

Your Ref: BMW 320i
(chassis number WBA5F72000AE90203)
Our Ref : CI/TP21012531/D

13 December 2021

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

**INSPECTION REPORT OF AN UNREGISTERED BMW 320i MOTOR CAR
WITH CHASSIS NUMBER WBA5F72000AE90203**

1. I refer to your request on 07 December 2021 to conduct a physical inspection of an unregistered BMW 320i motor car bearing chassis number WBA5F72000AE90203 (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. The photographs provided to me had showed damage to the Motor Car's frontal portion. Body parts damaged include the front bumper, front bumper under cover, front bumper centre lower grille, front bumper sponge, front bumper reinforcement, front bumper left lower grille, front bumper sensors, radar unit, radiator grilles, front bonnet, front bonnet locks, front bonnet hinges, front left day light, front left headlamp, front left fender, front support panel, front support panel top centre garnish, front left headlamp top garnish, front left headlamp top panel, front centre air guide, aircon condenser and radiator amongst others.
4. Apart for the frontal portion, there was no physical damage observed to other areas of the Motor Car. The left side curtain airbag and front left passenger airbag were seen to be deployed. See photo 1 – 4 below.



Photo 1 shows the front left body of the Motor Car (photograph provided to me). The Motor Car was observed to have sustained damage at its frontal portion. The front bumper, front bumper reinforcement, front bumper sponge, front bumper centre lower grille, front bumper left lower grille, radar unit, front bonnet, front bonnet left lock, front bonnet left hinge, front left day light, front left headlamp, front left fender, front support panel, front left headlamp top panel, aircon condenser and radiator were amongst the body parts that were observed to have been damaged. The front left passenger airbag was deployed (arrowed).

