

Your Ref: BMW 540i
(chassis number WBAJB32080WW06265)
Our Ref : CI/TP19020353/D

15 November 2019

Rally Pitstop

176 Sin Ming Drive #04-17
Sin Ming Autocare
Singapore 575721

INSPECTION REPORT OF AN UNREGISTERD BMW 540i MOTOR CAR WITH CHASSIS NUMBER WBAJB32080WW06265

1. I refer to your request on 04 November 2019 to conduct a physical inspection of an unregistered BMW 540i motor car bearing chassis number WBAJB32080WW06265 (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 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.
3. Following the request, I carried out a physical inspection of the Motor Car on 06 November 2019 at the premises of 176 Sin Ming Drive #04-17, Sin Ming Autocare, Singapore 575721. 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.

Inspection of the Motor Car

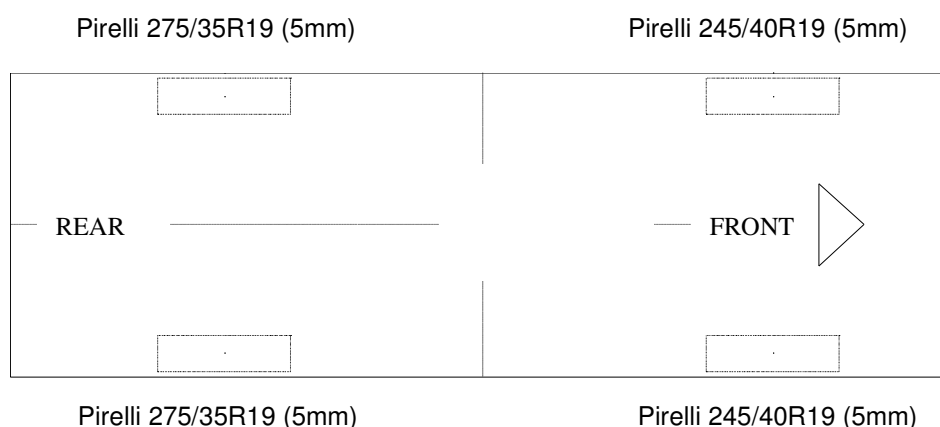
4. The mileage of the Motor Car recorded at the time of my inspection was 12,697km. The Motor Car was also hoisted up during the inspection to facilitate my examination of its undercarriage.

Exterior Condition

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

Tyres and Wheel Rims

6. It was fitted with 19inch 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)

7. The detachable body panels of the Motor Car like the front fenders, front bumper, rear bumper, doors, front bonnet and rear bootlid amongst others were all found to be fitted securely.
8. Checks on the non-detachable body panels like the rear fenders, floor board, roof panel, pillars and rocker panels amongst others, revealed that these body panels were spot welded onto the chassis/structure 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

9. 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)

10. The seats of the Motor Car were found to be secured to the floor board of the Motor Car via seat rails bolted onto the floor board. Retractable seat belt reels and pre-tensioners were fitted on all seats of the Motor Car. The seat belt reels were able to be fastened securely to the respective pre-tensioner that is fixed to the side of all the seats.

Electronic Safety Features

11. 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

12. 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 various operating fluids like the 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.
13. 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. They were not mounted onto the chassis/structural body or any integral body part of the Motor Car. All undercarriage components of the Motor Car were also observed to be intact and secured in an appropriate manner.

Steering System & Braking System

14. 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.

15. 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

16. 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 within the building premises of Sin Ming Autocare, where I was able to make multiple right turns and left turns; travel over road humps; left bend and right bend; upslope and downslope.
17. 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.
18. 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 12,698km.

Conclusion

19. 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. There was no sign(s) or indication(s) of any work 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.
20. 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 1 – 17 below taken at the time of my inspection.



Photo 1 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 relatively good general condition with no loose exterior fittings observed.



Photo 2 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 relatively good general condition with no loose exterior fittings observed.

