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Our Ref : CI/TPD21008010/N

3 August 2021

Fatal Accident Investigation Team

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

**INSPECTION REPORT OF BICYCLE (BLACK) - TRAFFIC POLICE POUND
REPORT NO. 1873/21**

1. We refer to your request dated 30 June 2021 to conduct a physical inspection of a Bicycle bearing Traffic Police Pound Report no. 1873/21 (herein referred to as "**Bicycle**"), which was involved in a fatal road traffic accident on 31 May 2021.
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 3 August 2021 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 Bicycle was observed to have sustained damages all around. The body parts that were found to have been damaged include its front fork assembly, handlebar, frame, seat and pedals, amongst others as a result of the accident. See photos 1 – 8 below.

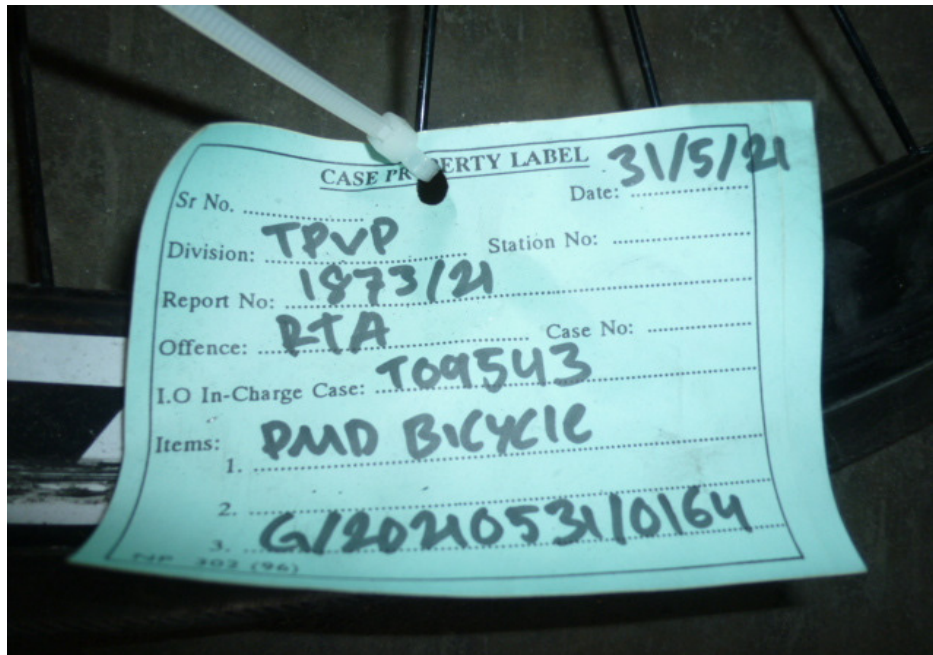


Photo 1 shows the identification of the Bicycle with reference to Traffic Police Pound Report No. 1873/21.



Photo 2 shows the right body of the Bicycle at the time of our inspection. The Bicycle had sustained damages all around. The body parts that were found to have been damaged include its front fork assembly, handlebar, frame, seat and pedals, amongst others as a result of the accident.



Photo 3 shows the deformed handlebar of the Bicycle at the time of our inspection.



Photo 4 shows the bent frame of the Bicycle as a result of the accident.



Photo 5 shows a close-up view of the torn seat of the Bicycle due to the accident.



Photo 6 shows the broken left pedal of the Bicycle as a result of the accident (arrowed).



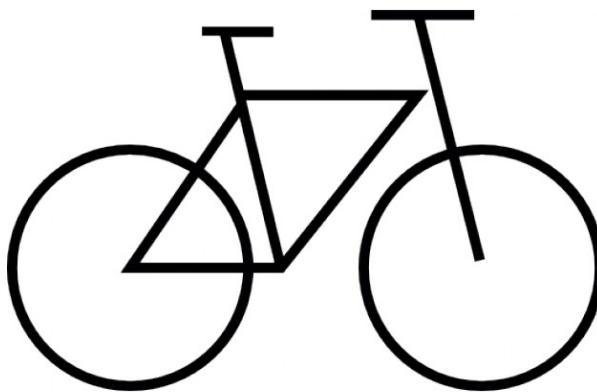
Photo 7 shows the broken left pedal of the Bicycle as a result of the accident (arrowed).



Photo 8 shows the dislodged rear frame of the Bicycle as a result of the accident (arrowed).

Tyres and Wheel Rims

5. The condition of the Bicycle's front & rear tyres were 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 rear tyre. The rear tyre was observed to be deflated as a result of the accident. However we observed a cut/tear on the front tyre of the Bicycle. The tyre brand, tyre size and remaining tread depth of the 2 tyres were recorded as follows:-



Chao Yang 25 – 622 (700 x 25C)

H C Tyre (700 x 23)
(Deflated/Cut)

6. Both tyres were wrapped around alloy spoke wheel rims. At the time of our inspection, we observed that the front wheel rim was dislodged as a result of the accident. We also found both wheel rims were bent and the spokes on both wheel rims were bent as a result of the accident. See photos 9 - 12 below.



Photo 9 shows the bent front wheel rim and deflated front tyre of the Bicycle most likely as a result of the accident (arrowed). The pattern of the tread was clearly visible. However we also observed a cut/tear on the front tyre (circled).



Photo 10 shows a close up view of the cut/tear on the front tyre of the Bicycle most likely as a result of the accident (arrowed).



Photo 11 shows the bent rear wheel rim (circled) and deflated rear tyre of the Bicycle most likely as a result of the accident (arrowed). The pattern of the tread was clearly visible.



Photo 12 shows the deflated rear tyre of the Bicycle. 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 rear tyre.

Drive Train

7. The gear train 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 photos 13 & 14 below.



Photo 13 shows the general view of the gear train of the Bicycle, which was observed to have sustained severe damages as a result of the accident. (arrowed).



Photo 14 shows a close up view of the gear train of the Bicycle, which was observed to have sustained severe damages as a result of the accident (arrowed). No free play tension test can be conducted due to the extensive damages.

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 assembly was found to be broken and dislodged as a result of the accident, hence causing the whole steering system to be out of alignment and rendering the Bicycle immobile for any static or operational tests.
9. The Bicycle was found not to be fitted with a braking system. Hence we were unable to conduct any static or operational tests of the braking system. See photos 15 - 16 below.



Photo 15 shows the front fork assembly (arrowed) of the Bicycle. The front forks and fork bracket of the Bicycle were both found to be broken and dislodged as a result of the accident, hence causing the whole steering system to be out of alignment and rendering the Bicycle immobile for any static or operational tests.



Photo 16 shows the dislodged handlebar (arrowed) of the Bicycle. The Bicycle was found not to be fitted with a braking system. Hence we were unable to conduct any static or operational tests of the braking system.

Conclusion

10. At the time of our inspection of the Bicycle, its steering system could not be tested due to the damages as a result of the accident. The Bicycle was found not to be fitted with a braking system. Hence we were unable to conduct any static or operational tests of the braking system.
11. The 2 tyres of the Bicycle were found to be in serviceable condition (which included the deflated rear tyre). This had also included the front tyre where a cut/tear was observed. This cut/tear was a result of the accident and did not occur prior to the accident.
12. 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 damage of its steering system as a result of the accident which had rendered the Bicycle immobile.

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