

Your Ref: TP/IP/59635/2017  
Our Ref :CI/TPD17022592/Z

28<sup>th</sup> November 2017

**Fatal Accident Investigation Team**

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

**INSPECTION REPORT OF MOTORCYCLE FBH 9470B**

1. We refer to your request dated 16<sup>th</sup> November 2017 to conduct a physical inspection of a Motorcycle bearing registration number FBH 9470B (herein referred to as "**Motorcycle**"), which was involved in a fatal road traffic accident on 04<sup>th</sup> November 2017.
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 27<sup>th</sup> November 2017 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 not recorded due to the frontal portion of the motor cycle was badly damaged likely due to the accident.
5. The Motorcycle was observed to have sustained extensive damages at the frontal portion, rear portion & along both its left side and right side. The body parts that were found to have been damaged includes its front head lamp, ERP unit & bracket, handle bar, front wing mirrors, chassis structure, seat assembly, and rear portion amongst others. Its front forks assemblies were also observed to be broken as a result of the accident. See photos 1 – 6.



**Photo 1** shows the Motorcycle number plate for identification.



**Photo 2** shows a general view of the front right body of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained with relatively extensive impact due to the accident collision. Amongst the body parts damaged was its front fork (arrowed), which was observed to be broken into 2 pieces.



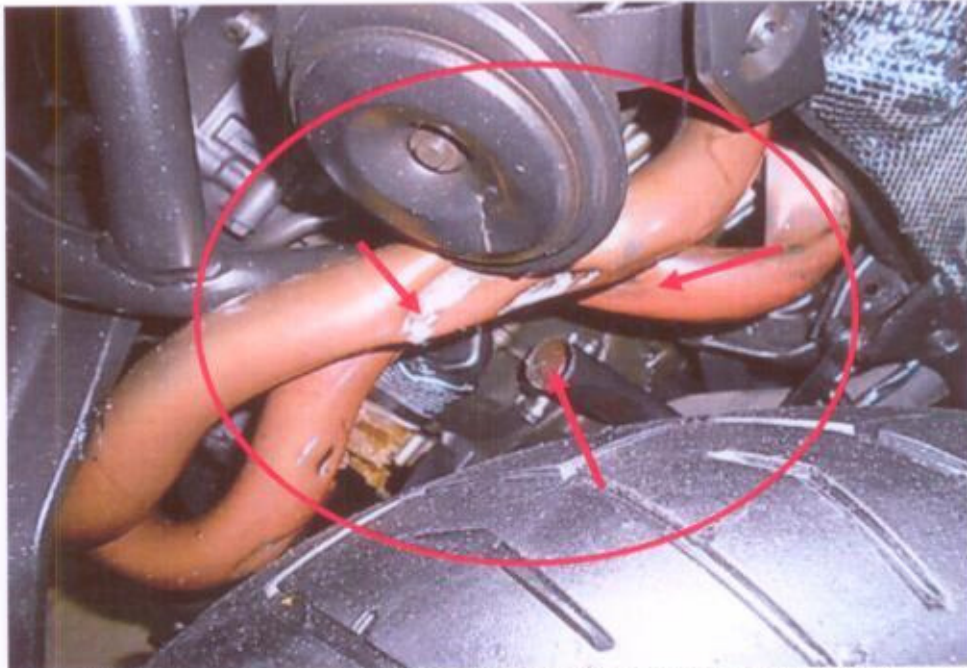


**Photo 3** shows a general view of the rear left body of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained damages at the frontal portion, rear portion, along both its left side and right side.



**Photo 4** shows a general view of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained relatively extensive impact due to the accident collision.





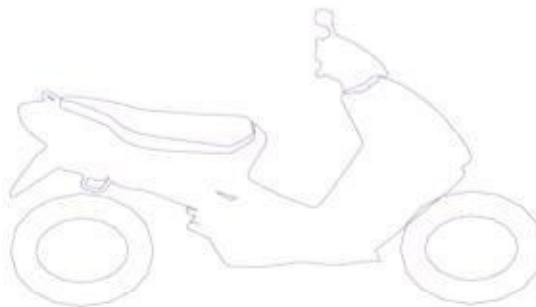
**Photo 5** shows a close-up view of the frontal portion of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained relatively extensive impact including damages to the exhaust manifold & broken crash bar (circled) likely due to the accident collision.



**Photo 6** shows a close-up view of the frontal portion of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained relatively extensive impact including damages to the broken front fork (circled) likely due to the accident collision.

## 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:-



Pirelli Diablo Strada 160/60 – 17(5mm)

Pirelli Diablo Strada 160/60 - 17 (3mm)

7. The rear tyre was observed to be wrapped around alloy wheel rims that were found to be without any significant damage. Except for the front rim was noted to have sustained with damages due to the accident's collision. Nevertheless, both tyres were found to be in serviceable condition with adequately inflated for operational purpose. See photo 7 – 10 below





**Photo 7** shows the rear tyre of the Motorcycle at the time of our inspection. 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. There was no significant damage observed on the rear wheel rim & tyre.