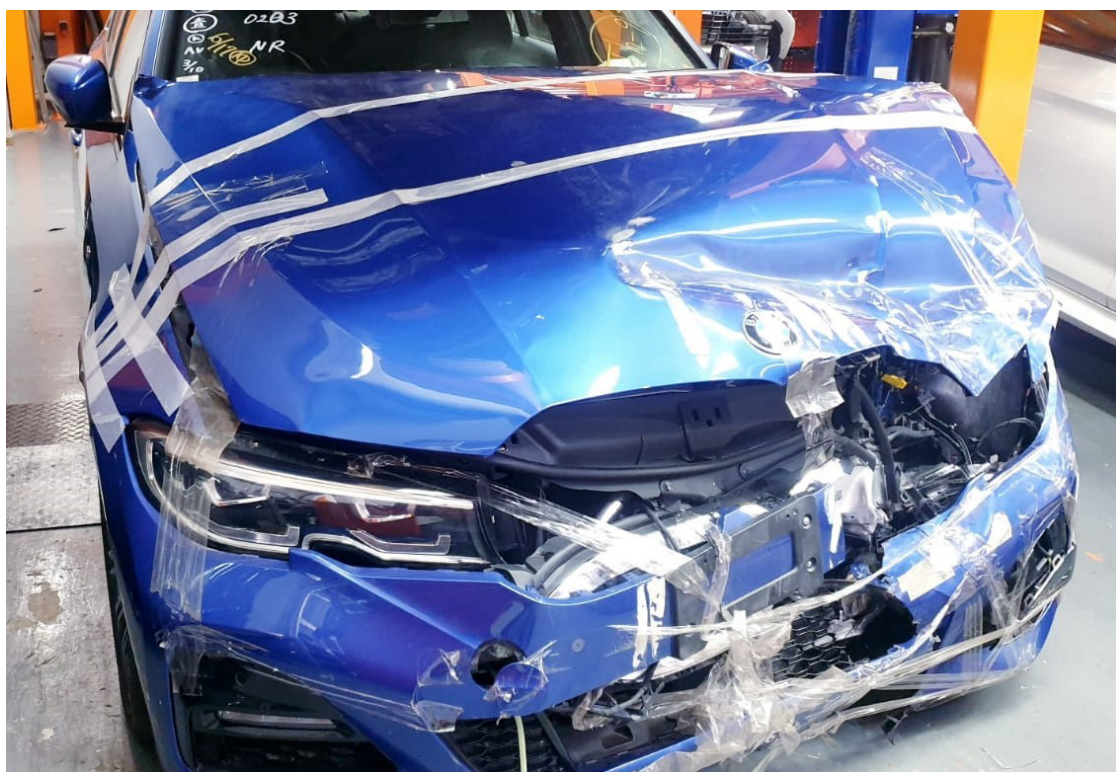


Photo 2 shows the front right body of the Motor Car (photograph provided to me). The Motor Car was observed to have sustained damage at its frontal portion. The front bumper, front bumper reinforcement, front bumper sponge, front bumper centre lower grille, radiator grilles, front bonnet, front bonnet right hinge, front support panel and front centre air guide were amongst the body parts that were observed to have been damaged.



Photo 3 shows the rear right body of the Motor Car (photograph provided to me). Apart for the frontal portion, there was no physical damage seen to other areas of the Motor Car.



Photo 4 shows the rear left body of the Motor Car (photograph provided to me). Apart for the frontal portion, there was no physical damage seen to other areas of the Motor Car. The left side curtain airbag and front left passenger airbag were seen to be deployed (arrowed).

Inspection of the Motor Car

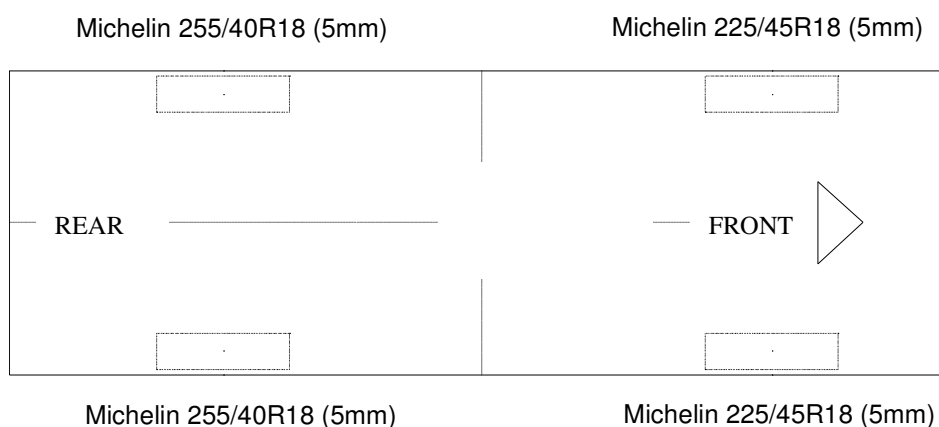
5. Following the request, I had carried out a physical inspection of the Motor Car on 09 December 2021 at the premises of 128 Woodlands Industrial Park E5, Singapore 757851. I also conducted a short test drive of the Motor Car during this inspection. My observations and comments with respect to this inspection and test drive are set out below.
6. The mileage of the Motor Car recorded at the time of my inspection was 19,687km. The Motor Car was also hoisted up during the inspection to facilitate my examination of its undercarriage.

Exterior Condition

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

Tyres and Wheel Rims

8. It was fitted with 18inch 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)

9. 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.
10. 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

11. 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)

12. 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 belts 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

13. The Motor Car's automatic self-test of the functionality of its various electronic safety features like the Anti-Lock Brake System (ABS), Supplemental Restraint System (SRS), Integral Active Steering (IAS), Tyre Pressure Monitor (TPM) and Dynamic Stability Control (DSC) 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

14. 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.
15. 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

16. 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.
17. 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.

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 19,690km.

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. The body parts at the frontal portion of the Motor Car were visually examined and it was noted that the repair/restoration works carried out to the damaged area of the Motor Car (refer to photograph 1 & 2 above) were reasonably adequate and in order.
23. 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 – 33 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. The body parts at the frontal portion of the Motor Car were visually examined and it was observed that the repair/restoration works carried out to the damaged area of the Motor Car (refer to photograph 1 & 2 above) were reasonably adequate and in order.



