

Your Ref: TP/IP/17223/2022
Our Ref : CI/TPD22008685/N

16 September 2022

General Investigation Team

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

INSPECTION REPORT OF MOTORCYCLE FBR 8195A

1. We refer to your request dated 16 August 2022 to conduct a physical inspection of a motorcycle bearing registration number FBR 8195A herein referred to as "**Motorcycle**"), which was involved in a non- fatal road traffic accident on 2 July 2022.
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 15 September 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 flat battery in the smart key remote transponder.
5. The Motorcycle was observed to have sustained damages all around. The body parts that were found to have been damaged include its front cowlings, side cowlings, handlebar, handlebar ends, side mirrors, front mudguard, hand brake levers, bottom cowlings, left pillion grab rail, right rear side cover, tail light and exhaust muffler heat shield, amongst others as a result of the accident. See photos 1 – 14 below.



Photo 1 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 mileage of the Motorcycle could not be recorded at the time of our inspection due to a flat battery in the smart key remote transponder.



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 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. The body parts that were found to have been damaged include its front cowling, side cowlings, handlebar, handlebar ends, side mirrors, front mudguard, hand brake levers, bottom cowlings, left pillion grab rail, right rear side cover, tail light and exhaust muffler heat shield, amongst others as a result of the accident.



Photo 4 shows a closer view of the grazed front cowling of the Motorcycle as a result of the accident (arrowed).



Photo 5 shows a closer view of the cracked headlight (arrowed) which was amongst the body parts at the front body of the Motorcycle that had sustained damage as a result of the accident.



Photo 6 shows a closer view of the cracked front mudguard of the Motorcycle as a result of the accident.



Photo 7 shows a closer view of the handlebar, hand brake levers, side mirrors and handlebar ends of the Motorcycle which were observed to be damaged due to the accident (arrowed).



Photo 8 shows a closer view of the right cowling of the Motorcycle that had sustained damage as a result of the accident.



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



Photo 10 shows a closer view of grazed right rear side cover (arrowed) of the Motorcycle at the time of our inspection.



Photo 11 shows a closer view of the deformed left bottom cowling of the Motorcycle as a result of the accident (arrowed).



Photo 12 shows the broken left pillion grab rail of the Motorcycle as a result of the accident (arrowed).



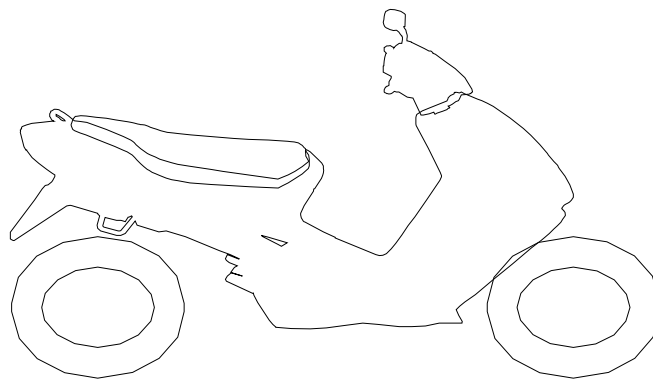
Photo 13 shows a closer view of the cracked tail light of the Motorcycle as a result of the accident (arrowed).



Photo 14 shows a closer view of the grazed exhaust muffler heat shield of the Motorcycle at the time of our inspection.

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:-



Maxxis 130/70 – 13 (3mm)

Maxxis 110/70 - 13 (4mm)
(Deflated)

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 rear wheel rim of the Motorcycle. However we did observe that the front wheel rim was broken. See photos 15 - 17 below.



Photo 15 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 4mm. 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. However the front tyre was observed to be deflated.



Photo 16 shows the broken front wheel rim and deflated front tyre (arrowed) of the Motorcycle at the time of our inspection.



Photo 17 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

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 no visible tear or cut observed on the connecting hoses and cables. The shock absorbers of the Motorcycle were also found to be intact without any misalignment. See photos 18 - 22 below.



Photo 18 shows the radiator of the Motorcycle at the time of our inspection. The radiator was found to be intact with no visible damage. There was also no sign(s) or indication(s) of fluid leak observed around the radiator of the Motorcycle.



Photo 19 shows the drive train cover of the Motorcycle which was found to be intact without any misalignment.

