

Your Ref: TP/IP/35321/2021  
Our Ref : CI/TPD21010020/P

30<sup>th</sup> September 2021

**Fatal Accident Investigation Team**

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

**MECHANICAL INSPECTION REPORT OF MOTOR CAR SGH 1678M**

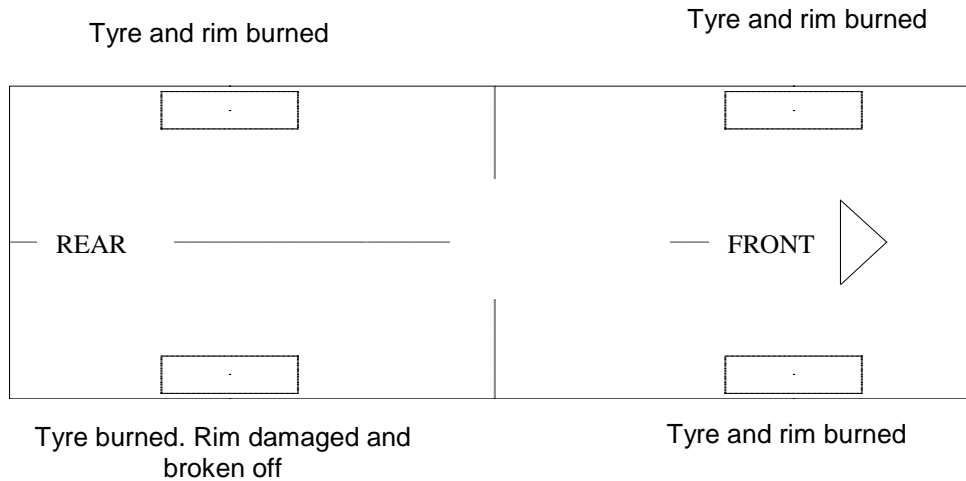
1. I refer to your request on 22<sup>nd</sup> September 2021 to conduct a visual inspection of a Motor Car bearing registration number SGH 1678M (herein referred to as "**Motor Car**"), which was involved in a road traffic accident on 23<sup>rd</sup> July 2021.
2. The objective of the inspection is to determine if there was any possible mechanical failure to the Motor Car that may have contributed to the accident.
3. Following the request, I had carried out a physical inspection of the Motor Car on 30<sup>th</sup> September 2021 at the premises of Traffic Police vehicle pound, 517 Airport Road Singapore 539942. I now set out below my observations and comments with respect to this inspection.

**General Condition**

4. The mileage of the Motor Car was not recorded at the time of my inspection as the Motor Car had caught fire and was totally burn up as result of the accident.
5. Although the Motor Car had caught fire and burned up, however we were still able to observed physically damages to it. We observed that the Motor Car had sustained damage all around the vehicle. Its front bonnet, left and right body panel and rear boot were amongst the body parts various components in the engine compartments were also damaged as a result of the accident.

## Tyres and Wheel Rims

6. The condition of the Motor Car's 4 tyres and wheel rims was observed to be burned and damaged as a result of the accident.



7. All 4 tyres and wheel rims was observed to be burned and damaged as a result of the accident and fire. See photo 1 – 10 below.



**Photo 1** shows a general view of the Motor Car's front body at the time of my inspection. Motor Car had caught fire and burned up, however we were still able to observe physically damages to it. We observed that the Motor Car had sustained damage all around the vehicle. Its front bonnet, left body panel and rear boot were amongst the body parts various components in the engine compartments were also damaged as a result of the accident.



**Photo 2** shows the close up view of the Motor Car's front body at the time of my inspection. The Motor Car was observed to have sustained damage at its front portion. Its front bonnet (circled) were amongst the body parts that were damaged as a result of the accident.



**Photo 3** shows a general view of the Motor Car's right body at the time of my inspection. The Motor Car was observed to have sustained damage at its right portion. Its right body panels (circled) were amongst the body parts that were burned and damaged as a result of the accident.





**Photo 4** shows a general view of the Motor Car's left at the time of my inspection. The Motor Car was observed to have sustained damage at its right portion. Its left body panels (circled) were amongst the body parts that were burned and damaged as a result of the accident.



**Photo 5** shows a close up view of the Motor Car's left at the time of my inspection. The Motor Car was observed to have sustained damage at its left portion. Its left body panels (circled) were amongst the body parts that were burned and damaged as a result of the accident.



**Photo 6** shows a close up view of the Motor Car's rear at the time of my inspection. The Motor Car was observed to have sustained damage at its rear portion. Its rear body panels (circled) were amongst the body parts that were burned and damaged as a result of the accident.



**Photo 7** shows the condition of the front right tyre and rim of the Motor Car, which was observed to be burned and damaged as a result of the accident.





**Photo 8** shows the condition of the rear right tyre and rim of the Motor Car, which was observed to be burned, damaged and broken as a result of the accident.



**Photo 9** shows the condition of the rear left tyre and rim of the Motor Car, which was observed to be burned and damaged as a result of the accident.