Photo 6 shows a closer view of the Motor Car's front bumper, front bumper centre lower grille, radar unit and radiator grilles. The body parts at the frontal portion of the Motor Car were visually examined and it was observed that the repair/restoration works carried out to the damaged area of the Motor Car (refer to photograph 1 & 2 above) were reasonably adequate and in order.



Photo 7 shows a general view of the front 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 body parts at the frontal portion of the Motor Car were visually examined and it was observed that the repair/restoration works carried out to the damaged area of the Motor Car (refer to photograph 1 & 2 above) were reasonably adequate and in order.



Photo 8 shows a closer view of the Motor Car's front left fender, front left door and front bonnet. The body parts at the frontal portion of the Motor Car were visually examined and it was observed that the repair/restoration works carried out to the damaged area of the Motor Car (refer to photograph 1 & 2 above) were reasonably adequate and in order.



Photo 9 shows a closer view of the Motor Car's front bumper, front bumper left lower grille, front bumper left day light and front left headlamp. The body parts at the frontal portion of the Motor Car were visually examined and it was observed that the repair/restoration works carried out to the damaged area of the Motor Car (refer to photograph 1 & 2 above) were reasonably adequate and in order.



Photo 10 shows a closer view of the Motor Car's front bumper, front bumper centre lower grille, front bonnet, front day lights, front headlamps, radar unit and radiator grilles. The body parts at the frontal portion of the Motor Car were visually examined, and it was observed that the repair/restoration works carried out to the damaged area of the Motor Car (refer to photograph 1 & 2 above) were reasonably adequate and in order.



Photo 11 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 19,687km.



Photo 12 shows a general view of the rear 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. The mileage of the Motor Car recorded at the time of my inspection was 19,687km.



Photo 13 shows the chassis number of the Motor Car. The chassis number recorded was WBA5F72000AE90203.

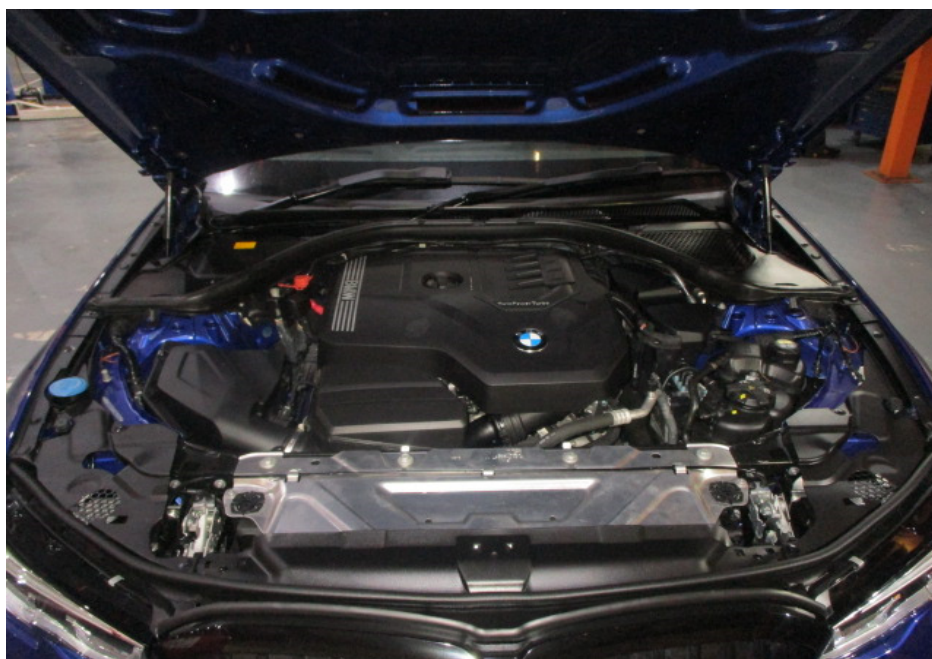


Photo 14 shows a general view of the engine compartment of the Motor Car at the time of my inspection. The various parts and components inside the engine compartment were all observed to be intact and properly fitted. There was also no sign(s) or indication(s) of fluid leak and/or fluid stain found inside the engine compartment. The repair/restoration works carried out to the various parts within the engine compartment like the front bonnet locks, front support panel, front support panel top centre garnish, front left headlamp top panel, aircon condenser and radiator amongst others, were reasonably adequate and in order.