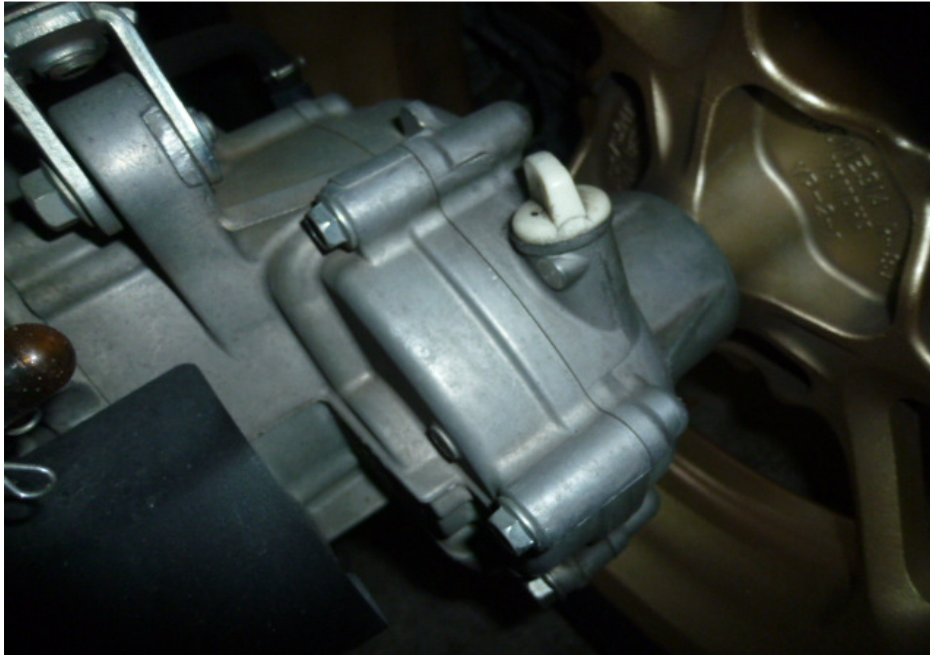


Photo 20 shows the drive train of the Motorcycle which was found to be intact without any misalignment.



Photo 21 shows the left shock absorber of the Motorcycle which was found to be intact without any misalignment.



Photo 22 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 front forks. The front forks were observed 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 rear brake fluid had also indicated that the rear brake fluid was of sufficient level for operational purposes and without contamination. Our checks on the front brake fluid had also indicated that the front brake fluid was of sufficient level for operational purposes. However the front brake fluid was observed to be slightly contaminated.
14. Static brake tests conducted on the Motorcycle had appeared to indicate that the brake system of the Motorcycle was in serviceable condition. There was some resistance felt (spongy like feel) upon pressing both brake levers. This would indicate that there's no leakage of pressure/vacuum in the braking system.
15. 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 front right fork, 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 23 – 29 below.

