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Company Registration No. 199607198R

511 BEAVER L, #01-25 PAYA UBI INDUSTRIAL PARK, SINGAPORE 408933 TEL : (065) 62563561 FAX : (065) 67414108

Your Ref: TP/IP/60517/2017
Our Ref : CI/TPD17022591/Z

28th November 2017

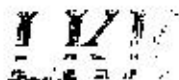
Fatal Accident Investigation Team
Traffic Police Department
Singapore Police Force
10 Ubi Avenue 3
Singapore 408865

**INSPECTION REPORT OF BICYCLE (BLACK & YELLOW) - TRAFFIC POLICE
POUND REPORT NO. 4663/17**

1. We refer to your request dated 16th November 2017 to conduct a physical inspection of a Bicycle bearing Traffic Police Pound Report no. 4663/17 (herein referred to as "**Bicycle**"), which was involved in a fatal road traffic accident on 08th November 2017.
2. The purpose of this inspection is to primarily determine if there was any possible mechanical failure to the Bicycle that may have contributed to the accident.
3. Following the request, we had carried out a physical inspection of the Bicycle on 27th November 2017 at the premises of Traffic Police vehicle pound, 517 Airport Road Singapore 539942. We now set out below my observations and comments with respect to this inspection.

General Condition

4. The Bicycle 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 include its handle bar, foot pedals, dislodged rear tyre, missing sea, bent rims & gear train amongst others as a result of the accident. See photo 1 to 5 below.



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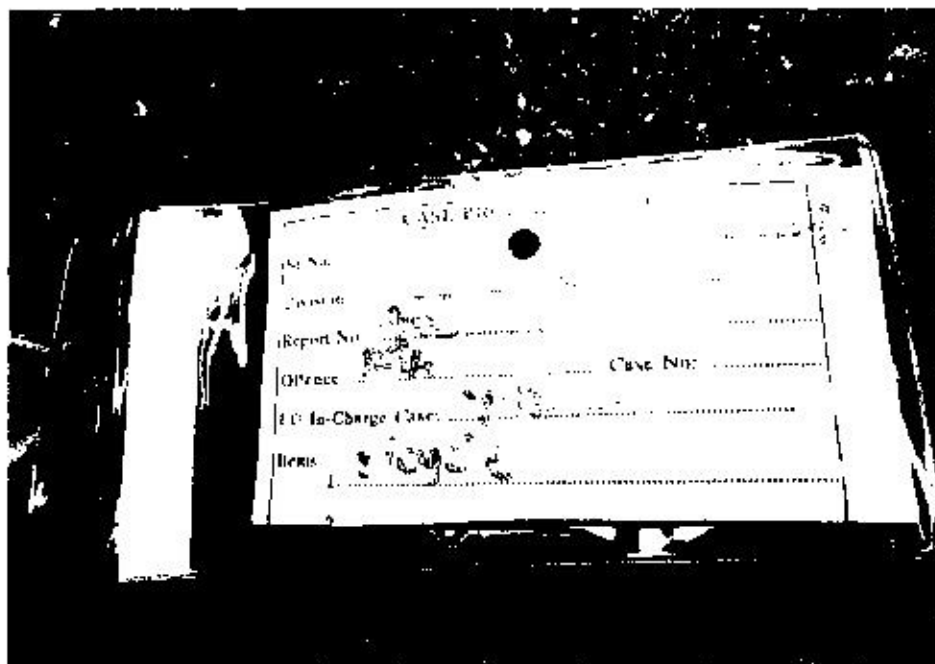


Photo 1 shows the identification of the Bicycle with reference to Traffic Police Pound Report No. 4663/17.

