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Our Ref : CI/TPD22002090/N

31 March 2022

**Fatal Accident Investigation Team**

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

**INSPECTION REPORT OF MOTORCYCLE FBH 956B**

1. We refer to your request dated 10 January 2022 to conduct a physical inspection of a motorcycle bearing registration number FBH 956B (herein referred to as “**Motorcycle**”), which was involved in a fatal road traffic accident on 9 November 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 31 March 2022 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 could not be recorded at the time of our inspection due to a missing speedometer gauge.
5. The Motorcycle was observed to have sustained damages all around. The body parts that were found to have been damaged include its handlebar, head cowlings, headlight, side cowlings, front brake lever, right handlebar end, radiator, bottom cowlings, pillion foot pegs, rear side covers, top box and exhaust muffler heat shield, amongst others as a result of the accident. See photos 1 – 18 below.



**Photo 1** shows the mileage of the Motorcycle which could not be recorded at the time of our inspection due to a missing speedometer gauge (arrowed).



**Photo 2** shows a general view of the rear portion of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained damages all around.



**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 all around.



**Photo 4** 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 all around. The body parts that were found to have been damaged include its handlebar, head cowlings, headlight, side cowlings, front brake lever, right handlebar end, radiator, bottom cowlings, pillion foot pegs, rear side covers, top box and exhaust muffler heat shield, amongst others as a result of the accident.



**Photo 5** shows a closer view of the cracked headlight of the Motorcycle at the time of our inspection (arrowed).



**Photo 6** shows a closer view of the missing head cowl of the Motorcycle as a result of the accident.



**Photo 7** shows a closer view of the deformed radiator which was amongst the body parts at the front body of the Motorcycle that had sustained damage as a result of the accident (arrowed).



**Photo 8** shows a closer view of the right handlebar end and front brake lever of the Motorcycle which were observed to be damaged due to the accident (circled).



**Photo 9** shows a general view of the grazed right cowling of the Motorcycle as a result of the accident (arrowed).



**Photo 10** shows a close-up view of the cracked right bottom cowling of the Motorcycle as a result of the accident.



**Photo 11** shows the missing left side cowling of the Motorcycle as a result of the accident.



**Photo 12** shows a close-up view of the cracked left bottom cowling of the Motorcycle as a result of the accident (arrowed).



**Photo 13** shows a close-up view of the grazed left pillion foot peg of the Motorcycle as a result of the accident (arrowed).



**Photo 14** shows a close-up view of the grazed right pillion foot peg of the Motorcycle as a result of the accident (arrowed).



**Photo 15** shows a close-up view of the grazed right rear side cover of the Motorcycle as a result of the accident (arrowed).



**Photo 16** shows a close-up view of the grazed left rear side cover of the Motorcycle as a result of the accident (arrowed).



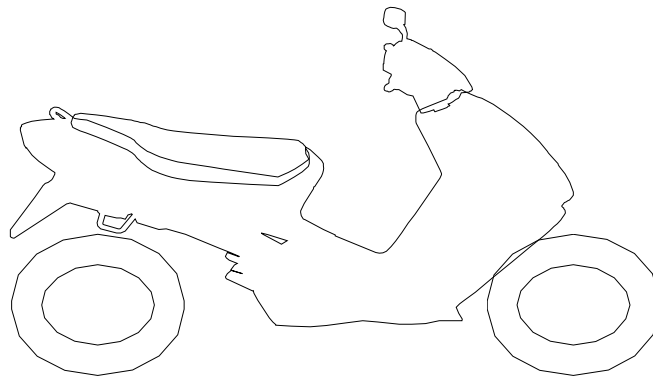
**Photo 17** shows a close-up view of the grazed top box of the Motorcycle as a result of the accident (arrowed).



**Photo 18** shows a close-up view of the deformed exhaust muffler heat shield of the Motorcycle as a result of the accident (arrowed).

**Tyres and Wheel Rims**

6. The condition of the Motorcycle's 2 tyres was observed to be in serviceable condition. The tread pattern of the 2 tyres was clearly visible. 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. The 2 tyres were both observed to be sufficiently inflated for vehicular operation. The tyre brand, tyre size and remaining tread depth of the 2 tyres were recorded as follows:-



IRC 130/70 - 12 (5mm)

IRC 110/90 - 13 (6mm)

7. 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 19 & 20 below.



**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 6mm. 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 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 5mm. 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**

8. 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.
9. 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. The shock absorbers were also observed to be intact without any misalignment. See photos 21 - 25 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 drive train cover of the Motorcycle which was found to be intact without any misalignment.



