

Your Ref: Mercedes Benz E400
(chassis number WDD2384662F048814)
Our Ref : CI/TP20011895/D

01 November 2020

ST Powered Motoring Pte Ltd
128 Woodlands Industrial Park E5
Singapore 757851

**INSPECTION REPORT OF AN UNREGISTERD MERCEDES BENZ E400
MOTOR CAR WITH CHASSIS NUMBER WDD2384662F048814**

1. I refer to your request on 28 October 2020 to conduct a physical inspection of an unregistered Mercedes Benz E400 motor car bearing chassis number WDD2384662F048814 (herein referred to as "**Motor Car**").
2. The purpose of this inspection is to primarily determine: -
 - a) the general road worthiness of the Motor Car, whether there is any possible mechanical problem(s) and/or operational issue(s) to the various operating systems of the Motor Car;
 - b) whether there was any work (repair) done to the chassis/structural body of the Motor Car, and if yes, whether all major components, welding and critical points of the Motor Car has been properly restored.

Damage to the Motor Car

3. I did not observe any physical damage to the Motor Car from the photographs that were provided to me. See photo 1 – 4 below.



Photo 1 shows the front left body of the Motor Car (photograph provided to me). There was no physical damage seen to the Motor Car from the photographs that were provided to me.



Photo 2 shows the front right body of the Motor Car (photograph provided to me). There was no physical damage seen to the Motor Car from the photographs that were provided to me.



Photo 3 shows the rear left body of the Motor Car (photograph provided to me). There was no physical damage seen to the Motor Car from the photographs that were provided to me.



Photo 4 shows the rear right body of the Motor Car (photograph provided to me). There was no physical damage seen to the Motor Car from the photographs that were provided to me.

Inspection of the Motor Car

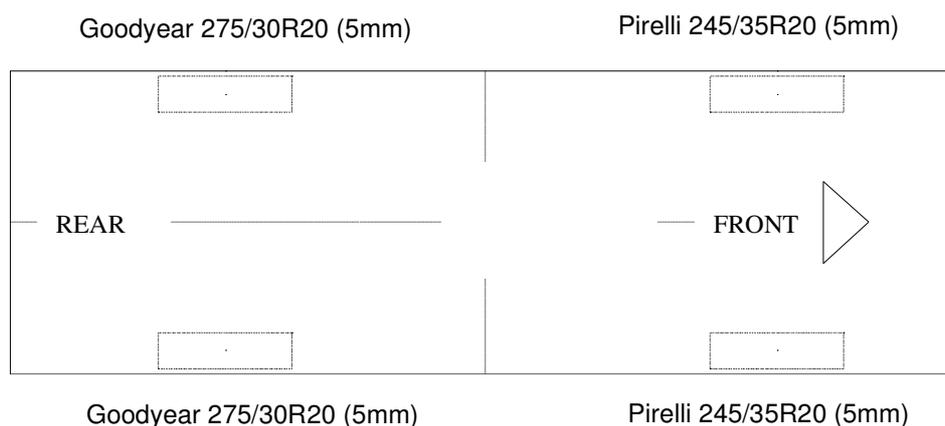
- Following the request, I had carried out a physical inspection of the Motor Car on 29 October 2020 at the premises of 128 Woodlands Industrial Park E5, Singapore 757851. I also conducted a short test drive of the Motor Car during this inspection. My observations and comments with respect to this inspection and test drive are set out below.
- The mileage of the Motor Car recorded at the time of my inspection was 14,052km. The Motor Car was also hoisted up during the inspection to facilitate my examination of its undercarriage.

Exterior Condition

- The Motor Car was observed to be in a relatively good general condition with no loose exterior fittings observed.

Tyres and Wheel Rims

- It was fitted with 20inch sport wheel rims that were wrapped with tyres that were observed to be of serviceable condition. The tyres were also sufficiently inflated for vehicular operation. The tyre brand, tyre size and approximate remaining tread depth of the 4 tyres of the Motor Car were recorded as follows: -



Body Panels (Detachable & Non-detachable)

8. The detachable body panels of the Motor Car like the front fenders, front bumper, rear bumper, doors, bonnet and rear bootlid amongst others were all found to be fitted securely.
9. Checks on the non-detachable body panels like the rear fenders, floorboard, roof panel, pillars and rocker panels amongst others, revealed that these body panels were spot welded onto the chassis/structural body of the Motor Car. The original factory sealant at the joints of the non-detachable body panels was all untouched indicating no replacement of the non-detachable body panels was carried out; and that these body panels were all originally fitted.

