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Your Ref: SFD 10D
Our Ref : CI/TP22000478/D

12 January 2022

Wheeler Dealers Sg Ptd Ltd
18 Boon Lay Way #03-100
TradeHub 21
Singapore 609966

AUTOMOBILE INSPECTION REPORT OF MOTOR CAR SFD 10D

1. I refer to your request on 22 December 2021 to conduct a physical inspection of a motor car bearing registration number SFD 10D (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 had carried out a physical inspection of the Motor Car on 27 December 2021 at the premises 18 Boon Lay Way #04-99, TradeHub 21, Singapore 609966. 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.	: SFD 10D
Make / Model	: Mazda Efini RX7 A
Chassis No	: FD3S100079
Year of Registration	: 1992 (February)
Mileage	: 90,149km

6. The Motor Car was fitted with a 5-speed manual transmission assembly. The front (input) side of the transmission was observed to be bolted to the crankshaft side (torque convertor) of the engine block while the rear (output) side of the transmission was connected to the propeller shaft, which links to the rear differential of the Motor Car, providing the drive to the rear wheels. There was no visible crack(s) and/or hole observed on the transmission housing.

7. The transmission is supported by its direct bolt on onto the crankshaft side of the engine block, and connection of the propeller shaft to the rear differential. The support of the transmission is reinforced by a bracket bolted onto the rear (output) side of the transmission at one end, and onto the rear differential at the other end. This bracket is fixed parallel to the propeller shaft, along a longitudinal axis of the Motor Car.

8. The transmission system of the Motor Car was operated by a clutch pedal, for engaging and disengaging the transmission gears. A gear selector fork from the transmission connects directly to the gear shifter through the Motor Car's floorboard. The gear shifter allows for manual upshifting and downshifting of the transmission gear to be engaged. See photo 1 – 14 below.

Photo 1 shows the Motor Car hoisted up at the time of my inspection. The mileage of the Motor Car recorded was 90,149km.

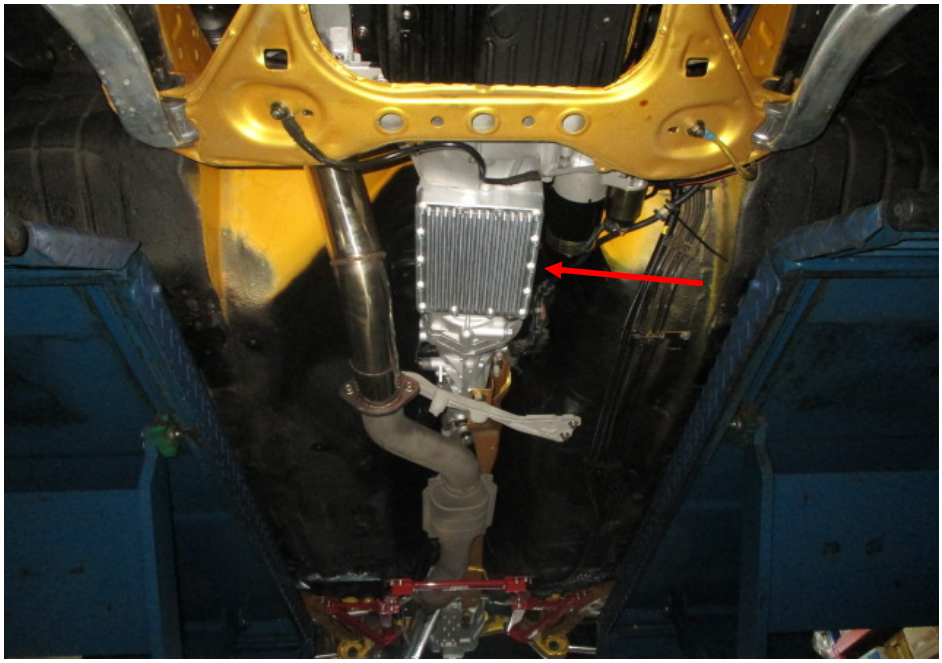

Photo 2 shows a general view of the transmission (arrowed) that was fitted on the Motor Car, as viewed from a front to rear perspective. The front (input) side of the transmission was observed to be bolted to the crankshaft side (torque convertor) of the engine block while the rear (output) side of the transmission was connected to the propeller shaft, which links to the rear differential of the Motor Car, providing the drive to the rear wheels. There was no visible crack(s) and/or hole observed on the transmission housing.

