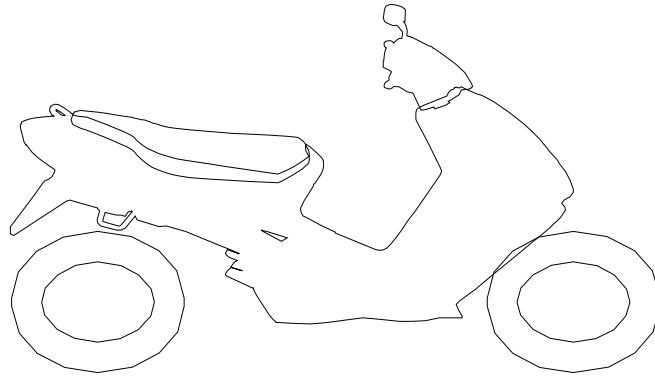
**General Condition**

4. The mileage of the Motorcycle at the time of our inspection was 72,256km.
5. The Motorcycle was observed to have sustained damages along its left body. The body parts that were found to have been damaged include its front mudguard, left front signal lamp, left side mirror, clutch lever, left rear side cover, left bottom cowl and top box, 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 3.50 - 10 (3mm)

Michelin 3.50 - 10 (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 – 11 below.



**Photo 1** shows the speedometer gauge of the Motorcycle where the mileage recorded at the time of our inspection was 72, 256km (circled).



**Photo 2** shows a general view of the frontal portion of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained damages at its left body.



**Photo 3** shows a general view of the left body of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained damages at its left body. Amongst the body parts that were found to have been damaged include its front mudguard, left front signal lamp, left side mirror, clutch lever, left rear side cover, left bottom cowling and top box, amongst others.





**Photo 4** shows a closer view of the clutch lever and left side mirror (arrowed) which were amongst the body parts of the Motorcycle that had sustained damage as a result of the accident.



**Photo 5** shows the damaged front mudguard (arrowed) of the Motorcycle. The damage sustained was again mainly of grazing nature.



**Photo 6** shows the dented left rear side cover (circled) of the Motorcycle as a result of the accident.



**Photo 7** shows the cracked left front signal lamp (arrowed) of the Motorcycle as a result of the accident.





**Photo 8** shows the grazed left bottom cowling (arrowed) of the Motorcycle as a result of the accident.



**Photo 9** shows the grazed top box (arrowed) of the Motorcycle as a result of the accident.



**Photo 10** 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.

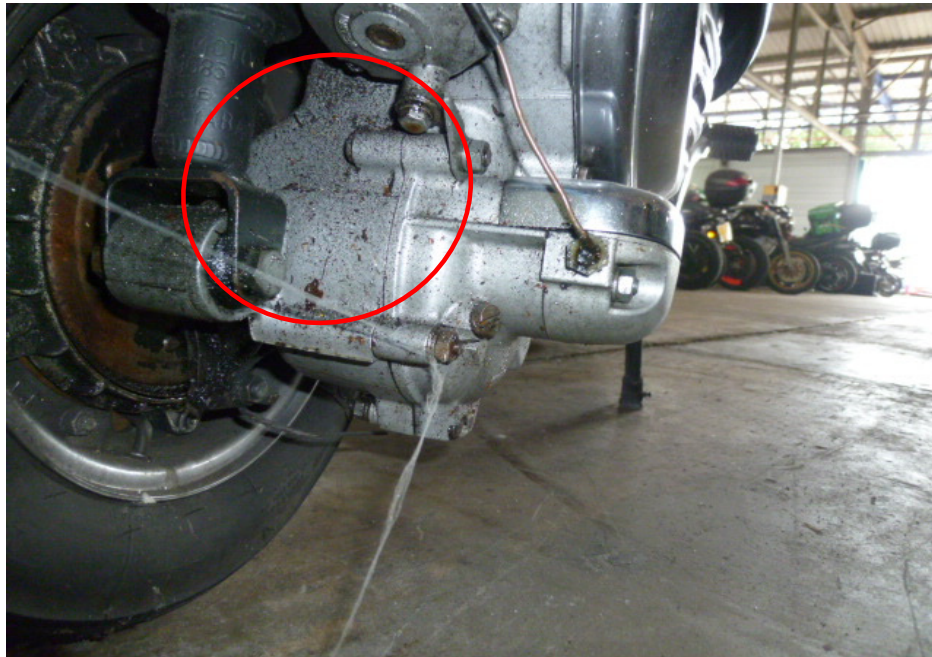


**Photo 11** shows the condition of the Motorcycle's rear tyre. The rear tyre was observed to be in serviceable condition with remaining tread depth of approximately 3mm. The tyre was also observed to be sufficiently inflated for vehicular operation. We did not observe any tear, burst mark(s) and/or punctured hole(s) on the sidewalls as well as across the tread of the rear tyre.