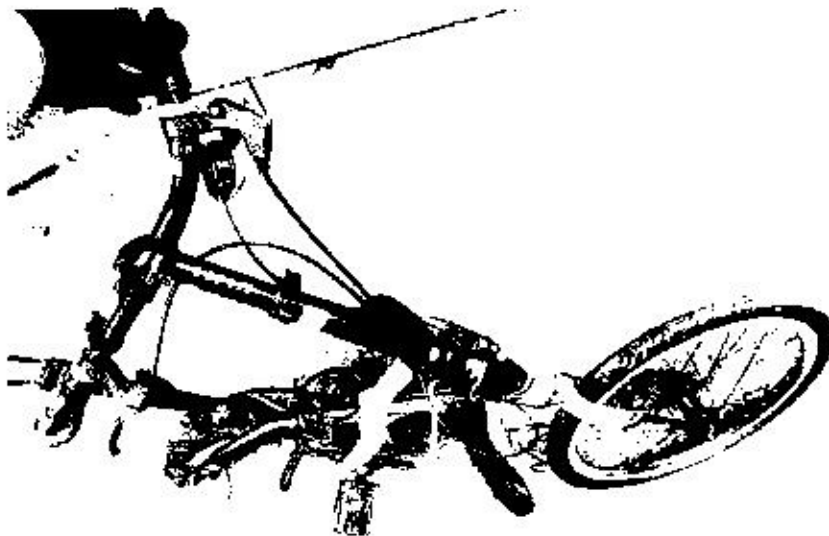
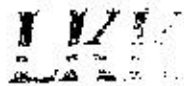


Photo 2 shows the frontal portion of the Bicycle at time of inspection. Misalignment of the handle bar & front tyre was then result of the accident.



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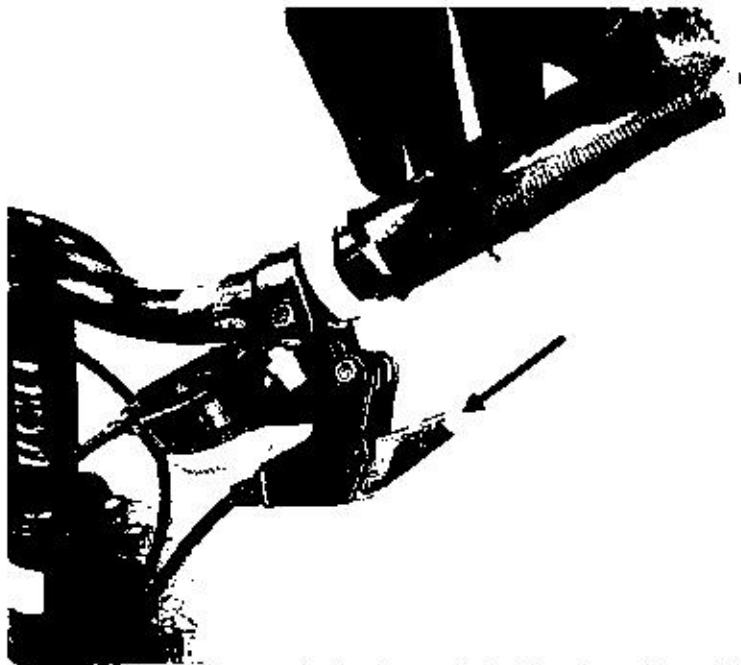


Photo 3 shows the rear brake lever of the Bicycle at time of inspection. It was observed to be broken as a result of the accident.