**Photo 24** shows the left shock absorber of the Motorcycle which was found to be intact without any misalignment.



**Photo 25** shows the right shock absorber of the Motorcycle which was found to be intact without any misalignment.

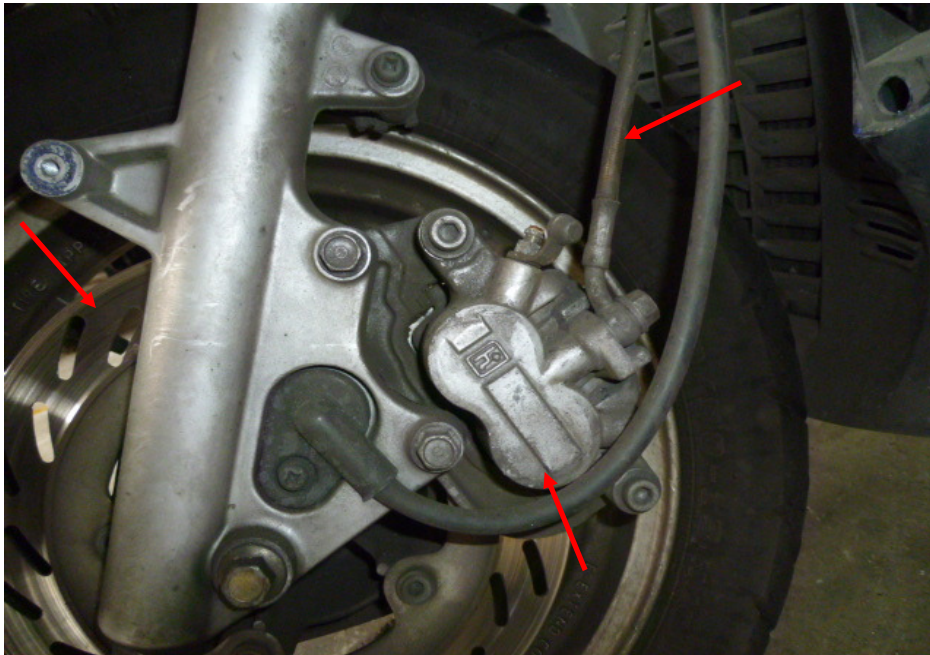
**Steering System & Braking System**

10. 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 handlebar. The handlebar was found to be bent as a result of the accident.
11. The braking system of the Motorcycle was observed to be of a full hydraulic type, where hydraulic (brake fluid) pressure controls the brake for the front wheel and rear wheel. The brake for the front wheel is engaged by pulling the brake lever at the right side of the Motorcycle's handle bar while the brake for the rear wheel is engaged by pulling the brake lever at the left side of the Motorcycle's handle bar.
12. Our visual examination of the various components in the Motorcycle's braking system like the brake discs, brake calipers, brake levers and brake hoses revealed all to be intact and without damage. There was also no leakage of brake fluid observed along the brake hoses. This was from the respective brake fluid reservoirs to the front brake caliper and rear brake caliper of the Motorcycle.
13. Our checks on the front brake fluid had also indicated that the front brake fluid was observed to be of sufficient level for operational purposes. However it was found to be contaminated.
14. Our checks on the rear brake fluid had also indicated that the rear brake fluid was observed to be of sufficient level for operational purposes. However it was found to be slightly contaminated.
15. Static brake tests conducted on the Motorcycle had appeared to indicate that the rear brake system of the Motorcycle was in serviceable condition. There was some resistance felt (spongy like feel) upon pressing the left hand brake lever. This would indicate that there's no leakage of pressure/vacuum in the rear brake system.
16. Static brake tests conducted on the Motorcycle had appeared to indicate that the front brake system of the Motorcycle was not in serviceable condition. There was no resistance felt (spongy like feel) upon pressing the right hand brake lever. This would indicate that there may be a leakage of pressure/vacuum in the front brake system.

