

Your Ref: SBP 1898L 11 June 2019

Our Ref: CI/TP19012272/D

Vision Autotrader Pte Ltd 10 Kaki Bukit Avenue 4 #03-64 Premier @ Kaki Bukit Singapore 415874

## **AUTOMOBILE INSPECTION REPORT OF MOTOR CAR SBP 1898L**

- I refer to your request on 08 June 2019 to conduct a physical inspection of a motor car bearing registration number SBP 1898L (herein referred to as "Motor Car").
- 2. The purpose of this inspection was to primarily determine: -
  - a) whether the manual transmission assembly on the Motor Car was fitted in a secure manner that will not affect the structural integrity of the Motor Car: and
  - b) whether there was any operational issue(s) to the manual transmission system of the Motor Car.
- 3. Following the request, I carried out a physical inspection of the Motor Car on 10 June 2019 at the premises of 160 Sin Ming Drive #03-05, Sin Ming Auto City, Singapore 575722. I also conducted a short test drive of the Motor Car during this inspection.
- 4. I now set out below my observations and comments with respect to this inspection and test drive.

## Inspection of the Motor Car

5. The following general information of the Motor Car was first recorded at the time of my inspection: -

Vehicle Registration No. : SBP 1898L

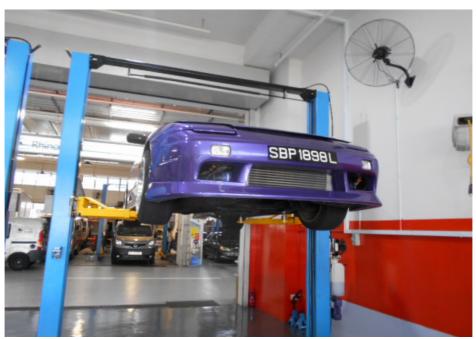
Make / Model : Nissan 200SX Chassis No : RS13501587

Year of Registration : 1990 (December)

Mileage : 145,033km



- 6. The Motor Car was fitted with a 5-speed manual transmission assembly. The front (input) side of the transmission is bolted to the crankshaft side of the engine block while the rear (output) side of the transmission was connected to the propeller shaft, which links to the rear axle of the Motor Car. A bracket mounted to the underside of the floor board of the Motor Car, via bolts and nuts, supports the rear (output) side of the transmission. A pair of rubber bushings, sitting between the transmission and this bracket, absorbs any vibrations arising from the rotation of the transmission gears, minimising any stress to the bracket.
- 7. The transmission assembly was operated by a clutch pedal, for engaging and disengaging the transmission gears; and a manual gear shifter for manually selecting the transmission gear to be engaged. See photo 1 11 below taken during my inspection of the Motor Car.



**Photo 1** shows the Motor Car hoisted for checks on its undercarriage.





**Photo 2** shows a general view of the transmission assembly (arrowed) that was fitted on the Motor Car. The front (input) side of the transmission is bolted to the crankshaft side of the engine block while the rear (output) side of the transmission was connected to the propeller shaft, which links to the rear axle of the Motor Car.



**Photo 3** shows the front (input) side of the transmission, which is bolted to the crankshaft side of the Motor Car's engine block.



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**Photo 4** shows the rear (output) side of the transmission (yellow arrow), which connects to the propeller shaft (red arrow) that links to the rear axle of the Motor Car.



**Photo 5** shows a general view of the bracket (arrowed) mounted to the underside of the floor board of the Motor Car, via bolts and nuts. The bracket supports the rear (output) side of the transmission.



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**Photo 6** shows a closer view of the bracket (arrowed) mounted to the underside of the Motor Car's floor board, via bolts and nuts. The bracket supports the rear (output) side of the transmission. Rubber bushings absorbs any vibrations arising from the rotation of the transmission gears, minimising any stress to the bracket.



**Photo 7** shows the rubber bushing (arrowed) that absorbs any vibrations arising from the rotation of the transmission gears, minimising any stress to the bracket.

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**Photo 8** shows a general view of the transmission assembly that was fitted on the Motor Car, as viewed from the rear to front. The transmission assembly is supported by a bracket (arrowed) that is mounted on the underside of the floor board of the Motor Car, via bolts and nuts.



**Photo 9** shows the bracket mounted on the underside of the Motor Car's floor board, via bolts and nuts.



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**Photo 10** shows the manual gear shifter for manually selecting the transmission gear to be engaged.



**Photo 11** shows the clutch pedal (arrowed) for engaging and disengaging the transmission gears.



- 8. I subsequently test drove the Motor Car to primarily determine whether there was any operational issue(s) to its manual transmission system. The Motor Car was driven around Sin Ming Industrial Estate.
- 9. The general performance of the transmission system of the Motor Car was satisfactory throughout the Motor Car's test drive. Operationally, I did not find any abnormal behaviour of the transmission system. I was able to engage the different transmission gears without any significant difficulty. Selecting the required transmission gear by depressing the clutch pedal and simultaneously upshifting and downshifting of the gear shifter manually was relatively smooth. The Motor Car was also able to reverse when the gear was manually shifted to reverse. The mileage of the Motor Car at the end of the test drive was 145,039km.
- 10. In general, the transmission assembly of the Motor Car was found to be secured properly. It was not mounted onto the chassis body or any integral body part of the Motor Car. The structural integrity of the Motor Car is not compromised by the fitment of this particular transmission assembly. Overall, the operating condition of the Motor Car's transmission system was satisfactory throughout the Motor Car's test drive.

## **Ang Bryan Tani**

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