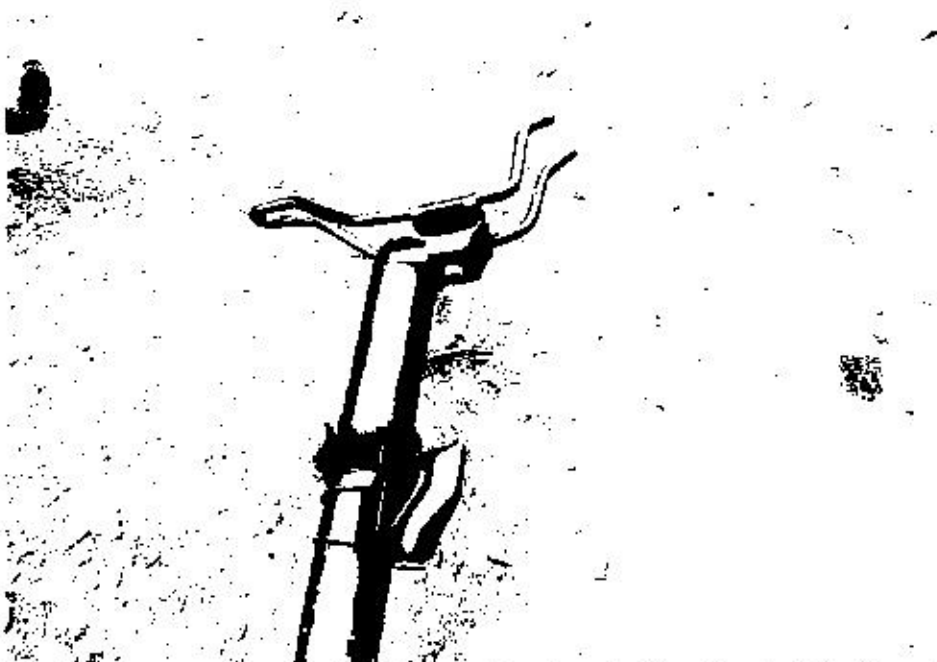


Photo 4 shows a close-up view of the dislodged seat of the Bicycle at the time of our inspection. It was due to the result of the accident.

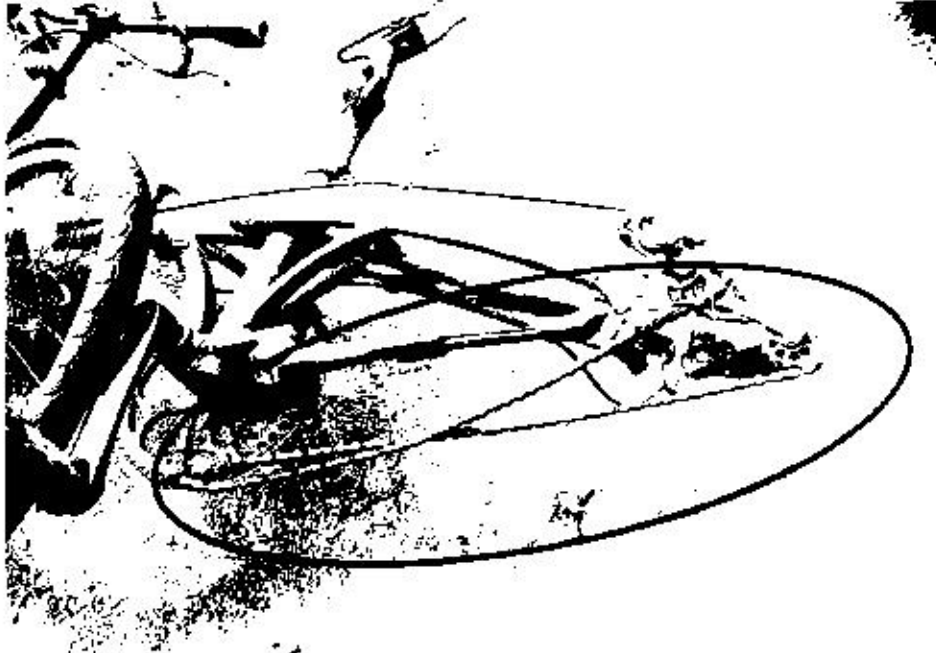
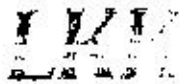


Photo 5 shows a close-up view of the drive train of the Bicycle at the time of our inspection. It was observed to have sustained damages at the circled area of the Bicycle due to the accident.

