

Your Ref. TP/IP/60763/2018 Our Ref. CI/TPD18022198/Z 22<sup>nd</sup> January 2019

Fatal Accident Investigation Team Traffic Police Department Singapore Police Force 10 Ubi Avenue 3

Singapore 408865

#### INSPECTION REPORT OF MOTORCYCLE FBJ 9677L

- We refer to your request dated 28<sup>th</sup> November 2018 to conduct a physical inspection of a motorcycle bearing registration number FBJ 9677L (herein referred to as "Motorcycle"), which was involved in a fatal road traffic accident on 27<sup>th</sup> October 2018.
- 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.
- Following the request, we had carried out a physical inspection of the Motorcycle on 24<sup>th</sup> December 2018 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

- The mileage of the Motorcycle was not recorded at time of our inspection due to severe frontal portion damages which affects the ignition system as a result of the accident.
- 5. The Motorcycle was observed to have sustained damages at the frontal portion, left portion & right portion. The body parts that were found to have been damaged include its front fairing cover, left hand rear brake lever, left hand wing mirror, headlamp, handle bar, In-vehicle unit, speedo meter, front right & left top fairing, side right & left lower fairing & rear compartment box amongst others as a result of the accident.



6. This was likely to be with the consistency of the accident's case fact that on 27<sup>th</sup> October 2018 at about 0827hrs, the motorcycle was travelling on a lane 1 of a 2 lanes road where a Motor Taxi ahead of him in –between 2 lanes suddenly made an illegal U-turn along Eng Neo Avenue by Eng Neo Avenue towards Dunearn road. The Motorcycle was unable to stop in time and collided onto the right side of the Motor Taxi on the lane1. See photo 1 to 9 below.



Photo 1 shows a close-up view of the speedo meter of the Motorcycle at the time of our inspection. It was observed to have sustained with damages due to the accident collision.





Photo 2 shows a general view of the right body of the Motorcycle at the time of our inspection. The Motorcycle frontal portion was observed to have sustained with damages due to the accident collision. (Circled)



Photo 3 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 the frontal portion.



Photo 4 shows a closer view of the frontal portion of the Motorcycle at the time of our inspection. The headlamp Motorcycle was observed to be dislodged from the original installation due to the accident collision. (Circled)



Photo 5 shows a closer view of the frontal portion of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained dislodged In-Vehicle unit due to the accident collision. (Circled)



Photo 6 shows a close-up view of the frontal portion of the Motorcycle at the time of our inspection was observed to have sustained dislodged outer front fairing cover due to the accident collision. (Circled)



Photo 7 shows a general view of the left hand side of the Motorcycle at the time of our inspection. The Motorcycle was observed to have sustained damages due to the accident collision. (Circled)





Photo 8 shows a closer view of damage handle bar of the Motorcycle at the time of our inspection. It was observed to have sustained damage due to the accident collision. (Circled)

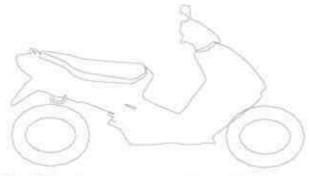


Photo 9 shows a view of the rear compartment box of the Motorcycle at the time of our inspection. It was observed to be unaffected by the accident.



## Tyres and Wheel Rims

7. 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 150/70 -13 (4mm)

Michelin City Grip 120/70 -14 (3mm)

 The rear tyre was wrapped around alloy wheel rims that were found to be without any significant damage. See photo 10 – 11 below



Photo 10 shows the rear tyre of the Motorcycle. The rear tyre was observed to be in serviceable condition with remaining tread depth of approximately 4mm. The tyre was also observed to be sufficiently inflated for vehicular operation.





Photo 11 shows the front tyre of the Motorcycle. The pattern of the tread was clearly visible 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.

## Engine & Drive Train

- 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 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, drive belting and cables. See photo 12 – 14 below.





Photo 12 shows no sign(s) or indication(s) of fluid leakage observed around the engine area of the Motorcycle.



Photo 13 shows the shock absorber of the motorcycle was found to be intact without any misalignment.



Photo 14 shows the drive train of the motorcycle was found to be intact without any misalignment.

## Steering System & Braking System

- 11. My checks on the various steering components of the Motorcycle had revealed that its steering system was in serviceable condition. Its front fork and fork bracket were both 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 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.



13. Static brake tests conducted on the Motorcycle front brake & rear brake 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 the brake lever at the right & left side of the handle bar. This would indicate that there's no leakage of pressure/vacuum in the brake system. Our checks on the brake fluid had also indicated that the brake fluid was of sufficient level for operational purposes, and without contamination. See photo 15 - 20 below.



Photo 15 shows the steering system was observed to be in a serviceable condition. It was able to be steered to the full left & right at time of our inspection.



Photo 16 shows the static brake tests conducted on the Motorcycle front brake 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 the brake lever at the right side of the handle bar.



Photo 17 shows the rear brake fluid reservoir. Our checks on the brake fluid had also indicated that the brake fluid was of sufficient level for operational purposes, and without contamination.



Photo 18 shows the brake fluid reservoir for front wheel brake on the right hand was noted to be of sufficient level for operational purposes, and without contamination.



Photo 19 shows the brake pad for front wheel brake of the Motorcycle. The frictional material was observed to be at an adequately sufficient level at time of our inspection.



Photo 20 shows the brake pad for rear wheel brake of the Motorcycle. The frictional material was observed to be at an adequately sufficient level at time of our inspection.

### Conclusion

- 14. At the time of our inspection of the Motorcycle, its steering system was found to be in serviceable condition.
- 15. The braking system of the Motorcycle was likely to be in serviceable condition. This is taking into consideration that the front & rear brake fluid was in sufficient level & without any contamination, also the various mechanical parts of the braking system were all intact & undamaged. The observations gathered from our physical inspection of the Motorcycle had indicated no evidence to suggest possible mechanical failure to the Motorcycle that may have contributed to the accident.