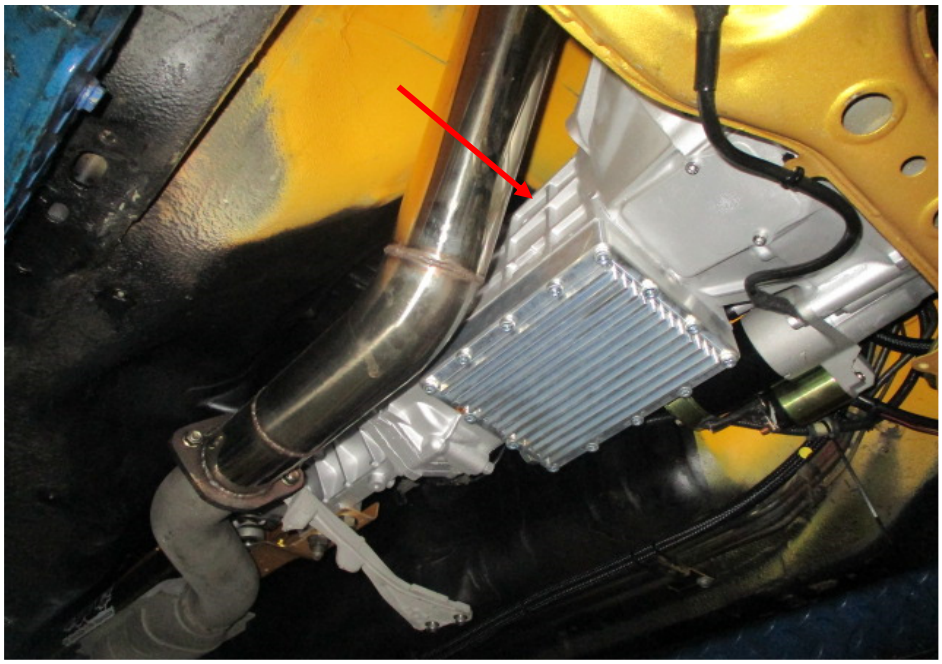

Photo 3 shows another view of the transmission (arrowed) that was fitted on the Motor Car. There was no crack and/or hole observed on the transmission housing.