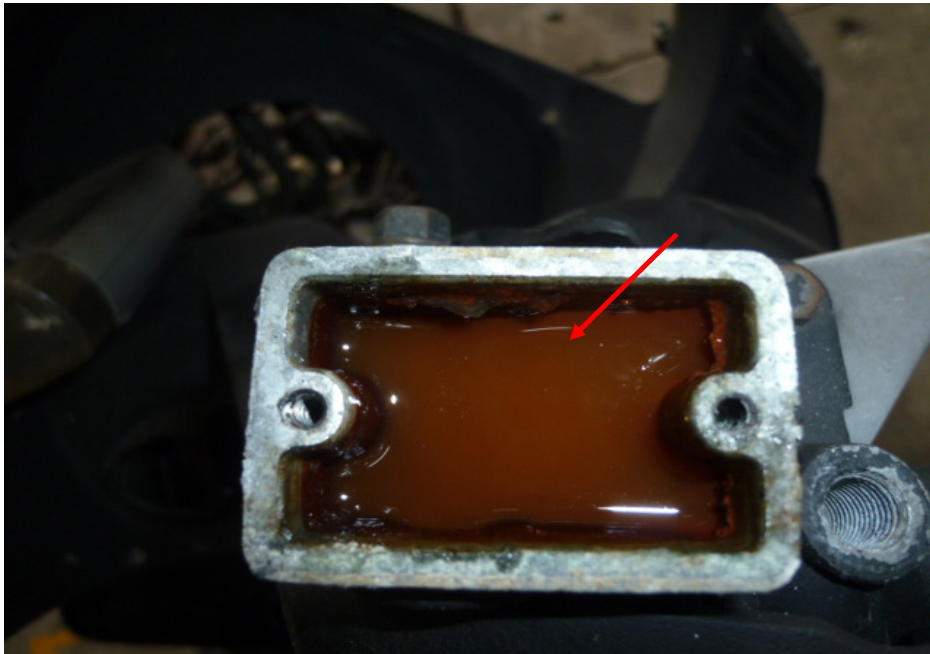
17. For this case, we were not able to carry out any operational tests to the steering system and braking system of the Motorcycle due to the damage of its handlebar, which had rendered the Motorcycle immobile for the operational tests. We were not able to push the Motorcycle manually forward and backward, simulating movement of the Motorcycle, for the operational tests. See photos 26 – 32 below.



**Photo 26** shows the handlebar of the Motorcycle. The handlebar was observed to be bent (arrowed) as a result of the accident. We were hence not able to conduct any tests on the steering system of the Motorcycle.



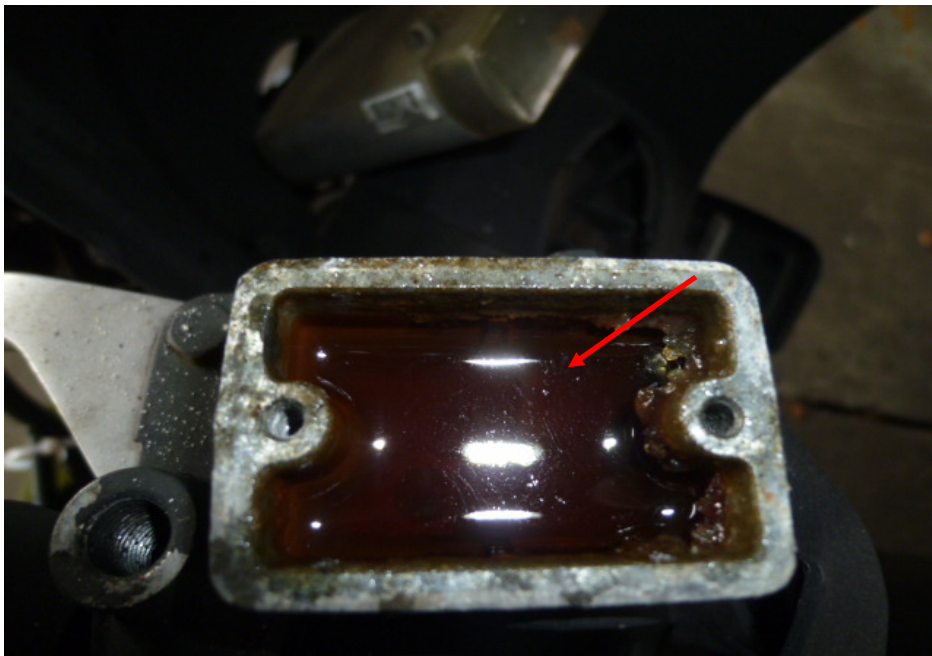
**Photo 27** shows a close up view of the front brake caliper, front brake disc and front brake hose (arrowed) of the Motorcycle, which are all part of the components in the hydraulic front brake system of the Motorcycle. Our visual checks of these various components had revealed all to be intact with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