**Photo 10** shows the condition of the front left tyre and rim of the Motor Car, which was observed to be burned and damaged as a result of the accident.

### **Engine Compartment & Operating Fluids**

8. Upon examination of the engine compartment of the Motor Car, I had observed that the whole engine and various components in the engine compartment to be burned and damaged as a result of the accident.
9. My subsequent checks on the underside of the Motor Car revealed signs of fluid leak and fluid stains as a result of the accident and fire damage. See photo 11 – 14 below.





**Photo 11** shows the close up view of the Motor Car's front body at the time of my inspection. The Motor Car was observed to have sustained damage at its front portion. Its various components in the engine compartments (circled) were also damaged as a result of the accident.



**Photo 12** shows the close up view of the Motor Car's engine compartments at the time of my inspection. Its engine and various components in the engine compartments (circled) were burned and damaged as a result of the accident.





**Photo 13** shows the close up view of the Motor Car's engine compartments at the time of my inspection. Its engine and various components in the engine compartments (circled) were burned and damaged as a result of the accident.



**Photo 14** shows the undercarriage of the Motor Car, at the area where the engine housing and transmission housing are located. I observed sign(s) of fluid leak and fluid stain(s) on the underside of the Motor Car as a result of the accident and fire damage.

## Braking System & Steering System

10. Static brake and steering tests was not conducted on the Motor Car as the fire from the accident had damaged the various braking and steering components. See photo 15 - 20 below.

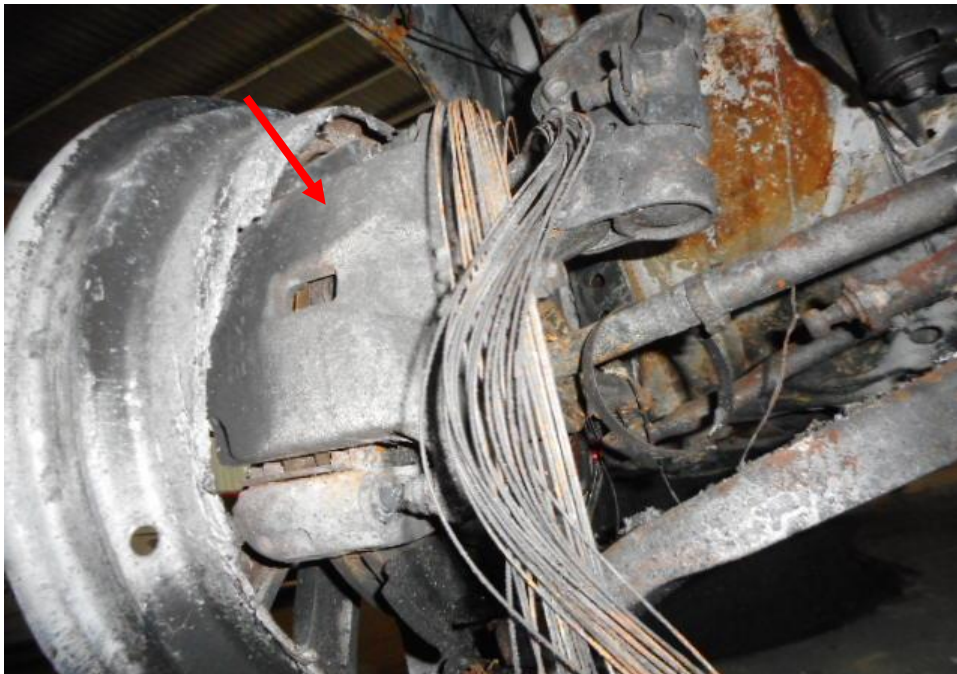


**Photo 15** shows the brake caliper (arrowed) at the rear right wheel of the Motor Car. The component was observed to sustain fire damage as a result of the accident.





**Photo 16** shows the brake caliper (arrowed) at the rear left wheel of the Motor Car. The component was observed to sustain fire damage as a result of the accident.