Chassis/Structural Body

10. Visually, I did not find any weld marks, other than the original spot weld marks, on the chassis/structural body of the Motor Car. The original factory sealant at the joints along the chassis/structural body was also untouched, again indicating that no replacement of the chassis/structural body was carried out; and that the chassis/structural body was originally fitted.

Interior Compartment (Seats)

11. The seats of the Motor Car were found to be secured to the floorboard of the Motor Car via seat rails bolted onto the floorboard. Retractable seat belt reels and pre-tensioners were fitted on all seats of the Motor Car. The seat belt reels were tested and were able to be fastened securely into the respective pre-tensioners that were fixed to the side of all the seats.

Electronic Safety Features

12. The Motor Car's automatic self-test of the functionality of its various electronic safety features like the Anti-Brake Lock System (ABS), Supplemental Restraint System (SRS), Electric Power Steering (EPS), Tyre Pressure Monitor (TPM) and Traction Control System (TCS) during cranking of the engine had indicated that these electronic systems were in working condition. This was determined from the respective warning lights disappearing from the instrument panel after the self-test.

Engine Compartment & Operating Fluids

13. My examination of the engine compartment of the Motor Car revealed that the various parts and components inside the engine compartment were all intact and properly fitted. The engine oil, brake fluid and engine coolant were all found to be of sufficient level for operating purposes. Visually, there was also no contamination found to these fluids.
14. My checks on the underside of the Motor Car revealed no sign(s) or indication(s) of fluid leakage and/or fluid stain(s). The engine block and automatic transmission assembly were both secured properly. All undercarriage components of the Motor Car were also observed to be intact and secured in an appropriate manner.

Steering System & Braking System

15. Static brake tests conducted on the Motor Car revealed no abnormality. The brake booster had responded well to the various tests conducted. There was also no abnormal movement of the brake pedal when it was depressed. The brake hoses and brake pipes were all intact with no leakage found. In general, the static brake tests had suggested that there was no internal leakage of pressure/vacuum in the braking system of the Motor Car and that the braking system is in serviceable condition.
16. Static test on the steering system of the Motor Car also revealed no abnormality to the steering system. I did not experience any abnormal free play and/or other resistance when turning the steering wheel left and right to full lock positions. My visual examination of the various steering components which had included the rack and pinion, tie rods, tie rod ends, and ball joints revealed that these components were all generally in good condition.

Others

17. The Motor Car's soft top (convertible) was also tested and it was observed that, as a safety feature, the soft top could only open and close when the Motor Car was in a stationary position. When opened, the soft top is completely folded into the rear boot compartment with no parts protruding out of the Motor Car's body. The soft top was also found adequately secured to the "A" Pillar after closing.

Test Drive of the Motor Car

18. I subsequently conducted a short test drive of the Motor Car to operationally determine if there was any possible mechanical problem(s) to the various operating systems of the Motor Car. The test drive was carried out along the arterial roads surrounding 128 Woodlands Industrial Park E5, where I was able to make multiple right turns and left turns; travel over road humps; left bend and right bend; upslope and downslope.
19. During this test drive, the general performance, stability, braking and handling of the Motor Car were satisfactory. No abnormal sound(s) was heard when executing left turns and right turns or when the Motor Car was going over road humps.
20. Operationally, I did not find any abnormal behaviour of the steering system and braking system. The Motor Car had responded well to my steering input and was able to come to a complete stop effectively during braking. The mileage of the Motor Car at the end of the test drive was 14,053km.

Conclusion

21. Basing on my physical inspection of the Motor Car, I am of the view that the overall general condition of the Motor Car was relatively good as at the time of my inspection. There was no sign(s) or indication(s) of any work (repair) done to the chassis/structural body of the Motor Car. There was also no sign(s) or indication(s) of fluid leak and/or fluid stain found.
22. My test drive of the Motor Car revealed no evidence to suggest possible mechanical problem(s) to the Motor Car. I did not experience any abnormal behaviour and/or sound(s) from the various operating systems of the Motor Car. The general performance, stability, braking and handling of the Motor Car were satisfactory throughout the Motor Car's short test drive. In general, I had found the Motor Car to be of road worthy condition. See photo 5 – 21 below taken at the time of my inspection.



