

Your Ref: CMQD1700040
Our Ref : CI/SMO17024557/D

28 December 2017

Sompo Insurance Singapore Pte Ltd

50 Raffles Place #05-01/06
Singapore Land Tower
Singapore 048623
(Motor Claims Department)

TECHNICAL REPORT OF TRANSMISSION WARRANTY CLAIM FOR THE INSURED VEHICLE SJR 9891Y

1. I refer to your request dated 26 December 2017 to carry out a physical inspection of the insured vehicle SJR 9891Y (herein referred to as "**Insured Vehicle**") to determine the possible cause(s) of fault to its transmission system.
2. The fault, described by the owner of the Insured Vehicle in his claim form, was gearbox malfunction, no reverse gear.
3. Following the request, I had physically inspected the Insured Vehicle on 27 December 2017 at the premises of Accord Auto Services Pte Ltd, Block 1009 Bukit Merah Lane 3 #01-80, Singapore 159723.

Inspection of the Insured Vehicle

4. The following general information of the Insured Vehicle was first recorded during the inspection:-.

Vehicle Registration No.	: SJR 9891Y
Make / Model	: Audi A4 2.0 TFSI QU S-tronic
Chassis No	: WAUZZZ8K29A230697
Year of Registration	: July 2009
Mileage	: 130,725km
Transmission Type	: 7 speed S-tronic automatic transmission

5. The Insured Vehicle was observed to be in good general condition. Visual examination of its exterior body revealed no loose exterior fittings or connections. There was no error message on the instrument panel of the Insured Vehicle upon starting the engine of the Insured Vehicle.

6. A diagnostic test was then carried out on the Insured Vehicle to primarily check whether there was any electronic fault(s) to the Insured Vehicle. Such diagnostic test normally detects whether there is any electronic problem to the various electronically controlled operating systems of a motor vehicle. For this case, the result after the diagnostic test had showed 1 fault code relating to the transmission system of the Insured Vehicle. The fault code was P174F00. See photo 1 - 4 below.



Photo 1 shows a general view of the Insured Vehicle at the time of my inspection. The Insured Vehicle was observed to be in good general condition with no loose exterior fittings or connections.



Photo 2 shows no error message appearing on the instrument panel of the Insured Vehicle after its engine was started.



Photo 3 shows the diagnostic test being carried out on the Insured Vehicle to check for any electronic fault(s). Data from the various electronic control modules of the Insured Vehicle were being retrieved.

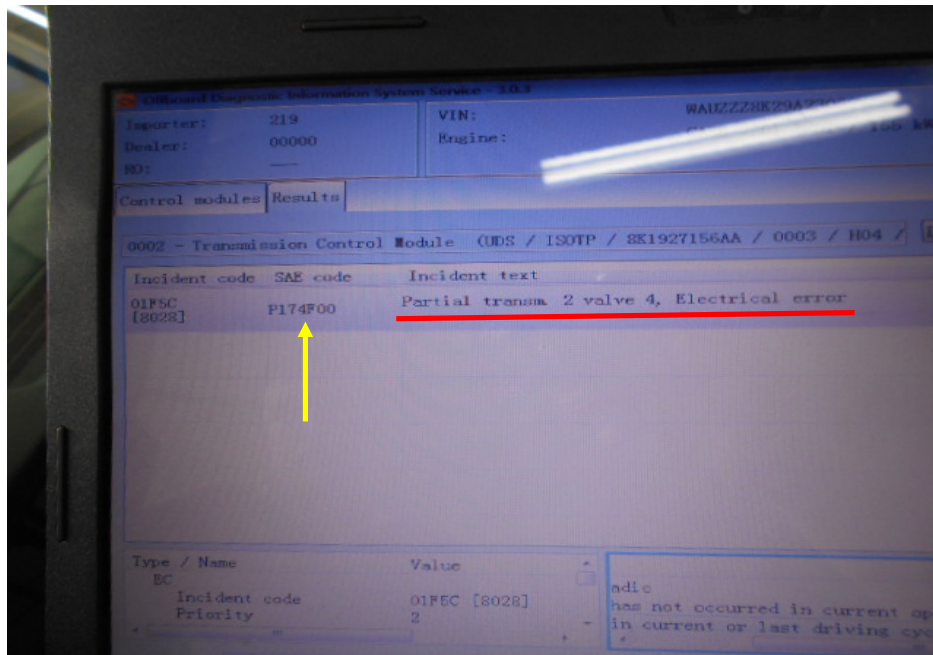


Photo 4 shows the recorded fault code after the completion of the diagnostic test. The fault code recorded was P174F00 (yellow arrow). The description of this fault (red line) was noted to be related to the transmission system of the Insured Vehicle.