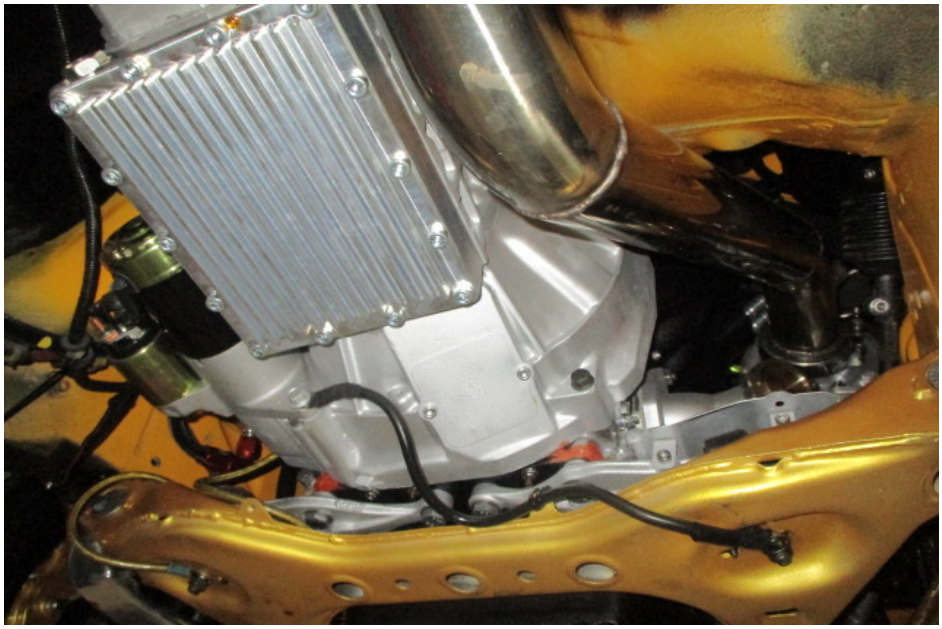

Photo 4 shows the front (input) side of the Motor Car's transmission, which was observed to be bolted to the crankshaft side (torque convertor) of the engine block. The transmission is supported by its direct bolt on onto the crankshaft side of the engine block, and connection of the propeller shaft to the rear differential (refer to photograph 6, 7 & 9 below).

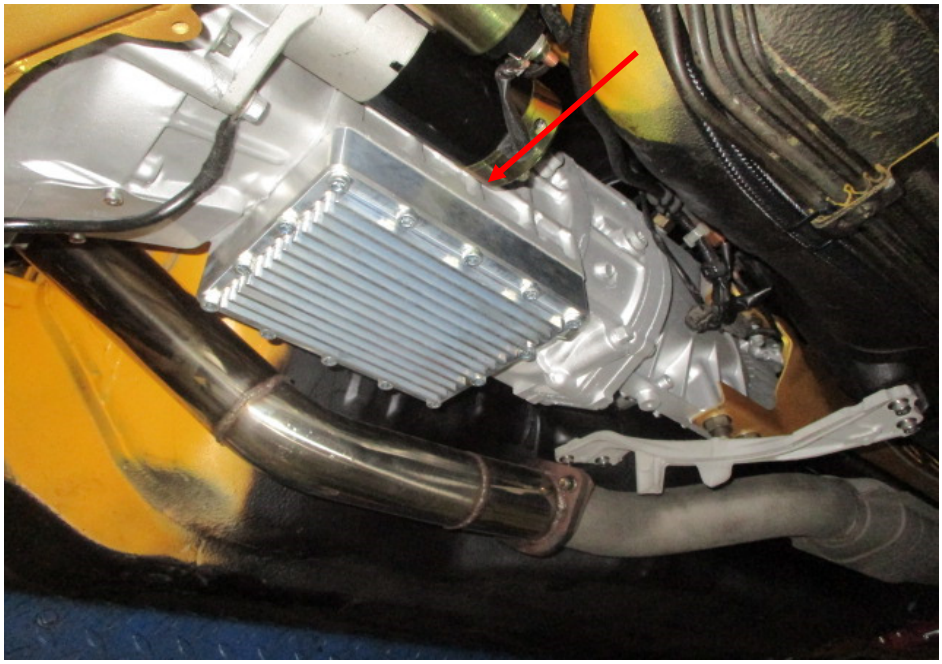

Photo 5 shows another view of the transmission (arrowed) that was fitted on the Motor Car, as viewed from a left to right angled perspective. The front (input) side of the transmission was observed to be bolted to the crankshaft side (torque convertor) of the engine block while the rear (output) side of the transmission was connected to the propeller shaft, which links to the rear differential of the Motor Car, providing the drive to the rear wheels. There was no visible crack(s) and/or hole observed on the transmission housing.