Photo 5 shows a general view of the front right body of the Motor Car at the time of my inspection. The Motor Car was observed to be in a relatively good general condition with no loose exterior fittings observed.



Photo 6 shows a general view of the rear left body of the Motor Car at the time of my inspection. The Motor Car was observed to be in a relatively good general condition with no loose exterior fittings observed. The mileage of the Motor Car recorded at the time of my inspection was 14,052km.



Photo 7 shows the chassis number of the Motor Car. The chassis number recorded was WDD2384662F048814



Photo 8 shows a general view of the engine compartment of the Motor Car at the time of my inspection. The various parts and components inside the engine compartment were all observed to be intact and properly fitted. There was also no sign(s) or indication(s) of fluid leak and/or fluid stain found inside the engine compartment.



Photo 9 shows the interior compartment of the Motor Car. All the seats of the Motor Car were secured via seat rails to the floorboard and were also all fitted with a retractable seat belt reel and pre-tensioner. The seat belts were tested and able to be fastened into the respective pre-tensions that were fitted on the side of each individual seat.



Photo 10 shows the warning lights for the various electronic safety features appearing on the instrument panel of the Motor Car during its self-test when the engine is cranked, in particular the ABS, SRS, EPS, TPM and TCS lights (arrowed).



Photo 11 shows the respective warning lights no longer illuminated, indicating that there is no fault detected to the ABS, SRS, EPS, TPM and TCS systems of the Motor Car during the self-test. These electronic systems were hence in working condition at the time of my inspection.



Photo 12 shows the Motor Car's soft top (convertible) being tested. It was observed that as a safety feature, the soft top could only open and close when the Motor Car was in a stationary position. When opened, the soft top is completely folded into the rear boot compartment with no parts protruding out of the Motor Car's body. The soft top was also found adequately secured to the "A" pillar after closing.

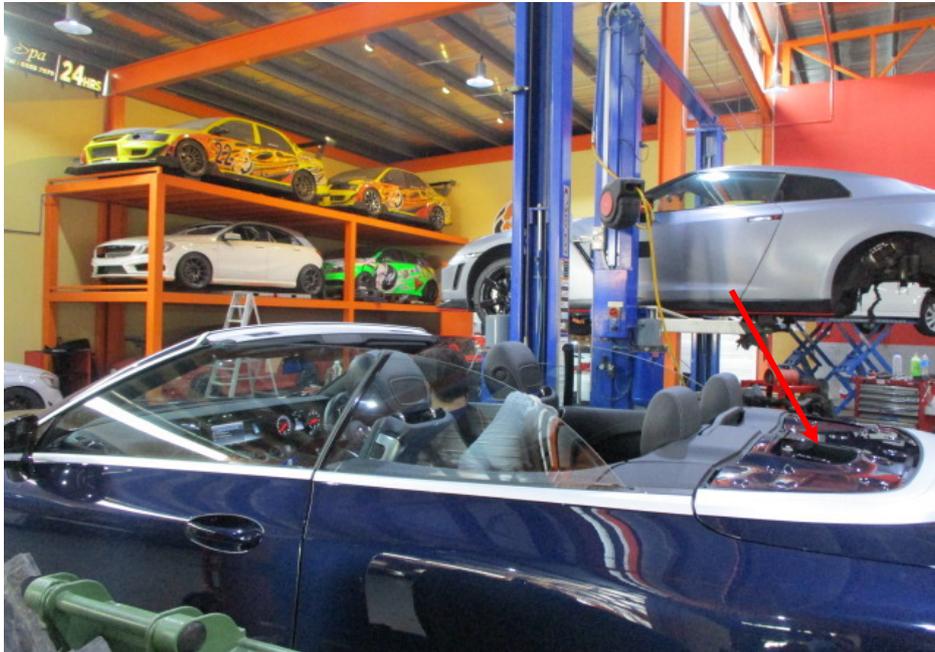


Photo 13 shows the Motor Car's soft top (convertible) completely opened during my testing. It was observed that as a safety feature, the soft top could only open and close when the Motor Car was in a stationary position. When opened, the soft top is completely folded into the rear boot compartment (arrowed) with no parts protruding out of the Motor Car's body. The soft top was also found adequately secured to the "A" pillar after closing.