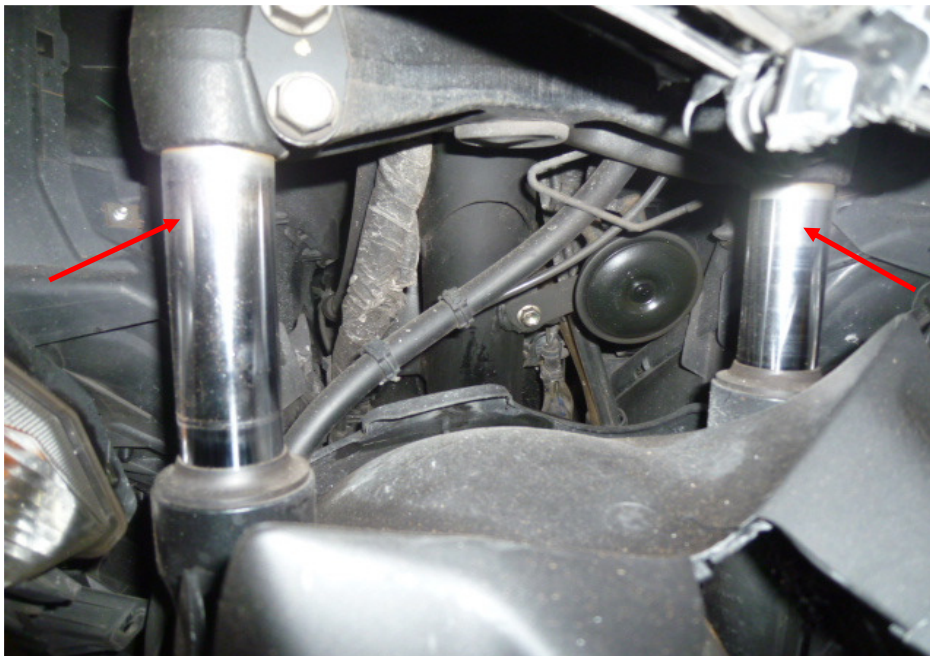


Photo 23 shows the front forks of the Motorcycle. The right front fork was observed to be bent as a result of the accident (arrowed). Hence we were not able to conduct any test(s) on the steering system of the Motorcycle.

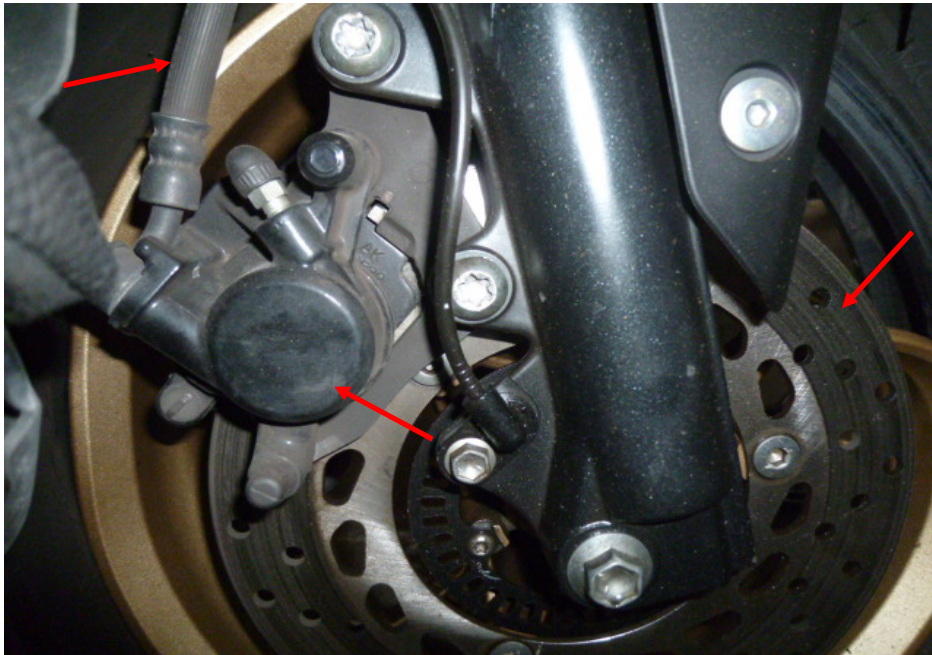


Photo 24 shows a close up view of the front brake caliper, front brake disc and front brake hose (arrowed) of the Motorcycle, which are all part of the components in the hydraulic front brake system of the Motorcycle. Our visual checks of these various components had revealed all to be intact with no visible damage. No leakage of brake fluid was also observed.