**Photo 8** shows the front tyre of the Motorcycle at the time of our inspection. The pattern of the tread was clearly visible. 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 9** shows the front tyre of the Motorcycle at the time of our inspection. The pattern of the tread was clearly visible. 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 10** shows the rear tyre of the Motorcycle at the time of our inspection. The pattern of the tread was clearly visible. 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.



## Engine & Drive Train

8. Upon examination of the engine area of the Motorcycle, we had observed that the various engine related parts and components were intact with no visible damage. The engine underside was however observed to be covered with reddish fluid, suggesting leakage of fluid. There was no accumulation of dust and/or dirt particles on the engine housing where the fluid stains had formed. This would indicate that the fluid leakage was a fresh leak and likely to be a result of the accident.
9. The gear chain of the Motorcycle was found to be intact without any misalignment. It was also adequately lubricated for operating purposes. See photo 11 – 13 below.

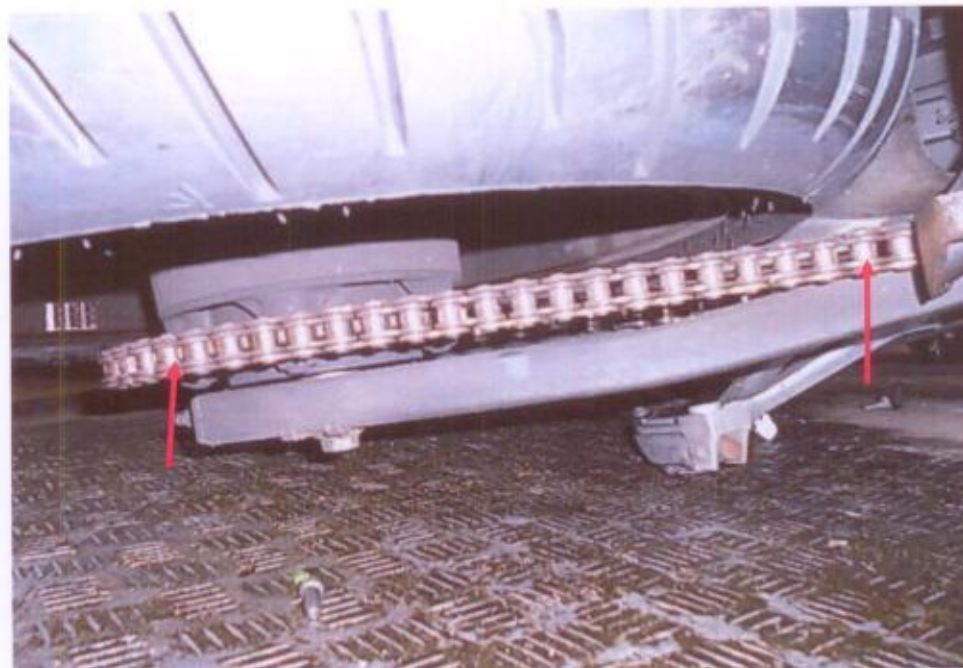


**Photo 11** shows sign(s) or indication(s) of fluid leakage observed around the engine's underside area of the Motorcycle.





**Photo 12** shows sign(s) or indication(s) of fluid leakage observed around the engine's area of the Motorcycle.



**Photo 13** shows the general 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.

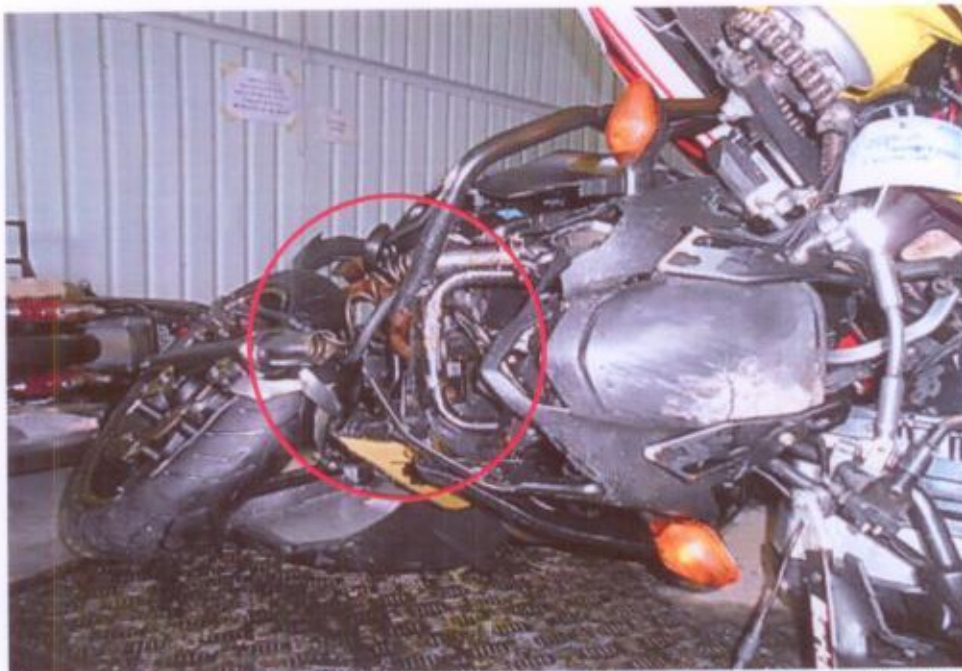
### **Steering System & Braking System**