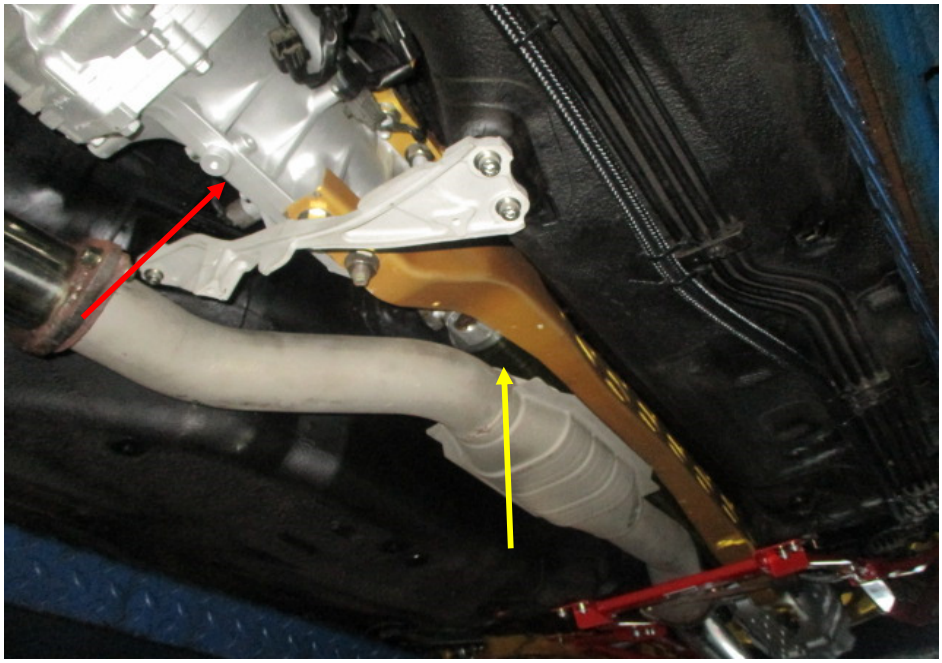

Photo 6 shows the rear (output) side of the Motor Car's transmission, highlighted by the red arrow. The rear side of the transmission connects to the propeller shaft (yellow arrow), which links to the rear differential of the Motor Car, providing the drive to the rear wheels.

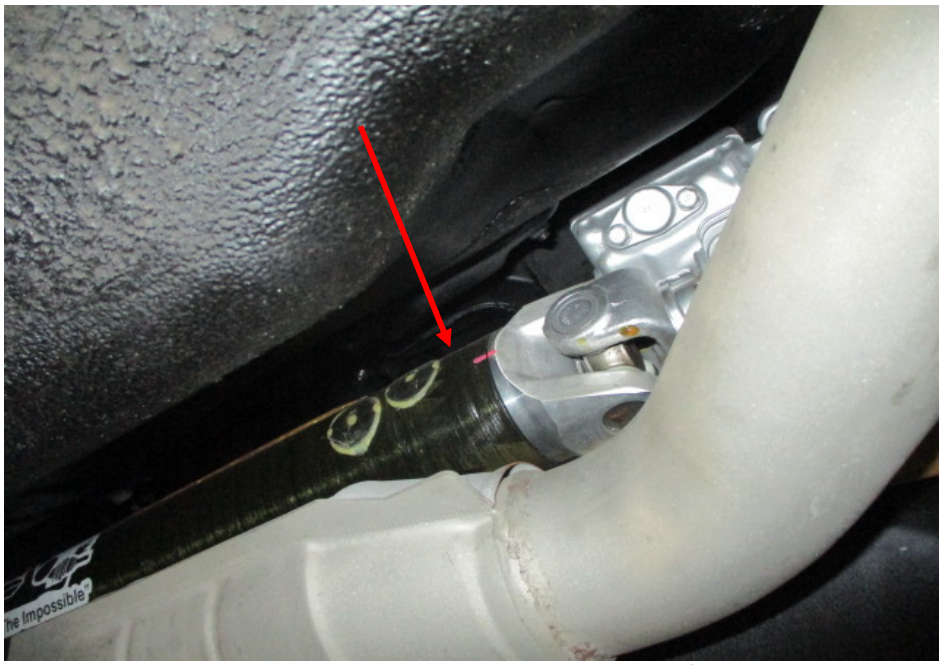

Photo 7 shows the propeller shaft (arrowed) of the Motor Car. The rear (output) side of the Motor Car's transmission (refer to photograph 6 above) connects to this propeller shaft, linking to the rear differential of the Motor Car, providing the drive to the rear wheels.