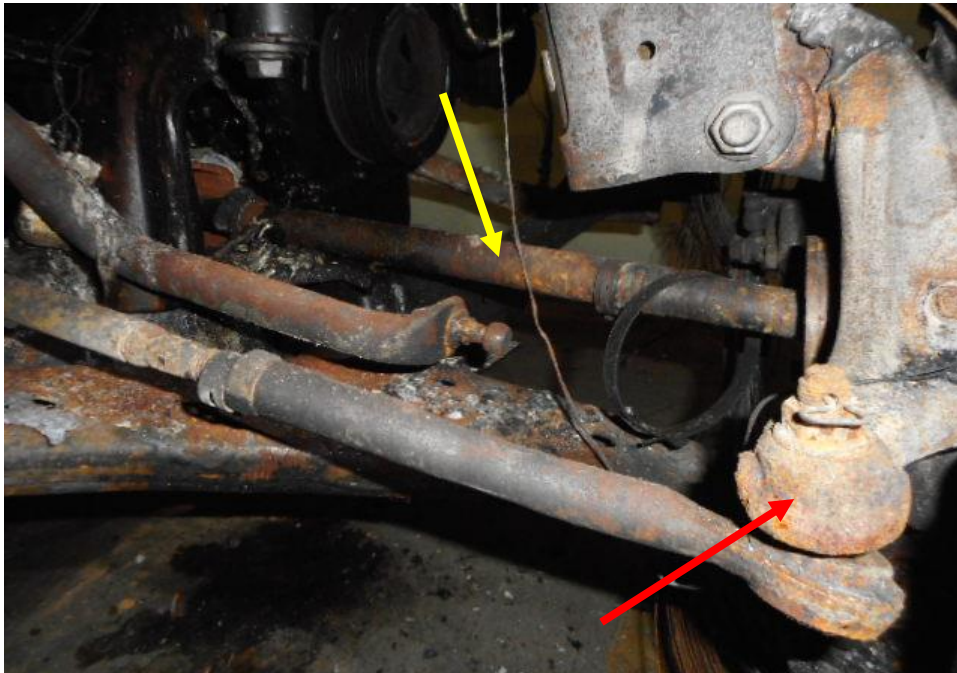


**Photo 17** shows the brake caliper (arrowed) at the front right wheel of the Motor Car. The component was observed to sustain fire damage as a result of the accident.

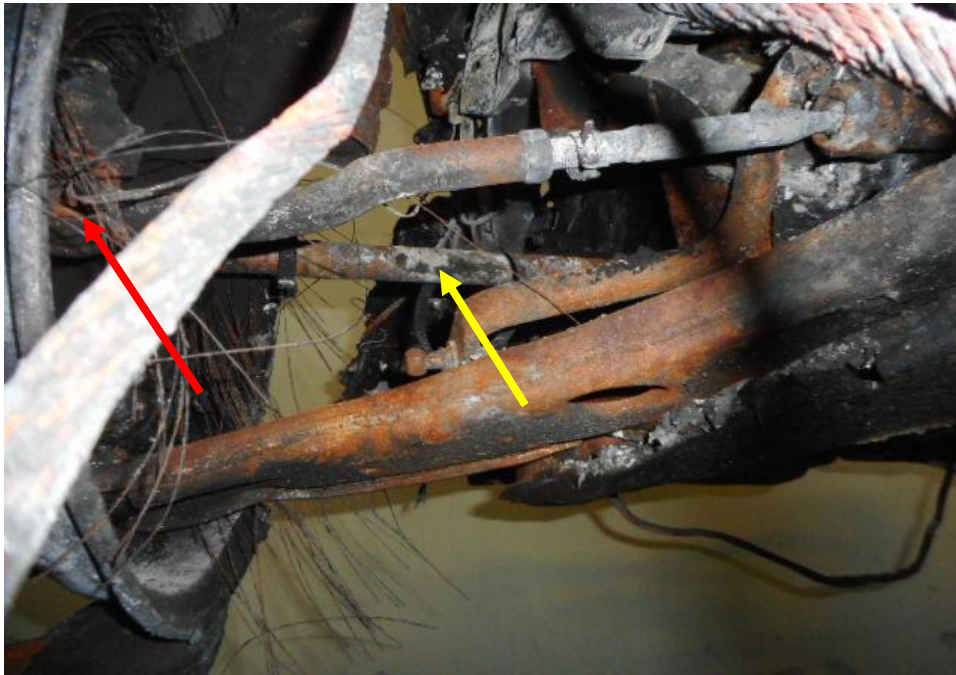




**Photo 18** shows the brake caliper (arrowed) at the front left wheel of the Motor Car. The component was observed to sustain fire damage as a result of the accident.



**Photo 19** shows the various undercarriage steering components at the front right wheel of the Motor Car. The steering tie rod (red arrow) and driveshaft (yellow arrow) was observed to sustain fire damage as a result of the accident.



**Photo 20** shows the various undercarriage steering components at the front left wheel of the Motor Car, The steering tie rod (red arrow) and driveshaft (yellow arrow) was observed to sustain fire damage as a result of the accident.

### **Electronic Safety / Warning Indicators**

11. The Motor Car's automatic self-test of the functionality of its electronic operating systems was not conducted as the whole vehicle and engine was burned and damaged as a result of the accident.

### **Seat Belts**

12. The front left, front right, rear left and rear right seat belts of the "Motor Car" were not tested as they were burned as a result of the accident.

### **Operational Behaviour of the Motor Car**

13. An operational test by driving the Motor Car to primarily determine whether there was any abnormality to the engine system, transmission system and braking system of the Motor Car could not be conducted given the extent of damage that it had sustained to the whole of the vehicle as it was totally burned as a result of the accident.

## Conclusion

14. For this particular case, I was unable to determine whether there was any possible mechanical failure to the Motor Car that may have contributed to the accident. The extent of damage that it had sustained had prevented me from carrying out any operational test(s).

15. All Motor Car's 4 tyres and wheel rims was observed to be burned and damaged as a result of the accident.



**Sherwin Beh**

*Technical Investigator*



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