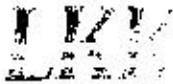
Tyres and Wheel Rims

5. The condition of the Bicycle's front & rear 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 tyres were 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:-



Kenda KWEST 40-406 20 X 1.50 (1.6mm)

Kenda KWEST 40-406 20 X 1.50 (1.6mm)



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6. Both tyres were wrapped around alloy spork wheel rims. Only the rear spork wheel rims were observed to be bent as a result of the accident's impact. See photo 6 & 7 below

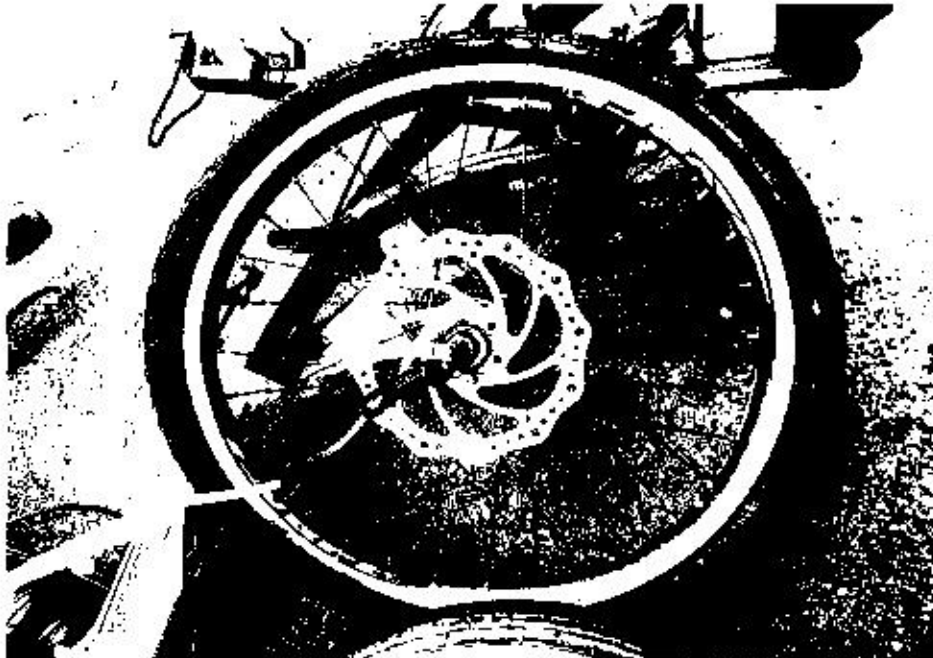


Photo 6 shows although the rear tyre was observed to be in serviceable condition with remaining tread depth of approximately 1.6mm. The tyre was also observed to be dislodged from the rear bracket & bent due to the accident.



Photo 7 shows the front tyre of the Motorcycle. 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.



Drive Train

7. The gear chain of the Bicycle was found to be severely damaged as a result of the accident. No free play tension test can be conducted due to the extensive damages. See photo 8 below.