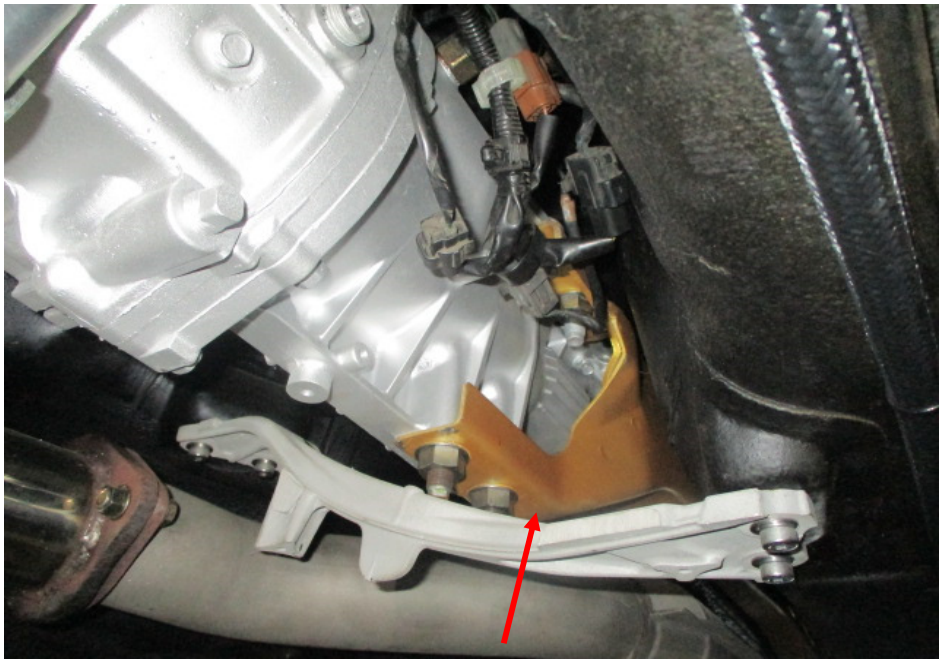

Photo 8 shows the rear (output) side of the Motor Car's transmission. The support of the transmission is reinforced by a bracket (arrowed) bolted onto the rear (output) side of the transmission at one end, and onto the rear differential at the other end (refer to photograph 10 below). This bracket is fixed parallel to the propeller shaft, along a longitudinal axis of the Motor Car.

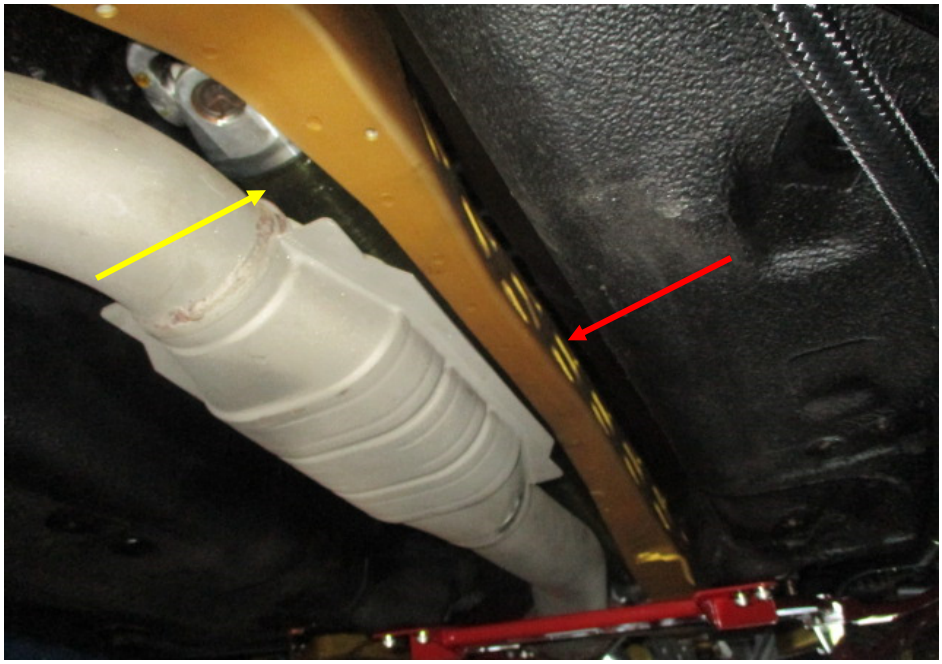

Photo 9 shows the bracket (red arrow) that was bolted onto the rear (output) side of the transmission at one end, and onto the rear differential at the other end. This bracket reinforces the support to the Motor Car's transmission and is fixed parallel to the propeller shaft (yellow arrow), along a longitudinal axis of the Motor Car.