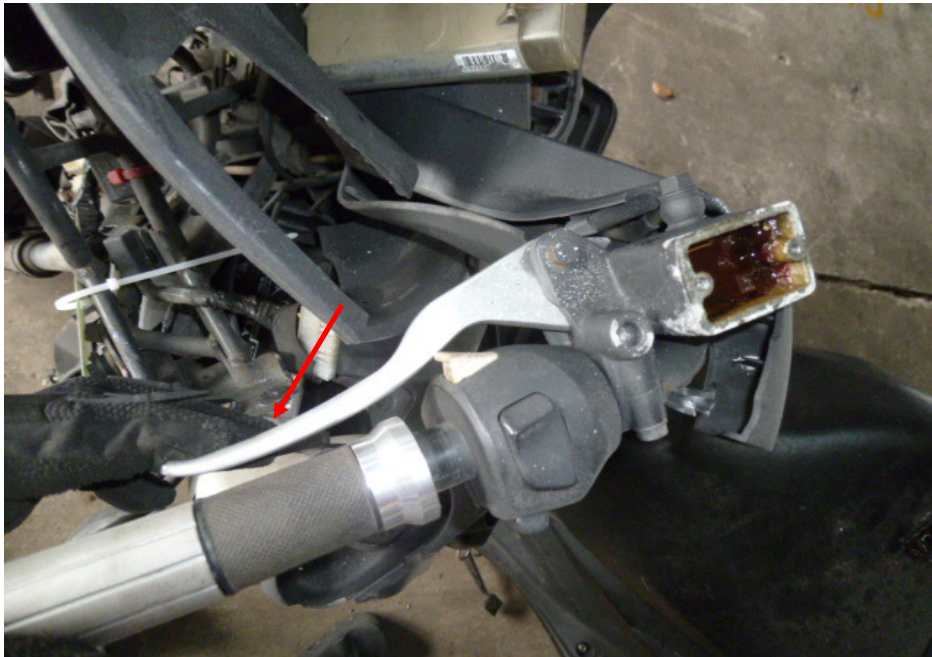
**Photo 28** shows the brake fluid reservoir for the front brake of the Motorcycle. The brake fluid was observed to be of sufficient level for operational purposes. However it was found to be contaminated (arrowed).



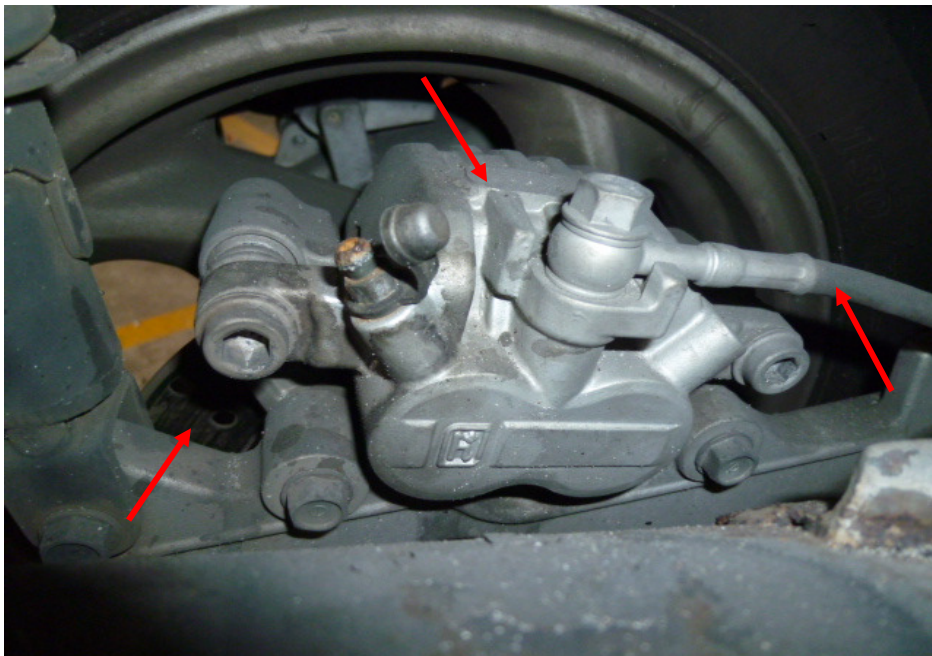
**Photo 29** shows the front brake lever being depressed. There was no resistance felt (spongy like feel) upon pressing the front brake lever (arrowed). This would indicate that there may be a leakage of pressure/vacuum in the front brake system.



**Photo 30** shows the brake fluid reservoir for the rear brake of the Motorcycle. The brake fluid was observed to be of sufficient level for operational purposes. However it was found to be slightly contaminated (arrowed).



**Photo 31** shows the rear brake lever being depressed. There was some resistance felt (spongy like feel) upon pressing the rear brake lever (arrowed). This would indicate that there is no leakage of pressure/vacuum in the rear brake system.



**Photo 32** shows a close up view of the rear brake caliper, rear brake disc and rear brake hose (arrowed) of the Motorcycle, which are all part of the components in the hydraulic rear brake system of the Motorcycle. Our visual checks of these various components revealed all to be intact with no visible damage. No leakage of brake fluid was also observed.

## **Conclusion**

18. 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 as a result of the accident. However basing on our physical inspection of the Motorcycle, it appears that only the rear braking system of the Motorcycle was in serviceable condition.
19. 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. It was sufficiently inflated for vehicular operation with remaining tread depth of approximately 6mm and 5mm.

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