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Your Reference: SLU 3473X 13 April 2018

Our Reference: CI/TP18006746/D

INSPECTION REPORT OF MOTOR CAR SLU 3473X

Requested By:
Tan Ai Wei
331 River Valley Road #02-01
Singapore 238363



Introduction and Instructions

- 1. I, Ang Bryan Tani, have been asked to provide my expert opinion on the matter set out below at paragraphs 9 14, with request at paragraph 15.
- 1. By way of introduction, I set out below a brief description of my professional qualifications and professional work experiences.
- 2. I am a Senior Technical Investigator and certified Accident Reconstructionist with LKK Auto Consultants Pte Ltd. I have been carrying out assessments, valuations, inspections and technical investigations of motor vehicles involved in, among other things, accident since 2007. I have also carried out accident reconstruction basing on the laws of dynamics and physics by applying mathematical equations with technique competencies aligned with international standards, ensuring proper cause analysis. Some of my clients include the Singapore Police Force, NTUC Income Insurance Co-Operative Limited, AIG Asia Pacific Insurance Pte Ltd, AXA Insurance Singapore Pte Ltd, Cycle & Carriage Industries Pte Ltd and Performance Motors Limited amongst others. I also have experience in providing analysis and commentaries on damages and faults of motor vehicles.
- 3. I have given oral evidence as an expert witness in both the State Court and High Court, for both the prosecution and the defence for criminal proceedings and also for both the plaintiff and defendant in civil proceedings. For instance, in MC Suit 17701/2010/Q, I acted as an expert witness in proceedings which involved among other things, a claim by an owner of a Mercedes sedan against the dealer for allegedly carrying out negligent works on the Mercedes sedan; in Suit 760/2011, I was asked by the dealer to provide my expert opinion on whether a brand new BMW sedan sold to a customer was defective. I have also been jointly appointed by both a car dealer and a car owner to provide my expert opinion as to whether the transmission of a brand new car was defective.
- 4. My testimony as an expert witness for accident reconstruction and speed analysis cases involving criminal proceedings for the prosecution include amongst others, MAC 2350-51/2011, an accident involving four motor cars and a motorcycle resulting in the death of the motorcyclist; DAC 039421-2011, a motor car and motorcycle accident resulting in the death of the motorcyclist; MAC 3935/12, a motor lorry and pedal bicycle accident resulting in the death of the cyclist.



- 5. Cases where I have been engaged by an accused person include amongst others, DAC 60889-90/10, a motorcycle and motor car accident resulting in the death of the pillion rider; DAC 049130-2013 & DAC 049131-2013, self-accident involving a SMRT bus resulting in the death of one of its passengers.
- 6. I have also carried out numerous line of sight simulation, in close replication of an accident scenario, to determine a driver's view and sighting capability
- 7. I hold a certificate in Technical Accident Investigation and Reconstruction from the Society of Automotive Engineers Australasia and a National ITE Certificate (Intermediate) in Automotive Technology (Light Vehicle) from the Institute of Technical Education. I have also attended training and passed a practical examination on correct repair methods, safe and cost effective assessment of damaged motor vehicles (Thatcham Escribe System).
- 8. I am an affiliate member of the Society of Automotive Engineers Australasia; an affiliate member of the Institute of Automotive Engineer Assessors (UK); an associate member with the Society of Operations Engineers (UK).
- 9. On 20 March 2018, I was approached by Ms Tan Ai Wei (herein referred to as "Ms Tan"), on the possibility of producing an expert report in relation to a potential civil proceeding that she intends to commence against M/s Venture Cars Pte Ltd (herein referred to as "Venture Cars"), in respect to the sale and purchase of a brand new Honda Vezel Hybrid 1.5X bearing registration number SLU 3473X (herein referred to as "Motor Car").
- 10.I was instructed by Ms Tan that on 22 October 2017, she had entered into a sales agreement with Venture Cars for the purchase of the Motor Car at a price of \$106,688/-. She made full payment for the Motor Car on 28 November 2017. The Motor Car was registered on 29 November 2017 and she took possession of it on 30 November 2017.
- 11. Ms Tan's further instructions to me was that on 03 December 2017, 3 days after collecting the Motor Car, it stopped abruptly while she was driving it, simultaneously all indicator lights came on. She turned off and turned on the engine and the Motor Car moved, but sluggishly. She then called the sales person of Venture Cars and was told to send the Motor Car to them for checking. On the same day, at Venture Cars, the salesman checked the Motor Car and subsequently informed her that the problem was fixed as he had re-set the system. The indicator lights were no longer on and Ms Tan drove the Motor Car away.