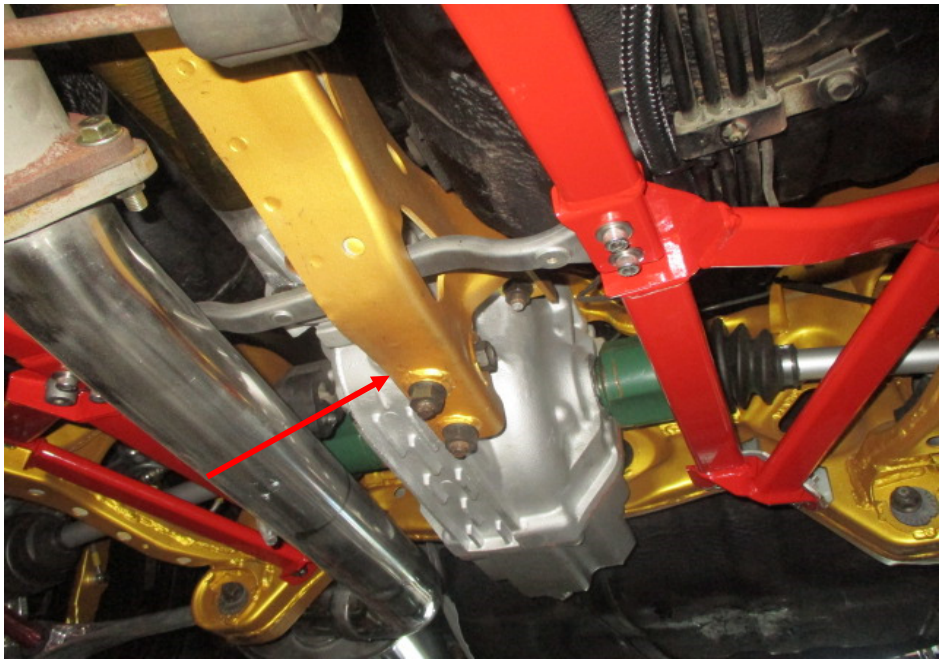

Photo 10 shows the rear differential of the Motor Car. The support of the transmission is reinforced by a bracket (arrowed) bolted onto the rear (output) side of the transmission at one end (refer to photograph 8 above), and onto this rear differential at the other end.

Photo 11 shows a closer view of the bracket that reinforces the support of the Motor Car's transmission. This was at the end that bolts onto the Motor Car's rear differential.