7. The Insured Vehicle was subsequently hoisted up for visual checks on its transmission housing and transmission fluid. There was no sign(s) of fluid stain(s) and/or fluid leakage observed on the underside of the Insured Vehicle. The transmission fluid was found to be of sufficient level and without contamination for operational purposes. There was also no visible damage observed on the transmission housing. The electronic sensors were all observed to be securely fitted into the connector ports. See photo 5 – 9 below.



Photo 5 shows the Insured Vehicle being hoisted up for checks on its underside, in particular to its transmission assembly and transmission fluid.



Photo 6 shows a general view of the underside of the Insured Vehicle where the transmission housing was located. There was no sign(s) of fluid stain(s) and/or fluid leakage observed on the underside of the Insured Vehicle.



Photo 7 shows a general view of the underside of the Insured Vehicle where the transmission housing was located. There was no sign(s) of fluid stain(s) and/or fluid leakage observed on the underside of the Insured Vehicle.



Photo 8 shows a general view of the underside of the Insured Vehicle, at the area where the transmission housing was located. There was no sign(s) of fluid stain(s) and/or fluid leakage observed on the underside of the Insured Vehicle. There was also no visible damage observed on the transmission housing. The electronic sensors were all securely fitted into the connector ports.



Photo 9 shows checks being carried out on the transmission fluid level of the Insured Vehicle. The transmission fluid (arrowed) was observed to have flowed out from the valve body (mechatronic) of the transmission housing upon releasing of the stopper. Such observations after releasing the stopper is an indication that the transmission fluid was of sufficient level for operating purposes. Visually, there was also no contamination observed to the transmission fluid.

Comments & Opinions

8. My checks and enquiries revealed that the fault code P174F00 relating to the transmission system of the Insured Vehicle were for electrical errors to the valve body (mechatronic) of the Insured Vehicle. These fault codes are also amongst the common fault codes that are associated with the type of transmission system that is fitted on most Audi model motor cars. See photo 10 below showing the valve body of the Insured Vehicle.



Photo 10 shows a general view of the Insured Vehicle's transmission valve body (mechatronic) (circled).

9. Briefly, the valve body in the transmission system of the Insured Vehicle controls the gear shifting through sensors, actuators, solenoids, valves and hydraulic fluid (transmission fluid). Gear shift is performed through solenoids and valves that are acted upon by hydraulic pressure from the transmission fluid upon input signal from the sensors and actuators. In this case, one of these components had electronically malfunctioned, rendering the transmission system of the Insured Vehicle to function partially.
10. My checks with both local and international bodies and associations revealed that at the time of writing this report, there is no on-going manufacturer recall campaign relating to transmission system issue(s) that involved the Insured Vehicle. See screenshot below showing search result from LTA.

Enquiry on Vehicle Recall - Vehicle Specific

* ONLY INFORMATION ON VEHICLE RECALLS SUBMITTED FROM 9 APRIL 2007 IS AVAILABLE

Vehicle Owner Particulars	
Owner ID Type:	Singapore NRIC
Owner ID:	2283E
Vehicle Details	
Vehicle Registration number:	SJR9891Y ←
Make:	AUDI
Vehicle Model:	A4 2.0 TFSI QU S-TRONIC
Engine No.:	CDN040532
Chassis No.:	WAUZZZ8K29A230697
Recall Details	
No Recall Detail records ←	

Conclusion

11. Basing on my inspection of the Insured Vehicle and the information gathered during the course of my investigations, I am of the view that the transmission system of the Insured Vehicle had malfunctioned electronically, resulting in partial operation of its transmission system.
12. Such malfunction is commonly associated with the type of transmission system that is fitted on most Audi model motor cars, where components in the valve body (mechatronic) are known to have failed pre-maturely.
13. For this case, I did not find any evidence to suggest that the malfunction was due to poor maintenance of the Insured Vehicle's transmission system.

Ang Bryan Tani

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Technical Investigation & Reconstructionist (SAE-A)

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