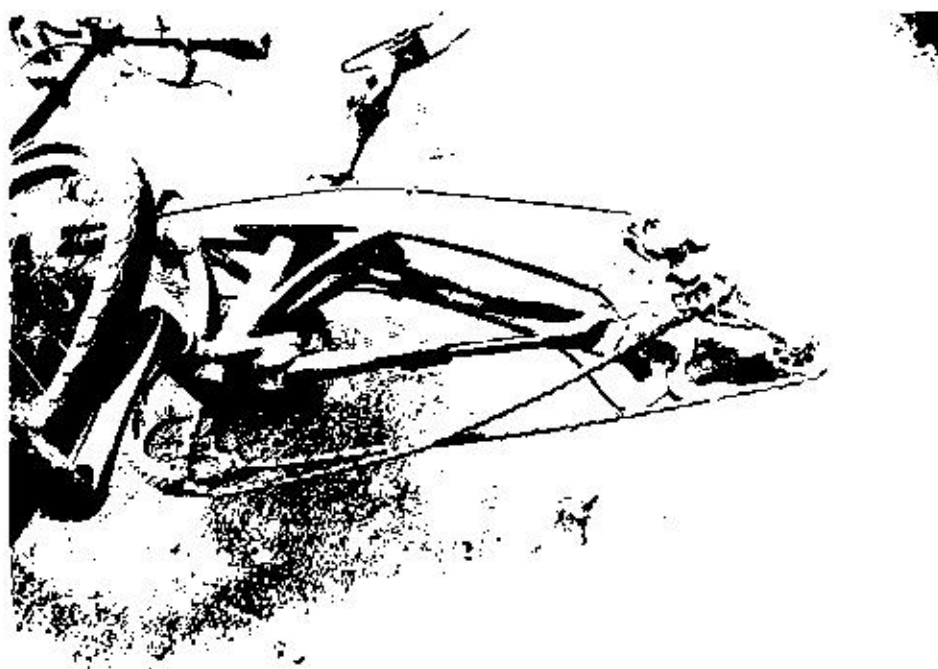
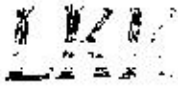


Photo 8 shows the general view of the gear train of the Bicycle, which was observed to be with severe damages as a result of the accident.

Steering System & Braking System

8. For this case, we were not able to conduct any test(s) on the steering system of the Bicycle due to the damages on its front fork. The front fork was found to be misaligned as a result of the accident, hence causing the whole steering system to be out of alignment.
9. The brake system of the Bicycle was controlled by mechanical means (cables and springs). Our visual examination of the various components in the brake system revealed that the left hand brake lever (rear brake) was broken as a result of the accident. As for the right brake (front brake) was observed to be intact. Nevertheless, there was no visible tear or cut observed on the connecting cables.



10. A static brake test can only be conducted on the front brake of the Bicycle. There was some resistance felt (spongy like feel) upon gripping right hand brake lever. This was further confirmed by looking at front brake clamps while we gripped on the brake lever. It shows that the front brake clamps responded to the gripping action. This had appeared to indicate that the front brake was in serviceable condition. As for the rear brake we could not conduct any test due to the broken brake lever on the left side of the handle bar.
11. For this case, we was not able to carry out any operational tests to the steering system and brake system of the Bicycle due to the damage of its front fork & dislodged rear tyre, which had rendered the Bicycle immobility for the operational tests. We were not able to push the Bicycle manually forward and backward, simulating movement of the Bicycle, for the operational tests. See photo 9 - 11 below.