- 12. A similar incident of the Motor Car stalling abruptly and indicator lights coming on occurred the next day, on 04 December 2017. Ms Tan again highlighted the problem to the salesman, who again told her to send the Motor Car to them for checks. As Ms Tan felt that the Motor Car was unsafe to be driven, she had insisted that the Motor Car be towed to Venture Cars for checks. On 08 December 2017, the Motor Car was towed to Venture Cars where this time, the Motor Car remained in their possession till 15 December 2017. Ms Tan subsequently collected the Motor Car after being informed that the Motor Car was fixed.
- 13. A third similar incident occurred on 06 January 2018 while the Motor Car was idling, the indicator lights came on and the Motor Car again had no power (sluggish) and could only move very slowly. The salesman was again informed and the Motor Car was arranged to be collected on 08 January 2018 for checks. The Motor Car was kept by Ventures Cars for approximately 2 weeks till 23 January 2018 when Ms Tan was informed that the Motor Car was ready for collection. She collected it on 25 January 2018.
- 14. The same incident ie indicator lights coming on with loss of power was experienced for the fourth time on 27 January 2018. The Motor Car was again sent to Venture Cars and was eventually collected on 12 February 2018 after once again being informed that the Motor Car was ready for collection. However, on 14 February 2018, the same issue occurred. This time, the Motor Car was left parked at Ms Tan's residence and has not been driven since.
- 15. For this particular case, I was requested to carry out a physical inspection of the Motor Car and thereafter to comment on its condition at the time of my inspection.
- 16. Following the request, I had physically inspected the Motor Car on 02 April 2018 at 331 River Valley Road, Yong An Park Singapore 238363. A test drive of the Motor Car was also carried out during this inspection.
- 17.I now set out below my observations and comments with respect to the condition of the Motor Car.

Inspection of the Motor Car

18. The following general information of the Motor Car was first recorded: -



Vehicle Registration No. : SLU 3473X

Make / Model : Honda Vezel Hybrid 1.5X Auto

Chassis No : RU31264116

Year of Registration : 29 November 2017

Mileage : 1,179km

- 19. Exteriorly, I had observed the Motor Car to be in good general condition. There were no loose exterior fittings or connections observed. There was also no visible damage observed on the exterior body of the Motor Car. The mileage of the Motor Car at the time of my inspection was 1,179km.
- 20. Upon checking the engine compartment of the Motor Car, I had observed that the various mechanical components, hoses and sensors were all intact and securely fitted/attached. Checks on the various operating fluids like the engine oil, engine coolant and brake fluid revealed all to be of sufficient level for operating purposes and without any contamination. There was also fluid stain(s) and/or fluid leak(s) found within the engine compartment. See photo 1 7 below.



Photo 1 shows the front right body of the Motor Car at the time of my inspection. The Motor Car was observed to be in good general condition exteriorly. There was also no visible damage and/or loose exterior fittings observed on the exterior body of the Motor Car.

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Photo 2 shows the rear left body of the Motor Car at the time of my inspection. The Motor Car was observed to be in good general condition exteriorly. There was also no visible damage and/or loose exterior fittings observed on the exterior body of the Motor Car.



Photo 3 shows the mileage of the Motor Car at the time of my inspection. The mileage recorded was 1,179km.

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Photo 4 shows a general view of the Motor Car's engine compartment. I had observed that the various mechanical components, hoses and sensors were all intact and securely fitted/attached. The engine compartment was also observed to be relatively clean with no fluid stain(s) and/or fluid leak(s) found.