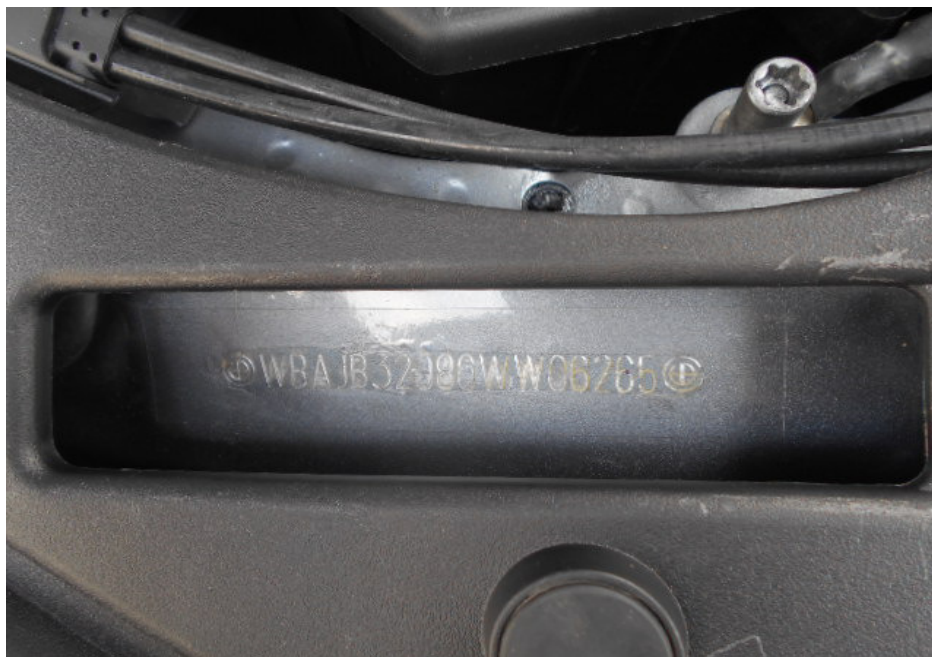


Photo 3 shows the chassis number of the Motor Car. The chassis number recorded was WBAJB32080WW06265.



Photo 4 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 within the engine compartment.



Photo 5 shows the seats of the Motor Car, which were secured via seat rails (arrowed) to the floor board. All the seats of the Motor Car were fitted with a retractable seat belt reel and pre-tensioner. The seat belts were also able to be fastened to the pretension that were fitted on the side of each individual seat.



Photo 6 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 7 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 8 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). The undercarriage components of the Motor Car were also all observed to be intact and secured in an appropriate manner.



Photo 9 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 10 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 11 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.



Photo 12 shows the Motor Car's rear exhaust muffler (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 muffler.



Photo 13 shows the chassis/structural body at the underside front left of the Motor Car. Visually, 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 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.

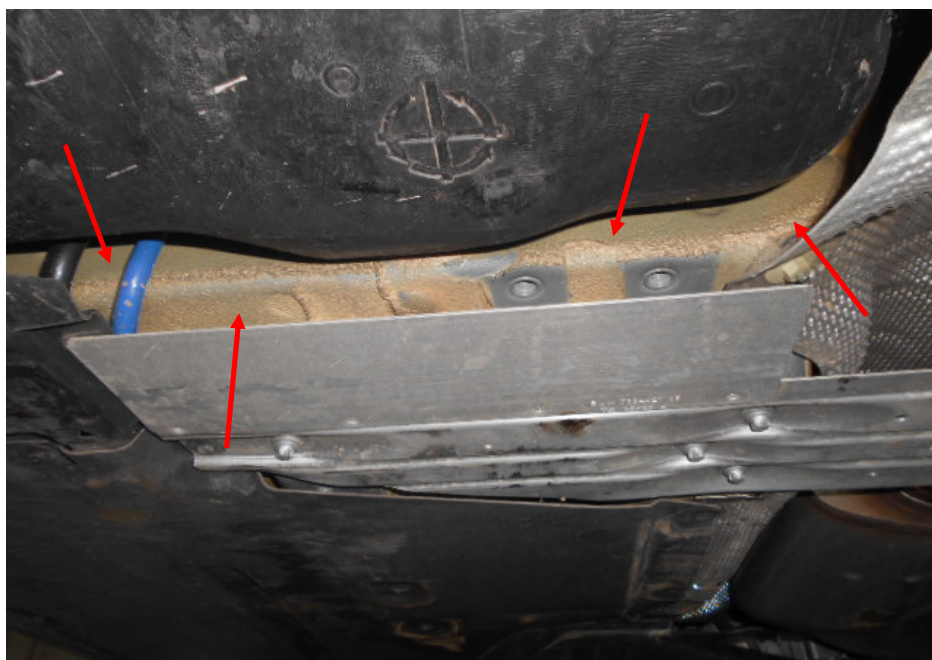


Photo 14 shows the floor board at the underside centre of the Motor Car. The original factory sealant (arrowed) at the joints of the non-detachable body panels was all untouched indicating no replacement of the non-detachable body panels was carried out;



Photo 15 shows the floor board at the underside rear of the Motor Car. The original factory sealant 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 the non-detachable body panels were originally fitted.



Photo 16 shows the rear left "C" pillar of the Motor Car. I did not find any weld marks other than original spot weld marks (arrowed) on the non-detachable body panels of the Motor Car, indicating that there was no re-welding works carried out; and that the non-detachable body panels of the Motor Car were originally fitted.



Photo 17 shows the front right “A” pillar of the Motor Car. I did not find any weld marks other than original spot weld marks (arrowed) on the non-detachable body panels of the Motor Car, indicating that there was no re-welding works carried out; and that the non-detachable body panels of the Motor Car were originally fitted.

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.