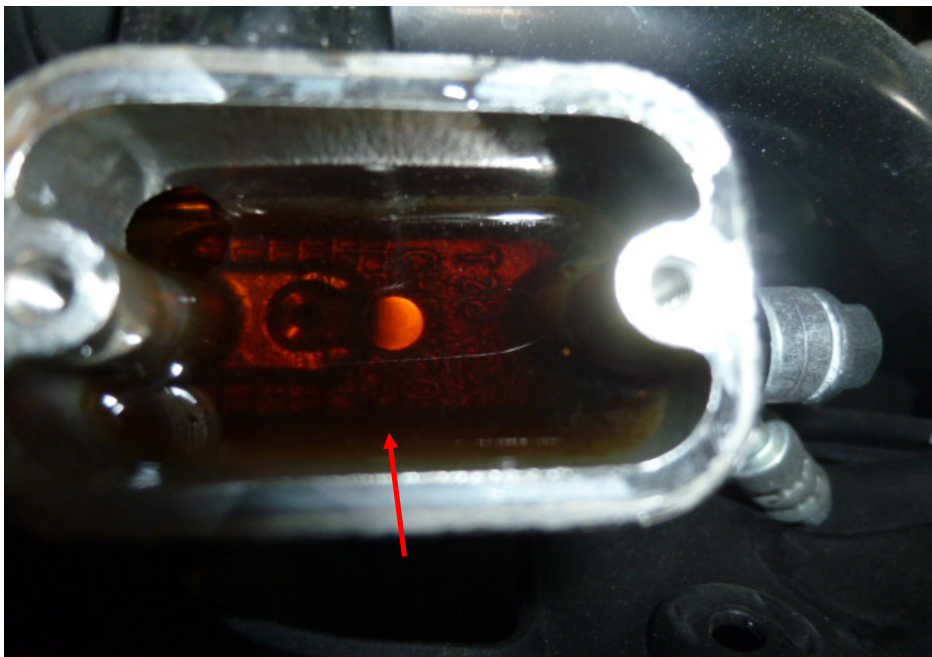


Photo 25 shows the brake fluid reservoir for the front brake of the Motorcycle. The brake fluid was observed to be of sufficient level for operational purposes. However it was observed to be slightly contaminated (arrowed).



Photo 26 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 27 shows the brake fluid reservoir for the rear brake of the Motorcycle. The brake fluid was observed to be of sufficient level and without contamination for operational purposes.



Photo 28 shows the rear 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 brake system.

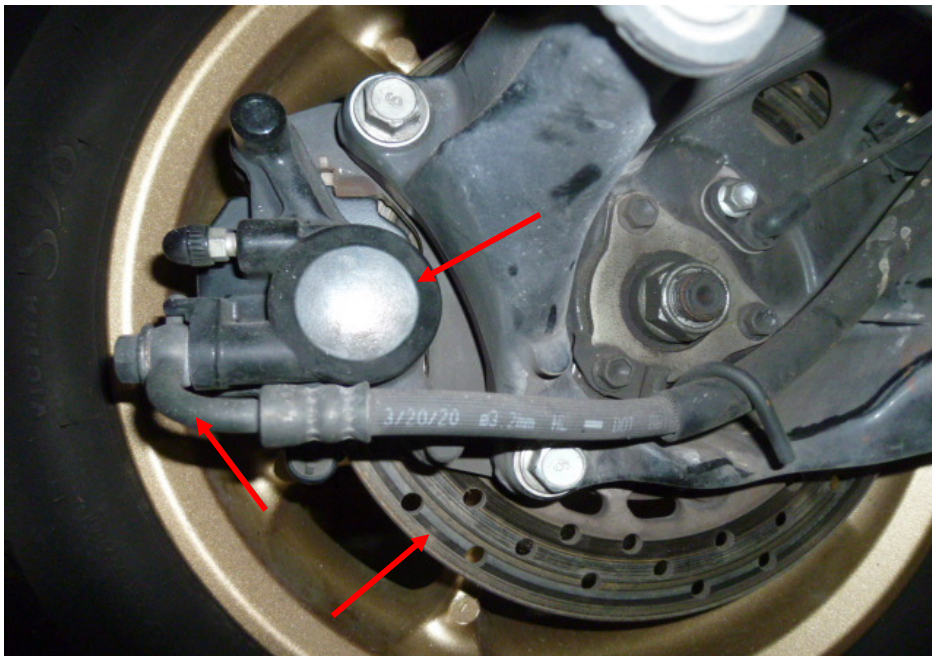


Photo 29 shows a close up view of the rear brake caliper, rear brake disc and rear brake hose (arrowed) of the Motorcycle, which are all part of the components in the hydraulic rear brake system of the Motorcycle. Our visual checks of these various components revealed all to be intact with no visible damage. No leakage of brake fluid was also observed.

Conclusion

16. Basing on our physical inspection of the Motorcycle, it appears that the braking system of the Motorcycle were all in serviceable condition. However the steering system of the Motorcycle was damaged as a result of the accident.
17. The tyres of the Motorcycle were found to be in a serviceable condition (which had included the deflated front tyre). 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 rear tyre was sufficiently inflated for vehicular operation. Both tyres had remaining tread depth of approximately 4mm and 3mm.

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