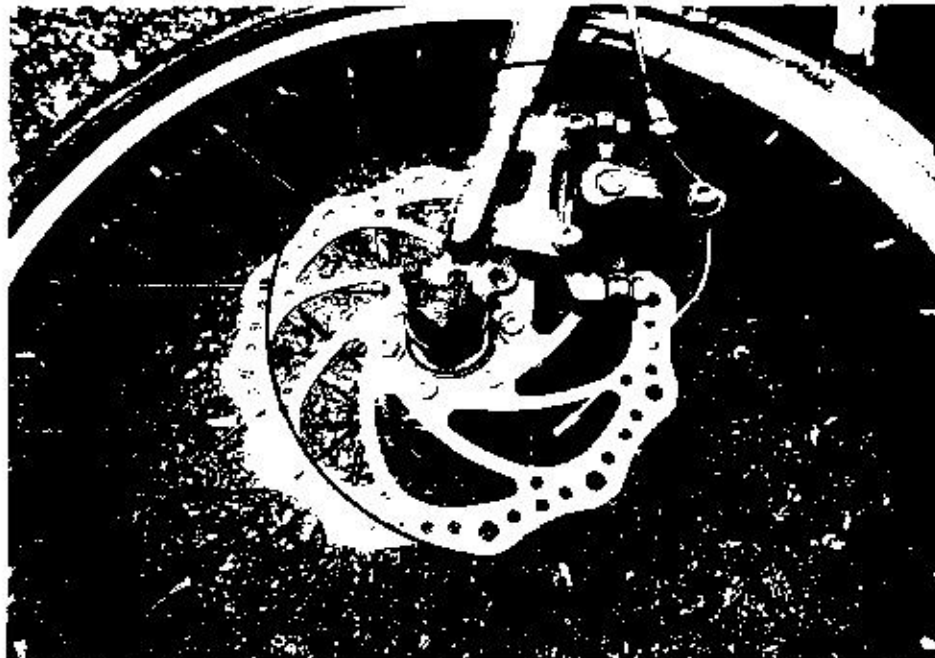


Photo 9 shows the front brake (circled) was observed to be intact without any damages. Static brake test was conducted on front brake found to be in serviceable condition.



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Photo 10 shows the response from the front brake static test upon gripping the brake lever. It was observed to be in serviceable condition.

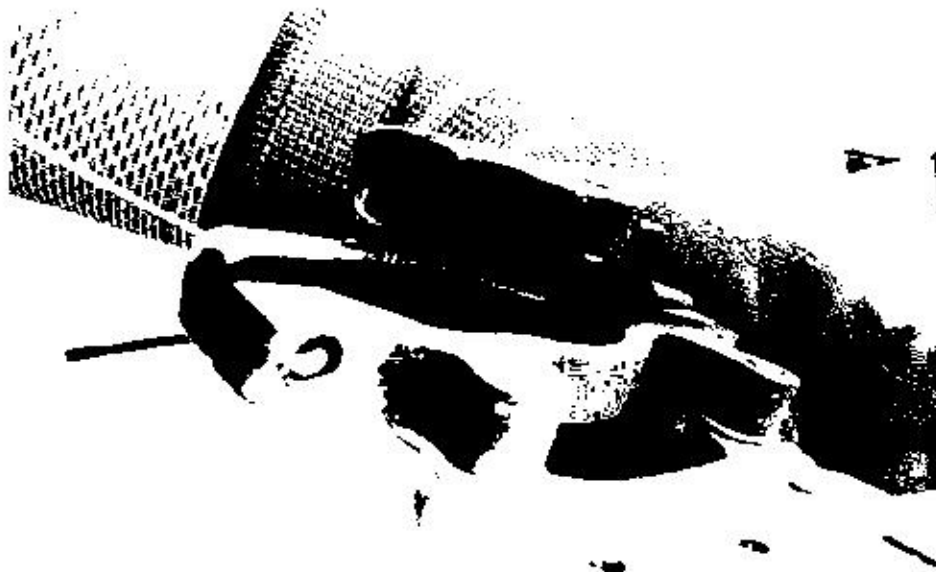
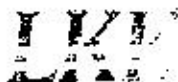


Photo 11 shows the rear brake calliper that was dislodged from the original installation together with the rear tyre. However, its brake pad was observed to have sufficient frictional material for operational purposes.



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Conclusion

12. At the time of our inspection of the Bicycle, its steering system could not be tested (due to damage as a result of the accident). Its front brake was however found to be in serviceable condition except for the rear brake that was damaged due to the result of the accident.
13. Notwithstanding that the steering system & braking system could not be tested, the observations gathered from our physical inspection of the Bicycle had indicated no evidence to suggest possible mechanical failure to the Bicycle that may have contributed to the accident.
14. Both tyres of the Bicycle 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 1.6mm each. However, the rear tyre was observed to be dislodged from the original installation due to the accident's impact.
15. Our findings were based solely on a static and visual inspection of the Bicycle. No operational test(s) could be carried out to the Bicycle due to the severe damages of its steering system & braking system (as a result of the accident), which had rendered the Bicycle's immobility.

Rohaizal A. Rahim
Technical Investigator

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