Photo 5 shows the brake fluid reservoir of the Motor Car at the time of my inspection. The brake fluid was observed to be of sufficient level for operating purposes and without any visible contamination.

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Photo 6 shows the engine coolant reservoir of the Motor Car at the time of my inspection. The engine coolant was observed to be of sufficient level (arrowed) and without any visible contamination.



Photo 7 shows the engine oil dip stick of the Motor Car at the time of my inspection. The engine oil was observed to be of sufficient level and without any visible contamination.

21. Checks to the underside of the Motor Car revealed its various undercarriage components intact and without any visible damage. The Motor Car's 4 tyres were also observed to be in serviceable condition and sufficiently inflated for vehicular operation. See photo 8 & 9 below.



Photo 8 shows the various undercarriage components at the rear left wheel of the Motor Car. The undercarriage components of the Motor Car were all observed to be intact and without any visible damage.



Photo 9 shows the various undercarriage components at the front right wheel of the Motor Car. The undercarriage components of the Motor Car were all observed to be intact and without any visible damage.

22. The Motor Car's automatic self-test of the functionality of its various electronic operating systems like the Anti-Lock Brake System (ABS), Electronic Power Steering (EPS), Traction Control (TC) and Supplemental Restraint System (SRS) during cranking of the engine had indicated that these systems were in working condition and without abnormality. This can be established from the warning lights disappearing from the instrument panel after the self-test. See photo 10 & 11 below.

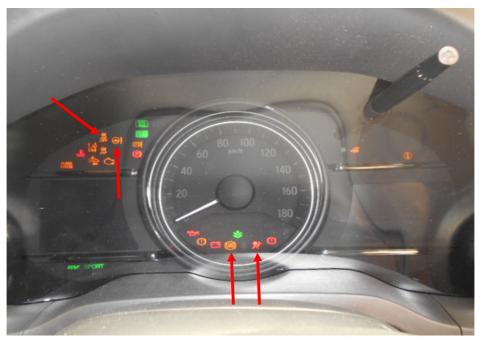


Photo 10 shows the warning light for the Anti-Lock Brake System (ABS), Electric Power Steering System (EPS), Traction Control (TC) and Supplemental Restraint System (SRS) appearing on the instrument panel of the Motor Car during the self-test of its various electronic operating systems when its engine was cranked.



Photo 11 shows no warning lights illuminated on the instrument panel of the Motor Car after the engine was cranked. This would suggest that there was no abnormality to the various electronic operating systems of the motor car, like the ABS, EPS, TC and SRS etc.

- 23. The Motor Car was subsequently test driven to primarily determine if there was any possible mechanical/electronical problem(s) and/or abnormality to the various operating systems of the Motor Car. During the test drive, the Motor Car was driven at various speeds and through various right turns and left turns; over different height and type of road humps along a route which covers several arterial roads and a multi-storey carpark. The general performance, stability, braking and handling of the Motor Car were satisfactory throughout the test drive.
- 24. Operationally, I did not find any abnormal behaviour to the Motor Car's engine system, transmission system, steering system and braking system. The Motor Car had responded well to the steering input and was able to come to a complete stop effectively during braking. Throughout the duration of the test drive, the Motor Car's indicator lights did not come on and there was no loss of power to the engine performance of the Motor Car. Neither did I experience the Motor Car's engine stalling. The mileage at the end of the test drive was recorded to be 1,185km. See photo 12 below.



Photo 12 shows the mileage of the Motor Car at the end of my test drive. The mileage recorded was 1,185km.

25. Upon returning to 331 River Valley Road after my test drive, several warning/indicator lights abruptly came on whilst the Motor Car was idling. These lights were the warning/indicator light for the engine system, collision mitigation braking system, vehicle stability assist, electric power steering and road departure mitigation system. The parking brake indicator light also came on intermittently. I then turned off the engine and restarted the engine. The same warning/indicator lights remained lighted up after the Motor Car's automatic self-test of the functionality of its various electronic operating systems. See photo 13 below.