Photo 14 shows the Motor Car hoisted up for checks on its undercarriage. There was no sign(s) or indication(s) of fluid leakage and/or fluid stain(s) on the underside of the Motor Car. The undercarriage components of the Motor Car were also all observed to be intact and secured in an appropriate manner.



Photo 15 shows a general view of the control arms and linkages at the rear left wheel of the Motor Car. I did not observe any fluid leak and/or fluid stain on the underside of the Motor Car. All of the Motor Car's undercarriage components were observed to be intact and secured in an appropriate manner.



Photo 16 shows the various undercarriage components at the front left wheel of the Motor Car. The mechanical components, control arms and linkages were all found to be intact and secured in an appropriate manner.



Photo 17 shows the various undercarriage components at the front right wheel of the Motor Car. The mechanical components, control arms and linkages were all found to be intact and secured in an appropriate manner. I also did not observe any fluid leak and/or fluid stain on the underside of the Motor Car.



Photo 18 shows the Motor Car's catalytic converters (arrowed). My examination of the Motor Car's exhaust system revealed no sign(s) or indication(s) of any cut or weld marks along its exhaust pipes and on its rear mufflers.

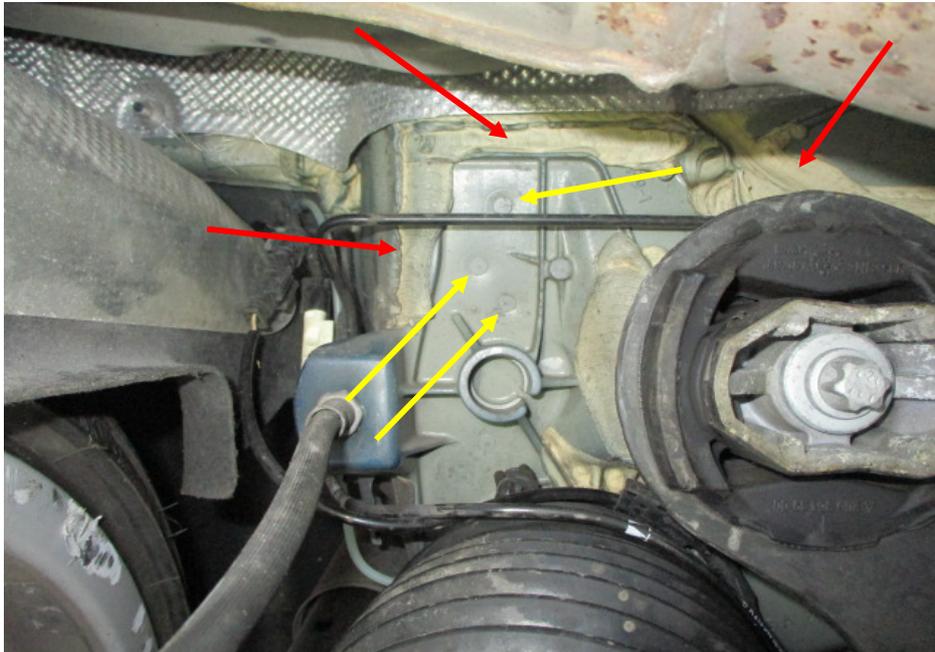


Photo 19 shows the chassis/structural body at the underside rear left of the Motor Car. I did not find any weld marks other than original spot weld marks (yellow arrow) on the chassis/structural body of the Motor Car. The original factory sealant (red arrow) at the joints along the chassis/structural body was untouched, indicating no work was done on the chassis/structural body of the Motor Car and that the chassis/structural body was originally fitted.