10. For this case, we were not able to conduct any test(s) on the steering system of the Motorcycle due to the damages on its front fork. The front fork was found to be broken as a result of the accident, hence causing the whole steering system to be in a state of immobility.
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 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 foot rest of the Motorcycle. Our visual examination of the various components in the brake system, like the brake disc, brake calliper, drum and brake foot pedal, revealed all to be intact and without damages. However, some braking components were noted to be extensively damaged such as hand brake lever & brake fluid leakage at the material time of our inspection.
12. Static brake tests was unable to be conducted on the Motorcycle front brake due to some braking components were noted to be extensively damaged such as hand brake lever & brake fluid leakage at the material time of our inspection.
13. For this case, we was not able to carry out any operational tests to the steering system and brake system of the Motorcycle due to the damages on its front forks, which had rendered the Motorcycle immobility 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 photo 14 - 19 below.





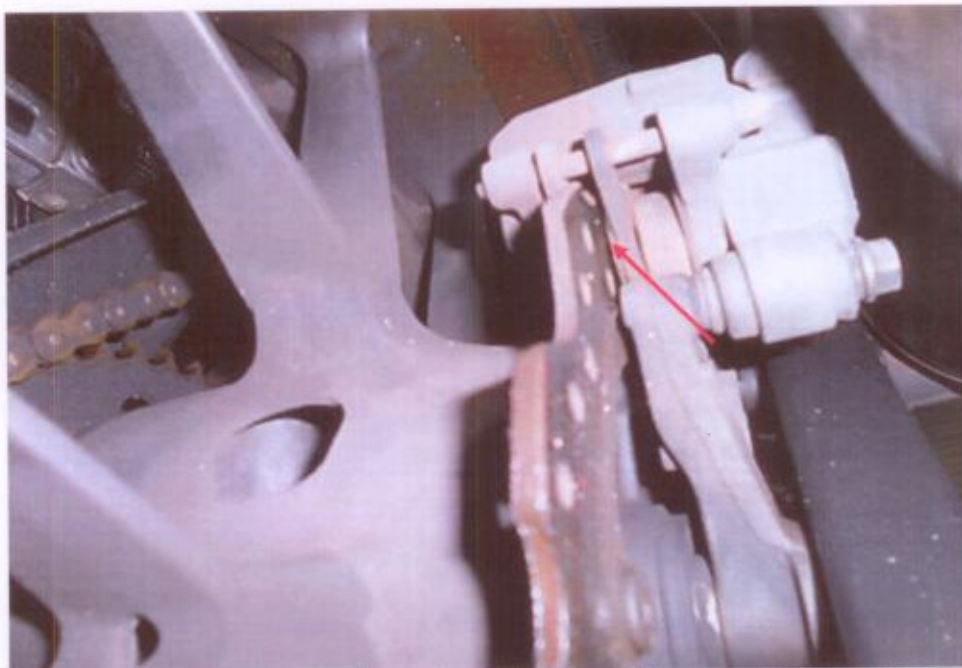
**Photo 14** shows the hand brake lever (arrowed) was observed to be broken likely due to the result of the accident. Hence, we are unable to conduct any tests on the braking system of the Motorcycle.



**Photo 15** shows the front fork (circled) was observed to be broken as a result of the accident. Hence, we are unable to conduct any tests on the steering system of the Motorcycle.



**Photo 16** shows the front brake calliper, front brake disc and front brake hose of the Motorcycle (arrowed in red), which are all part of the components in the front brake system of the Motorcycle. Our visual checks of these various components had revealed all to be intact with no visible damage.



**Photo 17** shows the rear brake pad, which is part of the components in the rear brake system of the Motorcycle. Our visual checks had revealed that it is still in serviceable condition, intact with no visible damage.





**Photo 18** shows the front brake fluid reservoir of the Motorcycle which was observed to be insufficient due to the leakage likely caused by the accident's collision.



**Photo 19** shows the rear brake fluid reservoir of the Motorcycle which was observed to be sufficient at time of our inspection.

## Conclusion

14. At the time of our inspection of the Motorcycle, its steering system & braking system could not be tested likely due to the damages as a result of 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 tyre. It was sufficiently inflated for vehicular operation with remaining tread depth of approximately 3 & 5mm each.
16. 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 due to the damages of its front fork (as a result of the accident), which had rendered the Motorcycle's immobility.



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