Photo 13 shows several warning/indicator lights lighted up. These lights (circled) had abruptly came on whilst the Motor Car was idling after my test drive. These lights were the warning/indicator light for the engine system, collision mitigation braking system, vehicle stability assist, electric power steering and road departure mitigation system. The lights had remained lighted up after I had turned off and restarted the engine of the Motor Car.

- 26. Given this observation, I had carried out a second test drive of the Motor Car, primarily focusing on whether there was any operational abnormality to the Motor Car if it was to be driven with the warning/indicator lights on.
- 27. Firstly, it was noted that the transmission of the Motor Car could be shifted without any difficulty. I was able to shift the transmission from drive mode to reverse mode, and from reverse mode back to drive mode. The braking system of the Motor Car was also observed to be functioning without any abnormality. Upon stepping on the accelerator pedal, the Motor Car had moved however the speed of the Motor Car did not correspond to the accelerator/throttle input. In other words, despite depressing more on the accelerator pedal, the Motor Car's speed did not increase accordingly. The Motor Car felt sluggish, moving more slowly than normal and with less power. This sluggishness was experienced throughout the second test drive. The Motor Car even "struggled" to move up a slope within the premise of 331 River Valley Road. It had displayed a lack of power and was extremely slow when moving up the slope even though the accelerator pedal was fully depressed. The air-conditioning system was also observed to be functioning intermittently ie blowing hot air with intermittent cool air.

28. Given the abnormal engine performance of the Motor Car, the second test drive was confined to within the premise of 331 River Valley Road. It was concluded without driving the Motor Car on any public roadway. See photo 14 below.



Photo 14 shows the warning/indicator lights (circled) lighted up during my second test drive of the Motor Car. During this second test drive, the Motor Car felt sluggish. The Motor Car had displayed a lack of power and was extremely slow even when the accelerator pedal was fully depressed. The air-conditioning system was also observed to be functioning intermittently ie blowing hot air with intermittent cool air.

Conclusion

- 29. Basing on the observations gathered during my physical inspection of the Motor Car, the following paragraphs would represent my professional opinion with respect to the condition of the Motor Car.
- 30. Exteriorly, the Motor Car was in good general condition. Its various operating fluids like the engine oil, engine coolant and brake fluid were all of sufficient level and without visible contamination for operational purposes. The undercarriage components were also found to be intact, fitted securely and without any visible damage.



- 31. During my inspection, several warning/indicator lights of the Motor Car abruptly came on. These lights were the warning/indicator light for the engine system, collision mitigation braking system, vehicle stability assist, electric power steering and road departure mitigation system. Despite turning off and re-starting the Motor Car's engine, these lights remain lighted and did not go off.
- 32. My test drive of the Motor Car when these warning/indicator lights came on revealed abnormal behaviour of its engine system. The Motor Car displayed symptoms of sluggishness and lack of power. The speed of the Motor Car did not correspond to the accelerator/throttle input. It was moving slowly despite depressing more on the accelerator pedal. The air-conditioning system was also observed to be functioning intermittently.
- 33. These symptoms were however not observed during the initial period of my physical inspection when I test drove the Motor Car without any warning/indicator lights coming on. In other words, when the warning/indicator lights came on, the Motor Car's engine performance was affected.
- 34. Given that the warning/indicator lights did not come on during the initial period of my physical inspection but had subsequently came on abruptly, I am of the view that the Motor Car is in an unsafe condition to be driven. The Motor Car's abnormal behaviour when the warning/indicator lights came on may pose a danger to the driver and other road users. The multiple occasions, experienced by Ms Tan, pertaining to these warning/indicator lights abruptly coming on, would seem to suggest that this issue is not an intermittent issue. The issue had continued to recur despite attempts by Venture Cars to rectify.
- 35.I am also of the opinion that for a brand new motor car with only 1,179km on its mileage, the Motor Car cannot be considered to be of a reasonable satisfactory condition at the time of my inspection.

Ang Bryan Tani

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

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