Photo 15 shows the interior compartment of the Motor Car. The front dashboard, steering wheel, seats, upholstery and trims etc were all observed to be intact and properly fitted.



Photo 16 shows the rear seats of the Motor Car. All the seats of the Motor Car were secured via seat rails to the floorboard. They were also fitted with a retractable seat belt reel and a pre-tensioner. The seat belts (arrowed) were tested and were able to be fastened into the respective pre-tensions that were fitted on the side of each individual seat.



Photo 17 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, IAS, TPM and DSC lights (arrowed).



Photo 18 shows the respective warning lights no longer illuminated, indicating that there is no fault detected to the ABS, SRS, IAS, TPM and DSC systems of the Motor Car during the self-test. These electronic systems were hence in working condition at the time of my inspection.



Photo 19 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 20 shows a general view of the control arms and linkages at the rear right 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 21 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 22 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 23 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 24 shows the rear section of the Motor Car's exhaust system. 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 (arrowed), on its rear muffler, on its centre resonator boxes and on its catalytic converter.

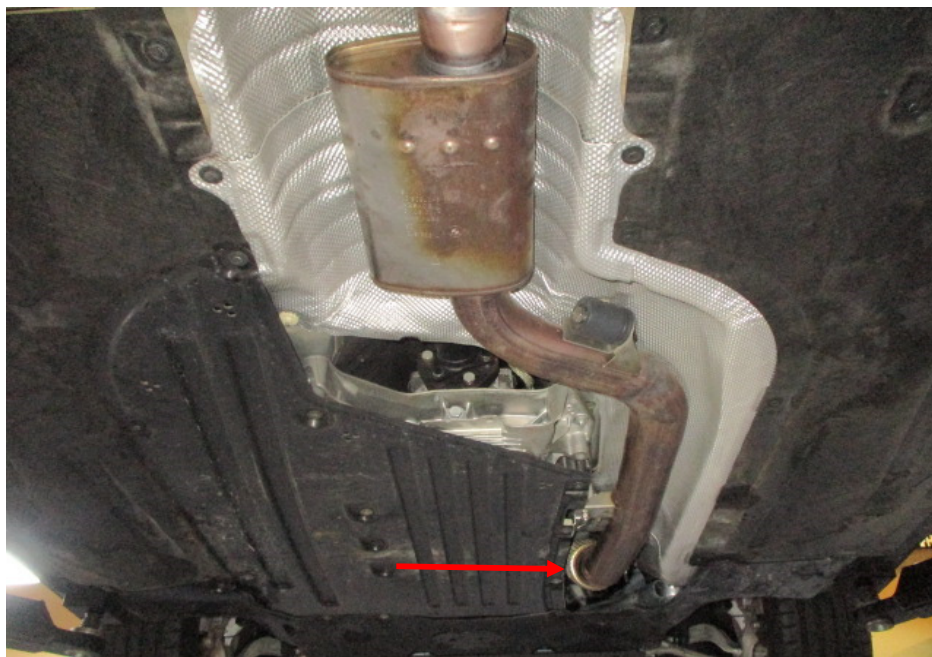


Photo 25 shows the front section of the Motor Car's exhaust system. My examination of the Motor Car's exhaust system revealed no sign(s) or indication(s) of any cut or weld marks along its exhaust pipes, on its rear muffler, on its centre resonator boxes and on its catalytic converter (arrowed).