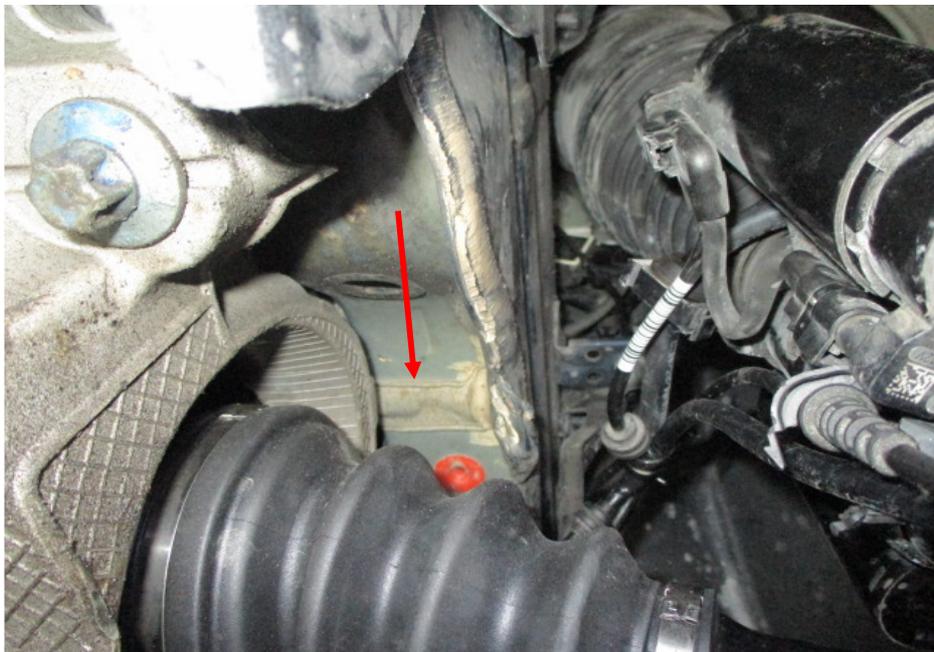


Photo 20 shows the chassis/structural body at the underside front right of the Motor Car. The original factory sealant (arrowed) at the joints along the chassis/structural body was also untouched, indicating no work was done on the chassis/structural body of the Motor Car and that the chassis/structural body was originally fitted.

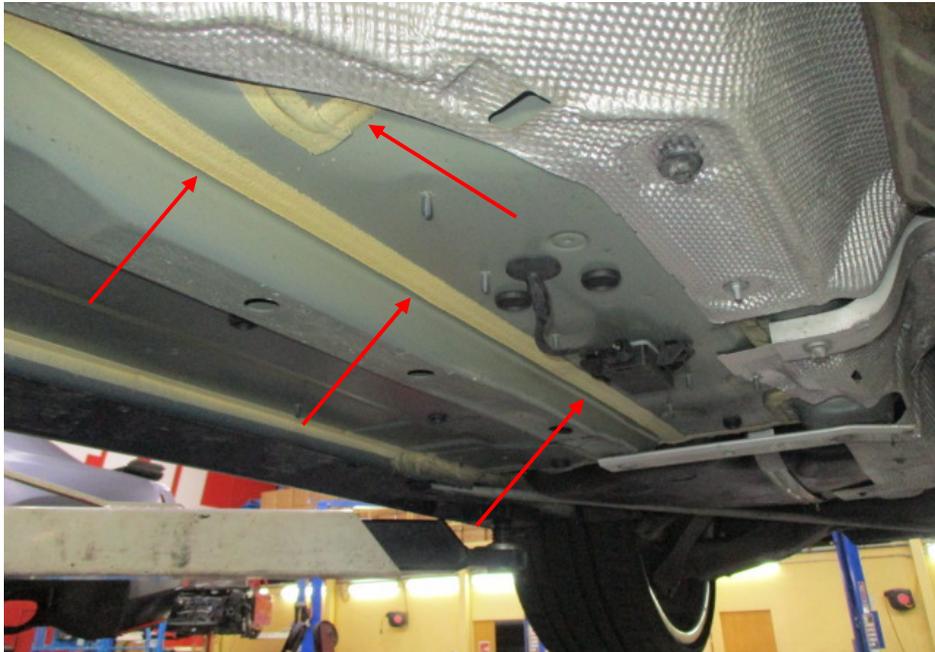


Photo 21 shows the floorboard at the right underside of the Motor Car. The original factory sealant (arrowed) at the joints along the non-detachable body panels were untouched, indicating no work was done on the non-detachable body panels of the Motor Car; and that these body panels were originally fitted. In general, I had found all the non-detachable body panels of the Motor Car to be originally fitted at the time of my inspection.

Ang Bryan Tani*AMSOE, AMIRTE, AFF SAE, M.MATAI, AFF.Inst.AEA**Senior Technical Investigator**Technical Investigation & Accident Reconstructionist (SAE-A)*

DISCLAIMER OF LIABILITY TO THIRD PARTIES:- This Report is made solely for the use and benefit of the Client named on the front page of this Report. No liability or responsibility whatsoever, in contract or tort, is accepted to any third party who may rely on the Report wholly or in part. Any third party acting or relying on this Report, in whole or in part, does so at his or her own risk.