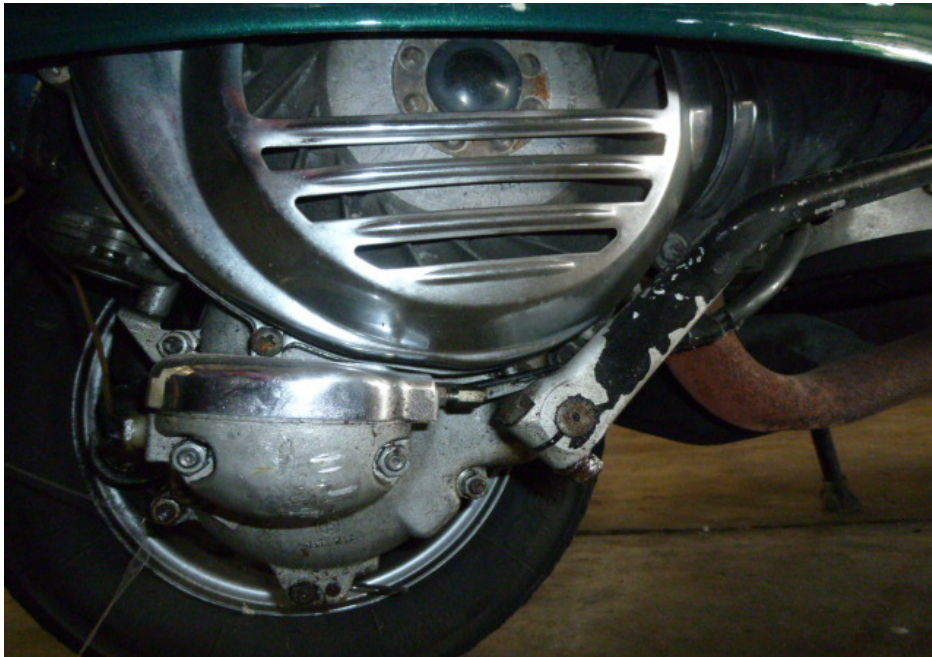
**Engine & Drive Train**

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. Fluid stains were however observed on the underside of the engine area. The presence of dust and dirt particles accumulated around the stained areas indicates that the fluid leak had occurred sometime before the accident.
10. The drive train of the Motorcycle was found to be intact without any misalignment. There was also no visible tear or cut observed on the connecting hoses and cables. See photos 12 – 14 below.



**Photo 12** shows the bottom of the Motorcycle's engine area where fluid stains were observed to have been formed. The presence of dust and/or dirt particles accumulated at the areas where the fluid stains had formed (circled), indicates that the fluid leak had occurred sometime before the accident.





**Photo 13** shows 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 engine area of the Motorcycle.

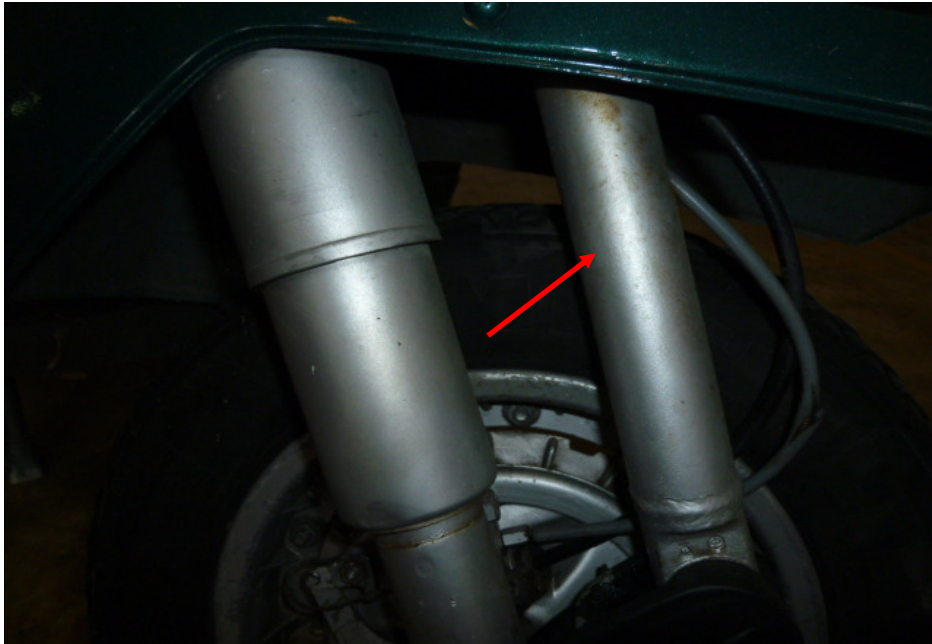


**Photo 14** shows the general view of the drive train of the Motorcycle, which was observed to be intact with no misalignment. There was also no visible tear or cut observed on the connecting hoses and cables (arrowed).