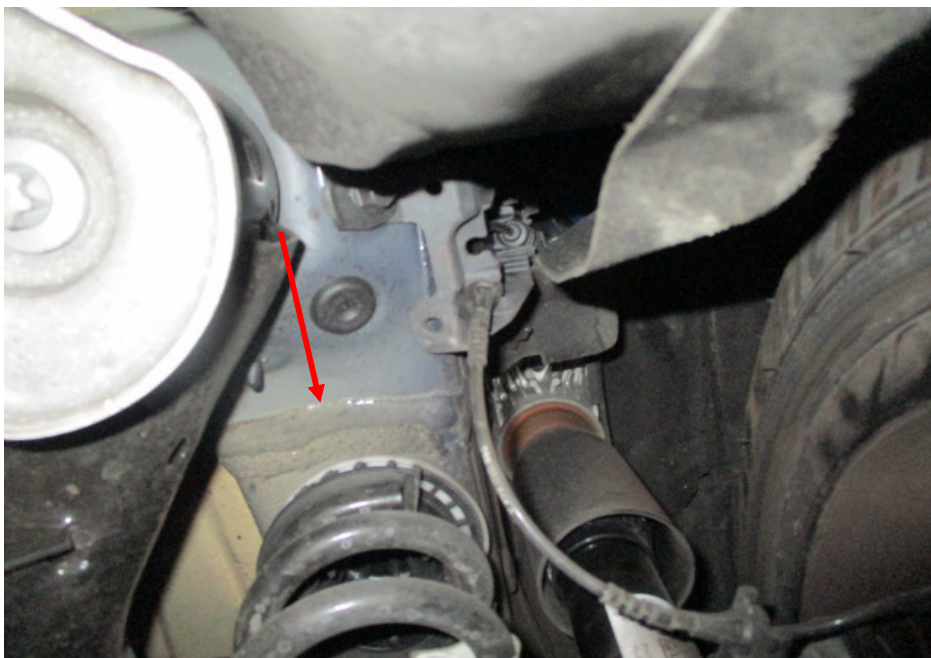


Photo 26 shows the chassis/structural body at the underside rear right of the Motor Car. I did not find any weld marks other than original spot weld marks on the chassis/structural body of the Motor Car. The original factory sealant (arrowed) at the joints along the chassis/structural body was also untouched, indicating no work was done on the chassis/structural body of the Motor Car and that the chassis/structural body was originally fitted.

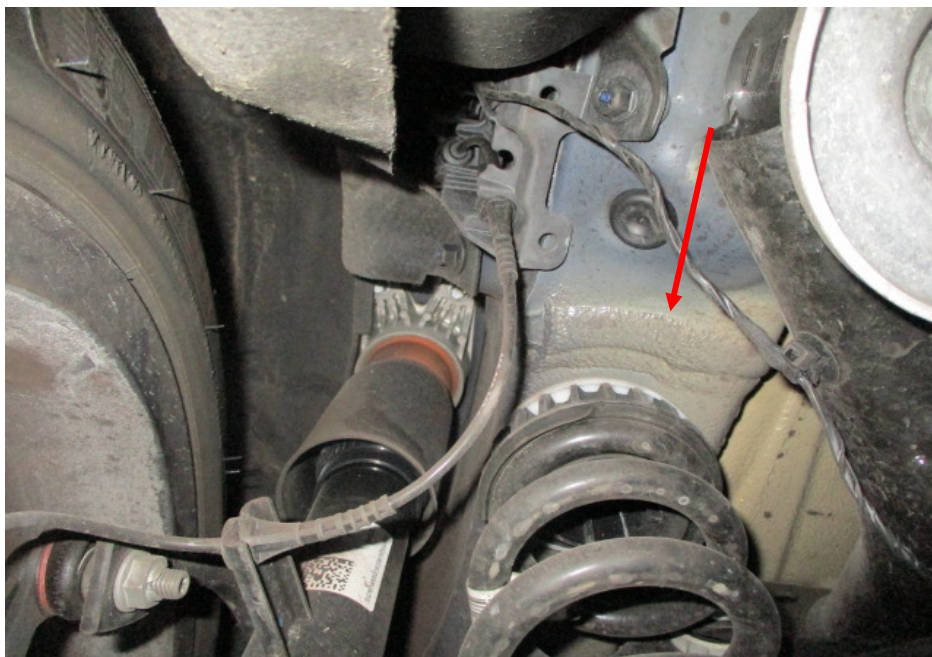


Photo 27 shows the chassis/structural body at the underside rear left of the Motor Car. The original factory sealant (arrowed) at the joints along the chassis/structural body was observed to be untouched. In general, I had found no work was carried out on the chassis/structural body of the Motor Car. The chassis/structural body of the Motor Car was originally fitted.