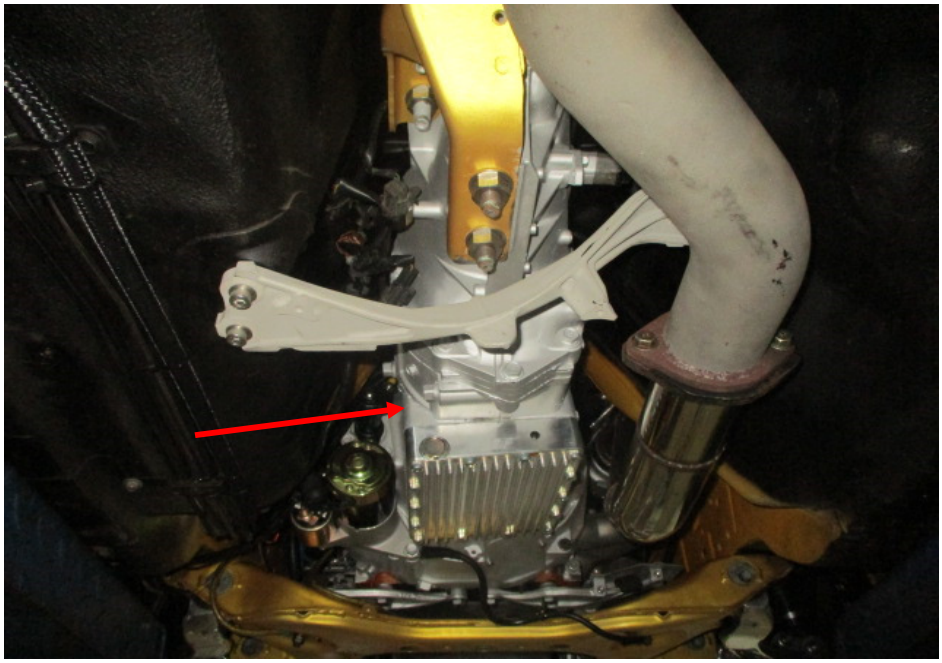

Photo 12 shows a general view of the transmission (arrowed) that was fitted on the Motor Car, as viewed from the rear to front perspective of the Motor Car. Overall, I had found the transmission of the Motor Car to be secured properly. The fitting of the manual transmission system, as at the time of my inspection, did not compromise the structural integrity of the Motor Car.

Photo 13 shows the gear shifter (arrowed) that was fitted on the Motor Car, for manually selecting the transmission gear to be engaged. The gear selector fork from the transmission of the Motor Car connects to this gear shifter through the floorboard of the Motor Car.

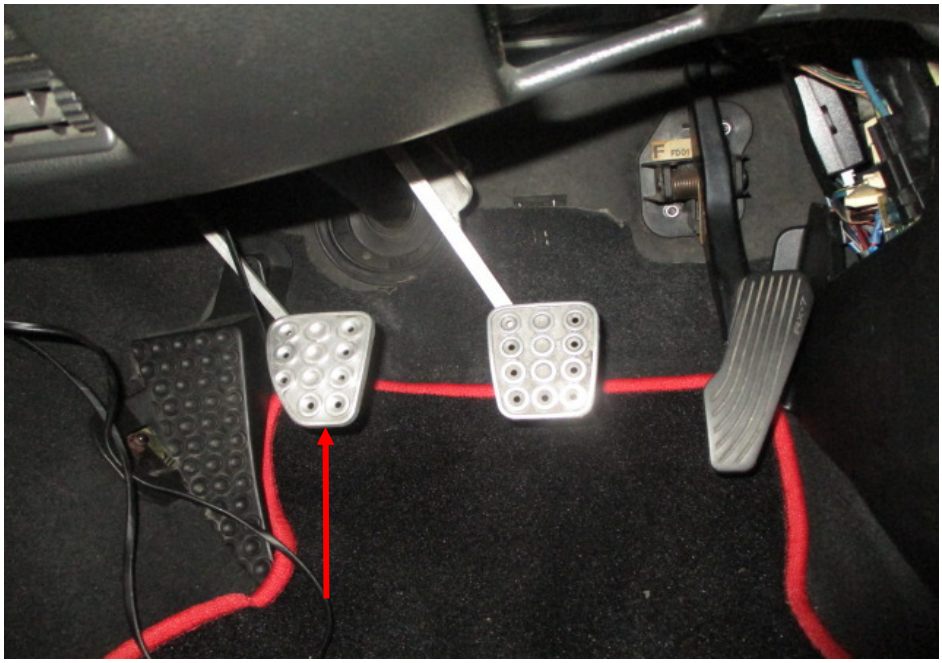

Photo 14 shows the clutch pedal (arrowed) of the Motor Car, for engaging and disengaging the transmission gears.

9. 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 within the building premise of TradeHub 21.

10. The general performance of the manual 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 manual transmission system. I was able to engage the different transmission gears without any significant difficulty. Selecting the required transmission gear by manually upshifting and downshifting of the gear shifter 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 90,151km.

11. In summary, the transmission of the Motor Car was found to be secured properly. The fitting of the manual transmission system, as at the time of my inspection, did not compromise the structural integrity of the Motor Car.

12. The Motor Car's manual transmission system was found to be in satisfactory operating condition during a test drive of the Motor Car that I had carried out.

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