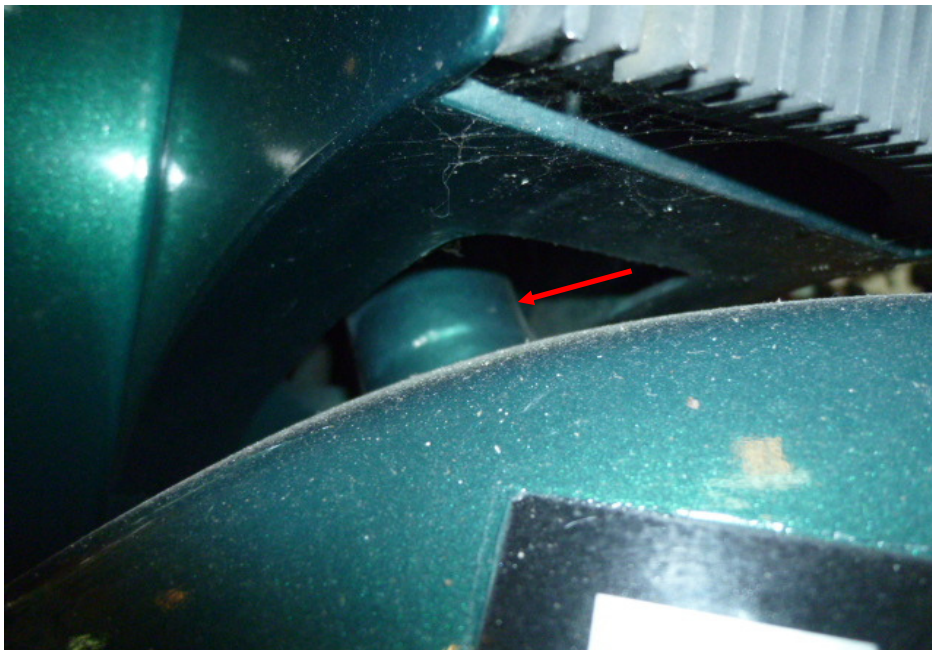
**Steering System & Braking System**

11. Our checks on the various steering components of the Motorcycle revealed that its steering system was in serviceable condition. Its steering stem and front fork was found to be intact and undamaged. Turning the handle bar towards the left and right also did not produce any abnormal free play and/or resistance.
12. The braking system of the Motorcycle was observed to be controlled by mechanical means (cables and springs). Our visual examination of the various components in the Motorcycle's braking system like the brake cables, springs, drums, brake lever and brake pedal reveal all to be intact and without damage. The brake for the front wheel is engaged by pressing the brake lever at the right side of the Motorcycle's handle bar while the brake for the rear wheel is engaged by stepping on the brake pedal at the right side panel of the Motorcycle. There was also no visible tear or cut observed on the connecting hoses and cables.
13. We subsequently carried out an operational test of the Motorcycle's braking system. This was done by manually pushing the Motorcycle forward and backward, simulating the Motorcycle in motion, and thereafter engaging the front brake and rear brake of the Motorcycle. At the end of the short operational test, we did not observe any abnormal behaviour of the Motorcycle's braking system. The front wheel and rear wheel of the Motorcycle were able to stop rotating immediately upon depressing the brake lever and stepping on the brake pedal. See photos 15 – 20 below.





**Photo 15** shows the front fork (arrowed) of the Motorcycle. The front fork of the Motorcycle was both found to be intact and undamaged. Turning the Motorcycle's handle bar towards the left and right did not produce any abnormal free play and/or resistance. The steering system of the Motorcycle was in serviceable condition at the time of our inspection.



**Photo 16** shows the steering stem (arrowed) of the Motorcycle. The steering stem of the Motorcycle was both found to be intact and undamaged. Turning the Motorcycle's handle bar towards the left and right did not produce any abnormal free play and/or resistance. The steering system of the Motorcycle was in serviceable condition at the time of our inspection.



**Photo 17** shows the front wheel of the Motorcycle turned towards its full left. Turning the Motorcycle's handle bar towards the left and right did not produce any abnormal free play and/or resistance. This would indicate that the steering system of the Motorcycle was in serviceable condition at the time of our inspection.



**Photo 18** shows the front wheel of the Motorcycle turned towards its full right. Turning the Motorcycle's handle bar towards the left and right did not produce any abnormal free play and/or resistance. This would indicate that the steering system of the Motorcycle was in serviceable condition at the time of our inspection.





**Photo 19** shows the front wheel of the Motorcycle. The type of brake system for the front wheel was of a mechanical type, controlled by the front brake lever of the Motorcycle. Our checks of the cable (arrowed), spring and drum which are all part of the components in the front brake system of the Motorcycle reveal all to be intact and without damage.



**Photo 20** 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.

**Conclusion**

14. Basing on our physical inspection of the Motorcycle, it appears that the steering system and braking system of the Motorcycle were all in serviceable condition. We did not find any evidence(s) to suggest that there was possible mechanical failure to the Motorcycle that may have caused and/or contributed to the accident.
15. The 2 tyres of the Motorcycle were found to be in 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 2 tyres. The 2 tyres were sufficiently inflated for vehicular operation with remaining tread depth of approximately 3mm each.

**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)*

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