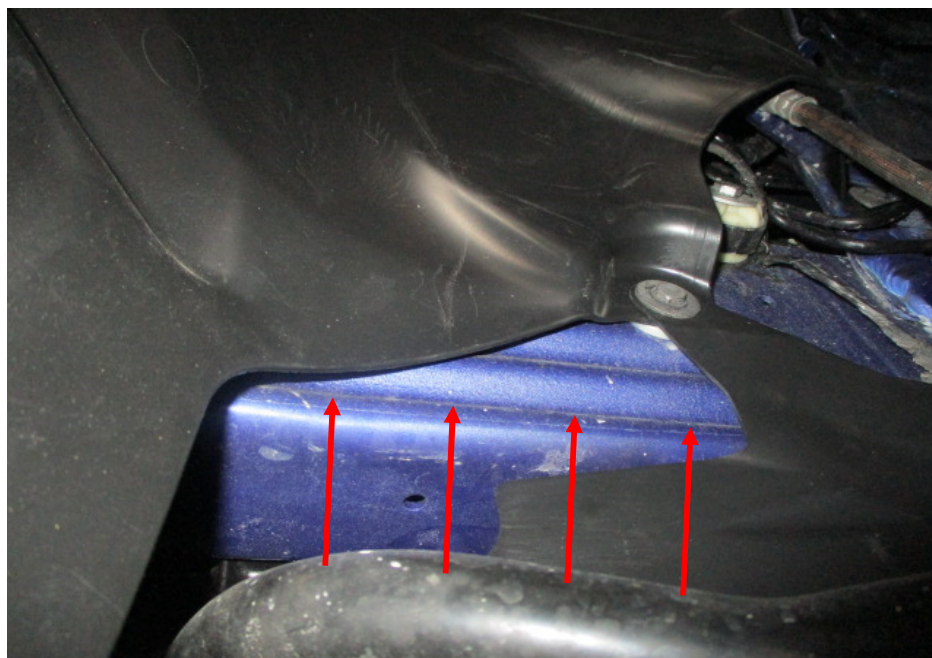


Photo 28 shows the chassis/structural body at the underside front left of the Motor Car. I did not find any weld marks other than original spot weld marks on the chassis/structural body of the Motor Car. The original factory sealant (arrowed) at the joints along the chassis/structural body was also untouched, indicating no work was done on the chassis/structural body of the Motor Car and that the chassis/structural body was originally fitted.



Photo 29 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 observed to be untouched. In general, I had found no work was carried out on the chassis/structural body of the Motor Car. The chassis/structural body of the Motor Car was originally fitted.



Photo 30 shows the right side "A" pillar of the Motor Car. I did not find any weld marks other than original spot weld marks (arrowed) on the right side "A" pillar of the Motor Car which, indicates that there was no re-welding works carried out. 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.



Photo 31 shows the right side “C” pillar of the Motor Car. I did not find any weld marks other than original spot weld marks (arrowed) on the right side “C” pillar of the Motor Car which, indicates that there was no re-welding works carried out. 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.



Photo 32 shows the left side “A” pillar of the Motor Car. I did not find any weld marks other than original spot weld marks (arrowed) on the left side “A” pillar of the Motor Car which, indicates that there was no re-welding works carried out. 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.



Photo 33 shows the left side "C" pillar of the Motor Car. I did not find any weld marks other than original spot weld marks (arrowed) on the left side "C" pillar of the Motor Car which, indicates that there was no re-welding works carried out. 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.